Supplementary Table 1 The markers of 25 immune cells as the signature matrix

	Mast Cells	Neutrophil Cells	Eosinophil Cells	B Cells Memory	B Cells Naive	Plasma Cells	T Cells CD8 Actived	T Cells CD8 Naive	T Cells CD8 Memory	M0 Macrophage	M1 Macrophage	M2 Macrophage	Treg Cells	T Cells CD4 Memory	T Cells CD4 Naive	T Cells CD4 Follicular	Th1 Cells	Th17 Cells	Th2 Cells	Monocyte	GammaDelta T Cells	NK Resting	NK. Actived	DC Actived	DC Immature
Ngp	39.237995	18916.353	5776.0376	65.817689	65.300643	70.874386	38.671984	53.645295	57.473955	45.929185	36.595365	41.062042	56.508448	44.397894	46.492421	39.045338	38.751675	47.725053	60.898532	207.99263	54.43938	83.182126	46.163784	1812.8502	3399.456
Camp	41.104777	16257.716	320.9129	61.615683	55.471245	52.85008	40.903599	48.871369	51.327029	48.057799	82.888799	57.483197	68.801949	47.514667	50.181858	44.950943	61.547567	56.860097	61.685258	179.597	47.960121	88.319751	62.775023	650.57776	884.45451
Mmp8	69.275618	12196.486	572.645	39.406753	30.706337	43.633925	18.768778	27.028379	23.824569	569.88804	90.962175	359.04725	23.694175	20.170722	22.517954	25.446674	29.536598	25.586833	29.879662	565.20523	26.449792	27.270153	24.250899	2041.1455	4568.4981
Cd177	16.230455	11646.908	86.680879	12.656065	10.915883	12.478529	15.177591	11.882783	14.290257	17.297947	18.235666	16.773951	16.518901	15.857798	19.818145	13.543828	16.455292	15.43535	14.908228	817.05758	15.768015	15.097155	13.522146	38.140916	96.700474
Mmp9	34.273311	10154.764	435.80185	51.435896	48.785544	47.881147	30.798206	33.860734	35.069823	47.705776	50.150327	45.261745	44.427528	76.093153	47.993814	44.354181	27.539216	51.727572	39.67308	29.961727	30.598923	44.58851	38.089099	261.14963	451.65973
Fpr2	30.568697	10047.499	171.66383	38.447115	39.061446	46.675331	46.229575	54.265532	53.618488	381.75709	8546.6881	132.59873	30.171638	28.661557	30.353911	30.860524	25.449121	47.824884	31.818039	2170.3682	35.812117	38.256156	26.123902	5629.9178	3522.2995
Ifitm6	28.666267	9701.3888	480.50936	34.02728	26.367868	33.600717	23.400753	26.982195	28.158481	91.360752	213.89047	41.267729	27.287262	24.535853	22.529284	21.310901	24.503077	33.983519	64.446855	7605.0134	26.019306	29.77158	29.743658	392.48166	1050.4318

Chi3l3	23.002509	9514.7457	1180.3729	9.803574	11.064887	10.194896	9.2345527	10.70494	12.661735	30.069775	13.233189	580.30734	14.47466	15.138114	11.163053	10.938448	11.569475	12.515546	67.77185	8353.6764	10.914518	17.548428	10.598027	6416.3684	7930.9618
1810033B17Rik	34.885184	6147.6096	205.21207	38.110192	50.11635	55.872308	40.17371	44.04201	41.348328	70.954993	80.54052	39.76608	38.309347	37.208432	32.760482	27.29804	46.31174	40.791239	37.254359	4014.7687	46.594601	60.563156	47.124548	1399.7205	1955.28
Itgb2l	69.70812	5640.2119	119.13667	58.763829	70.738974	67.389873	69.640598	65.03461	52.215391	50.39229	74.507476	59.461237	52.308985	92.581184	54.058599	52.050204	65.61008	54.807389	51.105745	86.746794	51.850732	57.396072	49.279293	121.21003	143.44108
Trem3	38.705685	5347.6617	212.36656	66.850024	65.529408	56.469599	33.853373	44.567839	44.729217	43.116913	106.52832	39.0051	39.568146	52.076271	41.745197	40.533871	32.556144	33.720657	37.916795	1834.926	64.040203	47.040062	54.891619	207.45126	131.18992
Nfe2	1117.1068	4863.7522	3243.6584	38.990463	24.299407	27.466803	17.492339	18.533241	19.314732	22.071821	18.640828	37.160965	27.218474	30.13309	22.464485	36.350673	24.896458	23.592923	23.853389	2075.6397	20.155738	95.228356	30.827344	80.23107	432.57587
Csf3r	65.745118	4749.0389	210.72883	81.116348	79.09996	88.191012	50.523585	64.147705	59.435961	504.92492	889.8911	890.5702	63.813686	77.538646	67.693406	64.512798	74.650832	64.036242	55.173146	1562.9407	72.259597	60.481021	42.818417	564.00156	471.13461
Fpr1	25.914103	4740.2185	152.71822	34.441989	24.778562	57.464195	23.542073	32.116908	32.244738	102.76484	3854.3902	36.575308	28.392699	46.259036	31.068722	27.145217	27.092463	26.298883	27.562514	161.22795	34.453717	30.365066	22.353742	2026.4291	1168.0391
Pram1	75.719986	4583.1184	127.83449	223.24237	138.31076	205.21593	55.213744	81.666971	67.468471	77.286689	80.453227	59.78019	61.897732	124.62627	86.323966	66.180862	74.925061	63.566688	55.789235	895.58878	62.424861	100.75792	77.141805	118.13397	278.41819
Clec4d	107.28704	4548.0662	1933.7903	36.305598	31.552557	38.38593	22.856705	25.314663	27.23787	6536.0128	4872.5623	3721.6785	27.604016	24.578403	28.355036	24.259128	26.167876	49.067293	30.537808	312.18874	26.750083	27.428578	35.78118	4440.5007	3910.6572

Sell	30.243279	4200.9023	911.99679	1458.5427	3370.7549	113.19302	727.76572	4363.1915	4631.3364	25.414413	780.44458	28.783473	1425.6226	644.35966	4251.5804	424.70878	248.46281	40.301478	34.620637	985.61059	29.840772	3222.9424	1182.0143	309.01265	186.99212
Cd300lb	3411.1269	4157.0107	4422.6442	30.69175	20.793463	22.17625	14.150771	17.85703	16.592078	3181.5394	646.50091	5987.5497	18.938241	24.798515	18.982875	18.52522	19.020371	15.970994	18.932586	3409.6441	62.515859	25.392564	34.725465	107.65745	1239.2696
Cxcr2	51.080633	3964.6525	338.51076	160.39862	75.289362	140.34019	43.029941	55.971669	51.632772	50.988616	43.15583	58.84911	65.512145	80.931643	68.990982	69.008742	132.26891	95.04719	84.159456	81.435295	95.710312	117.83145	97.971255	91.800835	113.14741
Hck	54.612019	3913.8639	2538.5514	905.6887	1071.0889	39.397463	16.489477	36.567314	49.693569	1912.5843	4046.7234	998.1446	32.13138	82.335159	24.526435	22.29528	32.294577	28.542726	25.484742	6533.5497	30.822408	85.213157	31.694465	4066.8096	1867.7806
Slfn1	16.196954	3815.9773	15.561872	15.5051	15.655165	13.288378	40.46935	294.88494	466.33379	22.405061	614.5058	14.97619	386.34054	826.66471	613.37747	225.04893	124.38537	1478.6529	726.89266	848.78008	22.08335	14.507826	14.576927	1753.6068	287.43902
Hk3	38.074159	3491.9172	692.65645	78.828262	58.107954	66.414544	32.771362	56.729147	64.846362	1024.5488	3749.7422	1041.4041	39.79189	63.857543	52.263421	39.991258	32.883366	36.396103	37.189012	555.43034	46.811157	134.69737	86.235429	1598.6368	555.57651
Ltb	103.94182	3266.9971	2065.8693	2850.893	3250.9567	53.089038	1486.1551	9130.652	7694.7626	79.976629	171.09259	69.386585	7072.7624	5781.1372	9094.0866	7354.9161	212.93637	8462.52	1596.8474	229.07672	2039.5945	1241.5173	463.53116	128.28156	331.21113
Adpgk	96.046063	3093.9759	249.8001	107.99849	103.56888	131.68128	135.52362	156.72989	211.86923	74.28214	59.163903	84.448425	233.10522	140.57048	175.47342	99.884854	251.03936	129.81026	131.01838	127.71288	65.386867	74.828783	110.5345	76.991854	136.75254
Slfn4	21.014016	2987.3237	18.773426	28.157357	29.856239	28.530859	22.293367	20.806015	22.785145	41.980996	4949.4861	30.510133	29.323615	21.746309	26.987822	29.742408	18.703745	25.426104	23.419971	714.78326	25.871705	20.816855	21.603919	3067.1765	94.356184

Pilra	181.50772	2969.8468	285.01271	20.623695	23.543896	25.747185	19.025479	35.014491	41.888105	102.03983	799.78041	59.498174	27.010101	21.031157	25.001869	23.20193	25.649958	26.971845	23.568042	1093.5901	27.433576	29.395101	22.677694	1778.069	2080.9361
Pirb	928.34535	2942.4774	1631.0077	405.14419	424.23962	50.53453	49.452117	45.750094	45.634194	1658.0614	2177.0909	961.91875	28.498294	119.72916	42.37727	38.048499	38.079957	31.564955	28.927324	3072.0183	31.748731	40.785799	39.452449	1727.3409	1422.8486
Itgam	18.303194	2898.0718	1151.984	23.238978	25.284353	23.883718	17.723138	15.663508	17.014726	1580.9734	1691.5118	1550.0283	20.150646	21.633446	23.484266	20.311813	19.994075	24.710635	17.042234	1075.6286	23.894268	232.94757	58.26258	986.26314	1394.7832
Padi4	19.905692	2745.4415	2177.2048	20.857381	21.213457	36.531351	20.239722	22.768403	21.848718	25.532452	20.661789	22.163799	23.286427	20.983715	27.154279	185.6391	18.700702	19.77977	24.567026	116.59104	21.350197	44.129537	32.334556	135.39037	230.70932
Igsf6	21.936402	2575.0838	869.40148	24.503946	26.591415	24.181832	17.548584	27.517958	23.65995	1674.9338	1665.4789	1078.5281	19.417699	41.464903	20.364493	17.248762	23.947712	24.28017	17.891671	4112.8747	16.747589	29.757206	21.798956	1423.3136	1379.7874
Alox5	4358.1707	2567.4058	2195.9078	87.435548	75.784732	75.142111	65.700027	86.555189	70.082783	78.016028	84.185556	73.010275	72.790275	103.53075	74.272678	69.681319	64.95222	66.17411	218.34848	346.64417	124.51837	119.40266	103.65093	255.78225	396.12426
Rgs18	3099.479	2456.5739	1666.1215	38.054397	180.93694	11.298621	12.37993	12.329894	12.158404	656.47099	23.891415	315.06065	12.295927	11.161034	11.467266	11.930043	11.06992	10.960961	16.585042	761.40048	11.248155	65.513914	84.569813	36.487956	190.98314
Il1b	251.78101	2374.4032	866.38607	51.650652	49.982995	65.69261	53.212365	66.707149	53.747714	89.040168	2652.3119	93.367785	49.446687	67.956242	45.466453	45.710527	53.697213	140.35811	45.820033	628.75826	44.832711	105.23959	62.574139	7568.5956	667.17979
Fgr	47.476545	2292.1724	550.36669	215.94295	186.70609	111.10821	66.535496	65.388797	89.127131	133.28598	197.4511	190.39084	72.955179	88.890102	53.731235	63.086392	88.943522	51.908906	52.863369	2024.8842	367.42952	184.36182	133.48732	428.10233	604.81785

Fcgr4	37.828978	2160.0276	291.52733	34.166497	30.964342	32.212807	29.343589	47.685175	64.832113	1061.2897	5424.9765	866.10978	29.327652	30.789624	27.364803	27.246735	30.717693	28.234749	27.141753	759.29995	37.224735	31.484927	28.240171	1151.7154	182.99389
Clec5a	12.434442	2056.5614	150.38402	14.373825	13.296056	14.525693	14.495929	13.700276	13.9497	264.50369	131.76665	275.09928	15.555075	17.006226	14.205698	14.109815	16.6767	16.920534	14.703146	134.71205	17.003813	14.866673	17.094946	470.20842	453.78775
4930438A08Rik	26.412657	1999.6513	38.351096	23.832163	26.59283	31.00611	27.095507	26.938482	28.294792	27.471197	26.507706	25.753265	28.804115	29.201461	28.01182	27.04303	29.241332	28.695594	30.216514	45.165098	38.095735	23.119533	31.817689	36.632556	37.984967
Bmx	17.948325	1989.956	18.617661	22.236678	17.328026	16.0278	14.290092	14.48228	14.964559	14.513612	15.312471	13.890815	13.862261	14.272395	15.045017	13.575164	14.876554	15.147616	14.913168	365.36403	13.534687	18.550906	17.562147	14.450394	22.69547
Tlr13	27.164436	1898.4284	443.61182	26.325992	41.263112	32.438142	32.748259	30.948571	30.901763	1980.2941	1177.0463	726.73998	31.695825	23.395766	28.134606	25.55324	24.292647	30.999165	25.821112	2374.1113	23.640627	25.616608	25.218959	396.36603	414.80995
Slc15a3	20.646569	1751.6387	866.48648	130.60914	136.02281	75.355271	108.13907	30.704408	39.637404	1715.7185	4617.3166	2459.554	189.9455	46.756107	22.233219	66.978917	307.13923	319.89115	35.891409	704.9304	20.206385	40.184759	23.796512	4760.0702	2092.7989
Ccr1	158.49376	1746.0219	793.05146	61.90647	21.435376	13.044867	15.396575	14.655349	13.781714	71.039593	139.45381	76.59465	16.549168	13.784764	13.547221	14.56232	16.895693	61.094694	146.47417	83.339383	14.029765	12.452948	13.410241	446.7558	817.09829
Gpr97	1968.8104	1637.5813	673.36406	55.313243	30.443182	25.347802	32.228458	133.88532	100.59763	33.529775	30.874301	35.469085	39.468843	29.215161	97.299177	36.746895	25.556284	115.00102	258.31942	51.212016	40.103013	73.009483	132.40067	67.986166	85.487757
Lin28a	11.73879	1614.472	157.19447	14.81472	13.325646	15.271512	13.509263	14.191551	13.706873	11.807968	12.769011	16.151798	13.845246	12.10236	12.617134	12.578701	10.882088	12.603858	12.809361	15.250909	12.984781	11.658349	12.904984	13.860786	14.92618

Cd300ld	30.944813	1557.2294	185.31505	36.255254	28.611507	31.867055	23.559077	33.589778	26.44863	1564.1882	664.97183	2465.2683	29.590106	29.369631	28.063986	29.997219	36.090762	31.391881	31.992918	861.84058	34.902192	34.503596	32.471068	89.760446	248.45194
Tbc1d10c	445.08827	1520.2545	875.78674	986.24823	856.22453	193.93473	616.5095	3260.9314	4452.1434	29.107932	30.120872	28.731411	1892.7477	3556.4378	2636.5533	2528.7651	807.9927	3102.3031	2083.7863	133.54598	3479.5618	1703.6978	1225.4987	35.647622	91.028288
Cyp4f18	21.117674	1436.2938	3036.0562	889.47059	827.56842	159.1383	17.976283	18.709912	18.698973	144.12498	65.682515	86.394781	20.700849	32.710472	20.559821	21.461298	21.759252	17.962002	19.346612	2206.5201	16.87953	37.235461	20.936028	286.40595	550.12165
Nfam1	58.535199	1402.9456	190.95636	33.432157	35.689863	27.083887	24.881046	30.805708	26.2101	221.91432	103.78714	218.80912	27.231358	27.024209	29.409015	25.712499	29.482287	28.696921	31.396095	670.81452	24.07655	25.399356	24.60593	168.61599	417.53871
Fcnb	28.844175	1367.5632	48.772403	27.692526	49.720488	35.240174	33.395187	42.094559	37.228177	31.302442	36.039556	30.800214	33.601206	30.275936	39.291805	30.072775	25.648047	32.910488	29.741384	80.721268	30.176005	29.284098	26.887727	65.811606	71.394775
Il18rap	528.08264	1334.2643	455.72107	65.094261	69.061814	52.421548	400.1234	116.82445	772.57052	39.700933	42.376523	41.455147	100.52078	298.66476	89.053599	131.24705	245.87362	306.08333	249.16837	54.780478	46.904172	2767.6746	1445.099	83.953235	123.69153
Klra17	28.051382	1289.1441	89.584794	30.810482	21.413149	23.667782	17.430463	17.526763	17.664015	49.048635	21.769455	26.515873	17.466168	17.840094	18.748717	14.684035	18.286733	16.851106	15.025376	28.49977	20.084793	24.712755	24.190299	81.885982	74.227383
Btg1	158.62921	1277.5362	65.643229	769.22233	1004.5421	42.271644	194.91673	3077.6338	1435.1236	107.52862	200.30385	112.93254	385.35099	766.32281	2197.4968	1555.8797	99.704637	1275.984	897.7359	549.96578	1025.6622	4774.5861	689.08393	162.96541	271.45615
Il1f9	39.542644	1261.9899	85.24793	29.358014	38.001215	39.298534	25.001947	33.18242	27.370456	29.160039	438.08642	30.058656	28.647144	29.149288	28.563305	27.624759	35.843621	28.451596	28.029311	34.926968	28.8341	34.037967	30.125018	1202.0375	134.76536

Ear2	16.02885	1164.3748	15625.721	12.621767	16.766036	10.84597	12.199393	15.622547	18.307841	22.591125	26.294498	29.520286	14.95897	46.814337	15.917769	15.547599	14.129776	11.464827	14.631136	3954.2086	15.994415	15.896535	13.304377	844.87049	1751.259
Hvcn1	216.3931	1140.0052	1689.7532	4781.0439	5750.293	660.09413	208.12911	871.75524	1066.1723	834.05796	395.53804	1085.0519	323.28672	652.94924	760.20276	517.05817	353.72534	636.43401	144.96638	84.07845	1750.7149	641.76998	363.45252	1073.4099	1117.7585
Cd3d	28.318689	1075.7204	54.65622	25.981135	47.07037	32.147879	4612.6156	9589.6063	10288.988	36.281671	43.1771	36.881303	7099.6845	3084.9024	9276.1147	9411.197	5025.9004	9480.283	9001.4611	64.647022	9316.517	129.21916	67.29269	30.506626	29.735185
Clec4e	16.91777	1042.9569	590.69799	13.950562	15.146014	14.141126	11.878646	13.009826	12.773862	128.24274	1801.716	37.196362	14.382663	13.555305	13.374377	14.151057	13.688763	24.672031	12.155974	240.05843	13.875376	20.98494	19.365756	3685.7496	515.48048
C5ar1	54.326706	966.59448	121.91858	20.64415	20.239967	20.260981	19.87572	21.074766	21.334402	132.07064	92.501932	46.405383	21.78854	27.150993	21.72232	22.401845	22.486152	22.474514	24.361652	75.314352	21.177971	24.708674	23.092138	226.42898	495.60745
Nlrp12	18.260335	953.60184	243.13188	22.777406	18.948084	22.338393	16.202627	17.722183	18.230261	18.643226	20.129243	19.087854	17.425834	21.771889	18.180248	19.416913	21.498083	18.587862	17.706372	19.336762	15.259062	21.761925	21.74501	17.172512	18.703649
Trem1	27.722361	933.341	92.953309	36.733703	31.183487	25.154326	30.880424	33.15365	26.4348	31.63702	39.900276	26.756241	28.110113	30.569392	30.96926	28.820235	27.602604	25.778852	26.443535	107.87006	33.737304	24.799976	25.109588	155.48244	117.32046
Cnr2	110.97834	876.62497	510.65557	860.57637	1386.783	13.651848	24.475231	243.51067	189.01038	202.73047	31.603154	288.92598	55.328759	29.536698	113.69131	51.643472	18.201627	73.580394	37.547854	273.06322	15.352572	45.087848	22.298522	19.185174	171.05497
Il1rn	31.068471	866.13417	543.40414	37.65864	36.472326	33.218563	30.187407	29.223928	27.304143	166.65408	4441.3287	171.35924	65.817851	30.792488	26.302853	54.527342	31.008359	38.519979	28.624695	58.104024	30.9618	31.759358	32.731418	7310.6453	1274.4527

Napsa	743.40242	845.55956	3075.9444	2035.6021	1445.4975	445.614	51.910075	48.205761	41.906451	798.23564	363.24088	709.20615	45.527074	57.659962	40.521556	52.629346	147.84114	110.02657	117.9813	4774.94	763.57588	316.54105	237.3578	1869.9467	3164.9557
Stfa3	14.621422	815.01827	53.91785	12.986166	16.423536	12.254343	13.410651	13.526173	12.886875	13.701033	14.433863	15.615249	20.10559	22.143737	12.848835	251.43987	15.200429	17.062602	14.745085	13.002603	15.020756	13.269808	15.468248	63.759382	134.57193
Lyl1	1200.1258	804.6665	1448.0829	1926.6066	1895.6448	632.3663	34.130368	36.562535	31.919406	312.86851	141.62309	205.07407	92.020997	91.242153	47.011689	58.575329	52.128348	71.760149	41.235535	1753.7414	329.10313	97.986805	52.23516	91.717423	310.2989
Ccno	66.002358	794.56688	46.229817	33.813769	32.193857	39.891641	53.339671	50.795234	46.647425	43.17619	51.980836	42.271368	46.995442	40.555183	43.60968	35.899377	46.652032	35.859223	42.709852	38.036599	62.938947	31.017834	41.44399	39.68067	45.934025
Ikzf1	147.26554	775.26708	149.55559	169.44374	181.43981	151.05578	174.56185	227.35857	152.92512	132.31933	170.71831	139.49271	416.57227	251.2226	385.47293	250.56255	926.70995	1088.4317	748.77862	508.19971	269.44823	298.48522	212.69545	248.02947	184.79241
AF251705	657.72917	745.43829	567.00596	113.75146	101.72788	135.94427	78.143127	106.40584	99.605955	3370.7846	1119.856	3639.7464	76.336519	168.2818	93.794411	77.641853	101.33143	81.271105	72.273121	1955.1136	104.84132	96.316051	88.434282	761.08301	1557.6499
Gdpd3	60.901901	713.31213	71.566507	2869.5042	1244.322	801.36765	31.78282	51.8927	52.268061	2971.3742	649.07003	2568.7652	61.124398	48.213516	67.710794	50.319369	32.51368	53.820296	53.634741	199.90476	5684.3902	103.07278	80.610586	67.116659	99.022685
Tspan32	164.15846	688.03676	927.23175	126.85229	70.530069	16.387156	81.409931	589.56147	250.09923	44.785006	17.065166	25.754542	1196.9815	1729.2964	2442.3248	2282.3141	97.742737	1323.9697	1307.9603	128.56654	13.582744	451.48372	48.306215	79.497242	441.11343
Clec4a2	17.85854	662.22489	413.1777	13.28201	13.33297	18.976666	15.049278	15.466433	17.877108	216.96769	87.629653	135.56873	16.077996	17.414748	15.610385	16.079262	16.574957	16.225461	16.138519	69.205421	14.309693	18.600927	17.045157	39.9754	141.39381

Chst13	43.284362	635.22462	1328.9633	59.231675	35.21244	41.918712	43.95527	51.16406	48.193578	37.902253	28.354557	35.654413	42.420616	32.271235	46.323395	38.814845	40.883942	39.688855	42.31337	59.01689	44.911217	42.653155	43.362928	55.893322	60.908875
AI839979	37.975281	602.49171	39.022521	33.285334	50.640117	24.524471	23.452414	28.063725	20.916222	116.45822	33.731219	50.781108	29.629061	24.369164	23.499384	25.715934	25.129407	24.47102	25.595719	1191.4143	26.062015	30.560832	27.597095	32.115582	131.9742
Rab44	2444.1266	600.26694	805.31522	33.592505	25.083112	32.497365	34.206479	28.367518	30.697041	31.069707	38.313702	43.318521	28.997975	31.61549	32.323372	31.2459	34.026845	28.516205	28.314389	129.08255	26.017656	29.218559	25.043505	53.439672	79.953814
Igj	20.120337	548.1227	16.978829	175.33242	18.752073	13143.332	16.914196	67.82678	54.498998	17.777957	15.921393	16.058413	101.8183	477.20309	31.096666	112.78818	24.830761	16.028132	19.298315	34.683656	23.510221	40.064968	16.537446	36.015041	39.868232
2310005G13Rik	11.864331	504.56924	11.778159	10.164698	13.332443	11.039232	10.347042	11.680373	10.346458	10.555949	14.11744	11.136498	11.707364	10.60196	10.865494	12.054695	12.428267	9.9960739	11.623181	10.327313	10.582449	11.293482	11.83564	10.455548	10.654402
Csf2rb2	8692.4852	489.50575	5685.633	90.34538	26.801349	37.825735	17.099842	19.509591	21.25839	2686.0203	1891.188	3754.4477	18.14911	20.502285	22.117719	19.788759	19.414255	20.164792	48.420948	408.34849	25.712669	21.266372	16.467504	3297.3423	4160.2504
Myb	1015.1723	474.56969	1562.8261	26.897119	47.369321	42.931954	739.27854	235.0213	396.84976	13.849615	14.533773	13.663376	718.17458	95.373379	235.39372	531.03203	435.69041	312.26739	96.506052	28.155547	21.956565	250.59737	164.12576	25.36034	29.268684
Aqp9	210.367	464.50789	486.16133	36.972677	31.232986	38.780567	66.707234	36.677257	95.760788	25.840466	28.063347	31.887075	43.037477	39.753908	40.652396	27.028207	35.97073	174.27151	881.96895	41.591453	32.301991	50.453351	53.967296	253.14382	168.91068
Lime1	95.058366	455.38381	90.922187	149.19204	75.597755	121.54963	648.48786	1332.0196	1953.7146	69.700294	86.00099	68.52935	664.60666	1048.9751	1449.2389	2085.1213	584.44978	1960.7663	1016.2075	100.32592	960.93488	424.69123	352.08476	101.67406	86.157188

Olr1	15.198223	446.00012	1331.1674	12.244655	13.687529	12.592035	16.997222	10.470204	10.029015	10.909206	13.882712	33.914156	11.76279	10.362231	10.470675	16.146571	19.5325	13.107049	11.668991	60.384298	10.630581	10.602561	10.393597	1225.9569	341.82814
Ifi204	10.111703	412.5679	57.806915	10.829249	12.597734	22.160353	11.969869	9.828299	16.078172	511.53106	1385.9287	266.26157	9.1140786	12.619403	10.271614	43.853889	9.3332671	9.9089565	10.049437	1353.1537	8.6516264	17.557276	11.849379	2590.5689	350.64076
Cd5l	36.959255	405.2506	318.9379	34.968744	29.797522	88.882673	24.400128	87.552529	140.0881	7157.3889	1415.8822	5680.2521	57.316878	79.449615	29.291666	28.422568	107.21461	24.609946	32.880684	37.370062	37.204318	60.264	31.582257	53.740041	48.286309
Bank1	50.394494	401.23828	189.32319	10279.768	9441.6079	901.04193	31.075947	147.98137	92.284707	87.485027	42.194631	32.971207	87.855017	99.078861	69.100092	50.085043	30.974805	31.84139	21.336886	143.85223	23.097277	330.47614	60.612125	36.242852	61.407729
Il18bp	82.064478	398.70587	124.76652	78.079988	79.590269	104.27081	67.173298	82.073052	82.192929	370.49546	2546.8453	486.80664	97.578998	131.02528	77.98359	61.943173	98.013582	78.648501	79.618714	98.003669	96.874618	83.688447	75.701331	1520.5067	362.74444
Cd300a	593.88549	349.27534	421.87914	37.216909	37.108222	40.207342	29.858962	35.247465	39.758044	633.87467	131.22784	509.77237	29.870186	41.661069	31.946115	28.304977	33.634909	28.403005	29.218001	849.3472	31.406814	42.046897	35.433966	57.528347	190.93258
C130050O18Rik	32.475861	349.20392	186.7493	29.716212	47.244468	33.342873	23.431075	24.312232	22.433412	78.069266	76.276369	61.63994	29.268348	40.538746	24.46802	22.932715	33.578448	29.650555	27.5301	651.07714	25.281233	27.425449	22.849452	67.161979	164.78501
Treml4	13.979958	325.91563	118.84143	12.12914	13.411546	18.686014	15.825791	32.719702	40.532949	52.246381	104.90099	28.997518	15.587966	23.903761	16.600072	15.705311	13.959695	13.245565	14.929532	1786.837	17.273665	29.483599	13.489864	75.240495	39.164935
Clec4a3	14.503228	318.41395	201.98776	13.148125	22.136252	18.128398	11.523232	18.488737	38.308868	2081.304	719.54752	2025.8304	13.627357	20.867403	13.855716	13.253858	12.839702	13.824607	14.531629	8494.3309	13.757254	20.050381	12.956092	657.23941	1149.9007

Lct	18.028152	300.04028	26.382733	26.246853	37.84305	32.077513	24.94089	21.863016	23.749391	19.182266	19.569854	17.971177	19.657974	15.509894	19.353643	21.572176	18.366102	17.650957	18.368698	17.448185	402.18614	23.504259	28.061991	18.540272	19.766923
Tbxas1	983.58319	277.9876	569.45319	35.846595	52.415767	75.323551	85.291963	69.872328	71.402424	762.66071	636.6513	1590.6889	54.964088	106.86648	68.0353	55.352341	73.082458	58.558321	51.702848	212.89941	75.140548	44.832773	53.494756	486.80001	1164.2254
Irg1	25.41326	250.36129	713.95012	23.678999	20.10293	29.446885	19.859959	26.51054	23.238029	487.87864	10547.216	393.49299	22.786512	23.939195	25.018264	40.102077	26.998911	28.816717	22.735554	25.882072	31.513081	21.469921	20.787073	11465.582	1796.4199
Tlr8	23.909515	248.30723	34.599185	35.114873	34.482314	35.65854	23.549821	25.869686	21.58665	371.11253	228.32545	552.33289	26.951446	31.202702	27.454602	28.736417	27.010875	26.197132	26.075452	301.66043	30.390718	43.844051	28.039098	126.17669	114.89404
Ddx60	14.880436	246.3665	30.62911	22.610012	54.119888	16.889985	20.260602	151.43149	155.39037	275.32753	1789.9376	79.367294	34.721432	47.717501	121.23105	81.275374	15.158283	25.976253	16.577483	27.142045	31.224131	43.397168	22.313088	618.27703	31.991196
Itgax	40.512382	246.26599	267.52756	34.269843	47.363603	38.959254	60.30537	41.938144	144.76047	523.07814	193.69288	703.00088	31.906704	72.146511	30.626581	35.16005	39.8706	53.406087	41.481325	290.3455	44.646864	1331.7978	579.60095	1768.2489	2403.9017
Prss16	32.941157	231.18603	45.955569	177.62476	52.505807	415.61267	72.685407	50.987287	51.480679	51.002762	51.094546	47.656234	49.54088	60.574209	64.473897	55.329639	70.034301	181.05257	56.877632	45.243048	37.622666	68.280584	63.729721	36.724902	45.696182
Tlr7	22.08391	227.67579	72.684383	182.70829	210.00049	71.886092	31.832497	68.379061	69.754291	906.96354	677.3095	769.25781	117.02778	47.217218	59.979851	33.275063	26.036112	25.946189	22.653148	1203.3662	26.605966	43.721214	35.951682	453.73348	192.29991
Cxcl2	15.776792	224.1044	600.09956	17.956416	18.135083	22.129596	14.716227	16.967449	13.893946	149.91904	510.21361	89.19458	41.071132	23.387602	14.66815	68.727531	20.796032	53.331011	74.640703	38.417531	15.314707	20.511208	15.492304	7421.5897	920.01655

2010002M12Rik	11.244737	223.1795	11.982945	9.8809479	11.369162	10.356509	11.865874	13.729946	12.041136	12.01955	15.935339	12.269656	11.787054	11.333138	15.573927	12.460568	12.110905	12.325923	11.426122	11.538565	13.383648	11.095243	10.177022	13.582134	11.613356
Siglec5	19.343929	216.62213	1809.385	23.860215	17.004275	11.605449	11.908723	12.098152	10.856741	203.542	17.9007	102.42625	11.359878	11.283404	12.114806	11.600637	45.699976	12.420232	11.011591	12.967173	10.856968	11.759525	11.563225	71.540358	259.86348
Apoc2	24.578184	215.44866	210.10048	33.272807	43.36671	29.862198	32.347977	23.197202	21.477445	809.11839	190.612	636.36206	24.951843	38.603391	30.680773	30.562283	32.842896	26.020092	29.463526	2257.6033	335.27799	40.816118	30.318928	933.59736	1794.8697
Siglecg	35.279557	201.98585	162.88978	1180.7408	750.29258	233.80791	33.100225	36.701002	32.113115	34.294748	39.594644	36.995494	38.105057	69.083302	36.595614	35.211001	49.746431	36.306309	35.522395	105.23226	39.790476	91.14273	44.544139	133.47843	86.549169
Ctsg	228.61024	197.72152	992.40564	44.11391	29.630507	36.834022	24.853463	25.219425	23.562887	33.928322	33.144758	30.605462	32.413543	31.464301	26.145669	24.818925	29.188168	26.146531	31.601686	192.0632	26.592949	37.629846	39.343344	43.085424	44.879834
Rasal3	70.526445	197.41491	96.561623	84.530735	111.64466	95.046511	114.41442	544.29863	637.7505	47.568324	41.545412	89.10277	727.19629	614.90161	788.40134	582.29782	240.7264	1112.7818	1159.0888	64.960647	548.81928	428.077	467.17503	37.221738	89.266942
Ldhc	19.998706	191.4866	1054.7059	12.456847	12.902622	11.035214	14.861466	14.697367	14.811824	13.433043	14.184908	14.516338	13.804567	15.014994	13.803561	15.23088	12.999988	12.866715	13.110471	14.179356	13.948912	14.965724	12.208446	17.874891	22.360535
Cd79b	28.535519	190.74355	76.267975	11033.668	11520.162	3692.07	65.012897	251.44851	150.6803	42.393226	29.000488	41.516848	105.73312	184.99362	40.319872	119.23994	44.181891	51.085413	33.483453	325.38529	495.0642	221.4399	36.065077	30.039028	30.481103
Ighg2c	19.016824	188.23211	19.842079	355.29674	17.192419	16070.052	16.810806	31.169393	24.19246	19.924954	24.128885	20.961157	64.121826	83.20201	22.162174	36.505502	21.602328	19.285815	20.444436	43.020883	22.629517	26.454698	27.971979	61.211467	65.658431

Jak3	133.16582	183.36369	83.874811	58.067668	64.119371	67.75373	139.49906	156.38248	287.21234	53.242403	93.955526	60.154481	615.91479	444.57532	188.92205	255.5014	946.5747	1230.497	1341.3734	127.83611	723.50142	179.57094	155.29526	206.29314	158.58502
Mcpt8	327.15609	172.31875	4185.935	49.671569	23.323417	26.995949	26.871222	24.35194	25.29711	19.236961	23.415008	24.027586	23.617176	34.73182	24.994551	25.816537	25.056609	21.299233	30.506889	39.207056	34.265678	27.622483	26.085167	42.163397	45.321939
Tnfrsf18	618.2858	171.79662	192.37295	105.57539	165.69625	103.22976	1962.4283	487.645	702.37141	34.461992	33.821028	35.641031	2858.8887	549.11648	939.27512	2755.5957	2446.2245	1853.3715	5209.5371	36.792059	782.20285	754.79974	1023.1487	142.527	152.69111
P2rx1	487.49644	171.17926	1255.1104	33.736065	30.154908	36.901057	36.206934	37.262536	33.848286	28.391854	31.873434	29.911744	32.119258	26.502366	33.575286	30.280506	35.114159	30.165078	31.587955	51.604011	29.477403	35.231264	31.510596	33.974275	33.744849
Klra2	31.258548	169.38893	23.021845	11.615434	13.050315	10.405482	9.9955017	9.8921939	9.7197017	10.607443	25.46814	9.8336387	10.396648	12.253995	10.790727	9.9243095	11.408556	11.307581	11.085951	330.70385	10.285535	10.853694	10.570237	23.785712	19.248777
Zbtbd6	17.24301	169.33599	68.793834	28.068682	32.113197	227.52359	58.709253	12.207506	13.547781	20.127576	15.192734	19.546159	29.019075	15.825632	16.187046	26.525332	26.600029	21.002329	27.40184	24.707603	18.597608	17.450574	43.459466	15.042739	19.08999
Clec4n	99.645565	168.46425	577.71737	18.413859	19.207452	31.957909	17.087053	31.69177	34.740853	501.02789	525.01389	301.83613	16.772462	28.138556	18.087389	17.525807	16.7564	61.104973	20.892604	115.79435	16.395743	23.342898	17.21157	6981.0231	8908.4961
Hal	24.609596	162.12581	22.414881	18.379227	19.088013	23.261654	26.570124	24.13186	26.639295	835.2099	71.616234	307.82889	25.599405	26.950846	26.410776	24.779781	22.034352	34.611954	32.972615	67.288816	31.487861	40.919993	29.362917	31.321663	37.491653
Ighg2b	20.084	156.36831	22.775943	33.335078	23.006288	5183.1779	23.795673	34.653452	26.669323	24.284853	23.299007	26.373364	38.579441	42.961032	29.373566	26.367347	21.318387	22.267065	22.558108	34.151557	23.566663	21.10421	18.965573	47.478733	46.971283

Pld4	35.07275	155.76968	318.32243	983.19021	700.06797	922.69368	26.943966	37.944168	69.044249	1360.4968	1054.6386	1188.004	53.659852	103.00425	35.61382	37.285981	45.133429	37.726126	38.71281	5290.5328	38.216856	89.436647	37.23092	794.39647	1809.6281
Mzb1	80.121768	153.26436	47.753563	2692.2272	1831.5533	12904.115	61.67403	69.275009	63.485494	58.65126	65.742775	59.033129	88.08994	91.265889	75.093512	63.634428	68.30737	62.005729	74.020637	96.670958	81.133035	159.16607	57.435235	123.57382	84.998937
Spns3	731.96561	148.44962	1472.9915	160.329	177.32815	82.287671	56.201921	70.008036	58.698217	61.444703	81.875423	63.538814	59.301282	153.26067	68.412053	64.490263	70.842673	63.524176	95.739327	111.29355	96.965647	77.979585	71.671433	101.96789	89.884733
Lfng	41.897232	146.61212	65.228016	36.804747	31.072265	28.856394	61.271806	78.004318	72.272937	49.903446	39.443448	49.674642	152.72591	60.244908	129.39223	67.573869	197.15881	190.44016	288.37763	62.344798	64.283948	60.32353	63.593198	51.949636	85.31594
Fcrl1	22.174258	146.01742	20.928311	3533.1442	3298.0155	320.31251	27.041437	20.861586	23.126542	111.3218	42.150647	28.883514	88.472313	104.4359	27.611173	193.28132	119.79291	29.343683	27.551659	76.942942	28.954053	56.429031	23.048356	20.736836	19.983883
Ccl4	1195.2013	143.83894	522.92164	107.63019	69.197066	108.81362	4231.1385	128.73364	498.49975	420.5486	2351.2724	453.38052	226.83924	91.151147	84.180471	97.270516	6956.0866	84.461802	68.752264	140.99445	1162.0846	622.97191	812.46243	5071.9296	426.63931
Clec1b	12.417732	141.25924	487.74929	14.512654	18.313252	18.621784	12.516189	17.417681	22.369086	31.437478	24.528426	24.01573	14.181021	20.508682	15.108275	14.092362	12.585676	15.053633	16.062082	207.33226	14.411353	20.524986	16.291703	25.612836	56.475094
Gm9706	39.627939	139.16317	39.499505	24.170752	20.434833	37.472872	60.681018	71.589337	83.821928	76.15299	2013.6661	48.296674	63.821733	41.3212	92.895142	158.33053	33.180683	38.884946	45.089452	44.000959	47.443165	55.001634	51.063654	2322.1291	41.990359
Rnase6	366.32027	138.94584	973.36164	1889.3615	1867.7578	881.30187	10.486689	17.392184	17.690908	20.179381	195.57681	19.16638	12.481549	16.653261	12.987001	11.441078	11.181203	11.576366	9.8971158	3394.0358	9.8488302	78.273903	13.001791	38.0669	298.84937

Hemgn	13.558274	138.17338	40.460894	27.596706	71.251116	15.311766	395.96902	12.232701	15.013791	12.716934	12.026205	12.180026	23.879082	13.053549	13.532245	15.247104	20.450875	110.8197	73.210386	17.274161	14.398509	86.768662	903.35352	14.26315	14.680775
Rcbtb2	126.97163	138.16525	169.53712	83.800982	107.9111	418.50446	44.634716	137.31353	181.82515	896.12502	92.018459	484.04306	91.707529	165.74896	148.95846	134.45013	36.296657	113.51976	268.49592	154.87353	174.49455	130.78337	212.03861	122.36436	746.72065
Cd200r1	434.4482	129.9663	121.63662	14.053062	12.368902	13.533663	15.781705	19.927206	19.684695	435.98458	68.145994	362.01551	28.748024	24.08727	66.966361	84.078289	15.862016	49.989874	470.12715	16.726264	951.03258	16.760686	16.97705	215.23483	623.70935
Itga2b	5982.2521	123.41753	2290.7431	87.392712	71.633289	91.217967	49.474759	61.101842	65.934791	65.830079	61.475835	60.290439	67.597275	55.826291	84.908088	63.114415	52.864636	54.038493	72.282823	145.60328	72.833067	67.976595	56.98123	121.73172	109.38001
Ubash3a	29.161534	123.3982	41.902206	29.931411	25.397151	31.480616	264.84952	267.87434	310.00238	29.028798	23.408448	26.790544	537.12807	439.039	359.09945	408.45771	227.1829	474.37285	563.11612	31.941311	27.703074	107.43423	123.84047	24.550093	25.586872
Emr4	15.228928	119.64645	960.79727	21.57636	24.069324	30.68818	16.119123	36.293263	35.270415	143.95261	16.923651	74.909524	18.852743	22.731819	17.700035	16.934153	14.933448	15.940362	14.10037	3149.4025	17.498785	37.452612	15.50509	479.92213	1228.6916
Gimap3	118.38164	118.30017	58.27469	551.54196	386.97646	152.39868	263.1163	1402.4204	1869.5193	61.381855	62.809749	65.518329	2382.967	3987.0997	1732.7282	1358.6305	1063.452	3463.2232	1958.3199	118.03639	2807.9793	1213.1208	1144.8972	209.61512	124.66295
Prg2	14.436573	113.59637	25141.756	17.896456	13.937675	37.836633	15.874238	17.009046	16.352295	22.147539	21.349915	17.657891	27.346744	18.811453	15.162015	15.098572	19.332466	13.448267	14.333399	19.635768	15.191052	14.320559	17.60819	1421.5993	1522.9992
Tal1	3178.7339	109.67224	425.65673	33.978317	25.250381	35.95294	23.971689	29.157162	27.325722	92.956467	76.232356	83.352454	26.616819	24.007975	24.131775	21.781303	23.637143	24.618022	23.043801	30.349339	24.316377	27.878799	29.768237	145.36442	169.90896

Cd3e	57.629668	109.04975	44.371626	48.237288	49.89843	67.466246	475.82355	1133.7062	2931.7297	54.305602	58.174921	46.461028	1980.6108	1523.7313	1651.9211	1504.6631	1532.0134	2221.5831	1571.7761	79.850248	3367.033	63.889378	64.801373	77.440704	53.009893
Cd72	134.68767	107.17741	206.3974	1368.5504	2533.5147	59.366159	191.83744	893.06785	637.06809	829.33282	3569.6622	877.70966	390.01754	229.51629	315.74395	161.21688	56.359373	266.5907	54.489867	62.961057	58.812659	1431.9394	623.22504	329.63815	134.03729
Trem2	90.273179	106.74796	593.50168	120.98097	87.960821	111.25638	89.630611	110.23974	85.136666	5166.8341	555.55443	4707.227	68.037231	111.73757	92.692237	76.554828	94.028465	81.320156	84.461429	262.03818	74.935176	160.53159	111.68638	809.20871	1836.5843
Pyhin1	14.712181	105.62503	33.338941	2913.772	4536.8409	1170.0577	203.14231	2596.8629	1821.8095	433.28962	4017.004	222.51228	239.96081	2128.5185	2142.8729	1233.4411	22.375656	712.87704	344.64372	2439.6871	459.92314	860.2156	338.31202	4859.7475	320.2275
Gpr35	35.087216	105.19887	101.59847	23.773933	24.51262	19.99396	22.436785	23.678003	22.209795	30.17221	104.46542	25.700653	20.689549	28.161627	21.357098	48.922425	22.822788	21.635102	20.306816	1402.0146	22.427077	24.64877	20.85325	204.75408	189.82683
Cd244	524.32323	103.26668	156.47103	31.890589	25.472866	14.576138	24.48955	18.779333	26.945042	20.064165	23.76655	27.794506	16.178557	18.055128	16.658072	14.38101	16.798369	16.776399	25.448237	571.30611	4046.8398	1764.963	1982.4659	36.526076	72.247921
Fam71b	21.956849	102.47457	16.100565	18.354783	16.512786	25.893038	389.45919	167.24966	89.358868	18.604732	16.847998	21.058128	45.332488	21.298511	35.716016	53.899026	301.18458	86.696347	194.17854	18.770315	68.372811	18.340906	24.793823	21.856388	19.625923
Cd6	51.650458	101.83346	48.649054	56.904436	78.920586	73.623665	750.38588	867.81591	1120.8638	50.095972	60.324868	53.494305	1755.2016	2081.9039	1310.4898	1805.366	2824.0576	1221.8601	291.34633	58.544155	69.285633	53.246631	51.217084	76.034991	79.185217
Ms4a1	20.018293	97.241462	15.22471	12133.27	10095.428	1315.0098	22.290652	44.011111	23.037521	19.455057	16.492116	19.020818	25.714867	73.146885	18.236053	18.397317	18.691613	16.03342	17.074969	46.634861	22.415839	280.5715	17.648528	23.902762	23.555446

H2-DMb2	45.698303	93.61397	45.441347	109.26895	112.91309	37.898648	41.32863	43.400414	40.529727	64.24631	70.98336	65.242879	58.900389	45.268883	39.835718	64.776305	46.458716	68.282816	41.255993	93.529771	49.297888	51.019508	35.054705	986.10761	1171.7879
Klrk1	34.432601	93.111343	58.290144	61.458485	56.051768	53.81068	1568.6413	97.889159	1605.4902	52.930481	1217.2064	52.0846	60.645936	67.896932	68.746677	44.883216	1646.6751	44.374586	41.436249	205.38717	78.251561	2536.1641	1932.5617	516.27217	233.97506
Fcgr1	40.269661	92.232551	103.9517	36.936469	30.795746	37.75456	29.234258	38.23995	41.503553	719.11014	2943.2185	314.72609	40.265526	38.09353	45.313212	37.713949	31.270437	36.972332	42.104699	509.50426	35.114851	36.750288	34.056619	1461.6478	570.47531
Ly6i	50.170688	92.008554	50.889892	46.873498	46.585165	45.22043	49.868994	44.604126	46.299167	75.59244	494.91919	67.022139	46.623101	42.794301	55.034818	47.297769	56.683306	53.420227	50.57044	389.11963	57.765554	44.777031	44.180586	2902.3564	1161.9723
Ms4a4c	12.324781	91.466492	50.213371	260.14481	1890.3584	14.301506	880.75074	1533.5991	3266.1523	238.96738	5316.1747	112.04243	105.00473	292.31116	327.37051	180.57761	48.806095	21.74111	15.573427	4366.7639	13.344581	391.03001	107.22802	2839.3552	44.910762
Ly9	23.647499	90.790967	408.33635	124.4661	121.91892	137.88492	648.62031	1092.6499	1377.0734	1379.0585	1358.4673	1066.7697	638.10159	338.84766	1168.3264	1058.0491	292.98326	573.03537	476.69668	131.88915	46.897182	313.15237	208.56969	654.94438	250.45228
Klrb1a	12.802383	90.605198	15.538566	10.225756	14.37628	10.853641	15.302688	14.909582	14.560539	31.911565	12.738775	21.510477	11.126744	14.780977	11.481536	38.2195	12.713504	11.920216	11.950711	13.25848	64.123204	743.50122	440.34936	15.479809	57.415549
Ctsw	72.878222	88.778485	56.554554	50.658436	33.023534	74.039914	805.21902	3664.1039	7643.5447	39.986307	46.89243	47.070605	2385.7224	1406.2051	818.40515	363.42845	392.53964	1496.6982	206.19339	69.665668	7840.4198	5483.394	5367.1707	64.427007	56.773676
Hist1h1e	13.925979	88.494261	20.451208	144.96518	160.85274	142.77503	51.247952	30.591439	26.737926	13.088684	11.960325	12.127758	32.430653	17.066008	52.584685	44.853093	18.534434	86.869034	73.910122	21.936563	21.716456	38.412053	15.32794	12.708106	12.484501

Spib	23.844578	88.316418	101.11836	2404.2402	2032.6966	24.862864	27.210719	26.940417	25.071602	22.536216	21.815904	22.179304	38.129873	48.909618	22.730471	28.278185	43.000023	25.027072	19.008204	44.380848	31.349693	87.492977	20.452789	152.44362	318.58286
Ighg1	28.433041	87.888601	25.349791	1667.0567	26.895162	19649.66	25.529791	25.596634	29.11278	29.564633	30.128545	29.201135	41.307364	34.179166	27.127031	30.268416	36.5639	26.850643	27.64885	40.776136	25.246853	21.781356	23.620101	23.056718	24.287002
Herc6	53.628581	87.463738	24.490045	56.237696	61.21157	45.738353	88.800462	131.0837	107.99859	158.82212	1734.3048	106.02318	73.908651	64.308405	112.00998	99.331633	78.75565	121.11223	112.7131	95.051756	69.013877	75.288299	98.608799	866.79531	64.328752
Gm20199	37.464472	83.363705	39.577683	803.67863	535.88252	306.45481	46.736344	80.386334	65.271874	38.527753	35.284527	43.966681	33.27505	56.20528	89.746906	71.459601	38.653387	46.677195	43.811399	87.15459	64.208344	603.18215	258.59797	44.279973	41.615773
Cxcr3	36.443921	83.31176	60.180673	530.39606	38.565803	709.15497	408.3477	417.27649	4701.2293	205.72791	44.646509	144.24341	348.87365	4029.2734	157.10241	2944.7037	410.32834	50.589899	45.616878	68.56864	373.07706	2631.8092	1640.975	51.405265	47.620647
A430035B10Rik	40.484229	82.753741	39.428071	26.592372	91.512922	193.67351	15.476119	23.504049	23.631469	26.804377	19.2509	26.412169	21.647847	15.248842	27.063806	25.238132	14.307263	18.063947	16.577981	16.97353	27.672223	25.108142	24.586072	16.619083	21.107512
H2-Eb2	61.235896	81.395827	47.617283	1425.456	1211.3827	452.18969	94.498695	103.06172	98.60026	57.702042	104.2086	73.520933	69.16584	83.133908	86.677834	70.775489	62.088283	58.259014	61.051796	73.093953	113.16561	89.588385	59.482594	223.40018	158.50428
Nmrk1	150.14502	79.781932	124.54013	143.29921	30.784068	78.4906	543.48253	118.05127	151.63332	113.33084	46.191106	79.213807	35.608296	19.405771	64.931699	35.977757	186.62984	133.31951	41.931119	14.579754	137.16936	31.304222	38.054226	33.185938	35.334414
Gpr114	48.252778	78.599306	54.771317	152.5961	72.955453	112.34774	193.6168	1460.949	1650.0266	53.761265	62.325194	61.56949	68.438784	159.82683	76.304476	60.291189	105.08064	318.32469	61.63291	88.536914	1507.9439	299.32149	399.10506	64.384122	79.185096

Cpa3	16771.722	77.981778	9487.6164	61.697515	26.284943	25.0844779	32.204811	30.847573	25.152467	24.616733	25.69846	27.307923	27.168089	23.568404	24.388405	24.453356	44.629069	22.172796	46.348098	31.512117	41.535259	27.8704	23.561411	64.192354	77.091914
Faim3	20.316297	76.91912	21.739138	5201.174	10557.316	92.3478533	106.72896	29.518798	22.39995	20.794572	22.40587	20.574367	234.38728	205.09592	22.768944	92.49716	82.607308	82.321596	322.76629	52.240673	22.488849	231.8561	31.894611	46.431969	29.437353
Ccl3	2169.2425	75.963334	3646.8236	46.892373	17.416375	16.281999	9339.5107	29.810558	119.58421	564.97746	2656.331	282.37507	94.767325	29.90857	17.397787	31.321266	9507.2875	79.971366	17.535804	102.85065	1054.373	1366.8832	828.11028	6548.0941	394.7937
Cd4	63.105549	75.691094	55.147123	68.099177	81.912518	79.938159	51.904019	56.896451	50.678186	58.673309	68.682313	60.516074	368.92241	321.18364	260.74565	351.33297	616.44689	2267.1239	1095.6742	75.273295	59.937096	79.570545	70.151835	75.842095	60.981227
Lck	62.061654	75.302736	48.238997	125.424	171.51929	62.216818	1731.5132	4529.9098	5056.1871	61.535074	84.521889	54.105658	4549.1229	5041.1494	5373.3661	5737.2248	2910.8538	4380.1115	2231.2927	89.679732	5017.4868	3500.7297	3360.93	126.27675	66.604693
Ccr2	19.657091	75.249401	157.9777	15.773326	15.232478	17.184091	103.43986	25.120381	201.83476	49.283845	30.352761	27.04402	43.232593	55.30816	26.727194	43.909918	60.998305	483.56487	3912.703	2955.426	15.766723	652.69509	986.16457	184.31835	1826.1122
Cd7	69.175432	74.357711	94.3607	48.745175	34.055306	50.3568144	78.602602	448.82446	819.53009	42.886239	48.367583	46.590321	141.08085	181.9388	230.75752	87.686205	50.55565	66.970624	54.307883	86.273555	14460.273	888.40401	364.02716	69.562417	59.44795
H2-Ea-ps	67.278962	73.667588	52.348734	66.044547	100.03771	87.49942	61.041971	68.889174	58.872695	1147.2512	812.60185	1141.0577	57.212161	61.706225	61.97789	52.144036	80.658204	52.17873	57.556558	76.661353	68.042303	66.43539	62.467932	82.99428	69.183992
Gpr18	22.792902	71.695601	604.52501	3795.776	3439.3764	521.33917	481.30164	1706.615	1718.7317	58.8843	925.80131	38.852813	645.55639	903.23635	1110.1791	302.52901	1052.4172	1277.1429	41.973831	846.82488	4346.2538	890.22938	357.69353	67.849827	61.389444

Nkg7	48.095889	71.629065	135.10343	25.600475	21.331962	22.027417	3249.3053	2983.4225	7888.4288	22.193711	23.515888	18.906141	499.7435	671.46066	161.242	267.14482	3522.8173	44.525903	87.337316	72.594587	8616.7002	7749.9189	6636.1291	29.22116	25.940735
Lair1	78.889015	71.308571	351.6763	27.725788	19.906101	19.957868	28.484606	82.956119	185.77189	503.37986	434.80544	902.03779	40.884354	23.605212	79.413101	36.865463	18.364171	40.481918	26.273066	272.95853	17.64617	79.664493	66.887211	76.142629	120.94664
Cd19	40.60316	69.8984	40.479136	624.70873	429.65398	104.12649	39.85115	45.141832	44.332218	42.21879	39.264826	41.344736	50.771526	126.26285	56.591429	43.430261	61.57671	45.215081	47.753456	79.027316	56.33996	112.10917	49.928682	86.189187	64.930252
Gm11346	18.093204	69.654077	18.608192	1501.7625	1661.571	122.79347	19.519212	2421.1214	1622.6333	18.120245	16.122595	14.842103	88.652927	927.72463	2477.9391	294.45648	19.934878	139.34495	28.499562	15.58346	17.862406	455.09145	115.76459	12.117141	12.814157
Klrg1	107.45249	67.724958	202.72795	51.411673	27.726746	47.896893	60.438614	82.88832	160.05924	41.971735	60.895353	43.695021	232.19817	982.80257	109.65378	169.70438	76.622084	48.710234	63.219112	63.109283	123.81306	3935.1897	646.80195	55.176822	43.026297
Ccl5	62.170384	66.552983	108.65517	33.322797	39.297683	53.554842	1739.2813	2062.7615	13808.734	653.80924	15297.824	504.89976	195.40391	3547.2791	1188.9214	825.85057	3328.536	97.360471	70.128894	121.21642	19189.026	12686.606	3533.5163	13432.589	5119.6788
BC021614	47.789341	66.038155	38.123718	59.826795	40.381209	64.361287	115.60822	349.09109	537.88757	32.292681	46.320625	38.845995	638.04714	623.88997	539.34104	802.48256	215.14513	445.555	753.6991	70.616755	63.147595	65.166423	53.289812	72.111866	52.953812
Hc	25.422962	65.632509	20.946368	15.797287	27.262292	25.413429	20.558434	18.066313	17.021708	16.992759	18.447678	16.303594	22.22201	24.308013	22.014747	36.638827	27.273654	23.339209	422.32022	21.571328	20.452861	20.301972	18.776687	24.470783	20.911944
Gzma	29.122975	63.532495	23.47609	41.023599	54.459271	61.539451	54.25677	105.46892	132.39777	26.078342	23.018051	25.681032	40.693038	136.17557	117.43741	66.932384	5109.0737	127.18667	7068.9173	119.82196	16768.17	17393.471	14357.772	30.446087	30.691975

Btla	20.554738	63.466798	91.439583	10106.228	11259.768	282.82108	420.11778	1282.4378	1529.2683	18.764625	27.030516	18.290423	1182.6416	3716.2146	1483.5267	3252.4114	2066.0216	1799.8286	163.90177	1156.1343	23.75036	242.58677	23.601641	550.4975	86.330354
Gm15708	26.027777	62.636288	32.547793	38.497083	19.220058	21.084767	20.302245	42.349479	43.075833	30.021812	34.269465	26.979967	84.359439	70.660476	285.59809	35.357327	20.662608	29.07847	93.958078	35.706115	21.946014	26.260047	21.866893	26.59009	26.749664
Ear1	10.509335	62.586668	22212.359	11.659713	11.135856	10.350003	9.796792	8.6108303	9.6013041	11.355136	10.224535	10.208381	16.065847	11.440014	11.03301	9.4869728	15.638484	10.897866	9.1476502	13.272999	9.7666706	12.935861	11.890284	530.1236	486.2065
Il1rl1	7766.6097	62.547811	396.43809	43.17191	33.776512	37.375179	85.601109	39.728006	31.833152	40.918567	44.883085	55.07848	49.815653	74.589414	40.174578	40.890625	64.741735	36.939245	588.02198	31.671453	36.379279	42.909201	49.563025	65.966986	71.040641
Batf3	51.950914	61.806276	135.69807	58.4942	52.323329	66.92552	1180.3649	73.477712	61.573442	149.28695	244.25062	896.06177	98.618957	51.755045	56.676003	52.94736	1737.5425	471.64762	55.164793	275.53234	72.50362	95.866601	74.588311	567.33172	654.84089
Gata1	957.55696	60.506669	1637.7137	41.723934	39.759221	42.839048	32.75378	49.759536	34.390549	31.543596	33.902774	36.062329	197.95894	47.856116	99.370418	42.059372	29.459518	43.743665	65.570906	28.822666	29.163888	38.10083	38.206684	43.841332	47.27082
Pou2af1	11.25753	60.460335	9.6323694	2923.7881	3013.7573	4846.1516	35.99041	166.7016	145.43261	9.989057	9.8763029	10.115545	65.075752	295.22975	112.14925	1171.3675	348.08162	66.051299	11.500371	18.911617	11.952966	76.876997	12.189341	12.083425	11.603911
Gngt2	154.98163	60.38944	61.599818	48.292444	49.424739	25.507015	32.260363	56.167621	61.997385	391.67274	407.29738	211.18533	42.741759	35.290789	45.195333	35.229274	36.886719	80.904586	44.768079	1042.96	51.360847	28.334184	33.842279	392.45271	210.56883
5830411N06Rik	60.566117	60.030223	42.034892	57.422728	59.669169	61.389584	45.900841	57.502722	243.64056	43.029098	54.187647	47.11515	62.431143	88.062171	53.95684	58.681108	55.713377	223.13869	54.127133	61.317197	74.674791	54.933814	53.60044	91.413217	81.149997

Nrp	125.38523	59.574126	56.786299	192.33171	193.25129	199.00745	167.11425	233.88779	172.68206	78.117927	53.492677	88.562223	224.79079	92.843563	246.34792	173.01969	297.62658	444.05625	494.80064	85.369236	98.651872	178.19157	184.98009	76.35556	123.31355
Cd209a	19.855852	58.935885	52.113839	23.816256	26.696223	21.396853	16.360145	18.218418	21.829827	19.748545	17.5215	17.351704	17.996434	18.417334	18.586829	16.913585	22.47898	19.040835	18.994995	726.67463	20.62452	21.863755	18.231188	26.624622	58.338851
A430088P11Rik	39.424524	58.371786	23.825322	52.027669	70.892611	27.786488	44.068725	140.52898	176.74847	32.515806	30.83392	32.914178	41.747652	35.55412	86.07969	66.023368	30.793278	141.2986	72.54556	23.686802	38.248894	35.737169	44.46696	18.257019	20.854708
Folr4	47.780178	56.443238	35.896213	51.467112	105.14789	38.674442	82.620422	118.08385	78.19315	41.708059	42.843235	43.238023	2690.3527	1807.1438	382.10242	2040.8182	325.16846	138.41807	953.83312	49.20573	60.303308	63.599055	48.076802	43.627355	40.120784
Tmem202	18.364646	56.399817	28.746433	10.547551	14.511391	14.229814	15.24485	14.780264	15.769755	63.608397	66.480896	122.74228	15.542057	15.304087	14.027047	12.305584	12.911534	13.595829	13.041252	12.990599	12.589937	13.087818	14.308773	26.588093	22.537745
Trac	46.951663	56.301551	51.042463	45.943123	48.937969	59.215129	3087.5153	7317.5934	7627.4307	43.352974	56.873913	47.227985	5730.4659	4205.1333	9046.2985	10724.954	3330.1497	8812.8047	6048.057	88.05919	5071.6805	155.09801	125.59107	52.20905	50.932507
Klrb1c	52.608077	56.224458	39.040298	59.331066	52.222911	51.197334	49.37586	54.012321	160.18722	45.840702	42.676899	43.913042	51.528138	112.46205	59.088475	106.37438	48.075543	43.56284	44.232899	68.366189	52.217905	6022.3707	4087.1474	61.169245	54.005782
Blk	45.740106	55.740571	36.183987	1032.2335	913.85261	133.07839	40.761487	50.302696	49.461342	38.730849	40.178847	33.897764	58.865947	73.602381	49.239988	52.749342	47.484706	57.254847	40.222183	71.708357	79.144751	80.516394	36.50676	102.12828	75.979665
Prg3	34.30853	54.166298	9426.9276	37.193914	27.318858	40.994104	33.920072	36.212901	34.938592	27.897897	33.819763	27.575483	30.723171	27.115832	34.642752	32.210809	35.386935	28.514581	31.6574	40.545418	39.386804	35.604122	34.91415	111.69267	97.438987

E230029C05Rik	17.926999	53.676084	17.894837	25.404117	17.000563	19.412775	32.165651	21.065949	17.293784	23.37096	25.590055	29.187701	22.571387	18.228772	17.551931	21.228697	24.476937	17.64762	24.884062	293.4915	21.244075	18.210288	14.633303	43.164624	76.619557
Flt3l	404.70276	53.588986	111.2309	13.354002	16.20498	14.900322	60.082897	278.00905	317.48725	58.939787	106.88854	43.911774	300.15709	54.045211	654.57022	242.89394	116.04184	482.37665	1084.4532	36.503809	256.3509	58.234199	108.35327	30.150797	36.055357
Bach2	218.75066	52.744766	32.70363	1264.2279	1459.6676	18.62189	592.63847	1776.7731	927.41733	38.596061	19.007697	41.27762	972.38936	603.77792	1936.5596	186.98685	1154.0241	1470.4751	214.85982	75.528356	24.403132	791.03195	281.79171	17.151869	24.864609
Cst7	5370.8237	52.160807	1177.2401	26.786622	17.520747	31.74581	783.92601	984.66291	2932.6881	39.644137	2388.4547	71.548826	493.07741	1220.9557	189.34646	1606.8317	1728.9104	1564.8994	3707.0592	55.425904	4212.193	1348.3988	1033.2922	445.69412	62.574433
Cma1	22407.81	51.253026	54.24802	39.807942	36.859064	41.989444	32.778058	33.459272	30.059215	28.725678	29.766286	29.703923	32.2026	45.409352	37.454182	34.157563	46.574941	40.56029	42.69676	64.966461	45.891243	953.42046	177.11049	48.836994	37.569159
Lat2	5396.0046	50.807696	650.20288	23.290682	16.538354	20.843996	34.336676	24.408138	30.938464	1563.3397	857.08566	1301.078	33.93385	21.773898	27.218803	39.703787	128.65909	34.864638	146.13857	351.04725	1507.5505	156.98787	329.69269	420.1076	561.03958
Tpsb2	5785.2977	50.74515	44.362505	46.91975	47.006601	49.935016	47.225851	52.861458	44.67892	38.065102	40.400627	41.043994	43.949199	57.123893	48.651564	46.860965	55.306624	46.601174	45.511153	47.305154	62.226544	49.295112	55.620277	60.609053	53.226848
Endou	43.674871	50.401307	35.031902	125.97562	228.17238	1517.6022	43.27761	46.271017	36.736417	42.044358	49.214669	43.620621	41.668096	39.674885	47.540537	44.933275	40.297048	49.757213	38.866157	45.013354	47.669208	41.422988	38.46099	56.227731	45.570854
Fam26f	12.720006	50.337315	17.600061	378.54789	907.02681	187.3029	106.43178	840.46503	998.88953	472.06903	5471.7608	149.71597	222.52548	579.67667	660.45783	332.39864	27.926496	87.508957	22.396326	752.27631	245.90069	720.55079	704.90287	1619.7839	38.841132

Tifab	18.209589	50.126829	48.939406	17.772045	18.959974	23.858626	20.249501	22.216505	21.145434	105.31668	133.87355	184.44322	19.632329	21.827689	18.239187	18.857573	20.668862	26.030156	20.748689	1326.4721	20.752512	22.642066	18.28435	160.65286	597.45792
Ccr3	17.574153	50.049285	872.6824	20.438667	15.530627	17.038795	14.917938	19.250796	23.551081	45.64768	20.04244	28.203327	23.10078	12.690898	13.56933	15.604024	15.434621	19.102566	25.422607	15.930707	17.927159	15.158714	13.212964	23.18576	22.319608
Trbj2-1	34.79814	49.870504	71.933322	44.203853	68.139207	106.67813	693.76691	1770.0513	1475.7045	76.041233	46.895551	59.895992	1151.7504	1115.8108	2931.9459	3064.5029	860.51608	2690.6056	1473.85	79.802366	1140.4287	168.86266	145.59293	30.488817	30.746368
Fam169b	22.533269	49.691033	44.191645	257.10807	266.13269	158.70247	266.27818	545.76436	611.24916	19.685864	22.643886	21.653706	530.27507	545.63097	542.02858	394.39602	182.69828	351.33615	61.711309	24.444658	44.159365	26.042473	24.705992	27.524426	29.73728
Tlr1	12.536452	49.660039	133.50316	2518.186	1526.0873	12.859428	114.20259	1777.4194	758.40904	583.19819	1267.4325	475.68535	476.82603	1206.8718	929.54414	717.83285	31.128653	384.8275	605.34861	456.34853	12.709315	40.302666	15.109202	667.63907	104.81782
Gzmm	44.538675	48.924719	38.241341	39.088324	41.255676	49.997371	66.060638	91.660858	2454.3481	38.415273	38.972284	42.062793	51.502983	77.817115	62.881643	52.054454	40.477818	40.054135	44.634135	46.71945	54.388126	99.653025	67.071518	42.635458	44.786985
Tnfrsf13c	34.446522	48.412156	37.934799	4870.919	4698.4885	1883.1545	54.252745	72.29596	63.508279	37.340481	41.818378	38.548649	57.444018	39.165341	33.952462	50.224652	55.682513	33.896737	33.280019	40.630852	56.545746	161.27547	62.375976	39.365118	31.69261
Cd22	30.427918	48.214668	41.358474	732.56637	644.79865	34.725402	28.675737	33.174057	148.12209	171.81609	105.69091	160.01005	42.102632	60.855988	32.552625	177.07691	29.640613	32.531305	35.318211	84.802576	33.244442	102.79481	35.276958	55.965763	65.832148
Slc18a2	5989.396	48.203824	1819.1451	16.498237	18.05799	11.670805	16.987449	14.745037	12.971009	16.748079	14.104474	12.993848	14.200776	14.703811	14.567288	18.812667	17.266027	15.333397	15.022113	22.956402	16.148174	60.790952	33.187302	17.001082	18.990959

Ccl1	176.7797	47.891753	32.943447	27.372822	26.261258	39.56067	316.93307	36.631684	33.71938	28.563126	39.870536	34.530923	83.476649	67.654403	36.359393	44.82882	1002.5503	35.526541	44.48739	44.2258	31.815046	48.684469	61.126583	41.897282	29.679048
Klrb1f	26.008656	47.680652	150.1111	62.063037	32.865351	19.396102	23.175198	32.055322	80.510157	16.330965	17.333815	17.101483	35.643609	53.85665	36.350007	59.962766	21.038395	116.69183	20.051457	122.24815	49.402741	886.8131	632.5768	39.029526	58.379211
Kcnk13	37.355607	47.462526	139.62993	80.611795	74.297519	44.956165	45.602188	45.80626	43.671761	445.36247	187.03029	380.75594	46.201582	52.81321	41.621392	40.46578	44.156739	45.419475	42.48473	92.872726	55.819888	44.331194	39.297333	175.05583	312.98383
Bcl2	448.05484	47.326394	76.282525	346.79423	271.09907	45.467278	356.63217	871.15212	1543.2519	49.522546	44.425527	61.21393	427.38345	513.41785	974.25819	286.90191	307.59837	1306.9813	1508.5512	129.27693	1344.5426	798.49873	1724.6542	41.235686	46.383345
Msr1	37.180057	47.268629	92.40802	43.774528	44.993377	44.144381	39.247545	40.185059	38.346556	897.0833	1799.4265	611.92706	40.012214	30.551515	38.943313	33.457698	33.540061	36.557214	34.040174	375.58163	35.432638	32.994354	35.502657	876.34616	625.43205
Slfn5	23.578978	47.221192	27.613872	25.560237	26.461246	19.192301	20.873532	36.119326	30.964718	283.84726	761.86616	113.54973	27.762664	25.151405	68.073791	54.636494	24.557807	28.949959	26.325245	82.409599	23.043155	23.794651	18.847615	162.30864	36.053009
Sapcd2	48.218372	47.063823	44.372203	32.298458	33.001467	230.91146	89.905408	33.298036	30.56012	35.420978	35.965436	37.341336	68.566212	39.235372	35.944237	53.690695	86.15503	63.238729	85.632513	38.980408	37.569177	34.125922	68.532905	32.401601	36.565107
Il13	217.68318	46.390598	214.2618	48.394606	47.96939	49.927818	57.113921	45.100626	35.748662	36.449871	40.756265	38.238815	35.743608	37.200025	35.944898	39.519783	86.545676	43.933612	965.36873	33.370225	29.295444	35.036273	32.902307	29.822586	26.536241
A430093F15Rik	22.562133	45.968258	20.496515	24.331191	26.968168	28.964204	398.02878	168.55572	335.32041	24.085979	22.257742	23.27294	937.00297	484.47777	264.52964	1094.8657	903.19	551.20967	243.1169	32.734079	23.048195	26.309722	21.22406	38.089237	32.935994

Mcpt-ps1	2247.1568	45.910296	28.933238	42.266788	39.806983	36.245848	29.50893	29.757666	30.05681	29.549763	32.353314	29.436662	35.559138	36.068769	31.749957	30.1986	37.535731	36.314313	30.791206	34.071927	39.633164	39.074057	39.806816	46.707435	39.096341
Kel	35.643658	45.363931	29.681982	34.672774	39.955729	45.64958	31.523787	33.404904	31.893067	34.347379	36.47354	36.664683	38.130493	25.044817	36.205768	32.425996	31.892165	31.172979	305.59732	34.665038	36.160116	36.393517	33.998693	36.922641	35.002441
Slc9a9	38.19187	45.356115	45.259002	19.407535	22.292448	21.707754	33.610163	94.887193	132.23562	340.70424	27.931542	322.09251	48.3346	94.849183	102.64088	314.6739	24.740377	112.37864	71.699536	86.423298	49.315536	95.782602	109.15111	19.919542	28.479007
Ccr6	37.595282	45.26778	34.643506	2518.8879	1103.7198	97.281526	59.779231	53.715722	51.309691	34.876529	37.550136	37.473514	714.10514	548.0115	71.17213	299.93252	110.95702	293.45075	37.242872	55.408938	66.773034	111.12367	64.062787	70.160803	63.73394
Saa3	122.93872	45.264857	314.51636	30.549079	33.063017	32.666533	40.961044	48.211042	37.050108	684.73906	12239.237	505.73985	43.784317	68.498326	46.330517	44.970219	52.412072	65.077441	40.210544	62.463651	36.974641	39.522436	34.482888	13036.505	3503.6954
Tg	136.23284	45.076672	21.408285	29.190309	21.103381	384.4507	531.57421	23.366856	28.591216	22.518723	21.453695	23.009965	65.825363	30.890044	26.988402	69.445969	332.80675	234.13832	166.25358	24.407692	25.341025	28.290401	25.923421	29.386383	24.61689
2310007L24Rik	30.296794	44.305803	33.5645	32.324117	40.525259	46.944166	26.416573	29.175917	30.804947	28.169178	30.733164	30.877878	45.212917	49.40754	34.755518	30.648116	39.268134	111.93476	33.876366	35.950565	32.739641	31.596676	42.172126	34.026138	32.574967
Zbtb32	30.481324	44.287077	34.589497	77.035134	30.536285	33.786765	1049.2791	49.508376	62.436661	31.403488	57.324993	35.071158	189.84878	64.801419	46.37087	139.48673	1171.4158	104.65704	70.271043	44.0598	32.535703	33.815533	148.55755	31.918591	32.656481
Lacc1	64.219177	43.472721	79.465998	55.999695	48.026191	31.485977	30.725738	27.98714	31.7626	169.73115	1335.3613	189.73254	40.919031	31.437996	27.567543	39.060295	65.75627	39.223985	34.887491	138.6325	46.181824	29.218732	29.090963	1378.8774	518.49002

Ighg3	44.124498	43.28212	30.682472	820.22565	57.399671	15726.311	42.231962	44.811833	44.096379	31.558411	30.212016	28.608417	79.965454	69.062849	43.027649	58.519777	48.252559	40.005766	34.792004	44.831888	33.428532	38.736738	36.432299	32.840209	36.07191
Zap70	37.317645	43.145449	30.847656	33.415301	46.487707	31.199607	830.75265	1264.0793	1609.4247	41.497061	45.294317	41.064252	1536.3745	2088.1278	1436.1385	3164.7828	1002.3317	1696.9731	1767.6848	32.141304	2372.8454	1353.947	948.36084	59.032998	49.323053
Cxcl10	49.525333	43.058601	106.14592	36.424657	35.839914	27.742228	82.569532	42.518346	113.44491	137.82124	9587.3688	56.13216	52.082794	95.612072	32.656711	599.91191	64.405765	41.075823	28.342482	146.8058	28.669205	37.830517	26.710588	11274.991	142.97902
Kmo	29.019163	42.844078	105.01296	766.46944	1641.5449	236.8286	33.026036	29.543713	27.239494	39.749312	43.436062	39.232881	28.076055	40.442957	28.609897	26.104169	28.626002	27.156196	24.055296	142.10307	23.330237	53.712999	25.107879	83.850463	159.73524
Spic	11.925422	42.572139	44.270206	29.532935	21.723779	13.034463	12.105477	18.979825	35.708343	115.21323	292.25907	40.319929	13.237962	19.728337	11.960344	12.180593	14.155123	12.376123	13.418581	47.063077	12.074492	11.440543	11.940328	50.757735	14.368562
Apoa1	26.654148	42.431931	27.352251	23.819708	25.215482	30.916154	28.025145	31.210607	27.352835	31.599081	32.334061	30.548534	31.043493	36.877565	38.829564	35.545153	34.35866	32.002591	34.628661	33.587312	2801.4983	34.172511	32.960073	29.768977	27.062889
Fam129c	37.723258	42.049633	28.263903	1282.7418	1768.4525	41.726146	44.002116	112.9494	115.69084	34.042052	31.800606	36.95924	89.053394	48.715254	85.73548	74.457271	26.53721	46.643824	53.576559	34.368526	100.92841	62.222934	29.205018	53.107582	48.570658
Alox15	31.07075	41.971117	6918.4949	50.881562	28.318187	43.291859	26.91772	36.743342	31.354283	31.728078	34.643783	31.599281	37.228476	30.367926	36.217597	31.688039	29.712722	30.463534	33.803048	37.722118	33.878356	31.083231	32.496229	86.865032	87.845546
Clec4b1	14.348025	41.954337	19.194593	13.181619	12.31123	13.476947	15.477528	15.281305	21.456709	112.50649	14.325294	33.004805	14.382517	15.64243	13.52527	14.267341	14.151862	13.98046	14.513772	126.98844	12.805944	15.31746	15.071718	90.361324	617.72777

Ch25h	35.793527	41.764203	64.025565	29.239277	37.054628	35.269879	28.856652	26.453137	31.173506	32.632509	1588.1722	69.04192	32.797633	24.686937	33.505306	33.765866	27.897319	31.583745	30.892873	28.666893	37.812179	28.646372	25.42497	2015.0764	70.764469
1810011H11Rik	521.61363	41.729718	49.56658	25.494977	25.714275	17.431504	23.749986	27.724834	26.250268	152.88489	49.915903	302.74838	41.966906	44.703556	31.281182	27.232382	21.756812	25.85024	254.25112	40.984567	117.23583	23.703559	23.698297	29.162799	79.049568
Dcstamp	34.805253	41.030646	53.882465	47.78619	46.506835	50.991449	37.157407	36.647249	37.970216	163.57977	95.921485	127.47989	41.353671	39.166546	44.943226	43.328899	37.816362	35.460689	40.676164	46.204771	51.857653	48.848287	42.588556	1153.8964	1087.4398
Bambi-ps1	22.191357	40.90468	50.334102	19.930764	17.427513	17.579716	35.802583	251.56563	65.682897	90.265569	826.55539	45.34748	75.534806	47.627697	540.54377	186.22609	24.768476	161.98526	33.795807	26.753973	33.333211	20.243802	19.715394	288.21483	24.127216
Klk8	755.29872	40.726937	34.473265	51.902929	54.452905	38.117588	707.60606	2127.9116	2665.1126	41.137727	42.555389	38.715058	1430.7764	654.80481	1295.5124	760.10098	390.18069	1123.2926	2510.463	55.637569	1297.508	137.71975	123.69872	42.147855	41.76271
Ido1	25.67837	40.707239	23.048962	52.897577	29.075891	320.05575	26.396412	26.634879	24.870397	23.050493	227.06793	25.084774	23.980788	23.141029	24.885503	24.165352	28.399341	26.807706	24.942042	29.167581	52.220698	29.292194	24.288579	35.112953	31.55922
BC051142	29.940631	40.650443	23.495635	452.7954	82.223323	73.840909	25.958883	32.416511	34.702917	27.56873	39.604741	32.089802	28.557422	70.713534	30.363853	34.621776	36.962322	28.708985	28.22937	38.681776	25.321284	50.813037	39.395236	30.087307	24.674333
Cryba4	46.994121	40.413215	21.555417	19.705145	18.833595	155.04492	23.643096	21.657426	22.721094	33.972374	36.088315	26.800386	20.859754	28.873335	22.88984	20.925717	21.243433	22.858547	22.20835	53.128474	19.916084	22.360845	21.102214	19.503008	19.827605
Tfec	17.492413	40.225598	173.46587	17.697182	18.345899	15.982135	16.284384	19.186213	27.690056	545.28858	129.71866	1731.9441	15.754466	25.809127	16.74553	14.693847	17.373861	16.950819	14.361354	155.18641	15.390762	17.101019	15.848545	721.56493	1073.6016

Ccl17	44.982966	39.74595	127.34176	38.060987	38.900127	37.965247	34.090251	39.593544	34.819392	35.972019	42.432462	37.805282	43.391713	47.741799	39.556218	37.347167	55.192005	38.826468	40.665939	37.201284	49.014918	37.138511	34.929979	7073.2161	5904.9165
Lpxn	3271.7407	39.046692	653.58119	662.67419	626.74992	146.97624	1088.8891	1228.8982	1642.7609	1933.1888	1643.1598	4185.7768	1768.3358	1886.6229	497.7707	2216.0245	1258.4922	2553.018	1718.6877	528.75834	2596.3498	559.51271	947.72769	823.50053	863.9833
Msc	49.964008	38.994348	45.357697	42.411309	49.44565	103.0527	45.676765	43.667639	38.278864	40.116319	32.915792	44.22637	43.159423	54.342602	42.650488	39.510391	228.59082	186.92443	45.122138	61.085406	57.561456	41.341485	44.396099	50.607292	43.650331
4930486L24Rik	303.45496	38.976312	44.481021	37.485952	60.458422	43.742571	128.72626	130.3051	261.37343	59.534523	117.93268	47.069094	102.29493	88.016055	99.963951	57.66071	57.502827	331.67652	1021.5341	42.353376	84.326062	456.61933	385.21363	31.237094	26.852358
Il12rb1	51.733736	38.750208	48.565667	64.940706	56.025737	53.722005	293.02322	75.339243	156.56053	31.452128	365.52882	30.306334	314.4772	240.48813	55.30746	196.27864	472.64475	258.72346	633.20944	29.516197	228.21803	204.36099	531.56385	81.128311	36.647427
Prf1	37.587012	38.339884	45.502189	93.327921	51.890994	66.908182	1588.6223	485.50568	705.17881	57.404328	76.200763	59.553792	62.844371	82.294511	301.20815	64.003522	2451.5251	46.950799	89.495481	38.44874	260.25215	6578.769	5559.9186	41.84375	37.837943
Ms4a4b	11.913761	38.32553	33.31342	17.754674	24.171564	11.325404	8090.2647	12666.17	13146.083	35.698781	70.101345	18.217912	2070.4018	13489.055	10860.367	9573.5992	1038.3093	2918.9624	481.58734	580.82048	11.500267	9371.237	6853.6493	59.165943	18.455155
Irf4	27.53299	38.165699	48.91975	304.84225	340.23816	1641.4141	422.85589	41.413126	36.287743	25.393655	29.518976	94.045859	508.75915	133.829	39.272206	157.95589	1554.5127	317.42992	250.39977	152.64793	29.882588	48.260091	38.078687	448.29209	272.3369
Gp1ba	1491.8415	37.843972	265.60486	22.436781	16.799088	22.237851	21.828736	19.898886	20.176605	26.152642	34.95012	32.524394	19.676843	32.185023	22.149302	23.010089	24.62878	20.848541	27.903051	31.740329	25.739025	27.457194	25.255583	24.951245	22.86611

Il17a	44.036408	37.594282	38.358915	48.385045	53.218328	67.588045	75.848388	53.426046	54.642395	49.380618	51.623175	48.6147	46.189802	31.913301	42.841951	43.500987	57.955364	2316.7836	56.151813	46.838548	40.614298	31.171686	33.729145	68.87716	54.555729
Cyp4a12a	1002.2831	37.041403	46.372766	36.492522	50.297079	49.973073	30.032687	31.729942	30.012683	30.43081	32.146632	41.77046	28.816933	19.271244	27.338308	21.917948	19.582945	24.69252	26.663746	56.074992	47.851589	18.046095	26.937662	66.199142	71.974249
Tpsg1	5318.1363	36.53019	35.233414	23.556832	35.646695	27.558537	35.348367	26.399642	26.4804	25.819705	29.410297	25.053286	34.319449	25.122507	30.877521	30.554875	38.396891	31.346804	35.432999	28.637359	29.926432	32.320913	44.74019	30.043177	30.359911
Gzmb	15938.384	36.355713	124.8604	30.067535	23.134206	35.94291	18487.916	71.286301	198.24307	24.65213	30.466544	24.784189	290.00419	167.11148	44.262716	121.49164	17495.268	301.43109	14381.396	36.919458	18288.137	3679.0376	17092.614	35.170067	29.687998
Tcrg-C4	33.905158	36.130737	33.591366	50.253506	36.75751	33.55499	155.27851	77.552585	248.13183	24.612754	23.048363	25.330822	81.562142	123.23062	47.971871	31.139254	1537.1566	94.858357	111.36826	45.471879	9307.5237	272.67093	280.55511	36.692265	35.396406
Cysltr2	39.510394	36.026896	29.204551	29.522014	33.852477	47.878667	43.98035	52.324908	71.582542	40.927384	263.41385	50.153278	39.354191	56.386756	41.147693	69.163586	33.15443	260.98907	81.757194	26.501668	201.2349	105.1118	124.27215	50.338133	32.359169
Ccl7	1782.1084	35.972317	300.98459	26.368492	20.73934	26.066254	21.818748	24.852008	25.962886	62.850484	2529.6074	212.87222	28.73889	19.520143	31.224556	25.216416	28.438165	23.668593	24.709125	26.740064	30.529223	24.489634	23.644618	850.31095	53.538513
Cep97	55.972354	35.907782	51.260738	55.894778	52.249471	37.887063	75.15888	222.22707	90.601115	41.243348	41.802246	42.667385	119.86832	130.09365	282.27889	139.79429	77.115804	274.27259	94.698095	37.131127	53.829165	93.897676	92.487932	25.186612	29.678724
Il2rb	29.821697	35.823128	31.295677	32.425248	24.213778	36.196754	914.26126	272.11855	2249.9356	28.579472	32.492931	30.467516	1393.7407	539.35419	108.36256	639.55495	2183.262	565.51843	500.17642	28.370176	2747.9719	809.33902	1229.8701	28.495649	25.961772

Tcf7	37.221463	35.694695	48.792324	59.757551	44.791686	50.78945	351.55278	2327.1167	2514.8494	34.821497	35.079579	35.742876	858.83677	1490.5772	3738.5792	2629.3676	280.13121	4004.7653	61.002106	56.117182	268.65403	227.06048	165.92369	58.72069	64.981141
Gpr132	24.585884	35.691791	30.201763	24.844783	32.409567	29.414303	34.312572	44.734448	45.616063	25.284051	33.215472	24.784017	53.883231	35.234399	70.382043	45.687532	262.42614	208.02873	103.21149	42.71294	36.885418	28.457193	26.328052	65.666331	64.926996
Lag3	142.59402	35.52919	53.082999	33.074184	36.059238	31.466295	128.86557	36.932943	52.579813	38.17657	38.387898	35.259231	152.20557	100.76941	37.173702	546.2132	319.42207	115.39815	53.012932	33.0933	1220.5678	46.976674	46.91948	43.102816	36.633894
Fosb	565.6965	35.52877	32.121342	57.21744	33.635585	71.165256	32.682398	51.229994	124.39039	23.028585	24.714414	20.963259	40.008984	25.243287	43.249729	79.0002	54.512374	25.227745	79.576367	64.23754	43.834186	145.26594	28.106038	35.445171	29.530046
Alpk2	59.685746	35.452155	26.759365	123.83241	68.078295	267.00971	68.513699	38.37913	44.709241	31.079469	37.637694	32.144048	46.931289	31.844668	31.543416	36.142636	185.41287	120.05626	43.303657	26.301014	38.468201	31.765128	30.708276	319.0232	78.974997
Itgae	63.063971	35.373901	88.61176	180.98604	74.603232	64.786819	37.726946	1468.6865	152.0091	32.951321	41.062115	29.67859	262.4518	303.81869	47.204118	188.18946	39.088157	59.610279	36.144716	36.549977	10246.833	101.8116	51.947702	40.974612	51.552888
Cd40	35.992155	35.289612	82.81895	1621.4673	1394.4195	57.384764	38.326774	42.618896	38.870873	120.87193	3162.6115	421.13012	99.82623	61.499708	43.354335	40.921918	62.119116	53.21764	43.47333	271.57179	31.371313	55.638935	37.428035	3038.0004	110.99526
Timd4	17.107115	34.227547	16.066945	20.511557	26.672455	25.743015	22.129532	22.313302	25.785095	27.900083	459.62131	22.185031	19.091955	18.356918	17.953416	16.310724	17.462736	17.110881	19.894459	20.066958	21.311698	18.445589	19.821526	20.561907	19.193386
Piwil2	27.601314	33.92571	42.315327	39.743067	24.491751	89.354038	30.451078	19.121275	20.561717	28.163087	29.24841	23.974791	31.413174	25.719938	25.127289	24.709537	36.713288	163.89972	261.44725	25.527282	28.654419	26.568567	35.499112	46.732175	42.964772

9430069I07Rik	27.701848	33.724052	26.194521	27.218721	25.231697	192.72044	26.243677	29.918757	31.599755	24.805357	24.866318	23.689959	32.555206	31.229184	31.091618	32.660639	31.149235	29.945874	32.71014	30.666372	27.741346	32.055165	33.321437	27.990608	25.956319
Ms4a6d	62.250746	33.426907	564.29079	16.87503	11.82657	15.310539	163.44035	182.68309	372.05934	2950.8617	6755.8423	4457.3716	31.854248	90.141788	101.47283	291.48283	23.05316	29.150802	23.960855	1544.1296	13.709795	23.132955	14.903585	3950.326	869.5194
Zfp94	30.854655	33.412872	30.851429	373.37474	327.56231	67.054017	51.490582	67.428812	72.316285	43.82622	32.124941	41.86145	63.90895	48.49474	65.699822	56.725005	36.128675	60.24302	45.241743	25.494139	30.234373	30.402009	39.45765	24.081654	31.103676
Slamf6	33.17327	33.405257	28.913526	331.75599	244.62057	350.60384	48.73965	400.8537	287.57622	50.189305	224.5585	90.798228	236.40592	1060.9846	463.72144	1300.8579	114.12837	125.1627	32.604602	44.583337	66.21847	90.332706	44.45662	155.54818	68.270823
Slamf8	18.990673	33.379519	88.617104	15.258688	19.610057	17.904353	19.055072	26.639124	25.539704	34.393821	474.82709	46.224139	21.136569	18.077671	24.734223	24.152036	16.608589	24.419354	19.537752	649.15069	22.151033	23.080958	19.757114	943.32646	433.18235
Cd163l1	35.708719	32.990868	31.66173	31.072094	32.965979	32.717048	43.076122	49.3279	692.53491	34.613374	34.260414	36.461044	43.396443	65.790981	34.53504	52.544484	42.460737	141.72428	37.133205	31.780294	36.801787	78.614816	77.754712	29.456585	28.255838
Tnfrsf25	25.357896	32.856382	40.704859	44.896936	19.617833	21.437395	40.127983	200.74424	211.51888	25.147007	31.403423	27.935325	502.05112	1142.8623	644.70316	409.828	137.89051	527.43979	91.103428	22.225061	24.392615	95.702478	50.392548	26.607671	26.537983
Mcoln2	39.82468	32.806082	125.82863	279.64458	298.71829	494.43151	158.39473	244.05762	355.58783	690.87269	861.76608	1052.4713	35.397912	56.713323	55.076817	72.630978	52.917972	60.523515	62.825023	23.303257	278.87186	218.62689	241.92135	871.18845	269.15304
Ear11	10.890112	32.314238	15.203495	10.881238	9.8596676	10.574671	13.11112	12.226764	11.857088	12.244847	13.87779	106.45359	10.923881	12.671573	10.286272	11.444347	12.543884	10.893791	11.19021	19.025235	11.1708	11.941399	12.197973	984.11814	913.00264

Fcrla	28.713895	32.238603	51.603501	1105.3112	1236.5092	539.13955	24.675422	24.264371	21.570014	23.609252	21.954197	22.519868	24.242342	25.606892	20.678146	18.597135	22.762024	21.513378	20.831134	24.633237	22.081669	54.216616	22.256054	20.412086	20.571551
Gm4951	20.411759	32.15942	19.774022	20.149051	28.394646	21.01622	24.939264	48.096465	38.099977	118.57602	3474.1424	291.4121	66.429783	63.570576	40.556831	45.904882	39.965902	20.667193	21.641288	21.762261	18.437406	26.826395	26.877132	1701.2396	69.941009
Pax5	27.439506	32.134733	28.786019	400.50964	223.98407	29.178572	34.257212	33.116728	30.402548	25.967326	35.04068	28.928182	26.844083	30.956482	33.694962	33.579754	28.154271	26.238524	28.631332	31.608	32.664357	30.335042	26.710388	35.892722	30.727696
Il27ra	159.10086	32.104693	34.591029	475.78763	603.077	23.027118	183.51316	1016.8818	874.52509	43.24758	35.23266	55.367384	650.91976	1133.8258	1041.4009	1191.5748	288.19046	991.82479	430.36433	41.945019	428.995	458.29307	355.52647	33.335167	41.92698
Il4	593.64129	31.921261	1117.0259	29.707653	29.919823	36.879345	29.184897	23.269731	22.866181	24.784854	34.305328	26.269691	34.078639	42.39688	29.71807	419.76402	26.836532	28.66608	1029.3278	30.522174	31.94671	25.443107	26.009665	30.720291	31.680246
Slc16a5	27.914562	31.877767	28.344767	34.056233	23.086521	178.00395	50.071886	346.93038	200.94644	32.558372	32.021791	31.898975	40.573697	135.60646	543.90992	146.26701	34.605037	31.567338	29.749389	32.26551	37.986762	40.409516	34.300034	28.845475	29.142064
Ccr7	20.281189	31.812484	35.209686	404.42847	494.3129	25.875042	1981.3973	2893.9575	1603.2054	20.7183	74.140585	24.00032	1667.6198	704.18353	3662.5783	402.45787	1571.8895	2227.2667	39.149576	34.681285	20.023782	48.713218	40.203408	3992.8249	3159.7838
Cd96	1068.0044	31.438221	28.668972	34.965467	38.374143	38.632426	350.41814	1490.1981	1167.5052	28.984961	31.071583	29.455474	1177.2705	2179.6131	1235.2036	730.9092	248.4426	1560.5421	233.77475	35.984209	5827.0196	1075.4104	972.06365	32.770209	31.845614
Ceacam15	52.810586	31.296299	37.030485	53.843446	64.837166	42.278957	70.71363	55.961018	49.852902	36.391021	45.211864	38.781395	58.064013	41.660327	44.948793	42.690792	45.795568	43.269937	42.419769	41.331241	44.390641	33.763918	39.752739	421.5759	609.11148

Gimap1	551.20374	31.2759	138.15993	724.56708	661.62052	363.09746	777.72711	1797.9343	1360.0836	21.067355	20.098478	21.735942	994.20258	1675.1401	2562.9481	2614.3417	544.07683	1609.3937	1277.2255	19.887965	1872.6193	1684.7749	1038.0758	26.372671	38.914057
Cxcl9	21.1319	31.183315	20.264952	27.627758	31.363818	26.296586	27.143786	32.553475	35.414861	29.134309	4137.428	26.959496	23.02812	24.967866	23.658421	25.465883	25.170287	26.792795	24.089848	38.511403	23.859306	31.602649	31.422742	1018.035	25.970108
B3gnt5	17.455519	30.736296	23.939901	799.53373	1172.1485	19.183206	55.94555	110.53259	174.09752	22.461678	17.606827	19.740474	43.5388	44.78877	47.873271	71.461604	25.334052	45.015055	17.121681	24.835598	22.553174	259.69033	75.561486	62.737375	30.898116
Epx	13.452943	30.550137	19073.743	25.015143	18.466223	17.232282	16.280011	17.481777	24.353403	18.627882	16.979266	20.938451	20.574661	25.476426	18.613199	15.724866	19.12157	17.033332	16.405658	17.654079	19.538314	28.320792	20.408518	225.84551	214.2217
F7	27.958202	30.528859	154.60301	28.191871	40.445831	25.293588	30.761358	34.616073	30.00762	315.80648	325.48982	547.49986	29.016338	22.143743	31.317653	26.21273	28.539372	24.376227	27.774885	47.484021	35.692556	24.028686	24.267032	2118.8794	2224.9222
Prss30	30.324444	30.402417	29.819884	28.371093	28.348669	37.335534	55.386595	57.430385	59.675795	29.631094	27.128008	30.829573	28.152162	36.278311	26.281573	31.904981	40.213628	81.590997	31.500039	32.497805	38.834595	31.943268	38.757045	34.784691	37.337811
Ninj2	24.317377	30.220407	29.33515	37.925311	41.190308	37.384614	52.020258	67.578424	54.31719	27.658306	27.356363	27.700839	57.665468	37.439344	48.706345	48.649082	65.268627	91.982417	47.362995	28.213925	33.112794	22.747781	31.899927	34.132588	31.550515
Ell3	30.929554	30.190351	28.543571	848.52522	691.43744	29.632709	28.58793	30.389405	29.722977	28.863262	35.326319	28.388467	29.84617	31.729854	30.144345	30.681572	33.622745	31.859905	28.517932	30.883914	35.348554	38.124121	31.677853	39.618199	27.132777
Il7r	57.4977	30.184374	363.00057	29.963286	28.27911	20.4365	601.79347	4855.1972	4923.6222	1902.5186	747.8473	1294.2314	268.8831	3168.6166	3361.581	440.10902	363.19601	4791.5219	1853.2332	25.534549	27.668735	786.57718	144.89201	1740.9886	941.57035

Alpi	25.172958	30.105451	26.306992	35.476235	32.141972	30.200551	29.30443	32.683779	32.193771	28.186099	35.210023	27.155202	30.435444	21.809422	36.676987	34.182399	32.719312	30.4135	29.486978	34.588789	631.10619	24.635366	24.096153	42.098081	37.627644
Pbx4	72.928463	30.095603	38.676173	22.198129	20.55256	25.272379	34.546253	31.577924	39.06801	36.914611	41.02802	32.710519	37.179704	52.756285	38.886586	45.837531	28.079949	66.129152	39.142723	37.674102	29.648932	23.879408	24.809453	20.728633	21.043023
Lef1	28.185534	30.03174	25.707502	28.598645	52.300196	42.258452	366.2845	2184.8482	1151.0345	27.891718	26.777985	33.150652	788.29965	271.88949	2453.416	474.50202	448.28778	2571.2166	538.50258	33.140778	44.053375	238.72209	188.18211	29.219204	28.74499
F10	22.921625	29.962857	484.97267	18.908199	19.462324	19.130027	19.692033	21.690445	20.37816	117.14615	379.53183	346.96234	18.96184	28.367486	22.162891	20.284328	22.324868	24.110378	23.21993	327.91678	19.06833	20.473367	22.560827	2073.9603	1071.245
Spo11	27.300069	29.598498	19.824274	21.192899	22.978392	52.144981	30.213563	83.337892	118.03898	19.673314	22.120209	20.246525	27.635526	71.422729	70.012913	108.24091	21.85042	184.26623	24.38841	21.126647	33.174279	155.05125	52.264583	24.396207	29.285479
Icos	29.420588	29.59809	26.565456	30.224308	29.411014	28.977589	326.54532	254.86185	256.83463	27.915741	30.088567	29.48012	1118.1485	2218.286	349.43501	4084.0239	990.44671	1215.2745	2022.5308	30.214805	38.406045	151.74545	211.35344	53.755722	45.751298
Il1a	34.391651	29.303418	220.15522	20.968056	27.137158	22.103955	36.853283	20.926173	23.372568	50.58737	1079.5628	36.742894	48.474399	18.603288	18.227436	20.807616	358.24978	47.205422	21.44894	21.877443	22.654819	24.14007	23.793255	7186.4032	421.70652
Cd8a	24.992562	29.256738	23.304158	27.018525	25.4172	26.964469	736.24545	2734.0778	1980.6849	24.888733	24.262855	24.941782	30.425555	30.084736	25.591983	24.351177	42.938522	22.927396	24.563798	27.800285	8032.2897	24.668409	24.358091	26.014236	29.447343
Ccl22	38.774431	29.184716	40.619542	27.76971	22.679023	35.386107	35.379111	32.492095	36.640801	33.774347	47.064549	36.659874	37.982219	30.513528	34.550164	32.535119	42.755828	54.817264	39.130761	26.279455	29.975819	27.282599	32.275626	6268.3628	3645.4374

Grap	21.375486	29.177518	45.109554	107.25483	133.7394	51.128757	314.43153	432.1331	344.74571	55.537099	80.806457	60.157169	514.86163	503.54861	770.34182	616.49982	434.39705	683.88886	619.94159	23.304101	86.438499	211.99389	122.92109	22.694649	22.761544
C3ar1	196.37343	29.071986	1532.2306	31.592515	28.615608	24.568648	20.543236	25.394982	24.11777	4230.8868	4123.12	4553.5388	21.601892	21.422265	25.784628	23.750334	23.552738	22.929121	21.929229	30.44958	25.741873	25.147822	21.623709	984.05749	752.87031
Lif	99.84444	29.03768	30.441056	32.164217	37.477599	27.058837	82.47975	29.407411	30.165113	33.311651	38.580125	32.714202	64.720875	37.267871	31.60062	42.522289	104.40727	91.483827	169.85872	31.260092	30.075608	33.043097	36.867863	40.496524	29.336504
Tnfrsf9	376.02753	28.951102	65.670352	29.210714	25.383256	22.569601	1273.4613	42.148703	48.90125	28.871695	30.20913	27.919357	851.12843	119.91899	48.28283	373.576	2099.4278	353.27132	1476.6191	19.640627	544.8507	166.47135	1059.1047	2346.0133	1192.1399
Klrd1	14.624723	28.861884	178.80043	13.276156	14.090244	16.599199	1747.0517	5353.65	8238.1088	12.37575	12.396275	12.021192	77.0253	132.64591	480.36923	26.272701	907.98064	1272.5977	51.361835	62.030306	8832.1306	10289.72	7656.3637	22.517681	70.884781
Csf2	33.19309	28.62278	41.511926	31.281341	28.815093	34.27379	2551.0948	25.901126	115.64829	26.820277	32.072319	29.963432	58.540678	28.166058	32.153252	26.721871	456.53647	70.024612	113.73126	33.16103	87.615302	88.341352	89.265725	31.302568	27.301633
Scn11a	27.925657	28.585943	29.495893	38.393998	40.974294	214.39498	31.455872	32.801864	33.603174	26.600497	31.355018	27.072948	41.002436	34.199082	35.73107	39.24784	29.994086	45.686456	34.809577	37.830018	44.410845	30.580856	33.024575	48.516617	37.319216
Fcer1a	16367.89	28.321534	1912.3825	25.21678	15.240566	16.453015	15.066154	15.629642	14.372971	15.288575	13.286269	14.557766	14.354739	17.310299	13.944878	15.96639	17.851757	17.960095	15.894521	16.767052	15.891175	15.55507	15.88977	18.10477	20.190701
Hpgds	273.87044	28.19188	57.645223	28.588888	43.904578	26.106094	23.501931	31.670023	40.298094	1468.334	469.37892	500.35364	28.099252	23.795721	33.344088	36.397491	26.249857	28.995116	96.180673	24.623535	49.139984	23.211689	23.172077	30.279905	36.987851

Art2b	31.483174	28.073467	25.744993	29.464465	26.166843	26.876349	38.127244	580.44606	198.35667	30.417224	30.381943	33.984113	167.9437	230.33627	368.37546	635.96203	24.786066	66.302258	34.89764	34.410161	289.44606	28.17652	31.807448	24.697527	25.515417
Cd160	22.570806	27.490658	21.437551	27.189264	26.23103	25.374169	163.35311	102.15158	338.41934	23.678223	24.208109	24.506404	49.318226	56.182872	45.276313	104.1035	41.720971	29.197853	29.396192	23.444345	1660.1756	303.29317	172.0901	20.214217	21.956241
Tnfrsf8	23.454196	27.270843	27.281637	30.257747	31.851794	27.727084	34.800005	28.260808	25.478059	32.184482	29.37387	29.06009	32.077774	23.294901	27.236078	27.847657	303.41144	87.570761	70.873417	31.908649	28.915974	27.397957	26.962992	29.921171	27.89057
Il24	26.470112	27.109142	22.276132	32.875795	26.419081	48.18157	40.993241	33.399012	26.959621	29.602978	22.044225	27.563428	41.28451	34.115831	28.554287	26.583837	121.77889	84.421027	341.0176	30.864957	35.128157	23.51589	23.292179	38.463926	36.451354
Spink2	845.73	27.100949	31.507322	21.650859	19.987538	33.256084	39.268571	29.896135	30.869774	28.460643	40.702341	31.301209	37.770263	26.099431	32.717078	36.208841	49.832028	46.251912	44.044344	55.300021	25.745508	20.763501	25.629389	363.56492	417.35424
Ms4a8a	17.304163	26.992762	21.855308	15.053765	20.977653	20.197415	25.033214	19.668219	21.055784	23.38526	32.805623	28.821594	20.5709	20.732679	19.648854	19.896886	22.524019	20.458738	18.815975	531.96414	85.223488	26.098069	19.182827	52.828424	53.183156
Pdcd1lg2	138.01568	26.958978	103.90326	217.76163	39.222966	25.006602	233.86651	27.144891	55.694251	23.527346	132.95517	519.78462	354.24089	69.520762	37.719928	308.58869	716.38929	64.300277	198.97658	34.462151	92.670942	47.282875	59.809152	769.99208	478.23508
Xcl1	41.499099	26.900705	30.490246	22.571899	33.865414	23.592754	6588.5607	121.27776	1565.2375	25.042788	23.625832	24.215992	156.54763	56.777548	53.731954	80.99388	3345.7081	31.369659	29.674902	19.870095	2550.483	565.65124	954.28734	18.494245	20.541234
Zg16	28.895949	26.865873	27.065042	22.768014	21.193094	21.286901	28.280298	29.360324	26.323206	30.536754	34.65536	32.021911	25.942548	40.03337	27.772368	27.395022	29.924214	29.698473	28.530406	29.05438	1830.3625	28.698822	29.721736	27.647695	24.818766

Capn3	75.848584	26.81255	25.551293	24.952929	21.113069	29.390137	32.007954	41.448825	46.690281	24.365542	23.522293	23.121486	369.68849	118.54514	65.57381	127.54813	34.218094	132.47951	30.953309	34.979072	2221.5513	50.473807	54.372582	26.87109	27.514284
Slamf7	21.938071	26.415304	66.532286	216.91739	355.87952	2722.4047	228.06461	45.558011	169.18919	365.28689	2208.0145	255.14663	35.137525	77.371834	35.729189	49.904593	101.24007	38.113888	32.096823	68.600034	279.14227	216.51888	150.04773	1439.6505	177.42756
Aicda	26.452685	26.353638	26.250793	645.07588	23.127177	28.943996	22.491158	23.61925	26.745604	22.724917	30.192432	24.540743	26.874355	34.767453	29.065175	31.62419	39.887241	26.372804	26.161764	30.049796	25.738368	27.32909	27.639068	26.004798	23.501405
Marco	24.091666	26.276635	27.458041	20.853706	22.933586	26.713694	25.538567	28.464993	30.111174	88.323374	4192.3262	72.380629	26.508742	44.932027	26.335015	23.982261	30.538107	23.945169	23.789322	22.356446	22.982977	32.640541	28.509414	1144.9364	172.5871
AI607873	11.210707	26.124418	61.783991	12.026012	14.200302	13.46211	9.5138831	11.066858	13.266567	275.10677	681.32048	87.253082	9.9846263	11.771068	10.270073	9.8060366	9.8972864	11.326452	10.966397	1425.3738	9.3972945	10.744996	11.265948	1787.9267	341.39714
Poln	629.04957	26.109109	92.015667	59.708019	42.353864	45.504537	36.614511	39.683807	43.892808	26.110781	22.878818	20.268173	39.975282	20.493322	28.004609	25.404254	22.998162	26.734697	27.33891	22.244241	27.964421	30.845873	25.307752	24.619991	23.199421
Zfp566	28.700988	26.04118	29.749622	604.33342	609.71779	275.98964	156.27127	225.46794	187.92936	50.332306	21.44011	39.983738	88.33984	166.57486	170.93508	83.044364	70.997346	63.559076	59.173031	35.681421	71.312785	113.43821	71.968495	16.19715	24.344588
Eif2ak4	100.58548	25.907621	101.01765	658.92175	805.63468	234.94325	173.34109	113.18949	112.00176	128.62055	70.976192	126.4658	84.213883	157.64017	105.17592	117.85553	99.20595	103.5221	97.261089	170.04302	105.64151	66.784028	53.093027	37.930973	60.107105
Ccdc62	30.378456	25.464254	17.609843	295.57101	80.463123	28.108602	16.740023	47.244336	58.123669	23.521183	16.693375	17.861834	33.022288	32.598176	48.22685	34.792743	15.247662	24.913467	27.532307	20.44062	21.96938	22.193519	22.142252	15.335389	17.057057

Xkrx	21.611232	25.1319	43.737837	455.14893	468.41129	28.269715	20.712111	137.55881	30.329712	29.128341	35.727183	27.818709	36.796889	41.799241	130.95388	37.320195	24.441007	24.504734	24.0391	19.80412	21.691765	40.754699	31.371244	25.121088	22.857579
Rgs1	7321.0125	25.13015	189.54628	42.501206	24.248562	21.349533	1259.2881	157.0274	610.17867	495.30073	1074.1136	241.46125	2661.9272	651.75705	162.16911	1170.104	3452.4677	1079.941	4557.8674	40.058664	9419.4981	522.82148	230.60732	2510.5802	418.14746
Sit1	23.11283	25.076047	20.314307	73.914574	92.351077	27.955422	137.02406	390.13767	398.08505	26.025867	22.788984	23.764473	409.34175	794.09911	916.60544	521.92782	72.638508	509.70375	328.78876	22.24091	25.213537	26.490414	23.078947	21.409885	22.310411
Cd200r4	2729.3919	24.978007	970.16196	12.688572	15.986773	11.612337	46.55711	224.95348	286.65696	490.53169	759.85626	519.09379	18.098042	42.539784	82.589792	41.287945	11.664799	20.641688	162.09	13.464551	11.90034	664.03018	197.26299	617.38707	964.21698
Pga5	556.80722	24.709014	309.72587	39.155099	31.591472	26.613882	33.758702	28.704406	29.517588	27.073022	24.393802	32.287794	35.347887	35.754086	26.838348	24.514756	35.388297	33.849601	26.124775	34.595841	34.207292	32.386562	38.43686	25.736218	30.681452
Gzmk	29.654603	24.602086	20.373103	18.445134	34.776794	25.041595	38.666586	90.051655	492.07455	18.87292	18.286076	20.399177	22.857691	123.6204	38.500321	276.95525	21.437603	17.45925	18.489093	22.804747	21.204537	51.005898	95.193978	18.60553	18.622447
H2-Ob	168.3422	24.407323	29.007432	2432.8908	2250.1171	82.497672	15.730077	401.85905	230.09403	15.257592	20.851885	15.04324	81.301915	93.921758	288.32035	107.74626	14.907977	74.858813	15.130558	45.558992	13.483546	100.40137	18.301299	76.116328	82.384579
Asgr2	20.442918	24.40125	22.193163	32.042781	27.920555	18.435889	26.079681	35.098398	25.305347	33.873883	30.847549	26.635659	24.140578	41.740428	24.672736	24.627005	21.693957	23.217016	23.4434	27.561739	21.048462	32.474301	29.323404	97.807861	694.29412
Lyzl4	22.567048	24.22448	34.621118	20.376104	34.779882	27.673304	27.16127	25.13895	26.553588	108.03399	27.484103	428.32354	24.612018	25.924896	26.14495	22.389777	30.041241	29.018492	27.226789	22.673557	24.411616	26.957265	24.970796	30.232672	33.09325

Atp6v0d2	149.64575	24.176529	424.77104	25.981357	22.878929	22.277525	19.348854	20.184286	38.680227	3481.4843	270.20948	4778.636	27.314769	28.727677	20.316715	50.706803	28.068799	81.62787	25.211171	16.598182	20.647435	20.538243	18.854424	751.35421	1231.2658
Cysltr1	19.202508	24.158518	33.100196	22.475042	24.763204	20.323147	36.088849	18.05197	16.979947	321.69369	259.64448	201.91466	26.299407	17.429867	17.463112	21.455307	94.796417	1005.001	1921.3936	174.13588	16.011556	20.816199	18.619279	328.68022	484.23083
Klk1b1	17.814053	24.019198	21.515978	14.516485	16.92136	21.892657	13.845684	17.186148	15.557475	20.426488	21.198647	20.949957	18.076516	21.71861	19.210069	20.96968	26.536541	19.806412	20.73348	24.710767	24.998468	21.130294	18.975837	757.47436	982.19646
Cd70	27.026105	23.893957	21.794775	16.044814	19.20154	20.737541	181.08946	22.664346	24.885388	23.839123	24.505238	21.195687	42.64582	30.149633	24.903205	31.11156	800.92268	34.932274	27.161087	20.735925	24.277235	28.363899	26.543856	506.98656	40.326398
Cxcr5	20.332449	23.87842	16.434678	2510.2009	2414.8578	19.727606	201.69787	111.27706	568.20956	17.187155	27.745656	18.626056	228.99698	805.9565	30.798598	3621.171	17.459324	40.79629	16.86544	18.464355	17.535408	41.157625	22.385036	33.684231	17.704959
Cyp11a1	9835.1261	23.816949	5862.6723	40.836808	26.611666	33.158929	24.846076	21.067834	20.802581	23.66592	25.500703	20.789684	77.062817	19.161363	21.248681	23.249612	33.310077	56.967018	5507.2512	18.744231	22.281925	17.921505	20.329765	28.856127	30.3367
Nxpe2	23.165719	23.719502	26.71332	239.76646	263.6175	29.756229	23.599292	28.842871	26.437787	21.269606	25.397735	23.532068	21.609586	23.256501	24.214671	22.274713	25.666394	24.753951	22.513713	26.030415	23.801111	26.024785	24.712597	22.928151	21.859002
Timd2	24.328687	23.528194	20.13486	68.593827	27.479782	268.45373	20.965503	21.744779	21.316471	20.872464	22.019227	21.567001	25.659811	21.686151	23.138923	23.871906	102.17731	127.26394	22.964298	26.459816	26.207917	20.838314	19.813352	24.21555	24.672534
Tnfrsf17	16.22477	23.517121	18.196961	19.204973	21.511491	123.44985	21.397568	19.336547	18.639831	22.63829	16.5761	22.109799	19.339459	19.133125	19.939427	18.366365	18.184572	21.96709	22.11919	20.290134	21.744	24.559603	21.635315	21.131794	21.067457

Ppp3cc	40.580172	23.452339	41.593013	264.68832	246.49704	555.01014	196.87947	235.43092	481.46708	39.68834	32.664886	32.707298	110.56204	111.96096	162.22688	140.37147	176.75932	306.24886	286.89099	18.436476	319.28235	291.9681	372.80226	29.106274	25.386667
Gbp2b	22.100796	23.282074	20.119181	20.668062	28.972551	26.721834	19.622331	22.012333	19.764048	28.839412	2703.4043	26.409501	92.419762	133.14452	25.538924	53.34005	25.699405	18.868066	25.174709	26.128942	28.33062	25.3205	22.627091	188.21321	128.1435
Eomes	41.063056	23.104903	22.656782	20.69023	21.501429	20.663264	1230.571	422.80567	2973.8202	19.327558	21.644299	20.90409	52.064265	77.868172	55.287375	72.191371	89.292871	26.578893	29.483812	19.033252	18.771344	2067.6072	1827.9603	19.440683	19.10392
Gimap5	116.26882	22.742692	29.683006	642.88427	436.23411	57.831112	157.65618	506.04766	482.6541	30.044519	30.890183	34.348925	119.87974	628.06345	382.71509	367.28074	182.19465	151.9063	114.15359	27.489298	326.46444	929.46284	484.29163	21.574704	20.89251
2500002B13Rik	47.457799	22.594616	18.123319	12.626697	12.746599	19.88316	30.686967	16.760515	21.882819	35.951548	47.512433	22.833526	22.719827	12.115568	18.134683	18.104194	16.25534	50.837948	67.507945	23.039367	13.932587	12.409667	13.044523	21.209557	17.273637
Htr2b	21.906543	22.540763	25.6406	36.722816	48.576489	31.608582	21.960615	21.911624	22.816827	299.49663	109.2094	226.5311	25.589989	26.115683	25.191318	25.526461	25.38803	22.263464	23.152095	30.419618	32.274103	26.211279	25.161683	75.031608	33.114683
Il12rb2	35.415723	22.506093	37.548055	23.763039	20.687991	28.277416	87.102251	25.555846	28.394487	25.736823	23.617539	23.415083	27.825356	30.629298	26.879771	28.765716	707.02863	92.238013	25.628172	37.448506	57.575344	68.677278	65.296074	158.8708	77.713465
Gm14047	289.07692	22.46633	24.004157	14.341727	17.941801	13.410218	13.155153	13.348464	12.616073	12.583795	15.582932	12.371374	14.722299	15.613397	12.912632	13.386678	13.158896	11.871007	13.391598	15.056518	14.588131	12.359587	13.303435	35.292509	15.365386
Catsperd	115.34393	22.114629	32.961966	20.100972	18.014927	21.412	26.293089	25.603222	34.847646	23.937823	24.934952	22.680401	35.770877	44.685997	46.258124	65.645942	23.862413	107.99419	198.03421	22.189708	46.30629	66.607532	33.076013	28.150239	28.721464

Lta	25.440719	22.100189	21.527116	83.377587	82.137066	21.532931	2321.6316	143.22561	102.81056	20.528877	33.662365	24.273495	2195.2586	184.11508	239.52569	204.57319	3149.3079	546.92735	53.53906	18.239569	23.374972	31.520401	81.47531	126.16152	24.881557
Pglyrp3	25.756959	22.0758	19.360846	102.85881	55.563665	185.04076	20.048245	30.02274	30.919273	17.644982	28.012841	20.255911	23.330125	37.584081	39.708684	28.639257	39.563902	23.742519	17.082174	26.238141	25.065554	77.770174	47.008002	22.800908	23.065837
Cd8b1	15.681307	22.041827	18.318087	18.028003	16.827216	18.349194	1333.6966	8644.6081	6393.7125	18.231281	22.885796	16.211878	112.03789	31.914209	212.61309	82.554032	36.294819	136.57095	152.4406	25.85997	21.795028	21.595929	20.65666	19.260671	17.598019
Mcpt2	364.00149	21.97352	16.55827	23.527608	16.397958	22.301408	14.708872	18.951288	19.308828	15.012696	13.478183	14.900307	19.666958	17.295857	17.499602	18.522607	19.843708	17.624565	16.724007	22.423146	27.470813	19.836789	19.922671	21.44872	21.810535
Calca	2251.3203	21.865043	22.957857	18.935776	19.548088	24.159408	17.474063	17.223189	17.154007	18.417398	20.630689	19.622778	25.674904	20.628517	19.366038	18.942377	18.272771	18.74455	245.18546	22.518386	21.930115	25.524035	22.902545	24.190949	23.07462
Oosp1	21.954293	21.719758	35.798392	35.311286	25.17201	326.38936	24.635656	25.306425	23.062275	22.503685	19.012933	24.393696	21.879798	22.457984	21.740088	19.393139	21.518124	19.190271	17.991817	21.696923	24.868931	21.843117	25.27156	35.575116	34.387281
Egr2	158.84412	21.678951	709.53617	304.31487	336.70265	39.728895	416.00961	197.10064	78.972844	433.27856	21.69328	2436.3216	464.17362	960.48304	186.29946	1024.2313	393.42554	51.289103	105.35359	21.81545	256.47943	279.97269	635.79937	448.41939	906.55111
Trdc	22.120728	21.66018	68.41639	15.129279	14.867748	20.937055	49.423476	94.418574	185.9075	15.868894	17.2685	21.143029	60.351314	57.443183	92.982069	55.431299	1065.2145	103.1564	130.12549	15.38945	8537.2045	785.20783	775.94676	18.221747	17.97757
Pdcd1	19.186844	21.62923	20.61987	19.644708	19.065815	17.771547	342.38164	31.736276	48.095069	17.83402	23.101345	19.779684	429.91457	712.26598	54.59278	2935.4019	1000.3984	111.497	77.239118	18.459084	24.934081	19.750655	20.512931	18.384957	22.992339

Cxcl11	21.562265	21.603284	19.504565	27.525888	23.263529	22.788764	21.587317	24.901262	19.930633	22.920032	1561.8416	20.165625	20.004359	17.833817	18.480691	20.730838	18.991791	20.628768	17.582648	17.824133	17.582891	19.535406	18.206594	184.93652	16.75746
Cd5	18.988967	21.537072	15.44851	20.047391	22.190413	24.4416	1148.5155	1563.2581	1731.7182	16.726992	15.770954	16.925689	4242.3569	5469.5873	3298.9718	4555.6728	4933.3211	3033.8027	699.15701	20.709424	22.299853	18.626128	17.91043	21.964941	21.736809
Gbp8	37.10982	21.518528	12.147245	757.73657	163.50677	36.97856	197.62077	2643.598	1887.3663	13.226841	1203.6362	24.283146	163.46661	1646.1041	1237.3778	923.55653	120.86445	802.88362	1513.0012	19.537115	1310.2566	1246.748	662.48692	688.09721	148.3745
Pkd2l2	22.46926	21.370599	21.957503	24.892159	25.953609	275.70294	21.940821	22.717033	21.461452	28.222154	32.062098	27.388737	24.166878	20.343577	23.789498	20.853695	22.732178	21.688606	21.047381	22.650249	23.588	21.95039	20.396656	22.065885	23.113925
Cr2	19.967125	21.345753	20.702758	1999.497	1634.6221	51.194162	18.046878	19.753071	19.474583	23.247284	21.699923	24.584546	18.396814	67.193716	24.2471	21.829018	20.848361	21.125295	19.01137	24.636211	18.443419	50.499582	20.47113	18.848281	18.456923
Ptger3	347.06495	21.338368	37.064812	21.254469	19.083958	18.908632	25.006737	18.301592	18.054491	22.857605	20.595187	18.425742	20.495132	18.893202	19.207899	15.262947	42.404951	20.717844	376.07869	16.43867	17.687905	18.845084	45.961283	17.798429	22.720308
Myl10	285.09127	21.238864	406.49119	14.980022	16.914179	15.547728	18.116174	28.838462	20.790788	19.647909	16.92041	17.726546	24.938272	26.775779	87.657089	22.789535	23.505983	50.992747	58.939821	18.533368	17.651765	22.680728	24.61663	23.330264	30.566056
St8sia1	25.484059	21.103069	30.896557	21.197454	22.282536	20.455875	29.708577	99.411933	42.596068	21.872776	23.814121	40.835039	86.489806	42.987954	160.59455	78.481185	28.777415	151.95414	69.066751	22.840873	20.924423	19.643906	20.83486	19.811886	19.772016
6430571L13Rik	28.55398	21.087932	25.204982	21.164149	21.387875	20.96781	35.99819	20.28423	20.657075	22.499071	22.281826	23.558213	59.855201	25.622148	22.695619	24.814408	49.208779	70.519145	115.5006	22.246323	22.384324	19.147049	20.142957	26.115451	24.47181

Il2	19.840134	21.024468	17.433775	18.614674	18.062411	21.940804	75.989257	18.179158	46.667986	19.646654	16.976831	18.574066	84.442651	44.023387	22.57662	72.357253	4622.7172	47.878403	19.764778	23.448033	26.72571	30.964385	20.72745	26.434155	24.025302
Ccr8	14.624672	20.977664	19.463995	16.647874	20.653408	19.614019	19.813403	18.620276	19.326319	17.714207	23.036248	18.505273	384.66006	37.163864	21.963735	50.459065	32.169447	89.047962	518.35793	20.214184	23.614907	31.570353	31.113461	30.27033	23.47499
2010109A12Rik	24.570809	20.974964	31.497614	18.305502	28.823688	46.092186	20.560371	32.700541	35.112505	17.641373	16.638358	16.412538	24.210131	18.958864	30.915546	27.660738	19.167081	55.148133	34.633503	15.889023	16.103303	24.443203	21.64591	15.90123	16.594135
Fam167a	21.46125	20.952509	24.599805	168.78929	206.19592	22.523036	19.347438	17.41838	19.35832	17.174718	18.511715	20.458751	22.100141	24.095497	20.143809	24.898528	18.560192	18.053581	19.919589	19.401326	21.82529	18.538719	16.865259	22.681121	23.152325
4930428O21Rik	22.622478	20.791978	20.909817	20.064008	22.597201	117.72805	25.712355	19.355402	18.846871	20.897387	20.452281	21.437232	21.0363	25.577069	23.526539	28.310963	22.176458	21.765663	25.343604	20.626756	20.832442	25.441955	22.810539	20.744828	19.544884
Cd2	14.327249	20.557349	16.437472	546.90318	998.33044	66.191798	1503.3241	3242.6765	3678.5594	18.904637	19.830207	19.313747	5204.0503	2179.0282	3785.3789	5079.6696	1084.6416	5073.4834	2924.0908	30.115948	18.972762	2814.1935	1324.5495	12.783989	15.798417
Ccr4	20.873065	20.183051	18.556739	21.267319	18.377945	21.233845	28.810906	19.90104	19.946064	16.560995	18.8453	19.503107	92.871864	36.96005	24.122726	78.927164	77.154192	102.90654	65.42764	22.277132	23.353886	24.479452	23.002598	29.517281	25.323379
Cdkn2a	454.76913	20.036838	1136.006	18.157435	25.473629	24.873292	43.746539	21.819112	21.597698	27.747132	26.897911	27.896907	21.775262	25.473462	20.837303	44.275836	61.544057	27.594713	61.304932	22.458595	26.582147	21.486924	21.32393	23.593035	21.693964
Ampd1	23.926397	19.982228	16.908872	24.483843	27.933677	38.447793	17.884776	178.76974	32.727561	17.372884	21.168403	17.986769	35.409044	22.473493	212.46047	22.749052	21.129056	21.432192	24.876847	17.603107	22.700883	23.818907	23.123661	25.177986	23.821187

Plau	179.22607	19.972103	41.922563	17.98567	16.805032	18.727093	16.736909	17.161628	16.378945	182.09404	64.527042	187.78915	25.544383	19.027174	18.977275	18.625401	18.863838	18.202051	18.550557	19.487492	19.924425	17.523916	21.285003	29.546115	29.624872
Itk	202.27543	19.959028	18.572266	17.264639	19.175929	15.642337	673.37442	168.76688	136.23327	15.271969	15.971181	15.837168	118.00061	30.181739	172.73652	113.1833	416.83164	216.40054	331.42982	15.435535	19.203654	19.596533	27.060204	14.066668	13.951729
Cd247	20.577787	19.924964	19.801539	20.740808	23.709695	19.018352	153.43213	257.21133	252.15809	20.603657	20.89932	20.284883	183.69802	55.086761	423.6787	277.30831	55.015762	356.06913	127.48731	19.556733	37.572207	47.105625	37.945297	21.443643	20.123572
Gimap7	18.169773	19.814079	14.938041	2588.6156	1358.8403	241.17539	943.36748	1282.3755	1799.0754	14.89703	14.948096	17.189248	572.9457	1661.1765	1099.2725	2421.1329	247.11635	1560.0782	793.7353	18.666416	6603.7317	978.77702	574.54094	19.128889	18.98658
Reg3b	18.788134	19.732673	18.681581	20.87583	19.69388	18.380406	24.766791	21.588724	20.308336	20.638281	17.722277	22.10074	20.722413	18.602401	20.335737	21.369924	19.54682	19.632615	19.167426	21.234371	397.34267	18.140561	18.197502	25.33342	22.291112
Themis	23.166014	19.698419	18.392442	21.145654	21.986758	19.824192	287.64293	182.79577	190.29105	22.010834	22.136045	22.891976	63.53152	76.345356	150.45503	141.26784	270.88736	691.40987	419.78624	20.278139	58.872599	24.506247	20.366906	18.732104	19.316961
Gm11110	115.34276	19.573259	62.632942	87.202671	47.529753	25.889529	78.768801	68.870388	83.780618	24.883485	99.812878	20.777083	138.26287	102.82785	119.6477	182.48743	50.531354	354.33487	246.13877	30.40454	79.412767	53.160736	103.86661	86.547761	88.009237
Mcoln3	21.216373	19.424363	21.800021	22.932334	26.616518	27.893036	24.695218	51.055482	35.152806	126.42233	20.17192	103.93174	49.696694	22.709655	53.486689	41.534788	17.732711	23.157638	18.710454	17.705861	51.686237	21.708966	19.74944	24.865271	28.675179
Ncr1	25.026691	19.383909	17.521616	17.296352	16.966997	18.030001	17.747824	19.831587	21.554011	16.578103	16.433537	17.584849	21.954508	17.552228	16.274243	18.219351	14.08332	16.239966	16.630593	18.923134	17.201403	846.87101	689.49402	16.133664	15.751518

Mx1	23.153188	19.290199	20.059776	81.915848	90.996131	54.514988	68.245138	81.252972	342.06664	149.14823	5707.6753	47.454644	49.270216	134.34534	42.992324	149.53069	39.905917	32.573339	93.737247	596.49712	17.703523	51.21398	30.303028	4189.4824	674.88845
Cacna1s	22.927404	19.252311	19.646673	55.545569	16.189194	339.51652	53.937001	27.85458	25.558994	18.757175	20.362734	20.116823	33.569859	21.969098	19.429023	108.68787	56.56749	40.557457	21.918256	19.80606	17.623937	24.134734	20.42031	20.732028	20.172505
Cd27	16.339304	19.23796	15.336196	13.882903	16.325437	14.610307	424.03224	1208.2334	1665.9339	16.474604	17.2138	16.049341	559.98845	796.31161	1222.8091	1567.698	214.37581	389.46056	202.60926	12.867675	434.86096	184.99408	110.12712	12.43826	13.206661
Mylk3	76.715562	19.198694	369.26449	22.801987	25.579715	20.187639	14.952111	16.625512	17.491125	19.121012	21.752707	18.36789	18.979156	18.089984	16.423265	16.904397	16.68925	16.26654	16.976408	19.027759	16.891241	16.502145	17.429283	20.388471	20.24171
Tbx21	14.360539	19.112113	16.583941	59.640984	67.407004	21.633514	1142.6078	154.01054	2456.1945	15.114893	15.859617	15.230808	149.8765	585.36991	70.365046	326.41175	1185.3673	20.151435	17.154515	13.307258	786.79411	2215.3384	1006.7377	15.623525	16.301922
Ccr9	16.130576	19.012992	61.13925	17.114489	19.940453	22.556247	17.766732	487.52677	28.754742	17.826898	18.782425	18.029567	41.052335	26.211178	49.18978	38.379554	17.762263	16.198236	15.285761	19.550317	558.1936	16.995716	15.791769	20.120664	24.014435
Ms4a2	3228.4046	18.959799	559.36281	34.723445	23.813341	19.45924	14.978629	14.470562	14.151487	14.20388	16.565017	15.006195	15.384563	15.545225	14.739781	15.463382	14.884783	15.446324	15.396116	16.965978	15.707092	15.453552	15.188129	17.462793	17.475085
Crtam	60.503376	18.856332	20.662911	28.020061	27.022405	18.882513	2172.2076	684.0665	970.3911	24.247457	26.805946	22.287432	54.550789	105.67994	136.01991	97.954882	819.36364	37.784137	24.573654	24.103459	994.88847	612.97238	629.5304	20.382321	17.420009
Ctla4	25.512959	18.853379	19.780978	21.534995	27.520651	78.996458	579.108	70.481044	51.81732	20.253744	27.811174	22.580546	1622.9511	1188.5208	113.80531	2825.0837	1075.6778	4313.8762	387.60686	21.052503	43.613543	30.242809	25.20646	21.269081	20.586019

Mmp13	11.604006	18.851341	494.74524	13.217045	11.704522	12.845664	10.6821	10.77851	10.780177	226.21002	1370.8294	557.82819	10.678082	9.6884386	10.704086	11.092346	9.2755095	14.749581	22.094574	8.2624532	10.268262	10.734465	10.378991	3681.2753	715.29238
Trav12-3	24.923638	18.785845	21.466858	21.148636	15.90401	17.302598	34.369631	63.506226	46.540091	18.895764	20.723219	21.148374	43.287943	16.041999	142.90979	168.75176	32.574236	179.45056	142.35671	21.115751	20.099331	24.365103	27.39076	17.469244	18.045473
Fasl	19.519889	18.707264	14.977166	15.015672	16.029346	17.843248	782.82299	31.082736	358.8382	14.505012	16.718546	14.857929	71.921944	81.00705	87.363529	58.126195	330.57714	30.649787	38.18047	15.863026	2561.1797	675.89345	885.98481	16.2875	16.859231
Tph1	11616.598	18.656345	18.989193	17.679002	14.201016	19.663154	18.197892	20.348068	20.740535	15.464913	19.612095	18.157012	24.145388	21.595367	22.376974	17.498183	29.0198	19.944642	23.594257	24.102046	26.795544	20.288345	22.323012	21.657221	20.642068
Bex6	13.263637	18.578761	24.423128	11.617948	10.194015	10.874608	10.770178	11.1692	11.61363	12.709448	11.359093	15.090354	10.385196	10.58015	10.80958	9.9891547	10.758797	11.26706	9.9672533	186.99194	10.114758	12.619289	10.412164	14.082769	19.410631
Reg1	24.213233	18.572831	19.316711	20.687109	21.904142	19.94147	16.731777	21.503492	17.627232	20.66718	22.771884	20.015008	20.708299	24.349272	20.055533	19.142029	21.868618	21.258592	21.761913	22.918478	708.12852	20.426097	17.056865	21.61943	23.751187
Spef2	17.992287	18.546259	19.108048	19.457548	16.07734	21.009755	32.234676	31.885588	43.120112	21.004558	16.545745	18.774724	22.553928	22.911842	38.57293	19.559927	23.374309	61.544449	43.475948	17.920245	17.248946	21.056874	20.804339	17.707322	18.100025
Apoc3	23.573139	18.537051	27.094241	28.977813	27.445411	25.147634	24.872277	28.974852	32.72934	26.326418	22.158076	23.861212	23.415748	26.293934	25.182596	28.367738	28.262872	26.367821	26.271313	21.191452	805.44568	23.671667	29.821258	20.501694	21.514031
Il5ra	21.421505	18.536181	265.88193	18.255755	43.073594	15.046541	17.79897	20.242145	18.015393	15.742312	14.908924	14.919959	15.775134	15.577902	17.626493	16.338804	16.300098	14.39355	18.321383	16.191806	15.481026	17.528345	15.474198	17.414742	16.37537

Abcc2	20.951169	18.463755	337.95368	20.35982	21.905848	16.756681	22.94661	21.425478	20.015944	24.763559	21.973015	22.478467	18.709221	16.77164	18.679132	21.618761	17.878047	17.478514	19.464191	25.548292	25.526278	18.794551	18.45484	20.608143	20.38656
Skap1	148.33456	18.46284	18.101854	18.434052	16.115752	17.418094	420.01298	2012.3592	2125.4542	17.934174	19.207041	18.94833	1276.5532	1281.5443	2496.4176	2158.5574	280.22925	2897.5192	3375.118	17.110543	1258.243	1147.6025	1718.7001	15.780292	15.254321
Lipn	13.470294	18.401014	20.392011	12.244872	11.232263	14.65739	15.590731	13.274917	15.393565	74.919376	112.70551	564.36906	12.752383	12.665843	13.380979	16.552458	13.787027	12.970206	13.519883	13.089509	13.144154	11.698666	14.18873	23.294702	23.849695
Trbj2-2	20.76995	18.25742	23.200323	29.61194	23.048932	23.712932	365.76453	867.24774	649.45521	26.157548	28.336896	29.388525	658.52581	335.01686	1520.356	1396.5437	211.82747	970.14671	618.00925	20.885581	372.16276	27.200751	33.332919	25.943872	24.502467
A630023P12Rik	17.746229	18.224053	18.577608	147.46669	58.335424	21.00123	25.760008	271.76905	269.80862	18.969324	19.06246	15.620913	441.39527	1928.0704	935.95039	1081.2392	32.752417	1545.5578	282.62241	18.821407	22.093683	21.473911	20.72358	16.169213	16.222366
Cdh17	18.736807	18.110431	308.10389	373.15155	69.378312	49.801085	14.145138	18.714979	17.614719	15.216502	16.876974	14.024065	20.704276	15.598353	18.369883	21.13162	29.985924	72.076366	83.309854	21.567587	204.13857	27.55173	22.606633	36.510112	34.473534
Il12b	16.828346	18.073563	16.944851	19.890661	18.897413	19.259982	16.826894	20.617605	19.168244	17.830393	666.9992	18.075561	18.393616	15.868194	16.923386	17.724689	14.756369	17.42427	18.045056	14.737792	16.300472	17.022766	17.78397	6556.8441	75.93121
Klre1	17.355822	18.043971	19.669749	16.434739	14.574847	14.001488	320.51089	48.605673	989.69728	19.126699	17.462116	16.696607	19.83968	22.599586	26.307004	19.525286	37.532785	18.929746	14.920061	18.495437	23.769764	3241.2062	1949.3662	16.112562	18.015324
Pglyrp2	13.324474	17.975827	21.211185	108.35603	86.150493	15.55644	79.246558	354.164	519.74732	15.86796	17.635064	15.190705	262.49789	426.98452	534.03826	363.26294	28.906446	614.35419	1284.6766	14.531417	398.65432	551.77963	368.64248	15.92647	15.261084

Foxp3	18.810917	17.9751	15.301126	21.373851	31.729626	23.366187	14.813428	20.154144	18.191783	20.828781	18.299741	18.784719	1241.4963	724.38587	51.78598	305.74963	16.63257	20.832071	21.683725	18.52787	18.432134	17.393832	17.30061	19.997459	19.359118
Il2ra	33.434612	17.947048	15.439696	18.52029	17.703393	18.87263	820.96889	16.973175	19.755645	17.4141	18.879031	15.909397	1371.3906	59.749035	35.777964	60.052336	3404.6388	779.4728	2921.6172	14.348857	17.166619	18.279067	28.257526	313.75027	45.307662
Txk	314.07258	17.585032	27.715731	19.224708	28.423617	17.260271	327.00631	655.94357	599.36577	18.481187	20.564052	18.85223	305.72237	156.71506	909.6349	157.47623	24.806107	297.28133	34.988298	17.434166	2114.3043	1362.4254	1758.6202	19.802068	20.217058
Ccl12	22.971778	17.443912	44.34287	14.877769	15.739117	13.854185	15.006728	14.293591	15.35987	28.673687	4231.9178	105.38936	14.865293	14.791558	15.945856	15.830611	16.019678	17.606389	13.614943	13.973751	14.76626	18.037761	17.403848	870.93952	28.502189
Tnfsf4	91.650783	17.366113	37.085909	25.763616	29.132424	19.442337	276.40424	27.045735	36.582113	19.246343	52.650517	17.841144	74.543163	29.442918	23.987773	33.135109	625.37365	124.24205	30.716103	23.049948	25.783339	24.353958	30.103402	735.45759	253.98749
S1pr5	15.218792	17.327289	15.80283	16.962133	15.668811	16.047721	19.741881	31.660561	303.20643	15.531826	16.03229	15.829432	17.857263	120.45334	47.027785	16.31168	18.363617	16.836232	16.77926	769.32144	15.973389	3529.3558	501.24688	14.563041	14.883787
Gpr34	536.30255	17.228795	438.91249	139.97265	15.111556	13.890171	38.610752	240.8318	36.272683	120.58511	9.8327717	33.864391	65.554543	17.110377	135.40508	23.225012	18.517816	63.025809	216.96807	11.984422	1380.6981	18.247137	53.020622	13.261148	65.143052
Gm5547	201.8394	16.984335	40.96112	50.628824	22.941075	554.05693	50.376485	353.10441	440.78928	85.941042	27.732508	50.895497	67.124035	94.674254	203.66541	288.67483	22.360826	365.8481	287.34243	219.23378	156.72755	260.00136	94.12644	18.505419	37.579748
4930426D05Rik	15.522599	16.854196	14.99826	831.11054	491.60513	18.210887	14.327504	15.457699	19.522473	16.691435	15.760746	16.852853	14.831484	15.519697	15.856108	17.168584	16.811147	16.31132	14.43716	16.798771	17.308158	26.76584	15.907827	16.746481	16.706591

Clnk	346.39796	16.80643	18.061828	21.072921	23.696565	17.84493	20.615098	15.879884	36.384293	18.293359	13.846567	16.948827	21.570943	17.639335	18.308746	18.141929	19.045958	17.666034	23.224258	18.253788	863.1326	539.8491	1061.1699	18.578278	18.414916
Nlrc3	93.913297	16.68379	16.883075	373.57563	232.75407	15.407575	116.25347	790.52795	714.23453	40.742966	19.967471	28.190211	188.49572	1029.7782	471.09264	319.46494	58.06568	292.57165	277.05691	16.704317	436.56927	619.26765	488.77648	12.985729	14.088752
Trbv14	19.487416	16.630498	17.06954	21.328614	19.551401	15.935583	273.57853	899.6574	636.81452	15.098234	17.294439	14.87495	214.19513	58.354806	602.12486	408.53015	66.651514	498.44819	293.66601	19.123888	20.159397	17.04054	16.965599	17.058075	17.547158
Cyp3a11	16.896641	16.553737	14.413277	20.947781	25.016259	24.855684	11.969972	14.784693	13.755722	16.858957	14.688736	17.323849	18.091947	14.78236	16.034488	15.72006	15.940031	16.385186	12.49955	18.236829	1037.2677	12.564986	14.09731	43.434379	32.75707
P2ry14	1368.9251	16.510095	2670.2026	17.083201	15.479007	50.90045	22.324014	18.639806	19.585288	417.34579	1220.8472	261.60503	20.457481	17.088246	34.052646	16.985624	95.361755	42.398107	541.59524	19.203191	14.73619	215.44004	1596.2186	3097.0219	1024.7664
Khdc1b	13.071945	16.396528	14.172594	30.533372	17.013404	24.11147	26.80117	15.813265	15.632249	16.966538	11.278938	13.374592	15.435732	17.760098	20.78338	21.057122	14.724456	19.773052	12.047042	20.839164	21.972741	1364.82	511.40231	31.635422	24.626585
Trat1	15.991604	16.142103	17.368597	16.549144	14.860104	16.384975	17.297033	98.587794	44.545609	16.13356	14.628653	16.287586	129.1837	235.66565	597.11764	215.98937	18.885135	102.47468	167.91503	13.647855	93.407859	19.874199	16.36659	14.719112	15.383574
Pth	16.456177	16.082259	14.617695	14.850374	13.831635	16.954703	14.173459	14.79413	14.488649	17.376128	15.806397	14.881847	15.613372	11.699766	12.852609	13.998314	16.063308	15.034771	1662.6284	14.841493	15.441336	13.010654	13.875801	15.432598	14.53683
Kynu	16.685956	16.071575	24.531772	370.43799	250.81796	17.350376	18.903654	18.115163	16.953507	24.833768	384.92924	37.552162	31.550891	15.541496	17.333675	16.846802	15.340691	16.269219	13.737353	31.314337	15.13405	16.461716	14.844731	397.31673	305.42387

Gpr171	878.08328	16.068909	124.26653	202.63534	248.00953	80.502017	1044.9538	713.72948	824.24819	12.553636	12.918159	12.242113	174.98634	181.49619	654.75394	471.21117	1379.7124	1343.3605	1652.8445	13.86942	2390.7545	861.77322	1585.0184	153.70993	202.88033
Cd28	17.857683	16.010799	66.319346	14.307031	14.607893	746.56591	782.50101	901.94076	1782.7934	713.2474	15.542644	399.58133	894.92886	2617.9937	1550.5256	2959.5493	904.18547	2569.6121	1439.2301	16.199257	15.855497	345.82723	363.20385	25.376838	98.901781
Havcr2	2038.3506	15.916346	124.52886	18.918338	16.176075	16.063883	112.60647	20.226949	19.894652	116.48367	51.624134	162.09883	35.449191	25.386166	18.401064	22.439273	259.25494	24.698354	51.764844	220.69272	17.335229	16.095088	17.741351	18.665458	25.731919
Lax1	13.210119	15.908314	13.398211	28.028785	21.624718	34.826922	29.162081	129.78845	368.48092	13.566674	14.443776	14.374133	77.821684	73.290744	81.004285	239.05172	18.606814	76.797699	28.281225	11.431398	74.179944	188.37964	182.81543	12.365777	12.400951
Fabp1	15.952591	15.773511	15.649434	12.657176	14.307757	13.931732	16.575107	15.999839	16.944876	13.281296	15.395071	14.567757	15.133878	15.241111	14.839364	15.54748	16.149459	16.962476	16.762921	15.298615	1025.1272	15.010213	15.824779	15.44199	15.873952
Dppa3	20.450295	15.710493	34.313227	13.784429	17.150441	13.555571	16.0962	16.546995	16.928412	94.379901	71.082965	56.285099	20.166056	15.639371	17.108586	20.161857	16.099812	18.754975	19.785021	17.88713	13.800657	26.526987	19.948763	16.183925	22.637203
Il10	13.707357	15.705612	17.028249	15.204521	12.768029	20.193115	22.532341	17.549732	15.892919	29.950941	228.24878	34.556008	35.158621	15.771869	14.734681	132.61454	130.56902	26.182562	2249.2412	12.32419	15.068392	13.480336	11.874721	194.46003	14.672073
Klk1b11	16.272666	15.566137	85.393204	12.691831	13.001139	13.112456	16.012872	18.563995	17.372881	23.697519	19.164455	24.158704	17.472597	37.935485	21.952268	27.761162	17.469558	19.225398	17.204825	16.17848	18.982026	18.670613	15.862787	2018.2029	3311.111
Il5	18.238793	15.411515	16.529479	15.510331	15.729902	16.311958	15.045043	15.14252	14.92273	15.345637	14.125967	14.304013	14.569339	15.470035	16.34326	14.901902	14.150461	17.291395	1148.9366	15.229441	15.785368	16.074977	14.739528	15.291262	15.636624

Klra7	12.22499	15.301956	12.120988	12.541763	12.279966	12.335626	849.68446	30.737211	2321.1963	12.109099	11.988049	11.960199	15.307347	10.973693	11.726299	13.144005	59.022873	11.382739	11.961991	13.302586	12.101793	5190.7408	4402.1447	13.470343	12.422468
1810073O08Rik	18.950573	15.052556	16.680964	21.507235	23.636635	18.047109	23.839644	18.716854	17.96959	19.538892	17.360534	18.151805	31.574631	14.932455	17.762662	25.51822	14.944206	47.821041	18.92431	14.302133	14.221741	14.336726	14.776956	16.964429	21.047508
Trbv29	13.616832	14.970912	15.83472	14.228675	14.459638	12.985093	226.54379	630.69818	397.39	13.632033	15.038755	15.372491	94.407623	46.832984	244.04652	222.92686	39.372913	321.89471	91.743024	13.312102	39.430185	15.759883	15.481403	12.196466	12.932894
Art2a-ps	15.412074	14.837883	13.438593	15.906497	13.07439	14.066011	13.194461	13.154162	14.421934	17.832446	15.411022	17.08191	26.609015	18.194093	19.936342	392.40963	13.520001	14.317315	17.227395	14.701695	764.07434	12.887682	12.927893	14.722787	16.290558
Gm8369	13.315771	14.753817	9.8307614	828.12634	1606.5165	15.748335	410.19961	631.87408	536.03622	17.139405	69.616999	13.494174	178.79376	357.97545	353.27404	709.23178	251.74073	165.72788	39.69967	46.586052	11.512557	71.707173	24.401203	20.011923	11.419395
Klra5	15.468427	14.629108	14.438359	19.857076	29.969633	23.802341	64.943451	14.892076	117.27121	16.169128	15.799189	17.881707	16.896721	13.241552	15.380093	14.885041	268.5696	14.920599	23.114653	15.908209	5275.0478	183.35539	187.49147	20.343052	19.271185
Il3	25.714446	14.621761	13.105994	14.337564	15.355752	16.678694	569.90477	13.268173	13.885943	12.174666	11.519578	12.73555	23.33143	14.913753	14.625592	13.290851	1835.8266	13.229523	11.796552	13.063688	15.06357	13.825652	16.061204	14.590984	13.704669
F9	14.796819	14.407749	15.696054	37.92855	45.233347	163.52736	13.986571	14.616003	15.979005	27.638951	20.887866	22.155071	16.084535	14.815037	16.05055	15.093734	18.010913	14.24625	12.894395	18.166771	17.060265	17.699612	15.266591	37.572473	34.342751
Ifng	14.335018	14.258713	14.775922	16.808825	24.317653	18.030014	15223.804	34.194022	288.99385	14.316084	16.50593	13.962844	54.163657	386.09019	48.14667	701.14829	11465.428	85.093281	19.672873	12.979489	27.780479	2741.3438	1322.9745	13.010651	12.498287

Tnfsf11	14.460759	14.246971	15.18181	17.243082	17.93346	14.79404	585.53704	17.250317	24.38072	15.226175	14.931055	15.310971	358.97418	191.9975	43.274776	983.96556	1480.5774	143.5297	101.50941	12.012727	12.63115	15.7275	29.683875	13.023252	13.485125
Ddx43	30.246236	14.239313	13.165208	16.775345	15.951258	16.788475	74.105122	63.154083	215.15374	19.402648	18.227488	16.483762	78.318065	110.5046	48.370533	156.79015	14.299661	14.443565	18.842115	15.625556	460.03704	313.7962	199.83461	15.691001	17.382296
Plac1l	13.626651	13.91174	14.736425	18.118158	15.478859	111.5004	12.701435	13.076791	12.468234	13.191551	13.337248	14.114323	12.530929	12.494327	15.304446	12.755276	13.127124	12.739587	14.109012	14.73518	16.022183	17.382363	14.034061	15.895818	15.403922
Klrc1	11.780419	13.896123	11.800904	11.208835	12.795422	12.425836	415.97076	16.220739	248.79042	12.733891	14.652451	12.200161	15.995223	12.130951	13.228776	14.976372	415.91492	33.4304	14.381418	13.323243	21.243442	33.433532	28.239454	13.225644	13.480163
Mucl1	14.55748	13.854124	12.551343	10.081503	11.40983	11.505415	12.743199	13.752167	13.234433	12.216398	13.878078	13.944374	14.302402	16.08964	13.461137	13.516617	12.434599	13.174254	13.456816	14.211168	11.966531	14.147833	13.167211	310.34529	293.98524
Trbv5	13.199145	13.830367	12.278784	12.153416	14.94563	13.242727	217.99707	619.09977	387.61884	13.063112	12.566333	14.229355	729.33232	160.33669	2045.514	1792.5671	199.96788	1397.308	1075.0597	11.985786	311.81601	13.722632	14.941528	12.871487	13.200118
Cd3g	13.203485	13.806092	13.107546	14.202284	13.84484	11.815965	1967.0873	7054.1791	7570.6178	12.269857	13.875262	11.849607	2567.8971	2351.3656	8137.8997	8810.8355	2254.8052	8191.8954	7311.2013	18.229834	14615.241	59.281232	43.760811	11.285432	11.754785
Mmp12	26.633851	13.586384	540.0487	15.175673	13.686839	14.105537	14.210802	14.466004	15.252087	2645.032	812.42854	2836.0348	14.528127	13.190981	14.917734	15.307857	13.42339	136.63402	98.074871	12.681951	13.164132	17.243291	16.686894	5286.5071	6282.3889
Cd226	11.781276	13.523277	79.88461	12.009179	13.501266	12.679841	159.15102	737.9364	417.9014	12.161067	11.884094	11.643506	91.443393	283.95742	212.98271	113.06842	61.565644	151.01876	84.952872	18.432374	261.76558	424.05659	253.24388	25.648754	18.576996

Tktl1	26.709918	13.359876	13.083368	21.003876	16.457963	116.29557	11.913546	13.048002	17.137058	12.134328	12.679744	12.753143	16.161323	28.71269	16.615328	24.278618	13.321256	14.352869	188.68553	13.170807	13.097075	14.81256	12.380744	12.936251	12.993361
Cxcr6	14.019923	13.346509	22.747629	13.445386	12.684214	14.93598	220.11919	1259.557	1455.835	13.893026	15.248046	14.706435	71.38634	343.07787	122.6614	192.96399	197.41497	1329.4366	4474.009	12.035989	3164.6991	38.715132	136.06546	12.616781	12.941222
Gzmg	11.228406	13.221457	11.238571	13.267614	12.855642	14.353111	11.563208	11.419583	11.058519	11.048058	10.804529	11.031558	11.764072	14.483059	11.895339	11.432694	29.347196	13.62008	605.65571	12.334331	12.460921	12.379336	12.688658	12.441857	12.505997
Sema3d	15.80685	13.188587	14.38304	17.379272	17.749541	17.32848	13.494071	15.726241	15.174268	13.959687	14.71587	14.202515	19.364313	15.463359	14.887138	14.878652	15.919077	35.45249	16.207287	13.755927	14.052223	14.594367	14.408748	14.321293	14.297898
Il21	14.608167	13.026565	13.329378	14.487505	22.836703	15.758727	17.541389	15.119554	16.440546	12.780586	12.863283	13.314476	21.672067	335.66964	13.629085	1453.8168	376.50416	2988.5579	23.852702	13.171381	13.005767	12.453217	13.548177	13.967959	14.14354
Khdc1a	10.808574	12.961209	11.207659	13.618424	12.466881	13.377025	16.151745	11.210901	10.232489	11.869816	14.39756	12.048589	29.260963	23.428662	12.440503	11.998752	13.03183	12.058703	10.65326	19.205234	15.779373	354.41755	119.61941	18.93217	16.884826
BC030307	12.627314	12.945985	11.702735	11.510365	12.523751	83.128056	16.176972	14.451597	14.289392	12.668336	12.102824	12.480289	13.555324	14.974176	15.401203	12.262889	13.670944	13.817637	14.265619	13.876448	12.20056	12.169202	11.477601	11.845068	11.453939
1110032F04Rik	12.47533	12.884442	18.956351	11.75591	15.289385	13.524361	388.19558	28.322203	46.632453	11.712094	18.812314	12.484866	375.5877	23.811904	165.64323	44.21941	404.11788	102.44262	17.151665	10.84364	14.535972	12.911577	31.724507	31.564525	15.044649
Cd200r3	936.26156	12.726165	154.94718	17.427153	12.172832	11.364649	11.658321	11.904942	11.179367	11.898599	12.242624	12.095598	11.889751	12.703515	17.36534	12.320417	11.463297	12.973248	137.65521	11.243977	11.647092	11.792186	11.686303	14.367594	18.050815

Ambn	14.153984	12.726078	13.378733	12.108703	16.620577	16.268968	13.619305	14.302234	13.262555	17.588121	16.456728	17.039647	14.648962	15.523599	13.633173	14.093836	13.983093	14.009636	113.50073	12.513884	13.795774	13.529007	13.520968	13.14666	13.140353
Il6	2266.7642	12.679228	1981.8223	21.298045	11.637017	14.497145	11.915943	9.6583924	9.6978146	11.551194	1316.8492	10.901481	12.025643	10.187517	9.8447758	18.645299	13.952935	12.631659	14.737964	9.9796049	10.940808	11.290601	10.572952	9324.383	102.37709
Ahrr	418.48046	12.521974	85.013024	16.427633	15.829447	23.546315	17.630378	15.214603	16.732168	275.71695	192.52549	507.62599	18.437655	13.577496	15.5716	14.075369	27.483975	35.156477	36.502916	20.509731	178.91201	12.912591	145.47092	311.0157	543.76051
Klra8	15.979265	12.517223	11.331079	12.036783	12.200559	10.129219	18.191349	11.901884	256.8079	11.14439	12.585953	11.684866	13.266431	20.90215	12.04778	11.409114	12.070398	11.629206	11.486606	27.616154	11.782043	10361.559	5190.1901	11.342396	11.379761
2010106E10Rik	12.435715	12.406728	12.79981	13.755338	11.427274	12.834827	13.554425	14.832378	14.312405	11.431878	10.743458	11.116158	12.20744	11.502507	12.680813	13.076876	10.23312	12.976331	14.367184	11.145406	255.66316	12.330001	12.274277	10.899086	11.052706
Htra4	13.138532	12.100633	12.283521	12.906985	13.018226	12.152942	14.031892	12.86348	12.333606	17.659726	24.065602	16.106077	12.885517	14.412018	12.925307	12.845642	13.669895	12.744849	12.878906	11.350285	12.071965	13.080805	14.322064	1004.3505	15.555633
Serpinb7	10.974679	12.020513	11.001625	20.425771	52.590026	97.900338	10.309002	10.446318	10.444069	10.937132	10.201026	10.837949	12.592811	11.617777	11.539741	10.70375	11.882576	9.8437948	10.257662	12.993162	13.442035	12.997483	13.944142	40.01611	13.867045
Sh2d1a	13.650779	11.94528	9.4823836	11.646592	12.220961	11.161438	1584.5327	688.12092	1727.4651	11.530924	11.809378	10.730792	476.72412	492.06863	929.43184	3977.4282	280.21203	1388.0453	235.80464	9.2535479	14.342076	649.75167	567.61909	9.6443266	9.7421534
Slc15a1	13.885538	11.880284	12.579584	18.909032	12.731832	13.451541	12.735696	12.009667	12.301581	14.428894	11.224432	13.323717	13.128892	12.38209	17.84381	13.168467	16.239923	33.268342	13.75953	12.260094	69.384739	12.571248	13.459683	12.727689	13.863094

A430108G06Rik	14.283952	11.766876	19.875919	12.685244	13.210112	14.035514	13.167298	12.787522	13.135561	64.721742	16.222795	35.211444	12.012612	10.523125	13.209933	12.998078	13.660493	12.770551	13.508242	11.649985	13.187297	11.483595	10.57939	13.521549	14.556651
Klrb1b	10.899904	11.705855	21.719632	12.365695	12.049793	11.175775	11.572805	10.610132	10.743186	11.409394	11.98148	11.712243	14.652363	12.19684	11.165423	11.352964	11.036387	10.630028	11.405929	11.247723	11.445616	223.38612	262.49849	22.251312	27.953164
1700061F12Rik	11.603567	11.426739	10.468148	12.468588	10.498051	11.260686	10.864237	10.732806	9.9633521	9.8476218	10.826078	10.51821	10.909131	12.281992	9.79629	10.636288	10.332771	9.7789472	398.47679	10.708361	11.077764	11.038402	10.804574	10.62623	10.821742
Sval1	12.825088	11.300619	11.355281	11.925902	13.008568	11.843681	14.486537	12.639391	11.788508	10.932429	12.122613	11.856631	11.188059	10.671996	10.682589	12.187555	11.276265	12.99222	382.612	11.436419	11.862192	11.952341	11.110503	11.552043	11.243015
Otop1	197.19421	11.255106	12.453235	11.962486	12.622279	12.172117	11.794078	13.044115	12.607834	11.233996	12.093215	11.586509	11.728244	12.146547	13.182008	13.428783	13.682286	11.234172	12.460531	12.531841	13.01097	12.683182	13.169411	12.855575	12.157212
Dmrta1	11.358259	11.084011	11.754522	11.504259	11.542186	10.572776	11.329017	37.083012	531.97049	11.518596	12.434595	10.940531	10.08473	13.294837	11.982493	10.723434	10.925398	11.154133	10.010988	10.298456	10.806927	42.43861	28.214294	10.408196	10.60276
Gpr174	300.97145	10.760388	22.825983	292.30036	351.1906	36.999296	230.83871	319.18227	443.57789	11.800645	11.716147	11.670346	150.65314	267.62985	279.67339	360.66139	171.7859	248.79648	250.48251	8.3162995	25.525343	527.79398	301.52521	9.8669902	10.244661
Hsf2	13.895929	10.504352	12.959795	12.544794	15.308507	13.124321	222.20605	29.637289	13.755364	62.355668	58.97062	39.429204	32.964202	11.071524	41.175383	26.100087	10.835961	12.202138	11.120521	9.356369	16.697333	10.655034	11.026656	59.319295	29.126665
Rgs13	380.00357	10.492961	10.501534	46.291599	19.918337	10.596274	9.9804527	10.686044	10.149096	9.9959945	10.416528	9.6896426	9.831523	9.9899709	10.291444	10.39782	10.992597	9.8030663	9.6905765	9.6483504	10.686437	10.273863	9.3758018	10.1546	10.078494

5430437J10Rik	11.058907	10.464007	10.938549	9.8915072	10.06085	10.470058	9.615895	10.2942	9.5545248	20.417975	25.5116	13.680123	10.427066	10.003351	9.6192887	9.7909537	10.605991	10.229193	10.20826	217.40173	12.623175	10.511355	10.091201	301.25731	227.5305
Klra1	8.9364925	10.275622	9.8138559	9.6151868	12.692564	9.5864019	186.95229	10.363292	342.43896	8.3932316	9.8639691	9.444059	10.154803	11.86753	8.9644718	9.7797657	11.780859	9.4991016	8.8167039	8.6109917	18.820001	1365.0202	1263.0086	8.6033647	9.1818655
Gzmc	89.991136	10.251442	23.449072	9.9819114	11.26576	11.598615	743.75902	11.937407	11.673329	11.190253	12.066367	12.300667	25.904678	15.983914	17.544404	17.947672	1880.2601	23.122354	573.22995	10.233732	120.02321	32.651781	372.93528	11.516878	11.861351
Tcrg-V4	10.264527	9.91552	9.7064307	10.769465	10.330714	8.8422961	11.533837	9.3797258	25.172295	8.8949735	9.3474011	9.2233124	9.975847	10.061761	9.639135	9.123711	57.251437	19.042737	17.216562	9.1138228	979.73275	10.621191	10.376722	9.0954006	9.2928475
Cxcl3	9.4172514	9.8755354	646.15215	10.335024	12.633946	10.367912	9.1487131	10.29226	9.5469826	17.495882	21.686457	14.725196	11.387729	11.778759	10.368005	28.233454	9.9009525	85.773665	55.988813	7.8184446	9.1493126	10.492605	10.202794	6375.5229	2425.2004
Gzme	132.06922	9.8184553	9.5047389	9.7648081	10.099859	9.7485458	30.522927	9.3940871	9.4445917	9.1655016	10.783484	9.169348	10.147864	9.4480467	10.334047	9.6736722	186.57642	10.549852	324.36597	9.5565943	10.450847	10.417771	10.554173	10.306208	9.6269822
BC061194	9.5376561	9.6561071	10.297162	10.112955	12.865095	56.734113	9.562477	9.1207132	10.126958	8.5920318	10.116261	8.9390174	9.2517736	10.16331	8.8756152	9.3228867	9.4863517	9.3260161	9.3487546	9.407621	8.9243308	9.7052494	9.9409424	9.0855842	8.9305873
A530021J07Rik	9.2448861	9.2902614	9.4375499	10.217261	10.240589	9.5435333	9.199836	21.411758	10.750774	9.1951202	9.0852984	9.0460628	9.9955073	10.066636	120.4468	10.595712	8.9234394	10.305376	9.1584549	8.9588737	8.6271708	9.2084267	9.0567981	8.9968119	9.0977204
Gzmd	343.15714	8.8947285	8.8871349	9.9245596	10.076735	9.3224792	36.874712	8.6973051	8.5213141	8.8267459	8.7695076	9.3138792	9.2516924	9.2148221	9.1549848	9.1964836	399.29761	9.3907245	793.32589	8.8453306	9.9958629	9.0546495	8.9056152	10.336722	10.150382

Supplementary Table 2 **Detailed enrichment items of DEGs**

_MEMBER_MyList	_LogP_MyList	GO	_PATTERN_	_RANK_	GinIndex	Category	CategoryID	Description	PARENT_GO	LogP	Enrichment	Z-score	#TotalGeneInLibrary	#GeneInGO	#GeneInHitList	#GeneInGOAndHitList	%InGO	STDV%InGO	GeneID	Hits	Log(q-value)	EvidenceCutoff	GROUP_ID	FirstInGroupByEnrichment	FirstInGroupByLogP	BestLogPInGroup	BestEnrichmentInGroup	URL
1	-7.119595129	WP3626	M1	1	0	WikiPathways	27	Microglia pathogen phagocytosis pathway		-7.119595129	9.307602966	8.734544242	20836	41	546	10	1.831501832	0.573843453	12259|12260|14129|16409|17972|18706|22177|22324|83433|170758	C1qa|C1qb|Fcgr1|Itgam|Ncf4|Pik3ca|Tyrobp|Vav1|Trem2|Rac3	-2.850642927	0	1	1	1	-7.119595129	28.62087912	

1	-4.938734351	GO:0006909	GO Biological Processes	M1	1	0	19	phagocytosis	19_GO:0051179 localization	-4.938734351	3.765905147	5.614277335	20836	152	546	15	2.747252747	0.699526105	11629|12491|14129|14461|16409|17304|17972|18706|19401|22177|22324|83433|170758|226421|270160	Aif1|Cd36|Fcgr1|Gata2|Itgam|Mfge8|Ncf4|Pik3ca|Rara|Tyrobp|Vav1|Trem2|Rac3|Rab7b|Rab39	-1.447933399	0	1	0	0	-7.119595129	28.62087912
1	-4.71455657	GO:0001774	GO Biological Processes	M1	1	0	19	microglial cell activation	19_GO:0002376 immune system process	-4.71455657	8.094794095	6.690919911	20836	33	546	7	1.282051282	0.4814536	11629|12259|12759|16189|16409|22177|83433	Aif1|C1qa|Clu|Il4|Itgam|Tyrobp|Trem2	-1.399846877	0	1	0	0	-7.119595129	28.62087912
1	-4.5	GO:0	GO Bi	M1	1	0	19	synapse pruning	19_GO:0009987	-4.	19.	8.3	20836	8	546	4	0.7	0.36	12259|12260|16409|83433	C1qa|C1qb|Itgam|Trem2	-1.	0	1	0	0	-7.11	28.6208

	22538858	098883				ological Processes			cellular process	522538858	08058608	90459843					32600733	495614			332767901					9595129	7912
1	-4.522538858	GO:0110089	M1	1	0	GO Biological Processes	19	regulation of hippocampal neuron apoptotic process	19_GO:0050789 regulation of biological process	-4.522538858	19.08058608	8.390459843	20836	8	546	4	0.732600733	0.36495614	16409|16819|22177|83433	Itgam|Lcn2|Tyrobp|Trem2	-1.332767901	0	1	0	0	-7.119595129	28.62087912
1	-4.3719	GO:0002	M1	1	0	GO Biologica	19	leukocyte activation involved in inflammatory response	19_GO:0002376 immune system process	-4.371	7.2196	6.2115	20836	37	546	7	1.2820	0.48145	11629|12259|12759|16189|16409|22177|83433	Aif1|C1qa|Clu|Il4|Itgam|Tyrobp|Trem2	-1.279	0	1	0	0	-7.119595	28.62087912

	49707	269				l Processes				9497070 7	8122	47505					51282	36			088763					129	
1	-4.153706279	GO:0150062	M1	1	0	GO Biological Processes	19	complement-mediated synapse pruning	19_GO:0009987 cellular process	-4.153706279	28.662087912	9.062626041	20836	4	546	3	0.549450549	0.316352724	12259|16409|83433	C1qa|Itgam|Trem2	-1.206973372	0	1	0	0	-7.119595129	28.62087912
1	-4.07210 54	GO:0061900	M1	1	0	GO Biological Proc	19	glial cell activation	19_GO:0032501 multicellular organismal process	-4.072105	6.5153220	5.7978763	20836	41	546	7	1.2820512	0.4814536	11629|12259|12759|16189|16409|22177|83433	Aif1|C1qa|Clu|Il4|Itgam|Tyrobp|Trem2	-1.192604	0	1	0	0	-7.119595129	28.62087912

	99					esses				499	76	48					82				238						
1	-3.876409217	GO:0150146	M1	1	0	GO Biological Processes	19	cell junction disassembly	19_GO:0009987 cellular process	-3.876409217	13.87678988	7.007506297	20836	11	546	4	0.732600733	0.36495614	12259|12260|16409|83433	C1qa|C1qb|Itgam|Trem2	-1.142474951	0	1	0	0	-7.119595129	28.62087912
1	-3.512738995	GO:0150076	M1	1	0	GO Biological Processes	19	neuroinflammatory response	19_GO:0050896 response to stimulus	-3.512738995	5.342564103	5.043102892	20836	50	546	7	1.282051282	0.4814536	11629|12259|12759|16189|16409|22177|83433	Aif1|C1qa|Clu|Il4|Itgam|Tyrobp|Trem2	-0.969979593	0	1	0	0	-7.119595129	28.62087912

1	-3.496063716	GO:0042116	M1	1	0	GO Biological Processes	19	macrophage activation	19_GO:0002376 immune system process	-3.496063716	4.625596626	4.839330173	20836	66	546	8	1.465201465	0.514217873	11629|12259|12759|16189|16409|18754|22177|83433	Aif1|C1qa|Clu|Il4|Itgam|Prkce|Tyrobp|Trem2	-0.969979593	0	1	0	0	-7.119595129	28.62087912
1	-3.426222066	GO:0002274	M1	1	0	GO Biological Processes	19	myeloid leukocyte activation	19_GO:0002376 immune system process	-3.426222066	3.043529068	4.296599957	20836	163	546	13	2.380952381	0.65244862	11541|11629|12259|12759|13419|16189|16409|16822|18754|22177|83433|94176|109648	Adora2b|Aif1|C1qa|Clu|Dnase1|Il4|Itgam|Lcp2|Prkce|Tyrobp|Trem2|Dock2|Npy	-0.958930737	0	1	0	0	-7.119595129	28.62087912
1	-3.3	GO:0	M1	1	0	GOBi	19	apoptotic cell clearance	19_GO:0051179	-3.	6.0	5.0	20836	38	546	6	1.0	0.44	12491|17304|19401|22177|83433|170758	Cd36|Mfge8|Rara|Tyrobp|Trem2|Rac3	-0.	0	1	0	0	-7.11	28.6208

	70447997	043277				ological Processes			localization	370447997	25448236	86369022					98901099	6152716			940344885					9595129	7912
1	-2.972586387	GO:1900221	M1	1	0	GO Biological Processes	19	regulation of amyloid-beta clearance	19_GO:0032501 multicellular organismal process	-2.972586387	8.48026048	5.208174441	20836	18	546	4	0.732600733	0.36495614	12759|16189|83433|214384	Clu|Il4|Trem2|Myocd	-0.741060682	0	1	0	0	-7.119595129	28.62087912
1	-2.4815	GO:1905	M1	1	0	GO Biologica	19	negative regulation of amyloid fibril formation	19_GO:0048519 negative regulation of	-2.481	9.54402	4.85543	20836	12	546	3	0.5494	0.31635	12759|12955|83433	Clu|Cryab|Trem2	-0.507	0	1	0	0	-7.119595	28.62087912

	2716	907				l Processes			biological process	52716	9304	75514					50549	2724			687937					129	
1	-2.222579271	GO:0021782	M1	1	0	GO Biological Processes	19	glial cell development	19_GO:0032502 developmental process	-2.222579271	2.725798012	3.187404912	20836	126	546	9	1.648351648	0.544903294	11652|12259|12759|14580|16409|18991|19058|83433|232232	Akt2|C1qa|Clu|Gfap|Itgam|Pou3f1|Ppp3r1|Trem2|Hdac11	-0.391377632	0	1	0	0	-7.119595129	28.62087912
1	-2.1095769	GO:1905906	M1	1	0	GO Biological Proc	19	regulation of amyloid fibril formation	19_GO:0008152 metabolic process	-2.109576	7.155219	4.0403151	20836	16	546	3	0.5494505	0.3163527	12759|12955|83433	Clu|Cryab|Trem2	-0.347129	0	1	0	0	-7.119595129	28.62087912

	22					esses				922	78	65					49	24			752						
1	-2.085412823	GO:0006911	M1	1	0	GO Biological Processes	19	phagocytosis, engulfment	19_GO:0051179 localization	-2.085412823	3.9751221	3.38509693	20836	48	546	5	0.915750916	0.407656781	11629|14129|16409|83433|170758	Aif1|Fcgr1|Itgam|Trem2|Rac3	-0.337347265	0	1	0	0	-7.119595129	28.62087912
1	-5.656757374	GO:0045807	M1	1	0	GO Biological Processes	19	positive regulation of endocytosis	19_GO:0051179 localization	-5.656757374	4.303891597	6.270281217	20836	133	546	15	2.747252747	0.699526105	12491|12512|12759|13645|14129|14461|16189|19055|20379|20620|22416|23892|30878|83433|192167	Cd36|Cd63|Clu|Egf|Fcgr1|Gata2|Il4|Ppp3ca|Sfrp4|Plk2|Wnt3a|Grem1|Apln|Trem2|Nlgn1	-1.68835167	0	2	1	1	-5.656757374	7.632234432

1	-5.000623858	GO:0030100	M1	1	0	GO Biological Processes	19	regulation of endocytosis	19_GO:0051179 localization	-5.00623858	3.06515439	5.377838011	20836	249	546	20	3.663003663	0.803931241	11812|12491|12512|12759|13645|14129|14461|16189|19055|19058|20379|20620|22416|23892|23970|30878|83433|192167|192199|233186	Apoc1|Cd36|Cd63|Clu|Egf|Fcgr1|Gata2|Il4|Ppp3ca|Ppp3r1|Sfrp4|Plk2|Wnt3a|Grem1|Pacsin2|Apln|Trem2|Nlgn1|Rspo1|Siglecf	-1.447933399	0	2	0	0	-5.656757374	7.632234432
1	-4.756779843	GO:0060627	M1	1	0	GO Biological Processes	19	regulation of vesicle-mediated transport	19_GO:0051179 localization	-4.756779843	2.164734239	4.817720919	20836	617	546	35	6.41025641	1.048227401	11541|11652|11812|12317|12491|12512|12759|12921|13645|14129|14461|16189|16409|17175|18752|19055|19058|20379|20620|22416|23892|23970|30878|60510|75209|83433|94176|109648|192167|192199|216963|227541|233186|241770|329502	Adora2b|Akt2|Apoc1|Calr|Cd36|Cd63|Clu|Crhr1|Egf|Fcgr1|Gata2|Il4|Itgam|Masp2|Prkcg|Ppp3ca|Ppp3r1|Sfrp4|Plk2|Wnt3a|Grem1|Pacsin2|Apln|Syt9|Sv2c|Trem2|Dock2|Npy|Nlgn1|Rspo1|Git1|Camk1d|Siglecf|Rims4|Pla2g4e	-1.399846877	0	2	0	0	-5.656757374	7.632234432
1	-4.5	GO:0	M1	1	0	GO Bi	19	positive regulation of	19_GO:0051179	-4.	7.6	6.4	20836	35	546	7	1.2	0.48	12512|13645|20379|20620|22416|23892|30878	Cd63|Egf|Sfrp4|Plk2|Wnt3a|Grem1|Apln	-1.	0	2	0	0	-5.65	7.63223

	37240467	002092				ological Processes		receptor internalization	localization	537240467	32234432	41749529					82051282	14536			332767901					6757374	4432
1	-4.38021294	GO:0048260	M1	1	0	GO Biological Processes	19	positive regulation of receptor-mediated endocytosis	19_GO:0051179 localization	-4.38021294	5.366414835	5.738889652	20836	64	546	9	1.648351648	0.544903294	12512|12759|13645|16189|20379|20620|22416|23892|30878	Cd63|Clu|Egf|Il4|Sfrp4|Plk2|Wnt3a|Grem1|Apln	-1.279088763	0	2	0	0	-5.656757374	7.632234432
1	-3.7587	GO:0048	M1	1	0	GO Biologica	19	regulation of receptor-mediated endocytosis	19_GO:0051179 localization	-3.758	3.4956	4.7004	20836	131	546	12	2.1978	0.62744	11812|12512|12759|13645|16189|19058|20379|20620|22416|23892|30878|192199	Apoc1|Cd63|Clu|Egf|Il4|Ppp3r1|Sfrp4|Plk2|Wnt3a|Grem1|Apln|Rspo1	-1.080	0	2	0	0	-5.656757	7.632234432

	21932	259				l Processes				721932	79893	4484					02198	0123			834336					374	
1	-3.49427889	GO:0002090	M1	1	0	GO Biological Processes	19	regulation of receptor internalization	19_GO:0051179 localization	-3.49427889	4.137958427	4.698917704	20836	83	546	9	1.648351648	0.544903294	12512|13645|19058|20379|20620|22416|23892|30878|192199	Cd63|Egf|Ppp3r1|Sfrp4|Plk2|Wnt3a|Grem1|Apln|Rspo1	-0.969979593	0	2	0	0	-5.656757374	7.632234432
1	-5.10495820	R-MMU-760	M1	1	0	Reactome Gene Sets	6	Platelet activation, signaling and aggregation		-5.104958	3.1151977	5.4632030	20836	245	546	20	3.6630036	0.8039312	11747|12491|12512|12759|13590|13645|14065|14676|14677|16822|18706|18752|18754|18761|19039|22324|66066|227612|235505|320202	Anxa5|Cd36|Cd63|Clu|Lefty1|Egf|F2rl3|Gna15|Gnai1|Lcp2|Pik3ca|Prkcg|Prkce|Prkcq|Lgals3bp|Vav1|Gng11|Tor4a|Cd109|Lefty2	-1.447933	0	3	1	1	-5.104958252	3.469197469

	52	02							2522	27	77					63	41			399						
1	-3.583708701	R-MMU-109582	M1	1	0	Reactome Gene Sets	6	Hemostasis	-3.583708701	2.098475862	4.040680087	20836	491	546	27	4.945054945	0.927847489	11747|12491|12512|12759|13590|13645|14065|14461|14676|14677|16822|18706|18752|18754|18761|19039|19363|22324|22761|66066|75050|94176|110033|227612|232943|235505|320202	Anxa5|Cd36|Cd63|Clu|Lefty1|Egf|F2rl3|Gata2|Gna15|Gnai1|Lcp2|Pik3ca|Prkcg|Prkce|Prkcq|Lgals3bp|Rad51b|Vav1|Zfpm1|Gng11|Kif27|Dock2|Kif22|Tor4a|Klc3|Cd109|Lefty2	-0.969979593	0	3	0	0	-5.104958252	3.469197469
1	-3.463848366	R-MMU-76005	M1	1	0	Reactome Gene Sets	6	Response to elevated platelet cytosolic Ca2+	-3.463848366	3.469197469	4.468462213	20836	121	546	11	2.014652015	0.601290399	11747|12491|12512|12759|13590|13645|18752|19039|227612|235505|320202	Anxa5|Cd36|Cd63|Clu|Lefty1|Egf|Prkcg|Lgals3bp|Tor4a|Cd109|Lefty2	-0.969979593	0	3	0	0	-5.104958252	3.469197469

1	-3.019042601	R-MMU-114608	M1	1	0	Reactome Gene Sets	6	Platelet degranulation		-3.019042601	3.289756221	4.056723584	20836	116	546	10	1.831501832	0.573843453	11747|12491|12512|12759|13590|13645|19039|227612|235505|320202	Anxa5|Cd36|Cd63|Clu|Lefty1|Egf|Lgals3bp|Tor4a|Cd109|Lefty2	-0.768770459	0	3	0	0	-5.104958252	3.469197469
1	-5.083165716	GO:0003013	M1	1	0	GO Biological Processes	19	circulatory system process	19_GO:0032501 multicellular organismal process	-5.083165716	2.4254988231	5.1387588261	20836	472	546	30	5.494505495	0.975206336	11541|11550|12373|12490|12491|12918|13166|13616|13850|15559|16523|16533|16598|17300|17390|18706|19225|20537|20657|21333|21391|21924|30878|67451|75697|109648|110809|240672|244911|319552	Adora2b|Adra1d|Casq2|Cd34|Cd36|Crh|Dbh|Edn3|Ephx2|Htr2b|Kcnj8|Kcnmb1|Klf2|Foxc1|Mmp2|Pik3ca|Ptgs2|Slc5a1|Sod3|Tac1|Tbxas1|Tnnc1|Apln|Pkp2|C2cd4b|Npy|Srsf1|Dusp5|C2cd4a|Spx	-1.447933399	0	4	1	1	-5.083165716	3.509073302
1	-4.8	GO:0	M1	1	0	GO Bi	19	blood circulation	19_GO:0032501 multicellul	-4.	2.4	4.9	20836	438	546	28	5.1	0.94	11541|11550|12373|12490|12918|13166|13616|13850|15559|16523|16533|16598|17300|17390|187	Adora2b|Adra1d|Casq2|Cd34|Crh|Dbh|Edn3|Ephx2|Htr2b|Kcnj8|Kcnmb1|Klf2|Foxc1|M	-1.	0	4	0	0	-5.08	3.50907

	28714017	008015				ological Processes			ar organismal process	828714017	39526987	94765726					28205128	3962912	06|19225|20657|21333|21391|21924|30878|67451|75697|109648|110809|240672|244911|319552	mp2|Pik3ca|Ptgs2|Sod3|Tac1|Tbxas1|Tnnc1|Apln|Pkp2|C2cd4b|Npy|Srsf1|Dusp5|C2cd4a|Spx	404859854					3165716	3302
1	-4.19388146	GO:0003018	M1	1	0	GO Biological Processes	19	vascular process in circulatory system	19_GO:0032501 multicellular organismal process	-4.19388146	2.874063175	4.780058847	20836	239	546	18	3.296703297	0.76412472	11541|11550|12491|13166|13616|15559|16533|16598|17300|17390|19225|20537|20657|21391|30878|75697|240672|244911	Adora2b|Adra1d|Cd36|Dbh|Edn3|Htr2b|Kcnmb1|Klf2|Foxc1|Mmp2|Ptgs2|Slc5a1|Sod3|Tbxas1|Apln|C2cd4b|Dusp5|C2cd4a	-1.225959253	0	4	0	0	-5.083165716	3.509073302
1	-3.8892	GO:0090	M1	1	0	GO Biologica	19	regulation of anatomical structure size	19_GO:0065007 biological regulation	-3.889	2.0609	4.2283	20836	574	546	31	5.6776	0.99036	11541|11550|11858|13166|13616|13860|14260|15163|15559|16533|16598|17300|17390|18706|18754|18846|19225|20348|20359|20496|20657|21391|22362|22416|2	Adora2b|Adra1d|Rnd2|Dbh|Edn3|Eps8|Fmn1|Hcls1|Htr2b|Kcnmb1|Klf2|Foxc1|Mmp2|Pik3ca|Prkce|Plxna3|Ptgs2|Sema3c|Sema6b|Slc12a2|Sod3|Tbxas1|Vpreb1a|Wnt3a|Sema4g|	-1.142	0	4	0	0	-5.083165	3.509073302

	00287	066				l Processes				2002887	69228	37346					55678	5487	6456|30878|66333|107351|230796|240672|382253	Apln|Aqp11|Kank1|Wdtc1|Dusp5|Cdkl5	474951					716	
1	-3.558264091	GO:0035296	M1	1	0	GO Biological Processes	19	regulation of tube diameter	19_GO:0065007 biological regulation	-3.558264091	2.984672683	4.374554516	20836	179	546	14	2.564102564	0.676442475	11541|11550|13166|13616|15559|16533|16598|17300|17390|19225|20657|21391|30878|240672	Adora2b|Adra1d|Dbh|Edn3|Htr2b|Kcnmb1|Klf2|Foxc1|Mmp2|Ptgs2|Sod3|Tbxas1|Apln|Dusp5	-0.969979593	0	4	0	0	-5.083165716	3.509073302
1	-3.5582640	GO:0097746	M1	1	0	GO Biological Proc	19	blood vessel diameter maintenance	19_GO:0032501 multicellular organismal process	-3.558264	2.9846726	4.3745545	20836	179	546	14	2.5641025	0.6764424	11541|11550|13166|13616|15559|16533|16598|17300|17390|19225|20657|21391|30878|240672	Adora2b|Adra1d|Dbh|Edn3|Htr2b|Kcnmb1|Klf2|Foxc1|Mmp2|Ptgs2|Sod3|Tbxas1|Apln|Dusp5	-0.969979	0	4	0	0	-5.083165716	3.509073302

	91					esses				091	83	16					64	75			593						
1	-3.5334137	GO:0035150	M1	1	0	GO Biological Processes	19	regulation of tube size	19_GO:0065007 biological regulation	-3.5334137	2.968091168	4.350211807	20836	180	546	14	2.564102564	0.676442475	11541|11550|13166|13616|15559|16533|16598|17300|17390|19225|20657|21391|30878|240672	Adora2b|Adra1d|Dbh|Edn3|Htr2b|Kcnmb1|Klf2|Foxc1|Mmp2|Ptgs2|Sod3|Tbxas1|Apln|Dusp5	-0.969979593	0	4	0	0	-5.083165716	3.509073302
1	-2.69614722	GO:0019229	M1	1	0	GO Biological Processes	19	regulation of vasoconstriction	19_GO:0032501 multicellular organismal process	-2.69614722	3.509073302	3.847037684	20836	87	546	8	1.465201465	0.514217873	11550|13166|13616|17390|19225|21391|30878|240672	Adra1d|Dbh|Edn3|Mmp2|Ptgs2|Tbxas1|Apln|Dusp5	-0.603286277	0	4	0	0	-5.083165716	3.509073302

1	-2.51670149	GO:0044057	M1	1	0	GO Biological Processes	19	regulation of system process	19_GO:0032501 multicellular organismal process	-2.51670149	1.71639455	3.084786115	20836	667	546	30	5.494505495	0.975206336	11541 | 11550 | 11629 | 12373 | 12918 | 12919 | 12921 | 13166 | 13616 | 14129 | 15200 | 16322 | 17390 | 19055 | 19225 | 20203 | 20620 | 20855 | 21333 | 21391 | 21924 | 30878 | 56543 | 67451 | 74116 | 192167 | 214384 | 240672 | 319552 | 380702	Adora2b | Adra1d | Aif1 | Casq2 | Crh | Crhbp | Crhr1 | Dbh | Edn3 | Fcgr1 | Hbegf | Inha | Mmp2 | Ppp3ca | Ptgs2 | S100b | Plk2 | Stc1 | Tac1 | Tbxas1 | Tnnc1 | Apln | Kcnd3 | Pkp2 | Pi16 | Nlgn1 | Myocd | Dusp5 | Spx | Shisa6	-0.514921016	0	4	0	0	-5.083165716	3.509073302
1	-2.321130752	GO:1903522	M1	1	0	GO Biological Processes	19	regulation of blood circulation	19_GO:0032501 multicellular organismal process	-2.321130752	2.143886076	3.085914333	20836	267	546	15	2.747252747	0.699526105	11550 | 12373 | 13166 | 13616 | 15200 | 17390 | 19225 | 20855 | 21333 | 21391 | 30878 | 56543 | 67451 | 240672 | 319552	Adra1d | Casq2 | Dbh | Edn3 | Hbegf | Mmp2 | Ptgs2 | Stc1 | Tac1 | Tbxas1 | Apln | Kcnd3 | Pkp2 | Dusp5 | Spx	-0.419534471	0	4	0	0	-5.083165716	3.509073302
1	-4.3	R-M	M1	1	0	Reacto	6	Metabolism of amine-derived hormones		-4.	11.	7.1	20836	16	546	5	0.9	0.40	13166 | 13195 | 13371 | 107585 | 216343	Dbh | Ddc | Dio2 | Dio3 | Tph2	-1.	0	5	1	1	-4.37	15.2644

	79802814	MU-209776				me Gene Sets				379802814	9253663	71461738					15750916	7656781			279088763					9802814	6886
1	-4.063616432	GO:0019336	M1	1	0	GO Biological Processes	19	phenol-containing compound catabolic process	19_GO:0008152 metabolic process	-4.063616432	15.26446886	7.401244027	20836	10	546	4	0.732600733	0.36495614	13166|13371|59012|107585	Dbh|Dio2|Moxd1|Dio3	-1.192604238	0	5	0	0	-4.379802814	15.26446886
1	-2.8410	GO:0018	M1	1	0	GO Biologica	19	phenol-containing compound metabolic process	19_GO:0008152 metabolic process	-2.841	3.3671	3.9313	20836	102	546	9	1.6483	0.54490	13166|13195|13371|53626|54381|59012|107585|216343|237940	Dbh|Ddc|Dio2|Insm1|Cpq|Moxd1|Dio3|Tph2|Aoc2	-0.686	0	5	0	0	-4.379802	15.26446886

	23528	958				l Processes				023528	6225	21987					51648	3294			014678					814	
1	-2.727791242	GO:0042421	M1	1	0	GO Biological Processes	19	norepinephrine biosynthetic process	19_GO:0008152 metabolic process	-2.727791242	11.44835165	5.421218341	20836	10	546	3	0.549450549	0.316352724	13166|53626|59012	Dbh|Insm1|Moxd1	-0.614745553	0	5	0	0	-4.379802814	15.26446886
1	-2.6115243	GO:1901615	M1	1	0	GO Biological Proc	19	organic hydroxy compound metabolic process	19_GO:0008152 metabolic process	-2.611524	1.9122155	3.2417966	20836	459	546	23	4.2124542	0.8596581	11812|13082|13166|13195|13371|15360|15450|16189|16816|18830|19662|53626|54200|54381|59012|67963|105349|106648|107585|192156|216134|216343|237940	Apoc1|Cyp26a1|Dbh|Ddc|Dio2|Hmgcs2|Lipc|Il4|Lcat|Pltp|Rbp4|Insm1|Sult2b1|Cpq|Moxd1|Npc2|Akr1c18|Cyp4f15|Dio3|Mvd|Pdxk|Tph2|Aoc2	-0.553808	0	5	0	0	-4.379802814	15.26446886

	29					esses				329	98	15					12	77			523						
1	-2.485943835	GO:0009713	M1	1	0	GO Biological Processes	19	catechol-containing compound biosynthetic process	19_GO:0008152 metabolic process	-2.485943835	6.360195336	4.310040796	20836	24	546	4	0.732600733	0.364956614	13166|13195|53626|59012	Dbh|Ddc|Insm1|Moxd1	-0.508397223	0	5	0	0	-4.379802814	15.26446886
1	-2.485943835	GO:0042423	M1	1	0	GO Biological Processes	19	catecholamine biosynthetic process	19_GO:0008152 metabolic process	-2.485943835	6.360195336	4.310040796	20836	24	546	4	0.732600733	0.364956614	13166|13195|53626|59012	Dbh|Ddc|Insm1|Moxd1	-0.508397223	0	5	0	0	-4.379802814	15.26446886

1	-2.379466615	GO:0046189	M1	1	0	GO Biological Processes	19	phenol-containing compound biosynthetic process	19_GO:0008152 metabolic process	-2.379466615	4.653801483	3.841576305	20836	41	546	5	0.915750916	0.407656781	13166|13195|53626|59012|216343	Dbh|Ddc|Insm1|Moxd1|Tph2	-0.457038809	0	5	0	0	-4.379802814	15.26446886
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1	-2.1	GO:0	M1	1	0	GO Bi	19	catechol-containing compound	19_GO:0008152	-2.	4.0	3.4	20836	47	546	5	0.9	0.40	13166|13195|53626|59012|237940	Dbh|Ddc|Insm1|Moxd1|Aoc2	-0.	0	5	0	0	-4.37	15.2644

	23946947	009712				ological Processes		metabolic process	metabolic process	123946947	59699166	44791237					15750916	7656781			354681828					9802814	6886
1	-2.002028849	GO:0006576	M1	1	0	GO Biological Processes	19	biogenic amine metabolic process	19_GO:0008152 metabolic process	-2.002028849	2.935474782	3.035313433	20836	91	546	7	1.282051282	0.4814536	13166|13195|53626|59012|69215|216343|237940	Dbh|Ddc|Insm1|Moxd1|Sat2|Tph2|Aoc2	-0.296557732	0	5	0	0	-4.379802814	15.26446886
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	42774	778				l Processes				342774	74422	32435					5641	7401	192194|210808|240754|246730|625018|667277	av1|Fyb|Irf7|Irgm2|Rsad2|Trem2|Btnl10|Lacc1|Lax1|Oas1a|C4a|C1rb	199858					774	
1	-4.243807781	GO:0002699	M1	1	0	GO Biological Processes	19	positive regulation of immune effector process	19_GO:0002376 immune system process	-4.243807781	2.567418311	4.686391859	20836	327	546	22	4.029304029	0.841565687	11541|12491|12524|12921|14129|14461|14972|15040|15042|16189|16409|16768|17175|19260|19401|19662|22042|22177|22324|58185|83433|210808	Adora2b|Cd36|Cd86|Crhr1|Fcgr1|Gata2|H2-K1|H2-T23|H2-T24|Il4|Itgam|Lag3|Masp2|Ptpn22|Rara|Rbp4|Tfrc|Tyrobp|Vav1|Rsad2|Trem2|Lacc1	-1.25360918	0	6	0	0	-4.319342774	2.567418311
1	-3.1383662	GO:0002697	M1	1	0	GO Biological Proc	19	regulation of immune effector process	19_GO:0002376 immune system process	-3.138366	2.0255399	3.6929452	20836	471	546	25	4.5787545	0.8945402	11541|12491|12524|12921|13345|13419|14129|14461|14972|15040|15042|16189|16409|16768|17175|19260|19401|19662|22042|22177|22324|58185|74048|83433|210808	Adora2b|Cd36|Cd86|Crhr1|Twist2|Dnase1|Fcgr1|Gata2|H2-K1|H2-T23|H2-T24|Il4|Itgam|Lag3|Masp2|Ptpn22|Rara|Rbp4|Tfrc|Tyrobp|Vav1|Rsad2|Vsir|Trem2|Lacc1	-0.823656	0	6	0	0	-4.319342774	2.567418311

	46					esses				246	24	45					79	82			553						
1	-2.500284495	mmu04145	M1	1	0	KEGG Pathway	24	Phagosome - Mus musculus (house mouse)		-2.500284495	2.516121241	3.369919994	20836	182	546	12	2.197802198	0.627440123	12317|12491|14129|14972|15040|15042|16409|17972|22042|170786|226421|667277	Calr|Cd36|Fcgr1|H2-K1|H2-T23|H2-T24|Itgam|Ncf4|Tfrc|Cd209a|Rab7b|C1rb	-0.510839795	0	6	0	0	-4.319342774	2.567418311
1	-2.451794293	GO:0002703	M1	1	0	GO Biological Processes	19	regulation of leukocyte mediated immunity	19_GO:0002376 immune system process	-2.451794293	2.092709441	3.179694754	20836	310	546	17	3.113553114	0.743298631	11541|12921|13419|14129|14461|14972|15040|15042|16189|16409|16768|22042|22177|22324|58185|74048|83433	Adora2b|Crhr1|Dnase1|Fcgr1|Gata2|H2-K1|H2-T23|H2-T24|Il4|Itgam|Lag3|Tfrc|Tyrobp|Vav1|Rsad2|Vsir|Trem2	-0.496709311	0	6	0	0	-4.319342774	2.567418311

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</table>

	88972382	019725				ological Processes			homeostatic process	588972382	10868709	58492009					27106227	4154616	91|22042|27421|66222|66333|66844|68428|71753|73649|76376|98415|105243|109648|210808|212032|214189|216963|230796|269356|270160	Tbxas1|Tfrc|Abcc6|Serpinb1a|Aqp11|Ormdl2|Steap3|Tmprss6|Cybrd1|Slc24a2|Nucks1|Slc9a3|Npy|Lacc1|Hk3|Scgn|Git1|Wdtc1|Slc4a11|Rab39	969979593					6899823	9157
1	-3.483545237	GO:0006873	M1	1	0	GO Biological Processes	19	cellular monoatomic ion homeostasis	19_GO:0042592 homeostatic process	-3.483545237	2.139079157	3.989006756	20836	446	546	25	4.578754579	0.894540282	12373|13616|15559|16819|17748|17750|18754|20203|20393|20496|20535|20855|21391|22042|66333|68428|71753|73649|76376|105243|109648|210808|214189|269356|270160	Casq2|Edn3|Htr2b|Lcn2|Mt1|Mt2|Prkce|S100b|Sgk1|Slc12a2|Slc4a2|Stc1|Tbxas1|Tfrc|Aqp11|Steap3|Tmprss6|Cybrd1|Slc24a2|Slc9a3|Npy|Lacc1|Scgn|Slc4a11|Rab39	-0.969979593	0	7	0	0	-4.296899823	2.139079157
1	-3.25551	GO:0030	M1	1	0	GO Biologica	19	cellular monoatomic cation homeostasis	19_GO:0042592 homeostatic process	-3.2555	2.1006	3.8099	20836	436	546	24	4.3956	0.87730	12373|13616|15559|16819|17748|17750|18754|20203|20393|20496|20535|20855|22042|66333|68428|71753|73649|76376|105243|109648|210808|214189|269356|270160	Casq2|Edn3|Htr2b|Lcn2|Mt1|Mt2|Prkce|S100b|Sgk1|Slc12a2|Slc4a2|Stc1|Tfrc|Aqp11|Steap3|Tmprss6|Cybrd1|Slc24a2|Slc9a3|Npy|Lacc1|Scgn|Slc4a11|Rab39	-0.883	0	7	0	0	-4.296899	2.139079157

	64383	003				l Processes				164383	14981	18023					04396	7634			839272					823	
1	-2.874422372	GO:0050801	M1	1	0	GO Biological Processes	19	monoatomic ion homeostasis	19_GO:0042592 homeostatic process	-2.874422372	1.883641039	3.435510419	20836	547	546	27	4.945054945	0.927847489	12373 | 13616 | 15559 | 16819 | 17748 | 17750 | 18754 | 20203 | 20393 | 20496 | 20535 | 20855 | 21391 | 22042 | 27421 | 59091 | 66333 | 68428 | 71753 | 73649 | 76376 | 105243 | 109648 | 210808 | 214189 | 269356 | 270160	Casq2 | Edn3 | Htr2b | Lcn2 | Mt1 | Mt2 | Prkce | S100b | Sgk1 | Slc12a2 | Slc4a2 | Stc1 | Tbxas1 | Tfrc | Abcc6 | Jph2 | Aqp11 | Steap3 | Tmprss6 | Cybrd1 | Slc24a2 | Slc9a3 | Npy | Lacc1 | Scgn | Slc4a11 | Rab39	-0.69319184	0	7	0	0	-4.296899823	2.139079157
1	-2.7064578	GO:0055080	M1	1	0	GO Biological Proc	19	monoatomic cation homeostasis	19_GO:0042592 homeostatic process	-2.706457	1.8580346	3.2950200	20836	534	546	26	4.7619047	0.9113797	12373 | 13616 | 15559 | 16819 | 17748 | 17750 | 18754 | 20203 | 20393 | 20496 | 20535 | 20855 | 22042 | 27421 | 59091 | 66333 | 68428 | 71753 | 73649 | 76376 | 105243 | 109648 | 210808 | 214189 | 269356 | 270160	Casq2 | Edn3 | Htr2b | Lcn2 | Mt1 | Mt2 | Prkce | S100b | Sgk1 | Slc12a2 | Slc4a2 | Stc1 | Tfrc | Abcc6 | Jph2 | Aqp11 | Steap3 | Tmprss6 | Cybrd1 | Slc24a2 | Slc9a3 | Npy | Lacc1 | Scgn | Slc4a11 | Rab39	-0.605332	0	7	0	0	-4.296899823	2.139079157

	88					esses				888		97					62	65			64						
1	-2.188528465	GO:0098771	M1	1	0	GO Biological Processes	19	inorganic ion homeostasis	19_GO:0042592 homeostatic process	-2.188528465	1.790076306	2.838860014	20836	469	546	22	4.029304029	0.841565687	12373|13616|15559|16819|17748|17750|18754|20203|20379|20393|20496|20855|21391|22042|27421|59091|68428|71753|73649|76376|109648|214189	Casq2|Edn3|Htr2b|Lcn2|Mt1|Mt2|Prkce|S100b|Sfrp4|Sgk1|Slc12a2|Stc1|Tbxas1|Tfrc|Abcc6|Jph2|Steap3|Tmprss6|Cybrd1|Slc24a2|Npy|Scgn	-0.379317055	0	7	0	0	-4.296899823	2.139079157
1	-2.175899564	GO:0006875	M1	1	0	GO Biological Processes	19	cellular metal ion homeostasis	19_GO:0042592 homeostatic process	-2.175899564	1.918718153	2.876286164	20836	358	546	18	3.296703297	0.76412472	12373|13616|15559|16819|17748|17750|18754|20203|20393|20496|20855|22042|68428|71753|73649|76376|109648|214189	Casq2|Edn3|Htr2b|Lcn2|Mt1|Mt2|Prkce|S100b|Sgk1|Slc12a2|Stc1|Tfrc|Steap3|Tmprss6|Cybrd1|Slc24a2|Npy|Scgn	-0.376769377	0	7	0	0	-4.296899823	2.139079157

1	-4.290879555	GO:0001819	M1	1	0	GO Biological Processes	19	positive regulation of cytokine production	19_GO:0048518 positive regulation of biological process	-4.290879555	2.201606086	4.551942206	20836	520	546	30	5.494505495	0.975206336	11541|11629|12490|12491|12608|12654|12759|13653|15559|16189|17975|18761|19225|19260|19401|22177|22411|22416|22761|23845|54123|58185|83433|140497|210808|226421|246728|246730|320924|667034	Adora2b|Aif1|Cd34|Cd36|Cebpb|Chil1|Clu|Egr1|Htr2b|Il4|Ncl|Prkcq|Ptgs2|Ptpn22|Rara|Tyrobp|Wnt11|Wnt3a|Zfpm1|Clec5a|Irf7|Rsad2|Trem2|Cd300c2|Lacc1|Rab7b|Oas2|Oas1a|Ccbe1|Pnp2	-1.277199858	0	8	1	1	-4.290879555	5.088156288
1	-3.496063716	GO:0032720	M1	1	0	GO Biological Processes	19	negative regulation of tumor necrosis factor production	19_GO:0048519 negative regulation of biological process	-3.496063716	4.625596626	4.839330173	20836	66	546	8	1.465201465	0.514217873	12490|13345|16189|19260|19401|20128|74048|83433	Cd34|Twist2|Il4|Ptpn22|Rara|Trim30a|Vsir|Trem2	-0.969979593	0	8	0	0	-4.290879555	5.088156288
1	-3.4	GO:1	M1	1	0	GO Bi	19	negative regulation of tumor necrosis	19_GO:0048519 negative	-3.	4.5	4.7	20836	67	546	8	1.4	0.51	12490|13345|16189|19260|19401|20128|74048|83433	Cd34|Twist2|Il4|Ptpn22|Rara|Trim30a|Vsir|Trem2	-0.	0	8	0	0	-4.29	5.08815

	5075923	903556				ological Processes		factor superfamily cytokine production	regulation of biological process	45075923	5655787	83122879					65201465	4217873			969979593					0879555	6288
1	-3.412129059	GO:0032680	M1	1	0	GO Biological Processes	19	regulation of tumor necrosis factor production	19_GO:0032501 multicellular organismal process	-3.412129059	2.887872488	4.230970805	20836	185	546	14	2.564102564	0.676442475	12490|12491|12759|13345|16189|17975|19260|19401|20128|22177|74048|83433|246728|246730	Cd34|Cd36|Clu|Twist2|Il4|Ncl|Ptpn22|Rara|Trim30a|Tyrobp|Vsir|Trem2|Oas2|Oas1a	-0.956090214	0	8	0	0	-4.290879555	5.088156288
1	-3.3416	GO:1903	M1	1	0	GO Biologica	19	regulation of tumor necrosis factor superfamily cytokine production	19_GO:0032501 multicellular organismal process	-3.341	2.8417	4.1613	20836	188	546	14	2.5641	0.67644	12490|12491|12759|13345|16189|17975|19260|19401|20128|22177|74048|83433|246728|246730	Cd34|Cd36|Clu|Twist2|Il4|Ncl|Ptpn22|Rara|Trim30a|Tyrobp|Vsir|Trem2|Oas2|Oas1a	-0.923	0	8	0	0	-4.290879	5.088156288

	51996	555				l Processes				6519996	89416	28033					02564	2475			958143					555	
1	-3.093981221	GO:0001818	M1	1	0	GO Biological Processes	19	negative regulation of cytokine production	19_GO:0048519 negative regulation of biological process	-3.093981221	2.336398296	3.785648318	20836	294	546	18	3.296703297	0.76412472	12490|13345|16189|16598|16768|17472|19260|19401|20128|22177|22411|22761|66222|67526|74048|83433|216963|246730	Cd34|Twist2|Il4|Klf2|Lag3|Gbp4|Ptpn22|Rara|Trim30a|Tyrobp|Wnt11|Zfpm1|Serpinb1a|Atg12|Vsir|Trem2|Git1|Oas1a	-0.794974414	0	8	0	0	-4.290879555	5.088156288
1	-2.2947440	GO:0062207	M1	1	0	GO Biological Proc	19	regulation of pattern recognition receptor signaling pathway	19_GO:0044419 biological process involved in interspecies interaction	-2.294744	3.0226671	3.3426055	20836	101	546	8	1.4652014	0.5142178	12491|19260|20128|54123|58185|83433|100340|226421	Cd36|Ptpn22|Trim30a|Irf7|Rsad2|Trem2|Smpdl3b|Rab7b	-0.415592	0	8	0	0	-4.290879555	5.088156288

	79					esses			between organisms	079	02	36					65	73			984						
1	-2.275090552	GO:0032675	M1	1	0	GO Biological Processes	19	regulation of interleukin-6 production	19_GO:0032501 multicellular organismal process	-2.275090552	2.469252316	3.155329243	20836	170	546	11	2.014652015	0.601290399	11541|11629|12491|12608|16598|17975|19260|20128|22177|83433|226421	Adora2b|Aif1|Cd36|Cebpb|Klf2|Ncl|Ptpn22|Trim30a|Tyrobp|Trem2|Rab7b	-0.415592984	0	8	0	0	-4.290879555	5.088156288
1	-2.12818159	GO:1900225	M1	1	0	GO Biological Processes	19	regulation of NLRP3 inflammasome complex assembly	19_GO:0050789 regulation of biological process	-2.12818159	5.088156288	3.675749195	20836	30	546	4	0.732600733	0.36495614	12491|19260|20128|83433	Cd36|Ptpn22|Trim30a|Trem2	-0.354773726	0	8	0	0	-4.290879555	5.088156288

1	-2.02802099	GO:0034121	M1	1	0	GO Biological Processes	19	regulation of toll-like receptor signaling pathway	19_GO:0044419 biological process involved in interspecies interaction between organisms	-2.02802099	4.77014652	3.501159092	20836	32	546	4	0.732600733	0.36495614	12491|20128|54123|100340	Cd36|Trim30a|Irf7|Smpdl3b	-0.313317094	0	8	0	0	-4.290879555	5.088156288
1	-4.099763501	GO:0008285	M1	1	0	GO Biological Processes	19	negative regulation of cell population proliferation	19_GO:0048519 negative regulation of biological process	-4.099763501	1.943866678	4.306675502	20836	746	546	38	6.95970696	1.089017078	11541|11629|12524|12608|13345|13590|14461|15451|16189|17927|18094|19225|19268|19401|19662|20379|20535|22177|22411|23892|26971|30878|53626|54200|55948|58801|66333|67451|74048|78933|83433|116701|208154|214384|216795|235505|320256|671535	Adora2b|Aif1|Cd86|Cebpb|Twist2|Lefty1|Gata2|Hpn|Il4|Myod1|Nkx2-9|Ptgs2|Ptprf|Rara|Rbp4|Sfrp4|Slc4a2|Tyrobp|Wnt11|Grem1|Pla2g2f|Apln|Insm1|Sult2b1|Sfn|Pmaip1|Aqp11|Pkp2|Vsir|Agbl4|Trem2|Fgfrl1|Btla|Myocd|Wnt9a|Cd109|Dlec1|Parp10	-1.192604238	0	9	1	1	-4.099763501	1.943866678
1	-4.0	GO:0	M1	1	0	GO Bi	19	immune effector process	19_GO:0002376 immune	-4.	2.3	4.4	20836	408	546	25	4.5	0.89	11541|12259|12260|12608|12759|12986|13036|13166|13419|14129|14972|15040|16189|16768|171	Adora2b|C1qa|C1qb|Cebpb|Clu|Csf3r|Ctsh|Dbh|Dnase1|Fcgr1|H2-K1|H2-	-1.	0	10	1	1	-4.07	8.17739

	783125	002252				ological Processes			system process	0783125	38307118	78421797					78754579	4540282	75|18754|19885|20442|22177|54123|60504|83433|94176|625018|667277	T23|Il4|Lag3|Masp2|Prkce|Rorc|St3gal1|Tyrobp|Irf7|Il21r|Trem2|Dock2|C4a|C1rb	192604238					83125	4035
1	-2.628605366	GO:0002449	M1	1	0	GO Biological Processes	19	lymphocyte mediated immunity	19_GO:0002376 immune system process	-2.628605366	2.492940895	3.47134614	20836	199	546	13	2.380952381	0.65244862	12259|12260|12986|13036|14129|14972|15040|16189|16768|17175|54123|60504|667277	C1qa|C1qb|Csf3r|Ctsh|Fcgr1|H2-K1|H2-T23|Il4|Lag3|Masp2|Irf7|Il21r|C1rb	-0.55824615	0	10	0	0	-4.0783125	8.177394035
1	-2.5381	GO:0002	M1	1	0	GO Biologica	19	leukocyte mediated immunity	19_GO:0002376 immune system process	-2.538	2.2625	3.3143	20836	253	546	15	2.7472	0.69952	11541|12259|12260|12986|13036|13166|14129|14972|15040|16189|16768|17175|54123|60504|667277	Adora2b|C1qa|C1qb|Csf3r|Ctsh|Dbh|Fcgr1|H2-K1|H2-T23|Il4|Lag3|Masp2|Irf7|Il21r|C1rb	-0.522	0	10	0	0	-4.0783125	8.177394035

	26524	443				l Processes				126524	20089	33991					52747	6105			969483						
1	-2.485093354	mmu04610	M1	1	0	KEGG Pathway	24	Complement and coagulation cascades - Mus musculus (house mouse)		-2.485093354	3.247759333	3.582947723	20836	94	546	8	1.465201465	0.514217873	12259|12260|12759|14065|16409|17175|625018|667277	C1qa|C1qb|Clu|F2rl3|Itgam|Masp2|C4a|C1rb	-0.508397223	0	10	0	0	-4.0783125	8.177394035
1	-2.384353	GO:0016064	M1	1	0	GO Biological Proc	19	immunoglobulin mediated immune response	19_GO:0002376 immune system process	-2.384353	2.8861390	3.3848218	20836	119	546	9	1.6483516	0.5449032	12259|12260|12986|14129|16189|17175|54123|60504|667277	C1qa|C1qb|Csf3r|Fcgr1|Il4|Masp2|Irf7|Il21r|C1rb	-0.457038	0	10	0	0	-4.0783125	8.177394035

	37					esses				37	71						48	94			809						
1	-2.375742993	GO:0002460	M1	1	0	GO Biological Processes	19	adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains	19_GO:0002376 immune system process	-2.375742993	2.329085625	3.198297745	20836	213	546	13	2.380952381	0.65244862	12259|12260|12986|13036|14129|14972|15040|16189|17175|19885|54123|60504|667277	C1qa|C1qb|Csf3r|Ctsh|Fcgr1|H2-K1|H2-T23|Il4|Masp2|Rorc|Irf7|Il21r|C1rb	-0.457038809	0	10	0	0	-4.0783125	8.177394035
1	-2.29026261	GO:0019724	M1	1	0	GO Biological Processes	19	B cell mediated immunity	19_GO:0002376 immune system process	-2.29026261	2.79228089	3.270311921	20836	123	546	9	1.648351648	0.544903294	12259|12260|12986|14129|16189|17175|54123|60504|667277	C1qa|C1qb|Csf3r|Fcgr1|Il4|Masp2|Irf7|Il21r|C1rb	-0.415592984	0	10	0	0	-4.0783125	8.177394035

1	-2.279779417	R-MMU-166786	M1	1	0	Reactome Gene Sets	6	Creation of C4 and C2 activators		-2.279779417	8.177394035	4.406782706	20836	14	546	3	0.549450549	0.316352724	12259|12260|17175	C1qa|C1qb|Masp2	-0.415592984	0	10	0	0	-4.0783125	8.177394035
1	-2.123946947	GO:0006956	M1	1	0	GO Biological Processes	19	complement activation	19_GO:0002376 immune system process	-2.123946947	4.059699166	3.444791237	20836	47	546	5	0.915750916	0.407656781	12259|12260|17175|625018|667277	C1qa|C1qb|Masp2|C4a|C1rb	-0.354681828	0	10	0	0	-4.0783125	8.177394035
1	-2.0	GO:0	M1	1	0	GO Bi	19	adaptive immune response	19_GO:0002376 immune	-2.	1.8	2.7	20836	365	546	18	3.2	0.76	12259|12260|12524|12986|13036|13733|14129|14972|15040|1618	C1qa|C1qb|Cd86|Csf3r|Ctsh|Adgre1|Fcgr1|H2-K1|H2-	-0.	0	10	0	0	-4.07	8.17739

	93102253	002250				ological Processes			system process	093102253	81920819	88422305					96703297	412472	9|16768|17175|19885|54123|60504|208154|240754|667277	T23|Il4|Lag3|Masp2|Rorc|Irf7|Il21r|Btla|Lax1|C1rb	337347265					83125	4035
1	-2.07710272	GO:0006958	M1	1	0	GO Biological Processes	19	complement activation, classical pathway	19_GO:0002376 immune system process	-2.07710272	4.924022214	3.586579769	20836	31	546	4	0.732600733	0.36495614	12259|12260|17175|667277	C1qa|C1qb|Masp2|C1rb	-0.337347265	0	10	0	0	-4.0783125	8.177394035
1	-2.0336	WP200	M1	1	0	WikiPathw	27	Complement classical pathway	activation,	-2.033	6.7343	3.8799	20836	17	546	3	0.5494	0.31635	12259|12260|625018	C1qa|C1qb|C4a	-0.314	0	10	0	0	-4.0783125	8.177394035

	80425					ays				680425	24499	74255					50549	2724			382575						
1	-4.041603218	GO:0032102	M1	1	0	GO Biological Processes	19	negative regulation of response to external stimulus	19_GO:0048519 negative regulation of biological process	-4.041603218	2.280897646	4.428792964	20836	435	546	26	4.761904762	0.911379765	11629|11747|12140|12490|16189|18846|19260|20348|20359|20496|21357|22416|23892|26456|67526|77772|83433|100340|109648|216963|226421|235505|246730|268902|319552|574402	Aif1|Anxa5|Fabp7|Cd34|Il4|Plxna3|Ptpn22|Sema3c|Sema6b|Slc12a2|Tarbp2|Wnt3a|Grem1|Sema4g|Atg12|Dcst1|Trem2|Smpdl3b|Npy|Git1|Rab7b|Cd109|Oas1a|Robo2|Spx|Gpr17	-1.187624364	0	11	1	1	-4.041603218	2.280897646
1	-4.0027505	GO:0050873	M1	1	0	GO Biological Proc	19	brown fat cell differentiation	19_GO:0032502 developmental process	-4.002750	6.360195	5.7041152	20836	42	546	7	1.2820512	0.4814536	12608|13371|14461|19225|20249|76905|94187	Cebpb|Dio2|Gata2|Ptgs2|Scd1|Lrg1|Zfp423	-1.165162	0	12	1	1	-4.002750581	6.36019536

	81					esses				581	36	81					82				143						
1	-2.866356252	WP2872	M1	1	0	WikiPathways	27	White fat cell differentiation		-2.866356252	5.96268315	4.608612196	20836	32	546	5	0.915750916	0.407656781	12608|14461|16598|19401|94187	Cebpb|Gata2|Klf2|Rara|Zfp423	-0.69319184	0	12	0	0	-4.002750581	6.36019536
1	-3.966221914	GO:0010632	M1	1	0	GO Biological Processes	19	regulation of epithelial cell migration	19_GO:0040011 locomotion	-3.966221914	2.758638951	4.579645689	20836	249	546	18	3.296703297	0.76412472	11541|12317|12512|13036|13645|14461|15200|16189|16819|18754|19225|20620|20684|20855|21333|69683|105844|320924	Adora2b|Calr|Cd63|Ctsh|Egf|Gata2|Hbegf|Il4|Lcn2|Prkce|Ptgs2|Plk2|Sp100|Stc1|Tac1|Emc10|Card10|Ccbe1	-1.144427743	0	13	1	1	-3.966221914	3.094149094

1	-3.614691195	GO:0030335	M1	1	0	GO Biological Processes	19	positive regulation of cell migration	19_GO:0040011 locomotion	-3.614691195	1.988229138	4.011919457	20836	595	546	31	5.677655678	0.990365487	11541|11629|11652|12317|13036|13345|13616|13645|13653|14461|14828|15200|16189|16819|17390|18754|19055|19225|20348|20359|20620|21333|22411|26456|53626|69683|74048|83433|225631|227541|320924	Adora2b|Aif1|Akt2|Calr|Ctsh|Twist2|Edn3|Egf|Egr1|Gata2|Hspa5|Hbegf|Il4|Lcn2|Mmp2|Prkce|Ppp3ca|Ptgs2|Sema3c|Sema6b|Plk2|Tac1|Wnt11|Sema4g|Insm1|Emc10|Vsir|Trem2|Onecut2|Camk1d|Ccbe1	-0.979207449	0	13	0	0	-3.966221914	3.094149094
1	-3.452050988	GO:0010634	M1	1	0	GO Biological Processes	19	positive regulation of epithelial cell migration	19_GO:0040011 locomotion	-3.452050988	3.0622316285	4.322674883	20836	162	546	13	2.380952381	0.65244862	11541|12317|13036|13645|14461|15200|16819|18754|19225|20620|21333|69683|320924	Adora2b|Calr|Ctsh|Egf|Gata2|Hbegf|Lcn2|Prkce|Ptgs2|Plk2|Tac1|Emc10|Ccbe1	-0.969979593	0	13	0	0	-3.966221914	3.094149094
1	-3.2	GO:2	M1	1	0	GO Bi	19	positive regulation of cell motility	19_GO:0040011	-3.	1.9	3.7	20836	622	546	31	5.6	0.99	11541|11629|11652|12317|13036|13345|13616|13645|13653|14461|14828|15200|16189|16819|173	Adora2b|Aif1|Akt2|Calr|Ctsh|Twist2|Edn3|Egf|Egr1|Gata2|Hspa5|Hbegf|Il4|Lcn2|Mmp	-0.	0	13	0	0	-3.96	3.09414

	87391843	000147				ological Processes			locomotion	287391843	01923371	46198216					77655678	0365487	90|18754|19055|19225|20348|20359|20620|21333|22411|26456|53626|69683|74048|83433|225631|227541|320924	2|Prkce|Ppp3ca|Ptgs2|Sema3c|Sema6b|Plk2|Tac1|Wnt11|Sema4g|Insm1|Emc10|Vsir|Trem2|Onecut2|Camk1d|Ccbe1	893500904					6221914	9094
1	-3.095046935	GO:0040017	M1	1	0	GO Biological Processes	19	positive regulation of locomotion	19_GO:0040011 locomotion	-3.095046935	1.851324471	3.585536631	20836	639	546	31	5.677655678	0.990365487	11541|11629|11652|12317|13036|13345|13616|13645|13653|14461|14828|15200|16189|16819|17390|18754|19055|19225|20348|20359|20620|21333|22411|26456|53626|69683|74048|83433|225631|227541|320924	Adora2b|Aif1|Akt2|Calr|Ctsh|Twist2|Edn3|Egf|Egr1|Gata2|Hspa5|Hbegf|Il4|Lcn2|Mmp2|Prkce|Ppp3ca|Ptgs2|Sema3c|Sema6b|Plk2|Tac1|Wnt11|Sema4g|Insm1|Emc10|Vsir|Trem2|Onecut2|Camk1d|Ccbe1	-0.794974414	0	13	0	0	-3.966221914	3.094149094
1	-2.5993	GO:010	M1	1	0	GO Biologica	19	regulation of endothelial cell migration	19_GO:0040011 locomotion	-2.599	2.5871	3.4786	20836	177	546	12	2.1978	0.62744	11541|12317|13645|14461|16819|19225|20620|20684|20855|69683|105844|320924	Adora2b|Calr|Egf|Gata2|Lcn2|Ptgs2|Plk2|Sp100|Stc1|Emc10|Card10|Ccbe1	-0.553	0	13	0	0	-3.96621	3.094149094

	88948	594				l Processes				388948	98113	85556					02198	0123			808523					914	
1	-2.586942603	GO:0010595	M1	1	0	GO Biological Processes	19	positive regulation of endothelial cell migration	19_GO:0040011 locomotion	-2.586942603	3.094149094	3.628890538	20836	111	546	9	1.648351648	0.544903294	11541|12317|13645|14461|16819|19225|20620|69683|320924	Adora2b|Calr|Egf|Gata2|Lcn2|Ptgs2|Plk2|Emc10|Ccbe1	-0.553808523	0	13	0	0	-3.966221914	3.094149094
1	-3.9477152	GO:0002673	M1	1	0	GO Biological Proc	19	regulation of acute inflammatory response	19_GO:0050896 response to stimulus	-3.947715	5.3559539	5.402728	20836	57	546	8	1.4652014	0.5142178	13419|14129|16189|19225|21333|75697|109648|244911	Dnase1|Fcgr1|Il4|Ptgs2|Tac1|C2cd4b|Npy|C2cd4a	-1.142474	0	14	1	1	-3.947715246	5.611937083

	46					esses				246	88	94					65	73			951					
1	-3.2994804445	GO:0006954	M1	1	0	GO Biological Processes	19	inflammatory response	19_GO:0050896 response to stimulus	-3.299480445	1.982398554	3.79068958	20836	539	546	28	5.128205128	0.943962912	11629|12259|12608|12654|12759|12918|12919|13850|14129|16189|16409|17084|18761|19225|20295|20308|21333|22177|23887|66222|75697|77134|83433|100340|210808|227541|244911|381493	Aif1|C1qa|Cebpb|Chil1|Clu|Crh|Crhbp|Ephx2|Fcgr1|Il4|Itgam|Ly86|Prkcq|Ptgs2|Ccl17|Ccl9|Tac1|Tyrobp|Ggt5|Serpinb1a|C2cd4b|Hnrnpa0|Trem2|Smpdl3b|Lacc1|Camk1d|C2cd4a|S100a7a	-0.893543092	0	14	0	0	-3.947715246	5.611937083
1	-2.74459088	GO:0002675	M1	1	0	GO Biological Processes	19	positive regulation of acute inflammatory response	19_GO:0048518 positive regulation of biological process	-2.74459088	5.611937083	4.414914899	20836	34	546	5	0.915750916	0.407656781	14129|19225|21333|75697|244911	Fcgr1|Ptgs2|Tac1|C2cd4b|C2cd4a	-0.621766713	0	14	0	0	-3.947715246	5.611937083

1	-3.915247919	GO:0051091	M1	1	0	GO Biological Processes	19	positive regulation of DNA-binding transcription factor activity	19_GO:0008152 metabolic process	-3.915247919	2.646212668	4.499669267	20836	274	546	19	3.47985348	0.784319737	12491|12759|15163|16189|18013|18761|19055|20128|20684|22042|22416|23892|59016|66930|170720|214384|226421|227541|269209	Cd36|Clu|Hcls1|Il4|Neurod2|Prkcq|Ppp3ca|Trim30a|Sp100|Tfrc|Wnt3a|Grem1|Thap11|Fank1|Card14|Myocd|Rab7b|Camk1d|Stk36	-1.142474951	0	15	1	1	-3.915247919	2.646212668
1	-2.452106932	GO:0051090	M1	1	0	GO Biological Processes	19	regulation of DNA-binding transcription factor activity	19_GO:0008152 metabolic process	-2.452106932	1.886619747	3.101345804	20836	445	546	22	4.029304029	0.841565687	12491|12759|15163|16189|18013|18761|19055|20128|20379|20684|21335|22042|22416|23892|59016|66930|170720|214384|226421|227541|269209|671535	Cd36|Clu|Hcls1|Il4|Neurod2|Prkcq|Ppp3ca|Trim30a|Sfrp4|Sp100|Tacc3|Tfrc|Wnt3a|Grem1|Thap11|Fank1|Card14|Myocd|Rab7b|Camk1d|Stk36|Parp10	-0.496709311	0	15	0	0	-3.915247919	2.646212668
1	-3.8	mmu	M1	1	0	KEG	24	VEGF signaling pathway - Mus musculus (house mouse)		-3.	5.2	5.3	20836	58	546	8	1.4	0.51	11652|18706|18752|19055|19058|19225|170758|329502	Akt2|Pik3ca|Prkcg|Ppp3ca|Ppp3r1|Ptgs2|Rac3|Pla2g4e	-1.	0	16	1	1	-3.89	5.45159

	93204904	04370				G Pathway			893204904	63609953	33860381					65201465	4217873			142474951					3204904	6023
1	-3.463848366	mmu04650	M1	1	0	KEGG Pathway	24	Natural killer cell mediated cytotoxicity - Mus musculus (house mouse)	-3.463848366	3.469197469	4.468462213	20836	121	546	11	2.014652015	0.601290399	14972|15040|15896|16822|18706|18752|19055|19058|22177|22324|170758	H2-K1|H2-T23|Icam2|Lcp2|Pik3ca|Prkcg|Ppp3ca|Ppp3r1|Tyrobp|Vav1|Rac3	-0.969979593	0	16	0	0	-3.893204904	5.451596023
1	-3.26111	mmu040	M1	1	0	KEGG Path	24	Rap1 signaling pathway - Mus musculus (house mouse)	-3.261	2.6748	4.0398	20836	214	546	15	2.7472	0.69952	11541|11652|12388|13645|14065|14677|16409|16822|18706|18752|22324|23880|53978|170758|227377	Adora2b|Akt2|Ctnnd1|Egf|F2rl3|Gnai1|Itgam|Lcp2|Pik3ca|Prkcg|Vav1|Fyb|Lpar2|Rac3|Farp2	-0.883	0	16	0	0	-3.893204	5.451596023

	64599	15				way			1645999	48516	85705					52747	6105			839272					904	
1	-2.776984945	mmu04664	M1	1	0	KEGG Pathway	24	Fc epsilon RI signaling pathway - Mus musculus (house mouse)	-2.776984945	4.047397047	4.067567908	20836	66	546	7	1.282051282	0.4814536	11652|16189|16822|18706|22324|170758|329502	Akt2|Il4|Lcp2|Pik3ca|Vav1|Rac3|Pla2g4e	-0.64475331	0	16	0	0	-3.893204904	5.451596023
1	-2.2725864	mmu04662	M1	1	0	KEGG Pathway	24	B cell receptor signaling pathway - Mus musculus (house mouse)	-2.272586	3.2978790	3.3990719	20836	81	546	7	1.2820512	0.4814536	11652|17060|18706|19055|19058|22324|170758	Akt2|Blnk|Pik3ca|Ppp3ca|Ppp3r1|Vav1|Rac3	-0.415253	0	16	0	0	-3.893204904	5.451596023

	71								471	76	79					82				975						
1	-2.243738703	mmu04660	M1	1	0	KEGG Pathway	24	T cell receptor signaling pathway - Mus musculus (house mouse)	-2.243738703	2.963974537	3.277747098	20836	103	546	8	1.465201465	0.514217873	11652|16189|16822|18706|18761|19055|19058|22324	Akt2|Il4|Lcp2|Pik3ca|Prkcq|Ppp3ca|Ppp3r1|Vav1	-0.404133451	0	16	0	0	-3.893204904	5.451596023
1	-2.236923006	R-MMU-28718	M1	1	0	Reactome Gene Sets	6	FCERI mediated Ca+2 mobilization	-2.236923006	5.451596023	3.866621327	20836	28	546	4	0.732600733	0.36495614	16822|19055|19058|22324	Lcp2|Ppp3ca|Ppp3r1|Vav1	-0.404133451	0	16	0	0	-3.893204904	5.451596023

1	-2.02802099	09R-MMU-389356	M1	1	0	Reactome Gene Sets	6	CD28 co-stimulation		-2.02802099	4.77014652	3.501159092	20836	32	546	4	0.732600733	0.36495614	11652|12524|18706|22324	Akt2|Cd86|Pik3ca|Vav1	-0.313317094	0	16	0	0	-3.893204904	5.451596023
1	-3.876409217	GO:0048149	M1	1	0	GO Biological Processes	19	behavioral response to ethanol	19_GO:0032501 multicellular organismal process	-3.876409217	13.87678988	7.007506297	20836	11	546	4	0.732600733	0.36495614	12919|12921|13166|13860	Crhbp|Crhr1|Dbh|Eps8	-1.142474951	0	17	1	1	-3.876409217	13.87678988

1	-2.243492184	GO:0045471	M1	1	0	GO Biological Processes	19	response to ethanol	19_GO:0050896 response to stimulus	-2.243492184	3.257661038	3.360213005	20836	82	546	7	1.282051282	0.4814536	12919|12921|13166|13860|16533|18754|19401	Crhbp|Crhr1|Dbh|Eps8|Kcnmb1|Prkce|Rara	-0.404133451	0	17	0	0	-3.876409217	13.87678988
1	-3.867359109	GO:0007263	M1	1	0	GO Biological Processes	19	nitric oxide mediated signal transduction	19_GO:0023052 signaling	-3.867359109	9.540293304	6.268175985	20836	20	546	5	0.915750916	0.407656781	12491|17748|17750|19416|234889	Cd36|Mt1|Mt2|Rasd1|Gucy1a2	-1.142474951	0	18	1	1	-3.867359109	9.54029304
1	-2.2	GO:0	M1	1	0	GO Bi	19	second-messenger-	19_GO:0023052 signaling	-2.	2.3	3.1	20836	195	546	12	2.1	0.62	11541|12373|12491|13616|15559|17748|17750|19055|19058|19416|54396|234889	Adora2b|Casq2|Cd36|Edn3|Htr2b|Mt1|Mt2|Ppp3ca|Ppp3r1|Rasd1|Irgm2|Gucy1a2	-0.	0	18	0	0	-3.86	9.54029

	61393862	019932				ological Processes		mediated signaling		261393862	48379825	03246219					97802198	7440123			409082167					7359109	304
1	-2.12818159	GO:0019934	M1	1	0	GO Biological Processes	19	cGMP-mediated signaling	19_GO:0023052 signaling	-2.12818159	5.088156288	3.675749195	20836	30	546	4	0.732600733	0.36495614	11541|12491|15559|234889	Adora2b|Cd36|Htr2b|Gucy1a2	-0.354773726	0	18	0	0	-3.867359109	9.54029304
1	-3.8541	mmu043	M1	1	0	KEGG Path	24	Osteoclast differentiation - Mus musculus (house mouse)		-3.854	3.5776	4.7984	20836	128	546	12	2.1978	0.62744	11652|14129|14200|16477|16822|17060|17972|18706|19055|19058|22177|83433	Akt2|Fcgr1|Fhl2|Junb|Lcp2|Blnk|Ncf4|Pik3ca|Ppp3ca|Ppp3r1|Tyrobp|Trem2	-1.141	0	19	1	1	-3.854183	5.263609953

	83918	80				way			183918	0989	96102					02198	0123			534216					918	
1	-2.525646548	R-MMU-2172127	M1	1	0	Reactome Gene Sets	6	DAP12 interactions	-2.525646548	5.021206863	4.069953775	20836	38	546	5	0.915750916	0.407656781	16822|18706|22177|23845|83433	Lcp2|Pik3ca|Tyrobp|Clec5a|Trem2	-0.521512168	0	19	0	0	-3.854183918	5.263609953
1	-2.181401	R-MMU-24	M1	1	0	Reactome Gene	6	DAP12 signaling	-2.18140	5.263609	3.768979	20836	29	546	4	0.732600	0.364956	16822|18706|22177|83433	Lcp2|Pik3ca|Tyrobp|Trem2	-0.37931	0	19	0	0	-3.854183918	5.263609953

	637	24491				Sets				1637	953	567				733	14			7055							
1	-2.089005318	GO:0002275	M1	1	0	GO Biological Processes	19	myeloid cell activation involved in immune response	19_GO:0002376 immune system process	-2.089005318	3.417418402	3.251123612	20836	67	546	6	1.098901099	0.446152716	11541|13419|18754|22177|83433|94176	Adora2b|Dnase1|Prkce|Tyrobp|Trem2|Dock2	-0.337347265	0	19	0	0	-3.854183918	5.263609953
1	-3.7885840	GO:0032103	M1	1	0	GO Biological Processes	19	positive regulation of response to external stimulus	19_GO:0048518 positive regulation of biological process	-3.7885840	2.0627660	4.1628574	20836	555	546	30	5.4945054	0.975206336	11541|11629|11652|12317|12524|12608|13616|14129|16189|16768|17084|17175|18754|19225|19260|20128|21333|22177|22324|54123|54396|58185|75697|83433|109648|210808|227541|244911|246730|380713	Adora2b|Aif1|Akt2|Calr|Cd86|Cebpb|Edn3|Fcgr1|Il4|Lag3|Ly86|Masp2|Prkce|Ptgs2|Ptpn22|Trim30a|Tac1|Tyrobp|Vav1|Irf7|Irgm2|Rsad2|C2cd4b|Trem2|Npy|Lacc1|Camk1d|C2cd4a|Oas1a|Scarf1	-1.0984922	0	20	1	1	-3.788584026	2.120065122

	26					ses				26	63	26					95				32						
1	-3.189326739	GO:0031347	M1	1	0	GO Biological Processes	19	regulation of defense response	19_GO:0050896 response to stimulus	-3.189326739	1.779536526	3.620665551	20836	772	546	36	6.593406593	1.062055896	11541 | 12491 | 12524 | 12608 | 12918 | 13419 | 14129 | 16189 | 16768 | 17175 | 17472 | 18754 | 19225 | 19260 | 20128 | 21333 | 21357 | 21923 | 22177 | 22324 | 54123 | 54396 | 58185 | 66222 | 67526 | 75697 | 77772 | 83433 | 100340 | 109648 | 210808 | 216963 | 226421 | 244911 | 246730 | 574402	Adora2b | Cd36 | Cd86 | Cebpb | Crh | Dnase1 | Fcgr1 | Il4 | Lag3 | Masp2 | Gbp4 | Prkce | Ptgs2 | Ptpn22 | Trim30a | Tac1 | Tarbp2 | Tnc | Tyrobp | Vav1 | Irf7 | Irgm2 | Rsad2 | Serpinb1a | Atg12 | C2cd4b | Dcst1 | Trem2 | Smpdl3b | Npy | Lacc1 | Git1 | Rab7b | C2cd4a | Oas1a | Gpr17	-0.852968453	0	20	0	0	-3.788584026	2.12006512
1	-2.865577265	GO:0045087	M1	1	0	GO Biological Processes	19	innate immune response	19_GO:0044419 biological process involved in interspecies interaction between organisms	-2.865577265	1.75392574	3.37248822	20836	718	546	33	6.043956044	1.019827429	12259 | 12260 | 14129 | 16189 | 16768 | 16819 | 17084 | 17175 | 17472 | 20128 | 20295 | 20308 | 20684 | 21333 | 21822 | 23845 | 26971 | 54123 | 54396 | 55932 | 58185 | 66713 | 71856 | 77772 | 78416 | 83433 | 100340 | 109648 | 210808 | 226421 | 246728 | 246730 | 667277	C1qa | C1qb | Fcgr1 | Il4 | Lag3 | Lcn2 | Ly86 | Masp2 | Gbp4 | Trim30a | Ccl17 | Ccl9 | Sp100 | Tac1 | Tgtp1 | Clec5a | Pla2g2f | Irf7 | Irgm2 | Gbp3 | Rsad2 | Actr2 | Wfdc3 | Dcst1 | Rnase6 | Trem2 | Smpdl3b | Npy | Lacc1 | Rab7b | Oas2 | Oas1a | C1rb	-0.69319184	0	20	0	0	-3.788584026	2.12006512

1	-2.848794866	GO:0031349	M1	1	0	GO Biological Processes	19	positive regulation of defense response	19_GO:0048518 positive regulation of biological process	-2.848794866	2.032798517	3.477626312	20836	413	546	22	4.029304029	0.841565687	11541|12524|12608|12918|14129|16768|17175|18754|19225|19260|20128|21333|22177|22324|54123|54396|58185|75697|83433|210808|244911|246730	Adora2b|Cd86|Cebpb|Crh|Fcgr1|Lag3|Masp2|Prkce|Ptgs2|Ptpn22|Trim30a|Tac1|Tyrobp|Vav1|Irf7|Irgm2|Rsad2|C2cd4b|Trem2|Lacc1|C2cd4a|Oas1a	-0.690432374	0	20	0	0	-3.788584026	2.12006512
1	-2.584714622	GO:0002831	M1	1	0	GO Biological Processes	19	regulation of response to biotic stimulus	19_GO:0050896 response to stimulus	-2.584714622	1.872940965	3.204358965	20836	489	546	24	4.395604396	0.877307634	12491|12524|16189|16768|17084|17175|17472|18754|19260|20128|21357|22177|22324|54123|54396|58185|66222|67526|77772|83433|100340|210808|226421|246730	Cd36|Cd86|Il4|Lag3|Ly86|Masp2|Gbp4|Prkce|Ptpn22|Trim30a|Tarbp2|Tyrobp|Vav1|Irf7|Irgm2|Rsad2|Serpinb1a|Atg12|Dcst1|Trem2|Smpdl3b|Lacc1|Rab7b|Oas1a	-0.553808523	0	20	0	0	-3.788584026	2.12006512
1	-2.4	GO:0	M1	1	0	GO Bi	19	regulation of innate immune response	19_GO:0044419 biological	-2.	1.9	3.1	20836	389	546	20	3.6	0.80	12491|12524|16768|17175|18754|19260|20128|22177|22324|54123|54396|58185|66222|67526|777	Cd36|Cd86|Lag3|Masp2|Prkce|Ptpn22|Trim30a|Tyrobp|Vav1|Irf7|Irgm2|Rsad2|Serpinb1	-0.	0	20	0	0	-3.78	2.12006

	65556225	045088				ological Processes			process involved in interspecies interaction between organisms	465556225	62013993	41907836					63003663	3931241	72|83433|100340|210808|226421|246730	a|Atg12|Dcst1|Trem2|Smpdl3b|Lacc1|Rab7b|Oas1a	501955392					8584026	512
1	-2.403234923	GO:0002253	M1	1	0	GO Biological Processes	19	activation of immune response	19_GO:0002376 immune system process	-2.403234923	2.02029735	3.111599629	20836	340	546	18	3.296703297	0.76412472	12259|12260|12524|16822|17060|17175|18754|19260|20128|22177|23880|54396|192194|210808|240754|246730|625018|667277	C1qa|C1qb|Cd86|Lcp2|Blnk|Masp2|Prkce|Ptpn22|Trim30a|Tyrobp|Fyb|Irgm2|Btnl10|Lacc1|Lax1|Oas1a|C4a|C1rb	-0.46672118	0	20	0	0	-3.788584026	2.12006512
1	-2.2771	GO:0002	M1	1	0	GO Biological	19	immune response-regulating signaling pathway	19_GO:0002376 immune system process	-2.277	2.1200	3.0388	20836	270	546	15	2.7472	0.69952	12524|13036|16822|17060|17175|18754|19260|22177|23880|54396|192194|208154|210808|240754|246730	Cd86|Ctsh|Lcp2|Blnk|Masp2|Prkce|Ptpn22|Tyrobp|Fyb|Irgm2|Btnl10|Btla|Lacc1|Lax1|Oas1a	-0.415	0	20	0	0	-3.788584	2.12006512

	21319	764				l Processes				121319	6512	01203					52747	6105			592984					026	
1	-3.787660838	GO:0050922	M1	1	0	Biological Processes	19	negative regulation of chemotaxis	19_GO:0040011 locomotion	-3.787660838	5.088156288	5.20204611	20836	60	546	8	1.465201465	0.514217873	11629|18846|20348|20359|22416|23892|26456|268902	Aif1|Plxna3|Sema3c|Sema6b|Wnt3a|Grem1|Sema4g|Robo2	-1.098492232	0	21	1	1	-3.787660838	7.066883734
1	-3.2165382	GO:0048843	M1	1	0	Biological Proc	19	negative regulation of axon extension involved in axon guidance	19_GO:0040007 growth	-3.216538	7.0668837	5.1745668	20836	27	546	5	0.9157509	0.4076567	18846|20348|20359|22416|26456	Plxna3|Sema3c|Sema6b|Wnt3a|Sema4g	-0.866664	0	21	0	0	-3.787660838	7.066883734

	29					esses				229	34	19					16	81			119						
1	-2.804339306	GO:0048841	M1	1	0	GO Biological Processes	19	regulation of axon extension involved in axon guidance	19_GO:0040007 growth	-2.804339306	5.781995782	4.50977863	20836	33	546	5	0.915750916	0.407656781	18846|20348|20359|22416|26456	Plxna3|Sema3c|Sema6b|Wnt3a|Sema4g	-0.665720872	0	21	0	0	-3.787660838	7.066883734
1	-2.701098574	GO:0031345	M1	1	0	GO Biological Processes	19	negative regulation of cell projection organization	19_GO:0048519 negative regulation of biological process	-2.701098574	2.439526987	3.513024539	20836	219	546	14	2.564102564	0.676442475	14580|14972|17152|18846|19055|19268|20348|20359|22416|26456|74694|107351|192167|228357	Gfap|H2-K1|Mak|Plxna3|Ppp3ca|Ptprf|Sema3c|Sema6b|Wnt3a|Sema4g|Tbc1d30|Kank1|Nlgn1|Lrp4	-0.605332664	0	21	0	0	-3.787660838	7.066883734

1	-2.498758631	GO:0030308	M1	1	0	GO Biological Processes	19	negative regulation of cell growth	19_GO:0040007 growth	-2.498758631	2.408229311	3.332034013	20836	206	546	13	2.380952381	0.65244862	12696|12955|18846|20348|20359|20671|22411|22416|23892|26456|56191|56437|74116	Cirbp|Cryab|Plxna3|Sema3c|Sema6b|Sox17|Wnt11|Wnt3a|Grem1|Sema4g|Tro|Rrad|Pi16	-0.510839795	0	21	0	0	-3.787660838	7.066883734
1	-2.358723284	GO:0050920	M1	1	0	GO Biological Processes	19	regulation of chemotaxis	19_GO:0040011 locomotion	-2.358723284	2.235382247	3.151014855	20836	239	546	14	2.564102564	0.676442475	11629|11652|12317|13616|16189|18846|20348|20359|22416|23892|26456|83433|227541|268902	Aif1|Akt2|Calr|Edn3|Il4|Plxna3|Sema3c|Sema6b|Wnt3a|Grem1|Sema4g|Trem2|Camk1d|Robo2	-0.44458901	0	21	0	0	-3.787660838	7.066883734
1	-2.2	GO:0	M1	1	0	GO Bi	19	mesenchyme development	19_GO:0032502 developm	-2.	2.1	3.0	20836	243	546	14	2.5	0.67	13082|13616|15559|17285|17300|19058|20348|20359|22411|22416|23796|23967|26456|268902	Cyp26a1|Edn3|Htr2b|Meox1|Foxc1|Ppp3r1|Sema3c|Sema6b	-0.	0	21	0	0	-3.78	7.06688

	95831953	060485				ological Processes			ental process	295831953	9858605	82936618					64102564	6442475		|Wnt11|Wnt3a|Aplnr|Osr1|Sema4g|Robo2	415592984					7660838	3734
1	-2.289286694	GO:0071526	M1	1	0	GO Biological Processes	19	semaphorin-plexin signaling pathway	19_GO:0023052 signaling	-2.289286694	4.4373456	3.701271139	20836	43	546	5	0.915750916	0.407656781	18846|20348|20359|26456|227377	Plxna3|Sema3c|Sema6b|Sema4g|Farp2	-0.415592984	0	21	0	0	-3.787660838	7.066883734
1	-2.2429	GO:0048	M1	1	0	GO Biologica	19	stem cell differentiation	19_GO:0032502 developmental process	-2.2442	2.2447	3.0517	20836	221	546	13	2.3809	0.65244	13082|13616|15412|15559|17300|20348|20359|20671|23892|23967|26456|74048|214384	Cyp26a1|Edn3|Hoxb4|Htr2b|Foxc1|Sema3c|Sema6b|Sox17|Grem1|Osr1|Sema4g|Vsir|Myocd	-0.404	0	21	0	0	-3.787660	7.066883734

	24943	863				l Processes				924943	74833	385					52381	862			133451					838	
1	-2.128218702	GO:0040013	M1	1	0	GO Biological Processes	19	negative regulation of locomotion	19_GO:0040011 locomotion	-2.128218702	1.897516848	2.825840178	20836	362	546	18	3.296703297	0.76412472	11629|12317|12512|16189|18846|20348|20359|20684|20855|22411|22416|23892|26456|67451|105844|107351|214384|268902	Aif1|Calr|Cd63|Il4|Plxna3|Sema3c|Sema6b|Sp100|Stc1|Wnt11|Wnt3a|Grem1|Sema4g|Pkp2|Card10|Kank1|Myocd|Robo2	-0.354773726	0	21	0	0	-3.787660838	7.066883734
1	-2.1050361	GO:0014032	M1	1	0	GO Biological Proc	19	neural crest cell development	19_GO:0032502 developmental process	-2.1050036	3.0704391	3.1745016	20836	87	546	7	1.2820512	0.4814536	13082|13616|15559|17300|20348|20359|26456	Cyp26a1|Edn3|Htr2b|Foxc1|Sema3c|Sema6b|Sema4g	-0.3452886	0	21	0	0	-3.787660838	7.066883734

	99					esses				1999	39	72					82				519						
1	-2.085412823	GO:0030517	M1	1	0	Biological Processes	19	negative regulation of axon extension	19_GO:0040007 growth	-2.085412823	3.9751221	3.38509693	20836	48	546	5	0.915750916	0.407656781	18846|20348|20359|22416|26456	Plxna3|Sema3c|Sema6b|Wnt3a|Sema4g	-0.337347265	0	21	0	0	-3.787660838	7.066883734
1	-3.743201592	GO:0080164	M1	1	0	Biological Processes	19	regulation of nitric oxide metabolic process	19_GO:0008152 metabolic process	-3.743201592	4.460396746	4.990224606	20836	77	546	9	1.648351648	0.544903294	11629|11652|12490|12491|12759|16189|16598|19225|109648	Aif1|Akt2|Cd34|Cd36|Clu|Il4|Klf2|Ptgs2|Npy	-1.07630938	0	22	1	1	-3.743201592	10.40759241

1	-3.405408993	GO:1904407	M1	1	0	GO Biological Processes	19	positive regulation of nitric oxide metabolic process	19_GO:0048518 positive regulation of biological process	-3.405408993	5.137080868	4.89985429	20836	52	546	7	1.282051282	0.4814536	11629|11652|12491|12759|16598|19225|109648	Aif1|Akt2|Cd36|Clu|Klf2|Ptgs2|Npy	-0.956000726	0	22	0	0	-3.743201592	10.40759241
1	-3.196135418	GO:0045428	M1	1	0	GO Biological Processes	19	regulation of nitric oxide biosynthetic process	19_GO:0008152 metabolic process	-3.196135418	4.182046264	4.46766539	20836	73	546	8	1.465201465	0.514217873	11629|11652|12490|12491|12759|16189|16598|19225	Aif1|Akt2|Cd34|Cd36|Clu|Il4|Klf2|Ptgs2	-0.852968453	0	22	0	0	-3.743201592	10.40759241
1	-2.7	GO:0	M1	1	0	GO Bi	19	positive regulation of nitric oxide	19_GO:0048518 positive	-2.	4.5	4.1	20836	50	546	6	1.0	0.44	11629|11652|12491|12759|16598|19225	Aif1|Akt2|Cd36|Clu|Klf2|Ptgs2	-0.	0	22	0	0	-3.74	10.4075

	25335263	045429				ological Processes		biosynthetic process	regulation of biological process	725335263	79340659	56756884					98901099	6152716			614745553					3201592	9241
1	-2.597982993	GO:0090270	M1	1	0	GO Biological Processes	19	regulation of fibroblast growth factor production	19_GO:0032501 multicellular organismal process	-2.597982993	10.40759241	5.119580553	20836	11	546	3	0.549450549	0.316352724	11629|19225|22411	Aif1|Ptgs2|Wnt11	-0.553808523	0	22	0	0	-3.743201592	10.40759241
1	-3.7093	WP2140	M1	1	0	WikiPathw	27	Serotonin and anxiety-related events		-3.709	12.720	6.6619	20836	12	546	4	0.7326	0.36495	12918|12921|19055|192167	Crh|Crhr1|Ppp3ca|Nlgn1	-1.053	0	23	1	1	-3.709397	16.35478807

	97347					ays				397347	39072	70199					00733	614			229001					347	
1	-3.237352348	GO:2000852	M1	1	0	GO Biological Processes	19	regulation of corticosterone secretion	19_GO:0051179 localization	-3.237352348	16.35478807	6.66516165	20836	7	546	3	0.549450549	0.316352724	12918|12921|21333	Crh|Crhr1|Tac1	-0.876885164	0	23	0	0	-3.709397347	16.35478807
1	-2.874187	GO:0051459	M1	1	0	GO Biological Proc	19	regulation of corticotropin secretion	19_GO:0051179 localization	-2.874187	12.720390	5.7690198	20836	9	546	3	0.5494505	0.3163527	12918|12919|30878	Crh|Crhbp|Apln	-0.693191	0	23	0	0	-3.709397347	16.35478807

	26					esses				26	72	91					49	24			84						
1	-2.433459117	GO:0044060	M1	1	0	GO Biological Processes	19	regulation of endocrine process	19_GO:0032501 multicellular organismal process	-2.433459117	4.016965491	3.741515072	20836	57	546	6	1.098901099	0.446152716	12918|12919|12921|16322|21333|30878	Crh|Crhbp|Crhr1|Inha|Tac1|Apln	-0.4846532	0	23	0	0	-3.709397347	16.35478807
1	-2.376055113	GO:2000849	M1	1	0	GO Biological Processes	19	regulation of glucocorticoid secretion	19_GO:0051179 localization	-2.376055113	8.806424345	4.618534924	20836	13	546	3	0.549450549	0.316352724	12918|12921|21333	Crh|Crhr1|Tac1	-0.457038809	0	23	0	0	-3.709397347	16.35478807

1	-2.32222621	mmu04730	M1	1	0	KEGG Pathway	24	Long-term depression - Mus musculus (house mouse)		-2.32222621	3.816117216	3.583417702	20836	60	546	6	1.098901099	0.446152716	12918|12921|14677|18752|234889|329502	Crh|Crhr1|Gnai1|Prkcg|Gucy1a2|Pla2g4e	-0.419534471	0	23	0	0	-3.709397347	16.35478807
1	-2.085412823	GO:0043949	M1	1	0	GO Biological Processes	19	regulation of cAMP-mediated signaling	19_GO:0023052 signaling	-2.085412823	3.9751221	3.38509693	20836	48	546	5	0.915750916	0.407656781	11541|12918|12921|14677|23796	Adora2b|Crh|Crhr1|Gnai1|Aplnr	-0.337347265	0	23	0	0	-3.709397347	16.35478807
1	-2.0	GO:0	M1	1	0	GO Bi	19	negative regulation of	19_GO:0032501 multicellul	-2.	4.9	3.5	20836	31	546	4	0.7	0.36	11550|12918|21333|30878	Adra1d|Crh|Tac1|Apln	-0.	0	23	0	0	-3.70	16.3547

	7710272	003085				ological Processes		systemic arterial blood pressure	ar organismal process	07710272	24022214	86579769					32600733	495614			337347265					9397347	8807
1	-3.669870035	GO:0001503	M1	1	0	GO Biological Processes	19	ossification	19_GO:0032501 multicellular organismal process	-3.669870035	2.611791251	4.315090468	20836	263	546	18	3.296703297	0.76412472	13345|13395|14200|16477|17300|17390|18634|19225|20855|22411|22416|23845|58185|66695|69121|74511|216963|231633	Twist2|Dlx5|Fhl2|Junb|Foxc1|Mmp2|Pex7|Ptgs2|Stc1|Wnt11|Wnt3a|Clec5a|Rsad2|Aspn|Chrdl2|Lrrc17|Git1|Tmem119	-1.024167123	0	24	1	1	-3.669870035	2.75035475
1	-2.0530	GO:0001	M1	1	0	GO Biologica	19	osteoblast differentiation	19_GO:0032502 developmental process	-2.053	2.7503	3.0331	20836	111	546	8	1.4652	0.51421	13345|13395|14200|16477|22411|22416|23845|231633	Twist2|Dlx5|Fhl2|Junb|Wnt11|Wnt3a|Clec5a|Tmem119	-0.326	0	24	0	0	-3.669870	2.75035475

	87732	649				l Processes			087732	5475	3924					01465	7873			591609					035	
1	-3.539543314	R-MMU-372790	M1	1	0	Reactome Gene Sets	6	Signaling by GPCR	-3.539543314	1.968379928	3.951695397	20836	601	546	31	5.677655678	0.990365487	11541 | 11652 | 12854 | 12918 | 12919 | 12921 | 13616 | 13733 | 14065 | 14539 | 14676 | 14677 | 14744 | 15200 | 15559 | 18706 | 18752 | 18754 | 18761 | 20295 | 20308 | 21333 | 22324 | 23796 | 23919 | 30878 | 53978 | 66066 | 109648 | 216152 | 574402	Adora2b | Akt2 | Cort | Crh | Crhbp | Crhr1 | Edn3 | Adgre1 | F2rl3 | Opn1mw | Gna15 | Gnai1 | Gpr65 | Hbegf | Htr2b | Pik3ca | Prkcg | Prkce | Prkcq | Ccl17 | Ccl9 | Tac1 | Vav1 | Aplnr | Insl5 | Apln | Lpar2 | Gng11 | Npy | Plppr3 | Gpr17	-0.969979593	0	25	1	1	-3.539543314	2.671282051
1	-3.119917	R-MMU-500	M1	1	0	Reactome Gene Sets	6	GPCR ligand binding	-3.111991	2.1308268	3.7173597	20836	394	546	22	4.0293040	0.8415656	11541 | 12854 | 12918 | 12919 | 12921 | 13616 | 13733 | 14065 | 14539 | 14744 | 15559 | 20295 | 20308 | 21333 | 23796 | 23919 | 30878 | 53978 | 66066 | 109648 | 216152 | 574402	Adora2b | Cort | Crh | Crhbp | Crhr1 | Edn3 | Adgre1 | F2rl3 | Opn1mw | Gpr65 | Htr2b | Ccl17 | Ccl9 | Tac1 | Aplnr | Insl5 | Apln | Lpar2 | Gng11 | Npy | Plppr3 | Gpr17	-0.802080	0	25	0	0	-3.539543314	2.671282051

	59	792							759	72	24					29	87			949						
1	-3.075721636	R-MMU-416476	M1	1	0	Reactome Gene Sets	6	G alpha (q) signalling events	-3.075721636	2.671282051	3.895866241	20836	200	546	14	2.564102564	0.676442475	13616|14065|14676|14744|15200|15559|18706|18754|18761|20308|21333|53978|66066|574402	Edn3|F2rl3|Gna15|Gpr65|Hbegf|Htr2b|Pik3ca|Prkce|Prkcq|Ccl9|Tac1|Lpar2|Gng11|Gpr17	-0.794974414	0	25	0	0	-3.539543314	2.671282051
1	-2.653569848	R-MMU-388396	M1	1	0	Reactome Gene Sets	6	GPCR downstream signalling	-2.653569848	1.817198674	3.236346936	20836	567	546	27	4.945054945	0.927847489	11541|11652|12854|12918|12921|13616|14065|14539|14676|14677|14744|15200|15559|18706|18752|18754|18761|20308|21333|22324|23796|23919|30878|53978|66066|109648|574402	Adora2b|Akt2|Cort|Crh|Crhr1|Edn3|F2rl3|Opn1mw|Gna15|Gnai1|Gpr65|Hbegf|Htr2b|Pik3ca|Prkcg|Prkce|Prkcq|Ccl9|Tac1|Vav1|Aplnr|Insl5|Apln|Lpar2|Gng11|Npy|Gpr17	-0.566461234	0	25	0	0	-3.539543314	2.671282051

1	-2.494528969	R-MMU-373076	M1	1	0	Reactome Gene Sets	6	Class A/1 (Rhodopsin-like receptors)	-2.494528969	2.11315937	3.223255164	20836	307	546	17	3.113553114	0.743298631	11541|12854|13616|14065|14539|14744|15559|20295|20308|21333|23796|23919|30878|53978|109648|216152|574402	Adora2b|Cort|Edn3|F2rl3|Opn1mw|Gpr65|Htr2b|Ccl17|Ccl9|Tac1|Aplnr|Insl5|Apln|Lpar2|Npy|Plppr3|Gpr17	-0.508877995	0	25	0	0	-3.539543314	2.671282051
1	-3.523568451	R-MMU-1280218	M1	1	0	Reactome Gene Sets	6	Adaptive Immune System	-3.523568451	1.916771204	3.916930616	20836	657	546	33	6.043956044	1.019827429	11652|12317|12490|12491|12524|13033|13036|14129|14828|14972|15040|15896|16768|16822|17060|17972|18706|18761|19055|19058|19260|22324|23880|56550|68854|75050|78369|83433|110033|140497|208154|232943|233186	Akt2|Calr|Cd34|Cd36|Cd86|Ctsd|Ctsh|Fcgr1|Hspa5|H2-K1|H2-T23|Icam2|Lag3|Lcp2|Blnk|Ncf4|Pik3ca|Prkcq|Ppp3ca|Ppp3r1|Ptpn22|Vav1|Fyb|Ube2d2a|Asb11|Kif27|Icam4|Trem2|Kif22|Cd300c2|Btla|Klc3|Siglecf	-0.969979593	0	26	1	1	-3.523568451	1.916771204

1	-3.512738995	mmu04979	M1	1	0	KEGG Pathway	24	Cholesterol metabolism - Mus musculus (house mouse)		-3.512738995	5.342564103	5.043102892	20836	50	546	7	1.282051282	0.4814536	11812|12491|15450|16816|16891|18830|67963	Apoc1|Cd36|Lipc|Lcat|Lipg|Pltp|Npc2	-0.969979593	0	27	1	1	-3.512738995	11.44835165
1	-3.421702966	GO:0034375	M1	1	0	GO Biological Processes	19	high-density lipoprotein particle remodeling	19_GO:0032501 multicellular organismal process	-3.421702966	10.90319205	6.080370568	20836	14	546	4	0.732600733	0.36495614	15450|16816|16891|18830	Lipc|Lcat|Lipg|Pltp	-0.958930737	0	27	0	0	-3.512738995	11.44835165
1	-3.3	GO:0	M1	1	0	GO Bi	19	protein-lipid complex remodeling	19_GO:0009987	-3.	7.6	5.4	20836	25	546	5	0.9	0.40	11812|15450|16816|16891|18830	Apoc1|Lipc|Lcat|Lipg|Pltp	-0.	0	27	0	0	-3.51	11.4483

	79472834	034368				ological Processes			cellular process	379472834	32234432	42963838					15750916	7656781			943029544					2738995	5165
1	-3.379472834	GO:0034369	M1	1	0	GO Biological Processes	19	plasma lipoprotein particle remodeling	19_GO:0032501 multicellular organismal process	-3.379472834	7.632234432	5.442963838	20836	25	546	5	0.915750916	0.407656781	11812|15450|16816|16891|18830	Apoc1|Lipc|Lcat|Lipg|Pltp	-0.943029544	0	27	0	0	-3.512738995	11.44835165
1	-3.21654	GO:00334	M1	1	0	GO Biologica	19	protein-containing complex remodeling	19_GO:0009987 cellular process	-3.216	7.0668	5.1745	20836	27	546	5	0.91557	0.40765	11812|15450|16816|16891|18830	Apoc1|Lipc|Lcat|Lipg|Pltp	-0.866	0	27	0	0	-3.512738	11.44835165

	38229	367				l Processes			538229	837334	66819					50916	6781			664119					995	
1	-2.878946043	WP1	M1	1	0	WikiPathways	27	Statin pathway	-2.878946043	8.033930981	5.031736409	20836	19	546	4	0.732600733	0.36495614	11812|15450|16816|18830	Apoc1|Lipc|Lcat|Pltp	-0.69319184	0	27	0	0	-3.512738995	11.44835165
1	-2.7277912	R-MMU-8896	M1	1	0	ReactomeGeneSets	6	HDL remodeling	-2.727791	11.448351	5.4212183	20836	10	546	3	0.5494505	0.3163527	16816|16891|18830	Lcat|Lipg|Pltp	-0.614745	0	27	0	0	-3.512738995	11.44835165

	42	4058								242	65	41					49	24			553						
1	-2.636829104	GO:0097006	M1	1	0	GO Biological Processes	19	regulation of plasma lipoprotein particle levels	19_GO:0050789 regulation of biological process	-2.636829104	4.403212172	4.030678707	20836	52	546	6	1.098901099	0.446152716	11812|12491|15450|16816|16891|18830	Apoc1|Cd36|Lipc|Lcat|Lipg|Pltp	-0.55824615	0	27	0	0	-3.512738995	11.44835165
1	-2.525646548	GO:0071827	M1	1	0	GO Biological Proces	19	plasma lipoprotein particle organization	19_GO:0032501 multicellular organismal process	-2.5256465	5.021206863	4.06953775	20836	38	546	5	0.915750916	0.407656781	11812|15450|16816|16891|18830	Apoc1|Lipc|Lcat|Lipg|Pltp	-0.5215121	0	27	0	0	-3.512738995	11.44835165

1	-2.333698675	GO:0071825	M1	1	0	ses GO Biological Processes	19	protein-lipid complex subunit organization	19_GO:0009987 cellular process	48-2.333698675	4.542996686	3.770321822	20836	42	546	5	0.915750916	0.407656781	11812|15450|16816|16891|18830	Apoc1|Lipc|Lcat|Lipg|Pltp	68-0.424581955	0	27	0	0	-3.512738995	11.44835165
1	-2.236923006	R-MMU-8963899	M1	1	0	Reactome Gene Sets	6	Plasma remodeling	lipoprotein	-2.236923006	5.451596023	3.866621327	20836	28	546	4	0.732600733	0.36495614	15450|16816|16891|18830	Lipc|Lcat|Lipg|Pltp	-0.404133451	0	27	0	0	-3.512738995	11.44835165

1	-2.184794868	R-MMU-174824	M1	1	0	Reactome Gene Sets	6	Plasma lipoprotein assembly, remodeling, and clearance		-2.184794868	3.57760989	3.387817989	20836	64	546	6	1.098901099	0.446152716	11812|15450|16816|16891|18830|67963	Apoc1|Lipc|Lcat|Lipg|Pltp|Npc2	-0.379317055	0	27	0	0	-3.512738995	11.44835165
1	-3.452050988	GO:0007613	M1	1	0	GO Biological Processes	19	memory	19_GO:0032501 multicellular organismal process	-3.452050988	3.062316285	4.322674883	20836	162	546	13	2.380952381	0.65244862	12921|13166|13653|14156|16819|19225|20203|20393|20620|21333|53418|76376|83433	Crhr1|Dbh|Egr1|Fen1|Lcn2|Ptgs2|S100b|Sgk1|Plk2|Tac1|B4galt2|Slc24a2|Trem2	-0.969979593	0	28	1	1	-3.452050988	3.062316285
1	-3.4	GO:0	M1	1	0	GO Bi	19	regulation of monoatomic ion transport	19_GO:0051179	-3.	1.9	3.8	20836	636	546	32	5.8	1.00	11652|12373|12512|12733|12918|13616|13645|14065|16189|16508|16523|16533|16819|18754|190	Akt2|Casq2|Cd63|Clcnka|Crh|Edn3|Egf|F2rl3|Il4|Kcnd2|Kcnj8|Kcnmb1|Lcn2|Prkce|Ppp	-0.	0	29	1	1	-3.44	4.12553

	46540106	043269				ological Processes			localization	446540106	20058977	65632735					60805861	5234961	55|19058|19225|19260|20393|20855|23796|23967|53376|56437|56543|59091|83433|105243|212933|237611|381925|382571	3ca|Ppp3r1|Ptgs2|Ptpn22|Sgk1|Stc1|Aplnr|Osr1|Usp2|Rrad|Kcnd3|Jph2|Trem2|Slc9a3|Pm20d1|Stac3|Plpp4|Kcnf1	969979593					6540106	2126
1	-3.258761897	GO:0010959	M1	1	0	GO Biological Processes	19	regulation of metal ion transport	19_GO:0051179 localization	-3.258761897	2.064998494	3.797378442	20836	462	546	25	4.578754579	0.894540282	11652|12373|12512|12918|13616|13645|14065|16533|16819|18754|19055|19058|19225|19260|20393|20855|23796|23967|53376|56437|59091|83433|105243|237611|381925	Akt2|Casq2|Cd63|Crh|Edn3|Egf|F2rl3|Kcnmb1|Lcn2|Prkce|Ppp3ca|Ppp3r1|Ptgs2|Ptpn22|Sgk1|Stc1|Aplnr|Osr1|Usp2|Rrad|Jph2|Trem2|Slc9a3|Stac3|Plpp4	-0.883839272	0	29	0	0	-3.446540106	4.125532126
1	-3.15631	GO:0051	M1	1	0	GO Biological	19	negative regulation of calcium ion transport	19_GO:0051179 localization	-3.1566	4.1255	4.4183	20836	74	546	8	1.4652	0.51421	12373|18754|19055|19058|19225|20855|53376|56437	Casq2|Prkce|Ppp3ca|Ppp3r1|Ptgs2|Stc1|Usp2|Rrad	-0.831	0	29	0	0	-3.446540	4.125532126

	4228	926				l Processes				34228	32126	21191					01465	7873			872749					106	
1	-3.148597313	GO:0051051	M1	1	0	Biological Processes	19	negative regulation of transport	19_GO:0051179 localization	-3.148597313	1.96631994	3.675041866	20836	524	546	27	4.945054945	0.927847489	11652|11747|11812|12373|12491|12918|12919|12921|12955|13616|13645|16322|17472|18754|19055|19058|19225|20379|20684|20855|23967|23970|53376|56437|58185|70377|319552	Akt2|Anxa5|Apoc1|Casq2|Cd36|Crh|Crhbp|Crhr1|Cryab|Edn3|Egf|Inha|Gbp4|Prkce|Ppp3ca|Ppp3r1|Ptgs2|Sfrp4|Sp100|Stc1|Osr1|Pacsin2|Usp2|Rrad|Rsad2|Derl3|Spx	-0.829035118	0	29	0	0	-3.446540106	4.125532126
1	-2.530481111	GO:0034762	M1	1	0	Biological Proc	19	regulation of transmembrane transport	19_GO:0051179 localization	-2.53048111	1.7400534	3.1093385	20836	636	546	29	5.3113553	0.9597437	11652|12373|12512|12733|12918|12919|13616|14065|16189|16508|16523|16533|16819|18754|19055|19058|19260|20411|23796|23967|56437|56543|59091|83433|192167|212933|237611|380702|382571	Akt2|Casq2|Cd63|Clcnka|Crh|Crhbp|Edn3|F2rl3|Il4|Kcnd2|Kcnj8|Kcnmb1|Lcn2|Prkce|Ppp3ca|Ppp3r1|Ptpn22|Sorbs1|Aplnr|Osr1|Rrad|Kcnd3|Jph2|Trem2|Nlgn1|Pm20d1|Stac3|Shisa6|Kcnf1	-0.522969	0	29	0	0	-3.446540106	4.125532126

	73					esses				173	48	37					11	81			483						
1	-2.30786539	GO:0051924	M1	1	0	GO Biological Processes	19	regulation of calcium ion transport	19_GO:0051179 localization	-2.30786539	2.076798485	3.05027355	20836	294	546	16	2.93040293	0.721786844	12373|12918|13645|14065|18754|19055|19058|19225|19260|20855|23796|53376|56437|59091|237611|381925	Casq2|Crh|Egf|F2rl3|Prkce|Ppp3ca|Ppp3r1|Ptgs2|Ptpn22|Stc1|Aplnr|Usp2|Rrad|Jph2|Stac3|Plpp4	-0.415592984	0	29	0	0	-3.446540106	4.125532126
1	-2.246288253	GO:0034765	M1	1	0	GO Biological Processes	19	regulation of monoatomic ion transmembrane transport	19_GO:0051179 localization	-2.246288253	1.783957235	2.886747515	20836	492	546	23	4.212454212	0.859658177	12373|12512|12733|13616|14065|16189|16508|16523|16533|16819|18754|19055|19058|19260|23796|23967|56437|56543|59091|83433|212933|237611|382571	Casq2|Cd63|Clcnka|Edn3|F2rl3|Il4|Kcnd2|Kcnj8|Kcnmb1|Lcn2|Prkce|Ppp3ca|Ppp3r1|Ptpn22|Aplnr|Osr1|Rrad|Kcnd3|Jph2|Trem2|Pm20d1|Stac3|Kcnf1	-0.404133451	0	29	0	0	-3.446540106	4.125532126

1	-2.024484434	GO:1904062	M1	1	0	GO Biological Processes	19	regulation of monoatomic cation transmembrane transport	19_GO:0051179 localization	-2.024484434	1.851485442	2.714628208	20836	371	546	18	3.296703297	0.76412472	12373|12512|13616|14065|16189|16533|16819|18754|19055|19058|19260|23796|23967|56437|59091|83433|212933|237611	Casq2|Cd63|Edn3|F2rl3|Il4|Kcnmb1|Lcn2|Prkce|Ppp3ca|Ppp3r1|Ptpn22|Aplnr|Osr1|Rrad|Jph2|Trem2|Pm20d1|Stac3	-0.311834732	0	29	0	0	-3.446540106	4.125532126
1	-3.362708906	R-MMU-9009391	M1	1	0	Reactome Gene Sets	6	Extra-nuclear estrogen signaling		-3.362708906	4.424483729	4.673958169	20836	69	546	8	1.465201465	0.514217873	11652|13645|14677|15200|17390|18706|66066|103573	Akt2|Egf|Gnai1|Hbegf|Mmp2|Pik3ca|Gng11|Xpo1	-0.938854743	0	30	1	1	-3.362708906	8.177394035

1	-2.279779417	R-MMU-1963642	M1	1	0	Reactome Gene Sets	6	PI3K events in ERBB2 signaling		-2.279779417	8.177394035	4.406782706	20836	14	546	3	0.549450549	0.316352724	13645|15200|18706	Egf|Hbegf|Pik3ca	-0.415592984	0	30	0	0	-3.362708906	8.177394035
1	-2.277121319	GO:0050730	M1	1	0	GO Biological Processes	19	regulation of peptidyl-tyrosine phosphorylation	19_GO:0008152 metabolic process	-2.277121319	2.12006512	3.038801203	20836	270	546	15	2.747252747	0.699526105	11308|12388|12491|13645|15163|15200|16189|17975|18754|19260|22416|23892|83433|108900|228357	Abi1|Ctnnd1|Cd36|Egf|Hcls1|Hbegf|Il4|Ncl|Prkce|Ptpn22|Wnt3a|Grem1|Trem2|Fam72a|Lrp4	-0.415592984	0	30	0	0	-3.362708906	8.177394035

1	-2.2042714484	GO:0061098	M1	1	0	GO Biological Processes	19	positive regulation of protein tyrosine kinase activity	19_GO:0048518 positive regulation of biological process	-2.2042714484	4.24013024	3.569300274	20836	45	546	5	0.915750916	0.407656781	11308|13645|15200|22416|23892	Abi1|Egf|Hbegf|Wnt3a|Grem1	-0.380923485	0	30	0	0	-3.362708906	8.177394035
1	-2.191317356	R-MMU-1250196	M1	1	0	Reactome Gene Sets	6	SHC1 events in ERBB2 signaling		-2.191317356	7.632234432	4.215089074	20836	15	546	3	0.549450549	0.316352724	13645|15200|18754	Egf|Hbegf|Prkce	-0.379317055	0	30	0	0	-3.362708906	8.177394035

1	-2.16354995	R-MMU-1227986	M1	1	0	Reactome Gene Sets	6	Signaling by ERBB2	-2.163549995	4.147953496	3.506162411	20836	46	546	5	0.915750916	0.407656781	11652|13645|15200|18706|18754	Akt2|Egf|Hbegf|Pik3ca|Prkce	-0.373164243	0	30	0	0	-3.362708906	8.177394035
1	-2.033680425	R-MMU-180292	M1	1	0	Reactome Gene Sets	6	GAB1 signalosome	-2.033680425	6.734324499	3.879974255	20836	17	546	3	0.549450549	0.316352724	13645|15200|18706	Egf|Hbegf|Pik3ca	-0.314382575	0	30	0	0	-3.362708906	8.177394035

1	-3.299172434	GO:1901214	M1	1	0	GO Biological Processes	19	regulation of neuron death	19_GO:0050789 regulation of biological process	-3.299172434	2.156528157	3.865288468	20836	407	546	23	4.212454212	0.859658177	12259|12490|12608|12759|12921|13653|15505|16409|16819|17748|17865|18008|18706|18752|19268|21333|22177|22416|58801|59016|83433|109648|212933	C1qa|Cd34|Cebpb|Clu|Crhr1|Egr1|Hsph1|Itgam|Lcn2|Mt1|Mybl2|Nes|Pik3ca|Prkcg|Ptprf|Tac1|Tyrobp|Wnt3a|Pmaip1|Thap11|Trem2|Npy|Pm20d1	-0.893543092	0	31	1	1	-3.299172434	3.035547786
1	-2.573114301	GO:1901216	M1	1	0	GO Biological Processes	19	positive regulation of neuron death	19_GO:0048518 positive regulation of biological process	-2.573114301	2.869261065	3.547571765	20836	133	546	10	1.831501832	0.573843453	12259|12759|13653|16409|16819|17865|19268|21333|22177|58801	C1qa|Clu|Egr1|Itgam|Lcn2|Mybl2|Ptprf|Tac1|Tyrobp|Pmaip1	-0.547200147	0	31	0	0	-3.299172434	3.035547786
1	-2.0	GO:0	M1	1	0	GO Bi	19	positive regulation of neuron	19_GO:0048518 positive	-2.	3.0	3.1	20836	88	546	7	1.2	0.48	13653|16409|16819|17865|19268|22177|58801	Egr1|Itgam|Lcn2|Mybl2|Ptprf|Tyrobp|Pmaip1	-0.	0	31	0	0	-3.29	3.03554

	78668907	043525				ological Processes		apoptotic process	regulation of biological process	078668907	35547786	3896569					82051282	14536			337347265					9172434	7786
1	-3.289484746	GO:0048705	M1	1	0	GO Biological Processes	19	skeletal system morphogenesis	19_GO:0032502 developmental process	-3.289484746	2.504787362	3.997477598	20836	259	546	17	3.113553114	0.743298631	12406|13345|13395|14260|15412|17300|17390|18634|19401|20379|20855|23967|66910|79456|216795|231633|270685	Serpinh1|Twist2|Dlx5|Fmn1|Hoxb4|Foxc1|Mmp2|Pex7|Rara|Sfrp4|Stc1|Osr1|Tmem107|Recql4|Wnt9a|Tmem119|Mthfd1l	-0.893500904	0	32	1	1	-3.289484746	3.928355958
1	-2.7013	GO:0060	M1	1	0	GO Biologica	19	endochondral bone morphogenesis	19_GO:0032502 developmental process	-2.701	3.9283	3.9676	20836	68	546	7	1.2820	0.48145	12406|13395|17300|18634|19401|20855|231633	Serpinh1|Dlx5|Foxc1|Pex7|Rara|Stc1|Tmem119	-0.605	0	32	0	0	-3.289484	3.928355958

	2788	350				l Processes				32788	55958	47085					51282	36			33264					746	
1	-2.6137207152	GO:0060349	M1	1	0	GO Biological Processes	19	bone morphogenesis	19_GO:0032502 developmental process	-2.613727152	3.122277722	3.660942107	20836	110	546	9	1.648351648	0.544903294	12406|13395|17300|18634|19401|20379|20855|66910|231633	Serpinh1|Dlx5|Foxc1|Pex7|Rara|Sfrp4|Stc1|Tmem107|Tmem119	-0.553808523	0	32	0	0	-3.3289484746	3.928355958
1	-2.2958319	GO:0060348	M1	1	0	GO Biological Proc	19	bone development	19_GO:0032502 developmental process	-2.295831	2.198586	3.0829366	20836	243	546	14	2.5641025	0.6764424	11308|12406|12643|13395|15412|17300|18634|19401|20379|20855|22761|66910|74511|231633	Abi1|Serpinh1|Chad|Dlx5|Hoxb4|Foxc1|Pex7|Rara|Sfrp4|Stc1|Zfpm1|Tmem107|Lrrc17|Tmem119	-0.415592	0	32	0	0	-3.3289484746	3.928355958

	53					esses				953	05	18					64	75			984						
1	-2.106951708	GO:0001501	M1	1	0	GO Biological Processes	19	skeletal system development	19_GO:0032502 developmental process	-2.106951708	1.71190305	2.736472445	20836	535	546	24	4.395604396	0.877307634	11308|12406|12643|13345|13395|14260|15412|17300|17390|18634|19401|19662|20379|20855|22761|23967|66910|69121|74511|79456|116701|216795|231633|270685	Abi1|Serpinh1|Chad|Twist2|Dlx5|Fmn1|Hoxb4|Foxc1|Mmp2|Pex7|Rara|Rbp4|Sfrp4|Stc1|Zfpm1|Osr1|Tmem107|Chrdl2|Lrrc17|Recql4|Fgfrl1|Wnt9a|Tmem119|Mthfd1l	-0.345855377	0	32	0	0	-3.289484746	3.928355958
1	-3.267939641	GO:0061053	M1	1	0	GO Biological Processes	19	somite development	19_GO:0032502 developmental process	-3.267939641	3.858994938	4.433868274	20836	89	546	9	1.648351648	0.544903294	11308|12808|17285|17300|19363|20348|22411|22416|233826	Abi1|Cobl|Meox1|Foxc1|Rad51b|Sema3c|Wnt11|Wnt3a|Palb2	-0.883839272	0	33	1	1	-3.267939641	12.72039072

1	-2.87418726	GO:0048341	M1	1	0	GO Biological Processes	19	paraxial mesoderm formation	19_GO:0032502 developmental process	-2.87418726	12.72039072	5.769019891	20836	9	546	3	0.549450549	0.316352724	17300|22411|22416	Foxc1|Wnt11|Wnt3a	-0.69319184	0	33	0	0	-3.267939641	12.72039072
1	-2.594191705	GO:0072132	M1	1	0	GO Biological Processes	19	mesenchyme morphogenesis	19_GO:0032502 developmental process	-2.594191705	4.320132697	3.970007324	20836	53	546	6	1.098901099	0.446152716	17300|22411|22416|23796|23967|268902	Foxc1|Wnt11|Wnt3a|Aplnr|Osr1|Robo2	-0.553808523	0	33	0	0	-3.267939641	12.72039072
1	-2.5	GO:0	M1	1	0	GO Bi	19	somitogenesis	19_GO:0032502 developm	-2.	3.7	3.8	20836	71	546	7	1.2	0.48	11308|12808|17285|17300|20348|22416|233826	Abi1|Cobl|Meox1|Foxc1|Sema3c|Wnt3a|Palb2	-0.	0	33	0	0	-3.26	12.7203

	93170497	001756				ological Processes			ental process	593170497	62369086	24696356					82051282	14536			553808523					7939641	9072
1	-2.376055113	GO:0048340	M1	1	0	GO Biological Processes	19	paraxial mesoderm morphogenesis	19_GO:0032502 developmental process	-2.376055113	8.806424345	4.618534924	20836	13	546	3	0.549450549	0.316352724	17300|22411|22416	Foxc1|Wnt11|Wnt3a	-0.457038809	0	33	0	0	-3.2679396641	12.72039072
1	-2.1221	GO:0035	M1	1	0	GO Biologica	19	segmentation	19_GO:0032502 developmental process	-2.1222	2.8267	3.1222	20836	108	546	8	1.4652	0.51421	11308|12808|17285|17300|20348|22416|23967|233826	Abi1|Cobl|Meox1|Foxc1|Sema3c|Wnt3a|Osr1|Palb2	-0.354	0	33	0	0	-3.267939	12.72039072

	89475	282				l Processes				189475	53493	32029					01465	7873			296535					641	
1	-3.237352348	GO:2000564	M1	1	0	GO Biological Processes	19	regulation of CD8-positive, alpha-beta T cell proliferation	19_GO:0002376 immune system process	-3.237352348	16.35478807	6.66516165	20836	7	546	3	0.549450549	0.316352724	19260|20535|74048	Ptpn22|Slc4a2|Vsir	-0.876885164	0	34	1	1	-3.237352348	16.35478807
1	-2.1095769	GO:0046642	M1	1	0	GO Biological Proc	19	negative regulation of alpha-beta T cell proliferation	19_GO:0002376 immune system process	-2.109576	7.155219	4.0403151	20836	16	546	3	0.5494505	0.3163527	20535|74048|208154	Slc4a2|Vsir|Btla	-0.347129	0	34	0	0	-3.237352348	16.35478807

	22					esses				922	78	65					49	24			752						
1	-3.187422204	GO:0032885	M1	1	0	GO Biological Processes	19	regulation of polysaccharide biosynthetic process	19_GO:0008152 metabolic process	-3.187422204	5.58456178	4.820169892	20836	41	546	6	1.098901099	0.446152716	11652|13645|20411|53412|54646|76487	Akt2|Egf|Sorbs1|Ppp1r3c|Ppp1r3f|Ppp1r3g	-0.852968453	0	35	1	1	-3.187422204	5.96268315
1	-2.866356252	GO:0005979	M1	1	0	GO Biological Processes	19	regulation of glycogen biosynthetic process	19_GO:0008152 metabolic process	-2.866356252	5.96268315	4.608612196	20836	32	546	5	0.915750916	0.407656781	11652|20411|53412|54646|76487	Akt2|Sorbs1|Ppp1r3c|Ppp1r3f|Ppp1r3g	-0.693191844	0	35	0	0	-3.187422204	5.96268315

1	-2.866356252	GO:0010962	M1	1	0	GO Biological Processes	19	regulation of glucan biosynthetic process	19_GO:0008152 metabolic process	-2.866356252	5.96268315	4.608612196	20836	32	546	5	0.915750916	0.407656781	11652|20411|53412|54646|76487	Akt2|Sorbs1|Ppp1r3c|Ppp1r3f|Ppp1r3g	-0.69319184	0	35	0	0	-3.187422204	5.96268315
1	-2.81846231	GO:0032881	M1	1	0	GO Biological Processes	19	regulation of polysaccharide metabolic process	19_GO:0008152 metabolic process	-2.81846231	4.77014652	4.289676517	20836	48	546	6	1.098901099	0.446152716	11652|13645|20411|53412|54646|76487	Akt2|Egf|Sorbs1|Ppp1r3c|Ppp1r3f|Ppp1r3g	-0.673361748	0	35	0	0	-3.187422204	5.96268315
1	-2.4	GO:0	M1	1	0	GO Bi	19	regulation of glycogen	19_GO:000 8152	-2.	4.8	3.9	20836	39	546	5	0.9	0.40	11652|20411|53412|54646|76487	Akt2|Sorbs1|Ppp1r3c|Ppp1r3f|Ppp1r3g	-0.	0	35	0	0	-3.18	5.96268

	75360543	070873				ological Processes		metabolic process	metabolic process	475360543	92457969	91240884					15750916	7656781			505261417					74222204	315
1	-3.166504006	GO:0002761	M1	1	0	GO Biological Processes	19	regulation of myeloid leukocyte differentiation	19_GO:0002376 immune system process	-3.166504006	3.012724118	4.085458754	20836	152	546	12	2.197802198	0.627440123	12608|14461|15163|16189|16409|19055|19401|20308|22177|22761|74511|83433	Cebpb|Gata2|Hcls1|Il4|Itgam|Ppp3ca|Rara|Ccl9|Tyrobp|Zfpm1|Lrrc17|Trem2	-0.837071056	0	36	1	1	-3.166504006	4.240130024
1	-3.0583	GO:0030	M1	1	0	GO Biologica	19	myeloid cell differentiation	19_GO:0032502 developmental process	-3.058	2.2587	3.7283	20836	321	546	19	3.4798	0.78431	11308|12608|13345|14461|15122|15163|16189|16409|16477|16598|20535|22042|22177|22761|23845|83433|210710|227377|235505	Abi1|Cebpb|Twist2|Gata2|Hba-a1|Hcls1|Il4|Itgam|Junb|Klf2|Slc4a2|Tfrc|Tyrobp|Zfpm1|Clec5a|Trem2|Gab3|Farp2|Cd109	-0.785	0	36	0	0	-3.16650 4	4.240130 24

	32954	099				l Processes				332954	60969	10499					5348	9737			015947					006	
1	-2.896266929	GO:0030316	M1	1	0	GO Biological Processes	19	osteoclast differentiation	19_GO:0032502 developmental process	-2.896266929	4.24013024	4.225082387	20836	63	546	7	1.282051282	0.4814536	16477|20535|22042|22177|83433|227377|235505	Junb|Slc4a2|Tfrc|Tyrobp|Trem2|Farp2|Cd109	-0.69319184	0	36	0	0	-3.166504006	4.24013024
1	-2.8664472	GO:0045637	M1	1	0	GO Biological Proc	19	regulation of myeloid cell differentiation	19_GO:0002376 immune system process	-2.866447	2.4462289	3.6495754	20836	234	546	15	2.7472527	0.6995261	12608|12986|13345|14461|15163|16189|16409|19055|19401|20308|22177|22761|74511|83433|226421	Cebpb|Csf3r|Twist2|Gata2|Hcls1|Il4|Itgam|Ppp3ca|Rara|Ccl9|Tyrobp|Zfpm1|Lrrc17|Trem2|Rab7b	-0.693191	0	36	0	0	-3.166504006	4.24013024

	57					esses				257	85	69					47	05			84						
1	-2.855645562	GO:0002573	M1	1	0	GO Biological Processes	19	myeloid leukocyte differentiation	19_GO:0032502 developmental process	-2.855645562	2.775357975	3.755771952	20836	165	546	12	2.197802198	0.627440123	14461|16189|16409|16477|20535|22042|22177|22761|83433|210710|227377|235505	Gata2|Il4|Itgam|Junb|Slc4a2|Tfrc|Tyrobp|Zfpm1|Trem2|Gab3|Farp2|Cd109	-0.69319184	0	36	0	0	-3.166504006	4.24013024
1	-3.078830092	GO:0002886	M1	1	0	GO Biological Processes	19	regulation of myeloid leukocyte mediated immunity	19_GO:0002376 immune system process	-3.078830092	4.016965491	4.322306046	20836	76	546	8	1.465201465	0.514217873	11541|12921|13419|14129|14461|16189|16409|22177	Adora2b|Crhr1|Dnase1|Fcgr1|Gata2|Il4|Itgam|Tyrobp	-0.794974414	0	37	1	1	-3.078830092	14.31043956

1	-3.041761136	GO:0070345	M1	1	0	GO Biological Processes	19	negative regulation of fat cell proliferation	19_GO:0048519 negative regulation of biological process	-3.041761136	14.31043956	6.176830117	20836	8	546	3	0.549450549	0.316352724	14461|16189|83433	Gata2|Il4|Trem2	-0.781409106	0	37	0	0	-3.078830092	14.31043956
1	-2.855699535	GO:1903307	M1	1	0	GO Biological Processes	19	positive regulation of regulated secretory pathway	19_GO:0051179 localization	-2.855699535	4.1738878205	4.171508543	20836	64	546	7	1.282051282	0.4814536	11541|12921|14461|16189|16409|60510|192167	Adora2b|Crhr1|Gata2|Il4|Itgam|Syt9|Nlgn1	-0.69319184	0	37	0	0	-3.078830092	14.31043956
1	-2.5	GO:0	M1	1	0	GO Bi	19	positive regulation of	19_GO:0002376 immune	-2.	5.1	4.1	20836	37	546	5	0.9	0.40	11541|12921|14461|16189|16409	Adora2b|Crhr1|Gata2|Il4|Itgam	-0.	0	37	0	0	-3.07	14.3104

	77609895	043302				ological Processes		leukocyte degranulation	system process	577609895	56915157	51479					15750916	7656781			549206941					8830092	3956
1	-2.4191943076	GO:0033008	M1	1	0	GO Biological Processes	19	positive regulation of mast cell activation involved in immune response	19_GO:0002376 immune system process	-2.419194376	6.105787546	4.190234416	20836	25	546	4	0.732600733	0.36495614	11541|12921|14461|16189	Adora2b|Crhr1|Gata2|Il4	-0.476578035	0	37	0	0	-3.078830092	14.31043956
1	-2.4191	GO:0043	M1	1	0	GO Biologica	19	positive regulation of mast cell degranulation	19_GO:0002376 immune system process	-2.419	6.1057	4.1902	20836	25	546	4	0.7326	0.36495	11541|12921|14461|16189	Adora2b|Crhr1|Gata2|Il4	-0.476	0	37	0	0	-3.078830	14.31043956

	94376	306				l Processes				1943776	87546	34416					00733	614			5780355					092	
1	-2.294924456	GO:0060143	M1	1	0	GO Biological Processes	19	positive regulation of syncytium formation by plasma membrane fusion	19_GO:0032502 developmental process	-2.294924456	5.653506987	3.969069444	20836	27	546	4	0.732600733	0.36495614	16189|17927|22177|83433	Il4|Myod1|Tyrobp|Trem2	-0.415592984	0	37	0	0	-3.078830092	14.31043956
1	-2.2797794	GO:0050798	M1	1	0	GO Biological Proc	19	activated T cell proliferation	19_GO:0002376 immune system process	-2.2797779	8.1773940	4.4067827	20836	14	546	3	0.5494505	0.3163527	16189|16409|381924	Il4|Itgam|Itgad	-0.415592	0	37	0	0	-3.078830092	14.31043956

	17					esses				417	35	06					49	24			984						
1	-2.279779417	GO:0070344	M1	1	0	GO Biological Processes	19	regulation of fat cell proliferation	19_GO:0050789 regulation of biological process	-2.279779417	8.177394035	4.406782706	20836	14	546	3	0.549450549	0.316352724	14461|16189|83433	Gata2|Il4|Trem2	-0.415592984	0	37	0	0	-3.078830092	14.31043956
1	-3.074407968	GO:0090287	M1	1	0	GO Biological Processes	19	regulation of cellular response to growth factor stimulus	19_GO:0050896 response to stimulus	-3.074407968	2.265819597	3.743281684	20836	320	546	19	3.47985348	0.784319737	12512|14828|16189|19268|20379|23892|30878|66695|69121|71753|74048|76905|94187|116701|213262|214384|225631|235505|320924	Cd63|Hspa5|Il4|Ptprf|Sfrp4|Grem1|Apln|Aspn|Chrdl2|Tmprss6|Vsir|Lrg1|Zfp423|Fgfrl1|Fstl5|Myocd|Onecut2|Cd109|Ccbe1	-0.794974414	0	38	1	1	-3.074407968	2.376336728

1	-3.033976249	GO:0090092	M1	1	0	GO Biological Processes	19	regulation of transmembrane receptor protein serine/threonine kinase signaling pathway	19_GO:0023052 signaling	-3.033976249	2.376336728	3.755042315	20836	273	546	17	3.113553114	0.743298631	13590|14828|16322|20379|23892|66695|69121|71753|71805|74048|76905|94187|213262|214384|225631|235505|320202	Lefty1|Hspa5|Inha|Sfrp4|Grem1|Aspn|Chrdl2|Tmprss6|Nup93|Vsir|Lrg1|Zfp423|Fstl5|Myocd|Onecut2|Cd109|Lefty2	-0.777861272	0	38	0	0	-3.074407968	2.376336728
1	-3.07270054	GO:0060100	M1	1	0	GO Biological Processes	19	positive regulation of phagocytosis, engulfment	19_GO:0051179 localization	-3.07270054	8.979099332	5.398839914	20836	17	546	4	0.732600733	0.36495614	12491|14129|14461|83433	Cd36|Fcgr1|Gata2|Trem2	-0.794974414	0	39	1	1	-3.07270054	14.31043956
1	-3.0	GO:1	M1	1	0	GO Bi	19	positive regulation of	19_GO:0048518 positive	-3.	8.9	5.3	20836	17	546	4	0.7	0.36	12491|14129|14461|83433	Cd36|Fcgr1|Gata2|Trem2	-0.	0	39	0	0	-3.07	14.3104

	7270054	905155				ological Processes		membrane invagination	regulation of biological process	07270054	79099332	98399914					32600733	495614			794974414					270054	3956
1	-3.041761136	GO:0150094	M1	1	0	GO Biological Processes	19	amyloid-beta clearance by cellular catabolic process	19_GO:0032501 multicellular organismal process	-3.041761136	14.31043956	6.176830117	20836	8	546	3	0.549450549	0.316352724	12491|83433|228357	Cd36|Trem2|Lrp4	-0.781409106	0	39	0	0	-3.07270054	14.31043956
1	-2.7082	GO:0060	M1	1	0	GO Biological	19	regulation of phagocytosis, engulfment	19_GO:0051179 localization	-2.708	7.2687	4.7147	20836	21	546	4	0.7326	0.36495	12491|14129|14461|83433	Cd36|Fcgr1|Gata2|Trem2	-0.605	0	39	0	0	-3.07270054	14.31043956

	845442	099				l Processes				2845442	94697	37708					00733	614			33264						
1	-2.6301311174	GO:1905153	M1	1	0	GO Biological Processes	19	regulation of membrane invagination	19_GO:0050789 regulation of biological process	-2.6301311174	6.938394938	4.571457567	20836	22	546	4	0.732600733	0.36495614	12491|14129|14461|83433	Cd36|Fcgr1|Gata2|Trem2	-0.55824615	0	39	0	0	-3.07270054	14.31043956
1	-2.55614522	GO:0097242	M1	1	0	GO Biological Proc	19	amyloid-beta clearance	19_GO:0032501 multicellular organismal process	-2.5561455	6.6367255	4.4368578	20836	23	546	4	0.7326007	0.36495614	12491|16409|83433|228357	Cd36|Itgam|Trem2|Lrp4	-0.535166	0	39	0	0	-3.07270054	14.31043956

	68					esses				268	93	94					33				332						
1	-2.401164484	GO:0050766	M1	1	0	GO Biological Processes	19	positive regulation of phagocytosis	19_GO:0051179 localization	-2.401164484	3.147313168	3.477277888	20836	97	546	8	1.465201465	0.514217873	12317|12491|14129|14461|17175|83433|94176|227541	Calr|Cd36|Fcgr1|Gata2|Masp2|Trem2|Dock2|Camk1d	-0.466666032	0	39	0	0	-3.07270054	14.31043956
1	-2.15723272	GO:0050764	M1	1	0	GO Biological Processes	19	regulation of phagocytosis	19_GO:0051179 localization	-2.15723272	2.66240736	3.106889209	20836	129	546	9	1.648351648	0.544903294	12317|12491|14129|14461|17175|18752|83433|94176|227541	Calr|Cd36|Fcgr1|Gata2|Masp2|Prkcg|Trem2|Dock2|Camk1d	-0.369723146	0	39	0	0	-3.07270054	14.31043956

1	-3.043918442	GO:0003002	M1	1	0	GO Biological Processes	19	regionalization	19_GO:0032502 developmental process	-3.043918442	2.065192846	3.63950747	20836	425	546	23	4.212454212	0.859658177	11308|12259|12808|13082|13590|15412|16409|17285|17300|20348|20671|22411|22416|23796|23892|23967|54562|66910|71860|110082|228357|233826|381738	Abi1|C1qa|Cobl|Cyp26a1|Lefty1|Hoxb4|Itgam|Meox1|Foxc1|Sema3c|Sox17|Wnt11|Wnt3a|Aplnr|Grem1|Osr1|Dnaaf11|Tmem107|Cfap52|Dnah5|Lrp4|Palb2|Drc1	-0.781409106	0	40	1	1	-3.043918442	2.805968541
1	-2.821136987	GO:0007389	M1	1	0	GO Biological Processes	19	pattern specification process	19_GO:0032502 developmental process	-2.821136987	1.952810516	3.42358789	20836	469	546	24	4.395604396	0.877307634	11308|12259|12808|13082|13590|15412|16409|17285|17300|20348|20671|20855|22411|22416|23796|23892|23967|54562|66910|71860|110082|228357|233826|381738	Abi1|C1qa|Cobl|Cyp26a1|Lefty1|Hoxb4|Itgam|Meox1|Foxc1|Sema3c|Sox17|Stc1|Wnt11|Wnt3a|Aplnr|Grem1|Osr1|Dnaaf11|Tmem107|Cfap52|Dnah5|Lrp4|Palb2|Drc1	-0.673361748	0	40	0	0	-3.043918442	2.805968541
1	-2.5	GO:0	M1	1	0	GO Bi	19	determination of bilateral symmetry	19_GO:0032502 developm	-2.	2.8	3.4	20836	136	546	10	1.8	0.57	13590|20671|22416|23796|23892|54562|66910|71860|110082|381738	Lefty1|Sox17|Wnt3a|Aplnr|Grem1|Dnaaf11|Tmem107|Cfap52|Dnah5|Drc1	-0.	0	40	0	0	-3.04	2.805 96

	02882821	009855				ological Processes			ental process	502882821	05968541	66143291					31501832	3843453			510839795					3918442	8541
1	-2.479974949	GO:0009799	M1	1	0	GO Biological Processes	19	specification of symmetry	19_GO:0032502 developmental process	-2.479974949	2.785487019	3.439492356	20836	137	546	10	1.831501832	0.573843453	13590|20671|22416|23796|23892|54562|66910|71860|110082|381738	Lefty1|Sox17|Wnt3a|Aplnr|Grem1|Dnaaf11|Tmem107|Cfap52|Dnah5|Drc1	-0.507687937	0	40	0	0	-3.043918442	2.805968541
1	-2.1359	GO:0007	M1	1	0	GO Biologica	19	determination of left/right symmetry	19_GO:0032502 developmental process	-2.135	2.6419	3.0805	20836	130	546	9	1.6483	0.54490	13590|20671|22416|23796|54562|66910|71860|110082|381738	Lefty1|Sox17|Wnt3a|Aplnr|Dnaaf11|Tmem107|Cfap52|Dnah5|Drc1	-0.356	0	40	0	0	-3.043918	2.805968541

	50086	368				l Processes				9500086	27303	59109					51648	3294			956363					442	
1	-2.013225619	GO:0060972	M1	1	0	GO Biological Processes	19	left/right pattern formation	19_GO:0032502 developmental process	-2.013225619	2.525371687	2.927601849	20836	136	546	9	1.648351648	0.544903294	13590|20671|22416|23796|54562|66910|71860|110082|381738	Lefty1|Sox17|Wnt3a|Aplnr|Dnaaf11|Tmem107|Cfap52|Dnah5|Drc1	-0.3053748	0	40	0	0	-3.043918442	2.805968541
1	-3.0165333	GO:0030198	M1	1	0	GO Biological Proc	19	extracellular matrix organization	19_GO:0009987 cellular process	-3.0165333	2.3676639	3.738299	20836	274	546	17	3.1135531	0.7432986	12406|12836|14115|14580|15451|17300|17388|17390|22416|23892|68553|99011|107581|207596|224224|235130|319742	Serpinh1|Col7a1|Fbln2|Gfap|Hpn|Foxc1|Mmp15|Mmp2|Wnt3a|Grem1|Col6a4|Pomt1|Col16a1|Thsd4|Impg2|Adamts15|Mpzl3	-0.768770	0	41	1	1	-3.016533362	2.367663966

	62					esses				362	66	21					14	31			459						
1	-2.981956676	GO:0043062	M1	1	0	GO Biological Processes	19	extracellular structure organization	19_GO:0009987 cellular process	-2.981956676	2.350506981	3.7050312	20836	276	546	17	3.113553114	0.743298631	12406|12836|14115|14580|15451|17300|17388|17390|22416|23892|68553|99011|107581|207596|224224|235130|319742	Serpinh1|Col7a1|Fbln2|Gfap|Hpn|Foxc1|Mmp15|Mmp2|Wnt3a|Grem1|Col6a4|Pomt1|Col16a1|Thsd4|Impg2|Adamts15|Mpzl3	-0.742388251	0	41	0	0	-3.016533362	2.367663966
1	-2.981956676	GO:0045229	M1	1	0	GO Biological Processes	19	external encapsulating structure organization	19_GO:0009987 cellular process	-2.981956676	2.350506981	3.7050312	20836	276	546	17	3.113553114	0.743298631	12406|12836|14115|14580|15451|17300|17388|17390|22416|23892|68553|99011|107581|207596|224224|235130|319742	Serpinh1|Col7a1|Fbln2|Gfap|Hpn|Foxc1|Mmp15|Mmp2|Wnt3a|Grem1|Col6a4|Pomt1|Col16a1|Thsd4|Impg2|Adamts15|Mpzl3	-0.742388251	0	41	0	0	-3.016533362	2.367663966

1	-2.972586387	GO:0045475	M1	1	0	GO Biological Processes	19	locomotor rhythm	19_GO:0048511 rhythmic process	-2.972586387	8.48026048	5.208174441	20836	18	546	4	0.732600733	0.36495614	13653|16508|53376|229599	Egr1|Kcnd2|Usp2|Ciart	-0.741060682	0	42	1	1	-2.972586387	8.48026048
1	-2.07710272	GO:0048512	M1	1	0	GO Biological Processes	19	circadian behavior	19_GO:0048511 rhythmic process	-2.077010272	4.924022214	3.586579769	20836	31	546	4	0.732600733	0.36495614	13653|16508|53376|229599	Egr1|Kcnd2|Usp2|Ciart	-0.337347265	0	42	0	0	-2.972586387	8.48026048
1	-2.9	GO:1	M1	1	0	GO Bi	19	regulation of regulated	19_GO:0051179	-2.	2.8	3.8	20836	161	546	12	2.1	0.62	11541|12921|14461|16189|16409|18752|60510|75209|109648|192167|216963|241770	Adora2b|Crhr1|Gata2|Il4|Itgam|Prkcg|Syt9|Sv2c|Npy|Nlgn1|Git1|Rims4	-0.	0	43	1	1	-2.94	3.88079

	47356541	90305				ological Processes		secretory pathway	localization	947356541	44310969	5368647					97802198	7440123			719797024					7356541	7169
1	-2.534243111	GO:0099536	M1	1	0	GO Biological Processes	19	synaptic signaling	19_GO:0023052 signaling	-2.534243111	1.916771204	3.180945846	20836	438	546	22	4.029304029	0.841565687	11308|12918|12919|14409|15559|16647|18610|18752|18754|19055|20411|21333|60510|72585|75209|83762|109648|170758|192167|237611|241770|380702	Abi1|Crh|Crhbp|Gabrr2|Htr2b|Kpna2|Pdyn|Prkcg|Prkce|Ppp3ca|Sorbs1|Tac1|Syt9|Lypd1|Sv2c|Otof|Npy|Rac3|Nlgn1|Stac3|Rims4|Shisa6	-0.522969483	0	43	0	0	-2.947356541	3.880797169
1	-2.4398	GO:0007	M1	1	0	GO Biologica	19	chemical synaptic transmission	19_GO:0023052 signaling	-2.439	1.9919	3.1318	20836	364	546	19	3.4798	0.78431	12918|12919|14409|15559|18610|18752|18754|19055|21333|60510|72585|75209|83762|109648|170758|192167|237611|241770|380702	Crh|Crhbp|Gabrr2|Htr2b|Pdyn|Prkcg|Prkce|Ppp3ca|Tac1|Syt9|Lypd1|Sv2c|Otof|Npy|Rac3|Nlgn1|Stac3|Rims4|Shisa6	-0.488	0	43	0	0	-2.947356	3.880797169

	81305	268				l Processes				881305	29316	6715					5348	9737			992438					541	
1	-2.439881305	GO:0098916	M1	1	0	GO Biological Processes	19	anterograde trans-synaptic signaling	19_GO:0023052 signaling	-2.439881305	1.991929316	3.131867115	20836	364	546	19	3.47985348	0.784319737	12918|12919|14409|15559|18610|18752|18754|19055|21333|60510|72585|75209|83762|109648|170758|192167|237611|241770|380702	Crh|Crhbp|Gabrr2|Htr2b|Pdyn|Prkcg|Prkce|Ppp3ca|Tac1|Syt9|Lypd1|Sv2c|Otof|Npy|Rac3|Nlgn1|Stac3|Rims4|Shisa6	-0.488992438	0	43	0	0	-2.947356541	3.880797169
1	-2.4158595	GO:0051046	M1	1	0	GO Biological Proc	19	regulation of secretion	19_GO:0051179 localization	-2.415859	1.6279546	2.9653193	20836	797	546	34	6.2271062	1.0341546	11541|11686|11747|12918|12919|12921|13616|13645|14461|16189|16322|16409|17929|18752|18754|18761|19055|19662|20496|20855|21333|30878|58185|60510|75209|83433|98170|109648|192167|216963|229593|241770|246728|319552	Adora2b|Alox12b|Anxa5|Crh|Crhbp|Crhr1|Edn3|Egf|Gata2|Il4|Inha|Itgam|Myom1|Prkcg|Prkce|Prkcq|Ppp3ca|Rbp4|Slc12a2|Stc1|Tac1|Apln|Rsad2|Syt9|Sv2c|Trem2|Tmem132a|Npy|Nlgn1|Git1|Golph3l|Rims4|Oas2|Spx	-0.475286	0	43	0	0	-2.947356541	3.880797169

	66					esses				566	47	18					27	16			967						
1	-2.358480678	GO:2000300	M1	1	0	GO Biological Processes	19	regulation of synaptic vesicle exocytosis	19_GO:0051179 localization	-2.358480678	3.880797169	3.634957335	20836	59	546	6	1.098901099	0.446152716	18752|75209|109648|192167|216963|241770	Prkcg|Sv2c|Npy|Nlgn1|Git1|Rims4	-0.44458901	0	43	0	0	-2.947356541	3.880797169
1	-2.212653442	GO:1903530	M1	1	0	GO Biological Processes	19	regulation of secretion by cell	19_GO:0051179 localization	-2.212653442	1.633145742	2.797299273	20836	701	546	30	5.494505495	0.975206336	11541|11747|12918|12919|12921|13616|13645|14461|16189|16322|16409|17929|18752|18754|18761|19055|19662|20496|21333|30878|58185|60510|75209|83433|98170|109648|192167|216963|229593|241770	Adora2b|Anxa5|Crh|Crhbp|Crhr1|Edn3|Egf|Gata2|Il4|Inha|Itgam|Myom1|Prkcg|Prkce|Prkcq|Ppp3ca|Rbp4|Slc12a2|Tac1|Apln|Rsad2|Syt9|Sv2c|Tmem132a|Npy|Nlgn1|Git1|Golph3l|Rims4	-0.384610322	0	43	0	0	-2.947356541	3.880797169

1	-2.183221846	GO:0099537	M1	1	0	GO Biological Processes	19	trans-synaptic signaling	19_GO:0023052 signaling	-2.183221846	1.883278626	2.8696099	20836	385	546	19	3.47985348	0.784319737	12918|12919|14409|15559|18610|18752|18754|19055|21333|60510|72585|75209|83762|109648|170758|192167|237611|241770|380702	Crh|Crhbp|Gabrr2|Htr2b|Pdyn|Prkcg|Prkce|Ppp3ca|Tac1|Syt9|Lypd1|Sv2c|Otof|Npy|Rac3|Nlgn1|Stac3|Rims4|Shisa6	-0.379317055	0	43	0	0	-2.947356541	3.880797169
1	-2.137286112	GO:1903532	M1	1	0	GO Biological Processes	19	positive regulation of secretion by cell	19_GO:0051179 localization	-2.137286112	1.863913293	2.821513997	20836	389	546	19	3.47985348	0.784319737	11541|12918|12921|13616|14461|16189|16409|17929|18754|18761|19662|20496|21333|30878|60510|83433|98170|192167|229593	Adora2b|Crh|Crhr1|Edn3|Gata2|Il4|Itgam|Myom1|Prkce|Prkcq|Rbp4|Slc12a2|Tac1|Apln|Syt9|Trem2|Tmem132a|Nlgn1|Golph3l	-0.356956363	0	43	0	0	-2.947356541	3.880797169
1	-2.0	GO:0	M1	1	0	GO Bi	19	positive regulation of secretion	19_GO:0051179	-2.	1.7	2.7	20836	453	546	21	3.8	0.82	11541|11686|12918|12921|13616|14461|16189|16409|17929|18754|18761|19055|19662|20496|213	Adora2b|Alox12b|Crh|Crhr1|Edn3|Gata2|Il4|Itgam|Myom1|Prkce|Prkcq|Ppp3ca|Rbp4|Sl	-0.	0	43	0	0	-2.94	3.88079

	58226233	051047				ological Processes			localization	0582226233	69060961	14737645					46153846	3000947	33|30878|60510|83433|98170|192167|229593	c12a2|Tac1|Apln|Syt9|Trem2|Tmem132a|Nlgn1|Golph3l	326591609					7356541	7169
1	-2.918180237	GO:0045321	M1	1	0	GO Biological Processes	19	leukocyte activation	19_GO:0002376 immune system process	-2.918180237	1.785317996	3.425836037	20836	684	546	32	5.860805861	1.005234961	11541|11629|12259|12524|12608|12759|13419|13653|16189|16409|16768|16822|17060|18030|18754|18761|19260|19885|20442|22177|22324|22362|22416|58185|83433|94176|102545|109648|114570|216963|240754|381924	Adora2b|Aif1|C1qa|Cd86|Cebpb|Clu|Dnase1|Egr1|Il4|Itgam|Lag3|Lcp2|Blnk|Nfil3|Prkce|Prkcq|Ptpn22|Rorc|St3gal1|Tyrobp|Vav1|Vpreb1a|Wnt3a|Rsad2|Trem2|Dock2|Cmtm7|Npy|Crip3|Git1|Lax1|Itgad	-0.694551013	0	44	1	1	-2.918180237	1.785317996
1	-2.5528	GO:0001	M1	1	0	GO Biologica	19	cell activation	19_GO:0032501 multicellular organismal process	-2.552	1.6613	3.0900	20836	781	546	34	6.2271	1.03415	11541|11629|12259|12524|12608|12759|13419|13653|14065|16189|16409|16768|16822|17060|18030|18754|18761|19260|19885|20442|22177|22324|22362|22416|58185|83433|94176|102545|10964	Adora2b|Aif1|C1qa|Cd86|Cebpb|Clu|Dnase1|Egr1|F2rl3|Il4|Itgam|Lag3|Lcp2|Blnk|Nfil3|Prkce|Prkcq|Ptpn22|Rorc|St3gal1|Tyrobp|Vav1|Vpreb1a|Wnt3a|Rsad2|Trem2|Dock2|Cm	-0.534	0	44	0	0	-2.918180	1.785317996

	0056	775				l Processes				80056	0583	71906					06227	4616	8|114570|214384|216963|240754|381924	tm7|Npy|Crip3|Myocd|Git1|Lax1|Itgad	26836					237	
1	-2.89678665	GO:0010038	M1	1	0	GO Biological Processes	19	response to metal ion	19_GO:0050896 response to stimulus	-2.89678665	2.244774833	3.598397099	20836	306	546	18	3.296703297	0.76412472	11747|12919|16477|16533|16816|17748|17750|18013|19055|20496|20657|21924|22042|27421|60510|66871|73649|192167	Anxa5|Crhbp|Junb|Kcnmb1|Lcat|Mt1|Mt2|Neurod2|Ppp3ca|Slc12a2|Sod3|Tnnc1|Tfrc|Abcc6|Syt9|Cpne8|Cybrd1|Nlgn1	-0.69319184	0	45	1	1	-2.89678665	2.525371687
1	-2.2634126	GO:01035	M1	1	0	GO Biological Proc	19	response to inorganic substance	19_GO:0050896 response to stimulus	-2.263412	1.7646784	2.8939085	20836	519	546	24	4.3956043	0.8773076	11747|12919|12955|16477|16533|16816|16819|17390|17748|17750|18013|18706|19055|20496|20537|20657|21924|22042|27421|60510|66871|73649|192167|329064	Anxa5|Crhbp|Cryab|Junb|Kcnmb1|Lcat|Lcn2|Mmp2|Mt1|Mt2|Neurod2|Pik3ca|Ppp3ca|Slc12a2|Slc5a1|Sod3|Tnnc1|Tfrc|Abcc6|Syt9|Cpne8|Cybrd1|Nlgn1|Pkd2l1	-0.409082	0	45	0	0	-2.89678665	2.525371687

	26					esses				626	81	83					96	34			167						
1	-2.013225619	GO:0051592	M1	1	0	GO Biological Processes	19	response to calcium ion	19_GO:0050896 response to stimulus	-2.013225619	2.525371687	2.927601849	20836	136	546	9	1.648351648	0.544903294	11747|12919|16477|16533|18013|19055|60510|66871|192167	Anxa5|Crhbp|Junb|Kcnmb1|Neurod2|Ppp3ca|Syt9|Cpne8|Nlgn1	-0.3053748	0	45	0	0	-2.8967868665	2.525371687
1	-2.896289843	R-MMU-901334	M1	1	0	Reactome Gene Sets	6	RAC2 GTPase cycle		-2.896289843	3.769004658	4.095971038	20836	81	546	8	1.465201465	0.514217873	11308|17972|18706|22042|22324|75739|94176|216963	Abi1|Ncf4|Pik3ca|Tfrc|Vav1|Mpp7|Dock2|Git1	-0.69319184	0	46	1	1	-2.896289843	3.769004658

		04																									
1	-2.411843777	R-MMU-9013149	M1	1	0	Reactome Gene Sets	6	RAC1 GTPase cycle		-2.411843777	2.575293827	3.312117011	20836	163	546	11	2.014652015	0.601290399	11308|17972|18706|22042|22324|75739|78816|94176|216963|226652|227377	Abi1|Ncf4|Pik3ca|Tfrc|Vav1|Mpp7|Gmip|Dock2|Git1|Arhgap30|Farp2	-0.473305348	0	46	0	0	-2.896289843	3.769004658
1	-2.87418726	GO:0140112	M1	1	0	GO Biological Processes	19	extracellular vesicle biogenesis	19_GO:0009987 cellular process	-2.87418726	12.72039072	5.769019891	20836	9	546	3	0.549450549	0.316352724	12490|66412|68428	Cd34|Arrdc4|Steap3	-0.69319184	0	47	1	1	-2.87418726	12.72039072

1	-2.857188867	GO:0001934	M1	1	0	GO Biological Processes	19	positive regulation of protein phosphorylation	19_GO:0048518 positive regulation of biological process	-2.857188867	1.718971719	3.350579765	20836	777	546	35	6.410256410	1.048227401	11308|11629|11652|12388|12491|12524|12531|12654|12759|12918|13590|13616|13645|13653|15163|15200|15559|16189|16322|18706|19225|22042|22416|23796|23892|50883|54396|68145|83433|105844|170720|192199|228357|231633|320202	Abi1|Aif1|Akt2|Ctnnd1|Cd36|Cd86|Cdc25b|Chil1|Clu|Crh|Lefty1|Edn3|Egf|Egr1|Hcls1|Hbegf|Htr2b|Il4|Inha|Pik3ca|Ptgs2|Tfrc|Wnt3a|Aplnr|Grem1|Chek2|Irgm2|Etaa1|Trem2|Card10|Card14|Rspo1|Lrp4|Tmem119|Lefty2	-0.693191184	0	48	1	1	-2.857188867	1.718971719
1	-2.854934073	GO:0002683	M1	1	0	GO Biological Processes	19	negative regulation of immune system process	19_GO:0002376 immune system process	-2.854934073	1.904396307	3.42942476	20836	521	546	26	4.761904762	0.911379765	12524|12608|13345|14461|16189|16768|19260|19401|20128|20535|22177|22761|23892|26971|67526|74048|74511|77772|83433|100340|109648|208154|226421|240754|246730|574402	Cd86|Cebpb|Twist2|Gata2|Il4|Lag3|Ptpn22|Rara|Trim30a|Slc4a2|Tyrobp|Zfpm1|Grem1|Pla2g2f|Atg12|Vsir|Lrrc17|Dcst1|Trem2|Smpdl3b|Npy|Btla|Rab7b|Lax1|Oas1a|Gpr17	-0.693191184	0	49	1	1	-2.854934073	2.935474782
1	-2.8	GO:0	M1	1	0	GO Bi	19	regulation of lymphocyte proliferation	19_GO:0002376 immune	-2.	2.	3.	20836	260	546	16	2.9	0.72	11629|12524|12608|16189|18761|19055|19260|20535|21333|2204	Aif1|Cd86|Cebpb|Il4|Prkcq|Ppp3ca|Ptpn22|Slc4a2|Tac1|Tfr	-0.	0	49	0	0	-2.85	2.93547

	35424739	050670				ological Processes			system process	835424739	48379825	88975507					3040293	1786844	2|22177|22416|26971|74048|170786|208154	c|Tyrobp|Wnt3a|Pla2g2f|Vsir|Cd209a|Btla	683743832					4934073	4782
1	-2.7988975	GO:0070663	M1	1	0	GO Biological Processes	19	regulation of leukocyte proliferation	19_GO:0050789 regulation of biological process	-2.7988975	2.260417863	3.527054757	20836	287	546	17	3.113553114	0.743298631	11629|12524|12608|16189|18761|19055|19260|20535|21333|22042|22177|22416|23892|26971|74048|170786|208154	Aif1|Cd86|Cebpb|Il4|Prkcq|Ppp3ca|Ptpn22|Slc4a2|Tac1|Tfrc|Tyrobp|Wnt3a|Grem1|Pla2g2f|Vsir|Cd209a|Btla	-0.663484206	0	49	0	0	-2.854934073	2.935474782
1	-2.7674	GO:0032	M1	1	0	GO Biologica	19	regulation of mononuclear cell proliferation	19_GO:0050789 regulation of biological process	-2.7677	2.3127	3.5213	20836	264	546	16	2.9304	0.72178	11629|12524|12608|16189|18761|19055|19260|20535|21333|22042|22177|22416|26971|74048|170786|208154	Aif1|Cd86|Cebpb|Il4|Prkcq|Ppp3ca|Ptpn22|Slc4a2|Tac1|Tfrc|Tyrobp|Wnt3a|Pla2g2f|Vsir|Cd209a|Btla	-0.638	0	49	0	0	-2.854934	2.935474782

	94303	944				l Processes				494303	98313	87074					0293	6844			421187					073	
1	-2.590780233	GO:0042129	M1	1	0	GO Biological Processes	19	regulation of T cell proliferation	19_GO:0002376 immune system process	-2.590780233	2.468135513	3.430946819	20836	201	546	13	2.380952381	0.65244862	11629|12524|12608|16189|18761|19055|19260|20535|22042|26971|74048|170786|208154	Aif1|Cd86|Cebpb|Il4|Prkcq|Ppp3ca|Ptpn22|Slc4a2|Tfrc|Pla2g2f|Vsir|Cd209a|Btla	-0.553808523	0	49	0	0	-2.854934073	2.935474782
1	-2.5028828	GO:0050868	M1	1	0	GO Biological Proc	19	negative regulation of T cell activation	19_GO:0002376 immune system process	-2.502882	2.8059685	3.4661432	20836	136	546	10	1.8315018	0.5738434	12524|12608|16189|16768|19260|20535|26971|74048|208154|240754	Cd86|Cebpb|Il4|Lag3|Ptpn22|Slc4a2|Pla2g2f|Vsir|Btla|Lax1	-0.510839	0	49	0	0	-2.854934073	2.935474782

	21					esses				821	41	91					32	53			795						
1	-2.218761012	GO:0070664	M1	1	0	GO Biological Processes	19	negative regulation of leukocyte proliferation	19_GO:0048519 negative regulation of biological process	-2.218761012	2.935474782	3.245903744	20836	104	546	8	1.465201465	0.514217873	12524|12608|20535|22177|23892|26971|74048|208154	Cd86|Cebpb|Slc4a2|Tyrobp|Grem1|Pla2g2f|Vsir|Btla	-0.389141503	0	49	0	0	-2.854934073	2.935474782
1	-2.200803148	GO:0051250	M1	1	0	GO Biological Processes	19	negative regulation of lymphocyte activation	19_GO:0002376 immune system process	-2.200803148	2.412487895	3.069200289	20836	174	546	11	2.014652015	0.601290399	12524|12608|16189|16768|19260|20535|22177|26971|74048|208154|240754	Cd86|Cebpb|Il4|Lag3|Ptpn22|Slc4a2|Tyrobp|Pla2g2f|Vsir|Btla|Lax1	-0.379317055	0	49	0	0	-2.854934073	2.935474782

1	-2.183395034	GO:1903038	M1	1	0	GO Biological Processes	19	negative regulation of leukocyte cell-cell adhesion	19_GO:0048519 negative regulation of biological process	-2.183395034	2.527229944	3.089706254	20836	151	546	10	1.831501832	0.573843453	12524|12608|16189|16768|19260|20535|26971|74048|208154|240754	Cd86|Cebpb|Il4|Lag3|Ptpn22|Slc4a2|Pla2g2f|Vsir|Btla|Lax1	-0.379317055	0	49	0	0	-2.854934073	2.935474782
1	-2.068754772	GO:0050671	M1	1	0	GO Biological Processes	19	positive regulation of lymphocyte proliferation	19_GO:0002376 immune system process	-2.068754772	2.430647908	2.951684088	20836	157	546	10	1.831501832	0.573843453	11629|12524|16189|18761|19055|19260|21333|22042|22416|170786	Aif1|Cd86|Il4|Prkcq|Ppp3ca|Ptpn22|Tac1|Tfrc|Wnt3a|Cd209a	-0.333828676	0	49	0	0	-2.854934073	2.935474782
1	-2.0	GO:0	M1	1	0	GO Bi	19	positive regulation of mononuclear	19_GO:0048518 positive	-2.	2.3	2.8	20836	160	546	10	1.8	0.57	11629|12524|16189|18761|19055|19260|21333|22042|22416|170786	Aif1|Cd86|Il4|Prkcq|Ppp3ca|Ptpn22|Tac1|Tfrc|Wnt3a|Cd209a	-0.	0	49	0	0	-2.85	2.93547

	1395164	032946				ological Processes		cell proliferation	regulation of biological process	01395164	8507326	85037913					31501832	3843453			3053748					4934073	4782
1	-2.000685809	GO:0045785	M1	1	0	GO Biological Processes	19	positive regulation of cell adhesion	19_GO:0048518 positive regulation of biological process	-2.000685809	1.697692379	2.635179088	20836	517	546	23	4.212454212	0.859658177	11629|12317|12491|12512|12524|14115|14260|15505|16189|18754|18761|19055|19260|19401|22042|22324|22416|74048|107581|109648|170758|170786|234839	Aif1|Calr|Cd36|Cd63|Cd86|Fbln2|Fmn1|Hsph1|Il4|Prkce|Prkcq|Ppp3ca|Ptpn22|Rara|Tfrc|Vav1|Wnt3a|Vsir|Col16a1|Npy|Rac3|Cd209a|Piezo1	-0.296399671	0	49	0	0	-2.854934073	2.935474782
1	-2.8082	GO:0071	M1	1	0	GO Biologica	19	potassium ion transmembrane transport	19_GO:0051179 localization	-2.8088	2.8949	3.7562	20836	145	546	11	2.0146	0.60129	13616|15451|16508|16523|16533|20496|56543|76376|105243|329064|382571	Edn3|Hpn|Kcnd2|Kcnj8|Kcnmb1|Slc12a2|Kcnd3|Slc24a2|Slc9a3|Pkd2l1|Kcnf1	-0.666	0	50	1	1	-2.808281	2.894985474

	81674	805				l Processes				281674	85474	21518					52015	0399			43427					674	
1	-2.2750905552	GO:0006813	M1	1	0	GO Biological Processes	19	potassium ion transport	19_GO:0051179 localization	-2.2750905552	2.469252316	3.155329243	20836	170	546	11	2.014652015	0.601290399	13616|15451|16508|16523|16533|20496|56543|76376|105243|329064|382571	Edn3|Hpn|Kcnd2|Kcnj8|Kcnmb1|Slc12a2|Kcnd3|Slc24a2|Slc9a3|Pkd2l1|Kcnf1	-0.415592984	0	50	0	0	-2.808281674	2.894985474
1	-2.2440638	GO:0098657	M1	1	0	GO Biological Proc	19	import into cell	19_GO:0051179 localization	-2.244063	2.3363982	3.0836221	20836	196	546	12	2.1978021	0.6274401	12491|14580|16523|19662|20496|20537|56543|68428|76376|83433|105243|319552	Cd36|Gfap|Kcnj8|Rbp4|Slc12a2|Slc5a1|Kcnd3|Steap3|Slc24a2|Trem2|Slc9a3|Spx	-0.404133	0	50	0	0	-2.808281674	2.894985474

	84					esses				884	96	21					98	23			451						
1	-2.74459088	GO:0035335	M1	1	0	GO Biological Processes	19	peptidyl-tyrosine dephosphorylation	19_GO:0008152 metabolic process	-2.74459088	5.611937083	4.414914899	20836	34	546	5	0.915750916	0.407656781	19249|19260|19268|67603|240672	Ptpn13|Ptpn22|Ptprf|Dusp6|Dusp5	-0.621766713	0	51	1	1	-2.74459088	5.611937083
1	-2.148392846	GO:0016311	M1	1	0	GO Biological Processes	19	dephosphorylation	19_GO:0008152 metabolic process	-2.148392846	2.185441578	2.945891007	20836	227	546	13	2.380952381	0.652448862	12531|13850|19055|19058|19249|19260|19268|67603|70351|216152|225283|240672|381925	Cdc25b|Ephx2|Ppp3ca|Ppp3r1|Ptpn13|Ptpn22|Ptprf|Dusp6|Ppp4r1|Plppr3|Rprd1a|Dusp5|Plpp4	-0.363740483	0	51	0	0	-2.74459088	5.611937083

1	-2.727791242	GO:0034163	M1	1	0	GO Biological Processes	19	regulation of toll-like receptor signaling pathway	9	19_GO:0044419 biological process involved in interspecies interaction between organisms	-2.727791242	11.44835165	5.421218341	20836	10	546	3	0.549450549	0.316352724	19260|58185|226421	Ptpn22|Rsad2|Rab7b	-0.614745553	0	52	1	1	-2.727791242	11.44835165
1	-2.708284542	R-MMU-2029485	M1	1	0	Reactome Gene Sets	6	Role of phospholipids in phagocytosis			-2.708284542	7.268794697	4.714737708	20836	21	546	4	0.732600733	0.364956614	14129|18706|18754|381925	Fcgr1|Pik3ca|Prkce|Plpp4	-0.605332264	0	53	1	1	-2.708284542	7.268794697

1	-2.628541265	mmu05221	M1	1	0	KEGG Pathway	24	Acute myeloid leukemia - Mus musculus (house mouse)	-2.628541265	3.816117216	3.871465318	20836	70	546	7	1.282051282	0.4814536	11652|12044|14129|16409|18706|19401|67603	Akt2|Bcl2a1a|Fcgr1|Itgam|Pik3ca|Rara|Dusp6	-0.55824615	0	53	0	0	-2.708284542	7.268794697
1	-2.513899951	mmu04666	M1	1	0	KEGG Pathway	24	Fc gamma R-mediated phagocytosis - Mus musculus (house mouse)	-2.513899951	3.282681476	3.6191206	20836	93	546	8	1.465201465	0.514217873	11652|14129|18706|18752|18754|22324|66713|329502	Akt2|Fcgr1|Pik3ca|Prkcg|Prkce|Vav1|Actr2|Pla2g4e	-0.514460693	0	53	0	0	-2.708284542	7.268794697
1	-2.4	R-M	M1	1	0	Reacto	6	Fcgamma receptor (FCGR) dependent phagocytosis	-2.	3.5	3.6	20836	75	546	7	1.2	0.48	11308|14129|18706|18754|22324|66713|381925	Abi1|Fcgr1|Pik3ca|Prkce|Vav1|Actr2|Plpp4	-0.	0	53	0	0	-2.70	7.26879

	58049574	MU-2029480				meGeneSets				458049574	61709402	45762805					82051282	14536			497386008					8284542	4697
1	-2.668345481	GO:0003206	M1	1	0	GO Biological Processes	19	cardiac chamber morphogenesis	19_GO:0032502 developmental process	-2.668345481	2.779952939	3.609847442	20836	151	546	11	2.014652015	0.601290399	14200|17300|19662|20348|21924|22411|22761|23796|67451|116701|268902	Fhl2|Foxc1|Rbp4|Sema3c|Tnnc1|Wnt11|Zfpm1|Aplnr|Pkp2|Fgfrl1|Robo2	-0.578370226	0	54	1	1	-2.668345481	2.779952939
1	-2.274	GO:00	M1	1	0	GO Biolog	19	heart development	19_GO:0032502 developmental process	-2.27	1.703	2.878	20836	605	546	27	4.945	0.9278	12180|13590|14200|15559|16523|17300|17390|17927|19058|19401|19662|20348|20671|21924|22411|22416|22761|23796|23892|23	Smyd1|Lefty1|Fhl2|Htr2b|Kcnj8|Foxc1|Mmp2|Myod1|Ppp3r1|Rara|Rbp4|Sema3c|Sox17|Tnnc1|Wnt11|Wnt3a|Zfpm1|Aplnr|Grem1|Osr1|Apln|Pkp	-0.41	0	54	0	0	-2.668345	2.779952939

	612063	7507				ical Processes				4612063	060576	815339					054945	47489	967|30878|67451|110082|116701|214384|268902|381738	2|Dnah5|Fgfrl1|Myocd|Robo2|Drc1	5592984					481	
1	-2.209826668	GO:0003205	M1	1	0	GO Biological Processes	19	cardiac chamber development	19_GO:0032502 developmental process	-2.209826668	2.312798313	3.044730454	20836	198	546	12	2.197802198	0.627440123	14200|17300|19662|20348|21924|22411|22761|23796|67451|116701|214384|268902	Fhl2|Foxc1|Rbp4|Sema3c|Tnnc1|Wnt11|Zfpm1|Aplnr|Pkp2|Fgfrl1|Myocd|Robo2	-0.383354235	0	54	0	0	-2.668345481	2.779952939
1	-2.171417	GO:00487	M1	1	0	GO Biological Pr	19	tissue morphogenesis	19_GO:0032502 developmental process	-2.17141	1.654044	2.770177	20836	646	546	28	5.128205	0.9439629	12388|12808|13036|13645|14260|15200|15412|17300|17390|19058|19401|20348|20496|20671|20855|21923|21924|22411|22416|22761|23796|23892|23967|67451|76905|231470|268902|270685	Ctnnd1|Cobl|Ctsh|Egf|Fmn1|Hbegf|Hoxb4|Foxc1|Mmp2|Ppp3r1|Rara|Sema3c|Slc12a2|Sox17|Stc1|Tnc|Tnnc1|Wnt11|Wnt3a|Zfpm1|Aplnr|Grem1|Osr1|Pkp2|Lrg1|Fras1|Robo2|Mthfd1l	-0.37375	0	54	0	0	-2.668345481	2.779952939

	234	29				ocesses				7234	614	026					128	12			6743						
1	-2.16380509	GO:0003231	M1	1	0	GO Biological Processes	19	cardiac ventricle development	19_GO:0032502 developmental process	-2.16380509	2.510603432	3.066246367	20836	152	546	10	1.831501832	0.573843453	17300|20348|21924|22411|22761|23796|67451|116701|214384|268902	Foxc1|Sema3c|Tnnc1|Wnt11|Zfpm1|Aplnr|Pkp2|Fgfrl1|Myocd|Robo2	-0.373164243	0	54	0	0	-2.668345481	2.77952939
1	-2.082454558	GO:0003007	M1	1	0	GO Biological Process es	19	heart morphogenesis	19_GO:0032502 developmental process	-2.0824545	2.015554868	2.82675108	20836	284	546	15	2.747252747	0.699526105	13590|14200|15559|17300|19662|20348|20671|21924|22411|22416|22761|23796|67451|116701|268902	Lefty1|Fhl2|Htr2b|Foxc1|Rbp4|Sema3c|Sox17|Tnnc1|Wnt11|Wnt3a|Zfpm1|Aplnr|Pkp2|Fgfrl1|Robo2	-0.3373472	0	54	0	0	-2.668345481	2.77952939

						ses			58											65						
1	-2.630131174	GO:0045606	M1	1	0	GO Biological Processes	19	positive regulation of epidermal cell differentiation	19_GO:0032502 developmental process	-2.630131174	6.938394938	4.571457567	20836	22	546	4	0.732600733	0.36495614	17300|20379|54200|55948	Foxc1|Sfrp4|Sult2b1|Sfn	-0.55824615	0	55	1	1	-2.630131174	6.938394938
1	-2.355606366	GO:0045684	M1	1	0	GO Biological Processes	19	positive regulation of epidermis development	19_GO:0032502 developmental process	-2.355606366	5.870949563	4.076770998	20836	26	546	4	0.732600733	0.36495614	17300|20379|54200|55948	Foxc1|Sfrp4|Sult2b1|Sfn	-0.44458901	0	55	0	0	-2.630131174	6.938394938

1	-2.630131174	GO:0035634	M1	1	0	GO Biological Processes	19	response to stilbenoid	19_GO:0050896 response to stimulus	-2.630131174	6.938394938	4.571457567	20836	22	546	4	0.732600733	0.36495614	12491|15122|24110|319554	Cd36|Hba-a1|Usp18|Idi1	-0.55824615	0	56	1	1	-2.630131174	6.938394938
1	-2.62351051	GO:0007051	M1	1	0	GO Biological Processes	19	spindle organization	19_GO:0009987 cellular process	-2.62351051	2.743613685	3.550923112	20836	153	546	11	2.014652015	0.601290399	17865|20620|21335|50883|51944|54141|66977|68519|78906|110854|219072	Mybl2|Plk2|Tacc3|Chek2|Knstrn|Spag5|Nuf2|Eml1|Misp|Ptpa|Haus4	-0.556399637	0	57	1	1	-2.62351051	3.392104192
1	-2.6	GO:0	M1	1	0	GO Bi	19	mitotic spindle organization	19_GO:0009987	-2.	3.3	3.7	20836	90	546	8	1.4	0.51	17865|20620|21335|50883|66977|68519|78906|110854	Mybl2|Plk2|Tacc3|Chek2|Nuf2|Eml1|Misp|Ptpa	-0.	0	57	0	0	-2.62	3.39210

	02944988	00752				ological Processes			cellular process	602944988	92104192	30664636					65201465	4217873			553808523					351051	4192
1	-2.621231857	mmu04726	M1	1	0	KEGG Pathway	24	Serotonergic synapse - Mus musculus (house mouse)		-2.621231857	2.913066577	3.603131936	20836	131	546	10	1.831501832	0.573843453	11686|13195|14677|15559|16508|18752|19225|66066|216343|329502	Alox12b|Ddc|Gnai1|Htr2b|Kcnd2|Prkcg|Ptgs2|Gng11|Tph2|Pla2g4e	-0.556399637	0	58	1	1	-2.621231857	2.913066577
1	-2.59444	GO:0043	M1	1	0	GO Biological	19	regulation of protein-containing complex assembly	19_GO:0050789 regulation of biological process	-2.594	1.93389	3.2386	20836	433	546	22	4.0293	0.84156	12491|12759|12955|13590|13860|14260|15163|16816|18754|19260|20128|20393|22042|53626|54396|74202|75739|83433|107351|216963|227377|234839	Cd36|Clu|Cryab|Lefty1|Eps8|Fmn1|Hcls1|Lcat|Prkce|Ptpn22|Trim30a|Sgk1|Tfrc|Insm1|Irgm2|Fblim1|Mpp7|Trem2|Kank1|Git1|Farp2|Piezo1	-0.553	0	59	1	1	-2.594450	1.938904821

	50647	254				l Processes			450647	04821	98743					04029	5687			808523					647	
1	-2.594191705	R-MMU-2142753	M1	1	0	Reactome Gene Sets	6	Arachidonic acid metabolism	-2.594191705	4.320132697	3.970007324	20836	53	546	6	1.098901099	0.446152716	11686|13850|19225|21391|23887|106648	Alox12b|Ephx2|Ptgs2|Tbxas1|Ggt5|Cyp4f15	-0.553808523	0	60	1	1	-2.594191705	4.320132697
1	-2.1590061	mmu00590	M1	1	0	KEGG Pathway	24	Arachidonic acid metabolism - Mus musculus (house mouse)	-2.159906	3.142684	3.247134	20836	85	546	7	1.282051	0.4814536	11686|13850|19225|21391|23887|26971|329502	Alox12b|Ephx2|Ptgs2|Tbxas1|Ggt5|Pla2g2f|Pla2g4e	-0.37011	0	60	0	0	-2.594191705	4.320132697

	995									19995	766	514					282				6736						
1	-2.587253621	GO:0060828	M1	1	0	GO Biological Processes	19	regulation of canonical Wnt signaling pathway	19_GO:0023052 signaling	-2.587253621	2.28967033	3.365230209	20836	250	546	15	2.747252747	0.699526105	12388|13395|13645|13653|20379|20671|22411|22416|23892|64929|72125|107351|192199|228357|380702	Ctnnd1|Dlx5|Egf|Egr1|Sfrp4|Sox17|Wnt11|Wnt3a|Grem1|Scel|Amer2|Kank1|Rspo1|Lrp4|Shisa6	-0.553808523	0	61	1	1	-2.587253621	2.544078144
1	-2.033106424	GO:0090090	M1	1	0	GO Biological Processes	19	negative regulation of canonical Wnt signaling pathway	19_GO:0023052 signaling	-2.0331064	2.544078144	2.952517956	20836	135	546	9	1.648351648	0.544903294	12388|13653|20379|20671|22411|23892|72125|228357|380702	Ctnnd1|Egr1|Sfrp4|Sox17|Wnt11|Grem1|Amer2|Lrp4|Shisa6	-0.3143825	0	61	0	0	-2.587253621	2.544078144

						ses				24											75						
1	-2.562329084	GO:1903829	M1	1	0	GO Biological Processes	19	positive regulation of protein localization	19_GO:0051179 localization	-2.562329084	1.838206752	3.172174674	20836	519	546	25	4.578754579	0.894540282	11652|12918|13645|14677|15163|16409|17929|18754|18761|19225|19260|19662|20411|22042|22177|22416|55948|58801|83433|98170|105844|192167|228357|229593|237611	Akt2|Crh|Egf|Gnai1|Hcls1|Itgam|Myom1|Prkce|Prkcq|Ptgs2|Ptpn22|Rbp4|Sorbs1|Tfrc|Tyrobp|Wnt3a|Sfn|Pmaip1|Trem2|Tmem132a|Card10|Nlgn1|Lrp4|Golph3l|Stac3	-0.5388955	0	62	1	1	-2.562329084	2.582334958
1	-2.183037334	GO:0070201	M1	1	0	GO Biological Processes	19	regulation of establishment of protein localization	19_GO:0051179 localization	-2.183037334	1.675368534	2.788875429	20836	615	546	27	4.945054945	0.927847489	11652|11747|12491|12918|13033|13645|15163|16409|17472|17929|18754|18761|19055|19225|19260|19662|20496|20684|55948|58185|58801|60510|70377|83433|98170|103573|229593	Akt2|Anxa5|Cd36|Crh|Ctsd|Egf|Hcls1|Itgam|Gbp4|Myom1|Prkce|Prkcq|Ppp3ca|Ptgs2|Ptpn22|Rbp4|Slc12a2|Sp100|Sfn|Rsad2|Pmaip1|Syt9|Derl3|Trem2|Tmem132a|Xpo1|Golph3l	-0.379317055	0	62	0	0	-2.562329084	2.582334958

1	-2.178477821	GO:0051223	M1	1	0	GO Biological Processes	19	regulation of protein transport	19_GO:0051179 localization	-2.178477821	1.693157809	2.792032472	20836	586	546	26	4.761904762	0.911379765	11652|11747|12491|12918|13645|15163|16409|17472|17929|18754|18761|19055|19225|19260|19662|20496|20684|55948|58185|58801|60510|70377|83433|98170|103573|229593	Akt2|Anxa5|Cd36|Crh|Egf|Hcls1|Itgam|Gbp4|Myom1|Prkce|Prkcq|Ppp3ca|Ptgs2|Ptpn22|Rbp4|Slc12a2|Sp100|Sfn|Rsad2|Pmaip1|Syt9|Derl3|Trem2|Tmem132a|Xpo1|Golph3l	-0.377872949	0	62	0	0	-2.562329084	2.582334958
1	-2.148392846	GO:0033157	M1	1	0	GO Biological Processes	19	regulation of intracellular protein transport	19_GO:0051179 localization	-2.148392846	2.185441578	2.945891007	20836	227	546	13	2.380952381	0.65244862	11652|12491|15163|16409|17472|18761|19225|19260|20684|55948|58801|70377|103573	Akt2|Cd36|Hcls1|Itgam|Gbp4|Prkcq|Ptgs2|Ptpn22|Sp100|Sfn|Pmaip1|Derl3|Xpo1	-0.363740483	0	62	0	0	-2.562329084	2.582334958
1	-2.0	GO:0	M1	1	0	GO Bi	19	regulation of intracellular transport	19_GO:0051179	-2.	1.9	2.7	20836	338	546	17	3.1	0.74	11652|12491|12955|15163|16409|17472|18761|19225|19260|2068	Akt2|Cd36|Cryab|Hcls1|Itgam|Gbp4|Prkcq|Ptgs2|Ptpn22|	-0.	0	62	0	0	-2.56	2.58233

	85677868	032386				ological Processes			localization	085677868	19348896	95342418					13553114	3298631	4|21924|54141|55948|58801|70377|103573|329502	Sp100|Tnnc1|Spag5|Sfn|Pmaip1|Derl3|Xpo1|Pla2g4e	337347265					2329084	4958
1	-2.073545088	GO:0046822	M1	1	0	GO Biological Processes	19	regulation of nucleocytoplasmic transport	19_GO:0051179 localization	-2.073545088	2.582334958	3.003029875	20836	133	546	9	1.648351648	0.544903294	12491|15163|17472|18761|19225|19260|20684|55948|103573	Cd36|Hcls1|Gbp4|Prkcq|Ptgs2|Ptpn22|Sp100|Sfn|Xpo1	-0.337347265	0	62	0	0	-2.562329084	2.582334958
1	-2.5256	GO:0070	M1	1	0	GO Biologica	19	axonemal dynein complex assembly	19_GO:0009987 cellular process	-2.525	5.0212	4.0699	20836	38	546	5	0.9157	0.40765	54562|110082|110084|114602|381738	Dnaaf11|Dnah5|Dnah1|Zmynd10|Drc1	-0.521	0	63	1	1	-2.525646	5.021206863

	46548	286				l Processes				6466548	06863	53775					50916	6781			512168					548	
1	-2.487004813	GO:0030031	M1	1	0	GO Biological Processes	19	cell projection assembly	19_GO:0009987 cellular process	-2.487004813	1.899424859	3.13528384	20836	442	546	22	4.029304029	0.841565687	11629|17152|54562|56226|64099|66713|66910|75050|83922|94187|110082|110084|114602|170758|212892|225631|229474|232943|269209|381738|382571|432516	Aif1|Mak|Dnaaf11|Espn|Parvg|Actr2|Tmem107|Kif27|Cep41|Zfp423|Dnah5|Dnah1|Zmynd10|Rac3|Rsph4a|Onecut2|Fhdc1|Klc3|Stk36|Drc1|Kcnf1|Myo1a	-0.508397223	0	63	0	0	-2.525646548	5.021206863
1	-2.2892866	GO:0003351	M1	1	0	GO Biological Proc	19	epithelial cilium movement involved in extracellular fluid movement	19_GO:0051179 localization	-2.289286	4.4373456	3.7012711	20836	43	546	5	0.9157509	0.4076567	54562|75050|110082|110084|269209	Dnaaf11|Kif27|Dnah5|Dnah1|Stk36	-0.415592	0	63	0	0	-2.525646548	5.021206863

	94					esses				694		39					16	81			984						
1	-2.261393862	GO:0003341	M1	1	0	GO Biological Processes	19	cilium movement	19_GO:0009987 cellular process	-2.261393862	2.348379825	3.103246219	20836	195	546	12	2.197802198	0.627440123	18830|54562|71860|75050|110082|110084|114602|212892|224661|232943|269209|269701	Pltp|Dnaaf11|Cfap52|Kif27|Dnah5|Dnah1|Zmynd10|Rsph4a|Slc26a8|Klc3|Stk36|Wdr66	-0.409082167	0	63	0	0	-2.525646548	5.021206863
1	-2.184546646	GO:0060271	M1	1	0	GO Biological Processes	19	cilium assembly	19_GO:0009987 cellular process	-2.184546646	1.965878566	2.90128954	20836	330	546	17	3.113553114	0.743298631	17152|54562|66713|66910|75050|83922|94187|110082|110084|114602|212892|225631|229474|232943|269209|381738|382571	Mak|Dnaaf11|Actr2|Tmem107|Kif27|Cep41|Zfp423|Dnah5|Dnah1|Zmynd10|Rsph4a|Onecut2|Fhdc1|Klc3|Stk36|Drc1|Kcnf1	-0.379317055	0	63	0	0	-2.525646548	5.021206863

1	-2.16354995	GO:0006858	M1	1	0	GO Biological Processes	19	extracellular transport	19_GO:0051179 localization	-2.16354995	4.147953496	3.506162411	20836	46	546	5	0.915750916	0.407656781	54562|75050|110082|110084|269209	Dnaaf11|Kif27|Dnah5|Dnah1|Stk36	-0.373164243	0	63	0	0	-2.525646548	5.021206863
1	-2.144411985	GO:0001539	M1	1	0	GO Biological Processes	19	cilium or flagellum-dependent cell motility	19_GO:0009987 cellular process	-2.144411985	2.494194259	3.042972749	20836	153	546	10	1.831501832	0.573843453	18830|54562|71860|110082|110084|212892|224661|232943|269701|381738	Pltp|Dnaaf11|Cfap52|Dnah5|Dnah1|Rsph4a|Slc26a8|Klc3|Wdr66|Drc1	-0.362598158	0	63	0	0	-2.525646548	5.021206863
1	-2.1	GO:0	M1	1	0	GO Bi	19	cilium-dependent cell motility	19_GO:0009987	-2.	2.4	3.0	20836	153	546	10	1.8	0.57	18830|54562|71860|110082|110084|212892|224661|232943|269701|381738	Pltp|Dnaaf11|Cfap52|Dnah5|Dnah1|Rsph4a|Slc26a8|Klc3|Wdr66|Drc1	-0.	0	63	0	0	-2.52	5.02120

	44411985	060285				ological Processes		cellular process	144411985	94194259	42972749					31501832	3843453			362598158					56465548	6863
1	-2.500284495	mmu04514	M1	1	0	KEGG Pathway	24	Cell adhesion molecules - Mus musculus (house mouse)	-2.500284495	2.516121241	3.369919994	20836	182	546	12	2.197802198	0.627440123	12490|12524|12555|14972|15040|15042|15896|16409|17968|19268|74048|192167	Cd34|Cd86|Cdh15|H2-K1|H2-T23|H2-T24|Icam2|Itgam|Ncam2|Ptprf|Vsir|Nlgn1	-0.510839795	0	64	1	1	-2.500284495	3.213572393
1	-2.4567	R-MMU-	M1	1	0	Reactome Ge	6	Immunoregulatory interactions between a Lymphoid and a non-Lymphoid cell	-2.456	3.2135	3.5472	20836	95	546	8	1.4652	0.51421	12490|14972|15040|15896|78369|83433|140497|233186	Cd34|H2-K1|H2-T23|Icam2|Icam4|Trem2|Cd300c2|Siglecf	-0.497	0	64	0	0	-2.500284	3.213572393

	08043	198933				neSets				708043	72393	57673					01465	7873			386008					495	
1	-2.470784074	GO:0097435	M1	1	0	GO Biological Processes	19	supramolecular fiber organization	19_GO:0009987 cellular process	-2.470784074	1.784515245	3.075791257	20836	556	546	26	4.761904762	0.911379765	11308|11629|12373|12406|12491|12808|13346|13644|13860|14260|14580|15163|17300|20393|20411|21335|23892|56226|66713|67451|107993|170758|207596|229474|406220|432516	Abi1|Aif1|Casq2|Serpinh1|Cd36|Cobl|Des|Efs|Eps8|Fmn1|Gfap|Hcls1|Foxc1|Sgk1|Sorbs1|Tacc3|Grem1|Espn|Actr2|Pkp2|Bfsp2|Rac3|Thsd4|Fhdc1|Krt77|Myo1a	-0.504545081	0	65	1	1	-2.470784074	1.784515245
1	-2.4703012	GO:0072001	M1	1	0	GO Biological Proc	19	renal system development	19_GO:0032502 developmental process	-2.470301	2.0504510	3.1795286	20836	335	546	18	3.2967032	0.76412472	12388|12733|13653|14260|17300|19055|19401|19662|20537|20671|22411|23892|23967|66333|214384|228357|231470|268902	Ctnnd1|Clcnka|Egr1|Fmn1|Foxc1|Ppp3ca|Rara|Rbp4|Slc5a1|Sox17|Wnt11|Grem1|Osr1|Aqp11|Myocd|Lrp4|Fras1|Robo2	-0.504545	0	66	1	1	-2.470301226	8.177394035

	26					esses				226	41	81					97				081						
1	-2.279779417	GO:0072087	M1	1	0	GO Biological Processes	19	renal vesicle development	19_GO:0032502 developmental process	-2.279779417	8.177394035	4.406782706	20836	14	546	3	0.549450549	0.316352724	14260|23892|23967	Fmn1|Grem1|Osr1	-0.415592984	0	66	0	0	-2.470301226	8.177394035
1	-2.243492184	GO:0001656	M1	1	0	GO Biological Processes	19	metanephros development	19_GO:0032502 developmental process	-2.243492184	3.257661038	3.360213005	20836	82	546	7	1.282051282	0.4814536	14260|20537|20671|23892|23967|231470|268902	Fmn1|Slc5a1|Sox17|Grem1|Osr1|Fras1|Robo2	-0.404133451	0	66	0	0	-2.470301226	8.177394035

1	-2.419194376	GO:0042219	M1	1	0	GO Biological Processes	19	cellular modified amino acid catabolic process	19_GO:0008152 metabolic process	-2.419194376	6.105787546	4.190234416	20836	25	546	4	0.732600733	0.36495614	13371|23887|107585|193742	Dio2|Ggt5|Dio3|Abhd16a	-0.476578035	0	67	1	1	-2.419194376	8.806424345
1	-2.376055113	GO:0042447	M1	1	0	GO Biological Processes	19	hormone catabolic process	19_GO:0008152 metabolic process	-2.376055113	8.806424345	4.618534924	20836	13	546	3	0.549450549	0.316352724	13371|105349|107585	Dio2|Akr1c18|Dio3	-0.457038809	0	67	0	0	-2.419194376	8.806424345
1	-2.3	GO:0	M1	1	0	GO Bi	19	visual perception	19_GO:0032501 multicellul	-2.	2.5	3.2	20836	164	546	11	2.0	0.60	12959|14409|14539|19023|19662|64242|76376|107993|224224|237940|243923	Cryba4|Gabrr2|Opn1mw|Ppef2|Rbp4|Ngb|Slc24a2|Bfsp2|Impg2|Aoc2|Rgs9bp	-0.	0	68	1	1	-2.39	2.55959

	91759264	007601				ological Processes			ar organismal process	391759264	59590816	89223581					14652015	1290399			459266796					1759264	0816
1	-2.31326431	GO:0050953	M1	1	0	GO Biological Processes	19	sensory perception of light stimulus	19_GO:0032501 multicellular organismal process	-2.31326431	2.498648177	3.199316122	20836	168	546	11	2.014652015	0.601290399	12959|14409|14539|19023|19662|64242|76376|107993|224224|237940|243923	Cryba4|Gabrr2|Opn1mw|Ppef2|Rbp4|Ngb|Slc24a2|Bfsp2|Impg2|Aoc2|Rgs9bp	-0.415592984	0	68	0	0	-2.391759264	2.559590816
1	-2.3794	WP1259	M1	1	0	WikiPathw	27	Retinol metabolism		-2.379	4.6538	3.8415	20836	41	546	5	0.9157	0.40765	12491|13082|19401|19662|54200	Cd36|Cyp26a1|Rara|Rbp4|Sult2b1	-0.457	0	69	1	1	-2.379466	7.632234432

	66615					ays				466615	01483	76305					50916	6781			038809					615	
1	-2.191317356	GO:0140354	M1	1	0	GO Biological Processes	19	lipid import into cell	19_GO:0051179 localization	-2.191317356	7.632234432	4.215089074	20836	15	546	3	0.549450549	0.316352724	12491|19662|319552	Cd36|Rbp4|Spx	-0.379317055	0	69	0	0	-2.379466615	7.632234432
1	-2.3556063	GO:0016601	M1	1	0	GO Biological Proc	19	Rac protein signal transduction	19_GO:0023052 signaling	-2.3556066	5.8709495	4.0767709	20836	26	546	4	0.7326007	0.36495614	11629|13860|170758|227377	Aif1|Eps8|Rac3|Farp2	-0.444589	0	70	1	1	-2.355606366	8.177394035

	66					esses				366	63	98					33				01						
1	-2.279779417	GO:0051764	M1	1	0	GO Biological Processes	19	actin crosslink formation	19_GO:0009987 cellular process	-2.279779417	8.177394035	4.406782706	20836	14	546	3	0.549450549	0.316352724	11629|12808|13860	Aif1|Cobl|Eps8	-0.415592984	0	70	0	0	-2.355606366	8.177394035
1	-2.191317356	GO:1900029	M1	1	0	GO Biological Processes	19	positive regulation of ruffle assembly	19_GO:0048518 positive regulation of biological process	-2.191317356	7.632234432	4.215089074	20836	15	546	3	0.549450549	0.316352724	12808|13860|192167	Cobl|Eps8|Nlgn1	-0.379317055	0	70	0	0	-2.355606366	8.177394035

1	-2.181401637	GO:1900027	M1	1	0	GO Biological Processes	19	regulation of ruffle assembly	19_GO:0050789 regulation of biological process	-2.181401637	5.263609953	3.768979567	20836	29	546	4	0.732600733	0.36495614	12808|13860|107351|192167	Cobl|Eps8|Kank1|Nlgn1	-0.379317055	0	70	0	0	-2.355606366	8.177394035
1	-2.02802099	GO:0030041	M1	1	0	GO Biological Processes	19	actin filament polymerization	19_GO:0009987 cellular process	-2.02802099	4.77014652	3.501159092	20836	32	546	4	0.732600733	0.36495614	11629|12808|15163|229474	Aif1|Cobl|Hcls1|Fhdc1	-0.313317094	0	70	0	0	-2.355606366	8.177394035
1	-2.3	mmu	M1	1	0	KEGG	24	Vascular smooth muscle contraction - Mus musculus (house mouse)		-2.	2.6	3.2	20836	144	546	10	1.8	0.57	11541|11550|13616|16533|18752|18754|18761|26971|234889|329502	Adora2b|Adra1d|Edn3|Kcnmb1|Prkcg|Prkce|Prkcq|Pla2g2f|Gucy1a2|Pla2g4e	-0.	0	71	1	1	-2.32	3.81611

	26274766	04270				GPathway			326274766	50814	59398267					31501832	3843453			419534471					6274766	7216
1	-2.32222621	WP403	M1	1	0	WikiPathways	27	Wnt signaling pathway	-2.32222621	3.816117216	3.583417702	20836	60	546	6	1.098901099	0.446152716	18752|18754|18761|20379|22411|22416	Prkcg|Prkce|Prkcq|Sfrp4|Wnt11|Wnt3a	-0.419534471	0	71	0	0	-2.326274766	3.816117216
1	-2.0527	WP232	M1	1	0	WikiPathw	27	G protein signaling pathways	-2.052	3.014	3.1039	20836	89	546	7	1.2820	0.48145	14676|14677|18752|18754|18761|19055|66066	Gna15|Gnai1|Prkcg|Prkce|Prkcq|Ppp3ca|Gng11	-0.326	0	71	0	0	-2.326274	3.816117216

	18384					ays				7183884	40507	31192					51282	36			5916609					766	
1	-2.305482413	GO:0044283	M1	1	0	GO Biological Processes	19	small molecule biosynthetic process	19_GO:0008152 metabolic process	-2.305482413	1.863685152	2.968675924	20836	430	546	21	3.846153846	0.823000947	11686|12352|13166|14261|15360|15450|18830|19225|19662|20249|21391|23887|59012|71275|83603|106861|192156|216134|231691|270685|328035	Alox12b|Car5a|Dbh|Fmo1|Hmgcs2|Lipc|Pltp|Ptgs2|Rbp4|Scd1|Tbxas1|Ggt5|Moxd1|Noxred1|Elovl4|Abhd3|Mvd|Pdxk|Sds|Mthfd1l|Fads6	-0.415592984	0	72	1	1	-2.305482413	1.863685152
1	-2.2949244	GO:2000738	M1	1	0	GO Biological Proc	19	positive regulation of stem cell differentiation	19_GO:0032502 developmental process	-2.294924	5.6535069	3.9690694	20836	27	546	4	0.7326007	0.36495614	15412|17300|20671|74048	Hoxb4|Foxc1|Sox17|Vsir	-0.415592	0	73	1	1	-2.294924456	5.653506987

	56					esses				456	87	44					33				984						
1	-2.279779417	GO:0045906	M1	1	0	GO Biological Processes	19	negative regulation of vasoconstriction	19_GO:0048519 negative regulation of biological process	-2.279779417	8.177394035	4.406782706	20836	14	546	3	0.549450549	0.316352724	17390|30878|240672	Mmp2|Apln|Dusp5	-0.415592984	0	74	1	1	-2.279779417	8.177394035
1	-2.244874928	GO:0071772	M1	1	0	GO Biological Processes	19	response to BMP	19_GO:0050896 response to stimulus	-2.244874928	2.747604396	3.214768104	20836	125	546	9	1.648351648	0.544903294	13395|13590|13653|22416|56543|71753|74048|110542|320202	Dlx5|Lefty1|Egr1|Wnt3a|Kcnd3|Tmprss6|Vsir|Amhr2|Lefty2	-0.404133451	0	75	1	1	-2.244874928	2.75035475

1	-2.244874928	GO:0071773	M1	1	0	GO Biological Processes	19	cellular response to BMP stimulus	19_GO:0050896 response to stimulus	-2.244874928	2.747604396	3.214768104	20836	125	546	9	1.648351648	0.544903294	13395|13590|13653|22416|56543|71753|74048|110542|320202	Dlx5|Lefty1|Egr1|Wnt3a|Kcnd3|Tmprss6|Vsir|Amhr2|Lefty2	-0.404133451	0	75	0	0	-2.244874928	2.75035475
1	-2.053087732	GO:0030509	M1	1	0	GO Biological Processes	19	BMP signaling pathway	19_GO:0023052 signaling	-2.053087732	2.750354775	3.03313924	20836	111	546	8	1.465201465	0.514217873	13395|13590|13653|22416|71753|74048|110542|320202	Dlx5|Lefty1|Egr1|Wnt3a|Tmprss6|Vsir|Amhr2|Lefty2	-0.326591609	0	75	0	0	-2.244874928	2.75035475
1	-2.2	GO:0	M1	1	0	GO Bi	19	neuron projection regeneration	19_GO:0032502 developm	-2.	5.4	3.8	20836	28	546	4	0.7	0.36	14580|17390|19268|21923	Gfap|Mmp2|Ptprf|Tnc	-0.	0	76	1	1	-2.23	5.45159

	36923006	031102				ological Processes			ental process	236923006	51596023	66621327					32600733	495614			404133451					6923006	6023
1	-2.236923006	GO:0043171	M1	1	0	GO Biological Processes	19	peptide catabolic process	19_GO:0008152 metabolic process	-2.236923006	5.451596023	3.866621327	20836	28	546	4	0.732600733	0.36495614	13036|23887|54381|237553	Ctsh|Ggt5|Cpq|Trhde	-0.404133451	0	77	1	1	-2.236923006	5.451596023
1	-2.2042	GO:0010	M1	1	0	GO Biologica	19	regulation of myotube differentiation	19_GO:0032502 developmental process	-2.204	4.2401	3.5693	20836	45	546	5	0.9157	0.40765	12180|17927|214384|231633|234839	Smyd1|Myod1|Myocd|Tmem119|Piezo1	-0.380	0	78	1	1	-2.204271	4.24013024

	71484	830				l Processes				271484	3024	00274					50916	6781			923485					484	
1	-2.191317356	GO:0018410	M1	1	0	GO Biological Processes	19	C-terminal protein amino acid modification	19_GO:0008152 metabolic process	-2.191317356	7.632234432	4.215089074	20836	15	546	3	0.549450549	0.316352724	54396|67526|78933	Irgm2|Atg12|Agbl4	-0.379317055	0	79	1	1	-2.191317356	7.632234432
1	-2.1814016	GO:0046688	M1	1	0	GO Biological Proc	19	response to copper ion	19_GO:0050896 response to stimulus	-2.181401	5.2636099	3.7689795	20836	29	546	4	0.7326007	0.36495614	16816|17748|17750|20657	Lcat|Mt1|Mt2|Sod3	-0.379317	0	80	1	1	-2.181401637	5.263609953

	37					esses				637	53	67					33				055						
1	-2.169820671	GO:0001938	M1	1	0	GO Biological Processes	19	positive regulation of endothelial cell proliferation	19_GO:0048518 positive regulation of biological process	-2.169820671	2.880088465	3.183344327	20836	106	546	8	1.465201465	0.514217873	11541|13645|14461|15559|23796|30878|69683|76905	Adora2b|Egf|Gata2|Htr2b|Aplnr|Apln|Emc10|Lrg1	-0.373624918	0	81	1	1	-2.169820671	2.880088465
1	-2.091692608	GO:0001568	M1	1	0	GO Biological Processes	19	blood vessel development	19_GO:0032502 developmental process	-2.091692608	1.685564141	2.712573315	20836	566	546	25	4.578754579	0.894540282	13645|13653|14461|15200|16477|17300|17304|17390|17975|18706|19058|19225|20348|20671|22411|23796|23892|23967|30878|53417|69683|110542|214384|268902|320924	Egf|Egr1|Gata2|Hbegf|Junb|Foxc1|Mfge8|Mmp2|Ncl|Pik3ca|Ppp3r1|Ptgs2|Sema3c|Sox17|Wnt11|Aplnr|Grem1|Osr1|Apln|Hif3a|Emc10|Amhr2|Myocd|Robo2|Ccbe1	-0.337347265	0	81	0	0	-2.169820671	2.880088465

1	-2.073622227	GO:0001525	M1	1	0	GO Biological Processes	19	angiogenesis	19_GO:0032502 developmental process	-2.073622227	1.9136871	2.782301833	20836	339	546	17	3.113553114	0.743298631	13645|14461|15200|17300|17304|17390|17975|18706|19058|19225|20671|23796|23892|30878|53417|69683|320924	Egf|Gata2|Hbegf|Foxc1|Mfge8|Mmp2|Ncl|Pik3ca|Ppp3r1|Ptgs2|Sox17|Aplnr|Grem1|Apln|Hif3a|Emc10|Ccbe1	-0.337347265	0	81	0	0	-2.169820671	2.880088465
1	-2.164656419	GO:1903034	M1	1	0	GO Biological Processes	19	regulation of response to wounding	19_GO:0050896 response to stimulus	-2.164656419	2.38507326	3.02702474	20836	176	546	11	2.014652015	0.601290399	11747|12490|12491|15200|18754|19268|20496|107351|216963|235505|380713	Anxa5|Cd34|Cd36|Hbegf|Prkce|Ptprf|Slc12a2|Kank1|Git1|Cd109|Scarf1	-0.373164243	0	82	1	1	-2.164656419	2.38507326
1	-2.1	GO:0	M1	1	0	GO Bi	19	regulation of insulin receptor	19_GO:0023052 signaling	-2.	3.1	3.2	20836	86	546	7	1.2	0.48	13033|17975|18761|19268|20411|98415|107351	Ctsd|Ncl|Prkcq|Ptprf|Sorbs1|Nucks1|Kank1	-0.	0	83	1	1	-2.13	3.10614

	31830394	046626				ological Processes		signaling pathway		131830394	0614192	10553103					82051282	14536			354773726					1830394	192
1	-2.027174847	GO:1900076	M1	1	0	GO Biological Processes	19	regulation of cellular response to insulin stimulus	19_GO:0050896 response to stimulus	-2.027174847	2.968091168	3.069384747	20836	90	546	7	1.282051282	0.4814536	13033|17975|18761|19268|20411|98415|107351	Ctsd|Ncl|Prkcq|Ptprf|Sorbs1|Nucks1|Kank1	-0.313317094	0	83	0	0	-2.131830394	3.10614192
1	-2.1095	GO:0061	M1	1	0	GO Biologica	19	neuroendocrine cell differentiation	19_GO:0032502 developmental process	-2.109	7.1552	4.0403	20836	16	546	3	0.5494	0.31635	14461|22411|53626	Gata2|Wnt11|Insm1	-0.347	0	84	1	1	-2.109576	7.15521978

	76922	101				l Processes				576922	1978	15165					50549	2724			129752					922	
1	-2.033680425	GO:0042074	M1	1	0	GO Biological Processes	19	cell migration involved in gastrulation	19_GO:0032502 developmental process	-2.033680425	6.734324499	3.879974255	20836	17	546	3	0.549450549	0.316352724	13590|20671|22411	Lefty1|Sox17|Wnt11	-0.314382575	0	84	0	0	-2.109576922	7.15521978
1	-2.1095769	GO:0016322	M1	1	0	GO Biological Proc	19	neuron remodeling	19_GO:0032502 developmental process	-2.109576	7.155219	4.0403151	20836	16	546	3	0.5494505	0.3163527	12259|227377|380713	C1qa|Farp2|Scarf1	-0.347129	0	85	1	1	-2.109576922	7.15521978

	22					esses				922	78	65					49	24			752						
1	-2.094281556	mmu05205	M1	1	0	KEGG Pathway	24	Proteoglycans in cancer - Mus musculus (house mouse)		-2.094281556	2.233824712	2.91220743	20836	205	546	12	2.197802198	0.627440123	11652|12512|13345|15163|15200|17390|18706|18752|22324|22411|22416|216795	Akt2|Cd63|Twist2|Hcls1|Hbegf|Mmp2|Pik3ca|Prkcg|Vav1|Wnt11|Wnt3a|Wnt9a	-0.337347265	0	86	1	1	-2.094281556	2.233824712
1	-2.07710272	GO:0046475	M1	1	0	GO Biological Processes	19	glycerophospholipid catabolic process	19_GO:0008152 metabolic process	-2.07710272	4.924022214	3.586579769	20836	31	546	4	0.732600733	0.36495614	15450|77626|193742|329502	Lipc|Smpd4|Abhd16a|Pla2g4e	-0.337347265	0	87	1	1	-2.07710272	4.924022214

1	-2.011368392	GO:0009395	M1	1	0	GO Biological Processes	19	phospholipid catabolic process	19_GO:0008152 metabolic process	-2.011368392	3.816117216	3.270410877	20836	50	546	5	0.915750916	0.407656781	15450|77626|100340|193742|329502	Lipc|Smpd4|Smpdl3b|Abhd16a|Pla2g4e	-0.304709054	0	87	0	0	-2.07710272	4.924022214
1	-2.075816969	mmu04931	M1	1	0	KEGG Pathway	24	Insulin resistance - Mus musculus (house mouse)		-2.075816969	2.775357975	3.062503413	20836	110	546	8	1.465201465	0.514217873	11652|12491|18706|18754|18761|19268|53412|110854	Akt2|Cd36|Pik3ca|Prkce|Prkcq|Ptprf|Ppp1r3c|Ptpa	-0.337347265	0	88	1	1	-2.075816969	2.775357975
1	-2.0	GO:0	M1	1	0	GO Bi	19	muscle system process	19_GO:0032501 multicellul	-2.	2.0	2.8	20836	258	546	14	2.5	0.67	11541|12373|13616|15559|16523|17927|17929|18706|19055|21924|67451|110809|214384|237611	Adora2b|Casq2|Edn3|Htr2b|Kcnj8|Myod1|Myom1|Pik3ca|	-0.	0	89	1	1	-2.07	2.07076

	74766065	003012				ological Processes			ar organismal process	074766065	7076128	3891886					64102564	6442475		Ppp3ca|Tnnc1|Pkp2|Srsf1|Myocd|Stac3	337347265					4766065	128
1	-2.053211734	GO:0034341	M1	1	0	GO Biological Processes	19	response to type II interferon	19_GO:0044419 biological process involved in interspecies interaction between organisms	-2.053211734	2.5673063802	2.977659287	20836	134	546	9	1.648351648	0.544903294	17472|20295|20308|20684|21822|54396|55932|66713|226421	Gbp4|Ccl17|Ccl9|Sp100|Tgtp1|Irgm2|Gbp3|Actr2|Rab7b	-0.326591609	0	90	1	1	-2.053211734	2.563063802
1	-2.0530	GO:1905	M1	1	0	GO Biologica	19	positive regulation of protein localization to membrane	19_GO:0051179 localization	-2.053	2.7503	3.0331	20836	111	546	8	1.4652	0.51421	11652|16409|20411|22416|58801|83433|228357|237611	Akt2|Itgam|Sorbs1|Wnt3a|Pmaip1|Trem2|Lrp4|Stac3	-0.326	0	91	1	1	-2.053087	2.75035475

	87732	477				l Processes				087732	5475	3924					01465	7873			591609					732	
1	-2.052718384	mmu03320	M1	1	0	KEGG Pathway	24	PPAR signaling pathway - Mus musculus (house mouse)		-2.052718384	3.001440507	3.103931192	20836	89	546	7	1.282051282	0.48145536	11520|12140|12491|15360|18830|20249|20411	Plin2|Fabp7|Cd36|Hmgcs2|Pltp|Scd1|Sorbs1	-0.326591609	0	92	1	1	-2.052718384	3.001440507
1	-2.0336804	GO:0030002	M1	1	0	GO Biological Proc	19	cellular monoatomic anion homeostasis	19_GO:0042592 homeostatic process	-2.033680	6.7343244	3.8799742	20836	17	546	3	0.5494505	0.3163527	20496|20855|21391	Slc12a2|Stc1|Tbxas1	-0.314382	0	93	1	1	-2.033680425	6.734324499

	25					esses				425	99	55					49	24			5755						
1	-2.033680425	mmu00910	M1	1	0	KEGG Pathway	24	Nitrogen metabolism - Mus musculus (house mouse)		-2.033680425	6.734324499	3.879974255	20836	17	546	3	0.549450549	0.316352724	12319|12352|71934	Car8|Car5a|Car13	-0.314382575	0	94	1	1	-2.033680425	6.734324499
1	-2.015518892	GO:0006897	M1	1	0	GO Biological Processes	19	endocytosis	19_GO:0051179 localization	-2.015518892	1.812655678	2.692096806	20836	404	546	19	3.47985348	0.784319737	11629|12491|14129|15559|16409|17975|19039|22042|23970|83433|94176|104601|105243|107767|170758|170786|192167|228357|380713	Aif1|Cd36|Fcgr1|Htr2b|Itgam|Ncl|Lgals3bp|Tfrc|Pacsin2|Trem2|Dock2|Mycbpap|Slc9a3|Scamp1|Rac3|Cd209a|Nlgn1|Lrp4|Scarf1	-0.3053748	0	95	1	1	-2.015518892	1.812655678

Supplementary Table 3 **Detailed enrichment items of all the genes by GSEA**

ID	Description	setSize	enrichmentScore	NES	pvalue	p.adjust	qvalue	rank	leading_edge	core_enrichment
REACTOME_PEPTIDE_LIGAND_BINDING_RECEPTORS	REACTOME_PEPTIDE_LIGAND_BINDING_RECEPTORS	135	-0.55958978	-1.9640147	8.4923E-08	0.00043956	0.00042694	2015	tags=41%, list=14%, signal=35%	Oprk1/Bdkrb2/Prokr2/Rxfp2/Ccl21a/Avpr2/Sstr1/Rxfp1/Tac2/Cckbr/Edn3/Agtr2/Gal/Sstr2/Ccr6/Npy/Npbwr1/F2rl1/Hc/Ece2/Mc1r/F2rl3/Ghsr/Pmch/Pnoc/Mc5r/Penk/Insl5/Tacr1/Oprm1/Pf4/Ccl5/Ccl3/Tac1/Ccr5/Kiss1/Pdyn/Trhr/Cort/Ccl28/Oxtr/Tacr2/Cxcl10/Ccl9/Npsr1/Trh/Galr1/Mc3r/Sstr5/Apln/Aplnr/Avpr1a/Pomc/Ghrl/Prlhr
LEIN_CHOROID_PLEXUS_MARKERS	LEIN_CHOROID_PLEXUS_MARKERS	93	-0.60928857	-2.04348921	2.5356E-07	0.0006562	0.00063736	2519	tags=55%, list=18%, signal=45%	Cab39l/Slco1c1/Kif9/Slc39a12/Slc4a5/Pcolce/4932438H23Rik/Rbm47/Ttr/Itgb5/Vwa3a/Spata17/Slc6a20a/Cldn1/Col9a3/Nid2/Pltp/Sostdc1/Otx2/Tcn2/Cpq/Efs/Cfh/F13a1/Lgals3bp/Slc26a11/Dnali1/Tgfbi/Cdh3/Trpv4/Tbc1d9/Rnaset2a/Prlr/Cfap44/Lbp/Wfdc2/Tpsb2/Ace/Cldn2/Slc24a5/Col8a1/Abca4/Tmem72/Sulf1/Col8a2/F5/Folr1/Ttc21a/Lepr/Calml4/Kcne2
CREIGHTON_ENDOCRINE_THERAPY_RESISTANCE_2	CREIGHTON_ENDOCRINE_THERAPY_RESISTANCE_2	373	-0.42976101	-1.63659602	1.0568E-06	0.00182339	0.00177103	2785	tags=30%, list=20%, signal=25%	Tub/Cep128/Spata6/Paqr8/Pitpnm1/Saxo2/Prr29/Eml6/Ngef/Meig1/Dzip1/1700030J22Rik/Cfap126/Frmd8/Rabl2/Kif9/Odf2/Arntl2/Kif3a/Map6/Morn5/Tekt1/Ppp1r32/Bbs12/Cfap157/Ccdc40/BC051019/Ttc7b/Rasal2/Fam149a/Rfx2/Cfap45/Casc1/Coprs/Tsga10/Anks1/Mdh1b/Cfap69/Rint1/Tmem231/Pask/Spata17/Ccdc121/Rsph1/Nacc2/Cep41/Iqch/Neto2/Drc1/Ppp6r3/Zbbx/Iqub/Pomt1/Eml1/Efhc1/Dnah12/Nod2/Znfx1/Akap14/Zmynd10/Efcab12/Adgb/Fank1/Dnaaf1/Spaca9/Ttc29/Ranbp9/Sntn/Nek5/Dnali1/Coch/Mlf1/Wdr49/W

										dr66/Dnaaf3/Kif24/Cfap53/Dnajb13/1700016K19Rik/Rsph4a/Rsad2/Map3k19/Dnah5/Dynlrb2/Armc3/Ttll6/Ly6h/Oasl1/Lrrc23/Ak9/Fam81b/Zhx3/Iqcg/Ak7/Mak/Dnah7b/Pifo/Cfap221/Cfap57/Rab36/Cfap46/Cfap206/Jhy/Ston2/Ttc21a/Dnah11/Dzank1/Dnah6/2410004P03Rik/Foxj1/Ptpn22/Cfap52/Dnal1
REACTOME_GPCR_LIGAND_BINDING	REACTOME_GPCR_LIGAND_BINDING	317	-0.43931904	-1.65515564	3.3898E-06	0.00438646	0.0042605	2392	tags=36%, list=17%, signal=31%	Ednrb/Tacr3/Wnt2b/Ccrl2/Wnt7b/Gpr4/Opn4/Pth1r/Gnb4/Adra2a/Smo/P2ry13/Cmklr1/Oprk1/Bdkrb2/Fzd9/Wnt7a/Prokr2/Rxfp2/Chrm5/P2ry12/Cysltr1/Ccl21a/Avpr2/Lpar1/Ptafr/Sstr1/Calcb/Crhbp/Fzd10/Rxfp1/Plppr3/Tac2/Cckbr/Gngt2/Ptger2/Crhr2/Ihh/Ptch1/Edn3/Agtr2/Pth2r/Gal/Sstr2/Lpar3/Crhr1/Adcyap1/Ccr6/Npy/Adora2b/Calca/Npbwr1/F2rl1/Adcyap1r1/Hc/Ece2/Mc1r/F2rl3/Ghsr/Rho/Pmch/Pnoc/Ptger3/Mc5r/Gng11/Penk/Insl5/Grm8/Pth2/Tacr1/Oprm1/Opn3/Hrh1/Gpr35/Adora2a/Pf4/Ptgfr/Ccl5/Drd2/Ccl3/Gpr39/Vipr2/Crh/Tac1/Ccr5/Gpr17/Kiss1/Pdyn/Trhr/Cort/Ccl28/Adra2b/Oxtr/Wnt16/Tacr2/Lpar2/Cxcl10/Ccl9/Npsr1/Adgre1/Trh/Galr1/Mc3r/Sstr5/Apln/Aplnr/Glp1r/Glp2r/Avpr1a/Opn1mw/Pomc/Ghrl/Ucn2/Casr/Prlhr
REACTOME_CLASS_A_1_RHODOPSIN_LIKE_RECEPTORS	REACTOME_CLASS_A_1_RHODOPSIN_LIKE_RECEPTORS	228	-0.47027999	-1.73496825	4.8924E-06	0.00506459	0.00491916	2560	tags=39%, list=18%, signal=33%	Htr2c/P2ry6/Galr2/Sstr4/Npffr1/Ednrb/Tacr3/Ccrl2/Gpr4/Opn4/Adra2a/P2ry13/Cmklr1/Oprk1/Bdkrb2/Prokr2/Rxfp2/Chrm5/P2ry12/Cysltr1/Ccl21a/Avpr2/Lpar1/Ptafr/Sstr1/Rxfp1/Plppr3/Tac2/Cckbr/Ptger2/Edn3/Agtr2/Gal/Sstr2/Lpar3/Ccr6/Npy/Adora2b/Npbwr1/F2rl1/Hc/Ece2/Mc1r/F2rl3/Ghsr/Rho/Pmch/Pnoc/Ptger3/Mc5r/Penk/Insl5/Tacr1/Oprm1/Opn3/Hrh1/Gpr35/Adora2a/Pf4/Ptgfr/Ccl5/Drd2/Ccl3/Gpr39/Tac1/Ccr5/Gpr17/Kiss1/Pdyn/Trhr/Cort/Ccl28/Adra2b/Oxtr/Tacr2/Lpar2/Cxcl10/Ccl9/Npsr1/Trh/Galr1/Mc3r/Sstr5/Apln/Aplnr/Avpr1a/Opn1mw/Pomc/Ghrl/Prlhr
REACTOME_COLLAGEN_FORMATION	REACTOME_COLLAGEN_FORMATION	81	-0.59359958	-1.94636	7.9595E-06	0.00686	0.00666	2305	tags=44%, list=16%,	P3h2/Loxl3/Col6a2/Pcolce/P4ha1/Col11a2/Crtap/Col22a1/Col6a3/Col14a1/Tll1/Col6a5/Col9a3/Itgb4/Col2a1/Col26a1/Serpinh1/Col6a1/Col5a1/Col20a1/Col18a1/P4ha3/Col12a1/Col28a1/Lamc2/Loxl2/Col7a1/Col23a1/Col17a1/Loxl4/Col10a1/Col8a1/Col6a6/Col16a1/Col8a2/Col24a1

				235	-06	644	926		signal=37%	
REACTOME_COLLAGEN_BIOSYNTHESIS_AND_MODIFYING_ENZYMES	REACTOME_COLLAGEN_BIOSYNTHESIS_AND_MODIFYING_ENZYMES	63	-0.61420145	-1.9432517	9.7957E-06	0.00724324	0.00703524	2305	tags=49%, list=16%, signal=41%	P3h2/Col6a2/Pcolce/P4ha1/Col11a2/Crtap/Col22a1/Col6a3/Col14a1/Tll1/Col6a5/Col9a3/Col2a1/Col26a1/Serpinh1/Col6a1/Col5a1/Col20a1/Col18a1/P4ha3/Col12a1/Col28a1/Col7a1/Col23a1/Col17a1/Col10a1/Col8a1/Col6a6/Col16a1/Col8a2/Col24a1
AMIT_EGF_RESPONSE_40_HELA	AMIT_EGF_RESPONSE_40_HELA	38	0.65333891	2.1250175	2.2185E-05	0.0136799	0.01328708	3381	tags=68%, list=24%, signal=52%	Sgk1/Klf2/Cebpb/Nr4a1/Junb/Egr1/Rnf141/Dusp5/Ptgs2/Dusp1/Slc2a3/Mbnl1/Pias1/Bcl3/Cbx4/Hes1/Mbnl2/Btg2/Cdkn2aip/Klf6/Nfib/Zfp36/Camkmt/Ier2/Sec23a/Ube4b
REACTOME_EXTRACELLULAR_MATRIX_ORGANIZATION	REACTOME_EXTRACELLULAR_MATRIX_ORGANIZATION	262	-0.44124233	-1.6517755	2.3787E-05	0.0136799	0.01328708	3025	tags=48%, list=21%, signal=39%	Icam5/Efemp1/Dag1/Serpine1/Itga1/Tgfb3/Mmp24/Sdc3/Fn1/Scube1/Vtn/Ltbp4/Col3a1/Adamts2/Lama2/Col1a1/Timp2/Adam19/Pxdn/F11r/Trappc4/Plod1/Nid1/Adam17/Lamc3/P3h3/Adam8/Dcn/Mmp25/Adamts16/Col5a2/Ltbp1/Adamts18/Cd151/Fbln1/Bmp7/Cdh1/Htra1/Pecam1/Vcan/P3h2/Adamts1/Loxl3/Sdc2/Hspg2/Ctsk/Col6a2/Bmp4/Pcolce/Musk/P4ha1/Tgfb1/Jam2/Col11a2/Ttr/Ltbp3/Crtap/Itgb5/Capn3/Emilin2/Col22a1/Ddr2/Itgb2/Matn4/Sdc1/Itga2b/Itga11/Itga8/Col6a3/Col14a1/Tll1/Col6a5/Col9a3/Nid2/Itgb4/Lrp4/Col2a1/Itgal/Ctsd/Adamts5/Col26a1/Dmp1/Serpinh1/Ltbp2/Col6a1/Col5a1/Itga9/Icam2/Fbln2/Itgam/Itga3/Col20a1/Casp3/Col18a1/Adamts4/Cma1/Mmp17/Mmp2/Cd44/P4ha3/Col12a1/Col28a1/Mmp11/Lamc2/Mmp15/Tnc/Loxl2/Vcam1/Col7a1/Ntn4/Timp1/Col23a1/Tpsb2/Col17a1/Loxl4/Capn11/Col10a1/Col8a1/Col6a6/Capns2/Itgb8/Aspn/Col16a1/Prkca/Col8a2/Gdf5/Col24a1

COLDREN_GEFITINIB_RESISTANCE_DN	COLDREN_GEFITINIB_RESISTANCE_DN	179	-0.47718734	-1.721218019	3.6023E-05	0.01864548	0.01811007	2754	tags=39%, list=19%, signal=31%	Zfp458/B3gnt3/Sestd1/Bspry/Fgd4/Plekha7/Arhgdib/Cdh1/Spint1/Gab1/Enpp5/Stap2/Lnx1/Prrg2/Rbm47/Ttc22/Anxa9/Zfp457/AA986860/Eps8l1/Ovol1/Lgals9/Smim22/Smagp/Tmem40/Sytl1/Cgn/Fam171b/Reps2/Vamp8/Sytl5/Prrg4/Krt19/Tjp2/Syne4/Unc13d/Slc44a3/Myh14/Tspan1/Wls/Rhod/Psd4/Cdh3/Scel/Eps8l2/Epn3/Smpdl3b/Aldh1a3/Rab38/Lamc2/Mpp7/Sptlc3/Esrp2/Myo1d/Cldn9/Erp27/Marveld3/Wfdc3/Tmc5/Slc2a12/Blnk/Enpp4/Cnksr1/Mpzl3/Zdhhc21/Krt15/Prss8/Pde5a/Klk6
NABA_COLLAGENS	NABA_COLLAGENS	42	-0.66343112	-1.972823776	4.5693E-05	0.01970891	0.01914296	2204	tags=57%, list=15%, signal=48%	Col6a2/Col11a2/Col22a1/Col6a3/Col14a1/Col6a5/Col9a3/Col2a1/Col26a1/Col6a1/Col5a1/Col20a1/Col18a1/Col12a1/Col28a1/Col7a1/Col23a1/Col17a1/Col10a1/Col8a1/Col6a6/Col16a1/Col8a2/Col24a1
REACTOME_COLLAGEN_CHAIN_TRIMERIZATION	REACTOME_COLLAGEN_CHAIN_TRIMERIZATION	42	-0.66343112	-1.972823776	4.5693E-05	0.01970891	0.01914296	2204	tags=57%, list=15%, signal=48%	Col6a2/Col11a2/Col22a1/Col6a3/Col14a1/Col6a5/Col9a3/Col2a1/Col26a1/Col6a1/Col5a1/Col20a1/Col18a1/Col12a1/Col28a1/Col7a1/Col23a1/Col17a1/Col10a1/Col8a1/Col6a6/Col16a1/Col8a2/Col24a1
REACTOME_ASSEMBLY_OF_COLLAGEN_FIBRILS_AND_OTHER_MULTIMERIC_STRUCTURES	REACTOME_ASSEMBLY_OF_COLLAGEN_FIBRILS_AND_OTHER_MULTIMERIC_STRUCTURES	55	-0.62789796	-1.9383407	5.4052E-05	0.02152093	0.02090295	2299	tags=49%, list=16%, signal=41%	Col5a2/Cd151/Loxl3/Col6a2/Pcolce/Col11a2/Col6a3/Col14a1/Tll1/Col6a5/Col9a3/Itgb4/Col2a1/Col6a1/Col5a1/Col18a1/Col12a1/Lamc2/Loxl2/Col7a1/Col17a1/Loxl4/Col10a1/Col8a1/Col6a6/Col8a2/Col24a1

FLORIO_NEOCORTEX_BASAL_RADIAL_GLIA_UP	FLORIO_NEOCORTEX_BASAL_RADIAL_GLIA_UP	244	-0.43671247	-1.6200784	7.8029E-05	0.02884836	0.02801997	2950	tags=38%, list=21%, signal=30%	Tmem212/Pde7b/Morc4/Olfml1/Slc14a2/Pcdh11x/Cpt1a/Slc38a11/Gpr83/Eml6/Cdhr4/Shisa9/Htr2c/Slc17a6/Sfmbt2/Ttc6/Npffr1/Marveld2/Ccdc190/Tmc7/Abca9/Gimap1/Pde3a/Wwtr1/Chdh/Zfp57/Oprk1/Parp14/Yes1/Synpo2/Cnksr3/Pla2r1/Ankrd55/Prrg4/Gbp9/Ttc39b/Cfap54/Adgrl4/Vstm4/Cenpi/Acot11/Icam2/Arhgap28/Pcdh18/Rhoh/Crb1/Kcng3/Ppp1r3b/Tm4sf1/Mfsd4b1/Adamts4/Nnmt/Chrdl1/Sult1c2/Gadl1/Dmc1/C1qtnf7/Col28a1/Dock5/Cux2/Stc1/Penk/Cdcp1/Bnipl/Rsad2/Lamc2/Axdnd1/Ptpn14/Dsc3/Foxp2/Neurod4/Mrap2/Crabp1/Clmn/Greb1/Col8a1/Cobl/Fblim1/Syt9/Gbp8/Slc10a1/Cgnl1/Myocd/Gdf5/Oas2/2410004P03Rik/Wdr93/Gbp4/Apol9a/Abcc9/Lax1/Sv2c
KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION	KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION	209	-0.44370193	-1.62493278	0.00020171	0.06960262	0.06760395	2587	tags=40%, list=18%, signal=33%	Grm3/Htr2c/P2ry6/Galr2/Sstr4/Grik1/Npffr1/Ednrb/Tacr3/Chrnb1/Grin2c/Pth1r/Gabra3/Chrnb3/Adra2a/P2ry13/Oprk1/Bdkrb2/Rxfp2/Chrm5/Grik3/Cysltr1/Avpr2/Chrna7/Lpar1/Ptafr/Gabrd/Sstr1/Gria4/Rxfp1/Cckbr/Ptger2/Crhr2/Ghr/Agtr2/Pth2r/Glra3/Sstr2/Lpar3/Crhr1/Adora2b/Npbwr1/F2rl1/Chrna3/Adcyap1r1/Mc1r/F2rl3/Gpr50/Ghsr/Ptger3/Mc5r/Grm8/Grin3a/Tacr1/Prlr/Oprm1/Hrh1/Gpr35/Adora2a/Ptgfr/Drd2/Vipr2/Trhr/Gabrq/Chrnb4/Gabrg3/Adra2b/Oxtr/Tacr2/Lpar2/Chrna4/Grin2d/Galr1/Mc3r/Sstr5/Lepr/Aplnr/Glp1r/Glp2r/Avpr1a/Chrna10/Gh/Prlhr
PID_SYNDECAN_1_PATHWAY	PID_SYNDECAN_1_PATHWAY	43	-0.6407079	-1.911150322	0.00022728	0.07352394	0.07141266	2204	tags=49%, list=15%, signal=41%	Col6a2/Tgfb1/Col11a2/Hpse/Sdc1/Col6a3/Col14a1/Col9a3/Col2a1/Met/Col6a1/Col5a1/Col12a1/Col7a1/Hgf/Ccl5/Col17a1/Col10a1/Col8a1/Col16a1/Col8a2
VILIMAS_NOTCH1_TARGETS_DN	VILIMAS_NOTCH1_TARGETS_DN	19	-0.75	-1.8	0.00031	0.08991	0.08733	18	tags=58%, list=13%	Itgb2/Csf3r/Itgam/Cma1/Ncf4/Clec10a/Trem2/Tpsb2/Lrrc25/Ccl9/Vpreb1

			411076	7848	433	826	621	44	, signal=50%	
REACTOME_PROCESSING_OF_CAPPED_INTRON_CONTAINING_PRE_MRNA	REACTOME_PROCESSING_OF_CAPPED_INTRON_CONTAINING_PRE_MRNA	223	0.34653651	1.52893779	0.00033007	0.008991826	0.008733621	3509	tags=32%, list=25%, signal=25%	Nup107/Srsf1/Elavl2/Polr2l/Eif4e/Magohb/Zc3h11a/Cpsf6/Cwc27/Wbp11/Cwc22/Hnrnpa0/Nup93/Wtap/Cdc40/Gcfc2/Aaas/Cstf3/Prpf40a/Zmat5/Pqbp1/Seh1l/Ppih/Nupl1/Smndc1/Clp1/Nup43/Sf3b4/Lsm8/Srsf11/Snrnp40/Thoc7/Lsm5/Eif4a3/Polr2f/Thoc2/Upf3b/Srsf5/Hnrnpl/Isy1/Zcrb1/Sugp1/Nxt1/Magoh/Rae1/Cdc5l/Usp39/Snrpb2/Hnrnph2/Rbm22/Gtf2f2/Nup37/Snrpf/Sf1/Nupl2/Ppil6/Snrpd1/Pcbp1/Cwc25/Sec13/Lsm7/Plrg1/Cstf2t/Syf2/Dnajc8/Wbp4/Nup88/Eftud2/Sf3a3/Prpf38a/Sf3b2/Snrpa1
NABA_MATRISOME_ASSOCIATED	NABA_MATRISOME_ASSOCIATED	471	-0.37753399	-1.452726	0.00031068	0.008991826	0.008733621	2305	tags=28%, list=16%, signal=25%	P3h2/Adamts1/Loxl3/Angptl4/Sdc2/Wnt7b/Ctsk/Muc13/Bmp4/Adamts7/P4ha1/Tgfb1/Fgf11/Sema3g/Mmp21/Grifin/Clec3b/Angpt2/Anxa9/Kitl/Hpse/Wnt7a/Lgals9/Sema6d/Megf6/Inhba/Ccl21a/Ctsz/Plxnb3/Tpo/Sdc1/C1qc/Cbln2/Ptn/Mmp28/Tll1/Crhbp/Anxa5/Hbegf/S100b/Pspn/Cstl1/C1qtnf2/Ihh/C1qtnf5/Gpc3/Ctsd/Adamts5/Nrg1/Adamtsl4/Gpc6/Serpinh1/Brinp3/Il11/Sema4g/Sema3f/F13a1/Sema3a/Nodal/Clec4a3/C1qa/Sema4d/Megf11/Epgn/Clec5a/Plxna3/C1qb/Adamts4/Chrdl1/Inha/Mmp17/Mmp2/Ctsh/Lgals12/Fam20a/P4ha3/C1qtnf7/Bmp6/Bmp3/Ntf5/Insl5/Mmp11/Tgm4/Igf2/Mmp15/Cbln1/Wfikkn2/Clec10a/Hhip/Loxl2/Gdnf/Ccl12/Btc/Adamts15/Ccl6/Hgf/Adamtsl1/Timp1/Pf4/Ccl5/Sema3b/Sema6b/Ccl3/Plxnd1/Loxl4/Serpind1/Elfn2/Adamts12/Gdf15/Ccl28/Angptl2/Wnt16/Cd209b/Cxcl10/Fasl/Masp2/Adamts13/Sulf1/Ccl9/Pappa2/Ctsw/Il1b/Bmp8a/Serpinb1a/Sfrp5/Tgm6/Il7/Gdf5/C1qtnf3/Adam33/Chrdl2/Adamts19/Gh/Il4
SMID_BREAST_CANCER_NORMAL_LIKE_UP	SMID_BREAST_CANCER_NORMAL_LIKE_UP	345	-0.39	-1.490	0.00038	0.009837	0.009555	24	tags=31%, list=17%	Cdkn1c/Pecam1/Baalc/Mrc1/Plcb2/Gimap6/Lamp3/P3h2/Lime1/Synm/Lyn/Rasgrp2/Jchain/Arhgap25/Clec3b/St6gal1/Angpt2/Ly9/Reln/Cd180/Ccl21a/Ly96/Trat1/Ptn/Il33/Ptprc/Col14a1/Tnfrsf1b/Trf/Il27ra/Clu/Pltp/Arid5a/Sost

			435399	22536	012	615	123	23	, signal=27%	dc1/S100b/Git2/Dpp4/Fyb/Cd72/Cnn1/Met/Syne3/Edn3/Rasa4/Itgal/Tnfrsf25/Folr2/Cfh/Dok2/Icam2/Prkcq/F13a1/Acap1/Ccr6/Clec4a3/Nlrp3/Lcp2/Sp110/Dock2/Col18a1/Gmip/Cma1/Nrip2/Chrdl1/Chil1/Cd6/Pnoc/Ciita/Ggt5/Mef2c/Tnfaip8/Des/Gng11/Ncf4/Doc2b/Cryab/Aif1/Clec10a/Vcam1/Fcmr/Hgf/Ccl5/Mzb1/Wipf1/Col17a1/Svep1/Bbox1/Meox1/Mall/Acta2/Oxtr/Vill/Il1r2/Srpx/Il21r/Enpp2/Zeb1/Rnase6/Ctsw/Fcrls/Lepr/Il7/Aplnr/Cd4/Ptpn22/Aqp1/Adarb1/Kctd12
MIKKELSEN_ES_ICP_WITH_H3K27ME3	MIKKELSEN_ES_ICP_WITH_H3K27ME3	33	-0.65203921	-1.83331887	0.00046012	0.10941263	0.10627079	2045	tags=48%, list=14%, signal=42%	Lrrtm3/Calcb/Neurl3/Rnf112/Cnn1/Cplx3/Tlr9/Parvg/Kcng4/Xirp1/Th/Mzb1/Kcnj9/Cfap57/Mc3r/Col24a1
REACTOME_G_ALPHA_I_SIGNALLING_EVENTS	REACTOME_G_ALPHA_I_SIGNALLING_EVENTS	218	-0.42778769	-1.57170699	0.00047179	0.10941263	0.10627079	2211	tags=26%, list=16%, signal=22%	Ppp1r1b/Gnb4/Adra2a/P2ry13/Oprk1/Rgsl1/Bdkrb2/Rgs22/P2ry12/Ccl21a/Lpar1/Sstr1/Gngt2/Agtr2/Gal/Sstr2/Lpar3/Ccr6/Adcy1/Npy/Camk2d/Npbwr1/Hc/Rho/Pmch/Pnoc/Ptger3/Gng11/Penk/Insl5/Grm8/Gna15/Oprm1/Opn3/Pf4/Ccl5/Rgs6/Ccr5/Gpr17/Pdyn/Adcy8/Cort/Ccl28/Adra2b/Lpar2/Cxcl10/Itpr2/Ccl9/Prkca/Galr1/Sstr5/Apln/Aplnr/Opn1mw/Pomc/Casr
SENGUPTA_NASOPHARYNGEAL_CARCINOMA_DN	SENGUPTA_NASOPHARYNGEAL_CARCINOMA_DN	256	-0.40967858	-1.53093847	0.00048618	0.10941263	0.10627079	2034	tags=29%, list=14%, signal=26%	Fam149a/Cfap45/AA986860/Casc1/Tsga10/Dhcr24/Mdh1b/Tmem231/Smim22/Spata17/Tmem40/Rsph1/Cgn/B3gnt7/Tcea3/Drc1/Clic3/Zbbx/Tlcd2/Impa2/Efhc1/Dnah12/Spag17/Akap14/Morn3/Dnah2/Fank1/Dnaaf1/Ccdc81/Tox3/Ttc29/Ankrd35/Sntn/Nek5/Dnali1/Wdr66/Stoml3/Tspan1/Cfap53/Bnipl/Rsph4a/Map3k19/Dnah5/Chst9/Rrad/Dynlrb2/Armc3/Myo1d/Dmkn/Wfdc2/Ak9/Tmc5/Il20ra/Lrrc34/Fam81b/Clic6/Daw1/Dnah10/Hydin/Cobl/Iqcg/Ak7/

										Bace2/Zmynd12/Dnah7b/Fam216b/Pifo/Vill/Cfap206/1700012B09Rik/Ttc21a/Foxj1/Erich5/Cfap52/Dnal1
WP_OVERLAP_BETWEEN_SIGNAL_TRANSDUCTION_PATHWAYS_CONTRIBUTING_TO_LMNA_LAMINOPATHIES	WP_OVERLAP_BETWEEN_SIGNAL_TRANSDUCTION_PATHWAYS_CONTRIBUTING_TO_LMNA_LAMINOPATHIES	50	0.53493485	1.83633682	0.000055383	0.11944263	0.11601277	1466	tags=32%, list=10%, signal=29%	Myod1/Cebpd/Spp1/Wnt10b/Dicer1/Cebpb/Junb/Apc/Runx2/Tarbp2/Bmp2/Csnk1a1/Cebpa/Tgfb2/Lemd3/Hes1
MIKKELSEN_MEF_ICP_WITH_H3K27ME3	MIKKELSEN_MEF_ICP_WITH_H3K27ME3	138	-0.46380223	-1.62954468	0.00060565	0.12539376	0.12179301	1308	tags=41%, list=9%, signal=38%	Kcnj5/1700020L24Rik/Entpd3/Arhgap9/Adamts16/Lpo/Slc38a11/Tdgf1/Abcc3/Grm3/Ly6g6e/Ryr1/Tnfrsf8/Car3/4932438H23Rik/Chdh/Fam149a/Calcb/Resp18/Cd72/Brinp3/C1qa/Kcnn3/Cplx3/Lrrc43/Zdhhc22/Plcxd3/Hc/Mc1r/Kcng4/Tmem63c/Smtnl1/Pnoc/Ciita/Epn3/Dnajb13/Slfn5/Cux2/Scn9a/Ttll6/Cldn9/Pm20d1/Lrrc23/Pdyn/Mall/Chrnb4/Kcnj9/Nrl/Nfe2/Pcdh12/Slc28a3/Tmem184a/1700012B09Rik/Pkhd1l1/Erich5/Galntl6/Tnk1
MANNE_COVID19_ICU_VS_HEALTHY_DONOR_PLATELETS_UP	MANNE_COVID19_ICU_VS_HEALTHY_DONOR_PLATELETS_UP	100	-0.49008473	-1.64860642	0.00085876	0.17095997	0.16605076	3858	tags=49%, list=27%, signal=36%	Shisa4/Slc25a37/Ankrd45/Sec14l2/Insl3/Acadvl/Herc6/Smim1/Gckr/Creld1/Tpm2/Ly6e/Cd274/Idua/Ppp6r2/Ifi27/Fndc4/Mmp25/Unc13b/Isg15/Tspan17/Cercam/Ifitm1/Wfdc1/Cacfd1/Hpse/Pfkfb4/Ltbr/Adgrg3/Exoc3l4/Als2cl/Pspn/Mgat5b/Serpinh1/Folr2/Cdhr1/Lgals3bp/Col18a1/Hp/Mmp17/Rsad2/Bhmt2/Fcgr1/Mzb1/Il1r2/Lpar2/Kremen1/Ctsw/Folr1
REACTOME_IRON_UPTAKE_AND_TRANSPORT	REACTOME_IRON_UPTAKE_AND_TRANSPORT	51	0.51025134	1.77007342	0.0009047	0.17343431	0.16845406	549	tags=14%, list=4%, signal=13%	Lcn2/Atp6v1b1/Glrx3/Cybrd1/Heph/Tfrc/Cand1

WP_VITAMIN_A_AND_CAROTENOID_METABOLISM	WP_VITAMIN_A_AND_CAROTENOID_METABOLISM	31	-0.64458878	-1.79189503	0.00100902	0.17541788	0.17038066	1770	tags=39%, list=12%, signal=34%	Rlbp1/Cyp26b1/Bco1/Awat2/Rxrg/Rbp4/Aldh1a3/Npc1l1/Crabp1/Cd36/Cyp26a1/Rpe65
JAEGER_METASTASIS_DN	JAEGER_METASTASIS_DN	191	-0.4210461	-1.52515431	0.00104547	0.17541788	0.17038066	1828	tags=27%, list=13%, signal=24%	Sdc1/Chn2/Cda/Mmp28/Itgb4/Fzd10/Fhod3/Zfp750/Cyp26b1/Clic3/Impa2/Krt19/Ptch1/Jag1/Sfn/Fgfr2/Efs/Cfh/Cdhr1/F2rl1/Zfp185/Tm4sf1/Cdh3/Scel/Cd24a/Lamc2/Bicd2/Gna15/Chp2/Esrp2/Evpl/Col7a1/Ctnnd1/Tpsb2/Col17a1/Dsc3/Bbox1/Nlrx1/Car12/Abhd2/Cobl/Ephx3/Il1r2/Enpp2/Dio2/Krt23/Tfap2c/Tyrp1/Fat2/Krt15/Prss8/Cpa3
NABA_CORE_MATRISOME	NABA_CORE_MATRISOME	220	-0.41335178	-1.52062531	0.00105061	0.17541788	0.17038066	2811	tags=36%, list=20%, signal=29%	Dcn/Vwa3b/Ntn3/Col5a2/Ltbp1/Ecm2/Fbln1/Lgi4/Ntn1/Crim1/Vcan/Mmrn2/Hspg2/Col6a2/Vwa1/Pcolce/Aebp1/Prelp/Ogn/Egflam/Col11a2/Ltbp3/Vwa5b2/Reln/Emilin2/Col22a1/Creld2/Igfbp5/Vwa3a/Matn4/Col6a3/Col14a1/Col6a5/Col9a3/Nid2/Col2a1/Hmcn2/Tinagl1/Col26a1/Dmp1/Ltbp2/Col6a1/Fras1/Col5a1/Papln/Fbln2/Abi3bp/Col20a1/Coch/Tgfbi/Mfge8/Sbspon/Col18a1/Emid1/Col12a1/Col28a1/Fndc8/Lamc2/Tnc/Esm1/Igfbp1/Col7a1/Ntn4/Col23a1/Col17a1/Svep1/Col10a1/Rspo1/Hmcn1/Col8a1/Col6a6/Igfbp2/Srpx/Ndnf/Aspn/Col16a1/Col8a2/Impg2/Col24a1
LIM_MAMMARY_STEM_CELL_UP	LIM_MAMMARY_STEM_CELL_UP	438	-0.36694362	-1.40397719	0.000991	0.17541788	0.17038066	2513	tags=27%, list=18%, signal=23%	Mcam/Bmp7/Aldh1l2/Efcab1/Cdh13/Htra1/Plpp1/Fam184a/Pla2g7/Lgals1/Ednrb/Slc1a3/Sox11/Prx/Vcan/P3h2/Adamts1/Hspg2/Lims2/Synm/Gnb4/Pcolce/Jam2/Sntb2/Aebp1/Hdac4/Cacnb4/Arhgap25/Lrp1/Ngfr/Rfx2/Pdpn/Thsd1/Reln/Bag3/Plekha4/Scn4b/Upp1/Tshz3/Col14a1/Map3k7cl/Slc1a5/Itgb4/Neto2/Fhod3/Lrp4/Rcsd1/Rarres2/Cnn1/Gpc3/Tinagl1/Jag1/Nrg1/Scml2/Serpinh1/Lcat/Col5a1/Itga9/Abi3bp/Adgra2/Pcdh18/Heg1/Card10/Vsir/Sbspon

										/Col18a1/Btbd11/Zfp423/Edaradd/Nnmt/Cdh3/Tm7sf3/Psd2/Tro/Mpdz/Mmp2/Tmem255b/Mamdc2/Fgfrl1/Qrich2/Mef2c/Col12a1/Gng11/Amotl1/Cryab/Phldb1/Tagln/Col7a1/Col23a1/Eid3/Ppp1r3c/Wipf1/Col17a1/Svep1/Kcnmb1/Vgll3/Acta2/Ssh1/Has2/Mia/Angptl2/Adgrl1/Oxtr/Igfbp2/Srpx/Enpp2/Sulf1/Tenm3/Col16a1/Lag3/Il1b/Myocd/Cd36/Tns4/Ucn2/Soga1/Adarb1
HANSON_HRAS_SIGNALING_VIA_NFKB	HANSON_HRAS_SIGNALING_VIA_NFKB	19	-0.72458252	-1.804925554	0.00116932	0.1834057	0.17813911	1037	tags=26%, list=7%, signal=24%	Col18a1/Aldh1a3/Oas1a/Tslp/Sox5
REACTOME_MRNA_SPLICING	REACTOME_MRNA_SPLICING	178	0.35092478	1.506987775	0.00113477	0.1834057	0.17813911	4948	tags=46%, list=35%, signal=30%	Srsf1/Elavl2/Polr2l/Magohb/Cpsf6/Cwc27/Wbp11/Cwc22/Hnrnpa0/Cdc40/Gcfc2/Cstf3/Prpf40a/Zmat5/Pqbp1/Ppih/Smndc1/Clp1/Sf3b4/Lsm8/Srsf11/Snrnp40/Lsm5/Eif4a3/Polr2f/Upf3b/Srsf5/Hnrnpl/Isy1/Zcrb1/Sugp1/Magoh/Cdc5l/Usp39/Snrpb2/Hnrnph2/Rbm22/Gtf2f2/Snrpf/Sf1/Ppil6/Snrpd1/Pcbp1/Cwc25/Lsm7/Plrg1/Cstf2t/Syf2/Dnajc8/Wbp4/Eftud2/Sf3a3/Prpf38a/Sf3b2/Snrpa1/Papola/Ppie/Prcc/Cpsf3/U2af1/Hnrnpu/Crnkl1/Cstf2/Ncbp1/Sf3b5/Snrpd2/Fus/Polr2d/Ddx42/Polr2j/Gtf2f1/Cwc15/Cpsf2/Prpf3/Lsm2/Bcas2/Prpf8/Bud31/Prpf31/Tra2b/Snrpn/Polr2c
REACTOME_INTERFERON_GAMMA_SIGNALING	REACTOME_INTERFERON_GAMMA_SIGNALING	73	-0.52194567	-1.690430778	0.00128067	0.1949636	0.18936512	1533	tags=38%, list=11%, signal=34%	Trim21/B2m/Trim14/H2-D1/Gbp2/Ptafr/Gbp9/Socs1/Sp100/H2-M3/Gbp7/H2-Q1/Camk2d/Pml/Cd44/Ciita/Trim6/H2-T23/Vcam1/Gbp5/Oasl1/Irf7/Fcgr1/Gbp3/Oas1a/Gbp8/Oas2/Gbp4

Supplementary Table 4 **Detailed enrichment items of Brown Module genes**

_MEMBER_MyList	_LogP_MyList	GO	_PATTERN_	_RANK_	GiniIndex	Category	CategoryID	Description	PARENT_GO	LogP	Enrichment	Z-score	#TotalGeneInLibrary	#GeneInGO	#GeneInHitList	#GeneInGOAndHitList	%InGO	STDV %InGO	GeneID	Hits	Log(q-value)	EvidenceCutoff	GROUP_ID	FirstInGroupByEnrichment	FirstInGroupByLogP	BestLogPInGroup	BestEnrichmentInGroup	URL
1	-11.24932	R-MMU-89482	M1	1	0	Reactome Gene Sets	6	Collagen chain trimerization		-11.24932	9.7485964	11.107853	20836	35	916	15	1.6375546	0.4193386	12815 | 12822 | 12833 | 12834 | 12836 | 69700 | 73368 | 77018 | 107581 | 140709 | 213945 | 237759 | 245026 | 373864 | 665033	Col11a2 | Col18a1 | Col6a1 | Col6a2 | Col7a1 | Col22a1 | Col20a1 | Col25a1 | Col16a1 | Col26a1 | Col28a1 | Col23a1 | Col6a6 | Col27a1 | Col6a5	-6.980368	0	1	1	1	-11.24932	9.7485964	

1	-8.38222	16R-MMU-1650814	M1	1	0	Reactome Gene Sets	6	Collagen biosynthesis and modifying enzymes	-8.38222	6.0657933	8.4263975	20836	60	916	16	1.7467249	0.4328506	12406 | 12815 | 12822 | 12833 | 12834 | 12836 | 69700 | 73368 | 77018 | 107581 | 140709 | 213945 | 237759 | 245026 | 373864 | 665033	Serpinh1 | Col11a2 | Col18a1 | Col6a1 | Col6a2 | Col7a1 | Col22a1 | Col20a1 | Col25a1 | Col16a1 | Col26a1 | Col28a1 | Col23a1 | Col6a6 | Col27a1 | Col6a5	-4.958366	0	1	0	0	-11.24932	9.7485964
1	-8.081117	mmu04974	M1	1	0	KEGG Pathway	24	Protein digestion and absorption - Mus musculus (house mouse)	-8.081117	4.4229743	7.647802	20836	108	916	21	2.2925764	0.4945133	11931 | 12815 | 12822 | 12833 | 12834 | 12836 | 68553 | 69700 | 73368 | 74338 | 77018 | 98660 | 107581 | 110891 | 140709 | 213945 | 234967 | 237759 | 245026 | 373864 | 665033	Atp1b1 | Col11a2 | Col18a1 | Col6a1 | Col6a2 | Col7a1 | Col6a4 | Col22a1 | Col20a1 | Slc6a19 | Col25a1 | Atp1a2 | Col16a1 | Slc8a2 | Col26a1 | Col28a1 | Slc36a4 | Col23a1 | Col6a6 | Col27a1 | Col6a5	-4.715255	0	1	0	0	-11.24932	9.7485964

1	-7.892165	R-MMU-1474290	M1	1	0	Reactome Gene Sets	6	Collagen formation	-7.892165	5.2971825	7.886785	20836	73	916	17	1.8558952	0.4459243	12406 | 12815 | 12822 | 12833 | 12834 | 12836 | 13039 | 69700 | 73368 | 77018 | 107581 | 140709 | 213945 | 237759 | 245026 | 373864 | 665033	Serpinh1 | Col11a2 | Col18a1 | Col6a1 | Col6a2 | Col7a1 | Ctsl | Col22a1 | Col20a1 | Col25a1 | Col16a1 | Col26a1 | Col28a1 | Col23a1 | Col6a6 | Col27a1 | Col6a5	-4.577455	0	1	0	0	-11.24932	9.7485964
1	-7.489815	R-MMU-1474244	M1	1	0	Reactome Gene Sets	6	Extracellular matrix organization	-7.489815	3.0525908	6.727007	20836	231	916	31	3.3842795	0.5974606	12406 | 12505 | 12815 | 12822 | 12833 | 12834 | 12836 | 13039 | 13179 | 13406 | 14115 | 15896 | 17385 | 17388 | 17389 | 20692 | 20969 | 21923 | 64706 | 69700 | 71753 | 73368 | 77018 | 107581 | 140709 | 213945 | 214058 | 237759 | 245026 | 373864 | 665033	Serpinh1 | Cd44 | Col11a2 | Col18a1 | Col6a1 | Col6a2 | Col7a1 | Ctsl | Dcn | Dmp1 | Fbln2 | Icam2 | Mmp11 | Mmp15 | Mmp16 | Sparc | Sdc1 | Tnc | Scube1 | Col22a1 | Tmprss6 | Col20a1 | Col25a1 | Col16a1 | Col26a1 | Col28a1 | Megf11 | Col23a1 | Col6a6 | Col27a1 | Col6a5	-4.352365	0	1	0	0	-11.24932	9.7485964

1	-6.260531	R-MMU-1442490	M1	1	0	Reactome Gene Sets	6	Collagen degradation	-6.260531	5.3764986	6.9690686	20836	55	916	13	1.419214	0.390816	12815|12822|12833|12834|12836|13039|17385|17388|71753|77018|140709|245026|665033	Col11a2|Col18a1|Col6a1|Col6a2|Col7a1|Ctsl|Mmp11|Mmp15|Tmprss6|Col25a1|Col26a1|Col6a6|Col6a5	-3.435312	0	1	0	0	-11.24932	9.7485964
1	-5.383713	R-MMU-1474228	M1	1	0	Reactome Gene Sets	6	Degradation of the extracellular matrix	-5.383713	3.6139656	5.8130279	20836	107	916	17	1.8558952	0.4459243	12505|12815|12822|12833|12834|12836|13039|13179|17385|17388|17389|64706|71753|77018|140709|245026|665033	Cd44|Col11a2|Col18a1|Col6a1|Col6a2|Col7a1|Ctsl|Dcn|Mmp11|Mmp15|Mmp16|Scube1|Tmprss6|Col25a1|Col26a1|Col6a6|Col6a5	-2.767974	0	1	0	0	-11.24932	9.7485964

1	-3.901788	R-MMU-2022090	M1	1	0	Reactome Gene Sets	6	Assembly of collagen fibrils and other multimeric structures	-3.901788	4.5493445	5.1111262	20836	45	916	9	0.9825328	0.325898	12815|12822|12833|12834|12836|13039|245026|373864|665033	Col11a2|Col18a1|Col6a1|Col6a2|Col7a1|Ctsl|Col6a6|Col27a1|Col6a5	-1.708383	0	1	0	0	-11.24932	9.7485964
1	-3.374774	R-MMU-3000178	M1	1	0	Reactome Gene Sets	6	ECM proteoglycans	-3.374774	4.3327095	4.6361012	20836	42	916	8	0.8733624	0.3074289	12833|12834|13179|13406|20692|21923|245026|665033	Col6a1|Col6a2|Dcn|Dmp1|Sparc|Tnc|Col6a6|Col6a5	-1.328538	0	1	0	0	-11.24932	9.7485964

1	-3.2374447	R-MMU-216083	M1	1	0	Reactome Gene Sets	6	Integrin cell surface interactions	-3.2374447	3.4464735	4.2686844	20836	66	916	10	1.0917031	0.3433372	12505|12822|12833|12834|12836|15896|21923|107581|245026|665033	Cd44|Col18a1|Col6a1|Col6a2|Col7a1|Icam2|Tnc|Col16a1|Col6a6|Col6a5	-1.240185	0	1	0	0	-11.24932	9.7485964
1	-2.789906	mmu04512	M1	1	0	KEGG Pathway	24	ECM-receptor interaction - Mus musculus (house mouse)	-2.789906	2.8433406	3.7158539	20836	88	916	11	1.2008734	0.3598963	12505|12833|12834|13406|19699|20969|21923|68553|75209|245026|665033	Cd44|Col6a1|Col6a2|Dmp1|Reln|Sdc1|Tnc|Col6a4|Sv2c|Col6a6|Col6a5	-0.925787	0	1	0	0	-11.24932	9.7485964
1	-2.35	R-MMU	M1	1	0	Reactome	6	NCAM1 interactions	-2.35	5.686	4.021	20836	16	916	4	0.436	0.217	12833|12834|245026|665033	Col6a1|Col6a2|Col6a6|Col6a5	-0.645217	0	1	0	0	-11.24932	9.7485964

	4551	-419037				Gene Sets				4551	6812	4703					6812	8634								
1	-9.1042085	GO:0007610	M1	1	0	GO Biological Processes	19	behavior	19_GO:00032501 multicellular organismal process	-9.1420085	2.1678087	6.9606353	20836	745	916	71	7.78510917	0.8835158	11514|11516|11556|11980|12043|12426|12921|13048|13134|13167|13411|13488|13489|13860|14167|14169|14466|14805|14814|15165|15465|15559|15560|15572|17202|17260|17978|18013|18032|18205|18216|18516|18619|18667|19699|20265|21336|21349|21834|22044|27386|29813|30878|56747|64378|66797|72194|72585|74653|75141|76376|98660|104156|109648|110886|110891|207686|210274|211323|211612|218476|219228|223864|229599|238384|242202|243914|244723|246317|260297|381677	Adcy8|Adcyap1|Adrb3|Atp8a1|Bcl2|Cckbr|Crhr1|Cux2|Dach1|Dbi|Dnah11|Drd1|Drd2|Eps8|Fgf12|Fgf14|Gba|Grik1|Grin2d|Hcn1|Hrh1|Htr2b|Htr2c|Elavl4|Mc4r|Mef2c|Ncoa2|Neurod2|Nfix|Ntf3|Ntsr1|Pbx3|Penk|Pgr|Reln|Scn1a|Tacr1|Tal1|Thrb|Trh|Npas3|Zfp385a|Apln|Sez6l|Gpr88|Cntnap2|Fbxl20|Lypd1|Pomk|Rasd2|Slc24a2|Atp1a2|Etv5|Npy|Gabra5|Slc8a2|Cfap69|Shank2|Nrg1|Ptchd1|Gcnt4|Pcdh17|Rapgef3|Ciart|Slc24a4|Pde5a|Lgi4|Olfm2|Neto1|Prrt1|Vgf	-5.174162	0	2	1	1	-9.142085	2.4238313

1	-7.654496	GO:0050804	M1	1	0	GO Biological Processes	19	modulation of chemical synaptic transmission	19_GO:0023052 signaling	-7.654496	2.0593743	6.2436618	20836	729	916	66	7.2054202	0.8543547	11514 | 11516 | 11551 | 12048 | 12308 | 12404 | 12426 | 12669 | 12921 | 13048 | 13167 | 13488 | 13489 | 13841 | 13869 | 14169 | 14580 | 14805 | 14813 | 14814 | 15165 | 15465 | 15560 | 15893 | 16504 | 17260 | 18013 | 18205 | 18619 | 18751 | 19055 | 19266 | 19699 | 21336 | 23970 | 54377 | 56077 | 56808 | 66220 | 66797 | 69035 | 70530 | 72194 | 74513 | 75209 | 76376 | 78808 | 81905 | 108069 | 109648 | 109905 | 110784 | 110891 | 170935 | 192167 | 210274 | 219228 | 235415 | 241770 | 243547 | 246317 | 260297 | 319229 | 380702 | 381677 | 545192	Adcy8 | Adcyap1 | Adra2a | Bcl2l1 | Calb2 | Cbln1 | Cckbr | Chrm1 | Crhr1 | Cux2 | Dbi | Drd1 | Drd2 | Epha7 | Erbb4 | Fgf14 | Gfap | Grik1 | Grin2c | Grin2d | Hcn1 | Hrh1 | Htr2c | Ica1 | Kcnc3 | Mef2c | Neurod2 | Ntf3 | Penk | Prkcb | Ppp3ca | Ptprd | Reln | Tacr1 | Pacsin2 | Cacng4 | Dgke | Cacna2d2 | Zdhhc12 | Cntnap2 | Zdhhc3 | Lrfn2 | Fbxl20 | Neto2 | Sv2c | Slc24a2 | Stxbp5 | Cacng8 | Grm3 | Npy | Rap1a | Nr3c2 | Slc8a2 | Grid2ip | Nlgn1 | Shank2 | Pcdh17 | Cplx3 | Rims4 | Grip2 | Neto1 | Prrt1 | Sctr | Shisa6 | Vgf | Baiap3	-4.404037	0	2	0	0	-9.142085	2.4238313
1	-7.6315	GO:00991	M1	1	0	GO Biological Pr	19	regulation of trans-synaptic signaling	19_GO:0023052 signaling	-7.6315	2.05655	6.23145	20836	730	916	66	7.20524	0.85435	11514 | 11516 | 11551 | 12048 | 12308 | 12404 | 12426 | 12669 | 12921 | 13048 | 13167 | 13488 | 13489 | 13841 | 13869 | 14169 | 14580 | 14805 | 14813 | 14814 | 15165 | 15465 | 15560 | 15893 | 16504 | 17260 | 18013 | 18205 | 18619 | 18751 | 19055 | 19266 |	Adcy8 | Adcyap1 | Adra2a | Bcl2l1 | Calb2 | Cbln1 | Cckbr | Chrm1 | Crhr1 | Cux2 | Dbi | Drd1 | Drd2 | Epha7 | Erbb4 | Fgf14 | Gfap | Grik1 | Grin2c | Grin2d | Hcn1 | Hrh1 | Htr2c | Ica1 | Kcnc3 | Mef2c | Neurod2 | Ntf3 | Penk | Prkcb | Ppp3ca | Ptprd | Re	-4.404037	0	2	0	0	-9.142085	2.4238313

	97	77				ocesses				97	32	96					02	47	19699|21336|23970|54377|56077|56808|66220|66797|69035|70530|72194|74513|75209|76376|78808|81905|108069|109648|109905|110784|110891|170935|192167|210274|219228|235415|241770|243547|246317|260297|319229|380702|381677|545192	ln|Tacr1|Pacsin2|Cacng4|Dgke|Cacna2d2|Zdhhc12|Cntnap2|Zdhhc3|Lrfn2|Fbxl20|Neto2|Sv2c|Slc24a2|Stxbp5|Cacng8|Grm3|Npy|Rap1a|Nr3c2|Slc8a2|Grid2ip|Nlgn1|Shank2|Pcdh17|Cplx3|Rims4|Grip2|Neto1|Prrt1|Sctr|Shisa6|Vgf|Baiap3							
1	-4.696892	GO:0007611	M1	1	0	GO Biological Processes	19	learning or memory	19_GO:0032501 multicellular organismal process	-4.696892	2.2328074	4.810841	20836	326	916	32	3.4934498	0.6066775	11514|11980|12921|13048|13167|13411|13488|13489|15465|15572|17260|18013|18032|18205|18216|19699|21336|29813|64378|66797|74653|76376|98660|110886|110891|210274|211323|211612|223864|242202|246317|260297	Adcy8|Atp8a1|Crhr1|Cux2|Dbi|Dnah11|Drd1|Drd2|Hrh1|Elavl4|Mef2c|Neurod2|Nfix|Ntf3|Ntsr1|Reln|Tacr1|Zfp385a|Gpr88|Cntnap2|Pomk|Slc24a2|Atp1a2|Gabra5|Slc8a2|Shank2|Nrg1|Ptchd1|Rapgef3|Pde5a|Neto1|Prrt1	-2.260449	0	2	0	0	-9.142085	2.4238313
1	-4.13	GO:005	M1	1	0	GO Biolog	19	cognition	19_GO:0032501 multicellular	-4.13	2.062	4.384	20836	364	916	33	3.602	0.615	11514|11980|12669|12921|13048|13167|13411|13488|13489|15465|15572|17260|18013|18032|18205|18216|19699|21336|29813|64378|	Adcy8|Atp8a1|Chrm1|Crhr1|Cux2|Dbi|Dnah11|Drd1|Drd2|Hrh1|Elavl4|Mef2c|Neurod2|Nfix|Ntf3|Ntsr1|Reln|Tacr1|Zfp385a|Gpr88|	-1.855599	0	2	0	0	-9.142085	2.4238313

	5403	0890				ical Processes			organismal process	5403	2031	0746					6201	7354	66797|74653|76376|98660|110886|110891|210274|211323|211612|223864|242202|246317|260297	Cntnap2|Pomk|Slc24a2|Atp1a2|Gabra5|Slc8a2|Shank2|Nrg1|Ptchd1|Rapgef3|Pde5a|Neto1|Prrt1							
1	-3.5560613	GO:0007612	M1	1	0	GO Biological Processes	19	learning	19_GO:0032501 multicellular organismal process	-3.5560613	2.3943921	4.1404121	20836	190	916	20	2.1834061	0.4828651	11980|12921|13488|13489|15465|15572|18013|18032|18216|19699|21336|64378|66797|76376|98660|110886|110891|210274|223864|246317	Atp8a1|Crhr1|Drd1|Drd2|Hrh1|Elavl4|Neurod2|Nfix|Ntsr1|Reln|Tacr1|Gpr88|Cntnap2|Slc24a2|Atp1a2|Gabra5|Slc8a2|Shank2|Rapgef3|Neto1	-1.451414	0	2	0	0	-9.142085	2.4238313
1	-3.095721	GO:0007613	M1	1	0	GO Biological Proc	19	memory	19_GO:0032501 multicellular organismal proces	-3.095721	2.387002	3.8003374	20836	162	916	17	1.8558952	0.4459243	11514|12921|13048|13488|13489|15465|18032|18205|19699|21336|76376|110891|210274|211323|211612|242202|246317	Adcy8|Crhr1|Cux2|Drd1|Drd2|Hrh1|Nfix|Ntf3|Reln|Tacr1|Slc24a2|Slc8a2|Shank2|Nrg1|Ptchd1|Pde5a|Neto1	-1.144832	0	2	0	0	-9.142085	2.4238313

						esses																					
1	-3.054891	GO:0050806	M1	1	0	GO Biological Processes	19	positive regulation of synaptic transmission	19_GO:0023052 signaling	-3.054891	1.9313257	3.5887851	20836	318	916	27	2.9475983	0.5588427	11514|11516|12048|12426|12921|13167|13488|13489|13869|14580|14805|14813|14814|15560|19699|21336|54377|66220|69035|76376|81905|110891|192167|210274|241770|260297|545192	Adcy8|Adcyap1|Bcl2l1|Cckbr|Crhr1|Dbi|Drd1|Drd2|Erbb4|Gfap|Grik1|Grin2c|Grin2d|Htr2c|Reln|Tacr1|Cacng4|Zdhhc12|Zdhhc3|Slc24a2|Cacng8|Slc8a2|Nlgn1|Shank2|Rims4|Prrt1|Baiap3	-1.112275	0	2	0	0	-9.142085	2.4238313
1	-2.557139	GO:0008306	M1	1	0	GO Biological Processes	19	associative learning	19_GO:0032501 multicellular organismal process	-2.557139	2.4238313	3.3822546	20836	122	916	13	1.419214	0.390816	12921|13488|13489|15465|18013|19699|21336|66797|98660|110886|210274|223864|246317	Crhr1|Drd1|Drd2|Hrh1|Neurod2|Reln|Tacr1|Cntnap2|Atp1a2|Gabra5|Shank2|Rapgef3|Neto1	-0.777141	0	2	0	0	-9.142085	2.4238313

<table>
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1	-3.6444	GO:00324	M1	1	0	GO Biological Pr	19	positive regulation of ion transmembrane transporter activity	19_GO:0051179 localization	-3.6444	2.75717	4.34285	20836	132	916	16	1.74672	0.43285	11931|12313|12638|14169|15165|16485|18216|19055|19699|54377|59091|77574|81905|93692|223864|230899	Atp1b1|Calm1|Cftr|Fgf14|Hcn1|Kcna1|Ntsr1|Ppp3ca|Reln|Cacng4|Jph2|Tcaf1|Cacng8|Glrx|Rapgef3|Nppa	-1.517252	0	5	0	0	-8.420132	2.7571788

	62	14				ocesses				62	88	78					49	06									
1	-3.596408	GO:0034764	M1	1	0	GO Biological Processes	19	positive regulation of transmembrane transport	19_GO:0051179 localization	-3.596408	2.1273915	4.0579488	20836	278	916	26	2.8384279	0.5487044	11931|12313|12638|13167|13488|13869|14169|14734|15165|15945|16337|16485|16518|18216|19055|19699|22065|54377|59091|77574|81905|93692|109905|223864|230899|232430	Atp1b1|Calm1|Cftr|Dbi|Drd1|Erbb4|Fgf14|Gpc3|Hcn1|Cxcl10|Insr|Kcna1|Kcnj2|Ntsr1|Ppp3ca|Reln|Trpc3|Cacng4|Jph2|Tcaf1|Cacng8|Glrx|Rap1a|Rapgef3|Nppa|Crebl2	-1.476675	0	5	0	0	-8.420132	2.7571788
1	-3.512357	GO:0034767	M1	1	0	GO Biological Processes	19	positive regulation of monoatomic ion transmembrane transport	19_GO:0051179 localization	-3.512357	2.3188409	4.0792115	20836	206	916	21	2.2925764	0.4945133	11931|12313|12638|13167|13488|14169|15165|15945|16485|16518|18216|19055|19699|22065|54377|59091|77574|81905|93692|223864|230899	Atp1b1|Calm1|Cftr|Dbi|Drd1|Fgf14|Hcn1|Cxcl10|Kcna1|Kcnj2|Ntsr1|Ppp3ca|Reln|Trpc3|Cacng4|Jph2|Tcaf1|Cacng8|Glrx|Rapgef3|Nppa	-1.422382	0	5	0	0	-8.420132	2.7571788

1	-3.352812	GO:0032411	M1	1	0	GO Biological Processes	19	positive regulation of transporter activity	19_GO:0051179 localization	-3.352812	2.5996257	4.0722929	20836	140	916	16	1.7467249	0.4328506	11931 | 12313 | 12638 | 14169 | 15165 | 16485 | 18216 | 19055 | 19699 | 54377 | 59091 | 77574 | 81905 | 93692 | 223864 | 230899	Atp1b1 | Calm1 | Cftr | Fgf14 | Hcn1 | Kcna1 | Ntsr1 | Ppp3ca | Reln | Cacng4 | Jph2 | Tcaf1 | Cacng8 | Glrx | Rapgef3 | Nppa	-1.311747	0	5	0	0	-8.420132	2.7571788
1	-3.238257	GO:1903169	M1	1	0	GO Biological Processes	19	regulation of calcium ion transmembrane transport	19_GO:0051179 localization	-3.238257	2.2633557	3.8594131	20836	201	916	20	2.1834061	0.4828651	11931 | 12043 | 12313 | 13167 | 13367 | 13488 | 13489 | 14169 | 15444 | 15945 | 18216 | 18854 | 19055 | 22065 | 30955 | 59091 | 98660 | 108058 | 223864 | 230899	Atp1b1 | Bcl2 | Calm1 | Dbi | Diaph1 | Drd1 | Drd2 | Fgf14 | Hpca | Cxcl10 | Ntsr1 | Pml | Ppp3ca | Trpc3 | Pik3cg | Jph2 | Atp1a2 | Camk2d | Rapgef3 | Nppa	-1.240185	0	5	0	0	-8.420132	2.7571788
1	-2.5	GO:00	M1	1	0	GO Biol	19	regulation of calcium ion transport	19_GO:0051179	-2.5	1.85	3.17	20836	294	916	24	2.62	0.52	11931 | 12043 | 12313 | 13167 | 13367 | 13488 | 13489 | 14169 | 15444 | 15945 | 16170 | 18216 | 18854 | 19055 | 22065 | 30955 |	Atp1b1 | Bcl2 | Calm1 | Dbi | Diaph1 | Drd1 | Drd2 | Fgf14 | Hpca | Cxcl10 | Il16 | Ntsr1 | Pml | Ppp3ca | Trpc3 | Pik3cg | Jph2 |	-0.777141	0	5	0	0	-8.420132	2.7571788

	56135	51924				ogical Processes			localization	56135	68755	29984					00873	77702	59091|98660|107589|108058|223864|230899|269587|546134	Atp1a2|Mylk|Camk2d|Rapgef3|Nppa|Epb41|Gramd2							
1	-2.536714	GO:2001257	M1	1	0	GO Biological Processes	19	regulation of cation channel activity	19_GO:0051179 localization	-2.536714	2.2447426	3.3028124	20836	152	916	15	1.6375546	0.4193386	12313|13489|14167|14169|15165|15168|15444|16485|18216|19055|59091|74513|230899|241794|246317	Calm1|Drd2|Fgf12|Fgf14|Hcn1|Hcn3|Hpca|Kcna1|Ntsr1|Ppp3ca|Jph2|Neto2|Nppa|Kcng1|Neto1	-0.764692	0	5	0	0	-8.420132	2.7571788
1	-2.3630	GO:19040	M1	1	0	GO Biological Pr	19	positive regulation of cation transmembrane transport	19_GO:0051179 localization	-2.3630	2.09165	3.10079	20836	174	916	16	1.74672	0.43285	11931|12313|13167|13488|14169|15165|15945|16485|16518|18216|19055|22065|59091|93692|223864|230899	Atp1b1|Calm1|Dbi|Drd1|Fgf14|Hcn1|Cxcl10|Kcna1|Kcnj2|Ntsr1|Ppp3ca|Trpc3|Jph2|Glrx|Rapgef3|Nppa	-0.645217	0	5	0	0	-8.420132	2.7571788

	96	64				ocesses				96	29	34					49	06									
1	-2.0709625	GO:1904427	M1	1	0	GO Biological Processes	19	positive regulation of calcium ion transmembrane transport	19_GO:0051179 localization	-2.0709655	2.2955441	2.9080109	20836	109	916	11	1.2087343	0.3598963	11931 | 12313 | 13167 | 13488 | 14169 | 15945 | 18216 | 19055 | 22065 | 59091 | 223864	Atp1b1 | Calm1 | Dbi | Drd1 | Fgf14 | Cxcl10 | Ntsr1 | Ppp3ca | Trpc3 | Jph2 | Rapgef3	-0.493978	0	5	0	0	-8.420132	2.7571788
1	-8.403773	GO:0044057	M1	1	0	GO Biological Processes	19	regulation of system process	19_GO:0032501 multicellular organismal process	-8.403773	2.1825943	6.6566594	20836	667	916	64	6.9862899 6	0.8422996	11550 | 11551 | 11640 | 11931 | 12313 | 12325 | 12404 | 12426 | 12671 | 12921 | 13048 | 13488 | 13489 | 13618 | 14167 | 14466 | 14805 | 14813 | 14814 | 15165 | 15168 | 15465 | 15560 | 16322 | 16392 | 16485 | 16518 | 17260 | 18216 | 18516 | 18585 | 19055 | 19216 | 19699 | 20271 | 20346 | 20606 | 21336 | 21834 | 21924 | 22003 | 22065 | 30878 | 53817 | 54377 | 56808 | 57080 | 66797 |	Adra1d | Adra2a | Akap1 | Atp1b1 | Calm1 | Camk2g | Cbln1 | Cckbr | Chrm3 | Crhr1 | Cux2 | Drd1 | Drd2 | Ednrb | Fgf12 | Gba | Grik1 | Grin2c | Grin2d | Hcn1 | Hcn3 | Hrh1 | Htr2c | Inha | Isl1 | Kcna1 | Kcnj2 | Mef2c | Ntsr1 | Pbx3 | Pde9a | Ppp3ca | Ptger1 | Reln | Scn5a | Sema3a | Sstr2 | Tacr1 | Thrb | Tnnc1 | Tpm1 | Trpc3 | Apln | Ddx39b | Cacng4 | Cacna2d2 | Gtf2ird1 | Cn	-4.958366	0	6	1	1	-8.403773	3.0194768

																			67451|74513|98660|108058|108069|110891|192167|211323|230899|240672|242202|243547|246317|269587|319552|380702	tnap2|Pkp2|Neto2|Atp1a2|Camk2d|Grm3|Slc8a2|Nlgn1|Nrg1|Nppa|Dusp5|Pde5a|Grip2|Neto1|Epb41|Spx|Shisa6							
1	-5.325874	GO:0008015	M1	1	0	GO Biological Processes	19	blood circulation	19_GO:0032501 multicellular organismal process	-5.325874	2.1292596	5.1219683	20836	438	916	41	4.4759825	0.6832077	11516|11550|11551|11556|11819|11931|12638|12671|13488|13489|13618|15465|15559|15560|16518|18216|18706|20265|20271|21334|21336|21924|22003|22339|30878|50706|52589|67451|69632|71660|74617|84094|98660|108058|109648|110784|230899|240672|242202|243547|319552	Adcyap1|Adra1d|Adra2a|Adrb3|Nr2f2|Atp1b1|Cftr|Chrm3|Drd1|Drd2|Ednrb|Hrh1|Htr2b|Htr2c|Kcnj2|Ntsr1|Pik3ca|Scn1a|Scn5a|Tac2|Tacr1|Tnnc1|Tpm1|Vegfa|Apln|Postn|Ncald|Pkp2|Arhgef12|Rarres2|Scpep1|Plvap|Atp1a2|Camk2d|Npy|Nr3c2|Nppa|Dusp5|Pde5a|Grip2|Spx	-2.71968	0	6	0	0	-8.403773	3.0194768
1	-4.898834	GO:0003013	M1	1	0	GO Biological Processes	19	circulatory system process	19_GO:0032501 multicellular organismal process	-4.898834	2.024073	4.8258096	20836	472	916	42	4.5851528	0.691094	11516|11550|11551|11556|11819|11931|12638|12671|13488|13489|13618|15465|15559|15560|16518|18216|18706|20265|20271|21334|21336|21924|22003|22339|22601|30878|50706|52589|67451|69632|71660|74617|84094|98660|108058|10964	Adcyap1|Adra1d|Adra2a|Adrb3|Nr2f2|Atp1b1|Cftr|Chrm3|Drd1|Drd2|Ednrb|Hrh1|Htr2b|Htr2c|Kcnj2|Ntsr1|Pik3ca|Scn1a|Scn5a|Tac2|Tacr1|Tnnc1|Tpm1|Vegfa|Yap1|Apln|Postn|Ncald|Pkp2|Arhgef12|Rarres2|Scpep1|Plvap|Atp1a2|Camk2d	-2.422274	0	6	0	0	-8.403773	3.0194768

						esses													8|110784|230899|240672|242202|243547|319552	|Npy|Nr3c2|Nppa|Dusp5|Pde5a|Grip2|Spx							
1	-4.280774	GO:1903522	M1	1	0	GO Biological Processes	19	regulation of blood circulation	19_GO:0032501 multicellular organismal process	-4.280774	2.3002306	4.5853158	20836	267	916	27	2.9475983	0.5588427	11550|11551|11931|12313|12671|13488|13489|13618|15165|15168|15465|15560|16392|16518|20271|20346|21336|21834|22003|30878|56808|67451|98660|230899|240672|242202|319552	Adra1d|Adra2a|Atp1b1|Calm1|Chrm3|Drd1|Drd2|Ednrb|Hcn1|Hcn3|Hrh1|Htr2c|Isl1|Kcnj2|Scn5a|Sema3a|Tacr1|Thrb|Tpm1|Apln|Cacna2d2|Pkp2|Atp1a2|Nppa|Dusp5|Pde5a|Spx	-1.968769	0	6	0	0	-8.403773	3.0194768
1	-3.905852	GO:0035296	M1	1	0	GO Biological Processes	19	regulation of tube diameter	19_GO:0065007 biological regulation	-3.905852	2.5415335	4.4416638	20836	179	916	20	2.1834061	0.4828651	11516|11550|11551|11556|12638|12671|13488|13618|15465|15559|15560|21336|22339|30878|74617|98660|230899|240672|242202|243547	Adcyap1|Adra1d|Adra2a|Adrb3|Cftr|Chrm3|Drd1|Ednrb|Hrh1|Htr2b|Htr2c|Tacr1|Vegfa|Apln|Scpep1|Atp1a2|Nppa|Dusp5|Pde5a|Grip2	-1.708781	0	6	0	0	-8.403773	3.0194768

1	-3.905852	GO:0097746	M1	1	0	GO Biological Processes	19	blood vessel diameter maintenance	19_GO:0032501 multicellular organismal process	-3.905852	2.5415335	4.4416638	20836	179	916	20	2.1834061	0.4828651	11516|11550|11551|11556|12638|12671|13488|13618|15465|15559|15560|21336|22339|30878|74617|98660|230899|240672|242202|243547	Adcyap1|Adra1d|Adra2a|Adrb3|Cftr|Chrm3|Drd1|Ednrb|Hrh1|Htr2b|Htr2c|Tacr1|Vegfa|Apln|Scpep1|Atp1a2|Nppa|Dusp5|Pde5a|Grip2	-1.708781	0	6	0	0	-8.403773	3.0194768
1	-3.893617	GO:0002027	M1	1	0	GO Biological Processes	19	regulation of heart rate	19_GO:0032501 multicellular organismal process	-3.893617	3.0194768	4.615849	20836	113	916	15	1.6375546	0.4193386	12313|12671|13489|13618|15165|15168|16392|16518|20271|20346|22003|30878|67451|230899|319552	Calm1|Chrm3|Drd2|Ednrb|Hcn1|Hcn3|Isl1|Kcnj2|Scn5a|Sema3a|Tpm1|Apln|Pkp2|Nppa|Spx	-1.70745	0	6	0	0	-8.403773	3.0194768
1	-3.8	GO:00	M1	1	0	GO Biol	19	regulation of tube size	19_GO:0065007 biologi	-3.8	2.52	4.41	20836	180	916	20	2.18	0.48	11516|11550|11551|11556|12638|12671|13488|13618|15465|15559|15560|21336|22339|30878|74617|98660|	Adcyap1|Adra1d|Adra2a|Adrb3|Cftr|Chrm3|Drd1|Ednrb|Hrh1|Htr2b|Htr2c|Tacr1|Vegfa|Apln|Scpep1|Atp	-1.690021	0	6	0	0	-8.403773	3.0194768

	72613	35150				ogical Processes			cal regulation	72613	74139	36335					34061	28651	230899|240672|242202|243547	1a2|Nppa|Dusp5|Pde5a|Grip2							
1	-3.780156	GO:0008016	M1	1	0	GO Biological Processes	19	regulation of heart contraction	19_GO:0032501 multicellular organismal process	-3.780156	2.4247778	4.3085957	20836	197	916	21	2.2925764	0.4945133	11550|11931|12313|12671|13489|13618|15165|15168|16392|16518|20271|20346|21834|22003|30878|56808|67451|98660|230899|242202|319552	Adra1d|Atp1b1|Calm1|Chrm3|Drd2|Ednrb|Hcn1|Hcn3|Isl1|Kcnj2|Scn5a|Sema3a|Thrb|Tpm1|Apln|Cacna2d2|Pkp2|Atp1a2|Nppa|Pde5a|Spx	-1.618413	0	6	0	0	-8.403773	3.0194768
1	-3.7610	GO:00030	M1	1	0	GO Biological Pr	19	regulation of systemic arterial blood pressure	19_GO:0032501 multicellular organismal	-3.7610	2.82129	4.44956	20836	129	916	16	1.74672	0.43285	11550|11556|11819|12671|13489|13618|18216|21336|22003|30878|50706|52589|71660|110784|230899|319552	Adra1d|Adrb3|Nr2f2|Chrm3|Drd2|Ednrb|Ntsr1|Tacr1|Tpm1|Apln|Postn|Ncald|Rarres2|Nr3c2|Nppa|Spx	-1.605998	0	6	0	0	-8.403773	3.0194768

	06	73				ocesses			process	06	92	33					49	06									
1	-3.505374	GO:0008217	M1	1	0	GO Biological Processes	19	regulation of blood pressure	19_GO:0032501 multicellular organismal process	-3.505374	2.2643799	4.0521159	20836	221	916	22	2.4017467	0.5058676	11550|11556|11819|12671|13489|13618|18216|21334|21336|22003|30878|50706|52589|69632|71660|74617|98660|109648|110784|230899|243547|319552	Adra1d|Adrb3|Nr2f2|Chrm3|Drd2|Ednrb|Ntsr1|Tac2|Tacr1|Tpm1|Apln|Postn|Ncald|Arhgef12|Rarres2|Scpep1|Atp1a2|Npy|Nr3c2|Nppa|Grip2|Spx	-1.418265	0	6	0	0	-8.403773	3.0194768
1	-3.25989	GO:0090257	M1	1	0	GO Biological Processes	19	regulation of muscle system process	19_GO:0032501 multicellular organismal process	-3.25989	2.0916529	3.8057014	20836	261	916	24	2.6200873	0.5277702	11551|11640|11931|12313|12325|12671|16485|16518|17260|18585|19055|20271|20606|21336|21924|22065|53817|57080|67451|98660|108058|230899|242202|319552	Adra2a|Akap1|Atp1b1|Calm1|Camk2g|Chrm3|Kcna1|Kcnj2|Mef2c|Pde9a|Ppp3ca|Scn5a|Sstr2|Tacr1|Tnnc1|Trpc3|Ddx39b|Gtf2ird1|Pkp2|Atp1a2|Camk2d|Nppa|Pde5a|Spx	-1.253389	0	6	0	0	-8.403773	3.0194768

1	-2.830679	GO:0019229	M1	1	0	GO Biological Processes	19	regulation of vasoconstriction	19_GO:0032501 multicellular organismal process	-2.830679	2.8760227	3.7600961	20836	87	916	11	1.2008734	0.3598963	11550|11551|12671|13488|15465|15560|21336|30878|98660|240672|242202	Adra1d|Adra2a|Chrm3|Drd1|Hrh1|Htr2c|Tacr1|Apln|Atp1a2|Dusp5|Pde5a	-0.959667	0	6	0	0	-8.403773	3.0194768
1	-2.681698	GO:0003018	M1	1	0	GO Biological Processes	19	vascular process in circulatory system	19_GO:0032501 multicellular organismal process	-2.681698	1.9986662	3.3297923	20836	239	916	21	2.2925764	0.4945133	11516|11550|11551|11556|12638|12671|13488|13618|15465|15559|15560|21336|22339|30878|74617|84094|98660|230899|240672|242202|243547	Adcyap1|Adra1d|Adra2a|Adrb3|Cftr|Chrm3|Drd1|Ednrb|Hrh1|Htr2b|Htr2c|Tacr1|Vegfa|Apln|Scpep1|Plvap|Atp1a2|Nppa|Dusp5|Pde5a|Grip2	-0.847315	0	6	0	0	-8.403773	3.0194768
1	-2.1	GO:00	M1	1	0	GO Biol	19	regulation of muscle contraction	19_GO:0032501 multic	-2.1	2.03	2.87	20836	168	916	15	1.63	0.41	11551|11931|12313|12671|16485|16518|20271|20606|21336|21924|67451|98660|230899|242202|319552	Adra2a|Atp1b1|Calm1|Chrm3|Kcna1|Kcnj2|Scn5a|Sstr2|Tacr1|Tnnc1|Pkp2|Atp1a2|Nppa|Pde5a|Spx	-0.520337	0	6	0	0	-8.403773	3.0194768

	33797	06937				ogical Processes			ellular organismal process	33797	09576	70409					75546	93386									
1	-7.568133	GO:0033555	M1	1	0	GO Biological Processes	19	multicellular organismal response to stress	19_GO:0032501 multicellular organismal process	-7.568133	4.3327095	7.33414493	20836	105	916	20	2.1834061	0.4828651	11516|11551|12043|12921|13167|13488|13618|14805|15165|15560|18013|18619|19055|19699|21336|66797|72194|72585|98660|110886	Adcyap1|Adra2a|Bcl2|Crhr1|Dbi|Drd1|Ednrb|Grik1|Hcn1|Htr2c|Neurod2|Penk|Ppp3ca|Reln|Tacr1|Cntnap2|Fbxl20|Lypd1|Atp1a2|Gabra5	-4.378359	0	7	1	1	-7.56813	6.1605713
1	-7.01284	GO:00425	M1	1	0	GO Biological Pr	19	fear response	19_GO:0032501 multicellular organismal	-7.01284	6.16057	7.67559	20836	48	916	13	1.4190214	0.3908116	11516|11551|12043|12921|13167|13488|15560|18013|18619|72194|72585|98660|110886	Adcyap1|Adra2a|Bcl2|Crhr1|Dbi|Drd1|Htr2c|Neurod2|Penk|Fbxl20|Lypd1|Atp1a2|Gabra5	-4.061448	0	7	0	0	-7.56813	6.1605713

		96				ocesses			process		13	18															
1	-6.43832	GO:0002209	M1	1	0	GO Biological Processes	19	behavioral defense response	19_GO:0032501 multicellular organismal process	-6.43832	6.0657933	7.2948414	20836	45	916	12	1.3100437	0.3756917	11516|12043|12426|13167|13488|15560|18013|18619|72194|72585|98660|110886	Adcyap1|Bcl2|Cckbr|Dbi|Drd1|Htr2c|Neurod2|Penk|Fbxl20|Lypd1|Atp1a2|Gabra5	-3.567308	0	7	0	0	-7.56813	6.1605713
1	-5.753914	GO:0001662	M1	1	0	GO Biological Processes	19	behavioral fear response	19_GO:0032501 multicellular organismal process	-5.753914	5.8189296	6.7830662	20836	43	916	11	1.2008734	0.3598963	11516|12043|13167|13488|15560|18013|18619|72194|72585|98660|110886	Adcyap1|Bcl2|Dbi|Drd1|Htr2c|Neurod2|Penk|Fbxl20|Lypd1|Atp1a2|Gabra5	-3.041264	0	7	0	0	-7.56813	6.1605713

1	-2.032931	GO:0035094	M1	1	0	GO Biological Processes	19	response to nicotine	19_GO:0050896 response to stimulus	-2.032931	3.7911208	3.2805358	20836	30	916	5	0.5458515	0.2434451	12043|15560|21336|72585|98660	Bcl2|Htr2c|Tacr1|Lypd1|Atp1a2	-0.46641	0	7	0	0	-7.56813	6.1605713
1	-7.475189	mmu04080	M1	1	0	KEGG Pathway	24	Neuroactive ligand-receptor interaction - Mus musculus (house mouse)		-7.475189	2.501558	6.427421	20836	391	916	43	4.6943231	0.6988728	11516|11550|11551|11556|12426|12669|12671|12854|12921|13488|13489|13618|14401|14403|14805|14813|14814|15465|15559|15560|17202|18155|18216|18610|18619|19216|20605|20606|21334|21336|21834|22044|22045|23919|30878|71897|108069|109648|110886|229214|319229|319552|381677	Adcyap1|Adra1d|Adra2a|Adrb3|Cckbr|Chrm1|Chrm3|Cort|Crhr1|Drd1|Drd2|Ednrb|Gabrb2|Gabrd|Grik1|Grin2c|Grin2d|Hrh1|Htr2b|Htr2c|Mc4r|Pnoc|Ntsr1|Pdyn|Penk|Ptger1|Sstr1|Sstr2|Tac2|Tacr1|Thrb|Trh|Trhr|Insl5|Apln|Lypd6b|Grm3|Npy|Gabra5|Qrfpr|Sctr|Spx|Vgf	-4.352365	0	8	1	1	-7.475189	2.976207
1	-7.1	mmu0	M1	1	0	KEGG Pa	24	Calcium signaling pathway - Mus musculus (house mouse)		-7.1	2.93	6.47	20836	240	916	31	3.38	0.59	11514|11550|11556|12313|12325|12426|12669|12671|13488|13618|13869|14813|14814|15465|15559|15560|	Adcy8|Adra1d|Adrb3|Calm1|Camk2g|Cckbr|Chrm1|Chrm3|Drd1|Ednrb|Erbb4|Grin2c|Grin2d|Hrh1|Htr2b	-4.064944	0	8	0	0	-7.475189	2.976207

	03448	4020				thway			03448	81186	58139					42795	74606	18216|18751|19055|19216|21336|21924|22045|22339|71785|74055|107589|108058|110891|210044|269717	|Htr2c|Ntsr1|Prkcb|Ppp3ca|Ptger1|Tacr1|Tnnc1|Trhr|Vegfa|Pdgfd|Plce1|Mylk|Camk2d|Slc8a2|Adcy2|Orai2							
1	-6.084236	R-MMU-500792	M1	1	0	Reactome Gene Sets	6	GPCR ligand binding	-6.084236	2.3093122	5.626385	20836	394	916	40	4.3668122	0.67521	11516|11551|11556|12426|12669|12671|12854|12921|13488|13489|13618|13733|14696|14706|15465|15559|15560|15945|17202|18155|18216|18619|19216|20301|20605|20606|21334|21336|22044|22045|23919|30878|56838|59289|108069|109648|229214|238377|319229|574402	Adcyap1|Adra2a|Adrb3|Cckbr|Chrm1|Chrm3|Cort|Crhr1|Drd1|Drd2|Ednrb|Adgre1|Gnb4|Gng4|Hrh1|Htr2b|Htr2c|Cxcl10|Mc4r|Pnoc|Ntsr1|Penk|Ptger1|Ccl27a|Sstr1|Sstr2|Tac2|Tacr1|Trh|Trhr|Insl5|Apln|Ccl28|Ackr2|Grm3|Npy|Qrfpr|Gpr68|Sctr|Gpr17	-3.333798	0	8	0	0	-7.475189	2.976207
1	-5.663689	R-MMU-373	M1	1	0	Reactome Gene Sets	6	Class A/1 (Rhodopsin-like receptors)	-5.663689	2.4450877	5.4698991	20836	307	916	33	3.6026201	0.6157354	11551|11556|12426|12669|12671|12854|13488|13489|13618|15465|15559|15560|15945|17202|18155|18216|18619|19216|20301|20605|20606|21334|21336|22044|22045|23919|30878|56838|59289|109648|229214|238377|574402	Adra2a|Adrb3|Cckbr|Chrm1|Chrm3|Cort|Drd1|Drd2|Ednrb|Hrh1|Htr2b|Htr2c|Cxcl10|Mc4r|Pnoc|Ntsr1|Penk|Ptger1|Ccl27a|Sstr1|Sstr2|Tac2|Tacr1|Trh|Trhr|Insl5|Apln|Ccl28|Ackr2|Npy|Qrfpr|Gpr68|Gpr17	-2.985802	0	8	0	0	-7.475189	2.976207

		076																								
1	-5.230659	R-MMU-3727790	M1	1	0	Reactome Gene Sets	6	Signaling by GPCR	-5.230659	1.9302545	4.9623483	20836	601	916	51	5.5676856	0.7576174	11514|11516|11551|11556|12313|12426|12669|12671|12854|12921|13488|13489|13618|13733|14696|14706|15465|15559|15560|15945|17202|18155|18216|18619|18706|19216|20301|20605|20606|21334|21336|22044|22045|22065|23919|30878|30955|50779|56077|56838|59289|108069|109648|109904|229214|236915|238377|269060|269608|319229|574402	Adcy8|Adcyap1|Adra2a|Adrb3|Calm1|Cckbr|Chrm1|Chrm3|Cort|Crhr1|Drd1|Drd2|Ednrb|Adgre1|Gnb4|Gng4|Hrh1|Htr2b|Htr2c|Cxcl10|Mc4r|Pnoc|Ntsr1|Penk|Pik3ca|Ptger1|Ccl27a|Sstr1|Sstr2|Tac2|Tacr1|Trh|Trhr|Trpc3|Insl5|Apln|Pik3cg|Rgs6|Dgke|Ccl28|Ackr2|Grm3|Npy|Mcf2|Qrfpr|Arhgef9|Gpr68|Dagla|Plekhg5|Sctr|Gpr17	-2.655801	0	8	0	0	-7.475189	2.976207
1	-5.109941	WP1396	M1	1	0	WikiPathways	27	GPCRs, non-odorant	-5.1609941	2.4613993	5.1634514	20836	268	916	29	3.1659389	0.578519	11550|11551|11556|12426|12669|12671|12921|13488|13489|13618|13733|15465|15559|15560|17202|18216|19216|20605|20606|21336|22045|59289|108069|140741|170757|229214|238377|319229|574402	Adra1d|Adra2a|Adrb3|Cckbr|Chrm1|Chrm3|Crhr1|Drd1|Drd2|Ednrb|Adgre1|Hrh1|Htr2b|Htr2c|Mc4r|Ntsr1|Ptger1|Sstr1|Sstr2|Tacr1|Trhr|Ackr2|Grm3|Gpr6|Adgrl4|Qrfpr|Gpr68|Sctr|Gpr17	-2.573382	0	8	0	0	-7.475189	2.976207

1	-4.930507	R-MMU-388396	M1	1	0	Reactome Gene Sets	6	GPCR downstream signalling	-4.930507	1.9256487	4.7920503	20836	567	916	48	5.2401747	0.7362703	11514|11516|11551|11556|12313|12426|12669|12671|12854|12921|13488|13618|14696|14706|15465|15559|15560|15945|17202|18155|18216|18619|18706|19216|20301|20605|20606|21334|21336|22044|22045|22065|23919|30878|30955|50779|56077|56838|108069|109648|109904|229214|236915|238377|269060|269608|319229|574402	Adcy8|Adcyap1|Adra2a|Adrb3|Calm1|Cckbr|Chrm1|Chrm3|Cort|Crhr1|Drd1|Ednrb|Gnb4|Gng4|Hrh1|Htr2b|Htr2c|Cxcl10|Mc4r|Pnoc|Ntsr1|Penk|Pik3ca|Ptger1|Ccl27a|Sstr1|Sstr2|Tac2|Tacr1|Trh|Trhr|Trpc3|Insl5|Apln|Pik3cg|Rgs6|Dgke|Ccl28|Grm3|Npy|Mcf2|Qrfpr|Arhgef9|Gpr68|Dagla|Plekhg5|Sctr|Gpr17	-2.433922	0	8	0	0	-7.475189	2.976207
1	-4.136224	R-MMU-375276	M1	1	0	Reactome Gene Sets	6	Peptide ligand-binding receptors	-4.136224	2.5681786	4.6067198	20836	186	916	21	2.2925764	0.4945133	12426|12854|13618|15945|17202|18155|18216|18619|20301|20605|20606|21334|21336|22044|22045|23919|30878|56838|59289|109648|229214	Cckbr|Cort|Ednrb|Cxcl10|Mc4r|Pnoc|Ntsr1|Penk|Ccl27a|Sstr1|Sstr2|Tac2|Tacr1|Trh|Trhr|Insl5|Apln|Ccl28|Ackr2|Npy|Qrfpr	-1.855599	0	8	0	0	-7.475189	2.976207

1	-4.1332	R-MMU-416476	M1	1	0	Reactome Gene Sets	6	G alpha (q) signalling events		-4.1332	2.5021397	4.5773318	20836	200	916	22	2.4017467	0.5058676	12426|12669|12671|13618|14696|14706|15465|15559|15560|18216|18706|19216|21334|21336|22044|22045|22065|56077|229214|238377|269060|574402	Cckbr|Chrm1|Chrm3|Ednrb|Gnb4|Gng4|Hrh1|Htr2b|Htr2c|Ntsr1|Pik3ca|Ptger1|Tac2|Tacr1|Trh|Trhr|Trpc3|Dgke|Qrfpr|Gpr68|Dagla|Gpr17	-1.855599	0	8	0	0	-7.475189	2.976207
1	-3.606548	GO:0007200	M1	1	0	GO Biological Processes	19	phospholipase C-activating G protein-coupled receptor signaling pathway	19_GO:0023052 signaling	-3.606548	2.976207	4.394758	20836	107	916	14	1.5283843	0.4053443	11550|11551|12426|12671|12921|13488|13489|13618|15559|15560|18751|22045|74055|574402	Adra1d|Adra2a|Cckbr|Chrm3|Crhr1|Drd1|Drd2|Ednrb|Htr2b|Htr2c|Prkcb|Trhr|Plce1|Gpr17	-1.483724	0	8	0	0	-7.475189	2.976207
1	-2.	GO:0	M1	1	0	GO Bi	19	positive regulation of cytosolic	19_GO:0065007	-2.	2.1	3.5	20836	214	916	20	2.1	0.4	11514|11516|11550|12043|12426|12921|13488|13489|13618|15560|19216|21336|	Adcy8|Adcyap1|Adra1d|Bcl2|Cckbr|Crhr1|Drd1|Drd2|Ednrb|Htr2c|Ptger1|Tacr1	-1.012193	0	8	0	0	-7.475189	2.976

	899128	007204				ological Processes		calcium ion concentration	biological regulation	899128	258621	499851					834061	828651	22045 | 22065 | 30955 | 56838 | 59091 | 110891 | 140741 | 574402	| Trhr | Trpc3 | Pik3cg | Ccl28 | Jph2 | Slc8a2 | Gpr6 | Gpr17							207
1	-7.00224	R-MMU-112316	M1	1	0	Reactome Gene Sets	6	Neuronal System		-7.00224	2.6137541	6.2580632	20836	322	916	37	4.0393013	0.6505072	11514 | 12313 | 12325 | 14401 | 14696 | 14706 | 14813 | 14814 | 15165 | 15168 | 16485 | 16504 | 16517 | 16518 | 16522 | 18751 | 19266 | 19268 | 27204 | 52589 | 54377 | 56808 | 70530 | 71770 | 108058 | 110886 | 192167 | 210274 | 236915 | 241794 | 242274 | 243547 | 243616 | 245446 | 269587 | 380728 | 382571	Adcy8 | Calm1 | Camk2g | Gabrb2 | Gnb4 | Gng4 | Grin2c | Grin2d | Hcn1 | Hcn3 | Kcna1 | Kcnc3 | Kcnj16 | Kcnj2 | Kcnj6 | Prkcb | Ptprd | Ptprf | Syn3 | Ncald | Cacng4 | Cacna2d2 | Lrfn2 | Ap2b1 | Camk2d | Gabra5 | Nlgn1 | Shank2 | Arhgef9 | Kcng1 | Lrrc7 | Grip2 | Slc6a11 | Slitrk4 | Epb41 | Kcnh4 | Kcnf1	-4.061448	0	9	1	1	-7.00224	4.0619152
1	-5.628	R-MMU-	M1	1	0	Reactome Ge	6	Neurotransmitter receptors and postsynaptic signal transmission		-5.628	3.3206	5.8438	20836	137	916	20	2.1834	0.4828	11514 | 12313 | 12325 | 14401 | 14696 | 14706 | 14813 | 14814 | 16517 | 16518 | 16522 | 18751 | 52589 | 54377 | 71770 | 108058 | 110886 | 236915 | 242274 | 243547	Adcy8 | Calm1 | Camk2g | Gabrb2 | Gnb4 | Gng4 | Grin2c | Grin2d | Kcnj16 | Kcnj2 | Kcnj6 | Prkcb | Ncald | Cacng4 | Ap2b1 | Camk2d | Gabra5 | Arhgef9 | Lrrc7 | Grip2	-2.972189	0	9	0	0	-7.00224	4.0619152

	357	112314				ne Sets			357	898	964					061	651									
1	-4.5988863	R-MMU-112315	M1	1	0	Reactome Gene Sets	6	Transmission across Chemical Synapses	-4.5988863	2.61588734	4.9239018	20836	200	916	23	2.510917	0.5169475	11514|12313|12325|14401|14696|14706|14813|14814|16517|16518|16522|18751|27204|52589|54377|56808|71770|108058|110886|236915|242274|243547|243616	Adcy8|Calm1|Camk2g|Gabrb2|Gnb4|Gng4|Grin2c|Grin2d|Kcnj16|Kcnj2|Kcnj6|Prkcb|Syn3|Ncald|Cacng4|Cacna2d2|Ap2b1|Camk2d|Gabra5|Arhgef9|Lrrc7|Grip2|Slc6a11	-2.187244	0	9	0	0	-7.00224	4.0619152
1	-3.0998	R-MMU-97	M1	1	0	Reactome Gene	6	GABA receptor activation	-3.0999598	3.591586	4.20136	20836	57	916	9	0.982553	0.325898	11514|14401|14696|14706|16517|16518|16522|110886|236915	Adcy8|Gabrb2|Gnb4|Gng4|Kcnj16|Kcnj2|Kcnj6|Gabra5|Arhgef9	-1.146861	0	9	0	0	-7.00224	4.0619152

<table>
<tr><td></td><td>43</td><td>7443</td><td></td><td></td><td></td><td>Sets</td><td></td><td></td><td>43</td><td>81</td><td>98</td><td></td><td></td><td></td><td></td><td>28</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td>-2.248038</td><td>mmu04727</td><td>M1</td><td>1</td><td>0</td><td>KEGG Pathway</td><td>24</td><td>GABAergic synapse - Mus musculus (house mouse)</td><td>-2.248038</td><td>2.5558118</td><td>3.1540911</td><td>20836</td><td>89</td><td>916</td><td>10</td><td>1.0917031</td><td>0.3433372</td><td>11514|14401|14403|14696|14706|16522|18751|110886|210044|243616</td><td>Adcy8|Gabrb2|Gabrd|Gnb4|Gng4|Kcnj6|Prkcb|Gabra5|Adcy2|Slc6a11</td><td>-0.585467</td><td>0</td><td>9</td><td>0</td><td>0</td><td>-7.00224</td><td>4.0619152</td></tr>
<tr><td>1</td><td>-2.180255</td><td>mmu05032</td><td>M1</td><td>1</td><td>0</td><td>KEGG Pathway</td><td>24</td><td>Morphine addiction - Mus musculus (house mouse)</td><td>-2.180255</td><td>2.4996401</td><td>3.0743325</td><td>20836</td><td>91</td><td>916</td><td>10</td><td>1.0917031</td><td>0.3433372</td><td>11514|13488|14401|14403|14696|14706|16522|18751|110886|210044</td><td>Adcy8|Drd1|Gabrb2|Gabrd|Gnb4|Gng4|Kcnj6|Prkcb|Gabra5|Adcy2</td><td>-0.542747</td><td>0</td><td>9</td><td>0</td><td>0</td><td>-7.00224</td><td>4.0619152</td></tr>
<tr><td>1</td><td>-2.1</td><td>R-MM</td><td>M1</td><td>1</td><td>0</td><td>Reactom</td><td>6</td><td>Activation of G protein gated Potassium channels</td><td>-2.1</td><td>4.06</td><td>3.47</td><td>20836</td><td>28</td><td>916</td><td>5</td><td>0.54</td><td>0.24</td><td>14696|14706|16517|16518|16522</td><td>Gnb4|Gng4|Kcnj16|Kcnj2|Kcnj6</td><td>-0.540615</td><td>0</td><td>9</td><td>0</td><td>0</td><td>-7.00224</td><td>4.0619152</td></tr>
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	62931	U-1296041				e Gene Sets			62931	19152	66168					58515	34451									
1	-2.1662931	R-MMU-1296059	M1	1	0	Reactome Gene Sets	6	G protein gated Potassium channels	-2.1662931	4.0619152	3.4766168	20836	28	916	5	0.54585151	0.24344551	14696|14706|16517|16518|16522	Gnb4|Gng4|Kcnj16|Kcnj2|Kcnj6	-0.540615	0	9	0	0	-7.00224	4.0619152
1	-2.1	R-MM	M1	1	0	Reactom	6	Inhibition of voltage gated Ca2+ channels via Gbeta/gamma subunits	-2.1	4.06	3.47	20836	28	916	5	0.54	0.24	14696|14706|16517|16518|16522	Gnb4|Gng4|Kcnj16|Kcnj2|Kcnj6	-0.540615	0	9	0	0	-7.00224	4.0619152

	62931	U-997272				e Gene Sets			62931	19152	66168					58515	34451									
1	-2.067162	R-MMU-977444	M1	1	0	Reactome Gene Sets	6	GABA B receptor activation	-2.067162	3.328789	3.2006813	20836	41	916	6	0.6550218	0.2665343	11514|14696|14706|16517|16518|16522	Adcy8|Gnb4|Gng4|Kcnj16|Kcnj2|Kcnj6	-0.492815	0	9	0	0	-7.00224	4.0619152
1	-2.067	R-MMU-	M1	1	0	Reactome Ge	6	Activation of GABAB receptors	-2.067	3.3287	3.2006	20836	41	916	6	0.6550	0.2665	11514|14696|14706|16517|16518|16522	Adcy8|Gnb4|Gng4|Kcnj16|Kcnj2|Kcnj6	-0.492815	0	9	0	0	-7.00224	4.0619152

	162	991365				neSets				162	89	813					218	343									
1	-6.9477715	GO:0007420	M1	1	0	GO Biological Processes	19	brain development	19_GO:0032502 developmental process	-6.9477715	2.0233816	5.8929783	20836	697	916	62	6.768559	0.8300066	11819|11922|12043|12140|12404|13167|13367|13395|13488|13489|13640|13841|13869|14466|14828|15208|15572|16392|16485|16568|18013|18032|18080|18111|18205|18516|18846|18991|19014|19699|20346|20359|20361|22026|22062|30841|30928|56747|66797|68169|73750|74653|75050|78801|93761|98660|104001|110082|170758|171167|211323|211612|214968|239857|241062|242620|252838|268902|269116|319229|320191|545428	Nr2f2|Neurod6|Bcl2|Fabp7|Cbln1|Dbi|Diaph1|Dlx5|Drd1|Drd2|Efna5|Epha7|Erbb4|Gba|Hspa5|Hes5|Elavl4|Isl1|Kcna1|Kif3a|Neurod2|Nfix|Nin|Nnat|Ntf3|Pbx3|Plxna3|Pou3f1|Med1|Reln|Sema3a|Sema6b|Sema7a|Nr2c2|Trp73|Kdm2b|Zbtb18|Sez6l|Cntnap2|Ndnf|Whrn|Pomk|Kif27|Ak7|Smarca1|Atp1a2|Rtn1|Dnah5|Rac3|Fut10|Nrg1|Ptchd1|Sema6d|Cadm2|Pgap1|Dmrta2|Tox|Robo2|Nfasc|Sctr|Hook3|Ccdc141	-4.040491	0	10	1	1	-6.947715	2.8181783
1	-5.	GO:0	M1	1	0	GO Bi	19	head development	19_GO:0032502	-5.	1.8	5.1	20836	758	916	62	6.7	0.8	11819|11922|12043|12140|12404|13167|13367|13395|13488|13489|13640|13841|	Nr2f2|Neurod6|Bcl2|Fabp7|Cbln1|Dbi|Diaph1|Dlx5|Drd1|Drd2|Efna5|Epha7|E	-3.002594	0	10	0	0	-6.947715	2.818

	703344	060322				ological Processes			developmental process	703344	605501	754765					68559	300066	13869|14466|14828|15208|15572|16392|16485|16568|18013|18032|18080|18111|18205|18516|18846|18991|19014|19699|20346|20359|20361|22026|22062|30841|30928|56747|66797|68169|73750|74653|75050|78801|93761|98660|104001|110082|170758|171167|211323|211612|214968|239857|241062|242620|252838|268902|269116|319229|320191|545428	rbb4|Gba|Hspa5|Hes5|Elavl4|Isl1|Kcna1|Kif3a|Neurod2|Nfix|Nin|Nnat|Ntf3|Pbx3|Plxna3|Pou3f1|Med1|Reln|Sema3a|Sema6b|Sema7a|Nr2c2|Trp73|Kdm2b|Zbtb18|Sez6l|Cntnap2|Ndnf|Whrn|Pomk|Kif27|Ak7|Smarca1|Atp1a2|Rtn1|Dnah5|Rac3|Fut10|Nrg1|Ptchd1|Sema6d|Cadm2|Pgap1|Dmrta2|Tox|Robo2|Nfasc|Sctr|Hook3|Ccdc141							1783
1	-4.788588	GO:0030900	M1	1	0	GO Biological Processes	19	forebrain development	19_GO:0032502 developmental process	-4.788588	2.0878636	4.7943012	20836	414	916	38	4.1484716	0.6588641	11819|11922|12140|13167|13395|13488|13489|13869|15208|15572|16392|16485|16568|18032|18080|18846|18991|19699|20346|20359|20361|22062|30841|30928|66797|68169|98660|110082|170758|171167|211323|211612|241062|242620|252838|268902|320191|545428	Nr2f2|Neurod6|Fabp7|Dbi|Dlx5|Drd1|Drd2|Erbb4|Hes5|Elavl4|Isl1|Kcna1|Kif3a|Nfix|Nin|Plxna3|Pou3f1|Reln|Sema3a|Sema6b|Sema7a|Trp73|Kdm2b|Zbtb18|Cntnap2|Ndnf|Atp1a2|Dnah5|Rac3|Fut10|Nrg1|Ptchd1|Pgap1|Dmrta2|Tox|Robo2|Hook3|Ccdc141	-2.325815	0	10	0	0	-6.947715	2.8181783

1	-3.695759	GO:0021537	M1	1	0	GO Biological Processes	19	telencephalon development	19_GO:0032502 developmental process	-3.695759	2.1584483	4.1392256	20836	274	916	26	2.8384279	0.5487044	11922|13167|13395|13488|13489|13869|15208|16485|16568|18032|18080|18846|19699|20346|20359|20361|22062|30841|30928|98660|110082|171167|211323|242620|268902|545428	Neurod6|Dbi|Dlx5|Drd1|Drd2|Erbb4|Hes5|Kcna1|Kif3a|Nfix|Nin|Plxna3|Reln|Sema3a|Sema6b|Sema7a|Trp73|Kdm2b|Zbtb18|Atp1a2|Dnah5|Fut10|Nrg1|Dmrta2|Robo2|Ccdc141	-1.557141	0	10	0	0	-6.947715	2.8181783
1	-3.358935	GO:0021761	M1	1	0	GO Biological Processes	19	limbic system development	19_GO:0032502 developmental process	-3.358935	2.8181783	4.155748	20836	113	916	14	1.5283843	0.4053443	11922|13488|16485|16568|18032|18846|19699|20346|20359|22062|30928|66797|68169|98660	Neurod6|Drd1|Kcna1|Kif3a|Nfix|Plxna3|Reln|Sema3a|Sema6b|Trp73|Zbtb18|Cntnap2|Ndnf|Atp1a2	-1.315292	0	10	0	0	-6.947715	2.8181783
1	-2.5	GO:00	M1	1	0	GO Biol	19	hippocampus development	19_GO:0032502 develo	-2.5	2.77	3.45	20836	82	916	10	1.09	0.34	11922|13488|16485|16568|18032|18846|19699|20359|22062|30928	Neurod6|Drd1|Kcna1|Kif3a|Nfix|Plxna3|Reln|Sema6b|Trp73|Zbtb18	-0.741407	0	10	0	0	-6.947715	2.8181783

	05038	21766				ogical Processes		pmental process	05038	39908	14947					17031	33372									
1	-6.894097	mmu04971	M1	1	0	KEGG Pathway	24	Gastric acid secretion - Mus musculus (house mouse)	-6.894097	4.8526346	7.1674413	20836	75	916	16	1.7467249	0.4328506	11514 | 11931 | 12313 | 12325 | 12426 | 12638 | 12671 | 16517 | 16518 | 18751 | 20606 | 98660 | 107589 | 108058 | 110895 | 210044	Adcy8 | Atp1b1 | Calm1 | Camk2g | Cckbr | Cftr | Chrm3 | Kcnj16 | Kcnj2 | Prkcb | Sstr2 | Atp1a2 | Mylk | Camk2d | Slc9a4 | Adcy2	-4.005356	0	11	1	1	-6.894097	4.8526346
1	-4.603232	mmu04022	M1	1	0	KEGG Pathway	24	cGMP-PKG signaling pathway - Mus musculus (house mouse)	-4.603232	2.7611631	4.9879923	20836	173	916	21	2.2925764	0.4945133	11514 | 11550 | 11551 | 11556 | 11931 | 12313 | 13618 | 16337 | 17260 | 17261 | 17931 | 19055 | 19092 | 30955 | 57080 | 98660 | 107589 | 110891 | 210044 | 230899 | 242202	Adcy8 | Adra1d | Adra2a | Adrb3 | Atp1b1 | Calm1 | Ednrb | Insr | Mef2c | Mef2d | Ppp1r12a | Ppp3ca | Prkg2 | Pik3cg | Gtf2ird1 | Atp1a2 | Mylk | Slc8a2 | Adcy2 | Nppa | Pde5a	-2.187244	0	11	0	0	-6.894097	4.8526346

1	-4.019437	mmu04713	M1	1	0	KEGG Pathway	24	Circadian entrainment - Mus musculus (house mouse)	-4.019437	3.2495321	4.7865393	20836	98	916	14	1.5283843	0.4053443	11514|11516|12313|12325|14696|14706|14813|14814|16522|18751|19092|19416|108058|210044	Adcy8|Adcyap1|Calm1|Camk2g|Gnb4|Gng4|Grin2c|Grin2d|Kcnj6|Prkcb|Prkg2|Rasd1|Camk2d|Adcy2	-1.787911	0	11	0	0	-6.894097	4.8526346
1	-3.8579	mmu04921	M1	1	0	KEGG Pathway	24	Oxytocin signaling pathway - Mus musculus (house mouse)	-3.8579	2.6760853	4.4620546	20836	153	916	18	1.9650655	0.458597	11514|12313|12325|16518|16522|17260|17931|18751|19055|30955|54377|56808|81905|107589|108058|108099|210044|230899	Adcy8|Calm1|Camk2g|Kcnj2|Kcnj6|Mef2c|Ppp1r12a|Prkcb|Ppp3ca|Pik3cg|Cacng4|Cacna2d2|Cacng8|Mylk|Camk2d|Prkag2|Adcy2|Nppa	-1.678852	0	11	0	0	-6.894097	4.8526346
1	-3.3988	mmu04725	M1	1	0	KEGG Pathway	24	Cholinergic synapse - Mus musculus (house mouse)	-3.3988	2.84334	4.19447	20836	112	916	14	1.52838	0.40534	11514|12043|12325|12669|12671|14696|14706|16518|16522|18706|18751|30955|108058|210044	Adcy8|Bcl2|Camk2g|Chrm1|Chrm3|Gnb4|Gng4|Kcnj2|Kcnj6|Pik3ca|Prkcb|Pik3cg|Camk2d|Adcy2	-1.347339	0	11	0	0	-6.894097	4.8526346

	08								08	06	52					43	43									
1	-2.3909941	mmu04970	M1	1	0	KEGG Pathway	24	Salivary secretion - Mus musculus (house mouse)	-2.3909941	2.6760853	3.3203654	20836	85	916	10	1.0917031	0.3433372	11514 | 11550 | 11556 | 11931 | 12313 | 12671 | 18751 | 19092 | 98660 | 210044	Adcy8 | Adra1d | Adrb3 | Atp1b1 | Calm1 | Chrm3 | Prkcb | Prkg2 | Atp1a2 | Adcy2	-0.657283	0	11	0	0	-6.894097	4.8526346
1	-2.3459967	WP553	M1	1	0	WikiPathways	27	Calcium regulation in cardiac cells	-2.3459967	2.2114871	3.1282298	20836	144	916	14	1.5283843	0.4053443	11514 | 11550 | 11556 | 11931 | 12317 | 12325 | 12669 | 12671 | 14696 | 14706 | 18751 | 50779 | 108058 | 210044	Adcy8 | Adra1d | Adrb3 | Atp1b1 | Calr | Camk2g | Chrm1 | Chrm3 | Gnb4 | Gng4 | Prkcb | Rgs6 | Camk2d | Adcy2	-0.645217	0	11	0	0	-6.894097	4.8526346
1	-2.284	mmu049	M1	1	0	KEGG Path	24	Aldosterone synthesis and secretion - Mus musculus (house mouse)	-2.284	2.4530	3.1546	20836	102	916	11	1.2008	0.3598	11514 | 11931 | 12313 | 12325 | 18751 | 75292 | 98660 | 108058 | 210044 | 230899 | 269060	Adcy8 | Atp1b1 | Calm1 | Camk2g | Prkcb | Prkd3 | Atp1a2 | Camk2d | Adcy2 | Nppa | Dagla	-0.60673	0	11	0	0	-6.894097	4.8526346

	617	25				way				617	782	221					734	963									
1	-6.246693	GO:0007626	M1	1	0	GO Biological Processes	19	locomotory behavior	19_GO:0032501 multicellular organismal process	-6.246693	2.6914064	5.9079807	20836	262	916	31	3.3842795	0.5974606	11514|12921|13488|13489|13860|14167|14169|14814|15560|15572|17978|18216|18516|18619|19699|20265|21349|22044|27386|29813|56747|64378|66797|75141|98660|104156|210274|211323|229599|243914|244723	Adcy8|Crhr1|Drd1|Drd2|Eps8|Fgf12|Fgf14|Grin2d|Htr2c|Elavl4|Ncoa2|Ntsr1|Pbx3|Penk|Reln|Scn1a|Tal1|Trh|Npas3|Zfp385a|Sez6l|Gpr88|Cntnap2|Rasd2|Atp1a2|Etv5|Shank2|Nrg1|Ciart|Lgi4|Olfm2	-3.435312	0	12	1	1	-6.246693	2.8433406
1	-3.556013	GO:0030534	M1	1	0	GO Biological Processes	19	adult behavior	19_GO:0032501 multicellular organismal process	-3.556013	2.3943921	4.1404121	20836	190	916	20	2.1834061	0.4828651	12921|13488|13489|13860|14167|14169|14805|14814|15560|18216|18516|20265|22044|56747|66797|98660|109648|210274|219228|243914	Crhr1|Drd1|Drd2|Eps8|Fgf12|Fgf14|Grik1|Grin2d|Htr2c|Ntsr1|Pbx3|Scn1a|Trh|Sez6l|Cntnap2|Atp1a2|Npy|Shank2|Pcdh17|Lgi4	-1.451414	0	12	0	0	-6.246693	2.8433406

1	-3.398808	GO:0008344	M1	1	0	GO Biological Processes	19	adult locomotory behavior	19_GO:0032501 multicellular organismal process	-3.398808	2.8433406	4.1944752	20836	112	916	14	1.5283843	0.4053443	13488|13489|13860|14167|14169|14814|18216|18516|20265|22044|56747|98660|210274|243914	Drd1|Drd2|Eps8|Fgf12|Fgf14|Grin2d|Ntsr1|Pbx3|Scn1a|Trh|Sez6l|Atp1a2|Shank2|Lgi4	-1.347339	0	12	0	0	-6.246693	2.8433406
1	-6.164264	WP570	M1	1	0	WikiPathways	27	Monoamine GPCRs		-6.164264	7.1083515	7.4152434	20836	32	916	10	1.0917031	0.3433372	11550|11551|11556|12669|12671|13488|13489|15465|15559|15560	Adra1d|Adra2a|Adrb3|Chrm1|Chrm3|Drd1|Drd2|Hrh1|Htr2b|Htr2c	-3.392499	0	13	1	1	-6.164264	7.1083515
1	-4.148	R-MMU-	M1	1	0	Reactome Ge	6	Amine ligand-binding receptors		-4.148	4.8742	5.3895	20836	42	916	9	0.9825	0.3258	11551|11556|12669|12671|13488|13489|15465|15559|15560	Adra2a|Adrb3|Chrm1|Chrm3|Drd1|Drd2|Hrh1|Htr2b|Htr2c	-1.857499	0	13	0	0	-6.164264	7.1083515

	728	375280				neSets				728	982	002					328	98									
1	-2.478479	GO:0007187	M1	1	0	GO Biological Processes	19	G protein-coupled receptor signaling pathway, coupled to cyclic nucleotide second messenger	19_GO:0023052 signaling	-2.478479	4.0141279	3.7717979	20836	34	916	6	0.6550218	0.2665343	12669|12671|13488|15465|15559|15560	Chrm1|Chrm3|Drd1|Hrh1|Htr2b|Htr2c	-0.720072	0	13	0	0	-6.164264	7.1083515
1	-2.35426	mmu04540	M1	1	0	KEGG Pathway	24	Gap junction - Mus musculus (house mouse)		-2.35426	2.644968	3.2779132	20836	86	916	10	1.0917031	0.3433372	11514|13488|13489|15559|15560|18751|19092|22143|71785|210044	Adcy8|Drd1|Drd2|Htr2b|Htr2c|Prkcb|Prkg2|Tuba1b|Pdgfd|Adcy2	-0.645217	0	13	0	0	-6.164264	7.1083515

1	-6.156301	GO:0090066	M1	1	0	GO Biological Processes	19	regulation of anatomical structure size	19_GO:0065007 biological regulation	-6.1566301	2.0606789	5.5258431	20836	574	916	52	5.6768559	0.7645666	11516|11550|11551|11556|12561|12638|12671|13488|13618|13640|13841|13860|14158|15465|15559|15560|17755|18706|18846|19092|19240|20346|20348|20359|20361|20499|21336|22003|22062|22339|22376|26456|30878|50875|50884|66616|71653|74617|98660|170643|214968|217835|223864|225288|230796|230899|240672|242202|243547|319229|320027|667663	Adcyap1|Adra1d|Adra2a|Adrb3|Cdh4|Cftr|Chrm3|Drd1|Ednrb|Efna5|Epha7|Eps8|Fer|Hrh1|Htr2b|Htr2c|Map1b|Pik3ca|Plxna3|Prkg2|Tmsb10|Sema3a|Sema3c|Sema6b|Sema7a|Slc12a7|Tacr1|Tpm1|Trp73|Vegfa|Was|Sema4g|Apln|Tmod3|Nckap1|Snx9|Shtn1|Scpep1|Atp1a2|Kirrel|Sema6d|Rin3|Rapgef3|Fhod3|Wdtc1|Nppa|Dusp5|Pde5a|Grip2|Sctr|Fstl4|Myo3a	-3.392499	0	14	1	1	-6.156301	5.897299
1	-4.206541	GO:0001755	M1	1	0	GO Biological Processes	19	neural crest cell migration	19_GO:0032502 developmental process	-4.206541	4.1018684	5.202566	20836	61	916	11	1.2008734	0.3598963	13618|13869|15559|16392|20346|20348|20359|20361|26456|214968|231858	Ednrb|Erbb4|Htr2b|Isl1|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d|Radil	-1.906071	0	14	0	0	-6.156301	5.897299

1	-4.152105	GO:0048841	M1	1	0	GO Biological Processes	19	regulation of axon extension involved in axon guidance	19_GO:0040007 growth	-4.152105	5.5143575	5.5653151	20836	33	916	8	0.8733624	0.3074289	18846|20346|20348|20359|20361|22339|26456|214968	Plxna3|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Sema6d	-1.857499	0	14	0	0	-6.156301	5.897299
1	-4.073162	GO:0090497	M1	1	0	GO Biological Processes	19	mesenchymal cell migration	19_GO:0009987 cellular process	-4.073162	3.9716504	5.0654519	20836	63	916	11	1.2008734	0.3598963	13618|13869|15559|16392|20346|20348|20359|20361|26456|214968|231858	Ednrb|Erbb4|Htr2b|Isl1|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d|Radil	-1.828964	0	14	0	0	-6.156301	5.897299
1	-4.0	GO:00	M1	1	0	GO Biol	19	semaphorin-plexin signaling pathway	19_GO:0023052	-4.0	4.76	5.29	20836	43	916	9	0.98	0.32	17260|18846|20346|20348|20359|20361|26456|67784|214968	Mef2c|Plxna3|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Plxnd1|Sema6d	-1.828333	0	14	0	0	-6.156301	5.897299

	63861	71526	ogical Processes						signaling	63861	09424	38564					253288	5898									
1	-3.89571	GO:0048843	GO Biological Processes	M1	1	0	19	negative regulation of axon extension involved in axon guidance	19_GO:0040007 growth	-3.89571	5.897299	5.4602525	20836	27	916	7	0.76419211	0.28773317	18846 | 20346 | 20348 | 20359 | 20361 | 26456 | 214968	Plxna3 | Sema3a | Sema3c | Sema6b | Sema7a | Sema4g | Sema6d	-1.70745	0	14	0	0	-6.156301	5.897299
1	-3.8071	GO:0001667	GO Biological Pr	M1	1	0	19	ameboidal-type cell migration	19_GO:0009987 cellular process	-3.8071	2.32522	4.28577	20836	25	916	23	2.510917	0.51694	12822 | 13590 | 13618 | 13869 | 15559 | 16392 | 18854 | 20346 | 20348 | 20359 | 20361 | 20997 | 22339 | 26456 | 50884 | 67784 | 76905 | 214968 | 231858 | 241639 | 245827 | 269608 | 320924	Col18a1 | Lefty1 | Ednrb | Erbb4 | Htr2b | Isl1 | Pml | Sema3a | Sema3c | Sema6b | Sema7a | T | Vegfa | Sema4g | Nckap1 | Plxnd1 | Lrg1 | Sema6d | Radil | Fermt1 | Fat2 | Plekhg5 | Ccbe1	-1.638534	0	14	0	0	-6.156301	5.897299

	16	67				ocesses				16	08	91						75									
1	-3.374774	GO:0050919	M1	1	0	GO Biological Processes	19	negative chemotaxis	19_GO:0040011 locomotion	-3.374774	4.3327095	4.6361012	20836	42	916	8	0.8733624	0.3074289	18846|20346|20348|20359|20361|26456|211323|214968	Plxna3|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Nrg1|Sema6d	-1.328538	0	14	0	0	-6.156301	5.897299
1	-3.301382	GO:0032535	M1	1	0	GO Biological Processes	19	regulation of cellular component size	19_GO:0065007 biological regulation	-3.301382	1.8580246	3.7345199	20836	404	916	33	3.6026201	0.6157354	12561|13640|13841|13860|14158|17755|18706|18846|19092|19240|20346|20348|20359|20361|20499|22003|22062|22339|22376|26456|50875|50884|66616|71653|170643|214968|217835|223864|225288|230796|319229|320027|667663	Cdh4|Efna5|Epha7|Eps8|Fer|Map1b|Pik3ca|Plxna3|Prkg2|Tmsb10|Sema3a|Sema3c|Sema6b|Sema7a|Slc12a7|Tpm1|Trp73|Vegfa|Was|Sema4g|Tmod3|Nckap1|Snx9|Shtn1|Kirrel|Sema6d|Rin3|Rapgef3|Fhod3|Wdtc1|Sctr|Fstl4|Myo3a	-1.285283	0	14	0	0	-6.156301	5.897299

1	-3.21659	GO:0050770	M1	1	0	GO Biological Processes	19	regulation of axonogenesis	19_GO:0032502 developmental process	-3.211659	2.3111646	3.8621427	20836	187	916	19	2.0742358	0.4709012	12561 | 13640 | 13841 | 16554 | 17755 | 18080 | 18846 | 20346 | 20348 | 20359 | 20361 | 22339 | 26456 | 67784 | 71653 | 214968 | 246048 | 268902 | 320027	Cdh4 | Efna5 | Epha7 | Kif13b | Map1b | Nin | Plxna3 | Sema3a | Sema3c | Sema6b | Sema7a | Vegfa | Sema4g | Plxnd1 | Shtn1 | Sema6d | Chodl | Robo2 | Fstl4	-1.224099	0	14	0	0	-6.156301	5.897299
1	-3.155997	GO:0040013	M1	1	0	GO Biological Processes	19	negative regulation of locomotion	19_GO:0040011 locomotion	-3.155997	1.8850877	3.6428313	20836	362	916	30	3.2751092	0.5880771	11819 | 12043 | 12317 | 13134 | 13179 | 13488 | 13489 | 14114 | 15560 | 17260 | 18846 | 19281 | 20346 | 20348 | 20359 | 20361 | 22003 | 22376 | 26456 | 56838 | 67451 | 77574 | 105844 | 211323 | 214968 | 217835 | 238328 | 268902 | 269003 | 320271	Nr2f2 | Bcl2 | Calr | Dach1 | Dcn | Drd1 | Drd2 | Fbln1 | Htr2c | Mef2c | Plxna3 | Ptprt | Sema3a | Sema3c | Sema6b | Sema7a | Tpm1 | Was | Sema4g | Ccl28 | Pkp2 | Tcaf1 | Card10 | Nrg1 | Sema6d | Rin3 | Vash1 | Robo2 | Sap130 | Scai	-1.179301	0	14	0	0	-6.156301	5.897299
1	-2.9	GO:00	M1	1	0	GO Biol	19	regulation of developmental growth	19_GO:0040007	-2.9	1.79	3.47	20836	405	916	32	3.49	0.60	11556 | 12043 | 12561 | 12576 | 13489 | 13640 | 13841 | 13869 | 14732 | 15183 | 16337 | 17260 | 17755 | 18706 | 18846 | 19662 |	Adrb3 | Bcl2 | Cdh4 | Cdkn1b | Drd2 | Efna5 | Epha7 | Erbb4 | Gpam | Hdac3 | Insr | Mef2c | Map1b | Pik3ca | Plxna3 | Rbp4	-1.057474	0	14	0	0	-6.156301	5.897299

	78122	48638				ogical Processes			growth	78122	72721	44741					34498	66775	20346|20348|20359|20361|22062|22339|22601|26456|53817|56808|67603|71653|107585|211323|214968|320027	|Sema3a|Sema3c|Sema6b|Sema7a|Trp73|Vegfa|Yap1|Sema4g|Ddx39b|Cacna2d2|Dusp6|Shtn1|Dio3|Nrg1|Sema6d|Fstl4							
1	-2.9538867	GO:0048864	M1	1	0	GO Biological Processes	19	stem cell development	19_GO:0032502 developmental process	-2.953867	2.8140278	3.8400398	20836	97	916	12	1.3100437	0.3756917	12043|13618|13869|15559|16392|20346|20348|20359|20361|26456|214968|231858	Bcl2|Ednrb|Erbb4|Htr2b|Isl1|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d|Radil	-1.042849	0	14	0	0	-6.156301	5.897299
1	-2.9351	GO:0050919	M1	1	0	GO Biological Pr	19	negative regulation of chemotaxis	19_GO:0040011 locomotion	-2.9351	3.41200	4.01211	20836	60	916	9	0.98253	0.325898	18846|20346|20348|20359|20361|26456|214968|217835|268902	Plxna3|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d|Rin3|Robo2	-1.031636	0	14	0	0	-6.156301	5.897299

	01	22				ocesses				01	87	48					28										
1	-2.837518	GO:0014033	M1	1	0	GO Biological Processes	19	neural crest cell differentiation	19_GO:0032502 developmental process	-2.837518	2.729607	3.7177892	20836	100	916	12	1.3100437	0.3756917	13618|13869|15559|16392|17260|20346|20348|20359|20361|26456|214968|231858	Ednrb|Erbb4|Htr2b|Isl1|Mef2c|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d|Radil	-0.961263	0	14	0	0	-6.156301	5.897299
1	-2.830679	GO:0014032	M1	1	0	GO Biological Processes	19	neural crest cell development	19_GO:0032502 developmental process	-2.830679	2.8760227	3.7600961	20836	87	916	11	1.2008734	0.3598963	13618|13869|15559|16392|20346|20348|20359|20361|26456|214968|231858	Ednrb|Erbb4|Htr2b|Isl1|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d|Radil	-0.959667	0	14	0	0	-6.156301	5.897299

1	-2.801972	GO:0008361	M1	1	0	GO Biological Processes	19	regulation of cell size	19_GO:0065007 biological regulation	-2.801972	2.0868555	3.4592074	20836	218	916	20	2.1834061	0.4828651	12561|13640|13841|17755|18846|19092|20346|20348|20359|20361|20499|22062|22339|26456|71653|214968|223864|230796|319229|320027	Cdh4|Efna5|Epha7|Map1b|Plxna3|Prkg2|Sema3a|Sema3c|Sema6b|Sema7a|Slc12a7|Trp73|Vegfa|Sema4g|Shtn1|Sema6d|Rapgef3|Wdtc1|Sctr|Fstl4	-0.936141	0	14	0	0	-6.156301	5.897299
1	-2.787304	GO:0061387	M1	1	0	GO Biological Processes	19	regulation of extent of cell growth	19_GO:0040007 growth	-2.787304	2.4686368	3.587984	20836	129	916	14	1.5283843	0.4053443	12561|13640|13841|17755|18846|20346|20348|20359|20361|22339|26456|71653|214968|320027	Cdh4|Efna5|Epha7|Map1b|Plxna3|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Shtn1|Sema6d|Fstl4	-0.924892	0	14	0	0	-6.156301	5.897299
1	-2.4	GO:00	M1	1	0	GO Biol	19	negative regulation of axonogenesis	19_GO:0048519 negati	-2.4	2.92	3.45	20836	70	916	9	0.98	0.32	13841|18846|20346|20348|20359|20361|26456|214968|320027	Epha7|Plxna3|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d|Fstl4	-0.709209	0	14	0	0	-6.156301	5.897299

<table>
<tr><td></td><td>60966</td><td>50771</td><td></td><td></td><td></td><td>ogical Processes</td><td></td><td></td><td>ve regulation of biological process</td><td>60966</td><td>45789</td><td>86621</td><td></td><td></td><td></td><td></td><td>25328</td><td>5898</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td>-2.376736</td><td>GO:0048863</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Processes</td><td>19</td><td>stem cell differentiation</td><td>19_GO:0032502 developmental process</td><td>-2.376736</td><td>1.955608</td><td>3.0625331</td><td>20836</td><td>221</td><td>916</td><td>19</td><td>2.0742358</td><td>0.4709012</td><td>12043|13618|13869|15559|16392|17260|19014|20346|20348|20359|20361|20997|21349|26456|68479|211323|214968|231858|242620</td><td>Bcl2|Ednrb|Erbb4|Htr2b|Isl1|Mef2c|Med1|Sema3a|Sema3c|Sema6b|Sema7a|T|Tal1|Sema4g|Phf5a|Nrg1|Sema6d|Radil|Dmrta2</td><td>-0.648113</td><td>0</td><td>14</td><td>0</td><td>0</td><td>-6.156301</td><td>5.897299</td></tr>
<tr><td>1</td><td>-2.3474</td><td>GO:00486</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Pr</td><td>19</td><td>negative regulation of developmental growth</td><td>19_GO:0040007 growth</td><td>-2.3474</td><td>2.29230</td><td>3.15719</td><td>20836</td><td>129</td><td>916</td><td>13</td><td>1.419214</td><td>0.390816</td><td>11556|12576|13841|18846|19662|20346|20348|20359|20361|22062|26456|214968|320027</td><td>Adrb3|Cdkn1b|Epha7|Plxna3|Rbp4|Sema3a|Sema3c|Sema6b|Sema7a|Trp73|Sema4g|Sema6d|Fstl4</td><td>-0.645217</td><td>0</td><td>14</td><td>0</td><td>0</td><td>-6.156301</td><td>5.897299</td></tr>
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	13	40				ocesses				13	56	43															
1	-2.325016	GO:0030517	M1	1	0	GO Biological Processes	19	negative regulation of axon extension	19_GO:0040007 growth	-2.325016	3.3172307	3.4465403	20836	48	916	7	0.7641921	0.2877317	18846|20346|20348|20359|20361|26456|214968	Plxna3|Sema3a|Sema3c|Sema6b|Sema7a|Sema4g|Sema6d	-0.633555	0	14	0	0	-6.156301	5.897299
1	-2.26164	GO:0060485	M1	1	0	GO Biological Processes	19	mesenchyme development	19_GO:0032502 developmental process	-2.26164	1.8721584	2.9325034	20836	243	916	20	2.1834061	0.4828651	12043|12192|13618|13869|15559|16392|17260|20346|20348|20359|20361|22601|26456|50884|56198|66515|71461|214968|231858|268902	Bcl2|Zfp36l1|Ednrb|Erbb4|Htr2b|Isl1|Mef2c|Sema3a|Sema3c|Sema6b|Sema7a|Yap1|Sema4g|Nckap1|Heyl|Cul7|Ptk7|Sema6d|Radil|Robo2	-0.591478	0	14	0	0	-6.156301	5.897299

1	-6.036025	GO:0050795	M1	1	0	GO Biological Processes	19	regulation of behavior	19_GO:0032501 multicellular organismal process	-6.036025	3.8265519	6.2857846	20836	107	916	18	1.9650655	0.458597	12426|12854|12921|13488|13489|15559|16337|17202|17260|18619|19699|22026|22044|23919|109648|192167|238384|545192	Cckbr|Cort|Crhr1|Drd1|Drd2|Htr2b|Insr|Mc4r|Mef2c|Penk|Reln|Nr2c2|Trh|Insl5|Npy|Nlgn1|Slc24a4|Baiap3	-3.298551	0	15	1	1	-6.036025	6.8240175
1	-3.44968	GO:0048520	M1	1	0	GO Biological Processes	19	positive regulation of behavior	19_GO:0048518 positive regulation of biological process	-3.44968	4.4383853	4.7257075	20836	41	916	8	0.8733624	0.3074289	12426|13488|17260|18619|22026|23919|109648|192167	Cckbr|Drd1|Mef2c|Penk|Nr2c2|Insl5|Npy|Nlgn1	-1.37881	0	15	0	0	-6.036025	6.8240175
1	-2.0	GO:20	M1	1	0	GO Biol	19	positive regulation of behavioral	19_GO:0048518 positiv	-2.0	6.82	3.95	20836	10	916	3	0.32	0.18	12426|17260|18619	Cckbr|Mef2c|Penk	-0.507933	0	15	0	0	-6.036025	6.8240175

	93839	00987				ogical Processes		fear response	e regulation of biological process	93839	40175	02043					75109	87786									
1	-5.993176	GO:0030001	M1	1	0	GO Biological Processes	19	metal ion transport	19_GO:0051179 localization	-5.993176	2.0037898	5.4094118	20836	613	916	54	5.8951965	0.7782288	11931|12043|12325|12576|12638|13489|13618|14813|14814|15165|15168|15203|15465|15559|15560|16485|16504|16517|16518|16522|18751|19055|20265|20271|20499|21982|22042|22065|27416|54377|56808|68428|70357|74055|74338|76376|80334|81905|98660|108058|110891|110895|223473|227059|227632|230899|238384|240332|241794|243616|269717|329064|380728|382571	Atp1b1|Bcl2|Camk2g|Cdkn1b|Cftr|Drd2|Ednrb|Grin2c|Grin2d|Hcn1|Hcn3|Heph|Hrh1|Htr2b|Htr2c|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Prkcb|Ppp3ca|Scn1a|Scn5a|Slc12a7|Tmem165|Tfrc|Trpc3|Abcc5|Cacng4|Cacna2d2|Steap3|Kcnip1|Plce1|Slc6a19|Slc24a2|Kcnip4|Cacng8|Atp1a2|Camk2d|Slc8a2|Slc9a4|Nipal2|Slc39a10|Kcnt1|Nppa|Slc24a4|Slc6a7|Kcng1|Slc6a11|Orai2|Pkd2l1|Kcnh4|Kcnf1	-3.268292	0	16	1	1	-5.993176	3.4994961
1	-5.2	GO:00	M1	1	0	GO Biol	19	inorganic cation transmembr	19_GO:0051179	-5.2	2.05	5.05	20836	487	916	44	4.870	0.770	11931|11974|12043|12638|13489|13618|14813|14814|15165|15168|15465|15559|15560|16485|16504|16517|	Atp1b1|Atp6v0e|Bcl2|Cftr|Drd2|Ednrb|Grin2c|Grin2d|Hcn1|Hcn3|Hrh1|Htr2b|Htr2c|Kcna1|Kcnc3|Kcnj16	-2.683505	0	16	0	0	-5.993176	3.4994961

	71216	98662				ogical Processes		ane transport	localization	71216	51456	24864					34934	65475	16518|16522|20265|20271|20499|21982|22065|27416|54377|68428|70357|74055|74338|76376|80334|81905|98660|110891|110895|227059|230899|238384|240332|241794|243616|329064|380728|382571	|Kcnj2|Kcnj6|Scn1a|Scn5a|Slc12a7|Tmem165|Trpc3|Abcc5|Cacng4|Steap3|Kcnip1|Plce1|Slc6a19|Slc24a2|Kcnip4|Cacng8|Atp1a2|Slc8a2|Slc9a4|Slc39a10|Nppa|Slc24a4|Slc6a7|Kcng1|Slc6a11|Pkd2l1|Kcnh4|Kcnf1							
1	-5.135965	GO:0098655	M1	1	0	GO Biological Processes	19	monoatomic cation transmembrane transport	19_GO:0051179 localization	-5.135965	2.0301337	4.9637438	20836	493	916	44	4.8034934	0.7065475	11931|11974|12043|12638|13489|13618|14813|14814|15165|15168|15465|15559|15560|16485|16504|16517|16518|16522|20265|20271|20499|21982|22065|27416|54377|68428|70357|74055|74338|76376|80334|81905|98660|110891|110895|227059|230899|238384|240332|241794|243616|329064|380728|382571	Atp1b1|Atp6v0e|Bcl2|Cftr|Drd2|Ednrb|Grin2c|Grin2d|Hcn1|Hcn3|Hrh1|Htr2b|Htr2c|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Scn1a|Scn5a|Slc12a7|Tmem165|Trpc3|Abcc5|Cacng4|Steap3|Kcnip1|Plce1|Slc6a19|Slc24a2|Kcnip4|Cacng8|Atp1a2|Slc8a2|Slc9a4|Slc39a10|Nppa|Slc24a4|Slc6a7|Kcng1|Slc6a11|Pkd2l1|Kcnh4|Kcnf1	-2.591288	0	16	0	0	-5.993176	3.4994961
1	-5.090	GO:098	M1	1	0	GO Biologica	19	inorganic ion transmembrane transport	19_GO:0051179 localization	-5.090	1.9688	4.9055	20836	543	916	47	5.1310	0.728	11931|11974|12043|12638|13489|13618|14401|14813|14814|15165|15168|15465|15559|15560|16485|16504|16517|16518|16522|20265|20271|20499|21982|22065|	Atp1b1|Atp6v0e|Bcl2|Cftr|Drd2|Ednrb|Gabrb2|Grin2c|Grin2d|Hcn1|Hcn3|Hrh1|Htr2b|Htr2c|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Scn1a|Scn5a|Slc12a7|Tmem165|Tr	-2.561996	0	16	0	0	-5.993176	3.4994961

	586	660				l Processes				586	694	967					044	98	27416|54377|68428|70357|74055|74338|76376|80334|81905|98660|110886|110891|110895|227059|230899|238384|240332|241794|243616|243634|329064|380728|382571	pc3|Abcc5|Cacng4|Steap3|Kcnip1|Plce1|Slc6a19|Slc24a2|Kcnip4|Cacng8|Atp1a2|Gabra5|Slc8a2|Slc9a4|Slc39a10|Nppa|Slc24a4|Slc6a7|Kcng1|Slc6a11|Ano2|Pkd2l1|Kcnh4|Kcnf1							
1	-4.978445	GO:0006812	M1	1	0	GO Biological Processes	19	monoatomic cation transport	19_GO:0051179 localization	-4.978445	1.8275704	4.7654315	20836	697	916	56	6.1135371	0.7915895	11931|11974|12043|12325|12576|12638|13489|13618|14813|14814|15165|15168|15203|15465|15559|15560|16485|16504|16517|16518|16522|18751|19055|20265|20271|20499|21982|22042|22065|27416|54377|56808|68428|70357|74055|74338|76376|80334|81905|98660|108058|110891|110895|217733|223473|227059|227632|230899|238384|240332|241794|243616|269717|329064|380728|382571	Atp1b1|Atp6v0e|Bcl2|Camk2g|Cdkn1b|Cftr|Drd2|Ednrb|Grin2c|Grin2d|Hcn1|Hcn3|Heph|Hrh1|Htr2b|Htr2c|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Prkcb|Ppp3ca|Scn1a|Scn5a|Slc12a7|Tmem165|Tfrc|Trpc3|Abcc5|Cacng4|Cacna2d2|Steap3|Kcnip1|Plce1|Slc6a19|Slc24a2|Kcnip4|Cacng8|Atp1a2|Camk2d|Slc8a2|Slc9a4|Tmem63c|Nipal2|Slc39a10|Kcnt1|Nppa|Slc24a4|Slc6a7|Kcng1|Slc6a11|Orai2|Pkd2l1|Kcnh4|Kcnf1	-2.472921	0	16	0	0	-5.993176	3.4994961
1	-4.	GO:0	M1	1	0	GO Bi	19	sodium ion transmembr	19_GO:00511 79	-4.	3.4	5.4	20836	104	916	16	1.7	0.4	11931|12638|15165|15168|20265|20271|74338|76376|98660|110891|110895|2308	Atp1b1|Cftr|Hcn1|Hcn3|Scn1a|Scn5a|Slc6a19|Slc24a2|Atp1a2|Slc8a2|Slc9a4|Nppa	-2.433922	0	16	0	0	-5.993176	3.499

	920271	035725				ological Processes		ane transport	localization	920271	994961	795937					467249	328506	99|238384|240332|243616|329064	|Slc24a4|Slc6a7|Slc6a11|Pkd2l1							4961
1	-4.9175444	GO:0034220	M1	1	0	GO Biological Processes	19	monoatomic ion transmembrane transport	19_GO:0051179 localization	-4.9175444	1.9085437	4.7754918	20836	584	916	49	5.349345	0.7434716	11931|11974|12043|12638|13489|13618|14401|14403|14813|14814|15165|15168|15465|15559|15560|16485|16504|16517|16518|16522|20265|20271|20499|21982|22065|27416|54377|68428|70357|74055|74338|76376|80334|81905|98660|110886|110891|110895|227059|230899|238384|240332|241794|243616|243634|329064|380728|382571|433926	Atp1b1|Atp6v0e|Bcl2|Cftr|Drd2|Ednrb|Gabrb2|Gabrd|Grin2c|Grin2d|Hcn1|Hcn3|Hrh1|Htr2b|Htr2c|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Scn1a|Scn5a|Slc12a7|Tmem165|Trpc3|Abcc5|Cacng4|Steap3|Kcnip1|Plce1|Slc6a19|Slc24a2|Kcnip4|Cacng8|Atp1a2|Gabra5|Slc8a2|Slc9a4|Slc39a10|Nppa|Slc24a4|Slc6a7|Kcng1|Slc6a11|Ano2|Pkd2l1|Kcnh4|Kcnf1|Lrrc8b	-2.433922	0	16	0	0	-5.993176	3.4994961
1	-4.71	GO:00	M1	1	0	GO Biolog	19	potassium ion transport	19_GO:0051179 localization	-4.71	2.809	5.080	20836	170	916	21	2.292	0.494	11931|12576|15165|15168|16485|16504|16517|16518|16522|20499|70357|76376|80334|98660|110895|22763	Atp1b1|Cdkn1b|Hcn1|Hcn3|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Slc12a7|Kcnip1|Slc24a2|Kcnip4|Atp1a2|Slc9a	-2.276027	0	16	0	0	-5.993176	3.4994961

	8904	6813				ical Processes				8904	8895	9877					5764	5133	2|238384|241794|329064|380728|382571	4|Kcnt1|Slc24a4|Kcng1|Pkd2l1|Kcnh4|Kcnf1							
1	-4.689312	GO:0071805	M1	1	0	GO Biological Processes	19	potassium ion transmembrane transport	19_GO:0051179 localization	-4.689312	2.9806053	5.1320517	20836	145	916	19	2.0742358	0.4709012	11931|15165|15168|16485|16504|16517|16518|16522|20499|70357|76376|80334|98660|110895|238384|241794|329064|380728|382571	Atp1b1|Hcn1|Hcn3|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Slc12a7|Kcnip1|Slc24a2|Kcnip4|Atp1a2|Slc9a4|Slc24a4|Kcng1|Pkd2l1|Kcnh4|Kcnf1	-2.259208	0	16	0	0	-5.993176	3.4994961
1	-3.811171	GO:0098657	M1	1	0	GO Biological Proc	19	import into cell	19_GO:0051179 localization	-3.811171	2.4371491	4.3348576	20836	196	916	21	2.2925764	0.4945133	11931|13489|14580|16517|16518|16522|18216|19662|20271|20499|20519|57738|68428|76376|98660|110891|110895|227059|238384|243616|319552	Atp1b1|Drd2|Gfap|Kcnj16|Kcnj2|Kcnj6|Ntsr1|Rbp4|Scn5a|Slc12a7|Slc22a3|Slc15a2|Steap3|Slc24a2|Atp1a2|Slc8a2|Slc9a4|Slc39a10|Slc24a4|Slc6a11|Spx	-1.639128	0	16	0	0	-5.993176	3.4994961

						esses																					
1	-2.953867	R-MMU-1296071	M1	1	0	Reactome Gene Sets	6	Potassium Channels		-2.953867	2.8140278	3.8400398	20836	97	916	12	1.3100437	0.3756917	14696|14706|15165|15168|16485|16504|16517|16518|16522|241794|380728|382571	Gnb4|Gng4|Hcn1|Hcn3|Kcna1|Kcnc3|Kcnj16|Kcnj2|Kcnj6|Kcng1|Kcnh4|Kcnf1	-1.042849	0	16	0	0	-5.993176	3.4994961
1	-2.914483	GO:0098659	M1	1	0	GO Biological Processes	19	inorganic cation import across plasma membrane	19_GO:0051179 localization	-2.914483	2.7853133	3.7987775	20836	98	916	12	1.3100437	0.3756917	11931|16517|16518|16522|20271|20499|76376|98660|110891|110895|227059|238384	Atp1b1|Kcnj16|Kcnj2|Kcnj6|Scn5a|Slc12a7|Slc24a2|Atp1a2|Slc8a2|Slc9a4|Slc39a10|Slc24a4	-1.023929	0	16	0	0	-5.993176	3.4994961

1	-2.9144833	GO:0099587	M1	1	0	GO Biological Processes	19	inorganic ion import across plasma membrane	19_GO:0051179 localization	-2.9144833	2.7853133	3.7987775	20836	98	916	12	1.3100437	0.3756917	11931 | 16517 | 16518 | 16522 | 20271 | 20499 | 76376 | 98660 | 110891 | 110895 | 227059 | 238384	Atp1b1 | Kcnj16 | Kcnj2 | Kcnj6 | Scn5a | Slc12a7 | Slc24a2 | Atp1a2 | Slc8a2 | Slc9a4 | Slc39a10 | Slc24a4	-1.023929	0	16	0	0	-5.993176	3.4994961
1	-2.5970806	GO:0006814	M1	1	0	GO Biological Processes	19	sodium ion transport	19_GO:0051179 localization	-2.5970806	2.1483018	3.3179437	20836	180	916	17	1.8558952	0.4459243	11931 | 12638 | 13618 | 15165 | 15168 | 20265 | 20271 | 74338 | 76376 | 98660 | 110891 | 110895 | 230899 | 238384 | 240332 | 243616 | 329064	Atp1b1 | Cftr | Ednrb | Hcn1 | Hcn3 | Scn1a | Scn5a | Slc6a19 | Slc24a2 | Atp1a2 | Slc8a2 | Slc9a4 | Nppa | Slc24a4 | Slc6a7 | Slc6a11 | Pkd2l1	-0.801914	0	16	0	0	-5.993176	3.4994961
1	-2.4	GO:00	M1	1	0	GO Biol	19	import across plasma membrane	19_GO:0051179	-2.4	2.18	3.19	20836	156	916	15	1.63	0.41	11931 | 14580 | 16517 | 16518 | 16522 | 18216 | 20271 | 20499 | 57738 | 76376 | 98660 | 110891 | 110895 | 227059 | 238384	Atp1b1 | Gfap | Kcnj16 | Kcnj2 | Kcnj6 | Ntsr1 | Scn5a | Slc12a7 | Slc15a2 | Slc24a2 | Atp1a2 | Sl	-0.682782	0	16	0	0	-5.993176	3.4994961

	2929	98739				ogical Processes			localization	2929	71851	15767					75546	93386		c8a2|Slc9a4|Slc39a10|Slc24a4							
1	-5.6737775	GO:0098900	M1	1	0	GO Biological Processes	19	regulation of action potential	19_GO:0050789 regulation of biological process	-5.6737775	4.4852697	6.3081123	20836	71	916	14	1.5283843	0.4053443	12313|14167|14466|15165|15168|16518|18216|20271|21336|66797|67451|70357|108058|110891	Calm1|Fgf12|Gba|Hcn1|Hcn3|Kcnj2|Ntsr1|Scn5a|Tacr1|Cntnap2|Pkp2|Kcnip1|Camk2d|Slc8a2	-2.985802	0	17	1	1	-5.673775	7.1083515
1	-3.4685	GO:00032	M1	1	0	GO Biological Pr	19	regulation of membrane depolarization	19_GO:0050789 regulation of biological	-3.4685	4.01412	4.62137	20836	51	916	9	0.98253	0.325898	13179|14167|15165|15168|17926|18216|20271|51800|108058	Dcn|Fgf12|Hcn1|Hcn3|Myoc|Ntsr1|Scn5a|Bok|Camk2d	-1.387129	0	17	0	0	-5.673775	7.1083515

	61	54				occesses			process	61	79	89					28										
1	-3.325244	GO:0045760	M1	1	0	GO Biological Processes	19	positive regulation of action potential	19_GO:0048518 positive regulation of biological process	-3.325244	7.1083515	5.2413538	20836	16	916	5	0.5458515	0.2434451	14466|20271|21336|66797|70357	Gba|Scn5a|Tacr1|Cntnap2|Kcnip1	-1.294847	0	17	0	0	-5.673775	7.1083515
1	-2.174297	GO:0086091	M1	1	0	GO Biological Processes	19	regulation of heart rate by cardiac conduction	19_GO:0032501 multicellular organismal process	-2.174297	3.4994961	3.3503043	20836	39	916	6	0.6550218	0.2665343	15165|15168|16392|16518|20271|67451	Hcn1|Hcn3|Isl1|Kcnj2|Scn5a|Pkp2	-0.540615	0	17	0	0	-5.673775	7.1083515

1	-2.096439	GO:0098901	M1	1	0	GO Biological Processes	19	regulation of cardiac muscle cell action potential	19_GO:0050789 regulation of biological process	-2.096439	3.9218491	3.3763843	20836	29	916	5	0.5458515	0.2434451	12313|15165|15168|67451|108058	Calm1|Hcn1|Hcn3|Pkp2|Camk2d	-0.507933	0	17	0	0	-5.673775	7.1083515
1	-5.646472	GO:0032228	M1	1	0	GO Biological Processes	19	regulation of synaptic transmission, GABAergic	19_GO:0023052 signaling	-5.646472	5.6866812	6.6733429	20836	44	916	11	1.2008734	0.3598963	12426|13167|13489|13869|14805|21336|66220|66797|69035|192167|545192	Cckbr|Dbi|Drd2|Erbb4|Grik1|Tacr1|Zdhhc12|Cntnap2|Zdhhc3|Nlgn1|Baiap3	-2.97958	0	18	1	1	-5.646472	7.9613537
1	-4.8	GO:00	M1	1	0	GO Biol	19	positive regulation of synaptic	19_GO:0023052	-4.8	7.96	6.67	20836	20	916	7	0.76	0.28	12426|13869|14805|21336|66220|69035|192167	Cckbr|Erbb4|Grik1|Tacr1|Zdhhc12|Zdhhc3|Nlgn1	-2.367952	0	18	0	0	-5.646472	7.9613537

	37564	32230				ogical Processes		transmission, GABAergic	signaling	37564	13537	8976					41921	77317									
1	-5.413066	GO:0031175	M1	1	0	GO Biological Processes	19	neuron projection development	19_GO:0032502 developmental process	-5.413066	1.8329593	5.0061116	20836	757	916	61	6.6593886	0.8237677	11308|11516|11658|12043|12505|12561|12808|13367|13395|13489|13640|13800|13841|13842|14580|14585|15208|15572|16392|16568|17260|17755|17926|18032|18080|18205|18209|18846|19055|19268|19699|20262|20346|20348|20359|20361|21923|22339|26456|50706|50884|53870|64242|66797|67784|71653|72584|73750|77018|78808|109904|170758|192167|214968|239985|245446|268902|269116|269784|667663|100503041	Abi1|Adcyap1|Alcam|Bcl2|Cd44|Cdh4|Cobl|Diaph1|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Gfap|Gfra1|Hes5|Elavl4|Isl1|Kif3a|Mef2c|Map1b|Myoc|Nfix|Nin|Ntf3|Ntn3|Plxna3|Ppp3ca|Ptprf|Reln|Stmn3|Sema3a|Sema3c|Sema6b|Sema7a|Tnc|Vegfa|Sema4g|Postn|Nckap1|Cntn6|Ngb|Cntnap2|Plxnd1|Shtn1|Cul4b|Whrn|Col25a1|Stxbp5|Mcf2|Rac3|Nlgn1|Sema6d|Arid1b|Slitrk4|Robo2|Nfasc|Cntn4|Myo3a|Pdzd7	-2.777582	0	19	1	1	-5.413066	2.6391228
1	-5.	GO:0	M1	1	0	GO Bi	19	cell morphogenesis involved	19_GO:0032502	-5.	1.9	5.0	20836	577	916	50	5.4	0.7	11308|11658|12043|12561|12808|12822|13395|13489|13640|13800|13841|13842|	Abi1|Alcam|Bcl2|Cdh4|Cobl|Col18a1|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Elavl	-2.767974	0	19	0	0	-5.413066	2.639

	391415	000904				ological Processes		in differentiation	developmental process	391415	7112	728454					585153	055865	15572 | 16392 | 17260 | 17755 | 18032 | 18080 | 18205 | 18209 | 18846 | 19055 | 19699 | 20346 | 20348 | 20359 | 20361 | 21349 | 22339 | 26456 | 26554 | 29813 | 53870 | 66797 | 67784 | 68708 | 69693 | 70737 | 71653 | 73750 | 77018 | 78808 | 170758 | 214968 | 245446 | 268902 | 269116 | 269784 | 667663 | 100503041	4 | Isl1 | Mef2c | Map1b | Nfix | Nin | Ntf3 | Ntn3 | Plxna3 | Ppp3ca | Reln | Sema3a | Sema3c | Sema6b | Sema7a | Tal1 | Vegfa | Sema4g | Cul3 | Zfp385a | Cntn6 | Cntnap2 | Plxnd1 | Rabl2 | Pof1b | Cgn | Shtn1 | Whrn | Col25a1 | Stxbp5 | Rac3 | Sema6d | Slitrk4 | Robo2 | Nfasc | Cntn4 | Myo3a | Pdzd7							1228
1	-5.225783	GO:0048667	M1	1	0	GO Biological Processes	19	cell morphogenesis involved in neuron differentiation	19_GO:0032502 developmental process	-5.225783	2.0467401	5.0227656	20836	489	916	44	4.8034934	0.7065475	11308 | 11658 | 12043 | 12561 | 12808 | 13395 | 13489 | 13640 | 13800 | 13841 | 13842 | 15572 | 16392 | 17260 | 17755 | 18032 | 18080 | 18205 | 18209 | 18846 | 19055 | 19699 | 20346 | 20348 | 20359 | 20361 | 22339 | 26456 | 53870 | 66797 | 67784 | 68708 | 71653 | 73750 | 77018 | 78808 | 170758 | 214968 | 245446 | 268902 | 269116 | 269784 | 667663 | 100503041	Abi1 | Alcam | Bcl2 | Cdh4 | Cobl | Dlx5 | Drd2 | Efna5 | Enah | Epha7 | Epha8 | Elavl4 | Isl1 | Mef2c | Map1b | Nfix | Nin | Ntf3 | Ntn3 | Plxna3 | Ppp3ca | Reln | Sema3a | Sema3c | Sema6b | Sema7a | Vegfa | Sema4g | Cntn6 | Cntnap2 | Plxnd1 | Rabl2 | Shtn1 | Whrn | Col25a1 | Stxbp5 | Rac3 | Sema6d | Slitrk4 | Robo2 | Nfasc | Cntn4 | Myo3a | Pdzd7	-2.655801	0	19	0	0	-5.413066	2.6391228
1	-4.9	GO:00	M1	1	0	GO Biol	19	axonogenesis	19_GO:0032502 develo	-4.9	2.15	4.95	20836	390	916	37	4.03	0.65	11658 | 12043 | 12561 | 12808 | 13395 | 13489 | 13640 | 13800 | 13841 | 13842 | 16392 | 17260 | 17755 | 18032 | 18080 | 18205 |	Alcam | Bcl2 | Cdh4 | Cobl | Dlx5 | Drd2 | Efna5 | Enah | Epha7 | Epha8 | Isl1 | Mef2c | Map1b | Nfix | Nin | Ntf3 | Ntn3 | Plxna	-2.47583	0	19	0	0	-5.413066	2.6391228

	965904	07409				ogical Processes			pmental process	96594	80226	04535					93013	05072	18209|18846|19699|20346|20348|20359|20361|22339|26456|53870|66797|67784|71653|77018|78808|170758|214968|245446|268902|269116|269784	3|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Cntn6|Cntnap2|Plxnd1|Shtn1|Col25a1|Stxbp5|Rac3|Sema6d|Slitrk4|Robo2|Nfasc|Cntn4							
1	-4.734653	GO:0000902	M1	1	0	GO Biological Processes	19	cell morphogenesis	19_GO:0032502 developmental process	-4.734653	1.76122294	4.5906679	20836	762	916	59	6.441048	0.8110978	11308|11658|12043|12561|12808|12822|13395|13489|13640|13800|13841|13842|15572|16392|17260|17755|18032|18080|18205|18209|18846|19014|19055|19699|20346|20348|20359|20361|21349|22339|22601|23836|23970|26456|26554|29813|50706|50884|53870|66797|67784|68708|69693|70737|71653|73750|77018|78808|170758|192167|211323|214968|241201|245446|268902|269116|269784|667663|100503041	Abi1|Alcam|Bcl2|Cdh4|Cobl|Col18a1|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Elavl4|Isl1|Mef2c|Map1b|Nfix|Nin|Ntf3|Ntn3|Plxna3|Med1|Ppp3ca|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Tal1|Vegfa|Yap1|Cdh20|Pacsin2|Sema4g|Cul3|Zfp385a|Postn|Nckap1|Cntn6|Cntnap2|Plxnd1|Rabl2|Pof1b|Cgn|Shtn1|Whrn|Col25a1|Stxbp5|Rac3|Nlgn1|Nrg1|Sema6d|Cdh7|Slitrk4|Robo2|Nfasc|Cntn4|Myo3a|Pdzd7	-2.278614	0	19	0	0	-5.413066	2.6391228
1	-4.	GO:0	M1	1	0	GO Bi	19	axon guidance	19_GO:0040011	-4.	2.4	4.8	20836	241	916	26	2.8	0.5	11658|12561|13395|13640|13800|13841|13842|16392|17260|18205|18209|18846|	Alcam|Cdh4|Dlx5|Efna5|Enah|Epha7|Epha8|Isl1|Mef2c|Ntf3|Ntn3|Plxna3|Reln|	-2.199894	0	19	0	0	-5.413066	2.639

<table>
<tr><td></td><td>623748</td><td>007411</td><td></td><td></td><td></td><td>ological Processes</td><td></td><td></td><td>locomotion</td><td>623748</td><td>540035</td><td>684745</td><td></td><td></td><td></td><td></td><td>384279</td><td>487044</td><td>19699|20346|20348|20359|20361|22339|26456|53870|67784|170758|214968|268902|269116|269784</td><td>Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Cntn6|Plxnd1|Rac3|Sema6d|Robo2|Nfasc|Cntn4</td><td></td><td></td><td></td><td></td><td></td><td></td><td>1228</td></tr>
<tr><td>1</td><td>-4.5927492</td><td>GO:0097485</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Processes</td><td>19</td><td>neuron projection guidance</td><td>19_GO:0040011 locomotion</td><td>-4.592492</td><td>2.443863</td><td>4.8446582</td><td>20836</td><td>242</td><td>916</td><td>26</td><td>2.8384279</td><td>0.5487044</td><td>11658|12561|13395|13640|13800|13841|13842|16392|17260|18205|18209|18846|19699|20346|20348|20359|20361|22339|26456|53870|67784|170758|214968|268902|269116|269784</td><td>Alcam|Cdh4|Dlx5|Efna5|Enah|Epha7|Epha8|Isl1|Mef2c|Ntf3|Ntn3|Plxna3|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Cntn6|Plxnd1|Rac3|Sema6d|Robo2|Nfasc|Cntn4</td><td>-2.186863</td><td>0</td><td>19</td><td>0</td><td>0</td><td>-5.413066</td><td>2.6391228</td></tr>
<tr><td>1</td><td>-4.4473</td><td>GO:00615</td><td>M1</td><td>1</td><td>0</td><td>GO Biological</td><td>19</td><td>axon development</td><td>19_GO:0032502 developmental</td><td>-4.4473</td><td>2.01486</td><td>4.55455</td><td>20836</td><td>429</td><td>916</td><td>38</td><td>4.14847</td><td>0.65886</td><td>11658|12043|12561|12808|13395|13489|13640|13800|13841|13842|16392|17260|17755|18032|18080|18205|18209|18846|19699|20346|20348|20359|20361|21923|22339|26456|53870|66797|</td><td>Alcam|Bcl2|Cdh4|Cobl|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Isl1|Mef2c|Map1b|Nfix|Nin|Ntf3|Ntn3|Plxna3|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Tnc|Vegfa|Sema4g|Cntn6|Cntnap2|Plxn</td><td>-2.080867</td><td>0</td><td>19</td><td>0</td><td>0</td><td>-5.413066</td><td>2.6391228</td></tr>
</table>

	67	64				Processes			process	67	14	16					16	41	67784|71653|77018|78808|170758|214968|245446|268902|269116|269784	d1|Shtn1|Col25a1|Stxbp5|Rac3|Sema6d|Slitrk4|Robo2|Nfasc|Cntn4							
1	-4.407192	GO:0050767	M1	1	0	GO Biological Processes	19	regulation of neurogenesis	19_GO:0032502 developmental process	-4.407192	1.9470057	4.4963828	20836	479	916	41	4.4759825	0.6832077	11516|12561|13047|13048|13489|13640|13841|14580|15208|17158|17755|18080|18088|18205|18846|19055|19266|19268|19699|20346|20348|20359|20361|22062|22339|22601|26456|56198|66515|67784|71653|104156|211323|214968|231672|242620|246048|268902|320027|320191|574437	Adcyap1|Cdh4|Cux1|Cux2|Drd2|Efna5|Epha7|Gfap|Hes5|Man2a1|Map1b|Nin|Nkx2-2|Ntf3|Plxna3|Ppp3ca|Ptprd|Ptprf|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Trp73|Vegfa|Yap1|Sema4g|Heyl|Cul7|Plxnd1|Shtn1|Etv5|Nrg1|Sema6d|Fbxw8|Dmrta2|Chodl|Robo2|Fstl4|Hook3|Xlr3b	-2.057318	0	19	0	0	-5.413066	2.6391228
1	-4.309547	mmu04360	M1	1	0	KEGG Pathway	24	Axon guidance - Mus musculus (house mouse)		-4.309547	2.6391228	4.7493918	20836	181	916	21	2.2925764	0.4945133	12325|13640|13800|13841|13842|18209|18706|18846|19055|20346|20348|20359|20361|22065|26456|69632|93737|108058|170758|214968|268902	Camk2g|Efna5|Enah|Epha7|Epha8|Ntn3|Pik3ca|Plxna3|Ppp3ca|Sema3a|Sema3c|Sema6b|Sema7a|Trpc3|Sema4g|Arhgef12|Pard6g|Camk2d|Rac3|Sema6d|Robo2	-1.985077	0	19	0	0	-5.413066	2.6391228

1	-4.27868	GO:0120035	M1	1	0	GO Biological Processes	19	regulation of plasma membrane bounded cell projection organization	19_GO:0050789 regulation of biological process	-4.27868	1.70674	4.293894	20836	773	916	58	6.3318777	0.8046637	11516 | 12325 | 12505 | 12561 | 12808 | 13047 | 13048 | 13640 | 13841 | 13860 | 14158 | 14580 | 14828 | 14964 | 14972 | 15507 | 15572 | 16554 | 17755 | 17909 | 18080 | 18286 | 18846 | 19055 | 19266 | 19268 | 19699 | 20346 | 20348 | 20359 | 20361 | 22339 | 22376 | 22601 | 26456 | 50884 | 66515 | 67425 | 67784 | 68169 | 71461 | 71653 | 74055 | 74694 | 76571 | 109905 | 192167 | 211323 | 214968 | 231672 | 237868 | 242274 | 246048 | 252838 | 268902 | 320027 | 574437 | 667663	Adcyap1 | Camk2g | Cd44 | Cdh4 | Cobl | Cux1 | Cux2 | Efna5 | Epha7 | Eps8 | Fer | Gfap | Hspa5 | H2-D1 | H2-K1 | Hspb1 | Elavl4 | Kif13b | Map1b | Myo10 | Nin | Odf2 | Plxna3 | Ppp3ca | Ptprd | Ptprf | Reln | Sema3a | Sema3c | Sema6b | Sema7a | Vegfa | Was | Yap1 | Sema4g | Nckap1 | Cul7 | Eps8l1 | Plxnd1 | Ndnf | Ptk7 | Shtn1 | Plce1 | Tbc1d30 | Styxl1 | Rap1a | Nlgn1 | Nrg1 | Sema6d | Fbxw8 | Sarm1 | Lrrc7 | Chodl | Tox | Robo2 | Fstl4 | Xlr3b | Myo3a	-1.968769	0	19	0	0	-5.413066	2.6391228
1	-4.122083	GO:0048858	M1	1	0	GO Biological Proc	19	cell projection morphogenesis	19_GO:0032502 developmental process	-4.122083	1.8431969	4.2692894	20836	543	916	44	4.8034934	0.7065475	11308 | 11658 | 12043 | 12561 | 12808 | 13395 | 13489 | 13640 | 13800 | 13841 | 13842 | 15572 | 16392 | 17260 | 17755 | 18032 | 18080 | 18205 | 18209 | 18846 | 19055 | 19699 | 20346 | 20348 | 20359 | 20361 | 22339 | 23970 | 26456 | 50706 | 50884 | 53870 | 66797 | 67784 | 71653 | 77018 | 78808 | 170758 | 192167 | 2149	Abi1 | Alcam | Bcl2 | Cdh4 | Cobl | Dlx5 | Drd2 | Efna5 | Enah | Epha7 | Epha8 | Elavl4 | Isl1 | Mef2c | Map1b | Nfix | Nin | Ntf3 | Ntn3 | Plxna3 | Ppp3ca | Reln | Sema3a | Sema3c | Sema6b | Sema7a | Vegfa | Pacsin2 | Sema4g | Postn | Nckap1 | Cntn6 | Cntnap2 | Plxnd1 | Shtn1 | Col25a1 | Stxbp5 | Rac3 | Nlgn1 | Sem	-1.855599	0	19	0	0	-5.413066	2.6391228

						esses													68|245446|268902|269116|269784	a6d|Slitrk4|Robo2|Nfasc|Cntn4							
1	-4.078407	GO:0010975	M1	1	0	GO Biological Processes	19	regulation of neuron projection development	19_GO:0032502 developmental process	-4.078407	1.8071664	4.2239096	20836	579	916	46	5.0218341	0.721598	11516|12325|12561|12808|13047|13048|13640|13841|14580|14828|14964|14972|15507|15572|16554|17755|18080|18846|19055|19266|19268|19699|20346|20348|20359|20361|22339|26456|66515|67784|68169|71461|71653|76571|109905|192167|211323|214968|231672|237868|242274|246048|252838|268902|320027|574437	Adcyap1|Camk2g|Cdh4|Cobl|Cux1|Cux2|Efna5|Epha7|Gfap|Hspa5|H2-D1|H2-K1|Hspb1|Elavl4|Kif13b|Map1b|Nin|Plxna3|Ppp3ca|Ptprd|Ptprf|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Cul7|Plxnd1|Ndnf|Ptk7|Shtn1|Styxl1|Rap1a|Nlgn1|Nrg1|Sema6d|Fbxw8|Sarm1|Lrrc7|Chodl|Tox|Robo2|Fstl4|Xlr3b	-1.828964	0	19	0	0	-5.413066	2.6391228
1	-4.072611	GO:0048812	M1	1	0	GO Biological Processes	19	neuron projection morphogenesis	19_GO:0032502 developmental process	-4.072611	1.8489776	4.2413198	20836	529	916	43	4.6943231	0.6988728	11308|11658|12043|12561|12808|13395|13489|13640|13800|13841|13842|15572|16392|17260|17755|18032|18080|18205|18209|18846|19055|19699|20346|20348|20359|20361|22339|26456|50706|50884|53870|66797|67784|71653|77018|78808|170758|192167|214968|245446|268902|269116|269784	Abi1|Alcam|Bcl2|Cdh4|Cobl|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Elavl4|Isl1|Mef2c|Map1b|Nfix|Nin|Ntf3|Ntn3|Plxna3|Ppp3ca|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Postn|Nckap1|Cntn6|Cntnap2|Plxnd1|Shtn1|Col25a1|Stxbp5|Rac3|Nlgn1|Sema6d|Slitrk4|Robo2|Nfasc|Cntn4	-1.828964	0	19	0	0	-5.413066	2.6391228

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<tr><td>1</td><td>-3.962711</td><td>GO:0120039</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Proc</td><td>19</td><td>plasma membrane bounded cell projection morphogenesis</td><td>19_GO:0032502 developmental process</td><td>-3.962711</td><td>1.8282414</td><td>4.1617401</td><td>20836</td><td>535</td><td>916</td><td>43</td><td>4.6943231</td><td>0.6988728</td><td>11308|11658|12043|12561|12808|13395|13489|13640|13800|13841|13842|15572|16392|17260|17755|18032|18080|18205|18209|18846|19055|19699|20346|20348|20359|20361|22339|26456|50706|50884|53870|66797|67784|71653|77018|78808|</td><td>Abi1|Alcam|Bcl2|Cdh4|Cobl|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Elavl4|Isl1|Mef2c|Map1b|Nfix|Nin|Ntf3|Ntn3|Plxna3|Ppp3ca|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Sema4g|Postn|Nckap1|Cntn6|Cntnap2|Plxnd1|Shtn1|Col25a1|Stxbp5</td><td>-1.746837</td><td>0</td><td>19</td><td>0</td><td>0</td><td>-5.413066</td><td>2.6391228</td></tr>
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						esses											170758|192167|214968|245446|268902|269116|269784	|Rac3|Nlgn1|Sema6d|Slitrk4|Robo2|Nfasc|Cntn4							
1	-3.936999	GO:0032989	M1	1	0	GO Biological Processes	19	cellular component morphogenesis	19_GO:0032502 developmental process	-3.936999	1.7237488	4.092773	20836	673	916	51	5.5676856	0.7576174	11308|11658|12043|12048|12561|12808|13395|13489|13640|13800|13841|13842|15572|16392|17260|17755|18032|18080|18205|18209|18846|19055|19699|20346|20348|20359|20361|22003|22339|23970|26456|50706|50875|50884|53604|53870|54137|66797|67784|68794|71653|77018|78808|170758|192167|214968|225288|245446|268902|269116|269784	Abi1|Alcam|Bcl2|Bcl2l1|Cdh4|Cobl|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Elavl4|Isl1|Mef2c|Map1b|Nfix|Nin|Ntf3|Ntn3|Plxna3|Ppp3ca|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Tpm1|Vegfa|Pacsin2|Sema4g|Postn|Tmod3|Nckap1|Zpbp|Cntn6|Acrbp|Cntnap2|Plxnd1|Flnc|Shtn1|Col25a1|Stxbp5|Rac3|Nlgn1|Sema6d|Fhod3|Slitrk4|Robo2|Nfasc|Cntn4	-1.724952	0	19	0	0	-5.413066	2.6391228
1	-3.922313	GO:0032990	M1	1	0	GO Biological Proc	19	cell part morphogenesis	19_GO:0032502 developmental process	-3.922313	1.7926491	4.1183716	20836	571	916	45	4.9126638	0.7141215	11308|11658|12043|12048|12561|12808|13395|13489|13640|13800|13841|13842|15572|16392|17260|17755|18032|18080|18205|18209|18846|19055|19699|20346|20348|20359|20361|22339|23970|26456|50706|50884|53870|66797|67784|71653|77018|78808|170758|19216	Abi1|Alcam|Bcl2|Bcl2l1|Cdh4|Cobl|Dlx5|Drd2|Efna5|Enah|Epha7|Epha8|Elavl4|Isl1|Mef2c|Map1b|Nfix|Nin|Ntf3|Ntn3|Plxna3|Ppp3ca|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Vegfa|Pacsin2|Sema4g|Postn|Nckap1|Cntn6|Cntnap2|Plxnd1|Shtn1|Col25a1|Stxbp5|Rac3|Nlg	-1.717819	0	19	0	0	-5.413066	2.6391228

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1	-3.535871	GO:0031346	M1	1	0	GO Biological Processes	19	positive regulation of cell projection organization	19_GO:0048518 positive regulation of biological process	-3.535871	1.8376175	3.8868478	20836	458	916	37	4.0393013	0.6505072	11516|12561|12808|13047|13048|13640|13860|14828|15507|15572|17755|18080|18846|19266|19268|19699|20361|22339|50884|66515|67425|67784|68169|71461|71653|74055|76571|109905|192167|211323|231672|242274|246048|252838|268902|574437|667663	Adcyap1|Cdh4|Cobl|Cux1|Cux2|Efna5|Eps8|Hspa5|Hspb1|Elavl4|Map1b|Nin|Plxna3|Ptprd|Ptprf|Reln|Sema7a|Vegfa|Nckap1|Cul7|Eps8l1|Plxnd1|Ndnf|Ptk7|Shtn1|Plce1|Styxl1|Rap1a|Nlgn1|Nrg1|Fbxw8|Lrrc7|Chodl|Tox|Robo2|Xlr3b|Myo3a	-1.44301	0	19	0	0	-5.413066	2.6391228

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1	-3.328475	GO:0040011	M1	1	0	GO Biological Processes	19	locomotion	19_GO:0040011 locomotion	-3.328475	1.7334865	3.6962083	20836	538	916	41	4.4759825	0.6832077	11658|12561|13395|13618|13640|13800|13841|13842|14158|14813|15465|15945|16170|16392|17260|18205|18209|18846|19699|20301|20346|20348|20359|20361|20963|22339|26456|30955|53870|56838|59289|67784|71660|98660|170758|211323|214968|268902|269116|269608|269784	Alcam|Cdh4|Dlx5|Ednrb|Efna5|Enah|Epha7|Epha8|Fer|Grin2c|Hrh1|Cxcl10|Il16|Isl1|Mef2c|Ntf3|Ntn3|Plxna3|Reln|Ccl27a|Sema3a|Sema3c|Sema6b|Sema7a|Syk|Vegfa|Sema4g|Pik3cg|Cntn6|Ccl28|Ackr2|Plxnd1|Rarres2|Atp1a2|Rac3|Nrg1|Sema6d|Robo2|Nfasc|Plekhg5|Cntn4	-1.295051	0	19	0	0	-5.413066	2.6391228
1	-3.2	GO:00	M1	1	0	GO Biol	19	positive regulation of cell	19_GO:0032502 develo	-3.2	1.71	3.60	20836	545	916	41	4.47	0.68	12043|12192|12561|12638|13047|13048|13489|13640|14580|17158|17755|18080|18088|18205|18846|19055|	Bcl2|Zfp36l1|Cdh4|Cftr|Cux1|Cux2|Drd2|Efna5|Gfap|Man2a1|Map1b|Nin|Nkx2-	-1.224099	0	19	0	0	-5.413066	2.6391228

	16814	10720				ogical Processes		development	pmental process	16814	12215	78729					59825	32077	19266 | 19268 | 19419 | 19699 | 20361 | 20963 | 22062 | 22339 | 66515 | 67784 | 71653 | 72147 | 104156 | 211323 | 214812 | 231672 | 238377 | 239985 | 242202 | 242620 | 243547 | 246048 | 252838 | 268902 | 574437	2 | Ntf3 | Plxna3 | Ppp3ca | Ptprd | Ptprf | Rasgrp1 | Reln | Sema7a | Syk | Trp73 | Vegfa | Cul7 | Plxnd1 | Shtn1 | Zbtb46 | Etv5 | Nrg1 | Zfp609 | Fbxw8 | Gpr68 | Arid1b | Pde5a | Dmrta2 | Grip2 | Chodl | Tox | Robo2 | Xlr3b							
1	-3.1907555	GO:0006935	M1	1	0	GO Biological Processes	19	chemotaxis	19_GO:0040011 locomotion	-3.1907555	1.7326607	3.5994247	20836	512	916	39	4.2576419	0.6670968	11658 | 12561 | 13395 | 13618 | 13640 | 13800 | 13841 | 13842 | 14158 | 15465 | 15945 | 16170 | 16392 | 17260 | 18205 | 18209 | 18846 | 19699 | 20301 | 20346 | 20348 | 20359 | 20361 | 20963 | 22339 | 26456 | 30955 | 53870 | 56838 | 59289 | 67784 | 71660 | 170758 | 211323 | 214968 | 268902 | 269116 | 269608 | 269784	Alcam | Cdh4 | Dlx5 | Ednrb | Efna5 | Enah | Epha7 | Epha8 | Fer | Hrh1 | Cxcl10 | Il16 | Isl1 | Mef2c | Ntf3 | Ntn3 | Plxna3 | Reln | Ccl27a | Sema3a | Sema3c | Sema6b | Sema7a | Syk | Vegfa | Sema4g | Pik3cg | Cntn6 | Ccl28 | Ackr2 | Plxnd1 | Rarres2 | Rac3 | Nrg1 | Sema6d | Robo2 | Nfasc | Plekhg5 | Cntn4	-1.202836	0	19	0	0	-5.413066	2.6391228
1	-3.1658	GO:00519	M1	1	0	GO Biological	19	positive regulation of nervous system development	19_GO:0032502 developmental	-3.1658	1.86547	3.64139	20836	378	916	31	3.38427	0.59746	12404 | 12561 | 13047 | 13048 | 13489 | 13640 | 14580 | 17158 | 17755 | 18080 | 18088 | 18205 | 18846 | 19266 | 19268 | 19699 | 20361 | 22062 | 22339 | 66515 | 67784 | 71653 | 104156 | 192167 | 211323 | 231672 | 242620 | 2	Cbln1 | Cdh4 | Cux1 | Cux2 | Drd2 | Efna5 | Gfap | Man2a1 | Map1b | Nin | Nkx2-2 | Ntf3 | Plxna3 | Ptprd | Ptprf | Reln | Sema7a | Trp73 | Vegfa | Cul7 | Plxnd1 | Shtn1 | Etv5 |	-1.184733	0	19	0	0	-5.413066	2.6391228

	84	62				Processes			process	84	21	03					95	06	45446|246048|268902|574437	Nlgn1|Nrg1|Fbxw8|Dmrta2|Slitrk4|Chodl|Robo2|Xlr3b							
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1	-2.147347	R-MMU-4224	M1	1	0	Reactome Gene Sets	6	Axon guidance		-2.147347	1.8270462	2.8153521	20836	249	916	20	2.1834061	0.4828651	12833|12834|13640|13800|13841|13842|14585|18706|18846|19699|20346|20361|22143|56705|67784|71770|214968|245026|269116|665033	Col6a1|Col6a2|Efna5|Enah|Epha7|Epha8|Gfra1|Pik3ca|Plxna3|Reln|Sema3a|Sema7a|Tuba1b|Ranbp9|Plxnd1|Ap2b1|Sema6d|Col6a6|Nfasc|Col6a5	-0.532484	0	19	0	0	-5.413066	2.6391228

1	-2.1288223	75 R-MMU-9675108	M1	1	0	Reactome Gene Sets	6	Nervous system development	-2.1288223	1.819738	2.79614	20836	250	916	20	2.1834061	0.4828651	12833 | 12834 | 13640 | 13800 | 13841 | 13842 | 14585 | 18706 | 18846 | 19699 | 20346 | 20361 | 22143 | 56705 | 67784 | 71770 | 214968 | 245026 | 269116 | 665033	Col6a1 | Col6a2 | Efna5 | Enah | Epha7 | Epha8 | Gfra1 | Pik3ca | Plxna3 | Reln | Sema3a | Sema7a | Tuba1b | Ranbp9 | Plxnd1 | Ap2b1 | Sema6d | Col6a6 | Nfasc | Col6a5	-0.518836	0	19	0	0	-5.413066	2.6391228
1	-5.281907	WP2140	M1	1	0	WikiPathways	27	Serotonin and anxiety-related events	-5.281907	11.373362	7.7077553	20836	12	916	6	0.6550218	0.2665343	12921 | 14814 | 15560 | 18751 | 19055 | 192167	Crhr1 | Grin2d | Htr2c | Prkcb | Ppp3ca | Nlgn1	-2.685053	0	20	1	1	-5.281907	11.373362

1	-5.206356	GO:0051966	M1	1	0	GO Biological Processes	19	regulation of synaptic transmission, glutamatergic	19_GO:0023052 signaling	-5.206356	3.8772827	5.8001011	20836	88	916	15	1.6375546	0.4193386	11516|12426|13488|13489|14805|14813|14814|15165|17260|19699|54377|81905|108069|192167|210274	Adcyap1|Cckbr|Drd1|Drd2|Grik1|Grin2c|Grin2d|Hcn1|Mef2c|Reln|Cacng4|Cacng8|Grm3|Nlgn1|Shank2	-2.644974	0	21	1	1	-5.206356	5.4158869
1	-4.979858	GO:0051968	M1	1	0	GO Biological Processes	19	positive regulation of synaptic transmission, glutamatergic	19_GO:0023052 signaling	-4.979858	5.4158869	6.1428992	20836	42	916	10	1.0917031	0.3433372	11516|12426|13488|14813|14814|19699|54377|81905|192167|210274	Adcyap1|Cckbr|Drd1|Grin2c|Grin2d|Reln|Cacng4|Cacng8|Nlgn1|Shank2	-2.472921	0	21	0	0	-5.206356	5.4158869
1	-4.0	GO:00	M1	1	0	GO Biol	19	regulation of nervous system process	19_GO:0032501 multic	-4.0	2.45	4.47	20836	204	916	22	2.40	0.50	12404|12426|13048|13618|14167|14466|14805|14813|14814|15560|18216|19699|54377|66797|74513|108069	Cbln1|Cckbr|Cux2|Ednrb|Fgf12|Gba|Grik1|Grin2c|Grin2d|Htr2c|Ntsr1|Reln|Cacng4|Cntnap2|Neto2|Grm3	-1.781722	0	21	0	0	-5.206356	5.4158869

	05351	31644				ogical Processes			ellular organismal process	05351	30782	23236					17467	58676	|110891|192167|243547|246317|319552|380702	|Slc8a2|Nlgn1|Grip2|Neto1|Spx|Shisa6							
1	-3.403609	GO:0098815	M1	1	0	GO Biological Processes	19	modulation of excitatory postsynaptic potential	19_GO:0023052 signaling	-3.403609	3.6105913	4.4499934	20836	63	916	10	1.0917031	0.3433372	12404|13048|14805|14813|14814|19699|110891|192167|243547|246317	Cbln1|Cux2|Grik1|Grin2c|Grin2d|Reln|Slc8a2|Nlgn1|Grip2|Neto1	-1.347339	0	21	0	0	-5.206356	5.4158869
1	-2.7248	GO:20004	M1	1	0	GO Biological Pr	19	positive regulation of excitatory postsynaptic potential	19_GO:0023052 signaling	-2.7248	3.88358	3.96319	20836	41	916	7	0.76419	0.28773	13048|14813|14814|19699|192167|243547|246317	Cux2|Grin2c|Grin2d|Reln|Nlgn1|Grip2|Neto1	-0.880497	0	21	0	0	-5.206356	5.4158869

	79	63				ocesses				79	72	44					21	17									
1	-5.14398	GO:0099072	M1	1	0	GO Biological Processes	19	regulation of postsynaptic membrane neurotransmitter receptor levels	19_GO:0065007 biological regulation	-5.14398	3.8337177	5.7447846	20836	89	916	15	1.6375546	0.4193386	12388 | 13858 | 13860 | 13869 | 54377 | 66797 | 71770 | 74513 | 81905 | 170935 | 242274 | 243547 | 246317 | 269788 | 380702	Ctnnd1 | Eps15 | Eps8 | Erbb4 | Cacng4 | Cntnap2 | Ap2b1 | Neto2 | Cacng8 | Grid2ip | Lrrc7 | Grip2 | Neto1 | Lhfpl4 | Shisa6	-2.591288	0	22	1	1	-5.14398	4.2409148
1	-4.346052	GO:0097120	M1	1	0	GO Biological Processes	19	receptor localization to synapse	19_GO:0051179 localization	-4.346052	4.2409148	5.3456685	20836	59	916	11	1.2008734	0.3598963	13869 | 19699 | 54377 | 74513 | 81905 | 192167 | 242274 | 243547 | 246317 | 269788 | 380702	Erbb4 | Reln | Cacng4 | Neto2 | Cacng8 | Nlgn1 | Lrrc7 | Grip2 | Neto1 | Lhfpl4 | Shisa6	-2.011598	0	22	0	0	-5.14398	4.2409148

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	963571	990778				ological Processes		to cell periphery	localization	963571	924139	459715					200873	277702	|109905|207304|217893|229593|238331|242274|243547|246317|269109|269116|269788|378460	ex3b|Rap1a|Hectd1|Pacs2|Golph3l|Zdhhc22|Lrrc7|Grip2|Neto1|Dpp10|Nfasc|Lhfpl4|Pram1							9148
1	-2.591143	GO:0072657	M1	1	0	GO Biological Processes	19	protein localization to membrane	19_GO:0051179 localization	-2.591143	1.6551671	3.1173738	20836	481	916	35	3.8209607	0.633401	11931|13869|14813|14828|19092|19699|30056|53620|66220|67451|69035|69683|72585|74043|74513|75869|75965|80334|104156|109905|140740|192167|207304|217893|229593|236915|238331|239766|242274|243547|246317|269109|269116|269788|378460	Atp1b1|Erbb4|Grin2c|Hspa5|Prkg2|Reln|Timm9|Vamp5|Zdhhc12|Pkp2|Zdhhc3|Emc10|Lypd1|Pex26|Neto2|Arl5b|Zdhhc20|Kcnip4|Etv5|Rap1a|Sec63|Nlgn1|Hectd1|Pacs2|Golph3l|Arhgef9|Zdhhc22|Rtp1|Lrrc7|Grip2|Neto1|Dpp10|Nfasc|Lhfpl4|Pram1	-0.801914	0	22	0	0	-5.14398	4.2409148
1	-2.5857	GO:19024	M1	1	0	GO Biological	19	protein localization to cell junction	19_GO:0051179 localization	-2.5857	2.55103	3.44924	20836	107	916	12	1.31004	0.37569	13869|14813|15507|16568|19699|66220|74513|192167|242274|243547|246317|269788	Erbb4|Grin2c|Hspb1|Kif3a|Reln|Zdhhc12|Neto2|Nlgn1|Lrrc7|Grip2|Neto1|Lhfpl4	-0.801914	0	22	0	0	-5.14398	4.2409148

	76	14				Processes				76	46	48					37	17									
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1	-2.274494	GO:0062237	M1	1	0	GO Biological Processes	19	protein localization to postsynapse	19_GO:0051179 localization	-2.274494	3.2495321	3.3806029	20836	49	916	7	0.7641921	0.2877317	13869|14813|74513|242274|243547|246317|269788	Erbb4|Grin2c|Neto2|Lrrc7|Grip2|Neto1|Lhfpl4	-0.602139	0	22	0	0	-5.14398	4.2409148

1	-4.7194451	mmu04024	M1	1	0	KEGG Pathway	24	cAMP signaling pathway - Mus musculus (house mouse)		-4.7194451	2.538697	4.9649727	20836	224	916	25	2.7292576	0.5383512	11514|11516|11931|12313|12325|12638|12669|12921|13488|13489|14813|14814|17931|18706|20605|20606|74055|98660|108058|109648|109905|170758|210044|223864|230899	Adcy8|Adcyap1|Atp1b1|Calm1|Camk2g|Cftr|Chrm1|Crhr1|Drd1|Drd2|Grin2c|Grin2d|Ppp1r12a|Pik3ca|Sstr1|Sstr2|Plce1|Atp1a2|Camk2d|Npy|Rap1a|Rac3|Adcy2|Rapgef3|Nppa	-2.276027	0	23	1	1	-4.719451	2.538697
1	-2.899128	mmu04015	M1	1	0	KEGG Pathway	24	Rap1 signaling pathway - Mus musculus (house mouse)		-2.899128	2.1258621	3.5499851	20836	214	916	20	2.1834061	0.4828651	11514|12313|12388|13489|13640|13800|14924|16337|18706|18751|19395|22339|71785|74055|75292|93737|109905|170758|210044|223864	Adcy8|Calm1|Ctnnd1|Drd2|Efna5|Enah|Magi1|Insr|Pik3ca|Prkcb|Rasgrp2|Vegfa|Pdgfd|Plce1|Prkd3|Pard6g|Rap1a|Rac3|Adcy2|Rapgef3	-1.012193	0	23	0	0	-4.719451	2.538697
1	-4.51550	GO:00515	M1	1	0	GO Biological Pr	19	regulation of neurotransmitter transport	19_GO:0051179 localization	-4.51550	3.11850	5.07374	20836	124	916	17	1.85589	0.44592	12048|13489|14580|15560|15893|16504|17260|18751|72194|75209|78808|109648|109905|192167|235415|241770|545192	Bcl2l1|Drd2|Gfap|Htr2c|Ica1|Kcnc3|Mef2c|Prkcb|Fbxl20|Sv2c|Stxbp5|Npy|Rap1a|Nlgn1|Cplx3|Rims4|Baiap3	-2.115296	0	24	1	1	-4.515017	3.4698394

	17	88				ocesses				17	26	51					52	43									
1	-4.313315	GO:0046928	M1	1	0	GO Biological Processes	19	regulation of neurotransmitter secretion	19_GO:0051179 localization	-4.313315	3.2807776	5.0001017	20836	104	916	15	1.6375546	0.4193386	12048|15560|15893|16504|17260|18751|72194|75209|78808|109648|109905|192167|235415|241770|545192	Bcl2l1|Htr2c|Ica1|Kcnc3|Mef2c|Prkcb|Fbxl20|Sv2c|Stxbp5|Npy|Rap1a|Nlgn1|Cplx3|Rims4|Baiap3	-1.985077	0	24	0	0	-4.515017	3.4698394
1	-3.451257	GO:0001505	M1	1	0	GO Biological Processes	19	regulation of neurotransmitter levels	19_GO:0065007 biological regulation	-3.451257	2.1982129	3.9866652	20836	238	916	23	2.510917	0.5169475	12048|13489|14580|15560|15893|16504|17260|18751|20519|27204|72194|75209|78808|83762|98660|109648|109905|192167|235415|241770|243616|269060|545192	Bcl2l1|Drd2|Gfap|Htr2c|Ica1|Kcnc3|Mef2c|Prkcb|Slc22a3|Syn3|Fbxl20|Sv2c|Stxbp5|Otof|Atp1a2|Npy|Rap1a|Nlgn1|Cplx3|Rims4|Slc6a11|Dagla|Baiap3	-1.37881	0	24	0	0	-4.515017	3.4698394

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	16998	17157				ogical Processes			localization	16998	29845	3355					34061	28651	67|230899|241770|378460|545192	py|Rap1a|Nlgn1|Nppa|Rims4|Pram1|Baiap3							
1	-2.23584	GO:0060627	M1	1	0	GO Biological Processes	19	regulation of vesicle-mediated transport	19_GO:0051179 localization	-2.23584	1.5115328	2.7658972	20836	617	916	41	4.4759825	0.6832077	11551|12048|12317|12638|12921|13489|14158|14734|15444|16337|16568|18205|18751|19055|20963|20969|21463|22339|23970|27418|30878|54524|66616|71770|72194|75209|78808|100102|108797|109648|109905|192167|192199|211323|217835|230899|235415|241062|241770|378460|545192	Adra2a|Bcl2l1|Calr|Cftr|Crhr1|Drd2|Fer|Gpc3|Hpca|Insr|Kif3a|Ntf3|Prkcb|Ppp3ca|Syk|Sdc1|Tcp11|Vegfa|Pacsin2|Mkln1|Apln|Syt6|Snx9|Ap2b1|Fbxl20|Sv2c|Stxbp5|Pcsk9|Mex3b|Npy|Rap1a|Nlgn1|Rspo1|Nrg1|Rin3|Nppa|Cplx3|Pgap1|Rims4|Pram1|Baiap3	-0.585038	0	24	0	0	-4.515017	3.4698394
1	-2.1040	GO:0006836	M1	1	0	GO Biological Pr	19	neurotransmitter transport	19_GO:0051179 localization	-2.1040	2.14280	2.88833	20836	138	916	13	1.419214	0.390816	13489|15893|20519|27204|75209|83762|98660|109905|192167|235415|240332|241770|243616	Drd2|Ica1|Slc22a3|Syn3|Sv2c|Otof|Atp1a2|Rap1a|Nlgn1|Cplx3|Slc6a7|Rims4|Slc6a11	-0.507933	0	24	0	0	-4.515017	3.4698394

	09	36				ocesses			09	74	94															
1	-4.499999	R-MMU-76002	M1	1	0	Reactome Gene Sets	6	Platelet activation, signaling and aggregation	-4.499999	2.4139382	4.7739136	20836	245	916	26	2.8384279	0.5487044	11551|12313|13590|13601|14696|14706|18706|18751|19039|19395|19419|20692|20963|22065|22339|30955|54216|56077|66866|68038|71660|104009|109905|223864|240334|269060	Adra2a|Calm1|Lefty1|Ecm1|Gnb4|Gng4|Pik3ca|Prkcb|Lgals3bp|Rasgrp2|Rasgrp1|Sparc|Syk|Trpc3|Vegfa|Pik3cg|Pcdh7|Dgke|Nhlrc2|Chid1|Rarres2|Qsox1|Rap1a|Rapgef3|Pcyox1l|Dagla	-2.110025	0	25	1	1	-4.499999	2.443863
1	-3.546256	R-MMU-109582	M1	1	0	Reactome Gene Sets	6	Hemostasis	-3.546256	1.8067663	3.8793547	20836	491	916	39	4.2576419	0.6670968	11551|11640|12313|12505|13590|13601|14696|14706|16554|16561|16564|16568|18585|18706|18751|19039|19395|19419|20692|20963|20969|22065|22143|22339|30955|54216|56077|66866|68038|71660|75050|104009|109905|110891|223864|232943|240334|242202|269060	Adra2a|Akap1|Calm1|Cd44|Lefty1|Ecm1|Gnb4|Gng4|Kif13b|Kif1b|Kif21a|Kif3a|Pde9a|Pik3ca|Prkcb|Lgals3bp|Rasgrp2|Rasgrp1|Sparc|Syk|Sdc1|Trpc3|Tuba1b|Vegfa|Pik3cg|Pcdh7|Dgke|Nhlrc2|Chid1|Rarres2|Kif27|Qsox1|Rap1a|Slc8a2|Rapgef3|Klc3|Pcyox1l|Pde5a|Dagla	-1.447566	0	25	0	0	-4.499999	2.443863

1	-2.588703	R-MMU-76005	M1	1	0	Reactome Gene Sets	6	Response to elevated platelet cytosolic Ca2+		-2.588703	2.443863	3.415671	20836	121	916	13	1.419214	0.390816	12313|13590|13601|18751|19039|20692|22339|54216|66866|68038|71660|104009|240334	Calm1|Lefty1|Ecm1|Prkcb|Lgals3bp|Sparc|Vegfa|Pcdh7|Nhlrc2|Chid1|Rarres2|Qsox1|Pcyox1l	-0.801914	0	25	0	0	-4.499999	2.443863
1	-2.297801	R-MMU-114608	M1	1	0	Reactome Gene Sets	6	Platelet degranulation		-2.297801	2.3531095	3.1337682	20836	116	916	12	1.3100437	0.3756917	12313|13590|13601|19039|20692|22339|54216|66866|68038|71660|104009|240334	Calm1|Lefty1|Ecm1|Lgals3bp|Sparc|Vegfa|Pcdh7|Nhlrc2|Chid1|Rarres2|Qsox1|Pcyox1l	-0.612047	0	25	0	0	-4.499999	2.443863
1	-4.	GO:0	M1	1	0	GO Bi	19	extracellular matrix organization	19_GO:0009987	-4.3	2.3	4.7	20836	274	916	28	3.0	0.5	12406|12815|12822|12836|13406|14114|14115|14580|17385|17388|17389|50706|	Serpinh1|Col11a2|Col18a1|Col7a1|Dmp1|Fbln1|Fbln2|Gfap|Mmp11|Mmp15|Mm	-2.110025	0	26	1	1	-4.498163	2.402

	498163	030198				ological Processes			cellular process	498163	244828	324797					567686	687773	64075|68169|68553|69700|72043|99011|104009|107581|207596|213945|237759|241639|279028|320078|321007|373864	p16|Postn|Smoc1|Ndnf|Col6a4|Col22a1|Sulf2|Pomt1|Qsox1|Col16a1|Thsd4|Col28a1|Col23a1|Fermt1|Adamts13|Olfml2b|Serac1|Col27a1							8231
1	-4.441334	GO:0043062	M1	1	0	GO Biological Processes	19	extracellular structure organization	19_GO:0009987 cellular process	-4.441334	2.3076388	4.6895438	20836	276	916	28	3.0567686	0.5687773	12406|12815|12822|12836|13406|14114|14115|14580|17385|17388|17389|50706|64075|68169|68553|69700|72043|99011|104009|107581|207596|213945|237759|241639|279028|320078|321007|373864	Serpinh1|Col11a2|Col18a1|Col7a1|Dmp1|Fbln1|Fbln2|Gfap|Mmp11|Mmp15|Mmp16|Postn|Smoc1|Ndnf|Col6a4|Col22a1|Sulf2|Pomt1|Qsox1|Col16a1|Thsd4|Col28a1|Col23a1|Fermt1|Adamts13|Olfml2b|Serac1|Col27a1	-2.080867	0	26	0	0	-4.498163	2.4028231
1	-4.4413	GO:00452	M1	1	0	GO Biological	19	external encapsulating structure organization	19_GO:0009987 cellular process	-4.4413	2.30763	4.68954	20836	276	916	28	3.05676	0.56877	12406|12815|12822|12836|13406|14114|14115|14580|17385|17388|17389|50706|64075|68169|68553|69700|72043|99011|104009|107581|207596|213945|237759|2	Serpinh1|Col11a2|Col18a1|Col7a1|Dmp1|Fbln1|Fbln2|Gfap|Mmp11|Mmp15|Mmp16|Postn|Smoc1|Ndnf|Col6a4|Col22a1|Sulf2|Pomt1|Qsox1|Col16a1|Thsd4|Col2	-2.080867	0	26	0	0	-4.498163	2.4028231

	34	29				Processes				34	88	38					86	73	41639|279028|320078|321007|373864	8a1|Col23a1|Fermt1|Adamts13|Olfml2b|Serac1|Col27a1							
1	-2.827309	GO:0010811	M1	1	0	GO Biological Processes	19	positive regulation of cell-substrate adhesion	19_GO:0048518 positive regulation of biological process	-2.827309	2.4028231	3.5968694	20836	142	916	15	1.6375546	0.4193386	12317|13406|14114|14115|17926|22288|22339|56838|64075|68169|107581|109648|140709|170758|241639	Calr|Dmp1|Fbln1|Fbln2|Myoc|Utrn|Vegfa|Ccl28|Smoc1|Ndnf|Col16a1|Npy|Col26a1|Rac3|Fermt1	-0.958031	0	26	0	0	-4.498163	2.4028231
1	-2.528943	GO:0010810	M1	1	0	GO Biological Processes	19	regulation of cell-substrate adhesion	19_GO:0050789 regulation of biological process	-2.528943	1.9779761	3.1981227	20836	230	916	20	2.1834061	0.4828651	11856|12043|12317|13406|13640|14114|14115|17926|22288|22339|50706|56838|64075|67451|68169|107581|109648|140709|170758|241639	Arhgap6|Bcl2|Calr|Dmp1|Efna5|Fbln1|Fbln2|Myoc|Utrn|Vegfa|Postn|Ccl28|Smoc1|Pkp2|Ndnf|Col16a1|Npy|Col26a1|Rac3|Fermt1	-0.758302	0	26	0	0	-4.498163	2.4028231

1	-4.468178	GO:0055119	M1	1	0	GO Biological Processes	19	relaxation of cardiac muscle	19_GO:0032501 multicellular organismal process	-4.468178	11.373362	7.0358479	20836	10	916	5	0.5458515	0.2434451	11931|16518|18706|108058|242202	Atp1b1|Kcnj2|Pik3ca|Camk2d|Pde5a	-2.09132	0	27	1	1	-4.468178	11.373362
1	-2.736434	GO:0090075	M1	1	0	GO Biological Processes	19	relaxation of muscle	19_GO:0032501 multicellular organismal process	-2.736434	5.4158869	4.341494	20836	21	916	5	0.5458515	0.2434451	11931|16518|18706|108058|242202	Atp1b1|Kcnj2|Pik3ca|Camk2d|Pde5a	-0.884505	0	27	0	0	-4.468178	11.373362
1	-2.3	GO:00	M1	1	0	GO Biol	19	actin-mediated cell contraction	19_GO:0009987 cellula	-2.3	3.03	3.38	20836	60	916	8	0.87	0.30	16518|18706|20265|20271|22003|67451|71653|108058	Kcnj2|Pik3ca|Scn1a|Scn5a|Tpm1|Pkp2|Shtn1|Camk2d	-0.642098	0	27	0	0	-4.468178	11.373362

	40507	70252				ogical Processes			r process	40507	28967	1503					33624	74289									
1	-2.2980066	GO:0060048	M1	1	0	GO Biological Processes	19	cardiac muscle contraction	19_GO:0032501 multicellular organismal process	-2.298066	2.7664936	3.2643232	20836	74	916	9	0.98255328	0.325898	11931|16518|18706|20265|20271|21924|22003|67451|108058	Atp1b1|Kcnj2|Pik3ca|Scn1a|Scn5a|Tnnc1|Tpm1|Pkp2|Camk2d	-0.612047	0	27	0	0	-4.468178	11.373362
1	-2.2480	GO:00300	M1	1	0	GO Biological Pr	19	actin filament-based movement	19_GO:0009987 cellular process	-2.2480	2.55581	3.155409	20836	89	916	10	1.09170	0.34333	16518|18706|20265|20271|22003|22376|67451|71653|108058|432516	Kcnj2|Pik3ca|Scn1a|Scn5a|Tpm1|Was|Pkp2|Shtn1|Camk2d|Myo1a	-0.585467	0	27	0	0	-4.468178	11.373362

	38	48				ocesses				38	81	11					31	72								
1	-2.230741	GO:0086003	M1	1	0	GO Biological Processes	19	cardiac muscle cell contraction	19_GO:0032501 multicellular organismal process	-2.230741	3.5915881	3.4288368	20836	38	916	6	0.6550218	0.2665343	16518|18706|20265|20271|67451|108058	Kcnj2|Pik3ca|Scn1a|Scn5a|Pkp2|Camk2d	-0.585038	0	27	0	0	-4.468178	11.373362
1	-4.363701	GO:0042403	M1	1	0	GO Biological Processes	19	thyroid hormone metabolic process	19_GO:0008152 metabolic process	-4.363701	5.8701226	5.8188438	20836	31	916	8	0.8733624	0.3074289	13039|13371|16522|19014|19699|107585|108115|218476	Ctsl|Dio2|Kcnj6|Med1|Reln|Dio3|Slco4a1|Gcnt4	-2.020793	0	28	1	1	-4.363701	5.8701226

1	-2.284617	GO:0018958	M1	1	0	GO Biological Processes	19	phenol-containing compound metabolic process	19_GO:0008152 metabolic process	-2.284617	2.4530782	3.1546221	20836	102	916	11	1.2008734	0.3598963	12043 | 13039 | 13371 | 13489 | 16522 | 19014 | 19699 | 56448 | 107585 | 108115 | 218476	Bcl2 | Ctsl | Dio2 | Drd2 | Kcnj6 | Med1 | Reln | Cyp2d22 | Dio3 | Slco4a1 | Gcnt4	-0.60673	0	28	0	0	-4.363701	5.8701226
1	-4.360326	R-MMU-397014	M1	1	0	Reactome Gene Sets	6	Muscle contraction		-4.360326	2.8247567	4.8578459	20836	153	916	19	2.0742358	0.4709012	11931 | 12313 | 12325 | 16518 | 20410 | 21924 | 22003 | 50875 | 54377 | 56808 | 59069 | 70357 | 80334 | 98660 | 108058 | 110891 | 229709 | 230899 | 242202	Atp1b1 | Calm1 | Camk2g | Kcnj2 | Sorbs3 | Tnnc1 | Tpm1 | Tmod3 | Cacng4 | Cacna2d2 | Tpm3 | Kcnip1 | Kcnip4 | Atp1a2 | Camk2d | Slc8a2 | Ahcyl1 | Nppa | Pde5a	-2.020793	0	29	1	1	-4.360326	3.0620591
1	-4.	mmu	M1	1	0	KEGG	24	Adrenergic signaling in cardiomyocytes -		-4.	2.7	4.7	20836	156	916	19	2.0	0.4	11514 | 11550 | 11931 | 12043 | 12313 | 12325 | 20271 | 21924 | 22003 | 30955 | 54377 | 56808 |	Adcy8 | Adra1d | Atp1b1 | Bcl2 | Calm1 | Camk2g | Scn5a | Tnnc1 | Tpm1 | Pik3cg | Cacng4 |	-1.938506	0	29	0	0	-4.360326	3.062

	24367	04261				Pathway		Mus musculus (house mouse)	24367	704344	595589					7423058	709012	59069|81905|98660|108058|110891|210044|223864	Cacna2d2|Tpm3|Cacng8|Atp1a2|Camk2d|Slc8a2|Adcy2|Rapgef3							0591
1	-3.449105	R-MMU-5576891	M1	1	0	Reactome Gene Sets	6	Cardiac conduction	-3.449105	3.0174227	4.2926584	20836	98	916	13	1.419214	0.390816	11931|12313|12325|16518|54377|56808|70357|80334|98660|108058|110891|229709|230899	Atp1b1|Calm1|Camk2g|Kcnj2|Cacng4|Cacna2d2|Kcnip1|Kcnip4|Atp1a2|Camk2d|Slc8a2|Ahcyl1|Nppa	-1.37881	0	29	0	0	-4.360326	3.0620591
1	-2.1312	R-MMU-5	M1	1	0	Reactome Gene	6	Ion homeostasis	-2.1312	3.06205	3.19255	20836	52	916	7	0.76419	0.28773	11931|12313|12325|98660|108058|110891|229709	Atp1b1|Calm1|Camk2g|Atp1a2|Camk2d|Slc8a2|Ahcyl1	-0.520337	0	29	0	0	-4.360326	3.0620591

	78	578775				Sets				78	91	24					21	17									
1	-2.082848	mmu05414	M1	1	0	KEGG Pathway	24	Dilated cardiomyopathy - Mus musculus (house mouse)		-2.082848	2.4198644	2.9585934	20836	94	916	10	1.0917031	0.3433372	11514 | 21924 | 22003 | 24051 | 54377 | 56808 | 59069 | 81905 | 110891 | 210044	Adcy8 | Tnnc1 | Tpm1 | Sgcb | Cacng4 | Cacna2d2 | Tpm3 | Cacng8 | Slc8a2 | Adcy2	-0.501425	0	29	0	0	-4.360326	3.0620591
1	-4.298993	GO:0003341	M1	1	0	GO Biological Processes	19	cilium movement	19_GO:0099987 cellular processes	-4.298993	2.5662972	4.712224	20836	195	916	22	2.4017467	0.5058676	13206 | 13411 | 16568 | 18830 | 54562 | 68270 | 68708 | 69329 | 74711 | 75050 | 75563 | 78801 | 110082 | 110084 | 207686 | 212892 | 224661 | 227058 | 232943 | 269701 | 327954 | 380654	Ddx4 | Dnah11 | Kif3a | Pltp | Dnaaf11 | Dnaaf1 | Rabl2 | Cfap206 | Ttll9 | Kif27 | Dnali1 | Ak7 | Dnah5 | Dnah1 | Cfap69 | Rsph4a | Slc26a8 | Dnah7b | Klc3 | Wdr66 | Dnah2 | Cfap54	-1.979431	0	30	1	1	-4.298993	6.3185347

1	-3.064484	GO:0036159	M1	1	0	GO Biological Processes	19	inner dynein arm assembly	19_GO:0009987 cellular process	-3.064484	6.3185347	4.8407045	20836	18	916	5	0.5458515	0.2434451	54562|68270|110084|227058|327954	Dnaaf11|Dnaaf1|Dnah1|Dnah7b|Dnah2	-1.119814	0	30	0	0	-4.298993	6.3185347
1	-2.931372	GO:0001539	M1	1	0	GO Biological Processes	19	cilium or flagellum-dependent cell motility	19_GO:0009987 cellular process	-2.931372	2.3787425	3.6704721	20836	153	916	16	1.7467249	0.4328506	13206|13411|18830|54562|68708|69329|74711|110082|110084|207686|212892|224661|232943|269701|327954|380654	Ddx4|Dnah11|Pltp|Dnaaf11|Rabl2|Cfap206|Ttll9|Dnah5|Dnah1|Cfap69|Rsph4a|Slc26a8|Klc3|Wdr66|Dnah2|Cfap54	-1.031636	0	30	0	0	-4.298993	6.3185347
1	-2.9	GO:00	M1	1	0	GO Biol	19	cilium-dependent cell motility	19_GO:0009987 cellula	-2.9	2.37	3.67	20836	153	916	16	1.74	0.43	13206|13411|18830|54562|68708|69329|74711|110082|110084|207686|212892|22	Ddx4|Dnah11|Pltp|Dnaaf11|Rabl2|Cfap206|Ttll9|Dnah5|Dnah1|Cfap69|Rsph4a|Sl	-1.031636	0	30	0	0	-4.298993	6.3185347

	31372	60285				ogical Processes			r process	31372	87425	04721					67249	28506	4661|232943|269701|327954|380654	c26a8|Klc3|Wdr66|Dnah2|Cfap54							
1	-2.736647	GO:0060294	M1	1	0	GO Biological Processes	19	cilium movement involved in cell motility	19_GO:0009987 cellular process	-2.736647	2.3531095	3.5061139	20836	145	916	15	1.6375546	0.4193386	13206|13411|18830|54562|68708|69329|74711|110082|110084|207686|212892|224661|232943|269701|380654	Ddx4|Dnah11|Pltp|Dnaaf11|Rabl2|Cfap206|Ttll9|Dnah5|Dnah1|Cfap69|Rsph4a|Slc26a8|Klc3|Wdr66|Cfap54	-0.884505	0	30	0	0	-4.298993	6.3185347
1	-2.6015	GO:00033	M1	1	0	GO Biological Pr	19	epithelial cilium movement involved in extracellular fluid movement	19_GO:0051179 localization	-2.6015	3.70295	3.80464	20836	43	916	7	0.76419	0.28773	13411|54562|75050|78801|110082|110084|380654	Dnah11|Dnaaf11|Kif27|Ak7|Dnah5|Dnah1|Cfap54	-0.801914	0	30	0	0	-4.298993	6.3185347

	55	51				ocesses				55	52	66					21	17									
1	-2.51297	GO:0030317	M1	1	0	GO Biological Processes	19	flagellated sperm motility	19_GO:0022414 reproductive process	-2.51297	2.3076388	3.3049353	20836	138	916	14	1.5283843	0.4053443	13206|13411|18830|54562|68708|69329|74711|110082|110084|207686|224661|232943|269701|380654	Ddx4|Dnah11|Pltp|Dnaaf11|Rabl2|Cfap206|Ttll9|Dnah5|Dnah1|Cfap69|Slc26a8|Klc3|Wdr66|Cfap54	-0.745077	0	30	0	0	-4.298993	6.3185347
1	-2.43062	GO:0006858	M1	1	0	GO Biological Processes	19	extracellular transport	19_GO:0051179 localization	-2.43062	3.4614581	3.5838015	20836	46	916	7	0.7641921	0.2877317	13411|54562|75050|78801|110082|110084|380654	Dnah11|Dnaaf11|Kif27|Ak7|Dnah5|Dnah1|Cfap54	-0.682806	0	30	0	0	-4.298993	6.3185347

1	-2.395852	GO:0007018	M1	1	0	GO Biological Processes	19	microtubule-based movement	19_GO:0009987 cellular process	-2.395852	1.6807925	2.9705947	20836	406	916	30	3.2751092	0.5880771	13206 | 13411 | 15507 | 16554 | 16561 | 16564 | 16568 | 17755 | 18830 | 19419 | 54562 | 68270 | 68708 | 69329 | 74711 | 75050 | 75563 | 78801 | 78933 | 110082 | 110084 | 207686 | 212892 | 224661 | 227058 | 232943 | 246317 | 269701 | 327954 | 380654	Ddx4 | Dnah11 | Hspb1 | Kif13b | Kif1b | Kif21a | Kif3a | Map1b | Pltp | Rasgrp1 | Dnaaf11 | Dnaaf1 | Rabl2 | Cfap206 | Ttll9 | Kif27 | Dnali1 | Ak7 | Agbl4 | Dnah5 | Dnah1 | Cfap69 | Rsph4a | Slc26a8 | Dnah7b | Klc3 | Neto1 | Wdr66 | Dnah2 | Cfap54	-0.660926	0	30	0	0	-4.298993	6.3185347
1	-2.345967	GO:0097722	M1	1	0	GO Biological Processes	19	sperm motility	19_GO:0022414 reproductive process	-2.345967	2.2114871	3.1282298	20836	144	916	14	1.5283843	0.4053443	13206 | 13411 | 18830 | 54562 | 68708 | 69329 | 74711 | 110082 | 110084 | 207686 | 224661 | 232943 | 269701 | 380654	Ddx4 | Dnah11 | Pltp | Dnaaf11 | Rabl2 | Cfap206 | Ttll9 | Dnah5 | Dnah1 | Cfap69 | Slc26a8 | Klc3 | Wdr66 | Cfap54	-0.645217	0	30	0	0	-4.298993	6.3185347
1	-2.2	GO:00	M1	1	0	GO Biol	19	axonemal dynein complex assembly	19_GO:0009987 cellula	-2.2	3.59	3.42	20836	38	916	6	0.65	0.26	54562 | 68270 | 110082 | 110084 | 227058 | 327954	Dnaaf11 | Dnaaf1 | Dnah5 | Dnah1 | Dnah7b | Dnah2	-0.585038	0	30	0	0	-4.298993	6.3185347

	30741	70286				ogical Processes			r process	30741	15881	88368					50218	65343									
1	-4.128846	GO:0030903	M1	1	0	GO Biological Processes	19	notochord development	19_GO:0032502 developmental process	-4.128846	6.369083	5.760013	20836	25	916	7	0.7641921	0.2877317	12808|12822|20997|21331|22601|50884|373864	Cobl|Col18a1|T|T2|Yap1|Nckap1|Col27a1	-1.855599	0	31	1	1	-4.128846	6.369083
1	-2.14726	GO:00485	M1	1	0	GO Biological Pr	19	embryonic organ development	19_GO:0032502 developmental process	-2.14726	1.53925	2.70182	20836	532	916	36	3.930131	0.64202	11819|12192|12608|12702|12808|12822|13395|14106|16477|16568|17260|17389|18516|19014|19662|20997|21331|21349|22339|22601|22658|30841|50884|66797|68270|71461|71660|73750|207304|225876|231672|238	Nr2f2|Zfp36l1|Cebpb|Socs3|Cobl|Col18a1|Dlx5|Foxh1|Junb|Kif3a|Mef2c|Mmp16|Pbx3|Med1|Rbp4|T|T2|Tal1|Vegfa|Yap1|Pcgf2|Kdm2b|Nckap1|Cntnap2|Dnaaf1|Ptk7|Rarres2|Whrn|Hect	-0.532484	0	31	0	0	-4.128846	6.369083

		68				ocesses				21	15						12	328|373864|380993|667663|100503041	d1|Kdm2a|Fbxw8|Vash1|Col27a1|Zfat|Myo3a|Pdzd7							
1	-4.12023	GO:0003012	M1	1	0	GO Biological Processes	19	muscle system process	19_GO:0032501 multicellular organismal process	-4.12023	2.2923056	4.4789202	20836	258	916	26	2.8384279	0.5487044	11931|12671|13488|13489|13618|15559|16518|17260|17926|18706|19055|20265|20271|20606|21336|21924|22003|50875|59069|67451|72043|107589|108058|230899|242202|243547	Atp1b1|Chrm3|Drd1|Drd2|Ednrb|Htr2b|Kcnj2|Mef2c|Myoc|Pik3ca|Ppp3ca|Scn1a|Scn5a|Sstr2|Tacr1|Tnnc1|Tpm1|Tmod3|Tpm3|Pkp2|Sulf2|Mylk|Camk2d|Nppa|Pde5a|Grip2	-1.855599	0	32	1	1	-4.12023	4.9449402
1	-3.7189	GO:0006936	M1	1	0	GO Biological Processes	19	muscle contraction	19_GO:0032501 multicellular organismal process	-3.7189	2.4004082	4.2565497	20836	199	916	21	2.2925764	0.4945133	11931|12671|13488|13489|13618|15559|16518|18706|20265|20271|20606|21336|21924|22003|50875|59069|67451|72043|107589|108058|243547	Atp1b1|Chrm3|Drd1|Drd2|Ednrb|Htr2b|Kcnj2|Pik3ca|Scn1a|Scn5a|Sstr2|Tacr1|Tnnc1|Tpm1|Tmod3|Tpm3|Pkp2|Sulf2|Mylk|Camk2d|Grip2	-1.577053	0	32	0	0	-4.12023	4.9449402

1	-3.403609	GO:0006939	M1	1	0	GO Biological Processes	19	smooth muscle contraction	19_GO:0032501 multicellular organismal process	-3.403609	3.6105913	4.4499934	20836	63	916	10	1.0917031	0.3433372	12671|13488|13489|13618|15559|20606|21336|72043|107589|243547	Chrm3|Drd1|Drd2|Ednrb|Htr2b|Sstr2|Tacr1|Sulf2|Mylk|Grip2	-1.347339	0	32	0	0	-4.12023	4.9449402
1	-2.549651	GO:0014821	M1	1	0	GO Biological Processes	19	phasic smooth muscle contraction	19_GO:0032501 multicellular organismal process	-2.549651	4.9449402	4.0591661	20836	23	916	5	0.5458515	0.2434451	13488|13489|13618|15559|20606	Drd1|Drd2|Ednrb|Htr2b|Sstr2	-0.773206	0	32	0	0	-4.12023	4.9449402
1	-4.10	GO:010	M1	1	0	GO Biol	19	muscle structure development	19_GO:0032502 develo	-4.1	1.83	4.25	20836	544	916	44	4.80	0.70	11819|12023|12043|12675|13549|13618|14106|16392|17260|17261|17932|18032|18205|18209|19014|19055|	Nr2f2|Barx2|Bcl2|Chuk|Dyrk1b|Ednrb|Foxh1|Isl1|Mef2c|Mef2d|Myt1|Nfix|Ntf3|Ntn3|Med1|Ppp3ca|Ptgfrn|	-1.84336	0	33	1	1	-4.103712	2.7739908

	03712	61061				ogical Processes			pmental process	03712	98086	61525					34934	65475	19221|20969|20997|21924|22003|22288|22339|24051|30928|50721|50875|53620|56198|56808|66797|67451|68794|70127|80288|107589|108058|116701|211323|211401|214812|225288|242620|244810	Sdc1|T|Tnnc1|Tpm1|Utrn|Vegfa|Sgcb|Zbtb18|Sirt6|Tmod3|Vamp5|Heyl|Cacna2d2|Cntnap2|Pkp2|Flnc|Dpf3|Bcl9l|Mylk|Camk2d|Fgfrl1|Nrg1|Mtss1|Zfp609|Fhod3|Dmrta2|AW551984							
1	-3.551777	GO:0007517	M1	1	0	GO Biological Processes	19	muscle organ development	19_GO:0032502 developmental process	-3.551777	2.0479366	3.9927623	20836	311	916	28	3.0567686	0.5687773	11819|12023|12043|14106|16392|17260|17261|17932|18032|19014|19055|21924|22003|24051|30928|50721|53620|56198|66797|67451|70127|80288|107589|116701|211323|211401|214812|242620	Nr2f2|Barx2|Bcl2|Foxh1|Isl1|Mef2c|Mef2d|Myt1|Nfix|Med1|Ppp3ca|Tnnc1|Tpm1|Sgcb|Zbtb18|Sirt6|Vamp5|Heyl|Cntnap2|Pkp2|Dpf3|Bcl9l|Mylk|Fgfrl1|Nrg1|Mtss1|Zfp609|Dmrta2	-1.450136	0	33	0	0	-4.103712	2.7739908
1	-3.4521	GO:0030	M1	1	0	GO Biological	19	heart morphogenesis	19_GO:0032502 developmental	-3.4521	2.08244	3.93856	20836	284	916	26	2.83842	0.54870	13411|13590|14106|15559|16337|16392|16568|17260|19014|19662|20348|20997|21924|22003|22339|22601|50721|56198|67451|67784|68270|73713|116701|211323|225876|268902	Dnah11|Lefty1|Foxh1|Htr2b|Insr|Isl1|Kif3a|Mef2c|Med1|Rbp4|Sema3c|T|Tnnc1|Tpm1|Vegfa|Yap1|Sirt6|Heyl|Pkp2|Plxnd1|Dnaaf1|Rbm20|Fgfrl1|Nrg1|Kdm2a|Robo2	-1.37881	0	33	0	0	-4.103712	2.7739908

	22	07				Processes			process	22	66	89					79	44									
1	-3.105329	GO:0007507	M1	1	0	GO Biological Processes	19	heart development	19_GO:0032502 developmental process	-3.105329	1.6543073	3.5022777	20836	605	916	44	4.8034934	0.7065475	12192|12576|13411|13590|13869|14106|14734|15559|16337|16392|16568|17260|18032|19014|19662|20271|20348|20997|21924|22003|22339|22601|24051|30878|50721|50884|56198|67451|67784|68270|71461|71770|73713|75691|108058|110082|116701|207304|211323|216991|225288|225876|244810|268902	Zfp36l1|Cdkn1b|Dnah11|Lefty1|Erbb4|Foxh1|Gpc3|Htr2b|Insr|Isl1|Kif3a|Mef2c|Nfix|Med1|Rbp4|Scn5a|Sema3c|T|Tnnc1|Tpm1|Vegfa|Yap1|Sgcb|Apln|Sirt6|Nckap1|Heyl|Pkp2|Plxnd1|Dnaaf1|Ptk7|Ap2b1|Rbm20|Anks6|Camk2d|Dnah5|Fgfrl1|Hectd1|Nrg1|Adap2|Fhod3|Kdm2a|AW551984|Robo2	-1.146861	0	33	0	0	-4.103712	2.7739908
1	-3.072075	GO:0060537	M1	1	0	GO Biological Proc	19	muscle tissue development	19_GO:0032502 developmental process	-3.072075	1.8411187	3.5626897	20836	383	916	31	3.3842795	0.5974606	11819|12023|12043|14049|14106|16392|17260|17261|18032|19014|19055|19662|20348|20997|21924|22003|22339|24051|30928|50721|53620|56198|66797|67451|80288|107589|108058|211323|225288|242620|244810	Nr2f2|Barx2|Bcl2|Eya2|Foxh1|Isl1|Mef2c|Mef2d|Nfix|Med1|Ppp3ca|Rbp4|Sema3c|T|Tnnc1|Tpm1|Vegfa|Sgcb|Zbtb18|Sirt6|Vamp5|Heyl|Cntnap2|Pkp2|Bcl9l|Mylk|Camk2d|Nrg1|Fhod3|Dmrta2|AW551984	-1.125342	0	33	0	0	-4.103712	2.7739908

<table>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>esses</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td>-3.028918</td><td>GO:0048729</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Processes</td><td>19</td><td>tissue morphogenesis</td><td>19_GO:0032502 developmental process</td><td>-3.028918</td><td>1.6197358</td><td>3.4312671</td><td>20836</td><td>646</td><td>916</td><td>46</td><td>5.0218341</td><td>0.721598</td><td>12043 | 12388 | 12505 | 12675 | 12702 | 12808 | 13039 | 13800 | 13841 | 13869 | 14106 | 14312 | 14734 | 15208 | 16392 | 16568 | 17260 | 18667 | 18854 | 19014 | 20346 | 20348 | 20997 | 21349 | 21923 | 21924 | 22003 | 22339 | 22601 | 30841 | 50721 | 50884 | 56198 | 67451 | 67784 | 68270 | 71461 | 76905 | 107589 | 207304 | 211323 | 211401 | 218476 | 225876 | 230099 | 268902</td><td>Bcl2 | Ctnnd1 | Cd44 | Chuk | Socs3 | Cobl | Ctsl | Enah | Epha7 | Erbb4 | Foxh1 | Brd2 | Gpc3 | Hes5 | Isl1 | Kif3a | Mef2c | Pgr | Pml | Med1 | Sema3a | Sema3c | T | Tal1 | Tnc | Tnnc1 | Tpm1 | Vegfa | Yap1 | Kdm2b | Sirt6 | Nckap1 | Heyl | Pkp2 | Plxnd1 | Dnaaf1 | Ptk7 | Lrg1 | Mylk | Hectd1 | Nrg1 | Mtss1 | Gcnt4 | Kdm2a | Car9 | Robo2</td><td>-1.090379</td><td>0</td><td>33</td><td>0</td><td>0</td><td>-4.103712</td><td>2.7739908</td></tr>
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1	-2.594916	GO:0051146	M1	1	0	GO Biological Processes	19	striated muscle cell differentiation	19_GO:0032502 developmental process	-2.594916	1.9657663	3.2472462	20836	243	916	21	2.2925764	0.4945133	12023|12043|12675|13549|16392|17260|18209|19055|19221|20997|22003|22339|24051|50721|50875|66797|68794|108058|211323|225288|244810	Barx2|Bcl2|Chuk|Dyrk1b|Isl1|Mef2c|Ntn3|Ppp3ca|Ptgfrn|T|Tpm1|Vegfa|Sgcb|Sirt6|Tmod3|Cntnap2|Flnc|Camk2d|Nrg1|Fhod3|AW551984	-0.801914	0	33	0	0	-4.103712	2.7739908
1	-2.5	GO:00	M1	1	0	GO Biol	19	cardiac ventricle morphogenesis	19_GO:0032502 develo	-2.5	2.77	3.45	20836	82	916	10	1.09	0.34	14106|16392|17260|19014|20348|21924|22003|56198|67451|211323	Foxh1|Isl1|Mef2c|Med1|Sema3c|Tnnc1|Tpm1|Heyl|Pkp2|Nrg1	-0.741407	0	33	0	0	-4.103712	2.7739908

	05038	03208				ogical Processes			pmental process	05038	39908	14947					17031	33372									
1	-2.371766	GO:0042692	M1	1	0	GO Biological Processes	19	muscle cell differentiation	19_GO:0032502 developmental process	-2.371766	1.7715518	2.9873194	20836	321	916	25	2.7292576	0.5383512	12023|12043|12675|13549|13618|16392|17260|18205|18209|19055|19221|20997|22003|22339|24051|50721|50875|56808|66797|68794|70127|108058|211323|225288|244810	Barx2|Bcl2|Chuk|Dyrk1b|Ednrb|Isl1|Mef2c|Ntf3|Ntn3|Ppp3ca|Ptgfrn|T|Tpm1|Vegfa|Sgcb|Sirt6|Tmod3|Cacna2d2|Cntnap2|Flnc|Dpf3|Camk2d|Nrg1|Fhod3|AW551984	-0.645639	0	33	0	0	-4.103712	2.7739908
1	-2.1654	GO:00032	M1	1	0	GO Biological Pr	19	cardiac chamber morphogenesis	19_GO:0032502 developmental process	-2.1654	2.10896	2.93278	20836	151	916	14	1.52838	0.40534	13411|14106|16392|17260|19014|19662|20348|21924|22003|56198|67451|116701|211323|268902	Dnah11|Foxh1|Isl1|Mef2c|Med1|Rbp4|Sema3c|Tnnc1|Tpm1|Heyl|Pkp2|Fgfrl1|Nrg1|Robo2	-0.540615	0	33	0	0	-4.103712	2.7739908

	79	06				ocesses				79	79	01					43	43									
1	-2.103468	GO:0014706	M1	1	0	GO Biological Processes	19	striated muscle tissue development	19_GO:0032502 developmental process	-2.103468	1.8781699	2.79501	20836	218	916	18	1.9650655	0.458597	14049|14106|16392|17260|19014|19662|20348|20997|21924|22003|22339|24051|50721|67451|108058|211323|225288|244810	Eya2|Foxh1|Isl1|Mef2c|Med1|Rbp4|Sema3c|T|Tnnc1|Tpm1|Vegfa|Sgcb|Sirt6|Pkp2|Camk2d|Nrg1|Fhod3|AW551984	-0.507933	0	33	0	0	-4.103712	2.7739908
1	-4.077674	GO:0021781	M1	1	0	GO Biological Processes	19	glial cell fate commitment	19_GO:0032502 developmental process	-4.077674	7.582416	5.9908769	20836	18	916	6	0.6550218	0.2665343	15208|18032|18088|18205|21349|211323	Hes5|Nfix|Nkx2-2|Ntf3|Tal1|Nrg1	-1.828964	0	34	1	1	-4.077674	7.582416

1	-4.0093341	GO:2000311	M1	1	0	GO Biological Processes	19	regulation of AMPA receptor activity	19_GO:0051179 localization	-4.0093341	6.1241182	5.6062131	20836	26	916	7	0.7641921	0.2877317	17260|19699|54377|81905|192167|260297|380702	Mef2c|Reln|Cacng4|Cacng8|Nlgn1|Prrt1|Shisa6	-1.781781	0	35	1	1	-4.009341	7.5822416
1	-2.377837	GO:0099601	M1	1	0	GO Biological Processes	19	regulation of neurotransmitter receptor activity	19_GO:0023052 signaling	-2.377837	2.8433406	3.3598211	20836	72	916	9	0.9825328	0.325898	17260|19699|54377|74513|81905|192167|246317|260297|380702	Mef2c|Reln|Cacng4|Neto2|Cacng8|Nlgn1|Neto1|Prrt1|Shisa6	-0.648113	0	35	0	0	-4.009341	7.5822416
1	-2.2	GO:20	M1	1	0	GO Biol	19	positive regulation of AMPA	19_GO:0051179	-2.2	7.58	4.23	20836	9	916	3	0.32	0.18	19699|54377|81905	Reln|Cacng4|Cacng8	-0.585038	0	35	0	0	-4.009341	7.5822416

	34427	00969				ogical Processes		receptor activity	localization	34427	22416	52743					75109	87786									
1	-2.159259	GO:0099590	M1	1	0	GO Biological Processes	19	neurotransmitter receptor internalization	19_GO:0051179 localization	-2.159259	5.0548278	3.6905321	20836	18	916	4	0.4366812	0.2178634	13858|54377|71770|81905	Eps15|Cacng4|Ap2b1|Cacng8	-0.540615	0	35	0	0	-4.009341	7.5822416
1	-2.0938	GO:00989	M1	1	0	GO Biological Pr	19	postsynaptic neurotransmitter receptor diffusion trapping	19_GO:0051179 localization	-2.0938	6.82401	3.95020	20836	10	916	3	0.32751	0.18877	54377|81905|380702	Cacng4|Cacng8|Shisa6	-0.507933	0	35	0	0	-4.009341	7.5822416

	39	70				ocesses				39	75	43					09	86									
1	-2.093839	GO:0099628	M1	1	0	GO Biological Processes	19	neurotransmitter receptor diffusion trapping	19_GO:0051179 localization	-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	54377|81905|380702	Cacng4|Cacng8|Shisa6	-0.507933	0	35	0	0	-4.009341	7.5822416
1	-2.077046	GO:0031623	M1	1	0	GO Biological Processes	19	receptor internalization	19_GO:0051179 localization	-2.077046	2.5590066	2.9958559	20836	80	916	9	0.9825328	0.325898	13489|13858|15559|16337|20963|22042|54377|71770|81905	Drd2|Eps15|Htr2b|Insr|Syk|Tfrc|Cacng4|Ap2b1|Cacng8	-0.497403	0	35	0	0	-4.009341	7.5822416

1	-4.000939	GO:0051592	M1	1	0	GO Biological Processes	19	response to calcium ion	19_GO:0050896 response to stimulus	-4.000939	2.8433406	4.6247653	20836	136	916	17	1.8558952	0.4459243	11514|12313|15165|15444|16477|17260|18013|19055|19395|20271|22065|54153|54524|66871|107589|192167|229709	Adcy8|Calm1|Hcn1|Hpca|Junb|Mef2c|Neurod2|Ppp3ca|Rasgrp2|Scn5a|Trpc3|Rasa4|Syt6|Cpne8|Mylk|Nlgn1|Ahcyl1	-1.781205	0	36	1	1	-4.000939	3.3698852
1	-3.678961	GO:0071277	M1	1	0	GO Biological Processes	19	cellular response to calcium ion	19_GO:0050896 response to stimulus	-3.678961	3.3698852	4.5825611	20836	81	916	12	1.3100437	0.3756917	11514|15444|16477|17260|18013|19395|20271|54153|54524|66871|107589|192167	Adcy8|Hpca|Junb|Mef2c|Neurod2|Rasgrp2|Scn5a|Rasa4|Syt6|Cpne8|Mylk|Nlgn1	-1.543548	0	36	0	0	-4.000939	3.3698852
1	-3.3	GO:00	M1	1	0	GO Biol	19	response to metal ion	19_GO:0050896 respon	-3.3	2.00	3.80	20836	306	916	27	2.94	0.55	11514|12043|12313|12576|12675|15165|15444|16477|16485|16816|17260|18013|19055|19395|20271|21924|	Adcy8|Bcl2|Calm1|Cdkn1b|Chuk|Hcn1|Hpca|Junb|Kcna1|Lcat|Mef2c|Neurod2|Ppp3ca|Rasgrp2|Scn5a|Tnn	-1.288504	0	36	0	0	-4.000939	3.3698852

	09483	10038				ogical Processes			se to stimulus	09483	7064	55998					75983	88427	22042|22065|27421|54153|54524|66871|67606|73649|107589|192167|229709	c1|Tfrc|Trpc3|Abcc6|Rasa4|Syt6|Cpne8|Fibin|Cybrd1|Mylk|Nlgn1|Ahcyl1							
1	-2.338992	GO:0071248	M1	1	0	GO Biological Processes	19	cellular response to metal ion	19_GO:0050896 response to stimulus	-2.338992	2.0797006	3.0757179	20836	175	916	16	1.7467249	0.4328506	11514|12576|12675|15444|16477|16485|17260|18013|19395|20271|22042|54153|54524|66871|107589|192167	Adcy8|Cdkn1b|Chuk|Hpca|Junb|Kcna1|Mef2c|Neurod2|Rasgrp2|Scn5a|Tfrc|Rasa4|Syt6|Cpne8|Mylk|Nlgn1	-0.641749	0	36	0	0	-4.000939	3.3698852
1	-3.93271	GO:00140	M1	1	0	GO Biological Pr	19	positive regulation of gamma-aminobutyric acid secretion	19_GO:0051179 localization	-3.93271	12.9981	6.80813	20836	7	916	4	0.43668	0.21786	14805|15560|18216|22044	Grik1|Htr2c|Ntsr1|Trh	-1.724456	0	37	1	1	-3.93271	12.998129

		54				ocesses					29	47					12	34									
1	-2.714589	GO:0014052	M1	1	0	GO Biological Processes	19	regulation of gamma-aminobutyric acid secretion	19_GO:0051179 localization	-2.714589	6.9989923	4.6395745	20836	13	916	4	0.4366812	0.2178634	14805|15560|18216|22044	Grik1|Htr2c|Ntsr1|Trh	-0.872148	0	37	0	0	-3.93271	12.998129
1	-3.847113	R-MMU-382551	M1	1	0	Reactome Gene Sets	6	Transport of small molecules		-3.847113	1.7307291	4.0393313	20836	644	916	49	5.349345	0.7434716	11931|11974|11980|12313|12325|12638|12733|14696|14706|15203|16816|16891|18830|20499|20503|20519|20652|22042|22065|27416|27421|28253|64242|67819|68428|70377|71770|73649|74338|76376|98660|100102|105847|107566|108058|108115|110891|110895|117591|223473|234967|238384|2	Atp1b1|Atp6v0e|Atp8a1|Calm1|Camk2g|Cftr|Clcnka|Gnb4|Gng4|Heph|Lcat|Lipg|Pltp|Slc12a7|Slc16a7|Slc22a3|Soat1|Tfrc|Trpc3|Abcc5|Abcc6|Slco1b2|Ngb|Derl1|Steap3|Derl3|Ap2b1|Cybrd1|Slc6a19|Slc24a2|Atp1a2|Pcsk9|Lmf2|Arl2bp|Camk2d|Slco4a1|Slc8a2|Slc9a4|Slc2a9|Nipal2|Slc36a4|Slc24a	-1.671583	0	38	1	1	-3.847113	1.8868251

																			40332 | 243616 | 243634 | 268512 | 329178 | 382427 | 433926	4 | Slc6a7 | Slc6a11 | Ano2 | Slc26a11 | Unc80 | Best3 | Lrrc8b							
1	-2.123301	R-MMU-425407	M1	1	0	Reactome Gene Sets	6	SLC-mediated transmembrane transport		-2.123301	1.8868251	2.8160079	20836	217	916	18	1.9650655	0.458597	12313 | 15203 | 20499 | 20503 | 20519 | 28253 | 74338 | 76376 | 107566 | 108115 | 110891 | 110895 | 117591 | 234967 | 238384 | 240332 | 243616 | 268512	Calm1 | Heph | Slc12a7 | Slc16a7 | Slc22a3 | Slco1b2 | Slc6a19 | Slc24a2 | Arl2bp | Slco4a1 | Slc8a2 | Slc9a4 | Slc2a9 | Slc36a4 | Slc24a4 | Slc6a7 | Slc6a11 | Slc26a11	-0.516153	0	38	0	0	-3.847113	1.8868251
1	-3.790772	GO:0071880	M1	1	0	GO Biological Processes	19	adenylate cyclase-activating adrenergic receptor signaling pathway	19_GO:0023052 signaling	-3.790772	6.8240175	5.5877742	20836	20	916	6	0.6550218	0.2665343	11550 | 11551 | 11556 | 13488 | 13489 | 245424	Adra1d | Adra2a | Adrb3 | Drd1 | Drd2 | Gpr101	-1.625624	0	39	1	1	-3.790772	6.8240175

1	-3.761006	GO:0007189	M1	1	0	GO Biological Processes	19	adenylate cyclase-activating G protein-coupled receptor signaling pathway	19_GO:0023052 signaling	-3.761006	2.8212992	4.4495633	20836	129	916	16	1.7467249	0.4328506	11514|11516|11550|11551|11556|12921|13488|13489|13733|15945|17202|19216|21463|170757|210044|245424	Adcy8|Adcyap1|Adra1d|Adra2a|Adrb3|Crhr1|Drd1|Drd2|Adgre1|Cxcl10|Mc4r|Ptger1|Tcp11|Adgrl4|Adcy2|Gpr101	-1.605998	0	39	0	0	-3.790772	6.8240175
1	-3.315571	GO:0071875	M1	1	0	GO Biological Processes	19	adrenergic receptor signaling pathway	19_GO:0023052 signaling	-3.315571	5.6866812	4.9262217	20836	24	916	6	0.6550218	0.2665343	11550|11551|11556|13488|13489|245424	Adra1d|Adra2a|Adrb3|Drd1|Drd2|Gpr101	-1.292132	0	39	0	0	-3.790772	6.8240175
1	-3.2	GO:00	M1	1	0	GO Biol	19	adenylate cyclase-modulating G protein-	19_GO:0023052	-3.2	2.23	3.88	20836	214	916	21	2.29	0.49	11514|11516|11550|11551|11556|12669|12671|12854|12921|13488|13489|13733|15945|17202|19216|20606|	Adcy8|Adcyap1|Adra1d|Adra2a|Adrb3|Chrm1|Chrm3|Cort|Crhr1|Drd1|Drd2|Adgre1|Cxcl10|Mc4r|Ptger1	-1.279125	0	39	0	0	-3.790772	6.8240175

	90398	07188				ogical Processes		coupled receptor signaling pathway	signaling	90398	21552	51407					25764	45133	21463|170757|210044|245424|319229	|Sstr2|Tcp11|Adgrl4|Adcy2|Gpr101|Sctr							
1	-3.1150777	GO:0045762	M1	1	0	GO Biological Processes	19	positive regulation of adenylate cyclase activity	19_GO:0065007 biological regulation	-3.1150777	5.2492442	4.6490278	20836	26	916	6	0.6550218	0.2665343	11516|11556|13488|15444|21858|210044	Adcyap1|Adrb3|Drd1|Hpca|Timp2|Adcy2	-1.153621	0	39	0	0	-3.790772	6.8240175
1	-2.6015	GO:00457	M1	1	0	GO Biological Pr	19	regulation of adenylate cyclase activity	19_GO:0065007 biological regulation	-2.6015	3.70295	3.80464	20836	43	916	7	0.76419	0.28773	11516|11556|13488|13489|15444|21858|210044	Adcyap1|Adrb3|Drd1|Drd2|Hpca|Timp2|Adcy2	-0.801914	0	39	0	0	-3.790772	6.8240175

	55	61				ocesses				55	52	66					21	17									
1	-2.478479	GO:0031281	M1	1	0	GO Biological Processes	19	positive regulation of cyclase activity	19_GO:0065007 biological regulation	-2.478479	4.0141279	3.7717979	20836	34	916	6	0.6550218	0.2665343	11516|11556|13488|15444|21858|210044	Adcyap1|Adrb3|Drd1|Hpca|Timp2|Adcy2	-0.720072	0	39	0	0	-3.790772	6.8240175
1	-2.41298	GO:0051349	M1	1	0	GO Biological Processes	19	positive regulation of lyase activity	19_GO:0065007 biological regulation	-2.41298	3.8994386	3.6813376	20836	35	916	6	0.6550218	0.2665343	11516|11556|13488|15444|21858|210044	Adcyap1|Adrb3|Drd1|Hpca|Timp2|Adcy2	-0.670367	0	39	0	0	-3.790772	6.8240175

1	-2.354551	GO:0007190	M1	1	0	GO Biological Processes	19	activation of adenylate cyclase activity	19_GO:0065007 biological regulation	-2.354551	5.6866812	4.0214703	20836	16	916	4	0.4366812	0.2178634	11516|11556|13488|210044	Adcyap1|Adrb3|Drd1|Adcy2	-0.645217	0	39	0	0	-3.790772	6.8240175
1	-2.169046	GO:0042311	M1	1	0	GO Biological Processes	19	vasodilation	19_GO:0032501 multicellular organismal process	-2.169046	2.8433406	3.1670597	20836	64	916	8	0.8733624	0.3074289	11516|11551|11556|12638|13488|13618|22339|230899	Adcyap1|Adra2a|Adrb3|Cftr|Drd1|Ednrb|Vegfa|Nppa	-0.540615	0	39	0	0	-3.790772	6.8240175
1	-2.0	GO:00	M1	1	0	GO Biol	19	regulation of cyclase activity	19_GO:0065007 biologi	-2.0	3.00	3.13	20836	53	916	7	0.76	0.28	11516|11556|13488|13489|15444|21858|210044	Adcyap1|Adrb3|Drd1|Drd2|Hpca|Timp2|Adcy2	-0.502919	0	39	0	0	-3.790772	6.8240175

	8613	31279				ogical Processes			cal regulation	8613	42844	28744					41921	77317									
1	-3.7491106	GO:0042551	M1	1	0	GO Biological Processes	19	neuron maturation	19_GO:0032502 developmental process	-3.7491106	4.3557558	4.9388098	20836	47	916	9	0.98253328	0.3258898	12043|12259|13842|17926|66797|67161|224650|243914|269116	Bcl2|C1qa|Epha8|Myoc|Cntnap2|Sclt1|Anks1|Lgi4|Nfasc	-1.600728	0	40	1	1	-3.749106	9.7485964
1	-2.5859	GO:00451	M1	1	0	GO Biological Pr	19	clustering of voltage-gated sodium channels	19_GO:0032502 developmental process	-2.5859	9.74859	4.96424	20836	7	916	3	0.32751	0.18877	17926|67161|269116	Myoc|Sclt1|Nfasc	-0.801914	0	40	0	0	-3.749106	9.7485964

	09	62				ocesses				09	64	28					09	86									
1	-2.583728	GO:0045161	M1	1	0	GO Biological Processes	19	neuronal ion channel clustering	19_GO:0032502 developmental process	-2.583728	6.4990643	4.4135842	20836	14	916	4	0.4366812	0.2178634	17926|66797|67161|269116	Myoc|Cntnap2|Sclt1|Nfasc	-0.801914	0	40	0	0	-3.749106	9.7485964
1	-2.354559	GO:0021700	M1	1	0	GO Biological Processes	19	developmental maturation	19_GO:0032502 developmental process	-2.354559	1.7660501	2.9707064	20836	322	916	25	2.7292576	0.5383512	12023|12043|12259|12638|13039|13842|13869|14466|15208|17926|18032|18667|21349|22339|56747|66797|67161|75965|192167|224650|224661|238384|243914|269116|545192	Barx2|Bcl2|C1qa|Cftr|Ctsl|Epha8|Erbb4|Gba|Hes5|Myoc|Nfix|Pgr|Tal1|Vegfa|Sez6l|Cntnap2|Sclt1|Zdhhc20|Nlgn1|Anks1|Slc26a8|Slc24a4|Lgi4|Nfasc|Baiap3	-0.645217	0	40	0	0	-3.749106	9.7485964

1	-2.157174	GO:0048469	M1	1	0	GO Biological Processes	19	cell maturation	19_GO:0032502 developmental process	-2.157174	1.9431876	2.8668247	20836	199	916	17	1.8558952	0.4459243	12043|12259|12638|13842|14466|15208|17926|18032|18667|21349|22339|66797|67161|224650|224661|243914|269116	Bcl2|C1qa|Cftr|Epha8|Gba|Hes5|Myoc|Nfix|Pgr|Tal1|Vegfa|Cntnap2|Sclt1|Anks1|Slc26a8|Lgi4|Nfasc	-0.5395	0	40	0	0	-3.749106	9.7485964
1	-3.725427	GO:0007218	M1	1	0	GO Biological Processes	19	neuropeptide signaling pathway	19_GO:0023052 signaling	-3.725427	3.2142111	4.5642194	20836	92	916	13	1.419214	0.390816	11516|12854|12921|13599|18155|18216|18610|18619|20605|20606|21334|109648|230899	Adcyap1|Cort|Crhr1|Ecel1|Pnoc|Ntsr1|Pdyn|Penk|Sstr1|Sstr2|Tac2|Npy|Nppa	-1.580326	0	41	1	1	-3.725427	10.109656
1	-3.4	GO:00	M1	1	0	GO Biol	19	synaptic signaling via neuropeptide	19_GO:0023052	-3.4	10.1	5.86	20836	9	916	4	0.43	0.21	18619|109648|230899|381677	Penk|Npy|Nppa|Vgf	-1.347339	0	41	0	0	-3.725427	10.109656

	0721	99538				ogical Processes			signaling	0721	09656	15122					66812	78634									
1	-3.643189	GO:0050805	M1	1	0	GO Biological Processes	19	negative regulation of synaptic transmission	19_GO:0023052 signaling	-3.643189	3.8553771	4.7097503	20836	59	916	10	1.0917031	0.3433372	13488|13489|14805|15165|66797|76376|170935|210274|219228|260297	Drd1|Drd2|Grik1|Hcn1|Cntnap2|Slc24a2|Grid2ip|Shank2|Pcdh17|Prrt1	-1.517252	0	42	1	1	-3.643189	5.1697102
1	-2.6402	GO:00602	M1	1	0	GO Biological Pr	19	long-term synaptic depression	19_GO:0023052 signaling	-2.6402	5.16971	4.19603	20836	22	916	5	0.54585	0.24344	13488|76376|170935|210274|260297	Drd1|Slc24a2|Grid2ip|Shank2|Prrt1	-0.81225	0	42	0	0	-3.643189	5.1697102

	93	92				ocesses				93	02	65					15	51									
1	-3.580951	GO:0034330	M1	1	0	GO Biological Processes	19	cell junction organization	19_GO:0009987 cellular processes	-3.580951	1.7560308	3.8783201	20836	557	916	43	4.6943231	0.6988728	11856 | 12043 | 12259 | 12260 | 12388 | 12404 | 12561 | 13488 | 13640 | 13869 | 14401 | 16337 | 19266 | 19268 | 19699 | 20346 | 21923 | 23836 | 56747 | 56808 | 66220 | 66797 | 67451 | 67784 | 69693 | 70737 | 73750 | 75677 | 104156 | 110891 | 170643 | 170758 | 192167 | 210274 | 211323 | 211401 | 219228 | 232533 | 241201 | 260297 | 269116 | 269788 | 333605	Arhgap6 | Bcl2 | C1qa | C1qb | Ctnnd1 | Cbln1 | Cdh4 | Drd1 | Efna5 | Erbb4 | Gabrb2 | Insr | Ptprd | Ptprf | Reln | Sema3a | Tnc | Cdh20 | Sez6l | Cacna2d2 | Zdhhc12 | Cntnap2 | Pkp2 | Plxnd1 | Pof1b | Cgn | Whrn | Cldn22 | Etv5 | Slc8a2 | Kirrel | Rac3 | Nlgn1 | Shank2 | Nrg1 | Mtss1 | Pcdh17 | Stk38l | Cdh7 | Prrt1 | Nfasc | Lhfpl4 | Frmpd4	-1.464287	0	43	1	1	-3.580951	4.549345
1	-3.566839	GO:0050808	M1	1	0	GO Biological Processes	19	synapse organization	19_GO:0009987 cellular processes	-3.566839	1.9953267	3.9798361	20836	342	916	30	3.2751092	0.5880771	12259 | 12260 | 12404 | 13488 | 13640 | 13869 | 14401 | 16337 | 19266 | 19268 | 19699 | 20346 | 21923 | 56747 | 56808 | 66220 | 66797 | 67784 | 104156 | 110891 | 170758 | 192167 | 210274 | 211323 | 219228 | 232533 | 260297 | 269116 | 269788 | 333605	C1qa | C1qb | Cbln1 | Drd1 | Efna5 | Erbb4 | Gabrb2 | Insr | Ptprd | Ptprf | Reln | Sema3a | Tnc | Sez6l | Cacna2d2 | Zdhhc12 | Cntnap2 | Plxnd1 | Etv5 | Slc8a2 | Rac3 | Nlgn1 | Shank2 | Nrg1 | Pcdh17 | Stk38l | Prrt1 | Nfasc | Lhfpl4 | Frmpd4	-1.456249	0	43	0	0	-3.580951	4.549345

1	-2.837518	GO:0007416	M1	1	0	GO Biological Processes	19	synapse assembly	19_GO:0032502 developmental process	-2.837518	2.729607	3.717892	20836	100	916	12	1.3100437	0.3756917	12404|13869|14401|19266|19699|66220|66797|67784|192167|210274|211323|219228	Cbln1|Erbb4|Gabrb2|Ptprd|Reln|Zdhhc12|Cntnap2|Plxnd1|Nlgn1|Shank2|Nrg1|Pcdh17	-0.961263	0	43	0	0	-3.580951	4.549345
1	-2.768707	GO:0099560	M1	1	0	GO Biological Processes	19	synaptic membrane adhesion	19_GO:0009987 cellular process	-2.768707	4.549345	4.171724	20836	30	916	6	0.6550218	0.2665343	13640|19266|19268|192167|211323|219228	Efna5|Ptprd|Ptprf|Nlgn1|Nrg1|Pcdh17	-0.909688	0	43	0	0	-3.580951	4.549345
1	-2.5	GO:00	M1	1	0	GO Biol	19	cell junction assembly	19_GO:0009987 cellula	-2.5	1.86	3.13	20836	280	916	23	2.51	0.51	11856|12043|12388|12404|12561|13869|14401|19266|19699|23836|66220|66797|67451|67784|69693|70737|	Arhgap6|Bcl2|Ctnnd1|Cbln1|Cdh4|Erbb4|Gabrb2|Ptprd|Reln|Cdh20|Zdhhc12|Cntnap2|Pkp2|Plxnd1|Pof1b|	-0.741407	0	43	0	0	-3.580951	4.549345

	06739	34329				ogical Processes			r process	06739	8481	73996					0917	69475	75677|192167|210274|211323|219228|241201|269116	Cgn|Cldn22|Nlgn1|Shank2|Nrg1|Pcdh17|Cdh7|Nfasc							
1	-2.332725	GO:0098742	M1	1	0	GO Biological Processes	19	cell-cell adhesion via plasma-membrane adhesion molecules	19_GO:0009987 cellular process	-2.332725	2.0245776	3.0503798	20836	191	916	17	1.8558952	0.4459243	11658|12404|12561|13640|19266|19268|19281|23836|53870|116701|192167|211323|219228|239857|241201|245827|268902	Alcam|Cbln1|Cdh4|Efna5|Ptprd|Ptprf|Ptprt|Cdh20|Cntn6|Fgfrl1|Nlgn1|Nrg1|Pcdh17|Cadm2|Cdh7|Fat2|Robo2	-0.636645	0	43	0	0	-3.580951	4.5493345
1	-2.1881	GO:00986	M1	1	0	GO Biological Pr	19	cell-cell adhesion	19_GO:0009987 cellular process	-2.1881	1.59626	2.76068	20836	456	916	32	3.49344	0.60667	11658|12043|12192|12388|12404|12505|12561|13640|14158|15896|19266|19268|19281|20963|22339|23836|53870|67451|76905|108797|116701|170643|192167|211323|214058|219228|23985	Alcam|Bcl2|Zfp36l1|Ctnnd1|Cbln1|Cd44|Cdh4|Efna5|Fer|Icam2|Ptprd|Ptprf|Ptprt|Syk|Vegfa|Cdh20|Cntn6|Pkp2|Lrg1|Mex3b|Fgfrl1|Kirrel|Nlgn1|Nrg1|Megf11|Pcdh17|Cadm2|Cdh7|Fat2|Robo2|Nfasc|Fndc3a	-0.547574	0	43	0	0	-3.580951	4.5493345

	37	09				ocesses				37	14	49					98	75	7|241201|245827|268902|269116|319448								
1	-2.064073	GO:0050807	M1	1	0	GO Biological Processes	19	regulation of synapse organization	19_GO:0050789 regulation of biological process	-2.064073	1.7153268	2.6986663	20836	305	916	23	2.510917	0.5169475	12404|13048|13196|13489|13640|13841|17260|18013|19266|19268|19281|19699|20692|70530|104156|192167|210274|211323|241770|245446|269788|333605|574437	Cbln1|Cux2|Asap1|Drd2|Efna5|Epha7|Mef2c|Neurod2|Ptprd|Ptprf|Ptprt|Reln|Sparc|Lrfn2|Etv5|Nlgn1|Shank2|Nrg1|Rims4|Slitrk4|Lhfpl4|Frmpd4|Xlr3b	-0.49235	0	43	0	0	-3.580951	4.549345
1	-3.577302	GO:0002090	M1	1	0	GO Biological Processes	19	regulation of receptor internalization	19_GO:0051179 localization	-3.577302	3.2886831	4.4800627	20836	83	916	12	1.3100437	0.3756917	13489|15444|16337|18205|20963|22339|27418|30878|100102|192199|211323|217835	Drd2|Hpca|Insr|Ntf3|Syk|Vegfa|Mkln1|Apln|Pcsk9|Rspo1|Nrg1|Rin3	-1.463686	0	44	1	1	-3.577302	4.549345

1	-3.149672	GO:0002092	M1	1	0	GO Biological Processes	19	positive regulation of receptor internalization	19_GO:0051179 localization	-3.149672	4.549345	4.506506	20836	35	916	7	0.7641921	0.2877317	13489|16337|18205|20963|22339|30878|100102	Drd2|Insr|Ntf3|Syk|Vegfa|Apln|Pcsk9	-1.175186	0	44	0	0	-3.577302	4.549345
1	-2.290898	GO:0048259	M1	1	0	GO Biological Processes	19	regulation of receptor-mediated endocytosis	19_GO:0051179 localization	-2.290898	2.2573086	3.0955636	20836	131	916	13	1.419214	0.390816	13489|15444|16337|16568|18205|20963|22339|27418|30878|100102|192199|211323|217835	Drd2|Hpca|Insr|Kif3a|Ntf3|Syk|Vegfa|Mkln1|Apln|Pcsk9|Rspo1|Nrg1|Rin3	-0.608011	0	44	0	0	-3.577302	4.549345
1	-2.2	GO:00	M1	1	0	GO Biol	19	positive regulation of endocytosis	19_GO:0051179	-2.2	2.22	3.03	20836	133	916	13	1.41	0.39	12048|13489|14734|16337|16568|18205|19055|20963|22339|30878|71770|100102|192167	Bcl2l1|Drd2|Gpc3|Insr|Kif3a|Ntf3|Ppp3ca|Syk|Vegfa|Apln|Ap2b1|Pcsk9|Nlgn1	-0.585038	0	44	0	0	-3.577302	4.549345

	35806	45807				ogical Processes			localization	35806	33641	50422					9214	0816								
1	-2.169046	GO:0048260	M1	1	0	GO Biological Processes	19	positive regulation of receptor-mediated endocytosis	19_GO:0051179 localization	-2.169046	2.8433406	3.1670597	20836	64	916	8	0.8733624	0.3074289	13489|16337|16568|18205|20963|22339|30878|100102	Drd2|Insr|Kif3a|Ntf3|Syk|Vegfa|Apln|Pcsk9	-0.540615	0	44	0	0	-3.577302	4.549345
1	-2.1473	GO:00301	M1	1	0	GO Biological Pr	19	regulation of endocytosis	19_GO:0051179 localization	-2.1473	1.82704	2.81535	20836	249	916	20	2.18340	0.48286	12048|13489|14734|15444|16337|16568|18205|19055|20963|22339|23970|27418|30878|66616|71770|100102|192167|192199|211323|217835	Bcl2l1|Drd2|Gpc3|Hpca|Insr|Kif3a|Ntf3|Ppp3ca|Syk|Vegfa|Pacsin2|Mkln1|Apln|Snx9|Ap2b1|Pcsk9|Nlgn1|Rspo1|Nrg1|Rin3	-0.532484	0	44	0	0	-3.577302	4.549345

	47	00				ocesses			47	62	21					61	51									
1	-3.539094	R-MMU-438066	M1	1	0	Reactome Gene Sets	6	Unblocking of NMDA receptors, glutamate binding and activation	-3.539094	6.2036522	5.2365066	20836	22	916	6	0.6550218	0.2665343	12313|12325|14813|14814|108058|242274	Calm1|Camk2g|Grin2c|Grin2d|Camk2d|Lrrc7	-1.443328	0	45	1	1	-3.539094	6.2036522
1	-3.184409	mmu04720	M1	1	0	KEGG Pathway	24	Long-term potentiation - Mus musculus (house mouse)	-3.184409	3.3950336	4.2105714	20836	67	916	10	1.0917031	0.3433372	11514|12313|12325|14813|14814|18751|19055|108058|109905|223864	Adcy8|Calm1|Camk2g|Grin2c|Grin2d|Prkcb|Ppp3ca|Camk2d|Rap1a|Rapgef3	-1.198758	0	45	0	0	-3.539094	6.2036522

1	-3.022228	R-MMU-399719	M1	1	0	Reactome Gene Sets	6	Trafficking of AMPA receptors	-3.022228	5.0548278	4.5209376	20836	27	916	6	0.6550218	0.2665343	12325|18751|54377|71770|108058|243547	Camk2g|Prkcb|Cacng4|Ap2b1|Camk2d|Grip2	-1.087729	0	45	0	0	-3.539094	6.2036522
1	-3.022228	R-MMU-399721	M1	1	0	Reactome Gene Sets	6	Glutamate binding, activation of AMPA receptors and synaptic plasticity	-3.022228	5.0548278	4.5209376	20836	27	916	6	0.6550218	0.2665343	12325|18751|54377|71770|108058|243547	Camk2g|Prkcb|Cacng4|Ap2b1|Camk2d|Grip2	-1.087729	0	45	0	0	-3.539094	6.2036522

1	-2.503854	mmu05031	M1	1	0	KEGG Pathway	24	Amphetamine addiction - Mus musculus (house mouse)		-2.503854	2.9669641	3.5094085	20836	69	916	9	0.9825328	0.325898	12313 | 12325 | 13488 | 14813 | 14814 | 18610 | 18751 | 19055 | 108058	Calm1 | Camk2g | Drd1 | Grin2c | Grin2d | Pdyn | Prkcb | Ppp3ca | Camk2d	-0.741407	0	45	0	0	-3.539094	6.2036522
1	-2.349954	R-MMU-442755	M1	1	0	Reactome Gene Sets	6	Activation of NMDA receptors and postsynaptic events		-2.349954	3.7911208	3.5941652	20836	36	916	6	0.6550218	0.2665343	12313 | 12325 | 14813 | 14814 | 108058 | 242274	Calm1 | Camk2g | Grin2c | Grin2d | Camk2d | Lrrc7	-0.645217	0	45	0	0	-3.539094	6.2036522
1	-3.48	GO:199	M1	1	0	GO Biolog	19	response to odorant	19_GO:0050896 response to	-3.48	17.06	6.888	20836	4	916	3	0.327	0.188	66797 | 207686 | 238384	Cntnap2 | Cfap69 | Slc24a4	-1.400311	0	46	1	1	-3.484572	17.060044

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1	-2.840373	mmu04510	M1	1	0	KEGG Pathway	24	Focal adhesion - Mus musculus (house mouse)		-2.840373	2.1501879	3.5136979	20836	201	916	19	2.0742358	0.4709012	12043|12833|12834|13367|17931|18706|18719|18751|19699|21923|22339|68553|68794|71785|107589|109905|170758|245026|665033	Bcl2|Col6a1|Col6a2|Diaph1|Ppp1r12a|Pik3ca|Pip5k1b|Prkcb|Reln|Tnc|Vegfa|Col6a4|Flnc|Pdgfd|Mylk|Rap1a|Rac3|Col6a6|Col6a5	-0.961263	0	47	0	0	-3.416037	2.1501879
1	-3.339288	GO:0019935	M1	1	0	GO Biological Processes	19	cyclic-nucleotide-mediated signaling	19_GO:0023052 signaling	-3.339288	3.8626514	4.4745782	20836	53	916	9	0.9825328	0.325898	11514|11516|13618|14433|15559|15560|18585|210044|230899	Adcy8|Adcyap1|Ednrb|Gapdh|Htr2b|Htr2c|Pde9a|Adcy2|Nppa	-1.300785	0	48	1	1	-3.339288	3.8626514

1	-2.243294	GO:0019932	M1	1	0	GO Biological Processes	19	second-messenger-mediated signaling	19_GO:0023052 signaling	-2.243294	1.9830478	2.9575112	20836	195	916	17	1.8558952	0.4459243	11514|11516|11931|12671|13488|13618|14433|15559|15560|18585|19055|19416|20963|52589|68169|210044|230899	Adcy8|Adcyap1|Atp1b1|Chrm3|Drd1|Ednrb|Gapdh|Htr2b|Htr2c|Pde9a|Ppp3ca|Rasd1|Syk|Ncald|Ndnf|Adcy2|Nppa	-0.585038	0	48	0	0	-3.339288	3.8626514
1	-2.032931	GO:0019934	M1	1	0	GO Biological Processes	19	cGMP-mediated signaling	19_GO:0023052 signaling	-2.032931	3.7911208	3.2805358	20836	30	916	5	0.5458515	0.2434451	13618|15559|15560|18585|230899	Ednrb|Htr2b|Htr2c|Pde9a|Nppa	-0.46641	0	48	0	0	-3.339288	3.8626514
1	-3.3	GO:00	M1	1	0	GO Biol	19	regulation of hormone secretion	19_GO:0051179	-3.3	1.95	3.79	20836	337	916	29	3.16	0.57	11514|11516|11551|12426|12638|12671|12921|13489|13640|15560|15893|16322|16392|16522|17932|18111|	Adcy8|Adcyap1|Adra2a|Cckbr|Cftr|Chrm3|Crhr1|Drd2|Efna5|Htr2c|Ica1|Inha|Isl1|Kcnj6|Myt1|Nnat|Prkcb	-1.295579	0	49	1	1	-3.331535	2.4591054

	31535	46883				ogical Processes			localization	31535	74333	9767					59389	8519	18751|19055|19662|21336|22044|30878|50721|67623|211323|215445|230899|238377|545192	|Ppp3ca|Rbp4|Tacr1|Trh|Apln|Sirt6|Tm7sf3|Nrg1|Rab11fip3|Nppa|Gpr68|Baiap3							
1	-3.086375	GO:0090277	M1	1	0	Biological Processes	19	positive regulation of peptide hormone secretion	19_GO:0051179 localization	-3.086375	2.4591054	3.8199536	20836	148	916	16	1.7467249	0.4328506	11514|11516|12426|12638|12671|13489|16392|18111|18751|19662|22044|30878|50721|67623|238377|545192	Adcy8|Adcyap1|Cckbr|Cftr|Chrm3|Drd2|Isl1|Nnat|Prkcb|Rbp4|Trh|Apln|Sirt6|Tm7sf3|Gpr68|Baiap3	-1.137569	0	49	0	0	-3.331535	2.4591054
1	-3.0166	GO:00108	M1	1	0	Biological Pr	19	regulation of hormone levels	19_GO:0065007 biological regulation	-3.0166	1.62734	3.42596	20836	629	916	45	4.91266	0.71412	11514|11516|11551|12426|12638|12671|12903|12921|13039|13371|13489|13618|13640|15560|15893|16322|16392|16522|17202|17932|18111|18751|19014|19055|19662|19699|21336|22044|30878|50721|56448|67623|	Adcy8|Adcyap1|Adra2a|Cckbr|Cftr|Chrm3|Crabp1|Crhr1|Ctsl|Dio2|Drd2|Ednrb|Efna5|Htr2c|Ica1|Inha|Isl1|Kcnj6|Mc4r|Myt1|Nnat|Prkcb|Med1|Ppp3ca|Rbp4|Reln|Tacr1|Trh|Apln|Sirt6|Cyp2d22|Tm7sf3|Akr1c18	-1.086889	0	49	0	0	-3.331535	2.4591054

	38	17				ocesses				38	92	99					38	15	105349 | 107522 | 107585 | 108115 | 211323 | 215445 | 218476 | 230899 | 235415 | 238377 | 381677 | 545192 | 665270	| Ece2 | Dio3 | Slco4a1 | Nrg1 | Rab11fip3 | Gcnt4 | Nppa | Cplx3 | Gpr68 | Vgf | Baiap3 | Plb1							
1	-3.015397	GO:1903530	M1	1	0	GO Biological Processes	19	regulation of secretion by cell	19_GO:0051179 localization	-3.015397	1.5899993	3.4074895	20836	701	916	49	5.349345	0.7434716	11514 | 11516 | 11551 | 12048 | 12426 | 12638 | 12671 | 12921 | 13489 | 13640 | 14158 | 15560 | 15893 | 16322 | 16392 | 16504 | 16522 | 17260 | 17932 | 18111 | 18216 | 18751 | 19055 | 19662 | 20963 | 20969 | 21336 | 21463 | 22044 | 30878 | 50721 | 54524 | 64292 | 67623 | 72194 | 75209 | 78808 | 109648 | 109905 | 192167 | 211323 | 215445 | 229593 | 230899 | 235415 | 238377 | 241770 | 378460 | 545192	Adcy8 | Adcyap1 | Adra2a | Bcl2l1 | Cckbr | Cftr | Chrm3 | Crhr1 | Drd2 | Efna5 | Fer | Htr2c | Ica1 | Inha | Isl1 | Kcnc3 | Kcnj6 | Mef2c | Myt1 | Nnat | Ntsr1 | Prkcb | Ppp3ca | Rbp4 | Syk | Sdc1 | Tacr1 | Tcp11 | Trh | Apln | Sirt6 | Syt6 | Ptges | Tm7sf3 | Fbxl20 | Sv2c | Stxbp5 | Npy | Rap1a | Nlgn1 | Nrg1 | Rab11fip3 | Golph3l | Nppa | Cplx3 | Gpr68 | Rims4 | Pram1 | Baiap3	-1.086889	0	49	0	0	-3.331535	2.4591054
1	-2.961704	GO:0002793	M1	1	0	GO Biological Proc	19	positive regulation of peptide secretion	19_GO:0051179 localization	-2.961704	2.3943921	3.6998938	20836	152	916	16	1.7467249	0.4328506	11514 | 11516 | 12426 | 12638 | 12671 | 13489 | 16392 | 18111 | 18751 | 19662 | 22044 | 30878 | 50721 | 67623 | 238377 | 545192	Adcy8 | Adcyap1 | Cckbr | Cftr | Chrm3 | Drd2 | Isl1 | Nnat | Prkcb | Rbp4 | Trh | Apln | Sirt6 | Tm7sf3 | Gpr68 | Baiap3	-1.046861	0	49	0	0	-3.331535	2.4591054

						esses																					
1	-2.83357	GO:0090276	M1	1	0	GO Biological Processes	19	regulation of peptide hormone secretion	19_GO:0051179 localization	-2.83357	1.9817222	3.4423273	20836	264	916	23	2.510917	0.5169475	11514 | 11516 | 11551 | 12426 | 12638 | 12671 | 13489 | 13640 | 15560 | 15893 | 16392 | 16522 | 17932 | 18111 | 18751 | 19055 | 19662 | 22044 | 30878 | 50721 | 67623 | 238377 | 545192	Adcy8 | Adcyap1 | Adra2a | Cckbr | Cftr | Chrm3 | Drd2 | Efna5 | Htr2c | Ica1 | Isl1 | Kcnj6 | Myt1 | Nnat | Prkcb | Ppp3ca | Rbp4 | Trh | Apln | Sirt6 | Tm7sf3 | Gpr68 | Baiap3	-0.959667	0	49	0	0	-3.331535	2.4591054
1	-2.735156	GO:0051046	M1	1	0	GO Biological Processes	19	regulation of secretion	19_GO:0051179 localization	-2.735156	1.5126429	3.1645061	20836	797	916	53	5.7860262	0.7714364	11514 | 11516 | 11551 | 11686 | 12048 | 12426 | 12638 | 12671 | 12921 | 13489 | 13618 | 13640 | 14158 | 14805 | 15560 | 15893 | 16322 | 16392 | 16504 | 16522 | 17260 | 17932 | 18111 | 18216 | 18751 | 19055 | 19662 | 20963 | 20969 | 21336 | 21463 | 22044 | 30878 | 50721 | 54524 | 64292 | 67623 | 72194 | 75209 | 78808 | 109648 | 109905 | 192167 | 211323 | 215445 | 229593 | 230899	Adcy8 | Adcyap1 | Adra2a | Alox12b | Bcl2l1 | Cckbr | Cftr | Chrm3 | Crhr1 | Drd2 | Ednrb | Efna5 | Fer | Grik1 | Htr2c | Ica1 | Inha | Isl1 | Kcnc3 | Kcnj6 | Mef2c | Myt1 | Nnat | Ntsr1 | Prkcb | Ppp3ca | Rbp4 | Syk | Sdc1 | Tacr1 | Tcp11 | Trh | Apln | Sirt6 | Syt6 | Ptges | Tm7sf3 | Fbxl20 | Sv2c | Stxbp5 | Npy | Rap1a | Nlgn1 | Nrg1 | Rab11fip3 | Golph3l | Nppa | Cplx3 | Gpr68 | Rims4 | Spx | Pram1 | Baiap3	-0.884505	0	49	0	0	-3.331535	2.4591054

																			| 235415 | 238377 | 241770 | 319552 | 378460 | 545192								
1	-2.727438	GO:0002791	M1	1	0	GO Biological Processes	19	regulation of peptide secretion	19_GO:0051179 localization	-2.727438	1.9448873	3.3448025	20836	269	916	23	2.510917	0.5169475	11514 | 11516 | 11551 | 12426 | 12638 | 12671 | 13489 | 13640 | 15560 | 15893 | 16392 | 16522 | 17932 | 18111 | 18751 | 19055 | 19662 | 22044 | 30878 | 50721 | 67623 | 238377 | 545192	Adcy8 | Adcyap1 | Adra2a | Cckbr | Cftr | Chrm3 | Drd2 | Efna5 | Htr2c | Ica1 | Isl1 | Kcnj6 | Myt1 | Nnat | Prkcb | Ppp3ca | Rbp4 | Trh | Apln | Sirt6 | Tm7sf3 | Gpr68 | Baiap3	-0.880497	0	49	0	0	-3.331535	2.4591054
1	-2.686027	GO:0090087	M1	1	0	GO Biological Processes	19	regulation of peptide transport	19_GO:0051179 localization	-2.686027	1.9305338	3.3063763	20836	271	916	23	2.510917	0.5169475	11514 | 11516 | 11551 | 12426 | 12638 | 12671 | 13489 | 13640 | 15560 | 15893 | 16392 | 16522 | 17932 | 18111 | 18751 | 19055 | 19662 | 22044 | 30878 | 50721 | 67623 | 238377 | 545192	Adcy8 | Adcyap1 | Adra2a | Cckbr | Cftr | Chrm3 | Drd2 | Efna5 | Htr2c | Ica1 | Isl1 | Kcnj6 | Myt1 | Nnat | Prkcb | Ppp3ca | Rbp4 | Trh | Apln | Sirt6 | Tm7sf3 | Gpr68 | Baiap3	-0.848438	0	49	0	0	-3.331535	2.4591054

1	-2.65641	GO:0046887	M1	1	0	GO Biological Processes	19	positive regulation of hormone secretion	19_GO:0051179 localization	-2.65641	2.1214562	3.3564052	20836	193	916	18	1.9650655	0.458597	11514 | 11516 | 12426 | 12638 | 12671 | 13489 | 16392 | 18111 | 18751 | 19662 | 21336 | 22044 | 30878 | 50721 | 67623 | 230899 | 238377 | 545192	Adcy8 | Adcyap1 | Cckbr | Cftr | Chrm3 | Drd2 | Isl1 | Nnat | Prkcb | Rbp4 | Tacr1 | Trh | Apln | Sirt6 | Tm7sf3 | Nppa | Gpr68 | Baiap3	-0.825208	0	49	0	0	-3.331535	2.4591054
1	-2.376736	GO:0050796	M1	1	0	GO Biological Processes	19	regulation of insulin secretion	19_GO:0051179 localization	-2.376736	1.9556008	3.0625331	20836	221	916	19	2.0742358	0.4709012	11514 | 11551 | 12638 | 12671 | 13489 | 13640 | 15893 | 16392 | 16522 | 17932 | 18111 | 18751 | 19055 | 19662 | 22044 | 50721 | 67623 | 238377 | 545192	Adcy8 | Adra2a | Cftr | Chrm3 | Drd2 | Efna5 | Ica1 | Isl1 | Kcnj6 | Myt1 | Nnat | Prkcb | Ppp3ca | Rbp4 | Trh | Sirt6 | Tm7sf3 | Gpr68 | Baiap3	-0.648113	0	49	0	0	-3.331535	2.4591054
1	-2.3	GO:00	M1	1	0	GO Biol	19	positive regulation of insulin secretion	19_GO:0051179	-2.3	2.39	3.20	20836	114	916	12	1.31	0.37	11514 | 12638 | 12671 | 16392 | 18111 | 18751 | 19662 | 22044 | 50721 | 67623 | 238377 | 545192	Adcy8 | Cftr | Chrm3 | Isl1 | Nnat | Prkcb | Rbp4 | Trh | Sirt6 | Tm7sf3 | Gpr68 | Baiap3	-0.645217	0	49	0	0	-3.331535	2.4591054

<table>
<tr><td></td><td>58635</td><td>32024</td><td></td><td></td><td></td><td>ogical Processes</td><td></td><td></td><td>localization</td><td>58635</td><td>43921</td><td>12628</td><td></td><td></td><td></td><td></td><td>00437</td><td>56917</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td>-2.229109</td><td>GO:0051047</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Processes</td><td>19</td><td>positive regulation of secretion</td><td>19_GO:0051179 localization</td><td>-2.229109</td><td>1.6068327</td><td>2.8001663</td><td>20836</td><td>453</td><td>916</td><td>32</td><td>3.4934498</td><td>0.6066775</td><td>11514 | 11516 | 11686 | 12048 | 12426 | 12638 | 12671 | 12921 | 13489 | 13618 | 14805 | 15560 | 16392 | 18111 | 18216 | 18751 | 19055 | 19662 | 20963 | 20969 | 21336 | 22044 | 30878 | 50721 | 64292 | 67623 | 78808 | 192167 | 229593 | 230899 | 238377 | 545192</td><td>Adcy8 | Adcyap1 | Alox12b | Bcl2l1 | Cckbr | Cftr | Chrm3 | Crhr1 | Drd2 | Ednrb | Grik1 | Htr2c | Isl1 | Nnat | Ntsr1 | Prkcb | Ppp3ca | Rbp4 | Syk | Sdc1 | Tacr1 | Trh | Apln | Sirt6 | Ptges | Tm7sf3 | Stxbp5 | Nlgn1 | Golph3l | Nppa | Gpr68 | Baiap3</td><td>-0.584439</td><td>0</td><td>49</td><td>0</td><td>0</td><td>-3.331535</td><td>2.4591054</td></tr>
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	93	32				ocesses				93	64	92					86	73									
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1	-3.132177	GO:0055065	M1	1	0	GO Biological Processes	19	metal ion homeostasis	19_GO:0042592 homeostatic process	-3.132177	1.7810635	3.5796614	20836	447	916	35	3.8209607	0.633401	11514|11931|12043|12308|13618|15203|15559|15560|16485|18751|18854|20499|21982|22042|22065|27421|51800|56491|59091|68428|71753|73649|76376|98660|108058|109648|110784|110891|110895|170935|208659|211401|217893|227059|238384	Adcy8|Atp1b1|Bcl2|Calb2|Ednrb|Heph|Htr2b|Htr2c|Kcna1|Prkcb|Pml|Slc12a7|Tmem165|Tfrc|Trpc3|Abcc6|Bok|Vapb|Jph2|Steap3|Tmprss6|Cybrd1|Slc24a2|Atp1a2|Camk2d|Npy|Nr3c2|Slc8a2|Slc9a4|Grid2ip|Fam20a|Mtss1|Pacs2|Slc39a10|Slc24a4	-1.15989	0	50	0	0	-3.32325	2.4198644

1	-3.116682	GO:0055080	M1	1	0	GO Biological Processes	19	monoatomic cation homeostasis	19_GO:0042592 homeostatic process	-3.116682	1.7038745	3.5334283	20836	534	916	40	4.3668122	0.67521	11514 | 11931 | 12043 | 12308 | 12426 | 12638 | 13618 | 15203 | 15559 | 15560 | 16485 | 16517 | 18751 | 18854 | 20499 | 21982 | 22042 | 22065 | 27421 | 51800 | 56491 | 59091 | 68428 | 71753 | 73649 | 76376 | 98660 | 108058 | 109648 | 110784 | 110891 | 110895 | 170935 | 208659 | 211401 | 217893 | 227059 | 238384 | 329178 | 435376	Adcy8 | Atp1b1 | Bcl2 | Calb2 | Cckbr | Cftr | Ednrb | Heph | Htr2b | Htr2c | Kcna1 | Kcnj16 | Prkcb | Pml | Slc12a7 | Tmem165 | Tfrc | Trpc3 | Abcc6 | Bok | Vapb | Jph2 | Steap3 | Tmprss6 | Cybrd1 | Slc24a2 | Atp1a2 | Camk2d | Npy | Nr3c2 | Slc8a2 | Slc9a4 | Grid2ip | Fam20a | Mtss1 | Pacs2 | Slc39a10 | Slc24a4 | Unc80 | Atp6ap1l	-1.153621	0	50	0	0	-3.32325	2.4198644
1	-2.919435	GO:0050801	M1	1	0	GO Biological Processes	19	monoatomic ion homeostasis	19_GO:0042592 homeostatic process	-2.919435	1.6633802	3.3715197	20836	547	916	40	4.3668122	0.67521	11514 | 11931 | 12043 | 12308 | 12426 | 12638 | 13618 | 15203 | 15559 | 15560 | 16485 | 16517 | 18751 | 18854 | 20499 | 21982 | 22042 | 22065 | 27421 | 51800 | 56491 | 59091 | 68428 | 71753 | 73649 | 76376 | 98660 | 108058 | 109648 | 110784 | 110891 | 110895 | 170935 | 208659 | 211401 | 217893 | 227059 | 238384 | 329178 | 435376	Adcy8 | Atp1b1 | Bcl2 | Calb2 | Cckbr | Cftr | Ednrb | Heph | Htr2b | Htr2c | Kcna1 | Kcnj16 | Prkcb | Pml | Slc12a7 | Tmem165 | Tfrc | Trpc3 | Abcc6 | Bok | Vapb | Jph2 | Steap3 | Tmprss6 | Cybrd1 | Slc24a2 | Atp1a2 | Camk2d | Npy | Nr3c2 | Slc8a2 | Slc9a4 | Grid2ip | Fam20a | Mtss1 | Pacs2 | Slc39a10 | Slc24a4 | Unc80 | Atp6ap1l	-1.023929	0	50	0	0	-3.32325	2.4198644
1	-2.7	GO:00	M1	1	0	GO Biol	19	inorganic ion homeostasis	19_GO:0042592 homeo	-2.7	1.69	3.27	20836	469	916	35	3.82	0.63	11514 | 11931 | 12043 | 12308 | 13618 | 15203 | 15559 | 15560 | 16485 | 18751 | 18854 | 20499 | 21982 | 22042 | 22065 | 27421 |	Adcy8 | Atp1b1 | Bcl2 | Calb2 | Ednrb | Heph | Htr2b | Htr2c | Kcna1 | Prkcb | Pml | Slc12a7 | Tmem165 | Tfrc | Trpc3 | Abcc6	-0.911569	0	50	0	0	-3.32325	2.4198644

	72281	98771				ogical Processes			static process	72281	75168	62526					09607	3401	51800|56491|59091|68428|71753|73649|76376|98660|108058|109648|110784|110891|110895|170935|208659|211401|217893|227059|238384	|Bok|Vapb|Jph2|Steap3|Tmprss6|Cybrd1|Slc24a2|Atp1a2|Camk2d|Npy|Nr3c2|Slc8a2|Slc9a4|Grid2ip|Fam20a|Mtss1|Pacs2|Slc39a10|Slc24a4							
1	-2.703593	GO:0055074	M1	1	0	GO Biological Processes	19	calcium ion homeostasis	19_GO:0042592 homeostatic process	-2.703593	1.9701888	3.3360238	20836	254	916	22	2.4017467	0.5058676	11514|11931|12043|12308|15559|15560|18751|18854|21982|22065|27421|51800|56491|59091|76376|108058|109648|110891|170935|208659|217893|238384	Adcy8|Atp1b1|Bcl2|Calb2|Htr2b|Htr2c|Prkcb|Pml|Tmem165|Trpc3|Abcc6|Bok|Vapb|Jph2|Slc24a2|Camk2d|Npy|Slc8a2|Grid2ip|Fam20a|Pacs2|Slc24a4	-0.864394	0	50	0	0	-3.32325	2.4198644
1	-2.3767	GO:00068	M1	1	0	GO Biological Pr	19	cellular calcium ion homeostasis	19_GO:0042592 homeostatic process	-2.3767	1.95560	3.06253	20836	221	916	19	2.07423	0.47090	11514|11931|12043|12308|15559|15560|18751|18854|21982|22065|51800|56491|76376|108058|109648|110891|170935|217893|238384	Adcy8|Atp1b1|Bcl2|Calb2|Htr2b|Htr2c|Prkcb|Pml|Tmem165|Trpc3|Bok|Vapb|Slc24a2|Camk2d|Npy|Slc8a2|Grid2ip|Pacs2|Slc24a4	-0.648113	0	50	0	0	-3.32325	2.4198644

<table>
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<tr><td>1</td><td>-2.3282836</td><td>GO:0006875</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Processes</td><td>19</td><td>cellular metal ion homeostasis</td><td>19_GO:0042592 homeostatic process</td><td>-2.3282836</td><td>1.7155351</td><td>2.9283873</td><td>20836</td><td>358</td><td>916</td><td>27</td><td>2.9475983</td><td>0.5588427</td><td>11514|11931|12043|12308|15203|15559|15560|18751|18854|21982|22042|22065|51800|56491|68428|71753|73649|76376|98660|108058|109648|110784|110891|170935|217893|227059|238384</td><td>Adcy8|Atp1b1|Bcl2|Calb2|Heph|Htr2b|Htr2c|Prkcb|Pml|Tmem165|Tfrc|Trpc3|Bok|Vapb|Steap3|Tmprss6|Cybrd1|Slc24a2|Atp1a2|Camk2d|Npy|Nr3c2|Slc8a2|Grid2ip|Pacs2|Slc39a10|Slc24a4</td><td>-0.633555</td><td>0</td><td>50</td><td>0</td><td>0</td><td>-3.32325</td><td>2.4198644</td></tr>
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1	-2.082848	GO:0097553	M1	1	0	GO Biological Processes	19	calcium ion transmembrane import into cytosol	19_GO:0051179 localization	-2.082848	2.4198644	2.9585934	20836	94	916	10	1.0917031	0.3433372	12043|13489|14813|14814|15559|15560|74055|76376|110891|238384	Bcl2|Drd2|Grin2c|Grin2d|Htr2b|Htr2c|Plce1|Slc24a2|Slc8a2|Slc24a4	-0.501425	0	50	0	0	-3.32325	2.4198644
1	-3.3	GO:00	M1	1	0	GO Biol	19	response to hormone	19_GO:0050896 respon	-3.3	1.65	3.65	20836	661	916	48	5.24	0.73	11514|11551|11883|12043|12192|12675|12921|13618|13640|13842|14158|14466|14732|16337|16816|17202|	Adcy8|Adra2a|Arsa|Bcl2|Zfp36l1|Chuk|Crhr1|Ednrb|Efna5|Epha8|Fer|Gba|Gpam|Insr|Lcat|Mc4r|Mef2c|	-1.294781	0	51	1	1	-3.320695	1.6518045

	20695	09725				ogical Processes			se to stimulus	20695	18045	18351					01747	62703	17260|17436|17978|18491|18667|18706|19014|19387|19662|20605|20606|21336|21834|21858|22044|22601|66797|67606|71660|73010|98660|100102|107476|110784|213464|229214|229709|230796|232087|238384|320706|381677	Me1|Ncoa2|Pappa|Pgr|Pik3ca|Med1|Rangap1|Rbp4|Sstr1|Sstr2|Tacr1|Thrb|Timp2|Trh|Yap1|Cntnap2|Fibin|Rarres2|Gpr22|Atp1a2|Pcsk9|Acaca|Nr3c2|Rbbp5|Qrfpr|Ahcyl1|Wdtc1|Mat2a|Slc24a4|Soga1|Vgf							
1	-2.038448	GO:0032870	M1	1	0	GO Biological Processes	19	cellular response to hormone stimulus	19_GO:0050896 response to stimulus	-2.038448	1.5832987	2.623984	20836	431	916	30	3.2751092	0.5880771	11514|11551|12192|12921|13640|13842|14158|14732|16337|17260|17978|18667|18706|19014|19387|20605|20606|21834|22044|22601|71660|73010|98660|100102|107476|110784|229214|229709|230796|320706	Adcy8|Adra2a|Zfp36l1|Crhr1|Efna5|Epha8|Fer|Gpam|Insr|Mef2c|Ncoa2|Pgr|Pik3ca|Med1|Rangap1|Sstr1|Sstr2|Thrb|Trh|Yap1|Rarres2|Gpr22|Atp1a2|Pcsk9|Acaca|Nr3c2|Qrfpr|Ahcyl1|Wdtc1|Soga1	-0.4702	0	51	0	0	-3.320695	1.6518045
1	-3.302	GO:0060	M1	1	0	GO Biologica	19	regulation of feeding behavior	19_GO:0032501 multicellular organi	-3.302	4.2319	4.5492	20836	43	916	8	0.8733	0.3074	12921|13488|16337|17202|22044|23919|109648|238384	Crhr1|Drd1|Insr|Mc4r|Trh|Insl5|Npy|Slc24a4	-1.285283	0	52	1	1	-3.302228	5.0548278

	228	259				l Processes			smal process	228	488	515					624	289									
1	-2.620151	GO:0007631	M1	1	0	GO Biological Processes	19	feeding behavior	19_GO:0032501 multicellular organismal process	-2.620151	2.5751009	3.4862738	20836	106	916	12	1.3100437	0.3756917	11556|12921|13134|13488|13489|15560|17202|21336|22044|30878|109648|238384	Adrb3|Crhr1|Dach1|Drd1|Drd2|Htr2c|Mc4r|Tacr1|Trh|Apln|Npy|Slc24a4	-0.801914	0	52	0	0	-3.302228	5.0548278
1	-2.617561	GO:0048521	M1	1	0	GO Biological Proc	19	negative regulation of behavior	19_GO:0048519 negative regulation of biological	-2.617561	4.2650109	3.9635654	20836	32	916	6	0.6550218	0.2665343	12921|13488|13489|16337|17202|22044	Crhr1|Drd1|Drd2|Insr|Mc4r|Trh	-0.801914	0	52	0	0	-3.302228	5.0548278

						esses			process																		
1	-2.159259	GO:2000252	M1	1	0	GO Biological Processes	19	negative regulation of feeding behavior	19_GO:0048519 negative regulation of biological process	-2.159259	5.0548278	3.6905321	20836	18	916	4	0.4366812	0.2178634	12921|16337|17202|22044	Crhr1|Insr|Mc4r|Trh	-0.540615	0	52	0	0	-3.302228	5.0548278
1	-3.298206	GO:0045664	M1	1	0	GO Biological Processes	19	regulation of neuron differentiation	19_GO:0032502 developmental process	-3.298206	2.1441585	3.8550646	20836	244	916	23	2.510917	0.5169475	12043|12317|13618|15208|16392|17260|17755|18013|18088|18205|19014|19699|21858|22062|50779|56198|104156|170758|192167|228839|243547|269784|320460	Bcl2|Calr|Ednrb|Hes5|Isl1|Mef2c|Map1b|Neurod2|Nkx2-2|Ntf3|Med1|Reln|Timp2|Trp73|Rgs6|Heyl|Etv5|Rac3|Nlgn1|Tgif2|Grip2|Cntn4|Vwc2l	-1.284527	0	53	1	1	-3.298206	2.1441585

1	-3.242477	GO:0043266	M1	1	0	GO Biological Processes	19	regulation of potassium ion transport	19_GO:0051179 localization	-3.242477	2.7452944	4.0420589	20836	116	916	14	1.5283843	0.4053443	11516|11931|13489|16485|16518|70357|74513|80334|110784|223864|230899|241794|246317|269109	Adcyap1|Atp1b1|Drd2|Kcna1|Kcnj2|Kcnip1|Neto2|Kcnip4|Nr3c2|Rapgef3|Nppa|Kcng1|Neto1|Dpp10	-1.240185	0	54	1	1	-3.242477	2.8433406
1	-2.993869	GO:1901379	M1	1	0	GO Biological Processes	19	regulation of potassium ion transmembrane transport	19_GO:0051179 localization	-2.993869	2.8433406	3.8818313	20836	96	916	12	1.3100437	0.3756917	11931|16485|16518|70357|74513|80334|110784|223864|230899|241794|246317|269109	Atp1b1|Kcna1|Kcnj2|Kcnip1|Neto2|Kcnip4|Nr3c2|Rapgef3|Nppa|Kcng1|Neto1|Dpp10	-1.069138	0	54	0	0	-3.242477	2.8433406
1	-2.0	GO:19	M1	1	0	GO Biol	19	regulation of potassium ion transmembr	19_GO:0051179	-2.0	2.67	2.96	20836	68	916	8	0.87	0.30	11931|16485|74513|110784|223864|230899|241794|246317	Atp1b1|Kcna1|Neto2|Nr3c2|Rapgef3|Nppa|Kcng1|Neto1	-0.447878	0	54	0	0	-3.242477	2.8433406

	1268	01016				ogical Processes		ane transporter activity	localization	1268	60853	86094					33624	74289									
1	-3.237295	GO:0002028	M1	1	0	GO Biological Processes	19	regulation of sodium ion transport	19_GO:0051179 localization	-3.237295	2.8709459	4.0817705	20836	103	916	13	1.419214	0.390816	11931|13489|14167|14169|20271|58237|74513|93692|98660|100102|108058|229709|246317	Atp1b1|Drd2|Fgf12|Fgf14|Scn5a|Nkain4|Neto2|Glrx|Atp1a2|Pcsk9|Camk2d|Ahcyl1|Neto1	-1.240185	0	55	1	1	-3.237295	3.4120087
1	-2.9352	GO:19023	M1	1	0	GO Biological Pr	19	regulation of sodium ion transmembrane transport	19_GO:0051179 localization	-2.9352	3.15926	3.93565	20836	72	916	10	1.09170	0.34333	11931|14167|14169|20271|74513|93692|98660|100102|108058|246317	Atp1b1|Fgf12|Fgf14|Scn5a|Neto2|Glrx|Atp1a2|Pcsk9|Camk2d|Neto1	-1.031636	0	55	0	0	-3.237295	3.4120087

	04	05				ocesses				04	73	46					31	72									
1	-2.935101	GO:2000649	M1	1	0	GO Biological Processes	19	regulation of sodium ion transmembrane transporter activity	19_GO:0051179 localization	-2.935101	3.4120087	4.0121148	20836	60	916	9	0.9825328	0.325898	11931|14167|14169|74513|93692|98660|100102|108058|246317	Atp1b1|Fgf12|Fgf14|Neto2|Glrx|Atp1a2|Pcsk9|Camk2d|Neto1	-1.031636	0	55	0	0	-3.237295	3.4120087
1	-3.2052246	GO:0022604	M1	1	0	GO Biological Processes	19	regulation of cell morphogenesis	19_GO:0032502 developmental process	-3.2052246	2.038237	3.743851	20836	279	916	25	2.7292576	0.5383512	12505|13047|13048|13367|13640|13860|16568|17909|18846|19266|19268|19699|20692|22003|22339|22379|27418|66515|67784|80288|170758|231672|269587|320609|574437	Cd44|Cux1|Cux2|Diaph1|Efna5|Eps8|Kif3a|Myo10|Plxna3|Ptprd|Ptprf|Reln|Sparc|Tpm1|Vegfa|Fmnl3|Mkln1|Cul7|Plxnd1|Bcl9l|Rac3|Fbxw8|Epb41|Strip2|Xlr3b	-1.215048	0	56	1	1	-3.205246	2.0824466

1	-2.004328	GO:0008360	M1	1	0	GO Biological Processes	19	regulation of cell shape	19_GO:0032502 developmental process	-2.004328	2.0824466	2.7754172	20836	142	916	13	1.419214	0.390816	13367|13860|16568|17909|18846|22003|22339|22379|27418|67784|170758|269587|320609	Diaph1|Eps8|Kif3a|Myo10|Plxna3|Tpm1|Vegfa|Fmnl3|Mkln1|Plxnd1|Rac3|Epb41|Strip2	-0.440384	0	56	0	0	-3.205246	2.0824466
1	-3.16986	GO:0030029	M1	1	0	GO Biological Processes	19	actin filament-based process	19_GO:0009987 cellular process	-3.16986	1.6777173	3.5590818	20836	583	916	43	4.6943231	0.6988728	11308|11856|12043|12317|12808|13367|13644|13800|13860|14158|16518|18706|19240|20265|20271|20410|21927|22003|22376|22379|23970|26554|27418|50875|50884|59069|67451|68794|69693|71461|71584|71653|108058|109270|170758|170935|211401|215789|225288|269587|333605|432516|544963	Abi1|Arhgap6|Bcl2|Calr|Cobl|Diaph1|Efs|Enah|Eps8|Fer|Kcnj2|Pik3ca|Tmsb10|Scn1a|Scn5a|Sorbs3|Tnfaip1|Tpm1|Was|Fmnl3|Pacsin2|Cul3|Mkln1|Tmod3|Nckap1|Tpm3|Pkp2|Flnc|Pof1b|Ptk7|Gdpd2|Shtn1|Camk2d|Prr5|Rac3|Grid2ip|Mtss1|Phactr2|Fhod3|Epb41|Frmpd4|Myo1a|Iqgap2	-1.186465	0	57	1	1	-3.16986	1.8732597
1	-2.	GO:0	M1	1	0	GO Bi	19	actin cytoskeleton organization	19_GO:0009987	-2.	1.6	3.1	20836	530	916	38	4.1	0.6	11308|11856|12043|12317|12808|13367|13644|13800|13860|14158|18706|19240|	Abi1|Arhgap6|Bcl2|Calr|Cobl|Diaph1|Efs|Enah|Eps8|Fer|Pik3ca|Tmsb10|Sorbs3	-0.822944	0	57	0	0	-3.16986	1.873

	652563	030036				ological Processes			cellular process	652563	308973	548899					484716	588641	20410|21927|22003|22376|22379|23970|26554|27418|50875|50884|59069|68794|69693|71461|71584|71653|109270|170758|170935|211401|215789|225288|269587|333605|432516|544963	|Tnfaip1|Tpm1|Was|Fmnl3|Pacsin2|Cul3|Mkln1|Tmod3|Nckap1|Tpm3|Flnc|Pof1b|Ptk7|Gdpd2|Shtn1|Prr5|Rac3|Grid2ip|Mtss1|Phactr2|Fhod3|Epb41|Frmpd4|Myo1a|Iqgap2							2597
1	-2.350061	GO:0007015	M1	1	0	GO Biological Processes	19	actin filament organization	19_GO:0009987 cellular process	-2.350061	1.8732597	3.0087084	20836	255	916	21	2.2925764	0.4945133	11308|11856|12043|12808|13367|13644|13800|13860|20410|21927|22003|22376|26554|59069|69693|71584|71653|170758|211401|432516|544963	Abi1|Arhgap6|Bcl2|Cobl|Diaph1|Efs|Enah|Eps8|Sorbs3|Tnfaip1|Tpm1|Was|Cul3|Tpm3|Pof1b|Gdpd2|Shtn1|Rac3|Mtss1|Myo1a|Iqgap2	-0.645217	0	57	0	0	-3.16986	1.8732597
1	-2.0804	GO:00974	M1	1	0	GO Biological	19	supramolecular fiber organization	19_GO:0009987 cellular process	-2.0804	1.51372	2.63287	20836	556	916	37	4.03930	0.65050	11308|11856|12043|12406|12808|12815|12822|13367|13644|13800|13860|14580|16665|17385|18080|20262|20410|21927|22003|22376|26554|50875|59069|67451|68794|69693|71584|71653|	Abi1|Arhgap6|Bcl2|Serpinh1|Cobl|Col11a2|Col18a1|Diaph1|Efs|Enah|Eps8|Gfap|Krt15|Mmp11|Nin|Stmn3|Sorbs3|Tnfaip1|Tpm1|Was|Cul3|Tmod3|Tpm3|Pkp2|Flnc|Pof1b|Gdpd2|Shtn1|R	-0.499906	0	57	0	0	-3.16986	1.8732597

<table>
<tr><td></td><td>39</td><td>35</td><td></td><td></td><td></td><td>Processes</td><td></td><td></td><td></td><td>39</td><td>09</td><td>64</td><td></td><td></td><td></td><td></td><td>13</td><td>72</td><td>170758|207596|211401|225288|320191|373864|406220|432516|544963</td><td>ac3|Thsd4|Mtss1|Fhod3|Hook3|Col27a1|Krt77|Myo1a|Iqgap2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
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						esses													686|214812|214968|223864|241639|320924	69|Zfp609|Sema6d|Rapgef3|Fermt1|Ccbe1							
1	-2.993698	GO:0030335	M1	1	0	GO Biological Processes	19	positive regulation of cell migration	19_GO:0040011 locomotion	-2.993698	1.643881	3.417023	20836	595	916	43	4.6943231	0.6988728	11551|11980|12043|12317|12822|13367|13488|13869|14114|14158|14828|15507|15945|16337|17926|18205|18667|19055|19699|20346|20348|20359|20361|20692|21336|22339|26456|30955|50706|69453|69683|71653|71660|71785|84094|107589|108058|109270|214812|214968|223864|241639|320924	Adra2a|Atp8a1|Bcl2|Calr|Col18a1|Diaph1|Drd1|Erbb4|Fbln1|Fer|Hspa5|Hspb1|Cxcl10|Insr|Myoc|Ntf3|Pgr|Ppp3ca|Reln|Sema3a|Sema3c|Sema6b|Sema7a|Sparc|Tacr1|Vegfa|Sema4g|Pik3cg|Postn|Prss56|Emc10|Shtn1|Rarres2|Pdgfd|Plvap|Mylk|Camk2d|Prr5|Zfp609|Sema6d|Rapgef3|Fermt1|Ccbe1	-1.069138	0	58	0	0	-3.126944	1.6456634
1	-3.101114	GO:0060666	M1	1	0	GO Biological Processes	19	dichotomous subdivision of terminal units involved in salivary gland branching	19_GO:0032502 developmental process	-3.101114	13.648035	6.0653075	20836	5	916	3	0.327517109	0.18877786	20346|20348|67784	Sema3a|Sema3c|Plxnd1	-1.146861	0	59	1	1	-3.101114	13.648035

1	-2.585909	GO:0021828	M1	1	0	GO Biological Processes	19	gonadotrophin-releasing hormone neuronal migration to the hypothalamus	19_GO:0032502 developmental process	-2.585909	9.7485964	4.9642428	20836	7	916	3	0.3275109	0.1887786	18846|20346|68169	Plxna3|Sema3a|Ndnf	-0.801914	0	59	0	0	-3.101114	13.648035
1	-2.585909	GO:0021856	M1	1	0	GO Biological Processes	19	hypothalamic tangential migration using cell-axon interactions	19_GO:0032502 developmental process	-2.585909	9.7485964	4.9642428	20836	7	916	3	0.3275109	0.1887786	18846|20346|68169	Plxna3|Sema3a|Ndnf	-0.801914	0	59	0	0	-3.101114	13.648035
1	-2.3	GO:19	M1	1	0	GO Biol	19	semaphorin-plexin signaling pathway	19_GO:0040011	-2.3	5.68	4.02	20836	16	916	4	0.43	0.21	17260|18846|20346|67784	Mef2c|Plxna3|Sema3a|Plxnd1	-0.645217	0	59	0	0	-3.101114	13.648035

	54551	02287				ogical Processes		involved in axon guidance	locomotion	54551	66812	14703					66812	78634									
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1	-2.2344	GO:00218	M1	1	0	GO Biological Pr	19	hypothalamus cell migration	19_GO:0032502 developmental process	-2.2344	7.58224	4.23527	20836	9	916	3	0.32751	0.18877	18846|20346|68169	Plxna3|Sema3a|Ndnf	-0.585038	0	59	0	0	-3.101114	13.648035

	27	55				ocesses				27	16	43					09	86									
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1	-2.234427	GO:0021888	M1	1	0	GO Biological Processes	19	hypothalamus gonadotrophin-releasing hormone neuron development	19_GO:0032502 developmental process	-2.234427	7.5822416	4.2352743	20836	9	916	3	0.3275109	0.1887786	18846|20346|68169	Plxna3|Sema3a|Ndnf	-0.585038	0	59	0	0	-3.101114	13.648035

1	-3.099843	GO:0045777	M1	1	0	GO Biological Processes	19	positive regulation of blood pressure	19_GO:0032501 multicellular organismal process	-3.099843	3.5915881	4.2013698	20836	57	916	9	0.9825328	0.325898	11550|11819|21334|21336|22003|71660|110784|243547|319552	Adra1d|Nr2f2|Tac2|Tacr1|Tpm1|Rarres2|Nr3c2|Grip2|Spx	-1.146861	0	60	1	1	-3.099843	8.5300218
1	-2.396171	GO:0001993	M1	1	0	GO Biological Processes	19	regulation of systemic arterial blood pressure by norepinephrine-epinephrine	19_GO:0032501 multicellular organismal process	-2.396171	8.5300218	4.5679071	20836	8	916	3	0.3275109	0.1887786	11550|11556|22003	Adra1d|Adrb3|Tpm1	-0.660926	0	60	0	0	-3.099843	8.5300218
1	-2.1	GO:00	M1	1	0	GO Biol	19	regulation of systemic arterial blood	19_GO:0032501 multic	-2.1	3.06	3.19	20836	52	916	7	0.76	0.28	11550|11556|12671|13618|21336|22003|110784	Adra1d|Adrb3|Chrm3|Ednrb|Tacr1|Tpm1|Nr3c2	-0.520337	0	60	0	0	-3.099843	8.5300218

	31278	03044				ogical Processes		pressure mediated by a chemical signal	ellular organismal process	31278	20591	25524					41921	77317									
1	-3.030493	GO:0043087	M1	1	0	GO Biological Processes	19	regulation of GTPase activity	19_GO:0065007 biological regulation	-3.030493	1.8740199	3.5463787	20836	352	916	29	3.1659389	0.578519	11516 | 11856 | 13196 | 13640 | 14020 | 18205 | 18846 | 19387 | 19395 | 19419 | 20262 | 50779 | 54153 | 54610 | 66616 | 66687 | 67784 | 71310 | 74563 | 74694 | 78232 | 98910 | 99326 | 108797 | 109905 | 213990 | 216991 | 223864 | 544963	Adcyap1 | Arhgap6 | Asap1 | Efna5 | Evi5 | Ntf3 | Plxna3 | Rangap1 | Rasgrp2 | Rasgrp1 | Stmn3 | Rgs6 | Rasa4 | Tbc1d8 | Snx9 | Tbc1d15 | Plxnd1 | Tbc1d9 | Rasgef1c | Tbc1d30 | Trappc6b | Usp6nl | Garnl3 | Mex3b | Rap1a | Agap3 | Adap2 | Rapgef3 | Iqgap2	-1.090379	0	61	1	1	-3.030493	2.4773661
1	-2.6192	GO:00435	M1	1	0	GO Biological Pr	19	positive regulation of GTPase activity	19_GO:0065007 biological regulation	-2.6192	1.93964	3.25664	20836	258	916	22	2.40174	0.50586	11516 | 11856 | 13196 | 14020 | 18205 | 19387 | 19395 | 19419 | 50779 | 54610 | 66616 | 66687 | 71310 | 74563 | 74694 | 98910 | 99326 | 108797 | 109905 | 213990 | 216991 | 223864	Adcyap1 | Arhgap6 | Asap1 | Evi5 | Ntf3 | Rangap1 | Rasgrp2 | Rasgrp1 | Rgs6 | Tbc1d8 | Snx9 | Tbc1d15 | Tbc1d9 | Rasgef1c | Tbc1d30 | Usp6nl | Garnl3 | Mex3b | Rap1a | Agap3 | Adap2 | Rapgef3	-0.801914	0	61	0	0	-3.030493	2.4773661

	13	47				ocesses				13	32	99					67	76									
1	-2.317064	GO:0090630	M1	1	0	GO Biological Processes	19	activation of GTPase activity	19_GO:0065007 biological regulation	-2.317064	2.4773661	3.191513	20836	101	916	11	1.2008734	0.3598963	14020 | 18205 | 19387 | 19419 | 54610 | 66687 | 71310 | 74694 | 98910 | 99326 | 213990	Evi5 | Ntf3 | Rangap1 | Rasgrp1 | Tbc1d8 | Tbc1d15 | Tbc1d9 | Tbc1d30 | Usp6nl | Garnl3 | Agap3	-0.626813	0	61	0	0	-3.030493	2.4773661
1	-2.206152	GO:0051345	M1	1	0	GO Biological Processes	19	positive regulation of hydrolase activity	19_GO:0065007 biological regulation	-2.206152	1.5325808	2.7496445	20836	564	916	38	4.1484716	0.6588641	11516 | 11856 | 12313 | 12524 | 13039 | 13196 | 14020 | 15444 | 15559 | 17260 | 17931 | 18205 | 18854 | 19387 | 19395 | 19419 | 20963 | 22339 | 50779 | 51800 | 54610 | 58801 | 66616 | 66687 | 71310 | 74563 | 74694 | 79201 | 98910 | 99326 | 108797 | 109905 | 110854 | 213990 | 216991 | 223864 | 223870 | 227059	Adcyap1 | Arhgap6 | Calm1 | Cd86 | Ctsl | Asap1 | Evi5 | Hpca | Htr2b | Mef2c | Ppp1r12a | Ntf3 | Pml | Rangap1 | Rasgrp2 | Rasgrp1 | Syk | Vegfa | Rgs6 | Bok | Tbc1d8 | Pmaip1 | Snx9 | Tbc1d15 | Tbc1d9 | Rasgef1c | Tbc1d30 | Tnfrsf23 | Usp6nl | Garnl3 | Mex3b | Rap1a | Ptpa | Agap3 | Adap2 | Rapgef3 | Senp1 | Slc39a10	-0.56354	0	61	0	0	-3.030493	2.4773661

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1	-2.547662	GO:0032387	M1	1	0	GO Biological Processes	19	negative regulation of intracellular transport	19_GO:0051179 localization	-2.547662	3.0105959	3.5610801	20836	68	916	9	0.9825328	0.325898	11640|15183|17472|17755|19387|50721|70377|100102|241639	Akap1|Hdac3|Gbp4|Map1b|Rangap1|Sirt6|Derl3|Pcsk9|Fermt1	-0.773206	0	62	0	0	-2.933773	5.0548278
1	-2.3	GO:00	M1	1	0	GO Biol	19	negative regulation of intracellular	19_GO:0051179	-2.31	3.31	3.44	20836	48	916	7	0.76	0.28	11640|15183|17472|19387|50721|70377|241639	Akap1|Hdac3|Gbp4|Rangap1|Sirt6|Derl3|Fermt1	-0.633555	0	62	0	0	-2.933773	5.0548278

	25016	90317				ogical Processes		protein transport	localization	25016	72307	65403					41921	77317									
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1	-2.9260	GO:00019	M1	1	0	GO Biological Pr	19	startle response	19_GO:0032501 multicellular organismal	-2.9260	4.19018	4.22082	20836	38	916	7	0.76419	0.28773	12140|13489|14814|16485|18619|27386|83762	Fabp7|Drd2|Grin2d|Kcna1|Penk|Npas3|Otof	-1.028127	0	63	1	1	-2.926012	4.1901862

	12	64				ocesses			process	12	62	03					21	17									
1	-2.888255	GO:0050905	M1	1	0	GO Biological Processes	19	neuromuscular process	19_GO:0032501 multicellular organismal process	-2.888255	2.2252231	3.5796688	20836	184	916	18	1.9650655	0.458597	12140|13489|14167|14169|14466|14813|14814|16485|18619|20265|21924|27386|64378|66797|74653|83762|170758|231503	Fabp7|Drd2|Fgf12|Fgf14|Gba|Grin2c|Grin2d|Kcna1|Penk|Scn1a|Tnnc1|Npas3|Gpr88|Cntnap2|Pomk|Otof|Rac3|Tmem150c	-1.004909	0	63	0	0	-2.926012	4.1901862
1	-2.888335	GO:0007422	M1	1	0	GO Biological Processes	19	peripheral nervous system development	19_GO:0032502 developmental process	-2.888335	3.1159897	3.8835576	20836	73	916	10	1.0917031	0.3433372	13618|16392|17926|17936|18205|18991|56198|211323|243914|269116	Ednrb|Isl1|Myoc|Nab1|Ntf3|Pou3f1|Heyl|Nrg1|Lgi4|Nfasc	-1.004909	0	64	1	1	-2.888335	3.1159897

1	-2.858998	R-MMU-425561	M1	1	0	Reactome Gene Sets	6	Sodium/Calcium exchangers		-2.858998	7.5822416	4.8908257	20836	12	916	4	0.4366812	0.2178634	12313|76376|110891|238384	Calm1|Slc24a2|Slc8a2|Slc24a4	-0.977435	0	65	1	1	-2.858998	7.5822416
1	-2.814532	GO:1900086	M1	1	0	GO Biological Processes	19	positive regulation of peptidyl-tyrosine autophosphorylation	19_GO:0048518 positive regulation of biological process	-2.814532	11.373362	5.4494421	20836	6	916	3	0.32751709	0.1887786	12388|22339|211323	Ctnnd1|Vegfa|Nrg1	-0.946981	0	66	1	1	-2.814532	11.373362
1	-2.	GO:1	M1	1	0	GO Bi	19	regulation of peptidyl-tyrosine	19_GO:0008152	-2.	9.	4.	20836	7	916	3	0.	0.	12388|22339|211323	Ctnnd1|Vegfa|Nrg1	-0.801914	0	66	0	0	-2.814532	11.37

	585909	900084				ological Processes		autophosphorylation	metabolic process	585909	485964	642428					275109	887786									3362
1	-2.585909	GO:1901490	M1	1	0	GO Biological Processes	19	regulation of lymphangiogenesis	19_GO:0032502 developmental process	-2.585909	9.7485964	4.9642428	20836	7	916	3	0.3275109	0.1887786	22339|238328|320924	Vegfa|Vash1|Ccbe1	-0.801914	0	66	0	0	-2.814532	11.373362
1	-2.75021	GO:00019	M1	1	0	GO Biological	19	positive regulation of protein phosphorylation	19_GO:0048518 positive regulation of	-2.7521	1.52230	3.18184	20836	777	916	52	5.67685	0.76456	11308|11514|11516|11551|12043|12388|12505|12524|12576|12654|13488|13489|13590|13618|13640|13841|13869|14585|15183|15208|15559|16322|16337|16392|17260|18205|18706|19419|	Abi1|Adcy8|Adcyap1|Adra2a|Bcl2|Ctnnd1|Cd44|Cd86|Cdkn1b|Chil1|Drd1|Drd2|Lefty1|Ednrb|Efna5|Epha7|Erbb4|Gfra1|Hdac3|Hes5|Htr2b|Inha|Insr|Isl1|Mef2c|Ntf3|Pik3ca|Rasgrp1|Rel	-0.894829	0	67	1	1	-2.752161	1.5223033

	61	34				Processes		biological process	61	33	12					59	66	19699|20361|20963|22042|22339|30955|53603|66616|71660|71785|93834|105844|107566|108099|109270|109905|110891|192199|208659|211323|223864|232157|232430|242202	n|Sema7a|Syk|Tfrc|Vegfa|Pik3cg|Tslp|Snx9|Rarres2|Pdgfd|Peli2|Card10|Arl2bp|Prkag2|Prr5|Rap1a|Slc8a2|Rspo1|Fam20a|Nrg1|Rapgef3|Mob1a|Crebl2|Pde5a							
1	-2.7364434	R-MMU-8849932	M1	1	0	Reactome Gene Sets	6	Synaptic adhesion-like molecules	-2.7364434	5.4158869	4.3414494	20836	21	916	5	0.5458515	0.2434451	14813|14814|19266|19268|70530	Grin2c|Grin2d|Ptprd|Ptprf|Lrfn2	-0.884505	0	68	1	1	-2.736434	5.4158869
1	-2.638	R-MMU-	M1	1	0	Reactome Ge	6	Protein-protein interactions at synapses	-2.638	3.1018	3.6673	20836	66	916	9	0.9825	0.3258	14813|14814|19266|19268|70530|192167|210274|245446|269587	Grin2c|Grin2d|Ptprd|Ptprf|Lrfn2|Nlgn1|Shank2|Slitrk4|Epb41	-0.811684	0	68	0	0	-2.736434	5.4158869

	156	6794362				neSets				156	261	328					328	98									
1	-2.724879	GO:0007215	M1	1	0	GO Biological Processes	19	glutamate receptor signaling pathway	19_GO:0023052 signaling	-2.724879	3.8835872	3.9631944	20836	41	916	7	0.7641921	0.2877317	14805 | 14813 | 14814 | 20605 | 108069 | 170935 | 269060	Grik1 | Grin2c | Grin2d | Sstr1 | Grm3 | Grid2ip | Dagla	-0.880497	0	69	1	1	-2.724879	3.8835872
1	-2.7245	GO:00720	M1	1	0	GO Biological Pr	19	renal system development	19_GO:0032502 developmental process	-2.7245	1.8331	3.29720	20836	335	916	27	2.94759	0.55884	12043 | 12388 | 12505 | 12733 | 13047 | 13618 | 13841 | 13869 | 14734 | 15208 | 16568 | 17260 | 19055 | 19662 | 22339 | 56198 | 67784 | 71461 | 71770 | 72043 | 74055 | 75691 | 100102 | 211401 | 214133 | 218476 | 268902	Bcl2 | Ctnnd1 | Cd44 | Clcnka | Cux1 | Ednrb | Epha7 | Erbb4 | Gpc3 | Hes5 | Kif3a | Mef2c | Ppp3ca | Rbp4 | Vegfa | Heyl | Plxnd1 | Ptk7 | Ap2b1 | Sulf2 | Plce1 | Anks6 | Pcsk9 | Mtss1 | Tet2 | Gcnt4 | Robo2	-0.880497	0	70	1	1	-2.724567	3.4334679

	67	01				ocesses				67	81	18					83	27									
1	-2.712059	GO:0001822	M1	1	0	GO Biological Processes	19	kidney development	19_GO:0032502 developmental process	-2.712059	1.853965	3.2959326	20836	319	916	26	2.8384279	0.5487044	12043 | 12388 | 12505 | 12733 | 13047 | 13618 | 13841 | 13869 | 14734 | 15208 | 16568 | 17260 | 19055 | 22339 | 56198 | 67784 | 71461 | 71770 | 72043 | 74055 | 75691 | 100102 | 211401 | 214133 | 218476 | 268902	Bcl2 | Ctnnd1 | Cd44 | Clcnka | Cux1 | Ednrb | Epha7 | Erbb4 | Gpc3 | Hes5 | Kif3a | Mef2c | Ppp3ca | Vegfa | Heyl | Plxnd1 | Ptk7 | Ap2b1 | Sulf2 | Plce1 | Anks6 | Pcsk9 | Mtss1 | Tet2 | Gcnt4 | Robo2	-0.871242	0	70	0	0	-2.724567	3.4334679
1	-2.683997	GO:0032835	M1	1	0	GO Biological Processes	19	glomerulus development	19_GO:0032502 developmental process	-2.683997	3.4334679	3.8037263	20836	53	916	8	0.8733624	0.3074289	12043 | 12388 | 13618 | 17260 | 56198 | 72043 | 74055 | 211401	Bcl2 | Ctnnd1 | Ednrb | Mef2c | Heyl | Sulf2 | Plce1 | Mtss1	-0.848015	0	70	0	0	-2.724567	3.4334679

1	-2.662216	GO:0010613	M1	1	0	GO Biological Processes	19	positive regulation of cardiac muscle hypertrophy	19_GO:0048518 positive regulation of biological process	-2.662216	3.7911208	3.8827022	20836	42	916	7	0.7641921	0.2877317	17260|18585|19055|22065|53817|108058|242202	Mef2c|Pde9a|Ppp3ca|Trpc3|Ddx39b|Camk2d|Pde5a	-0.829426	0	71	1	1	-2.662216	3.7911208
1	-2.601555	GO:0014742	M1	1	0	GO Biological Processes	19	positive regulation of muscle hypertrophy	19_GO:0048518 positive regulation of biological process	-2.601555	3.7029552	3.8046466	20836	43	916	7	0.7641921	0.2877317	17260|18585|19055|22065|53817|108058|242202	Mef2c|Pde9a|Ppp3ca|Trpc3|Ddx39b|Camk2d|Pde5a	-0.801914	0	71	0	0	-2.662216	3.7911208
1	-2.2	GO:00	M1	1	0	GO Biol	19	regulation of muscle adaptation	19_GO:0032501 multic	-2.2	2.42	3.11	20836	103	916	11	1.20	0.35	11640|17260|18585|19055|20271|21924|22065|53817|57080|108058|242202	Akap1|Mef2c|Pde9a|Ppp3ca|Scn5a|Tnnc1|Trpc3|Ddx39b|Gtf2ird1|Camk2d|Pde5a	-0.587946	0	71	0	0	-2.662216	3.7911208

	52672	43502				ogical Processes			ellular organismal process	52672	92619	81656					08734	98963									
1	-2.631099	GO:0034331	M1	1	0	GO Biological Processes	19	cell junction maintenance	19_GO:0009987 cellular process	-2.631099	3.3698852	3.7392141	20836	54	916	8	0.8733624	0.3074289	12404|20346|66797|67451|73750|170643|192167|211401	Cbln1|Sema3a|Cntnap2|Pkp2|Whrn|Kirrel|Nlgn1|Mtss1	-0.806191	0	72	1	1	-2.631099	3.3698852
1	-2.41899	GO:00439	M1	1	0	GO Biological Pr	19	cellular component maintenance	19_GO:0009987 cellular process	-2.41899	2.88338	3.40880	20836	71	916	9	0.98253	0.325898	12404|16337|20346|66797|67451|73750|170643|192167|211401	Cbln1|Insr|Sema3a|Cntnap2|Pkp2|Whrn|Kirrel|Nlgn1|Mtss1	-0.673763	0	72	0	0	-2.631099	3.3698852

	69	54				ocesses			69	77	96					28										
1	-2.620689	R-MMU-381426	M1	1	0	Reactome Gene Sets	6	Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs)	-2.620689	2.4642285	3.4494222	20836	120	916	13	1.4190214	0.390816	13406|14734|16006|17304|18491|18619|19672|21923|100102|104009|208659|214058|381677	Dmp1|Gpc3|Igfbp1|Mfge8|Pappa|Penk|Rcn1|Tnc|Pcsk9|Qsox1|Fam20a|Megf11|Vgf	-0.801914	0	73	1	1	-2.620689	2.4642285
1	-2.358635	R-MMU-89572	M1	1	0	Reactome Gene Sets	6	Post-translational protein phosphorylation	-2.358635	2.3943921	3.2012628	20836	114	916	12	1.3100437	0.3756917	13406|14734|16006|17304|18619|19672|21923|100102|104009|208659|214058|381677	Dmp1|Gpc3|Igfbp1|Mfge8|Penk|Rcn1|Tnc|Pcsk9|Qsox1|Fam20a|Megf11|Vgf	-0.645217	0	73	0	0	-2.620689	2.4642285

		75																					
1	-2.617561	GO:0060384	M1	1	0	GO Biological Processes	19	innervation	19_GO:0032502 developmental process	-2.617561	4.2650109	3.9635654	20836	32	916	6	0.6550218	0.2665343	14401|16392|20346|72043|77018|110886	Gabrb2|Isl1|Sema3a|Sulf2|Col25a1|Gabra5	-0.801914	0	74	1	1	-2.617561	4.2650109
1	-2.601555	GO:0003352	M1	1	0	GO Biological Processes	19	regulation of cilium movement	19_GO:0050789 regulation of biological process	-2.6015555	3.7029552	3.8046466	20836	43	916	7	0.7641921	0.2877317	13411|21334|21336|68270|69329|207686|212892	Dnah11|Tac2|Tacr1|Dnaaf1|Cfap206|Cfap69|Rsph4a	-0.801914	0	75	1	1	-2.601555	3.7029552

1	-2.340507	GO:0060632	M1	1	0	GO Biological Processes	19	regulation of microtubule-based movement	19_GO:0050789 regulation of biological process	-2.340507	3.0328967	3.381503	20836	6	916	8	0.8733624	0.3074289	13411|16568|21334|21336|68270|69329|207686|212892	Dnah11|Kif3a|Tac2|Tacr1|Dnaaf1|Cfap206|Cfap69|Rsph4a	-0.642098	0	75	0	0	-2.601555	3.7029552
1	-2.585909	GO:0045590	M1	1	0	GO Biological Processes	19	negative regulation of regulatory T cell differentiation	19_GO:0002376 immune system process	-2.585909	9.7485964	4.9642428	20836	7	916	3	0.3275109	0.1887786	12505|15507|16768	Cd44|Hspb1|Lag3	-0.801914	0	76	1	1	-2.585909	9.7485964
1	-2.5	GO:19	M1	1	0	GO Biol	19	mitochondrion-endoplasmic reticulum	19_GO:0051179	-2.5	9.74	4.96	20836	7	916	3	0.32	0.18	12313|217893|229709	Calm1|Pacs2|Ahcyl1	-0.801914	0	77	1	1	-2.585909	9.7485964

	85909	90456				ogical Processes		membrane tethering	localization	85909	85964	42428					75109	87786									
1	-2.093839	GO:0042045	M1	1	0	GO Biological Processes	19	epithelial fluid transport	19_GO:0051179 localization	-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	12638|13618|229709	Cftr|Ednrb|Ahcyl1	-0.507933	0	77	0	0	-2.585909	9.7485964
1	-2.5859	R-MMU-11	M1	1	0	Reactome Gene	6	BH3-only proteins associate with and inactivate anti-apoptotic BCL-2 members		-2.5859	9.74859	4.96424	20836	7	916	3	0.32751	0.18877	12043|12048|58801	Bcl2|Bcl2l1|Pmaip1	-0.801914	0	78	1	1	-2.585909	9.7485964

	09	1453				Sets				09	64	28					09	86									
1	-2.58466	GO:0019226	M1	1	0	GO Biological Processes	19	transmission of nerve impulse	19_GO:0032501 multicellular organismal process	-2.58466	2.8433406	3.5422448	20836	80	916	10	1.0917031	0.3433372	13488|15165|16485|20265|20271|54377|64378|66797|81905|269116	Drd1|Hcn1|Kcna1|Scn1a|Scn5a|Cacng4|Gpr88|Cntnap2|Cacng8|Nfasc	-0.801914	0	79	1	1	-2.58466	3.4614581
1	-2.43062	GO:0019228	M1	1	0	GO Biological Processes	19	neuronal action potential	19_GO:0032501 multicellular organismal process	-2.43062	3.4614581	3.5838015	20836	46	916	7	0.7641921	0.2877317	13488|15165|16485|20265|20271|64378|66797	Drd1|Hcn1|Kcna1|Scn1a|Scn5a|Gpr88|Cntnap2	-0.682806	0	79	0	0	-2.58466	3.4614581

1	-2.583728	R-MMU-392517	M1	1	0	Reactome Gene Sets	6	Rap1 signalling	-2.583728	6.4990643	4.4135842	20836	14	916	4	0.4366812	0.2178634	19395|19419|109905|223864	Rasgrp2|Rasgrp1|Rap1a|Rapgef3	-0.801914	0	80	1	1	-2.583728	6.4990643
1	-2.349954	R-MMU-76009	M1	1	0	Reactome Gene Sets	6	Platelet Aggregation (Plug Formation)	-2.349954	3.7911208	3.5941652	20836	36	916	6	0.6550218	0.2665343	11551|19395|19419|20963|109905|223864	Adra2a|Rasgrp2|Rasgrp1|Syk|Rap1a|Rapgef3	-0.645217	0	80	0	0	-2.583728	6.4990643
1	-2.	R-M	M1	1	0	Reacto	6	Integrin signaling	-2.	4.2	3.5	20836	27	916	5	0.5	0.2	19395|19419|20963|109905|223864	Rasgrp2|Rasgrp1|Syk|Rap1a|Rapgef3	-0.585038	0	80	0	0	-2.583728	6.499

	232647	MU-354192				me Gene Sets				232647	123565	816227					458515	434451									0643
1	-2.174297	GO:0071320	M1	1	0	GO Biological Processes	19	cellular response to cAMP	19_GO:0050896 response to stimulus	-2.174297	3.4994961	3.3503043	20836	39	916	6	0.6550218	0.2665343	12192|12638|15165|30955|109905|223864	Zfp36l1|Cftr|Hcn1|Pik3cg|Rap1a|Rapgef3	-0.540615	0	80	0	0	-2.583728	6.4990643
1	-2.044	mmu046	M1	1	0	KEGG Path	24	Platelet activation - Mus musculus (house mouse)		-2.044	2.1836	2.8463	20836	125	916	12	1.3100	0.3756	11514|17931|18706|19092|19395|19419|20963|30955|69632|107589|109905|210044	Adcy8|Ppp1r12a|Pik3ca|Prkg2|Rasgrp2|Rasgrp1|Syk|Pik3cg|Arhgef12|Mylk|Rap1a|Adcy2	-0.474918	0	80	0	0	-2.583728	6.4990643

1	033-2.583728	11WP1245	M1	1	0	wayWikiPathways	27	Transcriptional activation by Nfe2l2 in response to phytochemicals		033-2.583728	8566.4990643	6544.4135842	20836	14	916	4	4370.4366812	9170.2178634	12608|17132|18706|50868	Cebpb|Maf|Pik3ca|Keap1	-0.801914	0	81	1	1	-2.583728	6.4990643
1	-2.583728	GO:0021670	M1	1	0	GO Biological Processes	19	lateral ventricle development	19_GO:0032502 developmental process	-2.583728	6.4990643	4.4135842	20836	14	916	4	0.4366812	0.2178634	13167|18032|30841|110082	Dbi|Nfix|Kdm2b|Dnah5	-0.801914	0	82	1	1	-2.583728	6.4990643
1	-2.	GO:0	M1	1	0	GO Bi	19	ventricular system	19_GO:0032502	-2.	3.5	3.4	20836	38	916	6	0.6	0.2	13167|18032|30841|75050|110082|214968	Dbi|Nfix|Kdm2b|Kif27|Dnah5|Sema6d	-0.585038	0	82	0	0	-2.583728	6.499

	230741	021591				ological Processes		development	developmental process	230741	915881	288368					550218	665343									0643
1	-2.583728	GO:0036037	M1	1	0	GO Biological Processes	19	CD8-positive, alpha-beta T cell activation	19_GO:0002376 immune system process	-2.583728	6.4990643	4.4135842	20836	14	916	4	0.4366812	0.2178634	12043|20230|252838|545030	Bcl2|Satb1|Tox|Wdfy4	-0.801914	0	83	1	1	-2.583728	6.4990643
1	-2.5468	mmu045	M1	1	0	KEGG Pathway	24	Cell adhesion molecules - Mus musculus (house mouse)		-2.5468	2.12469	3.26789	20836	182	916	17	1.85589	0.44592	11658|12524|12561|14961|14964|14972|15040|15042|15896|19266|19268|20969|66797|75677|192167|245446|269116	Alcam|Cd86|Cdh4|H2-Ab1|H2-D1|H2-K1|H2-T23|H2-T24|Icam2|Ptprd|Ptprf|Sdc1|Cntnap2|Cldn22|Nlgn1|Slitrk4|Nfasc	-0.773206	0	84	1	1	-2.546852	2.1246941

	52	14								52	41	31					52	43								
1	-2.546613	GO:0014009	M1	1	0	GO Biological Processes	19	glial cell proliferation	19_GO:0032502 developmental process	-2.546613	4.135768 2	3.865785 5	20836	33	916	6	0.6550218	0.2665343	13167|14466|14580|18032|66797|243914	Dbi|Gba|Gfap|Nfix|Cntnap2|Lgi4	-0.773206	0	85	1	1	-2.546613
1	-2.119805	GO:0021680	M1	1	0	GO Biological Processes	19	cerebellar Purkinje cell layer development	19_GO:0032502 developmental process	-2.119805	3.412008 7	3.274302 4	20836	40	916	6	0.6550218	0.2665343	14466|14828|18032|56747|66797|73750	Gba|Hspa5|Nfix|Sez6l|Cntnap2|Whrn	-0.515495	0	85	0	0	-2.546613

Final column (continued): 4.135768 2 (row 1); 4.135768 2 (row 2)

1	-2.518342	GO:0043523	M1	1	0	GO Biological Processes	19	regulation of neuron apoptotic process	19_GO:0050789 regulation of biological process	-2.518342	1.844329	3.1373082	20836	296	916	24	2.6200873	0.5277702	12043|12048|12608|13841|14401|14466|15183|15505|16392|17260|18032|18205|18706|19268|22062|22339|30841|51800|58801|67784|68169|100102|110886|237868	Bcl2|Bcl2l1|Cebpb|Epha7|Gabrb2|Gba|Hdac3|Hsph1|Isl1|Mef2c|Nfix|Ntf3|Pik3ca|Ptprf|Trp73|Vegfa|Kdm2b|Bok|Pmaip1|Plxnd1|Ndnf|Pcsk9|Gabra5|Sarm1	-0.749077	0	86	1	1	-2.518342	2.0370201
1	-2.465786	GO:0043524	M1	1	0	GO Biological Processes	19	negative regulation of neuron apoptotic process	19_GO:0048519 negative regulation of biological process	-2.465786	2.0370201	3.1679827	20836	201	916	18	1.9650655	0.458597	12043|12048|12608|14401|14466|15505|16392|17260|18032|18205|18706|22062|22339|30841|51800|67784|68169|110886	Bcl2|Bcl2l1|Cebpb|Gabrb2|Gba|Hsph1|Isl1|Mef2c|Nfix|Ntf3|Pik3ca|Trp73|Vegfa|Kdm2b|Bok|Plxnd1|Ndnf|Gabra5	-0.71091	0	86	0	0	-2.518342	2.0370201
1	-2.4	mmu0	M1	1	0	KEGG Pa	24	Regulation of lipolysis in adipocytes - Mus musculus (house mouse)		-2.4	3.19	3.55	20836	57	916	8	0.87	0.30	11514|11556|16337|18706|19092|109648|210044|230899	Adcy8|Adrb3|Insr|Pik3ca|Prkg2|Npy|Adcy2|Nppa	-0.720072	0	87	1	1	-2.480353	3.1925228

	80353	4923				thway				80353	25228	44225					33624	74289									
1	-2.0891	GO:0045776	M1	1	0	GO Biological Processes	19	negative regulation of blood pressure	19_GO:0032501 multicellular organismal process	-2.0891	2.7571788	3.0659812	20836	66	916	8	0.8733624	0.3074289	11550|11556|13489|18216|30878|74617|109648|230899	Adra1d|Adrb3|Drd2|Ntsr1|Apln|Scpep1|Npy|Nppa	-0.504095	0	87	0	0	-2.480353	3.1925228
1	-2.464907	GO:0022612	M1	1	0	GO Biological Proc	19	gland morphogenesis	19_GO:0032502 developmental process	-2.464907	2.3656594	3.2839512	20836	125	916	13	1.419214	0.390816	12043|12388|12505|12608|18667|18854|19014|20346|20348|21923|26554|67784|214133	Bcl2|Ctnnd1|Cd44|Cebpb|Pgr|Pml|Med1|Sema3a|Sema3c|Tnc|Cul3|Plxnd1|Tet2	-0.71091	0	88	1	1	-2.464907	6.8240175

						esses																					
1	-2.093839	GO:0072576	M1	1	0	GO Biological Processes	19	liver morphogenesis	19_GO:0032502 developmental process	-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	12608|26554|214133	Cebpb|Cul3|Tet2	-0.507933	0	88	0	0	-2.464907	6.8240175
1	-2.464272	GO:1900029	M1	1	0	GO Biological Processes	19	positive regulation of ruffle assembly	19_GO:0048518 positive regulation of biological process	-2.464272	6.0657933	4.2086434	20836	15	916	4	0.4366812	0.2178634	12808|13860|67425|192167	Cobl|Eps8|Eps8l1|Nlgn1	-0.71091	0	89	1	1	-2.464272	6.0657933

1	-2.463988	GO:2001224	M1	1	0	GO Biological Processes	19	positive regulation of neuron migration	19_GO:0040011 locomotion	-2.463988	4.738901	3.9299996	20836	24	916	5	0.5458515	0.2434451	13488|19699|20346|71653|214812	Drd1|Reln|Sema3a|Shtn1|Zfp609	-0.71091	0	90	1	1	-2.463988	4.738901
1	-2.41298	GO:0055075	M1	1	0	GO Biological Processes	19	potassium ion homeostasis	19_GO:0042592 homeostatic process	-2.41298	3.8994386	3.6813376	20836	35	916	6	0.6550218	0.2665343	11931|20499|98660|108058|110784|110895	Atp1b1|Slc12a7|Atp1a2|Camk2d|Nr3c2|Slc9a4	-0.670367	0	91	1	1	-2.41298	3.8994386
1	-2.2	mmu0	M1	1	0	KEGG Pa	24	Aldosterone-regulated sodium reabsorption - Mus		-2.2	3.59	3.42	20836	38	916	6	0.65	0.26	11931|16337|18706|18751|98660|110784	Atp1b1|Insr|Pik3ca|Prkcb|Atp1a2|Nr3c2	-0.585038	0	91	0	0	-2.41298	3.8994386

	30741	4960				thway		musculus (house mouse)		30741	15881	88368					50218	65343									
1	-2.396171	GO:0021894	M1	1	0	GO Biological Processes	19	cerebral cortex GABAergic interneuron development	19_GO:0032502 developmental process	-2.396171	8.5300218	4.5679071	20836	8	916	3	0.3275109	0.1887786	13488|13489|170758	Drd1|Drd2|Rac3	-0.660926	0	92	1	1	-2.396171	8.5300218
1	-2.253237	GO:1904936	M1	1	0	GO Biological Proc	19	interneuron migration	19_GO:0032502 developmental process	-2.253237	5.3521706	3.849464	20836	17	916	4	0.4366812	0.2178634	11819|13488|13489|19699	Nr2f2|Drd1|Drd2|Reln	-0.587946	0	92	0	0	-2.396171	8.5300218

						esses																					
1	-2.234427	GO:0021830	M1	1	0	GO Biological Processes	19	interneuron migration from the subpallium to the cortex	19_GO:0032502 developmental process	-2.234427	7.5822416	4.2352743	20836	9	916	3	0.3275109	0.1887786	13488|13489|211323	Drd1|Drd2|Nrg1	-0.585038	0	92	0	0	-2.396171	8.5300218
1	-2.096439	GO:0021895	M1	1	0	GO Biological Processes	19	cerebral cortex neuron differentiation	19_GO:0032502 developmental process	-2.096439	3.9218491	3.3763843	20836	29	916	5	0.5458515	0.2434451	13488|13489|15572|170758|252838	Drd1|Drd2|Elavl4|Rac3|Tox	-0.507933	0	92	0	0	-2.396171	8.5300218

1	-2.093839	GO:0007270	M1	1	0	GO Biological Processes	19	neuron-neuron synaptic transmission	19_GO:0023052 signaling	-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	13489|16561|239985	Drd2|Kif1b|Arid1b	-0.507933	0	92	0	0	-2.396171	8.5300218
1	-2.093839	GO:0021826	M1	1	0	GO Biological Processes	19	substrate-independent telencephalic tangential migration	19_GO:0032502 developmental process	-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	13488|13489|211323	Drd1|Drd2|Nrg1	-0.507933	0	92	0	0	-2.396171	8.5300218
1	-2.0	GO:00	M1	1	0	GO Biol	19	substrate-independent telencephalic tangential	19_GO:0032502 develo	-2.0	6.82	3.95	20836	10	916	3	0.32	0.18	13488|13489|211323	Drd1|Drd2|Nrg1	-0.507933	0	92	0	0	-2.396171	8.5300218

	93839	21843				ogical Processes		interneuron migration	pmental process	93839	40175	02043					75109	87786									
1	-2.396171	R-MMU-1250342	M1	1	0	Reactome Gene Sets	6	PI3K events in ERBB4 signaling		-2.396171	8.5300218	4.5679071	20836	8	916	3	0.3275109	0.1887786	13869|18706|211323	Erbb4|Pik3ca|Nrg1	-0.660926	0	93	1	1	-2.396171	8.5300218
1	-2.396	GO:0097	M1	1	0	GO Biologica	19	neuroblast migration	19_GO:0009987 cellular	-2.396	8.530	4.5679	20836	8	916	3	0.3275	0.1887	13618|18032|171167	Ednrb|Nfix|Fut10	-0.660926	0	94	1	1	-2.396171	8.5300218

	171	402				l Processes			process	171	218	071					109	786								
1	-2.396171	GO:0019800	M1	1	0	GO Biological Processes	19	peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan	19_GO:0008152 metabolic process	-2.396171	8.5300218	4.5679071	20836	8	916	3	0.3275109	0.1887786	13179|68169|71738	Dcn|Ndnf|Mamdc2	-0.660926	0	95	1	1	-2.396171	8.5300218
1	-2.371766	GO:0030099	M1	1	0	GO Biological Proc	19	myeloid cell differentiation	19_GO:0032502 developmental process	-2.371766	1.7715518	2.9873194	20836	321	916	25	2.7292576	0.5383512	11308|11655|12608|12675|14466|14734|15122|15203|15526|16477|17132|17260|18032|18854|19014|21349|22042|22339|29813|50875|72147|98386|214133|226419|238377	Abi1|Alas1|Cebpb|Chuk|Gba|Gpc3|Hba-a1|Heph|Hspa9|Junb|Maf|Mef2c|Nfix|Pml|Med1|Tal1|Tfrc|Vegfa|Zfp385a|Tmod3|Zbtb46|Lbr|Tet2|Dyrk3|Gpr68	-0.645639	0	96	1	1	-2.371766	1.7715518

						esses																					
1	-2.363096	GO:0007265	M1	1	0	GO Biological Processes	19	Ras protein signal transduction	19_GO:0023052 signaling	-2.363096	2.0916529	3.1007934	20836	174	916	16	1.7467249	0.4328506	12675|13860|18032|19395|19419|22376|50884|67425|69632|71653|74055|74563|109905|170758|223864|269608	Chuk|Eps8|Nfix|Rasgrp2|Rasgrp1|Was|Nckap1|Eps8l1|Arhgef12|Shtn1|Plce1|Rasgef1c|Rap1a|Rac3|Rapgef3|Plekhg5	-0.645217	0	97	1	1	-2.363096	2.8433406
1	-2.169046	GO:0007266	M1	1	0	GO Biological Processes	19	Rho protein signal transduction	19_GO:0023052 signaling	-2.169046	2.8433406	3.1670597	20836	64	916	8	0.8733624	0.3074289	12675|13860|18032|22376|67425|69632|71653|269608	Chuk|Eps8|Nfix|Was|Eps8l1|Arhgef12|Shtn1|Plekhg5	-0.540615	0	97	0	0	-2.363096	2.8433406

1	-2.358635	mmu04066	M1	1	0	KEGG Pathway	24	HIF-1 signaling pathway - Mus musculus (house mouse)		-2.358635	2.3943921	3.2012628	20836	114	916	12	1.3100437	0.3756917	12043|12325|12576|13808|14433|16337|18706|18751|22042|22339|108058|230899	Bcl2|Camk2g|Cdkn1b|Eno3|Gapdh|Insr|Pik3ca|Prkcb|Tfrc|Vegfa|Camk2d|Nppa	-0.645217	0	98	1	1	-2.358635	2.3943921
1	-2.358635	GO:0031099	M1	1	0	GO Biological Processes	19	regeneration	19_GO:0032502 developmental process	-2.358635	2.3943921	3.2012628	20836	114	916	12	1.3100437	0.3756917	12043|12608|13869|14580|18032|19014|19221|19268|21923|22601|29862|72043	Bcl2|Cebpb|Erbb4|Gfap|Nfix|Med1|Ptgfrn|Ptprf|Tnc|Yap1|Ninj2|Sulf2	-0.645217	0	99	1	1	-2.358635	2.3943921
1	-2.354	GO:1902	M1	1	0	GO Biologica	19	regulation of intrinsic apoptotic signaling pathway in response to	19_GO:0023052 signaling	-2.354	5.6866	4.0214	20836	16	916	4	0.4366	0.2178	12505|22062|29813|68428	Cd44|Trp73|Zfp385a|Steap3	-0.645217	0	100	1	1	-2.354551	5.6866812

	551	165				l Processes		DNA damage by p53 class mediator		551	812	703					812	634									
1	-2.3545551	GO:0034776	M1	1	0	GO Biological Processes	19	response to histamine	19_GO:0050896 response to stimulus	-2.3545551	5.6866812	4.0214703	20836	16	916	4	0.4366812	0.2178634	13367|13489|14401|15465	Diaph1|Drd2|Gabrb2|Hrh1	-0.645217	0	101	1	1	-2.354551	5.686812
1	-2.3545551	GO:0060712	M1	1	0	GO Biological Proc	19	spongiotrophoblast layer development	19_GO:0032502 developmental process	-2.3545551	5.6866812	4.0214703	20836	16	916	4	0.4366812	0.2178634	12192|207304|231672|380993	Zfp36l1|Hectd1|Fbxw8|Zfat	-0.645217	0	102	1	1	-2.354551	5.686812

						esses																	
1	-2.315981	GO:0050678	M1	1	0	GO Biological Processes	19	regulation of epithelial cell proliferation	19_GO:0050789 regulation of biological process	-2.315981	1.6437027	2.888845	20836	429	916	31	3.3842795	0.5974606	11819|12192|12576|12822|13039|13395|13489|13601|13618|13869|14734|15208|15559|16392|16568|17260|18667|19014|19302|20271|20692|21336|22339|22601|30878|50721|69683|72043|76905|211401|238328	Nr2f2|Zfp36l1|Cdkn1b|Col18a1|Ctsl|Dlx5|Drd2|Ecm1|Ednrb|Erbb4|Gpc3|Hes5|Htr2b|Isl1|Kif3a|Mef2c|Pgr|Med1|Pex2|Scn5a|Sparc|Tacr1|Vegfa|Yap1|Apln|Sirt6|Emc10|Sulf2|Lrg1|Mtss1|Vash1	-0.626813	0	103	1	1	-2.315981	1.9132759
1	-2.183861	GO:0050673	M1	1	0	GO Biological Processes	19	epithelial cell proliferation	19_GO:0009987 cellular process	-2.183861	1.9132759	2.879674	20836	214	916	18	1.9650655	0.458597	12048|12140|12576|12608|12675|12822|13039|13134|13489|14734|16568|17260|19014|19108|22339|22601|211401|241639	Bcl2l1|Fabp7|Cdkn1b|Cebpb|Chuk|Col18a1|Ctsl|Dach1|Drd2|Gpc3|Kif3a|Mef2c|Med1|Prkx|Vegfa|Yap1|Mtss1|Fermt1	-0.545337	0	103	0	0	-2.315981	1.9132759

1	-2.305853	GO:0032098	M1	1	0	GO Biological Processes	19	regulation of appetite	19_GO:0050896 response to stimulus	-2.305853	4.3743702	3.6918426	20836	26	916	5	0.5458515	0.2434451	15560|20519|109648|319229|319552	Htr2c|Slc22a3|Npy|Sctr|Spx	-0.617826	0	104	1	1	-2.305853	4.3743702
1	-2.289253	GO:0001958	M1	1	0	GO Biological Processes	19	endochondral ossification	19_GO:0032502 developmental process	-2.289253	3.6886581	3.5100664	20836	37	916	6	0.6550218	0.2665343	13395|17260|17261|17389|17936|18032	Dlx5|Mef2c|Mef2d|Mmp16|Nab1|Nfix	-0.608011	0	105	1	1	-2.289253	3.6886581
1	-2.2	GO:00	M1	1	0	GO Biol	19	replacement ossification	19_GO:0032501 multic	-2.2	3.68	3.51	20836	37	916	6	0.65	0.26	13395|17260|17261|17389|17936|18032	Dlx5|Mef2c|Mef2d|Mmp16|Nab1|Nfix	-0.608011	0	105	0	0	-2.289253	3.6886581

	89253	36075				ogical Processes			ellular organismal process	89253	86581	0064					50218	65343									
1	-2.26164	GO:0060348	M1	1	0	GO Biological Processes	19	bone development	19_GO:0032502 developmental process	-2.26164	1.87215844	2.93250344	20836	243	916	20	2.18340661	0.48286551	11308|12406|13395|13516|13601|17260|17261|17389|17926|17936|18032|19014|20692|20997|21349|29813|72043|74511|238377|373864	Abi1|Serpinh1|Dlx5|Epyc|Ecm1|Mef2c|Mef2d|Mmp16|Myoc|Nab1|Nfix|Med1|Sparc|T|Tal1|Zfp385a|Sulf2|Lrrc17|Gpr68|Col27a1	-0.591478	0	105	0	0	-2.289253	3.6886581
1	-2.01268	GO:00603	M1	1	0	GO Biological Pr	19	endochondral bone morphogenesis	19_GO:0032502 developmental process	-2.01268	2.676068	2.968660	20836	68	916	8	0.873736	0.307342	12406|13395|17260|17261|17389|17936|18032|373864	Serpinh1|Dlx5|Mef2c|Mef2d|Mmp16|Nab1|Nfix|Col27a1	-0.447878	0	105	0	0	-2.289253	3.6886581

		50				ocesses					53	94					24	89									
1	-2.284617	GO:0050772	M1	1	0	GO Biological Processes	19	positive regulation of axonogenesis	19_GO:0032502 developmental process	-2.284617	2.4530782	3.1546221	20836	102	916	11	1.2088734	0.3598963	12561|13640|17755|18080|18846|20361|22339|67784|71653|246048|268902	Cdh4|Efna5|Map1b|Nin|Plxna3|Sema7a|Vegfa|Plxnd1|Shtn1|Chodl|Robo2	-0.60673	0	106	1	1	-2.284617	5.0548278
1	-2.276746	GO:0060560	M1	1	0	GO Biological Processes	19	developmental growth involved in morphogenesis	19_GO:0040007 growth	-2.276746	2.1061782	3.03089	20836	162	916	15	1.6375546	0.4193386	12561|12808|13640|17755|18032|18080|18846|19014|20346|20361|21923|22601|50706|50721|71461	Cdh4|Cobl|Efna5|Map1b|Nfix|Nin|Plxna3|Med1|Sema3a|Sema7a|Tnc|Yap1|Postn|Sirt6|Ptk7	-0.602139	0	106	0	0	-2.284617	5.0548278

<table>
<tr><td>1</td><td>-2.159259</td><td>GO:0048668</td><td>M1</td><td>1</td><td>0</td><td>GO Biological Processes</td><td>19</td><td>collateral sprouting</td><td>19_GO:0040007 growth</td><td>-2.159259</td><td>5.0548278</td><td>3.6905321</td><td>20836</td><td>18</td><td>916</td><td>4</td><td>0.4366812</td><td>0.2178634</td><td>12808|13640|18032|18080</td><td>Cobl|Efna5|Nfix|Nin</td><td>-0.540615</td><td>0</td><td>106</td><td>0</td><td>0</td><td>-2.284617</td><td>5.0548278</td></tr>
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<tr><td>1</td><td>-2.2</td><td>GO:00</td><td>M1</td><td>1</td><td>0</td><td>GO Biol</td><td>19</td><td>cell cycle phase transition</td><td>19_GO:0009987 cellula</td><td>-2.2</td><td>2.10</td><td>3.03</td><td>20836</td><td>162</td><td>916</td><td>15</td><td>1.63</td><td>0.41</td><td>12043|12313|12325|12576|13860|18032|18557|19055|50875|57775|66131|68431|108058|217232|244879</td><td>Bcl2|Calm1|Camk2g|Cdkn1b|Eps8|Nfix|Cdk18|Ppp3ca|Tmod3|Usp29|Tipin|Fbxl15|Camk2d|Cdc27|Npat</td><td>-0.602139</td><td>0</td><td>107</td><td>1</td><td>1</td><td>-2.276746</td><td>2.1089679</td></tr>
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	76746	4470				ogical Processes			r process	76746	61782	089					75546	93386									
1	-2.165479	GO:0044772	M1	1	0	GO Biological Processes	19	mitotic cell cycle phase transition	19_GO:0009987 cellular process	-2.165479	2.1089679	2.9327801	20836	151	916	14	1.5283843	0.4053443	12043|12313|12325|12576|13860|18032|18557|19055|50875|57775|68431|108058|217232|244879	Bcl2|Calm1|Camk2g|Cdkn1b|Eps8|Nfix|Cdk18|Ppp3ca|Tmod3|Usp29|Fbxl15|Camk2d|Cdc27|Npat	-0.540615	0	107	0	0	-2.276746	2.1089679
1	-2.2744	GO:0075	M1	1	0	GO Biological Pr	19	respiratory gaseous exchange by respiratory system	19_GO:0032501 multicellular organismal	-2.2744	3.24953	3.38060	20836	49	916	7	0.76419	0.28773	13134|13599|17158|18516|21924|320924|380654	Dach1|Ecel1|Man2a1|Pbx3|Tnnc1|Ccbe1|Cfap54	-0.602139	0	108	1	1	-2.274494	3.2495321

	94	85				ocesses			process	94	21	29					21	17									
1	-2.2744494	GO:0030865	M1	1	0	GO Biological Processes	19	cortical cytoskeleton organization	19_GO:0009987 cellular process	-2.2744494	3.2495432	3.3806029	20836	49	916	7	0.7641921	0.2877317	12317|22379|50884|170758|192167|225288|269587	Calr|Fmnl3|Nckap1|Rac3|Nlgn1|Fhod3|Epb41	-0.602139	0	109	1	1	-2.274494	3.2495321
1	-2.2532237	GO:0042756	M1	1	0	GO Biological Processes	19	drinking behavior	19_GO:0032501 multicellular organismal process	-2.2532237	5.3521706	3.849464	20836	17	916	4	0.4366812	0.2178634	13489|21336|30878|238384	Drd2|Tacr1|Apln|Slc24a4	-0.587946	0	110	1	1	-2.253237	5.3521706

1	-2.253237	GO:0097205	M1	1	0	GO Biological Processes	19	renal filtration	19_GO:0032501 multicellular organismal process	-2.253237	5.3521706	3.849464	20836	17	916	4	0.4366812	0.2178634	19055|72043|170643|217733	Ppp3ca|Sulf2|Kirrel|Tmem63c	-0.587946	0	111	1	1	-2.253237	5.3521706
1	-2.125161	GO:0003014	M1	1	0	GO Biological Processes	19	renal system process	19_GO:0032501 multicellular organismal process	-2.125161	2.2373828	2.9393535	20836	122	916	12	1.3100437	0.3756917	11550|12043|13489|13618|19055|21336|57738|72043|110784|170643|217733|319229	Adra1d|Bcl2|Drd2|Ednrb|Ppp3ca|Tacr1|Slc15a2|Sulf2|Nr3c2|Kirrel|Tmem63c|Sctr	-0.516153	0	111	0	0	-2.253237	5.3521706
1	-2.2	GO:00	M1	1	0	GO Biol	19	positive regulation of cellular	19_GO:0048518 positiv	-2.2	1.54	2.78	20836	543	916	37	4.03	0.65	12404|12576|12808|13048|13640|13860|14158|17755|17926|19266|20410|20963|20969|21336|21349|22003|	Cbln1|Cdkn1b|Cobl|Cux2|Efna5|Eps8|Fer|Map1b|Myoc|Ptprd|Sorbs3|Syk|Sdc1|Tacr1|Tal1|Tpm1|Tfrc|Trhr	-0.585038	0	112	1	1	-2.238619	1.9143283

	38619	44089				ogical Processes		component biogenesis	e regulation of biological process	38619	9961	45723					93013	05072	22042|22045|22339|50884|54141|54343|66616|66797|67425|72587|74055|107581|170643|192167|211323|211401|223864|241639|245446|574437|667663	|Vegfa|Nckap1|Spag5|Atf7ip|Snx9|Cntnap2|Eps8l1|Pan3|Plce1|Col16a1|Kirrel|Nlgn1|Nrg1|Mtss1|Rapgef3|Fermt1|Slitrk4|Xlr3b|Myo3a							
1	-2.094671	GO:0051495	M1	1	0	GO Biological Processes	19	positive regulation of cytoskeleton organization	19_GO:0048518 positive regulation of biological process	-2.094671	1.9143283	2.8001801	20836	202	916	17	1.8558952	0.4459243	12576|14158|17755|17926|18205|18846|20301|20410|21336|22003|22376|50884|54141|66616|170643|211401|223864	Cdkn1b|Fer|Map1b|Myoc|Ntf3|Plxna3|Ccl27a|Sorbs3|Tacr1|Tpm1|Was|Nckap1|Spag5|Snx9|Kirrel|Mtss1|Rapgef3	-0.507933	0	112	0	0	-2.238619	1.9143283
1	-2.0650	GO:00329	M1	1	0	GO Biological Pr	19	regulation of actin filament-based process	19_GO:0050789 regulation of biological	-2.0650	1.60500	2.65641	20836	411	916	29	3.16593	0.578519	11856|13640|13860|14158|16518|17260|17926|18205|18706|19240|20271|20301|20410|21336|21924|22003|22376|50875|50884|66616|67451|98660|170643|170758|211401|223864|225288|544963|667663	Arhgap6|Efna5|Eps8|Fer|Kcnj2|Mef2c|Myoc|Ntf3|Pik3ca|Tmsb10|Scn5a|Ccl27a|Sorbs3|Tacr1|Tnnc1|Tpm1|Was|Tmod3|Nckap1|Snx9|Pkp2|Atp1a2|Kirrel|Rac3|Mtss1|Rapgef3|Fhod3|Iqgap2|Myo3a	-0.49235	0	112	0	0	-2.238619	1.9143283

	49	70				ocesses			process	49	01						89										
1	-2.232647	GO:0051590	M1	1	0	GO Biological Processes	19	positive regulation of neurotransmitter transport	19_GO:0051179 localization	-2.232647	4.2123565	3.5816227	20836	27	916	5	0.5458515	0.2434451	12048|13489|15560|192167|545192	Bcl2l1|Drd2|Htr2c|Nlgn1|Baiap3	-0.585038	0	113	1	1	-2.232647	6.824017 5
1	-2.093839	GO:2000807	M1	1	0	GO Biological Processes	19	regulation of synaptic vesicle clustering	19_GO:0051179 localization	-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	12048|192167|219228	Bcl2l1|Nlgn1|Pcdh17	-0.507933	0	113	0	0	-2.232647	6.824017 5

1	-2.213853	GO:0042490	M1	1	0	GO Biological Processes	19	mechanoreceptor differentiation	19_GO:0032502 developmental process	-2.213853	2.5274139	3.1139427	20836	90	916	10	1.0917031	0.3433372	13047|14401|15208|16568|18205|73750|110886|270893|667663|100503041	Cux1|Gabrb2|Hes5|Kif3a|Ntf3|Whrn|Gabra5|Tmem132e|Myo3a|Pdzd7	-0.570213	0	114	1	1	-2.213853	2.5274139
1	-2.190372	WP523	M1	1	0	WikiPathways	27	Regulation of actin cytoskeleton		-2.190372	2.1230277	2.9600404	20836	150	916	14	1.5283843	0.4053443	12669|12671|13367|13800|14167|14169|17931|18706|18719|22376|30955|50884|107589|170758	Chrm1|Chrm3|Diaph1|Enah|Fgf12|Fgf14|Ppp1r12a|Pik3ca|Pip5k1b|Was|Pik3cg|Nckap1|Mylk|Rac3	-0.548785	0	115	1	1	-2.190372	2.1230277
1	-2.184	GO:045	M1	1	0	GO Biological	19	positive regulation of osteoblast differentiation	19_GO:0032502 developmental	-2.184	2.6587	3.1268	20836	77	916	9	0.9825	0.3258	12608|12609|13395|17260|19055|22339|22601|71584|320799	Cebpb|Cebpd|Dlx5|Mef2c|Ppp3ca|Vegfa|Yap1|Gdpd2|Zhx3	-0.545337	0	116	1	1	-2.184287	2.6587081

	287	669				l Processes			process	287	081	852					328	98									
1	-2.169046	GO:0050775	M1	1	0	GO Biological Processes	19	positive regulation of dendrite morphogenesis	19_GO:0032502 developmental process	-2.169046	2.8433406	3.1670597	20836	64	916	8	0.8733624	0.3074289	13047|13048|19266|19268|19699|66515|231672|574437	Cux1|Cux2|Ptprd|Ptprf|Reln|Cul7|Fbxw8|Xlr3b	-0.540615	0	117	1	1	-2.169046	2.8433406
1	-2.050463	GO:0010770	M1	1	0	GO Biological Proc	19	positive regulation of cell morphogenesis involved in differentiation	19_GO:0032502 developmental process	-2.050463	2.7160269	3.0168486	20836	67	916	8	0.8733624	0.3074289	13047|13048|19266|19268|19699|66515|231672|574437	Cux1|Cux2|Ptprd|Ptprf|Reln|Cul7|Fbxw8|Xlr3b	-0.480481	0	117	0	0	-2.169046	2.8433406

						esses																					
1	-2.162931	GO:0044331	M1	1	0	GO Biological Processes	19	cell-cell adhesion mediated by cadherin	19_GO:0009987 cellular process	-2.162931	4.0619152	3.476168	20836	28	916	5	0.5458515	0.2434451	12388|12561|14158|23836|241201	Ctnnd1|Cdh4|Fer|Cdh20|Cdh7	-0.540615	0	118	1	1	-2.162931	4.0619152
1	-2.159259	GO:0030575	M1	1	0	GO Biological Processes	19	nuclear body organization	19_GO:0009987 cellular process	-2.159259	5.0548278	3.6905321	20836	18	916	4	0.4366812	0.2178634	18854|109229|213990|226419	Pml|Fam118b|Agap3|Dyrk3	-0.540615	0	119	1	1	-2.159259	5.0548278

1	-2.159259	GO:0014041	M1	1	0	GO Biological Processes	19	regulation of neuron maturation	19_GO:0032502 developmental process	-2.159259	5.0548278	3.6905321	20836	18	916	4	0.4366812	0.2178634	12043|13618|170758|243547	Bcl2|Ednrb|Rac3|Grip2	-0.540615	0	120	1	1	-2.159259	5.0548278
1	-2.159259	GO:0060914	M1	1	0	GO Biological Processes	19	heart formation	19_GO:0032502 developmental process	-2.159259	5.0548278	3.6905321	20836	18	916	4	0.4366812	0.2178634	14106|16392|17260|73713	Foxh1|Isl1|Mef2c|Rbm20	-0.540615	0	121	1	1	-2.159259	5.0548278
1	-2.1	R-MM	M1	1	0	Reactom	6	Kinesins		-2.16	3.06	3.19	20836	52	916	7	0.76	0.28	16554|16561|16564|16568|22143|75050|232943	Kif13b|Kif1b|Kif21a|Kif3a|Tuba1b|Kif27|Klc3	-0.520337	0	122	1	1	-2.131278	3.0620591

	31278	U-983189				e Gene Sets			31278	20591	25524					41921	77317									
1	-2.122287	R-MMU-194315	M1	1	0	Reactome Gene Sets	6	Signaling by Rho GTPases	-2.122287	1.5137925	2.6695151	20836	571	916	38	4.1484716	0.6588641	11308 | 11856 | 12313 | 12638 | 13367 | 17931 | 17978 | 18706 | 18751 | 19387 | 21927 | 22042 | 22143 | 22379 | 26554 | 50875 | 50884 | 53817 | 54216 | 59069 | 66871 | 67733 | 67784 | 68097 | 68428 | 98386 | 109904 | 170758 | 208263 | 223870 | 232943 | 236915 | 242202 | 269608 | 269966 | 320271 | 329366 | 544963	Abi1 | Arhgap6 | Calm1 | Cftr | Diaph1 | Ppp1r12a | Ncoa2 | Pik3ca | Prkcb | Rangap1 | Tnfaip1 | Tfrc | Tuba1b | Fmnl3 | Cul3 | Tmod3 | Nckap1 | Ddx39b | Pcdh7 | Tpm3 | Cpne8 | Itgb3bp | Plxnd1 | Dynll2 | Steap3 | Lbr | Mcf2 | Rac3 | Tor1aip1 | Senp1 | Klc3 | Arhgef9 | Pde5a | Plekhg5 | Nup98 | Scai | Ccdc187 | Iqgap2	-0.516092	0	123	1	1	-2.122287	1.6165185
1	-2.051	R-MMU-	M1	1	0	Reactome Ge	6	RHO GTPase cycle	-2.051	1.6165	2.6493	20836	394	916	28	3.0567	0.5687	11308 | 11856 | 12638 | 13367 | 18706 | 21927 | 22042 | 22143 | 22379 | 26554 | 50875 | 50884 | 53817 | 54216 | 59069 | 66871 | 67784 | 68428 | 98386 | 109904 | 170758 | 208263 | 223870 | 23	Abi1 | Arhgap6 | Cftr | Diaph1 | Pik3ca | Tnfaip1 | Tfrc | Tuba1b | Fmnl3 | Cul3 | Tmod3 | Nckap1 | Ddx39b | Pcdh7 | Tpm3 | Cpne8 | Plxnd1 | Steap3 | Lbr | Mcf2 | Rac3 | Tor1aip1 | Senp	-0.481105	0	123	0	0	-2.122287	1.6165185

	957	9012999				ne Sets			957	185	075					686	773	6915|242202|269608|329366|544963	1|Arhgef9|Pde5a|Plekhg5|Ccdc187|Iqgap2							
1	-2.119805	WP1496	M1	1	0	WikiPathways	27	Oxidative damage response	-2.119805	3.4120087	3.2743024	20836	40	916	6	0.6550218	0.2665343	12043|12259|12260|12576|22029|338372	Bcl2|C1qa|C1qb|Cdkn1b|Traf1|Map3k9	-0.515495	0	124	1	1	-2.119805	3.4120087
1	-2.067162	WP3626	M1	1	0	WikiPathways	27	Microglia pathogen phagocytosis pathway	-2.067162	3.328789	3.2006813	20836	41	916	6	0.6550218	0.2665343	12259|12260|18706|20963|30955|170758	C1qa|C1qb|Pik3ca|Syk|Pik3cg|Rac3	-0.492815	0	124	0	0	-2.119805	3.4120087

1	-2.11121	GO:0033143	M1	1	0	GO Biological Processes	19	regulation of intracellular steroid hormone receptor signaling pathway	19_GO:0023052 signaling	-2.11121	2.591399	3.0388563	20836	79	916	9	0.9825328	0.325898	12317|14106|16392|17978|19014|22601|56198|94186|109593	Calr|Foxh1|Isl1|Ncoa2|Med1|Yap1|Heyl|Strn3|Lmo3	-0.508729	0	125	1	1	-2.1121	4.7887842
1	-2.071738	GO:0033145	M1	1	0	GO Biological Processes	19	positive regulation of intracellular steroid hormone receptor signaling pathway	19_GO:0023052 signaling	-2.071738	4.7887842	3.5429695	20836	19	916	4	0.4366812	0.2178634	17978|19014|22601|109593	Ncoa2|Med1|Yap1|Lmo3	-0.493978	0	125	0	0	-2.1121	4.7887842
1	-2.0	GO:00	M1	1	0	GO Biol	19	negative regulation of heart contraction	19_GO:0048519 negati	-2.0	3.92	3.37	20836	29	916	5	0.54	0.24	11550|12671|98660|242202|319552	Adra1d|Chrm3|Atp1a2|Pde5a|Spx	-0.507933	0	126	1	1	-2.096439	3.9218491

	96439	45822				ogical Processes			ve regulation of biological process	96439	18491	63843					58515	34451								
1	-2.093839	R-MMU-8964058	M1	1	0	Reactome Gene Sets	6	HDL remodeling		-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	16816|16891|18830	Lcat|Lipg|Pltp	-0.507933	0	127	1	1	-2.093839	6.8240175
1	-2.093	GO:0051	M1	1	0	GO Biologica	19	endoplasmic reticulum localization	19_GO:0051179 localization	-2.093	6.8240	3.9502	20836	10	916	3	0.3275	0.1887	28015|56491|546134	Polr2m|Vapb|Gramd2	-0.507933	0	128	1	1	-2.093839	6.8240175

	839	643				l Processes				839	175	043					109	786									
1	-2.093839	R-MMU-1196780	M1	1	0	Reactome Gene Sets	6	Biotin transport and metabolism		-2.093839	6.8240175	3.9502043	20836	10	916	3	0.3275109	0.1887786	107476|110821|110948	Acaca|Pcca|Hlcs	-0.507933	0	129	1	1	-2.093839	6.8240175
1	-2.08613	GO:0021988	M1	1	0	GO Biological Proc	19	olfactory lobe development	19_GO:0032502 developmental process	-2.08613	3.0042844	3.1328744	20836	53	916	7	0.7641921	0.2877317	13395|13869|18032|20346|20361|98660|268902	Dlx5|Erbb4|Nfix|Sema3a|Sema7a|Atp1a2|Robo2	-0.502919	0	130	1	1	-2.08613	3.0042844

						esses																					
1	-2.071738	GO:0032516	M1	1	0	GO Biological Processes	19	positive regulation of phosphoprotein phosphatase activity	19_GO:0048518 positive regulation of biological process	-2.071738	4.7887842	3.5429695	20836	19	916	4	0.4366812	0.2178634	12313|17931|110854|227059	Calm1|Ppp1r12a|Ptpa|Slc39a10	-0.493978	0	131	1	1	-2.071738	4.7887842
1	-2.064321	R-MMU-8951664	M1	1	0	Reactome Gene Sets	6	Neddylation		-2.064321	1.8610957	2.7533433	20836	220	916	18	1.9650655	0.458597	12702|26554|30843|50868|54607|68431|68842|71833|72194|72584|75763|213464|224023|224111|230796|230903|231672|399566	Socs3|Cul3|Fbxl12|Keap1|Socs6|Fbxl15|Tulp4|Dcaf7|Fbxl20|Cul4b|Dcaf17|Rbbp5|Klhl22|Ubxn7|Wdtc1|Fbxo44|Fbxw8|Btbd6	-0.49235	0	132	1	1	-2.064321	1.8610957

Supplementary Table 5 **Detailed enrichment items of immune-related DEGs**

_MEMBER_MyList	_LogP_MyList	GO	_PATTERN_	_RANK_	GiniIndex	Category	CategoryID	Description	PARENT_GO	LogP	Enrichment	Z-score	#TotalGeneInLibrary	#GeneInGO	#GeneInHitList	#GeneInGOAndHitList	%InGO	STDV%InGO	GeneID	Hits	Log(q-value)	EvidenceCutoff	GROUP_ID	FirstInGroupByEnrichment	FirstInGroupByLogP	BestLogPInGroup	BestEnrichmentInGroup	URL
1	-7.3747	mmu04360	M1	1	0	KEGG Pathway	24	Axon guidance - Mus musculus (house mouse)		-7.37477	15.608952	10.519064	20836	181	59	8	13.559322	4.4570968	18706|18846|19055|20348|20359|26456|170758|268902	Pik3ca|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-3.105747	0	1	1	1	-7.3747	52.318895	
1	-6.129471	GO:0050922	M1	1	0	GO Biological Processes	19	negative regulation of che	19_GO:0040011 locom	-6.129471	29.429379	11.751502	20836	60	59	5	8.4745763	3.6258002	18846|20348|20359|26456|268902	Plxna3|Sema3c|Sema6b|Sema4g|Robo2	-2.443639	0	1	0	0	-7.3747	52.318895	

								motaxis	otion																		
1	-6.044307	GO:0051129	M1	1	0	GO Biological Processes	19	negative regulation of cellular component organization	19_GO:0048519 negative regulation of biological process	-6.044307	5.7190695	6.9703215	20836	741	59	12	20.338983	5.240365	13590|13860|14580|14972|18013|18706|18846|19055|20348|20359|22042|26456	Lefty1|Eps8|Gfap|H2-K1|Neurod2|Pik3ca|Plxna3|Ppp3ca|Sema3c|Sema6b|Tfrc|Sema4g	-2.4436639	0	1	0	0	-7.3747	52.318895
1	-6.013621	GO:0048843	M1	1	0	GO Biological Pro	19	negative regulation	19_GO:0040007	-6.01336	52.318895	14.218864	20836	27	59	4	6.779661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-2.44436	0	1	0	0	-7.3747	52.318895

						cesses		of axon extension involved in axon guidance	growth	21											39						
1	-5.651465	GO:0048841	M1	1	0	GO Biological Processes	19	regulation of axon extension involved in	19_GO:0040007 growth	-5.651465	42.806369	12.80776	20836	33	59	4	6.779661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-2.2276111	0	1	0	0	-7.3747	52.318895

								axon guidance																			
1	-5.558757	GO:0031345	M1	1	0	GO Biological Processes	19	negative regulation of cell projection organization	19_GO:0048519 negative regulation of biological process	-5.558757	11.287981	8.1558796	20836	219	59	7	11.864407	4.2099087	14580|14972|18846|19055|20348|20359|26456	Gfap|H2-K1|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g	-2.1928895	0	1	0	0	-7.3747	52.318895
1	-5.2	GO:00	M1	1	0	GO Biolog	19	negative	19_GO:00	-5.2	33.63	11.281	20836	42	59	4	6.77	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-2.1	0	1	0	0	-7.3747	52.318895

	22705	50919				ical Processes		chemotaxis	40011 locomotion	22705	3575	105					9661				29844						
1	-5.181218	GO:0071526	M1	1	0	GO Biological Processes	19	semaphorin-plexin signaling pathway	19_GO:0023052 signaling	-5.181218	32.851399	11.141291	20836	43	59	4	6.779661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-2.116386	0	1	0	0	-7.3747	52.318895
1	-5.144535	GO:0010977	M1	1	0	GO Biological Processes	19	negative regulation of neu	19_GO:0048519 negative	-5.144535	12.841911	8.1379374	20836	165	59	6	10.169492	3.9349167	14580|14972|18846|20348|20359|26456	Gfap|H2-K1|Plxna3|Sema3c|Sema6b|Sema4g	-2.106032	0	1	0	0	-7.3747	52.318895

								ron projection development	regulation of biological process															
1	-4.988052	GO:0030517	M1	1	0	GO Biological Processes	19	negative regulation of axon extension	19_GO:0040007 growth	-4.988052	29.429379	10.507828	20836	48	59	4	6.779661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-2.020013	0	1	0	0	-7.3747	52.318895
1	-4.529558	GO:0032	M1	1	0	GO Biological	19	negative reg	19_GO:00485	-4.52	6.4947594	6.1716	20836	435	59	8	13.559	4.4570968	12140|18846|20348|20359|26456|109648|268902|574402	Fabp7|Plxna3|Sema3c|Sema6b|Sema4g|Npy|Robo2|Gpr17	-1.68	0	1	0	0	-7.3747	52.318895

		102				Processes		ulation of response to external stimulus	19 negative regulation of biological process	9558		163					322				5202						
1	-4.505849	GO:0010721	M1	1	0	GO Biological Processes	19	negative regulation of cell development	19_GO:0048519 negative regulation of	-4.505849	7.77377981	6.4864882	20836	318	59	7	11.864407	4.2099087	16768|18846|19055|20348|20359|26456|74511	Lag3|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Lrrc17	-1.6852022	0	1	0	0	-7.3747	52.318895

									biological process															
1	-4.491756	GO:0048640	M1	1	0	GO Biological Processes	19	negative regulation of developmental growth	19_GO:0040007 growth	-4.491756	13.688083	7.7030659	20836	129	59	5	8.4745763	3.6258002	18846|19662|20348|20359|26456	Plxna3|Rbp4|Sema3c|Sema6b|Sema4g	-1.685202	0	1	0	0	-7.3747	52.318895
1	-4.470914	GO:0010975	M1	1	0	GO Biological Processes	19	regulation of neuron proj	19_GO:0032502 develo	-4.4709	5.4894178	5.8381208	20836	579	59	9	15.254237	4.6808879	14580|14828|14972|18846|19055|20348|20359|26456|268902	Gfap|Hspa5|H2-K1|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Robo2	-1.6790	0	1	0	0	-7.3747	52.318895

								ection development	pmental process	14											83						
1	-4.334978	GO:0050771	M1	1	0	GO Biological Processes	19	negative regulation of axonogenesis	19_GO:0048519 negative regulation of biological process	-4.334978	20.180145	8.5655613	20836	70	59	4	6.779661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-1.5845539	0	1	0	0	-7.3747	52.318895

1	-4.248783	GO:0120035	M1	1	0	GO Biological Processes	19	regulation of plasma membrane bounded cell projection organization	19_GO:0050789 regulation of biological process	-4.2487833	4.5685969	5.3879139	20836	773	59	10	16.949153	4.884499	13860|14580|14828|14972|18846|19055|20348|20359|26456|268902	Eps8|Gfap|Hspa5|H2-K1|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Robo2	-1.5361333	0	1	0	0	-7.3747	52.318895
1	-4.236675	GO:0050920	M1	1	0	GO Biological Pro	19	regulation of che	19_GO:0040011 loc	-4.23666	8.8657542	6.5173144	20836	239	59	6	10.169492	3.9349167	12317|18846|20348|20359|26456|268902	Calr|Plxna3|Sema3c|Sema6b|Sema4g|Robo2	-1.53559	0	1	0	0	-7.3747	52.318895

						cesses		motaxis	omotion	75											25						
1	-4.216624	GO:0007411	M1	1	0	GO Biological Processes	19	axon guidance	19_GO:0040011 locomotion	-4.2166624	8.7921795	6.4836253	20836	241	59	6	10.169492	3.9349167	18846|20348|20359|26456|170758|268902	Plxna3|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-1.528778	0	1	0	0	-7.3747	52.318895
1	-4.206667	GO:0097485	M1	1	0	GO Biological Processes	19	neuron projection guidance	19_GO:0040011 locomotion	-4.2066667	8.7558482	6.4669271	20836	242	59	6	10.169492	3.9349167	18846|20348|20359|26456|170758|268902	Plxna3|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-1.528778	0	1	0	0	-7.3747	52.318895
1	-4.183631	GO:0031	M1	1	0	GO Biological Pro	19	regulation of cell	19_GO:0050789	-4.183	4.4873258	5.3145301	20836	787	59	10	16.949153	4.884499	13860|14580|14828|14972|18846|19055|20348|20359|26456|268902	Eps8|Gfap|Hspa5|H2-K1|Plxna3|Ppp3ca|Sema3c|Sema	-1.516	0	1	0	0	-7.3747	52.318895

		344				cesses		projection organization	regulation of biological process	631										6b|Sema4g|Robo2	738					
1	-4.150203	GO:0040013	M1	1	0	GO Biological Processes	19	negative regulation of locomotion	19_GO:0040011 locomotion	-4.150203	6.8289166	5.9617274	20836	362	59	7	11.864407	4.2099087	12317|18846|20348|20359|26456|105844|268902	Calr|Plxna3|Sema3c|Sema6b|Sema4g|Card10|Robo2	-1.4940334	0	1	0	0	-7.3747	52.318895
1	-3.886917	GO:0050768	M1	1	0	GO Biological Pro	19	negative regulation	19_GO:0048519 neg	-3.88869	10.206721	6.4798161	20836	173	59	5	8.4745763	3.6258002	18846|19055|20348|20359|26456	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g	-1.33339	0	1	0	0	-7.3747	52.318895

						cesses		of neurogenesis	ative regulation of biological processes	17											68						
1	-3.829007	GO:0051961	M1	1	0	GO Biological Processes	19	negative regulation of nervous system development	19_GO:0048519 negative regulation of biologi	-3.829007	9.92000152	6.3688761	20836	178	59	5	8.4745763	3.6258002	18846|19055|20348|20359|26456	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g	-1.3004117	0	1	0	0	-7.3747	52.318895

								ment	cal process																		
1	-3.729121	GO:0050770	M1	1	0	GO Biological Processes	19	regulation of axonogenesis	19_GO:0032502 developmental process	-3.729121	9.4425813	6.1798493	20836	187	59	5	8.4745763	3.6258002	18846|20348|20359|26456|268902	Plxna3|Sema3c|Sema6b|Sema4g|Robo2	-1.2383321	0	1	0	0	-7.3747	52.318895
1	-3.69372	GO:0061564	M1	1	0	GO Biological Processes	19	axon development	19_GO:0032502 development	-3.693772	5.7623958	5.3112395	20836	429	59	7	11.864407	4.2099087	18846|20348|20359|21923|26456|170758|268902	Plxna3|Sema3c|Sema6b|Tnc|Sema4g|Rac3|Robo2	-1.2100097	0	1	0	0	-7.3747	52.318895

									al processes																		
1	-3.585997	GO:0031175	M1	1	0	GO Biological Processes	19	neuron projection development	19_GO:0032502 developmental processes	-3.585997	4.1986432	4.7772067	20836	757	59	9	15.2542237	4.6808879	14580|18846|19055|20348|20359|21923|26456|170758|268902	Gfap|Plxna3|Ppp3ca|Sema3c|Sema6b|Tnc|Sema4g|Rac3|Robo2	-1.15707089	0	1	0	0	-7.3747	52.318895
1	-3.513208	GO:0030516	M1	1	0	GO Biological Processes	19	regulation of axon extension	19_GO:0040007 growth	-3.513208	12.391317	6.4989303	20836	114	59	4	6.779661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-1.1307477	0	1	0	0	-7.3747	52.318895

1	-3.403895	GO:0050767	M1	1	0	GO Biological Processes	19	regulation of neurogenesis	19_GO:0032502 developmental process	-3.403895	5.1608931	4.9094039	20836	479	59	7	11.8644047	4.2099087	14580|18846|19055|20348|20359|26456|268902	Gfap|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Robo2	-1.0694441	0	1	0	0	-7.3747	52.318895
1	-3.35895	GO:0001667	M1	1	0	GO Biological Processes	19	ameboidal-type cell migration	19_GO:0009987 cellular process	-3.35895	7.8478343	5.5033395	20836	225	59	5	8.4745763	3.6258002	13590|20348|20359|26456|320924	Lefty1|Sema3c|Sema6b|Sema4g|Ccbe1	-1.034448	0	1	0	0	-7.3747	52.318895

1	-3.350201	GO:0048667	M1	1	0	GO Biological Processes	19	cell morphogenesis involved in neuron differentiation	19_GO:0032502 developmental process	-3.350201	5.0553534	4.8357549	20836	489	59	7	11.864407	4.2099087	18846 | 19055 | 20348 | 20359 | 26456 | 170758 | 268902	Plxna3 | Ppp3ca | Sema3c | Sema6b | Sema4g | Rac3 | Robo2	-1.0306399	0	1	0	0	-7.3747	52.318895
1	-3.309449	GO:0061387	M1	1	0	GO Biological Processes	19	regulation of extent of cell growth	19_GO:0040007 growth	-3.309449	10.950466	6.0410307	20836	129	59	4	6.779661	3.2729044	18846 | 20348 | 20359 | 26456	Plxna3 | Sema3c | Sema6b | Sema4g	-1.008998	0	1	0	0	-7.3747	52.318895

1	-3.160735	GO:0001755	M1	1	0	GO Biological Processes	19	neural crest cell migration	19_GO:0032502 developmental process	-3.160735	17.368158	6.8222172	20836	61	59	3	5.0847458	2.8600697	20348|20359|26456	Sema3c|Sema6b|Sema4g	-0.9129972	0	1	0	0	-7.3747	52.318895
1	-3.147798	GO:0048812	M1	1	0	GO Biological Processes	19	neuron projection morphogenesis	19_GO:0032502 developmental process	-3.147798	4.673096	4.5600392	20836	529	59	7	11.864407	4.2099087	18846|19055|20348|20359|26456|170758|268902	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.9041152	0	1	0	0	-7.3747	52.318895

1	-3.119749	GO:0090497	M1	1	0	GO Biological Processes	19	mesenchymal cell migration	19_GO:0009987 cellular process	-3.119749	16.816788	6.6999304	20836	63	59	3	5.0847458	2.8600697	20348|20359|26456	Sema3c|Sema6b|Sema4g	-0.8953394	0	1	0	0	-7.3747	52.318895
1	-3.119023	GO:0120039	M1	1	0	GO Biological Processes	19	plasma membrane bounded cell projection morpho	19_GO:0032502 developmental process	-3.119023	4.6206875	4.5210629	20836	535	59	7	11.864407	4.2099087	18846|19055|20348|20359|26456|170758|268902	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.8953394	0	1	0	0	-7.3747	52.318895

								genesis																			
1	-3.092825	GO:0007409	M1	1	0	GO Biological Processes	19	axonogenesis	19_GO:0032502 developmental process	-3.092825	5.433116	4.7094323	20836	390	59	6	10.169492	3.9349167	18846|20348|20359|26456|170758|268902	Plxna3|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.873309	0	1	0	0	-7.3747	52.318895
1	-3.081256	GO:0048858	M1	1	0	GO Biological Processes	19	cell projection morphogenesis	19_GO:0032502 developmental pro	-3.081256	4.552611	4.4699821	20836	543	59	7	11.864407	4.2099087	18846|19055|20348|20359|26456|170758|268902	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.871865	0	1	0	0	-7.3747	52.318895

									cess																		
1	-3.038023	GO:0045926	M1	1	0	GO Biological Processes	19	negative regulation of growth	19_GO:0040007 growth	-3.038023	6.6632555	4.94416244	20836	265	59	5	8.4745763	3.6258002	18846|19662|20348|20359|26456	Plxna3|Rbp4|Sema3c|Sema6b|Sema4g	-0.8518856	0	1	0	0	-7.3747	52.318895
1	-3.013569	GO:0032535	M1	1	0	GO Biological Processes	19	regulation of cellular component size	19_GO:0065007 biological regulation	-3.013569	5.2448397	4.5912176	20836	404	59	6	10.169492	3.9349167	13860|18706|18846|20348|20359|26456	Eps8|Pik3ca|Plxna3|Sema3c|Sema6b|Sema4g	-0.8428883	0	1	0	0	-7.3747	52.318895
1	-3.008031	GO:0048	M1	1	0	GO Biological	19	regulation of	19_GO:00400	-3.00	5.2318895	4.5829	20836	405	59	6	10.169	3.9349167	18706|18846|19662|20348|20359|26456	Pik3ca|Plxna3|Rbp4|Sema3c|Sema6b|Sema4g	-0.84	0	1	0	0	-7.3747	52.318895

		638				Processes		developmental growth	07 growth	8031		842					492				2883						
1	-2.954202	GO:0032990	M1	1	0	GO Biological Processes	19	cell part morphogenesis	19_GO:0032502 developmental process	-2.954202	4.3293657	4.2987044	20836	571	59	7	11.8644407	4.2099087	18846|19055|20348|20359|26456|170758|268902	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.8058823	0	1	0	0	-7.3747	52.318895
1	-2.94104	GO:0090066	M1	1	0	GO Biological Processes	19	regulation of anatomical	19_GO:0065007 biologi	-2.944104	4.3067383	4.2810072	20836	574	59	7	11.8644407	4.2099087	13860|18706|18846|20348|20359|26456|30878	Eps8|Pik3ca|Plxna3|Sema3c|Sema6b|Sema4g|Apln	-0.79822	0	1	0	0	-7.3747	52.318895

								structure size	cal regulation												66						
1	-2.932674	GO:0045596	M1	1	0	GO Biological Processes	19	negative regulation of cell differentiation	19_GO:0048519 negative regulation of biological process	-2.932674	3.7770325	4.1218744	20836	748	59	8	13.559322	4.4570968	12317|16768|18846|19055|20348|20359|26456|74511	Calr|Lag3|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Lrrc17	-0.7940566	0	1	0	0	-7.3747	52.318895
1	-2.927962	GO:0000	M1	1	0	GO Biological	19	cell morphogen	19_GO:00325	-2.92	4.2843463	4.2634	20836	577	59	7	11.864	4.2099087	18846|19055|20348|20359|26456|170758|268902	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.79	0	1	0	0	-7.3747	52.318895

		904				Processes		esis involved in differentiation	02 developmental processes	7962		304					407				2549						
1	-2.910654	GO:0051960	M1	1	0	GO Biological Processes	19	regulation of nervous system development	19_GO:0032502 developmental processes	-2.910654	4.2548499	4.24017796	20836	581	59	7	11.864407	4.2099087	14580|18846|19055|20348|20359|26456|268902	Gfap|Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Robo2	-0.7815581	0	1	0	0	-7.3747	52.318895
1	-2.851209	GO:0030	M1	1	0	GO Biological	19	positive regulat	19_GO:00400	-2.85	4.1547358	4.1604	20836	595	59	7	11.864	4.2099087	12317|14828|19055|20348|20359|26456|320924	Calr|Hspa5|Ppp3ca|Sema3c|Sema6b|Sema4g|Ccbe1	-0.73	0	1	0	0	-7.3747	52.318895

		335				Processes		ion of cell migration	11 locomotion	1209		167					407				1476						
1	-2.741298	GO:2000147	M1	1	0	GO Biological Processes	19	positive regulation of cell motility	19_GO:0040011 locomotion	-2.741298	3.9743855	4.0132633	20836	622	59	7	11.864407	4.2099087	12317|14828|19055|20348|20359|26456|320924	Calr|Hspa5|Ppp3ca|Sema3c|Sema6b|Sema4g|Ccbe1	-0.642607	0	1	0	0	-7.3747	52.318895
1	-2.714259	GO:0014032	M1	1	0	GO Biological Processes	19	neural crest cell development	19_GO:0032502 developmental pro	-2.714259	12.177674	5.5672896	20836	87	59	3	5.0847458	2.8600697	20348|20359|26456	Sema3c|Sema6b|Sema4g	-0.624284	0	1	0	0	-7.3747	52.318895

									cess																
1	-2.675094	GO:0040017	M1	1	0	GO Biological Processes	19	positive regulation of locomotion	19_GO:0040011 locomotion	-2.6750094	3.8686507	3.9247862	20836	639	59	7	11.864407	4.2099087	12317|14828|19055|20348|20359|26456|320924	Calr|Hspa5|Ppp3ca|Sema3c|Sema6b|Sema4g|Ccbe1	-0.5936662	0	1	0	0	-7.3747	52.318895
1	-2.579616	GO:0048864	M1	1	0	GO Biological Processes	19	stem cell development	19_GO:0032502 developmental process	-2.5796616	10.922244	5.2195515	20836	97	59	3	5.0847458	2.8600697	20348|20359|26456	Sema3c|Sema6b|Sema4g	-0.5228852	0	1	0	0	-7.3747	52.318895

1	-2.558772	GO:00303308	M1	1	0	GO Biological Processes	19	negative regulation of cell growth	19_GO:0040007 growth	-2.5587772	6.8573309	4.50209996	20836	206	59	4	6.77969661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-0.508825	0	1	0	0	-7.3747	52.318895
1	-2.549088	GO:00032989	M1	1	0	GO Biological Processes	19	cellular component morphogenesis	19_GO:0032502 developmental process	-2.5490888	3.6732062	3.7565897	20836	673	59	7	11.8644407	4.2099087	18846|19055|20348|20359|26456|170758|268902	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.5054445	0	1	0	0	-7.3747	52.318895
1	-2.5	GO:00	M1	1	0	GO Biolog	19	neural cres	19_GO:00	-2.5	10.59	5.1250	20836	100	59	3	5.0847	2.8600697	20348|20359|26456	Sema3c|Sema6b|Sema4g	-0.5	0	1	0	0	-7.3747	52.318895

	42126	14033				ical Processes		t cell differentiation	32502 developmental processes	42126	4576	092					458				03622						
1	-2.494759	GO:0006935	M1	1	0	GO Biological Processes	19	chemotaxis	19_GO:0040011 locomotion	-2.494759	4.1385064	3.8316404	20836	512	59	6	10.169492	3.9349167	18846|20348|20359|26456|170758|268902	Plxna3|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.463853	0	1	0	0	-7.3747	52.318895
1	-2.486437	GO:0042330	M1	1	0	GO Biological Processes	19	taxis	19_GO:0040011 locom	-2.48664	4.1224032	3.8196068	20836	514	59	6	10.169492	3.9349167	18846|20348|20359|26456|170758|268902	Plxna3|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.4580	0	1	0	0	-7.3747	52.318895

									otion	37											34						
1	-2.470606	GO:0008361	M1	1	0	GO Biological Processes	19	regulation of cell size	19_GO:0065007 biological regulation	-2.470606	6.4798632	4.33417709	20836	218	59	4	6.779661	3.2729044	18846|20348|20359|26456	Plxna3|Sema3c|Sema6b|Sema4g	-0.449627	0	1	0	0	-7.3747	52.318895
1	-2.389581	GO:0040011	M1	1	0	GO Biological Processes	19	locomotion	19_GO:0040011 locomotion	-2.389581	3.9385042	3.67978266	20836	538	59	6	10.169492	3.9349167	18846|20348|20359|26456|170758|268902	Plxna3|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.394787	0	1	0	0	-7.3747	52.318895
1	-2.338949	GO:0040	M1	1	0	GO Biological	19	regulation of	19_GO:00400	-2.33	3.3633575	3.4761	20836	735	59	7	11.864	4.2099087	18706|18846|19662|20348|20359|21923|26456	Pik3ca|Plxna3|Rbp4|Sema3c|Sema6b|Tnc|Sema4g	-0.36	0	1	0	0	-7.3747	52.318895

		008				Processes		growth	07growth	8949		268					407				0031						
1	-2.303438	GO:0060485	M1	1	0	GO Biological Processes	19	mesenchyme development	19_GO:0032502 developmental process	-2.3034381	5.8132106	4.0216987	20836	243	59	4	6.779661	3.2729044	20348|20359|26456|268902	Sema3c|Sema6b|Sema4g|Robo2	-0.3311151	0	1	0	0	-7.3747	52.318895
1	-2.254481	GO:0000902	M1	1	0	GO Biological Processes	19	cell morphogenesis	19_GO:0032502 developmental	-2.254481	3.2441835	3.3631808	20836	762	59	7	11.864407	4.2099087	18846|19055|20348|20359|26456|170758|268902	Plxna3|Ppp3ca|Sema3c|Sema6b|Sema4g|Rac3|Robo2	-0.2930225	0	1	0	0	-7.3747	52.318895

									al processes																		
1	-2.007159	GO:0001558	M1	1	0	GO Biological Processes	19	regulation of cell growth	19_GO:0040007 growth	-2.007159	3.8219972	3.2686676	20836	462	59	5	8.4745763	3.6258002	18846|20348|20359|21923|26456	Plxna3|Sema3c|Sema6b|Tnc|Sema4g	-0.1104429	0	1	0	0	-7.3747	52.318895
1	-6.662814	GO:0050778	M1	1	0	GO Biological Processes	19	positive regulation of immune response	19_GO:0002376 immune system process	-6.662814	6.5398619	7.6343336	20836	648	59	12	20.338983	5.240365	12259|12260|12524|12921|14972|15040|15042|16768|17060|22042|240754|625018	C1qa|C1qb|Cd86|Crhr1|H2-K1|H2-T23|H2-T24|Lag3|Blnk|Tfrc|Lax1|C4a	-2.694892	0	2	1	1	-6.662814	34.453907

1	-5.925782	mmu04650	M1	1	0	KEGG Pathway	24	Natural killer cell mediated cytotoxicity - Mus musculus (house mouse)		-5.925782	17.511696	9.7067367	20836	121	59	6	10.169492	3.9349167	14972|15040|15896|18706|19055|170758	H2-K1|H2-T23|Icam2|Pik3ca|Ppp3ca|Rac3	-2.434981	0	2	0	0	-6.662814	34.453907
1	-5.427735	GO:0002699	M1	1	0	GO Biological Processes	19	positive regulation of immune effector process	19_GO:0002376 immune system process	-5.427735	8.6398176	7.4202059	20836	327	59	8	13.559322	4.4570968	12524|12921|14972|15040|15042|16768|19662|22042	Cd86|Crhr1|H2-K1|H2-T23|H2-T24|Lag3|Rbp4|Tfrc	-2.129844	0	2	0	0	-6.662814	34.453907
1	-5.300024	mmu05416	M1	1	0	KEGG Pathway	24	Viral myocarditis - Mus musculus		-5.300	20.065485	9.5506388	20836	88	59	5	8.4745763	3.6258002	12524|14972|15040|15042|170758	Cd86|H2-K1|H2-T23|H2-T24|Rac3	-2.129	0	2	0	0	-6.662814	34.453907

								(house mouse)	024											844						
1	-5.296644	mmu05170	M1	1	0	KEGG Pathway	24	Human immunodeficiency virus 1 infection - Mus musculus (house mouse)	-5.296644	10.300282	7.72221099	20836	240	59	7	11.8644007	4.2099087	12317|14972|15040|15042|18706|19055|170758	Calr|H2-K1|H2-T23|H2-T24|Pik3ca|Ppp3ca|Rac3	-2.1298844	0	2	0	0	-6.662814	34.453907
1	-5.265254	R-MMU-983170	M1	1	0	Reactome Gene Sets	6	Antigen Presentation: Folding, assembly and peptide loading of class I MHC	-5.2665254	34.453907	11.4259006	20836	41	59	4	6.779661	3.2729044	12317|14828|14972|15040	Calr|Hspa5|H2-K1|H2-T23	-2.1298844	0	2	0	0	-6.662814	34.453907
1	-5.251965	mmu0	M1	1	0	KEGG Pat	24	Antigen processing and presentati	-5.25	19.619586	9.4331	20836	90	59	5	8.4745	3.6258002	12317|14828|14972|15040|15042	Calr|Hspa5|H2-K1|H2-T23|H2-T24	-2.12	0	2	0	0	-6.662814	34.453907

		4612				hway		on - Mus musculus (house mouse)		1965		213					763				9844						
1	-5.113242	mmu05163	M1	1	0	KEGG Pathway	24	Human cytomegalovirus infection - Mus musculus (house mouse)		-5.113242	9.6565148	7.4262867	20836	256	59	7	11.864407	4.2099087	12317|14972|15040|15042|18706|19055|170758	Calr|H2-K1|H2-T23|H2-T24|Pik3ca|Ppp3ca|Rac3	-2.0999562	0	2	0	0	-6.662814	34.453907
1	-4.849757	R-MMU-1280218	M1	1	0	Reactome Gene Sets	6	Adaptive Immune System		-4.849757	5.375229	6.0724645	20836	657	59	10	16.949153	4.884499	12317|12524|14828|14972|15040|15896|16768|17060|18706|19055	Calr|Cd86|Hspa5|H2-K1|H2-T23|Icam2|Lag3|Blnk|Pik3ca|Ppp3ca	-1.919945	0	2	0	0	-6.662814	34.453907
1	-4.600047	GO:0002474	M1	1	0	GO Biological Pro	19	antigen processing and	19_GO:0002376 im	-4.60000	23.543503	9.3185297	20836	60	59	4	6.779661	3.2729044	12317|14972|15040|15042	Calr|H2-K1|H2-T23|H2-T24	-1.71113	0	2	0	0	-6.662814	34.453907

						cesses		presentation of peptide antigen via MHC class I mune system process	47											06						
1	-4.515887	mmu05330	M1	1	0	KEGG Pathway	24	Allograft rejection - Mus musculus (house mouse)	-4.515887	22.422384	9.07443922	20836	63	59	4	6.779661	3.2729044	12524|14972|15040|15042	Cd86|H2-K1|H2-T23|H2-T24	-1.6852022	0	2	0	0	-6.662814	34.453907
1	-4.515887	mmu05332	M1	1	0	KEGG Pathway	24	Graft-versus-host disease - Mus	-4.515	22.422384	9.07443922	20836	63	59	4	6.779661	3.2729044	12524|14972|15040|15042	Cd86|H2-K1|H2-T23|H2-T24	-1.685	0	2	0	0	-6.662814	34.453907

								musculus (house mouse)	887											202						
1	-4.393227	mmu05167	M1	1	0	KEGG Pathway	24	Kaposi sarcoma-associated herpesvirus infection - Mus musculus (house mouse)	-4.393227	9.4594431	6.783238	20836	224	59	6	10.1694992	3.9349167	12524|14972|15040|15042|18706|19055	Cd86|H2-K1|H2-T23|H2-T24|Pik3ca|Ppp3ca	-1.6156366	0	2	0	0	-6.662814	34.453907
1	-4.334978	mmu04940	M1	1	0	KEGG Pathway	24	Type I diabetes mellitus - Mus musculus (house mouse)	-4.3349978	20.180145	8.5655613	20836	70	59	4	6.779661	3.2729044	12524|14972|15040|15042	Cd86|H2-K1|H2-T23|H2-T24	-1.5845339	0	2	0	0	-6.662814	34.453907
1	-4.318775	mmu05169	M1	1	0	KEGG Pathway	24	Epstein-Barr virus infection - Mus musculus	-4.318	9.1727933	6.656126	20836	231	59	6	10.1694992	3.9349167	12317|14972|15040|15042|17060|18706	Calr|H2-K1|H2-T23|H2-T24|Blnk|Pik3ca	-1.581	0	2	0	0	-6.662814	34.453907

								(house mouse)		775											302						
1	-4.285407	GO:0002697	M1	1	0	GO Biological Processes	19	regulation of immune effector process	19_GO:0002376 immune system process	-4.285407	5.9983447	5.8469016	20836	471	59	8	13.559322	4.4570968	12524|12921|14972|15040|15042|16768|19662|22042	Cd86|Crhr1|H2-K1|H2-T23|H2-T24|Lag3|Rbp4|Tfrc	-1.560522	0	2	0	0	-6.662814	34.453907
1	-4.128718	mmu05320	M1	1	0	KEGG Pathway	24	Autoimmune thyroid disease - Mus musculus (house mouse)		-4.128718	17.881141	8.0105881	20836	79	59	4	6.779661	3.2729044	12524|14972|15040|15042	Cd86|H2-K1|H2-T23|H2-T24	-1.493135	0	2	0	0	-6.662814	34.453907

1	-4.128618	mmu05166	M1	1	0	KEGG Pathway	24	Human T-cell leukemia virus 1 infection - Mus musculus (house mouse)		-4.128618	8.475661	6.3367264	20836	250	59	6	10.169492	3.9349167	12317|14972|15040|15042|18706|19055	Calr|H2-K1|H2-T23|H2-T24|Pik3ca|Ppp3ca	-1.493135	0	2	0	0	-6.662814	34.453907
1	-4.065472	GO:0048002	M1	1	0	GO Biological Processes	19	antigen processing and presentation of peptide antigen	19_GO:0002376 immune system process	-4.065472	17.226953	7.8455672	20836	82	59	4	6.779661	3.2729044	12317|14972|15040|15042	Calr|H2-K1|H2-T23|H2-T24	-1.4449732	0	2	0	0	-6.662814	34.453907
1	-3.9	GO:00	M1	1	0	GO Biolog	19	positive reg	19_GO:00	-3.9	10.51	6.5953	20836	168	59	5	8.4745	3.6258002	14972|15040|15042|16768|22042	H2-K1|H2-T23|H2-T24|Lag3|Tfrc	-1.3	0	2	0	0	-6.662814	34.453907

	46684	02708				ical Processes		ulation of lymphocyte mediated immunity	02376 immune system processes	46684	0492	789					763				58973						
1	-3.916364	R-MMU-1236974	M1	1	0	Reactome Gene Sets	6	ER-Phagosome pathway		-3.916364	31.160518	9.37901112	20836	34	59	3	5.0847458	2.8600697	12317|14972|15040	Calr|H2-K1|H2-T23	-1.3537333	0	2	0	0	-6.662814	34.453907
1	-3.783945	mmu04145	M1	1	0	KEGG Pathway	24	Phagosome - Mus musculus (house mouse)		-3.78839	9.7019929	6.2832403	20836	182	59	5	8.4745763	3.6258002	12317|14972|15040|15042|22042	Calr|H2-K1|H2-T23|H2-T24|Tfrc	-1.27708	0	2	0	0	-6.662814	34.453907

										45											68						
1	-3.783945	mmu04514	M1	1	0	KEGG Pathway	24	Cell adhesion molecules - Mus musculus (house mouse)		-3.783945	9.70199929	6.2832403	20836	182	59	5	8.4745763	3.6258002	12524|14972|15040|15042|15896	Cd86|H2-K1|H2-T23|H2-T24|Icam2	-1.270868	0	2	0	0	-6.662814	34.453907
1	-3.76182	mmu04218	M1	1	0	KEGG Pathway	24	Cellular senescence - Mus musculus (house mouse)		-3.76182	9.5965365	6.2414098	20836	184	59	5	8.4745763	3.6258002	14972|15040|15042|18706|19055	H2-K1|H2-T23|H2-T24|Pik3ca|Ppp3ca	-1.256296	0	2	0	0	-6.662814	34.453907
1	-3.748126	GO:0001912	M1	1	0	GO Biological Processes	19	positive regulation of leukocyt	19_GO:0002376 immune	-3.748126	14.26879	7.0519184	20836	99	59	4	6.779661	3.2729044	14972|15040|15042|16768	H2-K1|H2-T23|H2-T24|Lag3	-1.250026	0	2	0	0	-6.662814	34.453907

								e mediated cytotoxicity	system process																		
1	-3.655014	GO:0002705	M1	1	0	GO Biological Processes	19	positive regulation of leukocyte mediated immunity	19_GO:0002376 immune system process	-3.655014	9.1018696	6.0414553	20836	194	59	5	8.4745763	3.6258002	14972|15040|15042|16768|22042	H2-K1|H2-T23|H2-T24|Lag3|Tfrc	-1.187 08	0	2	0	0	-6.662814	34.453907
1	-3.619757	GO:000202	M1	1	0	GO Biological	19	regulation of	19_GO:00023	-3.61	6.8352105	5.5159	20836	310	59	6	10.169	3.9349167	12921|14972|15040|15042|16768|22042	Crhr1|H2-K1|H2-T23|H2-T24|Lag3|Tfrc	-1.16	0	2	0	0	-6.662814	34.453907

		703				Processes		leukocyte mediated immunity	76 immune system processes	9757		021					492				9019						
1	-3.58007	GO:0002486	M1	1	0	GO Biological Processes	19	antigen processing and presentation of endogenous peptide anti	19_GO:0002376 immune system processes	-3.58007	24.078582	8.1661748	20836	44	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.157089	0	2	0	0	-6.662814	34.453907

								gen via MHC class I via ER pathway, TAP-independent																			
1	-3.572453	GO:0031343	M1	1	0	GO Biological Processes	19	positive regulation of cell killing	19_GO:0048518 positive reg	-3.572453	12.841911	6.6357759	20836	110	59	4	6.779661	3.2729044	14972|15040|15042|16768	H2-K1|H2-T23|H2-T24|Lag3	-1.157089	0	2	0	0	-6.662814	34.453907

									ulation of biological process																		
1	-3.55098	GO:0002476	M1	1	0	GO Biological Processes	19	antigen processing and presentation of endogenous peptide anti	19_GO:0002376 immune system process	-3.55098	23.543503	8.0671718	20836	45	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.1570889	0	2	0	0	-6.662814	34.453907

1	-3.55098	GO:0002484	M1	1	0	GO Biological Processes	19	gen via MHC class Ib antigen processing and presentation of endogenous peptide antigen via MH	19_GO:0002376 immune system process	-3.55098	23.543503	8.0671718	20836	45	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.1570889	0	2	0	0	-6.662814	34.453907

1	-3.522563	GO:00002428	M1	1	0	GO Biological Processes	19	C class I via ER pathway antigen processing and presentation of peptide antigen via MHC	19_GO:0002376 immune system process	-3.522563	23.031688	7.9713297	20836	46	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.1344425	0	2	0	0	-6.662814	34.453907

								class Ib																			
1	-3.428414	GO:0019882	M1	1	0	GO Biological Processes	19	antigen processing and presentation	19_GO:0002376 immune system process	-3.428414	11.771751	6.3060198	20836	120	59	4	6.779661	3.2729044	12317|14972|15040|15042	Calr|H2-K1|H2-T23|H2-T24	-1.0703997	0	2	0	0	-6.662814	34.453907
1	-3.41507	GO:0002475	M1	1	0	GO Biological Processes	19	antigen processing and presentation via MH	19_GO:0002376 immune system pro	-3.415077	21.189153	7.6163864	20836	50	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.0703997	0	2	0	0	-6.662814	34.453907

								C class Ib	cess																		
1	-3.41507	GO:0002483	M1	1	0	GO Biological Processes	19	antigen processing and presentation of endogenous peptide antigen	19_GO:0002376 immune system process	-3.41507	21.189153	7.6163864	20836	50	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.0703979	0	2	0	0	-6.662814	34.453907
1	-3.41507	GO:0019	M1	1	0	GO Biological Pro	19	antigen processing	19_GO:0002376	-3.415	21.189153	7.6163864	20836	50	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.070	0	2	0	0	-6.662814	34.453907

		885				cesses		and presentation of endogenous peptide antigen via MHC class I	immune system processes	07											397						
1	-3.340244	GO:0019883	M1	1	0	GO Biological Processes	19	antigen processing and presenta	19_GO:0002376 immune	-3.3402444	19.989767	7.3762356	20836	53	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-1.0255335	0	2	0	0	-6.662814	34.453907

								tion of endogenous antigen	system process																		
1	-3.324079	mmu05203	M1	1	0	KEGG Pathway	24	Viral carcinogenesis - Mus musculus (house mouse)		-3.324079	7.7107542	5.4414297	20836	229	59	5	8.4745763	3.6258002	14972|15040|15042|18706|58801	H2-K1|H2-T23|H2-T24|Pik3ca|Pmaip1	-1.017052	0	2	0	0	-6.662814	34.453907
1	-3.24805	GO:0002706	M1	1	0	GO Biological Processes	19	regulation of lymphocyte mediated	19_GO:0002376 immune system	-3.24805	7.4191711	5.307454	20836	238	59	5	8.4745763	3.6258002	14972|15040|15042|16768|22042	H2-K1|H2-T23|H2-T24|Lag3|Tfrc	-0.964976	0	2	0	0	-6.662814	34.453907

								immunity	process																	
1	-3.247183	GO:0001910	M1	1	0	GO Biological Processes	19	regulation of leukocyte mediated cytotoxicity	19_GO:0002376 immune system process	-3.247183	10.541867	5.9048782	20836	134	59	4	6.779661	3.2729044	14972|15040|15042|16768	H2-K1|H2-T23|H2-T24|Lag3	-0.9649776	0	2	0	0	-6.662814	34.453907
1	-3.160735	GO:0001916	M1	1	0	GO Biological Processes	19	positive regulation of T cell mediated	19_GO:0002376 immune system	-3.160735	17.368158	6.8222172	20836	61	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-0.9129772	0	2	0	0	-6.662814	34.453907

								cytotoxicity	process																		
1	-3.080119	GO:0001909	M1	1	0	GO Biological Processes	19	leukocyte mediated cytotoxicity	19_GO:0002376 immune system process	-3.080119	16.299348	6.5831271	20836	65	59	3	5.0847458	2.8600697	14972|15040|16768	H2-K1|H2-T23|Lag3	-0.8718865	0	2	0	0	-6.662814	34.453907
1	-3.023039	GO:0001914	M1	1	0	GO Biological Processes	19	regulation of T cell mediated cyto	19_GO:0002376 immune system	-3.023039	15.580259	6.4173201	20836	68	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-0.8428883	0	2	0	0	-6.662814	34.453907

								toxicity	process																	
1	-3.01074	GO:0031341	M1	1	0	GO Biological Processes	19	regulation of cell killing	19_GO:0050789 regulation of biological process	-3.01074	9.113614	5.4028855	20836	155	59	4	6.779661	3.2729044	14972|15040|15042|16768	H2-K1|H2-T23|H2-T24|Lag3	-0.842883	0	2	0	0	-6.662814	34.453907
1	-2.919952	GO:0002824	M1	1	0	GO Biological Processes	19	positive regulation of adaptiv	19_GO:0002376 immune	-2.919952	8.6134766	5.2160895	20836	164	59	4	6.779661	3.2729044	14972|15040|15042|22042	H2-K1|H2-T23|H2-T24|Tfrc	-0.787772	0	2	0	0	-6.662814	34.453907

e immune response based on somatic recombination of immune receptors built fro	system process

1	-2.843746	GO:0002821	M1	1	0	GO Biological Processes	19	m immunoglobulin superfamily domains positive regulation of adaptive immune resp	19_GO:0002376 immune system process	-2.8437466	8.2128498	5.0616866	20836	172	59	4	6.779661	3.2729044	14972|15040|15042|22042	H2-K1|H2-T23|H2-T24|Tfrc	-0.7270822	0	2	0	0	-6.662814	34.453907

1	-2.644969	GO:0002711	M1	1	0	GO Biological Processes	19	onse positive regulation of T cell mediated immunity	19_GO:0002376 immune system process	-2.644969	11.515844	5.3867042	20836	92	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-0.5691441	0	2	0	0	-6.662814	34.453907
1	-2.644969	R-MMU-1236975	M1	1	0	Reactome Gene Sets	6	Antigen processing-Cross presentation		-2.644969	11.515844	5.3867042	20836	92	59	3	5.0847458	2.8600697	12317|14972|15040	Calr|H2-K1|H2-T23	-0.5691441	0	2	0	0	-6.662814	34.453907
1	-2.6	R-MM	M1	1	0	Reactome	6	Immunoregulatory interactio		-2.6	11.15	5.28	20836	95	59	3	5.0847	2.8600697	14972|15040|15896	H2-K1|H2-T23|Icam2	-0.5	0	2	0	0	-6.662814	34.453907

	05312	U-198933				Gene Sets		ns between a Lymphoid and a non-Lymphoid cell		05312	2186	4913					458				40479						
1	-2.446624	mmu05165	M1	1	0	KEGG Pathway	24	Human papillomavirus infection - Mus musculus (house mouse)		-2.446624	4.8777975	3.9661525	20836	362	59	5	8.4745763	3.6258002	14972|15040|15042|18706|21923	H2-K1|H2-T23|H2-T24|Pik3ca|Tnc	-0.430525	0	2	0	0	-6.662814	34.453907
1	-2.374452	GO:0002822	M1	1	0	GO Biological Processes	19	regulation of adaptive immune resp	19_GO:0002376 immune system pro	-2.374452	6.0888369	4.1535371	20836	232	59	4	6.779661	3.2729044	14972|15040|15042|22042	H2-K1|H2-T23|H2-T24|Tfrc	-0.386534	0	2	0	0	-6.662814	34.453907

onse based on somatic recombination of immune receptors built from immunoglob

cess

								ulin superfamily domains																			
1	-2.360802	GO:0001906	M1	1	0	GO Biological Processes	19	cell killing	19_GO:0009987 cellular process	-2.360802	9.1332554	4.6809054	20836	116	59	3	5.0847458	2.8600697	14972|15040|16768	H2-K1|H2-T23|Lag3	-0.377407	0	2	0	0	-6.662814	34.453907
1	-2.319717	GO:0002709	M1	1	0	GO Biological Processes	19	regulation of T cell mediat	19_GO:0002376 immu	-2.3197	8.8288136	4.5831594	20836	120	59	3	5.0847458	2.8600697	14972|15040|15042	H2-K1|H2-T23|H2-T24	-0.34452	0	2	0	0	-6.662814	34.453907

								ed immunity	ne system process	17											31						
1	-2.266241	GO:0002819	M1	1	0	GO Biological Processes	19	regulation of adaptive immune response	19_GO:0002376 immune system process	-2.266241	5.6731332	3.9531441	20836	249	59	4	6.779661	3.2729044	14972|15040|15042|22042	H2-K1|H2-T23|H2-T24|Tfrc	-0.30264	0	2	0	0	-6.662814	34.453907
1	-2.132689	mmu04144	M1	1	0	KEGG Pathway	24	Endocytosis - Mus musculus (house mouse)		-2.13260	5.1934197	3.7096277	20836	272	59	4	6.779661	3.2729044	14972|15040|15042|22042	H2-K1|H2-T23|H2-T24|Tfrc	-0.19819	0	2	0	0	-6.662814	34.453907

										89																	
1	-2.018588	mmu05168	M1	1	0	KEGG Pathway	24	Herpes simplex virus 1 infection - Mus musculus (house mouse)		-2.0185888	3.846976	3.286636	20836	459	59	5	8.4745763	3.6258002	12317|14972|15040|15042|18706	Calr|H2-K1|H2-T23|H2-T24|Pik3ca	-0.1169992	0	2	0	0	-6.662814	34.453907
1	-5.265254	WP3626	M1	1	0	WikiPathways	27	Microglia pathogen phagocytosis pathway		-5.2652554	34.453907	11.425906	20836	41	59	4	6.7796661	3.2729044	12259|12260|18706|170758	C1qa|C1qb|Pik3ca|Rac3	-2.1298444	0	3	1	1	-5.265254	62.321037
1	-5.077972	GO:0002250	M1	1	0	GO Biological Processes	19	adaptive immune resp	19_GO:0002376 immune	-5.0779772	7.7403297	6.9229211	20836	365	59	8	13.5593222	4.4570968	12259|12260|12524|13733|14972|15040|16768|240754	C1qa|C1qb|Cd86|Adgre1|H2-K1|H2-T23|Lag3|Lax1	-2.0877773	0	3	0	0	-5.265254	62.321037

								onse	system process																		
1	-4.845979	WP200	M1	1	0	WikiPathways	27	Complement activation, classical pathway		-4.845979	62.321037	13.478307	20836	17	59	3	5.0847458	2.8600697	12259|12260|625018	C1qa|C1qb|C4a	-1.919945	0	3	0	0	-5.265254	62.321037
1	-4.728373	GO:0002252	M1	1	0	GO Biological Processes	19	immune effector process	19_GO:0002376 immune system process	-4.728373	6.9245597	6.4402774	20836	408	59	8	13.559322	4.4570968	12259|12260|12608|14972|15040|16768|20442|625018	C1qa|C1qb|Cebpb|H2-K1|H2-T23|Lag3|St3gal1|C4a	-1.821149	0	3	0	0	-5.265254	62.321037

1	-3.681927	mmu05142	M1	1	0	KEGG Pathway	24	Chagas disease - Mus musculus (house mouse)		-3.681927	13.714662	6.89324446	20836	103	59	4	6.779661	3.2729044	12259|12260|12317|18706	C1qa|C1qb|Calr|Pik3ca	-1.2053666	0	3	0	0	-5.265254	62.321037
1	-3.60386	GO:0002449	M1	1	0	GO Biological Processes	19	lymphocyte mediated immunity	19_GO:0002376 immune system process	-3.60386	8.8731795	5.94681933	20836	199	59	5	8.4745763	3.6258002	12259|12260|14972|15040|16768	C1qa|C1qb|H2-K1|H2-T23|Lag3	-1.1674117	0	3	0	0	-5.265254	62.321037
1	-3.494791	GO:0006	M1	1	0	GO Biological Pro	19	complement acti	19_GO:0002376	-3.494	22.541652	7.87848805	20836	47	59	3	5.0847458	2.8600697	12259|12260|625018	C1qa|C1qb|C4a	-1.117	0	3	0	0	-5.265254	62.321037

		956				cesses		vation	immune system process	791											933						
1	-3.405553	GO:0002253	M1	1	0	GO Biological Processes	19	activation of immune response	19_GO:0002376 immune system process	-3.4055553	6.2321037	5.1833744	20836	340	59	6	10.169492	3.9349167	12259|12260|12524|17060|240754|625018	C1qa|C1qb|Cd86|Blnk|Lax1|C4a	-1.0694441	0	3	0	0	-5.265254	62.321037
1	-3.128239	GO:00002	M1	1	0	GO Biological Pro	19	leukocyte mediat	19_GO:0002376	-3.128	6.9792993	5.0990298	20836	253	59	5	8.4745763	3.6258002	12259|12260|14972|15040|16768	C1qa|C1qb|H2-K1|H2-T23|Lag3	-0.895	0	3	0	0	-5.265254	62.321037

		443				cesses		ed immunity	immune system process	239											394						
1	-3.074542	mmu05322	M1	1	0	KEGG Pathway	24	Systemic lupus erythematosus - Mus musculus (house mouse)		-3.074542	9.4806052	5.5360826	20836	149	59	4	6.779661	3.2729044	12259|12260|12524|625018	C1qa|C1qb|Cd86|C4a	-0.870048	0	3	0	0	-5.265254	62.321037
1	-3.052733	GO:0006959	M1	1	0	GO Biological Processes	19	humoral immune response	19_GO:0002376 immune system	-3.052733	6.7139267	4.9692982	20836	263	59	5	8.4745763	3.6258002	12259|12260|78416|109648|625018	C1qa|C1qb|Rnase6|Npy|C4a	-0.859328	0	3	0	0	-5.265254	62.321037

								process																		
1	-3.016191	mmu05020	M1	1	0	KEGG Pathway	24	Prion disease - Mus musculus (house mouse)	-3.016191	6.5886668	4.906942	20836	268	59	5	8.4745763	3.6258002	12259|12260|14828|18706|19055	C1qa|C1qb|Hspa5|Pik3ca|Ppp3ca	-0.8428883	0	3	0	0	-5.265254	62.321037
1	-2.866635	mmu05133	M1	1	0	KEGG Pathway	24	Pertussis - Mus musculus (house mouse)	-2.866635	13.759919	5.9771835	20836	77	59	3	5.0847458	2.8600697	12259|12260|625018	C1qa|C1qb|C4a	-0.74381	0	3	0	0	-5.265254	62.321037
1	-2.618379	mmu04610	M1	1	0	KEGG Pathway	24	Complement and coagulation cascades - Mus musculus	-2.6183	11.270826	5.3183304	20836	94	59	3	5.0847458	2.8600697	12259|12260|625018	C1qa|C1qb|C4a	-0.5508	0	3	0	0	-5.265254	62.321037

								(house mouse)		79											24						
1	-2.506659	GO:0002460	M1	1	0	GO Biological Processes	19	adaptive immune response based on somatic recombination of immune receptor	19_GO:002376 immune system process	-2.506659	6.6319726	4.4025648	20836	213	59	4	6.779661	3.2729044	12259|12260|14972|15040	C1qa|C1qb|H2-K1|H2-T23	-0.4732335	0	3	0	0	-5.265254	62.321037

								s built from immunoglobulin superfamily domains																		
1	-2.272368	mmu05171	M1	1	0	KEGG Pathway	24	Coronavirus disease - COVID-19 - Mus musculus (house mouse)	-2.272368	5.6960087	3.9644414	20836	248	59	4	6.779661	3.2729044	12259|12260|18706|625018	C1qa|C1qb|Pik3ca|C4a	-0.302264	0	3	0	0	-5.265254	62.321037

1	-2.241869	mmu05150	M1	1	0	KEGG Pathway	24	Staphylococcus aureus infection - Mus musculus (house mouse)	-2.241869	8.27770127	4.40400686	20836	128	59	3	5.0847458	2.8600697	12259|12260|625018	C1qa|C1qb|C4a	-0.286784	0	3	0	0	-5.265254	62.321037
1	-2.126133	mmu04936	M1	1	0	KEGG Pathway	24	Alcoholic liver disease - Mus musculus (house mouse)	-2.126133	7.5138839	4.135692	20836	141	59	3	5.0847458	2.8600697	12259|12260|625018	C1qa|C1qb|C4a	-0.195637	0	3	0	0	-5.265254	62.321037
1	-4.086277	mmu04662	M1	1	0	KEGG Pathway	24	B cell receptor signaling pathway - Mus musculus (house mouse)	-4.086277	17.439632	7.8995902	20836	81	59	4	6.779661	3.2729044	17060|18706|19055|170758	Blnk|Pik3ca|Ppp3ca|Rac3	-1.460777	0	4	1	1	-4.086277	18.266511

1	-3.322217	mmu04380	M1	1	0	KEGG Pathway	24	Osteoclast differentiation - Mus musculus (house mouse)	-3.322217	11.036017	6.069160606	20836	128	59	4	6.779661	3.2729044	16477|17060|18706|19055	Junb|Blnk|Pik3ca|Ppp3ca	-1.017052	0	4	0	0	-4.086277	18.266511
1	-3.224963	mmu04370	M1	1	0	KEGG Pathway	24	VEGF signaling pathway - Mus musculus (house mouse)	-3.224963	18.266511	7.0169446	20836	58	59	3	5.0847458	2.8600697	18706|19055|170758	Pik3ca|Ppp3ca|Rac3	-0.954027	0	4	0	0	-4.086277	18.266511
1	-2.700065	mmu05210	M1	1	0	KEGG Pathway	24	Colorectal cancer - Mus musculus (house mouse)	-2.700065	12.039291	5.5300078	20836	88	59	3	5.0847458	2.8600697	18706|58801|170758	Pik3ca|Pmaip1|Rac3	-0.612956	0	4	0	0	-4.086277	18.266511

1	-2.428561	mmu04024	M1	1	0	KEGG Pathway	24	cAMP signaling pathway - Mus musculus (house mouse)		-2.428561	6.3062954	4.2548474	20836	224	59	4	6.779661	3.2729044	12921|18706|109648|170758	Crhr1|Pik3ca|Npy|Rac3	-0.41968	0	4	0	0	-4.086277	18.266511
1	-2.037083	GO:0006909	M1	1	0	GO Biological Processes	19	phagocytosis	19_GO:0051179 localization	-2.037083	6.9701116	3.936576	20836	152	59	3	5.0847458	2.8600697	17304|18706|170758	Mfge8|Pik3ca|Rac3	-0.131742	0	4	0	0	-4.086277	18.266511
1	-4.018593	GO:1903037	M1	1	0	GO Biological Processes	19	regulation of leukocyte cell-cell	19_GO:0050789 regulation of	-4.018593	6.5054416	5.7717158	20836	380	59	7	11.864407	4.2099087	12524|12608|15505|16768|19055|22042|240754	Cd86|Cebpb|Hsph1|Lag3|Ppp3ca|Tfrc|Lax1	-1.412399	0	5	1	1	-4.018593	18.266511

								adhesion	biological process																	
1	-3.990312	GO:0050863	M1	1	0	GO Biological Processes	19	regulation of T cell activation	19_GO:0002376 immune system process	-3.990312	6.4376766	5.7311586	20836	384	59	7	11.8644067	4.2099087	12524|12608|15505|16768|19055|22042|240754	Cd86|Cebpb|Hsph1|Lag3|Ppp3ca|Tfrc|Lax1	-1.393458	0	5	0	0	-4.018593	18.266511
1	-3.915115	GO:0045321	M1	1	0	GO Biological Processes	19	leukocyte activation	19_GO:0002376 immu	-3.9151	4.646744	5.1677987	20836	684	59	9	15.254237	4.6808879	12259|12524|12608|16768|17060|20442|109648|114570|240754	C1qa|Cd86|Cebpb|Lag3|Blnk|St3gal1|Npy|Crip3|Lax1	-1.35537	0	5	0	0	-4.018593	18.266511

									ne system process	15											33						
1	-3.560397	GO:0007162	M1	1	0	GO Biological Processes	19	negative regulation of cell adhesion	19_GO:0048519 negative regulation of biological process	-3.560397	6.6632555	5.4230492	20836	318	59	6	10.169492	3.9349167	12524|12608|16768|18846|21923|240754	Cd86|Cebpb|Lag3|Plxna3|Tnc|Lax1	-1.157089	0	5	0	0	-4.018593	18.266511

1	-3.486212	GO:0001775	M1	1	0	GO Biological Processes	19	cell activation	19_GO:0032501 multicellular organismal process	-3.486212	4.0696196	4.65940009	20836	781	59	9	15.254237	4.6808879	12259|12524|12608|16768|17060|20442|109648|114570|240754	C1qa|Cd86|Cebpb|Lag3|Blnk|St3gal1|Npy|Crip3|Lax1	-1.1148887	0	5	0	0	-4.018593	18.266511
1	-3.36076	GO:0002694	M1	1	0	GO Biological Processes	19	regulation of leukocyte activation	19_GO:0002376 immune system	-3.360766	4.3938108	4.65826633	20836	643	59	8	13.559322	4.4570968	12524|12608|12921|15505|16768|19055|22042|240754	Cd86|Cebpb|Crhr1|Hsph1|Lag3|Ppp3ca|Tfrc|Lax1	-1.034448	0	5	0	0	-4.018593	18.266511

									process																		
1	-3.27718	GO:0022407	M1	1	0	GO Biological Processes	19	regulation of cell-cell adhesion	19_GO:0050789 regulation of biological process	-3.277718	4.9146477	4.7359519	20836	503	59	7	11.864407	4.2099087	12524|12608|15505|16768|19055|22042|240754	Cd86|Cebpb|Hsph1|Lag3|Ppp3ca|Tfrc|Lax1	-0.981356	0	5	0	0	-4.018593	18.266511
1	-3.224963	GO:0002639	M1	1	0	GO Biological Processes	19	positive regulation of immu	19_GO:0002376 immune	-3.2224963	18.266511	7.0169446	20836	58	59	3	5.0847458	2.8600697	12524|19662|22042	Cd86|Rbp4|Tfrc	-0.954027	0	5	0	0	-4.018593	18.266511

								noglobulin production	system process															
1	-3.222979	GO:0050868	M1	1	0	GO Biological Processes	19	negative regulation of T cell activation	19_GO:0002376 immune system process	-3.2229797 9	10.386839	5.8524136	20836	136	59	4	6.779661	3.2729044	12524|12608|16768|240754	Cd86|Cebpb|Lag3|Lax1	-0.9540277	0	5	0	0	-4.018593	18.266511
1	-3.186782	GO:0002683	M1	1	0	GO Biological Processes	19	negative regulation of	19_GO:0002376 immu	-3.18667	4.7448518	4.6129253	20836	521	59	7	11.864407	4.2099087	12524|12608|16768|74511|109648|240754|574402	Cd86|Cebpb|Lag3|Lrrc17|Npy|Lax1|Gpr17	-0.93006	0	5	0	0	-4.018593	18.266511

								immune system process	ne system process	82											67						
1	-3.142975	GO:0051249	M1	1	0	GO Biological Processes	19	regulation of lymphocyte activation	19_GO:0002376 immune system process	-3.1429775	4.6642789	4.5535027	20836	530	59	7	11.8644047	4.2099087	12524|12608|15505|16768|19055|22042|240754	Cd86|Cebpb|Hsph1|Lag3|Ppp3ca|Tfrc|Lax1	-0.9034077	0	5	0	0	-4.018593	18.266511
1	-3.122491	GO:0050865	M1	1	0	GO Biological Pro	19	regulation of cell acti	19_GO:0032501 mu	-3.12224	4.0418031	4.3591683	20836	699	59	8	13.5593222	4.4570968	12524|12608|12921|15505|16768|19055|22042|240754	Cd86|Cebpb|Crhr1|Hsph1|Lag3|Ppp3ca|Tfrc|Lax1	-0.89953	0	5	0	0	-4.018593	18.266511

						cesses		vation	lticellular organismal process	91											94						
1	-3.052966	GO:1903038	M1	1	0	GO Biological Processes	19	negative regulation of leukocyte cell-cell adhesion	19_GO:0048519 negative regulation of biological pro	-3.0529666	9.3550342	5.4908589	20836	151	59	4	6.779661	3.2729044	12524|12608|16768|240754	Cd86|Cebpb|Lag3|Lax1	-0.8593328	0	5	0	0	-4.018593	18.266511

									cess																		
1	-3.0213	GO:0046649	M1	1	0	GO Biological Processes	19	lymphocyte activation	19_GO:0002376 immune system process	-3.0213	4.4461651	4.38905331	20836	556	59	7	11.8644047	4.2099087	12524|12608|16768|17060|20442|114570|240754	Cd86|Cebpb|Lag3|Blnk|St3gal1|Crip3|Lax1	-0.8428883	0	5	0	0	-4.018593	18.266511
1	-2.825307	GO:0051250	M1	1	0	GO Biological Processes	19	negative regulation of lymphocyte acti	19_GO:0002376 immune system pro	-2.825307	8.1184492	5.02464426	20836	174	59	4	6.779661	3.2729044	12524|12608|16768|240754	Cd86|Cebpb|Lag3|Lax1	-0.711691	0	5	0	0	-4.018593	18.266511

								vation	cess																		
1	-2.714259	GO:0002637	M1	1	0	GO Biological Processes	19	regulation of immunoglobulin production	19_GO:0002376 immune system process	-2.714259	12.177674	5.5672896	20836	87	59	3	5.0847458	2.8600697	12524|19662|22042	Cd86|Rbp4|Tfrc	-0.624284	0	5	0	0	-4.018593	18.266511
1	-2.597233	GO:0042129	M1	1	0	GO Biological Processes	19	regulation of T cell proliferation	19_GO:0002376 immune system pro	-2.597233	7.0279113	4.5760839	20836	201	59	4	6.7796610	3.2729044	12524|12608|19055|22042	Cd86|Cebpb|Ppp3ca|Tfrc	-0.535107	0	5	0	0	-4.018593	18.266511

									cess																
1	-2.558772	GO:0002695	M1	1	0	GO Biological Processes	19	negative regulation of leukocyte activation	19_GO:0002376 immune system process	-2.558772	6.8573309	4.5020996	20836	206	59	4	6.779661	3.2729044	12524|12608|16768|240754	Cd86|Cebpb|Lag3|Lax1	-0.50825	0	5	0	0	-4.018593	18.266511
1	-2.521349	GO:0022408	M1	1	0	GO Biological Processes	19	negative regulation of cell-cell adh	19_GO:0048519 negative regulation	-2.521349	6.6948349	4.4305407	20836	211	59	4	6.779661	3.2729044	12524|12608|16768|240754	Cd86|Cebpb|Lag3|Lax1	-0.485393	0	5	0	0	-4.018593	18.266511

								esion	of biological process																		
1	-2.39449	GO:0042113	M1	1	0	GO Biological Processes	19	B cell activation	19_GO:0002376 immune system process	-2.394449	6.16860 34	4.19097 34	20836	229	59	4	6.779661	3.2729 044	12524|17060|20442|240754	Cd86|Blnk|St3gal1|Lax1	-0.3955532	0	5	0	0	-4.018593	18.266 511
1	-2.39449	GO:0050866	M1	1	0	GO Biological Pro	19	negative regulation	19_GO:0048519 neg	-2.394	6.16860 34	4.19097 34	20836	229	59	4	6.779661	3.2729 044	12524|12608|16768|240754	Cd86|Cebpb|Lag3|Lax1	-0.3955	0	5	0	0	-4.018593	18.266 511

						cesses		of cell activation	ative regulation of biological process	49											32						
1	-2.381928	GO:0042102	M1	1	0	GO Biological Processes	19	positive regulation of T cell proliferation	19_GO:0002376 immune system process	-2.381928	9.293488	4.7315687	20836	114	59	3	5.0847458	2.8600697	12524|19055|22042	Cd86|Ppp3ca|Tfrc	-0.391729	0	5	0	0	-4.018593	18.266511

1	-2.248027	GO:0050870	M1	1	0	GO Biological Processes	19	positive regulation of T cell activation	19_GO:0002376 immune system process	-2.248027	5.6055959	3.9196975	20836	252	59	4	6.779661	3.2729044	12524|15505|19055|22042	Cd86|Hsph1|Ppp3ca|Tfrc	-0.2887705	0	5	0	0	-4.018593	18.266511
1	-2.228243	GO:0002696	M1	1	0	GO Biological Processes	19	positive regulation of leukocyte activation	19_GO:0002376 immune system process	-2.228243	4.3278498	3.6175306	20836	408	59	5	8.4745763	3.6258002	12524|12921|15505|19055|22042	Cd86|Crhr1|Hsph1|Ppp3ca|Tfrc	-0.2752261	0	5	0	0	-4.018593	18.266511

1	-2.224187	GO:0031347	M1	1	0	GO Biological Processes	19	regulation of defense response	19_GO:0050896 response to stimulus	-2.2241877	3.201604	3.3226161	20836	772	59	7	11.864407	4.2099087	12524|12608|16768|17472|21923|109648|574402	Cd86|Cebpb|Lag3|Gbp4|Tnc|Npy|Gpr17	-0.273298	0	5	0	0	-4.018593	18.266511
1	-2.200659	GO:0050670	M1	1	0	GO Biological Processes	19	regulation of lymphocyte proliferation	19_GO:0002376 immune system process	-2.200659	5.433116	3.833069	20836	260	59	4	6.779661	3.2729044	12524|12608|19055|22042	Cd86|Cebpb|Ppp3ca|Tfrc	-0.255989	0	5	0	0	-4.018593	18.266511

1	-2.177604	GO:0032944	M1	1	0	GO Biological Processes	19	regulation of mononuclear cell proliferation	19_GO:0050789 regulation of biological process	-2.177604	5.3507961	3.7910872	20836	264	59	4	6.779661	3.2729044	12524|12608|19055|22042	Cd86|Cebpb|Ppp3ca|Tfrc	-0.234987	0	5	0	0	-4.018593	18.266511
1	-2.134068	GO:0050867	M1	1	0	GO Biological Processes	19	positive regulation of cell activation	19_GO:0048518 positive regulation	-2.134068	4.1064249	3.4685462	20836	430	59	5	8.4745763	3.6258002	12524|12921|15505|19055|22042	Cd86|Crhr1|Hsph1|Ppp3ca|Tfrc	-0.19819	0	5	0	0	-4.018593	18.266511

1	-2.109379	GO:0002702	M1	1	0	GO Biological Processes	19	positive regulation of production of molecular mediator of immu	of biological processes 19_GO:0002376 immune system process	-2.109379	7.4087946	4.0979248	20836	143	59	3	5.0847458	2.8600697	12524|19662|22042	Cd86|Rbp4|Tfrc	-0.186778	0	5	0	0	-4.018593	18.266511

								ne response																			
1	-2.100003	GO:1903039	M1	1	0	GO Biological Processes	19	positive regulation of leukocyte cell-cell adhesion	19_GO:0048518 positive regulation of biological process	-2.100003	5.0813315	3.6506078	20836	278	59	4	6.779661	3.2729044	12524|15505|19055|22042	Cd86|Hsph1|Ppp3ca|Tfrc	-0.181299	0	5	0	0	-4.018593	18.266511
1	-2.052493	GO:0070	M1	1	0	GO Biological	19	regulation of	19_GO:00507	-2.05	4.9219867	3.5651	20836	287	59	4	6.779661	3.2729044	12524|12608|19055|22042	Cd86|Cebpb|Ppp3ca|Tfrc	-0.13	0	5	0	0	-4.018593	18.266511

		663				Processes		leukocyte proliferation	89 regulation of biological processes	2493		931									9567						
1	-3.92106	R-MMU-5007092	M1	1	0	Reactome Gene Sets	6	GPCR ligand binding		-3.92106	6.2742837	5.6322412	20836	394	59	7	11.864407	4.2099087	12854|12921|13733|23919|30878|109648|574402	Cort|Crhr1|Adgre1|Insl5|Apln|Npy|Gpr17	-1.3537333	0	6	1	1	-3.92106	24.638549
1	-3.87117	GO:0007218	M1	1	0	GO Biological Processes	19	neuropeptide signaling	19_GO:0023052 sig	-3.87117	15.354458	7.3530211	20836	92	59	4	6.779661	3.2729044	12854|12921|18610|109648	Cort|Crhr1|Pdyn|Npy	-1.3264	0	6	0	0	-3.92106	24.638549

								pathway	naling												94						
1	-3.618427	GO:0050795	M1	1	0	GO Biological Processes	19	regulation of behavior	19_GO:0032501 multicellular organismal process	-3.618427	13.201964	6.7431652	20836	107	59	4	6.779661	3.2729044	12854|12921|23919|109648	Cort|Crhr1|Insl5|Npy	-1.169019	0	6	0	0	-3.92106	24.638549
1	-3.609866	GO:0060259	M1	1	0	GO Biological Processes	19	regulation of feeding beh	19_GO:0032501 multic	-3.60998	24.638549	8.2685206	20836	43	59	3	5.0847458	2.8600697	12921|23919|109648	Crhr1|Insl5|Npy	-1.1674	0	6	0	0	-3.92106	24.638549

								avior ellular organismal process	66											17						
1	-3.556757	R-MMU-372790	M1	1	0	Reactome Gene Sets	6	Signaling by GPCR	-3.556757	4.7008658	4.9059182	20836	601	59	8	13.559322	4.4570968	12854|12921|13733|18706|23919|30878|109648|574402	Cort|Crhr1|Adgre1|Pik3ca|Insl5|Apln|Npy|Gpr17	-1.157089	0	6	0	0	-3.92106	24.638549
1	-3.087054	mmu04080	M1	1	0	KEGG Pathway	24	Neuroactive ligand-receptor interaction - Mus musculus (house mouse)	-3.087054	5.4192206	4.7008007	20836	391	59	6	10.169492	3.9349167	12854|12921|18610|23919|30878|109648	Cort|Crhr1|Pdyn|Insl5|Apln|Npy	-0.871865	0	6	0	0	-3.92106	24.638549

1	-2.97335	R-MMU-4185894	M1	1	0	Reactome Gene Sets	6	G alpha (i) signalling events	-2.97335	6.4443895	4.8341834	20836	274	59	5	8.4745763	3.6258002	12854|23919|30878|109648|574402	Cort|Insl5|Apln|Npy|Gpr17	-0.816874	0	6	0	0	-3.92106	24.638549
1	-2.971882	R-MMU-388396	M1	1	0	Reactome Gene Sets	6	GPCR downstream signalling	-2.971882	4.3599079	4.3224909	20836	567	59	7	11.864407	4.2099087	12854|12921|18706|23919|30878|109648|574402	Cort|Crhr1|Pik3ca|Insl5|Apln|Npy|Gpr17	-0.816874	0	6	0	0	-3.92106	24.638549
1	-2.755451	R-MMU-373076	M1	1	0	Reactome Gene Sets	6	Class A/1 (Rhodopsin-like receptors)	-2.755451	5.7516701	4.4695408	20836	307	59	5	8.4745763	3.6258002	12854|23919|30878|109648|574402	Cort|Insl5|Apln|Npy|Gpr17	-0.650851	0	6	0	0	-3.92106	24.638549

1	-2.719389	R-MMU-375276	M1	1	0	Reactome Gene Sets	6	Peptide ligand-binding receptors		-2.719389	7.5946783	4.8141697	20836	186	59	4	6.779661	3.2729044	12854|23919|30878|109648	Cort|Insl5|Apln|Npy	-0.624284	0	6	0	0	-3.92106	24.638549
1	-2.470664	GO:0007631	M1	1	0	GO Biological Processes	19	feeding behavior	19_GO:0032501 multicellular organismal process	-2.470664	9.9948833	4.9474356	20836	106	59	3	5.0847458	2.8600697	12921|30878|109648	Crhr1|Apln|Npy	-0.4449627	0	6	0	0	-3.92106	24.638549

1	-3.833993	GO:1901214	M1	1	0	GO Biological Processes	19	regulation of neuron death	19_GO:0050789 regulation of biological process	-3.833993	6.0738767	5.5086464	20836	407	59	7	11.8644067	4.2099087	12259|12608|12921|15505|18706|58801|109648	C1qa|Cebpb|Crhr1|Hsph1|Pik3ca|Pmaip1|Npy	-1.3004417	0	7	1	1	-3.833993	9.3757312
1	-2.966314	GO:1901215	M1	1	0	GO Biological Processes	19	negative regulation of neuron death	19_GO:0048519 negative regulation	-2.966314	6.4209553	4.8222686	20836	275	59	5	8.4745763	3.6258002	12608|12921|15505|18706|109648	Cebpb|Crhr1|Hsph1|Pik3ca|Npy	-0.8146333	0	7	0	0	-3.833993	9.3757312

									of biological processes																		
1	-2.392643	mmu04668	M1	1	0	KEGG Pathway	24	TNF signaling pathway - Mus musculus (house mouse)		-2.3926443	9.37573712	4.7573705	20836	113	59	3	5.0847458	2.8600697	12608|16477|18706	Cebpb|Junb|Pik3ca	-0.3955332	0	7	0	0	-3.833993	9.3757312
1	-2.381928	GO:0031099	M1	1	0	GO Biological Processes	19	regeneration	19_GO:0032502 developmental pro	-2.3819928	9.2934488	4.7315687	20836	114	59	3	5.0847458	2.8600697	12608|14580|21923	Cebpb|Gfap|Tnc	-0.3917729	0	7	0	0	-3.833993	9.3757312

									cess																		
1	-2.27042	GO:0022612	M1	1	0	GO Biological Processes	19	gland morphogenesis	19_GO:0032502 developmental process	-2.27042	8.475661	4.4672001	20836	125	59	3	5.0847458	2.8600697	12608|20348|21923	Cebpb|Sema3c|Tnc	-0.302264	0	7	0	0	-3.833993	9.3757312
1	-2.041727	GO:0048732	M1	1	0	GO Biological Processes	19	gland development	19_GO:0032502 developmental pro	-2.041727	3.8979309	3.3230312	20836	453	59	5	8.4745763	3.6258002	12608|12921|18706|20348|21923	Cebpb|Crhr1|Pik3ca|Sema3c|Tnc	-0.131742	0	7	0	0	-3.833993	9.3757312

									cess																		
1	-2.006706	GO:0043523	M1	1	0	GO Biological Processes	19	regulation of neuron apoptotic process	19_GO:0050789 regulation of biological process	-2.006706	4.7723317	3.4832676	20836	296	59	4	6.779661	3.2729044	12608|15505|18706|58801	Cebpb|Hsph1|Pik3ca|Pmaip1	-0.110429	0	7	0	0	-3.833993	9.3757312
1	-3.649852	GO:0033555	M1	1	0	GO Biological Processes	19	multicellular organismal respons	19_GO:0032501 multicellular	-3.649852	13.45343	6.8171814	20836	105	59	4	6.779661	3.2729044	12921|18013|19055|72585	Crhr1|Neurod2|Ppp3ca|Lypd1	-1.18708	0	8	1	1	-3.649852	22.072034

								e to stress	organismal process																		
1	-3.467635	GO:0042596	M1	1	0	GO Biological Processes	19	fear response	19_GO:0032501 multicellular organismal process	-3.467635	22.072034	7.784683	20836	48	59	3	5.0847458	2.8600697	12921|18013|72585	Crhr1|Neurod2|Lypd1	-1.101773	0	8	0	0	-3.649852	22.072034
1	-2.1	GO:00	M1	1	0	GO Biolog	19	response to	19_GO:00	-2.1	7.790	4.2334	20836	136	59	3	5.0847	2.8600697	16477|18013|19055	Junb|Neurod2|Ppp3ca	-0.2	0	8	0	0	-3.649852	22.072034

	69196	51592				ical Processes		calcium ion	50896 response to stimulus	69196	1296	427					458				28623						
1	-3.247156	GO:0044060	M1	1	0	GO Biological Processes	19	regulation of endocrine process	19_GO:0032501 multicellular organismal process	-3.247156	18.586976	7.0851266	20836	57	59	3	5.0847458	2.8600697	12921|16322|30878	Crhr1|Inha|Apln	-0.9664976	0	9	1	1	-3.247156	18.586976

1	-2.579658	GO:0046883	M1	1	0	GO Biological Processes	19	regulation of hormone secretion	19_GO:0051179 localization	-2.579658	5.239652	4.1812887	20836	337	59	5	8.4745763	3.6258002	12921|16322|19055|19662|30878	Crhr1|Inha|Ppp3ca|Rbp4|Apln	-0.522852	0	9	0	0	-3.247156	18.586976
1	-2.117723	GO:0046660	M1	1	0	GO Biological Processes	19	female sex differentiation	19_GO:0022414 reproductive process	-2.117723	7.4609692	4.1167165	20836	142	59	3	5.0847458	2.8600697	12608|16322|19662	Cebpb|Inha|Rbp4	-0.193163	0	9	0	0	-3.247156	18.586976
1	-2.066308	GO:0010	M1	1	0	GO Biological	19	regulation of	19_GO:00650	-2.06	3.3687047	3.2145	20836	629	59	6	10.169	3.9349167	12921|16322|19055|19662|30878|105349	Crhr1|Inha|Ppp3ca|Rbp4|Apln|Akr1c18	-0.15	0	9	0	0	-3.247156	18.586976

		817				Processes		hormone levels	07 biological regulation	6308		239					492				1464						
1	-3.206544	GO:0045785	M1	1	0	GO Biological Processes	19	positive regulation of cell adhesion	19_GO:0048518 positive regulation of biological process	-3.2065444	4.7815625	4.63977729	20836	517	59	7	11.8644407	4.2099087	12317|12524|15505|19055|22042|109648|170758	Calr|Cd86|Hsph1|Ppp3ca|Tfrc|Npy|Rac3	-0.94455523	0	10	1	1	-3.206544	10.701592

1	-2.554486	WP2432	M1	1	0	WikiPathways	27	Spinal cord injury		-2.554486	10.701592	5.1560722	20836	99	59	3	5.0847458	2.8600697	14580|18610|19055	Gfap|Pdyn|Ppp3ca	-0.50825	0	10	0	0	-3.206544	10.701592
1	-2.436454	GO:0007268	M1	1	0	GO Biological Processes	19	chemical synaptic transmission	19_GO:0023052 signaling	-2.436454	4.8509965	3.9497992	20836	364	59	5	8.4745763	3.6258002	18610|19055|72585|109648|170758	Pdyn|Ppp3ca|Lypd1|Npy|Rac3	-0.42518	0	10	0	0	-3.206544	10.701592
1	-2.436454	GO:0098916	M1	1	0	GO Biological Processes	19	anterograde trans-synaptic signaling	19_GO:0023052 signaling	-2.436454	4.8509965	3.9497992	20836	364	59	5	8.4745763	3.6258002	18610|19055|72585|109648|170758	Pdyn|Ppp3ca|Lypd1|Npy|Rac3	-0.42518	0	10	0	0	-3.206544	10.701592

1	-2.33352	GO:0099537	M1	1	0	GO Biological Processes	19	signaling trans-synaptic signaling	19_GO:0023052 signaling	-2.33352	4.5863967	3.7849727	20836	385	59	5	8.4745763	3.6258002	18610|19055|72585|109648|170758	Pdyn|Ppp3ca|Lypd1|Npy|Rac3	-0.356824	0	10	0	0	-3.206544	10.701592
1	-2.117723	GO:0010811	M1	1	0	GO Biological Processes	19	positive regulation of cell-substrate adhesion	19_GO:0048518 positive regulation of biological	-2.117723	7.4609692	4.1167165	20836	142	59	3	5.0847458	2.8600697	12317|109648|170758	Calr|Npy|Rac3	-0.193163	0	10	0	0	-3.206544	10.701592

1	-2.101273	GO:0099536	M1	1	0	GO Biological Processes	19	synaptic signaling	process 19_GO:0023052 signaling	-2.101273	4.0314217	3.416811	20836	438	59	5	8.4745763	3.6258002	18610|19055|72585|109648|170758	Pdyn|Ppp3ca|Lypd1|Npy|Rac3	-0.1812999	0	10	0	0	-3.206544	10.701592
1	-3.205875	GO:0042742	M1	1	0	GO Biological Processes	19	defense response to bacterium	19_GO:0044419 biological process involved in	-3.205875	5.7113619	4.8793153	20836	371	59	6	10.169492	3.9349167	12608|14972|17472|55932|78416|109648	Cebpb|H2-K1|Gbp4|Gbp3|Rnase6|Npy	-0.9455523	0	11	1	1	-3.205875	8.0261941

1	-2.8071	GO:0050830	M1	1	0	GO Biological Processes	19	defense response to Gram-positive bacterium	interspecies interaction between organisms 19_GO:0044419 biological process involv	-2.8071	8.0261941	4.9881862	20836	176	59	4	6.779661	3.2729044	17472|55932|78416|109648	Gbp4|Gbp3|Rnase6|Npy	-0.699516	0	11	0	0	-3.205875	8.0261941

1	-2.394233	GO:0045087	M1	1	0	GO Biological Processes	19	innate immune response	ed in interspecies interaction between organisms 19_GO:0044419 biological process	-2.394233	3.4429914	3.5499957	20836	718	59	7	11.8644047	4.2099087	12259|12260|16768|17472|55932|78416|109648	C1qa|C1qb|Lag3|Gbp4|Gbp3|Rnase6|Npy	-0.3955532	0	11	0	0	-3.205875	8.0261941

1	-3.052966	GO:0003206	M1	1	0	GO Biological Processes	19	cardiac chamber morphogenesis	involved in interspecies interaction between organisms 19_GO:0032502 development	-3.052966	9.3550342	5.49085589	20836	151	59	4	6.779661	3.2729044	19662|20348|116701|268902	Rbp4|Sema3c|Fgfrl1|Robo2	-0.85593288	0	12	1	1	-3.052966	12.464207

									al process																		
1	-2.904272	GO:0003007	M1	1	0	GO Biological Processes	19	heart morphogenesis	19_GO:0032502 developmental process	-2.904272	6.2174743	4.717629	20836	284	59	5	8.4745763	3.6258002	13590|19662|20348|116701|268902	Lefty1|Rbp4|Sema3c|Fgfrl1|Robo2	-0.778335	0	12	0	0	-3.052966	12.464207
1	-2.743181	GO:0060411	M1	1	0	GO Biological Processes	19	cardiac septum morphogenesis	19_GO:0032502 development	-2.743181	12.464207	5.6437182	20836	85	59	3	5.0847458	2.8600697	20348|116701|268902	Sema3c|Fgfrl1|Robo2	-0.642607	0	12	0	0	-3.052966	12.464207

1	-2.620829	GO:0003205	M1	1	0	GO Biological Processes	19	cardiac chamber development	al process 19_GO:0032502 developmental process	-2.620829	7.1343948	4.6217011	20836	198	59	4	6.779661	3.2729044	19662|20348|116701|268902	Rbp4|Sema3c|Fgfrl1|Robo2	-0.550824	0	12	0	0	-3.052966	12.464207
1	-2.241869	GO:0003279	M1	1	0	GO Biological Processes	19	cardiac septum development	19_GO:0032502 development	-2.241869	8.2770127	4.400686	20836	128	59	3	5.0847458	2.8600697	20348|116701|268902	Sema3c|Fgfrl1|Robo2	-0.286784	0	12	0	0	-3.052966	12.464207

									al process																		
1	-2.145507	GO:0007507	M1	1	0	GO Biological Processes	19	heart development	19_GO:0032502 developmental process	-2.1455507	3.5023393	3.32848445	20836	605	59	6	10.1694492	3.9349167	13590|19662|20348|30878|116701|268902	Lefty1|Rbp4|Sema3c|Apln|Fgfrl1|Robo2	-0.206969	0	12	0	0	-3.052966	12.464207
1	-2.037083	GO:0003231	M1	1	0	GO Biological Processes	19	cardiac ventricle development	19_GO:0032502 development	-2.037083	6.9701116	3.93936576	20836	152	59	3	5.08474458	2.8600697	20348|116701|268902	Sema3c|Fgfrl1|Robo2	-0.1317742	0	12	0	0	-3.052966	12.464207

									al process																		
1	-3.045362	GO:0060541	M1	1	0	GO Biological Processes	19	respiratory system development	19_GO:0032502 developmental process	-3.045362	6.6884951	4.9566977	20836	264	59	5	8.4745763	3.6258002	12654|19662|21923|116701|320924	Chil1|Rbp4|Tnc|Fgfrl1|Ccbe1	-0.8555591	0	13	1	1	-3.045362	6.6884951
1	-2.367839	GO:0030324	M1	1	0	GO Biological Processes	19	lung development	19_GO:0032502 development	-2.367839	6.0627046	4.1412043	20836	233	59	4	6.779661	3.2729044	12654|19662|21923|320924	Chil1|Rbp4|Tnc|Ccbe1	-0.3821888	0	13	0	0	-3.045362	6.6884951

1	-2.348191	GO:0030323	M1	1	0	GO Biological Processes	19	respiratory tube development	al process 19_GO:0032502 developmental process	-2.348191	5.9856363	4.1046329	20836	236	59	4	6.779661	3.2729044	12654|19662|21923|320924	Chil1|Rbp4|Tnc|Ccbe1	-0.367041	0	13	0	0	-3.045362	6.6884951
1	-2.976326	GO:0001568	M1	1	0	GO Biological Processes	19	blood vessel development	19_GO:0032502 development	-2.976326	4.3676109	4.3284718	20836	566	59	7	11.864407	4.2099087	16477|17304|18706|20348|30878|268902|320924	Junb|Mfge8|Pik3ca|Sema3c|Apln|Robo2|Ccbe1	-0.816874	0	14	1	1	-2.976326	4.3676109

									al process																		
1	-2.818009	GO:0001944	M1	1	0	GO Biological Processes	19	vasculature development	19_GO:0032502 developmental process	-2.8188009	4.0996149	4.1159264	20836	603	59	7	11.8644407	4.2099087	16477|17304|18706|20348|30878|268902|320924	Junb|Mfge8|Pik3ca|Sema3c|Apln|Robo2|Ccbe1	-0.7074719	0	14	0	0	-2.976326	4.3676109
1	-2.026259	GO:0048514	M1	1	0	GO Biological Processes	19	blood vessel morphogenesis	19_GO:0032502 development	-2.026259	3.8638134	3.2986992	20836	457	59	5	8.4745763	3.6258002	16477|17304|18706|30878|320924	Junb|Mfge8|Pik3ca|Apln|Ccbe1	-0.1227295	0	14	0	0	-2.976326	4.3676109

1	-2.940113	GO:0008285	M1	1	0	GO Biological Processes	19	negative regulation of cell population proliferation	al processes 19_GO:0048519 negative regulation of biological processes	-2.940113	3.7871586	4.1311643	20836	746	59	8	13.559322	4.4570968	12524|12608|13590|19662|30878|58801|78933|116701	Cd86|Cebpb|Lefty1|Rbp4|Apln|Pmaip1|Agbl4|Fgfrl1	-0.7982666	0	15	1	1	-2.940113	3.7871586
1	-2.676921	GO:0090	M1	1	0	GO Biological	19	regulation of	19_GO:00508	-2.67	5.5180085	4.3401	20836	320	59	5	8.4745	3.6258002	14828|30878|71753|116701|320924	Hspa5|Apln|Tmprss6|Fgfrl1|Ccbe1	-0.59	0	16	1	1	-2.676921	9.9948833

		287				Processes		cellular response to growth factor stimulus	96 response to stimulus	6921		728					763				3662						
1	-2.470664	GO:0090288	M1	1	0	GO Biological Processes	19	negative regulation of cellular response to growth fact	19_GO:0048519 negative regulation of biological	-2.4706664	9.9948833	4.9474356	20836	106	59	3	5.0847458	2.8600697	30878|71753|116701	Apln|Tmprss6|Fgfrl1	-0.4449627	0	16	0	0	-2.676921	9.9948833

								or stimulus	process																	
1	-2.127183	GO:0090092	M1	1	0	GO Biological Processes	19	regulation of transmembrane receptor protein serine/threonine kinase signaling pat	19_GO:0023052 signaling	-2.127183	5.1743962	3.6996709	20836	273	59	4	6.779661	3.2729044	13590|14828|16322|71753	Lefty1|Hspa5|Inha|Tmprss6	-0.1956377	0	16	0	0	-2.676921	9.9948833

1	-2.07664	GO:0090101	M1	1	0	GO Biological Processes	19	hway negative regulation of transmembrane receptor protein serine/threonine kinase signalin	19_GO:0023052 signaling	-2.076664	7.2071947	4.0245342	20836	147	59	3	5.0847458	2.8600697	13590|14828|71753	Lefty1|Hspa5|Tmprss6	-0.159887	0	16	0	0	-2.676921	9.9948833

								g pathway																			
1	-2.631597	GO:0045670	M1	1	0	GO Biological Processes	19	regulation of osteoclast differentiation	19_GO:0002376 immune system process	-2.631597	11.392017	5.3522563	20836	93	59	3	5.0847458	2.8600697	12608|19055|74511	Cebpb|Ppp3ca|Lrrc17	-0.5585544	0	17	1	1	-2.631597	11.392017
1	-2.037083	GO:0002761	M1	1	0	GO Biological Processes	19	regulation of myeloid leukocyte	19_GO:0002376 immune syst	-2.037083	6.970116	3.936576	20836	152	59	3	5.0847458	2.8600697	12608|19055|74511	Cebpb|Ppp3ca|Lrrc17	-0.1317742	0	17	0	0	-2.631597	11.392017

								differentiation	em processes																		
1	-2.554486	GO:0032147	M1	1	0	GO Biological Processes	19	activation of protein kinase activity	19_GO:0048518 positive regulation of biological process	-2.554486	10.701592	5.1560722	20836	99	59	3	5.0847458	2.8600697	12524|12654|105844	Cd86|Chil1|Card10	-0.508250	0	18	1	1	-2.554486	10.701592
1	-2.209233	GO:0001	M1	1	0	GO Biological	19	positive regulat	19_GO:00485	-2.20	3.1815544	3.3025	20836	777	59	7	11.864	4.2099087	12524|12654|13590|16322|18706|22042|105844	Cd86|Chil1|Lefty1|Inha|Pik3ca|Tfrc|Card10	-0.26	0	18	0	0	-2.554486	10.701592

		934				Processes		ion of protein phosphorylation	18 positive regulation of biological process	9233		794					407				0427						
1	-2.006469	GO:1900180	M1	1	0	GO Biological Processes	19	regulation of protein localization to nucleus	19_GO:0051179 localization	-2.006469	6.791395	3.86902552	20836	156	59	3	5.08474458	2.8600697	17472|22042|105844	Gbp4|Tfrc|Card10	-0.1104429	0	18	0	0	-2.554486	10.701592

1	-2.542126	GO:0021954	M1	1	0	GO Biological Processes	19	central nervous system neuron development	19_GO:0032502 developmental process	-2.542126	10.594576	5.1250092	20836	100	59	3	5.0847458	2.8600697	18846|78933|170758	Plxna3|Agbl4|Rac3	-0.5036222	0	19	1	1	-2.542126	10.594576
1	-2.464904	GO:0007420	M1	1	0	GO Biological Processes	19	brain development	19_GO:0032502 developmental process	-2.464904	3.5467257	3.6442733	20836	697	59	7	11.864407	4.2099087	12140|14828|18013|18846|20359|170758|268902	Fabp7|Hspa5|Neurod2|Plxna3|Sema6b|Rac3|Robo2	-0.4463772	0	19	0	0	-2.542126	10.594576

1	-2.266746	GO:0060322	M1	1	0	GO Biological Processes	19	head development	19_GO:0032502 developmental process	-2.266746	3.2613032	3.3795938	20836	758	59	7	11.864407	4.2099087	12140|14828|18013|18846|20359|170758|268902	Fabp7|Hspa5|Neurod2|Plxna3|Sema6b|Rac3|Robo2	-0.302264	0	19	0	0	-2.542126	10.594576
1	-2.201956	GO:0030900	M1	1	0	GO Biological Processes	19	forebrain development	19_GO:0032502 developmental process	-2.201956	4.2651273	3.5758764	20836	414	59	5	8.4745763	3.6258002	12140|18846|20359|170758|268902	Fabp7|Plxna3|Sema6b|Rac3|Robo2	-0.255989	0	19	0	0	-2.542126	10.594576

1	-2.117723	GO:0008360	M1	1	0	GO Biological Processes	19	regulation of cell shape	19_GO:0032502 developmental process	-2.117723	7.4609692	4.1167165	20836	142	59	3	5.0847458	2.8600697	13860|18846|170758	Eps8|Plxna3|Rac3	-0.193163	0	19	0	0	-2.542126	10.594576
1	-2.421678	GO:0034976	M1	1	0	GO Biological Processes	19	response to endoplasmic reticulum stress	19_GO:0050896 response to stimulus	-2.421678	6.2782674	4.2419394	20836	225	59	4	6.779661	3.2729044	12317|12608|14828|58801	Calr|Cebpb|Hspa5|Pmaip1	-0.415177	0	20	1	1	-2.421678	6.2782674

Supplementary Table 6 **Sequence of all primers used**

Primer name	Primer sequence(5'to3')
H2-T24 forward	GCAACATGAGGCACTAACGCAG
H2-T24 reverse	GGAAACGCAAGGACACTCAGCA
Tfrc forward	GAAGTCCAGTGTGGGAACAGGT
Tfrc reverse	CAACCACTCAGTGGCACCAACA
Rac3 forward	ACACACCCATCCTTCTGGTG
Rac3 reverse	AGGTACTTGACGGAACCAATCTC
β-Actin forward	CATTGCTGACAGGATGCAGAAGG
β-Actin reverse	TGCTGGAAGGTGGACAGTGAGG