

Correlation of each gene with each PAM50 signature

Basal-like	Pearson.Coeff.	Her2E	Pearson.Coeff.	LumA	Pearson.Coeff.	LumB	Pearson.Coeff.
KIF23	0.6448	TMEM45B	0.6214	OGN	0.6505	MYBL2	0.4753
FOXC1	0.6360	AGR2	0.5823	ZEB1	0.6296	CCNA2	0.4405
FOXM1	0.6300	TFF3	0.5787	FAM198B	0.6163	PTTG1	0.4324
TOP2A	0.6217	FGFR4	0.5736	CYBRD1	0.6143	KIF4A	0.4318
NDC80	0.6117	FOXA1	0.5717	RAI2	0.6093	PGAM5	0.4234
CITED4	0.6102	SPDEF	0.5641	SCUBE2	0.6022	RRM2	0.4228
NUF2	0.6036	KRT18	0.5612	GNG11	0.5938	TFRC	0.4177
CDC20	0.6008	GALNT7	0.5605	RECK	0.5870	HSPD1	0.4025
CENPF	0.5946	AKT1	0.5031	LHFP	0.5604	RAB35	0.3972
TTK	0.5901	FAM174B	0.4999	REEP6	0.5573	CDK4	0.3966
CHEK1	0.5885	CAPN13	0.4920	PGR	0.5544	CENPA	0.3882
MKI67	0.5866	MLPH	0.4679	SETBP1	0.5525	UBE2T	0.3880
TYMS	0.5865	SCGB2A2	0.4618	ERBB4	0.5501	AURKA	0.3813
CDCA7	0.5832	REEP6	0.4553	KIAA1370	0.5415	RELB	0.3789
CEP55	0.5827	PIP	0.4523	IGF1	0.5339	MAD2L1	0.3769
ANLN	0.5784	GPR160	0.4347	SEMA3C	0.5285	NEK2	0.3725
MIA	0.5781	TOM1L1	0.4308	FAP	0.5245	CDCA5	0.3715
ATAD2	0.5629	CEACAM6	0.4162	CXCL14	0.5215	CDC25C	0.3709
KIFC1	0.5564	IDH2	0.4075	MLPH	0.5168	UBE2C	0.3559
TMEM158	0.5548	ACOT4	0.4027	CBX7	0.5161	BIRC5	0.3558
CDK1	0.5513	C4orf34	0.3956	LTBP2	0.5089	COX7B	0.3522
CKS2	0.5505	AR	0.3863	GSTM3	0.5008	HJURP	0.3517
NEK2	0.5494	DEGS2	0.3841	C4orf34	0.4982	BLVRA	0.3509
CENPA	0.5403	NQO1	0.3782	TMEM45B	0.4972	CCNB1	0.3504
BUB1	0.5400	ABCC3	0.3781	AR	0.4955	CDC6	0.3494
CDC45L	0.5359	TSPAN13	0.3555	PIK3R1	0.4861	GSTP1	0.3480
GGH	0.5313	CELSR1	0.3534	PPFIBP1	0.4858	RAD51	0.3467
GTPBP4	0.5304	AGR3	0.3496	C16orf45	0.4854	CKS1B	0.3463
GPSM2	0.5149	AZGP1	0.3462	TFF3	0.4816	TIMM17A	0.3414
BOP1	0.5057	F11R	0.3400	FBN1	0.4813	HN1	0.3338
TCF7L1	0.5024	Keraton.8	0.3333	TGFB2	0.4813	CDKN3	0.3310
MYC	0.4993	MYO5C	0.3317	Metical.LOC4	0.4808	COX6C	0.3276
KIF2C	0.4959	XBP1	0.3300	ABAT	0.4793	PRC1	0.3271
CDCA8	0.4932	TFF1	0.3297	CAV1	0.4784	E2F1	0.3254
ORC6L	0.4911	C17orf37	0.3278	CAMK2N1	0.4709	IDH2	0.3250
LRP8	0.4881	MUC1	0.3267	MME	0.4675	CKS2	0.3247
EXO1	0.4831	CLDN3	0.3167	SPATA7	0.4642	F11R	0.3199
CCNB1	0.4807	FBP1	0.3153	SLC40A1	0.4515	KRT18	0.3185
SUV39H2	0.4779	RRM2	0.3151	SCGB2A2	0.4509	CDC123	0.3183
PRC1	0.4778	S100A8	0.3151	NTN4	0.4506	CEP55	0.3158
EZH2	0.4752	RNF103	0.3126	TMEM25	0.4451	NFKB1	0.3154
FANCA	0.4726	PNP	0.3115	AGR3	0.4428	NFKBIE	0.3133
CDCA5	0.4704	ELOVL5	0.3076	PVRL3	0.4426	GABPB1	0.3129
MCM3	0.4667	CXXC5	0.3067	CEACAM6	0.4396	MTOR	0.3118

UBE2T	0.4664	C1orf106	0.3034	TCEAL1	0.4379	PCNA	0.3107
PHGDH	0.4626	S100A9	0.3014	ADRA2A	0.4363	MYB	0.3101
UBE2C	0.4612	SLC9A3R1	0.2975	IL6ST	0.4339	TYMS	0.3101
CDT1	0.4578	CDC6	0.2974	DNALI1	0.4334	PARP1	0.3084
PUF60	0.4514	SPINT2	0.2959	H19	0.4312	NOP56	0.3072
MCM2	0.4477	BLVRA	0.2928	PIP	0.4280	IDO1	0.3067
KIF4A	0.4467	CD24	0.2892	THY1	0.4237	EXO1	0.3059
CTPS	0.4414	WIPF2	0.2791	ADRA2C	0.4228	ATAD2	0.3050
PCNA	0.4389	ERBB2	0.2772	GALNT7	0.4178	CLDN3	0.3023
CENPI	0.4371	ZNF217	0.2762	CAPN13	0.4174	AGR2	0.3010
PTTG1	0.4317	ERBB4	0.2746	NT5E	0.4165	LAG3	0.3001
HJURP	0.4305	RELA	0.2740	C1orf21	0.4144	IKBKE	0.2993
CCNE1	0.4301	IGF2R	0.2737	IGBP1	0.4128	NUF2	0.2983
CKS1B	0.4284	AVL9	0.2727	TWIST1	0.4118	GALNT7	0.2977
BIRC5	0.4265	NAT1	0.2690	RARA	0.4106	ATAD3A	0.2925
HN1	0.4078	MTOR	0.2652	AXL	0.4098	C16orf61	0.2919
RANBP1	0.4069	PITX1	0.2639	GLRB	0.4083	PITX1	0.2919
BYSL	0.4016	CLDN7	0.2612	TWIST2	0.4082	PSMD14	0.2906
MUC5B	0.4009	TK1	0.2609	INPP4B	0.4056	SPAG5	0.2904
MELK	0.3992	MYBL2	0.2573	ELSPBP1	0.4012	CAND1	0.2902
MYBL2	0.3930	SPINT1	0.2530	TGFBR3	0.3989	RELA	0.2896
MTHFD1L	0.3905	NFIA	0.2500	MAPT	0.3984	TMEM45B	0.2892
RBBP8	0.3882	COX7B	0.2495	RGS22	0.3930	MAP2K1	0.2874
SEH1L	0.3861	VAMP8	0.2482	DDB2	0.3916	TK1	0.2842
CHEK2	0.3823	ERBB3	0.2466	RNF103	0.3873	BUB1	0.2841
OGFRL1	0.3800	SPAG5	0.2390	AGR2	0.3873	TOM1L1	0.2809
SFRP1	0.3795	TFRC	0.2388	CRIM1	0.3863	IL6R	0.2782
E2F1	0.3784	INPP4B	0.2373	DEGS2	0.3850	PSMA7	0.2777
HSPA14	0.3760	BRCA1	0.2372	KDR	0.3840	TAP1	0.2773
MSH2	0.3725	CAMK2N1	0.2355	Metical.LOC3	0.3839	SNRPA1	0.2750
C12orf11	0.3722	RARA	0.2342	ZEB2	0.3832	MELK	0.2745
RFC4	0.3694	MYB	0.2338	FOXA1	0.3811	ACOT4	0.2729
YBX1	0.3636	KIAA1370	0.2314	GPR160	0.3798	CENPF	0.2704
CCDC86	0.3556	MAPT	0.2307	ID4	0.3789	CENPI	0.2700
ACTR3B	0.3537	CLMN	0.2305	APH1B	0.3782	FANCA	0.2692
PROM1	0.3524	NFKB1	0.2255	F3	0.3778	FOXA1	0.2657
CCNA2	0.3476	KLF4	0.2251	RAD50	0.3768	SNRPD1	0.2645
TOMM40	0.3463	NPEPPS	0.2233	PDGFRA	0.3751	SEH1L	0.2636
LAMC2	0.3463	IGBP1	0.2217	PID1	0.3737	TACC3	0.2597
FAM171A1	0.3459	ADRA2C	0.2209	ALDH1A1	0.3717	MCM3	0.2583
POLD1	0.3418	EPN3	0.2193	A1CF	0.3707	KIF2C	0.2572
FGFR2	0.3404	GRB7	0.2167	ERBB2	0.3663	BCL2A1	0.2548
HSPD1	0.3390	CDYL	0.2165	FABP4	0.3642	SLC25A19	0.2523
DLGAP5	0.3336	PEX11G	0.2146	KIF20A	0.3634	C11orf30	0.2493
CDC6	0.3328	ABCB1	0.2140	SPDEF	0.3611	MCM2	0.2490
CDC123	0.3209	GSTM3	0.2135	C4orf32	0.3606	C21orf45	0.2484
HMGA1	0.3149	KRT19	0.2132	KDM4B	0.3601	PIP	0.2482

CDC25C	0.3147	FLVCR2	0.2111	PEX11G	0.3598	PDSS1	0.2481
TMCC2	0.3143	P4HTM	0.2076	KCNJ15	0.3542	CENPN	0.2474
GIN52	0.3096	KRT8	0.2076	ABCB1	0.3505	FOXM1	0.2470
DSP	0.3092	CDC25C	0.2072	NUDCD1	0.3503	HSPA14	0.2400
TRIM29	0.3074	RAB35	0.2072	RAD17	0.3432	TTK	0.2386
PARP1	0.3041	GSTM4	0.2030	LEPRE1	0.3421	STAT1	0.2371
MAD2L1	0.3035	AVEN	0.2028	VIM	0.3404	EPSTI1	0.2353
C8orf33	0.3010	GSTM1	0.2023	BDNF	0.3393	SH2B3	0.2351
RAD51	0.2965	AREG	0.2019	FGFR1	0.3383	VAMP8	0.2337
KRT16	0.2959	CDKN1A	0.2008	SLC7A6	0.3368	RACGAP1	0.2334
KRT23	0.2935	C16orf45	0.1971	CXCR1	0.3368	TFF3	0.2330
KRT6B	0.2927	cal.protein.L	0.1938	CTGF	0.3367	KIF23	0.2309
SLC5A6	0.2916	EPCAM	0.1928	RERG	0.3355	S100A14	0.2297
PRAME	0.2823	UIMC1	0.1903	CYR61	0.3345	BRCA1	0.2295
WDR12	0.2807	C4orf32	0.1898	LRIG1	0.3326	ELOVL5	0.2289
FABP5	0.2801	JUP	0.1894	NACC2	0.3322	AVL9	0.2276
NLN	0.2797	S100A14	0.1879	FAM174B	0.3295	PUM1	0.2257
DDIT4	0.2761	CHUK	0.1835	MAGEA1	0.3258	ORC6L	0.2252
CENPN	0.2714	RACGAP1	0.1832	KRTAP1.1	0.3239	ACTL8	0.2225
BTG3	0.2711	VAV3	0.1828	CHPF	0.3222	NDC80	0.2206
CSDA	0.2698	C21orf45	0.1826	APC	0.3198	AVEN	0.2193
KRT5	0.2684	GUSB	0.1811	EVI2A	0.3165	DLGAP5	0.2185
CDKN2A	0.2665	CCNA2	0.1804	FIGF	0.3141	PNP	0.2143
SERPINA3	0.2661	ARAF	0.1787	GUSB	0.3127	CDCA8	0.2143
TP53BP2	0.2658	GATA3	0.1785	EMP3	0.3088	ZNF217	0.2131
CTSL2	0.2626	HJURP	0.1775	FANK1	0.3080	BLM	0.2131
AURKA	0.2625	KIF4A	0.1768	NOTCH2	0.3057	MRPS17	0.2128
CDH3	0.2623	GABPB1	0.1764	MYO5C	0.3045	FNBP1	0.2116
PNO1	0.2617	BMI1	0.1760	CCND2	0.3025	CCNE1	0.2092
PDSS1	0.2596	COX6C	0.1742	CXXC5	0.3002	CDC45L	0.2080
UCHL1	0.2587	CD68	0.1734	XBP1	0.2998	CFLAR	0.2080
ESRP1	0.2568	TMEM125	0.1716	GSTM4	0.2988	EZH2	0.2079
SNRPA1	0.2562	KIAA0040	0.1704	AFF3	0.2972	PTDSS1	0.2059
NRAS	0.2556	SEMA3C	0.1695	COG8	0.2937	MSH2	0.2052
CDKN3	0.2550	C11orf30	0.1691	THBS1	0.2936	GIN52	0.2048
CRYAB	0.2549	HN1	0.1683	ELOVL5	0.2879	FLVCR2	0.2037
NUP93	0.2538	NFKBIB	0.1675	PTEN	0.2870	TOP2A	0.2033
PTDSS1	0.2529	NFKBIE	0.1665	NEO1	0.2833	GPR89A	0.2032
SQLE	0.2466	GOLT1A	0.1662	ATM	0.2829	AKT1	0.1993
BLM	0.2464	PSMD14	0.1649	KRT14	0.2810	CHUK	0.1959
CAPN6	0.2456	GRHL2	0.1606	MDM2	0.2804	FAM54A	0.1957
FZD7	0.2405	IRX3	0.1595	EGFR	0.2779	WDR12	0.1949
KRT17	0.2363	INSIG1	0.1547	GATA3	0.2768	CDT1	0.1947
SMO	0.2337	C16orf61	0.1526	DNAJC12	0.2764	NFKBIB	0.1935
SLC25A19	0.2331	KIF13B	0.1523	NR4A3	0.2764	YBX1	0.1930
S100A14	0.2294	KIAA1324	0.1508	KIF13B	0.2762	HMGA1	0.1929
VEGFA	0.2283	OCLN	0.1501	P4HTM	0.2729	PIR	0.1906

PSMA7	0.2267	SHC1	0.1499	FGFR4	0.2725	CDYL	0.1897
GAL	0.2267	CAND1	0.1483	KLF4	0.2724	CDC20	0.1883
SNRPD1	0.2239	TOR1A	0.1471	MAP2K4	0.2698	CDC25B	0.1871
CD24	0.2205	E2F1	0.1470	HEXIM1	0.2694	NQO1	0.1865
STRAP	0.2186	SLC7A6	0.1464	CA12	0.2668	NAT1	0.1864
SPAG5	0.2176	RAB25	0.1464	TFF1	0.2653	RFC4	0.1845
C8orf30A	0.2145	PRC1	0.1455	NFIA	0.2634	NFIA	0.1839
ITGA6	0.2132	PTGER4	0.1439	ST18	0.2632	KIFC1	0.1833
AARS	0.2129	CDKN3	0.1402	UIMC1	0.2630	SPDEF	0.1779
STC2	0.2104	HMGA1	0.1388	FBP1	0.2623	AZGP1	0.1751
STK38L	0.2103	IL6R	0.1387	PLA1A	0.2598	TOR1A	0.1746
PLOD1	0.2092	ABCC8	0.1376	INHBA	0.2591	XBP1	0.1740
ANXA8L2	0.2061	CLDN4	0.1366	NAT1	0.2570	TOMM40	0.1736
PIR	0.2001	RAF1	0.1364	LRRC2	0.2556	IGF2R	0.1728
TFRC	0.1993	IL8	0.1355	GREM1	0.2549	S100A8	0.1716
GPR172A	0.1984	HEXIM1	0.1341	PIK3CA	0.2546	RAD51C	0.1700
LSR	0.1940	IGFBP2	0.1336	KIAA1324	0.2541	BTG3	0.1699
WDR4	0.1916	TIMM17A	0.1317	NOTCH3	0.2497	POLD1	0.1698
NPM2	0.1884	HIF1A	0.1311	WIPF2	0.2484	ESR1	0.1687
CDKN2C	0.1849	FANK1	0.1284	MMP11	0.2449	GTPBP4	0.1673
SLC16A3	0.1848	EGFR	0.1263	TSHZ1	0.2448	BRCA2	0.1656
CLDN4	0.1809	RAD51	0.1258	SHC1	0.2372	AARS	0.1655
COX6C	0.1800	AURKA	0.1256	FAM38A	0.2357	AKT3	0.1650
C16orf61	0.1769	CENPA	0.1251	ITCH	0.2328	FGFR4	0.1647
NUP88	0.1749	CYCS	0.1250	BTG2	0.2304	PTGER4	0.1635
PDXK	0.1731	SH2B3	0.1249	TP63	0.2299	FAM174B	0.1632
FAM54A	0.1728	TMEM25	0.1247	ERCC1	0.2297	STK11	0.1621
C21orf45	0.1712	CDCA5	0.1221	LAMA3	0.2281	BMI1	0.1618
IL1B	0.1711	TUBA4A	0.1214	RB1	0.2237	USP10	0.1618
MAGOHB	0.1707	LRIG1	0.1208	ECE2	0.2217	C1orf106	0.1614
COX4NB	0.1695	SCUBE2	0.1204	ESR1	0.2204	ME1	0.1614
RINT1	0.1693	MMP11	0.1204	CHST11	0.2146	GARS	0.1605
PREP	0.1691	ME1	0.1192	SLC9A3	0.2107	MRPS35	0.1592
RRM2	0.1686	PDSS1	0.1182	cal.protein.f	0.2070	LRP8	0.1584
ADM	0.1655	PGAM5	0.1182	MUC1	0.2062	ASF1A	0.1579
USP10	0.1618	SLC9A3	0.1171	BLVRA	0.2057	C17orf37	0.1570
PTGS2	0.1573	ALDH1A1	0.1169	TSPAN13	0.2055	CHEK2	0.1568
al.protein.L	0.1534	ATAD3A	0.1166	VAV3	0.1997	CXXC5	0.1566
BRCA2	0.1534	EPSTI1	0.1165	IFT74	0.1936	SLC5A6	0.1565
TACC3	0.1530	GARS	0.1131	SLC39A6	0.1925	CTPS	0.1550
TAP1	0.1527	CDK4	0.1127	ACOT4	0.1904	COX4NB	0.1525
NOP56	0.1518	SRC	0.1107	ITGB1	0.1892	KIAA0040	0.1509
BCL11A	0.1512	NF1	0.1104	CDKN1A	0.1870	WDR4	0.1507
NFIB	0.1504	STK11	0.1104	AKT1	0.1844	NLN	0.1410
PGAM5	0.1481	BIRC5	0.1102	CTNNB1	0.1840	PUF60	0.1383
TMEM139	0.1396	S100A11	0.1075	NQO1	0.1838	GSTM1	0.1383
TP53	0.1383	ABAT	0.1055	GOLT1A	0.1832	MKI67	0.1376

PITX1	0.1374	IDO1	0.1050	NPEPPS	0.1796	AGR3	0.1374
GRHL1	0.1357	ESR1	0.1050	BCL2	0.1791	al.protein.L	0.1371
PCDH8	0.1357	ACTL8	0.1050	RAD51L1	0.1790	SLC9A3R1	0.1371
EPCAM	0.1347	C1orf21	0.1050	MET	0.1787	SCGB2A2	0.1363
MED21	0.1337	UBE2T	0.1039	AVEN	0.1770	RANBP1	0.1359
ATR	0.1334	STAT1	0.1031	ABCC8	0.1763	al.protein.L	0.1350
TFAM	0.1304	PUM1	0.1017	CDH1	0.1737	TP53BP2	0.1333
STAT1	0.1301	NUDT1	0.1015	ABCC3	0.1717	NUDT1	0.1318
TIMM17A	0.1273	ASF1A	0.1010	OCLN	0.1715	GPR160	0.1304
CTSL1	0.1258	CCNB1	0.1003	C17orf37	0.1704	CDKN2A	0.1289
IDO1	0.1210	CXCL1	0.1003	PTGER4	0.1660	PYROXD1	0.1286
RELB	0.1208	MRPS17	0.0993	CABP7	0.1657	SUV39H2	0.1285
GPR89A	0.1201	FAP	0.0991	CCND1	0.1640	PNO1	0.1276
FZD6	0.1190	AHCYL1	0.0987	KIT	0.1610	CD68	0.1260
NCAPH2	0.1169	MPP1	0.0985	CYCS	0.1608	CD24	0.1257
NDRG1	0.1165	SNRPA1	0.0970	CXCR2	0.1606	MLKL	0.1254
FBXL6	0.1150	CYB5B	0.0969	AHCYL1	0.1513	TSHZ1	0.1241
ASF1A	0.1149	DNAJC12	0.0964	BMI1	0.1511	CDK1	0.1239
DDR1	0.1119	SLC16A3	0.0958	GSTM1	0.1487	RBBP8	0.1238
GSTP1	0.1108	MLKL	0.0949	AZGP1	0.1474	Keraton.8	0.1221
MRPS17	0.1017	DDR1	0.0943	AREG	0.1451	CAPN13	0.1220
TIMM8A	0.1016	RAD17	0.0943	RHBG	0.1360	C4orf34	0.1219
CD44	0.1012	KDR	0.0934	ANXA1	0.1341	ABCB1	0.1213
CTNNB1	0.1011	STMN1	0.0931	EIF2S2	0.1328	RAF1	0.1190
CDC25B	0.0967	NTN4	0.0927	KLHL9	0.1297	NFKBIA	0.1186
NFKBIE	0.0932	PLA1A	0.0919	TMEM125	0.1283	CEACAM6	0.1181
TK1	0.0916	GSTP1	0.0910	HIF1A	0.1274	AR	0.1173
KRT14	0.0881	NACC2	0.0904	HRAS	0.1269	CD86	0.1142
BRAF	0.0876	TMEM208	0.0903	NF1	0.1252	REEP6	0.1135
IL8	0.0858	PTTG1	0.0894	STMN1	0.1245	SNAI1	0.1118
CDK4	0.0814	TCEAL1	0.0889	CRYAB	0.1230	CELSR1	0.1102
TUBB6	0.0775	PSMA7	0.0886	TUBB6	0.1207	ARAF	0.1088
ATAD3A	0.0741	IKBKB	0.0874	CDKN2B	0.1194	MDM2	0.1081
F11R	0.0730	NFKBIA	0.0872	SH2B3	0.1193	MPP1	0.1058
PSMD14	0.0689	NEK2	0.0837	NFIB	0.1184	INSIG1	0.1042
RRAGD	0.0684	CDC123	0.0827	ERBB3	0.1182	MUC1	0.1038
RRP15	0.0682	CTSL1	0.0818	STK11	0.1168	CHEK1	0.1037
TM7SF3	0.0668	BTG3	0.0815	IKBKB	0.1143	VAV3	0.1011
LAG3	0.0668	APH1B	0.0813	GRB7	0.1122	CYCS	0.0982
SRC	0.0657	CD86	0.0798	KIAA0040	0.1117	CTSL1	0.0977
GRHL2	0.0624	CDKN2B	0.0797	KLHL7	0.1103	FBP1	0.0970
RECQL	0.0616	MDM2	0.0797	CLMN	0.1093	KCTD1	0.0965
MRPS35	0.0616	NEO1	0.0796	MAP7D3	0.1092	TFF1	0.0958
TRIP13	0.0594	SLC40A1	0.0786	IRX3	0.1067	IGBP1	0.0957
STAT3	0.0591	VEGFA	0.0780	RECQL	0.1057	INPP4B	0.0928
GABPB1	0.0584	IKBKE	0.0780	ANGPTL4	0.1023	STRAP	0.0920
NUDT1	0.0572	UBE2C	0.0756	KRT19	0.1001	GGH	0.0913

CDH1	0.0560	RAI2	0.0752	ZNF217	0.0966	UIMC1	0.0899
RAF1	0.0547	MAP2K1	0.0749	CELSR1	0.0966	AHCYL1	0.0890
RAD51C	0.0525	GPR89A	0.0735	CDCA7L	0.0964	EPCAM	0.0889
IKBKE	0.0516	COX4NB	0.0724	CD68	0.0930	SLC9A3	0.0885
MAP7D3	0.0442	ESRP1	0.0708	PSPH	0.0928	TMEM208	0.0883
CHUK	0.0439	CCNE1	0.0700	MED21	0.0888	SPINT2	0.0874
S100A11	0.0425	LAG3	0.0693	AVL9	0.0842	KRAS	0.0862
IGFBP2	0.0405	TSHZ1	0.0691	ITGA6	0.0817	HIF1A	0.0857
MAP2K1	0.0395	SAPS1	0.0687	KCTD1	0.0815	ATR	0.0839
CXCL1	0.0382	FAM38A	0.0684	BRAF	0.0759	NUP93	0.0838
MKRN2	0.0379	TFAM	0.0662	ARAF	0.0679	IKBKB	0.0808
NOTCH1	0.0312	FAM198B	0.0651	AKT3	0.0627	C8orf30A	0.0765
CDKN1B	0.0255	APC	0.0644	RRAGD	0.0559	S100A9	0.0764
TUBA4A	0.0251	ITCH	0.0639	SPINT1	0.0559	BYSL	0.0760
al.protein.L	0.0213	MAD2L1	0.0633	NDUFAF4	0.0520	NDUFAF4	0.0749
ACTL8	0.0209	FNBP1	0.0614	TMEM139	0.0494	KPNA1	0.0706
RACGAP1	0.0198	RAD51C	0.0611	IL6	0.0485	KIAA1370	0.0693
PNP	0.0151	ITGB1	0.0588	CDKN1B	0.0443	CLDN4	0.0687
KLHL7	0.0117	CFLAR	0.0586	SFRP1	0.0427	ABCC8	0.0678
GARS	0.0111	RFC4	0.0580	RAB25	0.0418	CD44	0.0677
KLHL9	0.0109	KRAS	0.0560	MPP1	0.0405	GUSB	0.0658
FREQ	0.0107	CHPF	0.0557	PYROXD1	0.0392	CDCA7	0.0638
KIT	0.0098	CENPI	0.0546	IL6R	0.0378	ANLN	0.0626
ERCC1	0.0096	CENPN	0.0544	TOR1A	0.0375	IL8	0.0606
CDYL	0.0088	RB1	0.0522	PTGS2	0.0365	MLPH	0.0580
SPINT2	0.0064	RELB	0.0516	CCND3	0.0361	PLA1A	0.0556
BAG1	0.0040	KRT6C	0.0512	SLC9A3R1	0.0343	TP53	0.0555
ID4	0.0039	COG8	0.0506	KRT6A	0.0334	RINT1	0.0543
ANGPTL4	0.0013	HSPD1	0.0504	STK38L	0.0324	DDIT4	0.0540
SAPS1	-0.0011	CEP55	0.0471	FREQ	0.0316	RAD50	0.0531
CAND1	-0.0045	RAD50	0.0468	KRT17	0.0311	ACTR3B	0.0529
KRT6A	-0.0046	KCTD1	0.0458	INSIG1	0.0310	BAG1	0.0514
COX7B	-0.0058	F3	0.0449	NFKB1	0.0300	CLMN	0.0510
CDKN2D	-0.0107	ZEB2	0.0447	KRT8	0.0288	GPR172A	0.0501
EPN3	-0.0111	CKS1B	0.0441	IGF2R	0.0279	RNF103	0.0497
CYB5B	-0.0142	ORC6L	0.0440	KRAS	0.0232	KLF4	0.0482
THBS1	-0.0148	EVI2A	0.0436	JUP	0.0230	GSTM4	0.0464
KPNA1	-0.0165	CHST11	0.0433	MTOR	0.0228	NPEPPS	0.0454
KRT6C	-0.0190	TAP1	0.0423	CLDN7	0.0224	BTG2	0.0449
RAB25	-0.0191	SNAI1	0.0416	STAT3	0.0222	RB1	0.0441
NFKBIA	-0.0207	NOP56	0.0413	IGFBP2	0.0181	PEX11G	0.0422
EPSTI1	-0.0214	CA12	0.0408	NPM2	0.0173	CYB5B	0.0411
CD86	-0.0223	BLM	0.0399	CDKN2D	0.0152	ALDH1A1	0.0405
FLVCR2	-0.0236	PIR	0.0399	S100A9	0.0147	SLC7A6	0.0392
IL6	-0.0238	TYMS	0.0387	RELA	0.0139	ABCC3	0.0387
CTGF	-0.0279	TGFBR2	0.0355	TMEM208	0.0127	CCND2	0.0374
SNAI1	-0.0296	CCND2	0.0352	C11orf30	0.0114	TSPAN13	0.0369

MET	-0.0297	TACC3	0.0347	S100A11	0.0113	KIF13B	0.0366
VIM	-0.0299	DLGAP5	0.0345	SAPS1	0.0098	TFAM	0.0349
PYROXD1	-0.0316	KDM4B	0.0338	EPN3	0.0094	MKRN2	0.0346
NFKBIB	-0.0332	CDC25B	0.0333	KRT18	0.0060	SPINT1	0.0344
CYR61	-0.0374	MRPS35	0.0332	TIMM8A	0.0026	CCDC86	0.0324
BCL2A1	-0.0388	GINS2	0.0331	TM7SF3	0.0009	SHC1	0.0294
PUM1	-0.0409	TOMM40	0.0327	MKRN2	-0.0006	LAMA3	0.0280
Keraton.8	-0.0415	LSR	0.0325	NOTCH1	-0.0016	MYO5C	0.0268
NDUFAF4	-0.0418	CCND3	0.0317	KRT6C	-0.0019	CDKN1A	0.0263
KRAS	-0.0465	DDIT4	0.0316	KPNA1	-0.0027	NRAS	0.0242
TMEM208	-0.0469	SPATA7	0.0313	NFKBIA	-0.0029	PSPH	0.0230
VAMP8	-0.0471	NLN	0.0294	FZD7	-0.0056	STMN1	0.0222
KRT19	-0.0476	USP10	0.0286	FNBP1	-0.0057	NUP88	0.0216
CABP7	-0.0528	ATM	0.0280	CYB5B	-0.0060	TRIP13	0.0210
cal.protein.L	-0.0529	CKS2	0.0277	RRP15	-0.0091	FBXL6	0.0207
PSPH	-0.0532	ADRA2A	0.0264	MLKL	-0.0116	TUBA4A	0.0194
C1orf106	-0.0540	A1CF	0.0252	CFLAR	-0.0121	DEGS2	0.0185
JUP	-0.0541	EIF2S2	0.0245	CD86	-0.0132	DNAJC12	0.0176
CCND3	-0.0563	EXO1	0.0243	ANXA8L2	-0.0132	AREG	0.0175
MLKL	-0.0585	PDXK	0.0233	PCDH8	-0.0195	IL1B	0.0147
IRX3	-0.0623	KPNA1	0.0225	BCL11A	-0.0221	P4HTM	0.0146
PIK3CA	-0.0647	BDNF	0.0207	KRT23	-0.0249	PRAME	0.0131
ME1	-0.0650	HSPA14	0.0200	SNAI1	-0.0263	EIF2S2	0.0125
MPP1	-0.0651	ZEB1	0.0198	SERPINA3	-0.0264	AFF3	0.0121
ECE2	-0.0681	cal.protein.L	0.0197	TRIP13	-0.0264	CXCL1	0.0086
KRT8	-0.0689	KLHL7	0.0188	GRHL1	-0.0267	SAPS1	0.0083
ANXA1	-0.0705	KIFC1	0.0176	SRC	-0.0301	CLDN7	0.0039
RERG	-0.0757	CABP7	0.0143	FGFR2	-0.0303	LRIG1	0.0023
CDCA7L	-0.0767	LHFP	0.0132	SMO	-0.0306	C16orf45	0.0021
CFLAR	-0.0771	CD44	0.0126	BRCA1	-0.0307	RRP15	0.0019
INSIG1	-0.0798	HRAS	0.0125	KRT5	-0.0308	GAL	-0.0013
KCTD1	-0.0810	FANCA	0.0120	S100A8	-0.0321	FAM171A1	-0.0029
ITGB1	-0.0848	CDC45L	0.0111	NFKBIB	-0.0357	MYC	-0.0041
CLDN7	-0.0852	SLC5A6	0.0109	ME1	-0.0366	KRT8	-0.0063
FGFR1	-0.0855	EMP3	0.0080	MAGOHB	-0.0385	FANK1	-0.0064
IFT74	-0.0927	AKT3	0.0079	CDKN2C	-0.0391	CCND3	-0.0066
TGFB3	-0.0936	FBXL6	0.0076	RAB35	-0.0401	UCHL1	-0.0070
INHBA	-0.1015	MSH2	0.0068	BAG1	-0.0401	RHBG	-0.0078
FNBP1	-0.1033	RGS22	0.0061	TRIM29	-0.0422	ERBB3	-0.0081
CRIM1	-0.1046	FOXO1	0.0055	TUBA4A	-0.0441	HEXIM1	-0.0088
RHBG	-0.1099	IL6ST	0.0044	PUM1	-0.0464	HRAS	-0.0089
OCLN	-0.1100	THY1	0.0037	MYB	-0.0468	CDKN2D	-0.0113
NF1	-0.1109	MELK	0.0037	GRHL2	-0.0490	MAPT	-0.0116
CLDN3	-0.1165	KIF20A	0.0025	Keraton.8	-0.0508	NCAPH2	-0.0122
CCND1	-0.1166	MKRN2	0.0022	CXCL1	-0.0520	C4orf32	-0.0128
NOTCH3	-0.1169	LAMA3	0.0015	NDRG1	-0.0523	EVI2A	-0.0136
TMEM125	-0.1170	RAD51L1	0.0012	PLOD1	-0.0586	TM7SF3	-0.0140

CDKN2B	-0.1183	PSPH	0.0012	SPINT2	-0.0607	WIPF2	-0.0140
ARAF	-0.1192	BCL2A1	0.0002	C1orf106	-0.0609	RAD17	-0.0151
IGF2R	-0.1207	BTG2	-0.0009	ADM	-0.0630	STAT3	-0.0156
S100A9	-0.1225	PARP1	-0.0019	VAMP8	-0.0641	ITCH	-0.0157
GREM1	-0.1230	SLC25A19	-0.0022	CLDN3	-0.0678	BCL2	-0.0182
NR4A3	-0.1232	FAM54A	-0.0026	GARS	-0.0680	TMEM125	-0.0184
SLC39A6	-0.1238	GPR172A	-0.0026	FZD6	-0.0689	EPN3	-0.0186
TOM1L1	-0.1254	PTEN	-0.0041	BCL2A1	-0.0695	NF1	-0.0193
STMN1	-0.1257	PVRL3	-0.0043	IDH2	-0.0697	NEO1	-0.0208
HRAS	-0.1258	PCNA	-0.0056	al.protein.L	-0.0703	MTHFD1L	-0.0211
SLC9A3R1	-0.1267	WDR4	-0.0064	CAPN6	-0.0720	STC2	-0.0214
SPINT1	-0.1269	IL6	-0.0071	TOM1L1	-0.0748	RAD51L1	-0.0270
S100A8	-0.1269	AARS	-0.0074	DDR1	-0.0749	VEGFA	-0.0315
PDGFRA	-0.1274	PYROXD1	-0.0091	FLVCR2	-0.0769	GATA3	-0.0326
IKBKB	-0.1277	PTDSS1	-0.0094	PREP	-0.0829	CDCA7L	-0.0348
GOLT1A	-0.1336	BUB1	-0.0119	KRT16	-0.0860	C12orf11	-0.0348
EIF2S2	-0.1337	TTK	-0.0124	KRT6B	-0.0873	APC	-0.0353
MAP2K4	-0.1355	TOP2A	-0.0129	LSR	-0.0880	ADRA2A	-0.0368
CLMN	-0.1385	CDCA7L	-0.0154	NCAPH2	-0.0911	SCUBE2	-0.0381
FAM38A	-0.1388	GLRB	-0.0168	RAF1	-0.0913	PDXK	-0.0381
GRB7	-0.1398	CDT1	-0.0169	PDXK	-0.0977	CDKN2B	-0.0383
CXCR2	-0.1413	NUF2	-0.0177	CTSL2	-0.1000	C8orf33	-0.0388
ERBB3	-0.1459	PRAME	-0.0184	CD44	-0.1017	DSP	-0.0398
KCNJ15	-0.1465	RHBG	-0.0187	CDYL	-0.1032	JUP	-0.0407
TOR1A	-0.1484	SLC39A6	-0.0192	CDH3	-0.1041	IRX3	-0.0417
TP63	-0.1490	CCND1	-0.0193	RINT1	-0.1071	BOP1	-0.0420
C11orf30	-0.1490	RRAGD	-0.0193	EPSTI1	-0.1074	FZD6	-0.0455
IDH2	-0.1491	EZH2	-0.0201	RAD51C	-0.1085	FABP5	-0.0466
BRCA1	-0.1496	NCAPH2	-0.0204	FBXL6	-0.1102	TMEM158	-0.0467
FIGF	-0.1510	ANXA1	-0.0208	TMCC2	-0.1118	SLC16A3	-0.0467
CD68	-0.1554	OGN	-0.0215	OGFRL1	-0.1147	SLC39A6	-0.0490
CHST11	-0.1600	FBN1	-0.0217	TFAM	-0.1153	PCDH8	-0.0504
AKT3	-0.1638	NUP88	-0.0225	CSDA	-0.1163	PHGDH	-0.0505
MMP11	-0.1680	WDR12	-0.0227	PROM1	-0.1172	IL6	-0.0510
KIAA0040	-0.1681	MAP2K4	-0.0240	IL8	-0.1173	GRHL2	-0.0519
AHCYL1	-0.1721	IGF1	-0.0245	MRPS35	-0.1178	ZEB2	-0.0521
RAD51L1	-0.1722	MCM3	-0.0253	TP53	-0.1207	ST18	-0.0555
HIF1A	-0.1760	KRTAP1.1	-0.0262	ATR	-0.1293	ESRP1	-0.0557
RAB35	-0.1776	AXL	-0.0265	CHUK	-0.1302	CXCR2	-0.0557
MYB	-0.1807	PID1	-0.0272	ACTL8	-0.1380	FREQ	-0.0572
BCL2	-0.1811	NUDCD1	-0.0279	MAP2K1	-0.1405	APH1B	-0.0577
IL6R	-0.1859	KIF2C	-0.0287	NUDT1	-0.1461	CDKN1B	-0.0593
CHPF	-0.1870	LRRC2	-0.0289	GPR89A	-0.1469	TIMM8A	-0.0603
CA12	-0.1882	ANGPTL4	-0.0292	IL1B	-0.1491	MAGOHB	-0.0604
ST18	-0.1908	GNG11	-0.0295	LAMC2	-0.1517	KRT6C	-0.0607
ITCH	-0.1930	RANBP1	-0.0299	CAND1	-0.1519	S100A11	-0.0612
NOTCH2	-0.1949	MAGEA1	-0.0300	RACGAP1	-0.1542	A1CF	-0.0623

CYCS	-0.2021	GRHL1	-0.0300	CTSL1	-0.1554	ERBB4	-0.0625
AVL9	-0.2040	metical.LOC3	-0.0300	MIA	-0.1596	CHST11	-0.0637
STK11	-0.2064	CENPF	-0.0310	SLC16A3	-0.1636	PREP	-0.0683
ABCC8	-0.2101	SNRPD1	-0.0310	NUP88	-0.1649	ADRA2C	-0.0695
LRRC2	-0.2104	CXCR2	-0.0324	COX7B	-0.1755	NOTCH1	-0.0700
RELA	-0.2122	PGR	-0.0329	PNP	-0.1832	KDM4B	-0.0703
LAMA3	-0.2146	CDH3	-0.0334	IKBKE	-0.1886	KIAA1324	-0.0743
NPEPPS	-0.2153	PIK3R1	-0.0353	STC2	-0.1947	KRT19	-0.0765
ATM	-0.2172	CDK1	-0.0359	EPCAM	-0.1972	RGS22	-0.0776
LEPRE1	-0.2175	NUP93	-0.0360	GPR172A	-0.1990	RRAGD	-0.0794
DDB2	-0.2188	STAT3	-0.0365	MRPS17	-0.2010	SQLE	-0.0798
NT5E	-0.2192	ATAD2	-0.0370	GABPB1	-0.2032	PTEN	-0.0806
NFKB1	-0.2199	IL1B	-0.0391	VEGFA	-0.2037	CDKN2C	-0.0813
KIAA1324	-0.2227	GREM1	-0.0396	BRCA2	-0.2047	C1orf21	-0.0815
CELSR1	-0.2228	KRT6A	-0.0401	STRAP	-0.2054	CITED4	-0.0829
MME	-0.2244	BRCA2	-0.0433	NRAS	-0.2059	IFT74	-0.0838
EMP3	-0.2247	DNALI1	-0.0434	GAL	-0.2071	GOLT1A	-0.0840
MTOR	-0.2260	CDCA8	-0.0435	CLDN4	-0.2082	NUDCD1	-0.0846
ZNF217	-0.2265	CDKN2A	-0.0438	CDC25B	-0.2086	KIF20A	-0.0862
KRTAP1.1	-0.2268	NOTCH1	-0.0471	ESRP1	-0.2110	LRRC2	-0.0886
CAV1	-0.2288	ADM	-0.0478	UCHL1	-0.2122	NOTCH2	-0.0890
BTG2	-0.2297	LEPRE1	-0.0480	ASF1A	-0.2131	MAGEA1	-0.0903
MAGEA1	-0.2310	NDRG1	-0.0483	USP10	-0.2150	ATM	-0.0912
AREG	-0.2311	AFF3	-0.0500	al.protein.L	-0.2162	CAPN6	-0.0927
PTEN	-0.2316	MCM2	-0.0508	MUC5B	-0.2177	TCEAL1	-0.0939
BDNF	-0.2324	INHBA	-0.0509	SQLE	-0.2181	DDR1	-0.0943
BMI1	-0.2340	SQLE	-0.0529	LAG3	-0.2201	IGFBP2	-0.0983
VAV3	-0.2359	FREQ	-0.0530	C8orf30A	-0.2226	GSTM3	-0.1001
H19	-0.2361	TP53BP2	-0.0538	TK1	-0.2248	CXCR1	-0.1014
RB1	-0.2390	CDKN2D	-0.0539	COX4NB	-0.2250	IL6ST	-0.1016
TWIST1	-0.2403	LTBP2	-0.0548	FABP5	-0.2279	GRB7	-0.1042
COG8	-0.2410	CXCR1	-0.0554	TCF7L1	-0.2284	TMEM25	-0.1049
PPFIBP1	-0.2420	NDUF4F4	-0.0557	AARS	-0.2290	SRC	-0.1058
SH2B3	-0.2431	GGH	-0.0578	PIR	-0.2294	COG8	-0.1061
CXCR1	-0.2499	NDC80	-0.0596	PSMD14	-0.2368	RAB25	-0.1091
AFF3	-0.2527	NOTCH2	-0.0609	FAM171A1	-0.2370	EGFR	-0.1130
DNALI1	-0.2543	BAG1	-0.0615	ACTR3B	-0.2413	NDRG1	-0.1136
NACC2	-0.2546	MKI67	-0.0619	DDIT4	-0.2441	KRTAP1.1	-0.1164
ELSPBP1	-0.2571	ANLN	-0.0632	STAT1	-0.2451	BRAF	-0.1188
KIF13B	-0.2578	FABP4	-0.0646	ATAD3A	-0.2455	NACC2	-0.1194
GSTM1	-0.2602	CDC20	-0.0647	C8orf33	-0.2538	EMP3	-0.1199
SLC9A3	-0.2624	TP63	-0.0649	C12orf11	-0.2556	ADM	-0.1230
TSPAN13	-0.2633	CHEK1	-0.0666	PRAME	-0.2580	KRT6A	-0.1286
metical.LOC3	-0.2659	PNO1	-0.0668	NFKBIE	-0.2593	SLC40A1	-0.1289
SHC1	-0.2689	TWIST2	-0.0671	F11R	-0.2601	CCND1	-0.1320
ABCC3	-0.2692	SETBP1	-0.0674	FAM54A	-0.2623	BCL11A	-0.1323
CDKN1A	-0.2694	TM7SF3	-0.0675	TP53BP2	-0.2625	KDR	-0.1333

EGFR	-0.2700	TRIP13	-0.0697	IDO1	-0.2629	GLRB	-0.1350
TWIST2	-0.2702	KIF23	-0.0699	WDR4	-0.2658	GPSM2	-0.1351
NUDCD1	-0.2705	POLD1	-0.0707	PNO1	-0.2664	CA12	-0.1395
HEXIM1	-0.2726	SEH1L	-0.0733	TIMM17A	-0.2780	SEMA3C	-0.1439
PTGER4	-0.2745	TWIST1	-0.0761	TAP1	-0.2805	RECQL	-0.1440
WIPF2	-0.2751	CDKN1B	-0.0770	NUP93	-0.2820	etical.LOC3	-0.1450
C17orf37	-0.2814	CYBRD1	-0.0770	DSP	-0.2876	BDNF	-0.1451
GATA3	-0.2828	NT5E	-0.0783	CDK4	-0.2885	KLHL7	-0.1455
GLRB	-0.2843	BYSL	-0.0821	TACC3	-0.2888	TP63	-0.1478
KRT18	-0.2846	CHEK2	-0.0830	SNRPD1	-0.3007	ERBB2	-0.1513
THY1	-0.2864	CTSL2	-0.0846	RELB	-0.3020	OCLN	-0.1515
PLA1A	-0.2886	CBX7	-0.0892	PTDSS1	-0.3063	MAP2K4	-0.1524
APC	-0.2893	STRAP	-0.0916	C16orf61	-0.3125	F3	-0.1540
PID1	-0.2896	NR4A3	-0.0929	C21orf45	-0.3158	FABP4	-0.1559
KIF20A	-0.2925	ATR	-0.0931	COX6C	-0.3163	PVRL3	-0.1572
AZGP1	-0.2926	DSP	-0.0931	NOP56	-0.3166	ECE2	-0.1572
EVI2A	-0.2937	RINT1	-0.0940	CCDC86	-0.3181	KLHL9	-0.1614
FABP4	-0.2937	CTPS	-0.0985	GSTP1	-0.3210	FAP	-0.1641
AVEN	-0.2953	C8orf30A	-0.0988	MTHFD1L	-0.3214	ITGB1	-0.1651
NEO1	-0.2953	CXCL14	-0.1000	CD24	-0.3221	LSR	-0.1652
SPATA7	-0.2965	SUV39H2	-0.1005	CDKN2A	-0.3222	ABAT	-0.1656
AXL	-0.2990	etical.LOC4	-0.1033	SLC25A19	-0.3240	CTSL2	-0.1658
FANK1	-0.2994	STC2	-0.1076	BTG3	-0.3327	ANXA1	-0.1666
A1CF	-0.3006	ST18	-0.1115	PITX1	-0.3352	LHFP	-0.1667
MUC1	-0.3022	PLOD1	-0.1125	WDR12	-0.3447	GRHL1	-0.1725
P4HTM	-0.3040	YBX1	-0.1130	PHGDH	-0.3448	CABP7	-0.1738
LRIG1	-0.3050	TMEM139	-0.1151	RBBP8	-0.3460	TGFB2	-0.1744
F3	-0.3157	ELSPBP1	-0.1158	BLM	-0.3473	CSDA	-0.1760
KDM4B	-0.3158	TP53	-0.1164	FOXC1	-0.3507	CAMK2N1	-0.1769
CCND2	-0.3167	ECE2	-0.1168	PSMA7	-0.3511	FAM38A	-0.1774
KDR	-0.3175	PPFIBP1	-0.1195	NLN	-0.3537	MAP7D3	-0.1840
TSHZ1	-0.3177	FZD6	-0.1201	GPSM2	-0.3634	FAM198B	-0.1893
PIK3R1	-0.3194	NRAS	-0.1202	SNRPA1	-0.3720	MUC5B	-0.1899
ESR1	-0.3221	SERPINA3	-0.1240	SLC5A6	-0.3735	RARA	-0.1911
ZEB2	-0.3245	NOTCH3	-0.1243	CENPN	-0.3763	PLOD1	-0.1917
RAD17	-0.3273	C8orf33	-0.1247	TMEM158	-0.3858	NPM2	-0.1922
RGS22	-0.3302	PUF60	-0.1278	PGAM5	-0.3889	LEPRE1	-0.1928
SETBP1	-0.3312	PREP	-0.1314	S100A14	-0.3914	OGN	-0.1929
LTBP2	-0.3315	KLHL9	-0.1316	SPAG5	-0.3964	AXL	-0.1946
PVRL3	-0.3319	BCL2	-0.1323	PDSS1	-0.3984	ANGPTL4	-0.1953
MDM2	-0.3322	MUC5B	-0.1335	POLD1	-0.4018	IGF1	-0.2019
RARA	-0.3334	MET	-0.1376	GIN52	-0.4026	PID1	-0.2038
ERBB2	-0.3346	LRP8	-0.1471	CHEK2	-0.4055	LAMC2	-0.2053
GUSB	-0.3351	RRP15	-0.1486	BOP1	-0.4273	etical.LOC4	-0.2100
DNAJC12	-0.3357	DDB2	-0.1487	TOMM40	-0.4294	SMO	-0.2169
GSTM4	-0.3360	RBBP8	-0.1502	BYSL	-0.4336	ZEB1	-0.2177
APH1B	-0.3403	TIMM8A	-0.1505	PARP1	-0.4344	NTN4	-0.2180

AKT1	-0.3422	FGFR1	-0.1506	DLGAP5	-0.4395	OGFRL1	-0.2183
FBP1	-0.3432	RECK	-0.1528	YBX1	-0.4395	FIGF	-0.2204
RECK	-0.3471	THBS1	-0.1537	TFRC	-0.4404	MET	-0.2230
CBX7	-0.3503	GTPBP4	-0.1548	CITED4	-0.4412	NR4A3	-0.2239
NTN4	-0.3504	CAV1	-0.1586	HMGA1	-0.4413	MED21	-0.2239
NAT1	-0.3548	CCDC86	-0.1586	RFC4	-0.4496	TMCC2	-0.2244
MYO5C	-0.3554	TUBB6	-0.1599	AURKA	-0.4509	CHPF	-0.2255
C1orf21	-0.3554	FIGF	-0.1615	CDKN3	-0.4518	PIK3R1	-0.2297
NQO1	-0.3579	IFT74	-0.1656	HSPA14	-0.4583	MMP11	-0.2322
IL6ST	-0.3599	cal.protein.N	-0.1689	MSH2	-0.4647	RAI2	-0.2342
TCEAL1	-0.3619	UCHL1	-0.1716	RRM2	-0.4650	ELSPBP1	-0.2433
UIMC1	-0.3639	PHGDH	-0.1720	SEH1L	-0.4742	CXCL14	-0.2481
netical.LOC4	-0.3665	PIK3CA	-0.1720	MYC	-0.4757	THY1	-0.2494
TGFBR2	-0.3669	STK38L	-0.1721	PUF60	-0.4775	FBN1	-0.2524
ACOT4	-0.3678	MME	-0.1799	RANBP1	-0.4877	KIT	-0.2529
TFF1	-0.3748	PDGFRA	-0.1812	CDC123	-0.4880	TWIST2	-0.2542
FBN1	-0.3761	H19	-0.1816	SUV39H2	-0.4926	cal.protein.N	-0.2544
C4orf32	-0.3802	ACTR3B	-0.1817	RAD51	-0.5000	DDB2	-0.2547
SLC7A6	-0.3803	BRAF	-0.1911	MAD2L1	-0.5006	CDH3	-0.2582
ABAT	-0.3848	KCNJ15	-0.1972	CTPS	-0.5155	TMEM139	-0.2594
KLF4	-0.3885	PCDH8	-0.1974	GGH	-0.5222	GREM1	-0.2692
PEX11G	-0.3891	CDCA7	-0.1981	MELK	-0.5284	PTGS2	-0.2715
TMEM25	-0.3894	KRT6B	-0.1990	CDT1	-0.5376	FZD7	-0.2780
SLC40A1	-0.3970	CDH1	-0.2009	CCNE1	-0.5390	KCNJ15	-0.2781
NFIA	-0.3992	CYR61	-0.2013	LRP8	-0.5391	CBX7	-0.2815
CXCL14	-0.4046	GAL	-0.2031	CDC6	-0.5418	TCF7L1	-0.2850
CXXC5	-0.4077	CDKN2C	-0.2091	GTPBP4	-0.5430	PGR	-0.2880
CYBRD1	-0.4086	PTGS2	-0.2122	HSPD1	-0.5474	SPATA7	-0.2893
BLVRA	-0.4133	VIM	-0.2145	MCM2	-0.5507	NOTCH3	-0.2918
ALDH1A1	-0.4143	KRT23	-0.2165	EZH2	-0.5539	TWIST1	-0.2946
RAD50	-0.4148	CAPN6	-0.2213	CDC25C	-0.5663	SERPINA3	-0.2956
PGR	-0.4256	PROM1	-0.2215	CENPI	-0.5679	DNALI1	-0.2981
ADRA2C	-0.4301	KRT17	-0.2250	CDK1	-0.5700	TUBB6	-0.3034
GNG11	-0.4307	SMO	-0.2275	ANLN	-0.5753	GNG11	-0.3038
XBP1	-0.4326	RECQL	-0.2293	ORC6L	-0.5814	INHBA	-0.3063
ADRA2A	-0.4337	MED21	-0.2311	E2F1	-0.5837	FOXC1	-0.3089
CAMK2N1	-0.4360	FAM171A1	-0.2317	FANCA	-0.5841	PROM1	-0.3101
IGF1	-0.4370	KIT	-0.2434	HN1	-0.5842	FGFR1	-0.3109
ABCB1	-0.4372	MAGOHB	-0.2455	PCNA	-0.5979	STK38L	-0.3170
RNF103	-0.4385	LAMC2	-0.2466	MCM3	-0.5985	FGFR2	-0.3263
MAPT	-0.4390	KRT16	-0.2469	CKS1B	-0.5986	SETBP1	-0.3311
DEGS2	-0.4445	FABP5	-0.2493	BIRC5	-0.5988	ANXA8L2	-0.3387
FAP	-0.4530	CRIM1	-0.2542	CHEK1	-0.6029	PIK3CA	-0.3390
SEMA3C	-0.4628	TGFBR3	-0.2542	CDCA8	-0.6046	ITGA6	-0.3417
LHFP	-0.4710	BCL11A	-0.2547	CDCA7	-0.6057	KRT6B	-0.3418
INPP4B	-0.4712	MTHFD1L	-0.2569	CCNA2	-0.6253	CYBRD1	-0.3422
ELOVL5	-0.4751	CTNNB1	-0.2609	CDC45L	-0.6271	NFIB	-0.3439

GSTM3	-0.4827	TMEM158	-0.2649	MKI67	-0.6377	LTBP2	-0.3554
FAM174B	-0.4845	CSDA	-0.2652	EXO1	-0.6434	KRT16	-0.3598
FGFR4	-0.4908	CTGF	-0.2668	KIF2C	-0.6481	CDH1	-0.3639
GPR160	-0.4923	ITGA6	-0.2673	HJURP	-0.6536	CAV1	-0.3658
IGBP1	-0.4927	TRIM29	-0.2800	BUB1	-0.6568	PPFIBP1	-0.3662
FAM198B	-0.4978	RERG	-0.2819	KIFC1	-0.6577	ERCC1	-0.3702
ZEB1	-0.5069	NFIB	-0.2829	PRC1	-0.6609	RECK	-0.3747
RAI2	-0.5112	NPM2	-0.2837	UBE2T	-0.6650	NT5E	-0.3814
C16orf45	-0.5274	OGFRL1	-0.2887	CCNB1	-0.6692	RERG	-0.3819
AGR3	-0.5440	CITED4	-0.2897	UBE2C	-0.6699	KRT5	-0.3853
SPDEF	-0.5593	ERCC1	-0.2909	NDC80	-0.6734	CRIM1	-0.3889
OGN	-0.5620	ANXA8L2	-0.2931	PTTG1	-0.6774	H19	-0.3975
CAPN13	-0.5758	FZD7	-0.2938	KIF4A	-0.6846	PDGFRA	-0.4111
KIAA1370	-0.5901	C12orf11	-0.2978	CDC20	-0.6896	MME	-0.4203
SCUBE2	-0.5908	TMCC2	-0.3096	MYBL2	-0.6902	TGFB3	-0.4213
ERBB4	-0.5927	BOP1	-0.3167	CDCA5	-0.6968	KRT23	-0.4316
CEACAM6	-0.5964	GPSM2	-0.3216	ATAD2	-0.7033	MIA	-0.4369
SCGB2A2	-0.6133	MAP7D3	-0.3251	TTK	-0.7039	VIM	-0.4387
AGR2	-0.6139	KRT5	-0.3364	CENPF	-0.7192	THBS1	-0.4427
PIP	-0.6164	ID4	-0.3528	KIF23	-0.7317	CTNNA1	-0.4498
C4orf34	-0.6267	CRYAB	-0.3884	TYMS	-0.7330	SFRP1	-0.4586
AR	-0.6396	MYC	-0.3934	TOP2A	-0.7345	TRIM29	-0.4616
FOXA1	-0.6432	FGFR2	-0.4023	CKS2	-0.7347	CYR61	-0.4839
MLPH	-0.6445	TCF7L1	-0.4184	NUF2	-0.7352	CTGF	-0.5031
GALNT7	-0.6852	KRT14	-0.4512	FOXO1	-0.7372	KRT17	-0.5383
REEP6	-0.6960	MIA	-0.4876	NEK2	-0.7373	CRYAB	-0.5572
TFF3	-0.7227	FOXC1	-0.4972	CEP55	-0.7403	ID4	-0.6125
TMEM45B	-0.7699	SFRP1	-0.5125	CENPA	-0.7599	KRT14	-0.6728

Normal	Pearson.Coeff.
KRT14	0.6226
ID4	0.5933
TGFBR3	0.4922
CRYAB	0.4732
CTGF	0.4609
SFRP1	0.4564
MME	0.4540
RECK	0.4522
VIM	0.4520
RERG	0.4498
CYBRD1	0.4448
CAV1	0.4423
CYR61	0.4369
CRIM1	0.4365
PDGFRA	0.4362
SETBP1	0.4182
GNG11	0.4172
CBX7	0.4133
PPFIBP1	0.4001
H19	0.3992
LTBP2	0.3836
DDB2	0.3805
PGR	0.3796
NT5E	0.3792
ERCC1	0.3787
DNALI1	0.3770
CTNNB1	0.3765
TWIST1	0.3714
THBS1	0.3614
OGN	0.3604
KRT17	0.3508
PIK3CA	0.3506
KCNJ15	0.3485
CXCL14	0.3455
ZEB1	0.3444
FGFR1	0.3425
SPATA7	0.3412
PIK3R1	0.3402
MIA	0.3377
ELSPBP1	0.3364
IGF1	0.3362
RAI2	0.3315
NFIB	0.3245
FIGF	0.3203

TRIM29	0.3202
NR4A3	0.3168
FAM198B	0.3101
ITGA6	0.3065
CDH1	0.3057
FBN1	0.3029
NOTCH3	0.3024
thetical.LOC40	0.3018
LHFP	0.2936
KRT23	0.2933
PID1	0.2923
TWIST2	0.2883
TGFBR2	0.2859
THY1	0.2844
KRT5	0.2839
FABP4	0.2795
ABAT	0.2773
FGFR2	0.2739
RARA	0.2688
NTN4	0.2669
STK38L	0.2664
KIT	0.2642
MED21	0.2624
TUBB6	0.2581
ical.protein.M	0.2555
IL6ST	0.2538
AXL	0.2516
thetical.LOC38	0.2487
MAP7D3	0.2433
INHBA	0.2430
PTGS2	0.2421
SERPINA3	0.2380
CXCR1	0.2369
PVRL3	0.2360
CA12	0.2334
SEMA3C	0.2331
ANXA8L2	0.2316
GLRB	0.2309
SLC40A1	0.2306
FAP	0.2304
ECE2	0.2289
NACC2	0.2261
KRT6B	0.2244
MAGEA1	0.2225
GREM1	0.2209
NUDCD1	0.2198
KRT16	0.2179

TCEAL1	0.2168
EMP3	0.2166
RECQL	0.2148
CAMK2N1	0.2148
CHPF	0.2145
LEPRE1	0.2140
F3	0.2138
MAP2K4	0.2125
KDR	0.2118
FZD7	0.2116
KRTAP1.1	0.2079
TMEM139	0.2065
BDNF	0.2065
KIF20A	0.2065
APH1B	0.2014
COG8	0.1994
TMCC2	0.1977
ZEB2	0.1973
SCUBE2	0.1954
RGS22	0.1947
PROM1	0.1940
ERBB4	0.1932
TMEM25	0.1927
NOTCH2	0.1911
OGFRL1	0.1901
KLHL9	0.1893
A1CF	0.1884
GSTM3	0.1875
FAM38A	0.1870
ADRA2A	0.1856
NPM2	0.1852
FOXC1	0.1814
ERBB2	0.1785
IFT74	0.1784
C1orf21	0.1773
ATM	0.1773
KDM4B	0.1763
TP63	0.1746
ST18	0.1739
ADRA2C	0.1728
ANGPTL4	0.1712
TCF7L1	0.1701
MET	0.1699
EVI2A	0.1609
AFF3	0.1609
CABP7	0.1602
CXCR2	0.1599

CCND1	0.1539
SLC39A6	0.1510
APC	0.1463
RAD17	0.1460
ANXA1	0.1446
BRAF	0.1420
LRRC2	0.1384
KIAA1324	0.1383
PTEN	0.1341
ITGB1	0.1308
C16orf45	0.1288
BCL11A	0.1279
RAD51L1	0.1265
KLHL7	0.1264
KIAA1370	0.1231
ITCH	0.1222
SMO	0.1221
RAD50	0.1214
CHST11	0.1179
CDKN2C	0.1156
CDH3	0.1135
CSDA	0.1133
C4orf32	0.1101
BCL2	0.1101
GRB7	0.1090
MAPT	0.1083
EGFR	0.1073
MAGOHB	0.1066
PCDH8	0.1064
BTG2	0.1059
LAMC2	0.1055
GATA3	0.1038
CDKN1B	0.1026
STAT3	0.1025
PLOD1	0.1011
HEXIM1	0.1008
OCLN	0.0998
NEO1	0.0997
CCND2	0.0972
GRHL1	0.0966
RHBG	0.0959
ALDH1A1	0.0938
FREQ	0.0909
MMP11	0.0900
WIPF2	0.0897
CAPN6	0.0880
RRAGD	0.0876

KRT6A	0.0861
LRIG1	0.0859
RB1	0.0856
MUC5B	0.0844
SLC7A6	0.0844
KIF13B	0.0820
LAMA3	0.0817
DNAJC12	0.0799
FZD6	0.0769
NDRG1	0.0767
NOTCH1	0.0761
IL6	0.0760
INPP4B	0.0745
CDKN2D	0.0738
FANK1	0.0731
CTSL2	0.0725
CDCA7L	0.0720
PEX11G	0.0698
TIMM8A	0.0685
CCND3	0.0680
ADM	0.0669
RRP15	0.0639
DEGS2	0.0629
GUSB	0.0585
PLA1A	0.0580
MDM2	0.0578
TM7SF3	0.0574
KLF4	0.0573
GOLT1A	0.0565
C4orf34	0.0541
HRAS	0.0540
MLPH	0.0508
ABCB1	0.0488
RNF103	0.0476
IGBP1	0.0469
REEP6	0.0438
C12orf11	0.0437
SRC	0.0401
EIF2S2	0.0397
NF1	0.0384
IRX3	0.0325
PREP	0.0324
KRT19	0.0323
PSPH	0.0318
GSTM4	0.0318
UIMC1	0.0316
AREG	0.0303

LSR	0.0295
P4HTM	0.0284
IGFBP2	0.0255
GPSM2	0.0204
CDKN1A	0.0169
SQLE	0.0168
DDR1	0.0163
RAB25	0.0155
IKBKB	0.0141
KRT6C	0.0139
MYO5C	0.0135
TSHZ1	0.0134
SHC1	0.0101
NPEPPS	0.0097
TRIP13	0.0088
PDXK	0.0075
KPNA1	0.0065
AHCYL1	0.0062
FABP5	0.0058
ABCC8	0.0048
SAPS1	0.0045
NDUFAF4	0.0012
TMEM125	0.0011
S100A11	-0.0005
JUP	-0.0008
STMN1	-0.0016
CDKN2B	-0.0019
MKRN2	-0.0020
KRAS	-0.0032
SLC9A3	-0.0046
CEACAM6	-0.0049
AGR3	-0.0078
NCAPH2	-0.0081
HIF1A	-0.0095
CYB5B	-0.0100
VAV3	-0.0104
GRHL2	-0.0108
CXCL1	-0.0111
ERBB3	-0.0115
SCGB2A2	-0.0124
GAL	-0.0135
FBP1	-0.0146
STC2	-0.0167
GPR160	-0.0184
AR	-0.0185
CLMN	-0.0191
UCHL1	-0.0224

TSPAN13	-0.0232
C8orf33	-0.0237
MPP1	-0.0254
EPN3	-0.0273
BOP1	-0.0278
MUC1	-0.0292
NFKBIA	-0.0315
TMEM158	-0.0326
MYC	-0.0330
PYROXD1	-0.0334
IL1B	-0.0337
KCTD1	-0.0339
TFF1	-0.0340
CITED4	-0.0341
CYCS	-0.0342
ESR1	-0.0359
CD44	-0.0366
CAPN13	-0.0376
XBP1	-0.0379
ABCC3	-0.0390
BAG1	-0.0398
KRT8	-0.0408
TMEM208	-0.0441
NRAS	-0.0443
ESRP1	-0.0461
CD68	-0.0472
SLC16A3	-0.0476
PTGER4	-0.0494
TP53	-0.0517
CXXC5	-0.0526
KIAA0040	-0.0533
STK11	-0.0537
ATR	-0.0545
FBXL6	-0.0559
ARAF	-0.0560
MTHFD1L	-0.0569
NUP88	-0.0583
CD86	-0.0615
C17orf37	-0.0616
CLDN7	-0.0651
FGFR4	-0.0659
SNAI1	-0.0673
MLKL	-0.0686
TUBA4A	-0.0688
GSTM1	-0.0698
PHGDH	-0.0714
RINT1	-0.0722

FAM171A1	-0.0734
TFF3	-0.0748
DSP	-0.0750
AKT3	-0.0784
INSIG1	-0.0793
NAT1	-0.0793
ACTR3B	-0.0847
ELOVL5	-0.0849
SPINT1	-0.0864
NQO1	-0.0885
VEGFA	-0.0903
SPDEF	-0.0905
TFAM	-0.0905
NFIA	-0.0914
STRAP	-0.0925
BMI1	-0.0933
C8orf30A	-0.0940
SH2B3	-0.0941
TOR1A	-0.0947
CELSR1	-0.0957
IL8	-0.0973
AVEN	-0.0987
FAM174B	-0.0992
GPR172A	-0.0993
PIP	-0.1022
S100A9	-0.1047
CFLAR	-0.1052
RAF1	-0.1076
ZNF217	-0.1087
NUP93	-0.1089
BRCA2	-0.1095
SLC9A3R1	-0.1097
PRAME	-0.1100
TMEM45B	-0.1174
CTSL1	-0.1216
AZGP1	-0.1217
ME1	-0.1233
MRPS35	-0.1248
FNBP1	-0.1274
RAD51C	-0.1275
ical.protein.LC	-0.1275
CDC25B	-0.1309
DDIT4	-0.1322
AARS	-0.1356
GARS	-0.1357
CCDC86	-0.1377
BCL2A1	-0.1414

AVL9	-0.1416
IL6R	-0.1466
FLVCR2	-0.1466
TP53BP2	-0.1471
USP10	-0.1485
GALNT7	-0.1498
FOXA1	-0.1517
WDR4	-0.1537
IGF2R	-0.1569
PUM1	-0.1591
PIR	-0.1658
BYSL	-0.1668
CLDN4	-0.1677
RBBP8	-0.1679
NUDT1	-0.1695
GPR89A	-0.1698
CDYL	-0.1706
AKT1	-0.1711
COX4NB	-0.1722
SPINT2	-0.1724
NFKBIB	-0.1725
ACOT4	-0.1755
PNO1	-0.1763
Keraton.8	-0.1770
AGR2	-0.1777
BLVRA	-0.1818
ASF1A	-0.1821
C11orf30	-0.1853
S100A8	-0.1893
EPSTI1	-0.1936
PUF60	-0.1969
CHEK2	-0.1972
MAP2K1	-0.2002
NFKB1	-0.2006
EPCAM	-0.2023
CDKN2A	-0.2030
PTDSS1	-0.2076
ACTL8	-0.2103
CHUK	-0.2135
C1orf106	-0.2145
MRPS17	-0.2152
FAM54A	-0.2179
MTOR	-0.2211
CDCA7	-0.2220
VAMP8	-0.2222
BRCA1	-0.2222
SUV39H2	-0.2245

GGH	-0.2249
SNRPD1	-0.2255
NLN	-0.2266
RACGAP1	-0.2275
ANLN	-0.2277
STAT1	-0.2302
RELA	-0.2325
GTPBP4	-0.2328
LAG3	-0.2398
IKBKE	-0.2398
WDR12	-0.2400
PNP	-0.2403
RANBP1	-0.2409
CAND1	-0.2410
ical.protein.LC	-0.2415
GINS2	-0.2426
SLC25A19	-0.2462
TAP1	-0.2475
BTG3	-0.2488
MYB	-0.2489
SLC5A6	-0.2563
POLD1	-0.2575
YBX1	-0.2585
LRP8	-0.2596
RAB35	-0.2670
TACC3	-0.2681
BLM	-0.2684
TOMM40	-0.2687
CENPN	-0.2727
CTPS	-0.2744
PSMA7	-0.2793
CDK1	-0.2809
CHEK1	-0.2819
CLDN3	-0.2828
PSMD14	-0.2840
TOM1L1	-0.2850
RFC4	-0.2859
NOP56	-0.2869
IDO1	-0.2889
C16orf61	-0.2922
NFKBIE	-0.2927
GABPB1	-0.2957
HSPA14	-0.2963
PDSS1	-0.2967
COX6C	-0.2979
ATAD3A	-0.3006
DLGAP5	-0.3033

TK1	-0.3050
S100A14	-0.3106
CD24	-0.3128
MCM2	-0.3132
MSH2	-0.3145
C21orf45	-0.3145
CDT1	-0.3151
TIMM17A	-0.3165
PARP1	-0.3188
HMGA1	-0.3214
MKI67	-0.3221
SNRPA1	-0.3252
SEH1L	-0.3262
IDH2	-0.3303
RELB	-0.3319
CDC45L	-0.3353
COX7B	-0.3367
KRT18	-0.3372
SPAG5	-0.3393
CDCA8	-0.3393
CDK4	-0.3462
EZH2	-0.3484
MCM3	-0.3520
F11R	-0.3527
MELK	-0.3606
CDC20	-0.3607
KIFC1	-0.3645
CDC123	-0.3656
PITX1	-0.3681
NDC80	-0.3696
TOP2A	-0.3723
FANCA	-0.3727
ORC6L	-0.3740
CCNE1	-0.3749
PCNA	-0.3846
KIF23	-0.3916
CENPI	-0.3921
GSTP1	-0.3926
CDKN3	-0.3929
AURKA	-0.3999
RAD51	-0.4004
PGAM5	-0.4060
EXO1	-0.4078
KIF2C	-0.4083
TTK	-0.4111
FOXM1	-0.4130
ATAD2	-0.4132

MAD2L1	-0.4152
BUB1	-0.4168
CENPF	-0.4247
E2F1	-0.4282
CDC6	-0.4294
TFRC	-0.4331
BIRC5	-0.4348
NUF2	-0.4363
CKS1B	-0.4458
HSPD1	-0.4464
HN1	-0.4593
TYMS	-0.4653
CKS2	-0.4667
PRC1	-0.4705
UBE2C	-0.4773
CCNB1	-0.4788
CDC25C	-0.4802
UBE2T	-0.4842
CEP55	-0.4972
RRM2	-0.5004
HJURP	-0.5013
NEK2	-0.5052
CDCA5	-0.5238
PTTG1	-0.5240
CCNA2	-0.5334
CENPA	-0.5544
KIF4A	-0.5646
MYBL2	-0.6051