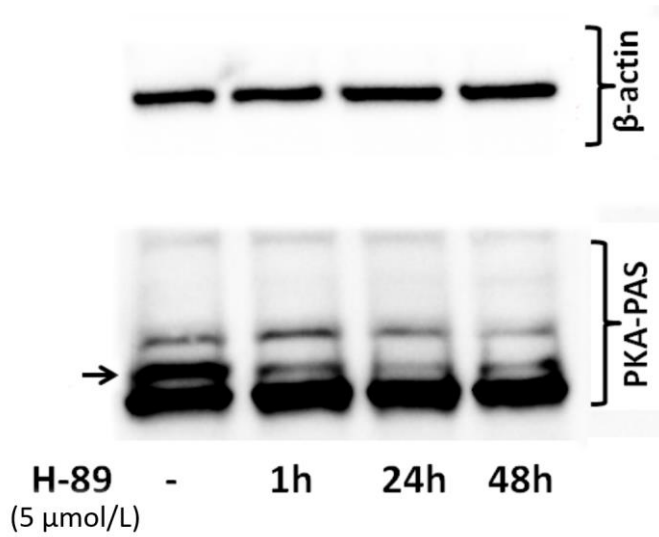


Gene	Fold change	P value	FDR P value
<i>FFAR1</i>	1.13	0.2157	0.3601
<i>FFAR4</i>	-1.09	0.9863	0.9910

Supplementary Figure 1 Relative expression levels of *FFAR1* and *FFAR4* genes in eighteen CRC patients. The difference for both genes is statistically insignificant.



Supplementary Figure 2 Time course analysis of effect of protein kinase inhibitor (H89) for 48 h. PKA: Protei kinase A.

Supplementary Table 1 Signal intensities for free fatty acid receptor 2 and 3 genes in patient samples

Sample ID	FFAR2 signal in normal sample	FFAR2 signal in tumor sample
032713-01	7.16	5.73
042412-01	7.76	4.56
051611-01	7.11	5.65
701113-01	6.52	5.21
073011-01	6.25	5.23
092511-01	8.28	4.78
092611-01	6.02	5.17
112611-01	6.52	4.15
112611-02	6.37	5.33
112611-03	5.7	4.8
120112-01	6.5	5.36
120511-01	5.86	5.01
010213-01	6.11	5.17
012114-01	5.6	4.74
042214-01	5.72	4.99
052811-01	6.25	4.58
061013-01	5.83	4.48
070911-01	5.46	5.48

FFAR: Free fatty acid receptor.

Supplementary Table 2 Details of paired *t*-test to analyse matched tumor normal samples

Table analysed	Data 1
Column B <i>vs</i> Column A	Tumor <i>vs</i> Normal
Paired <i>t</i> test	
<i>P</i> value	< 0.0001
<i>P</i> value summary	****
Significantly different (<i>P</i> < 0.05)?	Yes
One- or two-tailed <i>P</i> value?	Two-tailed
<i>t</i> , <i>df</i>	<i>t</i> = 6.721 <i>df</i> = 17
Number of pairs	18
How big is the difference?	
Mean of differences	-1.388
SD of differences	0.876
SE of differences	0.2065
95% confidence interval	-1.823 to -0.9521
<i>R</i> ² (partial eta squared)	0.7266
How effective was the pairing?	
Correlation coefficient (<i>r</i>)	-0.04606
<i>P</i> value (one tailed)	0.428
<i>P</i> value summary	NS

Supplementary Table 3 Values used for calculating fold change of free fatty acid receptor 2 and 3 genes using quantitative real time polymerase chain reaction

Sample type	Gene	Ct Mean	Adj. Ct Mean	Δ Ct Mean	Δ Ct SE	$\Delta\Delta$ Ct	RQ
Tumor	<i>FFAR2</i>	27.9012	27.9012	5.339917	0.741014	0.90544	0.53387
Tumor	<i>GAPDH</i>	22.56128	22.56128	NaN	NaN	NaN	NaN
Normal	<i>FFAR3</i>	27.94617	27.94617	3.346522	1.645813	0	1
Tumor	<i>FFAR3</i>	27.36378	27.36378	4.802503	1.365864	1.455981	0.364507
Normal	<i>GAPDH</i>	24.59965	24.59965	NaN	NaN	NaN	NaN
Normal	<i>FFAR2</i>	29.03413	29.03413	4.434476	1.315677	0	1

FFAR: Free fatty acid receptor; Ct: Threshold cycle.

Supplementary Table 4 Values used for calculating heat map of five patient samples from the group of patients studied

Sample	Type	Gene	Ct mean	ΔCt	ΔCt SE	ΔCt + control mean
012114-N	Normal	<i>FFAR2</i>	24.74934	1.987135	0.100897	15.74241
012114-N	Normal	<i>FFAR3</i>	22.542	-0.22021	0.118598	13.53506
012114-T	Tumor	<i>FFAR2</i>	28.19574	3.132869	0.056022	16.88814
012114-T	Tumor	<i>FFAR3</i>	24.74485	-0.31802	0.130176	13.43725
042214-01 N	Normal	<i>FFAR2</i>	35.30254	1.303394	NaN	15.05867
042214-01 N	Normal	<i>FFAR3</i>	33.90606	-0.09309	0.653177	13.66218
042214-01 T	Tumor	<i>FFAR3</i>	33.94321	7.829065	0.462647	21.58434
042214-01 T	Tumor	<i>FFAR2</i>	32.93634	6.822193	0.083337	20.57747
092611-N	Normal	<i>FFAR2</i>	25.22016	2.287048	0.161302	16.04232
092611-N	Normal	<i>FFAR3</i>	22.86852	-0.06459	0.190048	13.69068
092611-T	Tumor	<i>FFAR2</i>	25.49246	3.869785	0.06274	17.62506
092611-T	Tumor	<i>FFAR3</i>	23.87511	2.252433	0.14136	16.0077
112611-N	Normal	<i>FFAR3</i>	30.85896	7.540087	0.232233	21.29536
112611-N	Normal	<i>FFAR2</i>	28.71887	5.400002	0.211308	19.15527
112611-T	Tumor	<i>FFAR3</i>	29.61054	7.738243	0.210959	21.49352
112611-T	Tumor	<i>FFAR2</i>	27.03243	5.16013	0.087961	18.9154
120112-N	Normal	<i>FFAR2</i>	25.37826	1.873268	0.084152	15.62854
120112-N	Normal	<i>FFAR3</i>	23.38211	-0.12288	0.06885	13.63239
120112-T	Tumor	<i>FFAR2</i>	24.57696	3.406352	0.083246	17.16162
120112-T	Tumor	<i>FFAR3</i>	23.25544	2.084832	0.186496	15.8401

Ct: Threshold cycle.

Supplementary Table 5 Signal intensities for free fatty acid receptor 1 and 4 genes in patient samples

	FFAR1 signal in tumor tissue	FFAR1 signal in normal tissue	FFAR4 signal in tumor tissue	FFAR4 signal in normal tissue
032713-01	8.18	8.22	9.62	10.29
042412-01	8.44	7.68	10.98	6.56
051611-01	8.36	7.34	7	7.98
70113-01	8.46	7.84	8.52	6.04
073011-01	8.67	8.44	7.92	7.75
092511-01	7.71	8.03	10.07	8.1
092611-01	8.48	7.74	7.48	11
112611-01	7.42	8.51	8.4	7.16
112611-02	7.8	8.25	7.69	9.9
112611-03	8.24	7.82	10.51	10.79
120112-01	8.17	7.95	8.39	10.51
120511-01	8.39	8.15	7.4	8.67
010213-01	8.49	8.06	9.61	8.48
012114-01	8.04	8	7.32	9.9
042214-01	7.67	7.9	8.33	9.29
052811-01	7.95	8.13	7.86	6.71
061013-01	8.24	8.41	8.71	6.56
070911-01	8.21	8.03	10.08	10.02

FFAR: Free fatty acid receptor.