

Supplementary Table 1 Genes regulated by HIF1A and HIF2A from Qiagen Ingenuity Pathway Analyses

	Gene
Genes regulated by HIF1A	<i>ABCB1, ACE, ADAM10, ADORA2B, AGTR1, AHR, ALDOA, ALOX5AP, APOE, ASNS, AURKA, BAD, BCL2L1, BID, BIRC2, CCL5, CCN1, CCN3, CD36, CD44, CD70, CDH1, CDH2, CSF2, CTPS1, CXCL8, CXCR1, CYP1A1, DLL4, ECE1, EDNRB, EED, EGLN1, EIF4E, EIF4E2, ENO1, ENTPD1, EPAS1, ERBB2, ERBB4, EREG, ESRRG, EWSR1, F3, FAM162A, FHL2, FHL3, FLI1, FTMT, FYN, FSCN1, GLYR1, GPI, H2AX, HIF1A, HK2, HP, HRK, HSPB1, HUWE1, IFNG, IGF1, IL10, IL15, IL1B, IL4, INSIG2, ITGA1, ITGA5, ITGAV, ITGB3, ITGB5, JMJD6, KRT19, LEP, LIMS1, MAF, MBD2, MIF, MMP2, MMP7, MMP9, MST1R, MUC1, MYC, NODAL, NOTCH1, NOX4, NPM1, NR4A3, PDK1, PIM1, PIM2, PPARA, PROM1, PTGIS, PTGS2, RAB11FIP4, RELA, RIOK3, SDC4, SHH, SIAH1, SMAD2, SMAD7, SOD2, SRSF2, SULF1, SUZ12, TERT, TGFA, THBS1, TLR2, TLR6, TNF, TP53, VEGFC, VIM, YTHDF2</i>
Genes regulated by HIF2A	<i>ANGPT2, AREG, ATG5, BBC3, BIRC3, CA12, CCN5, CKB, CKM, CXCL2, DDIT3, DMXL1, DUSP7, FGF2, FLG, FXN, GAL3ST1, GLS, GYS2, HOXA5, ICAM1, IGFBP5, KDR, NANOG, NDUFB6, NFIL3, PAN2, PDGFB, PGM1, PIK3CA, PLIN2, RB1CC1, SLC2A3, SLC7A5, TEK, TNFAIP3, TNFSF15, TPP2, UGP2, UNG</i>
Genes regulated by HIF1A and HIF2A	<i>ABCF2, ADM, AKAP12, ALDOC, ANGPTL4, BNIP3, CA9, CCN2, CCND1, CD274, CDCP1, CDKN1A, CEMIP, CHKA, CORO1A, CXCL12, CXCR4, EDN1, EGFR, EGLN3, EIF5A, ENO2, EPO, EglN3, FAM13A, FHL1, FLT1, FOS, GJA1, HLA-DRB3, HSPA4, IGFBP3, IL6, ITPR1, L1CAM, LDHA, LOX, LOXL2, MB, NAA20, NBN, NCOA4, NDRG1, NEK8, NR4A1, NT5E, PDPK1, PFKFB3, PFKFB4, PGK1,</i>

*PHLPP1, PHLPP2, PKM, PLAUR, POU5F1, PPARG, PRKCA, RAB11B-AS1, RET, SERPINE1, SLC16A4,
SLC29A1, SLC2A1, SOX9, SPAG4, SPHK1, TAF9B, TGFB1, TGFB3, TMEM45A, VCAM1, VEGFA*

Supplementary Table 2 Functional categories in Ingenuity Pathway Analyses of genes regulated by HIF1A

Categories	P value	Genes	Number of genes
Carbohydrate Metabolism	3.50E-20	<i>ALDOA; BCL2L1; CA9; CXCL12; EGFR; ENO2; EPAS1; ESRRG; HIF1A; HK2; IGF1; IL15; IL6; ITGAV; ITGB3; PFKFB3; PFKFB4; PKM; PPARA; SLC2A1; TGFB1; TP53</i>	22
Cardiovascular System	3.31E-15	<i>ADAM10; ADM; ANGPTL4; APOE; CCL5; CCN1; CCN3; CCND1; CD274; CD36; CD44; CDH1; CDH2; CDKN1A; CSF2; CXCL12; CXCL8; CXCR1; CXCR4; DLL4; EDN1; EDNRB;</i>	84
Development and Function	4.96E-54	<i>EGFR; EPO; ERBB2; F3; FHL1; FLI1; FLT1; FOS; GPI; H2AX; HIF1A; HK2; HSPB1; IFNG; IGF1; IGFBP3; IL10; IL1B; IL4; IL6; ITGA1; ITGA5; ITGAV; ITGB3; L1CAM; LEP; LOX; LOXL2; MIF; MMP2; MMP9; NODAL; NOTCH1; NOX4; NR4A1; NT5E; PDPK1; PIM1; PKM; PLAUR; PPARA; PPARG; PRKCA; PTGIS; PTGS2; RELA; SDC4; SERPINE1; SPHK1; SULF1; TERT; TGFA; TGFB1; TGFB3; THBS1; TLR2; TNF; TP53; VCAM1; VEGFA; VEGFC; VIM</i>	54
Cell Cycle	7.42E-16	<i>ABCB1; ADAM10; AHR; APOE; ASNS; AURKA; BAD; BCL2L1; BIRC2; CCN1; CCND1; CD36; CD44; CDH1; CDKN1A; CHKA; CSF2; CXCL12; CXCL8; CXCR1; CXCR4; CYP1A1;</i>	99
	1.82E-38	<i>EDN1; EGFR; EIF4E; EPAS1; EPO; ERBB2; ERBB4; EREG; ESRRG; EWSR1; F3; FHL2; FLT1; FOS; FYN; GJA1; GPI; HIF1A; HP; HSPB1; HUWE1; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; ITGA5; ITGAV; ITGB3; KRT19; LEP; MIF; MMP9; MST1R; MUC1; MYC; NBN; NDRG1; NODAL; NOTCH1; NOX4; NPM1; NR4A1; NR4A3; PDPK1; PFKFB3; PIM1; PIM2;</i>	38

		<i>PKM; PLAUR; POU5F1; PPARA; PPARG; PRKCA; RELA; SERPINE1; SHH; SIAH1; SMAD2; SMAD7; SOD2; SOX9; SPHK1; SRSF2; SULF1; TERT; TGFA; TGFB1; THBS1; TLR2; TNF; TP53; VEGFA; VEGFC</i>	
Cell Death and Survival	3.79E15 - 7.3E-74	<i>ABCB1; ADAM10; ADM; ADORA2B; AGTR1; AHR; AKAP12; ALDOA; ANGPTL4; APOE; ASNS; AURKA; BAD; BCL2L1; BID; BIRC2; BNIP3; CA9; CCL5; CCN1; CCN2; CCN3; CCND1; CD274; CD36; CD44; CD70; CDCP1; CDH1; CDH2; CDKN1A; CHKA; CSF2; CXCL12; CXCL8; CXCR1; CXCR4; DLL4; EDN1; EDNRB; EGFR; EGLN1; EGLN3; EIF4E; EIF5A; ENO1; ENTPD1; EPAS1; EPO; ERBB2; ERBB4; EREG; EWSR1; F3; FAM162A; FHL2; FLI1; FLT1; FOS; FYN; GJA1; GPI; H2AX; HIF1A; HK2; HRK; HSPA4; HSPB1; HUWE1; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; ITGA5; ITGAV; ITGB3; ITPR1; JMJD6; KRT19; L1CAM; LDHA; LEP; LIMS1; MAF; MIF; MMP2; MMP7; MMP9; MST1R; MUC1; MYC; NBN; NCOA4; NDRG1; NEK8; NOTCH1; NOX4; NPM1; NR4A1; NR4A3; NT5E; PDK1; PDPK1; PFKFB3; PHLPP1; PHLPP2; PIM1; PIM2; PKM; PLAUR; POU5F1; PPARA; PPARG; PRKCA; PROM1; PTGIS; PTGS2; RELA; RET; SDC4; SERPINE1; SHH; SIAH1; SLC29A1; SLC2A1; SMAD2; SMAD7; SOD2; SOX9; SPHK1; SRSF2; SULF1; TAF9B; TERT; TGFA; TGFB1; TGFB3; THBS1; TLR2; TLR6; TNF; TP53; VCAM1; VEGFA; VEGFC; VIM</i>	150
Cell Morphology	1.66E-16 - 3.21E-	<i>ADM; ANGPTL4; BCL2L1; BID; BNIP3; CCL5; CCN1; CCND1; CD36; CD44; CDCP1; CDH1; CDKN1A; CSF2; CXCL12; CXCL8; CXCR4; EDN1; EDNRB; EGFR; EGLN3; EPO; ERBB2; FLT1; FYN; GPI; HSPA4; HSPB1; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; ITGA1;</i>	77

	24	<i>ITGA5; ITGAV; ITGB3; LEP; LOXL2; MMP2; MMP9; MST1R; MYC; NDRG1; NOTCH1; NOX4; NR4A1; PDK1; PHLPP1; PHLPP2; PIM1; PKM; PLAUR; POU5F1; PPARG; PRKCA; RET; RIOK3; SDC4; SERPINE1; SIAH1; SMAD2; SOD2; SPHK1; TERT; TGFB1; THBS1; TLR2; TNF; TP53; VCAM1; VEGFA; VEGFC; VIM</i>	
Cell Signaling	2.83E-19	<i>AGTR1; BCL2L1; CCL5; CCND1; CD36; CDKN1A; CSF2; CXCL12; CXCL8; CXCR1; CXCR4; EDN1; EDNRB; EGFR; ENTPD1; EPO; ERBB2; ERBB4; EREG; FOS; FYN; HIF1A; IFNG; IL10; IL1B; IL4; IL6; ITGA5; ITGAV; ITGB3; ITGB5; ITPR1; L1CAM; MMP2; MMP9; MUC1; MYC; PIM1; PLAUR; PTGS2; RELA; SHH; TGFB1; TNF; TP53; VCAM1; VEGFA; VIM</i>	48
Cell-To-Cell Signaling and Interaction	3.31E15 - 1.99E-36	<i>ADAM10; ADM; ADORA2B; AGTR1; AKAP12; ANGPTL4; APOE; BIRC2; BNIP3; CCL5; CCN1; CCN2; CCN3; CCND1; CD274; CD36; CD44; CD70; CDCP1; CDH1; CDH2; CDKN1A; CSF2; CXCL12; CXCL8; CXCR1; CXCR4; DLL4; ECE1; EDN1; EDNRB; EGFR; ENTPD1; EPAS1; EPO; ERBB2; ERBB4; EREG; F3; FLT1; FOS; FYN; GJA1; GPI; HIF1A; HSPB1; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; ITGA1; ITGA5; ITGAV; ITGB3; ITGB5; ITPR1; JMJD6; L1CAM; LEP; MAF; MIF; MMP2; MMP7; MMP9; MST1R; MUC1; MYC; NODAL; NOTCH1; NOX4; NPM1; NR4A1; NR4A3; NT5E; PDPK1; PHLPP1; PHLPP2; PKM; PLAUR; PPARA; PPARG; PRKCA; RELA; RET; SDC4; SERPINE1; SHH; SMAD7; SPHK1; TERT; TGFA; TGFB1; THBS1; TLR2; TLR6; TNF; TP53; VCAM1; VEGFA; VEGFC; VIM</i>	105
Cellular Assembly and	5.56E-16	<i>ACE; ADM; ALDOA; APOE; AURKA; CCL5; CCN2; CCN3; CCND1; CD44; CDH1; CDKN1A; CORO1A; CXCL12; CXCL8; CXCR1; EDN1; EGFR; EIF4E; ERBB2; ERBB4; F3;</i>	52

Organization	1.42E-17	<i>GPI; HIF1A; HSPB1; IFNG; IGF1; IL1B; IL6; ITGB3; ITGB5; KRT19; L1CAM; MST1R; NDRG1; NOTCH1; NR4A1; PDPK1; PKM; PLAUR; RET; SDC4; SIAH1; SPHK1; TGFB1; TGFB3; THBS1; TNF; TP53; VEGFA; VEGFC; VIM</i>	
Cellular Development	3.47-15 - 2.85E-73	<i>ABCB1; ADAM10; ADM; ADORA2B; AHR; AKAP12; ALDOA; ANGPTL4; APOE; ASNS; AURKA; BAD; BCL2L1; BID; BIRC2; BNIP3; CA9; CCL5; CCN1; CCN2; CCN3; CCND1; CD274; CD36; CD44; CD70; CDCP1; CDH1; CDH2; CDKN1A; CHKA; CSF2; CTPS1; CXCL12; CXCL8; CXCR1; CXCR4; CYP1A1; DLL4; EDN1; EDNRB; EED; EGFR; EIF4E; EIF5A; ENO1; ENTPD1; EPAS1; EPO; ERBB2; ERBB4; EREG; ESRRG; EWSR1; F3; FHL1; FHL2; FLI1; FLT1; FOS; FYN; GJA1; GPI; H2AX; HIF1A; HK2; HRK; HSPB1; HUWE1; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; ITGA1; ITGA5; ITGAV; ITGB3; ITGB5; ITPR1; KRT19; L1CAM; LDHA; LEP; LOX; LOXL2; MAF; MB; MBD2; MIF; MMP2; MMP7; MMP9; MST1R; MUC1; MYC; NCOA4; NDRG1; NODAL; NOTCH1; NOX4; NPM1; NR4A1; NR4A3; PDK1; PDPK1; PFKFB3; PHLPP1; PHLPP2; PIM1; PIM2; PKM; PLAUR; POU5F1; PPARA; PPARG; PRKCA; PTGS2; RELA; RET; SDC4; SERPINE1; SHH; SIAH1; SLC29A1; SLC2A1; SMAD2; SMAD7; SOD2; SOX9; SPHK1; SRSF2; SULF1; SUZ12; TAF9B; TERT; TGFA; TGFB1; TGFB3; THBS1; TLR2; TLR6; TNF; TP53; VCAM1; VEGFA; VEGFC; VIM</i>	151
Cellular Function and Maintenance	7.07E-32	<i>ADAM10; ADM; AGTR1; AHR; ALDOA; AURKA; BAD; BCL2L1; BID; BIRC2; BNIP3; CA9; CCL5; CCN3; CCND1; CD36; CDKN1A; CSF2; CXCL12; CXCL8; CXCR1; CXCR4; DLL4; EDN1; EGFR; ENTPD1; EPO; F3; FTMT; FYN; GJA1; HIF1A; HK2; HSPA4; HSPB1; IFNG;</i>	67

			<i>IGF1; IL10; IL15; IL1B; IL4; IL6; ITPR1; L1CAM; LEP; MYC; NDRG1; NOTCH1; NR4A1; NT5E; PDK1; PIM1; PKM; PPARG; PRKCA; RELA; SLC2A1; SMAD2; SOD2; SPHK1; TERT; TGFA; TGFB1; TLR2; TNF; TP53; VEGFA</i>	
Cellular Growth and Proliferation	9.07E-27	-	<i>ADM; AHR; APOE; AURKA; BAD; BCL2L1; BIRC2; CCL5; CCN1; CCN2; CCN3; CCND1; CD274; CD36; CD44; CD70; CDH1; CDKN1A; CSF2; CTPS1; CXCL12; CXCL8; CXCR4; DLL4; EDN1; EDNRB; EGFR; EIF4E; ENO1; EPAS1; EPO; ERBB2; ERBB4; EREG; FHL1; FHL2; FLI1; FLT1; FOS; FYN; GPI; H2AX; HIF1A; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; ITGA1; ITGA5; ITGB3; KRT19; L1CAM; LEP; LOX; MIF; MMP2; MMP7; MST1R; MUC1; MYC; NODAL; NOTCH1; NOX4; NR4A1; PDPK1; PHLPP1; PHLPP2; PIM1; PKM; PLAUR; POU5F1; PPARA; PPARG; PRKCA; PTGS2; RELA; SDC4; SERPINE1; SHH; SLC2A1; SMAD2; SMAD7; SOD2; SOX9; SPHK1; SULF1; TERT; TGFA; TGFB1; TGFB3; THBS1; TLR2; TNF; TP53; VCAM1; VEGFA; VIM</i>	101
Cellular Movement	3.31E-15	-	<i>ADAM10; ADM; AGTR1; AHR; AKAP12; ALDOA; ANGPTL4; APOE; ASNS; AURKA; BCL2L1; CA9; CCL5; CCN1; CCN2; CCN3; CCND1; CD274; CD36; CD44; CDCP1; CDH1; CDH2; CDKN1A; CEMIP; CORO1A; CSF2; CXCL12; CXCL8; CXCR1; CXCR4; DLL4; ECE1; EDN1; EDNRB; EED; EGFR; EGLN3; EIF4E; ENO1; EPAS1; EPO; ERBB2; ERBB4; EREG; F3; FHL1; FHL2; FLT1; FOS; FYN; GJA1; GPI; H2AX; HIF1A; HSPB1; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; INSIG2; ITGA1; ITGA5; ITGAV; ITGB3; ITGB5; ITPR1; KRT19; L1CAM; LEP; LIMS1; LOX; LOXL2; MB; MBD2; MIF; MMP2; MMP7; MMP9; MST1R; MUC1; MYC;</i>	132
	3.35E-67			

			<i>NDRG1; NOTCH1; NOX4; NPM1; NR4A1; PDK1; PDPK1; PHLPP1; PIM1; PKM; PLAUR; POU5F1; PPARA; PPARG; PRKCA; PROM1; PTGS2; RAB11B-AS1; RAB11FIP4; RELA; RET; RIOK3; SDC4; SERPINE1; SHH; SLC16A4; SLC2A1; SMAD2; SMAD7; SOD2; SOX9; SPHK1; SULF1; SUZ12; TERT; TGFA; TGFB1; TGFB3; THBS1; TLR2; TNF; TP53; VCAM1; VEGFA; VEGFC; VIM</i>	
Connective Tissue	1.36E-16	-	<i>AURKA; ACE; APOE; BCL2L1; CCN1; CCN2; CCN3; CCND1; CD274; CD44; CDKN1A; CSF2; CXCL12; CXCL8; EDN1; EGFR; EPO; EREG; FLI1; IFNG; IGF1; IGFBP3; IL10; IL15; IL1B; IL4; IL6; ITGA5; LEP; MIF; MMP7; MMP9; MYC; NOTCH1; PLAUR; POU5F1; PPARA; PPARG; SERPINE1; SOD2; SOX9; SPHK1; TERT; TGFB1; TNF; TP53</i>	46
Development and Function	1.73E-30			
DNA Replication, Recombination, and Repair	1.67E-18	-	<i>ADORA2B; ABCB1; ADM; APOE; BAD; BCL2L1; CCL5; CCN1; CDH1; CDKN1A; CSF2; CXCL12; CXCL8; EDN1; EGFR; EPO; ERBB2; EREG; FLT1; FOS; FYN; HSPB1; HUIWE1; IFNG; IGF1; IGFBP3; IL10; IL1B; IL4; IL6; LEP; MYC; NBN; NOX4; NR4A1; NR4A3; NT5E; PTGS2; SDC4; SLC29A1; SOD2; TERT; TGFA; TGFB1; TNF; TP53; VEGFA</i>	47
Drug Metabolism,Lipid Metabolism,Small Molecule Biochemistry	2.36E-16		<i>CCN1; CXCL8; EDN1; EGFR; IFNG; IL10; IL1B; IL4; IL6; PPARG; PRKCA; PTGS2; RELA; SPHK1; TNF; TP53</i>	16
Free Radical	6.09E-		<i>AGTR1; APOE; BCL2L1; BID; BNIP3; CCL5; CCN1; CD36; CD44; CDKN1A; CSF2; CXCL8;</i>	43

Scavenging	16	-	<i>CYP1A1; EDN1; EGFR; FYN; HK2; HSPA4; HSPB1; IFNG; IGF1; IL10; IL1B; IL4; IL6; ITGB3;</i>	
	5.5E-33		<i>MUC1; MYC; NOX4; PDK1; PIM1; PLAUR; PPARA; PRKCA; PTGS2; SOD2; TERT; TGFA;</i> <i>TGFB1; TLR2; TNF; TP53; VEGFA</i>	
Gene Expression	1.373-		<i>ADAM10; AHR; APOE; AURKA; BAD; BCL2L1; BIRC2; CCN1; CCN2; CCND1; CD44;</i>	88
	18	-	<i>CDH1; CDKN1A; CSF2; CXCL8; CXCR4; DLL4; EDN1; EDNRB; EGFR; EIF4E; EIF4E2;</i>	
	4.01E-		<i>EIF5A; ENO1; EPAS1; EPO; ERBB2; ERBB4; EREG; ESRRG; EWSR1; F3; FHL2; FLI1; FOS;</i>	
	31		<i>GJA1; GLYR1; HIF1A; HSPB1; IFNG; IGF1; IL10; IL1B; IL4; IL6; JMJD6; L1CAM; LIMS1;</i> <i>LOXL2; MAF; MBD2; MIF; MMP9; MYC; NCOA4; NOTCH1; NOX4; NPM1; NR4A1;</i> <i>NR4A3; PDPK1; PIM1; PKM; POU5F1; PPARA; PPARG; PRKCA; PTGS2; RELA; RET;</i> <i>SERPINE1; SHH; SIAH1; SMAD2; SMAD7; SOD2; SOX9; SRSF2; TAF9B; TERT; TGFA;</i> <i>TGFB1; TGFB3; TLR2; TNF; TP53; VCAM1; VEGFA</i>	
Inflammatory Response	5.48E-		<i>ABCB1; ACE; ADAM10; ADM; ADORA2B; AGTR1; AHR; APOE; ASNS; BCL2L1; BIRC2;</i>	77
	20	-	<i>CA9; CCL5; CCN3; CD274; CD36; CD44; CD70; CDH1; CDKN1A; CORO1A; CSF2; CXCL12;</i>	
	2.72E-		<i>CXCL8; CXCR1; CXCR4; CYP1A1; DLL4; EDN1; EDNRB; EGFR; EPO; ERBB2; F3; FLT1;</i>	
	26		<i>FOS; FYN; HIF1A; IFNG; IGF1; IL10; IL15; IL1B; IL4; IL6; ITGAV; ITGB3; LEP; MIF; MMP9;</i> <i>MUC1; MYC; NOX4; NPM1; PKM; PLAUR; PPARA; PPARG; PRKCA; PTGIS; PTGS2;</i> <i>RELA; RET; SERPINE1; SHH; SLC2A1; SOD2; SPHK1; TGFB1; THBS1; TLR2; TNF; TP53;</i> <i>VCAM1; VEGFA; VEGFC; VIM</i>	
Lipid Metabolism	6.24E-		<i>ABCB1; ADM; AGTR1; AHR; ALOX5AP; APOE; BCL2L1; BID; CCL5; CCN1; CD36; CDCP1;</i>	48

	16	-	<i>CHKA; CSF2; CXCL12; CXCL8; CYP1A1; EDN1; EGFR; FLT1; FOS; IFNG; IGF1; IL10; IL1B; IL4; IL6; INSIG2; ITGAV; ITGB3; LEP; MIF; MYC; PKM; PPARA; PPARG; PRKCA; PTGIS; PTGS2; RELA; SPHK1; TERT; TGFA; TGFB1; TLR2; TNF; TP53; VEGFA</i>	
Organismal	9.55E-		<i>ABCB1; ACE; AGTR1; ALDOA; ALDOC; APOE; AURKA; BAD; BCL2L1; CA9; CCN2;</i>	81
Survival	37	-	<i>CCND1; CD274; CD44; CDCP1; CDH1; CDKN1A; CXCL12; CXCL8; CXCR4; DLL4; EED; EGFR; EIF4E2; ENO1; EPAS1; EPO; ERBB2; ERBB4; EREG; FLT1; HIF1A; HK2; HSPB1; IFNG; IGFBP3; IL10; IL15; IL1B; IL6; ITGA5; ITGB3; LIMS1; LOX; MIF; MMP2; MMP7; MMP9; MUC1; MYC; NOTCH1; NPM1; NR4A1; NR4A3; NT5E; PFKFB3; PKM; PLAUR; PPARA; PPARG; PRKCA; PROM1; PTGS2; RAB11FIP4; RET; SERPINE1; SHH; SLC29A1; SLC2A1; SMAD2; SOD2; SPHK1; SRSF2; SUZ12; TERT; TGFB1; TLR2; TNF; TP53; VEGFA; VIM</i>	
Post-Translational Modification	1.86E-18		<i>AURKA; CCL5; CCN1; CCND1; CD36; CDKN1A; CSF2; EGFR; EPO; ERBB2; ERBB4; EREG; FLT1; FYN; HSPB1; IFNG; IGF1; IGFBP3; IL1B; IL4; ITGB3; LEP; MIF; MMP9; PDPK1; PIM1; PIM2; PLAUR; PRKCA; RET; TGFB1; THBS1; TNF; VEGFA</i>	34
Protein Synthesis	2.10E-15		<i>ACE; ADAM10; ADORA2B; AGTR1; APOE; AURKA; BAD; CCN1; CDH2; CDKN1A; CSF2; ECE1; EDN1; EGFR; EIF4E; EIF4E2; ERBB2; FOS; HSPB1; IFNG; IGF1; IGFBP3; IL1B; IL6; MMP2; MMP7; MMP9; MYC; NPM1; PHLPP1; PHLPP2; PIM2; RET; SDC4; SIAH1; SMAD7; SPHK1; TAF9B; TERT; TGFB1; THBS1; TNF; TP53; VIM</i>	44
Tissue	1.65E-		<i>ADM; APOE; BAD; BIRC2; CCL5; CCND1; CD36; CD44; CDH2; CDKN1A; CSF2; CXCL12;</i>	62

Development	19	-	<i>CXCL8; CXCR4; DLL4; EDN1; EDNRB; EGFR; EPO; ERBB2; EREG; F3; FHL2; FLI1; FLT1;</i>	
	4.13E-		<i>H2AX; HIF1A; IFNG; IGF1; IL10; IL1B; IL6; ITGA1; ITGB3; L1CAM; LEP; LOXL2; MMP2;</i>	
	46		<i>MST1R; MYC; NODAL; NOTCH1; NR4A1; PDPK1; PIM1; PKM; POU5F1; PPARG; PRKCA;</i>	
			<i>SERPINE1; SMAD7; SULF1; TERT; TGFA; TGFB1; THBS1; TLR2; TNF; TP53; VCAM1;</i>	
			<i>VEGFA; VEGFC</i>	
Tissue	3.02E-		<i>ABCB1; ADORA2B; BCL2L1; CCND1; CD44; CDKN1A; CSF2; CXCL12; CXCL8; CXCR4;</i>	42
Morphology	17	-	<i>EDN1; EGFR; ENO1; EPAS1; EPO; ERBB2; HIF1A; HSPB1; IFNG; IGF1; IGFBP3; IL10; IL15;</i>	
	3.06E-		<i>IL1B; IL4; IL6; LEP; MIF; MMP9; MYC; NODAL; NOTCH1; NR4A1; POU5F1; PPARG;</i>	
	26		<i>PTGS2; TERT; TGFB1; THBS1; TNF; TP53; VEGFA</i>	

Supplementary Table 3 Functional categories in Ingenuity Pathway Analyses of genes regulated by HIF2A

Categories	P value	Genes	Number of genes
Carbohydrate Metabolism	2.45E-12	<i>ADM; ALDOC; ATG5; CA9; CCN2; CCND1; CEMIP; CHKA; CKM; CXCL12; EDN1; EGFR; EGLN3; ENO2; EPO; FGF2; GYS2; ICAM1; IGFBP3; IGFBP5; IL6; L1CAM; LDHA; NR4A1; PDGFB; PDPK1; PFKFB3; PFKFB4; PGK1; PGM1; PIK3CA; PKM; PLAUR; PLIN2; PPARG; PRKCA; SERPINE1; SLC2A1; SLC2A3; TEK; TGFB1; TGFB3; UGP2; VEGFA</i>	44
Cardiovascular System Development and Function	1.00E-11	<i>ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; BIRC3; BNIP3; CCN2; CCN5; CCND1; CD274; CDKN1A; CKM; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EGLN3; EPO; FGF2; FHL1; FLT1; FOS; GJA1; HOXA5; ICAM1; IGFBP3; IGFBP5; IL6; KDR; L1CAM; LDHA; LOX; LOXL2; MB; NANOG; NDRG1; NEK8; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PGK1; PHLPP2; PIK3CA; PKM; PLAUR; PPARG; PRKCA; RAB11B-AS1; RB1CC1; RET; SERPINE1; SLC7A5; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFAIP3; TNFSF15; VCAM1; VEGFA</i>	68
Cell Cycle	8.41E-31	<i>ADM; AKAP12; ANGPT2; AREG; ATG5; CCN2; CCND1; CD274; CDKN1A; CHKA; CXCL12; CXCR4; DDIT3; DUSP7; EDN1; EGFR; EPO; FGF2; FLT1; FOS; GJA1; IGFBP3; IGFBP5; IL6; KDR; LOX; NANOG; NBN; NCOA4; NDRG1; NR4A1; PDGFB; PDPK1; PFKFB3; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SOX9; SPHK1; TGFB1; TGFB3; TNFAIP3; TNFSF15; TPP2; UNG; VCAM1; VEGFA</i>	53

Cell Death and Survival	1.08E-11 - 5.12E-36	ADM; AKAP12; ALDOC; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; BIRC3; BNIP3; CA9; CCN2; CCN5; CCND1; CD274; CDCP1; CDKN1A; CHKA; CORO1A; CXCL12; CXCL2; CXCR4; DDIT3; DUSP7; EDN1; EGFR; EGLN3; EIF5A; ENO2; EPO; FGF2; FHL1; FLT1; FOS; FXN; GJA1; GLS; HOXA5; HSPA4; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LDHA; LOX; LOXL2; MB; NANOG; NBN; NCOA4; NDRG1; NEK8; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PHLPP1; PHLPP2; PIK3CA; PKM; PLAUR; PLIN2; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SLC29A1; SLC2A1; SLC2A3; SOX9; SPHK1; TAF9B; TEK; TGFB1; TGFB3; TNFAIP3; TNFSF15; TPP2; UNG; VCAM1; VEGFA	88
Cell Morphology	1.11E-11 - 4.76E-19	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; BNIP3; CCN2; CCN5; CCND1; CD274; CDCP1; CDKN1A; CKB; CKM; CXCL12; CXCR4; DDIT3; EDN1; EGFR; EGLN3; EPO; FGF2; FLT1; FOS; FXN; GAL3ST1; GJA1; HSPA4; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LDHA; LOX; LOXL2; NANOG; NCOA4; NDRG1; NR4A1; PDGFB; PDPK1; PHLPP1; PHLPP2; PIK3CA; PKM; PLAUR; PLIN2; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SLC2A1; SOX9; SPHK1; TEK; TGFB1; TGFB3; TPP2; VCAM1; VEGFA	67
Cell Signaling	6.16E-12 - 1.73E-	ADM; AKAP12; ANGPT2; CXCL12; CXCR4; EDN1; EGFR; EPO; FGF2; FLT1; FOS; GJA1; HSPA4; ICAM1; IGFBP3; IL6; ITPR1; KDR; L1CAM; MB; NR4A1; PDGFB; PDPK1; PIK3CA; PLAUR; TGFB1; TNFAIP3; VCAM1; VEGFA	29

	12		
Cell-To-Cell Signaling and Interaction	7.17E-12	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BNIP3; CCN2; CCN5; CCND1; CD274; CDCP1; CDKN1A; CORO1A; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EPO; FGF2; FLT1; FOS; GAL3ST1; GJA1; HSPA4; ICAM1; IGFBP3; IL6; ITPR1; KDR; L1CAM; LOX; LOXL2; NANOG; NDRG1; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PHLPP1; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RET; SERPINE1; SLC2A3; SLC7A5; SPHK1; TEK; TGFB1; TNFAIP3; TNFSF15; UGP2; VCAM1; VEGFA	62
Cell-mediated Immune Response	4.19E-14	ATG5; BBC3; CCND1; CD274; CDKN1A; CORO1A; CXCL12; CXCR4; FLT1; ICAM1; IGFBP3; IL6; KDR; NBN; NR4A1; PDPK1; PHLPP1; PKM; PPARG; PRKCA; SLC2A1; TGFB1; TNFAIP3; TNFSF15; TPP2; VEGFA	26
	7.70E-15		
Cellular Assembly and Organization	1.74E-12	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BNIP3; CA9; CCN2; CCN5; CCND1; CDKN1A; CKB; CKM; CORO1A; CXCL12; CXCR4; EDN1; EGFR; EPO; FGF2; FLT1; FOS; FXN; GJA1; ICAM1; IL6; ITPR1; KDR; L1CAM; LOX; NANOG; NDRG1; NR4A1; PDGFB; PDPK1; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SOX9; SPHK1; TGFB1; TGFB3; TNFSF15; VCAM1; VEGFA	52
Cellular Development	1.10E-11	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; BIRC3; BNIP3; CA9; CCN2; CCN5; CCND1; CD274; CDCP1; CDKN1A; CHKA; CORO1A; CXCL12; CXCL2; CXCR4; DDIT3; DUSP7; EDN1; EGFR; EGLN3; EIF5A; EPO; FGF2; FHL1; FLG; FLT1; FOS; FXN;	89
	2.98E-		

	39		<i>GJA1; GLS; HOXA5; HSPA4; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LDHA; LOX; LOXL2; MB; NANOG; NBN; NCOA4; NDRG1; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PFKFB4; PGK1; PHLPP1; PHLPP2; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SLC29A1; SLC2A1; SLC2A3; SLC7A5; SOX9; SPHK1; TAF9B; TEK; TGFB1; TGFB3; TNFAIP3; TNFSF15; TPP2; UGP2; UNG; VCAM1; VEGFA</i>	
Cellular Function and Maintenance	4.81E-13	-	<i>ADM; ANGPT2; ANGPTL4; ATG5; BBC3; BIRC3; BNIP3; CA9; CCND1; CD274; CDKN1A; CKB; CORO1A; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EIF5A; EPO; FGF2; FLT1; FOS; FXN; GJA1; HSPA4; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LDHA; LOX; NANOG; NBN; NCOA4; NDRG1; NFIL3; NR4A1; NT5E; PDPK1; PGM1; PHLPP1; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RB1CC1; SERPINE1; SLC29A1; SLC2A1; SPHK1; TEK; TGFB1; TNFAIP3; TNFSF15; TPP2; VEGFA</i>	63
Cellular Growth and Proliferation	8.67E-13	-	<i>ADM; AKAP12; ANGPT2; AREG; ATG5; BBC3; BIRC3; CCN2; CCN5; CCND1; CD274; CDKN1A; CORO1A; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EIF5A; EPO; FGF2; FHL1; FLT1; FOS; FXN; GJA1; GLS; HOXA5; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LOX; NANOG; NBN; NCOA4; NDRG1; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PGK1; PHLPP1; PHLPP2; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SLC2A1; SLC7A5; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFAIP3; TNFSF15; TPP2; UNG; VCAM1; VEGFA</i>	72

Cellular Movement	9.45E-12	-	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; CA9; CCN2; CCN5; CCND1; CD274; CDCP1; CDKN1A; CEMIP; CORO1A; CXCL12; CXCL2; CXCR4; EDN1; EGFR; EGLN3; EPO; FGF2; FHL1; FLT1; FOS; GAL3ST1; GJA1; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LDHA; LOX; LOXL2; MB; NANOG; NCOA4; NDRG1; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PHLPP1; PHLPP2; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RAB11B-AS1; RB1CC1; RET; SERPINE1; SLC16A4; SLC2A1; SLC7A5; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFAIP3; TNFSF15; VCAM1; VEGFA	72
Connective Tissue Development and Function	1.56E-16	-	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; CCN2; CCND1; CD274; CDKN1A; CXCL12; EDN1; EGFR; EPO; FGF2; FOS; GJA1; HOXA5; IGFBP3; IGFBP5; IL6; KDR; LOX; NBN; NCOA4; NDRG1; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PGK1; PHLPP1; PIK3CA; PKM; PLAUR; PLIN2; POU5F1; PPARG; PRKCA; RET; SERPINE1; SLC2A1; SOX9; SPHK1; TEK; TGFB1; TNFSF15; VEGFA	50
DNA Replication, Recombination, and Repair	4.08E-22	-	ADM; ANGPT2; AREG; CCND1; CDKN1A; CXCL12; EDN1; EGFR; EPO; FGF2; FLT1; FOS; GJA1; IGFBP3; IGFBP5; IL6; KDR; LOX; NBN; NR4A1; PDGFB; PIK3CA; PLAUR; PPARG; PRKCA; SLC29A1; SPHK1; TGFB1; VEGFA	29
Digestive System Development and Function	1.42E-13	-	ANGPTL4; AREG; ATG5; CA9; CCND1; CDKN1A; EDN1; EGFR; EGLN3; EPO; FOS; FXN; IGFBP3; IGFBP5; IL6; NFIL3; NR4A1; PDGFB; PDPK1; PPARG; RB1CC1; RET; SOX9; SPHK1; TGFB1; TGFB3; TNFAIP3; VEGFA	28
Embryonic	1.52E-	-	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; CCN2; CCND1; CDKN1A;	60

Development	12	-	<i>CXCL12; CXCR4; DDIT3; EDN1; EGFR; EGLN3; EPO; FGF2; FHL1; FLT1; FOS; FXN; GJA1; HOXA5; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LOX; LOXL2; MB; NANOG; NBN; NEK8; NFIL3; NR4A1; PDGFB; PDPK1; PHLPP2; PIK3CA; PKM; PLIN2; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFSF15; UGP2; VCAM1; VEGFA</i>	
Free Radical Scavenging	3.11E-13	-	<i>ANGPT2; ATG5; BBC3; BNIP3; CCN2; CDKN1A; CXCL12; CXCL2; DDIT3; EDN1; EGFR; EPO; FGF2; FOS; GJA1; ICAM1; IL6; LDHA; NR4A1; PDGFB; PFKFB3; PHLPP2; PLAUR; PPARG; PRKCA; SLC2A1; TGFB1; VCAM1; VEGFA</i>	29
Hair and Skin Development and Function	1.33E-13	-	<i>AREG; CDKN1A; EGFR; FGF2; FOS; HOXA5; IL6; L1CAM; PDGFB; PRKCA; SLC2A1; SOX9; SPHK1; TGFB1; TGFB3; TPP2; VEGFA</i>	17
Hematological System Development and Function	1.17E-11	-	<i>ANGPT2; ANGPTL4; ATG5; BBC3; BIRC3; CA9; CCND1; CD274; CDKN1A; CORO1A; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EGLN3; EPO; FGF2; FLT1; FOS; GJA1; GLS; HOXA5; ICAM1; IGFBP3; IL6; ITPR1; KDR; NBN; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PIK3CA; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SLC29A1; SLC2A1; SPHK1; TEK; TGFB1; TNFAIP3; TNFSF15; TPP2; UNG; VCAM1; VEGFA</i>	52
Inflammatory Response	9.18E-22	-	<i>ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; BIRC3; CA12; CA9; CCND1; CD274; CDCP1; CDKN1A; CEMIP; CKB; CKM; CORO1A; CXCL12; CXCL2; CXCR4;</i>	59

	4E-24	<i>DDIT3; EDN1; EGFR; EGLN3; EPO; FGF2; FLT1; FOS; GJA1; HOXA5; ICAM1; IGFBP3; IL6; KDR; LOXL2; NFIL3; NR4A1; NT5E; PDGFB; PFKFB3; PHLPP1; PHLPP2; PIK3CA; PKM; PLAUR; PLIN2; PPARG; PRKCA; RET; SERPINE1; SLC2A1; SPHK1; TEK; TGFB1; TNFAIP3; TNFSF15; VCAM1; VEGFA</i>	
Lipid Metabolism	8.00E-12	<i>ADM; ANGPT2; ANGPTL4; AREG; ATG5; BNIP3; CDKN1A; CHKA; CXCL12; EDN1; EGFR; FGF2; FLT1; FOS; GAL3ST1; GLS; GYS2; HOXA5; ICAM1; IGFBP3; IL6; ITPR1; KDR; NDRG1; NFIL3; NR4A1; PDGFB; PDPK1; PIK3CA; PKM; PLIN2; POU5F1; PPARG; PRKCA; SERPINE1; SLC2A1; SPHK1; TEK; TGFB1; VCAM1; VEGFA</i>	41
Lymphoid Tissue Structure and Development	3.77E-16	<i>ANGPT2; ATG5; BBC3; CA9; CD274; CDKN1A; CORO1A; CXCL12; CXCR4; DDIT3; EPO; FLT1; FOS; GJA1; GLS; ICAM1; IGFBP3; IL6; ITPR1; NBN; NFIL3; NR4A1; NT5E; PIK3CA; PPARG; SLC29A1; SLC2A1; SPHK1; TEK; TGFB1; TNFAIP3; TNFSF15; TPP2; VCAM1; VEGFA</i>	35
Molecular Transport	7.49E-15	<i>ADM; ANGPT2; CA12; CA9; CDCP1; CDKN1A; CHKA; CORO1A; CXCL12; CXCL2; EDN1; EGFR; EIF5A; EPO; FGF2; FHL1; FLT1; FXN; GJA1; GLS; IL6; ITPR1; MB; NCOA4; NFIL3; NR4A1; PDPK1; PFKFB3; PIK3CA; PKM; PLIN2; PPARG; PRKCA; RET; SLC16A4; SLC29A1; SLC2A1; SLC2A3; SLC7A5; SPHK1; TEK; TGFB1; TGFB3; TNFSF15</i>	44
Nervous System Development and Function	4.54E-12	<i>ANGPTL4; AREG; ATG5; CCND1; CDKN1A; CXCL12; CXCR4; DDIT3; EGFR; EGLN3; FGF2; FOS; ICAM1; IGFBP3; IL6; KDR; PDGFB; SERPINE1; SOX9; TGFB3; VCAM1; VEGFA</i>	22

Organ Development, Renal and Urological System Development	8.50E-12	-	ANGPT2; CDKN1A; EDN1; EGFR; EPO; FLT1; ICAM1; IL6; PDGFB; PLAUR; TGFB1	11
Organ Morphology	1.78E-13	-	AKAP12; ANGPTL4; AREG; ATG5; CA9; CDKN1A; EDN1; EGFR; EGLN3; FXN; HOXA5; IGFBP3; IGFBP5; IL6; NR4A1; PDPK1; PLIN2; PPARG; SOX9; SPHK1; TGFB1; VEGFA	22
Organismal Development	1.92E-12	-	ADM; AKAP12; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; BIRC3; BNIP3; CA9; CCN2; CCND1; CDKN1A; CKB; CKM; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EGLN3; EPO; FGF2; FLT1; FOS; FXN; GAL3ST1; GJA1; HOXA5; HSPA4; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LDHA; LOX; LOXL2; MB; NANOG; NBN; NCOA4; NEK8; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PGK1; PIK3CA; PLAUR; PLIN2; POU5F1; PPARG; PRKCA; RB1CC1; RET; SERPINE1; SLC2A1; SLC2A3; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFAIP3; TPP2; UNG; VCAM1; VEGFA	73
Organismal Survival	7.68E-26	-	ADM; AKAP12; ALDOC; ANGPT2; ANGPTL4; AREG; ATG5; BBC3; BIRC3; CA12; CA9; CCN2; CCND1; CD274; CDCP1; CDKN1A; CHKA; CKB; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EGLN3; EPO; FGF2; FLT1; FOS; FXN; GJA1; GLS; HOXA5; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LOX; MB; NBN; NDRG1; NEK8; NFIL3; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PGK1; PIK3CA; PKM; PLAUR; PLIN2; PPARG; PRKCA;	75

		<i>RB1CC1; RET; SERPINE1; SLC29A1; SLC2A1; SLC2A3; SLC7A5; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFAIP3; TPP2; UNG; VCAM1; VEGFA</i>	
Post-Translational Modification	4.05E-12	<i>ADM; AREG; BBC3; BIRC3; CCN2; CCND1; CDKN1A; CXCL12; CXCR4; EDN1; EGFR; EPO; FGF2; FLT1; HSPA4; IGFBP3; KDR; LOX; PDGFB; PDPK1; PHLPP1; PIK3CA; PLAUR; PRKCA; RB1CC1; RET; SOX9; SPHK1; TEK; TGFB1; VEGFA</i>	31
	1.23E-15		
Skeletal and Muscular System Development and Function	1.08E-11	<i>ADM; ANGPT2; BIRC3; CCN2; CCN5; CCND1; CDKN1A; CKM; CXCL12; CXCR4; EDN1; EGFR; EPO; FGF2; FHL1; FOS; GJA1; ICAM1; IGFBP3; IGFBP5; IL6; LOX; MB; NR4A1; PDGFB; PDPK1; PIK3CA; PLAUR; PPARG; PRKCA; RB1CC1; SERPINE1; SOX9; SPHK1; TGFB1; TGFB3; TNFAIP3; VCAM1; VEGFA</i>	39
Tissue Development	1.73E-13	<i>ADM; ANGPT2; ANGPTL4; AREG; CA9; CCN2; CCN5; CCND1; CD274; CDKN1A; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EIF5A; EPO; FGF2; FLT1; FOS; GJA1; HOXA5; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; LOXL2; NANOG; NBN; NR4A1; NT5E; PDGFB; PDPK1; PFKFB3; PIK3CA; PKM; PLAUR; POU5F1; PPARG; PRKCA; RET; SERPINE1; SLC2A1; SLC2A3; SLC7A5; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFAIP3; TNFSF15; VCAM1; VEGFA</i>	58
	3.23E-30		
Tissue Morphology	3.33E-14	<i>ADM; ANGPT2; ATG5; BBC3; BIRC3; CA9; CCN2; CCND1; CD274; CDKN1A; CORO1A; CXCL12; CXCL2; CXCR4; DDIT3; EDN1; EGFR; EPO; FGF2; FLT1; FOS; FXN; GJA1; GLS; HOXA5; ICAM1; IGFBP3; IGFBP5; IL6; ITPR1; KDR; L1CAM; NBN; NFIL3; NR4A1; NT5E;</i>	60
	2.65E-		

24 PDGFB; PDPK1; PHLPP1; PIK3CA; PKM; PLAUR; POU5F1; PPARG; RB1CC1; RET;
SERPINE1; SLC29A1; SLC2A1; SLC2A3; SOX9; SPHK1; TEK; TGFB1; TGFB3; TNFAIP3;
TNFSF15; TPP2; VCAM1; VEGFA
