

RAF1-MEK1-ERK/AKT axis and NSCLC cell lines resistance to erlotinib

Supplementary data

Supplementary Table 1. Primers for qPCR validation

gene	forward	reverse
Actb	caccatgtaccctggcatt	gtacttgcgctcaggaggag
CCNT1	ACAACAAACGGTGGTATTTCACT	CCTGCTGGCGATAAGAAAGTT
CNNM4	CAGGAGATTCGCACTGTTTACAA	GGGCTCCGTCACCTTCAAC
CTNNA1	AAGCGAAGATTGCGGAACA	CATTTGGACACTTCAGCATCCA
CX3CL1	CCATGAGTCCCCTGTTTGTTC	TGCCTACAACCTCCCTTTCC
CXCL16	CAGAAGCAGCCGAAAAAAT	GGACTGGCACTGTGGCTGAT
CXCR4	ACGCCACCAACAGTCAGAG	AGTCGGGAATAGTCAGCAGGA
EGFR	TCTGCCGCAAATTCGAGAC	GTGGGGTTGTAGAGCATGAGT
EPHB4	CCACCGGAAGGTGAATGTC	CTGGGCGCACTTTTGTAGAA
MYC	GGCGAACACACAACGTCTTG	TGGTCACGCAGGGCAA
RAB3D	CACCATCACACGGCCTACT	CGGCAAAGGATCCTGATTG
RET	AAAGTGGCATTGGGCCTCTAC	GCAGGGCATGGACGTACAG
STK10	TCAGGAGTCCCACCTTGCAT	GCATTCCATTTCCCCTGAT
TP53	CAGCACATGACGGAGGTTGT	TCATCCAATACTCCACACGC

Supplementary Table 2. Significantly expression-altered genes in Calu-6 compared to U1752

Probe Set ID	Gene Symbol	Normalized difference	fold change	P value
8151532	FABP4	2.6974	6.486319	2.29E-03
8072626	TIMP3	2.6526	6.287995	6.80E-04
8047467	CDK15	2.4937	5.632206	3.55E-04
8108217	TGFBI	2.4842	5.59524	4.46E-04
7954090	EMP1	2.3863	5.228148	6.63E-04
7982597	THBS1	2.2967	4.913326	3.31E-05
8120967	NT5E	2.2249	4.674785	7.40E-06
7908388	RGS1	2.2249	4.674785	8.63E-04
8058857	IGFBP5	2.1317	4.382336	8.98E-04
8003667	SERPINF1	2.1011	4.290364	1.37E-03
8021081	SLC14A1	2.0958	4.274631	9.29E-04
8166611	MAGEB2	2.0954	4.273446	7.97E-04
7948229	SLC43A3	2.0428	4.120445	4.65E-05
8059905	COL6A3	2.0232	4.064844	3.43E-03
8102950	INPP4B	2.0215	4.060057	1.50E-03
7954196	MGST1	2.0159	4.044328	9.41E-04
8081548	PVRL3	2.013	4.036207	1.07E-04
8109677	GABRG2	1.992	3.977881	8.99E-04
7962579	AMIGO2	1.9752	3.931827	6.39E-04
8157524	TLR4	1.9164	3.774799	7.73E-03
7914270	LAPTM5	1.8676	3.64925	2.98E-04
8045664	LYPD6B	1.8387	3.576876	4.12E-05
8138381	AGR2	1.7371	3.333644	9.14E-03
8152512	TNFRSF11B	1.7184	3.290713	1.10E-02
7974341	GNG2	1.7124	3.277055	1.36E-03
8147000	ZFH4	1.7074	3.265718	1.36E-03
8058765	FN1	1.6959	3.239789	1.17E-04

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8140709	KIAA1324L	1.6903	3.227238	3.18E-03
8140967	SAMD9	1.6825	3.209837	2.02E-02
8129974	FUCA2	1.6594	3.158851	6.26E-04
8040365	TRIB2	1.6538	3.146614	6.82E-03
8113234	PCSK1	1.6491	3.136379	2.31E-04
8152606	SNTB1	1.6442	3.125745	4.46E-03
7983718	SCG3	1.6375	3.111262	5.74E-03
7947230	BDNF	1.636	3.108029	4.14E-03
7944351	FOXR1	1.6266	3.087844	3.07E-04
8100109	GABRA2	1.6191	3.071833	9.34E-06
8147030	STMN2	1.6173	3.068003	1.03E-03
8077899	PPARG	1.5784	2.986385	2.48E-05
8021169	LIPG	1.5772	2.983902	6.94E-04
7972713	EFNB2	1.5685	2.965962	1.36E-04
8104901	IL7R	1.5617	2.952015	9.35E-03
8078350	TGFBR2	1.553	2.934267	2.97E-03
8057506	FRZB	1.5393	2.906534	5.08E-03
7955613	KRT7	1.5239	2.875674	2.30E-02
8138745	HOXA7	1.5042	2.836673	2.33E-02
8051573	CDC42EP3	1.494	2.816688	6.65E-04
8095508	AMTN	1.4848	2.798784	9.02E-03
8036710	GMFG	1.4735	2.776948	3.70E-03
7972003	KLF12	1.4689	2.768108	3.06E-05
8106660	RASGRF2	1.4674	2.765231	9.85E-04
8018975	LGALS3BP	1.4653	2.761209	1.39E-03
8089082	DCBLD2	1.4594	2.74994	8.59E-04
8104663	CDH6	1.452	2.735871	2.91E-04
7922976	PTGS2	1.4476	2.727539	1.11E-03
7917912	DPYD	1.4436	2.719987	2.71E-04
8066822	SULF2	1.4386	2.710577	6.38E-04
7960362	LOC100128816	1.4257	2.686448	1.61E-03
8106448	PDE8B	1.4252	2.685517	4.69E-03
8068022	MIR155	1.42	2.675855	4.54E-03
8080810	PTPRG	1.4137	2.664196	2.98E-03
8115327	SPARC	1.402	2.642677	2.24E-04
7957140	LGR5	1.3987	2.636639	4.91E-03
8163637	TNC	1.3952	2.63025	6.95E-04
8128991	LAMA4	1.3901	2.620968	6.92E-03
8013753	RAB34	1.3877	2.616612	7.58E-03
8078330	RBMS3	1.3794	2.601602	3.76E-04
8150962	TOX	1.375	2.593679	4.99E-03
7955441	METTL7A	1.3749	2.593499	1.96E-03
7987145	FMN1	1.37	2.584706	6.69E-03
7939932	OR4C6	1.3451	2.540478	5.44E-04
8023415	TCF4	1.3405	2.532391	9.23E-05
8139500	TNS3	1.3394	2.530461	3.66E-04
8106743	VCAN	1.3354	2.523454	1.82E-03
8049487	MLPH	1.3335	2.520133	5.68E-04
7959856	PIWIL1	1.3247	2.504808	5.61E-03

RAF1-MEK1-ERK/AKT axis and NSCLC cell lines resistance to erlotinib

7962559	SLC38A4	1.3179	2.49303	3.25E-03
8046078	B3GALT1	1.3152	2.488368	4.46E-03
8111387	ADAMTS12	1.3114	2.481823	1.25E-02
8140971	SAMD9L	1.3078	2.475637	1.90E-03
8138749	HOXA9	1.3063	2.473065	9.83E-04
8044212	SULT1C2	1.2943	2.45258	8.81E-04
8047738	NRP2	1.2886	2.442909	1.71E-03
8005171	TRPV2	1.285	2.436821	4.82E-04
7909789	TGFB2	1.2834	2.43412	1.37E-04
7902541	IFI44L	1.2824	2.432433	1.51E-02
7967325	HCAR1	1.2821	2.431927	1.87E-04
8175710	CSAG3	1.2683	2.408776	3.30E-03
8081431	ALCAM	1.2634	2.400608	3.18E-03
8103769	HPGD	1.2591	2.393464	3.69E-04
7995681	MMP2	1.2573	2.390479	2.59E-03
7944667	SORL1	1.2561	2.388492	6.38E-04
8114938	JAKMIP2	1.253	2.383365	2.56E-06
7986214	SLCO3A1	1.2481	2.375284	2.00E-03
8148040	MAL2	1.2412	2.363951	1.69E-03
8170576	CSAG1	1.2332	2.350879	3.64E-03
8111234	CDH12	1.2295	2.344857	1.39E-03
8150419	ZMAT4	1.2287	2.343557	9.84E-04
7920291	S100A16	1.2286	2.343395	4.51E-03
8150698	SNAI2	1.2282	2.342745	4.79E-04
7978407	PRKD1	1.2094	2.312414	2.45E-02
7908072	LAMC2	1.201	2.29899	1.85E-03
8150881	PLAG1	1.1972	2.292942	3.34E-02
8142981	PODXL	1.1907	2.282635	5.81E-04
8035304	BST2	1.1906	2.282476	2.98E-02
8170580	CSAG3	1.1855	2.274422	2.79E-03
8140955	CDK6	1.1836	2.271429	1.09E-04
8020973	FHOD3	1.1717	2.25277	3.41E-03
8095728	EREG	1.1699	2.249961	5.39E-05
8094789	LIMCH1	1.1609	2.235969	1.54E-03
7932985	NRP1	1.1593	2.23349	1.57E-03
7934979	ANKRD1	1.1553	2.227306	5.55E-04
7953321	LTBR	1.1546	2.226226	6.99E-03
8055688	RND3	1.1517	2.221755	1.31E-03
7956867	HMGA2	1.1514	2.221293	3.59E-04
8088776	FOXP1	1.1466	2.213915	4.11E-04
7957298	NAV3	1.1397	2.203352	2.48E-03
7985147	DNAJA4	1.1346	2.195577	3.80E-03
7951372	CASP4	1.1288	2.186768	1.03E-03
8018754	CYGB	1.1249	2.180864	4.85E-03
8099591	RN5S157	1.1248	2.180713	1.15E-02
8099633	PPARGC1A	1.1236	2.1789	1.42E-04
7969665	HS6ST3	1.1213	2.175429	1.11E-03
8060997	SPTLC3	1.1209	2.174826	2.57E-03
8007100	IGFBP4	1.1205	2.174223	1.70E-05

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8093332	ZNF876P	1.1194	2.172566	2.02E-02
8113130	MCTP1	1.1192	2.172265	1.24E-02
7957338	SYT1	1.1183	2.17091	5.02E-05
8079217	ZNF35	1.1158	2.167151	1.62E-02
7939341	CD44	1.113	2.16295	9.63E-04
8081590	PHLDB2	1.1106	2.159354	1.84E-03
8047487	FZD7	1.1083	2.155915	2.94E-04
8052872	TGFA	1.1078	2.155167	4.15E-03
8166747	SYTL5	1.1063	2.152928	1.79E-03
8037079	ATP1A3	1.1043	2.149945	2.44E-04
7908409	RGS2	1.1036	2.148902	8.83E-05
8065071	FLRT3	1.1032	2.148307	3.35E-03
8045499	HNMT	1.097	2.139094	1.30E-03
7917754	BCAR3	1.0921	2.131841	8.69E-04
8039075	VN1R4	1.0881	2.125939	1.83E-02
8085797	THRB	1.0879	2.125644	4.55E-03
8013329	SNORD3D	1.0859	2.122699	4.37E-04
8013325	SNORD3B-2	1.0856	2.122258	4.39E-04
8013323	SNORD3B-1	1.0855	2.122111	4.38E-04
8005553	SNORD3B-2	1.0852	2.12167	4.38E-04
8005547	SNORD3D	1.0851	2.121523	4.38E-04
7905329	MLLT11	1.0827	2.117996	6.21E-04
8083594	PTX3	1.0809	2.115355	5.25E-03
7917944	MIR137	1.0715	2.101617	3.86E-02
8051864	LOC728819	1.0669	2.094927	1.48E-02
8108447	CXXC5	1.0662	2.093911	2.25E-04
8045674	LYPD6	1.0646	2.09159	1.99E-02
8172043	SRPX	1.0625	2.088548	5.92E-05
8059413	DOCK10	1.0512	2.072253	2.50E-02
7990555	NRG4	1.0492	2.069382	3.64E-05
8138741	HOXA6	1.0473	2.066658	1.84E-03
7973974	PAX9	1.0471	2.066372	1.50E-03
8069269	COL6A1	1.0467	2.065799	8.71E-04
8102342	ELOVL6	1.0421	2.059223	4.41E-04
7914342	FABP3	1.0405	2.05694	2.91E-03
8081564	CD96	1.0399	2.056085	3.72E-03
7986293	MCTP2	1.0396	2.055658	3.32E-04
7930498	ACSL5	1.0349	2.048972	1.59E-02
7950899	RAB38	1.032	2.044857	1.93E-03
8029006	AXL	1.0302	2.042307	2.45E-03
7962000	PTHLH	1.0294	2.041175	3.87E-03
8091972	MECOM	1.0256	2.035806	2.39E-03
8068633	B3GALT5	1.0207	2.028903	1.33E-02
8054479	MALL	1.0158	2.022024	1.93E-03
7929711	GOLGA7B	1.0138	2.019223	4.00E-02
8150988	ASPH	1.0134	2.018663	1.28E-04
8059580	DNER	1.0113	2.015727	2.58E-03
7982000	SNORD116-26	1.0095	2.013213	1.48E-02
7899627	TINAGL1	1.007	2.009728	2.81E-03

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8162216	SHC3	1.0051	2.007083	6.91E-04
7930980	PPAPDC1A	1.0029	2.004024	2.44E-03
8145977	PLEKHA2	1.0026	2.003608	3.74E-04
8117422	HIST1H4F	-1.0015	0.49948	1.15E-02
8105908	OCLN	-1.0033	0.498858	5.86E-04
8142471	WNT2	-1.0089	0.496925	1.18E-02
7976836	MIR495	-1.0104	0.496409	3.85E-02
8048026	CPS1	-1.0164	0.494348	3.94E-03
8155864	RORB	-1.0183	0.493698	3.87E-04
7928994	LIPK	-1.0261	0.491036	5.76E-06
8148317	MYC	-1.0329	0.488727	4.49E-04
8163896	STOM	-1.0362	0.48761	1.21E-03
8091715	LXN	-1.0482	0.483571	9.21E-05
8140579	CACNA2D1	-1.049	0.483303	4.78E-05
8054297	CHST10	-1.05	0.482968	1.17E-02
8108378	CTNNA1	-1.0562	0.480897	2.09E-04
8081758	GRAMD1C	-1.0567	0.48073	1.34E-02
7918768	DENND2C	-1.0692	0.476583	4.45E-03
8075390	SEC14L4	-1.0693	0.47655	1.44E-02
8111255	CDH10	-1.0699	0.476352	4.77E-05
8005603	SLC47A1	-1.0746	0.474803	8.13E-03
7961215	STYK1	-1.0767	0.474112	1.33E-03
7932765	MPP7	-1.0818	0.472439	2.05E-03
8051583	CYP1B1	-1.083	0.472046	5.76E-04
7976073	FLRT2	-1.0866	0.47087	9.05E-03
7958200	EID3	-1.0872	0.470674	1.53E-03
8149825	STC1	-1.0901	0.469729	8.66E-05
7956878	IRAK3	-1.0902	0.469696	3.86E-04
8109938	RANBP17	-1.0906	0.469566	7.07E-03
8124534	HIST1H4L	-1.0915	0.469273	1.10E-03
8113103	KIAA0825	-1.0953	0.468039	5.35E-03
8075142	TTC28	-1.0954	0.468006	3.73E-04
7917276	LPAR3	-1.0977	0.467261	6.27E-03
8022692	DSC3	-1.1087	0.463712	2.36E-02
8149835	NEFL	-1.109	0.463615	7.53E-03
8076094	DMC1	-1.1096	0.463423	5.44E-03
8151931	TSPYL5	-1.1214	0.459648	2.55E-04
7960947	A2M	-1.1241	0.458788	1.19E-03
7964834	CPM	-1.1278	0.457613	8.36E-03
8036309	ZFP82	-1.1313	0.456504	2.18E-03
8174654	KLHL13	-1.1338	0.455714	1.28E-03
8091515	GPR87	-1.1345	0.455493	2.22E-02
8020164	GNAL	-1.136	0.455019	2.87E-04
7901460	GPX7	-1.1453	0.452096	1.28E-03
8062873	KCNK15	-1.1475	0.451407	2.58E-03
8169249	MID2	-1.1547	0.44916	1.42E-03
8066431	ADA	-1.1648	0.446026	1.88E-03
8111203	LOC285696	-1.1649	0.445995	4.09E-03
7954293	PDE3A	-1.1661	0.445624	5.28E-04

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7991070	HDGFRP3	-1.1694	0.444606	5.28E-03
8173299	EDA2R	-1.1779	0.441994	2.92E-03
8149574	CSGALNACT1	-1.1783	0.441872	1.00E-03
8147796	RIMS2	-1.1855	0.439672	7.77E-03
7984704	NEO1	-1.1885	0.438759	4.62E-04
8108713	PCDHB8	-1.1963	0.436393	1.04E-02
8051298	GALNT14	-1.2016	0.434793	1.24E-03
8123920	ELOVL2	-1.2032	0.434311	5.90E-03
8068100	LINC00189	-1.2042	0.43401	8.27E-03
8011713	CXCL16	-1.205	0.433769	2.78E-02
8114354	NME5	-1.2056	0.433589	6.84E-03
7944803	VWA5A	-1.2078	0.432928	2.01E-04
8063458	DOK5	-1.208	0.432868	1.04E-03
8039054	ZNF347	-1.2092	0.432508	1.55E-03
8024712	ATCAY	-1.2102	0.432209	9.25E-04
8133728	ZP3	-1.2115	0.431819	3.18E-02
7898916	GRHL3	-1.2132	0.431311	2.61E-04
8081219	ST3GAL6	-1.2151	0.430743	3.74E-04
8073766	RIBC2	-1.2154	0.430654	1.38E-03
8107673	GRAMD3	-1.2192	0.429521	3.29E-04
8135661	CFTR	-1.2237	0.428183	2.49E-04
8022176	LAMA1	-1.2313	0.425933	1.94E-03
8113358	ST8SIA4	-1.2335	0.425284	3.14E-03
8089015	PROS1	-1.2447	0.421996	6.01E-03
8047788	ADAM23	-1.2581	0.418094	1.91E-03
8015412	JUP	-1.2591	0.417805	7.82E-04
8020384	GREB1L	-1.2615	0.41711	1.20E-02
8055952	NR4A2	-1.2634	0.416561	1.03E-04
8014248	SLFN13	-1.2668	0.415581	2.93E-03
8146738	MCMDC2	-1.275	0.413225	2.31E-03
8128553	BVES	-1.2751	0.413197	4.77E-03
8144742	EFHA2	-1.2792	0.412024	1.18E-03
8072229	NEFH	-1.2854	0.410257	3.44E-03
8121749	GJA1	-1.2879	0.409547	5.40E-04
8100870	ADAMTS3	-1.2897	0.409036	6.00E-03
7961440	PLBD1	-1.294	0.407819	1.77E-03
8096050	FGF5	-1.2985	0.406549	7.77E-04
8117045	RBM24	-1.301	0.405845	1.03E-03
8052399	BCL11A	-1.3066	0.404273	4.09E-03
8100338	ERVMER34-1	-1.3067	0.404244	3.09E-03
8116874	SYCP2L	-1.3186	0.400924	3.84E-03
8149927	CLU	-1.3291	0.398016	2.58E-04
8174598	IL13RA2	-1.3321	0.39719	7.62E-04
8141094	PDK4	-1.333	0.396942	8.05E-04
8096061	C4orf22	-1.3442	0.393872	2.38E-03
8099760	ARAP2	-1.3519	0.391776	2.42E-03
8104107	TRIML2	-1.3579	0.39015	2.14E-03
8122240	RN5S219	-1.3612	0.389258	5.57E-03
8173059	WNK3	-1.3673	0.387616	2.97E-03

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8169186	TBC1D8B	-1.3733	0.386007	1.01E-02
8051762	SLC8A1	-1.3822	0.383633	4.46E-04
7965231	MGAT4C	-1.3823	0.383607	7.20E-03
7983478	C15orf48	-1.4026	0.378247	1.02E-02
8054135	MGAT4A	-1.4041	0.377854	5.10E-03
8175234	GPC3	-1.4092	0.37652	1.22E-03
8123315	QKI	-1.4101	0.376286	1.71E-02
8014233	SLFN11	-1.4146	0.375114	1.42E-03
8122150	EYA4	-1.4178	0.374283	3.42E-03
8111569	RANBP3L	-1.424	0.372678	2.79E-03
8031398	NLRP2	-1.427	0.371903	3.90E-03
7971077	POSTN	-1.4323	0.37054	7.70E-03
7901497	ZYG11A	-1.4335	0.370232	1.32E-02
7901720	PRKAA2	-1.4367	0.369411	1.04E-04
8127767	ELOVL4	-1.443	0.367802	1.10E-02
8123864	TFAP2A	-1.4518	0.365565	1.35E-03
8141066	PON3	-1.4522	0.365464	1.98E-03
8092169	TNFSF10	-1.4559	0.364528	1.63E-03
8098856	RNF212	-1.4599	0.363518	2.12E-04
8054281	LONRF2	-1.4684	0.361383	3.76E-04
8092251	GNB4	-1.4732	0.360183	1.68E-02
8056323	FIGN	-1.4817	0.358067	1.32E-03
8006433	CCL2	-1.4818	0.358042	2.66E-04
7943413	BIRC3	-1.483	0.357744	5.40E-04
8151341	TRPA1	-1.4885	0.356383	3.79E-03
8112007	EMB	-1.4991	0.353774	2.81E-03
8142079	EFCAB10	-1.5014	0.35321	5.91E-03
8083616	MLF1	-1.5048	0.352379	2.30E-02
8035813	ZNF43	-1.5054	0.352233	6.57E-03
7907222	PRRX1	-1.5115	0.350746	1.45E-04
8070632	CBS	-1.5179	0.349194	6.80E-04
7988414	GATM	-1.5273	0.346926	4.38E-03
7932453	NEBL	-1.5448	0.342743	2.54E-04
8094751	CHRNA9	-1.5464	0.342363	1.91E-03
8166314	PPEF1	-1.5553	0.340258	1.58E-03
8167701	XAGE1B	-1.5561	0.340069	1.19E-03
8167710	XAGE1A	-1.5562	0.340046	1.19E-03
8172757	XAGE1E	-1.5565	0.339975	1.19E-03
8083743	ARL14	-1.5684	0.337182	1.60E-03
8122365	GPR126	-1.5892	0.332356	7.32E-04
8104601	BASP1	-1.6077	0.328121	8.28E-04
8076704	SMC1B	-1.6131	0.326895	1.79E-05
8108697	PCDHB5	-1.6174	0.325922	9.23E-03
7910030	DNAH14	-1.636	0.321747	7.91E-03
8080847	C3orf14	-1.6458	0.319569	4.96E-04
8031632	ZNF542	-1.655	0.317538	6.00E-04
8022711	DSC2	-1.666	0.315126	6.67E-04
8083968	NLGN1	-1.6713	0.31397	1.14E-02
8056611	LRP2	-1.6966	0.308512	2.17E-03

RAF1-MEK1-ERK/AKT axis and NSCLC cell lines resistance to erlotinib

8175539	LDOC1	-1.6995	0.307893	9.97E-04
7927827	MYPN	-1.7026	0.307232	4.16E-03
8144726	TUSC3	-1.7034	0.307062	1.29E-03
8124604	TRNAA46P	-1.7061	0.306487	4.80E-03
7926545	PLXDC2	-1.7085	0.305978	2.30E-05
8135697	ANKRD7	-1.727	0.302079	4.24E-04
8052355	EFEMP1	-1.7591	0.295432	8.81E-03
8094778	UCHL1	-1.7683	0.293554	9.12E-04
8052438	LOC339803	-1.7751	0.292174	2.08E-02
8098379	WDR17	-1.8297	0.281323	7.45E-04
7957452	ALX1	-1.8515	0.277104	7.14E-04
8150138	TEX15	-1.8548	0.276471	1.96E-04
8140556	HGF	-1.8902	0.26977	9.05E-05
8067903	USP25	-1.936	0.26134	9.69E-05
7934215	SPOCK2	-1.9485	0.259085	1.22E-04
7903227	PALMD	-1.9585	0.257296	3.43E-04
8007643	C17orf104	-1.9625	0.256583	8.34E-04
8127502	LINC00472	-1.9658	0.255997	4.68E-05
8113773	ALDH7A1	-1.9826	0.253033	8.97E-03
7937079	BNIP3	-1.9953	0.250816	4.94E-05
8170531	MAGEA4	-2.0525	0.241066	2.53E-03
7962250	CPNE8	-2.0745	0.237418	5.26E-03
7944769	GRAMD1B	-2.0779	0.236859	7.15E-04
8124531	HIST1H3I	-2.0804	0.236449	4.36E-04
7922994	FAM5C	-2.1145	0.230926	1.93E-04
8069532	HSPA13	-2.2188	0.21482	4.90E-04
8105040	OSMR	-2.2762	0.206441	1.59E-03
7957458	NTS	-2.4193	0.186947	1.88E-04
8067140	CYP24A1	-2.4803	0.179207	1.88E-05
7930208	INA	-2.503	0.176409	7.36E-04
8112980	EDIL3	-2.6215	0.162499	7.84E-04
8141016	TFPI2	-3.1938	0.109287	5.08E-06

**Supplementary Table 3.** 13 genes regulated by RAF1

Probe ID	Genes in dataset	Prediction (based on expression direction)	Fold Change	Findings
7954090	EMP1	Activated	5.228	Upregulates
7908388	RGS1	Activated	4.675	Upregulates
8089082	DCBLD2	Activated	2.750	Upregulates
7922976	PTGS2	Activated	2.728	Upregulates
7934979	ANKRD1	Activated	2.227	Upregulates
8055688	RND3	Affected	2.222	Regulates
7956867	HMGA2	Activated	2.221	Upregulates
7939341	CD44	Activated	2.163	Upregulates
7962000	PTHLH	Activated	2.041	Upregulates
8105908	OCLN	Activated	-2.005	Downregulates
8148317	MYC	Inhibited	-2.046	Upregulates
8105040	OSMR	Inhibited	-4.844	Upregulates
8141016	TFPI2	Inhibited	-9.150	Upregulates