

KEGG ID A	Protein Name	Subcellular location	KEGG ID B	Protein Name	Subcellular location	PIDS
hsa:56998	CTNNBIP1	nucleus	hsa:3728	JUP	cytoplasm	207.2929
hsa:56998	CTNNBIP1	nucleus	hsa:3728	JUP	cytoplasm	207.2929
hsa:8996	NOL3	nucleus	hsa:835	CASP2	cytoplasm	173.3722
hsa:8996	NOL3	nucleus	hsa:841	CASP8	cytoplasm	173.3722
hsa:11156	PTP4A3	nucleus	hsa:55898	UNC45A	cytoplasm	125.6321
hsa:11156	PTP4A3	nucleus	hsa:10985	GCN1L1	cytoplasm	125.6321
hsa:11156	PTP4A3	nucleus	hsa:55027	HEATR3	cytoplasm	125.6321
hsa:8915	BCL10	cytoplasm	hsa:10892	MALT1	extracellular	102.2818
hsa:1500	CTNND1	cytoplasm	hsa:64403	CDH24	extracellular	77.73484
hsa:1500	CTNND1	cytoplasm	hsa:1003	CDH5	extracellular	77.73484
hsa:1500	CTNND1	cytoplasm	hsa:999	CDH1	extracellular	77.73484
hsa:1500	CTNND1	cytoplasm	hsa:1001	CDH3	extracellular	77.73484
hsa:8502	PKP4	cytoplasm	hsa:1003	CDH5	extracellular	77.73484
hsa:8502	PKP4	cytoplasm	hsa:1825	DSC3	extracellular	77.73484
hsa:1501	CTNND2	cytoplasm	hsa:1000	CDH2	extracellular	77.73484
hsa:3728	JUP	cytoplasm	hsa:1830	DSG3	extracellular	77.73484
hsa:3728	JUP	cytoplasm	hsa:1829	DSG2	extracellular	77.73484
hsa:3728	JUP	cytoplasm	hsa:1824	DSC2	extracellular	77.73484
hsa:3728	JUP	cytoplasm	hsa:1823	DSC1	extracellular	77.73484
hsa:1501	CTNND2	cytoplasm	hsa:999	CDH1	extracellular	77.73484
hsa:1434	CSE1L	cytoplasm	hsa:999	CDH1	extracellular	77.73484
hsa:7874	USP7	nucleus	hsa:10346	TRIM22	cytoplasm	72.10188
hsa:7874	USP7	nucleus	hsa:7187	TRAF3	cytoplasm	72.10188
hsa:7874	USP7	nucleus	hsa:7186	TRAF2	cytoplasm	72.10188
hsa:7874	USP7	nucleus	hsa:7189	TRAF6	cytoplasm	72.10188
hsa:7874	USP7	nucleus	hsa:7188	TRAF5	cytoplasm	72.10188
hsa:8161	COIL	nucleus	hsa:3839	KPNA3	cytoplasm	64.49113
hsa:9391	CIAO1	nucleus	hsa:54919	HEATR2	cytoplasm	64.49113
hsa:6001	RGS10	nucleus	hsa:2770	GNAI1	cytoplasm	63.78243
hsa:6002	RGS12	nucleus	hsa:2770	GNAI1	cytoplasm	63.78243
hsa:6001	RGS10	nucleus	hsa:2781	GNAZ	cytoplasm	63.78243
hsa:6002	RGS12	nucleus	hsa:2771	GNAI2	cytoplasm	63.78243
hsa:6001	RGS10	nucleus	hsa:2773	GNAI3	cytoplasm	63.78243
hsa:6002	RGS12	nucleus	hsa:2773	GNAI3	cytoplasm	63.78243
hsa:3728	JUP	cytoplasm	hsa:1003	CDH5	extracellular	63.3395
hsa:3728	JUP	cytoplasm	hsa:1825	DSC3	extracellular	63.3395
hsa:3728	JUP	cytoplasm	hsa:1828	DSG1	extracellular	63.3395
hsa:3728	JUP	cytoplasm	hsa:1000	CDH2	extracellular	63.3395
hsa:421	ARVCF	cytoplasm	hsa:1000	CDH2	extracellular	63.3395
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hsa:3728	JUP	cytoplasm	hsa:999	CDH1	extracellular	63.3395
hsa:421	ARVCF	cytoplasm	hsa:1013	CDH15	extracellular	63.3395
hsa:3728	JUP	cytoplasm	hsa:1013	CDH15	extracellular	63.3395
hsa:56893	UBQLN4	nucleus	hsa:4867	NPHP1	cytoplasm	39.48436
hsa:56893	UBQLN4	nucleus	hsa:10254	STAM2	cytoplasm	39.48436
hsa:8996	NOL3	nucleus	hsa:8772	FADD	cytoplasm	31.19141

hsa:317	APAF1	cytoplasm	hsa:355	FAS	extracellular	31.19141
hsa:8915	BCL10	cytoplasm	hsa:8797	TNFRSF10A	extracellular	31.19141
hsa:9771	RAPGEF5	nucleus	hsa:5906	RAP1A	cytoplasm	28.89253
hsa:9771	RAPGEF5	nucleus	hsa:22808	MRAS	cytoplasm	28.89253
hsa:9771	RAPGEF5	nucleus	hsa:5911	RAP2A	cytoplasm	28.89253
hsa:9771	RAPGEF5	nucleus	hsa:5912	RAP2B	cytoplasm	28.89253
hsa:5931	RBBP7	nucleus	hsa:7189	TRAF6	cytoplasm	27.63905
hsa:9184	BUB3	nucleus	hsa:7189	TRAF6	cytoplasm	27.63905
hsa:8379	MAD1L1	nucleus	hsa:22981	RP4-691N24.1	cytoplasm	26.32291
hsa:8379	MAD1L1	nucleus	hsa:22981	KIAA0980	cytoplasm	26.32291
hsa:114609	TIRAP	cytoplasm	hsa:4615	MYD88	plasma membrane	26.20945
hsa:7097	TLR2	plasma membrane	hsa:148022	TICAM1	extracellular	24.67773
hsa:7098	TLR3	plasma membrane	hsa:148022	TICAM1	extracellular	24.67773
hsa:1107	CHD3	nucleus	hsa:7341	SUMO1	cytoplasm	24.03396
hsa:5371	PML	nucleus	hsa:7341	SUMO1	cytoplasm	24.03396
hsa:8554	PIAS1	nucleus	hsa:7341	SUMO1	cytoplasm	24.03396
hsa:10210	TOPORS	nucleus	hsa:7341	SUMO1	cytoplasm	24.03396
hsa:8805	TRIM24	nucleus	hsa:7341	SUMO1	cytoplasm	24.03396
hsa:4193	MDM2	nucleus	hsa:7341	SUMO1	cytoplasm	24.03396
hsa:6477	SIAH1	nucleus	hsa:573	BAG1	cytoplasm	24.03396
hsa:55658	RNF126	cytoplasm	hsa:7917	BAT3	extracellular	24.03396
hsa:29959	NRBP1	cytoplasm	hsa:55183	RIF1	extracellular	23.70637
hsa:699	BUB1	nucleus	hsa:324	APC	cytoplasm	23.70637
hsa:29959	NRBP	cytoplasm	hsa:55183	RIF1	extracellular	23.70637
hsa:55198	APPL2	nucleus	hsa:57403	RAB22A	cytoplasm	23.20714
hsa:55198	APPL2	nucleus	hsa:5868	RAB5A	cytoplasm	23.20714
hsa:26060	APPL1	nucleus	hsa:5868	RAB5A	cytoplasm	23.20714
hsa:55198	DIP13B	nucleus	hsa:57403	RAB22A	cytoplasm	23.20714
hsa:84440	RAB11FIP4	cytoplasm	hsa:9727	RAB11FIP3	extracellular	19.74218
hsa:9627	SNCAIP	nucleus	hsa:25897	RNF19A	cytoplasm	19.66415
hsa:57498	KIDINS220	cytoplasm	hsa:4804	NGFR	extracellular	19.66415
hsa:7704	ZBTB16	nucleus	hsa:7186	TRAF2	cytoplasm	19.52759
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hsa:84527	ZNF559	nucleus	hsa:4188	MDFI	cytoplasm	19.52759
hsa:699	BUB1	nucleus	hsa:163	AP2B1	cytoplasm	18.46892
hsa:11200	CHEK2	nucleus	hsa:3838	KPNA2	cytoplasm	18.46892
hsa:4193	MDM2	nucleus	hsa:64219	PJA1	cytoplasm	18.02547
hsa:2130	EWSR1	nucleus	hsa:138065	RNF183	cytoplasm	18.02547
hsa:2130	EWSR1	nucleus	hsa:4591	TRIM37	cytoplasm	18.02547
hsa:257397	MAP3K7IP3	nucleus	hsa:7186	TRAF2	cytoplasm	18.02547
hsa:54764	ZRANB1	nucleus	hsa:7189	TRAF6	cytoplasm	18.02547
hsa:257397	MAP3K7IP3	nucleus	hsa:7189	TRAF6	cytoplasm	18.02547
hsa:2130	EWSR1	nucleus	hsa:138065	RNF183	cytoplasm	18.02547
hsa:2130	EWSR1	nucleus	hsa:4591	TRIM37	cytoplasm	18.02547
hsa:388	RHOB	nucleus	hsa:85415	RHPN2	cytoplasm	15.86425
hsa:91653	BOC	plasma membrane	hsa:55183	RIF1	extracellular	15.72567
hsa:91653	BOC	plasma membrane	hsa:55183	RIF1	extracellular	15.72567

hsa:8767	RIPK2	cytoplasm	hsa:7132	TNFRSF1A	extracellular	15.5075
hsa:54106	TLR911344	plasma membrane	hsa:59307	SIGIRR	extracellular	14.38116
hsa:1025	CDK9	nucleus	hsa:27148	STK36	cytoplasm	13.23146
hsa:51366	UBR5	nucleus	hsa:5594	MAPK1	cytoplasm	13.23146
hsa:9020	MAP3K14	cytoplasm	hsa:23223	RRP12	plasma membrane	13.23146
hsa:58500	ZNF250	nucleus	hsa:373	TRIM23	cytoplasm	12.40631
hsa:58500	ZNF250	nucleus	hsa:373	TRIM23	cytoplasm	12.40631
hsa:8878	SQSTM1	nucleus	hsa:3932	LCK	cytoplasm	12.1726
hsa:5788	PTPRC	cytoplasm	hsa:919	CD247	extracellular	11.59681
hsa:5774	PTPN3	cytoplasm	hsa:919	CD247	extracellular	11.59681
hsa:26191	PTPN22	cytoplasm	hsa:919	CD247	extracellular	11.59681
hsa:9618	TRAF4	nucleus	hsa:4216	MAP3K4	cytoplasm	11.40974
hsa:9618	TRAF4	nucleus	hsa:6198	RPS6KB1	cytoplasm	11.40974
hsa:8618	CADPS	nucleus	hsa:1756	DMD	cytoplasm	9.476247
hsa:1019	CDK4	cytoplasm	hsa:7917	BAT3	extracellular	8.820974
hsa:5610	EIF2AK2	nucleus	hsa:1147	CHUK	cytoplasm	8.820974
hsa:5610	EIF2AK2	nucleus	hsa:3551	IKBKB	cytoplasm	8.820974
hsa:5127	PCTK1	cytoplasm	hsa:7917	BAT3	extracellular	8.820974
hsa:57396	CLK4	nucleus	hsa:59286	UBL5	cytoplasm	8.820974
hsa:23097	CDC2L6	nucleus	hsa:9821	RB1CC1	cytoplasm	8.820974
hsa:10114	HIPK3	nucleus	hsa:7341	SUMO1	cytoplasm	8.820974
hsa:1019	CDK4	cytoplasm	hsa:7917	BAT3	extracellular	8.820974
hsa:8767	RIPK2	cytoplasm	hsa:4804	NGFR	extracellular	8.612487
hsa:26060	APPL1	nucleus	hsa:5290	PIK3CA	cytoplasm	7.896872
hsa:55914	ERBB2IP	cytoplasm	hsa:3691	ITGB4	extracellular	7.691759
hsa:8125	ANP32A	nucleus	hsa:5788	PTPRC	cytoplasm	7.691759
hsa:5777	PTPN6	cytoplasm	hsa:919	CD247	extracellular	7.462293
hsa:6196	RPS6KA2	nucleus	hsa:9223	MAGI1	cytoplasm	6.895014
hsa:2321	FLT1	cytoplasm	hsa:8828	NRP2	extracellular	6.86211
hsa:83593	RASSF5	nucleus	hsa:5908	RAP1B	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:5906	RAP1A	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:5898	RALA	cytoplasm	6.768748
hsa:9770	RASSF2	nucleus	hsa:3265	HRAS	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:3265	HRAS	cytoplasm	6.768748
hsa:11186	RASSF1	nucleus	hsa:3265	HRAS	cytoplasm	6.768748
hsa:9770	RASSF2	nucleus	hsa:3845	KRAS	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:3845	KRAS	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:22800	RRAS2	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:6237	RRAS	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:22808	MRAS	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:4893	NRAS	cytoplasm	6.768748
hsa:83593	RASSF5	nucleus	hsa:5911	RAP2A	cytoplasm	6.768748
hsa:8878	SQSTM1	nucleus	hsa:8737	RIPK1	cytoplasm	6.248191
hsa:8878	SQSTM1	nucleus	hsa:3654	IRAK1	cytoplasm	6.248191
hsa:8878	SQSTM1	nucleus	hsa:7046	TGFBR1	cytoplasm	6.248191
hsa:8878	SQSTM1	nucleus	hsa:90	ACVR1	cytoplasm	6.248191
hsa:8878	SQSTM1	nucleus	hsa:5590	PRKCZ	cytoplasm	6.248191

hsa:8878	SQSTM1	nucleus	hsa:658	BMPR1B	cytoplasm	6.248191
hsa:8878	SQSTM1	nucleus	hsa:5584	PRKCI	cytoplasm	6.248191
hsa:5595	MAPK3	nucleus	hsa:5605	MAP2K2	cytoplasm	6.174682
hsa:5595	MAPK3	nucleus	hsa:5604	MAP2K1	cytoplasm	6.174682
hsa:57761	TRIB3	nucleus	hsa:5604	MAP2K1	cytoplasm	6.174682
hsa:10221	TRIB1	nucleus	hsa:5604	MAP2K1	cytoplasm	6.174682
hsa:5595	MAPK3	nucleus	hsa:23236	PLCB1	cytoplasm	5.439601
hsa:7465	WEE1	nucleus	hsa:57154	SMURF1	cytoplasm	5.439601
hsa:53904	MYO3A	cytoplasm	hsa:145781	Gcom1	extracellular	5.390596
hsa:51765	RP6-213H19.1	cytoplasm	hsa:145781	Gcom1	extracellular	5.390596
hsa:11156	PTP4A3	nucleus	hsa:1017	CDK2	cytoplasm	5.346045
hsa:5371	PML	nucleus	hsa:7048	TGFBR2	cytoplasm	5.177529
hsa:5371	PML	nucleus	hsa:7046	TGFBR1	cytoplasm	5.177529
hsa:5371	PML	nucleus	hsa:6790	AURKA	cytoplasm	5.177529
hsa:5371	PML	nucleus	hsa:1432	MAPK14	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:4215	MAP3K3	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:25	ABL129892	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:207	AKT1	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:3717	JAK2	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:3716	JAK1	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:1019	CDK4	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:1017	CDK2	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:1457	CSNK2A1	cytoplasm	5.177529
hsa:4193	MDM2	nucleus	hsa:3480	IGF1R	cytoplasm	5.177529
hsa:4193	MDM2	nucleus	hsa:25	ABL129892	cytoplasm	5.177529
hsa:4193	MDM2	nucleus	hsa:207	AKT1	cytoplasm	5.177529
hsa:4194	MDM4	nucleus	hsa:207	AKT1	cytoplasm	5.177529
hsa:9169	SFRS2IP	nucleus	hsa:6732	SRPK1	cytoplasm	5.177529
hsa:1107	CHD3	nucleus	hsa:25764	HYPK	cytoplasm	5.177529
hsa:4194	MDM4	nucleus	hsa:1452	CSNK1A1	cytoplasm	5.177529
hsa:22823	MTF2	nucleus	hsa:25865	PRKD2	cytoplasm	5.177529
hsa:10155	TRIM28	nucleus	hsa:5062	PAK2	cytoplasm	5.177529
hsa:80306	MED28	nucleus	hsa:3932	LCK	cytoplasm	5.177529
hsa:672	BRCA1	nucleus	hsa:6790	AURKA	cytoplasm	5.177529
hsa:55120	FANCL	nucleus	hsa:7046	TGFBR1	cytoplasm	5.177529
hsa:64207	C14orf4	nucleus	hsa:3055	HCK	cytoplasm	5.177529
hsa:84676	TRIM63	nucleus	hsa:7273	TIN	cytoplasm	5.177529
hsa:8554	PIAS1	nucleus	hsa:5747	PTK2	cytoplasm	5.177529
hsa:55120	FANCL	nucleus	hsa:90	ACVR1	cytoplasm	5.177529
hsa:55120	FANCL	nucleus	hsa:658	BMPR1B	cytoplasm	5.177529
hsa:9616	RNF7	nucleus	hsa:1457	CSNK2A1	cytoplasm	5.177529
hsa:546	ATRX	nucleus	hsa:4750	NEK1	cytoplasm	5.177529
hsa:10475	TRIM38	nucleus	hsa:8737	RIPK1	cytoplasm	5.177529
hsa:54476	RNF216	nucleus	hsa:8737	RIPK1	cytoplasm	5.177529
hsa:51132	RNF12	nucleus	hsa:3984	LIMK1	cytoplasm	5.177529
hsa:4193	MDM2	nucleus	hsa:156	ADRBK1	cytoplasm	5.177529
hsa:10155	TRIM28	nucleus	hsa:9641	IKBKE	cytoplasm	5.177529

hsa:5371	PML	nucleus	hsa:1457	CSNK2A1	cytoplasm	5.177529
hsa:5770	PTPN1	cytoplasm	hsa:4914	NTRK1	plasma membrane	5.090737
hsa:5581	PRKCE	cytoplasm	hsa:2915	GRM5	plasma membrane	5.040557
hsa:5581	PRKCE	cytoplasm	hsa:2906	GRIN2D	plasma membrane	5.040557
hsa:5580	PRKCD	cytoplasm	hsa:2915	GRM5	plasma membrane	5.040557
hsa:6714	SRC	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
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hsa:1020	CDK5	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
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hsa:5578	PRKCA	cytoplasm	hsa:2893	GRIA4	plasma membrane	5.040557
hsa:4067	LYN	cytoplasm	hsa:2892	GRIA3	plasma membrane	5.040557
hsa:5566	PRKACA730418	cytoplasm	hsa:2893	GRIA4	plasma membrane	5.040557
hsa:5566	PRKACA730418	cytoplasm	hsa:2890	GRIA1	plasma membrane	5.040557
hsa:5590	PRK CZ	cytoplasm	hsa:2915	GRM5	plasma membrane	5.040557
hsa:5579	PRKCB1	cytoplasm	hsa:2915	GRM5	plasma membrane	5.040557
hsa:5579	PRKCB1	cytoplasm	hsa:2906	GRIN2D	plasma membrane	5.040557
hsa:818	CAMK2G	cytoplasm	hsa:2893	GRIA4	plasma membrane	5.040557
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hsa:5582	PRKCG	cytoplasm	hsa:2893	GRIA4	plasma membrane	5.040557
hsa:815	CAMK2A	cytoplasm	hsa:2893	GRIA4	plasma membrane	5.040557
hsa:2066	ERBB4	cytoplasm	hsa:2902	GRIN1	plasma membrane	5.040557
hsa:11113	CIT	cytoplasm	hsa:2902	GRIN1	plasma membrane	5.040557
hsa:815	CAMK2A	cytoplasm	hsa:2902	GRIN1	plasma membrane	5.040557
hsa:5605	MAP2K2	cytoplasm	hsa:2902	GRIN1	plasma membrane	5.040557
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hsa:5582	PRKCG	cytoplasm	hsa:2902	GRIN1	plasma membrane	5.040557
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hsa:5579	PRKCB1	cytoplasm	hsa:2902	GRIN1	plasma membrane	5.040557
hsa:8573	CASK	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
hsa:816	CAMK2B	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
hsa:815	CAMK2A	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
hsa:2185	PTK2B	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
hsa:5578	PRKCA	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
hsa:2534	FYN	cytoplasm	hsa:2903	GRIN2A	plasma membrane	5.040557
hsa:815	CAMK2A	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:816	CAMK2B	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:818	CAMK2G	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:817	CAMK2D	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:2048	EPHB2	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:5582	PRKCG	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557

hsa:5579	PRKCB1	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:5578	PRKCA	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:2534	FYN	cytoplasm	hsa:2904	GRIN2B	plasma membrane	5.040557
hsa:5588	PRKCQ	cytoplasm	hsa:2915	GRM5	plasma membrane	5.040557
hsa:5582	PRKCG	cytoplasm	hsa:2915	GRM5	plasma membrane	5.040557
hsa:5562	PRKAA1	cytoplasm	hsa:2898	GRIK2	plasma membrane	5.040557
hsa:8573	CASK	cytoplasm	hsa:2898	GRIK2	plasma membrane	5.040557
hsa:11113	CIT	cytoplasm	hsa:2906	GRIN2D	plasma membrane	5.040557
hsa:5605	MAP2K2	cytoplasm	hsa:2906	GRIN2D	plasma membrane	5.040557
hsa:6197	RPS6KA3	cytoplasm	hsa:2906	GRIN2D	plasma membrane	5.040557
hsa:5582	PRKCG	cytoplasm	hsa:2906	GRIN2D	plasma membrane	5.040557
hsa:6196	RPS6KA2	nucleus	hsa:673	BRAF	cytoplasm	4.932782
hsa:260425	MAGI3	cytoplasm	hsa:5787	PTPRB	extracellular	4.711202
hsa:9351	SLC9A3R2	nucleus	hsa:5728	PTEN	cytoplasm	4.711202
hsa:1844	DUSP2	nucleus	hsa:1432	MAPK14	cytoplasm	4.675648
hsa:1846	DUSP4	nucleus	hsa:1432	MAPK14	cytoplasm	4.675648
hsa:1844	DUSP2	nucleus	hsa:5594	MAPK1	cytoplasm	4.675648
hsa:1847	DUSP5	nucleus	hsa:5594	MAPK1	cytoplasm	4.675648
hsa:1846	DUSP4	nucleus	hsa:5594	MAPK1	cytoplasm	4.675648
hsa:1846	DUSP4	nucleus	hsa:5599	MAPK8	cytoplasm	4.675648
hsa:1846	DUSP4	nucleus	hsa:5601	MAPK9	cytoplasm	4.675648
hsa:25888	ZNF473	nucleus	hsa:90933	TRIM41	cytoplasm	4.506367
hsa:59348	ZNF350	nucleus	hsa:26994	RNF11	cytoplasm	4.506367
hsa:8517	IKBK	nucleus	hsa:26994	RNF11	cytoplasm	4.506367
hsa:26036	ZNF451	nucleus	hsa:9810	RNF40	cytoplasm	4.506367
hsa:10127	ZNF263	nucleus	hsa:90933	TRIM41	cytoplasm	4.506367
hsa:8328	GFI1B	nucleus	hsa:55072	RNF31	cytoplasm	4.506367
hsa:653121	unknown	nucleus	hsa:90933	TRIM41	cytoplasm	4.506367
hsa:57473	ZNF512B	nucleus	hsa:27072	VPS41	cytoplasm	4.506367
hsa:6667	SP1	nucleus	hsa:25897	RNF19A	cytoplasm	4.506367
hsa:54840	APTX	nucleus	hsa:4591	TRIM37	cytoplasm	4.506367
hsa:147687	ZNF417	nucleus	hsa:4591	TRIM37	cytoplasm	4.506367
hsa:5178	PEG3	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:7597	ZBTB25	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:59269	HIVEP3	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:23099	ZBTB43	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:25988	MIZF	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:9726	ZNF646	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:10906	TRAFD1	nucleus	hsa:7189	TRAF6	cytoplasm	4.506367
hsa:171392	ZNF675	nucleus	hsa:7189	TRAF6	cytoplasm	4.506367
hsa:8517	IKBK	nucleus	hsa:329	BIRC2	cytoplasm	4.506367
hsa:126070	ZNF440	nucleus	hsa:64219	PJA1	cytoplasm	4.506367
hsa:51545	ZNF581	nucleus	hsa:373	TRIM23	cytoplasm	4.506367
hsa:8328	GFI1B	nucleus	hsa:25898	RCHY1	cytoplasm	4.506367
hsa:8328	GFI1B	nucleus	hsa:11043	MID2	cytoplasm	4.506367
hsa:10127	ZNF263	nucleus	hsa:90933	TRIM41	cytoplasm	4.506367
hsa:25888	ZNF473	nucleus	hsa:90933	TRIM41	cytoplasm	4.506367

hsa:147687	ZNF417	nucleus	hsa:4591	TRIM37	cytoplasm	4.506367
hsa:25988	MIZF	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:26036	ZNF451	nucleus	hsa:9810	RNF40	cytoplasm	4.506367
hsa:51545	ZNF581	nucleus	hsa:373	TRIM23	cytoplasm	4.506367
hsa:653121	ZBTB8	nucleus	hsa:90933	TRIM41	cytoplasm	4.506367
hsa:7597	ZNF46	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:84775	ZNF607	nucleus	hsa:4188	MDFI	cytoplasm	4.506367
hsa:90594	ZNF439	nucleus	hsa:4188	MDFI	cytoplasm	4.506367
hsa:9726	ZNF646	nucleus	hsa:7186	TRAF2	cytoplasm	4.506367
hsa:9841	ZBTB24	nucleus	hsa:4188	MDFI	cytoplasm	4.506367
hsa:1019	CDK4	cytoplasm	hsa:1028	CDKN1C	extracellular	4.410487
hsa:983	CDC2	nucleus	hsa:3306	HSPA2	cytoplasm	4.410487
hsa:4678	NASP	nucleus	hsa:9706	ULK2	cytoplasm	4.410487
hsa:80155	NARG1	nucleus	hsa:23043	TNIK	cytoplasm	4.410487
hsa:4678	NASP	nucleus	hsa:6446	SGK	cytoplasm	4.410487
hsa:5062	PAK2	cytoplasm	hsa:11052	CPSF6	extracellular	4.410487
hsa:80155	NARG1	nucleus	hsa:9641	IKBKE	cytoplasm	4.410487
hsa:55761	TTC17	nucleus	hsa:90	ACVR1	cytoplasm	4.410487
hsa:8473	OGT	nucleus	hsa:2932	GSK3B	cytoplasm	4.410487
hsa:55761	TTC17	nucleus	hsa:658	BMPR1B	cytoplasm	4.410487
hsa:8473	OGT	nucleus	hsa:1457	CSNK2A1	cytoplasm	4.410487
hsa:5536	PPP5C	nucleus	hsa:4217	MAP3K5	cytoplasm	4.410487
hsa:24148	PRPF6	nucleus	hsa:369	ARAF	cytoplasm	4.410487
hsa:3984	LIMK1	cytoplasm	hsa:1028	CDKN1C	extracellular	4.410487
hsa:4678	NASP	nucleus	hsa:9641	IKBKE	cytoplasm	4.410487
hsa:8473	OGT	nucleus	hsa:1017	CDK2	cytoplasm	4.410487
hsa:9641	IKBKE	cytoplasm	hsa:11052	CPSF6	extracellular	4.410487
hsa:4678	NASP	nucleus	hsa:9706	ULK2	cytoplasm	4.410487
hsa:5566	PRKACA730418	cytoplasm	hsa:3757	KCNH2	plasma membrane	4.34748
hsa:10114	HIPK3	nucleus	hsa:3985	LIMK2	cytoplasm	4.113949
hsa:55631	LRRC40	cytoplasm	hsa:3106	unknown	extracellular	4.084589
hsa:80824	DUSP16	nucleus	hsa:1432	MAPK14	cytoplasm	4.00525
hsa:51657	STYXL1	nucleus	hsa:7046	TGFBR1	cytoplasm	4.00525
hsa:80824	DUSP16	nucleus	hsa:5594	MAPK1	cytoplasm	4.00525
hsa:80824	DUSP16	nucleus	hsa:5599	MAPK8	cytoplasm	4.00525
hsa:80824	DUSP16	nucleus	hsa:5602	MAPK10	cytoplasm	4.00525
hsa:80824	DUSP16	nucleus	hsa:5601	MAPK9	cytoplasm	4.00525
hsa:80824	DUSP16	nucleus	hsa:5600	MAPK11	cytoplasm	4.00525
hsa:6196	RPS6KA2	nucleus	hsa:5604	MAP2K1	cytoplasm	3.957832
hsa:5595	MAPK3	nucleus	hsa:9846	GAB2	cytoplasm	3.717411
hsa:5595	MAPK3	nucleus	hsa:2549	GAB1	cytoplasm	3.717411
hsa:5595	MAPK3	nucleus	hsa:156	ADRBK1	cytoplasm	3.717411
hsa:983	CDC2	nucleus	hsa:1785	DNM2	cytoplasm	3.717411
hsa:6196	RPS6KA2	nucleus	hsa:50944	SHANK1	cytoplasm	3.613373
hsa:5595	MAPK3	nucleus	hsa:5829	PXN	cytoplasm	3.60858
hsa:10114	HIPK3	nucleus	hsa:8994	LIMD1	cytoplasm	3.60858
hsa:10114	HIPK3	nucleus	hsa:7791	ZYX	cytoplasm	3.60858

hsa:10114	HIPK3	nucleus	hsa:7041	TGFB1I1	cytoplasm	3.60858
hsa:10114	HIPK3	nucleus	hsa:5998	RGS3	cytoplasm	3.477853
hsa:995	CDC25C	nucleus	hsa:84446	BRSK1	cytoplasm	3.430379
hsa:995	CDC25C	nucleus	hsa:9024	BRSK2	cytoplasm	3.430379
hsa:995	CDC25C	nucleus	hsa:1263	PLK3	cytoplasm	3.430379
hsa:995	CDC25C	nucleus	hsa:4140	MARK3	cytoplasm	3.430379
hsa:995	CDC25C	nucleus	hsa:1432	MAPK14	cytoplasm	3.430379
hsa:995	CDC25C	nucleus	hsa:3932	LCK	cytoplasm	3.430379
hsa:995	CDC25C	nucleus	hsa:5585	PKN1	cytoplasm	3.430379
hsa:3932	LCK	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:6850	SYK	cytoplasm	hsa:150372	NFAM1	extracellular	3.327779
hsa:6850	SYK	cytoplasm	hsa:7305	TYROBP	extracellular	3.327779
hsa:6850	SYK	cytoplasm	hsa:2207	FCER1G	extracellular	3.327779
hsa:3718	JAK3	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:6464	SHC1	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:4067	LYN	cytoplasm	hsa:2207	FCER1G	extracellular	3.327779
hsa:2534	FYN	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:2885	GRB2	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:1445	CSK	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:10019	SH2B3	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:7535	ZAP70	cytoplasm	hsa:150372	NFAM1	extracellular	3.327779
hsa:7535	ZAP70	cytoplasm	hsa:7305	TYROBP	extracellular	3.327779
hsa:5336	PLCG2	cytoplasm	hsa:2207	FCER1G	extracellular	3.327779
hsa:695	BTK	cytoplasm	hsa:2207	FCER1G	extracellular	3.327779
hsa:84174	SLA2	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:6503	SLA	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:7535	ZAP70	cytoplasm	hsa:919	CD247	extracellular	3.327779
hsa:7153	TOP2A	nucleus	hsa:6732	SRPK1	cytoplasm	3.307865
hsa:7153	TOP2A	nucleus	hsa:5578	PRKCA	cytoplasm	3.307865
hsa:7153	TOP2A	nucleus	hsa:1457	CSNK2A1	cytoplasm	3.307865
hsa:7153	TOP2A	nucleus	hsa:5579	PRKCB1	cytoplasm	3.307865
hsa:7153	TOP2A	nucleus	hsa:5582	PRKCG	cytoplasm	3.307865
hsa:5798	PTPRN	cytoplasm	hsa:11122	PTPRT	extracellular	3.26317
hsa:5788	PTPRC	cytoplasm	hsa:3454	IFNAR1	extracellular	3.26317
hsa:5771	PTPN2	cytoplasm	hsa:2690	GHR	plasma membrane	3.26317
hsa:5795	PTPRJ	cytoplasm	hsa:3561	IL2RG	extracellular	3.26317
hsa:5770	PTPN1	cytoplasm	hsa:2690	GHR	plasma membrane	3.26317
hsa:5780	PTPN9	cytoplasm	hsa:2690	GHR	plasma membrane	3.26317
hsa:5774	PTPN3	cytoplasm	hsa:2690	GHR	plasma membrane	3.26317
hsa:983	CDC2	nucleus	hsa:1894	ECT2	cytoplasm	3.210306
hsa:5347	PLK1	nucleus	hsa:1894	ECT2	cytoplasm	3.210306
hsa:55743	CHFR	nucleus	hsa:6790	AURKA	cytoplasm	2.956305
hsa:11252	PACSIN2	cytoplasm	hsa:59341	TRPV4	plasma membrane	2.692116
hsa:29993	PACSIN1	cytoplasm	hsa:59341	TRPV4	plasma membrane	2.692116
hsa:29763	PACSIN3	cytoplasm	hsa:59341	TRPV4	plasma membrane	2.692116
hsa:54961	SSH3	nucleus	hsa:3984	LIMK1	cytoplasm	2.640252
hsa:5292	PIM1	nucleus	hsa:660	BMX	cytoplasm	2.619811



hsa:5578	PRKCA	cytoplasm	hsa:846	CASR	plasma membrane	2.432069
hsa:5579	PRKCB1	cytoplasm	hsa:846	CASR	plasma membrane	2.432069
hsa:5582	PRKCG	cytoplasm	hsa:846	CASR	plasma membrane	2.432069
hsa:394	ARHGAP5	nucleus	hsa:2185	PTK2B	cytoplasm	2.430268
hsa:1022	CDK7	nucleus	hsa:3927	LASP1	cytoplasm	2.427995
hsa:5781	PTPN11	cytoplasm	hsa:4914	NTRK1	plasma membrane	2.226038
hsa:5347	PLK1	nucleus	hsa:9088	PKMYT1	cytoplasm	2.205244
hsa:1024	CDK8	nucleus	hsa:1030	CDKN2B	cytoplasm	2.205244
hsa:56893	UBQLN4	nucleus	hsa:1760	DMPK	cytoplasm	2.205244
hsa:5901	RAN	nucleus	hsa:91754	NEK9	cytoplasm	2.145471
hsa:5901	RAN	nucleus	hsa:7046	TGFBR1	cytoplasm	2.145471
hsa:379	ARL4D	nucleus	hsa:7046	TGFBR1	cytoplasm	2.145471
hsa:5901	RAN	nucleus	hsa:658	BMPRI1B	cytoplasm	2.145471
hsa:5906	RAP1A	cytoplasm	hsa:4914	NTRK1	plasma membrane	2.145471
hsa:5595	MAPK3	nucleus	hsa:6850	SYK	cytoplasm	2.071011