

Reduced expression of short chain free fatty acid receptors 2 and 3 increases proliferation of colon cancer cells

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Supplementary Table 1

	FFAR1 signal in Tumor tissue	FFAR1 signal in Normal tissue	FFAR4 signal in Tumor tissue	FFAR4 signal in Normal tissue
03271 3-01	8.18	8.22	9.62	10.29
04241 2-01	8.44	7.68	10.98	6.56
05161 1-01	8.36	7.34	7	7.98
70113 -01	8.46	7.84	8.52	6.04
07301 1-01	8.67	8.44	7.92	7.75
09251 1-01	7.71	8.03	10.07	8.1
09261 1-01	8.48	7.74	7.48	11
11261 1-01	7.42	8.51	8.4	7.16
11261 1-02	7.8	8.25	7.69	9.9
11261 1-03	8.24	7.82	10.51	10.79
12011 2-01	8.17	7.95	8.39	10.51
12051 1-01	8.39	8.15	7.4	8.67
01021 3-01	8.49	8.06	9.61	8.48
01211 4-01	8.04	8	7.32	9.9
04221 4-01	7.67	7.9	8.33	9.29
05281 1-01	7.95	8.13	7.86	6.71
06101 3-01	8.24	8.41	8.71	6.56
07091 1-01	8.21	8.03	10.08	10.02

Supplementary table 2

Sample ID	FFAR2 Signal in Normal Sample	FFAR2 Signal in Tumor Sample	FFAR3 Signal in Normal Sample	FFAR3 Signal in Tumor Sample
032713-01	7.16	5.73	6.86	6.61
042412-01	7.76	4.56	6.88	6.26
051611-01	7.11	5.65	6.48	6.65
70113-01	6.52	5.21	6.27	6.89
073011-01	6.25	5.23	7.08	7.26
092511-01	8.28	4.78	6.75	6.45
092611-01	6.02	5.17	6.56	6.9
112611-01	6.52	4.15	7.41	6.54
112611-02	6.37	5.33	6.58	6.46
112611-03	5.7	4.8	6.48	6.47
120112-01	6.5	5.36	6.82	6.86
120511-01	5.86	5.01	6.63	6.74
010213-01	6.11	5.17	6.93	6.64
012114-01	5.6	4.74	6.36	6.15
042214-01	5.72	4.99	6.55	6.14
052811-01	6.25	4.58	6.1	6.2
061013-01	5.83	4.48	7.01	6.12
070911-01	5.46	5.48	6.55	6.74

These samples were also tested with qRT-PCR

Supplementary Table 3

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

Supplementary Table 4

Values used for calculating fold change of FFAR2 and FFA3 genes using qRT-PCR							
Sample Type	Gene	Ct Mean	Adj. Ct Mean	Δ Ct Mean	Δ Ct SE	$\Delta\Delta$ Ct	RQ
Tumor	FFAR2	27.9012	27.9012	5.339917	0.741014	0.90544	0.53387
Tumor	GAPDH	22.56128	22.56128	NaN	NaN	NaN	NaN
Normal	FFAR3	27.94617	27.94617	3.346522	1.645813	0	1
Tumor	FFAR3	27.36378	27.36378	4.802503	1.365864	1.455981	0.364507
Normal	GAPDH	24.59965	24.59965	NaN	NaN	NaN	NaN
Normal	FFAR2	29.03413	29.03413	4.434476	1.315677	0	1

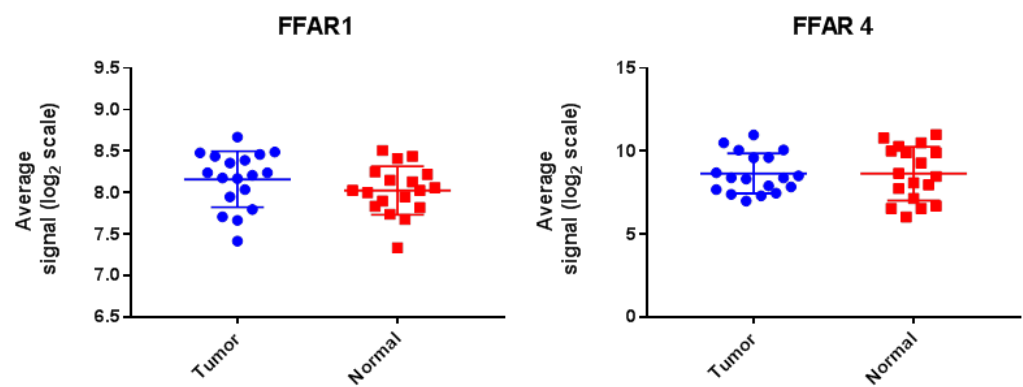
Supplementary Table 5

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

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 S1



Gene	Fold change	p-value	FDR pvalue
FFAR1	1.13	0.2157	0.3601
FFAR4	-1.09	0.9863	0.9910

Supplementary Figure 2

Time course analysis of effect of protein kinase inhibitor (H89) for 48 hrs.

