

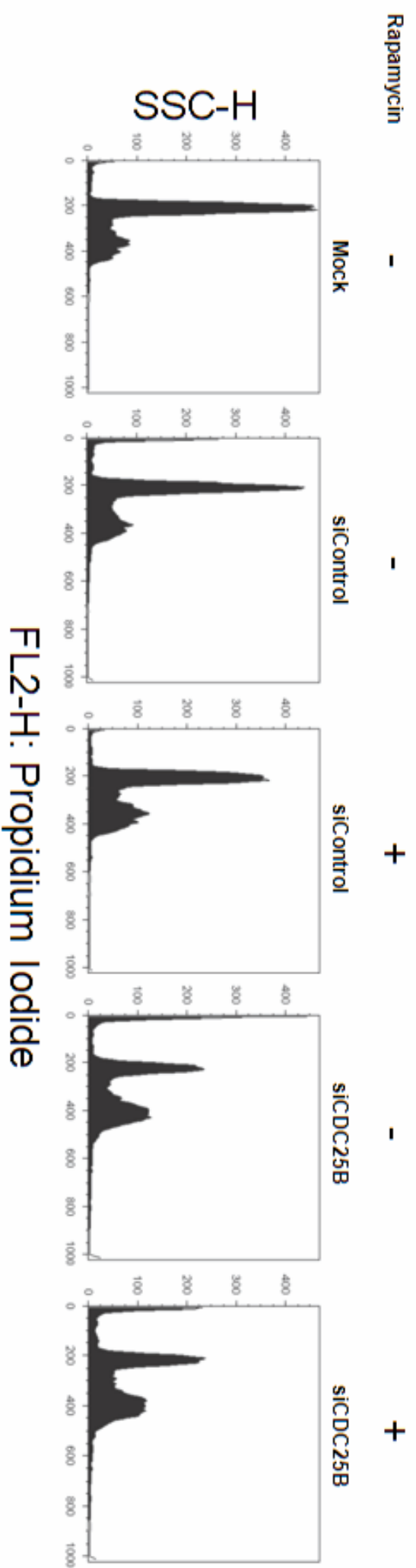
Type of file: figure

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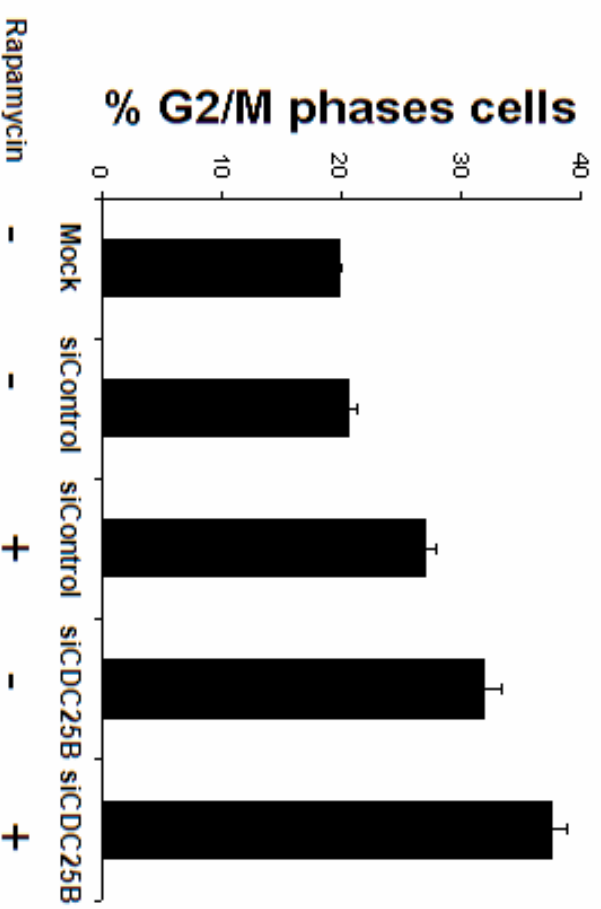
Filename: Supplemental figure 1.pdf

Supplemental figure 1

A



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Supplemental figure legends

Figure 1. Effect of CDC25B silencing and rapamycin on Cell Cycle Progression. HeLa cells were either nontransfected (Mock) or transfected with Control siRNA (siControl) or CDC25B siRNA (siCDC25B). After 48 hr, cells were treated with 100 nM rapamycin. Cell cycle distributions were examined after 24 hr by flow cytometry. A. Representative set of histograms for transfected and control cells treated or untreated with rapamycin. B. Percentage of cells in G2/M phase. Columns, mean of at least three independent experiments.

Type of file: table

Label: table 1

Filename: Supplemental Table 1.pdf

IPI	GeneID	Official Syr	Sequence	p-value	R-square	Site	R-ratio
IPI00000436.1	64405	CDH22	R.LLEPES	5.38E-08	0.61	S152	0.2
IPI00000634.1	8030	CCDC6	R.ILQEKLI	0.253322457	0.96	S240	1.07
IPI00000634.1	8030	CCDC6	K.SGGIVIS	0.12765804	0.98	S52	1.15
IPI00000634.1	8030	CCDC6	K.S*GGIVI	0.096924105	1	S46	1.22
IPI00000634.1	8030	CCDC6	R.TVS*SPI	0.197661257	0.88	S351	1.19
IPI00000634.1	8030	CCDC6	K.LDQPVS	0.12765804	1	S240	1.2
IPI00000685.1	1022	CDK7	R.AYT*HQ	0.401648339	0.9	T170	1.13
IPI00000687.1	10140	TOB1	R.TS*PINL	0.096924105	0.71	S205	1.04
IPI00000706.3	747	DAGLA	R.GS*PSLI	0.001432711	0.92	S806	1.74
IPI00000728.3	9958	USP15	R.GPS*TP	0.296993866	1	S225	1.11
IPI00000728.3	9958	USP15	R.GPST*P	0.296993866	1	T226	1.11
IPI00000769.2	3835	KIF22	R.ARGPEE	0.094770849	0.77	S412	0.84
IPI00000769.2	3835	KIF22	K.AVVMPL	0.342305379	0.83	S543	0.76
IPI00000811.2	5694	PSMB6	R.QS*FAIG	2.38E-08	0.85	S158	0.44
IPI00000856.7	10979	PLEKHC1	R.AKDQNE	0.0002914	0.67	S666	0.72
IPI00000858.1	7936	RDBP	R.KGNTLY	6.68E-07	0.5	T274	1.35
IPI00000858.1	7936	RDBP	R.KGNTLY	0.394935546	0.92	T272	1.07
IPI00000858.1	7936	RDBP	K.S*LYESF	0.643675939	0.92	S131	0.83
IPI00000858.1	7936	RDBP	K.SVWGS	0.346340474	0.98	S353	1.08
IPI00000858.1	7936	RDBP	R.S*LSEQL	0.080258071	0.92	S49	1.49
IPI00000858.1	7936	RDBP	R.SLS*EQL	0.080258071	0.92	S51	1.49
IPI00000897.1	9931	HELZ	R.RISS*SS	0.643675939	0.92	S1764	1.1
IPI00000977.1	4296	MAP3K11	K.T*PDSPI	0.233505398	0.5	T702	0.67
IPI00001053.4	25974	MMACHC	R.ARS*WL	0.530774648	0.88	S268	1.22
IPI00001466.2	27436	EML4	R.AS*PSP	0.51496205	0.71	S144	0.78
IPI00001600.1	79447	C16orf53	K.VLS*DM	0.214968943	0.9	S206	1.02
IPI00001722.1	4913	NTHL1	R.VAY*EG	0.152571688	0.81	Y68	1.04
IPI00001722.1	4913	NTHL1	R.VAYEGS	0.139636808	0.96	S71	1.06
IPI00001722.1	4913	NTHL1	R.VAYEGS	0.000485008	0.59	S73	1.04
IPI00001730.2	29109	FHOD1	K.EPLIPAS	0.604563646	0.96	S523	1.02
IPI00001730.2	29109	FHOD1	R.TPQS*P	0.214968943	1	S498	1.17
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.726073545	0.96	S2068	0.97
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.868109485	0.96	T2072	0.95
IPI00001735.4	9612	NCOR2	R.DYASHL	0.116581414	0.86	S54	1.08
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.49616549	0.98	S2056	1.02
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.49616549	0.98	S2056	1.02
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.643675939	0.98	S2064	0.97
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.566916624	0.98	S2064	0.97
IPI00001735.4	9612	NCOR2	R.LLS*PRF	0.684201094	0.98	S939	0.95
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.566916624	0.98	S2056	1.02
IPI00001735.4	9612	NCOR2	R.ANAS*P	0.253322457	1	S956	1.13
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.463105648	1	S2067	1.06
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.463105648	1	S2064	1.05
IPI00001735.4	9612	NCOR2	R.SLGYHC	0.401648339	1	S2067	1.05
IPI00001735.4	9612	NCOR2	K.S*PGNT	0.49616549	1	S2268	1.08
IPI00001738.4	4927	NUP88	K.NQSPT*	0.394935546	0.71	T37	0.65
IPI00001738.4	4927	NUP88	K.NQS*PT	0.181528891	0.92	S35	1.21
IPI00001738.4	4927	NUP88	K.NQS*PT	0.197661257	1	S35	1.18
IPI00001738.4	4927	NUP88	K.NQSPT	0.197661257	1	S45	1.18
IPI00001786.3	57602	USP36	K.LKS*PVL	0.684201094	0.96	S667	0.97

IPI00001813.4	57661 KIAA1542	R.KENPS*	1.77E-11	0.92	S814	3.74
IPI00001813.4	57661 KIAA1542	R.TVTCVT	0.905247537	0.88	S973	0.91
IPI00001835.3	57659 ZBTB4	R.AFHGIS'	0.391052876	0.83	S391	0.83
IPI00002186.3	10564 ARFGEF2	R.GSS*LS\	0.152571688	0.98	S277	0.84
IPI00002232.2	57551 TAOK1	R.ASDPQ	0.231191204	0.85	S421	1.05
IPI00002232.2	57551 TAOK1	R.AGS*LKI	0.684201094	0.92	S9	0.99
IPI00002349.2	57532 NUFIP2	K.TIQNSS\	0.730331964	0.98	S376	1.03
IPI00002349.2	57532 NUFIP2	K.TIQNSS\	0.730331964	0.98	T378	1.03
IPI00002349.2	57532 NUFIP2	K.DYEIES\	0.604563646	0.96	T633	0.99
IPI00002349.2	57532 NUFIP2	R.TS*PQV	0.253322457	1	S572	1.1
IPI00002349.2	57532 NUFIP2	K.RTS*PQ'	0.346340474	1	S572	1.1
IPI00002349.2	57532 NUFIP2	K.DYEIES\	0.684201094	1	S629	0.98
IPI00002374.2	79648 MCPH1	K.YRLS*P\	0.751811379	1	S333	1.01
IPI00002374.2	79648 MCPH1	K.YRLSPT	0.684201094	1	T335	1.08
IPI00002449.1	5144 PDE4D	R.RES*FL\	0.006469654	0.96	S190	1.26
IPI00002449.1	5144 PDE4D	-.MEAEGS	0.431601138	0.81	T25	0.93
IPI00002564.3	7515 XRCC1	R.INKT*SP	0.49616549	0.88	T198	1.09
IPI00002564.3	7515 XRCC1	R.AIGST*S	0.214968943	0.96	T235	1.07
IPI00002564.3	7515 XRCC1	R.AIGSTSI	0.214968943	0.96	S241	1.07
IPI00002564.3	7515 XRCC1	R.INKTSP\	0.401648339	0.98	Y211	1.08
IPI00002564.3	7515 XRCC1	K.TKPTQA	0.373234869	0.98	S446	1.09
IPI00002564.3	7515 XRCC1	R.INKTS*P	0.530774648	1	S199	1.02
IPI00002564.3	7515 XRCC1	K.TKPTQA	0.401648339	1	S447	1.04
IPI00002564.3	7515 XRCC1	R.INKTS*P	0.49616549	0.98	S199	1.15
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.836096036	0.94	T36	0.89
IPI00002569.2	1978 EIF4EBP1	R.DLPTIPC	0.106353987	0.96	S83	1.11
IPI00002569.2	1978 EIF4EBP1	R.DLPTIPC	0.096924105	0.94	S85	1.04
IPI00002569.2	1978 EIF4EBP1	R.DLPTIPC	0.096924105	0.94	S83	1.04
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.74749082	0.5	T37	0.68
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.684201094	0	T37	0.01
IPI00002569.2	1978 EIF4EBP1	R.DLPTIPC	0.214968943	1	S94	1.16
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.566916624	0.94	T41	0.95
IPI00002569.2	1978 EIF4EBP1	K.FLMECR	0.74749082	1	S65	0.97
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.777986561	0.98	T41	0.96
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.684201094	0.98	Y34	0.99
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.604563646	0.3	S35	0.61
IPI00002569.2	1978 EIF4EBP1	R.DLPTIPC	0.106353987	1	S101	1.24
IPI00002569.2	1978 EIF4EBP1	R.RVVLGC	0.643675939	1	T37	0.99
IPI00002828.2	79682 MLF1IP	K.HCGLSL	0.49616549	0.92	S97	1.11
IPI00002828.2	79682 MLF1IP	K.HCGLSL	0.566916624	0.96	T98	1.09
IPI00002879.3	79697 C14orf169	R.EPYGHL	0.49616549	0.66	S109	0.85
IPI00002902.5	79707 NOL9	R.LAAFAD	0.730331964	0.92	S487	1.05
IPI00002902.5	79707 NOL9	R.LAAFAD	0.839313928	0.96	T492	0.81
IPI00003337.4	8187 ZNF239	K.ILNTS*P	7.77E-06	0.79	S191	0.38
IPI00003362.2	3309 HSPA5	K.DAGT*IA	0	0.64	T190	7.43
IPI00003369.1	8994 LIMD1	R.T*PSVS/	0.829549043	0.92	T294	0.97
IPI00003369.1	8994 LIMD1	K.LS*PTSL	0.401648339	0.96	S384	1.11
IPI00003369.1	8994 LIMD1	K.LSPTS*L	0.401648339	0.96	S387	1.11
IPI00003369.1	8994 LIMD1	R.SNS*GL\	0.152571688	0.96	S316	1.37
IPI00003419.1	10944 C11orf58	K.RS*ASPI	0.530774648	0.88	S15	0.86
IPI00003419.1	10944 C11orf58	K.RSAS*PI	0.530774648	0.92	S17	1.18

IPI00003419.1	10944 C11orf58	R.S*ASPD	0.03637398	0.96 S15	1.37
IPI00003479.2	5594 MAPK1	R.VADPDF	0.463105648	0.94 Y187	1.19
IPI00003479.2	5594 MAPK1	R.VADPDF	0.096924105	0.94 T185	1.19
IPI00003479.2	5594 MAPK1	R.VADPDF	0.166517367	0.4 T185	0.4
IPI00003519.1	9343 EFTUD2	K.YYPTAE	0.044561326	0.62 T90	1.27
IPI00003519.1	9343 EFTUD2	K.YYPTAE	0.044561326	0.62 T86	1.27
IPI00003527.4	9368 SLC9A3R1	R.EALAEA	0.401648339	0.98 S280	1.02
IPI00003783.1	5605 MAP2K2	K.ELEAIFC	0.002042313	0.58 S293	0.91
IPI00003783.1	5605 MAP2K2	K.ELEAIFC	0.002042313	0.58 S295	0.91
IPI00004065.2	420 ART4	K.ILLPTT*\	0.000254984	0.98 T16	0.51
IPI00004069.1	9797 TATDN2	R.GFLSSC	0.27446972	0.83 S115	1.05
IPI00004208.4		R.GWVWS	4.13E-10	0.96 S75	0.31
IPI00004237.1	5256 PHKA2	R.RFS*AD	0.32093792	0.92 S1015	1.03
IPI00004273.6	58517 RBM25	K.LGASNS	0.233505398	0.98 S677	1.2
IPI00004958.2	63894 C14orf133	R.TRPGS*	0.346340474	0.88 S121	1.28
IPI00004958.2	63894 C14orf133	R.TRPGSF	0.03637398	1 S124	1.37
IPI00005036.1	10181 RBM5	R.GLVAAY	0.743182508	0.92 S624	0.97
IPI00005036.1	10181 RBM5	R.GLVAAY	0.373234869	0.96 S624	1.07
IPI00005132.3	54552 GNL3L	K.LLHS*PM	0.577359743	0.94 S465	0.95
IPI00005154.1	6749 SSRP1	K.EGMNPS	0.346340474	1 S444	1.1
IPI00005154.1	6749 SSRP1	K.EGMNPS	0.373234869	1 Y441	1.1
IPI00005180.2	731247 hCG_1998	R.RALVDT	0	0.83 Y107	7.24
IPI00005477.3	221830 TWISTNB	R.KHS*EE	0.431601138	0.85 S316	0.92
IPI00005477.3	221830 TWISTNB	R.KHSEEA	0.017448313	0.83 S328	1.13
IPI00005477.3	221830 TWISTNB	R.HIALS*P	0.080258071	1 S60	1.29
IPI00005477.3	221830 TWISTNB	R.KHS*EE	0.431601138	0.98 S316	1.09
IPI00005477.3	221830 TWISTNB	K.HSEEA	0.03637398	1 S328	1.32
IPI00005477.3	221830 TWISTNB	K.HSEEA	0.024009318	1 T322	1.32
IPI00005477.3	221830 TWISTNB	K.HQEVQI	0.27446972	0.98 S300	1.17
IPI00005477.3	221830 TWISTNB	K.HQEVQI	0.27446972	0.98 S304	1.17
IPI00005477.3	221830 TWISTNB	R.KHS*EE	0.84064003	1 S316	0.98
IPI00005614.5	6711 SPTBN1	R.AQTLPT	0.32093792	0.94 S2340	1.18
IPI00005614.5	6711 SPTBN1	R.AQTLPT	0.32093792	0.98 S2341	1.2
IPI00005614.5	6711 SPTBN1	R.AQTLPT	0.32093792	0.98 T2337	1.2
IPI00005621.1	85360 SYDE1	R.VPVGEY	0.726073545	1 S442	1
IPI00005675.3	55922 NKRF	R.FEPVHF	0.708392237	0.9 S65	1.1
IPI00005675.3	55922 NKRF	R.FEPVHF	0.708392237	0.9 S67	1.1
IPI00005717.1	2101 ESRRA	K.AEPAS*I	0.703604632	0.86 S116	0.99
IPI00005822.1	8697 CDC23	R.NQGETF	0.001128958	0.72 S578	1.1
IPI00006077.1	9767 PHF16	R.NSSTET	0.431601138	0.98 S566	1.06
IPI00006077.1	9767 PHF16	K.GVQVPA	0.214968943	0.98 S85	1.09
IPI00006091.2	1756 DMD	K.GLSPLP	0.197661257	0.76 S1076	1.05
IPI00006091.2	1756 DMD	K.GLSPLP	0.197661257	0.76 S3552	1.05
IPI00006091.2	1756 DMD	R.MGYLPA	0.296993866	0.92 S962	0.98
IPI00006091.2	1756 DMD	K.VNGTTV	0.917421569	0.88 S1140	1.02
IPI00006099.1	9790 BMS1	K.LGPQNF	0.147475653	0.69 T638	0.77
IPI00006099.1	9790 BMS1	K.LGPQNF	0.995403769	0.94 S639	0.92
IPI00006213.1	5108 PCM1	R.RQGLAE	0.604563646	0.88 S861	0.94
IPI00006213.1	5108 PCM1	R.RQGLAE	0.604563646	0.88 T859	0.94
IPI00006283.3	9344 TAOK2	R.AAS*GG	0.566916624	0.94 S1011	1.1
IPI00006283.3	9344 TAOK2	R.AASGG	0.566916624	0.94 S1014	1.1

IPI00006283.3	9344 TAOK2	R.LPGSDN	0.684201094	0.67	S452	0.73
IPI00006379.1	51602 NOP5/NOFK	LNLSCIF	0.545847833	0.85	S109	1.06
IPI00006379.1	51602 NOP5/NOFK	HIKEEPL	0.040276449	0.88	S502	1.1
IPI00006379.1	51602 NOP5/NOFK	HIKEEPL	0.181528891	0.96	S502	1.17
IPI00006379.1	51602 NOP5/NOFK	HIKEEPL	0.586469457	0.96	S502	1.17
IPI00006408.3	51070 NOSIP	K.VLPSFW	0.684201094	0.98	T168	1.08
IPI00006471.3	9833 MELK	K.LMTGVI	0.296993866	0.98	S498	1.1
IPI00006557.7	9867 PJA2	K.NHGSS*	0.881970624	0.72	S309	0.97
IPI00006571.1	81550 TDRD3	R.IRS*EDE	0.536956757	0.86	S256	0.96
IPI00006586.1	9878 TOX4	R.LSTTPS	0.713185935	0.72	S178	0.6
IPI00006900.1	57050 SAS10	K.AGPTLT	0.431601138	0.85	S37	1.1
IPI00006987.1	57062 DDX24	R.SPGKAE	0.717985529	0.83	S295	0.74
IPI00006987.1	57062 DDX24	R.S*PGKA	0.917421569	0.98	S287	0.88
IPI00006987.1	57062 DDX24	R.S*PGKA	0.604563646	0.98	S287	0.99
IPI00007004.4	51018 RRP15	K.T*PESKI	0.530774648	1	T104	1.01
IPI00007080.1	3623 INHA	R.S*T*PLM	0	0.94	S233	0.05
IPI00007208.4	51428 DDX41	R.TDEVPA	0.643675939	0.81	S21	0.99
IPI00007208.4	51428 DDX41	R.TDEVPA	0.152571688	0.96	S23	1.13
IPI00007208.4	51428 DDX41	R.TDEVPA	0.152571688	0.96	S21	1.13
IPI00007264.1	26353 HSPB8	R.DPFRDS	0.970843959	0.92	S24	0.92
IPI00007277.1	9209 LRRFIP2	R.RGS*GC	0.049260986	0.96	S328	1.12
IPI00007334.1	22985 ACIN1	K.EAS*S*F	0.181528891	0.85	S424	1.04
IPI00007334.1	22985 ACIN1	K.SLIPDIK	0.296993866	0.81	S895	0.87
IPI00007334.1	22985 ACIN1	K.SLIPDIK	0.214968943	0.81	S898	0.87
IPI00007334.1	22985 ACIN1	K.AES*PAI	0.197661257	0.85	S490	1.01
IPI00007334.1	22985 ACIN1	K.ASLVALI	0.566916624	0.92	S410	0.89
IPI00007334.1	22985 ACIN1	R.TAQVPS	0.233505398	0.96	S1004	1.17
IPI00007334.1	22985 ACIN1	K.EAS*SPI	0.373234869	0.92	S424	1.1
IPI00007334.1	22985 ACIN1	K.EASS*PI	0.743182508	0.92	S425	1.01
IPI00007334.1	22985 ACIN1	K.EAS*SPI	0.643675939	0.92	S424	1.01
IPI00007343.1	7737 RNF113A	K.AAY*GD	0.684201094	0.85	Y80	1.07
IPI00007343.1	7737 RNF113A	K.AAYGDL	0.684201094	0.85	S84	1.07
IPI00007343.1	7737 RNF113A	R.YGVYEC	0.738886535	0.9	S253	0.97
IPI00007411.1	11215 AKAP11	R.VTYAEK	0.197661257	1	S1580	0.96
IPI00007411.1	11215 AKAP11	R.VTYAEK	0.080258071	1	T1583	0.96
IPI00007411.1	11215 AKAP11	R.NVIPDTI	1.29E-05	0.5	T1104	0.97
IPI00007525.1	4197 MDS1	K.EGSPY*	0.577359743	0.9	Y64	0.94
IPI00007675.5	51143 DYNC1LI1	R.SVSSNV	0.346340474	0.98	S421	0.99
IPI00007675.5	51143 DYNC1LI1	R.NTASQE	0.267585708	0.83	T231	0.89
IPI00007675.5	51143 DYNC1LI1	R.NTASQE	0.267585708	0.83	S222	0.89
IPI00007675.5	51143 DYNC1LI1	K.KT*GSP	0.214968943	0.69	T456	0.85
IPI00007935.3	10611 PDLIM5	K.KANNSC	0.684201094	0.81	S313	1.06
IPI00007935.3	10611 PDLIM5	K.EVVKPV	0.791231585	0.98	T110	0.99
IPI00007935.3	10611 PDLIM5	K.EVVKPV	0.684201094	1	S111	1
IPI00008054.2	27154 BRPF3	R.RTS*VLF	0.03282354	0.94	S928	1.12
IPI00008054.2	27154 BRPF3	R.GTHLPE	0.273956116	0.62	S713	0.7
IPI00008137.1	49854 ZNF295	K.IQPLEPI	0.643675939	0.98	S1003	0.98
IPI00008137.1	49854 ZNF295	R.SLS*MD	0.438828959	0.77	S345	0.98
IPI00008137.1	49854 ZNF295	R.S*LSMD	0.438828959	0.77	S343	0.98
IPI00008177.3	57476 GRAMD1BK	SSIETKF	0.49616549	0.94	S274	1.03
IPI00008177.3	57476 GRAMD1BK	KSQSW	0.990601784	0.98	S88	0.99

IPI00008177.3	57476	GRAMD1BK.SSIETKF	0.32093792	0.98	S274	1.15	
IPI00008177.3	57476	GRAMD1BK.TESTYL	0.001938901	0.76	S550	0.36	
IPI00008274.5	10487	CAP1	K.ELS*GLF	0.197661257	0.83	S218	1.17
IPI00008283.2	64397	ZFP106	R.NRENS*	0.431601138	0.96	S1279	0.93
IPI00008283.2	64397	ZFP106	R.NRENSF	0.463105648	1	S1281	1.07
IPI00008283.2	64397	ZFP106	R.AAHVPE	0.253322457	0.98	T1372	1.17
IPI00008283.2	64397	ZFP106	R.AAHVPE	0.253322457	0.98	T1378	1.17
IPI00008283.2	64397	ZFP106	R.AAHVPE	0.32093792	0.98	S1370	1.05
IPI00008283.2	64397	ZFP106	R.LSFASE	0.049260986	0.9	S1328	0.86
IPI00008529.1	6181	RPLP2	K.KEES*EI	0.096924105	0.74	S102	0.97
IPI00008531.1	23186	RCOR1	R.RS*QER	0.401648339	0.96	S124	1.19
IPI00008616.1	10723	SLC12A7	R.TQAPPT	0.431601138	0.92	T973	1.1
IPI00008631.2	10744	PTTG2	K.LFQLGP	0.27446972	0.9	S165	1.21
IPI00008845.3	51193	ZNF639	R.NQNYLV	0.166517367	0.9	S88	1.22
IPI00008961.1	54386	TERF2IP	K.ENARS*	0.684201094	0.96	S154	0.93
IPI00008961.1	54386	TERF2IP	K.YLLGDA	0.566916624	0.98	S205	0.98
IPI00008961.1	54386	TERF2IP	K.YLLGDA	0.566916624	0.98	S203	0.98
IPI00008998.1	51495	PTPLAD1	R.WLDES*	0.233505398	0.98	S114	1.2
IPI00009111.1	7162	TPBG	R.NLFLT*G	0.120995626	0.71	T99	0.87
IPI00009328.2	9775	EIF4A3	K.LDYGQH	0.49616549	1	T163	1.13
IPI00009334.4	25865	PRKD2	R.RLS*STG	0.026216849	0.85	S197	1.02
IPI00009334.4	25865	PRKD2	R.LSS*TSL	0.296993866	0.96	S198	1.15
IPI00009334.4	25865	PRKD2	R.LS*STSL	0.296993866	0.96	S197	1.15
IPI00009334.4	25865	PRKD2	R.S*VVG	0.004600913	0.76	S710	1.24
IPI00009448.1	7128	TNFAIP3	R.GEAYEF	0.106353987	0.76	T454	1.32
IPI00009448.1	7128	TNFAIP3	R.GEAYEF	0.072926818	1	T454	1.31
IPI00009448.1	7128	TNFAIP3	R.GEAYEF	0.040276449	1	S459	1.32
IPI00009504.1	6575	SLC20A2	R.NNSY*TI	0.431601138	0.86	Y386	1.05
IPI00009505.1	6645	SNTB2	K.KPSLVS	0.197661257	0.92	S231	1.11
IPI00009505.1	6645	SNTB2	K.KPSLVS	0.928728317	0.76	S224	0.86
IPI00009505.1	6645	SNTB2	K.KPSLVS	0.893037453	0.92	S222	0.87
IPI00009505.1	6645	SNTB2	K.KPSLVS	0.970843959	0.92	S222	0.87
IPI00009505.1	6645	SNTB2	R.S*PSLG	0.214968943	0.72	S393	1.21
IPI00009505.1	6645	SNTB2	R.SPS*LG	0.214968943	0.72	S395	1.21
IPI00009505.1	6645	SNTB2	R.GPAGE/	0.106353987	0.94	S110	1.2
IPI00009505.1	6645	SNTB2	R.LVHSGS	0.368149744	0.69	S389	0.79
IPI00009505.1	6645	SNTB2	K.KPSLVS	0.566916624	1	S222	1.06
IPI00009505.1	6645	SNTB2	K.KPSLVS	0.346340474	1	S224	1.1
IPI00009505.1	6645	SNTB2	K.KPSLVS	0.197661257	1	S233	1.1
IPI00009544.2	10928	RALBP1	R.TPSSEE	0.088241621	0.98	S34	1.3
IPI00009544.2	10928	RALBP1	R.T*PSSEI	0.088241621	0.98	T27	1.28
IPI00009544.2	10928	RALBP1	R.TGEPSP	0.116581414	0.62	S62	1.25
IPI00009544.2	10928	RALBP1	R.TPSSEE	0.096924105	0.98	T36	1.22
IPI00009544.2	10928	RALBP1	R.TPS*SEI	0.32093792	0.94	S29	1.21
IPI00009544.2	10928	RALBP1	R.TPSS*EI	0.166517367	0.98	S30	1.25
IPI00009544.2	10928	RALBP1	R.TPS*SEI	0.116581414	0.98	S29	1.25
IPI00009544.2	10928	RALBP1	R.TPS*SEI	0.233505398	1	S29	1.16
IPI00009544.2	10928	RALBP1	R.T*PSSEI	0.233505398	1	T27	1.16
IPI00009597.1	6607	SMN2	R.RGTGQ	0.49616549	0.77	S28	1.12
IPI00009597.1	6607	SMN2	R.RGTGQ	0.154098617	0.69	S28	1.06
IPI00009597.1	6607	SMN2	R.RGT*GC	0.154098617	0.69	T25	1.06

IPI00009659.3	58490 C20orf77	K.LSMEDS	0.166517367	0.05	S134	0.45
IPI00009659.3	58490 C20orf77	K.RTFQQI	0.530774648	0.9	S166	0.97
IPI00009659.3	58490 C20orf77	R.TFQQIQ	0.158622263	0.96	S166	1.29
IPI00009771.5	84823 LMNB2	R.AGGPA1	0.684201094	0.36	S37	0.42
IPI00009771.5	84823 LMNB2	R.AGGPA1	0.643675939	0.9	T39	1.02
IPI00009900.1	51307 FAM53C	R.FSLS*P	0.401648339	0.98	S234	1.04
IPI00009900.1	51307 FAM53C	R.SLS*VP	0.116581414	0.96	S122	1.17
IPI00010088.1	9759 HDAC4	K.TQHSS*	0.214968943	0.9	S210	1.15
IPI00010088.1	9759 HDAC4	R.AQS*SP	0.353263807	0.94	S632	1.11
IPI00010196.1	8204 NRIP1	K.AGS*PI	0.9240167	0.92	S564	1.19
IPI00010308.1	728 C5AR1	-.MNSFNY	0.568296053	0.83	Y11	0.75
IPI00010349.1	8540 AGPS	R.RAAS*A	0.684201094	1	S65	1.01
IPI00010349.1	8540 AGPS	R.RAASAA	0.000888315	0.86	T68	0.95
IPI00010368.4	3796 KIF2A	R.ARPSQF	0.684201094	0.92	S120	0.99
IPI00010368.4	3796 KIF2A	R.ARPSQF	0.643675939	0.96	S117	1.01
IPI00010388.1	1059 CENPB	R.TPAAPA	0.401648339	1	S156	1.06
IPI00010428.3	83461 CDCA3	R.SPS*AG	0.643675939	0.96	S31	0.85
IPI00010428.3	83461 CDCA3	R.S*PS*AC	0.643675939	0.96	S29	0.85
IPI00010428.3	83461 CDCA3	K.HAQDSI	0.604563646	1	S68	1.01
IPI00010428.3	83461 CDCA3	R.SPSAGII	0.907673183	0.98	T37	1.01
IPI00010428.3	83461 CDCA3	R.SPSAGII	0.907673183	0.98	T37	1.01
IPI00010428.3	83461 CDCA3	K.VLGRS*I	0.003673579	0.98	S199	0.91
IPI00010428.3	83461 CDCA3	K.VLGRS*I	0.572822052	0.98	S199	0.91
IPI00010428.3	83461 CDCA3	K.VLGRSP	0.9949766	1	T202	0.91
IPI00010466.2	5579 PRKCB1	R.T*FCGTI	0.684201094	0.9	T500	0.99
IPI00010466.2	5579 PRKCB1	R.TFCGT*I	0.922292588	0.96	T504	1.08
IPI00010554.2	10580 SORBS1	R.RVGEQI	0.021601024	0.86	T280	1.14
IPI00010728.4		K.DKVSDG	0.001272035	0.81	S1534	1.36
IPI00010728.4		R.RLS*NV	0.627992512	0.76	S1826	0.94
IPI00010728.4		R.VDHGAE	0.088241621	1	S1813	1.38
IPI00010746.1	9791 PTDSS1	K.TYS*ECI	0.187602579	0.94	S417	0.77
IPI00010746.1	9791 PTDSS1	K.TYSECE	0.660822982	0.96	Y424	1.2
IPI00010746.1	9791 PTDSS1	K.TYSECE	0.463105648	0.98	S425	1.15
IPI00010746.1	9791 PTDSS1	K.T*YSECI	0.261301769	0.98	T415	0.78
IPI00010746.1	9791 PTDSS1	R.EKTY*S	0.902796178	0.88	S417	0.91
IPI00010833.1	7707 ZNF148	R.SLKQPL	0.941751315	0.98	S412	0.93
IPI00010882.3	1676 DFFA	R.SISASK/	0.000153677	0.76	S315	0.28
IPI00011069.1	7374 UNG	K.TLYSFF	0.346340474	0.86	S12	0.92
IPI00011069.1	7374 UNG	K.TLYSFF	0.346340474	0.92	S14	1.04
IPI00011069.1	7374 UNG	K.KAPAGC	0.233505398	0.86	T60	1.38
IPI00011115.1	83855 KLF16	R.GGPGA/	0.431601138	0.46	S99	0.99
IPI00011118.2	6241 RRM2	K.GLSLVD	0.604563646	1	T93	0.98
IPI00011118.2	6241 RRM2	R.VPLAPIT	0.431601138	1	S80	1.09
IPI00011590.1	8061 FOSL1	R.PLTYPQ	0.049260986	0.98	S74	1.35
IPI00011592.3	1783 DYNC1LI2	R.GGPAS\	0.604563646	0.98	S407	0.99
IPI00011592.3	1783 DYNC1LI2	R.GGPAS\	0.604563646	0.98	S406	0.99
IPI00011592.3	1783 DYNC1LI2	R.GPLTSC	0.152571688	0.96	S205	1.14
IPI00011665.1	9422 ZNF264	R.IHT*GEK	0.050832434	0.94	T422	0.73
IPI00011689.1	29904 EEF2K	K.SERYSS	0.060044376	0.96	S74	1.28
IPI00011689.1	29904 EEF2K	K.SERYS*	0.060044376	0.96	S70	1.28
IPI00011689.1	29904 EEF2K	R.YSSSGE	3.50E-07	0.85	S74	1.93

IPI00011689.1	29904 EEF2K	R.YS*SSG	0.827038504	0.96 S70	1.52
IPI00011689.1	29904 EEF2K	K.LLQSAK	0.044561326	0.98 T348	1.44
IPI00011735.2	3475 IFRD1	R.GSS*AG	0.401648339	0.79 S15	0.97
IPI00011735.2	3475 IFRD1	R.HLYNS*	0.58190894	0.9 S427	0.99
IPI00011857.1	8208 CHAF1B	R.TQDPSS	0.530774648	0.96 S429	1.11
IPI00011857.1	8208 CHAF1B	R.GSS*PG	0.296993866	1 S410	1.13
IPI00011857.1	8208 CHAF1B	R.GSSPGF	0.373234869	1 S422	1.08
IPI00011875.1	3550 IK	K.KPPEAD	0.13480971	0.94 S328	0.75
IPI00011875.1	3550 IK	K.KPPEAD	0.13480971	0.94 T329	0.75
IPI00011875.1	3550 IK	K.KPPEAD	0.618694288	0.94 T332	0.75
IPI00012149.1	10199 MPHOSP	K.SDLRKS	0.032094189	0.77 S163	0.84
IPI00012199.1	7908 CCDC86	R.RALVEF	0.530774648	0.98 S47	1
IPI00012199.1	7908 CCDC86	R.LGGLRF	0.401648339	0.98 S18	1.2
IPI00012199.1	7908 CCDC86	R.LGGLRF	0.401648339	0.98 S18	1.2
IPI00012199.1	7908 CCDC86	R.LGGLRF	0.373234869	0.96 S18	1.06
IPI00012199.1	7908 CCDC86	R.LGGLRF	0.296993866	0.96 S21	1.06
IPI00012199.1	7908 CCDC86	R.LGGLRF	0.604563646	1 S18	1.05
IPI00012199.1	7908 CCDC86	R.LGGLRF	0.604563646	1 S18	1.05
IPI00012199.1	7908 CCDC86	R.RALVEF	0.868109485	0.98 S50	1.1
IPI00012199.1	7908 CCDC86	R.AGLGS*	0.214968943	1 S58	1.15
IPI00012199.1	7908 CCDC86	R.LQQGAC	0.346340474	0.98 S91	1.07
IPI00012199.1	7908 CCDC86	R.LQQGAC	0.604563646	1 S80	1.05
IPI00012199.1	7908 CCDC86	R.LGGLRF	0.401648339	1 S26	1.08
IPI00012199.1	7908 CCDC86	R.ALVEFE	0.401648339	1 S47	1.08
IPI00012268.3	5708 PSMD2	K.APVQPC	0.021601024	0.94 S16	1.18
IPI00012268.3	5708 PSMD2	R.DKAPVC	0.32093792	0.9 S16	1.11
IPI00012318.3	4214 MAP3K1	R.RAPS*P	0.296993866	0.96 S478	1.14
IPI00012340.1	8683 SFRS9	R.GS*PHY	0.401648339	1 S211	1.07
IPI00012340.1	8683 SFRS9	R.GS*PHY	0.431601138	1 S211	1.06
IPI00012442.1	10146 G3BP1	R.YQDEVF	0.253322457	0.98 S149	1.05
IPI00012442.1	10146 G3BP1	K.SSS*PAI	0.233505398	1 S232	1.16
IPI00012462.1	83939 EIF2A	R.S*DKSP	0.12765804	0.94 S527	1.15
IPI00012462.1	83939 EIF2A	R.SDKS*P	0.12765804	0.98 S530	1.2
IPI00012463.3	83940 TATDN1	K.TEANLE	0.0313941	1 S214	0.65
IPI00012527.3	7553 ZNF7	R.ISPQDFI	0.463105648	0.96 S128	1.14
IPI00012527.3	7553 ZNF7	R.ISPQDFI	0.463105648	0.96 S138	1.14
IPI00012669.1	56006 C19orf61	R.AGPGSS	0.764845588	0.94 S451	1.04
IPI00012773.1	9112 MTA1	R.SNMS*P	0.463105648	1 S449	1.08
IPI00012773.1	9112 MTA1	K.SVSSVL	0.002581506	0.77 T564	0.95
IPI00012856.1	2309 FOXO3	K.GS*GLG	0.096924105	0.96 S421	1.27
IPI00012856.1	2309 FOXO3	K.GSGLGS	0.096924105	0.96 T427	1.27
IPI00012966.1	6938 TCF12	R.PGGQAI	0.152571688	0.98 S385	1.15
IPI00012966.1	6938 TCF12	R.PGGQAI	0.034268332	0.59 S386	0.45
IPI00012966.1	6938 TCF12	R.PGGQAI	0.12765804	0.98 S386	1.14
IPI00012966.1	6938 TCF12	R.PGGQAI	0.166517367	0.94 S388	1.12
IPI00012966.1	6938 TCF12	K.TRPTTL	0	0.88 S44	0.34
IPI00012966.1	6938 TCF12	K.TRPTTL	0	0.88 S49	0.34
IPI00012966.1	6938 TCF12	K.TRPTTL	0	0.88 S43	0.34
IPI00012966.1	6938 TCF12	R.PGGQAI	0.181528891	1 S392	1.19
IPI00013068.1	3646 EIF3S6	K.LGHVVM	0.643675939	1 S399	0.97
IPI00013068.1	3646 EIF3S6	K.LGHVVM	0.643675939	1 Y401	0.97

IPI00013174.2	84972	TMEM137	R.TQSS*A	0.84419767	0.98	S521	0.97
IPI00013174.2	84972	TMEM137	R.YS*GSY	0.139636808	0.94	S649	0.96
IPI00013174.2	84972	TMEM137	R.TRLS*PF	0.463105648	0.98	S582	1.06
IPI00013174.2	84972	TMEM137	R.RLS*ES	0.052879882	1	S618	0.66
IPI00013174.2	84972	TMEM137	R.QPT*PP	0.373234869	1	T206	1.1
IPI00013214.1	4172	MCM3	R.RYSDLT	0.011294655	0.67	T163	1.13
IPI00013214.1	4172	MCM3	R.RYS*DL	0.296993866	0.96	S160	1.08
IPI00013214.1	4172	MCM3	R.RY*SDL	0.166517367	0.96	Y159	1.16
IPI00013214.1	4172	MCM3	R.RYSDLT	0.27446972	0.98	T164	1.09
IPI00013214.1	4172	MCM3	R.RY*SDL	0.27446972	0.98	Y159	1.09
IPI00013214.1	4172	MCM3	R.RYS*DL	0.296993866	0.96	S160	1.11
IPI00013214.1	4172	MCM3	K.DGDSYL	0.431601138	0.96	S711	1.06
IPI00013214.1	4172	MCM3	K.DGDSYL	0.431601138	0.96	T713	1.06
IPI00013214.1	4172	MCM3	K.DGDSYL	0.373234869	1	S711	1.04
IPI00013214.1	4172	MCM3	R.RYSDLT	0.12765804	0.98	T164	1.17
IPI00013215.2	4998	ORC1L	K.LQTLS*F	0.253322457	0.98	S287	1.04
IPI00013215.2	4998	ORC1L	R.SQPDKL	0.317438906	0.98	S287	0.91
IPI00013215.2	4998	ORC1L	K.SAES*P	0.49616549	0.85	S199	0.89
IPI00013215.2	4998	ORC1L	K.SAESPS	0.49616549	0.85	S201	0.89
IPI00013215.2	4998	ORC1L	K.VAFSEIT	0.401648339	0.98	S273	1.02
IPI00013216.1	4999	ORC2L	R.VVSAPV	0.166517367	0.94	T226	1
IPI00013216.1	4999	ORC2L	K.LASELAI	0.431601138	0.98	T116	1.05
IPI00013297.1	11333	PDAP1	K.RMQS*L	0.000508502	0.96	S176	0.57
IPI00013415.1	6201	RPS7	R.SRT*LT/	0.684201094	0.83	T121	1.01
IPI00013415.1	6201	RPS7	R.S*RTL/	0.530774648	0.94	S119	0.95
IPI00013444.3			R.SSPAPS	0.566916624	0.98	S1883	0.99
IPI00013444.3			R.SS*PAP	0.008098758	0.94	S1873	1.13
IPI00013444.3			R.S*SPAP	0.008098758	0.94	S1872	1.13
IPI00013444.3			K.ISVGRL	0.27446972	0.76	S1734	0.83
IPI00013444.3			K.AHSEVF	0.49616549	0.98	S2681	0.99
IPI00013444.3			K.LGLVLQ	0.431601138	0.98	S476	1.2
IPI00013444.3			K.LGLVLQ	0.431601138	0.98	S479	1.2
IPI00013444.3			K.SSFTPS	0.401648339	0.83	S536	1.24
IPI00013452.8	2058	EPRS	K.EYIPGQ	0.32093792	0.9	S886	1.08
IPI00013452.8	2058	EPRS	K.EYIPGQ	0.32093792	0.9	T888	1.08
IPI00013651.1	155435	RBM33	R.CSATPS	0.604563646	0.92	S185	1.12
IPI00013651.1	155435	RBM33	R.RAADEL	0.438828959	0.88	S41	0.86
IPI00013743.3	84811	BUD13	R.ARHDS*	0.152571688	0.94	S271	1.1
IPI00013743.3	84811	BUD13	R.ARHDSF	0.233505398	0.98	S281	1.2
IPI00013743.3	84811	BUD13	R.HDS*PD	0.080258071	0.98	S271	1.21
IPI00013774.1	3065	HDAC1	R.MLPFAF	0.346340474	1	S393	1.05
IPI00013788.1	27336	HTATSF1	R.HFS*EH	0.726073545	0.94	S403	0.95
IPI00013905.1	5565	PRKAB2	K.IMVGS*1	0.026666866	0.81	S39	1.35
IPI00013905.1	5565	PRKAB2	K.S*HNDF	0.082584274	0.62	S108	0.58
IPI00013905.1	5565	PRKAB2	R.DLS*SSI	0.072926818	0.94	S182	1.25
IPI00013905.1	5565	PRKAB2	R.DLSSS*I	0.072926818	0.94	S184	1.25
IPI00013912.1	84886	C1orf198	R.FTYFSS	0.829549043	0.96	S37	1.04
IPI00014177.3	4735	39327	K.IYHLPD/	0.296993866	0.98	S218	1.08
IPI00014177.3	4735	39327	K.IYHLPD/	0.233505398	0.98	T228	1.16
IPI00014219.1	9784	SNX17	K.LSSKLS'	0.530774648	0.9	S437	1.03
IPI00014231.1	9929	JOSD1	K.SES*LEL	0.401648339	0.72	S15	1.14

IPI00014231.1	9929	JOSD1	K.AKSES*I	0.751731134	0.98	S15	0.93
IPI00014231.1	9929	JOSD1	K.AKS*ESI	0.751731134	0.98	S13	0.93
IPI00014319.5	10625	IVNS1ABP	K.S*LSFEM	0.066203153	0.24	S336	1.54
IPI00014319.5	10625	IVNS1ABP	K.SLS*FEM	0.088241621	0.92	S338	1.3
IPI00014344.1	1859	DYRK1A	R.IY*QYIQ	0.214968943	0.98	Y319	1.17
IPI00014344.1	1859	DYRK1A	R.IYQY*IQ	0.181528891	1	Y321	1.2
IPI00014513.1	7528	YY1	R.IHT*GDF	0.727601611	0.98	T378	0.93
IPI00014513.1	7528	YY1	K.KIDIDHE	0.014056191	0.53	S247	0.92
IPI00014575.1	990	CDC6	R.LGDDNL	0.49616549	0.86	T67	1.22
IPI00014575.1	990	CDC6	R.LVFDNC	0.431601138	0.98	S106	1.07
IPI00014575.1	990	CDC6	R.LGDDNL	0.166517367	0.98	S74	1.17
IPI00014865.3	63935	C20orf67	K.IEIPVTP	0.373234869	0.92	S144	1.1
IPI00014865.3	63935	C20orf67	K.IEIPVTP	0.373234869	0.92	S146	1.1
IPI00014865.3	63935	C20orf67	R.EEASLL	0.32093792	1	S19	1.03
IPI00014977.5	254394	MCM9	K.NTVVVS	0.32093792	0.96	S762	1.17
IPI00014977.5	254394	MCM9	K.SLAQVE	0.643675939	0.96	S915	1.02
IPI00015195.1	1479	CSTF3	K.RPNEDS	0.233505398	0.9	S691	1.1
IPI00015481.1	79797	ZNF408	R.AKT*PEI	7.58E-05	0.56	T322	0.78
IPI00015538.1	23683	PRKD3	R.IIGES*I	0.760488858	0.9	S731	1.27
IPI00015538.1	23683	PRKD3	R.QALMP\	0.152571688	0.92	S543	0.86
IPI00015538.1	23683	PRKD3	K.SVLPTA	0.000232333	0.86	S27	1.94
IPI00015538.1	23683	PRKD3	K.SVLPTA	0.990159288	0.98	S30	0.84
IPI00015538.1	23683	PRKD3	K.TIS*PST	0.096924105	0.92	S391	1.09
IPI00015538.1	23683	PRKD3	R.LS*NGS	0.84064003	0.92	S41	1.14
IPI00015538.1	23683	PRKD3	R.S*VVG	0.116581414	0.98	S735	1.23
IPI00015538.1	23683	PRKD3	K.SVLPTA	0.32093792	0.94	S27	1.03
IPI00015602.1	9868	TOMM70A	R.AS*PAP	0.530774648	0.98	S91	1.13
IPI00015602.1	9868	TOMM70A	R.ASPAP	0.530774648	0.98	S96	1.13
IPI00015894.1	23580	CDC42EP	K.AGPDLF	0.401648339	0.96	S292	1.08
IPI00015894.1	23580	CDC42EP	K.AGPDLF	0.373234869	0.9	S292	1.14
IPI00015894.1	23580	CDC42EP	R.NGAAGF	0.431601138	0.98	S174	1.15
IPI00015894.1	23580	CDC42EP	K.AGPDLF	0.296993866	1	S295	1.15
IPI00015894.1	23580	CDC42EP	R.RNGAAC	0.346340474	1	S174	1.08
IPI00015952.1	1982	EIF4G2	R.TQT*PPI	0.296993866	1	T508	1.15
IPI00015953.3	9188	DDX21	K.KLSVAC	0.938173728	0.77	T296	1.11
IPI00015953.3	9188	DDX21	K.LKNGFP	0.957149097	0.85	S168	0.95
IPI00015953.3	9188	DDX21	K.KAEPSE	0.684201094	0.96	S71	0.96
IPI00015953.3	9188	DDX21	K.NGFPHF	0.863507405	0.92	S168	0.95
IPI00015953.3	9188	DDX21	K.VTKNEE	0.373234869	0.98	S121	1.05
IPI00015953.3	9188	DDX21	K.LKNGFP	0.530774648	0.9	S171	0.98
IPI00015953.3	9188	DDX21	K.LKNGFP	0.643675939	0.94	S171	0.97
IPI00015953.3	9188	DDX21	K.KKEEPS	0.684201094	0.98	S89	1.02
IPI00015953.3	9188	DDX21	K.LKNGFP	0.463105648	0.96	S173	1.02
IPI00015953.3	9188	DDX21	K.NEEPS*I	0.346340474	1	S121	1.05
IPI00015953.3	9188	DDX21	K.LKNGFP	0.643675939	0.98	S168	0.93
IPI00015953.3	9188	DDX21	K.KKAEPS	0.604563646	1	S71	0.99
IPI00015953.3	9188	DDX21	K.KKAEPS	0.604563646	1	S65	0.99
IPI00015953.3	9188	DDX21	K.NGFPHF	0.463105648	0.98	S171	1.04
IPI00015953.3	9188	DDX21	K.LKNGFP	0.684201094	1	S164	1.01
IPI00015953.3	9188	DDX21	K.LKNGFP	0.684201094	0.98	S168	0.97
IPI00015973.1	2037	EPB41L2	K.IPGEKS'	0.072926818	0.92	S828	1.13

IPI00015973.1	2037 EPB41L2	K.HQAS*IE	0.49616549	0.92	S647	0.97
IPI00015973.1	2037 EPB41L2	K.KQKS*Y	0.836096036	0.96	S87	0.83
IPI00015973.1	2037 EPB41L2	K.GSQPPF	0.401648339	0.98	S58	1.05
IPI00015973.1	2037 EPB41L2	R.S*LDGA	0.090058644	0.81	S550	1.14
IPI00015973.1	2037 EPB41L2	K.EVAENC	0.373234869	1	S55	1.07
IPI00015973.1	2037 EPB41L2	K.EVAENC	0.373234869	1	S58	1.07
IPI00015973.1	2037 EPB41L2	K.KNS*LR\	0.080258071	0.98	S614	0.91
IPI00016074.1	10200 MPHOSP	R.RYETLV	0.011294655	0.83	T124	0.91
IPI00016250.5	9513 FXR2	R.TGGPAY	0.12765804	0.94	S453	1.08
IPI00016250.5	9513 FXR2	R.TGGPAY	0.12765804	0.94	T451	1.08
IPI00016250.5	9513 FXR2	R.RTGGP/	0.679764929	0.83	S453	1.28
IPI00016250.5	9513 FXR2	R.RTGGP/	0.679764929	0.83	T455	1.28
IPI00016250.5	9513 FXR2	R.TDGS*IE	0.643675939	0.94	S601	0.96
IPI00016250.5	9513 FXR2	R.T*DGSI	0.604563646	0.98	T598	1.02
IPI00016250.5	9513 FXR2	R.TDGSIS'	0.604563646	1	S603	1.06
IPI00016250.5	9513 FXR2	R.T*DGSI	0.604563646	1	T598	1.06
IPI00016250.5	9513 FXR2	R.TDGS*IE	0.27446972	1	S601	1.13
IPI00016250.5	9513 FXR2	R.T*DGSI	0.27446972	1	T598	1.13
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.489032481	0.96	S1495	0.87
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.726073545	0.61	S1493	0.83
IPI00016387.4	51585 PCF11	K.SRS*PIII	0.971449831	0.86	S489	1.03
IPI00016387.4	51585 PCF11	R.IDGPPT'	0.152571688	0.96	T785	0.99
IPI00016387.4	51585 PCF11	K.FLNKSP	0.214968943	0.98	T178	0.93
IPI00016387.4	51585 PCF11	K.FLNKS*F	0.214968943	0.98	S169	0.93
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.49616549	0.94	Y1482	0.94
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.604563646	0.94	S1493	1.01
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.431601138	0.86	S1487	0.94
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.401648339	0.74	S1495	0.93
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.726073545	0.98	S1495	1.04
IPI00016387.4	51585 PCF11	K.IYHPSC'	0.643675939	0.88	S1493	1.02
IPI00016387.4	51585 PCF11	R.EEQRS*	0.346340474	1	S705	1.1
IPI00016405.1	54940 OCIAD1	K.KLENS*F	0.643675939	0.98	S108	0.86
IPI00016604.1	5142 PDE4B	R.RES*FL'	0.006469654	0.96	S133	1.26
IPI00016610.2	5093 PCBP1	R.VMTIPY(	0.431601138	0.98	S190	1.04
IPI00016610.2	5093 PCBP1	R.CSDAAC	0.627992512	0.98	S223	0.85
IPI00016610.2	5093 PCBP1	R.CSDAAC	0.510604444	0.98	T229	0.86
IPI00016610.2	5093 PCBP1	R.CSDAAC	0.684201094	0.98	S231	0.86
IPI00016639.5	5584 PRKCI	K.QVPPF	0.373234869	0.94	T564	0.99
IPI00016639.5	5584 PRKCI	K.EGLRPC	0.181528891	0.98	T412	1.16
IPI00016639.5	5584 PRKCI	K.EGLRPC	0.166517367	0.98	T409	1.16
IPI00016670.2	55004 C11orf59	R.KLLLDPI	0.530774648	0.83	S27	0.89
IPI00016670.2	55004 C11orf59	R.LAVLSS'	0.044139359	0.96	S98	1.1
IPI00016725.1	9329 GTF3C4	K.TPSEAL'	0.604563646	0.98	S604	0.93
IPI00016743.1	11320 MGAT4A	K.EFS*KEI	0	0.96	S197	0.03
IPI00016861.4	2976 GTF3C2	R.AHFNAM	0.604563646	0.96	S903	1.12
IPI00016861.4	2976 GTF3C2	R.AHFNAM	0.27446972	0.98	T906	1.16
IPI00016861.4	2976 GTF3C2	R.AHFNAM	0.27446972	1	S904	1.08
IPI00017292.1	1499 CTNNB1	R.RTSMGC	0.346340474	0.98	T556	0.96
IPI00017292.1	1499 CTNNB1	R.T*SMGC	0.044561326	0.79	T551	1
IPI00017292.1	1499 CTNNB1	R.TS*MG	0.044561326	0.79	S552	1
IPI00017292.1	1499 CTNNB1	R.RTS*MG	0.401648339	1	S552	1.1

IPI00017292.1	1499 CTNNB1	K.RLS*VEI	0.726073545	1 S675	1.03
IPI00017297.1	9782 MATR3	R.RRT*EEI	0.080258071	0.76 T150	1.14
IPI00017297.1	9782 MATR3	R.GPSLNF	0.566916624	0.9 Y202	1.2
IPI00017297.1	9782 MATR3	R.GPSLNF	0.233505398	0.9 S206	1.2
IPI00017297.1	9782 MATR3	R.GPSLNF	0.080258071	1 S208	1.29
IPI00017297.1	9782 MATR3	R.RRTEEG	0.463105648	1 T155	1.06
IPI00017297.1	9782 MATR3	R.RRTEEG	0.463105648	1 S157	1.06
IPI00017297.1	9782 MATR3	R.GPSLNF	0.060044376	1 S206	1.31
IPI00017297.1	9782 MATR3	R.RDSFDC	0.726073545	1 S206	0.97
IPI00017297.1	9782 MATR3	R.RDS*FD	0.643675939	0.96 S188	0.94
IPI00017297.1	9782 MATR3	R.RDSFDC	0.566916624	0.96 S195	0.94
IPI00017450.2	2962 GTF2F1	R.LDTGPC	0.002900458	0.76 S433	1.84
IPI00017450.2	2962 GTF2F1	R.LDTGPC	5.97E-06	0.98 S436	2.08
IPI00017450.2	2962 GTF2F1	R.GNSRPC	0.039790008	0.28 T389	0.05
IPI00017450.2	2962 GTF2F1	R.GNS*RP	0.296993866	1 S385	1.18
IPI00017450.2	2962 GTF2F1	R.GNS*RP	0.01942062	1 S385	1.32
IPI00017578.1	6461 SHB	K.HGS*PE	0.12765804	0.96 S475	1.19
IPI00017617.1	1655 DDX5	K.LLQLVEI	0.040276449	0.72 S480	1.07
IPI00017630.4	26747 NUFIP1	K.LEGPPE	0.346340474	0.77 S340	0.91
IPI00017630.4	26747 NUFIP1	K.LEGPPE	0.03637398	0.77 S342	1.12
IPI00017630.4	26747 NUFIP1	K.LEGPPE	0.03637398	0.77 S340	1.12
IPI00017630.4	26747 NUFIP1	K.LEGPPE	0.03637398	0.77 S351	1.12
IPI00017763.4	4676 NAP1L4	R.LDNVPH	0.684201094	0.92 S53	1.07
IPI00017763.4	4676 NAP1L4	R.LDNVPH	0.684201094	0.92 T51	1.07
IPI00018009.2	80153 EDC3	K.KPAS*SI	0.909927945	0.96 S109	0.91
IPI00018009.2	80153 EDC3	R.RHNS*W	0.373234869	0.88 S161	1.05
IPI00018009.2	80153 EDC3	R.RHNS*W	0.373234869	0.88 S166	1.05
IPI00018117.1	1611 DAP	K.DKDDQE	0.166517367	0.9 S49	1.09
IPI00018117.1	1611 DAP	K.EEKDKC	0.27446972	0.98 S51	1.07
IPI00018117.1	1611 DAP	K.DKDDQE	0.296993866	1 S51	1.07
IPI00018208.1	23548 TTC33	K.KSEAPA	0.214968943	0.9 S197	2
IPI00018240.6	55153 SDAD1	K.YIEIDS*I	0.116581414	0.98 S585	1.09
IPI00018274.1	1956 EGFR	R.MHLPSF	0.743182508	0.94 S995	1
IPI00018274.1	1956 EGFR	R.MHLPS*	0.373234869	1 S991	1.13
IPI00018274.1	1956 EGFR	R.ELVEPL	0.463105648	1 T693	1.01
IPI00018294.3	6018 RLF	K.S*PSAIP	0.795669231	0.98 S632	0.94
IPI00018294.3	6018 RLF	K.SPS*AIP	0.795669231	0.98 S634	0.94
IPI00018321.5	9869 SETDB1	R.NYGYNF	0.233505398	0.98 S1066	1.07
IPI00018349.5	4173 MCM4	R.RGEDSI	0.170313028	0.83 S54	0.74
IPI00018889.2	2737 GLI3	R.SPGRPT	1.06E-05	0.81 T669	0.7
IPI00018924.2	10363 HMG20A	R.DSNAPK	0.431601138	1 S105	1.07
IPI00018974.1	1746 DLX2	K.SGEIPSI	0.233505398	0.85 S227	1.19
IPI00018974.1	1746 DLX2	K.SGEIPSI	0.37570848	0.76 S225	0.81
IPI00019155.1	2303 FOXC2	K.GAPAT*I	0.383343176	0.58 T197	0.96
IPI00019155.1	2303 FOXC2	R.SAAST*I	0.976229102	0.55 T247	0.89
IPI00019155.1	2303 FOXC2	K.VETLS*F	0.373234869	0.96 S232	1.22
IPI00019155.1	2303 FOXC2	K.VETLS*F	0.012189999	0.86 S232	0.38
IPI00019155.1	2303 FOXC2	K.VETLSP	0.566916624	0.98 S240	1.14
IPI00019155.1	2303 FOXC2	R.T*SPPGI	0.530774648	0.94 T280	1.11
IPI00019155.1	2303 FOXC2	R.TS*PPGI	0.530774648	0.94 S281	1.11
IPI00019155.1	2303 FOXC2	K.SEAAS*I	0.643675939	0.98 S219	1.05

IPI00019451.3	55257 C2orf20	K.VLTANS	0.684201094	0.86	S195	0.69
IPI00019471.1	3667 IRS1	R.HSS*ETI	0.03637398	0.96	S1101	1.12
IPI00019471.1	3667 IRS1	R.SKSQSE	0.726073545	0.96	S274	0.96
IPI00019471.1	3667 IRS1	R.S*KSQS	0.726073545	0.96	S268	0.96
IPI00019471.1	3667 IRS1	R.RHSS*E	0.181528891	0.98	S1101	1.21
IPI00019551.1	7262 PHLDA2	R.LSLFPAI	0.604563646	0.98	S42	1.02
IPI00019835.1	83596 BCL2L12	R.RGEAAC	0.431601138	0.9	S113	1.08
IPI00019835.1	83596 BCL2L12	K.LVRLS*E	0.858914691	0.98	S242	0.98
IPI00019993.1	4605 MYBL2	K.DCKPPV	0.066203153	0.67	S241	1.05
IPI00019993.1	4605 MYBL2	K.YSMDN1	0.566916624	0.83	T518	1.4
IPI00019993.1	4605 MYBL2	K.TLPFS*F	0.066203153	0.81	S452	0.96
IPI00019994.3	55787 CXorf15	R.NLVS*P)	0.643675939	0.9	S97	1.06
IPI00019994.3	55787 CXorf15	R.NLVSPA	0.011294655	0.81	T102	1.45
IPI00020124.1	55361 PI4KII	R.VAAAAC	0.827038504	0.81	S47	0.94
IPI00020385.1	11154 AP4S1	R.VS*ELD)	0.684519102	0.96	S99	0.82
IPI00020484.3	51203 NUSAP1	R.GRLS*V)	0.003257359	0.83	S239	0.94
IPI00020484.3	51203 NUSAP1	K.LTTEAT)	0.818022374	0.98	T348	0.92
IPI00020484.3	51203 NUSAP1	K.LTTEAT)	0.530774648	0.96	T348	1.01
IPI00020484.3	51203 NUSAP1	R.GRLS*V)	0.373234869	1	S239	1.04
IPI00020484.3	51203 NUSAP1	K.AS*LSRF	0.936890791	0.98	S362	1.03
IPI00020578.2	369 ARAF	R.S*TSTPI	0.346340474	0.96	S215	1.2
IPI00020578.2	369 ARAF	R.STST*PI	0.346340474	0.96	T218	1.2
IPI00021129.4	8546 AP3B1	K.PAPLLE)	0.296993866	0.88	S609	1.21
IPI00021167.3	8575 PRKRA	R.AEAPPL	0.166517367	0.9	T20	1.18
IPI00021167.3	8575 PRKRA	R.AEAPPL	0.166517367	0.9	S18	1.18
IPI00021175.1	51755 CRKRS	K.ETTSGT	0.088241621	0.85	S1082	1.17
IPI00021175.1	51755 CRKRS	R.HSS*IS*	0.233505398	0.85	S383	1.01
IPI00021175.1	51755 CRKRS	R.KETTSG	0.253322457	0.98	S1082	1.11
IPI00021175.1	51755 CRKRS	K.AIT*PPQ	0.726073545	0.4	T692	0.68
IPI00021175.1	51755 CRKRS	R.RQS*VS	0.431601138	0.98	S274	1.03
IPI00021175.1	51755 CRKRS	R.LYNSEE	0.566916624	1	T893	1.1
IPI00021175.1	51755 CRKRS	R.HLLTDLI	0.32093792	0.96	S681	1.15
IPI00021301.1	443 ASPA	R.YIDCDLI	1.21E-11	0.72	S83	4.05
IPI00021320.2	56257 BCDIN3	R.T*LNAE1	0.080258071	0.79	T208	1.12
IPI00021320.2	56257 BCDIN3	R.ES*PGA	0.139636808	0.98	S69	1.25
IPI00021320.2	56257 BCDIN3	R.CAPSAC	0.463105648	0.94	S60	1.11
IPI00021320.2	56257 BCDIN3	R.RVNSDC	0.519333664	0.76	S179	0.67
IPI00021320.2	56257 BCDIN3	R.RNS*CN	0.463105648	1	S152	1.06
IPI00021320.2	56257 BCDIN3	R.VNS*DC	0.277173616	0.96	S175	0.86
IPI00021320.2	56257 BCDIN3	R.CAPSAC	0.076938277	0.79	S60	0.79
IPI00021320.2	56257 BCDIN3	R.TLNAET	0.985805237	1	S216	0.94
IPI00021320.2	56257 BCDIN3	R.TLNAET	0.957149097	1	S217	0.94
IPI00021320.2	56257 BCDIN3	K.DITDPLS	0.643675939	0.98	S254	1.04
IPI00021320.2	56257 BCDIN3	R.RVNS*D	0.985805237	1	S175	0.93
IPI00021388.1	9969 THRAP1	K.KYS*AS)	0.86862174	0.92	S395	0.84
IPI00021388.1	9969 THRAP1	R.LLS*TEF	0.566916624	0.85	S2048	0.91
IPI00021388.1	9969 THRAP1	K.IEVDEGI	0.643675939	0.71	S890	1.19
IPI00021417.3	9092 SART1	K.KKPDYL	0.430690939	0.74	S321	1.13
IPI00021417.3	9092 SART1	R.RRVSE*E	0.197661257	0.94	S448	0.95
IPI00021417.3	9092 SART1	R.RVSEVE	0.166517367	0.96	T466	1.07
IPI00021417.3	9092 SART1	R.RVSEVE	0.166517367	0.96	S463	1.07

IPI00021417.3	9092 SART1	R.RVS*EV	0.116581414	0.96 S448	1.07
IPI00021595.2	113263 GLCCI1	R.GPSPSE	0.233505398	0.86 S108	1.18
IPI00021595.2	113263 GLCCI1	R.RTSS*LI	0.181528891	0.98 S172	1.18
IPI00021595.2	113263 GLCCI1	R.RTS*SLI	0.181528891	0.98 S171	1.18
IPI00021634.3	64837 KLC2	K.RASS*LI	0.000698007	0.96 S582	1.17
IPI00021634.3	64837 KLC2	K.RASS*LI	0.088241621	0.98 S582	1.25
IPI00021634.3	64837 KLC2	R.ASS*LN	0.233505398	0.98 S582	1.09
IPI00021786.1	5894 RAF1	R.STST*PI	0.566916624	0.96 T260	1.18
IPI00021786.1	5894 RAF1	R.YSTPHA	0.530774648	1 T239	1.13
IPI00021786.1	5894 RAF1	R.YST*PH	0.214968943	1 T234	1.13
IPI00021786.1	5894 RAF1	R.YS*TPH	0.116581414	1 S233	1.24
IPI00021786.1	5894 RAF1	R.Y*STPH	0.116581414	1 Y232	1.24
IPI00021786.1	5894 RAF1	R.ST*STPI	0.401648339	1 T258	1.14
IPI00021786.1	5894 RAF1	R.STS*TP	0.296993866	1 S259	1.14
IPI00021954.1	8729 GBF1	R.GYTS*D	0.604563646	1 S1318	1.11
IPI00021954.1	8729 GBF1	R.GYTSDS	0.27446972	1 T1324	1.11
IPI00021954.1	8729 GBF1	R.GYT*SD	0.27446972	1 T1317	1.11
IPI00021954.1	8729 GBF1	R.GYTSDS	0.27446972	1 S1320	1.11
IPI00021954.1	8729 GBF1	R.GY*TSD	0.27446972	1 Y1316	1.11
IPI00022019.1	8819 SAP30	R.KGS*DD	0.604563646	0.81 S131	0.99
IPI00022019.1	8819 SAP30	R.KGS*DD	0.000485008	0.88 S131	1.13
IPI00022145.5	64710 NUCKS1	K.ATVTPS	0.096924105	0.96 S181	1.19
IPI00022145.5	64710 NUCKS1	K.ATVTPS	0.106353987	0.98 S181	1.15
IPI00022145.5	64710 NUCKS1	R.LKATVT	0.373234869	0.98 T179	1.05
IPI00022145.5	64710 NUCKS1	K.VVDYSC	0.088241621	0.94 S19	1.16
IPI00022145.5	64710 NUCKS1	R.LKATVT	0.197661257	1 S181	1.15
IPI00022145.5	64710 NUCKS1	R.KVVDYS	0.166517367	0.96 S19	1.04
IPI00022215.1	23394 ADNP	K.ADIPVK	0.795669231	0.98 S607	1.01
IPI00022215.1	23394 ADNP	R.YSLQSA	0.726073545	0.98 S409	1.14
IPI00022215.1	23394 ADNP	K.ADIPVK	0.566916624	1 S608	1.03
IPI00022215.1	23394 ADNP	K.LMHNAS	0.072926818	0.94 S953	1.22
IPI00022215.1	23394 ADNP	R.LSNPQI	0.166517367	0.9 S1071	1.35
IPI00022479.4	8925 HERC1	R.RVS*TD	0.253322457	0.98 S1428	1.04
IPI00022628.3	9053 MAP7	K.RLSSSS	0.431601138	0.72 T205	0.81
IPI00022628.3	9053 MAP7	K.LFVT*PF	0.060044376	0.77 T277	0.84
IPI00022628.3	9053 MAP7	R.IIHGTAS	0.566916624	0.94 S293	0.96
IPI00022628.3	9053 MAP7	K.RLS*SS	0.49616549	0.96 S200	1.03
IPI00022628.3	9053 MAP7	R.SKST*AV	0.12765804	0.92 T243	1.05
IPI00022628.3	9053 MAP7	R.SKS*TA	0.12765804	0.92 S242	1.05
IPI00022628.3	9053 MAP7	K.RLSSSS	0.530774648	1 S209	1.08
IPI00022628.3	9053 MAP7	K.RLSSSS	0.952395062	0.98 S202	0.96
IPI00022628.3	9053 MAP7	R.LQLS*PA	0.566916624	0.98 S219	1.05
IPI00022649.3	6558 SLC12A2	K.KES*KG	0.530774648	0.98 S994	0.96
IPI00022649.3	6558 SLC12A2	K.LLRPSL	0.604563646	0.86 T268	0.87
IPI00022649.3	6558 SLC12A2	K.LLRPSL	0.604563646	0.45 S265	0.64
IPI00022790.1	4236 MFAP1	R.SLAALD	0.455306331	0.79 T267	0.74
IPI00023030.1	81539 SLC38A1	R.RS*LTN	0.000379914	0.64 S52	0.96
IPI00023100.5	1855 DVL1	R.ELAAVP	3.40E-08	0.86 S679	0.93
IPI00023103.1	1856 DVL2	R.TSGIGD	0.760488858	0.85 S143	1.04
IPI00023177.3	10036 CHAF1A	R.GLLSNH	0.463105648	0.98 S772	1.1
IPI00023177.3	10036 CHAF1A	R.SPSTT*	0.373234869	0.94 T779	1.02

IPI00023177.3	10036 CHAF1A	R.SPS*TT\	0.530774648	0.98 S777	0.91
IPI00023177.3	10036 CHAF1A	K.SPDLEA	0.346340474	0.86 T74	1.14
IPI00023177.3	10036 CHAF1A	R.S*PSTT\	0.530774648	1 S775	1.02
IPI00023177.3	10036 CHAF1A	K.S*PDLE/	0.346340474	0.9 S65	0.91
IPI00023177.3	10036 CHAF1A	R.SPST*T\	0.604563646	1 T778	1.03
IPI00023591.1	5813 PURA	R.GPGLG\$	0.106353987	0.81 S182	0.9
IPI00023649.1	55206 SBNO1	K.KKSIDPI	0.049260986	0.81 S799	1.14
IPI00023649.1	55206 SBNO1	K.LYSLLGI	0.472044151	0.83 S692	0.76
IPI00023649.1	55206 SBNO1	K.KKS*IDP	0.990601784	0.9 S794	0.97
IPI00023649.1	55206 SBNO1	K.KKSIDPI	4.62E-06	0.9 S807	0.97
IPI00023649.1	55206 SBNO1	K.RPSFS*!	0.296993866	0.66 S817	0.99
IPI00023664.3	1111 CHEK1	R.VTS*GG	0.8197889	0.96 S280	1.06
IPI00023664.3	1111 CHEK1	R.TGLSLW	0.49616549	0.71 T330	0.88
IPI00023748.3	4666 NACA	K.VQGEA\	0.296993866	0.88 S166	1.06
IPI00023860.1	4673 NAP1L1	R.LDGLVE	0.106353987	0.9 T62	1.14
IPI00024167.1	51575 ESF1	K.FKIDSNI	0.080258071	0.94 S153	1.25
IPI00024167.1	51575 ESF1	K.ALAEAA	0.684201094	0.94 S663	1.02
IPI00024167.1	51575 ESF1	K.ALAEAA	0.684201094	0.94 S657	0.96
IPI00024167.1	51575 ESF1	R.TLDSGT	0.463105648	1 S198	1.01
IPI00024214.1	7014 TERF2	K.DLVLPT!	0.530774648	1 S323	1.06
IPI00024291.2	572 BAD	R.S*APPN	0.253322457	0.79 S99	1.2
IPI00024312.2	2245 FGD1	K.S*LSLDF	0.373234869	0.96 S114	1.12
IPI00024320.1	5935 RBM3	R.NQGGYI	0.200615036	0.96 S147	0.84
IPI00024387.1	3169 FOXA1	R.KDPSG/	0.152571688	0.98 S308	1.3
IPI00024579.1	56852 RAD18	R.NHLLQF	0.463105648	0.94 S99	1.05
IPI00024579.1	56852 RAD18	R.NHLLQF	0.296993866	0.96 S99	1.07
IPI00024579.1	56852 RAD18	R.NHLLQF	0.463105648	0.94 S99	0.91
IPI00024579.1	56852 RAD18	R.NHLLQF	0.604563646	0.98 S103	0.98
IPI00024618.2	56941 C3orf37	K.TPQKEE	0.080258071	1 S322	1.26
IPI00024650.1	6566 SLC16A1	K.KESKEE	0.066203153	0.88 S467	1.16
IPI00024650.1	6566 SLC16A1	K.KES*KEI	0.643675939	0.88 S461	0.86
IPI00024662.1	23468 CBX5	K.RKS*NF!	0.373234869	1 S92	1.1
IPI00024662.1	23468 CBX5	K.RKSNFS	0.373234869	1 S95	1.1
IPI00024816.3	56947 C2orf33	R.VLTLSEI	0.32093792	0.92 T111	0.99
IPI00024816.3	56947 C2orf33	R.VLTLSEI	0.726073545	1 T112	0.99
IPI00024970.2	3619 INCENP	R.RIS*YVC	0.497617381	0.88 S72	0.77
IPI00024970.2	3619 INCENP	R.HS*PIAF	0.373234869	0.88 S306	1.1
IPI00024970.2	3619 INCENP	R.HSPIAP!	0.003656496	0.86 S312	1.03
IPI00024970.2	3619 INCENP	K.RTS*SA\	0.604563646	0.88 S898	0.97
IPI00024970.2	3619 INCENP	R.TDSQS*	0.373234869	0.96 S302	0.97
IPI00024970.2	3619 INCENP	R.TDS*QS	0.373234869	0.96 S300	0.97
IPI00024970.2	3619 INCENP	R.T*DSQS	0.373234869	0.98 T298	1.06
IPI00024970.2	3619 INCENP	R.T*DSQS	0.373234869	0.98 T298	1.06
IPI00024970.2	3619 INCENP	R.DSPAFP	0.054409842	0.88 S275	1.04
IPI00024970.2	3619 INCENP	R.RISY*VC	0.891255812	1 Y73	0.93
IPI00024970.2	3619 INCENP	R.IAQVS*F	0.566916624	1 S263	1.02
IPI00024970.2	3619 INCENP	R.HS*PIAF	0.401648339	1 S306	1.07
IPI00024970.2	3619 INCENP	R.HS*PIAF	0.401648339	1 S306	1.07
IPI00024970.2	3619 INCENP	R.VLAPILF	0.643675939	1 T292	0.99
IPI00024970.2	3619 INCENP	R.TDSQS*	0.566916624	1 S302	1.02
IPI00024970.2	3619 INCENP	R.TDSQSV	0.463105648	1 S306	1.02

IPI00024971.1	5007 OSBP	R.T*GSNIE	0.214968943	0.85 T377	0.98
IPI00024971.1	5007 OSBP	R.TGS*NIE	0.214968943	0.85 S379	0.98
IPI00024971.1	5007 OSBP	K.GDMS*C	0.181528891	0.83 S351	1.05
IPI00024971.1	5007 OSBP	K.MLAES*I	0.253322457	0.77 S190	1.02
IPI00024971.1	5007 OSBP	R.T*GSNIE	0.545847833	0.92 T377	0.94
IPI00024971.1	5007 OSBP	R.TGS*NIE	0.545847833	0.92 S379	0.94
IPI00024971.1	5007 OSBP	K.MLAES*I	0.463105648	0.98 S190	1.08
IPI00025156.4	10273 STUB1	R.LGAGGC	0.463105648	0.98 S19	1.06
IPI00025830.1	7465 WEE1	K.SPAAPY	0.181528891	0.98 S139	1.13
IPI00026089.3	23451 SF3B1	K.LSSWDC	0.566916624	0.08 T223	0.65
IPI00026089.3	23451 SF3B1	K.LSSWDC	0.877341226	0.79 T227	0.73
IPI00026089.3	23451 SF3B1	K.T*ERDTI	0.197661257	0.92 T299	0.94
IPI00026089.3	23451 SF3B1	K.LTATPT'	0.004600913	0.58 T436	1.1
IPI00026089.3	23451 SF3B1	K.TERDT*I	0.296993866	0.98 T303	1.08
IPI00026089.3	23451 SF3B1	K.IWDPT*F	0.116581414	0.85 T257	0.8
IPI00026089.3	23451 SF3B1	K.SRWDE	0.181528891	0.92 T341	1.03
IPI00026089.3	23451 SF3B1	K.SRWDE	0.566916624	0.98 T350	1.08
IPI00026089.3	23451 SF3B1	K.LTAT*PT	0.066203153	0.92 T434	0.98
IPI00026089.3	23451 SF3B1	K.VVNGAA	0.961160996	0.98 S194	1.06
IPI00026089.3	23451 SF3B1	R.RWDQT	0.296993866	0.94 T211	0.98
IPI00026089.3	23451 SF3B1	R.WDQTAI	0.431601138	0.96 T211	0.89
IPI00026089.3	23451 SF3B1	R.TMIIS*PI	0.060044376	0.83 S129	1.11
IPI00026089.3	23451 SF3B1	R.TMIIS*PI	0.877341226	0.67 S129	0.76
IPI00026089.3	23451 SF3B1	K.KLSSWE	0.49616549	1 T223	1.05
IPI00026089.3	23451 SF3B1	R.WDETP/	0.627992512	0.94 T350	0.89
IPI00026089.3	23451 SF3B1	R.WDETP/	0.627992512	0.94 S349	0.89
IPI00026089.3	23451 SF3B1	K.LSSWDC	0.530774648	0.98 T223	0.93
IPI00026219.4	29894 CPSF1	R.SGPEAE	0.86862174	0.85 S756	1.12
IPI00026230.1	3188 HNRPH2	K.HTGPNS	0.32093792	1 S104	1.09
IPI00026302.3	6160 RPL31	R.KRNEDE	0.777986561	0.96 S98	0.96
IPI00026317.3	51341 ZBTB7A	R.GGAPDF	0.401648339	1 S526	1.07
IPI00026317.3	51341 ZBTB7A	R.GGAPDF	0.32093792	0.98 S525	1.02
IPI00026320.1	51366 UBR5	R.FQLRS*I	0.684201094	0.77 S578	1.23
IPI00026320.1	51366 UBR5	R.RIS*QSC	0.106353987	0.96 S1549	1.1
IPI00026689.4	983 CDC2	K.IGEGT*Y	0.966676636	0.98 T14	1.03
IPI00026689.4	983 CDC2	R.VY*THE'	0.253322457	1 Y166	1.13
IPI00026689.4	983 CDC2	R.VYT*HE'	0.214968943	1 T167	1.13
IPI00026836.2	4137 MAPT	R.SGYSSF	0.214968943	0.58 T147	0.86
IPI00026836.2	4137 MAPT	K.AKTDHC	0.643675939	0.94 S338	1.01
IPI00026836.2	4137 MAPT	K.AKTDHC	0.27446972	0.94 S338	1.01
IPI00026836.2	4137 MAPT	K.AKTDHC	0.096924105	0.94 Y336	1.26
IPI00026836.2	4137 MAPT	R.TPSLPT	0.32093792	0.81 T162	0.89
IPI00026836.2	4137 MAPT	R.TPSLPT'	0.32093792	0.81 T159	0.89
IPI00026836.2	4137 MAPT	K.TDHGAE	0.32093792	0.98 Y336	1.16
IPI00026952.1	11187 PKP3	R.TLQRLS	0.253322457	1 S314	1.09
IPI00026952.1	11187 PKP3	R.TLQRLS	0.27446972	0.98 S313	1.09
IPI00026952.1	11187 PKP3	R.LS*SGFI	0.346340474	1 S313	1.08
IPI00026952.1	11187 PKP3	R.LSS*GFI	0.346340474	1 S314	1.08
IPI00027009.2	11252 PACSIN2	K.KATDGV	0.096924105	0.94 S375	1.12
IPI00027009.2	11252 PACSIN2	K.KATDGV	0.530774648	0.83 S375	0.91
IPI00027009.2	11252 PACSIN2	K.ATDGV	0.233505398	0.83 S354	1

IPI00027035.1	11321 XAB1	K.DSLS*PA	0.054409842	0.96 S314	1.1
IPI00027035.1	11321 XAB1	K.DS*LSP	0.054409842	0.96 S312	1.1
IPI00027082.1	29924 EPN1	R.TALPTS	0.782390145	0.92 S435	1.03
IPI00027157.1	1063 CENPF	K.SVPVNM	0.813530126	0.86 S3175	1
IPI00027157.1	1063 CENPF	K.VAQRS*	0.886608864	0.98 S3150	0.97
IPI00027157.1	1063 CENPF	K.LALS*PL	0.566916624	0.96 S3119	1.06
IPI00027202.2	7544 ZFY	R.IHT*GEK	0.373234869	0.96 T567	0.99
IPI00027258.3	11346 SYNPO	R.SPLPAG	0.32797409	0.86 S837	1.04
IPI00027258.3	11346 SYNPO	R.AAS*PAI	0.463105648	0.98 S589	0.98
IPI00027258.3	11346 SYNPO	R.RSPTDS	0.152571688	0.92 S871	1.11
IPI00027258.3	11346 SYNPO	R.AAS*PAI	0.080258071	0.94 S589	1.16
IPI00027258.3	11346 SYNPO	R.PSLFVL	0.197661257	0.98 S575	1.14
IPI00027258.3	11346 SYNPO	K.S*PGILG	0.373234869	0.98 S871	1.26
IPI00027258.3	11346 SYNPO	R.CPS*PTI	0.463105648	0.92 S510	1.06
IPI00027258.3	11346 SYNPO	R.ASPAAA	0.253322457	0.86 S458	0.92
IPI00027258.3	11346 SYNPO	R.CPSPT*I	0.27446972	0.83 T512	1.11
IPI00027258.3	11346 SYNPO	R.S*PPSY	0.782390145	0.98 S336	0.92
IPI00027258.3	11346 SYNPO	R.DRAS*P	0.296993866	0.98 S441	1.11
IPI00027258.3	11346 SYNPO	R.SAGAEN	0.214968943	1 S784	1.14
IPI00027726.1	51274 KLF3	R.RAS*PG	0.253322457	1 S92	1.09
IPI00027726.1	51274 KLF3	R.TDYYPE	0.463105648	0.94 S216	1.02
IPI00027726.1	51274 KLF3	K.RPLPVE	0.431601138	0.94 S250	1.11
IPI00027729.1	1454 CSNK1E	R.IPASQT	0.980510506	0.88 S408	1.27
IPI00027798.1	83640 FAM103A1	K.RPPES*I	0.12765804	0.12 S36	0.05
IPI00028005.1	57122 NUP107	R.SGFGEI	0.373234869	0.98 S11	1.14
IPI00028065.1	4690 NCK1	K.RKPS*VI	0.12765804	0.92 S85	1.44
IPI00028122.1	11168 PSIP1	K.KKPSS*I	0.49616549	0.96 S514	1.06
IPI00028122.1	11168 PSIP1	K.KKPSSE	0.431601138	0.96 T519	0.96
IPI00028276.4	85451 UNK	R.NSSLGS	0.296993866	0.98 S461	1.2
IPI00028307.2	63893 UBE2O	K.NMTVEC	0.233505398	0.98 S289	1.11
IPI00028307.2	63893 UBE2O	R.KEDKPE	0.166517367	0.88 S346	1.11
IPI00028307.2	63893 UBE2O	K.NMTVEC	0.643675939	0.96 T291	1
IPI00028307.2	63893 UBE2O	K.NMTVEC	0.632655857	0.94 S286	0.92
IPI00028416.1	5089 PBX2	R.HSMGPG	0.054409842	0.88 S395	1.26
IPI00028416.1	5089 PBX2	K.TAVSVT	0.001613065	0.96 S330	1.56
IPI00028416.1	5089 PBX2	K.GGGSAA	0.049260986	1 S151	1.32
IPI00028566.1	9891 NUA1	R.TGVLLP	0.152571688	0.94 S455	1.13
IPI00028566.1	9891 NUA1	R.TGVLLP	0.024009318	0.69 S445	1.12
IPI00028954.1	8888 MCM3AP	K.KPGDGE	0.684201094	0.92 S538	0.95
IPI00028954.1	8888 MCM3AP	R.TGASSL	0.684201094	1 S557	1.02
IPI00028954.1	8888 MCM3AP	K.EKKPGE	0.166517367	0.92 S529	1.11
IPI00028954.1	8888 MCM3AP	K.KPGDGE	0.9240167	0.81 S527	1
IPI00028954.1	8888 MCM3AP	K.EKKPGE	0.233505398	0.96 S527	1.03
IPI00028955.4	23246 BOP1	K.LALPGH	0.181528891	0.92 S323	1.16
IPI00028955.4	23246 BOP1	R.IGDEYA	0.116581414	0.71 S126	1.16
IPI00029009.3	23396 PIP5K1C	K.AAPTEV	0.001806639	0.9 T47	0.79
IPI00029079.5	8833 GMPS	K.VINAAS	0.40669332	0.92 T318	1.19
IPI00029081.2	3980 LIG3	K.FSGFSA	0.373234869	0.94 S241	0.93
IPI00029081.2	3980 LIG3	K.LTTTGQ	0.566916624	0.96 S216	1
IPI00029081.2	3980 LIG3	K.LTTTGQ	0.684201094	0.98 S210	1.02
IPI00029081.2	3980 LIG3	K.LTTTGQ	0.566916624	0.98 T209	1.02

IPI00029081.2	3980 LIG3	K.FSGFSA	0.726073545	0.98	S242	1.13
IPI00029081.2	3980 LIG3	K.LTTTGQ	0.401648339	1	S210	1.08
IPI00029111.2	1809 DPYSL3	R.GMYDG	0.017448313	0.94	T623	1.04
IPI00029174.3	60436 TGIF2	R.GELES*I	0.32093792	0.98	S153	1.17
IPI00029174.3	60436 TGIF2	R.GELESP	0.233505398	0.98	T159	1.17
IPI00029422.1	10112 KIF20A	R.QQS*VA	0	0.67	S662	5.47
IPI00029422.1	10112 KIF20A	K.EHSLQV	0.961160996	0.98	S532	0.93
IPI00029629.3	7706 TRIM25	R.AS*APSI	0.356956072	0.64	S97	0.95
IPI00029629.3	7706 TRIM25	R.ASAPS*I	0.858914691	0.64	S100	0.95
IPI00029661.2	7813 EVI5	R.RNSGS	0.233505398	0.74	S128	0.95
IPI00029661.2	7813 EVI5	R.RNS*GS	0.530774648	0.92	S113	0.84
IPI00029661.2	7813 EVI5	R.RNSGS	0.530774648	0.92	S116	0.84
IPI00029661.2	7813 EVI5	R.RNSGS*	0.530774648	0.92	S115	0.84
IPI00029734.1	994 CDC25B	R.LTHLS*L	0.181528891	0.98	S75	1.11
IPI00029734.1	994 CDC25B	R.SKS*LCI	3.14E-06	0.4	S396	0.95
IPI00030099.2	115 ADCY9	R.VIPQHQ	0.253322457	0.98	S1259	1.18
IPI00030136.1	4926 NUMA1	K.RVS*LEF	0.401648339	0.92	S855	1.11
IPI00030136.1	4926 NUMA1	R.RAS*MC	0.253322457	0.96	S833	1.14
IPI00030136.1	4926 NUMA1	K.APVPST	0.726073545	0.9	S169	0.82
IPI00030136.1	4926 NUMA1	K.APVPST	0.643675939	0.9	S172	0.82
IPI00030136.1	4926 NUMA1	R.VSLEPH	0.463105648	1	T864	1.06
IPI00030246.1	5783 PTPN13	R.S*STSD	0.373234869	0.9	S214	0.89
IPI00030246.1	5783 PTPN13	K.RWS*IV	0.463105648	0.96	S1082	1.04
IPI00030246.1	5783 PTPN13	K.RLSCS*I	0.604563646	0.94	S938	0.98
IPI00030246.1	5783 PTPN13	K.RLS*CSI	0.604563646	0.94	S936	0.98
IPI00030246.1	5783 PTPN13	K.T*FSSSF	0.877341226	0.94	T1355	0.89
IPI00030246.1	5783 PTPN13	K.TFSS*SF	0.995403769	0.94	S1358	0.94
IPI00030274.4	84081 CCDC55	K.TQQLHF	0.197661257	0.96	S27	1.1
IPI00030399.1	663 BNIP2	R.KGS*ITE	0.530774648	0.77	S114	1.04
IPI00030408.2	54737 HSMPP8	R.AGQDM	0.029596689	0.71	S319	1.26
IPI00030408.2	54737 HSMPP8	K.GYTS*D	0.27446972	0.98	S85	1.2
IPI00030408.2	54737 HSMPP8	K.GYT*SD	0.27446972	0.98	T84	1.2
IPI00030466.4	26115 TANC2	R.TWAVS	0.017448313	0.88	S1802	1.33
IPI00030466.4	26115 TANC2	R.ELPLTQ	0.080258071	0.98	T344	1.25
IPI00030466.4	26115 TANC2	R.SCDELS	0.214968943	0.9	T1739	1.38
IPI00030466.4	26115 TANC2	R.SCDELS	0.214968943	0.9	S1737	1.38
IPI00030466.4	26115 TANC2	K.DCSYGA	0.072926818	0.96	S79	1.1
IPI00030466.4	26115 TANC2	R.DSAYIS	0.431601138	0.98	S1368	1.11
IPI00030466.4	26115 TANC2	R.DSAYIS	0.373234869	0.98	S1372	1.11
IPI00030466.4	26115 TANC2	R.DSAYIS	0.096924105	1	S1367	1.21
IPI00030654.1	11052 CPSF6	R.EMDTAF	0.463105648	0.92	T444	1.11
IPI00030790.7	23247 KIAA0556	R.KDS*LS	0	0.83	S691	3.85
IPI00030820.1	57129 MRPL47	R.ASAFLK	0	0.52	S22	10.04
IPI00030851.1	10427 SEC24B	R.T*PPTA	0.239994114	0.94	T329	0.87
IPI00030915.1	9101 USP8	R.STKPVV	0.643675939	0.9	S452	1.05
IPI00030915.1	9101 USP8	R.STKPVV	0.643675939	0.9	T454	1.05
IPI00030915.1	9101 USP8	R.SYS*SPI	0.152571688	0.98	S718	1.21
IPI00031392.1	79092 CARD14	R.SS*SPAI	0.566916624	0.96	S237	1.38
IPI00031411.2	2195 FAT	R.VQVLDT	0.89791754	0.98	S150	0.95
IPI00031411.2	2195 FAT	R.VQVLDT	0.89791754	0.98	T152	0.95
IPI00031411.2	2195 FAT	R.VQVLDT	0.604563646	0.96	S153	0.96

IPI00031508.1	1659 DHX8	R.NPDRPT	0.054409842	0.85 S385	1
IPI00031605.1	79026 AHNAK	K.LQGSGV	0.01942062	0.96 S2927	1.31
IPI00031605.1	79026 AHNAK	K.FGTFGC	0.233505398	0.9 S2900	0.99
IPI00031605.1	79026 AHNAK	R.KGDRSF	0.463105648	0.9 T102	1.09
IPI00031605.1	79026 AHNAK	K.MYFPDV	0.401648339	0.94 S2169	1.09
IPI00031605.1	79026 AHNAK	K.GKGGV	0.296993866	1 S2801	1.13
IPI00031605.1	79026 AHNAK	R.IS*APNV	0.431601138	0.98 S2518	1.18
IPI00031605.1	79026 AHNAK	K.FKAEAP	0.296993866	1 S2180	1.2
IPI00031627.2	5430 POLR2A	K.YSPTS*F	0.604563646	0.98 S1871	1.02
IPI00031627.2	5430 POLR2A	K.YSPTS*F	0.604563646	0.98 S1871	1.02
IPI00031627.2	5430 POLR2A	K.YSPTSP	0.044561326	0.86 Y1895	1.13
IPI00031627.2	5430 POLR2A	K.YSPTS*F	0.401648339	0.96 S1892	1.04
IPI00031627.2	5430 POLR2A	K.YSPTSP	0.401648339	0.96 T1894	1.04
IPI00031627.2	5430 POLR2A	K.YSPTSP	0.096924105	0.96 T1905	1
IPI00031627.2	5430 POLR2A	K.YSPT*SF	0.868109485	0.86 T1891	1.03
IPI00031627.2	5430 POLR2A	K.YSPTS*F	0.868109485	0.86 S1892	1.03
IPI00031627.2	5430 POLR2A	K.YSPTS*F	0.467835816	0.83 S1913	0.82
IPI00031627.2	5430 POLR2A	K.YSPTS*F	0.14531114	0.81 S1878	1
IPI00031675.5	84315 MON1A	R.AES*PTI	0.044561326	0.79 S31	1.02
IPI00031681.1	1017 CDK2	K.IGEGT*Y	0.966676636	0.98 T14	1.03
IPI00031681.1	1017 CDK2	R.T*YTHE\	0.088241621	1 T158	1.24
IPI00031681.1	1017 CDK2	R.TY*THE\	0.152571688	1 Y159	1.24
IPI00031681.1	1017 CDK2	R.TYT*HE\	0.116581414	1 T160	1.22
IPI00031696.2	79072 FASTKD3	K.LETFT*F	0.001622925	0.77 T252	0.49
IPI00031698.3	79074 C2orf49	K.SPSPGV	2.14E-05	0.85 S189	1.2
IPI00031698.3	79074 C2orf49	R.KLSNSS	0.373234869	1 S147	1.08
IPI00031698.3	79074 C2orf49	R.KLS*NS	0.32093792	1 S143	1.08
IPI00031698.3	79074 C2orf49	R.KLSNSS	0.530774648	0.98 S148	1.07
IPI00031698.3	79074 C2orf49	R.KLSNSS	0.956313787	0.85 S150	1.08
IPI00031698.3	79074 C2orf49	R.KLSNS*	0.346340474	1 S145	1.11
IPI00031768.1	84376 HOOK3	R.S*YPGH	0.27446972	1 S707	1.12
IPI00031768.1	84376 HOOK3	R.SY*PGH	0.27446972	1 Y708	1.12
IPI00032003.1	2010 EMD	R.RLSPPS	0.296993866	0.86 S52	0.86
IPI00032003.1	2010 EMD	R.RLSPPS	0.296993866	0.86 S54	0.86
IPI00032003.1	2010 EMD	R.RLSPPS	0.346340474	1 S54	1.1
IPI00032003.1	2010 EMD	R.RLSPPS	0.566916624	1 S52	1.05
IPI00032003.1	2010 EMD	R.RLS*PP	0.463105648	1 S49	1.05
IPI00032003.1	2010 EMD	R.RLSPPS	0.431601138	1 S57	1.07
IPI00032003.1	2010 EMD	R.DSAYQE	0.166517367	0.98 S171	1.16
IPI00032003.1	2010 EMD	R.DSAYQE	0.106353987	0.98 S173	1.16
IPI00032342.3	9320 TRIP12	K.HLAESE	0.791231585	0.98 S990	1.05
IPI00032342.3	9320 TRIP12	K.RSES*PI	0.401648339	1 S354	1.07
IPI00032342.3	9320 TRIP12	R.SES*PP	0.346340474	0.98 S354	1.03
IPI00032491.1	23592 LEMD3	K.APPAPL	0.684201094	0.85 S187	0.88
IPI00032491.1	23592 LEMD3	K.TNNHIG	0.684201094	0.92 S402	0.97
IPI00032491.1	23592 LEMD3	R.YGLS*P	0.530774648	1 S27	1
IPI00032677.1	170463 SSBP4	K.SSPGAV	0.066203153	0.98 T333	1.38
IPI00032677.1	170463 SSBP4	K.S*SPGA'	0.216960964	0.9 S319	1.21
IPI00032677.1	170463 SSBP4	K.SS*PGA'	0.216960964	0.9 S320	1.21
IPI00032791.4	10775 POP4	K.SVIYHAL	9.73E-05	0.96 S10	1.34
IPI00032898.1	55509 SNFT	R.SVAAPC	0.096924105	0.98 S31	1.12

IPI00032936.4	2077	ERF	K.TPADTG	0.214968943	0.85	S20	1.03
IPI00032936.4	2077	ERF	-.MKT*PAC	0.373234869	0.98	T3	1.02
IPI00032936.4	2077	ERF	-.MKT*PAC	0.373234869	0.98	T3	1.02
IPI00032936.4	2077	ERF	K.TPADTG	0.296993866	1	S21	1.11
IPI00032970.2	114885	OSBPL11	K.S*RSFSI	0.732417704	0.83	S170	1.24
IPI00032970.2	114885	OSBPL11	R.S*FSLAS	0.49616549	0.74	S172	1.31
IPI00032970.2	114885	OSBPL11	R.SFSLAS	0.9240167	0.96	S179	1.2
IPI00032970.2	114885	OSBPL11	R.SFSLAS	0.9240167	0.96	S181	1.2
IPI00032970.2	114885	OSBPL11	K.SRSFSL	0	0.94	S179	0.06
IPI00032970.2	114885	OSBPL11	K.SRS*FSI	0	0.94	S172	0.06
IPI00032970.2	114885	OSBPL11	R.S*FSLAS	0.614059792	0.85	S172	0.91
IPI00032970.2	114885	OSBPL11	R.SFS*LAS	0.614059792	0.85	S174	0.91
IPI00032971.2	114884	OSBPL10	R.AKS*QY	0.49616549	0.9	S232	1.2
IPI00033008.1	2353	FOS	R.KGS*SS	5.89E-05	0.79	S362	1.1
IPI00033008.1	2353	FOS	R.KGS*SS	0.824668282	0.86	S362	0.9
IPI00033054.3	51496	CTDSPL2	K.RKY*SE'	0.296993866	0.9	Y27	1.15
IPI00033054.3	51496	CTDSPL2	R.TTLLGTI	0.530774648	0.92	S163	1.1
IPI00033054.3	51496	CTDSPL2	R.TTLLGTI	0.530774648	0.92	S165	1.1
IPI00033054.3	51496	CTDSPL2	K.RKYSEV	0.072926818	0.98	S36	1.12
IPI00033075.2	7920	BAT5	R.APASVP	0.738886535	0.72	T32	0.91
IPI00033153.1	10482	NXF1	R.AFAMPA	0.401648339	0.98	S558	1.09
IPI00033153.1	10482	NXF1	R.AFAMPA	0.49616549	0.98	S556	1.1
IPI00033153.1	10482	NXF1	R.AFAMPA	0.49616549	0.98	S557	1.1
IPI00033494.3	103910	MRLC2	R.AT*SNVI	0.024009318	0.81	T19	0.98
IPI00033494.3	103910	MRLC2	R.ATS*NVI	0.024009318	0.81	S20	0.98
IPI00033907.1	64682	ANAPC1	R.AHS*PA	0.886608864	0.92	S355	1.07
IPI00033907.1	64682	ANAPC1	R.FNISSHI	0.643675939	0.98	S377	0.98
IPI00033907.1	64682	ANAPC1	K.LHDS*L\	0.933447376	0.96	S569	1.13
IPI00033907.1	64682	ANAPC1	R.NFD FEC	0.335099417	0.74	S688	0.88
IPI00034006.1	25930	PTPN23	R.GAAAAL	0.795669231	0.98	S1126	0.97
IPI00034248.1	23598	PATZ1	K.LSHS*GI	0.9949766	0.96	S378	0.87
IPI00036742.5	25962	KIAA1429	R.FFT*PP/	0.956313787	0.86	T1708	0.82
IPI00036742.5	25962	KIAA1429	R.GPRT*P	0.49616549	0.66	T184	0.67
IPI00036742.5	25962	KIAA1429	R.GPRT*P	0.152571688	0.92	T184	1.16
IPI00036742.5	25962	KIAA1429	R.GPRT*P	0.32093792	0.98	T184	1.17
IPI00036742.5	25962	KIAA1429	R.SFLSEP	0.296993866	0.98	S1579	1.14
IPI00038698.1			K.LIPITGG	0.431601138	1	S531	1.1
IPI00043327.3	146705	C17orf56	R.HFEASC	0.604563646	1	S356	1.04
IPI00043494.6	197407	ZNF553	R.VHT*GE	0.995403769	0.01	T326	0.2
IPI00043565.3	91603	CCDC16	K.KEEENA	0.643675939	0.9	S351	0.95
IPI00044665.1	150864	ALS2CR13	K.YAT*SPH	0.541395815	0.96	T456	0.92
IPI00044665.1	150864	ALS2CR13	K.Y*ATSPH	0.541395815	0.96	Y454	0.92
IPI00044665.1	150864	ALS2CR13	R.TSS*LDI	0.152571688	0.98	S220	1.19
IPI00044665.1	150864	ALS2CR13	R.T*SSLDI	0.152571688	0.98	T218	1.19
IPI00044665.1	150864	ALS2CR13	R.TS*SLDI	0.152571688	0.98	S219	1.19
IPI00045051.2	5814	PURB	R.DSLGDF	0.9240167	0.59	S101	0.55
IPI00045207.1	112939	BTBD14B	K.VSSPSC	0.849082022	0.94	S145	0.85
IPI00045207.1	112939	BTBD14B	K.VSSPSC	3.32E-09	0.88	S140	2.72
IPI00045360.1	23152	CIC	K.S*SSEAI	0.431601138	0.98	S277	1.14
IPI00045360.1	23152	CIC	K.SS*SEAI	0.431601138	0.98	S278	1.14
IPI00045360.1	23152	CIC	R.VPGGSF	0.139636808	0.9	S726	0.98

IPI00045360.1	23152 CIC	R.VPGGS*	0.139636808	0.9 S721	0.98
IPI00045360.1	23152 CIC	R.FAELPE	0.166517367	0.9 S1382	1.13
IPI00045360.1	23152 CIC	R.FAELPE	0.431601138	0.96 S1373	1.08
IPI00045360.1	23152 CIC	R.AFSHSC	0.116581414	0.98 S370	1.12
IPI00045472.1	84219 WDR24	R.HEIVDT'	0.459466751	0.79 T711	0.59
IPI00045531.1	388695 LYSMD1	R.ARS*YG	0.03282354	0.9 S23	1.41
IPI00045914.1	23013 SPEN	R.LLSVKG	0.530774648	0.96 S1287	0.93
IPI00045914.1	23013 SPEN	K.DS*ELK	0.373234869	0.81 S1629	1.04
IPI00045914.1	23013 SPEN	R.LNTVAS	0.643675939	0.92 S1062	1.03
IPI00045914.1	23013 SPEN	R.LNT*VA	0.643675939	0.92 T1059	1.03
IPI00045914.1	23013 SPEN	R.SKT*PV	8.30E-09	0.61 T1826	0.24
IPI00045914.1	23013 SPEN	R.SVYATM	0.9949766	0.92 S1918	1.09
IPI00045914.1	23013 SPEN	R.SLVHEV	0.566916624	1 S1222	1.05
IPI00056880.6	126208 ZNF787	R.IHTGEKI	0.623338592	0.96 T151	0.87
IPI00056880.6	126208 ZNF787	R.IHT*GEK	0.623338592	0.96 T145	0.87
IPI00056880.6	126208 ZNF787	R.IHT*GEK	0.756570768	0.98 T117	0.92
IPI00059764.3	126299 ZNF428	R.SPLGEA	0.283672925	0.86 T108	0.7
IPI00061078.5		R.SVS*VD	0.559279862	0.85 S499	1.08
IPI00061087.3	116224 FAM122A	R.RNS*TTI	0.060044376	0.92 S62	1.32
IPI00061087.3	116224 FAM122A	R.SNSAPL	0.040276449	0.98 T47	1.39
IPI00061087.3	116224 FAM122A	K.RIDFIPV	0.116581414	1 S143	1.33
IPI00061087.3	116224 FAM122A	K.RIDFIPV	0.049260986	1 S143	1.33
IPI00061087.3	116224 FAM122A	R.S*NSAP	0.066203153	1 S35	1.29
IPI00061107.3		K.GLGLGA	0.197661257	0.94 T216	1.15
IPI00061178.1	56267 CCBL2	R.DRDYSL	0.530774648	0.37 S277	0.84
IPI00061178.1	56267 CCBL2	R.RDVYLS	0.12765804	1 S208	1.3
IPI00061178.1	56267 CCBL2	R.DYGHS*	0.214968943	0.96 S249	1.32
IPI00061178.1	56267 CCBL2	R.DYGHS	0.12765804	0.96 S250	1.32
IPI00061178.1	56267 CCBL2	R.DVYLS*I	0.022266161	0.79 S208	0.46
IPI00061282.1	5562 PRKAA1	K.IADFGL	0.530774648	0.71 T198	0.94
IPI00061282.1	5562 PRKAA1	K.IADFGL	0.791231585	0.79 S199	1.04
IPI00061282.1	5562 PRKAA1	R.VPFLVA	0.941751315	0.94 T397	0.98
IPI00061282.1	5562 PRKAA1	K.DFYLAT	0.296993866	0.88 S375	1.03
IPI00061356.1	54908 CCDC99	K.SVSIHT*	0.005157186	0.92 T509	1.56
IPI00061989.3	113130 CDCA5	K.PWAPDM	0.27446972	0.66 S209	0.89
IPI00061989.3	113130 CDCA5	R.LETLGS	0.231191204	0.98 T159	0.93
IPI00061989.3	113130 CDCA5	R.LETLGS	0.231191204	0.98 S158	0.93
IPI00061989.3	113130 CDCA5	R.KS*GSE	0.684201094	0.96 S33	0.99
IPI00061989.3	113130 CDCA5	K.S*GSELI	0.643675939	0.92 S33	0.95
IPI00061989.3	113130 CDCA5	R.IVAHAVI	0.214968943	1 S75	1.15
IPI00062697.1	91283 C9orf30	R.SVS*PLI	0.566916624	1 S98	1.04
IPI00062697.1	91283 C9orf30	K.EWPVSE	0.643675939	0.86 S274	1.04
IPI00062884.3	2017 CTTN	R.AKTQT*I	0.214968943	0.98 T364	1.17
IPI00062884.3	2017 CTTN	R.AKT*QTI	0.296993866	0.98 T362	1.18
IPI00062884.3	2017 CTTN	R.AKT*QTI	0.088241621	0.79 T362	1.14
IPI00062884.3	2017 CTTN	K.TQTTPV	0.181528891	0.96 S381	1.11
IPI00062884.3	2017 CTTN	K.TQTTPV	0.116581414	0.96 S380	1.11
IPI00062884.3	2017 CTTN	R.LPSS*P	0.604563646	0.88 S381	0.96
IPI00062884.3	2017 CTTN	K.TQT*PP	0.139636808	0.98 T364	1.2
IPI00062884.3	2017 CTTN	K.TQTTPV	0.27446972	1 Y384	1.15
IPI00062884.3	2017 CTTN	K.TQT*PP	0.463105648	1 T364	1.1

IPI00062884.3	2017 CTTN	R.AKTQT*I	0.566916624	1 T364	1.03
IPI00063387.3	29844 TFPT	R.TPAPPE	0.181528891	0.98 S180	1.21
IPI00063605.3	84962 JUB	R.SSFASS	0.760488858	0.98 S137	1.07
IPI00063605.3	84962 JUB	R.SSFASS	0.760488858	0.98 S130	1.07
IPI00063605.3	84962 JUB	R.SSFASS	0.760488858	0.98 S136	1.07
IPI00064086.4	1936 EEF1D	K.KPAT*P/	0.303680857	0.92 T123	1.17
IPI00064086.4	1936 EEF1D	K.KPATPA	0.643675939	0.9 S138	1.06
IPI00064086.4	1936 EEF1D	K.KPATPA	0.346340474	0.92 S138	0.93
IPI00064086.4	1936 EEF1D	R.ATAPQT	0.401648339	1 S109	1.11
IPI00066458.1	81669 CCNL2	K.AKADS*I	0.009053635	0.86 S369	1.08
IPI00066458.1	81669 CCNL2	R.GLLPGC	0.809048575	0.96 S330	0.87
IPI00066458.1	81669 CCNL2	K.GSKPS*	0.431601138	1 S348	1.04
IPI00066641.3		K.DRPAS*	0.643675939	0.92 S707	1.11
IPI00066641.3		K.DRPASC	0.643675939	0.92 S709	1.11
IPI00066641.3		K.IERPGEI	0.3495912	0.85 S287	0.66
IPI00069126.1	4646 MYO6	K.GT*VIKV	0.106353987	0.98 T405	1.23
IPI00069126.1	4646 MYO6	R.IDGLVK\	0.104720341	1 T845	0.69
IPI00069267.2	94104 C21orf66	K.MADHLE	0.373234869	0.58 S557	0.69
IPI00069309.4	222229 DKFZp434	K.RPDDVF	0.233505398	0.92 S335	1.21
IPI00069309.4	222229 DKFZp434	R.ACAS*P/	0.401648339	0.98 S343	1.03
IPI00069309.4	222229 DKFZp434	R.ACAS*P/	0.03282354	0.79 S343	0.96
IPI00069309.4	222229 DKFZp434	K.RPDDVF	0.106353987	1 S337	1.24
IPI00069693.4		K.AALLKA/	0.751731134	0.88 S139	0.77
IPI00071188.1	984 CDC2L1	K.RGT*S*F	0.253322457	0.79 T704	1
IPI00071188.1	984 CDC2L1	K.RGTS*P	0.296993866	0.96 S705	1.08
IPI00071188.1	984 CDC2L1	R.EYGS*P	0.530774648	0.88 S542	0.89
IPI00071188.1	984 CDC2L1	R.DLLSDL/	0.001432711	0.79 S236	0.99
IPI00071188.1	984 CDC2L1	R.EY*GSP	0.431601138	0.96 Y540	1.09
IPI00071188.1	984 CDC2L1	R.GTS*PR	0.463105648	0.86 S705	1.1
IPI00071188.1	984 CDC2L1	R.MEITIRN	0.096924105	0.92 S31	1.1
IPI00071188.1	984 CDC2L1	K.RGT*SP	0.296993866	0.98 T704	1.12
IPI00071188.1	984 CDC2L1	K.AYT*PV\	0.116581414	0.92 T548	1.2
IPI00071188.1	984 CDC2L1	R.GTSPRF	0.116581414	0.9 Y715	1.1
IPI00071188.1	984 CDC2L1	R.EYGS*P	0.604563646	0.98 S542	1.01
IPI00071824.2	26586 CKAP2	K.KVQFDC	0.166517367	0.92 S614	0.9
IPI00071824.2	26586 CKAP2	K.KVQFDC	0.166517367	0.92 T612	0.9
IPI00072534.1	55898 UNC45A	R.PATPGA	1.12E-06	0.59 S19	0.3
IPI00072955.2	90861 HN1L	K.LFS*PS/	2.34E-01	0.96 S1166	1.05
IPI00072955.2	90861 HN1L	K.TPAEGR	0.373234869	0.67 S785	0.72
IPI00072955.2	90861 HN1L	K.TSDIFG/	0.463105648	0.96 S97	0.94
IPI00074587.7	727922 LOC72792	R.SRS*FD/	0.296993866	0.96 S133	1.16
IPI00075805.7	57587 KIAA1430	K.HVSGITI	0.214968943	0.96 S218	1.12
IPI00082310.1	10657 KHDRBS1	R.S*GSMC	0.694048494	0.88 S18	0.97
IPI00082310.1	10657 KHDRBS1	R.SGS*MC	0.92716125	0.88 S20	0.97
IPI00082310.1	10657 KHDRBS1	R.AS*PAT/	0.181528891	0.21 S58	0.55
IPI00082310.1	10657 KHDRBS1	R.ASPAT*(	0.181528891	0.96 T61	1.15
IPI00084746.2	7916 BAT2	K.LGGPKE	0.139636808	0.81 T997	1.04
IPI00084746.2	7916 BAT2	R.ASSLLS/	5.20E-05	0.66 S163	0.94
IPI00084746.2	7916 BAT2	R.ASSLLS	5.20E-05	0.66 S166	0.94
IPI00084746.2	7916 BAT2	R.TAS*ET/	0.730331964	0.94 S1085	1.05
IPI00084746.2	7916 BAT2	K.EAPPPV	0.764845588	0.96 T1347	0.99

IPI00084746.2	7916 BAT2	R.RKQS*S	0.872720802	0.83 S456	1.14
IPI00084746.2	7916 BAT2	R.RKQSS	0.726073545	0.83 S461	1.07
IPI00084746.2	7916 BAT2	K.LIPGPLE	0.253322457	1 S1219	1.12
IPI00084746.2	7916 BAT2	K.EGPEPF	0.463105648	1 T610	1.04
IPI00087375.1	51322 WAC	R.IS*TPQT	0.32093792	0.96 S353	1.15
IPI00087375.1	51322 WAC	R.IST*PQT	0.346340474	1 T354	1.1
IPI00087498.4	157570 ESCO2	K.TTEINRL	0.738886535	0.81 S75	1.02
IPI00087498.4	157570 ESCO2	K.CDSLLH	0.643675939	0.85 S29	1.05
IPI00087498.4	157570 ESCO2	R.VLSEPIC	0.401648339	0.94 S512	1.01
IPI00087498.4	157570 ESCO2	R.LPSANC	0.373234869	1 S75	1.11
IPI00096899.6	81620 CDT1	R.LRLS*VI	0.091610201	0.59 S73	0.62
IPI00099746.3	728642 CDC2L2	K.RGT*S*F	0.253322457	0.79 T736	1
IPI00099746.3	728642 CDC2L2	K.RGTS*P	0.296993866	0.96 S737	1.08
IPI00099746.3	728642 CDC2L2	R.EY*GSP	0.49616549	0.96 Y572	1.02
IPI00099746.3	728642 CDC2L2	R.DLLSDL	0.001432711	0.79 S271	0.99
IPI00099746.3	728642 CDC2L2	K.AYT*PV	0.530774648	0.92 T580	1.16
IPI00099746.3	728642 CDC2L2	R.GTS*PR	0.463105648	0.86 S737	1.1
IPI00099746.3	728642 CDC2L2	K.RGT*SP	0.296993866	0.98 T736	1.12
IPI00099746.3	728642 CDC2L2	R.GTSPRF	0.116581414	0.9 S365	1.1
IPI00099746.3	728642 CDC2L2	R.GTSPRF	0.116581414	0.9 Y747	1.1
IPI00100041.3	83746 L3MBTL2	R.VKEEHL	6.68E-05	0.58 S683	0.97
IPI00100151.3	22803 XRN2	R.RNS*LG	0.03282354	0.94 S678	1.17
IPI00100197.3	55968 NSFL1C	R.KKS*PN	0.463105648	0.9 S114	0.93
IPI00100468.4	54680 C1orf181	K.SGGGL	0.214968943	1 S25	1.11
IPI00100630.5	4298 MLLT1	K.RPATAD	0.233505398	1 S296	1.16
IPI00100630.5	4298 MLLT1	K.RPATAD	0.233505398	1 S292	1.16
IPI00100930.1	64897 C12orf43	R.EAAVSA	0.643675939	0.96 T183	1.02
IPI00100930.1	64897 C12orf43	R.EAAVSA	0.98101429	0.94 S180	1.02
IPI00100947.3	79165 LENG1	R.HQNS*L	0.181528891	0.71 S59	0.9
IPI00100980.9	30846 EHD2	K.SKYDEIF	0.214968943	0.9 S470	0.72
IPI00100980.9	30846 EHD2	K.SKYDEIF	0.643675939	0.96 S468	0.93
IPI00100980.9	30846 EHD2	K.YDEIFY	0.726073545	0.96 S470	0.94
IPI00100980.9	30846 EHD2	K.YDEIFY	0.726073545	0.96 S468	0.94
IPI00101062.4	79724 ZNF768	R.SPGLVP	0.566916624	0.96 S97	0.97
IPI00101062.4	79724 ZNF768	R.YEPQS*	0.643675939	0.98 S125	1.02
IPI00101062.4	79724 ZNF768	R.S*PGLVI	0.346340474	0.86 S90	0.94
IPI00101532.5	55165 CEP55	K.VAASPK	0.566916624	0.98 S428	0.98
IPI00101532.5	55165 CEP55	K.VAASPK	0.49616549	0.98 T430	0.98
IPI00101532.5	55165 CEP55	K.S*PTAAL	0.530774648	0.92 S428	1.01
IPI00101532.5	55165 CEP55	K.SPT*AAL	0.530774648	0.92 T430	1.01
IPI00102291.1	84668 FAM126A	K.S*FEQV	0.066203153	0.92 S453	1.11
IPI00102377.2	84079 ANKRD27	R.RHT*VE	0.000888315	0.92 T1023	1.38
IPI00102427.3		R.ILKS*PE	0.566916624	0.03 S200	0.06
IPI00102575.2	79915 ATAD5	R.ISS*TPT	0.346340474	0.92 S602	1.33
IPI00102575.2	79915 ATAD5	K.HSLYTA	0.49616549	0.88 S653	1
IPI00102575.2	79915 ATAD5	K.HSLYTA	0.346340474	0.88 S651	1
IPI00102661.1	22974 TPX2	R.SLRLS*/	0.928728317	0.98 S125	1.07
IPI00102661.1	22974 TPX2	K.RCATPV	0.214968943	0.83 S157	0.74
IPI00102661.1	22974 TPX2	K.ICRDPQ	0.738886535	1 T405	0.98
IPI00102661.1	22974 TPX2	K.ANLQQ	0.726073545	0.98 T72	0.98
IPI00102661.1	22974 TPX2	K.SSDQPL	0.49616549	1 S774	1.06

IPI00103013.1	257364	SH3PX3	R.SGISTNI	0.604563646	0.92	S72	1.1
IPI00103013.1	257364	SH3PX3	R.SGISTNI	0.604563646	0.92	S73	1.1
IPI00103145.3	117581	TWIST2	K.KGS*PS	0.075572151	0.77	S55	0.92
IPI00103256.4			R.S*VNDLI	0.296993866	0.86	S132	0.93
IPI00103415.1	6777	STAT5B	R.IQAQFG	0.088241621	0.94	S193	1.32
IPI00103483.1	25920	RP13-122E	R.KPS*PA	0.401648339	0.85	S557	0.98
IPI00103517.1	84126	ATRIP	R.GFS*AA	8.59E-05	0.81	S38	1.14
IPI00103554.1	57459	GATAD2B	R.GRLTPS	0.009053635	0.88	S122	1.41
IPI00103554.1	57459	GATAD2B	R.LTPSPD	0.267585708	0.9	S135	0.87
IPI00103654.1	151987	PPP4R2	K.NHSDSE	0.096924105	0.98	S226	1.14
IPI00103756.1	23155	CLCC1	R.FQTGNF	0.98101429	1	S253	0.93
IPI00104050.3	9967	THRAP3	K.SPVGKS	0.181528891	0.74	S323	1.09
IPI00104050.3	9967	THRAP3	R.ERS*PA	0.431601138	0.98	S248	1.06
IPI00104050.3	9967	THRAP3	K.SPVGKS	0.684201094	0.92	S320	1.13
IPI00104050.3	9967	THRAP3	K.WAHDKI	0.32093792	0.94	S928	1.14
IPI00104050.3	9967	THRAP3	R.RIDIS*P	0.27446972	1	S682	1.14
IPI00104050.3	9967	THRAP3	R.ERS*PA	0.463105648	1	S248	1.06
IPI00104050.3	9967	THRAP3	R.IDIS*PS	0.346340474	1	S682	1.11
IPI00104907.3	55320	C14orf106	K.AVTDFV	0.928728317	0.98	S690	0.99
IPI00104907.3	55320	C14orf106	K.KAYILVT	0.643675939	0.98	T653	0.98
IPI00104907.3	55320	C14orf106	K.AVTDFV	0.346340474	0.98	S693	0.97
IPI00104907.3	55320	C14orf106	R.ILLPS*F	0.743182508	0.88	S1004	0.8
IPI00104907.3	55320	C14orf106	R.EFLEQL	0.684201094	0.98	T993	0.96
IPI00104907.3	55320	C14orf106	R.NTSNIP	0.074223941	0.56	T821	0.71
IPI00104907.3	55320	C14orf106	R.ILLPSFC	0.886608864	0.98	S1008	0.96
IPI00106955.3	144097	LOC14409	R.AES*PSI	0.643675939	0.98	S308	1
IPI00107484.1	55274	PHF10	K.RYS*PD	0.49616549	0.98	S180	1.06
IPI00107484.1	55274	PHF10	R.YLPLNT	0.845194016	0.98	S207	1.04
IPI00107660.1			K.GIGT*PF	8.59E-05	0.85	T110	1.67
IPI00107660.1			K.GIGTPPI	0.034268332	0.98	T115	0.62
IPI00107660.1			K.LCS*SAE	0.002581506	0.9	S407	1.17
IPI00107660.1			K.GIGTPPI	0.98101429	0.96	S121	0.94
IPI00107698.2	10818	FRS2	R.TALLNY	0.684519102	0.76	S354	0.91
IPI00107838.1	8567	MADD	R.KRSPTTE	0.054409842	0.94	T1046	1.23
IPI00107838.1	8567	MADD	R.KRSPTTE	0.054409842	0.94	S1043	1.23
IPI00107838.1	8567	MADD	R.GTLS*D	0.066203153	0.86	S1201	1.06
IPI00107838.1	8567	MADD	R.GT*LSD	0.066203153	0.86	T1199	1.06
IPI00140998.3	7024	TFCP2	R.NRFS*TI	0.566916624	0.9	S292	1.16
IPI00141933.2	701	BUB1B	K.KLS*PIIE	0.139636808	0.86	S670	0.87
IPI00141934.1			R.S*PLFIF	0.296993866	0.98	S77	1.1
IPI00148057.2	10902	BRD8	K.AT*PPP	0.139636808	0.74	T264	1.06
IPI00149098.1	6872	TAF1	R.LLEPPV	0.49616549	0.88	S545	0.87
IPI00151170.4	7272	TTK	K.HTTFEQ	0.886608864	0.88	S436	0.96
IPI00151170.4	7272	TTK	K.YVLGQL	0.809048575	0.98	S821	1.01
IPI00152007.1	9828	ARHGAF1	R.RPS*AD	0.088241621	0.88	S142	1.13
IPI00152011.4	9411	ARHGAP2	R.LLLAS*F	0.760488858	0.83	S1029	1.01
IPI00152011.4	9411	ARHGAP2	R.RSS*DS	0.296993866	0.62	S1144	0.9
IPI00152011.4	9411	ARHGAP2	K.IRPVS*L	0.233505398	0.98	S1019	1.16
IPI00152082.1	221908	C7orf47	R.APVPEP	0.463105648	0.72	S47	1.1
IPI00152082.1	221908	C7orf47	R.APVPEP	0.197661257	0.76	S45	0.99
IPI00152083.3	136647	C7orf11	R.DGY*GS	0.181528891	0.96	Y45	1.18

IPI00152251.3	84838	ZNF496	K.NQDAQF	0.614059792	0.86	S168	0.84
IPI00152251.3	84838	ZNF496	K.NQDAQF	0.418612999	0.76	S165	0.73
IPI00152407.3	147339	C18orf25	R.RDSS*E	0.152571688	0.94	S67	1.34
IPI00152407.3	147339	C18orf25	R.RDS*SE	0.152571688	0.94	S66	1.34
IPI00152407.3	147339	C18orf25	R.RDSSES	0.00181541	0.92	S76	1.15
IPI00152407.3	147339	C18orf25	R.RDSSES	0.00181541	0.92	S69	1.15
IPI00152407.3	147339	C18orf25	R.RDSSES	0.00181541	0.92	S73	1.15
IPI00152510.2	79039	DDX54	R.PLPTFP	0.346340474	0.98	S75	1.04
IPI00152849.1	85417	CCNB3	K.LGYWVF	8.22E-15	0.81	S1331	4.08
IPI00152946.1	29127	RACGAP1	R.QGNFFA	0.888156101	0.92	S628	0.91
IPI00152946.1	29127	RACGAP1	R.CPLPCIF	0.346340474	0.92	T342	1.06
IPI00152946.1	29127	RACGAP1	R.S*IGSAV	0.858851798	0.98	S203	1.02
IPI00152990.6	55102	C14orf103	K.SYIS*PH	0.32093792	0.98	S1747	1.07
IPI00152990.6	55102	C14orf103	K.KS*PGA	0.000429319	0.9	S1911	1.4
IPI00154515.3	79753	SNIP1	R.LS*PEV/	0.116581414	1	S35	1.21
IPI00154590.6	84365	MKI67IP	K.KVSGTL	0.000262831	0.72	T223	1.52
IPI00154614.2	85437	ZCRB1	K.APEPEE	0.863507405	0.62	S155	0.77
IPI00154614.2	85437	ZCRB1	K.KAPEPE	0.764845588	0.9	S155	0.99
IPI00154915.1	56288	PARD3	R.RIS*HSL	0.49616549	0.72	S715	0.92
IPI00154915.1	56288	PARD3	R.RISHSL\	0.726073545	0.86	Y719	1.04
IPI00154915.1	56288	PARD3	R.RISHS*L	0.012603917	0.88	S717	1.08
IPI00154915.1	56288	PARD3	R.RISHSL\	0.066203153	0.92	S720	1.22
IPI00154915.1	56288	PARD3	K.AGS*PS	0.000243782	0.96	S873	0.95
IPI00154915.1	56288	PARD3	R.SS*LSA9	0.152571688	0.98	S221	1.09
IPI00154915.1	56288	PARD3	R.S*LSA9	0.152571688	0.98	S220	1.09
IPI00154915.1	56288	PARD3	R.RISHS*L	0.049260986	0.98	S717	1.17
IPI00154915.1	56288	PARD3	R.WS*TTA	0.936890791	0.98	S174	0.93
IPI00154915.1	56288	PARD3	R.ISHSLY9	0.181528891	0.98	S728	1.14
IPI00154915.1	56288	PARD3	R.ISHSLY9	0.181528891	0.98	S730	1.14
IPI00154915.1	56288	PARD3	R.RIS*HSL	0.463105648	1	S715	1.13
IPI00154915.1	56288	PARD3	R.RIS*HSL	0.181528891	1	S715	1.12
IPI00154915.1	56288	PARD3	R.FS*PDS9	0.463105648	0.96	S383	1.13
IPI00154915.1	56288	PARD3	R.RSS*DP	0.84064003	0.81	S144	0.94
IPI00154915.1	56288	PARD3	R.RS*SDP	0.566916624	0.81	S143	0.94
IPI00154915.1	56288	PARD3	K.SPGS*P	0.604563646	0.77	S695	0.88
IPI00155134.3	57605	PITPNM2	R.SDS*ST	0.166517367	0.79	S668	1.29
IPI00156449.1	84437	KIAA1826	R.RENELP	0.942907226	0.98	T79	0.9
IPI00156793.4	7508	XPC	K.SEAAAP	0.643675939	0.98	S883	1.11
IPI00156793.4	7508	XPC	R.SLLPVK	0.346340474	0.96	T169	1.11
IPI00156793.4	7508	XPC	K.VIKDEAL	0.001613065	0.66	S94	0.89
IPI00156793.4	7508	XPC	K.VIKDEAL	0.383343176	0.92	S94	0.82
IPI00157230.3	6242	RTKN	R.T*FSLD/	0.060044376	0.92	T505	1.25
IPI00157230.3	6242	RTKN	R.TFS*LD/	0.054409842	0.98	S507	1.29
IPI00157384.2	548321	FAM27A	R.EDACIF9	0	0.71	S65	3.87
IPI00158159.3	4799	NFX1	K.SQQTSF	5.97E-06	0.94	S95	1.76
IPI00158159.3	4799	NFX1	R.RQDPQ\	0.401648339	0.98	S326	1.16
IPI00158159.3	4799	NFX1	R.NYSS*P	0.253322457	0.98	S50	1.13
IPI00158992.2	6621	SNAPC4	R.TDTPAP	0.346340474	0.98	T1157	1.09
IPI00158992.2	6621	SNAPC4	R.GGAGA\	0.296993866	0.96	S599	1.06
IPI00160901.3	51512	GTSE1	R.AQRPQ9	0.012603917	0.96	S477	1.45
IPI00160901.3	51512	GTSE1	K.NVAKPS	0.684201094	0.64	S688	0.75

IPI00160901.3	51512	GTSE1	K.NVAKPS	0.096924105	0.88	S699	1.2
IPI00160901.3	51512	GTSE1	R.AVGS*P	0.891255812	0.86	S536	1.19
IPI00160901.3	51512	GTSE1	K.NVAKPS	0.530774648	0.58	S688	0.77
IPI00160901.3	51512	GTSE1	R.LLASS*F	0.214968943	0.94	S168	1.03
IPI00160901.3	51512	GTSE1	R.LVDVS*I	0.088241621	0.96	S575	1.26
IPI00160901.3	51512	GTSE1	R.S*SGPA	0.373234869	0.92	S494	1.05
IPI00160901.3	51512	GTSE1	R.SS*GPA	0.373234869	0.92	S495	1.05
IPI00160901.3	51512	GTSE1	R.LVDVSP	0.181528891	0.98	S580	1.14
IPI00160901.3	51512	GTSE1	R.VPQALN	0.32093792	0.88	S611	1.17
IPI00161966.2			R.HIISATS	0.346340474	0.98	S226	0.98
IPI00161966.2			R.KVTPID	0.214968943	0.9	S740	1.05
IPI00161966.2			R.VRS*PD	0.296993866	0.94	S776	1.22
IPI00161966.2			R.VRS*PD	0.643675939	0.98	S776	0.99
IPI00163172.2	6502	SKP2	K.SKGS*D	0.32093792	0.81	S75	0.87
IPI00163172.2	6502	SKP2	R.LKS*KG	0.12765804	0.98	S72	1.13
IPI00163172.2	6502	SKP2	R.SFMDQF	0.523719116	0.9	S179	1.07
IPI00163172.2	6502	SKP2	K.TSELLS	0.936890791	0.76	S64	0.86
IPI00163319.1	4774	NFIA	R.SPGSG	0.346340474	0.94	S305	1.09
IPI00163319.1	4774	NFIA	R.SPGSG	0.726073545	0.94	T321	1.03
IPI00163319.1	4774	NFIA	R.LKS*VEI	0.91461637	0.71	S280	0.91
IPI00163319.1	4774	NFIA	R.S*PGSG	0.566916624	0.79	S300	0.93
IPI00163319.1	4774	NFIA	R.LKS*VEI	0.03637398	0.98	S280	1.12
IPI00163319.1	4774	NFIA	R.S*PGSG	0.373234869	1	S300	1.14
IPI00163319.1	4774	NFIA	R.S*PGSG	0.463105648	1	S300	1.07
IPI00163319.1	4774	NFIA	R.S*PGSG	0.463105648	1	S300	1.07
IPI00163391.4	79066	METT10D	K.ELSLKA	0.786805188	0.94	S329	1.13
IPI00163514.1	133522	PPARGC1	R.S*WEPS	0.181528891	0.72	S672	1.06
IPI00163516.3	752	FMNL1	K.EAAAQE	0.106353987	0.88	S1031	1.34
IPI00163516.3	752	FMNL1	K.EAAAQE	0.679764929	0.83	T1020	1.12
IPI00163602.1	8394	PIP5K1A	R.RAGS*S	0.805160956	0.83	S462	0.89
IPI00163602.1	8394	PIP5K1A	R.RAGSSC	0.49616549	1	S466	1.08
IPI00163602.1	8394	PIP5K1A	K.AEVEPG	0.530774648	0.94	T503	0.96
IPI00163602.1	8394	PIP5K1A	K.AEVEPG	0.214181266	0.96	T503	0.72
IPI00163602.1	8394	PIP5K1A	K.AEVEPG	0.430690939	0.96	T503	0.72
IPI00163646.1	11214	AKAP13	R.IPSFFP	0.214968943	0.79	S2709	1.01
IPI00163904.1	26108	PYGO1	K.VSSHGC	0.003656496	0.9	S34	1.13
IPI00164434.5	221035	REEP3	K.SKPAPS	0.810035043	0.9	T201	0.97
IPI00164434.5	221035	REEP3	R.SFS*MH	0.27446972	1	S152	1.12
IPI00164434.5	221035	REEP3	R.S*FSMH	0.27446972	1	S150	1.12
IPI00164672.5	55802	DCP1A	R.KASSPS	5.25E-06	0.37	S527	1.27
IPI00164672.5	55802	DCP1A	R.KASS*P	0.049260986	0.98	S525	1.28
IPI00164672.5	55802	DCP1A	R.KAS*SP	0.049260986	0.98	S524	1.28
IPI00164672.5	55802	DCP1A	R.KASS*P	0.99978897	0.86	S525	1.04
IPI00164779.1	8487	SIP1	R.LLPVEP	0.096924105	0.71	T48	1.2
IPI00164906.1	22907	DHX30	R.GFS*SS	0.936890791	0.96	S36	1.06
IPI00165014.3	79842	ZBTB3	R.GLVT*SI	0.106353987	0.81	T438	1.52
IPI00165014.3	79842	ZBTB3	R.GLVT*SI	0.066203153	0.9	S439	1.38
IPI00165216.4	5332	PLCB4	R.AMGIET	0.016614876	0.52	S726	0.63
IPI00165237.3	54663	WDR74	R.KLS*GL	0.373234869	0.98	S342	1.04
IPI00165357.4	57504	MTA3	R.HAELSC	0.040276449	0.9	S519	1.44
IPI00165547.1	5298	PIK4CB	R.ELPSLS	0.166517367	1	T263	1.26

IPI00165547.1	5298	PIK4CB	R.ELPSLS	0.166517367	1	S266	1.26
IPI00165547.1	5298	PIK4CB	R.S*VENLI	0.166517367	0.98	S413	1.18
IPI00165979.3	25998	IBTK	R.KRSDS*	0.000110287	0.94	S988	1.86
IPI00165979.3	25998	IBTK	R.KRS*DS	0.604563646	0.86	S986	1
IPI00165979.3	25998	IBTK	R.SDSSGC	4.30E-09	0.5	Y992	1.51
IPI00165979.3	25998	IBTK	R.KRS*DS	0.523719116	0.81	S986	0.68
IPI00165979.3	25998	IBTK	R.KRS*DS	0.296993866	0.72	S986	1.08
IPI00165979.3	25998	IBTK	R.KRSDSE	0.000262831	0.98	S989	1.78
IPI00165979.3	25998	IBTK	R.KRSDSE	4.58E-05	0.98	S1000	1.78
IPI00165979.3	25998	IBTK	R.KRSDSE	4.58E-05	0.98	Y992	1.78
IPI00165979.3	25998	IBTK	R.KRSDSE	4.58E-05	0.98	S995	1.78
IPI00165979.3	25998	IBTK	R.DLQS*P	0.431601138	0.96	S1041	0.9
IPI00165979.3	25998	IBTK	R.KRSDSE	0.303680857	0.98	S989	0.87
IPI00165979.3	25998	IBTK	R.KRSDS*	0.303680857	0.98	S988	0.87
IPI00165979.3	25998	IBTK	R.KRS*DS	0.166517367	0.96	S986	1.15
IPI00165979.3	25998	IBTK	K.VKPYVN	0.402755896	1	S1065	0.8
IPI00165979.3	25998	IBTK	R.DLQSPC	0.401648339	0.96	S1050	1.01
IPI00165979.3	25998	IBTK	K.VKPYVN	0.391052876	0.5	T1064	0.27
IPI00165979.3	25998	IBTK	R.EDLKPV	0.902796178	1	S1079	0.9
IPI00165979.3	25998	IBTK	R.KRS*DS	0.756570768	1	S986	0.88
IPI00165979.3	25998	IBTK	R.KRS*DS	0.001272035	0.32	S986	0.81
IPI00166044.1	57521	KIAA1303	K.GVHIHQ	0.026666866	0.85	T889	1.31
IPI00166044.1	57521	KIAA1303	R.LRS*VS	0.002296625	0.94	S719	1.93
IPI00166044.1	57521	KIAA1303	R.LRS*VS	0.000618432	0.98	S719	1.78
IPI00166044.1	57521	KIAA1303	K.GVHIHQ	0.001272035	0.94	S877	1.89
IPI00166044.1	57521	KIAA1303	K.GVHIHQ	0.054409842	0.92	S877	1.24
IPI00166044.1	57521	KIAA1303	R.VLDTSS	0.253322457	0.98	S863	1.1
IPI00166211.3	55057	AIM1L	R.EVRSLC	0	0.64	S433	99.69
IPI00166861.3	121053	C12orf45	K.GKIEVLI	0.152571688	0.98	S181	1.16
IPI00166861.3	121053	C12orf45	K.GKIEVLI	0.152571688	0.98	S178	1.16
IPI00166861.3	121053	C12orf45	K.GKIEVLI	0.197661257	1	S178	1.1
IPI00166874.3	10212	DDX39	K.GS*YVS	0.604563646	0.94	S37	0.87
IPI00166933.1	26148	C10orf12	K.RLTS*SI	0.928728317	0.98	S728	1.13
IPI00166933.1	26148	C10orf12	K.IKPNLS*	0.072926818	0.98	S293	1.12
IPI00167069.1	9314	KLF4	K.GS*PDG	0.530774648	0.98	S245	1.11
IPI00167074.3	151188	ARL6IP6	R.SVLPPD	0.463105648	0.71	S80	1.1
IPI00167147.1	11100	HNRPUL1	R.RGRS*P	0.373234869	0.27	S194	0.71
IPI00167147.1	11100	HNRPUL1	R.GRS*PQ	0.27446972	0.85	S194	1.08
IPI00167147.1	11100	HNRPUL1	R.RGRSPC	0.27446972	0.98	T209	1.11
IPI00167147.1	11100	HNRPUL1	R.RGRSPC	0.32093792	0.98	T215	1.07
IPI00167909.4	256364	EML3	R.GGKDPI	0.007240509	0.86	S198	1.46
IPI00167909.4	256364	EML3	R.VLGAGC	0.00181541	0.9	T881	1.31
IPI00167909.4	256364	EML3	R.KAIS*SA	0.088241621	1	S176	1.26
IPI00168056.2	253461	ZBTB38	R.SKS*PN	0.643675939	0.98	S309	1.01
IPI00168056.2	253461	ZBTB38	R.S*KSPN	0.643675939	0.98	S307	1.01
IPI00168056.2	253461	ZBTB38	R.NFSNS*	0.786805188	0.61	S130	1.04
IPI00168165.2	23122	CLASP2	K.DKSFDC	0.831562154	0.94	S254	1.01
IPI00168165.2	23122	CLASP2	K.DKSFDC	0.831562154	0.94	S258	1.01
IPI00168165.2	23122	CLASP2	K.DKS*FDI	0.831562154	0.94	S241	1.01
IPI00168165.2	23122	CLASP2	R.SRS*DIE	0.088241621	1	S603	1.21
IPI00168165.2	23122	CLASP2	R.DYNPYN	0.49616549	0.9	S1240	0.97

IPI00168165.2	23122	CLASP2	R.DYNPYM	0.49616549	0.9	S1242	0.97
IPI00168165.2	23122	CLASP2	R.VLNTGS	0.181528891	0.98	S808	1.11
IPI00168171.4			R.AAATGM	0.431601138	1	S44	1.08
IPI00168378.2	64419	MTMR14	R.AVLHTD	0.044561326	0.56	S576	0.64
IPI00168378.2	64419	MTMR14	R.AVAPS*I	0.489032481	0.88	S624	0.89
IPI00168378.2	64419	MTMR14	R.MGSS*P	0.717985529	0.94	S530	0.91
IPI00168527.1	55114	ARHGAP1	R.AESSSC	0	0.72	S297	0.07
IPI00168527.1	55114	ARHGAP1	R.AESSSC	0.152571688	1	S302	1.13
IPI00168550.4	84215	ZNF541	R.RESILS	0	0.58	S455	0.01
IPI00168698.1	118987	PDZD8	R.AQNEFK	0.775968482	0.94	S519	0.85
IPI00168849.1	9322	TRIP10	R.APSDSS	0.253322457	0.92	T302	1.2
IPI00168859.2	4150	MAZ	K.LS*HSDI	0.431601138	0.98	S300	1
IPI00168859.2	4150	MAZ	K.LSHS*DI	0.346340474	0.98	S302	1
IPI00169299.1	26031	OSBPL3	R.ALVHQL	0.005777772	0.83	S437	1.06
IPI00169299.1	26031	OSBPL3	R.RIHAESI	0.401648339	0.9	S410	1.11
IPI00169299.1	26031	OSBPL3	R.TYSAPA	0.197661257	0.9	S265	1.09
IPI00169307.2	57584	ARHGAP2	K.HNKS*P	0.27446972	0.9	S1514	1.16
IPI00169307.2	57584	ARHGAP2	R.SAS*QG	0.296993866	0.81	S477	1.06
IPI00169307.2	57584	ARHGAP2	R.FAILKE	0.895911332	0.92	S1527	1.16
IPI00169307.2	57584	ARHGAP2	R.SAS*QG	4.04E-05	0.52	S477	0.87
IPI00169307.2	57584	ARHGAP2	R.LRTS*TS	0.27446972	1	S1861	1.24
IPI00169307.2	57584	ARHGAP2	K.GKS*TG	0.32093792	0.98	S1742	1.14
IPI00169307.2	57584	ARHGAP2	R.S*ASQG	0.139636808	0.98	S475	1.2
IPI00169307.2	57584	ARHGAP2	R.S*TSHD	0.233505398	0.98	S441	1.06
IPI00169307.2	57584	ARHGAP2	R.ST*SHD	0.233505398	0.98	T442	1.06
IPI00169401.2	54477	PLEKHA5	R.AKSPTP	0.233505398	0.96	S918	1.19
IPI00169401.2	54477	PLEKHA5	R.SVPAGL	0.563781928	0.86	S607	0.87
IPI00169401.2	54477	PLEKHA5	K.ERPISM	0.717985529	0.94	S140	1.08
IPI00169401.2	54477	PLEKHA5	R.T*NSMQ	0.32093792	0.92	T408	0.88
IPI00169401.2	54477	PLEKHA5	R.YPEGYF	0.080258071	0.98	T460	1.33
IPI00169401.2	54477	PLEKHA5	R.GVISYQ	0.214968943	1	T438	1.17
IPI00169401.2	54477	PLEKHA5	R.AKS*PTI	0.214968943	1	S913	1.14
IPI00169434.3	26058	TNRC15	R.VGVEAS	0.152571688	0.96	S376	1.15
IPI00169434.3	26058	TNRC15	R.VGVEAS	0.152571688	0.96	T382	1.15
IPI00169434.3	26058	TNRC15	R.SGS*GS	0.346340474	0.86	S275	0.88
IPI00169434.3	26058	TNRC15	R.ALSSGC	0.139636808	0.94	S30	0.99
IPI00169434.3	26058	TNRC15	R.PGT*PS	0.106353987	0.98	T404	1.26
IPI00169434.3	26058	TNRC15	R.PGTPSL	0.106353987	0.98	S388	1.26
IPI00169434.3	26058	TNRC15	R.ALSSGC	0.91461637	0.92	S26	1.07
IPI00169434.3	26058	TNRC15	R.VGVEAS	0.214968943	0.98	S388	1.22
IPI00169434.3	26058	TNRC15	R.ALSSGC	0.827038504	0.98	S26	0.97
IPI00170581.1	10762	NUP50	K.KVDSSV	0.401648339	0.98	S266	1.02
IPI00170581.1	10762	NUP50	K.KVDSSV	0.401648339	0.98	S268	1.02
IPI00170581.1	10762	NUP50	K.VAAETQ	0.760488858	0.96	S193	0.97
IPI00170581.1	10762	NUP50	K.VAAETQ	0.760488858	0.96	T191	0.97
IPI00170594.4	25909	AHCTF1	R.NTPAKS	0.463105648	0.81	S2055	1.01
IPI00170594.4	25909	AHCTF1	R.NT*PAK	0.463105648	0.81	T2022	1.01
IPI00170594.4	25909	AHCTF1	R.CLVAGL	0.373234869	0.58	S566	0.84
IPI00170594.4	25909	AHCTF1	K.EPINSTI	0.373234869	0.74	S1089	0.8
IPI00170594.4	25909	AHCTF1	R.STPLAS	0.104720341	0.96	S1256	0.68
IPI00170594.4	25909	AHCTF1	R.STPLAS	0.267585708	0.98	S1223	0.74

IPI00170594.4	25909	AHCTF1	K.WIPGAA	0.166517367	0.98	T1295	1.17
IPI00170594.4	25909	AHCTF1	K.ESAWS*	0.197661257	0.92	S2221	1.09
IPI00170594.4	25909	AHCTF1	R.STPLAS	0.917421569	0.9	S1254	0.67
IPI00170594.4	25909	AHCTF1	R.PSQCSE	0.566916624	0.98	S1151	0.97
IPI00170594.4	25909	AHCTF1	R.TTSFFLI	0.824668282	0.92	S1321	0.98
IPI00170594.4	25909	AHCTF1	R.TTS*FFL	0.824668282	0.92	S1287	0.98
IPI00170594.4	25909	AHCTF1	R.IS*FVEE	0.769214181	0.98	S1270	1.04
IPI00170594.4	25909	AHCTF1	R.NLS*FNI	0.951462987	0.96	S1579	1.06
IPI00170594.4	25909	AHCTF1	R.SLPSSS	0.49616549	1	S1198	1.07
IPI00170641.2	57706	DENND1A	R.RTS*VP	0.003656496	0.88	S520	1.27
IPI00170641.2	57706	DENND1A	R.RTS*VP	0.152571688	0.77	S520	0.98
IPI00170766.3	57082	CASC5	R.RVS*FAI	0.296993866	0.96	S60	1.18
IPI00170766.3	57082	CASC5	K.NIKDVQ	0.253322457	0.9	S1050	1.09
IPI00170770.2	23469	PHF3	K.ST*FSPA	0.751731134	0.61	T1182	1.14
IPI00170770.2	23469	PHF3	K.VAQNS*	0.32093792	0.98	S1722	1.13
IPI00170770.2	23469	PHF3	R.RHS*DP	0.463105648	0.88	S1898	1.02
IPI00170770.2	23469	PHF3	R.KHS*DN	0.197661257	0.72	S1148	0.81
IPI00170770.2	23469	PHF3	R.FYS*DSI	0.9240167	1	S1925	0.92
IPI00170770.2	23469	PHF3	R.SSKS*F	0.49616549	0.96	S680	1.08
IPI00170770.2	23469	PHF3	K.STFS*P	0.684201094	0.96	S1184	1.01
IPI00170770.2	23469	PHF3	K.HSDNE	0.947647721	0.9	S1178	1.02
IPI00170770.2	23469	PHF3	K.STFSPA	0.604563646	0.96	T1194	1.01
IPI00170770.2	23469	PHF3	K.AKPVGS	0.566916624	0.98	S283	1.04
IPI00170770.2	23469	PHF3	R.KHSDNE	0.530774648	0.9	S1163	0.98
IPI00170770.2	23469	PHF3	R.KHS*DN	0.530774648	0.9	S1148	0.98
IPI00170770.2	23469	PHF3	R.KHSDNE	0.530774648	0.9	S1154	0.98
IPI00170770.2	23469	PHF3	R.RSS*KS	0.873506301	1	S678	0.9
IPI00170770.2	23469	PHF3	R.RS*SKS	0.932027377	1	S677	0.92
IPI00170770.2	23469	PHF3	R.RSSKS*	0.89791754	1	S680	0.91
IPI00170770.2	23469	PHF3	R.RSS*KS	0.89791754	1	S678	0.91
IPI00170778.2	23360	FNBP4	K.ATGGLC	2.92E-09	0.58	S116	1.93
IPI00170786.1	51729	WBP11	R.RRDEDM	0.021601024	0.92	S237	1.1
IPI00170805.1	10926	DBF4	K.YSVGSL	0.296993866	0.92	S362	0.98
IPI00170805.1	10926	DBF4	K.YSVGSL	0.401648339	0.96	S359	1
IPI00170805.1	10926	DBF4	R.IKYS*VC	0.029596689	0.98	S354	1.12
IPI00170805.1	10926	DBF4	R.IKY*SV	0.015665801	0.98	Y353	1.12
IPI00170805.1	10926	DBF4	K.YSVGSL	0.431601138	0.92	S359	1.1
IPI00170935.1	57470	LRR47	K.EEGSLS	0.373234869	0.98	S520	1.13
IPI00170935.1	57470	LRR47	K.EEGS*LS	0.373234869	0.98	S518	1.13
IPI00170935.1	57470	LRR47	K.YTLENK	0.951462987	0.86	S520	1.04
IPI00170935.1	57470	LRR47	K.EEGSLS	0.088241621	0.98	T522	1.17
IPI00171118.2	79759	ZNF668	R.THS*GE	0.941751315	0.9	S275	1.16
IPI00171217.1	445815	PALM2-AK	K.GQKSPC	0.566916624	1	S401	1.05
IPI00171217.1	445815	PALM2-AK	K.SEGDNY	0.769214181	0.92	S226	0.89
IPI00171217.1	445815	PALM2-AK	K.GQKS*P	0.791231585	1	S393	0.94
IPI00171217.1	445815	PALM2-AK	K.S*PGALI	0.632655857	0.96	S393	0.94
IPI00171217.1	445815	PALM2-AK	R.DGAEQC	0.818022374	0.77	S630	1.05
IPI00171217.1	445815	PALM2-AK	R.TLS*MIE	0.346340474	0.98	S720	1.09
IPI00171217.1	445815	PALM2-AK	R.DALGDS	0.467835816	0.77	S152	0.97
IPI00171274.1	8897	MTMR3	R.RS*LELS	0.181528891	0.96	S647	1.24
IPI00171460.1	5141	PDE4A	R.RES*FL	0.006469654	0.96	S84	1.26

IPI00171460.1	5141 PDE4A	R.S*PLGG	0.632655857	0.96 S148	1.06
IPI00171475.1	84901 NFATC2IP	R.KLS*FFF	0.32093792	0.9 S390	1.08
IPI00171475.1	84901 NFATC2IP	K.HQTLEV	0.152571688	0.98 S369	1.19
IPI00171475.1	84901 NFATC2IP	K.TEFLDLI	0.009053635	0.94 S204	1.04
IPI00171525.1	26168 SENP3	K.NHLSPC	0.27446972	0.9 S181	1.03
IPI00171525.1	26168 SENP3	R.WT*PKS	0.530774648	0.9 T229	1.1
IPI00171525.1	26168 SENP3	K.NHLS*P	0.530774648	0.88 S169	0.93
IPI00171525.1	26168 SENP3	K.NHLSPC	0.463105648	0.88 T176	0.93
IPI00171525.1	26168 SENP3	K.ETIQGT	0.233505398	0.96 S25	1.03
IPI00171525.1	26168 SENP3	K.NHLS*P	0.431601138	0.96 S169	1.03
IPI00171525.1	26168 SENP3	R.WTPKS*	0.643675939	1 S232	1.05
IPI00171749.5	79811 SLTM	R.GS*GSC	0.463643297	0.88 S1019	0.77
IPI00171749.5	79811 SLTM	R.ISS*KS*	0.27446972	1 S551	1.12
IPI00171749.5	79811 SLTM	R.GSGS*C	0.463643297	1 S1021	0.81
IPI00171749.5	79811 SLTM	R.AGAGMI	0.072926818	0.71 S1002	0.98
IPI00171749.5	79811 SLTM	R.IVQISGM	0.751811379	0.77 S1014	1
IPI00171749.5	79811 SLTM	R.IS*SKS*	0.106353987	1 S550	1.15
IPI00171749.5	79811 SLTM	K.S*PGHM	0.530774648	0.98 S553	1.03
IPI00171798.1	9219 MTA2	R.GHLSRF	0.431601138	0.98 S433	1.11
IPI00171798.1	9219 MTA2	R.GHLSRF	0.373234869	0.98 S435	1.02
IPI00171798.1	9219 MTA2	R.GHLSRF	0.27446972	0.98 Y437	1.12
IPI00171798.1	9219 MTA2	R.GHLSRF	0.431601138	1 T438	1.08
IPI00172530.1	78999 LRFN4	K.LSHVQS	0.985805237	0.66 T567	0.85
IPI00172611.4		R.GLNSQ	0.233505398	0.92 S115	1.04
IPI00172611.4		K.IREEELC	0.054409842	0.53 S199	1.3
IPI00172611.4		R.SS*SMS	0.614059792	0.79 S127	1.09
IPI00172611.4		R.SSS*MS	0.324441898	0.96 S128	0.77
IPI00173461.1	56704 JPH1	R.RGS*LL	0.32093792	1 S216	1.12
IPI00173901.1	64324 NSD1	R.S*PGRG	0.643675939	0.94 S669	1.11
IPI00173901.1	64324 NSD1	K.SIGAASI	0.459466751	0.77 S2105	0.79
IPI00173901.1	64324 NSD1	K.SIGAAS'	0.637328432	0.88 S2100	0.9
IPI00173946.5	85461 TANC1	K.GVSMSL	0.096924105	0.92 S66	1.23
IPI00173946.5	85461 TANC1	R.HPASLT	0.966676636	1 S1665	0.97
IPI00173946.5	85461 TANC1	R.HPASLT	0.966676636	1 S1668	0.97
IPI00174025.4	23268 DNMBP	R.HETS*D	0.990159288	0.92 S342	0.92
IPI00174962.2	85377 MICALL1	R.KAS*ES'	0.060044376	0.98 S309	1.22
IPI00174962.2	85377 MICALL1	K.SLHPWY	0.296993866	0.9 T469	1.04
IPI00174962.2	85377 MICALL1	K.SLHPWY	0.026666866	0.98 S470	1.18
IPI00174962.2	85377 MICALL1	K.SLHPWY	0.017448313	0.96 S471	1.1
IPI00174962.2	85377 MICALL1	R.VEQMP	0.463105648	0.83 S578	1.21
IPI00174962.2	85377 MICALL1	R.SPVPSP	0.463105648	0.98 S621	1.1
IPI00175136.3	29890 RBM15B	K.TLLISSL	0.684201094	0.86 S147	1.02
IPI00175136.3	29890 RBM15B	R.SLS*PV/	0.296993866	0.98 S267	1.13
IPI00175136.3	29890 RBM15B	R.YPQQYC	0.786805188	0.94 S504	0.98
IPI00175136.3	29890 RBM15B	R.RNS*LE	0.91461637	0.96 S562	1.04
IPI00175136.3	29890 RBM15B	R.DRTPPF	0.214968943	0.98 S539	1.15
IPI00175136.3	29890 RBM15B	R.DRT*PP	0.214968943	0.98 T532	1.15
IPI00175136.3	29890 RBM15B	R.TFLEGD	0.214968943	0.98 S552	1
IPI00175146.4	196441 CCDC131	R.RIS*TSD	0.296993866	0.53 S352	1.15
IPI00175146.4	196441 CCDC131	R.KPISDN	0.080258071	0.9 S1303	1.09
IPI00175146.4	196441 CCDC131	R.KPISDN	0.080258071	0.9 S1304	1.09

IPI00175146.4	196441	CCDC131	R.S*FLESM	0.604563646	1	S1046	1.03
IPI00175146.4	196441	CCDC131	R.KPISDN!	0.822525206	0.96	S1303	0.99
IPI00176532.1	57158	JPH2	R.QSVPYC	0.003916407	0.94	S157	0.58
IPI00176610.1	284672	hCG_2028	K.LNWLSV	0.497617381	0.45	S113	0.77
IPI00176637.5	728350	LOC72835	R.KKDAS*	0.566916624	0.86	S67	1.3
IPI00176642.3	9212	AURKB	R.RKT*MC	0.928728317	0.9	T232	0.77
IPI00176642.3	9212	AURKB	R.RKT*MC	0.928728317	0.9	T232	0.77
IPI00176642.3	9212	AURKB	R.KEPVT*I	0.566916624	0.88	T35	1.2
IPI00177929.3			R.ALENDF	5.40E-05	0.83	S44	0.4
IPI00177936.4	1837	DTNA	R.LRLEHE	0.005777772	0.98	T152	1.46
IPI00178047.4	27043	PELP1	R.GS*PDG	0.643675939	0.98	S479	0.95
IPI00178072.7	23384	SPECC1L	R.HS*ISGF	0.463105648	0.98	S887	1.07
IPI00178072.7	23384	SPECC1L	R.HSIS*GF	0.346340474	0.98	S889	1.07
IPI00178150.5	24137	KIF4A	R.RTFS*L1	0.116581414	0.98	S801	1.26
IPI00178150.5	24137	KIF4A	R.TFS*LTE	0.181528891	1	S801	1.19
IPI00178150.5	24137	KIF4A	K.KT*PPAF	0.643675939	0.98	T1181	0.99
IPI00178150.5	24137	KIF4A	K.T*PPAP	0.791231585	0.98	T1181	0.98
IPI00178150.5	24137	KIF4A	R.ALASNT	0.726073545	1	S1225	1
IPI00178302.5	80031	SEMA6D	K.RVDVPT	0.015402042	0.86	S957	1.05
IPI00178366.2	23362	PSD3	K.APSERP	0.040276449	0.88	S380	1.06
IPI00178366.2	23362	PSD3	K.APSERP	0.040276449	0.88	T374	1.06
IPI00178366.2	23362	PSD3	R.IGST*TN	0.566916624	0.94	T771	1
IPI00178366.2	23362	PSD3	R.IGS*TTN	0.253322457	0.94	S770	1
IPI00178366.2	23362	PSD3	R.IGSTT*N	0.096924105	0.98	T772	1.12
IPI00178375.3	23262	HISPPD1	R.RRS*GE	0.000888315	0.98	S1006	1.48
IPI00178515.1			K.SEFS*D/	0.076938277	0.66	S812	0.77
IPI00178714.2	10298	PAK4	K.S*LVGTI	0.32093792	0.88	S309	1.33
IPI00178861.1	55621	TRMT1	R.GDQCC'	0.088241621	0.98	S596	1.28
IPI00178953.3	27332	ZNF638	K.IDLPEVC	0.021601024	0.88	S1100	1.06
IPI00178953.3	27332	ZNF638	K.NYQSQA	0.530774648	1	S383	1.02
IPI00179071.1	23054	NCOA6	K.DVTLTS'	0.708392237	0.52	S884	0.63
IPI00179121.4	8498	RANBP3	R.TS*SLTC	0.839313928	0.66	S57	0.87
IPI00179121.4	8498	RANBP3	R.TSS*LTC	0.839313928	0.66	S58	0.87
IPI00179121.4	8498	RANBP3	R.VLS*PPH	0.181528891	1	S265	1.17
IPI00179326.7	55971	BAIAP2L1	K.TIFPHTA	0.03637398	0.94	S354	1
IPI00179326.7	55971	BAIAP2L1	R.SVS*VA'	0.233505398	0.88	S331	1.09
IPI00179326.7	55971	BAIAP2L1	K.TPASTP	0.32093792	1	S261	1.14
IPI00179438.4	1601	DAB2	K.QDLESS	0.181528891	0.88	S423	0.95
IPI00179438.4	1601	DAB2	K.SSPNPF	0.834430989	0.96	S401	1
IPI00179438.4	1601	DAB2	K.SS*PNPI	0.463105648	0.69	S394	0.93
IPI00179757.4	10749	KIF1C	R.YPPYTT	0.166517367	0.98	T1083	1.17
IPI00179890.2	9908	G3BP2	K.NLEELE	0.026666866	0.9	T226	1.32
IPI00179890.2	9908	G3BP2	K.NLEELE	0.026666866	0.9	S225	1.32
IPI00180434.3	57655	GRAMD1A	R.GHVT*P	0.060044376	0.85	T403	1.23
IPI00180434.3	57655	GRAMD1A	R.ELWHLV	0.566916624	0.98	S351	1.08
IPI00180465.3	124790	HEXIM2	R.HDSGG'	0.660822982	0.71	T46	0.73
IPI00180764.3	11143	MYST2	R.HFS*ISC	0.660822982	0.98	S205	0.88
IPI00180764.3	11143	MYST2	K.DMSLKC	0.430690939	0.96	S167	0.84
IPI00180764.3	11143	MYST2	K.DMSLKC	0.773594539	0.96	S162	0.84
IPI00180764.3	11143	MYST2	K.DMSLKC	0.773594539	0.96	S164	0.84
IPI00180764.3	11143	MYST2	K.VGS*PE	0.586469457	0.94	S506	0.97

IPI00180764.3	11143 MYST2	K.VGSPEF	0.586469457	0.94 S512	0.97
IPI00181009.6	51112 TTC15	R.APPASC	0.021601024	0.52 S165	1.02
IPI00181352.2	1785 DNM2	K.EALNIIG	0.049260986	0.77 T762	1.22
IPI00181352.2	1785 DNM2	K.EALNIIG	0.040276449	0.94 S757	1.3
IPI00181641.5	56252 YLPM1	R.GPASQF	0.401648339	0.98 S634	1.18
IPI00181641.5	56252 YLPM1	R.GPASQF	0.401648339	0.98 S630	1.18
IPI00181684.4	23085 ERC1	K.TFWS*P	0.818022374	0.98 S191	1.18
IPI00181703.1	4215 MAP3K3	R.HLS*VS	0.03282354	0.9 S197	1.5
IPI00181856.3	63925 ZNF335	R.TPVEAG	0.116581414	0.66 S418	0.98
IPI00182478.2	7090 TLE3	K.S*NTPTF	0.197661257	0.96 S317	1.1
IPI00182478.2	7090 TLE3	K.KDAPTS	0.373234869	0.85 S286	1.06
IPI00182478.2	7090 TLE3	K.DAPTS*I	0.566916624	0.88 S286	0.87
IPI00182478.2	7090 TLE3	K.DAPTS*I	0.373234869	1 S286	1.05
IPI00182540.4	1500 CTNND1	R.YRPS*M	0.342305379	0.96 S244	0.94
IPI00182540.4	1500 CTNND1	R.GSLAS*I	0.116581414	0.92 S349	0.96
IPI00182540.4	1500 CTNND1	R.GSLAS*I	0.373234869	0.98 S349	1.08
IPI00182540.4	1500 CTNND1	R.S*MGYC	0.12765804	0.96 S288	1.12
IPI00182540.4	1500 CTNND1	R.VGGS*S	0.726073545	1 S268	1.03
IPI00182540.4	1500 CTNND1	R.SQSSH	0.900575286	0.94 S868	1.03
IPI00182540.4	1500 CTNND1	R.SQSSH	0.900575286	0.94 T869	1.03
IPI00182540.4	1500 CTNND1	R.LRS*YEI	0.044561326	0.98 S320	1.21
IPI00182540.4	1500 CTNND1	R.HYEDG\	0.732417704	1 S230	0.99
IPI00182540.4	1500 CTNND1	R.HYEDG\	0.732417704	1 S232	0.99
IPI00182980.2	27086 FOXP1	R.RYS*DK	0.346340474	0.96 S364	0.97
IPI00183229.5	57666 KIAA1545	R.SRTT*PI	0.000194095	0.77 T994	0.48
IPI00183508.2	5756 TWF1	R.S*SHFL	0.907673183	0.71 S9	1.05
IPI00183530.2	6642 SNX1	R.RFS*DFI	0.000467805	0.76 S188	0.66
IPI00183642.2	55609 SUHW3	K.SEPHS*I	0.296993866	1 S80	1.08
IPI00183794.7		R.S*RS*PE	0.472044151	0.96 S305	0.9
IPI00183794.7		R.ENVEYII	0.049260986	0.94 S120	1.21
IPI00184317.2	8805 TRIM24	K.SEWLDF	0.27446972	1 S774	1.15
IPI00184317.2	8805 TRIM24	K.SEWLDF	0.253322457	1 S777	1.15
IPI00184330.5	4171 MCM2	R.RGNDPL	0.12765804	0.69 S27	0.48
IPI00184330.5	4171 MCM2	R.GNDPLT	0.021601024	0.76 S27	1.45
IPI00184330.5	4171 MCM2	R.AIPELD/	0.566916624	0.88 S108	1.01
IPI00184330.5	4171 MCM2	R.RGLLYD	0.054409842	0.9 S139	1.32
IPI00184330.5	4171 MCM2	R.RTDALT	0.346340474	0.94 S41	1.08
IPI00184330.5	4171 MCM2	R.RTDALT	0.346340474	0.94 S40	1.08
IPI00184330.5	4171 MCM2	R.RTDALT	0.32093792	0.94 T59	1.23
IPI00184330.5	4171 MCM2	R.GLLYDS	0.152571688	1 S139	1.21
IPI00184477.1	10243 GPHN	K.EVHDEL	0.373234869	0.62 S188	0.94
IPI00184477.1	10243 GPHN	K.EVHDEL	0.253322457	0.9 S188	1.03
IPI00184477.1	10243 GPHN	K.EVHDEL	0.296993866	0.83 S188	0.99
IPI00184477.1	10243 GPHN	K.EVHDEL	0.214968943	0.98 S188	1.14
IPI00184670.4	271 AMPD2	R.S*LPGP/	0.044561326	0.98 S19	1.31
IPI00184772.5	57572 DOCK6	R.GSGRP/	0.139636808	0.94 Y874	1.13
IPI00184772.5	57572 DOCK6	R.INS*LTF	0.863507405	0.96 S1308	0.93
IPI00184772.5	57572 DOCK6	R.GSGRP/	0.017448313	0.96 S872	1.06
IPI00184772.5	57572 DOCK6	R.RCSS*S	0.566916624	0.88 S41	0.94
IPI00184772.5	57572 DOCK6	R.RCSSSL	0.088241621	0.96 T48	1.23
IPI00184772.5	57572 DOCK6	R.RCS*SS	0.088241621	0.96 S40	1.23

IPI00185159.7	10458 BAIAP2	K.LSDSYS	0.49616549	0.98 T340	0.99
IPI00185159.7	10458 BAIAP2	K.NSYATT	0.49616549	0.98 T360	1.01
IPI00185361.4	57696 DDX55	R.KREEGE	0.730331964	0.85 S544	1.01
IPI00185371.4	151195 CCNYL1	R.RSFS*AI	0.283672925	0.81 S274	1.21
IPI00185371.4	151195 CCNYL1	R.RS*FSAI	0.283672925	0.81 S272	1.21
IPI00185371.4	151195 CCNYL1	R.SFS*ADI	0.566916624	0.74 S274	0.83
IPI00185371.4	151195 CCNYL1	K.S*NHLNI	0.980510506	0.85 S35	1.08
IPI00185769.2	9400 RECQL5	K.YTGEEC	0.021601024	0.96 S815	1.14
IPI00185769.2	9400 RECQL5	R.GEVPGC	0.726073545	0.98 S727	1.07
IPI00185919.3	23367 LARP1	K.WTSQH	0.346340474	0.9 T1091	1.37
IPI00185919.3	23367 LARP1	R.KFDGVE	0.643675939	0.86 T376	0.92
IPI00185919.3	23367 LARP1	K.EGT*GQ	0.530774648	0.88 T68	0.99
IPI00185919.3	23367 LARP1	R.SLPTTV	0.760488858	0.96 S774	1.04
IPI00185919.3	23367 LARP1	K.GSESAT	0.106353987	0.88 T303	1.01
IPI00185919.3	23367 LARP1	K.EGTGQC	0.730331964	0.88 S75	0.8
IPI00185919.3	23367 LARP1	K.FDGVEC	0.766262183	0.96 T376	1
IPI00185919.3	23367 LARP1	K.GLS*ASI	0.642010044	0.92 S546	0.87
IPI00185919.3	23367 LARP1	K.ILIVTQT	0.990159288	0.83 T649	0.68
IPI00185919.3	23367 LARP1	K.GSESAT	0.902796178	0.98 T303	0.87
IPI00185919.3	23367 LARP1	K.NTFTAV	0.017448313	0.76 S627	0.95
IPI00185919.3	23367 LARP1	K.NTFTAV	0.346340474	0.94 S627	0.96
IPI00185919.3	23367 LARP1	R.TASIS*S	2.12E-12	0.96 S849	0.27
IPI00185919.3	23367 LARP1	R.TASIS*S	2.12E-12	0.96 S849	0.27
IPI00185919.3	23367 LARP1	K.NTFTAV	0.966676636	0.98 S627	0.91
IPI00185919.3	23367 LARP1	R.T*AS*IS	0.072926818	0.96 T845	0.99
IPI00185919.3	23367 LARP1	K.EGTGQC	0.660822982	0.62 S75	0.94
IPI00185919.3	23367 LARP1	R.TASISS*	0.000160239	0.5 S850	0.97
IPI00185919.3	23367 LARP1	K.GLSAS*I	0.623338592	0.98 S548	0.86
IPI00185919.3	23367 LARP1	R.HSS*NP	0.566916624	0.98 S824	1.02
IPI00185919.3	23367 LARP1	R.HSSNPF	0.566916624	0.98 S830	1.02
IPI00185919.3	23367 LARP1	R.ES*PRP	0.684201094	1 S75	1.04
IPI00185919.3	23367 LARP1	R.HS*SNP	0.566916624	1 S823	1.04
IPI00185919.3	23367 LARP1	R.HSSNPF	0.566916624	1 S838	1.04
IPI00185919.3	23367 LARP1	R.AVT*PVI	0.873506301	1 T526	0.89
IPI00185919.3	23367 LARP1	K.NALPPV	0.698823319	0.98 S143	0.81
IPI00185919.3	23367 LARP1	R.S*LPTTV	0.054409842	1 S766	1.35
IPI00185919.3	23367 LARP1	R.ESPRPL	0.566916624	1 S90	1.04
IPI00185919.3	23367 LARP1	R.S*LPTTV	0.438828959	1 S766	0.82
IPI00186526.5	5863 RGL2	R.LLLDTS'	0.32093792	0.85 S13	1.11
IPI00186554.4	84530 KIAA1853	R.GVIT*GE	0.075572151	0.92 T259	0.71
IPI00186968.3	63967 CLSPN	R.NFVFHT	0.152571688	0.94 S1289	1.16
IPI00186968.3	63967 CLSPN	R.SPS*PG	0.049260986	0.72 S810	1.08
IPI00186968.3	63967 CLSPN	K.LSEPSLI	0.346340474	0.74 S846	1.12
IPI00187011.4	23211 C19orf7	R.AAKPGF	0.233505398	0.94 S1110	1.17
IPI00187011.4	23211 C19orf7	R.AAKPGF	0.139636808	1 S1104	1.21
IPI00187011.4	23211 C19orf7	R.AAKPGF	0.296993866	1 S1104	1.13
IPI00187011.4	23211 C19orf7	R.AAKPGF	0.27446972	1 T1106	1.14
IPI00215637.4	1654 DDX3X	R.FS*GGF	0	0.92 S594	9.53
IPI00215637.4	1654 DDX3X	R.GCHLLV	0.383343176	0.64 T323	0.74
IPI00215637.4	1654 DDX3X	K.SSRFS*(	0.849082022	1 S594	0.88
IPI00215637.4	1654 DDX3X	K.SS*RFS(	0.849082022	1 S591	0.88

IPI00215675.1	23648	SSBP3	K.NS*PNN	0.214968943	0.66	S320	1.21
IPI00215675.1	23648	SSBP3	K.NSPNNI	0.096924105	1	T333	1.4
IPI00215675.1	23648	SSBP3	K.NS*PNN	0.233505398	0.98	S320	1.14
IPI00215675.1	23648	SSBP3	K.NSPNNI	0.214968943	1	S325	1.14
IPI00215768.2	2729	GCLC	-.GLLSQG	0.233505398	0.86	S8	1.13
IPI00215772.1	4286	MITF	R.AHGLSL	0.902796178	0.98	S301	0.92
IPI00215795.1	56848	SPHK2	R.SRS*PS	0.743182508	0.96	S71	1.08
IPI00215795.1	56848	SPHK2	R.S*RSPS	0.743182508	0.96	S69	1.08
IPI00215801.1	9584	RBM39	R.YRS*PY	0.166517367	1	S97	1.16
IPI00215801.1	9584	RBM39	K.DKS*PVI	0.373234869	0.9	S136	1.1
IPI00215801.1	9584	RBM39	R.KDKS*P'	0.12765804	0.98	S136	1.15
IPI00215801.1	9584	RBM39	K.DKSPVR	0.197661257	1	T146	1.14
IPI00215877.2	324	APC	R.TPFSS*	0.373234869	0.96	S2663	1.09
IPI00215877.2	324	APC	R.TPFSS	0.373234869	0.96	S2667	1.09
IPI00215877.2	324	APC	R.SHS*ES	0.431601138	0.77	S2432	1.18
IPI00215877.2	324	APC	K.SGISLG	0.566916624	0.92	S2045	1.01
IPI00215877.2	324	APC	R.SGRSPT	0.12765804	0.96	T2578	1.05
IPI00215877.2	324	APC	K.AIQEGA	0.431601138	0.98	S2024	1.03
IPI00215877.2	324	APC	R.SGRS*P	0.166517367	0.98	S2573	1.05
IPI00215877.2	324	APC	R.S*GRSP	0.166517367	0.98	S2570	1.05
IPI00215877.2	324	APC	K.RHSGSY	0.401648339	1	Y2737	1.08
IPI00215877.2	324	APC	K.RHS*GS	0.401648339	1	S2734	1.08
IPI00215884.3	6426	SFRS1	K.VDGPRE	0.181528891	1	S199	1.17
IPI00215888.3	6731	SRP72	K.TVSS*PF	0.296993866	0.96	S621	1.13
IPI00215888.3	6731	SRP72	K.TVS*SPF	0.296993866	0.96	S620	1.12
IPI00215888.3	6731	SRP72	K.TVSS*PF	0.233505398	1	S621	1.18
IPI00215928.4	1069	CETN2	K.RMSPKF	0.49616549	0.98	T26	1.1
IPI00215928.4	1069	CETN2	K.RMS*PK	0.096924105	0.98	S20	1.1
IPI00216040.1	898	CCNE1	K.AMLSEC	0.017448313	0.81	S344	1.72
IPI00216047.3	6601	SMARCC2	K.DMDEPS	0.49616549	0.92	S347	1.08
IPI00216053.1	4209	MEF2D	R.RAS*EE	0.197661257	0.94	S121	1.12
IPI00216130.7	11054	OGFR	R.PAGPAC	0.060044376	0.98	S557	1.38
IPI00216130.7	11054	OGFR	R.KVDEG/	0.401648339	0.98	S488	1.18
IPI00216130.7	11054	OGFR	R.KVDEG/	0.401648339	0.98	S484	1.18
IPI00216159.13	9945	GFPT2	K.RLDS*S/	0.044561326	1	S244	1.32
IPI00216159.13	9945	GFPT2	K.RLDSS*)	0.044561326	1	S245	1.32
IPI00216190.1	2932	GSK3B	R.TTS*FAE	0.27446972	0.94	S9	1.29
IPI00216219.3	7082	TJP1	R.IDS*PGF	0.726073545	0.96	S912	0.97
IPI00216219.3	7082	TJP1	K.KVQIPV	0.166517367	0.94	Y132	1.11
IPI00216219.3	7082	TJP1	R.IDS*PGF	0.791231585	1	S912	0.96
IPI00216219.3	7082	TJP1	K.S*REDL	0.614059792	0.86	S617	1.17
IPI00216219.3	7082	TJP1	R.LEEPTP	0.116581414	0.81	S966	1.04
IPI00216219.3	7082	TJP1	R.LEEPTP	0.116581414	0.81	S968	1.04
IPI00216219.3	7082	TJP1	K.KVQIPV	0.116581414	0.98	S125	1.24
IPI00216219.3	7082	TJP1	K.VQIPVSI	0.809048575	0.9	Y132	1.2
IPI00216219.3	7082	TJP1	K.KVQIPV	0.233505398	0.98	S125	1.16
IPI00216219.3	7082	TJP1	K.AIPVSP	0.99978897	0.86	S1619	0.81
IPI00216219.3	7082	TJP1	K.AIPV*S	0.99978897	0.86	S1617	0.81
IPI00216219.3	7082	TJP1	K.VQIPVSI	0.463105648	0.94	S125	1.16
IPI00216219.3	7082	TJP1	K.KVQIPV	0.181528891	1	S125	1.12
IPI00216219.3	7082	TJP1	K.VQIPVSI	0.346340474	0.98	S125	1.14

IPI00216219.3	7082 TJP1	K.VQIPVSI	0.346340474	0.98	S131	1.14
IPI00216230.2	7112 TMPO	K.FQETEF	0.49616549	0.85	S424	0.99
IPI00216230.2	7112 TMPO	K.SVEERC	0.530774648	0.72	S444	1.06
IPI00216230.2	7112 TMPO	K.HAS*PIL	0.463105648	0.94	S306	0.95
IPI00216230.2	7112 TMPO	K.GPPDFS	1.04E-09	0.77	S66	2.72
IPI00216230.2	7112 TMPO	K.GPPDFS	1.04E-09	0.77	S67	2.72
IPI00216230.2	7112 TMPO	R.SHISDQ	0.891255812	1	S351	1.05
IPI00216230.2	7112 TMPO	K.SSSSSS	0.401648339	0.98	S310	1.09
IPI00216230.2	7112 TMPO	K.GAAGRF	0.253322457	0.98	S378	1.08
IPI00216230.2	7112 TMPO	K.GPPDFS	0.545847833	0.79	T74	1.22
IPI00216230.2	7112 TMPO	K.GPPDFS	0.373234869	0.76	S66	0.84
IPI00216230.2	7112 TMPO	K.FQETEF	0.401648339	0.98	S424	1.06
IPI00216241.1	8650 NUMB	K.EIAATCS	0.769214181	0.9	S414	0.97
IPI00216241.1	8650 NUMB	K.IVVGSS\	0.684201094	0.96	S229	1.04
IPI00216245.2	9414 TJP2	R.SILKPST	0.12765804	0.96	S1044	1.18
IPI00216245.2	9414 TJP2	R.SILKPST	0.106353987	0.94	S1045	1.09
IPI00216245.2	9414 TJP2	R.KVQVA\	0.197661257	0.96	S107	1.03
IPI00216245.2	9414 TJP2	R.DNS*PP	0.233505398	0.98	S963	1.13
IPI00216252.4	23095 KIF1B	R.GDS*LIL	0.011556994	0.76	S1441	0.42
IPI00216277.1	79109 MAPKAP1	R.RTS*FSI	0.00181541	1	S474	1.22
IPI00216306.1	5209 PFKFB3	R.RNS*VT	0.040276449	1	S461	1.3
IPI00216337.1	26088 GGA1	R.DPLPGF	0	0.96	S513	0.01
IPI00216354.3	776 CACNA1D	R.GTRLPL	0.463105648	1	S45	1.07
IPI00216396.2	1390 CREM	R.APTAAL	0.530774648	0.96	S50	1.04
IPI00216396.2	1390 CREM	R.APTAAL	0.49616549	1	S47	1.06
IPI00216396.2	1390 CREM	R.APTAAL	0.431601138	1	S47	1.07
IPI00216408.2	23348 DOCK9	R.ALS*KPC	0.03637398	0.94	S21	1.33
IPI00216408.2	23348 DOCK9	K.SNS*LDI	0.166517367	0.98	S1275	1
IPI00216408.2	23348 DOCK9	K.S*NSLDI	0.166517367	0.98	S1273	1
IPI00216442.4		K.TDS*PW	0.684201094	0.94	S404	1.07
IPI00216445.1	7852 CXCR4	K.TSAQHA	0.296993866	0.98	S328	1.08
IPI00216445.1	7852 CXCR4	K.TSAQHA	0.401648339	0.36	S323	0.09
IPI00216613.1	6421 SFPQ	R.S*PPPG	0.643675939	0.85	S33	1.11
IPI00216613.1	6421 SFPQ	R.GMGPG	0.197968259	0.98	T687	0.86
IPI00216686.1	2305 FOXM1	K.LLFGEG	0.080258071	0.85	S436	1.18
IPI00216686.1	2305 FOXM1	R.LLSSEP	0.985805237	0.76	S689	0.77
IPI00216686.1	2305 FOXM1	R.LLSSEP	0.604563646	0.96	S678	0.96
IPI00216686.1	2305 FOXM1	R.LLSSEP	0.604563646	0.96	S677	0.96
IPI00216688.4	4928 NUP98	K.TRS*LV	0.976229102	0.38	S1026	0.57
IPI00216688.4	4928 NUP98	R.CLIKS*P	0.49616549	0.9	S822	0.95
IPI00216688.4	4928 NUP98	K.FTSGAF	0.604563646	0.94	S1043	1
IPI00216688.4	4928 NUP98	K.FTSGAF	0.604563646	0.94	S1043	1
IPI00216688.4	4928 NUP98	K.FTSGAF	0.001080861	0.66	T1053	0.64
IPI00216688.4	4928 NUP98	K.ALTT*PT	0.726073545	1	T529	1
IPI00216688.4	4928 NUP98	R.FS*FLS*	0.00322629	0.62	S618	0.87
IPI00216688.4	4928 NUP98	R.FSFLS*F	0.809048575	0.9	S621	1.06
IPI00216688.4	4928 NUP98	K.PVDEN*	0.27446972	0.59	S636	0.61
IPI00216688.4	4928 NUP98	K.NLNNSN	0.32797409	0.29	S595	0.64
IPI00216695.1	9031 BAZ1B	R.RQS*LE	0.566916624	0.98	S1338	1.02
IPI00216695.1	9031 BAZ1B	R.RSDVQE	0.604820989	0.64	S704	1.06
IPI00216695.1	9031 BAZ1B	K.NSKS*PI	0.00043002	0.83	S361	0.86

IPI00216746.1	3190 HNRPK	K.KIIPTLEI	0.684201094	0.9	T118	0.91
IPI00216746.1	3190 HNRPK	K.IILDLISE	0.296993866	0.94	S216	1.14
IPI00216746.1	3190 HNRPK	K.IILDLISE	0.530774648	1	S216	1.13
IPI00216746.1	3190 HNRPK	K.IILDLISE*	0.530774648	1	S214	1.13
IPI00216746.1	3190 HNRPK	K.KIIPTLEI	0.726073545	0.88	T120	0.98
IPI00216746.1	3190 HNRPK	K.KIIPTLEI	0.738886535	1	S116	0.96
IPI00216746.1	3190 HNRPK	R.GS*YGD	0.27446972	1	S379	1.05
IPI00216746.1	3190 HNRPK	R.GSY*GD	0.27446972	1	Y380	1.05
IPI00216746.1	3190 HNRPK	K.IIPTLEE	0.253322457	1	S116	1.19
IPI00216746.1	3190 HNRPK	K.IIPTLEE	0.181528891	1	T118	1.19
IPI00216768.1	8622 PDE8B	R.IHS*MTI	6.68E-07	0.94	S349	1.15
IPI00216768.1	8622 PDE8B	R.RLS*GN	0.566916624	0.96	S420	1.08
IPI00216911.1	6929 TCF3	K.ALASIYS	0.73460299	0.9	S354	1.03
IPI00216911.1	6929 TCF3	R.AGAPG/	0.066203153	0.96	Y382	1.06
IPI00216911.1	6929 TCF3	R.AGAPG/	0.214968943	1	S379	1.08
IPI00216911.1	6929 TCF3	R.AGAPG/	0.214968943	1	S381	1.13
IPI00216919.1	10413 YAP1	R.QAS*TD	0.49616549	0.88	S109	1.39
IPI00216919.1	10413 YAP1	R.GDS*ET	0.401648339	0.77	S61	1.2
IPI00216953.1	4000 LMNA	R.LQLELS	0.900575286	0.77	S107	1.02
IPI00216953.1	4000 LMNA	R.SGAQA	0.001128958	0.92	S22	1.33
IPI00216953.1	4000 LMNA	R.S*VGGS	0.463105648	0.88	S598	1.16
IPI00216953.1	4000 LMNA	R.LRLS*P	0.431601138	1	S390	1.11
IPI00216953.1	4000 LMNA	R.LRLS*P	0.04505155	0.69	S390	0.71
IPI00216953.1	4000 LMNA	R.LRLS*P	0.637328432	0.69	S390	0.71
IPI00216993.1	9815 GIT2	R.QRS*MV	0.878390339	0.83	S564	0.82
IPI00217052.4	89797 NAV2	K.VNPAAC	0.060044376	0.98	S1302	1.33
IPI00217052.4	89797 NAV2	K.NSVVISI	0.116581414	0.96	S1376	1.13
IPI00217052.4	89797 NAV2	R.APSQVS	0.080258071	0.94	S1977	1.29
IPI00217121.1	126353 C19orf21	R.HLS*ES	0.346340474	0	S471	0.42
IPI00217121.1	126353 C19orf21	R.KSSTVA	4.62E-06	0.9	T160	1.13
IPI00217121.1	126353 C19orf21	R.KS*STV/	0.12765804	1	S155	1.19
IPI00217121.1	126353 C19orf21	R.KSS*TV/	0.12765804	1	S156	1.19
IPI00217121.1	126353 C19orf21	R.HLSESS	0.346340474	1	S474	1.04
IPI00217121.1	126353 C19orf21	R.ALSS*D	0.373234869	0.92	S395	1.12
IPI00217124.5	8844 KSR1	R.SIS*VSA	0.007240509	0.98	S92	1.34
IPI00217124.5	8844 KSR1	R.ALHSFIT	0.463105648	0.85	T133	0.96
IPI00217124.5	8844 KSR1	R.SISVSAL	0.296993866	0.94	T103	1.18
IPI00217124.5	8844 KSR1	R.SIS*VSA	0.03282354	0.98	S92	1.34
IPI00217124.5	8844 KSR1	R.ALHSFIT	0.296993866	1	T133	1.15
IPI00217124.5	8844 KSR1	R.AAEPHF	0.89791754	0.98	T288	0.99
IPI00217124.5	8844 KSR1	R.RTES*VI	0.952395062	0.92	S269	1.23
IPI00217157.4	83479 DDX59	R.HISESCI	0.566916624	0.53	S64	0.82
IPI00217223.1	10606 PAICS	K.EVYELLI	0.214968943	0.88	S53	1.03
IPI00217223.1	10606 PAICS	K.TKEVYE	0.214968943	0.98	S53	1.01
IPI00217240.1	84128 WDR75	K.VQDTSN	0.05184847	0.88	T798	0.92
IPI00217240.1	84128 WDR75	K.VQDTS*	0.05184847	0.88	S796	0.92
IPI00217261.2	55852 TEX2	R.RLS*EVI	0.27446972	0.9	S295	1.05
IPI00217261.2	55852 TEX2	K.EDLYLE	0.89791754	0.94	S91	1.07
IPI00217340.1	23286 WWC1	R.TDRGS*	0.024009318	0.86	S255	1.22
IPI00217340.1	23286 WWC1	K.VDKETN	0.253322457	0.98	T893	1.14
IPI00217340.1	23286 WWC1	K.VDKETN	0.253322457	0.98	T895	1.14

IPI00217340.1	23286 WWC1	K.VDKETN	0.181528891	0.94 T895	1.02
IPI00217340.1	23286 WWC1	R.SKT*FSF	0.001613065	0.9 T929	1.19
IPI00217354.3	55738 ARFGAP1	K.TRKSPS	0.214968943	0.96 T358	0.97
IPI00217354.3	55738 ARFGAP1	K.TRKSPS	0.214968943	0.96 S353	0.97
IPI00217354.3	55738 ARFGAP1	K.TRKSPS	0.214968943	0.96 S356	0.97
IPI00217354.3	55738 ARFGAP1	R.YVGFGM	0.373234869	0.86 T189	0.97
IPI00217354.3	55738 ARFGAP1	R.EWSLES	0.015665801	0.96 T135	1.39
IPI00217354.3	55738 ARFGAP1	R.EWSLES	0.01011525	0.96 S129	1.38
IPI00217357.2	55749 CCAR1	K.VMLMAE	0.804577835	0.92 S456	1.12
IPI00217357.2	55749 CCAR1	K.EIST*PT	0.604563646	1 T627	1.04
IPI00217413.3	54505 DHX29	K.FQSPQI	0.530774648	0.88 S200	0.97
IPI00217418.3	94134 ARHGAP1	R.ATTPPN	0.12765804	0.98 S240	1.27
IPI00217418.3	94134 ARHGAP1	R.S*FGHF	0.32093792	0.96 S176	1.11
IPI00217449.1	2969 GTF2I	R.T*NTPVI	0.431601138	0.96 T515	1.24
IPI00217449.1	2969 GTF2I	R.TNT*PVI	0.643675939	0.86 T517	1.04
IPI00217449.1	2969 GTF2I	R.VMVTDA	0.766262183	0.79 S207	0.71
IPI00217449.1	2969 GTF2I	R.SPS*WY	0.730331964	0.69 S476	0.74
IPI00217449.1	2969 GTF2I	R.S*PSWY	0.730331964	0.69 S495	0.74
IPI00217449.1	2969 GTF2I	R.TPT*QTI	0.431601138	0.98 T685	1.05
IPI00217449.1	2969 GTF2I	K.EESED	0.096924105	0.98 S278	1.24
IPI00217449.1	2969 GTF2I	R.SILSPG	0.463105648	0.98 S214	1.08
IPI00217449.1	2969 GTF2I	R.GREFS*	0.253322457	1 S681	1.09
IPI00217449.1	2969 GTF2I	R.KINSSPI	0.566916624	0.5 T817	0.75
IPI00217449.1	2969 GTF2I	R.KINSS*F	0.643675939	0.52 S790	0.66
IPI00217449.1	2969 GTF2I	R.KINS*SF	0.643675939	0.52 S810	0.66
IPI00217449.1	2969 GTF2I	R.SPGS*N	0.643675939	0.94 S636	1.06
IPI00217449.1	2969 GTF2I	K.VPEIEV	0.346340474	0.98 S679	1.06
IPI00217449.1	2969 GTF2I	R.SILS*PG	0.604563646	1 S210	1.04
IPI00217467.2	3008 HIST1H1E	-.SETAPA	0.346340474	0.96 T18	1.03
IPI00217467.2	3008 HIST1H1E	R.KAS*GP	0.604563646	0.96 S36	1.03
IPI00217467.2	3008 HIST1H1E	-.SETAPA	0.49616549	1 T18	1.04
IPI00217468.2	3009 HIST1H1B	-.SETAPAE	0.066203153	0.92 S18	1.03
IPI00217468.2	3009 HIST1H1B	-.SET*APA	0.27446972	0.98 T4	1
IPI00217564.1	905 CCNT2	K.QGQSQ	0.002581506	0.88 S480	1.19
IPI00217564.1	905 CCNT2	K.HSADGI	0.604563646	0.96 T597	1.04
IPI00217564.1	905 CCNT2	K.HSADGI	0.463105648	0.94 S601	1.01
IPI00217661.3	125950 RAVER1	K.DSGPLP	0.346340474	0.86 T505	0.87
IPI00217661.3	125950 RAVER1	R.LLS*PLS	0.253322457	1 S584	1.16
IPI00217686.3	117246 FTSJ3	K.QQLPQT	0.985337202	0.96 T573	1.09
IPI00217686.3	117246 FTSJ3	R.ILDPEGI	0.021601024	0.76 S676	0.96
IPI00217686.3	117246 FTSJ3	R.ILDPEGI	0.021601024	0.76 S677	0.96
IPI00217709.1	7155 TOP2B	K.SQDFGM	0.604563646	0.94 Y1448	0.95
IPI00217709.1	7155 TOP2B	K.VKAS*PI	0.026666866	0.52 S1395	0.79
IPI00217709.1	7155 TOP2B	K.KVVEAV	0.205975059	0.85 S1519	0.83
IPI00217709.1	7155 TOP2B	K.KLQLEE	0.604563646	0.98 S1231	1.04
IPI00217709.1	7155 TOP2B	K.SQDFGM	0.822525206	0.98 S1452	0.93
IPI00217709.1	7155 TOP2B	K.SQDFGM	0.822525206	0.98 S1449	0.93
IPI00217709.1	7155 TOP2B	K.FDSNEE	0.346340474	0.96 S1466	1.03
IPI00217709.1	7155 TOP2B	K.FDS*NEI	0.346340474	0.96 S1461	1.03
IPI00217709.1	7155 TOP2B	K.KVVEAV	0.394935546	0.94 S1519	0.99
IPI00217709.1	7155 TOP2B	K.VVEAVN	0.726073545	1 S1519	1.06

IPI00217709.1	7155 TOP2B	K.VVEAVN	0.726073545	1 S1521	1.06
IPI00217709.1	7155 TOP2B	K.VKAS*PI	0.253322457	0.98 S1395	1.01
IPI00217709.1	7155 TOP2B	K.TSFDQC	0.858851798	0.96 S1576	1.13
IPI00217709.1	7155 TOP2B	K.VVEAVN	0.813530126	0.98 S1517	0.97
IPI00217709.1	7155 TOP2B	K.SEDDSA	0.730331964	1 S1461	0.96
IPI00217709.1	7155 TOP2B	K.KTSFDQ	0.401648339	0.98 S1576	1.06
IPI00217709.1	7155 TOP2B	K.AS*PITN	0.726073545	0.98 S1395	1.02
IPI00217709.1	7155 TOP2B	K.ASPITN	0.27446972	0.98 S1419	1.05
IPI00217709.1	7155 TOP2B	K.KVVEAV	0.761414517	0.81 S1517	0.86
IPI00217709.1	7155 TOP2B	K.KT*SFDQ	0.463105648	1 T1570	1.06
IPI00217709.1	7155 TOP2B	K.VKAS*PI	0.604563646	1 S1395	1.03
IPI00217752.2	129563 DIS3L2	R.GVSAVA	0.684201094	0.98 S31	0.99
IPI00217761.3	9610 RIN1	R.GSPATS	0.684201094	0.85 S337	1.03
IPI00217761.3	9610 RIN1	R.GS*PAT	0.072893529	0.9 S333	1.45
IPI00217761.3	9610 RIN1	R.HT*AAG	0	0.85 T377	25.36
IPI00217773.1	26009 ZZZ3	R.RQTEPV	0.947647721	0.98 S113	1.01
IPI00217874.1	283248 RCOR2	R.VGTNYC	0.49616549	0.98 S63	1.02
IPI00217965.1	8841 HDAC3	R.TDEADA	0.756570768	0.83 S425	0.99
IPI00217965.1	8841 HDAC3	R.GPEENY	0.373234869	0.98 S425	1.16
IPI00217975.3	4001 LMNB1	R.AGGPTT	0.32093792	0.98 S23	1.12
IPI00218017.1	407977 TNFSF12	R.SMPSHF	0.03637398	0.79 Y292	1.37
IPI00218035.1	4782 NFIC	K.KTEMDK	0.831562154	0.96 S324	1.03
IPI00218035.1	4782 NFIC	K.KTEMDK	0.831562154	0.96 S328	1.03
IPI00218035.1	4782 NFIC	R.NWTEDI	0.27446972	0.94 S314	1.14
IPI00218035.1	4782 NFIC	R.LALPPA	0.373234869	0.81 S464	1.01
IPI00218035.1	4782 NFIC	R.LALPPA	0.373234869	0.81 S464	1.01
IPI00218035.1	4782 NFIC	R.LALPPA	0.27446972	0.92 T463	1.05
IPI00218035.1	4782 NFIC	R.LALPPA	0.27446972	0.92 S464	1.05
IPI00218035.1	4782 NFIC	K.SGSMEE	0.684201094	0.98 S295	1.08
IPI00218035.1	4782 NFIC	K.SGSMEE	0.684201094	0.98 S296	1.08
IPI00218035.1	4782 NFIC	K.SPFNSP	0.066203153	1 S330	1.31
IPI00218035.1	4782 NFIC	K.TEMDKS	0.373234869	1 S324	1.11
IPI00218035.1	4782 NFIC	R.NWTEDI	0.296993866	1 S313	1.21
IPI00218052.4	23001 WDFY3	K.ELIS*VS	3.91E-12	0.64 S465	2.26
IPI00218055.1	93649 MYOCD	K.FSIPS*P	0.27446972	0.96 S704	1.09
IPI00218135.1	8535 CBX4	R.CLSET*H	7.21E-09	0.66 T148	1.8
IPI00218386.1	864 RUNX3	R.GSLSTT	4.06E-06	0.83 S241	2.29
IPI00218397.2	6305 SBF1	R.LGLGT*I	0.27446972	0.98 T1147	1.11
IPI00218487.2	2697 GJA1	K.GKSDPY	0.804577835	0.92 S255	0.96
IPI00218487.2	2697 GJA1	K.GKSDPY	0.804577835	0.92 S251	0.96
IPI00218487.2	2697 GJA1	K.SDPYHA	0.689280356	0.81 S255	0.59
IPI00218490.3	63971 KIF13A	R.SLS*TPH	0.656107164	0.88 S1384	1.2
IPI00218500.4	4297 MLL	R.IRT*PS*	0.001432711	0.53 T2109	0.89
IPI00218500.4	4297 MLL	R.RHSTS*	0.604563646	0.86 S2160	0.85
IPI00218500.4	4297 MLL	R.RHS*TS*	0.604563646	0.86 S2158	0.85
IPI00218500.4	4297 MLL	K.ALSSAV	0.836096036	0.98 S3473	1.08
IPI00218500.4	4297 MLL	R.NSSTPC	0.726073545	0.96 T3000	0.99
IPI00218500.4	4297 MLL	R.NSSTPC	0.756144089	0.98 S2998	0.99
IPI00218500.4	4297 MLL	R.SDTPEV	0.604563646	0.98 S518	1.1
IPI00218500.4	4297 MLL	R.SDTPEV	0.463105648	0.98 S516	1.1
IPI00218500.4	4297 MLL	R.TIAHS*P	0.684201094	0.98 S2060	0.91

IPI00218507.1	3297 HSF1	R.GHTDTE	0.139636808	0.94 S363	1.2
IPI00218507.1	3297 HSF1	R.VEEASP	0.000618432	0.79 S319	1.14
IPI00218507.1	3297 HSF1	R.GHTDTE	0.072926818	0.94 S363	1.24
IPI00218507.1	3297 HSF1	R.VEEAS*I	0.431601138	0.72 S314	0.78
IPI00218507.1	3297 HSF1	R.VKEEPP	0.106353987	0.96 S303	1.2
IPI00218507.1	3297 HSF1	R.GHTDTE	0.139636808	0.98 S363	1.19
IPI00218507.1	3297 HSF1	R.VEEAS*I	0.021601024	0.9 S314	1.16
IPI00218507.1	3297 HSF1	R.VEEASP	0.026666866	0.92 S326	1.22
IPI00218567.1	6885 MAP3K7	R.RRSIQD	0.116581414	0.98 S454	1.25
IPI00218567.1	6885 MAP3K7	R.S*IQDLT	0.044561326	0.98 S439	1.28
IPI00218680.1	26277 TINF2	K.SKS*PC	0	0.98 S330	6.79
IPI00218680.1	26277 TINF2	R.NLGS*P	0.12765804	0.94 S295	1.3
IPI00218680.1	26277 TINF2	R.NLGSPT	0.181528891	0.96 T297	1.3
IPI00218697.2	2035 EPB41	R.LS*THSF	0.03637398	0.9 S676	1.19
IPI00218697.2	2035 EPB41	R.SPRPTS	0.139636808	0.96 T565	1.25
IPI00218697.2	2035 EPB41	R.SPRPTS	0.401648339	0.94 S560	1.05
IPI00218729.3	1739 DLG1	K.TKDS*G	0.000233021	0.76 S598	0.65
IPI00218729.3	1739 DLG1	K.FGDILH	0.49616549	0.85 S619	1.02
IPI00218729.3	1739 DLG1	R.SKPSEP	0.938173728	1 S102	0.96
IPI00218753.1	7153 TOP2A	K.RDPALN	0.858851798	0.94 S1488	0.89
IPI00218753.1	7153 TOP2A	K.RDPALN	0.604563646	0.98 S1485	1.01
IPI00218753.1	7153 TOP2A	K.SVVSDL	0.795669231	0.92 S1429	0.84
IPI00218753.1	7153 TOP2A	K.S*KGES	0.017036004	0.83 S1527	0.93
IPI00218753.1	7153 TOP2A	K.S*VVSDI	0.530774648	0.96 S1410	1.12
IPI00218753.1	7153 TOP2A	K.SVVS*DI	0.530774648	0.98 S1413	1.04
IPI00218753.1	7153 TOP2A	K.GSVPLS	0.604563646	0.98 S1429	1.02
IPI00218753.1	7153 TOP2A	K.VPDEEE	0.566916624	0.98 S1142	0.96
IPI00218753.1	7153 TOP2A	K.IKNENTE	0.566916624	0.98 S1283	0.94
IPI00218753.1	7153 TOP2A	K.KTQMAE	0.643675939	1 S1249	1.02
IPI00218753.1	7153 TOP2A	K.GSVPLS	0.84064003	0.88 S1428	1.03
IPI00218753.1	7153 TOP2A	K.SVVS*DI	0.684201094	1 S1413	0.96
IPI00218753.1	7153 TOP2A	K.TQMAE\	0.726073545	0.98 S1249	0.99
IPI00218753.1	7153 TOP2A	K.VPDEEE	0.726073545	1 T1155	0.98
IPI00218753.1	7153 TOP2A	K.GSVPLS	0.49616549	1 S1428	1.03
IPI00218788.1	5771 PTPN2	R.WKELS*	0.536956757	0.28 S293	0.35
IPI00218788.1	5771 PTPN2	K.ELSKED	0.000141509	0.76 S298	1.13
IPI00218788.1	5771 PTPN2	K.ELSKED	0.000141509	0.76 S304	1.13
IPI00218881.1	7249 TSC2	R.VVS*SE	0.008098758	0.92 S1321	1.47
IPI00218881.1	7249 TSC2	R.SLLGLD	0.854331471	0.94 S1054	0.9
IPI00218881.1	7249 TSC2	R.SLLGLD	0.166517367	0.88 S1053	0.97
IPI00218881.1	7249 TSC2	R.VGALDV	0.296993866	0.94 S1112	1.15
IPI00218901.1	23043 TNIK	R.LGSQPIL	0.096924105	0.96 S678	1.17
IPI00218909.1	2887 GRB10	K.ALLS*PF	0.152571688	0.9 S372	1.13
IPI00218936.1	861 RUNX1	R.FTPPST	0.181528891	0.96 S21	1.09
IPI00218936.1	861 RUNX1	R.RFT*PP	0.116581414	0.94 T14	1.21
IPI00219003.1	463 ATBF1	R.NRLS*FI	0.233505398	0.96 S571	1.21
IPI00219003.1	463 ATBF1	K.ASQTPV	0.253322457	0.09 S2495	0.18
IPI00219027.1	9203 ZMYM3	R.SAPTAP	0.401648339	0.85 T805	1.12
IPI00219027.1	9203 ZMYM3	R.GWAPP	0.401648339	0.94 T62	1.14
IPI00219027.1	9203 ZMYM3	R.FYSQQM	0.530774648	0.69 S772	0.82
IPI00219027.1	9203 ZMYM3	R.RAEPK	0.296993866	0.94 S263	1.1

IPI00219027.1	9203 ZMYM3	R.GWAPP	0.912548374	0.98 S51	0.89
IPI00219027.1	9203 ZMYM3	R.GWAPP	0.643675939	0.96 S51	1.03
IPI00219027.1	9203 ZMYM3	R.GWAPP	0.643675939	0.96 S53	1.03
IPI00219027.1	9203 ZMYM3	K.T*GSPG	0.643675939	1 T462	0.92
IPI00219027.1	9203 ZMYM3	K.TGS*PG	0.643675939	1 S464	0.92
IPI00219027.1	9203 ZMYM3	R.RAEPK	0.679764929	0.79 S263	1
IPI00219147.4	8531 CSDA	K.S*PVGS	0.530774648	0.96 S34	1.06
IPI00219147.4	8531 CSDA	R.PAPAVG	0.152571688	0.88 S255	1.1
IPI00219147.4	8531 CSDA	K.SPVGS*	0.044561326	1 S38	1.32
IPI00219301.6	4082 MARCKS	K.SFKLS*C	0.566916624	0.86 S167	0.85
IPI00219301.6	4082 MARCKS	K.LSGFS*F	0.401648339	0.85 S170	1.04
IPI00219301.6	4082 MARCKS	K.EELQAN	0.568296053	0.94 S81	1.02
IPI00219301.6	4082 MARCKS	K.GEAAAE	0.401648339	1 S27	1.11
IPI00219301.6	4082 MARCKS	K.GEAAAE	0.401648339	1 S26	1.11
IPI00219301.6	4082 MARCKS	K.SFKLS*C	0.604563646	1 S167	1
IPI00219301.6	4082 MARCKS	K.S*FKLS*	0.938173728	1 S163	0.95
IPI00219301.6	4082 MARCKS	K.EAPAEC	0.401648339	0.98 T120	1.03
IPI00219301.6	4082 MARCKS	K.LSGFS*F	0.214968943	1 S170	1.16
IPI00219314.5	9919 SEC16A	R.LLPSAP	1.24E-07	0.9 S1786	1.9
IPI00219314.5	9919 SEC16A	R.IVNHWA	0.684201094	0.98 S136	1.12
IPI00219314.5	9919 SEC16A	R.LS*GSAI	0.197661257	0.92 S356	1.11
IPI00219356.1	6926 TBX3	R.LDKAS*F	0.373234869	0.98 S432	0.99
IPI00219356.1	6926 TBX3	R.LDKAS*F	0.373234869	0.98 S432	0.99
IPI00219356.1	6926 TBX3	R.LDKAS*F	0.214968943	1 S432	1.15
IPI00219356.1	6926 TBX3	K.ASPDSR	0.166517367	0.98 T446	1.19
IPI00219356.1	6926 TBX3	K.ASPDSR	0.166517367	0.98 T441	1.19
IPI00219356.1	6926 TBX3	K.ASPDSR	0.166517367	0.98 S443	1.19
IPI00219415.3	9913 SUPT7L	R.FPSNLE	0.976229102	0.88 S332	0.85
IPI00219415.3	9913 SUPT7L	R.FPSNLE	0.845194016	0.81 S321	0.86
IPI00219509.1	8491 MAP4K3	K.TRS*EIT	0.643675939	0.98 S319	1.06
IPI00219556.2	7799 PRDM2	K.RKPS*Q	0.743182508	0.85 S421	0.87
IPI00219556.2	7799 PRDM2	R.TSS*PP	0.530774648	0.88 S739	0.97
IPI00219556.2	7799 PRDM2	K.RKPSQT	0.643675939	1 S427	0.96
IPI00219556.2	7799 PRDM2	K.RKPSQT	0.643675939	1 T423	0.96
IPI00219592.2	5568 PRKACG	K.GRTWTL	0.49616549	0.83 T211	0.89
IPI00219592.2	5568 PRKACG	K.GRT*WT	0.463105648	0.83 T205	0.89
IPI00219592.2	5568 PRKACG	R.TWT*LC	0.401648339	0.9 T207	1
IPI00219592.2	5568 PRKACG	K.GRTWT*	0.566916624	0.98 T207	1.11
IPI00219592.2	5568 PRKACG	R.T*WTLC	0.401648339	1 T205	1.14
IPI00219601.1	5598 MAPK7	R.GLCTSP	0.096924105	0.92 Y221	1.47
IPI00219602.1	11234 HPS5	K.STRPAP	0.139636808	0.79 S938	0.84
IPI00219602.1	11234 HPS5	K.IGTLHT	0.604563646	1 S449	0.99
IPI00219708.1	3953 LEPR	K.KY*YIHC	0	0.92 Y795	31.31
IPI00219754.1	8500 PPFIA1	K.GALHT*	0.011294655	0.86 T761	1.13
IPI00219754.1	8500 PPFIA1	K.GALHTV	0.214968943	0.98 S763	1.15
IPI00219764.3	24140 FTSJ1	K.YTPPTQ	0.373234869	0.98 S269	1.06
IPI00219799.2	9448 MAP4K4	R.RDS*PL	0.795669231	0.94 S608	1.01
IPI00219799.2	9448 MAP4K4	R.KGS*VV	0.054409842	0.96 S873	1.15
IPI00219799.2	9448 MAP4K4	R.TTTRS*F	0.49616549	0.96 S600	1.08
IPI00219799.2	9448 MAP4K4	R.RNT*FIG	0.530774648	0.74 T187	0.68
IPI00219799.2	9448 MAP4K4	K.LVDFGV	0.643675939	0.53 T181	0.78

IPI00219799.2	9448 MAP4K4	R.RNTFIG'	0.834430989	0.88 T191	1.14
IPI00219805.1	6276 S100A5	K.ALTTMV	0	0.58 T33	33.5
IPI00219841.6	3978 LIG1	K.EWNGV'	0.116581414	0.98 S51	1.16
IPI00219841.6	3978 LIG1	K.EWNGV'	0.116581414	0.98 S49	1.16
IPI00219841.6	3978 LIG1	K.GQKPAL	0.214968943	0.98 S91	1.16
IPI00220079.1	8202 NCOA3	K.TPHDILE	0.346340474	0.85 S214	1.22
IPI00220108.1	546 ATRX	R.NS*SDS	0.985805237	0.96 S586	0.87
IPI00220108.1	546 ATRX	R.EVIEIED	0.877341226	0.9 S1410	0.95
IPI00220119.4	56916 SMARCAD	R.KAS*ISY	0.604563646	0.96 S79	0.99
IPI00220119.4	56916 SMARCAD	R.RNDDIS	0.12765804	0.9 S146	0.97
IPI00220119.4	56916 SMARCAD	R.RNDDIS	0.071580795	0.77 S152	1
IPI00220158.1	118 ADD1	R.S*PGSP	0.467835816	0.85 S355	0.58
IPI00220158.1	118 ADD1	R.SPGS*P	0.467835816	0.85 S358	0.58
IPI00220158.1	118 ADD1	K.KYSDVE	0.346340474	0.77 S436	0.93
IPI00220158.1	118 ADD1	K.KYSDVE	0.346340474	0.77 S427	0.93
IPI00220158.1	118 ADD1	K.EDGHR1	0.088241621	0.66 T513	0.63
IPI00220158.1	118 ADD1	K.YSDVEV	0.8197889	0.92 S436	0.88
IPI00220158.1	118 ADD1	R.S*PGSP	0.643675939	0.92 S355	1.19
IPI00220158.1	118 ADD1	R.TPS*FLK	0.253322457	1 S757	1.15
IPI00220158.1	118 ADD1	R.AAVVTS	0.463105648	1 S12	1.05
IPI00220219.5	9276 COPB2	R.STAQQE	0.233505398	0.85 T861	1.02
IPI00220219.5	9276 COPB2	R.STAQQE	0.853966795	0.94 S859	1.22
IPI00220219.5	9276 COPB2	R.STAQQE	0.853966795	0.94 T861	1.22
IPI00220219.5	9276 COPB2	R.STAQQE	0.152571688	0.98 S859	1.12
IPI00220219.5	9276 COPB2	R.ST*AAQ	0.152571688	0.98 T848	1.12
IPI00220243.1	11135 CDC42EP	R.RSDSLL	0.32093792	0.94 S195	1.11
IPI00220243.1	11135 CDC42EP	R.RSDS*LI	0.346340474	0.98 S192	1.07
IPI00220308.1	4771 NF2	R.MSFSS*	0.463105648	0.98 S13	1.19
IPI00220318.1	2005 ELK4	K.LAEKKS	0.566916624	0.96 T185	1.01
IPI00220318.1	2005 ELK4	K.LAEKKS	0.566916624	0.96 S180	1.01
IPI00220318.1	2005 ELK4	K.KPPVEP	1.37E-13	0.64 S215	0.71
IPI00220381.2	6942 TCF20	R.RSVICD	0.346340474	0.92 S871	1.14
IPI00220381.2	6942 TCF20	R.GRS*PS	0.566916624	0.94 S1005	1.02
IPI00220381.2	6942 TCF20	R.GNAS*P	0.373234869	0.98 S966	1.1
IPI00220409.2	5564 PRKAB1	R.S*HNNF	0.139636808	0.92 S108	1.07
IPI00220409.2	5564 PRKAB1	K.CSDVSE	0.080258071	0.96 Y187	1.19
IPI00220409.2	5564 PRKAB1	K.CSDVSE	0.139636808	0.98 S181	1.15
IPI00220409.2	5564 PRKAB1	K.CSDVSE	0.139636808	0.96 S182	1.16
IPI00220426.1	3607 FOXK2	R.S*APAS'	0.99978897	0.94 S369	0.94
IPI00220426.1	3607 FOXK2	R.SAPAS*I	0.094770849	0.98 S373	0.77
IPI00220426.1	3607 FOXK2	R.EGS*PA	0.103012816	0.94 S398	0.78
IPI00220426.1	3607 FOXK2	R.FAQSAF	0.387188711	1 S428	0.81
IPI00220465.1	51474 LIMA1	K.SLNWSE	0.912548374	0.96 T554	0.93
IPI00220465.1	51474 LIMA1	R.KISENS'	0.132773239	0.69 Y69	0.79
IPI00220465.1	51474 LIMA1	K.SEVQQF	0.463105648	1 S202	1.05
IPI00220465.1	51474 LIMA1	R.KISENS'	0.795419436	0.94 S68	0.83
IPI00220465.1	51474 LIMA1	R.KIS*ENS	0.84419767	0.94 S65	0.83
IPI00220465.1	51474 LIMA1	K.SLNWSE	0.946608772	0.86 S549	0.7
IPI00220465.1	51474 LIMA1	K.EGHSLE	0.280412571	0.77 S526	0.75
IPI00220465.1	51474 LIMA1	R.KIS*ENS	0.656107164	0.81 S65	0.69
IPI00220465.1	51474 LIMA1	R.KISENS'	0.703604632	0.11 S68	0.1

IPI00220465.1	51474 LIMA1	R.KISENS`	0.698823319	0.81	S70	0.88
IPI00220465.1	51474 LIMA1	R.ETPHS*I	0.881970624	1	S330	0.96
IPI00220505.1	4140 MARK3	R.TPVAST	0.139636808	1	S569	1.29
IPI00220505.1	4140 MARK3	R.TPVAST	0.139636808	1	S566	1.29
IPI00220505.1	4140 MARK3	R.TPVAS**	0.933447376	0.92	S563	1.24
IPI00220505.1	4140 MARK3	R.TPVAST	0.643675939	1	T572	1.09
IPI00220505.1	4140 MARK3	R.SRGS*T	0.214968943	1	S624	1.23
IPI00220505.1	4140 MARK3	R.LLKT*IG	0.181528891	1	T61	1.19
IPI00220505.1	4140 MARK3	K.LDT*FCC	0.604563646	0.98	T234	1.13
IPI00220558.2	6261 RYR1	R.INGCPV	0.566916624	0.92	S781	0.7
IPI00220587.1	274 BIN1	K.GNKS*P	0.684201094	0.96	S280	1.13
IPI00220587.1	274 BIN1	R.VNHEPE	0.643675939	0.94	T307	1
IPI00220587.1	274 BIN1	R.VNHEPE	0.49616549	0.9	T307	0.94
IPI00220593.1	6453 ITSN1	R.SAFTPA	0.684201094	0.79	S899	0.8
IPI00220716.2	64783 RBM15	R.TTAPTE	0.431601138	0.96	S741	1.08
IPI00220716.2	64783 RBM15	R.HCAPS*	0.684201094	0.98	S670	1.02
IPI00220716.2	64783 RBM15	K.DKENTG	0.463105648	0.9	S935	0.82
IPI00220716.2	64783 RBM15	R.LHSYS*G	0.49616549	0.96	S127	1.03
IPI00220716.2	64783 RBM15	R.HCAPSF	0.84064003	0.94	S680	1.15
IPI00220716.2	64783 RBM15	R.HCAPSF	0.684201094	0.96	S679	1.11
IPI00220716.2	64783 RBM15	R.HCAPSF	0.296993866	0.96	S674	1.11
IPI00220716.2	64783 RBM15	R.S*LSPG	0.530774648	1	S292	1.04
IPI00220716.2	64783 RBM15	R.TTAPTE	0.346340474	1	S741	1.09
IPI00220716.2	64783 RBM15	R.HCAPS*	0.27446972	1	S670	1.13
IPI00220716.2	64783 RBM15	R.TTAPTE	0.32093792	1	S741	1.07
IPI00220716.2	64783 RBM15	R.SLS*PG	0.401648339	1	S294	1.05
IPI00220716.2	64783 RBM15	R.HCAPS*	0.32093792	1	S670	1.11
IPI00220716.2	64783 RBM15	R.DRT*PP	0.27446972	1	T568	1.11
IPI00220754.1	120 ADD3	R.WLNS*P	0.98101429	0.96	S442	0.95
IPI00220754.1	120 ADD3	R.HKS*DV	0.373234869	0.58	S402	0.96
IPI00220754.1	120 ADD3	R.HKSDVE	0.009053635	0.81	T409	0.98
IPI00220754.1	120 ADD3	R.HKSDVE	0.116581414	0.98	S423	1.03
IPI00220754.1	120 ADD3	R.TPS*FL	0.253322457	1	S661	1.15
IPI00220795.3	10919 EHMT2	R.GDGVTF	0.401648339	0.9	T526	1.03
IPI00220795.3	10919 EHMT2	K.S*PPSV	0.49616549	0.92	S140	1.09
IPI00220795.3	10919 EHMT2	R.KLNS*G	0.023896338	0.64	S232	0.51
IPI00220833.1	7343 UBTF	R.GKLPE	0.373234869	0.79	S447	1.04
IPI00220833.1	7343 UBTF	K.RPVS*AI	0.088241621	0.94	S375	1.18
IPI00220835.6	10952 SEC61B	-.PGPTPS	0.566916624	1	S13	1.06
IPI00220859.2	831 CAST	K.SLT*PA	0.072926818	0.96	T113	1.28
IPI00220859.2	831 CAST	K.S*LTPA	0.072926818	0.96	S92	1.28
IPI00220859.2	831 CAST	K.EGITGP	0.060044376	0.66	S221	1.01
IPI00220859.2	831 CAST	K.KEGITG	0.002296625	0.61	T223	0.72
IPI00220866.1	4665 NAB2	K.LS*PLP	0.463105648	0.96	S171	0.98
IPI00220866.1	4665 NAB2	R.SFSPKS	0.800289022	0.9	S162	1.14
IPI00220901.3	9882 TBC1D4	R.HAS*AP	0.253322457	0.96	S341	1.09
IPI00220901.3	9882 TBC1D4	R.AHT*FS	0.197661257	0.85	T642	0.98
IPI00220901.3	9882 TBC1D4	R.HASAPS	0.296993866	0.98	S344	1.19
IPI00220901.3	9882 TBC1D4	R.LGS*VD	0.139636808	0.98	S588	1.18
IPI00220901.3	9882 TBC1D4	R.SLTSS*L	0.530774648	0.88	S570	1.18
IPI00220901.3	9882 TBC1D4	R.GPDPG	0.431601138	0.88	S262	0.94

IPI00220918.1	1786 DNMT1	K.NRIS*W	0.004600913	0.94 S748	1.09
IPI00220918.1	1786 DNMT1	R.VGMAD/	0.296993866	1 S127	1.08
IPI00220918.1	1786 DNMT1	K.EADDDE	0.566916624	0.9 S730	0.96
IPI00221012.6	8239 USP9X	R.RPYTGM	0.566916624	0.55 S2443	0.6
IPI00221012.6	8239 USP9X	R.RPYTGM	0.253322457	0.72 Y2439	1.16
IPI00221073.1	4784 NFIX	R.SPAAGS	0.116581414	0.94 S298	1.15
IPI00221073.1	4784 NFIX	R.SITS*PP	0.849757871	0.96 S260	1.02
IPI00221073.1	4784 NFIX	R.VSQTPV	0.530774648	0.77 S250	0.9
IPI00221073.1	4784 NFIX	R.S*PAAG	0.49616549	0.98 S293	1.08
IPI00221171.4	25 ABL1	K.KNEEAA	0.011294655	0.71 S824	1.18
IPI00221285.5	57182 ANKRD50	R.TTSSTA	0.480507638	0.94 T1215	0.87
IPI00221285.5	57182 ANKRD50	R.TTSSTA	0.627992512	0.85 S1213	1.02
IPI00221285.5	57182 ANKRD50	R.TTSSTA	0.604563646	0.96 S1222	1.02
IPI00221306.2	4170 MCL1	K.RPAVLP	0.463105648	0.88 T163	1.03
IPI00221306.2	4170 MCL1	K.RPAVLP	0.751811379	0.72 S150	1.03
IPI00221306.2	4170 MCL1	K.RPAVLP	0.530774648	0.98 T154	1.03
IPI00221325.3	5903 RANBP2	K.S*GSSF	0.751811379	0.94 S1447	1.12
IPI00221325.3	5903 RANBP2	K.DSLITP	0.829549043	0.88 S2454	0.99
IPI00221325.3	5903 RANBP2	K.SGSSFV	0.932027377	0.98 S1456	0.92
IPI00221325.3	5903 RANBP2	R.EDALDC	0.853966795	0.96 S2251	0.86
IPI00221325.3	5903 RANBP2	K.NHETDC	0.463105648	0.88 S1160	1.01
IPI00221325.3	5903 RANBP2	R.LLLDIPL	0.113558743	0.96 T2153	0.89
IPI00221325.3	5903 RANBP2	K.NHETDC	0.604563646	0.88 S1160	0.9
IPI00221325.3	5903 RANBP2	K.AVVS*PI	0.831562154	1 S2510	0.98
IPI00221325.3	5903 RANBP2	K.VGEDEL	0.346340474	0.96 S2900	0.95
IPI00221394.7	1736 DKC1	R.KRES*E	0.777986561	0.62 S451	0.78
IPI00221394.7	1736 DKC1	R.KRES*E	0.401648339	1 S451	1.12
IPI00221394.7	1736 DKC1	R.KS*LPEE	0.834430989	0.96 S21	0.95
IPI00233796.2	114876 OSBPL1A	R.SLS*RL	0.985805237	0.66 S490	1.05
IPI00236575.1	50618 ITS2	R.TVSPGS	0.214968943	0.92 S886	0.86
IPI00236575.1	50618 ITS2	R.T*VSPG	0.139636808	0.92 T881	0.86
IPI00236575.1	50618 ITS2	R.TVS*PG	0.401648339	0.94 S883	1.02
IPI00236575.1	50618 ITS2	R.TVSPGS	0.296993866	1 S888	1.02
IPI00237884.2	9590 AKAP12	R.EGVTPV	0.27446972	0.98 S612	1.17
IPI00241886.2	23109 DDN	R.DAPTQF	0.214968943	0.92 S567	1.18
IPI00243221.2	4898 NRD1	R.RGS*LS	0.116581414	0.98 S94	1.25
IPI00247295.3	23345 SYNE1	R.GAVALS	0	0.52 S8261	0.15
IPI00247439.3	9748 SLK	R.RDSFIG	0.214968943	0.98 T193	1.17
IPI00247439.3	9748 SLK	R.RDS*FIG	0.214968943	0.98 S189	1.17
IPI00251559.8	56254 RNF20	R.SGSALL	0.296993866	0.96 S527	1.33
IPI00251559.8	56254 RNF20	R.SGSALL	0.296993866	0.96 S526	1.33
IPI00251559.8	56254 RNF20	K.ALVVPE	0.684201094	0.85 S138	1.07
IPI00253281.7	54869 EPS8L1	R.DRS*PA	0.004102604	0.96 S55	1.46
IPI00253323.3	65124 ANKRD57	R.DLVMGS	0.8197889	0.94 S212	0.98
IPI00254471.5	55734 ZFP64	R.IHS*DEF	0.519333664	0.81 S172	0.98
IPI00255778.6		R.QLPALD	0.530774648	0.86 S516	0.95
IPI00257508.4	1808 DPYSL2	R.GLYDGF	0.024009318	0.85 T509	1.09
IPI00257731.1	7991 TUSC3	R.IICLVGL	0.001001611	0.59 S327	1.08
IPI00259958.3		K.AMMISIC	0.03637398	0.86 S186	1.22
IPI00260388.3	5253 PHF2	K.SRES*A	0.905247537	0.86 S537	0.88
IPI00260388.3	5253 PHF2	K.FSFSFS	0.530774648	0.96 S640	1.02

IPI00260388.3	5253 PHF2	R.ESAS*P'	0.985337202	0.88 S539	0.93
IPI00260388.3	5253 PHF2	K.DSDYVY	0.684201094	0.96 S882	0.96
IPI00288889.3	5616 PRKY	R.T*WTLC	0.300293467	0.96 T201	0.77
IPI00288941.1	57727 NCOA5	R.LMRSS*	0.623338592	0.94 S378	0.94
IPI00288941.1	57727 NCOA5	R.S*STDSI	0.139636808	0.94 S377	1.14
IPI00288941.1	57727 NCOA5	R.SST*DSI	0.139636808	0.94 T379	1.14
IPI00289034.2	84444 DOT1L	K.S*PPKTL	0.726073545	0.86 S1213	1.01
IPI00289034.2	84444 DOT1L	K.IATISLE'	0.938173728	0.94 S1213	0.98
IPI00289034.2	84444 DOT1L	K.GPEAAC	0.040276449	0.92 S1349	1.15
IPI00289034.2	84444 DOT1L	K.KNQ TAL	0.296993866	0.96 S448	0.98
IPI00289034.2	84444 DOT1L	K.LSGLAA	0.181528891	1 S775	1.12
IPI00289082.2	5782 PTPN12	R.TPESFV	0.001613065	0.94 T693	1.16
IPI00289082.2	5782 PTPN12	R.TPESFV	0.001613065	0.94 S689	1.16
IPI00289082.2	5782 PTPN12	K.IADGVN	0.049260986	0.85 S332	0.98
IPI00289082.2	5782 PTPN12	R.KTVSLT	0.181528891	1 S588	1.12
IPI00289357.4	8408 ULK1	R.NPLPPIL	0.006469654	0.67 S623	1.29
IPI00289357.4	8408 ULK1	K.TPS*SQI	0.296927077	0.76 S638	0.91
IPI00289432.3	148398 SAMD11	R.ELGTGE	0.530774648	0.98 S673	1.08
IPI00289491.3	22794 CASC3	R.RLEQTS	0.116581414	0.96 S363	1.11
IPI00289491.3	22794 CASC3	R.RLEQTS	0.253322457	0.85 S358	1.12
IPI00289491.3	22794 CASC3	R.RLEQTS	0.253322457	0.85 S363	1.12
IPI00289547.3	3727 JUND	R.LAALKD	0.703604632	0.58 S255	0.82
IPI00289547.3	3727 JUND	R.LAALKD	0.021601024	0.83 S255	1.12
IPI00289547.3	3727 JUND	R.LAALKD	0.023342673	0.88 S259	0.6
IPI00289608.3	8943 AP3D1	K.KAEDLD	0.32093792	0.88 T787	1.12
IPI00289776.2	23077 MYCBP2	R.HEDEQ/	0.756144089	0.96 S2652	0.99
IPI00289776.2	23077 MYCBP2	R.HEDEQ/	0.756144089	0.96 T2645	0.99
IPI00289776.2	23077 MYCBP2	R.SLS*PNI	0.961160996	1 S2751	0.95
IPI00289776.2	23077 MYCBP2	R.RVNS*G	0.233505398	0.59 S3468	0.7
IPI00289776.2	23077 MYCBP2	R.HEDEQ/	0.684201094	0.9 T2645	1.08
IPI00289776.2	23077 MYCBP2	R.VNS*GD	0.643675939	0.94 S3468	1.01
IPI00289776.2	23077 MYCBP2	R.S*LSPNI	0.932027377	1 S2749	0.91
IPI00289776.2	23077 MYCBP2	R.SKS*DS'	0.9240167	0.92 S2833	0.84
IPI00289819.4	3482 IGF2R	K.LVSFHD	0.726073545	1 S2484	1
IPI00289849.6	114794 LRRC62	K.YIEKGS'	0.006469654	0.94 S668	1.57
IPI00289870.3	5099 PCDH7	K.SSSPLP	0.373234869	0.94 S964	0.9
IPI00289870.3	5099 PCDH7	K.TGEYKP	0.888156101	0.98 S1188	0.96
IPI00289870.3	5099 PCDH7	K.SSS*PLF	0.530774648	0.96 S1000	0.93
IPI00289870.3	5099 PCDH7	K.S*SSPLF	0.37570848	0.96 S951	0.82
IPI00290094.3	6433 SFRS8	K.SGVSS*	0.566916624	0.96 S283	1.14
IPI00290142.5	1503 CTPS	R.DTYSDF	0.152571688	0.59 S571	1.48
IPI00290142.5	1503 CTPS	R.DTYSDF	0.152571688	0.59 S574	1.48
IPI00290142.5	1503 CTPS	R.SGSSS*	0.489032481	0.88 S575	0.92
IPI00290142.5	1503 CTPS	R.SGSS*S	0.489032481	0.88 S574	0.92
IPI00290184.2	4234 METTL1	R.AHS*NP	0.877341226	0.86 S27	0.94
IPI00290204.1	6625 SNRP70	R.EFEVY*(	0.026666866	0.94 Y126	1.24
IPI00290204.1	6625 SNRP70	R.DDTS*R	0.106353987	0.94 S217	1.36
IPI00290272.2	23649 POLA2	R.S*PHQL	0.029596689	0.96 S141	1.26
IPI00290272.2	23649 POLA2	R.SPHQLL	0.011294655	0.96 S147	1.38
IPI00290272.2	23649 POLA2	R.S*PHQL	0.012603917	1 S141	1.4
IPI00290314.7	56897 WRNIP1	K.RPAAAA	0.01942062	0.98 S153	1.39

IPI00290314.7	56897	WRNIP1	R.RLS*ES	0.080258071	0.98	S75	1.24
IPI00290337.7	2059	EPS8	R.APAPAP	0.510604444	0.96	T223	0.86
IPI00290337.7	2059	EPS8	R.KGPGE	0.32093792	1	T317	1.09
IPI00290337.7	2059	EPS8	R.RKS*QM	0.99978897	0.76	S685	0.44
IPI00290410.3	30836	DNTTIP2	K.VT*PTKE	0.32093792	0.96	T129	1.22
IPI00290410.3	30836	DNTTIP2	K.VTPTKE	0.422621578	0.83	T136	0.91
IPI00290410.3	30836	DNTTIP2	K.VTPTKE	0.214968943	0.98	Y135	1.16
IPI00290410.3	30836	DNTTIP2	K.VT*PTKE	0.214968943	0.98	T129	1.16
IPI00290410.3	30836	DNTTIP2	K.VTPT*KE	0.936890791	0.98	T131	1.01
IPI00290410.3	30836	DNTTIP2	K.ESYTEE	0.40669332	0.01	S141	0.03
IPI00290460.3	8666	EIF3S4	K.GIPLATC	0.27446972	0.28	T41	0.54
IPI00290460.3	8666	EIF3S4	K.GIPLATC	0.296993866	0.98	S42	1.12
IPI00290562.4	4783	NFIL3	K.GPIHS*F	0.961160996	0.98	S301	0.97
IPI00290562.4	4783	NFIL3	R.GSYTAS	0.656107164	0.94	S258	0.93
IPI00290562.4	4783	NFIL3	K.LSS*PID	0.604563646	0.96	S353	1.04
IPI00290837.1	10517	FBXW10	R.DLSS*G	0.072926818	0.64	S269	1.09
IPI00290952.6	23076	RRP1B	K.KTDKS*I	0.136867371	0.71	S702	0.83
IPI00290952.6	23076	RRP1B	R.GS*PTG	0.809048575	0.96	S513	0.93
IPI00290952.6	23076	RRP1B	K.SILVS*P	0.604820989	0.85	S706	1.12
IPI00290952.6	23076	RRP1B	K.TPTSSP	0.510604444	0.98	S736	0.72
IPI00290952.6	23076	RRP1B	K.TPTSS*F	0.431601138	0.94	S732	1.15
IPI00290952.6	23076	RRP1B	K.TPTSS*F	0.49616549	0.96	S732	1.12
IPI00290952.6	23076	RRP1B	K.VGDGDI	0.12765804	0.98	S245	1.19
IPI00290952.6	23076	RRP1B	R.GS*PTG	0.726073545	1	S513	1.03
IPI00291003.5	115752	DIS3L	K.IPNTELI	0.684201094	0.96	S906	1.01
IPI00291016.7	4731	NDUFV3	R.KVAS*P	0.463105648	0.92	S98	0.94
IPI00291032.6	92521	SPECC1	K.ASL*PI	0.726073545	0.96	S325	0.91
IPI00291032.6	92521	SPECC1	K.ASLSPD	0.296993866	0.88	S340	0.94
IPI00291032.6	92521	SPECC1	K.ASLSPD	0.296993866	0.88	S344	0.94
IPI00291032.6	92521	SPECC1	K.ASLSPD	0.296993866	0.88	S347	0.94
IPI00291205.4	5139	PDE3A	R.RTS*LPC	0.346340474	0.92	S312	1.13
IPI00291205.4	5139	PDE3A	R.RVSST*)	0.726073545	0.98	T440	1.05
IPI00291205.4	5139	PDE3A	K.SRSFTS	0.928728317	0.72	Y497	1.09
IPI00291205.4	5139	PDE3A	R.RVSSTV	0.643675939	0.96	T443	1
IPI00291205.4	5139	PDE3A	R.VNPVTS	0.777986561	0.9	S408	1
IPI00291205.4	5139	PDE3A	K.IS*PLSS	0.726073545	0.94	S520	1.02
IPI00291427.2	91768	CABLES1	R.RNT*ID	0.431601138	0.04	T415	0.34
IPI00291510.3	3615	IMPDH2	R.LVGIISS	0.096924105	0.94	S160	1.28
IPI00291510.3	3615	IMPDH2	K.KYEQGF	0.197661257	0.98	S122	1.21
IPI00291711.4	26030	PLEKHG3	K.GPLS*PI	0.106353987	0.98	S76	1.29
IPI00291711.4	26030	PLEKHG3	R.RRES*L	0.296993866	0.98	S741	1.07
IPI00291755.5	23225	NUP210	R.KAS*PP	0.966676636	0.83	S1874	0.97
IPI00291755.5	23225	NUP210	R.KAS*PP	0.966676636	0.83	S1874	0.97
IPI00291916.4	55023	PHIP	R.GS*ISST	0.773594539	0.92	S674	0.92
IPI00291916.4	55023	PHIP	R.AQS*YD	0.726073545	0.94	S1315	1.04
IPI00291916.4	55023	PHIP	R.GSIS*ST	0.530774648	1	S676	1.11
IPI00291916.4	55023	PHIP	R.GSISST	0.32093792	1	S679	1.11
IPI00291916.4	55023	PHIP	R.GSISST	0.32093792	1	S683	1.11
IPI00291946.7	9100	USP10	R.IEFGVDI	0.12765804	0.83	T70	1.26
IPI00291946.7	9100	USP10	R.IEFGVDI	0.49616549	0.62	S68	0.46
IPI00291946.7	9100	USP10	R.TPSYSI	0.990601784	0.98	T95	0.9

IPI00291946.7	9100 USP10	K.SWASLF	0.985805237	0.94	S355	0.88
IPI00291946.7	9100 USP10	K.Y*SPPAI	0.152571688	0.96	Y364	1.2
IPI00291946.7	9100 USP10	K.YS*PPAI	0.152571688	0.96	S365	1.2
IPI00292326.4	6674 SPAG1	K.S*GRKH	0	0.71	S354	0.04
IPI00292387.5	9221 NOLC1	K.LQTPNT	0.166517367	0.96	T610	1.22
IPI00292387.5	9221 NOLC1	K.LQT*PN	0.166517367	0.69	T607	1.32
IPI00292387.5	9221 NOLC1	K.IKLQT*P	0.684201094	0.27	T607	0.34
IPI00292387.5	9221 NOLC1	R.GGSISV	0.604563646	0.77	S698	0.96
IPI00292537.2	4790 NFKB1	K.TTSQAH	0.001613065	0.69	S904	1.32
IPI00292537.2	4790 NFKB1	K.TTSQAH	0.007240509	0.9	S908	1.59
IPI00292686.3	4488 MSX2	R.EAHS*P	0.373234869	0.9	S91	1.1
IPI00292809.5	4139 MARK1	R.VPAASP	0.139636808	0.96	S573	1.13
IPI00292809.5	4139 MARK1	R.VPAAS*I	0.139636808	0.96	S566	1.13
IPI00292809.5	4139 MARK1	R.S*TFHG	0.373234869	0.96	S590	1.15
IPI00292809.5	4139 MARK1	K.LDT*FCC	0.604563646	0.98	T193	1.13
IPI00292953.6	26064 RAI14	K.ISQDAD	0.373234869	0.96	T254	1.03
IPI00292953.6	26064 RAI14	K.ISQDAD	0.27446972	0.96	T252	1.03
IPI00292953.6	26064 RAI14	K.LGLVS*F	0.181528891	0.72	S515	1.02
IPI00292953.6	26064 RAI14	K.LGLVSP	0.181528891	0.58	S518	0.87
IPI00292953.6	26064 RAI14	K.SSPSVL	0.726073545	1	S422	0.99
IPI00292953.6	26064 RAI14	K.S*SPSVI	0.296993866	1	S414	1.03
IPI00292975.4	54439 RBM27	R.NLMGSE	0.116581414	0.92	T477	1.18
IPI00292975.4	54439 RBM27	K.MIYSSSI	0.506261018	0.88	T796	0.96
IPI00292975.4	54439 RBM27	R.NLMGSE	0.214968943	0.96	S475	1.15
IPI00292975.4	54439 RBM27	R.NLMGSE	0.214968943	0.96	S474	1.15
IPI00292975.4	54439 RBM27	R.NLMGSE	0.27446972	1	S472	1.12
IPI00292975.4	54439 RBM27	R.LQLGT*I	0.197661257	1	T447	1.21
IPI00292988.6	25970 SH2B1	R.ASGSLS	0.116581414	0.96	S88	1.2
IPI00293086.2	11244 ZHX1	R.RKSTT*I	0.088241621	0.81	T9	1.04
IPI00293188.5	55719 C10orf6	R.SQSSDY	0.066203153	0.98	T657	1.12
IPI00293188.5	55719 C10orf6	R.SQSS*D	0.066203153	0.98	S654	1.12
IPI00293331.3	10940 POP1	R.VQAYEE	0.338692366	0.72	S730	0.63
IPI00293464.5	1642 DDB1	R.SLS*TTM	0.225432817	0.64	S645	0.77
IPI00293616.3	8653 DDX3Y	R.GCHLLV	0.383343176	0.64	T321	0.74
IPI00293654.5	55132 LARP2	K.LFDVSE	0.214968943	0.61	S593	0.73
IPI00293884.5	9493 KIF23	K.KGS*QT	0.883273668	0.79	S18	1.03
IPI00293884.5	9493 KIF23	R.S*VSPSI	0.214968943	0.53	S682	0.96
IPI00293884.5	9493 KIF23	K.KGSQT*	0.523719116	0.94	T20	1.05
IPI00293884.5	9493 KIF23	K.IPTYNT*	0.373234869	0.98	T738	1.02
IPI00293884.5	9493 KIF23	R.SVS*PSI	0.773594539	0.9	S684	1.08
IPI00293884.5	9493 KIF23	R.RSST*V	0.096924105	0.98	T809	1.29
IPI00293884.5	9493 KIF23	K.YMLTHC	0.001128958	0.92	S867	1.17
IPI00293884.5	9493 KIF23	R.RS*STV	0.27446972	0.96	S911	1.13
IPI00293884.5	9493 KIF23	R.SVSPS*I	0.296993866	0.12	S686	0.44
IPI00293884.5	9493 KIF23	R.SVS*PSI	0.296993866	1	S684	1.11
IPI00293897.2	55789 DEPDC1B	K.RHS*IAI	0.530774648	0.83	S160	1.02
IPI00294065.6	9950 GOLGA5	R.KKS*EPI	0.166517367	0.9	S116	1.32
IPI00294211.2	9785 DHX38	R.VET*PSI	0.108195276	0.94	T117	0.85
IPI00294391.2	10602 CDC42EP	K.LPRLS*C	0.139636808	0.94	S144	1.12
IPI00294395.1	732 C8B	R.DFGTHY	0.000892152	0.86	T346	0.54
IPI00294486.1	1852 DUSP9	K.S*NISPN	0.643675939	0.94	S325	1.02

IPI00294486.1	1852 DUSP9	K.SNIS*PN	0.401648339	0.94 S328	1.02
IPI00294575.7	996 CDC27	R.EVTPILA	0.166517367	0.94 T366	1.12
IPI00294728.1	1657 DMXL1	K.ILS*PFS	0.501931941	0.96 S924	0.89
IPI00294728.1	1657 DMXL1	K.LSEAVW	0.684201094	0.94 S918	1.09
IPI00294739.1	25939 SAMHD1	R.NFTKPC	0.296993866	0.96 T592	1.22
IPI00294739.1	25939 SAMHD1	R.NFTKPC	0.116581414	0.03 T592	0.17
IPI00294742.5	51574 LARP7	R.KRSS*S	0.942907226	0.96 S306	0.94
IPI00294742.5	51574 LARP7	R.KRS*SS	0.942907226	0.96 S305	0.94
IPI00294742.5	51574 LARP7	R.KRSSSE	0.942907226	0.96 S312	0.94
IPI00294744.6	5073 PARN	R.NNS*FT	0.000181407	0.77 S557	1.82
IPI00294926.5	23466 CBX6	R.ISDVHF	0.726073545	0.07 S107	0.6
IPI00295004.3	57679 ALS2	K.SDS*RS	0.643675939	0.83 S1460	1.19
IPI00295004.3	57679 ALS2	R.S*ESPEI	0.181528891	0.92 S1462	1.2
IPI00295004.3	57679 ALS2	R.SES*PEI	0.32093792	0.92 S1464	1.22
IPI00295502.3	58525 WIZ	K.TPLALA	0.233505398	1 T998	1.14
IPI00295502.3	58525 WIZ	K.NPEDKS	0.73460299	0.98 S1006	0.92
IPI00295502.3	58525 WIZ	R.AADGGE	0.431601138	0.96 S1517	1.04
IPI00295502.3	58525 WIZ	R.SPS*DLI	0.401648339	0.98 S1129	1.1
IPI00295502.3	58525 WIZ	R.S*PSDLI	0.32093792	0.98 S1127	1.13
IPI00295502.3	58525 WIZ	K.NPEDKS	0.604563646	0.98 S1012	1
IPI00295502.3	58525 WIZ	R.SPSDLH	0.463105648	1 S1134	1.09
IPI00295502.3	58525 WIZ	K.SPQLSL	0.296993866	1 S1012	1.14
IPI00295502.3	58525 WIZ	K.TPLALA	0.166517367	1 S996	1.13
IPI00295624.2	1627 DBN1	R.MAPTPII	0.431601138	0.94 T348	1.19
IPI00295624.2	1627 DBN1	R.MAPTPII	0.431601138	0.94 S339	1.19
IPI00295624.2	1627 DBN1	R.MAPTPII	0.373234869	0.98 T337	1.04
IPI00295624.2	1627 DBN1	R.MAPTPII	0.166517367	0.86 T337	0.99
IPI00295624.2	1627 DBN1	R.MAPTPII	0.166517367	0.86 T337	0.99
IPI00295624.2	1627 DBN1	R.LSS*PVI	0.27446972	1 S144	1.13
IPI00295624.2	1627 DBN1	R.MAPTPII	0.346340474	1 S341	1.08
IPI00296078.4	7227 TRPS1	K.AGFNYE	0.296993866	0.96 S99	1.11
IPI00296078.4	7227 TRPS1	R.RGS*GV	0.401648339	1 S892	1.01
IPI00296078.4	7227 TRPS1	R.NMLAFS	0.604563646	0.96 S115	1.07
IPI00296078.4	7227 TRPS1	K.ATEETG	0.756570768	0.94 S178	1.13
IPI00296078.4	7227 TRPS1	R.GSPS*Y	0.49616549	0.92 S805	0.98
IPI00296078.4	7227 TRPS1	R.GSPSY*	0.49616549	0.92 Y806	0.98
IPI00296078.4	7227 TRPS1	K.HPNY*S	0.822525206	1 Y1080	1.03
IPI00296078.4	7227 TRPS1	K.AGFNYE	0.463105648	0.98 S90	1.05
IPI00296078.4	7227 TRPS1	K.AGFNYE	0.401648339	0.98 S92	1.05
IPI00296078.4	7227 TRPS1	K.TDLLVN	0.463105648	0.9 S216	1.04
IPI00296078.4	7227 TRPS1	K.HPNYS*	0.822525206	1 S1081	0.94
IPI00296078.4	7227 TRPS1	R.GADILR	0.872720802	0.98 T807	0.99
IPI00296078.4	7227 TRPS1	R.GADILR	0.872720802	0.98 Y806	0.99
IPI00296078.4	7227 TRPS1	K.SKTDLL	0.957149097	0.96 S216	0.9
IPI00296318.6	79733 E2F8	K.WTGPEI	0.49616549	0.86 S357	1.25
IPI00296318.6	79733 E2F8	K.WTGPEI	0.026666866	0.94 S355	1.19
IPI00296318.6	79733 E2F8	K.WTGPEI	0.026666866	0.94 S358	1.19
IPI00296432.1	55677 IWS1	R.HQAS*D	0.873506301	0.92 S235	0.91
IPI00296485.3	55201 MAP1S	R.RSAS*P	0.106353987	0.83 S731	1.17
IPI00296485.3	55201 MAP1S	R.RS*ASP	0.106353987	0.83 S729	1.17
IPI00296485.3	55201 MAP1S	R.S*ASPH	0.214968943	0.88 S729	1.24

IPI00296485.3	55201	MAP1S	R.SAS*PH	0.214968943	0.88	S731	1.24
IPI00296485.3	55201	MAP1S	K.AVPMAF	0.253322457	1	S759	1.17
IPI00296485.3	55201	MAP1S	K.AVPMAF	0.253322457	1	S762	1.17
IPI00297139.1	23263	MCF2L	R.ALEQSC	0.096924105	0.86	S933	1.49
IPI00297139.1	23263	MCF2L	R.ALEQSC	0.554790037	0.69	S943	0.71
IPI00297211.1	8467	SMARCA5	K.GGPEG\	0.233505398	0.96	S66	1.12
IPI00297211.1	8467	SMARCA5	K.GGPEG\	0.530774648	0.94	S66	0.96
IPI00297234.1	672	BRCA1	K.KLESS*E	0.116581414	0.88	S1212	1.31
IPI00297234.1	672	BRCA1	K.VVDVEE	0.296993866	0.79	T1509	1.06
IPI00297234.1	672	BRCA1	K.KLES*SE	0.401648339	0.92	S1211	1.04
IPI00297234.1	672	BRCA1	K.KLESSE	0.401648339	0.92	S1176	1.04
IPI00297254.4	23094	SIPA1L3	K.RPVS*FI	0.152571688	0.88	S1135	1
IPI00297322.3	84364	ZNF289	K.YKDNPF	0.004600913	0.69	S368	1.09
IPI00297396.4	57455	REXO1	K.ETAVQC	0.604563646	0.92	S358	1.01
IPI00297723.1	10180	RBM6	R.EGETQC	0.643675939	0.98	S362	0.94
IPI00297851.1	1105	CHD1	R.S*PFEH!	0.604563646	0.98	S1689	1.06
IPI00297851.1	1105	CHD1	R.ASSSGF	0.233505398	0.98	S1677	1.16
IPI00297851.1	1105	CHD1	K.S*SPSIL	0.414622005	0.86	S89	1.01
IPI00297851.1	1105	CHD1	K.SS*PSIL	0.414622005	0.86	S90	1.01
IPI00297900.4	1662	DDX10	K.TANS*P(	0.604563646	0.96	S7	0.99
IPI00298612.1	10295	BCKDK	R.STSAT*I	0.907673183	0.94	T35	1.17
IPI00298612.1	10295	BCKDK	R.STS*ATI	0.907673183	0.94	S33	1.17
IPI00298696.1	6949	TCOF1	R.S*PAGP.	0.116581414	0.92	S967	1.27
IPI00298696.1	6949	TCOF1	R.SPAGPA	0.088241621	0.98	T983	1.26
IPI00298696.1	6949	TCOF1	K.TSQVGA	0.233505398	1	S381	1.14
IPI00298696.1	6949	TCOF1	K.TSQVGA	0.152571688	1	S381	1.12
IPI00298696.1	6949	TCOF1	R.SPAGPA	0.106353987	1	S982	1.32
IPI00298696.1	6949	TCOF1	R.AALAPA	0.152571688	1	S906	1.23
IPI00298696.1	6949	TCOF1	K.TSQVGA	0.197661257	1	S298	1.17
IPI00298696.1	6949	TCOF1	K.SLGNILC	0.373234869	1	S583	1.11
IPI00298696.1	6949	TCOF1	K.TVANLL!	0.116581414	1	S156	1.22
IPI00298731.2	5514	PPP1R10	K.YKPLNT	0.643675939	0.98	T268	1.04
IPI00298731.2	5514	PPP1R10	K.TSTEPS	0.072926818	0.83	T332	1.08
IPI00298731.2	5514	PPP1R10	K.GPQGPC	0.834430989	0.88	S591	0.82
IPI00298731.2	5514	PPP1R10	K.GPQGPC	0.966004444	0.88	S594	0.82
IPI00298731.2	5514	PPP1R10	K.TSTEPS	0.604563646	0.96	S337	0.96
IPI00298731.2	5514	PPP1R10	K.TSTEPS	0.214968943	0.98	S331	1.03
IPI00298731.2	5514	PPP1R10	K.VLS*PT/	0.743182508	1	S313	1
IPI00298788.4	3609	ILF3	R.S*GGNS	0.878390339	0.88	S820	0.9
IPI00298788.4	3609	ILF3	R.SGGNS\	0.431601138	0.9	Y840	0.95
IPI00298788.4	3609	ILF3	K.VLQDMC	0.27446972	0.92	S477	1.03
IPI00298788.4	3609	ILF3	K.VLQDMC	0.152571688	0.98	S476	1.19
IPI00298788.4	3609	ILF3	R.DSSKGE	0.92716125	0.96	T486	0.88
IPI00298788.4	3609	ILF3	R.DSS*KG	0.604563646	0.96	S477	0.88
IPI00298788.4	3609	ILF3	K.VLQDMC	0.233505398	0.88	S476	1.13
IPI00298788.4	3609	ILF3	K.LFPDT*F	0.604563646	0.88	T596	0.96
IPI00298788.4	3609	ILF3	K.GEDS*A	0.49616549	0.9	S482	1.05
IPI00298788.4	3609	ILF3	K.GEDSAE	0.49616549	0.9	T486	1.05
IPI00298788.4	3609	ILF3	R.DS*SKG	0.726073545	0.94	S476	0.88
IPI00298788.4	3609	ILF3	K.GEDS*A	0.32093792	0.98	S482	1.04
IPI00298788.4	3609	ILF3	K.LFPDT*F	0.800118017	0.81	T596	0.93

IPI00298788.4	3609 ILF3	R.DSSKGE	0.373234869	1 S482	1.05
IPI00298788.4	3609 ILF3	R.DSSKGE	0.373234869	1 S482	1.06
IPI00299063.1	6786 STIM1	R.SHS*PS	0.37570848	0.79 S618	0.81
IPI00299214.5	7083 TK1	R.KLFAPQ	0.566916624	0.98 S273	1.01
IPI00299214.5	7083 TK1	K.LFAPQQ	0.726073545	1 S273	1
IPI00299254.3	9669 EIF5B	K.NKPGPN	0.373234869	0.94 S214	1.02
IPI00299254.3	9669 EIF5B	K.LLQAQC	0.346340474	1 S438	1.05
IPI00299254.3	9669 EIF5B	K.LLQAQC	0.346340474	1 S435	1.05
IPI00299254.3	9669 EIF5B	K.VEMYS*	0.373234869	1 S135	1.11
IPI00299254.3	9669 EIF5B	K.VEMY*S	0.373234869	1 Y134	1.11
IPI00299254.3	9669 EIF5B	K.VEMYS*	0.463105648	0.98 S135	1.06
IPI00299254.3	9669 EIF5B	K.VEMY*S	0.463105648	0.98 Y134	1.06
IPI00299263.5	26286 ARFGAP3	R.SVISHS\	0.27446972	0.96 S331	0.99
IPI00299333.1	10736 SIX2	R.EWYAH	0.32093792	0.9 S150	0.85
IPI00299417.3	8563 THOC5	R.RPT*LG\	0.166517367	0.88 T328	1.05
IPI00299506.7	2673 GFPT1	R.VDS*TT	0.253322457	1 S243	1.17
IPI00299507.5	23397 NCAPH	R.KAPLNIF	0.566916624	0.98 T49	1.09
IPI00299524.1	9918 NCAPD2	R.YQPLAS	0.849757871	0.62 T1339	0.79
IPI00299526.6	23512 SUZ12	R.NS*ESLI	0.463105648	0.92 S382	1.06
IPI00299526.6	23512 SUZ12	K.ASMSEF	0.795669231	0.98 S546	1.08
IPI00299526.6	23512 SUZ12	R.LYFHSD	0.643675939	0.94 S583	1.04
IPI00299763.1	10451 VAV3	K.WLEQFE	0.096924105	0.55 S511	0.91
IPI00299763.1	10451 VAV3	R.TPIALAT	0.566916624	0.96 T131	1.07
IPI00299763.1	10451 VAV3	R.TPIALAT	0.566916624	0.96 S134	1.07
IPI00299763.1	10451 VAV3	R.NYSGT*	0.01942062	0.94 T606	1.35
IPI00299890.4	7581 ZNF33A	R.TLCDSS	0.756144089	0.96 S267	1
IPI00300222.5	56987 BBX	K.NIPSIFN	0.044561326	0.76 S822	1.21
IPI00300222.5	56987 BBX	K.FNSLPQ	0.530774648	0.88 S704	1.03
IPI00300222.5	56987 BBX	K.LWAFPS	0.072926818	0.9 S178	1.16
IPI00300222.5	56987 BBX	K.KFNSLP	0.32093792	1 S704	1.12
IPI00300222.5	56987 BBX	R.TADGR\	0.296993866	0.98 T849	1.1
IPI00300222.5	56987 BBX	R.TADGR\	0.296993866	0.98 S844	1.1
IPI00300789.1	27067 STAU2	K.VISGTTL	0.643675939	0.96 S440	1.08
IPI00300789.1	27067 STAU2	K.GILHLS*	0.572822052	0.71 S416	0.57
IPI00301034.2	65220 NADK	K.S*RSLS/	0.431601138	0.96 S44	1.22
IPI00301034.2	65220 NADK	K.SRS*LS/	0.431601138	0.96 S46	1.22
IPI00301034.2	65220 NADK	R.S*LHGP	0.021601024	0.98 S64	1.38
IPI00301041.2	55193 PBRM1	R.ATSPSS	0.9240167	0.88 S14	0.72
IPI00301041.2	55193 PBRM1	R.ATSPSS	0.12765804	0.98 S13	1.21
IPI00301041.2	55193 PBRM1	R.ATSPSS	0.054409842	0.98 S16	1.21
IPI00301041.2	55193 PBRM1	R.ATSPSS	0.296993866	0.98 S25	1.24
IPI00301041.2	55193 PBRM1	R.RATS*P	0.214968943	0.98 S10	1.12
IPI00301041.2	55193 PBRM1	R.ATS*PS	0.346340474	0.98 S10	1.06
IPI00301041.2	55193 PBRM1	R.AT*SPS	0.296993866	0.98 T9	1.12
IPI00301263.2	790 CAD	R.IHRAS*E	0.002387219	0.94 S1859	0.55
IPI00301293.1		K.ILCKS*P	0.777986561	0.96 S1861	1.01
IPI00301293.1		K.LDLAGT	0.029596689	0.81 S1207	0.95
IPI00301293.1		K.LDLLGN	0.604563646	0.94 S1937	0.97
IPI00301293.1		K.IACKS*P	0.726073545	0.85 S2105	0.92
IPI00301293.1		K.TPVQYS	0.956313787	0.98 S357	1.11
IPI00301293.1		K.LDLPGN	0.566916624	0.92 S2299	0.98

IPI00301293.1		R.RPQT*P	0.952395062	0.92	T1335	0.97
IPI00301293.1		K.AMHTPK	0.643675939	0.96	T1797	0.99
IPI00301293.1		R.RPQTPK	8.51E-13	0.9	T1347	0.9
IPI00301293.1		K.IPCKS*P	0.296993866	0.86	S2588	0.8
IPI00301293.1		K.IACKSPF	0.868109485	0.98	S1136	0.99
IPI00301293.1		K.IACKS*P	0.868109485	0.98	S1131	0.99
IPI00301293.1		K.AQSLVIF	0.566916624	1	S584	1.01
IPI00301311.1	6418 SET	K.ELNSNH	0.253322457	0.98	T23	1.15
IPI00301311.1	6418 SET	K.ELNSNH	0.233505398	0.98	S24	1.15
IPI00301311.1	6418 SET	K.ELNS*NI	0.233505398	0.98	S15	1.15
IPI00301311.1	6418 SET	K.ELNSNH	0.373234869	0.94	T23	1.11
IPI00301421.5	51530 ZC3HC1	R.TRSWDI	0.49616549	0.96	S359	1.08
IPI00301421.5	51530 ZC3HC1	K.NWGAVI	0.431601138	0.81	T28	1.17
IPI00301421.5	51530 ZC3HC1	K.DTSATS	0.800289022	0.96	S62	0.91
IPI00301421.5	51530 ZC3HC1	R.TRSWDI	0.088241621	1	S359	1.25
IPI00301421.5	51530 ZC3HC1	R.TRSWDI	0.072926818	1	S358	1.25
IPI00301421.5	51530 ZC3HC1	R.SQDATF	0.088241621	0.85	S338	0.9
IPI00301421.5	51530 ZC3HC1	R.SMGTFI	0.604563646	0.9	T387	1.02
IPI00301421.5	51530 ZC3HC1	R.SMGTFI	0.530774648	1	S394	1.04
IPI00301421.5	51530 ZC3HC1	K.DTSATS	0.849082022	0.9	S58	0.9
IPI00301421.5	51530 ZC3HC1	R.LPLVPEI	0.32093792	0.98	S321	1.05
IPI00301421.5	51530 ZC3HC1	R.SWDSSI	0.684519102	0.76	S370	0.92
IPI00301421.5	51530 ZC3HC1	R.T*RSWD	0.139636808	1	T352	1.19
IPI00301421.5	51530 ZC3HC1	R.TRS*WD	0.139636808	1	S354	1.19
IPI00301421.5	51530 ZC3HC1	R.SMGTFI	0.27446972	1	S395	1.14
IPI00301421.5	51530 ZC3HC1	K.NWGAVI	0.214968943	1	S24	1.15
IPI00301421.5	51530 ZC3HC1	R.SQDATF	0.604563646	1	S344	1.03
IPI00301421.5	51530 ZC3HC1	R.SMGTFI	0.463105648	1	S395	1.04
IPI00301465.2	55355 DKFZp762	R.VTPLPS	0.060044376	0.83	S185	1.23
IPI00301465.2	55355 DKFZp762	K.WLIS*PV	0.831562154	0.98	S412	1.01
IPI00301465.2	55355 DKFZp762	R.GGPAS*	0.197661257	0.98	S473	1.08
IPI00301503.8	6434 SFRS10	R.RSPS*P	0.401648339	0.94	S266	1.15
IPI00301609.7	91754 NEK9	K.VASEAP	0.463105648	0.98	S869	1.06
IPI00301609.7	91754 NEK9	K.VASEAP	0.401648339	0.98	S868	1.06
IPI00301719.1	51095 TRNT1	K.VGIS*SC	0.463105648	1	S379	1.09
IPI00301719.1	51095 TRNT1	K.VGISS*C	0.253322457	1	S380	1.09
IPI00301870.2	55657 ZNF692	R.LLPS*PV	0.756144089	0.98	S186	1.08
IPI00301936.3	1994 ELAVL1	K.NVALLSI	0.684201094	1	S202	1.04
IPI00301987.5	54468 FLJ20323	R.GFSQYC	0.214968943	0.96	S766	0.98
IPI00302133.2	56302 TRPV5	K.RILES*P	0.152571688	1	S47	1.21
IPI00302146.4	23 ABCF1	K.LSVPTSI	0.346340474	0.92	S109	1.03
IPI00302146.4	23 ABCF1	K.QQPPEFI	0.873506301	0.9	S22	1.25
IPI00302146.4	23 ABCF1	K.KLS*VP1	0.401648339	0.62	S105	0.92
IPI00302146.4	23 ABCF1	K.KLSVPTI	0.040276449	1	T108	1.24
IPI00302146.4	23 ABCF1	K.KLSVPTI	0.253322457	0.98	T108	1.05
IPI00302146.4	23 ABCF1	K.KLSVPTI	0.233505398	1	S109	1.11
IPI00302146.4	23 ABCF1	K.LSVPT*SI	0.139636808	1	T108	1.19
IPI00302146.4	23 ABCF1	K.KLS*VP1	0.27446972	1	S105	1.12
IPI00302146.4	23 ABCF1	K.LSVPT*SI	0.373234869	1	T108	1.15
IPI00302156.4	26130 GAPVD1	K.SSSLEM	0.568296053	0.71	T469	1.3
IPI00302156.4	26130 GAPVD1	R.ELPPAA	0.080258071	0.96	S976	1.22

IPI00302156.4	26130	GAPVD1	R.ELPPAA	0.139636808	0.98	S979	1.19
IPI00302156.4	26130	GAPVD1	R.DEALQN	0.72279082	0.77	S1105	0.99
IPI00302156.4	26130	GAPVD1	R.LQELES	0.684519102	0.94	S746	1.02
IPI00302156.4	26130	GAPVD1	R.LQELES	0.684519102	0.94	T606	1.02
IPI00302156.4	26130	GAPVD1	R.SRS*SD	0.044561326	0.98	S929	1.4
IPI00302594.2			R.RRAS*Q	0.769214181	0.92	S461	1.05
IPI00302594.2			R.SFELPP	0.530774648	0.94	S661	1.01
IPI00302594.2			R.RAS*QE	0.166517367	1	S461	1.04
IPI00302647.4	54862	CC2D1A	K.GPASTP	0.214968943	0.98	T206	1.19
IPI00302647.4	54862	CC2D1A	K.GPASTP	0.214968943	0.98	S208	1.19
IPI00302829.5	5925	RB1	K.ISEGLP1	0.005777772	0.94	T826	1.22
IPI00302829.5	5925	RB1	R.SPY*KFI	0.233505398	0.96	Y790	1.21
IPI00302829.5	5925	RB1	K.TLQTDS	0.296993866	0.9	T356	1.1
IPI00302829.5	5925	RB1	R.KSNLDE	0.106353987	0.9	T373	1.04
IPI00302829.5	5925	RB1	R.S*PYKFI	0.106353987	0.98	S788	1.26
IPI00302829.5	5925	RB1	R.KS*NLDI	0.106353987	0.98	S360	1.2
IPI00302829.5	5925	RB1	K.ISEGLP1	0.152571688	1	T821	1.18
IPI00302829.5	5925	RB1	R.IPGGNIY	0.139636808	0.61	S807	1.03
IPI00302829.5	5925	RB1	R.IPGGNIY	0.139636808	0.96	S807	1.21
IPI00303099.2	55143	CDCA8	R.LEVSMV	0.463105648	0.94	T189	1.02
IPI00303099.2	55143	CDCA8	R.IYNIS*G	0.643675939	0.94	S215	0.94
IPI00303099.2	55143	CDCA8	R.IYNISGN	0.933447376	0.98	S219	0.91
IPI00303343.5	58506	SR-A1	R.S*PFLKF	9.19E-11	0.67	S874	2.91
IPI00303343.5	58506	SR-A1	R.FDIYDPI	0.253322457	0.92	S239	0.89
IPI00303797.3	673	BRAF	R.WS*GSF	0.166517367	0.66	S605	1.09
IPI00303812.7	79886	C9orf82	K.SVNEILC	0.751731134	0.74	S312	1.03
IPI00303883.5	57590	WDFY1	K.IWDMTP	0.726073545	1	S365	1
IPI00303991.2	60686	C14orf93	R.HSLGLT	0.066203153	0.76	S285	1.05
IPI00304111.1	5595	MAPK3	R.IADPEHI	0.106353987	0.96	T202	1.21
IPI00304111.1	5595	MAPK3	R.IADPEHI	0.054409842	0.96	Y204	1.21
IPI00304235.1	4763	NF1	K.S*LLLTD	0.858914691	0.88	S2439	1.11
IPI00304235.1	4763	NF1	K.GSEGYL	0.080258071	0.94	S2494	1.17
IPI00304379.1	7398	USP1	K.ATSDTL	0.346340474	0.98	S313	1.08
IPI00304409.3	23589	CARHSP1	K.HETWSC	0.726073545	1	S146	1
IPI00304409.3	23589	CARHSP1	R.GNVVPS	0.03637398	0.98	S41	1.36
IPI00304409.3	23589	CARHSP1	R.GNVVPS	0.03637398	0.98	T45	1.36
IPI00304493.5	153443	SRFBP1	K.AVTIANE	0.346340474	0.98	S208	1.11
IPI00304493.5	153443	SRFBP1	K.TRS*LDI	0.373234869	0.69	S367	0.75
IPI00304493.5	153443	SRFBP1	K.T*RSLDI	0.373234869	0.69	T365	0.75
IPI00304493.5	153443	SRFBP1	K.AVTIANE	0.463105648	0.98	S203	1.07
IPI00304493.5	153443	SRFBP1	K.AVTIANE	0.566916624	1	S203	1.05
IPI00304527.4	222584	FAM83B	K.RHSY*AI	0.080258071	0.92	Y389	1.15
IPI00304589.3	85456	TNKS1BP	K.RDS*LG	0.900575286	0.88	S872	1.21
IPI00304589.3	85456	TNKS1BP	K.VNLFPG	0.92716125	0.94	S1652	0.83
IPI00304589.3	85456	TNKS1BP	K.VNLFPG	0.92716125	0.94	S1654	0.83
IPI00304589.3	85456	TNKS1BP	R.KEVLAS	0.296993866	0.96	S185	1.14
IPI00304589.3	85456	TNKS1BP	R.KEVLAS	0.296993866	0.96	S178	1.14
IPI00304589.3	85456	TNKS1BP	R.TEAQDL	0.088241621	0.92	S672	1.16
IPI00304589.3	85456	TNKS1BP	R.GS*GGL	0.152571688	0.98	S1024	1.14
IPI00304589.3	85456	TNKS1BP	R.GSGGLF	0.684201094	0.94	S1029	1.11
IPI00304589.3	85456	TNKS1BP	R.S*FGTR	0.139636808	0.9	S976	1.36

IPI00304589.3	85456 TNKS1BP	R.SFGTRF	0.139636808	0.9	S984	1.36
IPI00304589.3	85456 TNKS1BP	R.SFGTRF	0.139636808	0.9	S983	1.36
IPI00304596.3	4841 NONO	R.FACHS*	0.643675939	0.98	S147	0.95
IPI00304596.3	4841 NONO	R.FGQAAT	0.604563646	0.14	T450	0.08
IPI00304742.4	6793 STK10	K.RDSFIG	0.181528891	0.9	Y197	1.22
IPI00304742.4	6793 STK10	K.RDSFIG	0.27446972	0.98	T195	1.07
IPI00304742.4	6793 STK10	K.RDS*FIG	0.181528891	0.98	S191	1.07
IPI00304742.4	6793 STK10	R.ILRLS*T	0.27446972	0.98	S13	1.12
IPI00304885.1	1060 CENPC1	K.IKDTCIQ	0.401648339	0.98	S75	1.05
IPI00304885.1	1060 CENPC1	K.IKDTCIQ	0.401648339	0.98	S73	1.05
IPI00304885.1	1060 CENPC1	K.ILATDVE	0.431601138	1	S133	1.01
IPI00304932.2	23378 KIAA0409	R.ALEAAS	0.096924105	0.66	S62	1.21
IPI00304958.2	54758 KLHDC4	K.QVLTAP	0.139636808	0.96	S382	1.19
IPI00304958.2	54758 KLHDC4	K.QVLTAP	0.116581414	1	S382	1.22
IPI00305068.5	24148 PRPF6	K.GYLTDL	0.001272035	0.76	S279	1.07
IPI00305068.5	24148 PRPF6	K.GYLT*DI	0.346340474	0.81	T275	0.82
IPI00305282.2	10111 RAD50	R.EMMIVM	0.017448313	0.74	T1113	1.26
IPI00305282.2	10111 RAD50	R.VFQT*E	0.27446972	0.98	T690	1.12
IPI00305305.3	6494 SIPA1	R.SLSDE	0.346340474	0.76	S873	1.03
IPI00305305.3	6494 SIPA1	K.PSVPSA	0.181528891	0.96	S884	1.24
IPI00305305.3	6494 SIPA1	R.TEFLHS	0.970843959	1	S839	1.22
IPI00305344.6	23164 M-RIP	R.TKDQPC	0.088241621	0.98	S216	1.42
IPI00305344.6	23164 M-RIP	R.DFTNEA	0.233505398	0.9	S361	1.23
IPI00305344.6	23164 M-RIP	R.DFTNEA	0.021601024	0.96	S364	1.25
IPI00305430.3	54478 FAM64A	K.STRLSG	0.303680857	0.96	S151	0.96
IPI00305430.3	54478 FAM64A	K.STRLS*C	0.303680857	0.96	S144	0.96
IPI00305589.3	5208 PFKFB2	R.RNS*FTI	0.12765804	0.98	S466	1.2
IPI00305589.3	5208 PFKFB2	R.NS*FTPI	0.952395062	0.31	S466	0.58
IPI00305622.4	7051 TGM1	K.AVET*A	0.665546864	0.85	T559	1.05
IPI00305822.1	55771 PRR11	R.KVDVER	0.89791754	0.96	T314	0.91
IPI00305868.3	65983 GRAMD3	K.ACRS*P	0.957149097	0.94	S44	1.13
IPI00305868.3	65983 GRAMD3	K.SVCGHL	0.072926818	0.86	T220	1.06
IPI00305868.3	65983 GRAMD3	K.SVCGHL	0.072926818	0.86	S221	1.06
IPI00305868.3	65983 GRAMD3	K.S*SFDG	0.27446972	0.9	S71	1.15
IPI00305868.3	65983 GRAMD3	R.ADRPSE	0.643675939	0.98	S252	0.99
IPI00305922.5	84993 UBL7	R.DMPGG	0.643675939	0.98	S230	0.99
IPI00306087.5	55135 WDR79	R.GDPPRL	0.166517367	0.9	S54	1.05
IPI00306087.5	55135 WDR79	K.TLETQP	0.214968943	0.98	S26	1.09
IPI00306087.5	55135 WDR79	R.VFPEPT	0.166517367	0.69	S491	0.98
IPI00306170.5	10634 GAS2L1	R.VS*SPSI	0.066203153	0.83	S489	1.24
IPI00306170.5	10634 GAS2L1	R.RYS*GD	0.643675939	0.72	S352	1
IPI00306299.3	55837 EAPP	R.YYDDIYI	0.447034483	0.88	S109	1.04
IPI00306301.1	5160 PDHA1	R.YHGHS*	0.360667889	1	S331	0.78
IPI00306301.1	5160 PDHA1	R.YGMGT	0.147475653	0.96	S270	0.85
IPI00306301.1	5160 PDHA1	R.YHGHS	0.296993866	0.98	Y339	1.16
IPI00306301.1	5160 PDHA1	R.YHGHS*	0.604563646	1	S331	1
IPI00306301.1	5160 PDHA1	R.Y*HGHS	0.780826721	0.92	Y327	0.91
IPI00306301.1	5160 PDHA1	R.YHGHS	0.373234869	0.98	S338	1.06
IPI00306301.1	5160 PDHA1	R.YHGHS*	0.353263807	1	S331	0.81
IPI00306301.1	5160 PDHA1	R.YHGHS	0.726073545	1	S333	1
IPI00306369.3	54888 NSUN2	R.AGEPNE	0.32093792	0.9	S743	1.17

IPI00306369.3	54888 NSUN2	R.AGEPNE	0.106353987	0.66 S751	0.92
IPI00306369.3	54888 NSUN2	R.AGEPNE	0.152571688	1 S743	1.2
IPI00306406.3	55781 RIOK2	R.VQGGVI	0.990159288	0.86 S442	1.18
IPI00306446.1	7572 ZNF24	R.IHS*GEH	0.743182508	0.76 S274	0.8
IPI00306708.3	55872 PBK	K.KSVLCS	0.764845588	0.98 T24	0.96
IPI00306708.3	55872 PBK	K.KSVLCS	0.764845588	0.98 S23	0.96
IPI00306708.3	55872 PBK	K.SVLCST	0.431601138	0.98 S32	1.12
IPI00306708.3	55872 PBK	K.SVLCST	0.919312669	0.98 T24	0.91
IPI00306708.3	55872 PBK	R.GLSHS*	0.773594539	1 S59	0.99
IPI00306778.2	4320 MMP11	R.ADIMIDF	0.849082022	0.55 Y162	0.48
IPI00306840.2	81537 SGPP1	R.RNS*LTG	0.401648339	0.96 S112	1.16
IPI00307545.1	7145 TNS1	R.RAAS*D	0.197661257	0.94 S899	1.1
IPI00307545.1	7145 TNS1	K.SQSVPC	0.080258071	0.88 S742	1.07
IPI00307545.1	7145 TNS1	R.AQFSVA	0.096924105	0.9 S1177	1.28
IPI00307545.1	7145 TNS1	R.NYQSSS	0.002042313	0.71 T1139	0.95
IPI00307545.1	7145 TNS1	R.SYS*PYI	0.346340474	0.98 S794	1.09
IPI00307545.1	7145 TNS1	R.HLGGSC	0.684201094	0.98 S1314	1.11
IPI00307545.1	7145 TNS1	K.SFS*AP/	0.829549043	0.98 S1048	1.03
IPI00307545.1	7145 TNS1	K.S*FSAP/	0.919312669	0.98 S1046	1.03
IPI00307545.1	7145 TNS1	R.T*PTQPI	0.431601138	0.96 T1105	1.11
IPI00307545.1	7145 TNS1	R.SYSPY*I	0.32093792	1 Y796	1.14
IPI00307545.1	7145 TNS1	K.SQS*VP/	0.12765804	0.98 S733	1.23
IPI00307545.1	7145 TNS1	R.WDS*YC	0.530774648	1 S338	1.06
IPI00307545.1	7145 TNS1	K.EATSDP	0.152571688	0.98 T860	1.21
IPI00307545.1	7145 TNS1	K.EATSDP	0.152571688	0.98 S858	1.21
IPI00307545.1	7145 TNS1	K.VATTPG	0.373234869	1 S1269	1.12
IPI00307545.1	7145 TNS1	R.WDS*YC	0.088241621	0.92 S338	1.13
IPI00307545.1	7145 TNS1	K.EAFEEM	0.32093792	0.94 S963	1.06
IPI00307545.1	7145 TNS1	R.SGYIPSI	0.32093792	0.98 T775	0.39
IPI00307545.1	7145 TNS1	R.NYQSSS	0.566916624	1 S1155	1.06
IPI00307545.1	7145 TNS1	R.NYQSSS	0.566916624	1 S1157	1.06
IPI00307545.1	7145 TNS1	R.TVGTNT	0.566916624	0.98 S1192	1.09
IPI00307545.1	7145 TNS1	R.TVGTNT	0.566916624	0.98 T1189	1.09
IPI00307591.5	23060 ZNF609	R.LVEPHS	0.8197889	0.92 S578	1.16
IPI00307591.5	23060 ZNF609	R.LVEPHS	0.49616549	0.94 S576	1.03
IPI00307591.5	23060 ZNF609	R.NCPS*P	0.401648339	0.94 S491	1.15
IPI00307591.5	23060 ZNF609	R.TNS*MG	0.431601138	0.98 S467	1.06
IPI00307659.2	57332 CBX8	R.RQDSDL	0.048845949	0.67 S265	1.05
IPI00307659.2	57332 CBX8	R.RQDS*D	1.77E-07	0.79 S256	0.27
IPI00307733.4	29072 SETD2	K.SWQQT	0.912548374	0.83 S1228	1.12
IPI00307733.4	29072 SETD2	R.AHT*PLI	0.834430989	0.71 T1853	0.64
IPI00307733.4	29072 SETD2	K.IISENS*I	0.975679369	0.86 S1888	1.05
IPI00307733.4	29072 SETD2	R.RSS*LS'	0.31051834	0.66 S2080	0.76
IPI00307758.6	9600 PITPNM1	K.ERPQLA	0.530774648	0.79 S896	0.92
IPI00307758.6	9600 PITPNM1	R.RGSMNI	0.233505398	0.98 S600	1.13
IPI00307760.6	84524 ZC3H8	R.SKDYDV	0.49616549	0.48 S77	0.83
IPI00328258.2	85403 EAF1	K.TSPLKD	0.166517367	0.98 S254	1.17
IPI00328258.2	85403 EAF1	K.TS*PLKI	0.166517367	0.98 S247	1.17
IPI00328258.2	85403 EAF1	K.T*SPLKI	0.431601138	1 T246	1.12
IPI00328260.2	8439 NSMAF	K.T*LAWN	0.391052876	0.9 T611	0.74
IPI00328272.2	25921 ZDHHC5	K.S*KGSLI	0.49616549	0.69 S296	1.09

IPI00328272.2	25921	ZDHHC5	R.S*SSLK9	0.080258071	0.76	S427	1.05
IPI00328272.2	25921	ZDHHC5	K.SFHFD	0.166517367	0.98	S423	1.15
IPI00328272.2	25921	ZDHHC5	K.SLGSAS	0.233505398	0.98	S694	1.18
IPI00328272.2	25921	ZDHHC5	K.SLGSAS	0.233505398	0.98	S693	1.18
IPI00328272.2	25921	ZDHHC5	K.SFHFD	0.072926818	0.98	S425	1.24
IPI00328272.2	25921	ZDHHC5	R.GVGS*P	0.373234869	1	S621	1.12
IPI00328272.2	25921	ZDHHC5	R.GDS*LK	0.684201094	0.98	S380	1.16
IPI00328272.2	25921	ZDHHC5	R.SEPSLE	0.32093792	0.98	S409	1.02
IPI00328272.2	25921	ZDHHC5	R.SEPSLE	0.32093792	0.98	T411	1.02
IPI00328285.5	10868	USP20	K.LSSS*PF	0.401648339	0.92	S408	0.98
IPI00328285.5	10868	USP20	R.KFS*WC	0.463105648	1	S333	1.1
IPI00328285.5	10868	USP20	K.AVPIAV/	0	0.64	S132	2.14
IPI00328285.5	10868	USP20	K.AVPIAV/	0	0.64	S134	2.14
IPI00328306.8	9877	ZC3H11A	R.RLSS*A9	0.895911332	0.96	S759	0.96
IPI00328306.8	9877	ZC3H11A	R.RLSSAS	0.530774648	0.96	S761	0.96
IPI00328306.8	9877	ZC3H11A	R.RLSSAS	0.373234869	0.98	T762	1.02
IPI00328306.8	9877	ZC3H11A	R.RLS*SA9	0.373234869	0.98	S758	1.02
IPI00328306.8	9877	ZC3H11A	R.RLSSAS	0.346340474	0.98	S768	1.02
IPI00328306.8	9877	ZC3H11A	R.KFS*AG9	0.643675939	0.98	S290	1.03
IPI00328306.8	9877	ZC3H11A	R.KFSAG9	0.643675939	0.98	S295	1.03
IPI00328306.8	9877	ZC3H11A	R.RLS*SA9	0.346340474	0.85	S758	0.94
IPI00328306.8	9877	ZC3H11A	R.RLS*SA9	0.346340474	0.85	S758	0.94
IPI00328322.8	9013	TAF1C	R.DTPGC/	0.32093792	0.96	T741	1.1
IPI00328342.4	9497	SLC4A7	K.KHS*DP	0.060044376	0.69	S242	0.99
IPI00328342.4	9497	SLC4A7	R.MLQDDI	0.530774648	0.76	S1176	0.87
IPI00328573.1	84971	ATG4D	R.AKRPS*9	0.015665801	0.9	S467	1.07
IPI00328644.4	2357	FPR1	R.GIIRFIIG	0.360667889	0.88	S211	0.72
IPI00328659.1	9070	ASH2L	K.ARS*DP	0.27446972	0.79	S222	0.88
IPI00328798.1	283149	BCL9L	K.SPQVLC	0.84064003	0.96	S987	1.07
IPI00328798.1	283149	BCL9L	K.SPSMAV	0.005157186	0.58	S1004	1.77
IPI00328798.1	283149	BCL9L	K.SPSMAV	0.181528891	0.94	S1010	1.03
IPI00328798.1	283149	BCL9L	R.GLLS*PF	0.181528891	0.98	S750	1.19
IPI00328822.1	54583	EGLN1	K.AKPPAD	0.402755896	0.52	S125	0.93
IPI00328828.4	51742	ARID4B	R.KAEFPS	0.181528891	0.76	S1031	0.87
IPI00328828.4	51742	ARID4B	R.HFAESE	0.976229102	0.88	T133	0.98
IPI00328832.3	23335	WDR7	K.ARGS*P	0.004102604	1	S935	1.47
IPI00328884.7	5866	RAB3IL1	R.ELHPQL	0.27446972	1	S179	1.12
IPI00328911.2	25831	HECTD1	R.RRT*WC	1.13E-05	0.72	T1762	1.82
IPI00328911.2	25831	HECTD1	K.LAPGYD	0.751731134	0.96	S1347	0.91
IPI00328929.2	124245	NHN1	K.KLGVS	0.01011525	0.92	S534	1.18
IPI00328929.2	124245	NHN1	K.KLGVS*9	0.000547756	0.94	S532	1.35
IPI00328929.2	124245	NHN1	K.LGVSVS	0.401648339	0.98	S534	1.09
IPI00329054.1	28962	OSTM1	K.RLKSST	0.116581414	0.83	T324	1.08
IPI00329345.6	65244	SPATS2	R.SRCS*S	0.296993866	0.94	S385	1.11
IPI00329345.6	65244	SPATS2	R.S*RCS*9	0.296993866	0.94	S382	1.11
IPI00329528.8	9730	VPRBP	K.EADLPM	0.604563646	0.94	S899	1.05
IPI00329528.8	9730	VPRBP	R.HLPS*PI	0.088241621	0.66	S1004	1.12
IPI00329536.1	8411	EEA1	R.VLSLET	0	0.98	T621	0.06
IPI00329547.3	23091	ZC3H13	R.SASPY	0.566916624	0.94	S381	1.03
IPI00329547.3	23091	ZC3H13	R.SASPY	0.566916624	0.94	S380	1.03
IPI00329547.3	23091	ZC3H13	R.S*LSPS9	0.253322457	0.83	S875	1.04

IPI00329547.3	23091 ZC3H13	R.SAS*PYI	0.373234869	0.96	S372	1.18
IPI00329547.3	23091 ZC3H13	R.TPS*PPI	0.463105648	0.85	S265	1.05
IPI00329547.3	23091 ZC3H13	R.KTSAVS	0.99978897	0.96	S242	1.11
IPI00329547.3	23091 ZC3H13	R.SKLS*P	0.32093792	1	S207	1.07
IPI00329547.3	23091 ZC3H13	R.RS*PER	0.214968943	0.98	S77	1.16
IPI00329547.3	23091 ZC3H13	R.SKLS*P	8.15E-05	0.58	S207	0.77
IPI00329547.3	23091 ZC3H13	R.SLS*PSI	0.604563646	1	S877	1.11
IPI00329572.3	29763 PACSIN3	K.EKGRS	0.029596689	0.58	S319	0.84
IPI00329572.3	29763 PACSIN3	K.GGRSPI	0.058272236	0.53	T326	0.79
IPI00329572.3	29763 PACSIN3	K.GGRS*P	0.116581414	0.27	S319	1.06
IPI00329590.4	56342 PPAN	R.LQDISEI	0.12765804	0.83	S240	1.01
IPI00329590.4	56342 PPAN	R.VGGS*D	0.463105648	1	S359	1.11
IPI00329590.4	56342 PPAN	R.LQDISEI	0.373234869	0.96	S238	1.08
IPI00329590.4	56342 PPAN	R.LQDISEI	0.197661257	0.98	S238	1.26
IPI00329635.3	201163 FLCN	R.AHS*PA	0.001001611	0.9	S62	1.55
IPI00329638.10	51776 ZAK	K.NFS*SLI	0.072926818	1	S648	1.34
IPI00329638.10	51776 ZAK	R.SQSNPI	0.187602579	0.86	S599	0.95
IPI00329638.10	51776 ZAK	R.SQS*NP	0.32093792	0.79	S593	1.21
IPI00329638.10	51776 ZAK	R.SSS*PTC	0.401648339	0.98	S637	1.12
IPI00329638.10	51776 ZAK	R.VSQSAL	0.643675939	1	S727	1.05
IPI00329650.1	129401 NUP35	K.TLGT*PI	0.936890791	0.71	T273	1
IPI00329650.1	129401 NUP35	R.SIYDDIS	0.670278613	0.88	S100	0.96
IPI00329650.1	129401 NUP35	R.SIYDDIS	0.670278613	0.88	S100	0.96
IPI00329650.1	129401 NUP35	K.ASTSDY	0.604563646	0.96	T308	1.01
IPI00329748.7	54785 C17orf59	R.RAT*ISS	0.072926818	0.9	T62	1.42
IPI00329753.1	51101 C8orf70	K.GIEGHS	0.431601138	0.98	S292	1.04
IPI00329787.3	91833 WDR20	R.SNS*LPI	0.166517367	1	S373	1.11
IPI00329787.3	91833 WDR20	R.S*NSLPI	0.27446972	1	S371	1.17
IPI00332155.1	114787 GPRIN1	K.DLEAAG	0.786805188	0.9	S776	0.96
IPI00332155.1	114787 GPRIN1	K.VGSLPL	0.773594539	1	S615	0.99
IPI00333215.1	6917 TCEA1	K.KKEPAI	0.253322457	0.98	S97	1.09
IPI00333215.1	6917 TCEA1	K.KKEPAI	0.253322457	0.98	S100	1.09
IPI00333215.1	6917 TCEA1	K.KKEPAI	0.166517367	0.98	T96	1.15
IPI00333541.4	2316 FLNA	K.AFGPGL	0.27446972	1	S1084	1.11
IPI00333771.1	800 CALD1	K.RGS*IGE	0.49616549	0.96	S196	0.92
IPI00333771.1	800 CALD1	K.RGS*IGE	0.604563646	0.96	S196	1.03
IPI00333771.1	800 CALD1	R.RS*LAAI	0.805160956	0.92	S12	0.73
IPI00333771.1	800 CALD1	K.GNVFSS	0.938173728	0.98	T474	0.96
IPI00333771.1	800 CALD1	R.AEFLNK	0.726073545	0.98	S395	1.04
IPI00333771.1	800 CALD1	K.GNVFSS	0.604563646	1	S463	1.02
IPI00333771.1	800 CALD1	K.GNVFSS	0.684201094	1	T469	0.96
IPI00333771.1	800 CALD1	K.GNVFSS	0.878390339	1	S463	0.89
IPI00334400.1	8502 PKP4	K.DGWNQ	0.166517367	0.98	T1017	1.08
IPI00334400.1	8502 PKP4	K.DGWNQ	0.139636808	0.98	S1016	1.21
IPI00334400.1	8502 PKP4	R.SAVS*PI	0.463105648	0.96	S406	1.22
IPI00334400.1	8502 PKP4	R.S*AVSPI	0.463105648	0.96	S403	1.22
IPI00334400.1	8502 PKP4	R.LLGLNE	0.49616549	0.88	S776	1.1
IPI00334400.1	8502 PKP4	R.AAS*PYI	0.32093792	1	S273	1.15
IPI00334410.1	399687 MYO18A	R.RVSS*S	0.026666866	0.56	S737	0.84
IPI00334410.1	399687 MYO18A	R.RVS*SS	0.152571688	1	S736	1.26
IPI00334796.4	84229 CCDC135	R.T*EVDS	0	0.86	T573	0.06

IPI00334914.2	81627 C1orf25	K.RKS*NE	0.152571688	1 S612	1.2
IPI00335248.1	9252 RPS6KA5	K.LFQGYS	0.106353987	0.9 S376	1.39
IPI00335248.1	9252 RPS6KA5	K.LFQGYS	0.463105648	0.83 S376	1.3
IPI00335766.5	2011 MARK2	R.GRNS*A	0.296993866	0.94 S7	0.99
IPI00335766.5	2011 MARK2	R.SRNS*P	0.253322457	0.98 S452	1.13
IPI00335766.5	2011 MARK2	R.PSADLT	0.684201094	0.98 S357	1.02
IPI00335766.5	2011 MARK2	R.VPVAS*I	0.373234869	1 S481	1.09
IPI00335766.5	2011 MARK2	R.DQQNLF	0.530774648	0.96 S536	1.02
IPI00335766.5	2011 MARK2	R.DQQNLF	0.463105648	0.96 S531	1.02
IPI00335766.5	2011 MARK2	R.RFS*DQ	0.49616549	0.98 S376	1.07
IPI00335766.5	2011 MARK2	R.VPVAS*I	0.346340474	1 S481	1.11
IPI00335766.5	2011 MARK2	R.VPVASP	0.32093792	1 S483	1.11
IPI00335766.5	2011 MARK2	R.GRNSA1	0.253322457	1 S10	1.15
IPI00335766.5	2011 MARK2	R.LLKT*IG	0.181528891	1 T25	1.19
IPI00335766.5	2011 MARK2	K.VPAS*PI	0.233505398	0.98 S422	1.12
IPI00335766.5	2011 MARK2	R.RFS*DQ	0.197661257	1 S376	1.17
IPI00335766.5	2011 MARK2	R.S*TFHA	0.480507638	0.94 S507	1.04
IPI00335766.5	2011 MARK2	K.LDT*FC	0.604563646	0.98 T175	1.13
IPI00335849.2	9462 RASAL2	R.SIS*GTS	0.002296625	0.86 S148	1.38
IPI00335849.2	9462 RASAL2	R.SISGT*S	0.233505398	0.96 T150	1.11
IPI00335849.2	9462 RASAL2	R.S*HESLI	0.000618432	0.79 S219	1.44
IPI00336047.5	4650 MYO9B	R.VQEKPE	0.756570768	0.86 S1294	1.33
IPI00336047.5	4650 MYO9B	K.KKPGDA	0.12765804	0.88 S1405	0.89
IPI00336047.5	4650 MYO9B	K.AAGMS	0.32093792	0.96 S722	0.99
IPI00336047.5	4650 MYO9B	K.AAGMS	0.32093792	0.96 S717	0.99
IPI00336047.5	4650 MYO9B	K.AAGMS*	0.32093792	0.96 S716	0.99
IPI00336047.5	4650 MYO9B	R.VQEKPE	0.139636808	1 T1295	1.26
IPI00336047.5	4650 MYO9B	R.VQEKPE	0.139636808	1 S1290	1.26
IPI00336119.4	4664 NAB1	R.RLS*AG	0.03637398	1 S395	1.37
IPI00336159.3		K.RSAS*AI	0.51496205	0.58 S272	0.59
IPI00336159.3		R.SAS*AD	0.501931941	0.74 S272	0.81
IPI00337387.3	55660 PRPF40A	R.RLS*GS	0.000194095	0.32 S34	0.59
IPI00337532.4	85021 REPS1	K.KGS*VS	0.106353987	0.98 S91	1.25
IPI00337532.4	85021 REPS1	R.SS*SSQ	0.726073545	0.79 S377	1.2
IPI00337532.4	85021 REPS1	R.TSADAC	0.166517367	0.92 S110	1.26
IPI00337532.4	85021 REPS1	R.TSADAC	0.166517367	0.92 S110	1.26
IPI00337532.4	85021 REPS1	R.TGSDHT	0.346340474	0.98 S430	1.14
IPI00337532.4	85021 REPS1	R.RQS*SS	0.373234869	0.96 S220	1.08
IPI00337532.4	85021 REPS1	R.TGSDHT	0.431601138	0.98 T429	1.09
IPI00337532.4	85021 REPS1	R.TGSDHT	0.233505398	0.98 S437	1.2
IPI00337532.4	85021 REPS1	R.TSADAC	0.080258071	0.98 S118	1.18
IPI00337532.4	85021 REPS1	R.TSADAC	0.080258071	0.98 S118	1.18
IPI00337532.4	85021 REPS1	R.TGSDHT	0.214968943	1 T429	1.14
IPI00337532.4	85021 REPS1	R.TGSDHT	0.233505398	1 S430	1.16
IPI00337588.1	7159 TP53BP2	K.RSS*ITE	1.55E-15	0.5 S614	2.08
IPI00337662.3	10149 GPR64	K.RGS*LH	0.401648339	0.9 S959	1.18
IPI00337663.4		K.NITDYLI	0.836096036	0.72 S569	0.9
IPI00337663.4		R.LRECEL	0.27446972	0.77 S492	0.42
IPI00337663.4		K.NITDYLI	0.800289022	0.55 S579	0.79
IPI00337663.4		R.TQLWAS	0.49616549	1 T543	1.04
IPI00337663.4		R.HEL5*PI	0.214968943	1 S74	1.19

IPI00337663.4		R.ERFS*PI	0.088241621	1 S67	1.26
IPI00337667.1	23299 BICD2	K.KEGLAP	0.530774648	0.79 S331	0.97
IPI00337705.1	85439 STON2	R.ATNPFL	0.398836595	0.88 S123	0.82
IPI00337726.2	55904 MLL5	R.GTMYS	0.643675939	0.96 S1070	1.02
IPI00337726.2	55904 MLL5	R.SRS*PA'	0.49616549	0.85 S845	0.95
IPI00339353.2	23365 ARHGEF1	K.HLSTPS	0.296993866	0.96 S618	0.95
IPI00339394.1	22999 RIMS1	R.RASQS	0.139636808	1 S1359	1.23
IPI00339394.1	22999 RIMS1	R.RAS*QS	0.233505398	1 S1356	1.14
IPI00339394.1	22999 RIMS1	R.RAS*QS	0.152571688	1 S1356	1.18
IPI00339394.1	22999 RIMS1	R.RASQS*	0.233505398	1 S1358	1.18
IPI00373869.4	440400 MGC7199	K.VYEDSC	0.27446972	0.88 S96	1.1
IPI00373869.4	440400 MGC7199	R.KVYEDS	0.595623706	0.88 S96	0.57
IPI00373877.3	284695 ZNF326	K.ISLSKS*	0.627992512	0.98 S270	0.89
IPI00373877.3	284695 ZNF326	K.ISLSKS*	0.84419767	0.96 S270	1.03
IPI00373877.3	284695 ZNF326	K.ISLSKSF	0.743182508	0.98 T274	0.88
IPI00373988.4	55219 TMEM57	K.FVET*SF	0.01011525	0.88 T420	0.78
IPI00374065.3	375056 MIA3	R.WSAEA	0.726073545	0.92 T1733	0.99
IPI00374065.3	375056 MIA3	R.WSAEA	0.566916624	0.92 S1739	0.99
IPI00374065.3	375056 MIA3	R.SFSG*	0.002296625	0.94 S1706	1.11
IPI00374065.3	375056 MIA3	R.WSAEA	0.463105648	0.96 S1741	0.99
IPI00374065.3	375056 MIA3	R.WSAEA	0.463105648	0.96 S1740	0.99
IPI00374336.1	199834 LCE4A	K.SSNCYC	0.726073545	1 S83	1
IPI00374341.1	7464 CORO2A	R.PIFNSM	0.166517367	0.98 S423	1.21
IPI00374770.1	4131 MAP1B	K.VLSPLR	0.106353987	0.12 S1274	0.63
IPI00374770.1	4131 MAP1B	K.TELS*PS	0.12765804	0.61 S1972	1.03
IPI00374770.1	4131 MAP1B	R.KLGDVS	0.431601138	0.94 S1375	1.06
IPI00374770.1	4131 MAP1B	K.VLS*PLF	0.804577835	0.72 S1270	0.83
IPI00374770.1	4131 MAP1B	K.TELSPS	0.096924105	0.72 S1974	1.15
IPI00374770.1	4131 MAP1B	R.KLGDVS	0.258192345	0.86 T1377	0.85
IPI00374770.1	4131 MAP1B	R.TTKS*PS	0.004102604	0.72 S1789	1.08
IPI00374770.1	4131 MAP1B	K.T*ELSPS	0.233505398	0.94 T1969	1.22
IPI00375113.2	55619 DOCK10	R.S*LLRPC	0.684201094	0.72 S12	0.72
IPI00375252.5		R.SNT*LN	0.684201094	0.98 T1022	1.07
IPI00375252.5		R.SLS*LGI	0.166517367	0.94 S997	1
IPI00375252.5		R.S*NTLN	0.233505398	0.96 S1020	1.17
IPI00375333.2	6236 RRAD	K.S*KSCH	0.197661257	0.96 S299	1.36
IPI00375333.2	6236 RRAD	K.SKS*CH	0.197661257	0.96 S301	1.36
IPI00375359.2	5981 RFC1	K.NKPLS*F	0.181528891	0.94 S156	0.97
IPI00375359.2	5981 RFC1	R.IIYDS*D	0.530774648	0.96 S69	0.9
IPI00375494.3	5933 RBL1	R.DMQPLS	0.463105648	0.08 S640	0.25
IPI00375589.1	284836 C21orf125	R.RPPQPL	6.25E-10	0.96 S33	3.66
IPI00375640.1	9025 RNF8	R.KFS*LDE	0.214968943	0.96 S157	1.19
IPI00375756.2		K.IAIS*PLK	0.401648339	0.96 S310	1.11
IPI00375756.2		K.IAIS*PLK	0.530774648	0.98 S310	1.09
IPI00375756.2		K.IAISPLK	0.000698007	0.64 S314	1.14
IPI00375793.4	285190 RGPD4	K.HSTPSP	0.045978168	0.86 Y786	0.75
IPI00375793.4	285190 RGPD4	K.DSLITP	0.829549043	0.88 S1479	0.99
IPI00375793.4	285190 RGPD4	K.HSTPS*F	0.032806498	0.96 S782	0.72
IPI00375793.4	285190 RGPD4	R.EDALDC	0.853966795	0.96 S1276	0.86
IPI00375793.4	285190 RGPD4	R.LLPVINT	0.86862174	0.94 S1743	0.88
IPI00375793.4	285190 RGPD4	K.AVVS*PI	0.831562154	1 S1535	0.98

IPI00375907.7	200186	CRTC2	R.HGSGPI	0.346340474	0.96	S630	1
IPI00375907.7	200186	CRTC2	R.SSHYGC	0.029596689	0.86	S70	1.04
IPI00375907.7	200186	CRTC2	R.S*SHYG	0.253322457	0.83	S64	1.17
IPI00375907.7	200186	CRTC2	R.SSHYGC	0.166517367	0.92	S90	1.32
IPI00375907.7	200186	CRTC2	R.VPLS*PI	0.152571688	0.96	S439	1.18
IPI00375907.7	200186	CRTC2	R.SSHYGC	0.197661257	0.96	S79	1.18
IPI00375907.7	200186	CRTC2	R.SSHYGC	0.197661257	0.96	S70	1.18
IPI00375907.7	200186	CRTC2	R.HGSGPI	0.32093792	1	S629	1.17
IPI00375915.4	55388	MCM10	K.ATASGPI	0.181528891	0.94	S548	1.1
IPI00376215.2	5591	PRKDC	R.SSFDWL	0.447034483	0.81	S2674	0.9
IPI00376221.1	57669	EPB41L5	R.SALPVS	0.152571688	0.67	S418	0.88
IPI00376221.1	57669	EPB41L5	R.SALPVS	0.27446972	0.9	S436	1.02
IPI00376221.1	57669	EPB41L5	R.SALPVS	0.938173728	0.94	S418	0.87
IPI00376222.1	91746	YTHDC1	K.IRLSS*S	0	0.72	S119	0.23
IPI00376222.1	91746	YTHDC1	R.GIS*PIVI	0.32093792	0.96	S308	1.11
IPI00376283.1	5930	RBBP6	K.LEVTEIV	0.401648339	0.98	S1145	1.03
IPI00376283.1	5930	RBBP6	K.LGYLVS	0.760488858	0.88	S516	0.98
IPI00376312.1	8881	CDC16	K.NIIS*PPA	0.296993866	0.96	S559	1.06
IPI00376404.2	2186	BPTF	K.LS*PQM	0.296993866	0.83	S2370	0.7
IPI00376787.4	2146	EZH2	R.VKESSII	0.066203153	0.9	T492	1.01
IPI00376787.4	2146	EZH2	R.LPNNSS	0.467835816	0.92	S371	0.76
IPI00376787.4	2146	EZH2	R.LPNNSS	4.62E-06	0.96	S371	1.91
IPI00376787.4	2146	EZH2	R.LPNNSS	4.62E-06	0.96	S368	1.91
IPI00376787.4	2146	EZH2	R.LPNNSS	1.29E-05	1	S368	1.99
IPI00376787.4	2146	EZH2	R.LPNNSS*	8.77E-06	1	S367	1.99
IPI00376787.4	2146	EZH2	K.ESSIIAP	0.181528891	0.98	T492	1.1
IPI00376787.4	2146	EZH2	R.VKESSII	0.296993866	1	T492	1.14
IPI00376955.3	5128	PCTK2	R.RIS*MEI	0.096924105	0.98	S137	1.26
IPI00376955.3	5128	PCTK2	K.LQINS*P	0.643675939	0.58	S165	0.95
IPI00376955.3	5128	PCTK2	R.RLS*LTL	0.233505398	0.98	S9	1.14
IPI00376955.3	5128	PCTK2	K.RLS*LPA	0.49616549	0.98	S146	1.33
IPI00376955.3	5128	PCTK2	R.RAS*LSI	0.004102604	0.98	S180	1.12
IPI00376960.5	55147	RBM23	R.EKS*PVI	2.70E-07	0.94	S133	2.09
IPI00377052.1	9846	GAB2	R.S*SPAEI	0.197661257	0.94	S102	1.14
IPI00377052.1	9846	GAB2	R.SS*PAEI	0.197661257	0.94	S103	1.14
IPI00377152.1	9129	PRPF3	R.IKWDEC	0.27446972	0.92	S618	1.02
IPI00377185.2	817	CAMK2D	K.S*LLKKF	0.106353987	0.92	S319	1.05
IPI00377244.1	8085	MLL2	K.KEELGA	0.139636808	0.94	S1716	1.15
IPI00377244.1	8085	MLL2	K.KEELGA	0.139636808	0.94	S1715	1.15
IPI00377244.1	8085	MLL2	R.ALS*PVI	0.181528891	0.94	S4158	1.13
IPI00377244.1	8085	MLL2	K.KEELGA	0.726073545	0.94	S1715	0.97
IPI00377244.1	8085	MLL2	K.KEELGA	0.726073545	0.94	S1716	0.97
IPI00383133.2			R.RGSS*T	0.401648339	0.96	S1034	1.07
IPI00383133.2			R.RGS*ST	0.401648339	0.96	S1033	1.07
IPI00383133.2			R.RGSSTE	0.858914691	0.98	S1042	1.07
IPI00383219.2	27125	AFF4	R.SSS*PG	0.026666866	0.88	S180	1.04
IPI00383219.2	27125	AFF4	R.SS*SPG	0.566916624	0.94	S179	0.98
IPI00383219.2	27125	AFF4	K.AVGMP9	0.782390145	0.9	S1055	0.92
IPI00383219.2	27125	AFF4	R.SKS*PR	0.463105648	0.98	S212	0.92
IPI00383219.2	27125	AFF4	R.S*SSPG	0.800118017	0.96	S178	0.89
IPI00383219.2	27125	AFF4	K.EKDLLP	0.84419767	0.92	S821	0.97

IPI00383219.2	27125 AFF4	K.AVGMP9	0.73460299	0.94	S1058	0.95
IPI00383219.2	27125 AFF4	K.EKDLLP	0.684201094	0.96	S814	1.02
IPI00383219.2	27125 AFF4	K.AVGMP9	0.883273668	0.92	S1058	0.86
IPI00383219.2	27125 AFF4	K.NSYNNS	0.296993866	0.98	S1043	0.83
IPI00383219.2	27125 AFF4	K.EKDLLP	0.84419767	0	S814	0.01
IPI00383219.2	27125 AFF4	R.S*KSPR	0.431601138	1	S210	1.07
IPI00383219.2	27125 AFF4	K.YPESNR	0.463105648	0.88	T674	0.98
IPI00383219.2	27125 AFF4	K.YPESNR	0.463105648	0.88	S679	0.98
IPI00383219.2	27125 AFF4	K.ELLS*PL	0.604563646	0.98	S703	1.03
IPI00383219.2	27125 AFF4	K.ELLSPL9	0.604563646	0.98	S706	1.03
IPI00383255.2	142678 MIB2	R.RVSADE	0.000888315	0.92	S312	1.36
IPI00383303.1	2064 ERBB2	R.PAGAT*	0.253322457	0.92	T278	1.31
IPI00383303.1	2064 ERBB2	K.GLQSLP	0.346340474	0.96	S219	1.08
IPI00383303.1	2064 ERBB2	R.YSEDPT	0.296993866	0.9	S263	0.52
IPI00383303.1	2064 ERBB2	R.FVVIQNI	0.730331964	0.9	S110	1
IPI00383447.1		R.EVSKPV	0.197661257	0.96	S329	1.08
IPI00383480.2	10460 TACC3	R.LGQPAF	0.044561326	0.96	T481	1.4
IPI00383480.2	10460 TACC3	K.NTENCC	0.961160996	0.62	S25	0.83
IPI00383564.1	23677 SH3BP4	R.SYS*LSF	0.760488858	0.92	S246	0.91
IPI00383564.1	23677 SH3BP4	K.VPS*PS/	0.790552394	0.88	S42	0.93
IPI00383564.1	23677 SH3BP4	K.SDAPTS	0.00200812	0.76	S271	0.55
IPI00383694.2		K.ELLHSV	0.072893529	0.92	S129	1.17
IPI00383729.4	134353 LSM11	R.SRS*VP	0.007240509	0.94	S280	1.22
IPI00383729.4	134353 LSM11	R.S*RSVP	0.007240509	0.94	S278	1.22
IPI00383794.3	64282 PAPD5	R.AGSSAS	0.900575286	0.85	S49	0.9
IPI00383794.3	64282 PAPD5	R.AGS*SA	0.900575286	0.85	S45	0.9
IPI00383849.4	5335 PLCG1	R.ERGS*D	0.253322457	0.98	S1234	1.12
IPI00383849.4	5335 PLCG1	R.YQQPFE	0.040276449	0.86	S1264	1.2
IPI00383866.2		R.HS*LNSI	0.431601138	0.85	S1022	0.81
IPI00384154.2	10914 PAPOLA	K.HYGITS'	0.401648339	1	S24	1.1
IPI00384202.3	221037 JMJD1C	K.IKS*SPS	0.253322457	0.9	S638	1
IPI00384202.3	221037 JMJD1C	R.NDCRS*	0.197661257	0.94	S1185	0.95
IPI00384202.3	221037 JMJD1C	R.NDCRSF	0.197661257	0.94	T1187	0.95
IPI00384202.3	221037 JMJD1C	K.LTPPES	0.883273668	0.92	S2007	0.87
IPI00384202.3	221037 JMJD1C	K.ITAHSS*	0.401648339	0.98	S943	0.96
IPI00384202.3	221037 JMJD1C	K.LTPPES'	0.99978897	0.96	S2005	0.91
IPI00384259.1	9677 HISPPD2A	R.TLHS*PF	0.401648339	0.79	S1127	0.99
IPI00384432.3	9043 SPAG9	K.ERPISL	0.044561326	0.76	T217	0.96
IPI00384432.3	9043 SPAG9	K.YNAPTS	0.966676636	0.85	T576	0.71
IPI00384432.3	9043 SPAG9	K.LHQLSG	0.72279082	0.77	S185	0.87
IPI00384432.3	9043 SPAG9	K.LHQLS*(	0.431601138	0.77	S183	0.87
IPI00384432.3	9043 SPAG9	K.YNAPTS	0.966676636	1	S578	0.95
IPI00384432.3	9043 SPAG9	R.SAS*QS	0.116581414	0.98	S720	1.08
IPI00384432.3	9043 SPAG9	R.SASQS*	0.116581414	0.98	S722	1.08
IPI00384432.3	9043 SPAG9	K.ERPIS*L	0.139636808	0.96	S203	0.99
IPI00384432.3	9043 SPAG9	K.ERPIS*L	0.080258071	1	S203	1.24
IPI00384441.1	93323 NY-SAR-4	K.KPEST*9	0.985805237	0.9	T130	0.98
IPI00384456.4	2956 MSH6	K.IHNVGS'	0.868109485	0.9	S830	1.14
IPI00384456.4	2956 MSH6	R.S*VAPA/	0.008098758	0.85	S79	1.33
IPI00384456.4	2956 MSH6	R.QSTLYS	0.727601611	0.9	S14	0.96
IPI00384456.4	2956 MSH6	R.VHVQFF	0.197661257	0.98	S137	1.16

IPI00384456.4	2956 MSH6	R.VHVQFF	0.197661257	0.98 T139	1.16
IPI00384463.3	1981 EIF4G1	K.REAALP	0.006469654	0.88 S1144	1.31
IPI00384463.3	1981 EIF4G1	R.EAALPP	0.088241621	1 S1144	1.24
IPI00384471.1	23774 BRD1	R.IVEYS*P	0.401648339	0.96 S128	1.06
IPI00384495.2	4734 NEDD4	R.LTIFGN	0.938173728	0.81 S671	1.09
IPI00384529.4	23242 COBL	R.PAKLS**	0.001938901	0.72 S1142	0.95
IPI00384529.4	23242 COBL	R.LQADPK	0.818022374	0.98 S815	0.95
IPI00384529.4	23242 COBL	K.IDELGNI	0.604563646	0.05 S741	0.31
IPI00384562.1	5580 PRKCD	K.ARLS*Y	0.346340474	0.81 S645	1.11
IPI00384562.1	5580 PRKCD	K.ARLSYS	0.346340474	0.81 S647	1.11
IPI00384562.1	5580 PRKCD	R.AS*TFC	0.021601024	0.88 S506	1.22
IPI00384562.1	5580 PRKCD	R.RSDS*A	0.152571688	0.96 S304	1.26
IPI00384562.1	5580 PRKCD	R.RS*DSA	0.152571688	0.96 S302	1.26
IPI00384562.1	5580 PRKCD	R.AST*FC	0.373234869	1 T507	1.07
IPI00384714.1	55671 SMEK1	K.TNLSGR	0.233505398	1 S728	1.13
IPI00384714.1	55671 SMEK1	K.DPSVDI	0.878390339	0.86 S117	0.79
IPI00384857.1	51155 HN1	K.GEGDIH	0.401648339	0.96 S85	1.08
IPI00384857.1	51155 HN1	K.MASNIF	0.541395815	0.9 T8	1.06
IPI00384857.1	51155 HN1	R.RNS*SE	0.181528891	0.96 S41	1.29
IPI00384857.1	51155 HN1	R.RNSS*E	0.181528891	0.96 S88	1.29
IPI00384861.3	28964 GIT1	R.KGVSA	0.166517367	0.92 S335	1.28
IPI00384861.3	28964 GIT1	R.KGVSAE	0.373234869	0.67 S571	0.98
IPI00384861.3	28964 GIT1	R.LQPFHS	0.566916624	0.88 S310	1
IPI00384861.3	28964 GIT1	K.SLSS*P	0.530774648	0.88 S136	1.32
IPI00384861.3	28964 GIT1	R.HGS*GA	0.995403769	0.88 S592	1.06
IPI00384909.2	57498 KIDINS22	R.ETSQVII	0.296993866	0.96 S1619	0.99
IPI00384909.2	57498 KIDINS22	R.S*SPHS	0.9949766	0.98 S1311	0.91
IPI00384972.3	284058 KIAA1267	R.RTFPLA	0.049260986	0.9 S1045	1.15
IPI00384972.3	284058 KIAA1267	K.LEGKKS	0.49616549	0.88 S276	0.92
IPI00384972.3	284058 KIAA1267	R.S*PISPE	0.373234869	0.98 S991	1.12
IPI00384972.3	284058 KIAA1267	K.LEGKKS	0.726073545	0.98 S280	1
IPI00384972.3	284058 KIAA1267	K.LEGKKS	0.726073545	0.98 S272	1
IPI00384972.3	284058 KIAA1267	K.KS*PLSE	0.27446972	0.96 S268	1.06
IPI00384972.3	284058 KIAA1267	R.LS*PGTI	0.656107164	0.96 S249	1.04
IPI00384972.3	284058 KIAA1267	K.LEGKKS	0.726073545	0.98 S268	1.04
IPI00385083.2	91624 NEXN	K.TIS*QEF	0.872720802	0.96 S301	0.97
IPI00385215.1	4776 NFATC4	R.RTSS*E	0.684201094	0.98 S335	1.15
IPI00385215.1	4776 NFATC4	R.RTS*SE	0.530774648	0.98 S334	1.08
IPI00385215.1	4776 NFATC4	R.RYS*SS	0.181528891	1 S272	1.11
IPI00385312.3	10276 NET1	R.GS*SFTI	0.604563646	0.86 S50	0.88
IPI00385312.3	10276 NET1	R.GSS*FTI	0.604563646	0.86 S51	0.88
IPI00385325.2	2060 EPS15	R.FHDTSS	0.197661257	0.85 S108	1
IPI00385325.2	2060 EPS15	R.SINKLDS	0.253322457	0.96 S662	1.17
IPI00385325.2	2060 EPS15	K.LNDPFQ	0.769214181	0.96 S680	0.9
IPI00385383.2	10057 ABCC5	K.NATLAW	0.373234869	0.85 S509	0.88
IPI00385426.1	29801 ZDHHC8	R.LGPATG	0.872720802	0.94 S743	0.93
IPI00385426.1	29801 ZDHHC8	R.SLDFVS	0.49616549	0.58 S417	0.86
IPI00385455.2	7005 TEAD3	K.FSPPS*F	0.214968943	0.98 S148	1.13
IPI00385652.1	11011 TLK2	R.S*SPQH	0.000618432	0.66 S110	1.33
IPI00385652.1	11011 TLK2	R.SS*PQH	0.000618432	0.66 S111	1.33
IPI00385896.1	6696 SPP1	K.QLYNKY	0	0.5 S62	3.51

IPI00385995.1	51422 PRKAG2	R.FFS*RS'	0	0.62 S151	7.36
IPI00386072.3	85365 ALG2	K.FS*PEAF	0	0.52 S399	0.04
IPI00386115.2	26505 CNNM3	K.FENGAF	0.373234869	0.83 S547	1.01
IPI00386120.1	7536 SF1	K.YACGLV	0.373234869	0.94 S463	0.99
IPI00386128.1		K.VNFPEN	0.530774648	0.98 S178	1.04
IPI00386170.1	6744 SSFA2	K.KKES*S'	0.277173616	0.53 S352	1.02
IPI00386170.1	6744 SSFA2	K.KKESSS	0.277173616	0.53 S354	1.02
IPI00386170.1	6744 SSFA2	K.TLS*KLN	0.431601138	0.98 S300	1.11
IPI00386170.1	6744 SSFA2	K.SVHIST*	0.49616549	0.88 T442	1.01
IPI00386170.1	6744 SSFA2	R.SQS*LP'	0.197661257	0.96 S739	1.17
IPI00386194.2	223082 ZNRF2	R.SRS*LG'	0.320930141	0.96 S82	0.93
IPI00386194.2	223082 ZNRF2	R.S*RSLG'	0.320930141	0.96 S80	0.93
IPI00386194.2	223082 ZNRF2	R.AYSGS*	0.689280356	0.94 S21	0.92
IPI00386211.3	259282 FAM44A	R.GLEGN'	0.764845588	0.98 S2501	1.13
IPI00386228.3	57606 SLAIN2	R.LS*LQGI	0.431601138	1 S61	1.05
IPI00386349.1	81839 VANGL1	R.NKDGR'	0.684201094	0.96 S42	1.13
IPI00386403.1	8661 EIF3S10	R.RLGDS'	0.49616549	0.98 S882	1.1
IPI00386403.1	8661 EIF3S10	R.RLGDS'	0.49616549	0.98 S884	1.1
IPI00386403.1	8661 EIF3S10	K.AREES*'	0.501931941	0.79 S1188	0.73
IPI00386491.4		K.S*PQPP'	0.346340474	0.88 S252	0.93
IPI00386491.4		K.SS*GPT'	0.726073545	0.98 S188	1
IPI00386491.4		R.LQAALD	0.214968943	0.96 S59	1.11
IPI00386491.4		R.AKSPQF	0.604563646	0.26 T273	0.5
IPI00386491.4		R.AKSPQF	0.643675939	0.29 T267	0.55
IPI00386491.4		R.AKS*PQ	0.566916624	0.72 S252	0.73
IPI00386569.2	23170 TTLL12	R.S*SPGQ	0.116581414	0.86 S15	1.03
IPI00386569.2	23170 TTLL12	R.SSPGQ'	0.116581414	0.94 T20	1.29
IPI00386606.5	54542 RC3H2	K.IGS*PPK	0.233505398	0.9 S420	0.79
IPI00386760.2	55706 TMEM48	K.KLNS*PE	0.373234869	0.92 S406	1.05
IPI00386760.2	55706 TMEM48	K.KLNSPE	0.181528891	0.83 T414	0.88
IPI00386803.4	3927 LASP1	R.MGPSG'	0.566916624	0.85 S146	1.13
IPI00386961.2	55233 MOBK1B	K.HAEAT*I	0.296993866	0.92 T35	1.08
IPI00387130.1	57019 CIAPIN1	K.KS*SPS'	0.233505398	0.94 S182	1.1
IPI00387130.1	57019 CIAPIN1	K.KSS*PS'	0.233505398	0.94 S183	1.1
IPI00394668.1	103 ADAR	R.TMLLLS	0.152571688	0.98 S868	0.86
IPI00394668.1	103 ADAR	K.S*PVTTL	0.804577835	0.98 S657	0.95
IPI00394668.1	103 ADAR	K.TAESQT	0.795419436	0.98 T644	0.92
IPI00394668.1	103 ADAR	K.TAESQT	0.966004444	1 T644	0.92
IPI00394668.1	103 ADAR	K.TAESQT	0.379516392	0.98 T644	0.94
IPI00394679.3	7469 WHSC2	R.EASRPF	0.373234869	0.98 S371	1.07
IPI00394679.3	7469 WHSC2	R.EASRPF	0.27446972	0.98 S374	1.07
IPI00394679.3	7469 WHSC2	R.EASRPF	0.233505398	1 T376	1.06
IPI00394697.2		R.AASVAA	0.346340474	0.98 S107	1.05
IPI00394698.2	28987 NOB1	R.KDDS*D	0.181528891	0.98 S184	1.15
IPI00394698.2	28987 NOB1	R.NPLPNII	0.32093792	0.94 S167	0.97
IPI00394737.1	114882 OSBPL8	K.DLHQPS	0.116581414	0.19 S53	0.76
IPI00394737.1	114882 OSBPL8	K.DLHQPS	0.777986561	0.92 S50	0.96
IPI00394737.1	114882 OSBPL8	K.DLHQPS	0.049260986	0.96 S50	1.17
IPI00394781.3	9854 TMEM24	R.SSSCGI	0.03637398	0.76 S374	0.94
IPI00394781.3	9854 TMEM24	K.EAGLSC	0.029596689	0.96 S663	1.16
IPI00394829.2	286077 FAM83H	R.HGS*DP	0.054409842	0.85 S523	1.1

IPI00394829.2	286077 FAM83H	R.KGS*PT	0.463105648	1 S881	1.02
IPI00394829.2	286077 FAM83H	R.RGS*PT	0.566916624	0.98 S892	1.03
IPI00395337.1	81608 FIP1L1	R.ERDHS*	0.197661257	0.96 S492	1.27
IPI00395337.1	81608 FIP1L1	K.AEFTS*F	0.373234869	0.88 S259	0.98
IPI00395347.1	113251 LARP4	R.SNVVSF	0.431601138	0.67 S660	0.88
IPI00395347.1	113251 LARP4	K.DGLNQT	0.166517367	0.92 T588	1.14
IPI00395347.1	113251 LARP4	K.EQYVPF	0.373234869	0.14 S722	0.61
IPI00395347.1	113251 LARP4	K.DGLNQT	0.604563646	0.98 S583	0.99
IPI00395347.1	113251 LARP4	K.DGLNQT	0.604563646	0.98 S583	0.99
IPI00395347.1	113251 LARP4	K.DGLNQT	0.604563646	0.98 S583	0.99
IPI00395347.1	113251 LARP4	K.DGLNQT	0.401648339	1 T587	1.09
IPI00395347.1	113251 LARP4	R.SNVVSF	0.431601138	0.09 T649	0.16
IPI00395347.1	113251 LARP4	K.DGLNQT	0.431601138	1 T578	1.07
IPI00395347.1	113251 LARP4	K.DGLNQT	0.32093792	1 S583	1.07
IPI00395383.1	117177 RAB3IP	R.LRS*PS\	0.643675939	0.94 S147	1.18
IPI00395383.1	117177 RAB3IP	R.NKS*TS\	0.080258071	0.96 S272	1.24
IPI00395444.6	157922 CAMSAP1	K.S*SRPP\	0.014056191	0.79 S357	1.25
IPI00395444.6	157922 CAMSAP1	K.S*PNSH	0.080258071	0.94 S722	1.11
IPI00395467.2	153090 DAB2IP	K.ERNS*Y	0.106353987	0.67 S165	1.16
IPI00395474.1	90378 SAMD1	R.AAAAAA	0.873506301	0.96 S161	0.99
IPI00395554.4	116113 FOXP4	R.RDSSS*	0.530774648	0.92 S293	1.19
IPI00395554.4	116113 FOXP4	R.RDSSSF	0.530774648	0.92 S300	1.19
IPI00395554.4	116113 FOXP4	R.SS*DKF\	0.060044376	0.98 S443	1.31
IPI00395554.4	116113 FOXP4	R.SSDKFC	0.27446972	0.76 S448	1.2
IPI00395554.4	116113 FOXP4	R.S*SDKF\	0.401648339	0.96 S442	1.11
IPI00395568.1	84295 PHF6	K.TAHNSE	0.684201094	0.88 S156	0.84
IPI00395568.1	84295 PHF6	K.TAHNSE	0.166517367	0.96 S155	1.15
IPI00395568.1	84295 PHF6	K.TAHNSE	0.373234869	0.94 S145	1.07
IPI00395568.1	84295 PHF6	K.TAHNSE	0.002042313	0.94 S154	1.07
IPI00395568.1	84295 PHF6	K.TAHNSE	0.015665801	0.96 S155	1.02
IPI00395615.3	57596 BEGAIN	R.RPS*VD	0.072926818	0.59 S246	0.71
IPI00395615.3	57596 BEGAIN	R.DRRPS*	0.253322457	1 S246	1.17
IPI00395625.1	10454 MAP3K7IP	R.RSLLQS	0.166517367	0.66 S11	1.39
IPI00395625.1	10454 MAP3K7IP	R.S*LLQS\	0.116581414	0.98 S7	1.21
IPI00395631.3	84231 TRAF7	R.T*PSSS\	0.197968259	0.74 T59	0.5
IPI00395631.3	84231 TRAF7	R.TPS*SS\	0.197968259	0.74 S61	0.5
IPI00395663.4	23294 ANKS1A	K.S*PSFA\	0.060044376	0.92 S661	1.14
IPI00395663.4	23294 ANKS1A	K.SPS*FA\	0.060044376	0.92 S663	1.14
IPI00395663.4	23294 ANKS1A	K.EVDKT*F	0.32093792	0.86 T318	1.05
IPI00395737.3	7798 LUZP1	K.LVNTTIT	0.604563646	0.96 S690	1
IPI00395737.3	7798 LUZP1	R.TFSDTT	0.054409842	0.56 T515	0.91
IPI00395737.3	7798 LUZP1	R.T*FSDT\	0.346340474	0.18 T510	0.64
IPI00395737.3	7798 LUZP1	R.TFS*DT\	0.346340474	0.98 S512	1.16
IPI00395737.3	7798 LUZP1	R.TFSDT*F	0.346340474	0.98 T514	1.16
IPI00395737.3	7798 LUZP1	R.EKPDS*	0.49616549	1 S659	1.09
IPI00395813.1	57592 ZNF687	R.KAVVLP	0.643675939	0.98 S433	0.99
IPI00395813.1	57592 ZNF687	K.ATDIPAS	0.530774648	0.98 S253	1.03
IPI00395823.3	84181 CHD6	K.VLNHS*F	0.961160996	0.92 S21	0.98
IPI00395950.1	30850 CDR2L	R.T*IHTFP	0.8197889	0.94 T154	0.99
IPI00395950.1	30850 CDR2L	R.TIHT*FP	0.214968943	0.98 T157	1.19
IPI00395950.1	30850 CDR2L	R.LHSS*SI	0.12765804	0.98 S179	1.25

IPI00395950.1	30850	CDR2L	R.LHS*SSI	0.12765804	0.98	S178	1.25
IPI00396048.4	60684	FLJ12716	K.RT*SYE\	0.214968943	0.98	T70	1.15
IPI00396051.2	23371	TENC1	R.S*PVPT	0.096924105	0.92	S879	1.13
IPI00396057.1	23196	FAM120A	R.SSPINP/	0.017448313	0.98	S442	1.39
IPI00396057.1	23196	FAM120A	K.NQAAIQ	0.501931941	0.88	S1023	1.06
IPI00396057.1	23196	FAM120A	K.NLTEQN	0.096924105	0.92	T428	1.17
IPI00396063.4	10260	DENND4A	R.HKS*DN	0.27446972	0.53	S1058	0.86
IPI00396063.4	10260	DENND4A	R.LWS*SP	0.080258071	0.94	S1324	1.13
IPI00396063.4	10260	DENND4A	R.MNS*SF	0.296993866	0.98	S1194	1.35
IPI00396063.4	10260	DENND4A	K.SSPS*TE	0.010658547	0.9	S1554	0.68
IPI00396098.1	168850	ZNF800	R.RDS*ITF	0.242972405	0.85	S317	0.83
IPI00396098.1	168850	ZNF800	K.VKVEPA	0.9240167	0.96	T424	0.97
IPI00396098.1	168850	ZNF800	K.VKVEPA	0.873506301	0.92	S422	0.84
IPI00396098.1	168850	ZNF800	K.VKVEPA	0.975679369	0.92	S426	0.84
IPI00396098.1	168850	ZNF800	R.DSITPDI	0.373234869	0.98	S336	1.12
IPI00396098.1	168850	ZNF800	R.DSITPDI	0.373234869	0.98	S334	1.12
IPI00396098.1	168850	ZNF800	R.DSITPDI	0.32093792	1	S336	1.08
IPI00396171.3	4134	MAP4	K.KVDLT*L	0.604563646	0.81	T266	0.9
IPI00396171.3	4134	MAP4	K.TTTAA'	0.990159288	0.94	S560	0.92
IPI00396171.3	4134	MAP4	R.AS*PIKM	0.32093792	1	S358	0.99
IPI00396171.3	4134	MAP4	K.ETERAS	0.346340474	0.98	S358	1.04
IPI00396171.3	4134	MAP4	K.VGS*LDI	0.044561326	0.98	S808	1.12
IPI00396171.3	4134	MAP4	K.KCS*LP/	0.12765804	0.92	S636	1.12
IPI00396171.3	4134	MAP4	K.KKPCSE	0.49616549	0.96	T101	1.08
IPI00396171.3	4134	MAP4	K.GISEDSI	0.214968943	0.85	S624	1.16
IPI00396171.3	4134	MAP4	K.GISEDSI	0.214968943	0.85	T627	1.16
IPI00396171.3	4134	MAP4	K.DMES*P	0.139636808	0.85	S280	0.99
IPI00396230.2	84930	MASTL	R.DINMMC	1.29E-05	0.72	T194	0.99
IPI00396230.2	84930	MASTL	K.DLELAL'	0.253322457	1	S370	1.09
IPI00396230.2	84930	MASTL	R.LATSSA	0.147475653	0.96	S319	0.83
IPI00396265.1	1998	ELF2	R.VVNITS*	0.530774648	0.92	S303	1.1
IPI00396265.1	1998	ELF2	R.VVNITS*	0.49616549	0.88	S303	0.97
IPI00396265.1	1998	ELF2	K.TIEAAE/	0.660822982	0.55	S47	0.51
IPI00396285.5			R.LS*PTFF	0.296993866	0.83	S258	1.09
IPI00396352.4	553158	LOC55315	R.SKSYNT	0.214968943	0.96	T257	1.13
IPI00396352.4	553158	LOC55315	R.SKS*YN'	0.214968943	0.96	S254	1.13
IPI00396352.4	553158	LOC55315	R.S*KSYN'	0.214968943	0.96	S252	1.13
IPI00396387.3	2794	GNL1	R.REEQTE	0.166517367	0.81	T50	1.25
IPI00396387.3	2794	GNL1	R.EEQTDI	2.43E-06	0.79	S51	0.89
IPI00396399.4	7041	TGFB111	R.RGS*LC	0.346340474	0.96	S386	0.85
IPI00396412.2	6733	SRPK2	R.HKIPES\	0.49616549	0.77	S495	0.98
IPI00396412.2	6733	SRPK2	R.HKIPES\	0.643675939	0.88	S494	1.17
IPI00396435.2	1665	DHX15	R.HRLDLG	0.430690939	0.69	S15	0.77
IPI00396551.3	10635	RAD51AP'	R.SSSSPL	0.401648339	0.98	S310	1.05
IPI00396551.3	10635	RAD51AP'	R.SSSSPL	0.401648339	0.98	S314	1.05
IPI00396551.3	10635	RAD51AP'	R.KPLEIRE	0.726073545	0.81	S282	0.87
IPI00396557.3	7791	ZYX	R.EKVSS*I	0.643675939	0.4	S143	0.7
IPI00396557.3	7791	ZYX	K.FT*PVA\	0.872720802	1	T274	0.97
IPI00396557.3	7791	ZYX	K.LGHPEA	0.152571688	0.98	S308	1.06
IPI00396557.3	7791	ZYX	K.FS*PGAI	0.863507405	1	S281	1.02
IPI00396557.3	7791	ZYX	R.S*PGAP	0.49616549	1	S344	1.09

IPI00396561.3	84859 LRCH3	R.ISHEGS	0.331526627	0.69	S419	0.83
IPI00396634.2	85379 CTA-221G	R.TFQARF	0.604563646	0.98	S508	1.03
IPI00396634.2	85379 CTA-221G	R.RS*PTVI	0.054409842	0.94	S1224	1.07
IPI00396937.1	51535 PPHLN1	K.S*FYSSI	6.68E-07	0.5	S110	0.95
IPI00396937.1	51535 PPHLN1	R.Y*FT*LK	0.000297256	0.96	Y155	1.71
IPI00396937.1	51535 PPHLN1	R.DNTFFR	0.751811379	1	S85	0.96
IPI00397015.2	27245 AHDC1	R.ASTVS*I	0.106353987	0.55	S1064	1.16
IPI00397015.2	27245 AHDC1	R.GPAAA	0.166517367	0.98	S1549	1.05
IPI00397376.1	79882 ZC3H14	R.TGS*ISS	0.642010044	0.94	S327	1
IPI00397376.1	79882 ZC3H14	R.T*GSISS	0.938173728	0.94	T325	1
IPI00397376.1	79882 ZC3H14	R.KLPVVS	0.872720802	0.92	S301	0.91
IPI00397376.1	79882 ZC3H14	R.LCEPEV	0.49616549	0.76	S274	1.1
IPI00397376.1	79882 ZC3H14	K.NGDEC	0.684201094	1	S620	1.01
IPI00397376.1	79882 ZC3H14	K.FIVTLDC	0.827038504	0.98	Y531	0.98
IPI00397376.1	79882 ZC3H14	R.DLVQPC	0.684201094	1	S515	1
IPI00397519.3	9685 CLINT1	K.TIDLGA	0.643675939	0.98	S281	0.98
IPI00397519.3	9685 CLINT1	K.TIDLGA	0.005679537	0.81	S281	0.71
IPI00397519.3	9685 CLINT1	K.TIDLGA	0.026216849	0.92	T276	0.78
IPI00397576.4	10489 LRRC41	K.RSPS*AI	0.116581414	0.98	S359	1.13
IPI00397576.4	10489 LRRC41	K.RS*PSAI	0.026666866	0.98	S357	1.13
IPI00397576.4	10489 LRRC41	R.APS*RD	0.049260986	0.96	S276	1.27
IPI00397590.1	65125 WNK1	K.DRPVS*	0.373234869	0.81	S167	0.92
IPI00397590.1	65125 WNK1	R.DVDDG	0.072926818	0.76	S1786	0.74
IPI00397590.1	65125 WNK1	K.EKPELS	0.296993866	0.96	S1766	1
IPI00397590.1	65125 WNK1	K.KEKPEL	0.296993866	0.94	S1765	1.08
IPI00397590.1	65125 WNK1	K.KEKPEL	0.139636808	0.94	S1766	1.08
IPI00397590.1	65125 WNK1	K.VFPSEIT	0.003656496	0.67	S1049	0.84
IPI00397728.3	4659 PPP1R12A	R.RLAST*	1.99E-09	0.79	T508	1.14
IPI00397728.3	4659 PPP1R12A	K.FPTTATI	0.530774648	0.98	S422	1.05
IPI00397728.3	4659 PPP1R12A	K.FPTTATI	0.530774648	0.98	T419	1.05
IPI00397734.4		R.IHT*GEK	0.431601138	0.94	T382	1.1
IPI00397734.4		R.VHS*GE	0.154098617	0.76	S298	0.59
IPI00397794.4	57466 SFRS15	K.KPENEV	0.401648339	0.98	S656	1.07
IPI00397883.5		K.KKSMEE	0.152571688	0.92	T41	1.14
IPI00397883.5		K.KKSMEE	0.139636808	0.94	T46	1.32
IPI00397883.5		K.KKS*ME	0.139636808	0.94	S36	1.32
IPI00397904.5	9688 NUP93	R.GLDIS*F	0.088241621	0.69	S72	0.96
IPI00397930.3	57683 ZDBF2	K.SVFETS	0.928728317	0.98	S957	1.08
IPI00398131.4	389421 LIN28B	R.EVGGGI	0.001613065	0.72	S203	1.65
IPI00398154.2	60312 AFAP1	K.KKPSTD	0.431601138	0.88	T341	0.96
IPI00398154.2	60312 AFAP1	K.KKPSTD	0.431601138	0.88	S342	0.96
IPI00398154.2	60312 AFAP1	K.KKPS*TI	0.296993866	0.94	S336	1.05
IPI00398154.2	60312 AFAP1	R.TLENSP	0.431601138	1	S687	1.01
IPI00398154.2	60312 AFAP1	K.KKPS*TI	0.98101429	1	S336	0.99
IPI00398154.2	60312 AFAP1	K.KKPSTD	0.98101429	1	T341	0.99
IPI00398154.2	60312 AFAP1	K.SGTSSP	0.296993866	1	S668	1.14
IPI00398154.2	60312 AFAP1	K.EAYSGC	0.684201094	1	S265	1.01
IPI00398154.2	60312 AFAP1	K.EAYSGC	0.684201094	1	S264	1.01
IPI00398505.5	23358 USP24	R.HLQQG	0.088241621	0.86	S2604	1.03
IPI00398505.5	23358 USP24	R.VSDQN	0.296993866	0.98	S2047	1.14
IPI00398505.5	23358 USP24	K.NDINEA	0.40669332	0.96	S63	0.88

IPI00398505.5	23358	USP24	K.NDINEA'	0.40669332	0.96	S58	0.88
IPI00398505.5	23358	USP24	R.T*ISAQC	0.033531167	0.98	T2559	0.84
IPI00398505.5	23358	USP24	R.TIS*AQC	0.033531167	0.98	S2561	0.84
IPI00398718.5	4301	MLLT4	R.DYEPPS	0.000429319	0.74	S1679	1.13
IPI00398718.5	4301	MLLT4	R.SSPNVA	0.463105648	0.9	S1165	1.04
IPI00398718.5	4301	MLLT4	K.ITSVS*T	0.072926818	0.96	S1184	1.25
IPI00398749.1	23369	PUM2	R.SGQGF	0.024009318	0.81	S82	1.21
IPI00398779.3	5339	PLEC1	R.TSS*EDI	0.604563646	0.88	S21	1.14
IPI00398922.4	26472	PPP1R14E	R.VYFQS*	0.431601138	0.92	S84	0.9
IPI00398994.3	57523	KIAA1305	K.EWNVGI	0.233505398	0.72	S1887	1.24
IPI00398998.2	91750	LIN52	K.LDRAS*I	0.139636808	0.9	S28	0.96
IPI00399170.1	5976	UPF1	R.AYQHGC	0.726073545	1	S1116	1
IPI00399252.1	79960	PHF17	K.GVQVP\	0.27446972	0.96	S89	1.17
IPI00399252.1	79960	PHF17	K.GVQVP\	0.27446972	0.96	T92	1.17
IPI00399254.1	54726	OTUD4	K.RPEPST	0.007240509	0.98	S546	1.38
IPI00399306.1	5546	PRCC	K.IAAPELF	0.27446972	0.98	S157	1.02
IPI00400834.1	23389	THRAP2	R.AGSSSL	0.12765804	0.88	S817	0.88
IPI00400834.1	23389	THRAP2	R.AGSSSL	0.253322457	0.96	S817	1.04
IPI00400867.1	53335	BCL11A	K.LLLGSP!	0.980510506	0.83	S628	0.86
IPI00400867.1	53335	BCL11A	K.LLLGS*F	0.980510506	0.83	S625	0.86
IPI00400867.1	53335	BCL11A	K.AVDKPP	0.088241621	0.9	S88	0.88
IPI00400867.1	53335	BCL11A	K.AVDKPP	0.088241621	0.9	S86	0.88
IPI00400922.4	22984	PDCD11	R.YSHVSC	0.296993866	0.83	S1360	1.06
IPI00401163.5	4253	CTAGE5	R.FCSNSC	0.116581414	0.94	S606	1.31
IPI00401163.5	4253	CTAGE5	R.AFLS*PF	0.152571688	0.98	S507	1.2
IPI00401282.2	23307	FKBP15	R.RPS*QE	0.373234869	0.92	S1079	1.15
IPI00401282.2	23307	FKBP15	R.RPSQEC	0.346340474	0.88	S1085	1.15
IPI00401682.1	400793	FLJ13137	R.RAS*SP!	0.152571688	0.98	S222	1.13
IPI00401682.1	400793	FLJ13137	R.ASS*PSI	0.346340474	0.96	S223	1.18
IPI00401682.1	400793	FLJ13137	K.LSLSPIS	0.442923356	0.86	S249	0.9
IPI00401682.1	400793	FLJ13137	R.RASS*P!	0.373234869	1	S223	1.12
IPI00401682.1	400793	FLJ13137	R.TSS*LD!	0.726073545	1	S258	1
IPI00401752.1	27153	ZNF777	R.GGCVS*	0.751811379	0.98	S604	1.04
IPI00402159.1	5932	RBBP8	K.SSTHPC	0.743182508	0.76	S233	0.8
IPI00402167.2	9220	TIAF1	K.RFS*FSC	0.049260986	0.98	S140	1.2
IPI00402167.2	9220	TIAF1	R.RVSSSS	0.116581414	0.96	S1073	1.34
IPI00402167.2	9220	TIAF1	R.RVS*SS!	0.152571688	1	S1070	1.26
IPI00402214.3	23053	KIAA0913	K.NVPES	0.9949766	0.81	S336	0.7
IPI00402576.2	285735	LOC28573	K.FFTMSR	0	0.59	T71	0.19
IPI00409590.1	4008	LMO7	R.RKSYT*!	0.080258071	0.96	T753	1.12
IPI00409590.1	4008	LMO7	R.RKSYTS	0.080258071	0.96	S754	1.12
IPI00409590.1	4008	LMO7	R.S*ASVN	0.401648339	1	S1491	1.07
IPI00409590.1	4008	LMO7	R.SAS*VN	0.401648339	1	S1493	1.07
IPI00409638.2	163782	ANKRD38	K.EHPGRF	0.401648339	1	S553	1.1
IPI00409638.2	163782	ANKRD38	K.EHPGRF	0.373234869	1	S554	1.05
IPI00409638.2	163782	ANKRD38	K.EHPGRF	0.373234869	1	T556	1.05
IPI00409638.2	163782	ANKRD38	R.ASS*MP	0.088241621	0.96	S164	1.3
IPI00409638.2	163782	ANKRD38	R.AS*SMP	0.088241621	0.96	S163	1.3
IPI00409640.1	51599	LSR	K.AATSGV	0.836096036	1	S332	1
IPI00409640.1	51599	LSR	K.AATSGV	0.836096036	1	S326	1
IPI00409640.1	51599	LSR	K.AATSGV	0.836096036	1	Y328	1

IPI00409640.1	51599	LSR	R.ARS*VD	0.197661257	0.86	S493	1.21
IPI00409671.1	11325	DDX42	K.AGSSAA	0.813530126	0.92	S758	1.01
IPI00409671.1	11325	DDX42	K.AGSSAA	0.32093792	0.96	S744	1.16
IPI00409671.1	11325	DDX42	K.AGSSAA	0.431601138	1	S751	1.1
IPI00409671.1	11325	DDX42	R.YMAENF	0.643675939	0.66	S185	0.69
IPI00409671.1	11325	DDX42	R.YMAENF	0.829549043	0.79	S185	0.62
IPI00409671.1	11325	DDX42	K.AGSSAA	0.197661257	1	S754	1.18
IPI00409671.1	11325	DDX42	R.QQFHSF	0.463105648	0.92	S109	1.05
IPI00410067.1	56829	ZC3HAV1	R.SCTPSP	0.957149097	0.9	S284	0.76
IPI00410067.1	56829	ZC3HAV1	R.KFTYLG	0.822525206	0.98	S302	0.99
IPI00410067.1	56829	ZC3HAV1	R.SCTPS*I	0.431601138	1	S275	1.04
IPI00410067.1	56829	ZC3HAV1	R.AS*LEDJ	0.253322457	0.98	S284	1.03
IPI00410067.1	56829	ZC3HAV1	R.SS*LGSJ	0.907673183	0.96	S387	0.99
IPI00410067.1	56829	ZC3HAV1	K.TVFS*PI	0.401648339	1	S378	1.08
IPI00410103.1	51133	KCTD3	R.RTES*FI	0.769214181	0.94	S664	1.04
IPI00410103.1	51133	KCTD3	R.RTESFH	0.769214181	0.94	S667	1.04
IPI00410258.1	9150	CTDP1	K.RQPS*M	0.346340474	0.96	S720	1.11
IPI00410259.2	90102	PHLDB2	R.KYSS*S	0.27446972	0.76	S243	1.08
IPI00410259.2	90102	PHLDB2	R.KYS*SS	0.27446972	0.76	S242	1.08
IPI00410259.2	90102	PHLDB2	R.TASES*I	0.6467005	0.74	S982	1.07
IPI00410259.2	90102	PHLDB2	K.TTSSIS*	0.431601138	0.9	S909	1
IPI00410259.2	90102	PHLDB2	R.NDELLS	0.253322457	0.92	T550	1.27
IPI00410259.2	90102	PHLDB2	R.NDELLS	0.253322457	0.92	T557	1.27
IPI00410303.1	50807	DDEF1	K.SHPLDL	0.530774648	0.96	S1027	0.93
IPI00410351.1	9611	NCOR1	R.NDARS*	0.643675939	0.88	S2200	0.97
IPI00410351.1	9611	NCOR1	K.HEAPS*J	0.791231585	0.88	S157	1.05
IPI00410351.1	9611	NCOR1	R.PGSRVJ	0.296993866	0.94	S2136	1.08
IPI00410351.1	9611	NCOR1	R.KT*PEVJ	0.881970624	0.96	T1383	0.9
IPI00410351.1	9611	NCOR1	K.QQQLLE	0.604563646	0.96	S224	1.03
IPI00410351.1	9611	NCOR1	R.SHVSSE	0.214968943	0.96	S2167	0.95
IPI00410351.1	9611	NCOR1	R.NDARSF	0.863507405	1	S2203	1.03
IPI00410351.1	9611	NCOR1	K.AQLS*PI	0.261301769	0.96	S1488	1.21
IPI00410351.1	9611	NCOR1	R.S*PGSIE	0.995403769	1	S2200	1.04
IPI00410355.1			R.EPSLS*FI	0.472044151	0.9	S558	0.78
IPI00410369.1	79778	MICALL2	K.ATGEPG	0.166517367	0.98	S207	1.18
IPI00410383.1	2549	GAB1	R.SS*SLEI	0.233505398	0.98	S418	1.07
IPI00410383.1	2549	GAB1	R.SSS*LEI	0.401648339	1	S419	1.08
IPI00410485.2	51347	TAOK3	K.LADFGS	0.214968943	0.85	S177	1.05
IPI00410618.3	57456	KIAA1143	K.RIQPQP	0.197661257	0.94	S50	1.21
IPI00410618.3	57456	KIAA1143	R.IQPQPP	0.214968943	0.98	S50	1.07
IPI00410718.2			R.SFLVAS	0.253322457	0.9	S1285	0.93
IPI00410718.2			K.TAPVAS	0.029596689	0.83	T382	0.97
IPI00410718.2			K.LSGEHS	0.296993866	0.98	S1313	1.08
IPI00410718.2			K.LSGEHS	0.233505398	0.98	S1314	1.08
IPI00410718.2			K.LSGEHS	0.181528891	0.98	T1315	1.21
IPI00410718.2			K.TAPVAS	0.990601784	0.9	T395	1.04
IPI00410718.2			K.TAPVAS	0.990601784	0.9	S384	1.04
IPI00410718.2			K.TAPVAS	0.024009318	0.92	S381	1.08
IPI00410718.2			K.SLDSEP	0.431601138	1	S372	1.08
IPI00410727.1	8997	KALRN	K.WLTS*PI	0.32093792	0.98	S146	0.99
IPI00411329.2			K.SES*PKI	0.233505398	0.31	S6	0.49

IPI00411329.2		R.S*SGPY	0.86862174	1	S232	0.96	
IPI00411329.2		R.S*SGPY	0.197661257	0.94	S232	1.08	
IPI00411461.1	22839	DLGAP4	R.KLS*SIG	0.566916624	0.94	S126	1.17
IPI00411559.2	10051	SMC4	K.ISLHPIE	0.909927945	0.79	S1056	0.85
IPI00411559.2	10051	SMC4	R.TES*PA	0.166517367	0.52	S41	0.5
IPI00411570.2	5905	RANGAP1	R.KILDPN	0.214968943	0.92	S428	1.04
IPI00411570.2	5905	RANGAP1	R.KILDPN	0.9240167	0.86	S427	0.95
IPI00411570.2	5905	RANGAP1	K.ILDPNTC	0.106353987	0.92	S428	1.12
IPI00411570.2	5905	RANGAP1	R.KILDPN	0.961909673	0.98	S428	0.96
IPI00411592.2	1107	CHD3	R.AS*SPTI	0.346340474	0.98	S1532	1.04
IPI00411592.2	1107	CHD3	K.TSPTTP	0.017465765	0.94	S1549	0.57
IPI00411592.2	1107	CHD3	K.TSPTTP	0.180060499	0.98	S1549	0.73
IPI00411592.2	1107	CHD3	K.TSPTT*F	0.809048575	0.96	T1541	1.08
IPI00411594.1	9330	GTF3C3	K.GKLS*AI	0.431601138	1	S43	1.05
IPI00411984.4	6788	STK3	R.NATS*P	0.643675939	0.98	S385	1.07
IPI00411984.4	6788	STK3	R.NATSPC	0.643675939	0.98	S392	1.07
IPI00411984.4	6788	STK3	R.NATSPC	0.005185657	0.88	S392	0.88
IPI00411984.4	6788	STK3	R.NAT*SP	0.032094189	0.88	T384	0.88
IPI00411984.4	6788	STK3	R.NATS*P	0.632655857	0.98	S385	1
IPI00412329.6	23373	CRTC1	R.RTNS*D	0.044561326	0.96	S167	1.35
IPI00412329.6	23373	CRTC1	R.RTNSDE	0.044561326	0.96	S169	1.35
IPI00412344.4	6732	SRPK1	R.GSAPH	0.346340474	1	S51	1.1
IPI00412364.5	84464	BTBD12	R.DCRS*P	0.373234869	0.96	S786	1.08
IPI00412364.5	84464	BTBD12	K.MGQCAI	1.49E-14	0.69	S273	0.31
IPI00412415.1	11177	BAZ1A	R.GKLS*S	0.595623706	0.98	S1279	0.96
IPI00412415.1	11177	BAZ1A	K.RQS*PE	0.684201094	0.52	S1413	1.04
IPI00412441.3	23063	WAPAL	K.RPESPS	0.27446972	0.98	S308	1.17
IPI00412441.3	23063	WAPAL	K.RPES*P	0.066203153	0.86	S306	1.14
IPI00412441.3	23063	WAPAL	K.RPES*P	0.463105648	0.92	S306	1.16
IPI00412441.3	23063	WAPAL	K.VEEEST	0.604563646	1	S162	1.06
IPI00412527.1	57198	ATP8B2	R.KKSDS*	0	0.64	S1213	8.74
IPI00412535.2	9898	UBAP2L	K.SPAVAT	0.401648339	0.9	S460	0.99
IPI00412535.2	9898	UBAP2L	R.RYPSSI	0.373234869	0.96	S610	1.14
IPI00412535.2	9898	UBAP2L	K.STSAPQ	0.726073545	0.98	S469	1.08
IPI00412535.2	9898	UBAP2L	K.STSAPQ	0.726073545	0.98	S469	1.08
IPI00412535.2	9898	UBAP2L	K.STSAPQ	0.743182508	0.98	S472	1.03
IPI00412535.2	9898	UBAP2L	K.STSAPQ	0.743182508	0.98	S469	1.03
IPI00412535.2	9898	UBAP2L	K.TAQALA	0.197661257	0.94	S400	1.1
IPI00412535.2	9898	UBAP2L	K.S*PAVA	0.791231585	0.96	S441	1.05
IPI00412535.2	9898	UBAP2L	K.S*PAVA	0.791231585	0.96	S441	1.05
IPI00412535.2	9898	UBAP2L	K.NPSDSA	0.922292588	1	S418	1.03
IPI00412535.2	9898	UBAP2L	K.TAQALA	0.096924105	0.92	S402	1.14
IPI00412535.2	9898	UBAP2L	R.RYPSSI	0.214968943	1	S611	1.18
IPI00412535.2	9898	UBAP2L	R.FPLDYY	0.604563646	0.86	T845	0.95
IPI00412535.2	9898	UBAP2L	R.FPLDYY	0.604563646	0.86	T846	0.95
IPI00412535.2	9898	UBAP2L	R.FPLDYY	0.604563646	0.86	T849	0.95
IPI00412535.2	9898	UBAP2L	R.RYPSSI	0.346340474	1	T617	1.08
IPI00412535.2	9898	UBAP2L	R.RYPSSI	0.346340474	1	S610	1.08
IPI00412535.2	9898	UBAP2L	R.RYPSSI	0.346340474	1	S609	1.08
IPI00412535.2	9898	UBAP2L	R.RYPSSI	0.253322457	1	S611	1.08
IPI00412535.2	9898	UBAP2L	K.SPAVAT	0.373234869	1	S456	1.09

IPI00412535.2	9898 UBAP2L	K.SPAVAT	0.373234869	1 S455	1.09
IPI00412535.2	9898 UBAP2L	R.RYPSS*	0.12765804	1 S607	1.2
IPI00412650.1	6840 SVIL	K.YGS*FEI	0.021229856	0.85 S968	0.7
IPI00412672.1	5585 PKN1	R.T*STFC	0.49616549	0.85 T778	1.09
IPI00412672.1	5585 PKN1	R.TS*TFCC	0.49616549	0.85 S779	1.09
IPI00412672.1	5585 PKN1	R.TDVSNF	0.623338592	0.69 S922	1.07
IPI00412752.1	6774 STAT3	K.YCRPES	0.088241621	0.92 Y704	1.24
IPI00412752.1	6774 STAT3	K.YCRPES	0.096924105	0.96 Y705	1.36
IPI00412771.1	23607 CD2AP	K.DTCYS*I	0.026666866	0.77 S542	1.01
IPI00412771.1	23607 CD2AP	K.DTCYS*I	0.088241621	0.92 S542	1
IPI00412771.1	23607 CD2AP	K.DTCYS*I	0.088241621	0.92 S542	1
IPI00412771.1	23607 CD2AP	R.TSSSET	0.197661257	1 T236	1.14
IPI00412771.1	23607 CD2AP	R.TSS*SE	0.197661257	1 S233	1.14
IPI00412771.1	23607 CD2AP	R.TS*SSE	0.197661257	1 S232	1.14
IPI00412782.5	9181 ARHGEF2	K.S*VSTTN	0.166517367	0.98 S149	1.14
IPI00412782.5	9181 ARHGEF2	K.SVSTTN	0.932027377	0.52 T153	0.93
IPI00412782.5	9181 ARHGEF2	K.SVS*TTN	0.197661257	0.98 S151	1.28
IPI00412782.5	9181 ARHGEF2	K.SVSTTN	0.566916624	0.74 S163	0.96
IPI00412782.5	9181 ARHGEF2	R.EPALPL	0.181528891	0.74 T694	1.04
IPI00413100.1	23187 PHLDB1	R.S*PSPTI	0.007240509	0.67 S518	0.92
IPI00413100.1	23187 PHLDB1	R.TRS*PS	0.32093792	0.98 S518	1.13
IPI00413100.1	23187 PHLDB1	R.WAAHG	0.530774648	0.98 S501	0.96
IPI00413144.3	90381 C15orf42	R.HVLQTA	0.604563646	0.01 S441	0.34
IPI00413144.3	90381 C15orf42	R.SDWHA	0.233505398	0.76 S1453	0.81
IPI00413144.3	90381 C15orf42	R.ISHTPQ	0.49616549	0.96 T1134	1.12
IPI00413144.3	90381 C15orf42	R.NLFNQE	0.00181541	0.96 S923	1.1
IPI00413365.2	24149 ZNF318	K.RPETWE	0.296993866	0.88 S1971	0.92
IPI00413365.2	24149 ZNF318	R.IPS*PNII	0.253322457	0.96 S2101	1.13
IPI00413483.1	9704 DHX34	R.LQEEQL	0.49616549	0.98 S749	1.07
IPI00413562.2	80790 CMIP	R.LLHPS*F	0.331526627	0.98 S283	0.78
IPI00413659.3	54890 ALKBH5	R.RGS*FS	0.253322457	1 S361	1.11
IPI00413663.5	23143 LRCH1	R.NLESIDF	0.643675939	0.96 T574	1.06
IPI00413663.5	23143 LRCH1	R.ENS*PA	0.180060499	0.85 S538	0.81
IPI00413669.4	54816 SUHW4	K.RPS*TSI	0	0.81 S179	5.48
IPI00413669.4	54816 SUHW4	R.ASVGPL	0.214968943	0.98 S249	1.09
IPI00413671.1	9774 BCLAF1	K.LKDLFD	0.643675939	0.94 Y509	0.92
IPI00413671.1	9774 BCLAF1	K.STFREE	0.233505398	0.96 S529	1.22
IPI00413671.1	9774 BCLAF1	K.DLFDYS	0.604563646	0.9 S510	0.93
IPI00413671.1	9774 BCLAF1	R.RIDISPS	0.181528891	1 T659	1.18
IPI00413671.1	9774 BCLAF1	R.IDIS*PS	0.296993866	1 S656	1.15
IPI00413671.1	9774 BCLAF1	R.RIDIS*P	0.214968943	1 S656	1.14
IPI00413671.1	9774 BCLAF1	R.RIDISPS	0.181528891	1 S658	1.14
IPI00413671.1	9774 BCLAF1	K.LKDLFD	0.566916624	1 S510	1.01
IPI00413780.3	29941 PKN3	R.SPAAAL	0.27446972	0.94 S307	1.11
IPI00414022.1	90933 TRIM41	R.VDLTLD	0.858914691	0.92 S447	0.97
IPI00414058.1	2869 GRK5	K.TSFNHH	0.726073545	1 S586	1
IPI00414058.1	2869 GRK5	K.DVLDIEC	0.49616549	1 S484	1.1
IPI00414058.1	2869 GRK5	K.DVLDIEC	0.49616549	1 T485	1.1
IPI00414095.4	56478 EIF4ENIF1	K.WHASLY	0.726073545	0.94 S74	0.95
IPI00414095.4	56478 EIF4ENIF1	R.WFSNP	0.431601138	0.94 S182	1.02
IPI00414095.4	56478 EIF4ENIF1	K.WHASLY	0.233505398	0.98 S74	1.09

IPI00414095.4	56478	EIF4ENIF1	K.WHASLY	0.233505398	0.98	Y71	1.09
IPI00414095.4	56478	EIF4ENIF1	K.WHASLY	0.233505398	0.98	S74	1.09
IPI00414095.4	56478	EIF4ENIF1	R.LAGLEQ	0.530774648	0.85	S211	0.82
IPI00414095.4	56478	EIF4ENIF1	R.LAGLEQ	0.197661257	0.92	S211	1.18
IPI00414095.4	56478	EIF4ENIF1	R.APS*PPI	0.233505398	0.85	S389	0.95
IPI00414127.3	5902	RANBP1	K.DTHEDF	0.643675939	0.98	T15	0.99
IPI00414127.3	5902	RANBP1	K.DTHEDF	0.643675939	0.98	T13	0.99
IPI00414367.1	57224	NHSL1	R.HS*VINV	0.253322457	0.88	S964	1.14
IPI00414367.1	57224	NHSL1	R.NHS*PS	0.197661257	0.77	S1753	0.94
IPI00414367.1	57224	NHSL1	K.ESSAAC	0.643675939	0.96	S1601	1.17
IPI00414367.1	57224	NHSL1	K.T*ITGVP	0.401648339	0.69	T209	1.23
IPI00414367.1	57224	NHSL1	R.SPGAP	0.021601024	0.9	S1506	1.12
IPI00414367.1	57224	NHSL1	R.S*PGAP	0.961160996	0.98	S1492	1.01
IPI00414367.1	57224	NHSL1	R.LDSDAC	0.990601784	0.92	S653	1.04
IPI00414367.1	57224	NHSL1	R.SPGAP	0.139636808	1	S1516	1.25
IPI00414367.1	57224	NHSL1	R.S*LIYTD	0.106353987	0.96	S190	1.17
IPI00414367.1	57224	NHSL1	R.RKT*ITG	0.233505398	1	T209	1.13
IPI00414367.1	57224	NHSL1	K.ESSAAC	0.530774648	1	S1599	1.14
IPI00414482.2	2975	GTF3C1	R.PLEGSS	0.166517367	0.94	S1877	1.05
IPI00414482.2	2975	GTF3C1	R.RAS*WA	0.346340474	0.98	S1886	1.18
IPI00414482.2	2975	GTF3C1	R.PLEGSS	0.32093792	1	S1875	1.08
IPI00414482.2	2975	GTF3C1	R.EDPQAF	0.431601138	0.98	S1875	1.1
IPI00414482.2	2975	GTF3C1	R.EDPQAF	0.431601138	0.98	S1877	1.1
IPI00414497.1			K.KLLEDTI	0.463105648	0.55	S615	0.63
IPI00414497.1			R.KPSGS*	0.401648339	0.98	S445	1.11
IPI00414497.1			K.SSSVSP	0.451162192	0.79	S382	0.22
IPI00414497.1			K.ETDPVK	0.604563646	0.98	S108	1.04
IPI00414497.1			K.ET*DPVI	0.604563646	0.98	T103	1.04
IPI00414497.1			R.KPSGS*	0.530774648	1	S445	1.07
IPI00414497.1			K.SSSVSP	0.12765804	1	S382	1.27
IPI00414497.1			R.KTS*PA	0.447034483	0.96	S459	0.9
IPI00414497.1			K.TAPTLS'	0.643675939	1	S405	1.04
IPI00414497.1			K.LAPVPS	0.566916624	1	S204	1.04
IPI00414497.1			K.LAPVPS	0.604563646	1	S204	1.05
IPI00414576.2	4542	MYO1F	R.NRDVLF	0.002581506	0.85	S537	0.82
IPI00414603.2	402057	LOC40205	K.LLDFGS	0.917421569	0.9	S115	0.81
IPI00414603.2	402057	LOC40205	K.LLDFGS	0.530774648	0.96	S113	1.06
IPI00414657.4	63922	CHTF18	R.GDAASE	0.013541797	0.72	S64	0.79
IPI00414657.4	63922	CHTF18	R.GGGQLI	0.346340474	0.98	S253	1.02
IPI00414657.4	63922	CHTF18	R.VENSPC	0.01011525	0.76	S899	1.07
IPI00414696.1	3181	HNRPA2B	R.GFGDG'	0.604563646	1	S247	0.99
IPI00414696.1	3181	HNRPA2B	R.NMGGP'	0.003916407	0.85	S332	0.89
IPI00414723.2	644820	hCG_1983	K.YGPADV	0.116581414	0.92	S106	1.11
IPI00414723.2	644820	hCG_1983	K.YGPADV	0.49616549	0.92	S106	0.9
IPI00414723.2	644820	hCG_1983	K.YGPADV	0.32093792	0.92	T93	1
IPI00414723.2	644820	hCG_1983	K.YGPADV	0.32093792	0.92	S90	1
IPI00414723.2	644820	hCG_1983	K.YGPADV	0.346340474	1	T87	1.12
IPI00414827.1	57522	SRGAP1	K.NSPTPA	0.181528891	0.92	S985	1.16
IPI00414827.1	57522	SRGAP1	K.NSPTPA	0.106353987	0.88	S982	1.15
IPI00414827.1	57522	SRGAP1	K.NSPTPA	0.106353987	0.92	S987	1.1
IPI00414827.1	57522	SRGAP1	R.ST*SSS	0.49616549	0.96	T1005	1.18

IPI00414886.1	9639 ARHGEF1	R.TKS*LIA	0.009053635	0.96 S315	1.39
IPI00418132.3		R.SISTPT*	0.756570768	0.52 T167	0.71
IPI00418169.2	302 ANXA2	K.LSLEGD	0.836096036	0.98 T37	1.07
IPI00418184.1		K.KHPDAS	0.563781928	0.83 S39	0.9
IPI00418184.1		K.KHPDAS	0.563781928	0.83 S35	0.9
IPI00418316.5	23613 ZMYND8	K.ELSESV	0.643675939	0.92 S567	1.03
IPI00418316.5	23613 ZMYND8	K.TGQAGE	0.643675939	0.96 S510	0.82
IPI00418316.5	23613 ZMYND8	R.RIS*LSD	0.233505398	0.98 S445	1.2
IPI00418336.2	65123 INTS3	K.FPEFCS	0.49616549	0.62 S499	0.82
IPI00418336.2	65123 INTS3	R.EKFPEF	0.181528891	0.9 S501	1.03
IPI00418362.1	56033 BARX1	K.IVLQGG	0.300293467	0.98 T211	0.91
IPI00418362.1	56033 BARX1	K.IVLQGG	0.300293467	0.98 S209	0.91
IPI00418374.2	92154 ABBA-1	K.RLS*LPM	0.834430989	0.88 S643	0.98
IPI00418374.2	92154 ABBA-1	K.GGGAP	0.530774648	0.92 S300	1.14
IPI00418374.2	92154 ABBA-1	K.RLS*LPM	0.096924105	1 S643	1.2
IPI00418374.2	92154 ABBA-1	K.TPTVPD	0.139636808	1 S605	1.23
IPI00418374.2	92154 ABBA-1	R.AGS*EE	0.082584274	0.86 S616	0.9
IPI00418388.1		R.RSS*GT	0.431601138	0.98 S442	1.13
IPI00418458.3	5411 PNN	R.RGFS*D	0.03282354	0.35 S66	0.91
IPI00418458.3	5411 PNN	K.SLS*PGI	0.824668282	0.71 S443	0.72
IPI00418458.3	5411 PNN	K.S*LSPGI	0.824668282	0.71 S441	0.72
IPI00418482.1	51564 HDAC7A	R.T*VHPN	0.947647721	0.98 T143	1.19
IPI00418482.1	51564 HDAC7A	R.TVHPNS	0.694048494	0.96 S148	0.88
IPI00418482.1	51564 HDAC7A	R.AQS*SP	0.000141509	0.66 S525	1.23
IPI00418489.2	57496 MKL2	K.SGEISLF	0.197661257	0.9 S882	1.29
IPI00418600.1	619279 ZNF704	R.QHAHTV	3.04E-12	0.9 S367	2.72
IPI00418711.1		R.AS*VS*E	0.756570768	0.98 S192	0.91
IPI00419037.2	343641 TGM6	R.EAQMEI	0.92716125	0.72 T96	0.7
IPI00419273.4	8451 CUL4A	R.KGS*FS	0.072926818	0.96 S10	1.13
IPI00419322.1		R.KRS*EG	0.32093792	0.98 S454	0.94
IPI00419322.1		R.KRSEGF	0.32093792	0.98 S458	0.94
IPI00419337.1	4356 MPP3	K.NKEPLG	0.021601024	0.98 T150	1.51
IPI00419431.4	55252 ASXL2	R.KVSSSS	0.004600913	0.86 S146	1.35
IPI00419431.4	55252 ASXL2	R.KVSSSS*	0.995403769	0.96 S138	0.96
IPI00419431.4	55252 ASXL2	R.KVS*SS	0.995403769	0.96 S136	0.96
IPI00419431.4	55252 ASXL2	R.IVPVVS	0.919312669	0.98 S440	1
IPI00419431.4	55252 ASXL2	K.APS*PT	0.726073545	0.96 S834	0.99
IPI00419450.2	23403 FBXO46	R.ADEASE	0.12765804	0.79 S338	1.05
IPI00419604.1	374291 NDUFS7	R.QS*DVM	2.09E-07	0.96 S124	2.35
IPI00419684.2	1912 PHC2	K.LPQQDF	0.438828959	0.69 S86	0.73
IPI00419849.3	8725 C19orf2	R.KNS*TG	0.604563646	0.96 S345	1.03
IPI00419894.1	1523 CUTL1	R.RHSS*V	0.214968943	0.88 S1227	1.16
IPI00419894.1	1523 CUTL1	R.RHS*SV	0.253322457	0.96 S1226	1.16
IPI00419894.1	1523 CUTL1	R.RHS*S\	0.253322457	0.96 S1226	1.16
IPI00419894.1	1523 CUTL1	R.HSSVSC	0.181528891	0.94 S1244	1.18
IPI00419894.1	1523 CUTL1	R.HSSVSC	0.152571688	0.94 S1248	1.12
IPI00419894.1	1523 CUTL1	R.HSS*VS	0.566916624	0.98 S1227	1.17
IPI00419894.1	1523 CUTL1	R.HSS*VS	0.27446972	0.98 S1227	1.17
IPI00419894.1	1523 CUTL1	R.RHSS*V	0.116581414	0.94 S1227	1.09
IPI00419894.1	1523 CUTL1	R.HSS*VS	0.197661257	1 S1227	1.15
IPI00419894.1	1523 CUTL1	R.AYQQKF	0.463105648	0.98 S1281	1.05

IPI00419894.1	1523 CUTL1	R.HSS*VS	0.197661257	1 S1227	1.18
IPI00419922.1	23288 IQCE	R.S*ASNG	0.197661257	0.94 S128	1.14
IPI00419933.1	144100 PLEKHA7	R.KVTS*PI	0.373234869	0.81 S903	0.91
IPI00419979.2	5062 PAK2	K.YLSFT*F	0.233505398	0.86 T143	1.01
IPI00419979.2	5062 PAK2	K.YLS*FTF	0.431601138	0.81 S141	0.86
IPI00420019.1	255057 C19orf26	R.HAS*LDI	0.756144089	1 S299	0.93
IPI00420019.1	255057 C19orf26	K.IVTIHEC	0.727601611	0.88 S200	0.84
IPI00420019.1	255057 C19orf26	R.LAEPVV	0.726073545	1 S719	1
IPI00420019.1	255057 C19orf26	R.AASEST	0.86862174	0.96 T344	1
IPI00420019.1	255057 C19orf26	R.AAS*ES	0.86862174	0.96 S361	1
IPI00420061.2	157680 VPS13B	R.GNLNLS	0.891255812	0.77 S1263	0.93
IPI00420061.2	157680 VPS13B	K.LVHNLT	0.253322457	0.94 S3027	0.89
IPI00423207.1		R.TTVALP	0.32093792	0.94 S178	1.13
IPI00423207.1		R.TTVALP	0.32093792	0.94 T177	1.13
IPI00423207.1		-.MPVAVA	0	0.72 T33	59.71
IPI00424464.1	9765 ZFYVE16	R.NEIIQS*	0.431601138	0.94 S939	1.02
IPI00425405.1	55605 KIF21A	K.HSDSGT	0.106353987	0.96 S1261	1.21
IPI00425405.1	55605 KIF21A	K.HSDSGT	0.106353987	0.98 S1258	1.26
IPI00425405.1	55605 KIF21A	K.KIPEPS*	0.080258071	1 S1226	1.31
IPI00425405.1	55605 KIF21A	K.HSDSGT	0.088241621	0.98 S1258	1.22
IPI00425405.1	55605 KIF21A	R.KLS*SSI	0.214968943	1 S840	1.18
IPI00425405.1	55605 KIF21A	R.EKELS*F	0.346340474	1 S1199	1.14
IPI00425560.1	23513 SCRIB	R.VQS*PE	0.116581414	0.77 S1475	1.2
IPI00425560.1	23513 SCRIB	R.LAEAPS	0.463105648	0.94 S1547	1.01
IPI00425560.1	23513 SCRIB	R.LAEAPS	0.346340474	0.94 S1547	1.01
IPI00425560.1	23513 SCRIB	K.RVS*LV	0.072926818	0.25 S1378	0.79
IPI00425560.1	23513 SCRIB	R.AFAALP	0.463105648	0.81 S1591	1.18
IPI00425560.1	23513 SCRIB	R.HDHAVE	0.32093792	0.79 S939	0.68
IPI00425560.1	23513 SCRIB	R.LAEAPS	0.643675939	0.96 T1560	1.06
IPI00425560.1	23513 SCRIB	R.NS*LESI	0.813530126	0.94 S1220	1.11
IPI00425560.1	23513 SCRIB	R.SLEPSP	0.936890791	0.92 S1606	1.05
IPI00425560.1	23513 SCRIB	R.QSPAS*	0.566916624	1 S1448	1.03
IPI00425560.1	23513 SCRIB	R.LAEAPS	0.684201094	1 S1559	1
IPI00425560.1	23513 SCRIB	R.HCSLQA	0.346340474	1 S35	1.11
IPI00425560.1	23513 SCRIB	K.RVS*LV	0.373234869	1 S1378	1.03
IPI00425560.1	23513 SCRIB	R.LAEAPS	0.946608772	0.98 S1566	0.71
IPI00425560.1	23513 SCRIB	R.LPLLPI	0.401648339	1 S853	1.1
IPI00425560.1	23513 SCRIB	R.LAEAPS	0.643675939	0.94 S1561	0.8
IPI00425560.1	23513 SCRIB	R.LAEAPS	0.401648339	1 T1560	1.1
IPI00426447.2	613 BCR	R.HQDGLF	0.604563646	0.85 S102	0.85
IPI00426447.2	613 BCR	R.HQDGLF	0.813530126	0.85 S100	0.93
IPI00426447.2	613 BCR	R.HQDGLF	0.800118017	0.69 S462	0.82
IPI00426447.2	613 BCR	R.HQDGLF	0.756144089	0.69 S459	0.82
IPI00426447.2	613 BCR	R.ASASRF	0.116581414	0.96 S122	1.25
IPI00426728.3	8930 MBD4	K.YNKEAL	0	0.71 S422	3.64
IPI00426728.3	8930 MBD4	R.SLS*SG	0.928728317	0.96 S318	0.95
IPI00427522.1	5469 PPARBP	K.ALAPAD	0.03637398	0.92 S953	1.72
IPI00427522.1	5469 PPARBP	R.NKKPS*	0.905247537	1 S1302	0.93
IPI00427522.1	5469 PPARBP	K.ADTEGK	0.072926818	0.96 S1021	1.2
IPI00427522.1	5469 PPARBP	R.SQT*PP	0.253322457	0.92 T1051	0.91
IPI00427522.1	5469 PPARBP	K.LAS*PMI	0.233505398	1 S1207	1.17

IPI00427522.1	5469	PPARBP	K.LPSTSD	0	0.59	T805	0.11
IPI00428954.1	8861	LDB1	K.KKSPAS	0.152571688	0.98	S295	1.16
IPI00428954.1	8861	LDB1	K.KKS*PA	0.152571688	0.98	S287	1.09
IPI00429547.2	54812	AFTPH	R.KPLSTH	0.152571688	0.9	S226	1.03
IPI00430440.2	9686	VGLL4	R.PAGLS*I	0.37570848	0.88	S118	1.22
IPI00430440.2	9686	VGLL4	K.NSLDAS	0.000233021	0.83	T122	1.29
IPI00430440.2	9686	VGLL4	K.NSLDAS	0.530774648	1	S118	1.2
IPI00430473.1			K.FLNEHL	0.643675939	0.92	T209	1.09
IPI00431127.2	8812	CCNK	K.RAVVVS	0.088241621	0.88	S340	1.16
IPI00431263.2	9772	KIAA0195	R.SKHPS*	0.27446972	0.96	S513	1.14
IPI00431263.2	9772	KIAA0195	R.SKHPS*	0.253322457	0.94	S513	1.17
IPI00431698.2	64784	CRTC3	R.SQLS*FI	0.373234869	0.79	S437	1.3
IPI00431698.2	64784	CRTC3	R.LTQYHC	0.463105648	1	S62	1.11
IPI00431698.2	64784	CRTC3	R.SQLSFL	0.080258071	0.92	S448	1.27
IPI00431698.2	64784	CRTC3	R.LFSL*NB	0.373234869	0.98	S375	1.11
IPI00432061.3	11129	SFRS16	K.LTRPAA	0.233505398	0.96	S532	1.15
IPI00432436.1	65979	PHACTR4	K.RPLSSS	0.530774648	0.88	S178	0.97
IPI00432436.1	65979	PHACTR4	R.RLS*QR	0.530774648	0.76	S590	1.28
IPI00432436.1	65979	PHACTR4	R.TRS*LPI	0.116581414	1	S464	1.24
IPI00432436.1	65979	PHACTR4	R.LGS*TG	0.99978897	0.79	S147	0.85
IPI00432751.1	55054	ATG16L1	R.S*VSSFI	6.99E-08	0.69	S287	0.58
IPI00432751.1	55054	ATG16L1	R.SVS*SFI	6.99E-08	0.69	S289	0.58
IPI00432780.1	286133	SCARA5	R.SLS*KLM	0.868109485	0.96	S30	0.97
IPI00432780.1	286133	SCARA5	R.S*LSKLM	0.773594539	0.96	S28	0.97
IPI00432853.1			K.GGSA/	0.049260986	1	S159	1.32
IPI00432907.1			R.TVGQTV	0.32093792	0.98	S25	1.08
IPI00433194.1	23301	EHBP1	R.T*SGSD	0.703604632	0.94	T628	1.14
IPI00433194.1	23301	EHBP1	K.LNFLDE	0.761414517	0.98	T256	0.93
IPI00433194.1	23301	EHBP1	K.LNFLDE	0.761414517	0.98	T258	0.93
IPI00433194.1	23301	EHBP1	R.TSGS*D	0.746895813	0.83	S631	1.02
IPI00433194.1	23301	EHBP1	K.EVQTPC	0.088241621	0.92	T296	1.06
IPI00433194.1	23301	EHBP1	K.DLS*TSF	0.116581414	1	S391	1.25
IPI00433194.1	23301	EHBP1	K.DLSTS*F	0.116581414	1	S393	1.25
IPI00433211.1	146909	LOC14690	R.GSLPDT	0.32093792	0.96	S678	1
IPI00433211.1	146909	LOC14690	R.RGS*LP	0.139636808	0.94	S671	1.16
IPI00433211.1	146909	LOC14690	R.GSLPDT	0.000547756	0.96	T683	1.07
IPI00433211.1	146909	LOC14690	R.RGS*LP	0.000787564	0.86	S671	0.99
IPI00433211.1	146909	LOC14690	R.RGS*LP	0.27446972	0.96	S671	1.04
IPI00433211.1	146909	LOC14690	R.RGS*LP	0.139636808	0.96	S671	1.04
IPI00433211.1	146909	LOC14690	K.KLQVYE	0.353263807	0.86	S413	0.64
IPI00433211.1	146909	LOC14690	K.LQVYEG	0.604563646	0.94	S413	0.96
IPI00435422.1	26037	SIPA1L1	R.HSAS*P	0.373234869	0.98	S1412	1.08
IPI00435422.1	26037	SIPA1L1	R.TLS*DE	0.782390145	0.9	S1564	1.02
IPI00435422.1	26037	SIPA1L1	R.FLMPEA	0.604563646	0.98	S162	0.97
IPI00436632.1	25836	NIPBL	R.SPQPVC	0.684201094	0.94	S280	1.02
IPI00436632.1	25836	NIPBL	R.SPQPVC	0.684201094	0.94	S284	1.02
IPI00436632.1	25836	NIPBL	R.NAAS*FI	0.346340474	0.9	S269	1.08
IPI00436632.1	25836	NIPBL	K.AAMYDI	0.296993866	0.96	S350	1.16
IPI00436632.1	25836	NIPBL	R.NAASFP	0.197661257	0.98	S274	1.13
IPI00436632.1	25836	NIPBL	K.AAMYDI	0.253322457	0.98	S350	1.1
IPI00436632.1	25836	NIPBL	R.DVPPDII	0.296993866	0.88	S318	0.98

IPI00436632.1	25836 NIPBL	K.AITSLLC	0.566916624	1 S2658	1.03
IPI00436705.6	23515 MORC3	R.RLS*SQ	0.03637398	0.71 S561	1.04
IPI00438230.1	10155 TRIM28	R.LQEKLS	0.069007875	0.64 S670	0.69
IPI00438230.1	10155 TRIM28	R.LAS*PS	0.054409842	0.85 S512	1.1
IPI00438230.1	10155 TRIM28	R.STAPSA	0.373234869	0.94 S50	0.9
IPI00438230.1	10155 TRIM28	R.GAAAAA	0.27446972	1 T459	1.16
IPI00438230.1	10155 TRIM28	R.SRS*GE	0.530774648	0.98 S391	1.06
IPI00438702.1	4152 MBD1	R.LLPSVW	0.32093792	0.69 S376	0.94
IPI00439415.5	1975 EIF4B	R.VDVADC	0.32093792	0.81 S183	1.04
IPI00439415.5	1975 EIF4B	R.LPKSPP	0.088241621	0.77 Y96	1.03
IPI00439415.5	1975 EIF4B	R.LPKS*P	0.088241621	0.77 S93	1.03
IPI00439415.5	1975 EIF4B	K.EEDCHE	0.233505398	0.98 S462	1.15
IPI00439415.5	1975 EIF4B	K.EEDCHE	0.214968943	0.98 T461	1.15
IPI00439415.5	1975 EIF4B	K.SPPYTA	0.080258071	0.96 Y105	1.25
IPI00439415.5	1975 EIF4B	R.ERHPS*	0.096924105	0.94 S406	1.13
IPI00439415.5	1975 EIF4B	R.AAS*IFC	0.106353987	0.77 S359	0.54
IPI00439415.5	1975 EIF4B	K.TIS*LTD	0.854331471	0.79 S16	1.1
IPI00439415.5	1975 EIF4B	K.EEDCHE	0.152571688	1 S459	1.14
IPI00439415.5	1975 EIF4B	K.SLENET	0.072926818	0.96 S459	1.26
IPI00439415.5	1975 EIF4B	K.SLENET	0.072926818	0.98 T461	1.2
IPI00439415.5	1975 EIF4B	K.S*PPYT/	0.139636808	1 S93	1.23
IPI00439415.5	1975 EIF4B	K.SLENET	0.054409842	0.98 S462	1.29
IPI00439415.5	1975 EIF4B	K.S*PPYT/	0.566916624	0.98 S93	1.15
IPI00439415.5	1975 EIF4B	K.SPPY*T/	0.296993866	0.98 Y96	1.15
IPI00439548.1	54880 BCOR	R.RVS*KD	0.313968278	0.56 S1166	0.87
IPI00439548.1	54880 BCOR	R.QPVSEF	0.530774648	0.88 S1127	0.96
IPI00439548.1	54880 BCOR	R.KRPEPS	0.360667889	0.88 S1410	0.63
IPI00440151.1	167227 DCP2	R.HSQQLF	0.604563646	0.96 S284	1.16
IPI00440241.2	79649 MAP7D3	K.FTAILYR	0.586469457	0.86 T148	0.88
IPI00440241.2	79649 MAP7D3	R.LSS*YTE	2.74E-01	0.98 S448	1.19
IPI00440241.2	79649 MAP7D3	R.SAS*TEI	3.28E-02	0.94 S184	1.02
IPI00440502.1	6046 BRD2	R.KADTTT	0.566916624	0.83 S298	0.94
IPI00440502.1	6046 BRD2	R.KADTTT	0.181528891	0.88 S301	1.26
IPI00440502.1	6046 BRD2	R.KADTTT	0.643675939	0.94 S298	1.05
IPI00440502.1	6046 BRD2	K.TAPPAL	0.32093792	0.94 S668	1.03
IPI00440514.1	64764 CREB3L2	K.IKLEPHE	0.001613065	0.81 S191	2.08
IPI00440688.3	84271 POLDIP3	R.SS*PAAI	0.431601138	0.85 S127	1.01
IPI00440719.2	8260 ARD1A	R.HVVLGA	0.066203153	0.55 S171	1.04
IPI00440719.2	8260 ARD1A	R.HVVLGA	0.166517367	0.94 S167	1.08
IPI00440727.1	23476 BRD4	R.SEPFS*I	0.080258071	0.53 S1126	0.8
IPI00440727.1	23476 BRD4	K.MPDEPE	0.971449831	0.85 S470	0.78
IPI00440727.1	23476 BRD4	K.SKPPPT	0.530774648	1 Y599	1.03
IPI00440727.1	23476 BRD4	K.SKPPPT	0.197661257	0.96 S601	1
IPI00440811.1	6787 NEK4	R.ASGLLK	0.431601138	0.98 S340	1.04
IPI00441964.1	116985 CENTD2	R.ARLS*S/	0.197661257	1 S428	1.19
IPI00441964.1	116985 CENTD2	R.ARLSS*/	0.181528891	1 S429	1.19
IPI00441964.1	116985 CENTD2	R.LFPEFD	0.373234869	0.96 S229	1.18
IPI00442073.4	1465 CSRP1	K.GFGFGC	0.726073545	1 S192	1
IPI00442077.1	156 ADRBK1	R.IKMKQG	0.002581506	0.79 S98	1.75
IPI00442167.3	121536 AEBP2	R.LSPLPP	0.684201094	0.86 S24	0.83
IPI00442167.3	121536 AEBP2	R.RGS*LE	0.096380146	0.55 S206	0.5

IPI00442211.1	10152	ABI2	R.TLEPVR	0.530774648	0.94	S210	1.04
IPI00442379.1			R.T*ETSPF	0.000485008	0.98	T43	1.51
IPI00444329.1	593	BCKDHA	R.IGHHS*1	0.32093792	0.98	S371	1.05
IPI00444329.1	593	BCKDHA	R.IGHHST	0.233505398	0.92	T372	1.2
IPI00444329.1	593	BCKDHA	R.IGHHS*1	0.233505398	0.92	S371	1.2
IPI00444526.1	54815	GATAD2A	R.RPPSPC	0.296993866	0.12	S107	0.52
IPI00444526.1	54815	GATAD2A	R.RPPS*P	0.106353987	0.85	S100	1.22
IPI00444526.1	54815	GATAD2A	K.EATAQK	0.431601138	1	T189	1.02
IPI00444526.1	54815	GATAD2A	R.RPPS*P	0.346340474	0.96	S100	1.06
IPI00444526.1	54815	GATAD2A	R.RPPS*P	0.346340474	0.98	S100	1.1
IPI00444526.1	54815	GATAD2A	R.GLLASD	0.431601138	0.92	T49	1.11
IPI00444526.1	54815	GATAD2A	R.RPPS*P	0.181528891	0.74	S100	0.83
IPI00444572.2	57568	SIPA1L2	K.FSFYGN	0.868109485	0.92	S1478	1.11
IPI00444572.2	57568	SIPA1L2	K.YTIGDIF	7.21E-09	0.64	S148	2.21
IPI00444572.2	57568	SIPA1L2	R.S*NSDV	0.9240167	0.85	S160	0.87
IPI00444656.4	9853	RUSC2	R.LSEGPA	0.985337202	0.88	S536	0.83
IPI00445113.1	84722	PSRC1	K.RES*PTC	0.684201094	0.86	S175	0.82
IPI00445113.1	84722	PSRC1	K.RES*PTC	0.84064003	0.96	S175	1.01
IPI00445113.1	84722	PSRC1	R.LSLGPL	0.197661257	0.67	S70	0.8
IPI00445199.1			R.Y*PQGP	0.078322436	0.56	Y49	0.55
IPI00445335.1	286826	LIN9	R.LHYT*PF	0.181528891	0.81	T269	1.26
IPI00445335.1	286826	LIN9	R.LHYTPP	0.566916624	0.9	S274	1.14
IPI00445357.1			R.AIS*AA	0.431601138	0.98	S66	1.23
IPI00445387.1	85369	FAM40A	K.T*KFSS\	8.09E-11	0.76	T124	4.77
IPI00445429.1	22872	SEC31A	R.AQGEP\	0.296993866	0.98	S532	1.06
IPI00445658.2	170954	KIAA1949	R.LS*PGE	0.16091672	0.67	S224	0.7
IPI00445658.2	170954	KIAA1949	K.WRLS*P	0.296993866	1	S195	1.07
IPI00446175.1	159090	FAM122B	R.HSLLLS	0.106353987	0.92	S62	1.42
IPI00446175.1	159090	FAM122B	R.HSLLLS	0.106353987	0.92	S63	1.42
IPI00446175.1	159090	FAM122B	R.RNS*TTI	0.296993866	0.64	S50	1.09
IPI00446175.1	159090	FAM122B	K.MFVSSS	0.296993866	0.81	S160	1.1
IPI00446175.1	159090	FAM122B	R.HSLLLS	0.152571688	1	S64	1.19
IPI00446175.1	159090	FAM122B	R.SSS*API	0.214968943	0.98	S25	1.16
IPI00446175.1	159090	FAM122B	R.SSSAPL	0.373234869	0.98	S33	1.28
IPI00446175.1	159090	FAM122B	R.S*SSAPI	0.197661257	0.98	S23	1.28
IPI00446175.1	159090	FAM122B	K.RIDFTP\	0.080258071	1	S134	1.29
IPI00446175.1	159090	FAM122B	K.RIDFTP\	0.080258071	1	S134	1.29
IPI00446280.1	57619	SHROOM	R.PGF AFC	0.106353987	0.74	S51	1.16
IPI00446280.1	57619	SHROOM	R.DRPGS*	0.197661257	0.88	S421	0.9
IPI00446280.1	57619	SHROOM	R.DRPGS*	0.261301769	0.83	S421	0.98
IPI00446284.1	1643	DDB2	R.SRS*PLI	0.530774648	0.98	S26	1.2
IPI00446435.1	57488	FAM62B	R.SSSS*LI	0.060044376	0.96	S146	1.16
IPI00446435.1	57488	FAM62B	R.S*SSSLI	0.214968943	0.96	S143	1.09
IPI00446435.1	57488	FAM62B	K.SHMS*G	0.566916624	0.98	S98	1.05
IPI00446435.1	57488	FAM62B	K.SHMSG	0.827038504	0.96	S100	1
IPI00446435.1	57488	FAM62B	K.SHMS*G	0.530774648	0.98	S98	1.03
IPI00446435.1	57488	FAM62B	K.SHMSG	0.98101429	0.74	T108	1.16
IPI00446435.1	57488	FAM62B	R.SSS*SLI	0.401648339	0.98	S145	1.03
IPI00446435.1	57488	FAM62B	K.SHMS*G	0.858914691	0.98	S98	1.06
IPI00446435.1	57488	FAM62B	R.SS*SSLI	0.401648339	0.98	S144	1.02
IPI00446435.1	57488	FAM62B	R.SSSLL	0.684201094	1	S150	0.97

IPI00446435.1	57488	FAM62B	R.S*SSSLI	0.346340474	1	S143	0.97
IPI00446735.1	55177	FAM82C	R.KDSL DL	0.373234869	0.81	S221	0.92
IPI00446735.1	55177	FAM82C	R.KDS*LDI	0.463105648	0.98	S212	1.06
IPI00446735.1	55177	FAM82C	R.KDSL DL	0.431601138	0.04	S225	0.17
IPI00446735.1	55177	FAM82C	R.SQS*LPI	0.214968943	1	S46	1.17
IPI00446735.1	55177	FAM82C	R.S*QSLPI	0.214968943	1	S44	1.17
IPI00446866.1	2122	EVI1	K.SQSPLM	0.197661257	0.81	T342	0.99
IPI00446866.1	2122	EVI1	R.NFIGNS	0.643675939	0.98	S860	1.12
IPI00447051.1	9274	BCL7C	K.GTEPS*I	0.858914691	1	S114	0.91
IPI00447051.1	9274	BCL7C	K.GTEPSP	0.566916624	0.98	T118	0.92
IPI00447589.1	84928	FLJ14803	R.TLDTFLI	0.743182508	0.69	S248	0.85
IPI00448515.1	79657	FLJ21908	R.IKS*YDY	0.029596689	0.96	S87	1.31
IPI00449144.1	10024	TROAP	R.NPLEEL	0.966004444	0.96	S98	1.02
IPI00449906.3	8874	ARHGEF7	K.SGTLKS	0.044561326	0.85	S79	0.98
IPI00449906.3	8874	ARHGEF7	R.MS*GFI\	0.604563646	1	S340	1.05
IPI00449906.3	8874	ARHGEF7	R.MS*GFI\	0.604563646	1	S340	1.05
IPI00449924.1	10743	RAI1	K.AGWGS\	0.346340474	0.98	S869	1.11
IPI00449924.1	10743	RAI1	K.AGWGS	0.346340474	0.98	S874	1.11
IPI00449924.1	10743	RAI1	K.APGASF	0.530774648	0.94	S1315	1
IPI00449924.1	10743	RAI1	K.APGASF	0.530774648	0.94	S1311	1
IPI00449924.1	10743	RAI1	K.APGASF	0.530774648	0.94	S1313	1
IPI00449924.1	10743	RAI1	R.TPEQYY	0.431601138	0.98	S323	1.07
IPI00450855.1	3159	HMGA1	R.KQPPKE	0.296993866	0.77	T42	0.8
IPI00453458.2	135112	NCOA7	K.STGHT*I	0.886608864	0.92	T358	0.82
IPI00453458.2	135112	NCOA7	K.FNIT*PN	0.387188711	0.96	T134	0.85
IPI00454912.1	9569	GTF2IRD1	R.SDKGS*	0.181528891	0.53	S507	0.63
IPI00455134.1	220988	HNRPA3	R.S*SGSP	0.373234869	1	S333	1.06
IPI00455134.1	220988	HNRPA3	R.SSGS*P	0.373234869	1	S336	1.06
IPI00455134.1	220988	HNRPA3	R.SS*GSP	0.373234869	1	S334	1.06
IPI00455183.2	84678	FBXL10	R.APKPPT	0.181528891	0.94	T416	1.28
IPI00455210.1	1108	CHD4	K.EDNS*E\	0.080258071	0.92	S428	1.31
IPI00455210.1	1108	CHD4	K.MS*QPG	0.25510468	0.98	S1559	0.79
IPI00455210.1	1108	CHD4	K.MSQPG\	0.239994114	0.98	T1570	0.79
IPI00455210.1	1108	CHD4	K.MSQPG\	0.087012535	1	S1563	0.78
IPI00455359.1	6311	ATXN2	R.MSSEGF	0.642010044	0.94	S623	1.07
IPI00455359.1	6311	ATXN2	K.RGPEVT	0.566916624	0.94	S888	1.09
IPI00455359.1	6311	ATXN2	K.GIS*PVV	0.346340474	0.96	S783	0.91
IPI00455359.1	6311	ATXN2	R.QNSPAC	0.777986561	0.98	T770	1.02
IPI00455359.1	6311	ATXN2	K.RGPEVT	0.643675939	0.92	S887	1.06
IPI00455359.1	6311	ATXN2	K.GIS*PVV	0.27446972	1	S783	1.13
IPI00455359.1	6311	ATXN2	K.ENIKPNI	0.27446972	0.98	T770	0.93
IPI00455359.1	6311	ATXN2	K.RGPEVT	0.296993866	1	S888	1.11
IPI00455359.1	6311	ATXN2	R.T*SPSG\	0.373234869	0.98	T665	1.19
IPI00455359.1	6311	ATXN2	R.TS*PSG\	0.373234869	0.98	S666	1.19
IPI00455423.2	440577	LOC44057	K.CGSGP\	0.530774648	0.67	S163	0.82
IPI00455500.1	253260	RICTOR	R.ILNSLT*	0.139636808	0.72	T1103	0.77
IPI00455500.1	253260	RICTOR	R.AQS*LK\	0.080258071	0.98	S1302	1.16
IPI00455500.1	253260	RICTOR	R.KHLWP\	0.643675939	0.62	S1031	0.81
IPI00455500.1	253260	RICTOR	K.HLWPV\	0.32093792	0.77	S1028	1.16
IPI00455500.1	253260	RICTOR	K.SNSVSL	0.980510506	0.88	S1293	1.54
IPI00455500.1	253260	RICTOR	R.KHLWP\	0.139636808	0.76	S1030	0.94

IPI00455500.1	253260	RICTOR	R.KHLWPA	0.139636808	0.76	S1026	0.94
IPI00455500.1	253260	RICTOR	R.GRNDS*	0.604563646	0.88	S21	1.37
IPI00455502.1	91687	CENPL	R.KQSS*F	0.928728317	0.88	S39	0.92
IPI00455518.4	22880	MORC2	K.KLPLEV	0.066203153	0.96	T603	1.25
IPI00455518.4	22880	MORC2	K.KLPLEV	0.066203153	0.96	S602	1.25
IPI00455518.4	22880	MORC2	R.LMKPPS	0.03637398	0.9	T864	0.98
IPI00455518.4	22880	MORC2	K.TES*PIK	0.373234869	0.98	S725	1.16
IPI00455518.4	22880	MORC2	K.T*ESPIK	0.373234869	0.98	T723	1.16
IPI00455518.4	22880	MORC2	K.KTES*PI	0.431601138	0.98	S725	1.01
IPI00455518.4	22880	MORC2	R.LMKPPS	0.32093792	0.72	S861	0.97
IPI00455518.4	22880	MORC2	K.KTES*PI	0.116581414	0.98	S725	1.2
IPI00455518.4	22880	MORC2	R.PAPLVQ	0.952395062	0.96	S696	1.01
IPI00455518.4	22880	MORC2	R.LMKPPS	0.346340474	0.94	S856	1.02
IPI00455518.4	22880	MORC2	K.KTES*PI	0.152571688	1	S725	1.24
IPI00455518.4	22880	MORC2	K.KT*ESPI	0.296993866	1	T723	1.1
IPI00455518.4	22880	MORC2	R.PAPLVQ	0.684201094	1	S698	1.06
IPI00455518.4	22880	MORC2	R.S*PPLP/	0.214968943	1	S615	1.17
IPI00455541.3			K.DSLITP/	0.829549043	0.88	S666	0.99
IPI00455541.3			K.SALSLSI	0.356956072	0.94	S492	0.97
IPI00455541.3			K.AVVS*PI	0.831562154	1	S722	0.98
IPI00455786.3	3983	ABLIM1	R.TSSESI\	0.152571688	0.96	S282	1.2
IPI00455786.3	3983	ABLIM1	R.NGLHRF	0.024009318	0.72	T594	1.23
IPI00455786.3	3983	ABLIM1	R.T*LSPTF	0.368149744	0.92	T353	1.03
IPI00455982.1	10042	HMG2L1	K.ASSVGV	0.604563646	0.77	S497	0.96
IPI00456244.2	116987	CENTG2	R.FVLMAT	0.891255812	0.9	T783	0.87
IPI00456244.2	116987	CENTG2	R.LT*SQSI	0.541395815	0.94	T551	0.81
IPI00456244.2	116987	CENTG2	R.LTS*QSI	0.541395815	0.94	S552	0.81
IPI00456262.1	55690	PACS1	R.KLTSTS	0.011294655	0.98	S322	1.34
IPI00456262.1	55690	PACS1	K.TDLQGS	0.021601024	0.96	S495	1.35
IPI00456262.1	55690	PACS1	K.TDLQGS	0.044561326	0.98	S493	1.34
IPI00456262.1	55690	PACS1	K.TDLQGS	0.03637398	0.85	S495	1.05
IPI00456262.1	55690	PACS1	K.T*DLQG:	0.040276449	0.98	T488	1.34
IPI00456262.1	55690	PACS1	K.TDLQGS	0.03637398	0.98	S497	1.34
IPI00456361.3	11273	ATXN2L	R.MYPPRE	0.253322457	0.94	S455	1.14
IPI00456361.3	11273	ATXN2L	K.TESVS*I	0.12765804	0.96	S604	1.06
IPI00456361.3	11273	ATXN2L	K.EKEVDC	0.928728317	0.98	S600	1.04
IPI00456361.3	11273	ATXN2L	K.EKEVDC	0.928728317	0.98	S589	1.04
IPI00456361.3	11273	ATXN2L	K.EVDGLL	0.804577835	0.98	S600	1.05
IPI00456361.3	11273	ATXN2L	K.LQPSSS	0.233505398	0.85	S565	1.09
IPI00456361.3	11273	ATXN2L	K.GPPQS*	0.296993866	1	S111	1.11
IPI00456534.1	145567	TTC7B	K.LPISSS*	0.040276449	0.96	S58	0.95
IPI00456534.1	145567	TTC7B	K.LPISSST	0.463105648	0.98	T59	0.92
IPI00456609.2	1540	CYLD	R.FHS*LPI	0.643675939	0.85	S415	1.03
IPI00456620.1	7862	BRPF1	R.GAGWL:	0.971449831	0.98	S1082	0.93
IPI00456628.4	146206	RLTPR	R.LQRS*P'	0.03637398	0.98	S1347	1.24
IPI00456631.5	23028	AOF2	K.KLPPPP	0.072926818	0.77	S166	1.14
IPI00456631.5	23028	AOF2	K.LPPPPP	0.060044376	0.86	S166	1.13
IPI00456677.1	81545	FBXO38	K.NKDVYF	0.764845588	0.96	S724	0.97
IPI00456677.1	81545	FBXO38	K.NKDVYF	0.764845588	0.96	S722	0.97
IPI00456681.4	6830	SUPT6H	R.TRT*PA:	0.001938901	0.96	T1534	0.7
IPI00456681.4	6830	SUPT6H	R.TRTPAS	0.338692366	0.98	S1537	0.77

IPI00456681.4	6830 SUPT6H	R.TRT*PA	0.536956757	0.98	T1534	0.77
IPI00456681.4	6830 SUPT6H	R.T*RTPA	0.604820989	1	T1532	0.83
IPI00456681.4	6830 SUPT6H	R.T*RTPA	0.233505398	0.96	T1532	1.25
IPI00456681.4	6830 SUPT6H	R.TRT*PA	0.643675939	0.86	T1534	0.79
IPI00456681.4	6830 SUPT6H	R.LTPRPS	0.373234869	0.96	S1705	1.12
IPI00456708.3	55125 CEP192	K.GEVISS	0.296993866	0.85	S1159	0.97
IPI00456723.1	253959 GARNL1	R.HFSQSE	0.497617381	0.92	T778	1.09
IPI00456723.1	253959 GARNL1	R.HFS*QS	0.604563646	0.92	S773	1.09
IPI00456723.1	253959 GARNL1	R.HFSQS*	0.32093792	0.98	S775	1.14
IPI00456723.1	253959 GARNL1	R.S*SSTSI	0.005777772	0.96	S795	1.38
IPI00456723.1	253959 GARNL1	R.RGS*SP	0.088241621	1	S860	1.27
IPI00456899.1	254225 RNF169	R.VLS*PLI	0.643675939	0.77	S403	1.12
IPI00456899.1	254225 RNF169	R.S*VSPE	0.401648339	0.88	S366	1.07
IPI00456899.1	254225 RNF169	R.SVS*PE	0.586469457	0.96	S368	1.09
IPI00456899.1	254225 RNF169	R.SVS*PE	0.942907226	0.98	S368	1.04
IPI00456919.2	10075 HUWE1	R.S*HHAA	0.49616549	0.94	S1084	0.93
IPI00456919.2	10075 HUWE1	R.ESQLAH	0.296993866	0.86	S3919	1
IPI00456919.2	10075 HUWE1	R.REESPM	0.431601138	0.94	S3816	1.12
IPI00456919.2	10075 HUWE1	K.ACS*PC	0.822525206	0.86	S3373	1.03
IPI00456970.1	8621 CDC2L5	R.KDLSLG	0.011294655	0.85	T1058	1.6
IPI00456970.1	8621 CDC2L5	K.IEHAPS*	0.197661257	0.94	S525	1.08
IPI00456970.1	8621 CDC2L5	K.TKPLT*F	0.181528891	0.92	T588	1.12
IPI00456970.1	8621 CDC2L5	K.QTDPST	0.651399605	0.94	T1147	1.01
IPI00456970.1	8621 CDC2L5	K.QTDPS*	0.651399605	0.94	S1146	1.01
IPI00456970.1	8621 CDC2L5	R.LYSSEE	0.008098758	0.98	T871	0.98
IPI00456970.1	8621 CDC2L5	R.CLLADL	0.044561326	0.76	S664	1.37
IPI00456970.1	8621 CDC2L5	R.GGDVS*	0.431601138	0.98	S383	1.09
IPI00456970.1	8621 CDC2L5	R.ILELT*PI	0.233505398	1	T1246	1.17
IPI00457110.1	55784 MCTP2	R.RVS*SN	0.253322457	0.86	S134	1.24
IPI00464953.2	114793 FMNL2	K.LLEQEA	3.57E-06	0.85	S498	1.43
IPI00464978.1	8660 IRS2	R.SKSQSS	0.805160956	0.9	T316	1.08
IPI00464978.1	8660 IRS2	K.RT*YSLT	0.431601138	0.96	T577	1.04
IPI00464978.1	8660 IRS2	K.RTYS*L	0.431601138	0.96	S579	1.04
IPI00464978.1	8660 IRS2	R.TAS*EG	0.096924105	0.96	S367	1.2
IPI00464978.1	8660 IRS2	K.S*QSSG	0.431601138	0.92	S308	1.18
IPI00464978.1	8660 IRS2	K.SQS*SG	0.431601138	0.92	S310	1.18
IPI00464978.1	8660 IRS2	K.LLPNGD	0.049260986	0.86	S774	1.5
IPI00464978.1	8660 IRS2	R.PVSVAC	0.813530126	0.88	S393	1.24
IPI00464978.1	8660 IRS2	R.HS*SETI	0.03282354	0.94	S1150	1.18
IPI00464978.1	8660 IRS2	R.TYS*LTI	0.604563646	0.96	S579	0.96
IPI00464978.1	8660 IRS2	K.LLPNGD	0.886608864	0.96	T778	0.87
IPI00464999.1	63897 HEATR6	K.KAPAGF	0.831562154	0.96	S643	0.96
IPI00465040.3	55722 CEP72	R.GVTDTR	0.233505398	0.85	S404	0.98
IPI00465040.3	55722 CEP72	K.LDLS*GE	0.373234869	0.92	S318	0.98
IPI00465040.3	55722 CEP72	R.HLLS*PC	0.530774648	1	S237	1.05
IPI00465045.2	57609 DIP2B	R.YRS*DIF	0.431601138	0.98	S100	0.99
IPI00465061.1	55683 FLJ10081	K.TSGLPA	0.001001611	0.96	S747	1.38
IPI00465071.2	26000 TBC1D10E	R.QQPPLC	0.764845588	0.92	S382	1
IPI00465071.2	26000 TBC1D10E	R.AAGGAF	0.066203153	0.98	S403	1.3
IPI00465087.2	8314 BAP1	K.SAS*NK	0.566916624	0.96	S289	1.1
IPI00465087.2	8314 BAP1	K.GSSPSII	0.643675939	0.96	S595	1.11

IPI00465087.2	8314 BAP1	K.SASNKS	0.346340474	0.88	S292	1.02
IPI00465087.2	8314 BAP1	K.S*ASNK	0.346340474	0.88	S287	1.02
IPI00465087.2	8314 BAP1	K.GSS*PS	0.401648339	0.98	S583	1.02
IPI00465087.2	8314 BAP1	K.GSSPSII	0.401648339	1	S597	1.09
IPI00465087.2	8314 BAP1	K.GSSPSII	0.401648339	1	S596	1.09
IPI00465087.2	8314 BAP1	K.GSS*PS	0.684201094	1	S583	1.11
IPI00465087.2	8314 BAP1	R.SRPVVR	0.296993866	0.96	S395	1.03
IPI00465087.2	8314 BAP1	R.VPVRPF	0.072926818	0.98	S395	1.17
IPI00465088.3	22893 BAHD1	R.RLAS*LI	0.007240509	0.69	S121	0.81
IPI00465100.1	64763 ZNF574	R.APVASP	0.214968943	0.86	S818	0.73
IPI00465142.2	9847 KIAA0528	K.TPNDGE	0.166517367	0.96	S606	1.04
IPI00465142.2	9847 KIAA0528	K.NQTYSF	0.773594539	0.98	S295	1.06
IPI00465142.2	9847 KIAA0528	K.LSSPAA	0.726073545	1	S260	1.11
IPI00465142.2	9847 KIAA0528	R.AS*TDN	0.152571688	1	S817	1.19
IPI00465142.2	9847 KIAA0528	R.AST*DN	0.139636808	1	T818	1.19
IPI00465151.1	80223 RAB11FIP	K.HLFSST	0.346340474	0.98	S365	1.06
IPI00465151.1	80223 RAB11FIP	K.TPLSQS	0.296993866	0.98	S234	1.06
IPI00465151.1	80223 RAB11FIP	R.RSS*LLS	0.296993866	0.98	S435	1.09
IPI00465151.1	80223 RAB11FIP	R.NNMTAS	0.182552444	0.85	S156	0.82
IPI00465151.1	80223 RAB11FIP	K.DSGSDT	0.795669231	0.92	S202	0.91
IPI00465151.1	80223 RAB11FIP	K.DSGSDT	0.795669231	0.92	S206	0.91
IPI00465151.1	80223 RAB11FIP	K.HLFS*1	0.684201094	1	S357	1.02
IPI00465151.1	80223 RAB11FIP	K.HLFS*ST	0.643675939	1	S356	1.02
IPI00465151.1	80223 RAB11FIP	K.HLFS*ST	0.604563646	1	S356	1.05
IPI00465151.1	80223 RAB11FIP	K.HLFS*1	0.530774648	1	S357	1.05
IPI00465151.1	80223 RAB11FIP	K.HLFSST	0.463105648	1	T358	1.05
IPI00465151.1	80223 RAB11FIP	K.HLFSST	0.684201094	1	T358	1.03
IPI00465191.3	8021 NUP214	R.NRDS*G	0.566916624	0.9	S221	1.16
IPI00465191.3	8021 NUP214	R.PVAPSC	0.27446972	0.94	T741	0.98
IPI00465191.3	8021 NUP214	R.SAQGS	0.410648733	0.74	S95	0.96
IPI00465200.2	9702 CEP57	R.SPS*KP	0.966676636	0.98	S55	1.08
IPI00465288.2	6239 RREB1	R.THS*GE	0.942907226	0.76	S694	0.74
IPI00465288.2	6239 RREB1	K.DPNSAT	0.27446972	0.96	S161	1.19
IPI00465288.2	6239 RREB1	K.FSPFLQ	0.510604444	0.88	S1219	0.86
IPI00465288.2	6239 RREB1	K.FSPFLQ	0.9949766	0.88	S1219	0.98
IPI00465291.3	23235 SNF1LK2	R.RAS*DT	0.106353987	0.92	S587	1.33
IPI00465294.2	988 CDC5L	R.ILQEAQI	0.818022374	0.77	T373	1
IPI00465294.2	988 CDC5L	R.ILQEAQI	0.881970624	0.94	T377	0.94
IPI00465294.2	988 CDC5L	R.SGTT*PI	0.604563646	0.96	T430	0.97
IPI00465294.2	988 CDC5L	R.ILQEAQI	0.49616549	0.92	T377	1.07
IPI00465294.2	988 CDC5L	R.ILQEAQI	0.84064003	0.92	T377	0.91
IPI00465294.2	988 CDC5L	R.ILQEAQI	0.9949766	0.96	T373	0.91
IPI00465294.2	988 CDC5L	K.GGLNTE	0.431601138	0.98	T396	1.09
IPI00465345.1	25766 PRPF40B	R.ELQQA	0.12765804	0.98	S853	1.18
IPI00465370.2	79596 C13orf7	R.KIQSSL	0.32093792	0.9	S719	1.05
IPI00465370.2	79596 C13orf7	R.LKAEVD	0.03282354	0.98	S210	1.29
IPI00465387.1	157313 CDCA2	R.GS*PET	0.166517367	0.98	S99	1.17
IPI00465387.1	157313 CDCA2	R.VASDS*	0.536956757	0.88	S727	0.78
IPI00465387.1	157313 CDCA2	R.VAS*DS	0.536956757	0.88	S725	0.78
IPI00465427.2	7942 TFEB	R.VHGLPT	4.54E-09	0.72	S332	0.31
IPI00465427.2	7942 TFEB	R.VHGLPT	1.07E-07	0.9	T331	0.37

IPI00465427.2	7942 TFEB	R.VHGLPT	8.19E-10	0.92 S334	0.38
IPI00465427.2	7942 TFEB	R.VHGLPT	7.32E-10	0.94 T330	0.46
IPI00465427.2	7942 TFEB	R.EDEGPF	0.878390339	0.96 S429	1.08
IPI00465427.2	7942 TFEB	R.EDEGPF	0.878390339	0.96 S423	1.08
IPI00470461.3	58499 ZNF462	R.NNSRV	0.708392237	0.9 S2172	0.83
IPI00470461.3	58499 ZNF462	K.S*PHNS	0.197661257	0.98 S350	1.07
IPI00470461.3	58499 ZNF462	K.VIIPS*PF	0.818022374	0.96 S1747	0.95
IPI00470461.3	58499 ZNF462	R.KLANDF	0.054989367	0.77 S688	0.43
IPI00470497.3	26135 SERBP1	R.SS*FSH	0.233505398	0.13 S203	1.02
IPI00470497.3	26135 SERBP1	K.SKS*EE	0.253322457	0.92 S330	0.94
IPI00470497.3	26135 SERBP1	K.SKSEEA	0.214968943	0.94 S338	1.11
IPI00470497.3	26135 SERBP1	K.S*KSEE	0.214968943	0.94 S322	1.11
IPI00470497.3	26135 SERBP1	R.S*FSH	0.922292588	1 S202	0.95
IPI00470497.3	26135 SERBP1	R.GGSGSI	0.002900458	0.9 T226	1.59
IPI00470497.3	26135 SERBP1	R.GGSGSI	0.764845588	1 T232	0.96
IPI00470497.3	26135 SERBP1	R.GGSGSI	0.919312669	1 S234	0.93
IPI00470523.4	387680 RP11-56A	K.GIWKPE	0.116581414	0.92 T829	0.96
IPI00470523.4	387680 RP11-56A	K.ETVSEA	0.623338592	0.94 S622	0.95
IPI00470523.4	387680 RP11-56A	K.HSDLFS	0.214968943	0.9 S679	1.11
IPI00470523.4	387680 RP11-56A	K.RS*RPT	0.166517367	0.98 S178	1.23
IPI00470523.4	387680 RP11-56A	K.RS*RPT	0.12765804	0.98 S178	1.23
IPI00470523.4	387680 RP11-56A	R.S*HGLE	0.566916624	0.98 S890	1.2
IPI00470523.4	387680 RP11-56A	K.ASALLF	0.746895813	0.55 S513	0.91
IPI00470523.4	387680 RP11-56A	R.KS*PYG	0.373234869	0.9 S335	1
IPI00470523.4	387680 RP11-56A	R.S*RPTS	0.181528891	0.94 S178	1.05
IPI00470523.4	387680 RP11-56A	K.TVLS*LF	0.346340474	0.94 S696	1.31
IPI00470523.4	387680 RP11-56A	R.RT*PSD	0.530774648	0.83 T225	0.98
IPI00470523.4	387680 RP11-56A	R.RTPS*D	0.530774648	0.83 S227	0.98
IPI00470523.4	387680 RP11-56A	R.AASGEL	0.545847833	0.85 S1008	0.86
IPI00470523.4	387680 RP11-56A	K.GLFS*DI	0.296993866	0.96 S433	1.07
IPI00470523.4	387680 RP11-56A	K.LTDEDF	0.530774648	0.98 S246	0.99
IPI00470523.4	387680 RP11-56A	R.KSPYGF	0.401648339	0.96 T342	1.07
IPI00470523.4	387680 RP11-56A	R.SRPTS*I	0.044561326	0.98 S182	1.27
IPI00470594.1	26099 C1orf144	R.ILGSAS	0.346340474	0.98 T121	1.06
IPI00470594.1	26099 C1orf144	R.ILGSAS*	0.181528891	0.98 S107	1.06
IPI00470604.2	79651 RHBD2	R.RQASLS	0.27446972	0.92 S86	1.16
IPI00470604.2	79651 RHBD2	R.RQAS*L	0.27446972	0.92 S84	1.16
IPI00470604.2	79651 RHBD2	R.GIPHSA	0.32093792	0.88 S325	0.95
IPI00470604.2	79651 RHBD2	R.GIPHS*	0.839313928	0.67 S323	0.66
IPI00470610.3	29920 PYCR2	R.VKLESP	0.822525206	0.96 S304	0.99
IPI00470641.4	128061 C1orf131	R.KS*ASSI	0.152571688	0.98 S86	1.19
IPI00470641.4	128061 C1orf131	K.NGTLIL	0.985337202	0.94 S279	0.95
IPI00470672.1	9113 LATS1	K.KQITTS*	0.253322457	0.55 S613	0.87
IPI00470672.1	9113 LATS1	K.KQITT*S	0.03637398	0.96 T612	1.26
IPI00470711.2	23167 KIAA0143	K.VPVFGT	0.32093792	0.83 S422	1
IPI00470711.2	23167 KIAA0143	R.IGPPSSI	0.049831638	0.76 T224	0.95
IPI00470711.2	23167 KIAA0143	R.IGPPS*	0.049831638	0.76 S220	0.95
IPI00470711.2	23167 KIAA0143	R.LSVPYV	0.566916624	0.98 S694	1.03
IPI00470727.4		R.MNS*LT	0.088241621	0.98 S794	1.07
IPI00470744.1	8505 PARG	K.LENVSQ	0.011294655	0.88 S55	0.95
IPI00470744.1	8505 PARG	K.LENVSQ	0.011294655	0.88 T57	0.95

IPI00470771.2	55095	SAMD4B	R.HALTS*F	0.528118232	0.83	S607	1.01
IPI00470771.2	55095	SAMD4B	K.GWAFG!	0.868109485	0.94	S557	1.06
IPI00470771.2	55095	SAMD4B	R.HALT*SF	0.523719116	1	T606	0.9
IPI00470779.2	200081	TXLNA	K.S*SPGQ	0.116581414	1	S18	1.25
IPI00470801.1	29028	ATAD2	R.LS*SAGI	0.684201094	0.9	S166	1.17
IPI00470801.1	29028	ATAD2	R.LSSAGP	0.233505398	0.98	S172	1.12
IPI00470811.3	54861	SNRK	K.MNIAS*F	0.764845588	0.81	S518	1.03
IPI00470931.1	257218	SHPRH	K.LHNSIIP	0.751731134	0.85	S155	0.92
IPI00472161.2	4798	NFRKB	R.SPS*PA'	0.116581414	0.86	S228	1.1
IPI00472162.1	730410	LOC73041	R.KSSGG!	0	0.76	S351	5.71
IPI00472303.1	3831	KLC1	R.ALSAS*!	0.726073545	1	S618	1
IPI00472303.1	3831	KLC1	R.S*RESLI	0.054409842	0.9	S517	1.21
IPI00472303.1	3831	KLC1	K.RASS*LI	0.181528891	1	S587	1.2
IPI00472303.1	3831	KLC1	K.RAS*SLI	0.106353987	1	S586	1.2
IPI00472303.1	3831	KLC1	R.ASS*LN)	0.116581414	0.98	S587	1.25
IPI00472332.1	653441	LOC65344	R.DLGNPN	1.46E-05	0.94	T918	1.92
IPI00472339.1	31	ACACA	K.EGSLS*!	0.214968943	0.66	S50	0.89
IPI00472339.1	31	ACACA	R.SSMS*G	0.088241621	0.92	S80	1.05
IPI00472339.1	31	ACACA	R.FIIGSVS	0.756144089	0.92	S29	1.01
IPI00472339.1	31	ACACA	R.IFDEVM)	0.604563646	0.74	T1265	0.85
IPI00472339.1	31	ACACA	R.IFDEVM)	0.373234869	0.74	S1263	0.85
IPI00472339.1	31	ACACA	R.MSFSSM	0.060044376	0.94	Y1209	1.31
IPI00472339.1	31	ACACA	R.MS*FSS	0.060044376	0.94	S1201	1.31
IPI00472339.1	31	ACACA	R.MSFSSM	0.060044376	0.94	Y1209	1.31
IPI00472339.1	31	ACACA	R.IFDEVM)	0.014056191	0.61	S1259	1.08
IPI00472339.1	31	ACACA	R.FIIGS*V!	0.566916624	0.9	S23	1.28
IPI00472339.1	31	ACACA	R.FIIGS*V!	0.296993866	0.98	S23	1.1
IPI00472540.1	10174	SORBS3	R.HPSSPS	0.139636808	0.98	S205	1.13
IPI00472540.1	10174	SORBS3	R.HPSS*P!	0.296993866	0.98	S203	1.12
IPI00472540.1	10174	SORBS3	R.HPSS*P!	0.900575286	0.83	S203	1.02
IPI00472540.1	10174	SORBS3	R.LKFDFQ	0.566916624	0.98	S53	1.05
IPI00472540.1	10174	SORBS3	R.HPSS*P!	0.152571688	0.98	S203	1.21
IPI00472540.1	10174	SORBS3	R.HPSSPS	0.12765804	0.98	S205	1.23
IPI00472540.1	10174	SORBS3	R.SPADPT	0.32093792	1	S221	1.18
IPI00472540.1	10174	SORBS3	R.SPADPT	0.743182508	0.98	S221	1.06
IPI00472738.1	221150	C13orf3	K.S*PRSP!	0.463105648	0.98	S70	1.11
IPI00472738.1	221150	C13orf3	K.SPRS*P!	0.463105648	0.98	S73	1.11
IPI00472779.1	288	ANK3	R.RQSFAE	0.181528891	0.98	S1462	1.19
IPI00472779.1	288	ANK3	R.RQS*FA	0.116581414	0.98	S1459	1.19
IPI00472779.1	288	ANK3	K.IHGSGH	0.732417704	0.76	S4298	0.36
IPI00472789.2			R.EDALDC	0.853966795	0.96	S266	0.86
IPI00472789.2			R.LLPVINT	0.86862174	0.94	S733	0.88
IPI00472789.2			R.LLLDIPL	0.113558743	0.96	T168	0.89
IPI00472901.2	55636	CHD7	R.TPFKDE	0.463105648	0.79	S1874	0.9
IPI00472901.2	55636	CHD7	R.NIPS*PC	0.764845588	0.92	S2559	0.92
IPI00472981.3	56259	CTNNBL1	K.EYAENI	0.756144089	0.96	S358	1.13
IPI00472988.2	7080	TITF1	K.AAQQQL	0.881970624	0.92	S284	0.93
IPI00473037.2	171023	ASXL1	K.TDPAGL	0.970843959	0.77	T469	1.11
IPI00473037.2	171023	ASXL1	R.AS*ASPI	5.03E-09	0.55	S501	0.48
IPI00473136.3	1495	CTNNA1	R.LLEPLV	0.98101429	0.96	T38	0.85
IPI00473136.3	1495	CTNNA1	R.TPEELD	0.773594539	1	S641	0.99

IPI00477098.1	9807 IHPK1	K.HLDMVL	0.431601138	0.96 S212	1.1
IPI00477152.5	6935 ZEB1	R.IHS*GEK	0.771113571	0.79 S243	0.9
IPI00477152.5	6935 ZEB1	K.TSQCSS	0.233505398	0.98 S293	1.12
IPI00477152.5	6935 ZEB1	K.TSQCSS	0.197661257	0.98 S295	1.15
IPI00477152.5	6935 ZEB1	K.TSQCSS	0.197661257	0.98 S293	1.15
IPI00477230.4	23269 MGA	K.VVNANC	0.373234869	0.94 S18	0.95
IPI00477230.4	23269 MGA	K.NTSGLP	0.233505398	0.9 S3011	0.99
IPI00477230.4	23269 MGA	K.NTSGLP	0.233505398	0.9 T3015	0.99
IPI00477230.4	23269 MGA	K.GLPFYA	0.795419436	0.92 S1457	0.97
IPI00477230.4	23269 MGA	K.WLPSS*	0.684201094	0.96 S449	1.05
IPI00477230.4	23269 MGA	K.SILPYPV	0.530774648	0.98 S924	1.06
IPI00477242.1	23644 EDC4	R.T*RSPI	0.139636808	0.81 T727	1.09
IPI00477242.1	23644 EDC4	K.GPGQVF	0.181528891	0.83 S723	0.98
IPI00477242.1	23644 EDC4	R.TRSPDV	0.054409842	0.71 S741	1.03
IPI00477242.1	23644 EDC4	K.GPGQVF	0.166517367	0.96 S725	1.15
IPI00477242.1	23644 EDC4	R.TRS*PI	0.106353987	0.98 S729	1.2
IPI00477330.1	9824 ARHGAP1	R.RINS*LL	0.373234869	0.96 S847	1.06
IPI00477330.1	9824 ARHGAP1	R.RQS*VG	0.32093792	0.98 S285	1.07
IPI00477335.1	5187 PER1	R.KEPVVG	0.703604632	0.96 S704	0.64
IPI00477335.1	5187 PER1	R.KEPVVG	0.703604632	0.96 T702	0.64
IPI00477428.1	84456 L3MBTL3	R.LSGEMF	0.604563646	0.58 S583	0.66
IPI00477428.1	84456 L3MBTL3	R.LSGEMF	0.604563646	0.58 S585	0.66
IPI00477436.8		R.LKNDSC	0.800118017	0.9 S597	1.06
IPI00477468.1	9646 CTR9	K.KGGEFL	0.566916624	0.98 T925	1.03
IPI00477477.3	9859 CEP170	K.SIKS*DV	0.054409842	0.79 S359	0.91
IPI00477477.3	9859 CEP170	R.SS*GSL	0.463105648	0.98 S464	1.09
IPI00477477.3	9859 CEP170	R.TPLTS*/	0.401648339	0.98 S1059	1.21
IPI00477477.3	9859 CEP170	R.TWS*RC	8.59E-05	0.59 S1283	1.5
IPI00477477.3	9859 CEP170	K.QKS*EE	0.886608864	0.92 S446	1.05
IPI00477498.2		K.VS*IVSK	0.116581414	1 S1150	1.17
IPI00477498.2		R.NQKNS*	0.004600913	0.92 S589	1.14
IPI00477498.2		K.NIIEATH	0.00181541	0.74 S970	1.2
IPI00477498.2		R.KS*VSS	0.029596689	0.98 S1070	1.17
IPI00477498.2		R.AGS*PL	0.116581414	0.96 S975	1.24
IPI00477498.2		R.TSFSVG	0.152571688	1 S1179	1.17
IPI00477498.2		K.SVS*SSI	0.12765804	0.96 S1072	1.19
IPI00477526.2	221960 C7orf28B	R.HIEPEL/	0.684201094	0.94 S267	1.13
IPI00477535.4	2073 ERCC5	R.NAPAAV	0.72279082	0.88 S384	1.07
IPI00477535.4	2073 ERCC5	K.LKTEKE	0.253322457	0.98 T338	1.14
IPI00477535.4	2073 ERCC5	K.LKTEKE	0.233505398	0.98 S341	1.14
IPI00477620.1	23255 KIAA0802	R.GRS*PS	0.152571688	0.96 S1493	1.22
IPI00477620.1	23255 KIAA0802	R.VLHS*PI	0.139636808	0.98 S1195	1.22
IPI00477620.1	23255 KIAA0802	K.SLYGDV	0.530774648	0.92 S189	1.22
IPI00477642.3	4330 MN1	R.KLS*QN	0.566916624	0.92 S863	1
IPI00477661.1	80829 ZFP91	R.SS*PSAI	0.197661257	0.96 S83	1.12
IPI00477661.1	80829 ZFP91	R.S*SPSAI	0.197661257	1 S82	1.2
IPI00477661.1	80829 ZFP91	R.SSPS*AI	0.197661257	1 S85	1.2
IPI00477803.3	10992 SF3B2	R.GSDS*P	0.214968943	0.64 S362	0.89
IPI00477803.3	10992 SF3B2	R.GS*DSP	0.32093792	0.66 S360	0.92
IPI00477876.3	8470 SORBS2	K.SSILQHE	0.430690939	0.98 Y253	0.85
IPI00477876.3	8470 SORBS2	R.PASLYQ	0.951462987	0.92 S260	1.04

IPI00477876.3	8470 SORBS2	K.SFTSSS	0.346340474	0.98	S451	1.17
IPI00477876.3	8470 SORBS2	K.SSILQHE	0.609435295	0.96	S251	0.83
IPI00477876.3	8470 SORBS2	R.T*SPGR	0.956313787	0.45	T298	0.57
IPI00477876.3	8470 SORBS2	K.SSILQHE	0.849082022	0.96	S256	0.88
IPI00477876.3	8470 SORBS2	R.VGIFPIS	0.726073545	0.94	T543	0.96
IPI00477876.3	8470 SORBS2	R.TSPGRV	0.936890791	1	S308	0.92
IPI00477897.1	30011 SH3KBP1	R.ANS*PS	0.566916624	0.94	S550	0.93
IPI00477901.1		K.GIS*ASS	0.431601138	0.59	S1487	0.82
IPI00477923.1	1822 ATN1	K.RAPS*P	0.000160239	0.64	S640	1.65
IPI00477923.1	1822 ATN1	K.TAS*PP	0.726073545	0.9	S627	0.84
IPI00477944.1		R.LLELKS'	0.116581414	0.86	S2460	1.18
IPI00477944.1		R.LLELKS'	0.116581414	0.86	T2462	1.18
IPI00477982.1	6195 RPS6KA1	R.GFS*FV	0.346340474	0.94	S389	1.15
IPI00477982.1	6195 RPS6KA1	R.AENGLL	0.03637398	0.88	T582	1.24
IPI00477982.1	6195 RPS6KA1	K.AY*SFC	0.401648339	0.83	Y229	1.08
IPI00477982.1	6195 RPS6KA1	R.AENGLL	0.166517367	0.96	T582	1.17
IPI00477982.1	6195 RPS6KA1	R.AENGLL	0.026666866	0.96	Y585	1.25
IPI00477982.1	6195 RPS6KA1	K.AYS*FC	0.166517367	0.76	S230	1.13
IPI00478085.2	399664 RKHD1	R.HS*PTLF	0.139636808	0.22	S514	0.53
IPI00478191.2	54434 SSH1	K.PAPENL	0.31051834	0.94	S730	1.08
IPI00478191.2	54434 SSH1	K.SEAAPA	0.214968943	0.96	S582	1.14
IPI00478191.2	54434 SSH1	K.SEAAPA	0.373234869	0.94	S585	1.06
IPI00478208.2	645296 hCG_2004	R.INPYMS	0.971449831	0.96	S142	0.73
IPI00478214.2	653489 RGPDP3	K.HSTPSP	0.045978168	0.86	Y786	0.75
IPI00478214.2	653489 RGPDP3	K.DSLITP	0.829549043	0.88	S1473	0.99
IPI00478214.2	653489 RGPDP3	K.HSTPS*I	0.032806498	0.96	S782	0.72
IPI00478214.2	653489 RGPDP3	K.SALSLSI	0.356956072	0.94	S1299	0.97
IPI00478214.2	653489 RGPDP3	R.EDALDC	0.853966795	0.96	S1270	0.86
IPI00478214.2	653489 RGPDP3	R.LLLDIPL	0.113558743	0.96	T1172	0.89
IPI00478214.2	653489 RGPDP3	K.AVVS*PI	0.831562154	1	S1529	0.98
IPI00478230.1	5929 RBBP5	-.MNLELLE	0.000115247	0.98	S8	0.48
IPI00478280.3	57708 MIER1	R.RVNS*N	0.684201094	0.98	S500	1.12
IPI00478280.3	57708 MIER1	R.RVNSNC	0.296993866	0.96	S505	1.17
IPI00478280.3	57708 MIER1	R.RVNS*N	0.27446972	0.96	S500	1.17
IPI00478300.2	26065 LSM14A	K.SPT*ME	0.011294655	0.72	T194	1.06
IPI00478300.2	26065 LSM14A	K.S*PTME	0.014056191	0.86	S192	1.12
IPI00478300.2	26065 LSM14A	R.SPVS*TI	0.214968943	1	S219	1.17
IPI00478300.2	26065 LSM14A	R.SPVST*I	0.214968943	1	T220	1.17
IPI00478300.2	26065 LSM14A	R.S*PVSTI	0.197661257	1	S216	1.17
IPI00478442.2	57142 RTN4	K.RRGSS*	0.463105648	0.27	S182	1.18
IPI00478442.2	57142 RTN4	K.RRGSS*S	0.27446972	1	S181	1.15
IPI00478570.1	23328 SASH1	R.RVS*QD	0.096924105	0.9	S45	1.27
IPI00478623.1		R.LPS*KEI	0.296993866	0.92	S708	0.96
IPI00478623.1		R.LPS*KEI	0.12765804	0.92	S708	1.1
IPI00478623.1		R.LPS*KEI	0.12765804	0.92	S708	1.1
IPI00478623.1		K.RLS*LD	0.49616549	0.98	S525	1.13
IPI00478623.1		K.RLSLDS	0.49616549	0.98	S528	1.13
IPI00478623.1		K.TVS*PP	0.37570848	0.76	S599	1.04
IPI00478721.1		K.DFAKSK	2.14E-06	0.5	S38	1.07
IPI00478737.3	55159 RFWD3	R.GSQAW	0.957149097	0.86	S427	0.88
IPI00478737.3	55159 RFWD3	R.GSQAW	0.751811379	0.86	S425	0.88

IPI00478772.1	56905 C15orf39	R.LS*EHS	0.932027377	0.85	S455	1.12
IPI00478772.1	56905 C15orf39	K.EDARPF	0.782390145	0.64	S496	0.9
IPI00478977.1	4300 MLLT3	K.TNNNQI	0.116581414	0.94	S77	1.11
IPI00479094.1	6764 ST5	K.TASFGY	0.088526124	0.94	S105	0.84
IPI00479094.1	6764 ST5	K.TASFGY	0.088526124	0.94	S107	0.84
IPI00479125.3	23380 SRGAP2	K.TSPVVA	0.233505398	0.98	S993	1.12
IPI00479125.3	23380 SRGAP2	K.TSPVVA	0.233505398	0.98	S994	1.12
IPI00479125.3	23380 SRGAP2	K.STVS*E	0.463643297	0.96	S427	0.8
IPI00479125.3	23380 SRGAP2	K.S*TVSE	0.463643297	0.96	S424	0.8
IPI00479125.3	23380 SRGAP2	K.TSPVVA	0.6467005	0.98	S990	0.93
IPI00479191.1	3187 HNRPH1	K.SNNVEM	0.975679369	0.85	S104	1.08
IPI00479191.1	3187 HNRPH1	K.HTGPNS	0.800118017	0.83	T107	1.15
IPI00479191.1	3187 HNRPH1	K.HTGPNS	0.32093792	1	S104	1.09
IPI00479229.1	6829 SUPT5H	K.VVSISSE	0.172716899	0.56	T1034	0.67
IPI00479229.1	6829 SUPT5H	R.DVTNFT	0.604563646	1	S666	1.07
IPI00479333.1	7405 UVRAG	R.LQYKT*I	0.290257583	0.96	T518	0.89
IPI00479372.1		K.SWQQT	0.912548374	0.83	S725	1.12
IPI00479372.1		R.AHT*PLI	0.834430989	0.71	T1350	0.64
IPI00479372.1		K.IISENS*I	0.975679369	0.86	S1385	1.05
IPI00479498.2	50488 MINK1	R.VGVSSK	0.463105648	0.98	S762	1.05
IPI00479498.2	50488 MINK1	R.RNT*FIG	0.530774648	0.74	T187	0.68
IPI00479498.2	50488 MINK1	R.NLLHAD	0.296993866	0.72	S898	0.84
IPI00479498.2	50488 MINK1	R.VGVSSK	0.32093792	1	S757	1.1
IPI00479498.2	50488 MINK1	R.RNTFIG	0.834430989	0.88	T191	1.14
IPI00479498.2	50488 MINK1	R.SDSVLP	0.373234869	1	S743	1.09
IPI00479509.2		R.NYQQN	0.684201094	1	S161	1.07
IPI00479587.2	284403 WDR62	R.AGTGYA	0.000205322	0.86	S393	1.25
IPI00479587.2	284403 WDR62	R.AGT*GY	0.000205322	0.86	T389	1.25
IPI00479587.2	284403 WDR62	R.AGTGY*	0.000205322	0.86	Y391	1.25
IPI00479587.2	284403 WDR62	R.HHFETL	0.026666866	0.88	S319	1.21
IPI00479587.2	284403 WDR62	R.WSEPW	0.401648339	0.66	S654	0.8
IPI00479587.2	284403 WDR62	R.FATSLP	0.060044376	0.96	S297	1.25
IPI00479587.2	284403 WDR62	R.RPSS*V	0.233505398	0.96	S498	1.15
IPI00479587.2	284403 WDR62	R.RPS*SV	0.233505398	0.96	S497	1.15
IPI00479614.3	5887 RAD23B	K.QEKPAE	0.726073545	0.98	S88	0.99
IPI00479631.1	641 BLM	K.DLDTS*I	9.73E-05	0.85	S328	1.17
IPI00479631.1	641 BLM	K.KLEFSS	0.530774648	0.85	S144	0.8
IPI00479631.1	641 BLM	K.ELNFSH	0.849757871	0.98	S464	0.99
IPI00479760.3	22848 AAK1	R.I LSDVT*	0.080258071	0.98	T640	1.23
IPI00479760.3	22848 AAK1	K.AGQTQF	0.530774648	0.92	T389	1.05
IPI00479760.3	22848 AAK1	K.VQTT*PI	0.530774648	1	T606	1.03
IPI00479760.3	22848 AAK1	R.ILS*DVT	0.27446972	1	S637	1.12
IPI00479790.4		R.RLS*ITS	0.197661257	0.85	S1042	1.2
IPI00479795.2	22911 WDR47	R.LTHDAS	0.296993866	0.83	T514	1.08
IPI00479823.1	51773 RSF1	R.VLPSEQ	0.152571688	0.88	T1085	1.01
IPI00479823.1	51773 RSF1	R.LS*PIPE	0.096924105	0.92	S352	1.15
IPI00479823.1	51773 RSF1	K.KTFLDK	0.530774648	0.96	S352	1.1
IPI00479823.1	51773 RSF1	K.VGS*PLI	0.917421569	0.72	S1107	0.94
IPI00479823.1	51773 RSF1	K.T*FLDK	0.346340474	0.98	T342	1.1
IPI00479823.1	51773 RSF1	K.SVTPT*P	0.92716125	0.96	T158	0.97
IPI00479823.1	51773 RSF1	K.SVT*PT	0.92716125	0.96	T156	0.97

IPI00479823.1	51773	RSF1	K.TFLDKD	0.373234869	1	S352	1.04
IPI00479823.1	51773	RSF1	K.DAQRLS	0.197661257	0.98	S352	1.12
IPI00479823.1	51773	RSF1	K.STLESE	0.49616549	0.94	S370	1.06
IPI00479823.1	51773	RSF1	K.STLESE	0.49616549	1	S370	1.08
IPI00479824.2	473	RERE	K.EEALDD	0.03637398	0.76	S838	1.09
IPI00479824.2	473	RERE	K.LPDLQP	0.346340474	0.88	S36	1.08
IPI00479971.3	55209	SETD5	R.GHPTQ	0.280412571	0.81	S751	0.92
IPI00480042.2	259266	ASPM	K.VPLSNE	0.604563646	0.61	S425	0.78
IPI00480052.1	5774	PTPN3	K.SS*SSV	8.31E-08	0.85	S178	0.29
IPI00480054.2	55035	NOL8	R.SDSSGL	0.873506301	0.98	S597	1.01
IPI00480122.3	9698	PUM1	K.AVLWQI	0.836096036	0.92	S19	0.94
IPI00480122.3	9698	PUM1	R.SASSAS	0.32093792	0.66	S547	0.99
IPI00480122.3	9698	PUM1	R.SASSAS	0.32093792	0.66	S544	0.99
IPI00480141.2	23370	ARHGEF1	R.SLS*PIL	0.072926818	0.98	S945	1.27
IPI00480141.2	23370	ARHGEF1	R.RAETFA	0.286954617	0.94	S575	1.13
IPI00480157.1	9972	NUP153	K.RIPS*IV	0.431601138	0.71	S330	1.04
IPI00480157.1	9972	NUP153	K.EGSVLD	0.800118017	0.79	S614	1.02
IPI00480157.1	9972	NUP153	K.IDSVAA	0.643675939	0.88	S633	0.84
IPI00480157.1	9972	NUP153	R.IPSIVSS	0.00181541	0.76	T348	1
IPI00480157.1	9972	NUP153	K.NVFSSS	0.726073545	1	S1463	1.01
IPI00480157.1	9972	NUP153	R.IPSIVSS	0.431601138	0.96	S334	1.09
IPI00480157.1	9972	NUP153	R.SVYFKP	0.604563646	1	T388	1.01
IPI00480157.1	9972	NUP153	K.NTSLPP	0.684201094	0.81	S209	0.99
IPI00480157.1	9972	NUP153	K.VQMTSF	0.40669332	0.9	S518	1.17
IPI00480205.1			R.TAVDGF	0.008098758	0.79	T230	1.11
IPI00480205.1			R.T*AVDG	0.008098758	0.79	T207	1.11
IPI00480205.1			R.TAVDGF	0.008098758	0.79	S214	1.11
IPI00480205.1			K.GYDSEC	0.062876365	0.86	T92	1.02
IPI00480205.1			K.GYDS*E	0.727601611	0.94	S88	1.1
IPI00480205.1			K.GY*DSE	0.727601611	0.94	Y86	1.1
IPI00480205.1			R.TAVDGF	0.139636808	0.98	S216	1.19
IPI00513736.1	55929	DMAP1	K.DTIIDVV	0.463105648	0.96	T445	1.04
IPI00513743.1	10808	HSPH1	K.IES*PKL	0.152571688	0.81	S768	1.12
IPI00513773.1	284119	PTRF	R.KS*FTPI	2.57E-09	0.53	S210	1.35
IPI00513773.1	284119	PTRF	K.SFT*PDI	0.373234869	0.98	T212	1.13
IPI00513791.1	85440	DOCK7	R.MNS*LT	0.088241621	0.98	S1383	1.07
IPI00513791.1	85440	DOCK7	R.TTS*GD	0.253322457	0.86	S452	1.15
IPI00513791.1	85440	DOCK7	R.SAVRPA	0.253322457	0.98	S888	1.2
IPI00513791.1	85440	DOCK7	R.SLS*NSI	0.049260986	0.94	S898	1.21
IPI00513803.3	10746	MAP3K2	R.T*QGTS	0.000429319	0.96	T290	1.26
IPI00513803.3	10746	MAP3K2	R.TQGTSL	0.000429319	0.96	S297	1.26
IPI00513803.3	10746	MAP3K2	R.DRS*SP	0.029596689	0.98	S163	1.26
IPI00513803.3	10746	MAP3K2	R.DRSS*P	0.024009318	0.98	S164	1.25
IPI00513803.3	10746	MAP3K2	R.AQS*YP	0.166517367	0.88	S239	1.23
IPI00513811.1	10767	HBS1L	K.SANPPH	0.858851798	0.96	T231	0.9
IPI00513811.1	10767	HBS1L	K.KQTMGF	0.136867371	0.56	S182	0.47
IPI00513965.3	9202	ZMYM4	R.KKS*IVA	0.214968943	0.98	S1092	1.14
IPI00514071.2	23139	MAST2	R.RWS*LA	0.214968943	0.86	S230	1.36
IPI00514071.2	23139	MAST2	R.KLS*NPI	0.296993866	0.98	S74	1.26
IPI00514073.2	55187	VPS13D	K.SLSLAS	0.604563646	0.88	S2697	0.92
IPI00514073.2	55187	VPS13D	R.AQS*PV	0.810035043	0.83	S1047	0.96

IPI00514073.2	55187 VPS13D	R.S*LPSHI	0.463105648	0.96 S1729	1.17
IPI00514073.2	55187 VPS13D	K.SLSLAS	0.643675939	0.96 T2693	1.04
IPI00514073.2	55187 VPS13D	K.NLSFDIF	0.577359743	0.79 S1043	0.93
IPI00514106.3	221496 LEMD2	R.AEPWLS	0.12765804	0.88 Y98	1.15
IPI00514106.3	221496 LEMD2	R.WWAAS	0.373234869	0.86 S166	1.16
IPI00514106.3	221496 LEMD2	R.WTKPSS	0.756144089	0.94 S460	1.07
IPI00514127.1	3068 HDGF	R.AGDLE	0.181528891	1 S181	1.16
IPI00514135.1		R.KT*SDAI	0.431601138	0.24 T21	0.96
IPI00514135.1		R.RKTSDA	0.49616549	0.96 S33	1.12
IPI00514135.1		R.KTS*DAI	0.530774648	1 S22	0.98
IPI00514135.1		R.KTSDAN	0.698823319	0.94 T27	1.05
IPI00514135.1		R.RKTS*D	0.401648339	1 S22	1.05
IPI00514135.1		R.RKT*SD	0.32093792	1 T21	1.05
IPI00514135.1		K.T*SDANI	0.684201094	0.98 T21	1.09
IPI00514135.1		K.TS*DANI	0.684201094	0.98 S22	1.09
IPI00514135.1		R.RKTSDA	0.346340474	0.98 T27	1.09
IPI00514209.2	96459 FNIP1	R.NKS*SLI	0.001743493	0.96 S565	0.6
IPI00514221.2		R.GREDS	0.684201094	0.86 T958	1.06
IPI00514311.1	55917 CTTNBP2I	K.VSSPLS	0.233505398	0.81 S563	1.02
IPI00514311.1	55917 CTTNBP2I	R.DLS*PTL	0.03637398	0.86 S488	1.12
IPI00514398.1	83990 BRIP1	R.HFNYP	0.519333664	0.62 T113	1.03
IPI00514689.1	149986 LSM14B	R.GAGFP	0.780826721	0.96 S74	0.92
IPI00514705.2	253725 FAM21C	K.HSDLFS	0.214968943	0.9 S785	1.11
IPI00514705.2	253725 FAM21C	K.RS*RPT	0.166517367	0.98 S284	1.23
IPI00514705.2	253725 FAM21C	K.RS*RPT	0.12765804	0.98 S284	1.23
IPI00514705.2	253725 FAM21C	R.KS*PYG	0.373234869	0.9 S441	1
IPI00514705.2	253725 FAM21C	R.S*RPTS	0.181528891	0.94 S284	1.05
IPI00514705.2	253725 FAM21C	K.TVLS*LF	0.346340474	0.94 S802	1.31
IPI00514705.2	253725 FAM21C	K.GLFS*DI	0.27446972	0.94 S539	1.17
IPI00514705.2	253725 FAM21C	R.RT*PSD	0.530774648	0.83 T331	0.98
IPI00514705.2	253725 FAM21C	R.RTPS*D	0.530774648	0.83 S333	0.98
IPI00514705.2	253725 FAM21C	K.LTDEDF	0.530774648	0.98 S352	0.99
IPI00514705.2	253725 FAM21C	R.KSPYGF	0.401648339	0.96 T448	1.07
IPI00514705.2	253725 FAM21C	R.SRPTS*I	0.044561326	0.98 S288	1.27
IPI00514825.1	9722 NOS1AP	K.VSHPQE	0.684201094	1 S266	1
IPI00515006.1	64769 C1orf149	K.REPGSC	0.27446972	0.77 S125	1.03
IPI00515049.2	154043 CNKSR3	K.SAILDLY	0.233505398	0.9 S130	1.11
IPI00515090.1	64802 NMNAT1	K.LEASDC	0.92716125	0.94 T119	0.95
IPI00515090.1	64802 NMNAT1	K.LEASDC	0.912548374	0.52 S117	0.68
IPI00549229.1	6867 TACC1	K.ASYHFS	0.346340474	0.74 T80	0.87
IPI00549232.4	22862 FNDC3A	K.MSS*PP	0.643675939	0.96 S203	1.05
IPI00549248.3	4869 NPM1	K.T*PKGP	0.32093792	0.86 T237	0.96
IPI00549248.3	4869 NPM1	K.DELHIVE	0.49616549	0.64 S70	0.88
IPI00549248.3	4869 NPM1	-.MEDS*MI	0.463105648	0.74 S4	0.93
IPI00549248.3	4869 NPM1	K.MSVQP	0.431601138	0.92 S88	1.14
IPI00549248.3	4869 NPM1	K.QEKT*PI	0.643675939	0.98 T234	1.02
IPI00549248.3	4869 NPM1	K.MSVQP	0.166517367	0.06 T95	0.07
IPI00549248.3	4869 NPM1	K.DELHIVE	0.764845588	0.64 Y67	0.73
IPI00549248.3	4869 NPM1	K.DELHIVE	0.684201094	0.41 T75	0.55
IPI00549248.3	4869 NPM1	K.T*PKT*P	0.804577835	1 T234	1.01
IPI00549248.3	4869 NPM1	K.DELHIVE	0.769214181	0.13 S70	0.37

IPI00549248.3	4869	NPM1	R.TVSLGA	0.933447376	0.05	S70	0.19
IPI00549248.3	4869	NPM1	R.TVSLGA	0.791231585	0.06	T78	0.1
IPI00549248.3	4869	NPM1	R.TVSLGA	0.463105648	0.41	S70	0.56
IPI00549248.3	4869	NPM1	R.TVSLGA	0.760488858	0.03	Y67	0.13
IPI00549248.3	4869	NPM1	K.CGSGP\	0.530774648	0.67	S125	0.82
IPI00549248.3	4869	NPM1	R.TVSLGA	0.726073545	0.02	T75	0.08
IPI00549248.3	4869	NPM1	K.DELHIVE	0.995403769	0.14	T78	0.38
IPI00549342.2	8241	RBM10	K.LASDDR	0.253322457	1	S646	1.14
IPI00549380.1	54487	DGCR8	R.EQSSDL	0.000787564	0.92	S373	2.08
IPI00549380.1	54487	DGCR8	R.LLIDPNC	0.463105648	1	S92	1.07
IPI00549380.1	54487	DGCR8	R.LLIDPNC	0.463105648	1	S95	1.07
IPI00549516.3	114034	TOE1	R.ATSEVP	0.346340474	0.94	S428	1.07
IPI00549517.1	22994	AZI1	R.SGSPRF	0.002581506	0.76	T96	1.15
IPI00549517.1	22994	AZI1	R.SGSPRF	0.40669332	0.81	T93	0.67
IPI00549517.1	22994	AZI1	R.S*GSPR	0.401648339	0.98	S87	1.1
IPI00549517.1	22994	AZI1	R.S*GSPR	0.009818709	0.52	S87	0.63
IPI00549561.2	79047	KCTD15	R.SPVS*PI	0.463105648	0.92	S38	1.06
IPI00549561.2	79047	KCTD15	R.S*PVSPI	0.346340474	0.98	S35	1.1
IPI00549736.3	84164	ASCC2	R.GRLT*P	0.233505398	0.88	T233	1.15
IPI00549786.4	84335	AKT1S1	R.LNT*SDI	0.727601611	0.96	T246	0.89
IPI00549786.4	84335	AKT1S1	K.S*LPVS\	0.245972641	1	S183	0.75
IPI00549858.4	5127	PCTK1	K.RLS*LP/	0.49616549	0.98	S125	1.33
IPI00549858.4	5127	PCTK1	K.LTLNS*F	0.12765804	1	S144	1.24
IPI00549858.4	5127	PCTK1	K.LT*LNSF	0.12765804	1	T141	1.24
IPI00549858.4	5127	PCTK1	R.RVS*LSI	0.072926818	1	S159	1.28
IPI00549912.4	134957	STXBP5	R.KLS*LPT	0.048845949	0.96	S90	1.09
IPI00549912.4	134957	STXBP5	R.KLSLPT	0.116581414	0.98	T93	1.11
IPI00549912.4	134957	STXBP5	R.KLS*LPT	0.116581414	1	S90	1.22
IPI00550026.1	60313	GPBP1L1	R.RHNS*S	0.431601138	0.94	S49	1.09
IPI00550026.1	60313	GPBP1L1	R.ESAFTS	0.205975059	0.94	S292	0.79
IPI00550026.1	60313	GPBP1L1	R.HNS*SD	0.604563646	1	S49	1.02
IPI00550191.2	51759	C9orf78	R.VGDT*E	0.096924105	0.96	T253	1.19
IPI00550308.1	10137	RBM12	R.S*PHEA	0.296993866	0.72	S424	0.92
IPI00550468.2	26959	HBP1	R.RAS*LS	0.072926818	0.86	S380	1.22
IPI00550468.2	26959	HBP1	R.RASLS*	0.072926818	0.86	S382	1.22
IPI00550506.2	27237	ARHGEF1	R.HQS*FG	0.181528891	1	S107	1.22
IPI00550506.2	27237	ARHGEF1	K.GLGKPC	0.684201094	1	S174	1.03
IPI00550534.2	8028	MLLT10	R.GSLS*PI	0.78568809	0.79	S686	1.02
IPI00550655.4	10927	SPIN1	R.IS*DAHL	0.800118017	0.92	S124	0.81
IPI00550839.1	89796	NAV1	R.S*LGLAI	0.726073545	0.86	S1339	0.9
IPI00550839.1	89796	NAV1	R.GGPRP\	2.09E-07	0.81	S710	1.12
IPI00550839.1	89796	NAV1	R.RNS*TIV	0.096924105	0.96	S465	1.25
IPI00550839.1	89796	NAV1	K.TLSKS*E	0.373234869	0.98	S155	1.07
IPI00550954.4	285761	DCBLD1	K.HSLS*SC	0.604563646	0.94	S436	1
IPI00550987.1	9662	CEP135	R.DRSPS*	0.214968943	0.94	S441	1.1
IPI00550987.1	9662	CEP135	R.DRS*PS	0.166517367	1	S439	1.16
IPI00552169.1	8899	PRPF4B	K.LCDFGS	0.756144089	0.94	Y338	0.94
IPI00552288.1	79745	CLIP4	R.AS*AGLI	0.00E+00	0.5	S465	28.7
IPI00552345.3	54521	WDR44	K.GKELSD	0.03637398	0.96	S96	1.35
IPI00552345.3	54521	WDR44	R.KRKS*E	0.253322457	0.83	S262	1.09
IPI00552345.3	54521	WDR44	K.YNTEGF	0.139636808	0.96	S565	1.2

IPI00552345.3	54521 WDR44	K.YNTEGF	0.139636808	0.96	S561	1.2
IPI00552345.3	54521 WDR44	R.TKEYVS	0.32093792	0.98	S403	1.23
IPI00552345.3	54521 WDR44	K.RKS*ELI	0.373234869	0.98	S262	1
IPI00552365.3	79180 EFHD2	R.ADLNQC	0.181528891	0.92	S76	1.15
IPI00552365.3	79180 EFHD2	R.RADLNC	0.116581414	0.98	S74	1.15
IPI00552464.2	22978 NT5C2	R.S*ISEIKF	0.024009318	0.98	S209	1.34
IPI00552483.1		K.EEHGGL	0.346340474	1	S79	1.13
IPI00552502.5		R.ILEQQN	0.726073545	1	T407	1
IPI00552502.5		K.GQLTKS	0.01011525	0.96	S315	1.1
IPI00552530.2	5931 RBBP7	K.IGEEQS	0.373234869	0.71	S339	0.85
IPI00552546.1	79892 C10orf119	R.VSPSTS	0.566916624	0.92	Y159	0.95
IPI00552546.1	79892 C10orf119	R.VSPSTS	0.566916624	0.92	T160	0.95
IPI00552546.1	79892 C10orf119	R.VHS*PP	0.01011525	0.64	S298	1.67
IPI00552546.1	79892 C10orf119	R.VS*PST	0.072926818	0.98	S154	1.24
IPI00552561.5	54856 GON4L	R.KSTQPC	0.27446972	0.96	S206	1.05
IPI00552561.5	54856 GON4L	R.KGEMPA	0.342305379	0.79	S1957	0.73
IPI00552700.2	84248 FYTTD1	R.LVGATA	0.401648339	0.59	S16	0.72
IPI00552849.1	143684 FAM76B	K.ISNLS*P	0.604563646	0.85	S193	0.9
IPI00552909.3	57187 THOC2	K.IDTHPSF	0.665546864	0.79	S1306	1.02
IPI00552909.3	57187 THOC2	K.IDTHPS*	0.373234869	0.96	S1302	0.93
IPI00552909.3	57187 THOC2	K.TPVSGS	0.463105648	1	S1278	1.05
IPI00552909.3	57187 THOC2	K.LYINHT*	0.604563646	1	T1328	1.05
IPI00552909.3	57187 THOC2	K.GGEKT*	0.401648339	1	T1270	1.09
IPI00552988.4	8777 MPDZ	R.IGVAKPI	0.89791754	0.98	S790	0.95
IPI00552988.4	8777 MPDZ	R.TAPTAL	0.530774648	0.98	S354	1.03
IPI00552988.4	8777 MPDZ	R.GSLPQL	0.431601138	0.98	S230	1.01
IPI00553014.3	10160 FARP1	K.VS*AGE	0.637328432	0.81	S123	0.9
IPI00553014.3	10160 FARP1	K.VSAGEF	0.431601138	0.98	S427	1.06
IPI00553014.3	10160 FARP1	K.SSSPAP	0.152571688	0.94	S903	1.07
IPI00553014.3	10160 FARP1	K.SSSPAP	0.152571688	0.94	S902	1.07
IPI00553014.3	10160 FARP1	R.LGAPEN	0.643675939	1	T24	1.03
IPI00553043.1	22998 LIMCH1	R.VHGS*P	0.401648339	0.92	S601	0.83
IPI00553043.1	22998 LIMCH1	K.S*PEPE	0.197661257	0.98	S718	1.13
IPI00553067.2	55610 CCDC132	K.FMEQSF	0.773594539	0.96	S494	1.05
IPI00553156.3	169792 GLIS3	R.DAAAEC	0.827038504	0.98	S545	1.02
IPI00554494.1	54620 FBXL19	R.S*PEPD	0.116581414	0.94	S408	1.01
IPI00554497.1	4810 NHS	R.CSLVHS	0.426647605	0.79	S210	1
IPI00554497.1	4810 NHS	R.ANS*FT	0.060044376	0.67	S523	1.04
IPI00554497.1	4810 NHS	R.GQSIAA	0.072926818	0.88	S301	1.11
IPI00554497.1	4810 NHS	K.NPIHNIP	0.773594539	1	T154	0.98
IPI00554497.1	4810 NHS	R.ATT*PSL	0.773594539	0.9	T819	1.03
IPI00554521.1	2495 FTH1	R.KMGAPF	0.990159288	0.94	S179	0.94
IPI00554521.1	2495 FTH1	R.KMGAPF	0.990159288	0.94	S183	0.94
IPI00554711.1	3728 JUP	K.RVS*VEI	0.905247537	0.85	S664	0.64
IPI00554729.1	4077 NBR1	R.SLT*LD	0.373234869	0.96	T658	1
IPI00554729.1	4077 NBR1	R.S*LTLD	0.373234869	0.96	S656	1
IPI00554774.1	8767 RIPK2	K.MELSLN	0.394935546	0.86	S220	0.86
IPI00554824.1	151648 SGOL1	K.TPTTTPI	0.006212563	0.64	T433	0.47
IPI00554824.1	151648 SGOL1	R.RGDPFT	0.40669332	0.94	S238	0.83
IPI00554824.1	151648 SGOL1	K.TPTTTPI	0.008541331	0.76	S436	0.54
IPI00555619.1	9326 ZNHIT3	K.TVKPVE	0.116581414	0.88	S80	1.03

IPI00555619.1	9326 ZNHIT3	K.TVKPVE	0.096924105	0.88 S73	1.03
IPI00555619.1	9326 ZNHIT3	K.TVKPVE	0.088241621	0.85 S80	0.95
IPI00555619.1	9326 ZNHIT3	K.TVKPVE	0.296993866	0.85 S88	1.06
IPI00555651.1	2074 ERCC6	R.NSNFSV	0.002042313	0.22 S1348	0.32
IPI00555651.1	2074 ERCC6	R.NSNFSV	0.002042313	0.96 S1345	1.27
IPI00555659.3	79065 ATG9A	R.SFS*PLC	0.32093792	0.76 S656	1.28
IPI00555659.3	79065 ATG9A	R.HPEPVF	0.604563646	0.88 S828	1.12
IPI00555735.1	10277 UBE4B	R.HLLNS*F	0.088241621	0.92 S1136	1.21
IPI00555735.1	10277 UBE4B	K.NNESQV	0.03282354	0.83 S674	0.88
IPI00555735.1	10277 UBE4B	R.SQSSEC	0.286954617	0.92 S90	1.15
IPI00555735.1	10277 UBE4B	R.SQSSEC	0.286954617	0.92 S88	1.15
IPI00555819.1	441253 LOC44125	R.S*SSMS	0.559279862	0.88 S368	0.95
IPI00555819.1	441253 LOC44125	R.SSS*MS	0.559279862	0.88 S370	0.95
IPI00555868.1	3066 HDAC2	R.MLPHAF	0.296993866	1 S394	1.12
IPI00555917.2	5829 PXN	K.TSSVSN	0.32093792	0.94 S106	1.18
IPI00555917.2	5829 PXN	K.TGSS*SI	0.800118017	0.96 S335	0.98
IPI00555917.2	5829 PXN	R.FIHQQP	0.738886535	1 S83	0.98
IPI00555917.2	5829 PXN	R.FIHQQP	0.643675939	1 S85	0.98
IPI00556034.1	5936 RBM4	K.LHVGNI	0.985337202	0.98 T88	1.05
IPI00556038.2		R.KGEMPA	0.342305379	0.79 S795	0.73
IPI00556086.2	2002 ELK1	R.DLELPL	0.088241621	0.96 S324	1.26
IPI00556248.1	51454 GULP1	K.SPS*TDI	0.800118017	0.92 S213	1.14
IPI00556277.1		K.LDIPTG1	0.066203153	0.94 T926	1.15
IPI00556277.1		K.LDIPTG1	0.197661257	0.98 T925	1.12
IPI00556348.1	10179 RBM7	R.SFS*SPI	0.000110287	0.96 S136	1.65
IPI00556350.1	80025 PANK2	R.RAS*SA	0.32093792	0.96 S45	1.09
IPI00556350.1	80025 PANK2	R.DRLGS*	0.008303266	0.9 S66	0.88
IPI00556350.1	80025 PANK2	R.LGS*YS	0.214968943	0.98 S66	1.14
IPI00556379.1	7023 TFAP4	K.RFIQELS	0.431601138	1 S124	1.04
IPI00556379.1	7023 TFAP4	R.FIQELSC	0.976229102	0.92 S124	1.05
IPI00556379.1	7023 TFAP4	R.FIQELSC	0.827038504	1 S124	1.01
IPI00556429.1	5347 PLK1	R.KKTLCG	0.845194016	1 T214	0.96
IPI00556429.1	5347 PLK1	R.KKT*LC	0.831562154	1 T210	0.96
IPI00556429.1	5347 PLK1	R.KKTLCG	0.813530126	1 S224	0.98
IPI00556456.1	10664 CTCF	R.THS*GE	0.637328432	0.71 S74	0.82
IPI00556456.1	10664 CTCF	R.SHTGEF	0.836096036	0.96 S54	0.92
IPI00556456.1	10664 CTCF	R.SHT*GE	0.463105648	0.96 T46	0.97
IPI00556458.1	51684 SUFU	R.RLSGKC	0.27446972	0.67 T305	0.67
IPI00556458.1	51684 SUFU	R.APS*RK	0.181528891	0.9 S342	1.16
IPI00556458.1	51684 SUFU	R.APS*RK	0.643675939	0.56 S342	1.12
IPI00556458.1	51684 SUFU	R.APSRKC	0.072926818	0.98 S346	1.18
IPI00556476.2	9156 EXO1	K.KPLS*PA	0.021601024	0.96 S815	1.33
IPI00556476.2	9156 EXO1	R.TIS*PPT	0.373234869	0.92 S598	0.99
IPI00556594.2	55596 ZCCHC8	K.IHS*PIPI	0.463105648	1 S658	1.05
IPI00556594.2	55596 ZCCHC8	K.KSEAGF	0.253322457	0.96 S601	1.05
IPI00556594.2	55596 ZCCHC8	K.KSEAGF	0.253322457	0.96 S598	1.05
IPI00556594.2	55596 ZCCHC8	R.GT*PPP'	0.116581414	0.98 T479	1.23
IPI00556634.1	7709 ZBTB17	K.THS*PLF	0.566916624	0.98 S357	0.99
IPI00556634.1	7709 ZBTB17	K.T*HSPLF	0.566916624	0.98 T355	0.99
IPI00556645.2	221937 FOXK1	R.SGGLQ1	0.572822052	0.88 T436	0.66
IPI00556645.2	221937 FOXK1	R.SGGLQ1	0.009034562	0.98 S441	0.59

IPI00556645.2	221937 FOXK1	R.SGGLQ1	0.245972641	0.94 S441	0.72
IPI00556645.2	221937 FOXK1	R.SAPAS*I	0.018808105	0.96 S420	0.58
IPI00556645.2	221937 FOXK1	R.S*APASI	0.018808105	0.96 S416	0.58
IPI00556645.2	221937 FOXK1	K.EEAPAS	0.371919559	0.92 Y219	0.84
IPI00556645.2	221937 FOXK1	K.EEAPAS	0.096380146	0.98 S213	0.69
IPI00556645.2	221937 FOXK1	K.AAS*EQI	0.138946285	0.58 S288	0.6
IPI00556645.2	221937 FOXK1	K.AASEQC	0.138946285	0.58 T294	0.6
IPI00556645.2	221937 FOXK1	R.S*APAS'	0.878390339	0.88 S416	0.93
IPI00556645.2	221937 FOXK1	K.AAS*EQI	0.119105559	0.53 S288	0.58
IPI00556645.2	221937 FOXK1	K.EEAPAS	0.368149744	0.96 S223	0.76
IPI00556645.2	221937 FOXK1	K.EEAPAS	0.368149744	0.96 S213	0.76
IPI00604409.1	55072 RNF31	R.RLS*API	0.12765804	0.98 S315	1.18
IPI00604489.1		K.VSSPVA	0.643675939	0.92 S1420	1.09
IPI00604489.1		K.VSSPVA	0.831562154	0.96 S1417	1.11
IPI00604489.1		R.RAAS*D	0.197661257	0.94 S899	1.1
IPI00604489.1		K.VSSPVA	0.32093792	0.83 S1421	0.85
IPI00604489.1		K.SQSVPC	0.080258071	0.88 S742	1.07
IPI00604489.1		R.NYQSSS	0.002042313	0.71 T1139	0.95
IPI00604489.1		R.SYS*PYI	0.346340474	0.98 S794	1.09
IPI00604489.1		R.HLGGSC	0.684201094	0.98 S1314	1.11
IPI00604489.1		K.SFS*AP/	0.829549043	0.98 S1048	1.03
IPI00604489.1		R.SYSPY*I	0.32093792	1 Y796	1.14
IPI00604489.1		K.SQS*VP/	0.12765804	0.98 S733	1.23
IPI00604489.1		K.VSS*PV/	0.730331964	1 S1413	0.99
IPI00604489.1		K.VSS*PV/	0.684201094	0.98 S1413	1.05
IPI00604489.1		R.WDS*YC	0.530774648	1 S338	1.06
IPI00604489.1		K.EATSDP	0.152571688	0.98 T860	1.21
IPI00604489.1		K.EATSDP	0.152571688	0.98 S858	1.21
IPI00604489.1		K.VATTPG	0.373234869	1 S1269	1.12
IPI00604489.1		R.WDS*YC	0.088241621	0.92 S338	1.13
IPI00604489.1		K.EAFEEM	0.32093792	0.94 S963	1.06
IPI00604489.1		R.SGYIPSI	0.32093792	0.98 T775	0.39
IPI00604489.1		R.NYQSSS	0.566916624	1 S1155	1.06
IPI00604489.1		R.NYQSSS	0.566916624	1 S1157	1.06
IPI00604517.2		R.LELQGP	0.818022374	1 S540	1
IPI00604517.2		K.KVVVSP	0.566916624	1 T69	1.05
IPI00604517.2		K.ALVAT*F	0.756144089	1 T98	1
IPI00604517.2		K.KVVVS*I	0.530774648	1 S67	1.05
IPI00604547.2	55122 C6orf166	R.TLDFDP	0.096924105	0.98 S21	1.32
IPI00604547.2	55122 C6orf166	R.TLDFDP	0.197661257	0.96 S21	1.29
IPI00604582.1	57092 PCNP	K.NIGRDT'	0.566916624	0.9 T16	0.86
IPI00604620.3	4691 NCL	K.KVVVS*I	0.106353987	0.77 S67	1
IPI00604620.3	4691 NCL	K.VAVAT*F	0.530774648	0.94 T76	1.02
IPI00604620.3	4691 NCL	K.VVVSP	0.463105648	0.98 T69	1.01
IPI00604620.3	4691 NCL	R.LELQGP	0.818022374	1 S563	1
IPI00604620.3	4691 NCL	K.KVVVSP	0.566916624	1 T69	1.05
IPI00604620.3	4691 NCL	K.ALVAT*F	0.756144089	1 T121	1
IPI00604620.3	4691 NCL	K.KVVVS*I	0.530774648	1 S67	1.05
IPI00604786.1	678 ZFP36L2	R.RLS*DSI	0.152571688	0.42 S441	0.59
IPI00604786.1	678 ZFP36L2	R.RLSDS*I	0.296993866	0.9 S443	1.28
IPI00607564.1	25800 SLC39A6	K.YESQLS	0.03282354	0.96 S203	1.45

IPI00607584.1	10514	MYBBP1A	K.VPAQAN	0.233505398	0.9	T1227	1.08
IPI00607584.1	10514	MYBBP1A	K.NQKPSC	0.9240167	0.81	S1267	1.02
IPI00607584.1	10514	MYBBP1A	K.RKS*ED	0.32093792	0.92	S1186	1
IPI00607584.1	10514	MYBBP1A	R.LSLVIRE	0.604563646	1	S1308	0.98
IPI00607584.1	10514	MYBBP1A	R.LSLVIRE	0.604563646	1	S1310	0.98
IPI00607584.1	10514	MYBBP1A	K.ALGGEC	0.431601138	0.96	S775	1.12
IPI00607589.1	23309	SIN3B	R.YVEQYV	0.530774648	0.86	S971	0.95
IPI00607589.1	23309	SIN3B	R.YVEQYV	0.684201094	0.94	S969	0.99
IPI00607628.2	56850	GRIPAP1	R.SLSSSF	0.152571688	0.98	S661	1.15
IPI00607638.3	2036	EPB41L1	K.HQAS*IN	0.804577835	0.98	S401	0.96
IPI00607638.3	2036	EPB41L1	R.SLPELD	0.088241621	0.86	T543	0.95
IPI00607638.3	2036	EPB41L1	R.SLPELD	0.088241621	0.86	S541	0.95
IPI00607775.1	4683	NBN	R.IPNYQL	0.530774648	0.94	S350	1.07
IPI00607834.2			R.KPSAPS	0.431601138	0.86	S12	0.97
IPI00607875.1	84451	KIAA1804	K.DGHRIS	0.431601138	0.92	S517	1.05
IPI00607875.1	84451	KIAA1804	R.LRAIQCI	0	0.76	S562	7.62
IPI00607875.1	84451	KIAA1804	R.IS*LPSD	0.00082518	0.81	S514	0.31
IPI00619901.1	27115	PDE7B	R.RGS*YP	0.253322457	0.83	S45	1.38
IPI00619921.2	11083	DIDO1	R.GGLVGC	0.072926818	0.9	S1617	0.99
IPI00619921.2	11083	DIDO1	R.GGLVGC	0.054409842	0.9	S1616	0.99
IPI00619921.2	11083	DIDO1	K.SILAKPE	0.431601138	0.96	S1019	1.24
IPI00619921.2	11083	DIDO1	R.RNS*VE	0.214968943	1	S1456	1.13
IPI00619921.2	11083	DIDO1	K.TAAPS*F	0.233505398	0.98	S523	1.12
IPI00619921.2	11083	DIDO1	R.RNS*VE	0.296993866	1	S1456	1.16
IPI00619921.2	11083	DIDO1	K.SILAKPE	0.373234869	1	S1017	1.06
IPI00619921.2	11083	DIDO1	K.SKHDSE	0.463105648	0.88	S898	0.92
IPI00619921.2	11083	DIDO1	R.S*PPEG	0.181528891	0.92	S1040	1.18
IPI00619921.2	11083	DIDO1	R.YLSVPP	0.253322457	0.94	S1030	1.11
IPI00619921.2	11083	DIDO1	K.YPLCSA	0.072926818	0.96	T1256	1.25
IPI00619921.2	11083	DIDO1	R.RNS*VE	0.32093792	1	S1456	1.07
IPI00619935.1	5927	JARID1A	K.DLDLEP	0.98101429	0.81	S1111	1
IPI00619952.3	83605	CCM2	R.GIITDS*I	0.401648339	0.88	S405	0.97
IPI00619952.3	83605	CCM2	R.AIFDGA	0.530774648	0.96	T260	1.03
IPI00619952.3	83605	CCM2	R.AIFDGA	0.530774648	0.96	T262	1.03
IPI00619958.2	7163	TPD52	K.KLEDVK	0.088241621	0.98	S171	1.04
IPI00619958.2	7163	TPD52	K.KLEDVK	0.32797409	0.94	T173	0.97
IPI00639852.3	65057	ACD	R.TPSS*PI	0.27446972	0.98	S422	1.17
IPI00639863.1	4534	MTM1	K.YNSHSL	0.000787564	0.64	S18	1.15
IPI00639879.1	23248	KIAA0460	R.LSSS*PC	0.049260986	0.56	S883	0.67
IPI00639879.1	23248	KIAA0460	K.NTGVSF	0.197661257	0.98	T458	1.12
IPI00639879.1	23248	KIAA0460	R.ELSNSV	0.139636808	0.96	S772	1.16
IPI00639879.1	23248	KIAA0460	K.SSKLS*I	0.10132513	0.56	S838	0.59
IPI00639879.1	23248	KIAA0460	R.ELSNSV	0.054409842	0.92	S772	1.01
IPI00639879.1	23248	KIAA0460	K.IIS*PGS	0.005777772	0.81	S732	1.26
IPI00639879.1	23248	KIAA0460	R.ELSNSV	0.116581414	1	S770	1.28
IPI00639879.1	23248	KIAA0460	R.ELSNSV	0.214968943	0.98	S770	1.25
IPI00639879.1	23248	KIAA0460	R.SGT*PT	0.368149744	0.94	T706	1.04
IPI00639879.1	23248	KIAA0460	K.SFNYS*F	0.919312669	0.98	S567	1.02
IPI00639879.1	23248	KIAA0460	K.ASIGQS	0.49616549	0.98	S588	1.01
IPI00639981.1	5214	PFKP	R.GRS*FA	0.116581414	1	S170	1.21
IPI00640040.1	9277	WDR46	R.RYWEEI	0.643675939	0.98	S41	1.03

IPI00640055.1		R.S*PSPAI	0.072926818	0.94 S604	1.27
IPI00640055.1		R.TSKEPP	0.941751315	0.96 S669	1.04
IPI00640055.1		R.TLS*AD/	0.27446972	0.94 S573	1.05
IPI00640055.1		R.T*LSAD/	0.27446972	0.94 T571	1.05
IPI00640055.1		R.GPGLLE	0.946608772	0.88 S439	0.97
IPI00640092.1	9644 SH3PXD2/	R.WT*LGC	0.060044376	0.9 T256	1.12
IPI00640092.1	9644 SH3PXD2/	R.RSS*SD	0.656107164	0.59 S819	1
IPI00640136.2	64864 RFXDC2	R.NLS*GS	0.072926818	0.86 S1178	1.19
IPI00640149.1	9968 MED12	R.GDLAFC	0.684201094	0.94 S635	1.05
IPI00640186.1		K.FNIT*PN	0.387188711	0.96 T134	0.85
IPI00640318.2		R.LKEDILE	0.447034483	0.62 S53	0.37
IPI00640364.1	55593 OTUD5	R.KASATC	0.32093792	0.96 T449	1.12
IPI00640364.1	55593 OTUD5	R.KASATC	0.32093792	0.03 S450	0.03
IPI00640364.1	55593 OTUD5	R.ATS*PL\	0.139636808	0.98 S508	1.24
IPI00640364.1	55593 OTUD5	R.AT*SPL\	0.139636808	0.98 T507	1.24
IPI00640679.1	8577 TMEFF1	R.SVS*PLI	0.566916624	1 S98	1.04
IPI00640679.1	8577 TMEFF1	R.S*VSPLI	0.726073545	1 S96	1.02
IPI00640703.3	57510 XPO5	R.TCWPTI	1.92E-07	0.86 Y753	0.3
IPI00640759.1	23207 PLEKHM2	K.S*RSDE	0.080258071	0.85 S307	1.11
IPI00640759.1	23207 PLEKHM2	R.T*GSPG	0.726073545	0.94 T419	0.93
IPI00640818.1	10908 PNPLA6	R.LFPS*PC	0.49616549	0.92 S345	1
IPI00640847.1		K.AKPAMF	0.049260986	0.96 S481	1.33
IPI00640853.1	83444 ZNHIT4	K.SVPTFT	0.49616549	0.79 S97	0.9
IPI00640853.1	83444 ZNHIT4	K.SVPTFT	0.912548374	0.79 S99	0.74
IPI00640900.1		R.S*SKCC	0.660822982	0.83 S5	1.03
IPI00640924.1	23327 NEDD4L	K.DTLS*NF	0.040276449	0.94 S475	1.04
IPI00640924.1	23327 NEDD4L	K.DTLSNP	0.152571688	0.94 S483	1.15
IPI00640924.1	23327 NEDD4L	R.SCS*VTI	0.373234869	0.67 S342	0.82
IPI00640924.1	23327 NEDD4L	R.S*LSSP1	0.253322457	0.98 S382	1.11
IPI00640924.1	23327 NEDD4L	R.SLS*SP1	0.253322457	0.98 S384	1.11
IPI00641008.1	79980 DSN1	K.SLHLSP	0.637328432	0.86 S88	1.07
IPI00641008.1	79980 DSN1	R.IHLGSS	0.394935546	0.83 S58	1.1
IPI00641008.1	79980 DSN1	K.SLHLS*F	0.253322457	0.96 S81	1.04
IPI00641073.1	80736 SLC44A4	K.FLNRNA	0	0.58 Y562	0.11
IPI00641076.2	79567 FAM65A	R.SQS*FA	0.286954617	0.86 S36	1.19
IPI00641076.2	79567 FAM65A	R.S*QSFA	0.286954617	0.86 S34	1.19
IPI00641076.2	79567 FAM65A	K.HSDPTL	0.463105648	0.96 S670	1.05
IPI00641076.2	79567 FAM65A	R.FSTYSQ	0.49616549	0.96 S310	1.05
IPI00641106.1	9656 MDC1	R.SSGKT*	0.463105648	0.92 T1403	1.06
IPI00641106.1	9656 MDC1	R.SSVKT*I	0.795669231	0.88 T1567	0.9
IPI00641106.1	9656 MDC1	R.AQPFGF	0.684201094	0.86 T331	1.06
IPI00641106.1	9656 MDC1	K.SQASMA	0.401648339	0.76 S402	0.92
IPI00641106.1	9656 MDC1	R.AAESLT	0.836096036	0.98 S1775	1.02
IPI00641106.1	9656 MDC1	R.SSVKTP	0.854331471	0.96 S1570	0.99
IPI00641106.1	9656 MDC1	R.SS*VKTI	0.854331471	0.96 S1564	0.99
IPI00641106.1	9656 MDC1	K.TPKPVE	0.730331964	0.86 T1671	0.92
IPI00641106.1	9656 MDC1	K.GQAS*S	0.32093792	1 S963	1.11
IPI00641106.1	9656 MDC1	R.SSVKT*I	0.604563646	1 T1608	1.02
IPI00641106.1	9656 MDC1	R.AQPFGF	0.214968943	0.79 S329	1.07
IPI00641106.1	9656 MDC1	R.S*SVKTI	0.726073545	1 S1604	1
IPI00641106.1	9656 MDC1	R.ESEDSE	0.32093792	0.92 S780	1.08

IPI00641106.1	9656 MDC1	R.AAESLT	0.643675939	1 S1775	1.01
IPI00641181.4	65108 MARCKSL	K.LSGLS*F	0.233505398	1 S104	1.15
IPI00641225.1	57139 RGL3	R.VIEPPA/	0.044561326	0.59 S276	1.41
IPI00641268.1	11016 ATF7	K.KAAAGF	0.066203153	0.53 S97	1.09
IPI00641268.1	11016 ATF7	K.KAAAGF	0.195343632	0.98 S100	0.71
IPI00641268.1	11016 ATF7	K.KAAAGF	0.195343632	0.98 T101	0.71
IPI00641268.1	11016 ATF7	K.KAAAGF	0.004600913	1 S97	1.64
IPI00641268.1	11016 ATF7	K.TQGYLE	0.463105648	0.98 S424	1.16
IPI00641268.1	11016 ATF7	K.AAAGPL	0.394935546	0.98 T101	0.87
IPI00641268.1	11016 ATF7	K.AAAGPL	0.008098758	0.96 S97	1.7
IPI00641268.1	11016 ATF7	K.AAAGPL	0.008098758	0.96 S97	1.7
IPI00641287.1	9295 SFRS11	K.LNHVAA	0.684201094	0.98 S207	0.99
IPI00641330.1	6015 RING1	R.RPIPGS	0.13480971	0.94 S187	0.73
IPI00641330.1	6015 RING1	R.TPQEAI	0.401648339	0.96 S38	1
IPI00641582.1	9531 BAG3	R.SS*TPLI	0.014056191	0.98 S284	1.43
IPI00641582.1	9531 BAG3	R.AAPSTA	0.181528891	0.98 T406	1.06
IPI00641582.1	9531 BAG3	R.S*SLGSI	0.401648339	1 S194	1.05
IPI00641582.1	9531 BAG3	R.SST*PLI	0.017448313	1 T285	1.43
IPI00641582.1	9531 BAG3	R.SQS*PA	0.088241621	1 S173	1.22
IPI00641582.1	9531 BAG3	R.S*QSPA	0.088241621	1 S171	1.22
IPI00641582.1	9531 BAG3	R.SSTPLH	0.233505398	1 S291	1.16
IPI00641582.1	9531 BAG3	R.SSTPLH	0.233505398	1 S289	1.16
IPI00641692.2	10556 RPP30	K.KPRPS*I	0.373234869	1 S241	1.09
IPI00641692.2	10556 RPP30	K.KPRPSE	0.32093792	1 S251	1.09
IPI00641800.1	197259 MLKL	R.VKST*A`	0.742065003	0.71 T190	0.79
IPI00641857.1	79600 TECT1	R.S*TEGE	0.000297256	0.96 S201	1.14
IPI00641864.1	7027 TFDPI	K.VFIDQNI	0.106353987	0.96 S23	1.19
IPI00642012.1	3925 STMN1	K.RAS*GQ	0.253322457	0.83 S16	1.01
IPI00642012.1	3925 STMN1	K.RASGQ/	0.197661257	0.94 S25	1.16
IPI00642012.1	3925 STMN1	K.ESVPEF	0.296993866	0.96 S38	1.07
IPI00642012.1	3925 STMN1	R.RKS*HE	0.373234869	0.76 S63	0.95
IPI00642012.1	3925 STMN1	R.ASGQAF	0.253322457	0.98 S25	1.12
IPI00642012.1	3925 STMN1	K.RAS*GQ	0.32093792	1 S16	1.08
IPI00642012.1	3925 STMN1	R.AS*GQA	0.233505398	0.98 S16	1.15
IPI00642012.1	3925 STMN1	K.ESVPEF	0.49616549	1 S38	1.05
IPI00642012.1	3925 STMN1	R.SKESVP	0.604563646	1 S38	1.03
IPI00642018.3	84256 FLYWCH1	R.EKLPS*L	0.066203153	0.74 S191	0.61
IPI00642018.3	84256 FLYWCH1	K.AGQEP	0.643675939	0.98 S21	0.95
IPI00642046.1	26156 RSL1D1	K.IKEEAVI	0.975679369	0.96 S444	0.96
IPI00642046.1	26156 RSL1D1	K.IKEEAVI	0.975679369	0.96 S442	0.96
IPI00642046.1	26156 RSL1D1	K.FFTT*PS	0.713185935	0.96 T464	0.9
IPI00642046.1	26156 RSL1D1	K.AT*NESI	0.777986561	0.88 T357	0.94
IPI00642046.1	26156 RSL1D1	K.AAASET	0.401648339	0.94 S426	1
IPI00642046.1	26156 RSL1D1	K.FFTT*PS	0.726073545	0.98 T464	1.06
IPI00642046.1	26156 RSL1D1	K.ATNES*I	0.604563646	1 S360	1.02
IPI00642366.2	23271 CAMSAP1	R.RSSS*M	0.401648339	0.9 S405	1.07
IPI00642366.2	23271 CAMSAP1	R.SESVEC	0.03637398	0.67 S1310	1.27
IPI00642366.2	23271 CAMSAP1	R.SESVEC	0.03637398	0.67 S1308	1.27
IPI00642366.2	23271 CAMSAP1	R.RSS*SM	0.197661257	0.98 S404	1.25
IPI00642366.2	23271 CAMSAP1	R.RS*SSM	0.197661257	0.98 S403	1.25
IPI00642366.2	23271 CAMSAP1	R.SSS*MS	0.49616549	0.88 S405	1.14

IPI00642366.2	23271 CAMSAP1	R.SIS*NEC	0.029596689	0.98	S453	1.23
IPI00642366.2	23271 CAMSAP1	R.S*ISNEC	0.01942062	0.98	S451	1.23
IPI00642366.2	23271 CAMSAP1	K.WLKS*P	0.346340474	1	S851	1.07
IPI00642422.1	55870 ASH1L	R.KS*PSAI	0.530774648	0.98	S22	1.08
IPI00642422.1	55870 ASH1L	R.AVQTLA	0.831562154	1	T1683	0.98
IPI00642422.1	55870 ASH1L	R.AVQTLA	0.831562154	1	S1681	0.98
IPI00642468.1	8178 ELL	R.KLCQPC	0.27446972	0.96	S176	1.01
IPI00642524.1	90780 PYGO2	R.GGGT*P	0.373234869	1	T265	1.05
IPI00642705.1	8289 ARID1A	R.NPQMPC	0.49616549	0.94	S772	1.1
IPI00642705.1	8289 ARID1A	R.NPQMPC	0.49616549	0.94	S769	1.1
IPI00642705.1	8289 ARID1A	R.SAYPPP	0.152571688	0.85	S233	1.01
IPI00642705.1	8289 ARID1A	R.GPS*PS	0.401648339	0.98	S696	1.1
IPI00642862.1	85313 PPIL4	R.INHTVIL	0.166517367	0.28	T182	0.59
IPI00642862.1	85313 PPIL4	R.INHTVIL	0.116581414	0.98	S178	1.03
IPI00642957.1	8412 BCAR3	K.RLS*LTM	0.27446972	0.88	S199	1.11
IPI00643014.1	23352 UBR4	R.HVTLPS	0.005157186	0.96	S2730	1.24
IPI00643014.1	23352 UBR4	R.HVTLPS	0.005157186	0.96	S2718	1.24
IPI00643014.1	23352 UBR4	K.TKEQFC	0.566916624	0.94	T2468	0.86
IPI00643093.1		R.VDSPSF	0.829549043	0.94	T695	1.07
IPI00643093.1		R.VDSPS*	0.253322457	0.9	S690	1.02
IPI00643093.1		K.LNLAPA	0.346340474	0.98	S178	1.09
IPI00643093.1		R.VDS*PS	0.373234869	0.83	S688	0.95
IPI00643093.1		R.VDS*PS	0.253322457	0.98	S688	1.12
IPI00643093.1		R.VDSPSF	0.296993866	1	S702	1.03
IPI00643093.1		K.ICTLPSF	0.233505398	0.98	S671	1.09
IPI00643093.1		R.VDSPS*	0.530774648	0.98	S690	1.1
IPI00643093.1		K.ICTLPS*	0.253322457	0.98	S668	1.18
IPI00643093.1		K.DGDKS*	0.463105648	0.98	S495	1.03
IPI00643140.1	57794 SF4	K.AVQQHC	0.463105648	0.96	S35	1.05
IPI00643151.1	79366 NSBP1	R.S*ARLS'	0.863736843	0.9	S10	0.81
IPI00643151.1	79366 NSBP1	R.LSAMLV	0.643675939	1	T21	1.03
IPI00643168.3	93643 TJAP1	R.AFVDRT	0.431601138	0.98	T412	1.01
IPI00643168.3	93643 TJAP1	R.GS*PEE	0.604563646	0.98	S290	1.02
IPI00643168.3	93643 TJAP1	R.KDS*LTG	0.006399346	0.79	S535	0.62
IPI00643352.1		K.S*PGSTI	0.181528891	0.88	S430	1.12
IPI00643352.1		K.SPGS*TI	0.181528891	0.88	S433	1.12
IPI00643352.1		R.SAQGS	0.530774648	0.98	S657	1.03
IPI00643352.1		K.QTSLW	0.966676636	0.96	S911	1.05
IPI00643352.1		R.SAQGS	0.410648733	0.74	S666	0.96
IPI00643352.1		R.IT*PPAA	0.604563646	1	T670	1.02
IPI00643396.2	80206 FHOD3	R.GKMITD	0.004600913	0.58	S1307	0.64
IPI00643465.1	10579 TACC2	R.RKS*TD	0.000508502	0.59	S2072	0.72
IPI00643465.1	10579 TACC2	K.LDNTPA	0.106353987	0.86	S2317	1.32
IPI00643465.1	10579 TACC2	K.TPEKLD	0.401648339	0.92	T2314	1.1
IPI00643465.1	10579 TACC2	K.MQES*P	0.684201094	0.81	S2359	0.88
IPI00643522.1	6194 RPS6	R.RLS*S*L	0	0.96	S235,S236	0.14
IPI00643561.1	23274 KIAA0350	R.VFS*LSE	0.726073545	1	S948	1
IPI00643657.1	9757 MLL4	R.LADVAP	0.152571688	0.92	T172	1.07
IPI00643657.1	9757 MLL4	K.VAASMF	0.115387198	0.88	S821	0.92
IPI00643708.1	7019 TFAM	K.NLS*DSI	0.177590609	0.85	S161	0.81
IPI00643733.1	8776 MTMR1	R.GSS*PS	0.726073545	1	S653	1

IPI00643808.1	51514 DTL	K.ESRPGL	0.00181541	1 T429	1.62
IPI00643808.1	51514 DTL	K.IEGAGT!	0.033531167	0.86 S623	0.69
IPI00643808.1	51514 DTL	R.GSVSS*	0.088241621	0.98 S488	1.25
IPI00643808.1	51514 DTL	R.RLDS*SO	0.530774648	0.96 S557	1.18
IPI00643808.1	51514 DTL	R.TPSSS*F	0.106353987	0.61 S512	1
IPI00643818.1	163859 C1orf55	R.VVNTDF	0.132773239	0.85 S183	0.86
IPI00643900.1	4677 NARS	R.WNVISK	0.099657188	0.88 S60	0.95
IPI00643923.2	84726 KIAA0515	R.HIISATS	0.346340474	0.98 S226	0.98
IPI00643923.2	84726 KIAA0515	R.SFS*SQ	0.373234869	0.98 S742	1.03
IPI00643923.2	84726 KIAA0515	R.KVTPID!	0.214968943	0.9 S740	1.05
IPI00643923.2	84726 KIAA0515	R.SSPYGT	0.952395062	0.79 T1014	1.03
IPI00644021.1	26750 RPS6KC1	R.SKNS*P	0.684201094	0.96 S584	0.96
IPI00644021.1	26750 RPS6KC1	R.KGVDLL	0.27446972	0.98 T272	1.1
IPI00644021.1	26750 RPS6KC1	R.KGVDLL	0.27446972	0.98 S269	1.1
IPI00644210.1	84656 N-PAC	R.KLS*LSE	0.528118232	0.94 S61	0.81
IPI00644228.1	83549 UCK1	R.TFS*EP!	0.401648339	0.94 S244	1.08
IPI00644228.1	83549 UCK1	R.T*FSEPC	0.401648339	0.94 T242	1.08
IPI00644438.1	199953 RP13-15M	R.ADSGYL	0.205975059	0.86 S471	1.2
IPI00644438.1	199953 RP13-15M	R.RTS*PS!	0.197661257	0.98 S441	1.11
IPI00644438.1	199953 RP13-15M	R.ADSGYL	0.942907226	0.92 S477	1
IPI00644438.1	199953 RP13-15M	R.ALS*LG!	0.166517367	0.98 S454	1.2
IPI00644552.1	1877 E4F1	R.EAGEG/	0.775968482	0.83 S50	0.9
IPI00644591.2	64423 C14orf173	R.RSSWY'	0.139636808	0.96 Y570	1.03
IPI00644989.1	10130 PDIA6	R.DGELPV	0.604563646	0.98 S428	1.08
IPI00645078.1	7317 UBE1	K.ATLPS*F	0.401648339	0.92 S835	0.99
IPI00645078.1	7317 UBE1	R.RVS*GP	3.87E-08	0.61 S13	1.78
IPI00645179.2	84665 MYPN	K.HSPNLS	0.214968943	0.9 S127	1.1
IPI00645179.2	84665 MYPN	K.HSPNLS	0.214968943	0.9 S124	1.1
IPI00645179.2	84665 MYPN	R.TVS*KE!	0.139636808	0.98 S759	1.13
IPI00645179.2	84665 MYPN	R.T*VSKE!	0.139636808	0.98 T757	1.13
IPI00645192.2	4204 MECP2	K.MPFQTS	0.952395062	0.98 S241	0.97
IPI00645192.2	4204 MECP2	K.AETSEG	0.684201094	1 S92	1.11
IPI00645298.1	7402 UTRN	R.LGYLPV	0.03637398	0.72 Not con	1.15
IPI00645298.1	7402 UTRN	R.LGYLPV	0.197661257	0.92 Not con	1.06
IPI00645329.1	5928 RBBP4	K.IGEEQS'	0.49616549	0.79 S355	1.01
IPI00645608.1	26145 IRF2BP1	K.NVAEAL	0.401648339	0.9 S436	0.98
IPI00645608.1	26145 IRF2BP1	R.AGGAS*	0.373234869	1 S453	1.13
IPI00645613.1	58513 EPS15L1	R.STPSHC	0.49616549	0.88 S253	0.92
IPI00645613.1	58513 EPS15L1	R.STPSHC	0.49616549	0.98 S255	0.98
IPI00645613.1	58513 EPS15L1	R.STPSHC	0.431601138	1 T251	1.06
IPI00645613.1	58513 EPS15L1	K.TVFPGA	0.814911089	0.81 S229	0.69
IPI00645725.1	57648 KIAA1522	R.S*TVLGI	0.431601138	1 S172	1.05
IPI00645725.1	57648 KIAA1522	K.LQLERP	0.27446972	0.96 S940	1.14
IPI00645725.1	57648 KIAA1522	R.VTSLRS	0.248994789	0.76 S573	0.92
IPI00645725.1	57648 KIAA1522	K.LQLERP	0.139636808	0.98 T943	1.24
IPI00645725.1	57648 KIAA1522	R.ST*VLGI	0.296993866	0.86 T173	0.96
IPI00645725.1	57648 KIAA1522	K.GLAGPF	0.293581759	0.9 S556	0.91
IPI00645725.1	57648 KIAA1522	R.VTS*LR!	0.891255812	0.96 S570	1.09
IPI00645816.1	10849 CD3EAP	R.SALAPN	0.431601138	1 T171	1.08
IPI00645816.1	10849 CD3EAP	R.SALAPN	0.72279082	0.81 T171	0.88
IPI00645816.1	10849 CD3EAP	R.SALAPN	0.72279082	0.81 S172	0.88

IPI00645816.1	10849 CD3EAP	R.SALAPN	0.530774648	1 S172	1.03
IPI00645857.2	51362 CDC40	K.SPSSKP	0.139636808	0.92 S49	1.31
IPI00645857.2	51362 CDC40	K.S*PSSKI	0.096924105	0.9 S43	1.07
IPI00645857.2	51362 CDC40	K.SPSS*KI	0.116581414	0.94 S46	1.22
IPI00645857.2	51362 CDC40	K.S*PSSKI	0.106353987	0.94 S43	1.22
IPI00645857.2	51362 CDC40	K.SPSSKP	0.12765804	0.88 S49	1.09
IPI00645857.2	51362 CDC40	K.SPS*SKI	0.12765804	0.88 S45	1.09
IPI00645882.1	56181 FAM54B	K.ASS*FAI	0.431601138	0.88 S226	0.94
IPI00646058.1	6294 SAFB	K.RSVVS*I	0.401648339	0.98 S604	1.07
IPI00646058.1	6294 SAFB	R.SVVS*FI	0.49616549	0.96 S604	0.98
IPI00646058.1	6294 SAFB	R.S*VVVFI	0.530774648	1 S601	1.04
IPI00646058.1	6294 SAFB	R.TDCEPV	0.51496205	0.98 S344	0.64
IPI00646058.1	6294 SAFB	K.ELPEQL	0.566916624	0.96 T200	1.02
IPI00646058.1	6294 SAFB	K.ELPEQL	0.89791754	0.94 S195	0.87
IPI00646058.1	6294 SAFB	R.SVVS*FI	0.566916624	1 S604	1.05
IPI00646058.1	6294 SAFB	K.SEPVKE	0.990601784	0.96 S235	0.93
IPI00646058.1	6294 SAFB	K.SEPVKE	0.990601784	0.96 S234	0.93
IPI00646058.1	6294 SAFB	K.ELPEQL	0.800118017	0.94 S197	0.89
IPI00646311.2	10389 SCML2	R.SVPGTT	0.014056191	0.77 S590	1.12
IPI00646311.2	10389 SCML2	R.S*PQQT	0.373234869	0.86 S499	0.99
IPI00646311.2	10389 SCML2	K.RS*PQQ	0.214968943	1 S499	1.17
IPI00646311.2	10389 SCML2	R.SVPGTT	0.252038815	0.92 S590	0.62
IPI00646410.1	221656 AOF1	K.ASFDHS	0.197661257	0.98 S17	1.03
IPI00646410.1	221656 AOF1	K.KASFDH	0.066203153	0.9 S17	0.84
IPI00646782.1	84895 FAM73B	R.TLMLPL	0.566916624	0.86 S276	1.09
IPI00646837.1	64062 RBM26	R.LNHS*PI	0.197661257	0.92 S127	1.04
IPI00646837.1	64062 RBM26	R.EGSTQC	0.431601138	0.94 T168	1.03
IPI00646867.1		R.TYSLGS	0.234103486	0.74 T48	0.91
IPI00646867.1		R.TYSLGS	0.234103486	0.74 S47	0.91
IPI00646867.1		R.TYS*LG	0.614059792	0.76 S39	0.86
IPI00646867.1		R.SLYASS	0.849757871	0.98 S56	1
IPI00646885.1	394 ARHGAP5	R.LYHDS*	0.577359743	0.96 S590	0.85
IPI00646890.1	9739 SETD1A	R.DTGSEV	0.296993866	0.98 T540	1.17
IPI00646954.1	55740 ENAH	R.TNTMNC	0.233505398	1 S755	1.11
IPI00646954.1	55740 ENAH	R.TNTMNC	0.233505398	1 S753	1.11
IPI00646954.1	55740 ENAH	R.TNTMNC	0.166517367	1 S759	1.11
IPI00646970.1	359948 IRF2BP2	K.RPAS*V	0.253322457	0.98 S240	1.13
IPI00646970.1	359948 IRF2BP2	K.RPASVS	0.253322457	0.98 S244	1.13
IPI00646970.1	359948 IRF2BP2	K.RPASVS	0.253322457	1 S243	1.14
IPI00646970.1	359948 IRF2BP2	K.RPASVS	0.253322457	1 S242	1.14
IPI00646970.1	359948 IRF2BP2	K.LEEPPE	0.463105648	0.88 S175	1.14
IPI00647095.1	4007 LMO6	R.VS*FRD	0.253322457	0.9 S475	1.29
IPI00647192.1	83608 C18orf21	R.SFVSTL	0.152571688	0.98 S126	1.09
IPI00647239.3	254427 C10orf47	R.MAGNE	0.233505398	0.92 S212	1.28
IPI00647239.3	254427 C10orf47	R.SRS*FTI	0.197661257	0.98 S43	1.18
IPI00647239.3	254427 C10orf47	R.S*RSFTI	0.197661257	0.98 S41	1.18
IPI00647286.1	64855 FAM129B	K.AAPEAS	0.431601138	0.14 S691	0.59
IPI00647286.1	64855 FAM129B	K.AVDLGP	0.080258071	0.96 S728	1.13
IPI00647286.1	64855 FAM129B	K.AAPEAS	0.431601138	1 S692	1.06
IPI00647446.1	54801 FAM29A	K.LEPNS*F	0.98101429	0.83 S805	0.87
IPI00647446.1	54801 FAM29A	R.NQIPRT	0.32093792	0.98 T584	1.12

IPI00647596.1	3930 LBR	R.EVEVKL	0.296993866	0.9 T118	1.14
IPI00647596.1	3930 LBR	R.EVEVKL	0.49616549	0.94 T118	0.96
IPI00647596.1	3930 LBR	K.LT*PLILP	0.942907226	0.92 T118	0.93
IPI00647621.2	282996 RBM20	R.S*GSPN	0.726073545	1 S717	1
IPI00647621.2	282996 RBM20	R.SGS*PN	0.726073545	1 S719	1
IPI00647720.1	10250 SRRM1	R.APQTSS	0.106353987	0.9 S695	0.95
IPI00647720.1	10250 SRRM1	R.RYS*PP	0.066203153	1 S597	1.31
IPI00647752.1	56957 OTUD7B	R.GIS*HAE	0.643675939	0.98 S100	1.25
IPI00647868.1	261734 NPHP4	R.IFSNQPI	0.530774648	0.88 S142	1.2
IPI00647892.1	9787 DLG7	R.HIS*FGC	0.726073545	1 S830	1
IPI00647892.1	9787 DLG7	R.HISFGG	0.726073545	1 T837	1
IPI00647892.1	9787 DLG7	R.MS*LPLI	0.936890791	0.92 S725	0.89
IPI00647892.1	9787 DLG7	R.HIS*FGC	0.726073545	1 S830	1
IPI00647892.1	9787 DLG7	K.SLTTEC	0.401648339	0.98 S806	0.91
IPI00647892.1	9787 DLG7	R.SS*IEDA	0.956313787	0.92 S690	0.83
IPI00647892.1	9787 DLG7	R.S*SIEDA	0.956313787	0.92 S689	0.83
IPI00647892.1	9787 DLG7	R.HISFGG	0.726073545	1 S839	1
IPI00647951.1	54820 NDE1	R.RPSS*TI	0.008070766	0.81 S307	1
IPI00647951.1	54820 NDE1	R.RPS*STI	0.014634379	0.86 S306	0.58
IPI00651638.1	154810 AMOTL1	R.SVPSIA/	0.093180902	0.74 S755	0.65
IPI00651638.1	154810 AMOTL1	R.SVPSIA/	0.093180902	0.74 T753	0.65
IPI00651643.2	8878 SQSTM1	R.S*RLTP\	1.65E-06	0.81 S266	0.68
IPI00651643.2	8878 SQSTM1	R.RFS*FCI	0.181528891	0.94 S24	1.04
IPI00651653.1	10521 DDX17	R.S*SQSS	0.066203153	0.77 S594	1.08
IPI00651653.1	10521 DDX17	R.SS*QSS	0.066203153	0.77 S595	1.08
IPI00651766.1	7071 KLF10	R.KNIPCA/	0.604563646	0.9 S195	0.99
IPI00651766.1	7071 KLF10	R.LSPIAP/	0.181528891	0.67 S340	0.76
IPI00651771.1	64219 PJA1	R.NLAS*PI	0.751811379	0.88 S210	1.06
IPI00654555.2	4839 NOL1	K.TNKS*PI	0.530774648	0.96 S67	0.98
IPI00654555.2	4839 NOL1	R.RLGS*V	0.431601138	1 S58	1.07
IPI00654555.2	4839 NOL1	K.GPQPPT	0.12765804	0.94 S819	1.14
IPI00654555.2	4839 NOL1	K.GTDTQT	0.296993866	1 S767	1.12
IPI00654555.2	4839 NOL1	K.GTDTQT	0.296993866	1 S765	1.12
IPI00654603.3	55704 CCDC88A	R.RTS*IHC	0.32093792	0.98 S1792	1.01
IPI00654605.1	55700 MAP7D1	R.RSSQPE	0.026666866	0.88 S116	1.26
IPI00654605.1	55700 MAP7D1	R.SRS*AV	0.049260986	0.96 S313	1.37
IPI00654605.1	55700 MAP7D1	K.ESAAPA	0.296993866	0.98 S548	1.05
IPI00654605.1	55700 MAP7D1	K.SLSRT*F	0.208688308	0.94 T813	0.75
IPI00654605.1	55700 MAP7D1	R.RSS*QP	0.346340474	0.92 S113	1.1
IPI00654605.1	55700 MAP7D1	K.ESAAPA	0.253322457	1 S544	1.15
IPI00654605.1	55700 MAP7D1	K.ES*AAP/	0.253322457	1 S539	1.15
IPI00654605.1	55700 MAP7D1	R.RSS*QP	0.27446972	0.98 S113	1.13
IPI00654605.1	55700 MAP7D1	R.RSS*QP	0.27446972	0.98 S113	1.13
IPI00654605.1	55700 MAP7D1	R.T*PETLL	0.078322436	0.79 T813	0.96
IPI00654605.1	55700 MAP7D1	R.RSS*QP	0.643675939	0.96 S113	1.1
IPI00654605.1	55700 MAP7D1	R.RSS*QP	0.643675939	0.96 S113	1.1
IPI00654605.1	55700 MAP7D1	K.ESAAPA	0.152571688	0.81 S544	1.05
IPI00654605.1	55700 MAP7D1	R.RSS*QP	0.401648339	1 S113	1.12
IPI00654605.1	55700 MAP7D1	R.RS*SQP	0.296993866	1 S112	1.12
IPI00654605.1	55700 MAP7D1	R.RSSQPE	0.296993866	1 S116	1.12
IPI00654605.1	55700 MAP7D1	K.SLS*RTF	0.208688308	0.98 S811	0.93

IPI00654682.1	57018 CCNL1	K.GLNPDG	0.021743049	0.64	S335	0.35
IPI00654682.1	57018 CCNL1	K.GLNPDG	0.043241458	0.98	S335	0.64
IPI00654771.2		K.ESLSTH	0.253322457	0.96	S219	1.12
IPI00654771.2		K.ESLSTH	0.296993866	1	S215	1.18
IPI00654771.2		K.ESLSTH	0.932027377	0.98	T214	1.04
IPI00654779.1	7353 UFD1L	K.GVEPSF	0.373234869	0.98	S236	1.07
IPI00654832.1	117178 SSX2IP	K.EMISLLE	0.088241621	0.94	S293	1.38
IPI00654870.1		R.SSSQSC	0.401648339	1	S47	1.06
IPI00654870.1		R.SSSQSC	0.401648339	1	S48	1.06
IPI00655607.2	54899 P XK	K.YSNSNM	0	0.94	S471	6.35
IPI00655699.1	10557 RPP38	R.IEDSGE	0.005157186	0.88	S235	0.97
IPI00655699.1	10557 RPP38	R.ELLDTS	0.296993866	0.98	S235	1.08
IPI00655718.1	147138 TMC8	R.ASS*RP	0.373234869	0.98	S299	1.06
IPI00655885.1	55775 TDP1	R.WTISSS	0.002042313	0.85	S18	1.11
IPI00655885.1	55775 TDP1	R.WTISSS	0.002042313	0.85	S15	1.11
IPI00655887.1	84220 RGPD5	K.DSLITP	0.829549043	0.88	S1478	0.99
IPI00655887.1	84220 RGPD5	K.SALSLSI	0.356956072	0.94	S1304	0.97
IPI00656039.3		R.VLS*MD	0.455306331	0.94	S386	0.86
IPI00656048.1	9841 ZBTB24	K.AYTFDQ	0.822525206	0.88	S134	1
IPI00656138.1	5058 PAK1	K.AVSETP	0.000141509	0.66	S174	1.29
IPI00657687.1	54443 ANLN	K.NKAS*P	0.49616549	0.9	S792	1.16
IPI00657687.1	54443 ANLN	K.NKASPC	0.49616549	0.9	S795	1.16
IPI00657687.1	54443 ANLN	K.SNIHSS	0.096924105	0.98	S927	1.06
IPI00657687.1	54443 ANLN	K.TPIS*PL	0.49616549	0.88	S323	0.9
IPI00657687.1	54443 ANLN	K.ST*TPG	0.566916624	0.94	T363	0.98
IPI00657687.1	54443 ANLN	K.STT*PG	0.296993866	0.98	T364	1.1
IPI00657687.1	54443 ANLN	R.AESGDE	0.024460454	0.85	S661	0.51
IPI00657687.1	54443 ANLN	K.SCSPS*I	0.586469457	0.69	S99	0.9
IPI00657687.1	54443 ANLN	R.AESGDE	0.187602579	0.86	S664	0.85
IPI00657687.1	54443 ANLN	R.AES*GD	0.187602579	0.86	S658	0.85
IPI00657708.1	7158 TP53BP1	R.RSDS*P	0.296993866	0.98	S1417	1.15
IPI00657708.1	7158 TP53BP1	R.STPFIV	0.530774648	0.96	S385	0.94
IPI00657721.1	26121 PRPF31	R.S*S*GT	0.079724745	0.81	S439	0.66
IPI00657721.1	26121 PRPF31	R.SSGTAS	0.079724745	0.81	S445	0.66
IPI00657791.1	55536 CDCA7L	R.RAFS*E	0.900575286	0.94	S261	0.93
IPI00657791.1	55536 CDCA7L	K.EVADIF	0.886608864	0.96	S21	1.09
IPI00657842.1	2355 FOSL2	R.S*PPAP	0.604563646	0.98	S192	1.09
IPI00657842.1	2355 FOSL2	R.RS*SSS	0.019748483	0.9	S299	0.88
IPI00657938.1	112574 SNAG1	R.NLNRFS	0.066203153	0.92	S233	0.99
IPI00657953.1	7204 TRIO	R.LLVRPT	0.106353987	0.96	S1901	1.19
IPI00657954.1	9879 DDX46	K.AALGLQ	0.684201094	0.86	S804	0.98
IPI00658100.1	80012 PHC3	R.TPPPPT	0.233505398	0.81	S597	1.05
IPI00658100.1	80012 PHC3	R.MDRT*P	0.296993866	1	T590	1.09
IPI00658128.1	57620 STIM2	R.KQS*PP	0.863507405	0.66	S704	0.82
IPI00658128.1	57620 STIM2	R.HTS*CS	0.000485008	0.88	S792	1
IPI00658152.1	64759 TNS3	R.SCPETL	0.27446972	0.96	S901	1.19
IPI00658152.1	64759 TNS3	R.KLS*LG	0.253322457	0.98	S776	1.1
IPI00658152.1	64759 TNS3	R.SLGSVS	0.181528891	0.98	S1115	1.19
IPI00658152.1	64759 TNS3	R.SLGSVS	0.181528891	0.98	S1115	1.19
IPI00658152.1	64759 TNS3	R.LILELDP	0.530774648	0.94	S732	1.06
IPI00658210.1	57599 WDR48	K.GIHNFR	0.296993866	0.94	S335	0.98

IPI00718899.1	146956 EME1	K.IPEVPLF	0.32093792	0.9 T150	0.99
IPI00718992.1	57217 TTC7A	R.RGSPSA	0.530774648	0.85 T57	1.1
IPI00718992.1	57217 TTC7A	R.RGS*PS	0.253322457	0.98 S51	1.02
IPI00718992.1	57217 TTC7A	R.RGSPS*	0.233505398	0.98 S53	1.02
IPI00719073.1	57680 CHD8	R.S*QEMV	0.166517367	0.81 S2047	0.79
IPI00719073.1	57680 CHD8	K.VLSASE	0.909927945	0.94 S297	0.99
IPI00719073.1	57680 CHD8	R.T*ASPLF	0.021601024	0.69 T1858	0.51
IPI00719073.1	57680 CHD8	R.SQEMV	0.001432711	0.94 S2065	1.58
IPI00719073.1	57680 CHD8	R.APGYPE	0.029596689	0.96 S2383	1.26
IPI00719073.1	57680 CHD8	R.TAS*PLF	0.021601024	0.98 S1860	1.27
IPI00719073.1	57680 CHD8	R.T*ASPLF	0.072926818	0.98 T1858	1.15
IPI00719073.1	57680 CHD8	R.SQEMV	0.007240509	0.77 S2076	1.58
IPI00719073.1	57680 CHD8	R.VS*PSD	0.27446972	0.98 S1911	1.17
IPI00719106.1	79869 FLJ12529	R.VLIS*SL	0.017448313	0.94 S385	1.22
IPI00719106.1	79869 FLJ12529	R.DSSDSA	0.233505398	0.98 T194	1.2
IPI00719125.1	353174 LGICZ1	R.VFVSNV	0.401648339	1 S85	1.08
IPI00719331.1		K.GCLTTP	0.296993866	0.94 S269	1.06
IPI00719587.1	27 ABL2	K.VPVLIS*	0.401648339	0.98 S921	1.06
IPI00719587.1	27 ABL2	K.VPVLISF	0.401648339	0.98 T923	1.06
IPI00719587.1	27 ABL2	K.TGGS*S	0.181528891	1 S56	1.18
IPI00719587.1	27 ABL2	K.TGGS*	0.181528891	1 S57	1.18
IPI00719587.1	27 ABL2	K.GGFFSS	0.346340474	0.98 S640	1.2
IPI00719643.1	23064 SETX	R.S*LTHPF	0.233505398	0.79 S2439	1.34
IPI00719643.1	23064 SETX	K.KS*SPF	0.106353987	0.85 S910	0.92
IPI00719643.1	23064 SETX	R.RLS*DC	0.000888315	0.62 S1366	0.84
IPI00719643.1	23064 SETX	R.RLSDCE	0.000888315	0.62 S1370	0.84
IPI00719643.1	23064 SETX	K.KSS*PF	0.642010044	0.98 S911	1.03
IPI00719752.1	8662 EIF3S9	R.TEPAAE	0.181528891	0.92 S81	1.09
IPI00719752.1	8662 EIF3S9	R.TEPAAE	0.604563646	0.96 S85	1.03
IPI00719752.1	8662 EIF3S9	R.ALENGE	0.827038504	0.98 S152	0.96
IPI00735732.1	4133 MAP2	R.ATFS*D	0	0.74 S205	6.3
IPI00735732.1	4133 MAP2	R.VDHGAE	0.088241621	1 S514	1.38
IPI00735758.1		K.HSTPSP	0.045978168	0.86 Y130	0.75
IPI00735758.1		K.DSLITPF	0.829549043	0.88 S823	0.99
IPI00735758.1		K.HSTPS*I	0.032806498	0.96 S126	0.72
IPI00735758.1		K.SALSLSI	0.356956072	0.94 S649	0.97
IPI00735758.1		R.EDALDC	0.853966795	0.96 S620	0.86
IPI00735758.1		R.LLPVINT	0.86862174	0.94 S1087	0.88
IPI00735758.1		R.LLLDIPL	0.113558743	0.96 T522	0.89
IPI00735855.1	171024 SYNPO2	K.SSSSQF	0.530774648	0.85 S777	0.99
IPI00735855.1	171024 SYNPO2	R.GVSS*P	0.463105648	0.88 S638	1.08
IPI00735885.1	170394 PWWP2	R.APAEQV	0.139636808	0.98 S248	1.28
IPI00735918.1		R.HESEVN	1.13E-05	0.77 T609	2.51
IPI00736092.1		R.HLQQG	0.088241621	0.86 S395	1.03
IPI00736092.1		R.T*ISAQC	0.033531167	0.98 T350	0.84
IPI00736092.1		R.TIS*AQC	0.033531167	0.98 S352	0.84
IPI00736414.1		R.AADGGE	0.431601138	0.96 S703	1.04
IPI00736414.1		R.SPS*DLI	0.401648339	0.98 S315	1.1
IPI00736414.1		R.SPSDLH	0.463105648	1 S320	1.09
IPI00736431.1		K.RFS*TP	0.49616549	0.72 S776	0.87
IPI00736431.1		R.HFS*SA	0.072926818	0.9 S18	1.15

IPI00736661.1	9712 USP6NL	R.IEVLPE	0.604563646	0.98	S716	1.03
IPI00737083.1	22992 FBXL11	R.SCDEPL	0.253322457	0.83	T713	1.03
IPI00737083.1	22992 FBXL11	R.SCDEPL	0.373234869	0.98	T713	1.13
IPI00737083.1	22992 FBXL11	R.LT*PVRF	0.49616549	1	T550	1.06
IPI00737355.1		R.NHVVHQL	0.684201094	0.94	Y148	0.94
IPI00737969.1	57553 MICAL3	R.LGS*PL	0.27446972	0.81	S283	1.27
IPI00737969.1	57553 MICAL3	R.LGS*PL	0.431601138	0.98	S283	1.13
IPI00737991.1	59339 PLEKHA2	R.SIS*LTR	0.03637398	0.98	S314	1.38
IPI00737991.1	59339 PLEKHA2	R.RSQS*Y	0.106353987	0.98	S184	1.18
IPI00737991.1	59339 PLEKHA2	K.APSVAS	0.831562154	0.86	S352	1.29
IPI00737991.1	59339 PLEKHA2	K.APS*VA	0.831562154	0.86	S349	1.29
IPI00737991.1	59339 PLEKHA2	R.SQS*YIF	0.029596689	1	S184	1.31
IPI00738043.1		K.LSIMIEE	0.195343632	0.86	Y60	0.49
IPI00738216.1	23379 KIAA0947	R.RAS*PP	0.116581414	0.88	S1692	1.03
IPI00738216.1	23379 KIAA0947	R.RAS*PP	0.401648339	0.96	S1692	1.02
IPI00738438.1		R.S*PMDS	0.214968943	0.96	S112	1.13
IPI00738634.1		R.AFAGPL	0.197968259	0.83	S298	0.92
IPI00738634.1		R.AFAGPL	0.643675939	0.96	S298	1
IPI00738634.1		K.SQLPDL	0.401648339	0.52	S666	0.55
IPI00738634.1		R.YGGS*P	0.643675939	0.98	S282	1.03
IPI00738806.1	4648 MYO7B	K.T*GLVPI	0.010658547	0.98	T1554	0.69
IPI00738974.1	344558 SH3MD4	R.KAGS*LI	0.946608772	0.96	S797	1.16
IPI00739117.2	23215 BAT2D1	R.MLWGS	0.49616549	0.98	T822	1.06
IPI00739117.2	23215 BAT2D1	R.MLWGS	0.49616549	1	T821	1.07
IPI00739117.2	23215 BAT2D1	R.SVEDVF	0.214968943	0.98	T887	1.22
IPI00739117.2	23215 BAT2D1	R.S*VEDV	0.106353987	0.71	S878	0.94
IPI00739386.1	157285 DKFZp761	K.VSQGS/	0.360667889	0.86	S745	0.82
IPI00739497.1		K.SAPTS*F	9.94E-13	0.98	S376	0.23
IPI00739581.1	54454 ATAD2B	R.ENTLFD	0.933447376	0.96	S318	1.04
IPI00739846.1		R.FNISSHI	0.643675939	0.98	S164	0.98
IPI00739969.1	642995 LOC64299	R.EVIEIED	0.877341226	0.9	T1377	0.95
IPI00739969.1	642995 LOC64299	K.LTPVSL	0.25510468	0.96	S444	0.73
IPI00739969.1	642995 LOC64299	K.LTPVSL	0.25510468	0.96	S446	0.73
IPI00740132.1		R.KGS*DA	0.152571688	1	S23	1.14
IPI00740155.1		K.HSPIKEE	0.253322457	0.96	S172	1.11
IPI00740155.1		R.KS*PLG	0.431601138	0.98	S4	0.95
IPI00740178.1	9618 TRAF4	R.GS*LDE	0.872720802	0.98	S84	1.02
IPI00740185.1		R.S*LDDL	0.831562154	0.71	S246	0.83
IPI00740502.1		K.AEAPAG	0.401648339	0.86	S25	0.99
IPI00740502.1		K.AEAPAG	0.253322457	0.88	S25	0.93
IPI00741088.1	254102 EHBP1L1	R.ANEAGC	0.32093792	0.96	S285	1.12
IPI00741088.1	254102 EHBP1L1	R.ANEAGC	0.296993866	0.96	T284	1.12
IPI00741088.1	254102 EHBP1L1	R.KGS*DA	0.152571688	1	S310	1.14
IPI00741141.1		K.RNPNTG	0.418612999	0.88	S201	0.64
IPI00741141.1		K.RNPNTG	0.096380146	0.94	T200	0.66
IPI00741141.1		R.S*ASTS	0.197661257	0.92	S615	1.09
IPI00741141.1		R.T*PTSPI	0.12765804	0.92	T501	1.01
IPI00741141.1		R.TPTS*PI	0.12765804	0.92	S504	1.01
IPI00741141.1		K.EQAAAL	0.643675939	0.94	S408	1.12
IPI00741248.1		R.FYS*SEI	0.005157186	0.88	S66	1.5
IPI00741253.1		K.LSHS*DI	0.463105648	0.9	S79	0.76

IPI00741480.1		K.S*SPSG	0.431601138	0.94	S158	1.09
IPI00741480.1		K.SS*PSG	0.431601138	0.94	S159	1.09
IPI00741480.1		K.SSPS*G	0.604563646	0.94	S161	1.02
IPI00741728.1		R.S*RGQC	0.03282354	0.38	S812	0.97
IPI00741728.1		R.S*KSPLF	0.431601138	0.66	S383	0.96
IPI00741728.1		R.SKSPLP	0.566916624	0.07	T401	0.29
IPI00741728.1		R.SKSPLP	0.566916624	1	S410	1.04
IPI00741728.1		R.SKSPLP	0.643675939	0.98	T407	1.02
IPI00741728.1		R.SKS*PLF	0.566916624	0.98	S385	1.02
IPI00741728.1		R.SKSPLP	0.604563646	0.98	T409	1.02
IPI00741894.1	730429 LOC73042	R.RIS*QSC	0.106353987	0.96	S1547	1.1
IPI00741958.1	57673 KIAA1553	R.INDELE	0.89791754	0.85	S489	0.91
IPI00742090.1		K.NLEHLS	0.791231585	0.94	S1230	0.92
IPI00742124.1	26043 UBXD7	R.SESLID/	0.106353987	0.76	S288	1.24
IPI00742193.1	651771 LOC65177	R.ALDSGY	0	0.98	T714	7.76
IPI00742682.1	7175 TPR	R.GIASTSI	0.054409842	0.92	S1676	1.04
IPI00742682.1	7175 TPR	R.ILLSQTT	0.296993866	0.88	T641	1.06
IPI00742682.1	7175 TPR	R.GLQLT*I	0.166517367	0.96	T2116	1.13
IPI00742682.1	7175 TPR	R.TDGFAE	0.03282354	1	S2155	1.27
IPI00742686.1		K.LYSILQC	0.451162192	0.92	T487	0.82
IPI00742686.1		K.LYSILQC	0.451162192	0.92	S485	0.82
IPI00742785.1		R.SPS*SLI	0.726073545	1	S586	1
IPI00742887.1	2113 ETS1	R.VPSY*D	0.152571688	0.74	Y327	1.05
IPI00742889.1		R.SRIPS*F	0.088241621	0.81	S60	1.12
IPI00742905.1	1660 DHX9	K.SEEVPA	0.49616549	0.76	S87	0.95
IPI00743031.1	51720 UIMC1	R.LLS*FLE	0.829549043	0.83	S627	0.88
IPI00743031.1	51720 UIMC1	R.VPS*PG	0.614059792	0.67	S653	0.88
IPI00743121.1	55627 SMPD4	K.ASIQECI	0.822525206	0.94	S169	0.97
IPI00743179.1	645528 C10orf50	R.HS*HHH	0	0.79	S95	20.77
IPI00743510.1	79899 FLJ14213	R.FMS*SP	0.530774648	0.88	S28	0.96
IPI00743621.1	23049 SMG1	R.S*MSYS	2.09E-12	0.76	S140	4.38
IPI00743705.1		R.DPKPSC	0	0.94	Not con	17.2
IPI00743819.1		K.NREELG	0.863736843	0.69	S179	0.5
IPI00743879.1	89953 KLC4	R.AAS*LN'	0.152571688	1	S608	1.2
IPI00744075.1		R.SPSFGC	0.78568809	0.96	S270	0.94
IPI00744075.1		R.SPS*FG	0.643675939	0.94	S263	1.14
IPI00744075.1		R.DSSFTE	0.253322457	0.96	S245	1.2
IPI00744075.1		K.Y*GSFEI	0.021229856	0.85	Y540	0.7
IPI00744125.1	1997 ELF1	R.TIQAPT	0.886608864	0.94	S432	1.08
IPI00744134.1	8161 COIL	K.LLELTS	0.379516392	0.69	S489	0.68
IPI00744134.1	8161 COIL	K.LGFSLT'	0.401648339	0.96	T303	1.08
IPI00744134.1	8161 COIL	R.NS*SEK	0.684519102	0.98	S271	1.01
IPI00744134.1	8161 COIL	R.NSS*EK	0.684519102	0.98	S272	1.01
IPI00744221.1	9855 FARP2	K.DSSSSL	0.072926818	0.92	S439	1.45
IPI00744346.1		R.RLAVPT	0.017448313	0.81	T116	1.22
IPI00744428.1	63898 SH2D4A	K.RLS*LG/	0.066203153	0.94	S261	1.02
IPI00744551.1	23332 CLASP1	K.FSFRS*(	0.401648339	0.98	S1152	1.08
IPI00744551.1	23332 CLASP1	K.FS*FRS(	0.401648339	0.98	S1149	1.08
IPI00744551.1	23332 CLASP1	R.RQS*SG	0.12765804	0.98	S646	1.21
IPI00744551.1	23332 CLASP1	K.NSSNTS	0.643675939	0.9	S1086	1.04
IPI00744551.1	23332 CLASP1	R.TSPLTS	0.32093792	0.85	S1118	1.29

IPI00744551.1	23332 CLASP1	R.SRS*DIE	0.32093792	0.98 S369	1.13
IPI00744561.1	3493 IGHA1	R.VT*ISVD	0.346340474	1 T89	1.12
IPI00744563.1		K.VRGP/	8.07E-10	0.94 S91	2.61
IPI00744577.1	84142 CCDC98	K.GFGEYS	0.463105648	0.9 S297	1.01
IPI00744607.1		R.IGELGAI	0.373234869	0.92 S139	1.23
IPI00744707.1	22828 RBM16	K.SSEPVK	0.152571688	0.96 S619	0.92
IPI00744735.1	375337 FLJ36157	R.NSVT*P'	0.703604632	0.98 T752	0.96
IPI00744851.1	1832 DSP	R.S*SSFSI	0.431601138	0.86 S2006	0.86
IPI00744851.1	1832 DSP	R.SMS*FQ	0.096924105	0.85 S1609	1.15
IPI00744851.1	1832 DSP	K.GLPS*P'	0.530774648	0.96 S2215	0.97
IPI00744851.1	1832 DSP	R.RAS*S*P'	0.253322457	1 S165	1.1
IPI00744851.1	1832 DSP	R.KQPPVS	0.836096036	0.98 S36	0.83
IPI00744851.1	1832 DSP	K.GLPSPY	0.139636808	1 S2221	1.2
IPI00744851.1	1832 DSP	K.GLPSPY	0.139636808	1 S2225	1.2
IPI00744851.1	1832 DSP	R.KQPPVS	0.166517367	1 S36	1.18
IPI00744851.1	1832 DSP	R.KQPPVS	0.166517367	1 S36	1.18
IPI00744851.1	1832 DSP	R.KQPPVS	0.566916624	1 S36	1.01
IPI00744851.1	1832 DSP	R.SSSFS*I	0.463105648	0.98 S2010	1.05
IPI00744851.1	1832 DSP	R.SSSFSD	0.431601138	0.98 T2012	1.06
IPI00744888.1		R.KIQSSL'	0.32093792	0.9 S529	1.05
IPI00744935.1		K.RKYS*E'	0.296993866	0.9 S28	1.15
IPI00744935.1		K.RKYSEV	0.072926818	0.98 S36	1.12
IPI00744935.1		R.KYS*EVI	0.990601784	0.96 S28	0.96
IPI00745134.1		K.LSGNTH	0.049260986	0.83 S728	1.19
IPI00745230.1	5980 REV3L	K.ALNGDC	0.49616549	0.62 S2068	0.78
IPI00745230.1	5980 REV3L	K.ALNGDC	0.947647721	0.71 S2069	0.96
IPI00745236.1		K.KLNLTL	0.32093792	0.94 T565	1.03
IPI00745236.1		K.KLNLTL'	0.296993866	0.94 S567	1.03
IPI00745274.1		R.RAGDPC	0.035018133	0.92 S1400	0.81
IPI00745321.1		K.GGLTS*I	0.373234869	0.92 S248	1.03
IPI00745321.1		R.SHGLEF	0.040276449	0.98 S52	1.28
IPI00745321.1		R.LSLSPA	0.214968943	0.98 S1112	1.11
IPI00745321.1		R.LSLSPA	0.214968943	0.98 S1108	1.15
IPI00745375.1	140688 C20orf112	K.GGASTT	0.566916624	0.94 T402	0.94
IPI00745540.1	152518 NFXL1	R.HS*PAG	0.900575286	0.98 S65	0.93
IPI00745540.1	152518 NFXL1	R.HSPAGE	0.900575286	0.98 S69	0.93
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.197661257	0.96 S2051	0.94
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.12765804	0.96 S2053	0.94
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.000618432	0.88 S2048	1.06
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.000618432	0.88 S2047	1.06
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.106353987	0.92 S2047	1.08
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.181528891	0.96 S2051	1.18
IPI00745557.1	26057 ANKRD17	R.APS*PAI	0.27446972	0.9 S2407	1.1
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.197661257	0.96 S2048	1.17
IPI00745557.1	26057 ANKRD17	K.EHYPVS	0.152571688	0.98 S2048	1.17
IPI00745564.1	4609 MYC	R.SGLCS*	0.447034483	0.96 S71	0.66
IPI00745767.1	1186 CLCN7	R.VGHMS'	0.233505398	0.98 S60	1.27
IPI00745885.1		R.MLLS*P'	0.730331964	1 S163	1.04
IPI00746051.1	55604 LRRC16	R.RS*WGC	0.106353987	0.96 S505	0.99
IPI00746051.1	55604 LRRC16	K.GAVRS*	0.024009318	0.81 S320	1
IPI00746051.1	55604 LRRC16	R.S*WGQC	0.431601138	0.92 S505	0.94

IPI00746051.1	55604	LRRC16	R.SKSERF	0.684519102	0.81	S313	1.18
IPI00746051.1	55604	LRRC16	R.SKSERF	0.771113571	0.85	S312	1.05
IPI00746051.1	55604	LRRC16	K.SERPPT	0.373234869	1	S312	1.14
IPI00746051.1	55604	LRRC16	K.SERPPT	0.253322457	1	S313	1.14
IPI00746124.1	55117	SLC6A15	R.VLKEPV	0.49616549	0.98	S337	1.03
IPI00746124.1	55117	SLC6A15	R.VLKEPV	0.463105648	0.96	T336	1.09
IPI00746168.1	22821	RASA3	K.YGSQEF	0.643675939	0.96	S818	1.07
IPI00746168.1	22821	RASA3	R.HLS*FYI	0.233505398	0.94	S77	1.26
IPI00746168.1	22821	RASA3	K.YHNRDT	0.751811379	0.98	T110	1.12
IPI00746168.1	22821	RASA3	R.KTNNPC	0.152571688	0.88	S207	1.2
IPI00746184.1			R.RKS*ELI	0.152571688	0.98	S72	1.01
IPI00746184.1			R.VSS*QA	0.060044376	0.92	S179	1.1
IPI00746221.1	348262	LOC34826	R.TSSPRS	0.604563646	0.85	S21	1.17
IPI00746301.1	6792	CDKL5	R.SNS*KD	0.990159288	0.94	S343	1.08
IPI00746301.1	6792	CDKL5	R.S*NSKD	0.990159288	0.94	S341	1.08
IPI00746301.1	6792	CDKL5	K.DLTNNN	0.684201094	0.96	S407	1.04
IPI00746398.1	55667	DENND4C	R.SS*PHG	0.809048575	0.98	S1097	1.02
IPI00746398.1	55667	DENND4C	R.S*SPHG	0.604563646	0.98	S1096	1.02
IPI00746398.1	55667	DENND4C	R.RSS*LPI	0.00181541	0.96	S1042	1.28
IPI00746398.1	55667	DENND4C	K.RSS*LYC	0.214968943	1	S948	1.15
IPI00746398.1	55667	DENND4C	R.STS*LS/	0.233505398	0.96	S1089	1.23
IPI00746398.1	55667	DENND4C	R.EDVETC	0.05939869	0.85	T980	0.62
IPI00746398.1	55667	DENND4C	R.NLADEIF	0.431601138	0.96	S1008	1.05
IPI00746398.1	55667	DENND4C	K.TPDSER	0.27446972	0.96	S989	1.21
IPI00746398.1	55667	DENND4C	R.SSPHGE	0.627992512	0.92	S1110	0.11
IPI00746398.1	55667	DENND4C	R.THS*FEI	0.233505398	0.01	S863	0.05
IPI00746412.1	9169	SFRS2IP	R.FHSPST	0.834430989	0.94	T799	1
IPI00746412.1	9169	SFRS2IP	R.FHS*PS	0.975679369	0.94	S796	0.99
IPI00746412.1	9169	SFRS2IP	R.FHSPS*	0.756570768	0.79	S798	0.99
IPI00746412.1	9169	SFRS2IP	K.TEELIES	0.32093792	0.81	S608	0.53
IPI00746412.1	9169	SFRS2IP	R.FHS*PS	0.966676636	0.98	S796	0.88
IPI00746412.1	9169	SFRS2IP	K.HFSEDN	0.566916624	0.85	S731	1.16
IPI00746412.1	9169	SFRS2IP	R.FHSPST	0.459466751	0.96	S802	1.15
IPI00746412.1	9169	SFRS2IP	R.FHSPST	0.459466751	0.96	T800	1.15
IPI00746412.1	9169	SFRS2IP	R.FHS*PS	0.431601138	1	S796	1.09
IPI00746412.1	9169	SFRS2IP	R.FHS*PS	0.463105648	1	S796	1.09
IPI00746412.1	9169	SFRS2IP	R.S*PISDN	0.73460299	0.98	S338	1.04
IPI00746412.1	9169	SFRS2IP	R.AETASC	0.530774648	0.96	S338	0.98
IPI00746412.1	9169	SFRS2IP	K.T*EELIE	0.296993866	0.98	T602	1.1
IPI00746412.1	9169	SFRS2IP	R.FHS*PS	0.99978897	0.98	S796	0.93
IPI00746475.1	9024	BRSK2	R.TRSSGA	0.181528891	1		1.18
IPI00746523.1	29068	ZBTB44	R.KSYIVM	0.214968943	0.94	S194	1.09
IPI00746614.1			R.DRDYSI	0.530774648	0.37	S264	0.84
IPI00746614.1			K.AIKEVQ	0.04505155	0.81	S75	0.99
IPI00746614.1			R.RDVYLS	0.12765804	1	S195	1.3
IPI00746614.1			R.DYGHS*	0.214968943	0.96	S236	1.32
IPI00746614.1			R.DYGHS	0.12765804	0.96	S237	1.32
IPI00746614.1			R.DS*YSS	0.604563646	0.98	S313	1.14
IPI00746614.1			R.DSYSSS	0.604563646	0.98	S319	1.14
IPI00746614.1			K.VEQATK	0.166517367	1	S75	1.22
IPI00746655.1	23344	FAM62A	R.LTHVDS	0.530774648	0.79	S973	0.87

IPI00746678.1	146050	ZSCAN29	R.ARS*PD	0.106353987	0.37	S33	0.51
IPI00746695.1			R.RNSSS*	0.066203153	0.98	S286	1.22
IPI00746695.1			K.RKAS*PI	0.072926818	0.86	S174	1.18
IPI00746695.1			R.RNS*SS	0.233505398	1	S284	1.14
IPI00746695.1			K.RKASPE	0.27446972	0.98	S180	1.14
IPI00746695.1			R.RNS*SS	0.139636808	1	S284	1.21
IPI00746695.1			R.KAS*PEI	0.181528891	1	S174	1.12
IPI00746731.1			R.YSVLNN	0.401648339	0.83	S42	1
IPI00746737.1			K.IPLFNTC	0.116581414	0.92	T610	1.09
IPI00747179.1	10848	PPP1R13L	R.NYKVS*	0.014056191	0.94	S316	1.38
IPI00747179.1	10848	PPP1R13L	R.NYKVSF	0.014056191	0.94	S320	1.38
IPI00747179.1	10848	PPP1R13L	R.NYKVS*	0.12765804	0.66	S316	1.08
IPI00747179.1	10848	PPP1R13L	R.SESAPT	0.566916624	0.79	Y109	0.97
IPI00747179.1	10848	PPP1R13L	R.SESAPT	0.27446972	0.94	S113	1.2
IPI00747361.1	8086	AAAS	R.FS*PVL	0.296993866	0.98	S462	1.19
IPI00747496.1	285172	FAM126B	K.HLS*LPA	0.32093792	0.98	S430	1.04
IPI00747571.1			R.WISLLS'	0.009053635	0.96	Not con	1.46
IPI00747787.1	23310	NCAPD3	R.ASAGH\	0.791231585	0.92	S1329	1.12
IPI00747787.1	23310	NCAPD3	R.SRS*LG'	0.253322457	0.86	S1372	0.92
IPI00747787.1	23310	NCAPD3	R.SRS*LG'	0.253322457	0.86	S1372	0.92
IPI00747787.1	23310	NCAPD3	R.SLGVLP	0.373234869	0.98	S1384	1.09
IPI00747819.1	4038	LRP4	R.RGS*LP	0.431601138	0.98	S1887	1.03
IPI00747970.1	7994	MYST3	R.RLS*SQ	0.971449831	0.98	S669	1.03
IPI00747970.1	7994	MYST3	R.RLS*EG'	0.296993866	0.98	S104	1.11
IPI00747973.1	25425	LCORL	K.IECSGP'	0.049260986	0.85	S401	1.08
IPI00747986.1	80728	KIAA1688	R.AFS*EDI	0.296993866	0.98	S604	1.09
IPI00747999.1			R.RQFS*A	0.001128958	0.92	S1141	1.28
IPI00748143.1	1894	ECT2	R.LSSTSS	0.684201094	0.86	S860	0.89
IPI00748143.1	1894	ECT2	R.LSSTSS	0.684201094	0.86	S858	0.89
IPI00748311.1			R.LAERLS	0.205975059	0.86	S189	0.83
IPI00748592.1	27341	CTA-126B	R.IPS*PLG	0.27446972	0.85	S19	0.96
IPI00748592.1	27341	CTA-126B	R.LLSTCG	0.346340474	0.96	S103	1.27
IPI00748592.1	27341	CTA-126B	R.DPEDRI	0.009053635	0.94	Y23	1.27
IPI00748592.1	27341	CTA-126B	R.LLSTCG	0.49616549	0.98	S99	0.98
IPI00748604.1	1386	ATF2	R.TQS*EE:	0.253322457	0.98	S131	1.13
IPI00748604.1	1386	ATF2	R.T*QSEE:	0.197661257	0.98	T305	1.18
IPI00748604.1	1386	ATF2	R.TQSEES	0.233505398	0.98	S328	1.07
IPI00748604.1	1386	ATF2	K.MPLDLS	0.106353987	0.92	S112	1.22
IPI00748604.1	1386	ATF2	R.T*QSEE:	0.253322457	1	T305	1.16
IPI00748715.1	10801	39334	R.AEVLGH	0.214968943	0.92	T124	0.91
IPI00748715.1	10801	39334	R.RVQT*P	0.066203153	0.96	T31	1
IPI00748758.1	81928	CABLES2	R.TPAPQC	0.346340474	0.85	T107	1.02
IPI00748758.1	81928	CABLES2	R.T*PAPQ	0.346340474	0.85	T97	1.02
IPI00748783.1	7222	TRPC3	K.LNPS*M	0	0.96	S843	0.05
IPI00748878.1	79684	C11orf61	R.GASPLG	0.242972405	0.55	S54	1.2
IPI00748878.1	79684	C11orf61	K.SPGLYA	0.431601138	0.98	S391	1.13
IPI00748878.1	79684	C11orf61	K.SPGLYA	0.346340474	0.98	S384	1.13
IPI00748878.1	79684	C11orf61	R.GAS*PL	0.296993866	0.98	S48	1.01
IPI00748916.1	139818	DOCK11	R.T*VQS*T	0	0.64	T83	45.46
IPI00748920.1			R.SRS*PL	0.026666866	0.88	S2046	1.52
IPI00748920.1			R.T*PQAP	0.253322457	0.81	T2329	1.04

IPI00748920.1		R.DRS*PP	0.039790008	0.94	S404	0.67
IPI00748920.1		K.TVART*F	0.088241621	0.92	T1531	1.19
IPI00748920.1		R.SRT*PP	0.431601138	0.96	T2409	1.08
IPI00748920.1		K.THTTAL	0.401648339	0.98	S295	1.05
IPI00748920.1		K.AGMSS	0.463105648	0.96	S1404	1.07
IPI00748920.1		K.DKFSPF	0.813530126	0.94	S1199	1.01
IPI00748920.1		K.DKFS*PI	0.684201094	0.98	S1188	0.97
IPI00748920.1		K.AQT*PP	0.373234869	1	T1003	1.07
IPI00748920.1		R.KPIDSLF	0.106353987	0.98	S2688	1.19
IPI00748920.1		R.CRS*PG	0.431601138	1	S2132	1.08
IPI00748920.1		R.RGEGD	0.32093792	1	S322	1.06
IPI00748920.1		R.RGEGD	0.296993866	1	S323	1.06
IPI00748920.1		R.MGQAP	0.296993866	0.96	S2449	1.19
IPI00748920.1		R.HGGS*P	0.346340474	0.05	S377	0.8
IPI00748920.1		R.VSGRTE	0.530774648	1	S2398	1.04
IPI00748920.1		R.MAPALS	0.40669332	0.76	S2382	0.92
IPI00748920.1		R.TPAAAA	0.27446972	1	S2272	1.13
IPI00748953.1	79595 SAP130	K.VVPQQI	0.845194016	0.98	S442	1
IPI00748953.1	79595 SAP130	K.RKS*PPI	0.181528891	0.64	S875	0.88
IPI00748953.1	79595 SAP130	K.RKSPPK	0.116581414	0.9	Y880	1.23
IPI00749034.1	7410 VAV2	R.ASS*RS	0.49616549	0.79	S770	1.3
IPI00749034.1	7410 VAV2	R.ASSRS*	0.49616549	0.94	S772	1.2
IPI00749141.1		K.SNLNVM	0.011294655	0.96	S743	1.15
IPI00749141.1		K.SNLNVM	0.011294655	0.96	S746	1.15
IPI00749429.1	80727 TTYH3	K.YLATSQ	0.096924105	0.92	S519	1.21
IPI00749429.1	80727 TTYH3	K.YLATSQ	0.795669231	0.98	S522	0.95
IPI00749486.1	51780 JMJD1B	R.T*PENH	0.106353987	0.88	T270	1.13
IPI00749486.1	51780 JMJD1B	R.SSSPTS	0.401648339	0.94	S400	1.1
IPI00749486.1	51780 JMJD1B	R.HSGGFL	0.49616549	0.96	S435	0.94
IPI00749486.1	51780 JMJD1B	R.SSSPTS	0.253322457	0.88	S386	1.01
IPI00749486.1	51780 JMJD1B	R.SSSPTS	0.401648339	0.96	T389	1.12

Regression factor	Intensity1	Intensity2	Area ratio
0.78	2288632	6361524	0.36
0.98	2201357	1922374	1.15
0.99	5644064	4663433	1.21
1	9358042	7416281	1.26
0.94	2.34E+07	1.98E+07	1.18
1	3.60E+07	2.92E+07	1.23
0.95	1321932	1363514	0.97
0.84	3672874	2906457	1.26
0.96	1.42E+07	8647939	1.64
1	1.42E+07	1.27E+07	1.12
1	1.42E+07	1.27E+07	1.12
0.88	2061332	2943936	0.70
0.91	3021620	3800246	0.80
0.92	19499	55550	0.35
0.82	5906654	1.19E+07	0.50
0.71	4043286	1792602	2.26
0.96	1870837	2312312	0.81
0.96	9178173	9009658	1.02
0.99	1.01E+07	9177404	1.10
0.96	4.50E+07	3.52E+07	1.28
0.96	4.50E+07	3.52E+07	1.28
0.96	7137189	7014656	1.02
0.71	1446573	1251004	1.16
0.94	945663	898580	1.05
0.84	3402157	4061075	0.84
0.95	549336	470953	1.17
0.9	4184461	3455345	1.21
0.98	4408608	3608701	1.22
0.77	1.35E+07	7760266	1.74
0.98	2500717	2388581	1.05
1	1.22E+07	1.04E+07	1.17
0.98	1349221	1345166	1.00
0.98	2326676	2402771	0.97
0.93	2698104	2419675	1.12
0.99	4213839	3993398	1.06
0.99	4213839	3993398	1.06
0.99	4899990	4798266	1.02
0.99	4899990	4798266	1.02
0.99	7574905	7473733	1.01
0.99	8170744	7888628	1.04
1	1.54E+07	1.37E+07	1.12
1	1.52E+07	1.42E+07	1.07
1	2.51E+07	2.35E+07	1.07
1	2.73E+07	2.50E+07	1.09
1	4.68E+07	4.39E+07	1.07
0.84	6103706	7542429	0.81
0.96	1.01E+07	8480776	1.19
1	2.08E+07	1.76E+07	1.18
1	2.08E+07	1.76E+07	1.18
0.98	5242160	5081452	1.03

0.96	7219387	2342478	3.08
0.94	1.14E+07	1.18E+07	0.97
0.91	780735	966434	0.81
0.99	2.41E+07	1.98E+07	1.22
0.92	1006970	1323713	0.76
0.96	6376327	6291505	1.01
0.99	3674806	3676813	1.00
0.99	3674806	3676813	1.00
0.98	2.21E+07	2.14E+07	1.03
1	3.02E+07	2.62E+07	1.15
1	1.09E+08	9.89E+07	1.10
1	1.24E+08	1.24E+08	1.00
1	2587225	2646258	0.98
1	9969412	9875815	1.01
0.98	888901	680090	1.31
0.9	6914814	6404399	1.08
0.94	2014614	1902028	1.06
0.98	3494846	2977618	1.17
0.98	3494846	2977618	1.17
0.99	3445581	3151531	1.09
0.99	1.28E+07	1.16E+07	1.10
1	1.64E+07	1.61E+07	1.02
1	2.84E+07	2.64E+07	1.08
0.99	6.06E+07	5.71E+07	1.06
0.97	4643744	4985384	0.93
0.98	9214836	7347214	1.25
0.97	1.73E+07	1.38E+07	1.25
0.97	1.73E+07	1.38E+07	1.25
0.71	1.83E+07	1.76E+07	1.04
0.04	1.53E+07	1.92E+07	0.80
1	2.49E+07	2.13E+07	1.17
0.97	2.53E+07	2.45E+07	1.03
1	3.16E+07	3.17E+07	1.00
0.99	3.72E+07	3.77E+07	0.99
0.99	6.15E+07	6.09E+07	1.01
0.55	6.48E+07	6.24E+07	1.04
1	1.49E+08	1.19E+08	1.25
1	6.79E+08	6.81E+08	1.00
0.96	659979	623134	1.06
0.98	2299161	2204584	1.04
0.81	2154454	2036729	1.06
0.96	3445480	3449667	1.00
0.98	1.65E+07	1.82E+07	0.91
0.89	5245739	1.23E+07	0.43
0.8	2878116	498640	5.77
0.96	3645219	4028542	0.90
0.98	8011023	7365598	1.09
0.98	8011023	7365598	1.09
0.98	9483853	7845311	1.21
0.94	6558071	7759110	0.85
0.96	8709945	8304665	1.05

0.98	1.32E+07	9366130	1.41
0.97	3011537	3343870	0.90
0.97	3011537	3343870	0.90
0.63	3.13E+07	4.29E+07	0.73
0.79	1.69E+07	1.26E+07	1.34
0.79	1.69E+07	1.26E+07	1.34
0.99	7706647	7081331	1.09
0.76	5.55E+07	3.42E+07	1.62
0.76	5.55E+07	3.42E+07	1.62
0.99	1699813	3447735	0.49
0.91	5451202	4791501	1.14
0.98	721164	2308997	0.31
0.96	1724452	1476697	1.17
0.99	2745415	2376059	1.16
0.94	5332746	4803109	1.11
1	1.63E+07	1.20E+07	1.36
0.96	9913413	9956856	1.00
0.98	6.77E+07	6.13E+07	1.10
0.97	483634	567757	0.85
1	4.30E+08	3.90E+08	1.10
1	4.61E+08	4.17E+08	1.11
0.91	3.16E+07	3972281	7.96
0.92	2221149	2068944	1.07
0.91	6245341	4374209	1.43
1	5913805	4619267	1.28
0.99	6844702	6339254	1.08
1	3.72E+07	2.66E+07	1.40
1	3.72E+07	2.66E+07	1.40
0.99	3.84E+07	3.37E+07	1.14
0.99	3.84E+07	3.37E+07	1.14
1	8.36E+07	8.47E+07	0.99
0.97	3414657	2970320	1.15
0.99	1.82E+07	1.63E+07	1.12
0.99	1.82E+07	1.63E+07	1.12
1	2528672	2528672	1.00
0.95	1178493	1338860	0.88
0.95	1178493	1338860	0.88
0.93	1.04E+07	1.19E+07	0.87
0.85	1994280	1197233	1.67
0.99	4542222	4202716	1.08
0.99	5897317	5035663	1.17
0.87	7666111	6479731	1.18
0.87	7666111	6479731	1.18
0.96	7408897	6538392	1.13
0.94	6227492	6747453	0.92
0.83	1.60E+07	3.23E+07	0.50
0.97	1.20E+08	1.27E+08	0.94
0.94	1835743	1781311	1.03
0.94	1835743	1781311	1.03
0.97	2969474	2851888	1.04
0.97	2969474	2851888	1.04

0.82	3748817	3704865	1.01
0.92	1452219	1550240	0.94
0.94	3543920	2629336	1.35
0.98	1.77E+07	1.48E+07	1.20
0.98	3.32E+07	3.88E+07	0.86
0.99	5451332	5411528	1.01
0.99	2798159	2470612	1.13
0.85	2693458	2792114	0.96
0.93	2412260	2859953	0.84
0.85	6130521	6959555	0.88
0.92	5.28E+07	4.88E+07	1.08
0.91	7489953	8488070	0.88
0.99	2.35E+07	2.54E+07	0.93
0.99	1.57E+08	1.53E+08	1.03
1	4326301	4409001	0.98
0.97	571747	1.14E+07	0.05
0.9	1.84E+07	1.80E+07	1.02
0.98	3.10E+07	2.56E+07	1.21
0.98	3.10E+07	2.56E+07	1.21
0.96	1127555	1212381	0.93
0.98	7.23E+07	5.42E+07	1.33
0.92	4077594	3415780	1.19
0.9	5953823	5276014	1.13
0.9	5953823	5276014	1.13
0.92	8637242	7831218	1.10
0.96	1.02E+07	9896554	1.03
0.98	1.31E+07	1.13E+07	1.16
0.96	2.72E+07	2.47E+07	1.10
0.96	2.82E+07	2.83E+07	1.00
0.96	2.82E+07	2.83E+07	1.00
0.92	9377951	9314963	1.01
0.92	9377951	9314963	1.01
0.95	2.59E+07	2.60E+07	1.00
1	3162628	2478924	1.28
1	3162628	2478924	1.28
0.71	1.65E+07	8119936	2.03
0.95	4938606	5798636	0.85
0.99	1345524	1217122	1.11
0.91	2021964	2616817	0.77
0.91	2021964	2616817	0.77
0.83	3718501	3190933	1.17
0.9	687572	678253	1.01
0.99	2849934	2892261	0.99
1	2.30E+07	2.28E+07	1.01
0.97	1906887	1387793	1.37
0.79	1.47E+07	2.29E+07	0.64
0.99	1.58E+07	1.55E+07	1.02
0.88	1.52E+07	1.85E+07	0.82
0.88	1.52E+07	1.85E+07	0.82
0.97	1372995	1297053	1.06
0.99	3265340	3466364	0.94

0.99	2.24E+07	2.00E+07	1.12
0.87	4.03E+07	8.51E+07	0.47
0.91	6549813	5538474	1.18
0.98	718632	657508	1.09
1	2675807	2511042	1.07
0.99	3682472	3190900	1.15
0.99	3682472	3190900	1.15
0.99	7432892	6887543	1.08
0.95	1.23E+07	9222076	1.33
0.86	4323745	3423421	1.26
0.98	4170524	3834187	1.09
0.96	3701221	3440225	1.08
0.95	4456015	3892474	1.14
0.95	2465414	2054601	1.20
0.98	2733311	2691734	1.02
0.99	5.09E+07	4.88E+07	1.04
0.99	5.09E+07	4.88E+07	1.04
0.99	1.27E+07	1.10E+07	1.15
0.84	1805252	2524541	0.72
1	4288172	4027011	1.06
0.92	535826	844449	0.63
0.98	1701355	1499488	1.13
0.98	1701355	1499488	1.13
0.87	5903398	3799222	1.55
0.87	6267608	5007860	1.25
1	1.82E+07	1.45E+07	1.26
1	4.32E+07	3.27E+07	1.32
0.93	997216	924582	1.08
0.96	2312878	1849084	1.25
0.87	4534206	4745702	0.96
0.96	4760156	5501667	0.87
0.96	4760156	5501667	0.87
0.85	1.06E+07	9108247	1.16
0.85	1.06E+07	9108247	1.16
0.97	1.30E+07	1.04E+07	1.25
0.83	1.31E+07	1.63E+07	0.80
1	5.42E+07	5.20E+07	1.04
1	1.35E+08	1.22E+08	1.11
1	1.35E+08	1.22E+08	1.11
0.99	4035305	3183556	1.27
0.99	4268937	3369868	1.27
0.79	7080626	5687986	1.24
0.99	7621900	6028969	1.26
0.97	6844782	6111892	1.12
0.99	1.81E+07	1.50E+07	1.21
0.99	1.81E+07	1.50E+07	1.21
1	3.53E+07	3.06E+07	1.15
1	3.53E+07	3.06E+07	1.15
0.88	5000301	4723124	1.06
0.83	7439243	1.02E+07	0.73
0.83	7439243	1.02E+07	0.73

0.23	1.73E+07	1.01E+07	1.71
0.95	1.12E+07	1.07E+07	1.05
0.98	7.23E+07	9.85E+07	0.73
0.6	1380767	1222748	1.13
0.95	7094713	6961465	1.02
0.99	2485874	2274573	1.09
0.98	4676102	3779173	1.24
0.95	1827514	1566707	1.17
0.97	3679755	4611040	0.80
0.96	1087867	1137608	0.96
0.91	6.09E+08	7.17E+08	0.85
1	2638532	2601135	1.01
0.93	4572423	2711140	1.69
0.96	9954690	9839309	1.01
0.98	1.13E+07	1.11E+07	1.02
1	1.11E+07	1.05E+07	1.06
0.98	5191725	5080466	1.02
0.98	5191725	5080466	1.02
1	6969835	6738386	1.03
0.99	8633498	1.03E+07	0.84
0.99	8633498	1.03E+07	0.84
0.99	6252329	1.11E+07	0.56
0.99	6252329	1.11E+07	0.56
1	1.79E+07	1.96E+07	0.91
0.95	4609392	3941732	1.17
0.98	2.28E+07	2.47E+07	0.92
0.93	351260	249710	1.41
0.9	858059	517959	1.66
0.87	5880827	6814338	0.86
1	1.50E+07	1.18E+07	1.27
0.97	1818422	2527489	0.72
0.98	3185812	3663289	0.87
0.99	5070313	4870294	1.04
0.99	3960841	5138025	0.77
0.94	5278180	5737305	0.92
0.99	4103643	4432956	0.93
0.87	1417342	2942900	0.48
0.93	1403650	1263653	1.11
0.96	3308198	2975926	1.11
0.93	1.57E+07	1.35E+07	1.16
0.68	834613	473975	1.76
1	5775450	5864666	0.98
1	2.14E+07	1.98E+07	1.08
0.99	1.93E+07	1.45E+07	1.33
0.99	4218668	4093797	1.03
0.99	4218668	4093797	1.03
0.98	6588909	5443731	1.21
0.97	790886	1187193	0.67
0.98	1531519	1166142	1.31
0.98	1531519	1166142	1.31
0.92	2827515	1226379	2.31

0.98	1535386	1571127	0.98
0.99	3553774	2761096	1.29
0.89	275659	252837	1.09
0.95	388931	456106	0.85
0.98	833198	790624	1.05
1	1.04E+07	9168662	1.13
1	5.83E+07	5.31E+07	1.10
0.97	1.03E+07	1.43E+07	0.72
0.97	1.03E+07	1.43E+07	0.72
0.97	1.03E+07	1.43E+07	0.72
0.88	5207594	8086751	0.64
0.99	4988072	4651298	1.07
0.99	1.07E+07	9833801	1.09
0.99	1.07E+07	9833801	1.09
0.98	1.59E+07	1.40E+07	1.14
0.98	1.59E+07	1.40E+07	1.14
1	1.45E+07	1.42E+07	1.02
1	1.45E+07	1.42E+07	1.02
0.99	1.50E+07	1.55E+07	0.97
1	4.75E+07	4.13E+07	1.15
0.99	6.58E+07	5.96E+07	1.10
1	1.17E+08	1.13E+08	1.04
1	1.17E+09	1.07E+09	1.09
1	2.05E+09	1.87E+09	1.10
0.97	606766	429939	1.41
0.95	1197676	1071938	1.12
0.98	8966317	8635913	1.04
1	1.57E+07	1.45E+07	1.08
1	3.67E+08	3.42E+08	1.07
0.99	2.20E+07	1.92E+07	1.15
1	5.25E+08	4.52E+08	1.16
0.97	695430	565524	1.23
0.99	3850185	3137885	1.23
1	8814811	1.37E+07	0.64
0.98	1.39E+07	1.30E+07	1.07
0.98	1.39E+07	1.30E+07	1.07
0.97	4191878	4228450	0.99
1	3308116	3085076	1.07
0.88	1.06E+07	6629876	1.60
0.98	9870418	7849683	1.26
0.98	9870418	7849683	1.26
0.99	2299096	1899154	1.21
0.77	1633596	2526519	0.65
0.99	5195387	4105659	1.27
0.97	5050141	4217917	1.20
0.94	4627866	2.31E+07	0.20
0.94	4627866	2.31E+07	0.20
0.94	4627866	2.31E+07	0.20
1	3.32E+07	2.78E+07	1.19
1	4629841	4523721	1.02
1	4629841	4523721	1.02

0.99	3716058	4092052	0.91
0.97	6691036	5479702	1.22
0.99	1.38E+07	1.33E+07	1.04
1	3.32E+07	4.96E+07	0.67
1	1.44E+08	1.31E+08	1.10
0.82	1884496	1284526	1.47
0.98	4134995	3645090	1.13
0.98	7631067	6359088	1.20
0.99	7888977	6918239	1.14
0.99	7888977	6918239	1.14
0.98	7057220	6937567	1.02
0.98	4.07E+07	3.77E+07	1.08
0.98	4.07E+07	3.77E+07	1.08
1	5.58E+07	5.07E+07	1.10
0.99	7.20E+07	5.85E+07	1.23
0.99	1847484	1600032	1.15
0.99	1544173	1625402	0.95
0.92	7640826	7199250	1.06
0.92	7640826	7199250	1.06
0.99	1.09E+07	1.00E+07	1.09
0.97	579104	482782	1.20
0.99	4479615	4144362	1.08
0.98	176573	346976	0.51
0.91	1400023	1389918	1.01
0.97	7068433	6782063	1.04
0.99	850304	823075	1.03
0.97	1936985	1287771	1.50
0.97	1936985	1287771	1.50
0.87	4449476	3131771	1.42
0.99	5337931	5126925	1.04
0.99	7077716	6540299	1.08
0.99	7077716	6540299	1.08
0.91	1.16E+07	1.06E+07	1.09
0.95	3.77E+07	3.35E+07	1.13
0.95	3.77E+07	3.35E+07	1.13
0.96	2713990	2639069	1.03
0.94	2799960	3184551	0.88
0.97	3084212	2740467	1.13
0.99	4394033	3856682	1.14
0.99	2.73E+07	2.13E+07	1.28
1	4.38E+07	4.11E+07	1.07
0.97	1245076	1240606	1.00
0.9	7272195	5224726	1.39
0.79	8231535	1.22E+07	0.67
0.97	2.71E+07	2.11E+07	1.28
0.97	2.71E+07	2.11E+07	1.28
0.98	2653425	2931567	0.91
0.99	4161492	3720404	1.12
0.99	9586070	8170020	1.17
0.95	860023	822696	1.05
0.85	2098980	1917388	1.09

0.99	2020219	2271518	0.89
0.99	2020219	2271518	0.89
0.49	4226698	1341043	3.15
0.96	1.02E+07	8129263	1.25
0.99	6314819	5404735	1.17
1	2.67E+07	2.24E+07	1.19
0.99	2746985	3106439	0.88
0.73	1.73E+07	1.20E+07	1.44
0.93	3705886	3497561	1.06
0.99	6084465	5627795	1.08
0.99	2.44E+07	2.05E+07	1.19
0.96	3755637	3406989	1.10
0.96	3755637	3406989	1.10
1	1.99E+07	1.77E+07	1.12
0.98	1284036	1149678	1.12
0.98	5305310	5308972	1.00
0.95	6594339	5733143	1.15
0.75	5025356	2662268	1.89
0.95	784645	790887	0.99
0.96	1437350	1191670	1.21
0.93	8100840	4512703	1.80
0.99	8004648	8535247	0.94
0.96	1.38E+07	1.10E+07	1.25
0.96	1.71E+07	1.75E+07	0.98
0.99	2.55E+07	2.06E+07	1.24
0.97	2.35E+07	2.10E+07	1.12
0.99	2173689	2078837	1.05
0.99	2173689	2078837	1.05
0.98	2982233	2862279	1.04
0.95	4972753	4527560	1.10
0.99	1.29E+07	1.20E+07	1.08
1	7.54E+07	6.66E+07	1.13
1	1.04E+08	9.66E+07	1.08
1	7866092	6975760	1.13
0.88	774047	812611	0.95
0.92	3137331	3418637	0.92
0.98	6282720	6220682	1.01
0.96	9596244	9881892	0.97
0.99	1.46E+07	1.33E+07	1.10
0.95	1.44E+07	1.40E+07	1.03
0.97	1.55E+07	1.49E+07	1.04
0.99	2.10E+07	2.08E+07	1.01
0.98	2.38E+07	2.22E+07	1.07
1	2.97E+07	2.68E+07	1.11
0.99	4.21E+07	4.13E+07	1.02
1	4.87E+07	4.71E+07	1.03
1	4.87E+07	4.71E+07	1.03
0.99	7.10E+07	6.63E+07	1.07
1	1.05E+08	1.04E+08	1.01
0.99	1.86E+08	1.83E+08	1.02
0.96	533266	413028	1.29

0.96	1081005	1019833	1.06
0.98	1700757	1745182	0.97
0.99	7716444	7048848	1.09
0.9	5736328	8232962	0.70
1	1.07E+07	9719316	1.10
1	1.07E+07	9719316	1.10
0.99	1.66E+07	1.69E+07	0.98
0.91	1256256	852312	1.47
0.97	2933227	2379950	1.23
0.97	2933227	2379950	1.23
0.91	4920410	5626912	0.87
0.91	4920410	5626912	0.87
0.97	1.11E+07	1.09E+07	1.02
0.99	2.00E+07	1.95E+07	1.03
1	4.30E+07	4.16E+07	1.03
1	4.30E+07	4.16E+07	1.03
1	1.30E+08	1.14E+08	1.14
1	1.30E+08	1.14E+08	1.14
0.98	1208578	1452166	0.83
0.78	1790641	1739712	1.03
0.93	2401460	2539577	0.95
0.98	3805757	3147597	1.21
0.99	4220013	3607848	1.17
0.99	4220013	3607848	1.17
0.97	9011411	8475488	1.06
0.97	9077357	8839116	1.03
0.93	9897276	9161471	1.08
0.86	1.40E+07	1.26E+07	1.11
0.99	2.11E+07	2.11E+07	1.00
0.94	3.79E+07	3.71E+07	1.02
1	1.06E+08	9.57E+07	1.11
0.99	1931808	1898239	1.02
0.98	888901	680090	1.31
0.99	1.81E+07	1.73E+07	1.05
0.99	2.20E+07	2.55E+07	0.86
0.99	3.00E+07	3.58E+07	0.84
0.99	3.00E+07	3.58E+07	0.84
0.97	2933830	2928658	1.00
0.99	1.05E+07	8805470	1.19
0.99	1.05E+07	8805470	1.19
0.91	1162257	1107691	1.05
0.98	854817	1297093	0.66
0.99	1310400	1273494	1.03
0.98	1847531	7.93E+07	0.02
0.98	2101406	2035545	1.03
0.99	4548548	3983140	1.14
1	1.35E+07	1.14E+07	1.18
0.99	3239298	2906745	1.11
0.89	1.89E+07	1.41E+07	1.34
0.89	1.89E+07	1.41E+07	1.34
1	6.57E+07	5.62E+07	1.17

1	1.64E+08	1.60E+08	1.03
0.87	526528	411513	1.28
0.95	1806448	1733800	1.04
0.95	1806448	1733800	1.04
1	6563822	5123744	1.28
1	1.11E+07	1.04E+07	1.07
1	1.11E+07	1.04E+07	1.07
1	1.45E+07	1.11E+07	1.31
1	1.11E+08	1.11E+08	1.00
0.98	1.97E+08	1.89E+08	1.04
0.98	1.97E+08	1.89E+08	1.04
0.87	2078482	1310631	1.59
0.99	6538805	3123568	2.09
0.53	426912	4320894	0.10
1	5268285	4542162	1.16
1	1.26E+07	8868399	1.42
0.98	3187501	2576814	1.24
0.85	2243860	1421763	1.58
0.88	2098243	1895928	1.11
0.88	4731766	3484412	1.36
0.88	4731766	3484412	1.36
0.88	4731766	3484412	1.36
0.96	7904723	7801477	1.01
0.96	7904723	7801477	1.01
0.98	907737	946545	0.96
0.94	3102315	2818937	1.10
0.94	3102315	2818937	1.10
0.95	2790311	2330024	1.20
0.99	1.98E+07	1.73E+07	1.14
1	4.36E+07	4.05E+07	1.08
0.95	1794780	1530603	1.17
0.99	4.84E+07	3.91E+07	1.24
0.97	4745903	4763124	1.00
1	1.24E+07	1.13E+07	1.10
1	6.24E+07	5.85E+07	1.07
0.99	9835542	9999676	0.98
0.99	9835542	9999676	0.98
0.99	8163242	7112833	1.15
0.91	5781236	7835694	0.74
0.9	666906	1542766	0.43
1	2.71E+07	2.51E+07	1.08
0.92	4287083	3687115	1.16
0.87	4141936	5154496	0.80
0.76	3727385	4626810	0.81
0.74	4780402	5056240	0.95
0.98	3.80E+07	3.44E+07	1.10
0.93	2.15E+07	3.56E+07	0.60
0.99	4.18E+07	4.03E+07	1.04
0.97	4.40E+07	4.18E+07	1.05
0.97	4.40E+07	4.18E+07	1.05
0.99	4.36E+07	4.25E+07	1.03

0.93	2160269	2131251	1.01
0.98	3296902	2416496	1.36
0.98	4308511	4305472	1.00
0.98	4308511	4305472	1.00
0.99	8934679	7481968	1.19
0.99	5072073	4941978	1.03
0.95	2954738	2742116	1.08
0.99	4852727	4950901	0.98
0.82	2003844	1535974	1.30
0.91	2604817	2496256	1.04
0.9	5939380	4962535	1.20
0.95	1.27E+07	1.24E+07	1.02
0.9	2.38E+07	1.62E+07	1.47
0.9	1648139	1686735	0.98
0.98	5170556	5910975	0.87
0.91	2554586	1621813	1.58
0.99	2068566	2138782	0.97
0.98	3274561	3133218	1.05
1	3810711	3463666	1.10
0.99	3226768	3480326	0.93
0.98	1.53E+07	1.38E+07	1.11
0.98	1.53E+07	1.38E+07	1.11
0.94	1156122	1025001	1.13
0.95	8295852	6911693	1.20
0.95	8295852	6911693	1.20
0.92	1810200	1427638	1.27
0.92	2179702	1877917	1.16
0.99	2214672	1933931	1.15
0.63	2709361	2475751	1.09
0.99	8363469	7776761	1.08
1	2.08E+07	2.00E+07	1.04
0.98	4.00E+07	3.59E+07	1.11
0.85	7.69E+07	2.48E+07	3.10
0.89	348553	273098	1.28
0.99	2127165	1750120	1.22
0.97	4792673	4477319	1.07
0.87	5548601	5626819	0.99
1	6252181	5822757	1.07
0.98	5242403	6755639	0.78
0.89	7893711	1.15E+07	0.69
1	1.35E+07	1.43E+07	0.94
1	1.35E+07	1.43E+07	0.94
0.99	1.93E+07	1.90E+07	1.02
1	3.72E+07	4.04E+07	0.92
0.96	3252312	3561784	0.91
0.92	3857149	3697288	1.04
0.84	1.01E+07	9959060	1.01
0.86	3480305	4256967	0.82
0.97	4973836	4399443	1.13
0.98	1.75E+07	1.45E+07	1.21
0.98	1.75E+07	1.45E+07	1.21

0.98	1.75E+07	1.45E+07	1.21
0.93	2530100	2186284	1.16
0.99	1.31E+07	1.10E+07	1.19
0.99	1.31E+07	1.10E+07	1.19
0.98	2633866	1540381	1.71
0.99	9076479	7161787	1.27
0.99	3.26E+07	2.80E+07	1.16
0.98	5821997	5594701	1.04
1	6908886	6610053	1.05
1	6908886	6610053	1.05
1	9921755	7879520	1.26
1	9921755	7879520	1.26
1	3.32E+07	2.93E+07	1.13
1	3.32E+07	2.93E+07	1.13
1	2.58E+07	2.26E+07	1.14
1	2.58E+07	2.26E+07	1.14
1	2.58E+07	2.26E+07	1.14
1	2.58E+07	2.26E+07	1.14
1	2.58E+07	2.26E+07	1.14
0.9	1.53E+07	1.49E+07	1.03
0.94	2.92E+07	1.68E+07	1.74
0.98	2586251	2057942	1.26
0.99	4378629	3577129	1.22
0.99	4250653	3859420	1.10
0.97	6626464	4985746	1.33
1	1.34E+07	1.16E+07	1.16
0.98	2.38E+07	1.97E+07	1.21
0.99	1936197	1968462	0.98
0.99	3709954	3704693	1.00
1	5987438	5854273	1.02
0.97	1.18E+07	9172135	1.29
0.95	1.18E+07	9770845	1.21
0.99	1.46E+07	1.27E+07	1.15
0.85	547673	505767	1.08
0.88	819977	768626	1.07
0.97	1134607	1080726	1.05
0.98	2378249	2234188	1.06
0.96	3134650	2778865	1.13
0.96	3134650	2778865	1.13
1	6906425	6598609	1.05
0.99	1.70E+07	1.79E+07	0.95
0.99	2.84E+07	2.77E+07	1.03
0.99	1370184	1353859	1.01
0.93	9807880	9544386	1.03
0.67	6901422	1.04E+07	0.66
0.89	6453487	7834048	0.82
0.8	1244185	705347	1.76
0.93	4629220	1857654	2.49
0.92	1553372	1566284	0.99
0.99	7637512	7112130	1.07
0.97	1.22E+07	1.05E+07	1.16

0.99	1.10E+07	1.13E+07	0.97
0.93	2.44E+07	2.20E+07	1.11
1	2.26E+07	2.23E+07	1.01
0.95	3.11E+07	2.81E+07	1.11
1	6.64E+07	6.43E+07	1.03
0.9	2296311	1837324	1.25
0.9	1497321	1122580	1.33
0.91	1506018	1819119	0.83
0.95	4071426	1925421	2.11
0.95	4071426	1925421	2.11
0.81	3392482	2997231	1.13
0.98	4391248	4864429	0.90
0.84	9261667	8736169	1.06
0.94	9.05E+07	8.05E+07	1.12
0.95	8555405	6869618	1.25
0.97	2000050	1567200	1.28
0.97	1.68E+07	1.67E+07	1.01
0.97	2.06E+07	2.15E+07	0.96
1	6.08E+07	5.68E+07	1.07
1	4.04E+07	3.87E+07	1.04
0.89	1400955	1214208	1.15
0.98	3583338	3263512	1.10
0.98	5903982	7873178	0.75
0.99	735595	608818	1.21
0.97	2858709	2666185	1.07
0.98	3194379	2792797	1.14
0.97	3275309	3351128	0.98
0.99	1.23E+07	1.17E+07	1.05
1	7985101	6224156	1.28
0.94	5513396	4232863	1.30
0.94	1.01E+07	9990715	1.01
1	1.42E+07	1.29E+07	1.10
1	1.42E+07	1.29E+07	1.10
0.96	4497067	3627569	1.24
1	6.42E+07	6.35E+07	1.01
0.94	1044987	944747	1.11
0.94	1512955	1369699	1.10
0.93	3137351	2003849	1.57
0.94	3378647	3270053	1.03
0.98	5064608	4593543	1.10
0.98	5064608	4593543	1.10
0.99	6857710	6250931	1.10
0.99	6857710	6250931	1.10
0.94	1.25E+07	9420668	1.33
1	1.17E+07	1.21E+07	0.97
1	1.39E+07	1.33E+07	1.05
1	2.75E+07	2.51E+07	1.10
1	2.75E+07	2.51E+07	1.10
1	2.67E+07	2.62E+07	1.02
1	5.71E+07	5.50E+07	1.04
1	5.71E+07	5.50E+07	1.04

0.92	1695970	1452660	1.17
0.92	1695970	1452660	1.17
0.91	4002742	3296032	1.21
0.88	5160017	4485845	1.15
0.96	1.63E+07	1.93E+07	0.84
0.96	1.63E+07	1.93E+07	0.84
0.99	3.51E+07	3.29E+07	1.07
0.99	1408491	1386934	1.02
0.99	8487620	7142933	1.19
0.28	3746542	1109265	3.38
0.89	1080375	1236962	0.87
0.96	1541418	1254514	1.23
0.76	2025815	1399052	1.45
0.99	1636257	1453910	1.13
0.92	2058830	1660825	1.24
0.96	2448011	2054709	1.19
0.99	2179822	2097000	1.04
0.96	2138140	2261757	0.95
0.99	2251776	2414944	0.93
0.97	3813545	3204895	1.19
0.98	3599611	3327361	1.08
0.91	7706606	5901000	1.31
0.82	1.06E+07	1.09E+07	0.97
1	1.81E+07	1.76E+07	1.03
0.97	1.72E+07	1.99E+07	0.86
0.97	1.72E+07	1.99E+07	0.86
0.99	5.46E+07	5.19E+07	1.05
0.92	1.05E+07	1.15E+07	0.91
1	2.94E+07	2.67E+07	1.10
0.98	1.18E+07	1.20E+07	0.98
1	5450438	5021646	1.09
0.99	1.24E+07	1.11E+07	1.12
0.88	1040920	1027075	1.01
0.98	4074346	3607182	1.13
0.99	7452856	7008380	1.06
1	2.98E+08	2.61E+08	1.14
1	2.98E+08	2.61E+08	1.14
0.76	1688162	1446844	1.17
0.97	1958484	1926587	1.02
0.97	1958484	1926587	1.02
0.97	2632909	2088370	1.26
0.9	2460700	2193093	1.12
0.9	2460700	2193093	1.12
0.99	1.47E+07	1.31E+07	1.12
1	6976138	6075623	1.15
0.99	2.19E+07	1.94E+07	1.13
1	8.03E+07	7.23E+07	1.11
1	8.03E+07	7.23E+07	1.11
0.97	4377059	3472058	1.26
0.91	3684279	3517321	1.05
0.91	1.48E+07	1.28E+07	1.16

0.98	6016493	4547743	1.32
0.98	6016493	4547743	1.32
0.96	6117999	6199575	0.99
0.93	1218225	1242827	0.98
0.99	2165795	2246132	0.96
0.98	2375030	2292080	1.04
0.98	1658182	1501228	1.10
0.93	1851101	2340436	0.79
0.99	3041172	2973205	1.02
0.96	3838934	3174340	1.21
0.97	6759659	5274947	1.28
0.99	1.00E+07	8474389	1.18
0.99	1.29E+07	1.18E+07	1.09
0.96	1.61E+07	1.50E+07	1.07
0.93	1.43E+07	1.56E+07	0.92
0.91	2.40E+07	2.11E+07	1.14
0.99	4.27E+07	4.33E+07	0.99
0.99	5.39E+07	4.90E+07	1.10
1	8.25E+07	7.04E+07	1.17
1	8967000	7824077	1.15
0.97	1.18E+07	1.10E+07	1.07
0.97	1.73E+07	1.60E+07	1.08
0.94	2788324	2979561	0.94
0.35	1848309	5661845	0.33
0.99	1.01E+07	9169862	1.10
0.96	4744271	3869079	1.23
0.98	6819753	6464200	1.06
0.98	1.26E+07	1.16E+07	1.09
0.99	1.37E+07	1.21E+07	1.13
0.99	5619321	4879112	1.15
0.94	5879056	4900675	1.20
0.98	7865062	7733196	1.02
0.97	1.36E+07	1.57E+07	0.87
0.94	1228287	865826	1.42
0.98	2076787	1269833	1.64
1	2.70E+07	2.04E+07	1.32
0.97	1289597	1063148	1.21
0.83	3802840	2723163	1.40
0.96	964514	954727	1.01
1	2654413	2634354	1.01
0.96	4573899	3813023	1.20
0.9	6060084	6338731	0.96
0.98	9006795	7797155	1.16
0.96	8007234	6755681	1.19
0.84	1.81E+07	1.46E+07	1.24
0.95	1603482	2960389	0.54
0.96	4018979	4949480	0.81
0.97	1457611	1215153	1.20
0.98	1599854	1543418	1.04
0.99	2761929	2658215	1.04
0.99	2761929	2658215	1.04

0.99	5694049	5667321	1.00
1	4.92E+07	4.52E+07	1.09
0.97	1.52E+07	1.06E+07	1.43
0.99	7691145	6614205	1.16
0.99	7691145	6614205	1.16
0.82	1.47E+07	2808662	5.23
0.99	2.12E+07	2.27E+07	0.93
0.8	2564645	3209548	0.80
0.8	2564645	3209548	0.80
0.86	1501242	1294891	1.16
0.96	3514141	3357187	1.05
0.96	3514141	3357187	1.05
0.96	3514141	3357187	1.05
0.99	1173433	982195	1.19
0.63	9632054	4718354	2.04
0.99	1.23E+07	1.06E+07	1.16
0.96	1085364	991738	1.09
0.98	2782194	2423995	1.15
0.95	3400360	3349656	1.02
0.95	3400360	3349656	1.02
1	6971238	6606886	1.06
0.95	1824808	1658036	1.10
0.98	1955768	1835364	1.07
0.97	2236727	2174140	1.03
0.97	2236727	2174140	1.03
0.97	5048969	5097140	0.99
0.97	8447360	8974021	0.94
0.98	1.34E+07	1.13E+07	1.19
0.88	5966727	5697707	1.05
0.84	9207743	6664648	1.38
0.99	1.51E+07	1.32E+07	1.14
0.99	1.51E+07	1.32E+07	1.14
0.94	6469911	4514889	1.43
0.99	1.12E+07	8759831	1.28
0.95	1.73E+07	1.48E+07	1.17
0.95	1.73E+07	1.48E+07	1.17
0.98	3.20E+07	2.48E+07	1.29
0.99	3.12E+07	2.97E+07	1.05
0.99	3.12E+07	2.97E+07	1.05
1	4.00E+07	3.37E+07	1.19
0.96	1.54E+07	1.45E+07	1.06
0.91	1.19E+07	2484126	4.79
0.72	2.20E+08	2.88E+07	7.64
0.97	1.15E+07	1.51E+07	0.76
0.95	3564239	3485107	1.02
0.95	3564239	3485107	1.02
0.99	3.12E+07	2.59E+07	1.20
0.98	1.13E+07	1.09E+07	1.04
0.99	1.16E+07	1.27E+07	0.91
0.99	1.16E+07	1.27E+07	0.91
0.98	2.02E+07	1.96E+07	1.03

0.92	2071659	1573290	1.32
0.98	888566	624786	1.42
0.95	2581143	2314332	1.12
0.95	2836120	2659307	1.07
0.97	3413203	3125193	1.09
1	7955978	7016638	1.13
0.99	2.07E+07	1.93E+07	1.07
1	2.98E+07	2.65E+07	1.12
0.99	2876574	2792307	1.03
0.99	2876574	2792307	1.03
0.93	1.48E+07	1.11E+07	1.33
0.98	1.87E+07	1.71E+07	1.09
0.98	1.87E+07	1.71E+07	1.09
0.98	2.34E+07	1.85E+07	1.26
0.93	2.03E+07	2.10E+07	0.97
0.93	2.03E+07	2.10E+07	0.97
0.91	2.76E+07	3.34E+07	0.83
0.9	4.77E+07	6.56E+07	0.73
0.89	2932575	2187653	1.34
0.99	7452856	7008380	1.06
1	2.12E+07	1.68E+07	1.26
1	9.70E+07	8.01E+07	1.21
1	1.19E+08	9.71E+07	1.23
0.88	648499	1202273	0.54
0.92	1750570	881073	1.99
1	3599509	3283717	1.10
1	3599509	3283717	1.10
0.99	4167723	3808728	1.09
0.92	4968080	5334401	0.93
1	1.61E+07	1.48E+07	1.09
1	3010854	2637182	1.14
1	3010854	2637182	1.14
0.93	1856384	1647437	1.13
0.93	1856384	1647437	1.13
1	2.12E+07	1.91E+07	1.11
1	3.28E+07	3.15E+07	1.04
1	3.28E+07	3.15E+07	1.04
1	4.40E+07	4.07E+07	1.08
0.99	5.59E+07	4.68E+07	1.19
0.99	5.59E+07	4.68E+07	1.19
0.99	1.30E+07	1.32E+07	0.98
1	7.48E+07	6.87E+07	1.09
0.99	9.07E+07	8.16E+07	1.11
0.92	949321	945854	1.00
0.96	2539765	2542611	1.00
1	2.63E+07	2.59E+07	1.02
0.99	4662714	3581165	1.30
0.95	2757503	3647060	0.76
0.95	2757503	3647060	0.76
0.98	4417909	2367348	1.87
0.99	5165717	4114904	1.26

0.92	1892166	1450861	1.30
0.99	3906723	3554597	1.10
0.99	3906723	3554597	1.10
1	2.66E+07	2.37E+07	1.12
0.91	1122294	1267445	0.89
0.86	3727218	3524555	1.06
0.98	1.67E+07	1.74E+07	0.96
0.98	1.67E+07	1.74E+07	0.96
0.97	2243124	2.68E+07	0.08
0.97	2243124	2.68E+07	0.08
0.92	2.89E+07	3.36E+07	0.86
0.92	2.89E+07	3.36E+07	0.86
0.95	858457	808421	1.06
0.89	1.94E+07	1.01E+07	1.92
0.93	2.00E+07	2.21E+07	0.90
0.95	5650649	5013856	1.13
0.96	6373821	6073680	1.05
0.96	6373821	6073680	1.05
0.99	9056014	7001476	1.29
0.85	959331	962324	1.00
0.99	1.22E+07	1.12E+07	1.09
0.99	1.68E+07	1.58E+07	1.06
0.99	1.68E+07	1.58E+07	1.06
0.9	1.48E+07	1.06E+07	1.40
0.9	1.48E+07	1.06E+07	1.40
0.96	1008639	1046544	0.96
0.99	2959155	2906505	1.02
0.98	3257497	3415350	0.95
0.86	1.23E+07	1.55E+07	0.79
0.99	3162605	3215029	0.98
0.98	1098066	1169151	0.94
0.93	952500	1022766	0.93
0.81	1726708	1634134	1.06
0.96	5222738	4327226	1.21
0.99	1.33E+07	1.19E+07	1.12
0.99	2.25E+07	1.99E+07	1.13
1	1.95E+07	1.80E+07	1.08
1	3384469	3289174	1.03
0.1	2879878	1522707	1.89
0.95	7101898	7262454	0.98
0.98	2042909	2419850	0.84
0.98	2042909	2419850	0.84
0.99	2.56E+07	2.11E+07	1.21
0.99	2.56E+07	2.11E+07	1.21
0.99	2.56E+07	2.11E+07	1.21
0.77	8731777	1.40E+07	0.62
0.97	1977907	2159862	0.92
0.94	9533763	3572640	2.67
0.99	4219316	3908352	1.08
0.99	4219316	3908352	1.08
0.95	4922867	4048921	1.22

0.95	4922867	4048921	1.22
0.95	5291062	4409476	1.20
0.98	6465955	6663083	0.97
0.99	1.05E+07	8464111	1.24
0.89	702782	851499	0.83
0.95	7266404	5304921	1.37
0.98	537311	509418	1.05
0.9	3086263	2801353	1.10
0.96	3003154	2944938	1.02
0.96	3003154	2944938	1.02
0.78	1067106	3134211	0.34
0.96	1.37E+07	1.46E+07	0.94
1	1.82E+07	1.79E+07	1.02
0.98	2453955	2845797	0.86
0.98	2453955	2845797	0.86
0.99	4406774	4951569	0.89
0.93	4815737	6186770	0.78
0.92	1.11E+07	1.31E+07	0.85
0.96	3020414	2299271	1.31
0.99	1.01E+07	7440757	1.36
1	3.02E+07	2.28E+07	1.32
1	3.02E+07	2.28E+07	1.32
1	7.75E+07	5.96E+07	1.30
0.97	4141091	3495079	1.18
0.61	2151309	858768	2.51
1	3735824	3044672	1.23
0.98	6273355	5371682	1.17
0.98	6273355	5371682	1.17
0.89	1.44E+07	2.30E+07	0.63
0.84	2180373	2066720	1.05
0.89	2840288	2997771	0.95
0.97	3066398	3302694	0.93
0.94	4138790	3662787	1.13
0.96	2992495	1939984	1.54
0.81	4030623	3525255	1.14
0.99	6672071	8765598	0.76
0.99	6672071	8765598	0.76
0.98	1.98E+07	1.96E+07	1.01
0.96	3.97E+07	3.90E+07	1.02
1	1.60E+08	1.39E+08	1.15
1	8280638	7957227	1.04
0.93	1.20E+07	1.18E+07	1.02
0.99	1597386	1322766	1.21
0.99	1850385	1643410	1.13
0.89	3194551	2514472	1.27
0.98	1.04E+07	8418595	1.24
0.98	1.04E+07	8418595	1.24
0.94	9923870	9088911	1.09
0.99	1.16E+07	9559406	1.21
1	1.78E+07	1.57E+07	1.13
1	1.81E+07	1.70E+07	1.06

1	2.84E+07	2.73E+07	1.04
0.99	6109751	5114726	1.19
0.99	6387552	6442256	0.99
0.99	6387552	6442256	0.99
0.99	6387552	6442256	0.99
0.96	1.27E+07	1.62E+07	0.78
0.95	1.59E+07	1.68E+07	0.95
0.96	2.91E+07	2.90E+07	1.00
1	1.37E+08	1.23E+08	1.11
0.93	483285	325257	1.49
0.98	3283316	3325281	0.99
1	6826307	6573734	1.04
0.96	4457805	4376922	1.02
0.96	4457805	4376922	1.02
0.92	8409876	1.35E+07	0.62
0.99	2319959	1858101	1.25
1	3.52E+07	4.99E+07	0.71
0.76	4130989	3742077	1.10
0.96	4346833	4018081	1.08
0.99	1.85E+07	1.72E+07	1.08
0.89	2.99E+07	2.18E+07	1.37
1	4.71E+07	3.78E+07	1.25
0.94	2351845	3225218	0.73
0.89	2911003	2530227	1.15
0.98	6147213	5242940	1.17
0.94	6068846	5977256	1.02
0.89	1.82E+07	1.11E+07	1.64
0.98	1.50E+07	1.39E+07	1.08
0.93	1.62E+07	1.79E+07	0.91
0.96	2.82E+07	2.05E+07	1.38
0.99	2.33E+07	2.15E+07	1.08
0.96	3.82E+07	3.00E+07	1.27
0.95	3.83E+07	3.09E+07	1.24
0.99	3.58E+07	3.60E+07	0.99
0.96	993783	825307	1.20
0.96	993783	825307	1.20
0.77	1058000	2655865	0.40
0.98	3023790	2600435	1.16
0.82	5060629	4617597	1.10
0.98	1.56E+07	1.46E+07	1.07
0.98	4355716	3839513	1.13
0.98	3690719	3161952	1.17
0.94	646964	816182	0.79
0.94	646964	816182	0.79
0.46	2.80E+07	2.34E+07	1.20
0.98	3.10E+07	2.64E+07	1.17
0.9	767811	630919	1.22
0.81	4703188	2443657	1.92
0.81	4703188	2443657	1.92
0.97	3753420	3758822	1.00
0.98	5909226	5964356	0.99

0.91	8463804	8749553	0.97
0.91	9601415	9565018	1.00
1	1.14E+07	9952779	1.15
1	1.80E+08	1.68E+08	1.07
0.98	3850548	3452640	1.12
1	1.82E+07	1.64E+07	1.11
0.9	4090391	4101820	1.00
0.92	7264522	6937168	1.05
0.97	1.46E+07	1.34E+07	1.09
1	3.33E+07	3.02E+07	1.10
0.77	3673549	5112281	0.72
0.89	2911003	2530227	1.15
0.98	6147213	5242940	1.17
0.98	5552654	5259928	1.06
0.89	1.82E+07	1.11E+07	1.64
0.96	1.30E+07	1.24E+07	1.05
0.93	1.62E+07	1.79E+07	0.91
0.99	2.33E+07	2.15E+07	1.08
0.95	3.83E+07	3.09E+07	1.24
0.95	3.83E+07	3.09E+07	1.24
0.76	1.90E+07	1.00E+07	1.90
0.97	4259639	3114499	1.37
0.95	2425579	2226592	1.09
1	5377955	4718069	1.14
1	467839	404482	1.16
1	467839	404482	1.16
0.98	1.61E+07	1.58E+07	1.02
0.97	1.58E+07	1.68E+07	0.94
0.84	4168743	3489408	1.19
0.95	1755474	1774170	0.99
0.98	2546807	2655617	0.96
0.98	1.19E+07	1.18E+07	1.01
0.98	1.19E+07	1.18E+07	1.01
0.98	7713481	7416477	1.04
0.99	1.14E+07	1.12E+07	1.02
0.93	1.62E+07	1.47E+07	1.10
0.99	2485704	2341929	1.06
0.99	2485704	2341929	1.06
0.96	5475737	5212796	1.05
0.96	5475737	5212796	1.05
0.96	3123858	2412179	1.30
0.96	3759187	2226803	1.69
0.17	1278391	4754929	0.27
0.96	2972525	2684652	1.11
0.94	6790819	6124562	1.11
0.94	6790819	6124562	1.11
0.99	582056	609275	0.96
0.91	2786394	2626891	1.06
1	4773855	4857670	0.98
0.99	4929732	5109058	0.96
1	1.80E+08	1.70E+08	1.06

0.96	2799497	2712473	1.03
0.96	2799497	2712473	1.03
0.88	1.41E+07	2.06E+07	0.68
0.93	1366723	1206206	1.13
0.97	2841387	2234616	1.27
0.92	5739647	5023139	1.14
0.9	7028816	3737117	1.88
0.94	2304764	1549923	1.49
0.95	8803317	1.14E+07	0.77
0.99	1.05E+07	8337482	1.26
1	2103193	2226898	0.94
0.86	481028	403584	1.19
0.99	2950525	2766122	1.07
0.96	5846560	6455940	0.91
0.97	1.82E+07	1.62E+07	1.12
1	5.46E+07	4.89E+07	1.12
1	7.74E+07	7.25E+07	1.07
1	8.25E+07	7.44E+07	1.11
0.99	1529502	1602031	0.95
0.99	2650649	2634612	1.01
0.99	4015510	4157180	0.97
0.94	4142947	4157706	1.00
0.99	4747529	4694873	1.01
0.75	6339999	9238095	0.69
0.99	1.72E+07	1.79E+07	0.96
0.99	9059753	8908074	1.02
0.99	9920581	9359565	1.06
0.99	9.51E+07	9.77E+07	0.97
0.92	722109	383332	1.88
0.99	3618136	5592492	0.65
0.95	9561141	5965566	1.60
0.98	6122791	6488475	0.94
0.87	1860281	2127144	0.87
0.97	3488284	2635752	1.32
0.97	3488284	2635752	1.32
0.93	1.46E+07	1.12E+07	1.30
0.93	1.46E+07	1.12E+07	1.30
0.95	541327	519612	1.04
0.93	5504671	4511899	1.22
0.99	8920810	7880293	1.13
0.86	5183784	4233572	1.22
0.94	1.32E+07	1.25E+07	1.06
0.94	1495592	1550907	0.96
0.99	4563791	4654238	0.98
0.94	4078891	3212882	1.27
0.91	2851563	2874414	0.99
0.79	3497180	3101850	1.13
0.99	3729228	3210852	1.16
0.85	2281097	2140313	1.07
0.87	2936908	2495662	1.18
0.98	1224856	1025051	1.19

0.93	1487481	1730467	0.86
0.87	1348051	1750730	0.77
0.97	2474786	2052891	1.21
0.97	2474786	2052891	1.21
0.96	7442117	4572762	1.63
0.96	7442117	4572762	1.63
0.96	7442117	4572762	1.63
0.99	1.81E+07	1.62E+07	1.12
0.9	2.40E+07	6487320	3.70
0.96	1608435	1754916	0.92
0.96	3999106	3616849	1.11
0.99	1.50E+07	1.65E+07	0.91
0.99	3280708	2925294	1.12
0.95	8599491	4926130	1.75
1	2.10E+07	1.72E+07	1.22
0.85	2838423	1581343	1.79
0.79	2.60E+07	2.68E+07	0.97
0.95	7.08E+07	7.14E+07	0.99
0.85	694126	657115	1.06
0.93	788577	785934	1.00
0.94	2591354	1780776	1.46
0.96	2600740	1996343	1.30
0.98	1648604	3353217	0.49
0.99	4920511	4050883	1.21
0.99	4920511	4050883	1.21
0.99	6666301	5009481	1.33
0.99	6652883	7174581	0.93
0.99	1.25E+07	1.05E+07	1.19
0.99	1.25E+07	1.05E+07	1.19
1	1.16E+07	1.07E+07	1.08
1	1.35E+07	1.10E+07	1.23
0.98	1.25E+07	1.17E+07	1.07
0.9	2.18E+07	2.09E+07	1.04
0.9	2.18E+07	2.09E+07	1.04
0.88	3.07E+07	2.98E+07	1.03
0.89	1241346	1033991	1.20
0.99	3.67E+07	3.85E+07	0.95
0.99	4252929	4166849	1.02
0.98	7925576	7169352	1.11
0.81	4.49E+07	2.74E+07	1.64
0.96	1.27E+08	1.57E+08	0.81
0.96	6604565	5059664	1.31
0.99	1.09E+07	8223520	1.33
0.84	3521559	529297	6.65
0.97	1871527	896432	2.09
0.99	6546852	5980402	1.09
0.99	8373391	7349411	1.14
0.99	3692487	3333146	1.11
0.98	6148968	5453641	1.13
0.98	1137663	780463	1.46
0.8	1068913	1060493	1.01

0.94	1510526	1195875	1.26
0.93	1393107	1446708	0.96
0.76	1680819	1604283	1.05
0.97	2961381	2522204	1.17
0.98	3638512	2853736	1.27
0.96	9048085	8231499	1.10
0.96	9048085	8231499	1.10
0.99	1.12E+07	9366908	1.20
0.94	2.59E+07	2.32E+07	1.12
0.99	1539159	1621073	0.95
0.95	1971100	1683675	1.17
0.97	3416166	3034009	1.13
0.99	5707169	5616131	1.02
0.9	1202706	1072293	1.12
0.99	3202220	2603609	1.23
0.95	3752467	4465307	0.84
0.87	1.54E+07	1.66E+07	0.93
0.97	2738563	2526146	1.08
0.97	2949634	2938919	1.00
0.84	9467293	6940910	1.36
0.89	1.46E+07	1.82E+07	0.80
0.99	2.21E+07	1.83E+07	1.21
1	2.48E+07	2.21E+07	1.12
1	3.64E+07	3.41E+07	1.07
1	3.64E+07	3.41E+07	1.07
0.97	3296853	3431957	0.96
0.85	1720917	1448852	1.19
0.94	1441316	1151333	1.25
0.91	1168740	1337722	0.87
0.91	355344	467749	0.76
1	3802911	3604374	1.06
0.97	9196615	8727342	1.05
0.98	1.25E+07	1.53E+07	0.82
0.98	1.25E+07	1.53E+07	0.82
0.89	3123744	2678118	1.17
0.95	3267640	2080959	1.57
0.95	1.01E+07	1.12E+07	0.90
1	2.20E+07	1.95E+07	1.13
1	2.20E+07	1.95E+07	1.13
0.61	3234770	1065672	3.04
0.99	3004667	2253107	1.33
0.99	3004667	2253107	1.33
0.93	2938828	3127111	0.94
0.84	1445957	1147793	1.26
0.98	1071886	1156256	0.93
0.9	960516	770971	1.25
0.95	1798379	1378640	1.30
0.72	662324	1075000	0.62
0.99	3393005	3086760	1.10
0.95	405663	301563	1.35
1	2.10E+07	1.76E+07	1.19

1	2.10E+07	1.76E+07	1.19
0.99	2.65E+07	2.20E+07	1.20
0.97	3091793	1658449	1.86
0.93	2504153	2437409	1.03
0.71	6886238	2596721	2.65
0.9	2270772	2702955	0.84
0.85	3469221	3300158	1.05
0.99	1.21E+07	6279520	1.93
0.99	1.21E+07	6279520	1.93
0.99	1.21E+07	6279520	1.93
0.99	1.21E+07	6279520	1.93
0.98	7055723	6667252	1.06
0.99	7165468	9138710	0.78
0.99	7165468	9138710	0.78
0.98	1.75E+07	1.46E+07	1.20
1	1.43E+07	1.77E+07	0.81
0.98	2.12E+07	1.95E+07	1.09
0.71	3565073	1.96E+07	0.18
1	2.54E+07	2.76E+07	0.92
1	2.67E+07	3.00E+07	0.89
0.57	6.00E+07	5.22E+07	1.15
0.92	1796488	1289892	1.39
0.97	2502550	1551628	1.61
0.99	3286991	1907376	1.72
0.97	8679113	5242859	1.66
0.96	1.05E+07	8018078	1.31
0.99	1.24E+07	1.08E+07	1.15
0.8	2.46E+07	174725	140.79
0.99	5442489	4499328	1.21
0.99	5442489	4499328	1.21
1	1.16E+07	9820291	1.18
0.97	615386	598704	1.03
0.99	984700	1030742	0.96
0.99	4366130	3386871	1.29
0.99	7143342	6787753	1.05
0.84	5714228	5359758	1.07
0.52	1644441	1638404	1.00
0.92	3210420	2871833	1.12
0.99	1.54E+07	1.35E+07	1.14
0.99	2.70E+07	2.40E+07	1.13
0.93	2430874	1606671	1.51
0.95	2981284	1824823	1.63
1	8149362	6391911	1.27
0.99	2897872	2841248	1.02
0.99	2897872	2841248	1.02
0.78	8308520	8428951	0.99
0.97	6516132	6674172	0.98
0.97	6516132	6674172	0.98
0.97	6516132	6674172	0.98
1	1.41E+07	1.11E+07	1.27
0.95	1.22E+07	1.15E+07	1.06

0.95	1.22E+07	1.15E+07	1.06
0.99	2.94E+07	2.47E+07	1.19
1	1.13E+07	1.04E+07	1.09
0.75	2629763	1958288	1.34
0.94	2022058	2431381	0.83
0.97	2755480	3125697	0.88
0.85	3254601	5.79E+07	0.06
1	1.56E+08	1.35E+08	1.16
0.76	2489825	6.71E+07	0.04
0.97	4016425	4493147	0.89
0.96	2.30E+07	2.01E+07	1.14
0.99	7803773	7235848	1.08
0.99	7803773	7235848	1.08
0.91	889408	581479	1.53
0.95	1057993	973043	1.09
0.95	4330049	3676430	1.18
0.95	984562	860402	1.14
0.9	983829	942985	1.04
0.96	1433528	1489472	0.96
0.72	3561572	1831776	1.94
1	2249235	1967449	1.14
0.99	3609431	3216814	1.12
0.99	5409336	4428918	1.22
0.99	6438053	5536641	1.16
0.99	6438053	5536641	1.16
0.98	1809134	1565321	1.16
0.93	3680084	4336486	0.85
0.97	3940783	4467645	0.88
0.96	9036411	8042022	1.12
0.99	2.11E+07	1.65E+07	1.28
1	2.57E+07	2.20E+07	1.17
1	6.88E+07	6.00E+07	1.15
0.98	1416897	1168929	1.21
0.98	1416897	1168929	1.21
0.93	3889838	3510179	1.11
0.97	4394348	3595473	1.22
0.99	6463041	5158129	1.25
0.99	6463041	5158129	1.25
0.96	4.65E+07	4.86E+07	0.96
0.99	6.92E+07	5.90E+07	1.17
0.99	5.94E+07	6.08E+07	0.98
0.99	1.77E+07	1.63E+07	1.09
0.99	1.77E+07	1.63E+07	1.09
0.98	1.68E+07	1.69E+07	0.99
0.98	1.68E+07	1.69E+07	0.99
0.9	750354	703524	1.07
0.9	750354	703524	1.07
0.76	1896525	1717490	1.10
0.86	3286130	2975014	1.10
0.98	2128475	3003509	0.71
0.99	3509762	4541958	0.77

0.99	7896686	6600470	1.20
0.96	8293279	7004870	1.18
0.95	8549748	9265070	0.92
0.99	1.71E+07	1.64E+07	1.04
0.96	2.32E+07	2.57E+07	0.90
0.96	2.32E+07	2.57E+07	0.90
0.99	3.19E+07	3.22E+07	0.99
0.98	3.30E+07	3.55E+07	0.93
1	5.97E+07	5.61E+07	1.06
0.94	1614263	1024957	1.57
0.88	1602339	1324736	1.21
0.98	1139719	1004712	1.13
0.95	1938841	1686581	1.15
0.78	2503663	2816119	0.89
0.99	4054546	3669869	1.10
0.94	4332511	4056456	1.07
0.85	6725097	5698356	1.18
1	5397978	5738657	0.94
0.98	6935392	6530748	1.06
0.98	1.43E+07	1.40E+07	1.02
0.95	1.35E+07	1.41E+07	0.96
0.98	1.51E+07	1.46E+07	1.03
0.99	1.77E+07	1.70E+07	1.04
0.95	2.19E+07	2.09E+07	1.05
0.95	2.19E+07	2.09E+07	1.05
0.95	2.19E+07	2.09E+07	1.05
1	2.35E+07	2.56E+07	0.92
1	3.41E+07	3.68E+07	0.93
1	4.69E+07	5.13E+07	0.91
1	4.69E+07	5.13E+07	0.91
0.76	2.28E+07	8497820	2.68
0.96	1.71E+07	1.21E+07	1.41
0.96	1347742	1188642	1.13
0.98	2595164	2372194	1.09
0.99	5558741	4016989	1.38
0.99	5558741	4016989	1.38
0.96	8188093	7583981	1.08
0.99	1.22E+07	1.11E+07	1.10
0.99	1.22E+07	1.11E+07	1.10
0.93	1.88E+07	2.03E+07	0.93
0.99	3.12E+07	2.46E+07	1.27
0.95	1088215	1173108	0.93
1	2850998	2737589	1.04
0.96	1.10E+07	1.16E+07	0.95
1	1.22E+07	1.30E+07	0.94
0.98	1.27E+07	1.47E+07	0.86
0.88	2.23E+07	2.27E+07	0.98
0.99	2.80E+07	2.52E+07	1.11
0.88	1.05E+08	1.27E+08	0.83
0.98	2945550	2669510	1.10
0.98	888901	680090	1.31

0.98	1056910	1222729	0.86
0.95	783478	736970	1.06
0.99	9458083	7810777	1.21
0.97	7.12E+08	4.78E+08	1.49
0.95	1246797	1094630	1.14
0.95	3468733	3292537	1.05
0.94	4388710	4104948	1.07
0.94	4388710	4104948	1.07
0.98	1.93E+07	1.66E+07	1.16
0.98	2.01E+07	1.85E+07	1.09
1	4.71E+07	4.61E+07	1.02
0.94	572122	871504	0.66
1	2584515	2286004	1.13
1	1973549	2389268	0.83
0.84	4209972	2407698	1.75
0.88	6488270	6525816	0.99
1	1.14E+07	9145297	1.25
0.99	1.38E+07	1.35E+07	1.02
0.99	2043456	1894117	1.08
0.99	5733014	5581293	1.03
0.99	6933192	6075442	1.14
1	2.26E+07	2.10E+07	1.08
0.81	216719	229869	0.94
0.96	1555418	1339081	1.16
0.73	2748057	2086214	1.32
0.89	1.14E+07	1.33E+07	0.86
0.98	1.10E+07	1.40E+07	0.79
1	6048154	5404143	1.12
0.97	429842	420381	1.02
0.88	1358651	1646454	0.83
0.94	3365873	3891755	0.86
0.96	3827649	3048830	1.26
1	3366346	3554005	0.95
1	3366346	3554005	0.95
0.96	1.42E+07	1.51E+07	0.94
0.99	2378746	1819255	1.31
0.95	3461187	3071653	1.13
0.99	6175760	4443488	1.39
0.98	9788041	6848299	1.43
0.91	8133372	7611986	1.07
0.99	8786248	8246251	1.07
0.93	3048848	2831603	1.08
0.99	8642644	7662928	1.13
0.97	8057723	8544581	0.94
0.98	8668360	9047604	0.96
0.99	1.37E+07	1.17E+07	1.17
0.99	1.37E+07	1.17E+07	1.17
0.99	4.74E+07	4.07E+07	1.16
0.73	2540764	986949	2.57
0.95	8142636	6358690	1.28
0.95	8142636	6358690	1.28

1	1.18E+07	1.11E+07	1.06
0.98	1.49E+07	1.52E+07	0.98
0.97	2088835	3700047	0.56
0.67	5293149	4279534	1.24
0.93	4811195	4624915	1.04
0.95	1849248	2032750	0.91
0.95	1849248	2032750	0.91
0.94	2725837	2620662	1.04
0.91	1111205	2601720	0.43
0.99	4235402	2760826	1.53
0.99	1285883	1278864	1.01
0.99	3723900	3364787	1.11
0.99	3723900	3364787	1.11
0.99	2873597	2366816	1.21
1	6371615	5345687	1.19
0.99	1.12E+07	1.10E+07	1.02
0.99	1.36E+07	1.38E+07	0.99
1	2.48E+07	2.48E+07	1.00
0.93	1441544	2350022	0.61
0.94	1289419	955406	1.35
0.94	1289419	955406	1.35
0.97	5275783	5064179	1.04
0.97	5275783	5064179	1.04
0.99	1.14E+07	9037580	1.26
0.99	4421270	2613030	1.69
0.81	1.44E+07	2.09E+07	0.69
0.94	1.59E+07	1.42E+07	1.12
0.99	8700755	6850318	1.27
0.94	1.16E+07	8241813	1.41
1	2.74E+07	2.63E+07	1.04
0.72	1450843	1649503	0.88
0.81	1.28E+07	1.41E+07	0.91
0.81	1.28E+07	1.41E+07	0.91
1	9.60E+07	8.13E+07	1.18
0.97	1201577	884597	1.36
0.94	6670041	5731729	1.16
1	5.36E+07	4.79E+07	1.12
0.94	1961476	1649918	1.19
0.98	9934905	1.10E+07	0.90
0.83	1.25E+07	1.17E+07	1.07
0.99	1.23E+07	1.03E+07	1.19
0.95	2867985	2066054	1.39
0.95	2867985	2066054	1.39
0.92	518195	395112	1.31
0.99	8957951	8881979	1.01
0.84	1954344	2622828	0.75
0.99	1311024	1475250	0.89
0.98	1242826	1518653	0.82
0.98	1242826	1518653	0.82
0.98	1242826	1518653	0.82
0.97	4810458	5630873	0.85

0.97	4810458	5630873	0.85
0.72	6057937	4289676	1.41
0.88	5739742	4308203	1.33
0.97	2.13E+07	1.58E+07	1.35
0.99	1.38E+07	1.27E+07	1.09
0.99	1.38E+07	1.27E+07	1.09
0.99	1.70E+07	1.73E+07	0.98
0.95	490989	357411	1.37
0.81	6263139	5050942	1.24
0.98	1073550	908401	1.18
0.92	1093702	998003	1.10
0.94	6578642	6332740	1.04
1	7.17E+07	6.50E+07	1.10
0.98	629022	791666	0.79
0.96	3817705	3085655	1.24
0.99	4778205	4360088	1.10
0.98	7161382	5811634	1.23
1	6799991	6785184	1.00
0.97	1.86E+07	1.94E+07	0.96
0.97	1.86E+07	1.94E+07	0.96
0.99	3.70E+07	2.77E+07	1.34
1	6.62E+07	6.91E+07	0.96
1	6.62E+07	6.91E+07	0.96
0.98	3850851	4174831	0.92
0.88	1585363	3254812	0.49
0.84	1765962	1917419	0.92
0.87	1228947	2422985	0.51
1	9.44E+07	8.59E+07	1.10
0.98	5316587	6423004	0.83
0.97	1.72E+07	1.30E+07	1.32
1	2.33E+07	2.04E+07	1.14
1	2.33E+07	2.04E+07	1.14
0.83	469095	771462	0.61
0.87	1891541	1339699	1.41
0.94	1808646	1730844	1.04
0.95	2.00E+07	1.51E+07	1.32
0.97	2.62E+07	2.35E+07	1.11
0.97	2.62E+07	2.35E+07	1.11
0.97	4.08E+07	3.63E+07	1.12
1	1.04E+08	8.58E+07	1.21
0.79	1.00E+07	9149996	1.09
0.95	1.21E+07	1.05E+07	1.15
0.91	3.99E+07	3.52E+07	1.13
0.99	6.29E+07	5.39E+07	1.17
0.99	2988585	2222508	1.34
0.97	1480258	1214729	1.22
0.98	1246375	1285673	0.97
0.98	3051716	1849548	1.65
0.94	4427623	4262856	1.04
0.98	6196719	4896967	1.27
0.98	6196719	4896967	1.27

0.99	1.21E+07	1.14E+07	1.06
0.99	1.99E+07	1.87E+07	1.06
0.92	1.31E+07	1.49E+07	0.88
0.9	830693	1067121	0.78
0.9	830693	1067121	0.78
0.86	3260753	1337309	2.44
0.92	1416426	1513634	0.94
0.98	7156206	5083574	1.41
0.99	1.27E+07	1.27E+07	1.00
0.95	853573	768295	1.11
0.93	1355697	1300050	1.04
0.94	2142135	2049280	1.05
0.98	2246908	2149314	1.05
0.94	2694091	2162138	1.25
0.94	2462518	2465287	1.00
0.98	2332251	2614306	0.89
0.96	2457340	2941933	0.84
0.91	3531048	3763500	0.94
0.99	3769182	4020897	0.94
0.87	9419920	6608689	1.43
0.97	1.13E+07	1.01E+07	1.12
0.98	2860619	1.05E+07	0.27
0.98	2860619	1.05E+07	0.27
0.99	1.28E+07	1.36E+07	0.94
0.98	2.07E+07	1.60E+07	1.29
0.79	1.44E+07	1.66E+07	0.87
0.71	3.53E+07	1.93E+07	1.83
0.99	2.29E+07	2.61E+07	0.88
0.99	2.90E+07	2.79E+07	1.04
0.99	2.90E+07	2.79E+07	1.04
1	3.31E+07	3.17E+07	1.04
1	3.37E+07	3.23E+07	1.04
1	3.37E+07	3.23E+07	1.04
1	4.18E+07	4.58E+07	0.91
0.99	4.39E+07	4.90E+07	0.90
1	1.29E+08	9.78E+07	1.32
1	1.05E+08	1.00E+08	1.05
1	2.29E+08	2.79E+08	0.82
0.92	5614918	5013990	1.12
0.96	1481386	2156961	0.69
0.97	1401105	1207192	1.16
0.85	2505941	1890120	1.33
0.86	1.11E+07	1.00E+07	1.11
0.97	5747387	4969959	1.16
1	2.43E+07	1.99E+07	1.22
1	3.19E+07	2.84E+07	1.12
1	7.62E+07	6.71E+07	1.14
0.96	1.30E+07	1051047	12.37
0.8	2053249	2547990	0.81
1	6876954	7566894	0.91
1	6876954	7566894	0.91

0.81	4987343	4279113	1.17
1	1.13E+07	8928225	1.27
0.99	1.18E+07	1.02E+07	1.16
1	1.29E+07	1.11E+07	1.16
0.93	735430	631944	1.16
0.99	7357180	8149025	0.90
0.98	5928480	5741608	1.03
0.98	5928480	5741608	1.03
1	1.19E+07	9908890	1.20
0.95	1.88E+07	1.84E+07	1.02
0.99	2.37E+07	1.94E+07	1.22
1	6.65E+07	5.62E+07	1.18
0.98	914645	832539	1.10
0.98	914645	832539	1.10
0.88	1177999	1090954	1.08
0.96	1194554	1152088	1.04
0.98	1858635	1471904	1.26
0.99	2784338	2585341	1.08
0.99	1.16E+07	9670604	1.20
0.99	1.16E+07	9670604	1.20
1	2.76E+07	2.54E+07	1.09
1	2.76E+07	2.54E+07	1.09
1	3.76E+07	3.22E+07	1.17
0.98	6.67E+07	5.92E+07	1.13
0.98	7.58E+07	6.68E+07	1.13
1	1.08E+08	9.28E+07	1.16
0.99	1214169	965741	1.26
0.99	1214169	965741	1.26
0.9	4218505	2953017	1.43
0.96	1.41E+07	1.34E+07	1.05
0.97	8190779	6962109	1.18
0.99	4254762	3243990	1.31
0.99	1.24E+07	1.14E+07	1.09
0.99	1.24E+07	1.14E+07	1.09
1	7209468	5396459	1.34
1	7209468	5396459	1.34
0.97	2375013	1987206	1.20
0.98	1078248	1158624	0.93
0.97	2779543	2315696	1.20
1	3703232	3777517	0.98
0.93	4264732	4958757	0.86
0.9	1.00E+07	8048367	1.24
0.9	1.00E+07	8048367	1.24
0.99	1.05E+07	8456553	1.24
0.95	1.05E+07	1.07E+07	0.98
0.99	1.34E+07	1.16E+07	1.16
0.93	1.86E+07	1.98E+07	0.94
0.93	1.86E+07	1.98E+07	0.94
0.97	2.51E+07	2.34E+07	1.07
1	6.22E+07	5.49E+07	1.13
0.99	7.99E+07	7.19E+07	1.11

0.99	7.99E+07	7.19E+07	1.11
0.92	1727727	1579480	1.09
0.85	2734386	2601082	1.05
0.97	4730890	4168454	1.13
0.88	2.04E+07	7386747	2.76
0.88	2.04E+07	7386747	2.76
1	9970014	1.04E+07	0.96
0.99	1.59E+07	1.45E+07	1.10
0.99	2.34E+07	2.03E+07	1.15
0.89	2.78E+07	3.29E+07	0.84
0.87	3.65E+07	3.71E+07	0.98
0.99	5.54E+07	5.06E+07	1.09
0.95	3497344	3532851	0.99
0.98	1.04E+07	1.04E+07	1.00
0.98	6082362	4954527	1.23
0.97	6475675	5135612	1.26
0.98	7663415	6527042	1.17
0.99	1.13E+07	9695983	1.17
0.87	7309245	1.21E+07	0.60
1	1.72E+07	1.40E+07	1.23
1	1.13E+07	8369676	1.35
0.98	7777687	1.02E+09	0.01
1	5.03E+07	4.69E+07	1.07
0.98	2.51E+07	2.38E+07	1.05
1	5.35E+07	5.05E+07	1.06
1	1.35E+08	1.25E+08	1.08
0.97	772002	589174	1.31
0.99	1891206	1622265	1.17
0.99	1891206	1622265	1.17
0.97	1400639	1392015	1.01
0.99	3097814	2753238	1.13
0.6	2.04E+07	1.64E+08	0.12
0.92	1904117	1858855	1.02
0.99	1489372	1987406	0.75
0.92	2262433	1768766	1.28
0.87	2021259	2143355	0.94
0.98	1.28E+07	1.24E+07	1.03
0.98	1.28E+07	1.24E+07	1.03
0.62	1149075	605823	1.90
0.95	1329050	1254919	1.06
0.97	1503662	1463070	1.03
0.97	1503662	1463070	1.03
0.81	1253263	2374160	0.53
1	2519263	2511862	1.00
0.79	2086622	3733167	0.56
0.95	3803358	3884775	0.98
0.77	6714540	5889165	1.14
0.54	1.13E+07	8251818	1.37
0.99	2219692	2133091	1.04
0.8	6645439	7743064	0.86
0.91	1.22E+07	2.43E+07	0.50

0.95	6617926	6519724	1.02
0.97	9165673	8081539	1.13
1	1.33E+07	1.27E+07	1.05
1	1.33E+07	1.27E+07	1.05
0.94	1.44E+07	1.43E+07	1.01
1	4.46E+07	4.54E+07	0.98
1	1.09E+08	9.49E+07	1.15
1	1.09E+08	9.49E+07	1.15
1	5.40E+08	4.53E+08	1.19
1	5.58E+08	4.69E+08	1.19
0.97	1642735	727686	2.26
0.98	2115099	2038613	1.04
0.95	1400111	1402905	1.00
0.98	3843667	2965738	1.30
1	2.07E+07	1.75E+07	1.18
1	3.93E+07	3.37E+07	1.17
0.94	3292977	3092476	1.06
0.88	1.19E+07	1.10E+07	1.08
0.88	1756168	1826602	0.96
0.96	4524658	2712162	1.67
0.94	1.59E+07	1.49E+07	1.07
1	7.26E+07	6.69E+07	1.09
0.83	1.17E+08	1.78E+08	0.66
0.83	1.17E+08	1.78E+08	0.66
0.91	2287753	2860286	0.80
0.99	1033262	786709	1.31
0.98	3164922	2560002	1.24
0.97	6517016	5105593	1.28
0.06	1.73E+07	2789629	6.20
0.95	6073534	2882845	2.11
1	9667710	7855979	1.23
1	9667710	7855979	1.23
1	1.94E+07	1.75E+07	1.11
0.96	2.11E+07	1.92E+07	1.10
0.99	3120696	2066220	1.51
0.92	2757426	2571097	1.07
0.97	1.00E+07	8912621	1.12
0.99	1.60E+07	1.17E+07	1.37
1	1.51E+07	1.34E+07	1.13
0.99	1.51E+07	1.64E+07	0.92
0.96	3.05E+07	3.21E+07	0.95
0.73	5055264	4883258	1.04
0.94	5467904	4690502	1.17
0.99	4.30E+07	3.69E+07	1.17
0.94	2.08E+07	3.12E+07	0.67
0.94	2.08E+07	3.12E+07	0.67
0.95	1988131	1726567	1.15
0.97	2092065	2277356	0.92
0.93	2057133	1472853	1.40
0.99	1994655	1731181	1.15
0.99	1994655	1731181	1.15

0.97	2876595	2408749	1.19
0.95	4774005	3001500	1.59
0.98	1366771	1163526	1.17
0.98	1366771	1163526	1.17
0.98	1366771	1163526	1.17
0.93	2138083	1937793	1.10
0.98	2.28E+07	1.58E+07	1.44
0.98	2.58E+07	1.74E+07	1.48
0.96	2164924	2203852	0.98
1	2.05E+07	2.04E+07	1.00
0.94	4425032	4214742	1.05
0.99	3809263	3094642	1.23
0.98	6470978	5779122	1.12
0.98	1036482	955801	1.08
0.93	1461177	1488656	0.98
0.89	1452232	1627216	0.89
0.83	2171704	2173259	1.00
0.83	2171704	2173259	1.00
0.99	3859066	3588384	1.08
0.99	5086439	4049088	1.26
0.99	5263938	4906032	1.07
1	5952795	5526095	1.08
0.71	7066513	6768445	1.04
0.72	9652830	9486754	1.02
0.72	9652830	9486754	1.02
0.97	2.28E+07	2.24E+07	1.02
0.99	2.93E+07	2.65E+07	1.11
1	1.59E+08	1.54E+08	1.03
0.98	824690	742033	1.11
0.98	2029816	1971585	1.03
1	7634607	7214454	1.06
0.96	6233501	4812931	1.30
0.99	1.08E+07	9526959	1.13
0.94	1796398	1120107	1.60
0.98	1.09E+07	1.06E+07	1.03
0.97	1.48E+07	1.34E+07	1.10
0.93	5555220	4870176	1.14
1	3.50E+07	3.03E+07	1.16
0.98	1211934	1292783	0.94
0.87	2214437	1575598	1.41
0.87	2214437	1575598	1.41
0.97	1677854	1625044	1.03
0.72	3388005	2441667	1.39
0.92	3532680	4698485	0.75
0.99	9449298	9149161	1.03
0.99	1.53E+07	1.57E+07	0.97
0.99	1.53E+07	1.57E+07	0.97
0.98	1.88E+07	1.69E+07	1.11
0.98	1.88E+07	1.69E+07	1.11
0.97	1.41E+07	1.75E+07	0.81
1	2.57E+07	2.56E+07	1.00

1	2.57E+07	2.56E+07	1.00
0.99	3.00E+07	2.61E+07	1.15
0.98	2.47E+07	2.71E+07	0.91
0.99	3.58E+07	3.66E+07	0.98
1	4.16E+07	4.25E+07	0.98
0.99	5.45E+07	5.15E+07	1.06
0.99	7.17E+07	7.16E+07	1.00
0.99	8.91E+07	7.75E+07	1.15
0.9	8.76E+07	1.21E+08	0.72
1	1.31E+08	1.21E+08	1.08
1	1.45E+08	1.41E+08	1.03
0.99	1728355	1706799	1.01
0.92	398231	393237	1.01
0.95	359345	524616	0.68
0.92	1.37E+07	842956	16.25
0.99	2416085	2540531	0.95
0.99	6568231	6200701	1.06
0.91	5318261	5974076	0.89
0.99	2.53E+07	2.31E+07	1.10
0.99	7115513	6373908	1.12
0.89	9330374	6866323	1.36
0.98	1992515	2042182	0.98
0.98	1992515	2042182	0.98
0.97	3083085	2653438	1.16
0.9	4697626	4263145	1.10
0.9	4697626	4263145	1.10
0.96	9818709	8579734	1.14
0.96	9818709	8579734	1.14
0.99	1.32E+07	1.30E+07	1.02
0.99	1.32E+07	1.30E+07	1.02
1	2.40E+07	1.85E+07	1.30
1	3.30E+07	2.99E+07	1.10
1	8.61E+07	7.64E+07	1.13
0.8	7405804	2313860	3.20
0.98	3521560	3076910	1.14
0.81	1977605	758853	2.61
0.91	8073436	3816296	2.12
0.99	7161149	6272950	1.14
0.96	765284	779547	0.98
0.96	765284	779547	0.98
0.9	4700931	5365072	0.88
0.94	387744	446362	0.87
0.73	1738448	1054422	1.65
0.93	1302560	1269215	1.03
0.93	1302560	1269215	1.03
0.99	4453106	4567699	0.97
0.98	6483640	6484679	1.00
0.99	8294693	8355753	0.99
0.99	1.06E+07	9895048	1.07
0.99	1.06E+07	9895048	1.07
0.99	1.73E+07	1.79E+07	0.97

0.97	1631236	1301606	1.25
0.89	2409811	1400290	1.72
0.97	3719401	2878729	1.29
0.85	2769734	3969475	0.70
0.98	8267787	6791601	1.22
0.99	9511531	7770223	1.22
0.95	1.72E+07	1.21E+07	1.42
0.96	1.94E+07	1.40E+07	1.39
0.99	2734784	2208158	1.24
0.99	2.05E+07	1.54E+07	1.33
0.99	6090078	1002270	6.08
0.97	8281872	6594478	1.26
0.98	1.19E+07	9960022	1.19
0.95	688219	504855	1.36
0.98	1304539	1073248	1.22
0.97	9157720	8963563	1.02
0.87	915148	1865115	0.49
0.92	2803524	2633635	1.06
1	5.52E+07	5.80E+07	0.95
0.97	393809	432165	0.91
0.99	1738693	1696194	1.03
0.96	3556210	3739024	0.95
0.91	6873318	1.11E+07	0.62
0.98	1.33E+07	1.26E+07	1.06
0.99	1.44E+07	1.38E+07	1.04
0.99	1.48E+07	1.42E+07	1.04
0.99	1.44E+07	1.47E+07	0.98
0.99	3.04E+07	3.07E+07	0.99
1	3.32E+07	3.24E+07	1.02
0.94	3.34E+07	3.43E+07	0.97
1	6.15E+07	6.11E+07	1.01
0.99	8.72E+07	8.71E+07	1.00
1	3.17E+08	3.16E+08	1.00
1	1.42E+09	1.37E+09	1.04
0.53	2005431	8191999	0.24
0.87	1.85E+07	1.01E+07	1.83
0.87	1.85E+07	1.01E+07	1.83
0.96	1505760	1001770	1.50
0.97	1318157	1358155	0.97
0.94	2497237	2082853	1.20
0.97	3848864	3419473	1.13
0.98	1547934	1225881	1.26
0.95	1968786	1627538	1.21
0.98	1872417	1578194	1.19
0.97	4248465	3431061	1.24
0.98	933702	805123	1.16
0.3	1889878	4686096	0.40
0.92	4938967	4472025	1.10
0.97	5811767	5316430	1.09
0.83	5223102	5803152	0.90
0.97	1.45E+07	1.24E+07	1.17

0.99	1.23E+07	1.33E+07	0.92
0.98	1.41E+07	1.38E+07	1.02
0.98	1.41E+07	1.38E+07	1.02
1	1.49E+07	1.46E+07	1.02
1	1.49E+07	1.46E+07	1.02
0.89	1.42E+07	1.71E+07	0.83
0.98	4374938	4372554	1.00
0.94	6025087	4995426	1.21
1	2.10E+07	1.57E+07	1.34
0.93	1219720	1335125	0.91
0.92	2792609	2573802	1.09
0.97	5157380	6069901	0.85
1	1.16E+07	1.07E+07	1.08
1	1.16E+07	1.07E+07	1.08
1	1.88E+07	1.83E+07	1.03
1	4.52E+07	4.74E+07	0.95
0.99	8.28E+07	7.59E+07	1.09
1	1.07E+08	9.16E+07	1.17
0.95	3757482	1572146	2.39
0.99	2106580	2086539	1.01
0.96	5005361	4241925	1.18
0.99	2535129	2300814	1.10
0.99	2535129	2300814	1.10
1	3990594	3415374	1.17
0.99	4355368	3643054	1.20
0.99	4355368	3643054	1.20
0.99	4355368	3643054	1.20
0.94	4478301	4738565	0.95
0.9	7712288	7928255	0.97
0.99	1415690	1394106	1.02
0.92	2067555	1122244	1.84
0.94	1555623	1477852	1.05
1	6903948	6934465	1.00
1	6903948	6934465	1.00
0.91	2760771	2592702	1.06
0.91	2760771	2592702	1.06
0.95	7759594	7175482	1.08
0.99	7767669	7491251	1.04
1	6.50E+07	5.99E+07	1.09
0.96	2105191	1670558	1.26
0.89	2906200	2228041	1.30
1	5482697	5327558	1.03
0.96	4.66E+07	1739220	26.79
0.93	1215817	825980	1.47
0.99	9437876	8098241	1.17
0.99	3.62E+07	3.28E+07	1.10
0.97	132814	134908	0.98
0.98	1457266	1099915	1.32
0.98	1503893	1304576	1.15
0.86	4346527	3629604	1.20
0.73	1.32E+07	1.29E+07	1.02

0.94	1.19E+07	1.32E+07	0.90
0.76	7978559	170086	46.91
0.99	7049483	5705878	1.24
0.99	7049483	5705878	1.24
0.99	7895310	6773228	1.17
0.92	1.16E+07	1.05E+07	1.10
0.98	1146426	1216335	0.94
0.95	5561970	5756645	0.97
0.98	643833	670625	0.96
0.95	7540591	6127664	1.23
0.88	5476000	8010168	0.68
0.92	1790658	2164367	0.83
0.92	1790658	2164367	0.83
0.88	2475303	2594835	0.95
0.88	2475303	2594835	0.95
0.81	4480004	3515646	1.27
0.96	4308840	4773950	0.90
0.96	8248814	8115154	1.02
1	3.22E+07	2.80E+07	1.15
1	4.36E+07	4.09E+07	1.07
0.92	1817053	1562283	1.16
0.97	1802614	1980329	0.91
0.97	1802614	1980329	0.91
0.99	7489267	6214492	1.21
0.99	7489267	6214492	1.21
0.97	2916070	2548576	1.14
0.99	6857301	6232287	1.10
0.99	1633450	1526987	1.07
0.98	1255667	1212364	1.04
0.98	1255667	1212364	1.04
0.8	3.12E+07	9578436	3.26
0.96	699008	631649	1.11
0.97	831531	811403	1.02
0.99	6300614	5719926	1.10
0.96	1803351	1560793	1.16
0.98	6691459	5240976	1.28
0.99	9525381	7780094	1.22
0.98	2.81E+07	2.30E+07	1.22
0.97	1857947	1976426	0.94
0.99	2500631	3571762	0.70
0.97	5148003	7299484	0.71
1	5.71E+07	7.03E+07	0.81
0.98	3134387	3401379	0.92
0.83	2989036	4144351	0.72
1	1.31E+07	1.23E+07	1.07
0.97	1.15E+07	1.28E+07	0.90
0.97	1.15E+07	1.28E+07	0.90
0.93	1.05E+07	1.29E+07	0.81
0.88	1.42E+07	1.83E+07	0.78
0.9	2.11E+07	2.40E+07	0.88
0.33	8115486	2.85E+07	0.28

0.9	9.58E+07	1.09E+08	0.88
1	3.49E+08	3.61E+08	0.97
1	1274108	1048633	1.22
1	1274108	1048633	1.22
0.96	1143071	1197911	0.95
1	2539649	2497712	1.02
1	3653812	3132340	1.17
1	1.24E+07	1.04E+07	1.19
0.99	5.13E+07	4.98E+07	1.03
0.96	1.06E+07	1.02E+07	1.04
0.98	2549887	2520986	1.01
0.97	4379283	4283307	1.02
0.95	4712580	4458126	1.06
0.89	5995537	5933374	1.01
0.98	1078187	996753	1.08
0.99	1439670	1377624	1.05
0.95	1562434	1626862	0.96
0.98	1974240	1855899	1.06
0.97	4027367	4134878	0.97
0.98	7357178	7014374	1.05
0.98	7357178	7014374	1.05
1	7568473	7219749	1.05
1	1.50E+07	1.40E+07	1.07
1	2.33E+07	2.07E+07	1.13
1	3.17E+07	2.94E+07	1.08
1	3.58E+07	3.38E+07	1.06
1	5.96E+07	5.37E+07	1.11
1	8.61E+08	7.60E+08	1.13
0.98	2221607	2352187	0.94
0.76	4775805	4360535	1.10
0.9	7196724	4824916	1.49
0.99	1.97E+07	1.57E+07	1.25
1	3.22E+07	2.80E+07	1.15
0.95	2916280	2675737	1.09
0.96	3899517	3671539	1.06
0.8	3816825	6052310	0.63
0.89	1107169	1010554	1.10
0.97	1980547	1422690	1.39
1	3256478	3144580	1.04
0.98	1193033	921928	1.29
0.98	1193033	921928	1.29
0.81	1.90E+07	1.45E+07	1.31
0.78	2.73E+07	1.69E+07	1.62
0.98	960605	900611	1.07
0.95	2439062	2712123	0.90
0.98	1110589	947222	1.17
0.92	2080244	1956564	1.06
0.99	3513494	3102381	1.13
0.99	5294981	4353070	1.22
0.94	5658028	5394346	1.05
0.94	1.22E+07	1.23E+07	0.99

0.97	2178728	1467592	1.48
1	9801145	8703489	1.13
0.95	1.17E+07	1.13E+07	1.04
0.74	4549370	4379836	1.04
0.85	8747204	7585511	1.15
0.97	4786791	3847999	1.24
0.98	5235906	5384552	0.97
0.88	1.20E+07	1.15E+07	1.04
0.99	1.38E+07	1.31E+07	1.05
0.84	2455243	1675417	1.47
0.97	1123431	1353844	0.83
0.92	1297426	1503866	0.86
0.98	2060432	2005514	1.03
0.94	5301149	4916621	1.08
0.85	5428355	5460051	0.99
0.99	2.53E+07	2.41E+07	1.05
0.97	1137325	1143787	0.99
0.94	2250595	2487664	0.90
0.99	2506455	2705640	0.93
0.98	6834792	7508415	0.91
0.94	9457387	8869658	1.07
0.98	1.06E+07	1.51E+07	0.70
0.94	1.72E+07	1.67E+07	1.03
1	2.89E+07	2.96E+07	0.98
0.98	4.88E+07	4.47E+07	1.09
0.79	2413459	2728114	0.88
1	1.43E+07	1.31E+07	1.09
0.98	1.71E+07	1.88E+07	0.91
0.81	823139	873282	0.94
0.96	1569956	1287471	1.22
0.96	1569956	1287471	1.22
0.97	4058271	3706302	1.09
1	4373029	3916237	1.12
0.99	5860618	5188982	1.13
0.96	1680798	1439927	1.17
0.99	9489921	7641116	1.24
0.72	2228752	1.19E+07	0.19
0.99	9328971	7991936	1.17
0.99	2.22E+07	1.96E+07	1.13
0.98	1.49E+07	1.31E+07	1.14
0.98	1.49E+07	1.31E+07	1.14
0.92	1.42E+07	1.41E+07	1.01
0.98	296093	190208	1.56
0.97	518311	574235	0.90
0.9	303495	361593	0.84
0.93	5078549	4819354	1.05
0.92	1.61E+07	1.15E+07	1.40
0.77	2.13E+07	1.27E+07	1.68
0.93	7552828	5534178	1.36
0.93	1073549	1118672	0.96
0.98	1465227	1396702	1.05

0.94	1.21E+07	1.30E+07	0.93
0.98	4.27E+07	4.23E+07	1.01
0.98	5650527	7213317	0.78
0.97	776853	901533	0.86
0.97	8709524	7143795	1.22
0.97	8709524	7143795	1.22
0.93	503003	502849	1.00
0.97	750468	787861	0.95
0.96	2699373	2005897	1.35
0.98	2485819	2202993	1.13
1	6088125	5115423	1.19
0.97	4029878	2452151	1.64
0.97	4029878	2452151	1.64
0.92	5139585	3857098	1.33
1	7215976	6061688	1.19
0.82	3877516	2548695	1.52
0.87	5148333	6586942	0.78
0.99	5699614	5453875	1.05
0.98	6960983	5610563	1.24
0.92	9134876	7936278	1.15
0.92	9134876	7936278	1.15
0.76	1647237	2133434	0.77
0.91	1.25E+07	8861634	1.41
0.94	1.30E+07	2.06E+07	0.63
0.94	3687052	3294874	1.12
0.98	2518744	2537320	0.99
0.98	2518744	2537320	0.99
1	3308650	3549288	0.93
0.77	6883079	5941712	1.16
0.95	8333495	8239946	1.01
0.97	1.11E+07	1.08E+07	1.03
1	1.07E+07	1.16E+07	0.92
0.96	3.30E+07	3.45E+07	0.96
1	2.88E+07	2.88E+07	1.00
0.97	1619100	1062978	1.52
0.97	1769549	1610698	1.10
0.99	2235328	2436979	0.92
0.98	2759281	2638788	1.05
0.98	9418758	1.17E+07	0.81
0.98	8025520	7687209	1.04
0.77	1.04E+07	8590917	1.21
0.77	1.04E+07	8590917	1.21
0.94	3.12E+07	3.75E+07	0.83
0.94	3.12E+07	3.75E+07	0.83
0.93	1407904	1458090	0.97
0.97	1338639	960643	1.39
0.97	1413291	1126955	1.25
0.98	2301188	1664895	1.38
0.98	3082139	2103594	1.47
1	7439787	5100528	1.46
0.99	1939853	1369781	1.42

0.99	8274589	6456657	1.28
0.98	1769787	2114250	0.84
1	2514667	2427022	1.04
0.87	3082271	4280439	0.72
0.98	2765514	2465737	1.12
0.91	2565655	3145231	0.82
0.99	2.05E+07	1.74E+07	1.18
0.99	2.05E+07	1.74E+07	1.18
0.99	2.95E+07	3.18E+07	0.93
0.12	6361615	1.86E+08	0.03
0.53	3572088	3021525	1.18
0.99	5.59E+07	5.00E+07	1.12
0.99	2576373	2765730	0.93
0.97	2920847	3360007	0.87
0.98	5296834	5145574	1.03
0.8	2252557	1747364	1.29
0.84	1206158	1669285	0.72
0.98	1716042	1748536	0.98
0.92	2392121	2787944	0.86
0.99	5411058	6461978	0.84
0.97	8272804	7643997	1.08
0.98	1.26E+07	1.19E+07	1.06
0.99	2.75E+07	2.25E+07	1.22
1	3.19E+07	3.18E+07	1.00
0.98	2438081	2423249	1.01
0.96	2115874	1986736	1.07
0.98	6586823	6555829	1.00
0.94	1.08E+07	9580934	1.13
0.94	1.08E+07	9580934	1.13
0.94	1.08E+07	9580934	1.13
0.96	939502	848174	1.11
0.99	2739482	2731735	1.00
0.85	3536369	3702260	0.96
0.98	5166931	5042219	1.02
0.95	1.55E+07	1.57E+07	0.99
0.97	2.52E+07	2.39E+07	1.05
0.21	5739393	3977269	1.44
0.97	8539907	6803017	1.26
0.99	1.20E+07	1.01E+07	1.19
0.99	4299602	3438740	1.25
0.99	8668282	7639570	1.13
0.91	6582610	6953054	0.95
0.91	6582610	6953054	0.95
0.96	754483	867931	0.87
0.97	8146922	8113963	1.00
1	3.36E+07	3.01E+07	1.12
1	3.68E+07	3.30E+07	1.12
1	3.68E+07	3.30E+07	1.12
0.91	2537147	2069387	1.23
0.79	3461450	4207614	0.82
0.99	5338252	5664864	0.94

0.97	6596705	7297037	0.90
0.98	2.65E+07	2.18E+07	1.22
0.98	2.65E+07	2.18E+07	1.22
0.84	1005328	1.44E+07	0.07
0.98	2715741	2257782	1.20
0.83	7955600	6624443	1.20
0.52	7440373	2.02E+07	0.37
0.88	2.12E+07	2.03E+07	1.04
0.83	1276063	779651	1.64
0.95	3880075	2573203	1.51
0.95	4415440	4031680	1.10
0.98	1838580	1507705	1.22
0.98	1838580	1507705	1.22
0.98	2736497	2495400	1.10
0.99	5.13E+07	4.98E+07	1.03
0.98	1502767	1313771	1.14
0.98	1502767	1313771	1.14
0.85	2277659	1911049	1.19
0.76	3272067	2166464	1.51
1	3586857	3574419	1.00
1	1.48E+07	1.31E+07	1.13
0.96	3037717	2453052	1.24
0.94	3627860	4337154	0.84
0.98	9426114	8070510	1.17
0.98	9426114	8070510	1.17
1	2.81E+07	2.48E+07	1.13
1	3.07E+07	2.60E+07	1.18
0.98	8052003	6514602	1.24
0.9	2702542	2134680	1.27
0.99	1846672	1424953	1.30
0.99	1846672	1424953	1.30
0.85	1.19E+07	1.50E+07	0.79
0.8	1480076	1951257	0.76
0.8	2053249	2547990	0.81
0.78	1716308	1470651	1.17
0.89	531085	535528	0.99
0.73	3227296	2661202	1.21
0.97	3036793	3614186	0.84
0.99	4917830	4467177	1.10
0.95	4499297	4549931	0.99
0.99	1.39E+07	1.11E+07	1.25
0.96	2.44E+07	1.46E+07	1.67
0.98	1.98E+07	1.83E+07	1.08
0.35	3.05E+07	2.63E+07	1.16
1	1.19E+08	1.05E+08	1.13
0.91	2524913	2393486	1.05
0.95	3780658	3151738	1.20
0.97	9058287	1.28E+07	0.71
0.97	4664110	3831596	1.22
0.93	1.02E+07	1.95E+07	0.52
0.97	1.38E+07	1.27E+07	1.09

0.97	1.38E+07	1.27E+07	1.09
0.97	5052062	4193019	1.20
0.98	467052	559337	0.84
0.97	1.42E+07	1.41E+07	1.01
0.98	3603149	3188990	1.13
0.17	2269975	7479919	0.30
0.98	2.06E+07	2.16E+07	0.95
0.98	2.06E+07	2.16E+07	0.95
0.98	2.06E+07	2.16E+07	0.95
0.88	8466710	4648887	1.82
0.26	3174479	973143	3.26
0.91	3946719	3875736	1.02
0.96	4991437	3960558	1.26
0.96	5201424	4647053	1.12
1	1260358	1086623	1.16
0.99	1667781	1819639	0.92
0.98	2679221	2446144	1.10
0.99	3166250	2910128	1.09
0.99	4956824	4430489	1.12
0.99	4712875	4570958	1.03
1	1.17E+07	1.10E+07	1.06
1	2.87E+07	2.55E+07	1.13
1	3.93E+07	3.27E+07	1.20
0.97	3040843	2805743	1.08
0.97	3040843	2805743	1.08
0.99	4436456	4084854	1.09
0.93	6693499	5598226	1.20
0.93	6693499	5598226	1.20
1	1.76E+07	1.54E+07	1.14
1	4.85E+07	4.36E+07	1.11
0.98	1692300	1496682	1.13
1	2860227	2621371	1.09
0.98	4288680	4144895	1.03
0.97	4873503	5475201	0.89
0.96	8451760	7938423	1.06
0.96	8451760	7938423	1.06
1	9223284	9216811	1.00
0.99	1.14E+07	1.08E+07	1.06
0.99	1.14E+07	1.08E+07	1.06
0.95	1.45E+07	1.35E+07	1.07
1	1.66E+07	1.69E+07	0.98
0.99	1.72E+07	1.78E+07	0.97
0.99	1.72E+07	1.78E+07	0.97
0.98	2.53E+07	2.67E+07	0.95
0.93	1884121	1774963	1.06
0.97	3805796	2747085	1.39
0.97	3805796	2747085	1.39
0.96	8087750	8850222	0.91
0.91	5719196	4577580	1.25
0.91	5719196	4577580	1.25
0.94	1.11E+07	9479483	1.17

0.94	1.11E+07	9479483	1.17
1	1.60E+07	1.39E+07	1.15
1	1.60E+07	1.39E+07	1.15
0.93	1.16E+07	9251670	1.25
0.83	2.39E+07	2.82E+07	0.85
0.98	1.10E+08	9.48E+07	1.16
0.97	1.26E+08	1.21E+08	1.04
0.94	4409472	3553864	1.24
0.89	1.06E+07	9360536	1.13
0.96	1.14E+07	1.04E+07	1.10
0.96	1.14E+07	1.04E+07	1.10
0.94	4082799	3622565	1.13
0.83	3016356	1940399	1.55
0.96	3528653	3440852	1.03
0.99	1.58E+07	1.55E+07	1.02
0.99	1904990	1842720	1.03
0.99	2316962	1991537	1.16
0.93	4715895	5790056	0.81
0.93	4715895	5790056	0.81
0.98	847027	825916	1.03
0.97	3065153	3326880	0.92
0.97	3065153	3326880	0.92
0.96	1422410	1150463	1.24
0.99	2920048	2244273	1.30
1	4949418	4283007	1.16
1	6522384	5692112	1.15
1	1.15E+07	9268086	1.24
1	1.15E+07	9483212	1.21
1	1.56E+07	1.32E+07	1.18
1	5.39E+07	4.92E+07	1.10
1	2.30E+08	1.85E+08	1.24
0.99	2556429	2513513	1.02
0.91	4356443	3380751	1.29
0.94	6001656	6431457	0.93
0.94	6001656	6431457	0.93
0.98	1.09E+07	1.06E+07	1.03
0.99	2.59E+07	2.21E+07	1.17
1	2.16E+08	2.17E+08	1.00
0.94	1042654	1139466	0.92
0.95	2192792	2028202	1.08
0.96	4795724	4217848	1.14
0.99	7214990	5951757	1.21
0.98	7426034	8029113	0.92
0.98	7426034	8029113	0.92
0.94	9453882	8150427	1.16
0.94	1.31E+07	1.29E+07	1.02
0.95	2.16E+07	2.04E+07	1.06
0.95	2.16E+07	2.04E+07	1.06
0.97	2.92E+07	2.90E+07	1.01
0.99	3.44E+07	3.06E+07	1.12
0.9	4.04E+07	4.11E+07	0.98

1	1.20E+08	1.13E+08	1.06
1	2.03E+08	1.92E+08	1.06
0.89	3435446	4271977	0.80
0.99	7015681	6742513	1.04
1	2.51E+07	2.51E+07	1.00
0.97	975539	873534	1.12
1	1665740	1503439	1.11
1	1665740	1503439	1.11
1	5.18E+07	4.70E+07	1.10
1	5.18E+07	4.70E+07	1.10
0.99	5.20E+07	4.87E+07	1.07
0.99	5.20E+07	4.87E+07	1.07
0.98	1283585	1122668	1.14
0.95	1270085	1132108	1.12
0.94	3457074	2734449	1.26
1	5.33E+07	4.65E+07	1.15
0.99	2.56E+07	2.47E+07	1.04
0.79	6204192	6385226	0.97
0.96	1894372	1767346	1.07
0.99	1.55E+07	1.57E+07	0.99
0.97	1.71E+07	1.80E+07	0.95
0.74	1902296	1505226	1.26
0.98	6000840	5765783	1.04
0.98	6000840	5765783	1.04
0.97	9678034	6822378	1.42
0.98	3160512	3182652	0.99
0.87	1321311	984249	1.34
0.94	1194876	1138446	1.05
0.95	2856749	2216747	1.29
1	8937984	7992374	1.12
0.99	1.04E+07	9201950	1.13
0.99	1.04E+07	9201950	1.13
0.98	2.63E+07	2.58E+07	1.02
0.84	2.90E+07	3.66E+07	0.79
0.98	1435243	1330901	1.08
0.98	1435243	1330901	1.08
0.99	3709656	2639519	1.41
0.94	1130698	1443280	0.78
0.99	2317657	1762326	1.32
0.99	2317657	1762326	1.32
0.99	2226359	1971883	1.13
0.99	4230363	3607230	1.17
0.99	7720717	6943327	1.11
0.99	7952486	7014210	1.13
0.97	2951289	5643415	0.52
0.98	498535	504490	0.99
0.9	1316122	755536	1.74
0.97	1482316	1416026	1.05
0.92	1466080	1484598	0.99
0.99	1396836	1500208	0.93
0.96	1718673	1647654	1.04

0.96	2564423	2699157	0.95
0.98	3797552	3729642	1.02
0.95	2047950	7688232	0.27
0.93	7915172	7833901	1.01
0.99	1.95E+07	2.01E+07	0.97
0.99	1.95E+07	2.01E+07	0.97
1	7.98E+07	7.66E+07	1.04
0.99	4.37E+07	3.78E+07	1.16
0.99	4.37E+07	3.78E+07	1.16
0.99	4.37E+07	3.78E+07	1.16
0.97	5.22E+07	4.74E+07	1.10
0.98	1170277	1108550	1.06
0.9	1205680	1256340	0.96
0.98	3528526	3925012	0.90
1	6893245	5357381	1.29
1	6893245	5357381	1.29
0.92	7137674	5621293	1.27
0.95	6808861	6615716	1.03
1	7466614	7131129	1.05
0.95	1.53E+07	1.68E+07	0.91
0.99	1.99E+07	1.81E+07	1.10
0.87	2.88E+07	3.42E+07	0.84
1	4.97E+07	4.10E+07	1.21
1	4.97E+07	4.10E+07	1.21
1	5.05E+07	4.45E+07	1.13
1	5.33E+07	4.63E+07	1.15
1	1.39E+08	1.36E+08	1.02
1	1.84E+08	1.72E+08	1.07
0.91	1617936	1238307	1.31
0.99	5534532	5672769	0.98
0.99	1.82E+07	1.54E+07	1.18
0.97	1546886	1422088	1.09
0.99	5249558	4800414	1.09
0.99	5249558	4800414	1.09
1	6047292	5639284	1.07
1	6047292	5639284	1.07
0.99	4643277	4674087	0.99
1	2.21E+08	2.19E+08	1.01
0.98	2.30E+07	1.96E+07	1.17
1	5330924	4419844	1.21
0.96	1.47E+07	1.31E+07	1.12
0.95	1.29E+07	1.41E+07	0.91
0.79	1.32E+07	1.80E+07	0.73
1	2.62E+07	2.08E+07	1.26
0.99	2.71E+07	2.34E+07	1.16
1	2.89E+07	2.45E+07	1.18
1	6.46E+07	5.29E+07	1.22
1	8.09E+07	7.12E+07	1.14
1	1.79E+08	1.63E+08	1.10
0.84	1877942	2209067	0.85
0.98	3982927	3105789	1.28

0.99	1.08E+07	8889080	1.21
0.88	1.04E+07	1.18E+07	0.88
0.97	1.07E+07	1.22E+07	0.88
0.97	1.07E+07	1.22E+07	0.88
0.99	2.22E+07	1.66E+07	1.34
0.96	2718513	2745851	0.99
0.97	1.14E+07	1.09E+07	1.05
1	3.52E+07	2.94E+07	1.20
0.99	2814382	2404542	1.17
0.99	2814382	2404542	1.17
0.97	3464707	2263869	1.53
0.98	6349201	5475787	1.16
0.95	7838782	6645480	1.18
0.95	8113881	6658741	1.22
0.99	1.10E+07	8852574	1.24
0.99	2.91E+07	2.34E+07	1.24
1	2.88E+07	2.37E+07	1.22
0.78	6.01E+07	4.26E+07	1.41
0.98	5.53E+07	4.53E+07	1.22
0.97	1385164	1294657	1.07
0.97	1.05E+07	1.03E+07	1.02
0.99	2.16E+07	2.43E+07	0.89
0.82	1934524	655743	2.95
0.96	1.63E+07	1.42E+07	1.15
0.81	1897813	1576802	1.20
0.86	1.07E+07	1.21E+07	0.88
1	1714369	1714369	1.00
0.87	826382	635110	1.30
0.98	1.67E+07	1.27E+07	1.31
0.98	1.67E+07	1.27E+07	1.31
0.94	3132917	3689035	0.85
0.97	1.85E+07	1.44E+07	1.28
0.99	4003114	3615365	1.11
1	495943	495943	1.00
0.99	5881592	4317482	1.36
0.99	5881592	4317482	1.36
0.99	1277763	1150491	1.11
0.83	2482449	2256378	1.10
0.83	2482449	2256378	1.10
0.99	2.45E+07	2.29E+07	1.07
1	3.68E+07	3.58E+07	1.03
0.96	2724353	2122067	1.28
0.94	1250976	1301960	0.96
0.97	2381379	2575271	0.92
0.97	2381379	2575271	0.92
0.98	3263025	2882224	1.13
0.98	3263025	2882224	1.13
0.96	5886537	4633404	1.27
0.99	6727417	6173630	1.09
0.97	6653919	7180082	0.93
0.95	1.56E+07	1.27E+07	1.23

0.95	1.56E+07	1.27E+07	1.23
0.95	1.56E+07	1.27E+07	1.23
0.99	2148398	2096083	1.02
0.37	2.06E+07	3.18E+07	0.65
0.95	2832364	2371790	1.19
0.99	9482128	8667465	1.09
0.99	9482128	8667465	1.09
0.99	1.50E+07	1.30E+07	1.15
0.99	2754835	2523624	1.09
0.99	2754835	2523624	1.09
1	3402117	3151386	1.08
0.81	2759889	2184871	1.26
0.98	2773341	2288219	1.21
1	1.79E+07	1.44E+07	1.24
0.87	2652614	1602150	1.66
0.9	2935784	2902740	1.01
0.86	3742400	2624367	1.43
0.99	4.43E+07	3.90E+07	1.14
0.87	3410767	3059302	1.11
0.98	4910225	4120484	1.19
1	1.45E+07	1.55E+07	0.94
0.99	1300720	1024636	1.27
0.95	3191151	2740260	1.16
0.98	5427751	4146747	1.31
0.98	1092281	1393266	0.78
0.98	1092281	1393266	0.78
0.99	1409513	1206280	1.17
0.56	1.21E+07	2.01E+07	0.60
0.92	890485	1022207	0.87
0.98	951988	1036139	0.92
0.97	2375277	2484110	0.96
0.93	3966396	3077434	1.29
0.93	3966396	3077434	1.29
0.95	3870259	3399513	1.14
0.99	2.31E+07	2.27E+07	1.02
0.99	2.16E+07	2.18E+07	0.99
0.95	4287664	3565509	1.20
0.99	7277169	6395491	1.14
0.83	3.66E+07	2.81E+07	1.30
0.91	7164910	5498464	1.30
0.85	6241427	6097360	1.02
0.94	8937146	1.09E+07	0.82
1	2043791	2538163	0.81
0.98	1878924	2580290	0.73
0.99	5430851	4805337	1.13
1	6135318	6048128	1.01
0.96	5564154	6218355	0.89
0.99	8844813	8303581	1.07
1	2.42E+07	3.02E+07	0.80
1	8.77E+07	8.70E+07	1.01
0.95	3229713	2887196	1.12

0.81	5.57E+07	4.46E+07	1.25
1	3.13E+08	2.59E+08	1.21
0.93	1.34E+07	1.43E+07	0.94
0.87	890406	830115	1.07
0.99	4462703	4504611	0.99
0.99	4462703	4504611	0.99
0.99	1.28E+07	1.18E+07	1.08
0.99	5.51E+07	5.76E+07	0.96
1	7.65E+07	7.74E+07	0.99
0.74	1.65E+07	1.81E+07	0.91
0.98	6330228	5784151	1.09
0.97	1794185	1524753	1.18
0.94	3257230	2552192	1.28
0.95	3636165	2887167	1.26
0.84	5408175	3348270	1.62
0.99	4540760	4089608	1.11
0.99	7060904	6908325	1.02
0.99	6839660	7556367	0.91
0.99	6839660	7556367	0.91
0.98	9345714	8657081	1.08
1	1.03E+07	9171218	1.12
0.99	1.36E+07	1.11E+07	1.23
1	1.70E+07	1.63E+07	1.04
0.99	2.03E+07	1.69E+07	1.20
0.99	2.03E+07	1.69E+07	1.20
1	2.21E+07	2.00E+07	1.11
0.96	3.78E+07	2.97E+07	1.27
0.97	4.77E+07	4.25E+07	1.12
0.99	2.50E+07	5.92E+07	0.42
1	8.36E+07	8.03E+07	1.04
1	8.36E+07	8.03E+07	1.04
0.99	8.69E+07	8.33E+07	1.04
0.99	8.69E+07	8.33E+07	1.04
0.96	378461	418993	0.90
0.97	546966	524347	1.04
0.97	5766099	5298499	1.09
0.99	7540883	7012607	1.08
0.82	1.01E+07	1.53E+07	0.66
0.89	9503122	2.54E+07	0.37
0.91	1118787	1464991	0.76
0.84	3200518	3534381	0.91
0.93	6891394	7371748	0.93
0.81	1.53E+07	1.95E+07	0.78
0.89	1513500	1442788	1.05
0.99	3925510	3390756	1.16
0.69	3.46E+07	1.25E+07	2.77
0.99	1.37E+07	1.15E+07	1.19
0.99	1.37E+07	1.15E+07	1.19
1	2.52E+07	2.34E+07	1.08
0.95	1051508	1301557	0.81
0.83	2754204	2603671	1.06

0.87	3459268	2825454	1.22
0.99	1.01E+07	8677981	1.16
0.99	1.50E+07	1.29E+07	1.16
0.99	1.50E+07	1.29E+07	1.16
0.99	3.18E+07	2.56E+07	1.24
1	4.36E+07	3.96E+07	1.10
0.99	5.32E+07	5.25E+07	1.01
0.99	7.68E+07	6.83E+07	1.12
0.99	7.68E+07	6.83E+07	1.12
0.96	1917728	1752766	1.09
1	2415130	2267658	1.07
0.8	1.05E+07	2543321	4.13
0.8	1.05E+07	2543321	4.13
0.98	4309422	4478939	0.96
0.98	4309422	4478939	0.96
0.99	5851998	5272422	1.11
0.99	5851998	5272422	1.11
0.99	5851998	5272422	1.11
0.99	9645821	9492222	1.02
0.99	9645821	9492222	1.02
0.92	3.60E+07	3.24E+07	1.11
0.92	3.60E+07	3.24E+07	1.11
0.98	1565937	1392657	1.12
0.83	6842318	5218653	1.31
0.87	1.79E+07	1.69E+07	1.06
0.95	6735369	4686292	1.44
0.94	4.92E+07	6.14E+07	0.80
0.89	1431933	1257648	1.14
0.98	1792401	1840171	0.97
0.76	3341059	2163963	1.54
0.97	3715031	3114100	1.19
0.99	2.56E+07	2.15E+07	1.19
0.72	879755	1084782	0.81
0.87	3330841	2802973	1.19
0.94	3582856	3792864	0.94
1	6.31E+07	4.04E+07	1.56
1	7207461	6502858	1.11
0.85	6448460	3154649	2.04
0.98	8968625	1.01E+07	0.89
0.96	1285902	1053891	1.22
0.97	2870880	1661809	1.73
0.99	1.01E+07	9315272	1.08
0.91	607495	488400	1.24
0.97	2643151	2342461	1.13
0.97	2643151	2342461	1.13
0.97	2402533	2343668	1.03
0.81	7291565	5750604	1.27
0.99	3493984	5.62E+07	0.06
0.97	611249	587346	1.04
0.97	611249	587346	1.04
0.91	825818	718045	1.15

0.98	1154621	1047230	1.10
0.92	7840407	7352099	1.07
0.98	8405365	8943860	0.94
1	1.49E+07	1.34E+07	1.11
0.99	2.33E+07	1.99E+07	1.17
0.76	1.69E+07	3.61E+07	0.47
1	4.09E+07	3.97E+07	1.03
0.76	4610620	2723459	1.69
0.73	5447713	8100278	0.67
0.52	5.55E+07	2.42E+07	2.29
0.91	2001301	1632634	1.23
1	1.20E+07	1.13E+07	1.06
0.98	2.37E+07	2.15E+07	1.10
0.99	4.03E+07	3.25E+07	1.24
0.95	1072080	639194	1.68
1	2836592	2199213	1.29
0.93	3809739	5116393	0.74
0.89	6347282	5227593	1.21
0.99	9311164	8577754	1.09
1	1.11E+07	1.09E+07	1.02
0.84	268038	289209	0.93
0.94	8419562	9656571	0.87
0.94	8419562	9656571	0.87
0.98	1.89E+07	1.83E+07	1.03
0.95	1761850	1363367	1.29
0.99	3049875	2834000	1.08
1	2360245	2070684	1.14
1	9757635	8538738	1.14
0.95	5043798	5113824	0.99
1	1.24E+07	1.25E+07	0.99
0.99	6073238	5294740	1.15
0.99	6073238	5294740	1.15
0.99	1.80E+07	1.55E+07	1.16
1	5475441	4794162	1.14
0.98	951814	945572	1.01
0.98	1591840	1549645	1.03
0.96	1154251	1621519	0.71
0.99	1815316	1904090	0.95
0.99	5655022	5645454	1.00
1	6097078	5938336	1.03
1	1.23E+07	1.24E+07	0.99
1	7.65E+07	8.36E+07	0.92
0.99	2578295	2189723	1.18
0.99	5518788	4534858	1.22
0.98	6555003	6110755	1.07
0.98	6555003	6110755	1.07
0.94	7326449	6929165	1.06
1	8480451	7584364	1.12
0.75	1597668	1153251	1.39
1	3.86E+07	3.22E+07	1.20
0.93	1875244	2.42E+07	0.08

1	1.67E+07	1.38E+07	1.21
0.95	2328348	1856376	1.25
0.91	5646465	5253939	1.07
0.97	1028190	932778	1.10
0.99	1679472	1489328	1.13
0.99	2668958	2632006	1.01
1	3138148	2853657	1.10
0.98	3566844	3562564	1.00
0.98	3566844	3562564	1.00
0.99	3945020	3737047	1.06
1	7083470	6541687	1.08
1	7083470	6541687	1.08
1	1.09E+07	9430946	1.16
1	1.24E+07	1.04E+07	1.19
0.99	1.88E+07	1.62E+07	1.16
1	2.42E+07	2.05E+07	1.18
0.97	3.57E+07	4.31E+07	0.83
0.99	5.13E+07	4.98E+07	1.03
0.93	5238924	3245230	1.61
0.98	5692732	4911114	1.16
0.89	2.24E+07	1.30E+07	1.72
0.93	722144	811609	0.89
0.94	1468707	1194763	1.23
0.98	1614951	1439186	1.12
0.98	1614951	1439186	1.12
0.98	1614951	1439186	1.12
1	2717135	2222127	1.22
1	2717135	2222127	1.22
1	9558266	7014681	1.36
0.76	912894	1089789	0.84
0.86	1.03E+07	1.23E+07	0.84
0.57	3582406	2.71E+07	0.13
0.99	1763055	1405966	1.25
0.89	2784812	2783271	1.00
0.96	4278685	3555558	1.20
0.96	4278685	3555558	1.20
0.99	9219038	8303740	1.11
0.98	9879827	8980437	1.10
0.99	9824122	9107759	1.08
0.99	1.21E+07	1.01E+07	1.20
0.99	2.60E+07	2.04E+07	1.27
0.99	2.60E+07	2.04E+07	1.27
1	3.26E+07	2.82E+07	1.16
1	9.92E+07	8.55E+07	1.16
0.71	3428617	892536	3.84
0.95	455494	416322	1.09
0.85	4670271	4886656	0.96
0.88	3176816	1.01E+07	0.31
0.74	1.94E+07	2.16E+07	0.90
1	2.59E+07	2.44E+07	1.06
1	4.85E+07	4.17E+07	1.16

1	1.60E+08	1.26E+08	1.27
0.89	4212236	4179341	1.01
0.94	4832200	5964794	0.81
0.98	1864149	1933488	0.96
0.92	3417958	3019711	1.13
0.98	1013415	898845	1.13
1	4966524	4078341	1.22
1	1.90E+07	1.64E+07	1.16
1	4.74E+07	3.97E+07	1.19
1	1.74E+08	1.50E+08	1.16
0.94	994684	870114	1.14
0.94	1.27E+07	1.49E+07	0.85
0.99	894869	1036866	0.86
0.98	1125425	1239115	0.91
0.99	2705066	2715876	1.00
0.94	2511739	1693578	1.48
0.96	760171	759340	1.00
0.96	760171	759340	1.00
0.97	6427991	5198474	1.24
0.98	5745071	5393671	1.07
0.98	5745071	5393671	1.07
1	6750949	6750949	1.00
0.99	2408199	2005611	1.20
0.35	4639767	2623971	1.77
0.78	6396053	4937369	1.30
0.97	5847162	5768497	1.01
0.85	6361161	6477938	0.98
0.85	9728093	7740462	1.26
0.93	6722791	8729812	0.77
0.85	1.37E+07	8796880	1.56
0.97	2.76E+07	2.38E+07	1.16
0.85	2098833	2082100	1.01
0.99	1254338	1239831	1.01
0.97	3482229	2903058	1.20
0.98	3732419	3211960	1.16
0.98	9581062	8138341	1.18
0.98	9581062	8138341	1.18
0.97	1.41E+07	1.18E+07	1.19
0.98	1.76E+07	1.67E+07	1.05
0.29	1693820	3298460	0.51
0.98	9095775	3249826	2.80
0.98	2387423	2034267	1.17
0.98	2347336	2147053	1.09
0.99	2347604	2242786	1.05
0.8	5565241	3252306	1.71
0.93	693540	1048449	0.66
0.94	2250595	2487664	0.90
0.98	2078853	3224028	0.64
0.98	6834792	7508415	0.91
0.97	1.12E+07	1.23E+07	0.91
1	2.89E+07	2.96E+07	0.98

0.98	1192365	950298	1.25
0.93	2516823	1829047	1.38
0.91	2484845	2159184	1.15
0.96	3450568	2874032	1.20
0.98	5745147	4785075	1.20
0.98	7521789	6381729	1.18
0.98	7521789	6381729	1.18
1	7639326	6837974	1.12
0.97	1793098	1511809	1.19
0.9	2969008	3611802	0.82
0.82	1988642	1647218	1.21
0.95	2886144	2477816	1.16
0.97	3417554	3714375	0.92
0.85	667193	3259753	0.20
0.98	2.34E+07	2.10E+07	1.11
0.99	2651116	2346106	1.13
0.94	3784871	3816289	0.99
0.98	1.05E+07	9728064	1.08
0.91	370553	328011	1.13
0.95	2525343	932123	2.71
0.96	2033378	2458383	0.83
0.98	6066360	2870914	2.11
0.98	6066360	2870914	2.11
1	3.10E+07	1.50E+07	2.07
1	3.10E+07	1.50E+07	2.07
0.99	3.82E+07	3.20E+07	1.19
1	4.57E+07	4.04E+07	1.13
0.99	1720003	1368581	1.26
0.76	3421234	3345379	1.02
0.99	5473573	4705573	1.16
0.99	7176981	6777928	1.06
0.99	1.54E+07	1.04E+07	1.48
0.97	1.52E+07	6545831	2.32
0.97	2691115	2280538	1.18
0.97	2691115	2280538	1.18
0.96	9294068	8137063	1.14
0.96	596521	475837	1.25
0.97	2696286	2209683	1.22
0.97	2696286	2209683	1.22
0.97	4337090	3630942	1.19
0.97	4874217	4873123	1.00
0.97	4874217	4873123	1.00
0.98	1299449	1079632	1.20
0.98	1299449	1079632	1.20
0.99	4025123	4148788	0.97
0.94	1099709	792044	1.39
0.97	1185719	1143840	1.04
0.95	1822331	1846842	0.99
0.99	2802444	2628203	1.07
0.98	2694125	2739843	0.98
0.96	6063746	6675873	0.91

0.97	7513970	7531190	1.00
0.98	8895252	8436936	1.05
0.96	8441893	9217419	0.92
0.99	1.05E+07	9292670	1.13
0.04	2658887	1.17E+07	0.23
1	1.39E+07	1.29E+07	1.08
0.94	6.63E+07	6.17E+07	1.07
0.94	6.63E+07	6.17E+07	1.07
0.99	6.57E+07	6.35E+07	1.03
0.99	6.57E+07	6.35E+07	1.03
0.96	1203776	710598	1.69
0.96	358509	312694	1.15
0.98	1085430	975365	1.11
0.95	7453487	9484758	0.79
0.95	1.87E+07	1.87E+07	1.00
0.98	3365763	2859561	1.18
0.98	5762309	4298861	1.34
0.79	1.07E+07	1.15E+07	0.93
0.96	1.13E+07	1.14E+07	0.99
0.94	1.16E+07	1.29E+07	0.90
0.87	6939352	1.41E+07	0.49
0.96	2518764	3679227	0.68
0.97	2901634	1923205	1.51
0.97	2901634	1923205	1.51
0.92	1382050	1438680	0.96
0.92	1382050	1438680	0.96
0.99	1810011	1573141	1.15
0.93	4060048	3325931	1.22
0.92	783732	725864	1.08
1	4571957	4138301	1.10
0.95	1653197	1442134	1.15
0.97	1942688	1653041	1.18
0.97	1942688	1653041	1.18
0.96	3384729	3760384	0.90
0.99	4784544	4374000	1.09
0.98	6769694	7267711	0.93
0.89	2580302	2613145	0.99
0.87	1958080	1461678	1.34
0.92	1293288	1762689	0.73
0.88	5240723	5086651	1.03
0.88	5240723	5086651	1.03
1	6361977	6715620	0.95
0.99	1.67E+07	1.34E+07	1.25
0.99	1.67E+07	1.34E+07	1.25
0.98	2.19E+07	1.72E+07	1.27
1	7.81E+07	6.14E+07	1.27
0.95	636672	675376	0.94
0.95	4931652	5092309	0.97
0.92	1.33E+07	8908324	1.49
0.95	1.10E+07	1.25E+07	0.88
0.99	2.83E+07	2.38E+07	1.19

0.99	2.83E+07	2.38E+07	1.19
0.94	1529440	1007788	1.52
1	1.11E+08	8.61E+07	1.29
0.98	2.60E+07	2.38E+07	1.09
0.9	627555	658749	0.95
0.85	861885	1583674	0.54
0.99	5290068	5582967	0.95
0.22	1.87E+07	6839636	2.73
0.9	4235422	3820579	1.11
0.9	4235422	3820579	1.11
0.94	5729846	4051809	1.41
0.98	2.19E+07	1.81E+07	1.21
0.98	2.19E+07	1.81E+07	1.21
1	6.09E+07	5.54E+07	1.10
1	1775636	1524555	1.16
0.93	9196298	1.00E+07	0.92
0.98	3933493	3606803	1.09
0.95	8828160	1.05E+07	0.84
0.98	2.14E+07	1.79E+07	1.20
0.98	2.14E+07	1.79E+07	1.20
0.96	2232338	1852792	1.20
0.82	2450902	2220847	1.10
0.94	2477083	2375069	1.04
0.94	1.16E+07	1.11E+07	1.05
0.94	1.09E+07	1.16E+07	0.94
0.98	8177905	7231178	1.13
0.99	1.30E+07	1.34E+07	0.97
0.95	1593271	1198321	1.33
0.94	1394765	1253698	1.11
0.99	6680043	6045770	1.10
0.99	7802471	7766359	1.00
0.99	7802471	7766359	1.00
0.98	9679125	8351012	1.16
0.98	9008121	1.04E+07	0.87
0.99	1.32E+07	1.31E+07	1.01
0.98	1.46E+07	1.51E+07	0.97
0.99	2609398	2579419	1.01
0.99	3566990	3251327	1.10
1	4376194	3681361	1.19
0.93	3807157	3708764	1.03
0.93	3807157	3708764	1.03
0.92	3875021	3289318	1.18
0.98	4655973	4048790	1.15
0.98	5287110	5341860	0.99
0.92	2010876	1828571	1.10
0.97	1544621	1597621	0.97
0.76	4751281	4542279	1.05
0.99	3.03E+07	2.59E+07	1.17
0.81	8362171	4864359	1.72
0.81	8362171	4864359	1.72
0.71	2.06E+07	3204031	6.43

0.79	3842440	369264	10.41
0.72	124064	2602639	0.05
0.91	1190399	1078545	1.10
0.97	5018464	4400546	1.14
0.99	1.72E+07	1.64E+07	1.05
0.73	735493	947475	0.78
0.73	735493	947475	0.78
0.99	1450192	1338635	1.08
0.94	4429453	4175718	1.06
0.98	1.29E+07	1.09E+07	1.18
0.98	2356147	2985058	0.79
0.98	2356147	2985058	0.79
0.97	2833749	3234833	0.88
0.99	830204	837737	0.99
1	1.14E+07	1.05E+07	1.09
0.98	8770100	8667180	1.01
0.99	1271827	1201832	1.06
0.99	1271827	1201832	1.06
0.89	2018266	2416898	0.84
0.94	5611939	5076216	1.11
0.99	2.91E+07	2.90E+07	1.00
0.98	5.90E+07	5.06E+07	1.17
0.51	5.07E+08	4.97E+08	1.02
0.54	5.12E+08	5.00E+08	1.02
0.85	5.46E+08	5.13E+08	1.06
0.93	2780056	2515633	1.11
0.97	4638282	3742625	1.24
0.95	2762680	2372782	1.16
0.96	1027099	930874	1.10
0.91	1369499	1146686	1.19
0.92	4687594	4526389	1.04
0.96	645908	573410	1.13
0.97	2427355	2088262	1.16
0.97	2427355	2088262	1.16
0.99	2524937	2890060	0.87
0.99	1.11E+07	1.13E+07	0.98
0.99	1.31E+07	1.46E+07	0.90
1	7.02E+07	7.52E+07	0.93
0.99	7.92E+07	9.84E+07	0.80
0.99	5426942	4918419	1.10
0.99	5426942	4918419	1.10
1	1.47E+07	1.34E+07	1.10
0.99	2440200	2189362	1.11
0.99	3.42E+07	2.87E+07	1.19
0.97	5.69E+07	5.08E+07	1.12
0.44	4836799	1818940	2.66
0.96	1953216	2024445	0.96
0.98	4758439	3585308	1.33
0.87	3113854	2297504	1.36
0.98	7555694	5466127	1.38
0.92	311460	235734	1.32

1	1197295	1120861	1.07
0.99	2369162	2278598	1.04
0.98	1.13E+07	9594605	1.18
0.94	1.19E+07	1.08E+07	1.10
0.82	2639855	2277246	1.16
0.96	4596923	3833380	1.20
0.38	6904584	5952950	1.16
0.99	1.17E+07	1.13E+07	1.04
0.99	1.17E+07	1.13E+07	1.04
0.99	1.17E+07	1.13E+07	1.04
1	3.22E+07	2.96E+07	1.09
0.3	2.78E+07	3.19E+07	0.87
1	6.37E+07	5.91E+07	1.08
1	6.37E+07	5.91E+07	1.08
0.97	925123	904039	1.02
0.98	1922709	1501579	1.28
0.89	1374313	947581	1.45
0.97	1.79E+07	1.37E+07	1.31
0.82	1178732	944939	1.25
0.98	7039123	7701896	0.91
0.96	2505472	2390033	1.05
0.96	2505472	2390033	1.05
0.99	3562407	2729620	1.31
0.87	1.02E+07	8985281	1.14
0.98	2.29E+07	2.09E+07	1.10
0.94	2474941	2451716	1.01
0.98	2.33E+07	1.95E+07	1.19
0.97	2.86E+07	2.59E+07	1.10
0.97	2.86E+07	2.59E+07	1.10
0.98	1.09E+08	1.00E+08	1.09
0.77	1907234	1537094	1.24
1	5580947	4931422	1.13
0.81	2426559	2029815	1.20
0.99	3.30E+07	2.67E+07	1.24
0.86	3240848	4325258	0.75
0.86	3240848	4325258	0.75
0.96	1.65E+07	1.26E+07	1.31
0.96	1.65E+07	1.26E+07	1.31
0.93	1.49E+07	1.33E+07	1.12
0.98	877686	856035	1.03
0.75	1521096	1155844	1.32
0.43	1612903	1486044	1.09
0.99	1.82E+07	1.64E+07	1.11
0.99	1.82E+07	1.64E+07	1.11
1	7.73E+07	7.30E+07	1.06
0.99	3001866	2955451	1.02
0.99	2.63E+07	2.49E+07	1.06
0.96	1746662	1873304	0.93
0.97	1206392	1335503	0.90
0.99	2428497	2074037	1.17
0.99	3692955	3011037	1.23

0.99	3692955	3011037	1.23
0.99	1292822	1105652	1.17
0.96	2032509	1607707	1.26
0.99	2163764	1511529	1.43
0.94	2107187	2524211	0.83
0.96	5807607	4621858	1.26
0.73	1339730	1269849	1.06
0.97	1948127	1516464	1.28
0.99	2002406	1774210	1.13
0.95	3497860	6403192	0.55
0.92	1259004	1646366	0.76
0.98	3925352	4105216	0.96
0.96	5185271	5671598	0.91
0.96	5185271	5671598	0.91
0.99	8290764	7508864	1.10
0.99	8290764	7508864	1.10
1	2.60E+07	2.40E+07	1.08
0.9	1948290	1897258	1.03
0.97	2168232	2311682	0.94
1	3719891	3313326	1.12
0.99	3867086	3476544	1.11
0.99	5391258	4012159	1.34
0.96	8936252	7248473	1.23
0.98	2.03E+07	1.92E+07	1.06
0.92	2.35E+07	2.01E+07	1.17
0.92	2.35E+07	2.01E+07	1.17
0.92	3.14E+07	2.57E+07	1.22
0.85	2876455	1418855	2.03
1	5473470	4701151	1.16
0.98	3789677	5204178	0.73
0.96	631755	601336	1.05
0.94	1112003	1045757	1.06
0.74	2.64E+07	3.03E+07	0.87
0.91	6515171	5781532	1.13
0.98	1.02E+07	8772042	1.16
0.98	1.02E+07	8772042	1.16
0.98	1.02E+07	8772042	1.16
0.9	2635666	2202662	1.20
0.89	7059854	3265098	2.16
0.98	1526400	1377868	1.11
0.88	2272023	2140104	1.06
0.94	4327256	4243995	1.02
0.83	1989725	2433801	0.82
0.99	2635516	2416413	1.09
0.99	2635516	2416413	1.09
0.9	5212220	5192038	1.00
0.63	1237574	1326784	0.93
1	6996300	7131296	0.98
0.99	1.55E+07	1.28E+07	1.21
1	1.58E+07	1.63E+07	0.97
1	3.32E+07	3.13E+07	1.06

0.83	1488588	1879744	0.79
0.99	753648	759211	0.99
0.97	7436840	5653179	1.32
0.71	1817241	805153	2.26
0.98	2.66E+07	1.49E+07	1.79
1	3.53E+07	3.56E+07	0.99
0.74	3015812	2404046	1.25
0.99	8016829	7716674	1.04
0.97	498408	575526	0.87
0.97	498408	575526	0.87
0.96	1941670	2008596	0.97
0.87	1.53E+07	1.45E+07	1.06
1	1.55E+07	1.54E+07	1.01
0.99	1.89E+07	1.93E+07	0.98
1	3.11E+07	3.07E+07	1.01
0.99	7691687	7522900	1.02
0.9	1.77E+07	3.36E+07	0.53
0.96	2.85E+07	4.49E+07	0.63
0.99	601432	483737	1.24
0.99	601432	483737	1.24
0.98	2730041	2056072	1.33
0.9	461133	418752	1.10
0.87	794354	615422	1.29
0.98	4297843	3813295	1.13
0.97	5570476	4920951	1.13
0.97	5570476	4920951	1.13
0.82	8176893	5215011	1.57
0.89	3649210	1348093	2.71
0.99	2216031	2107713	1.05
0.99	2216031	2107713	1.05
0.97	1389991	1282775	1.08
0.87	1586917	2396363	0.66
0.99	8926512	8154002	1.09
0.96	2668690	2200183	1.21
0.97	3066771	2520187	1.22
0.97	3066771	2520187	1.22
0.83	438364	346227	1.27
0.99	4633861	4853259	0.95
0.85	4113930	2502417	1.64
0.94	1724431	1599658	1.08
0.94	1724431	1599658	1.08
0.97	3679643	3245922	1.13
1	4.72E+07	4.59E+07	1.03
1	5.97E+07	6.32E+07	0.94
1	5.97E+07	6.32E+07	0.94
1	7.34E+07	6.47E+07	1.13
1	1.20E+08	1.19E+08	1.01
1	1.20E+08	1.19E+08	1.01
0.93	3641496	2864997	1.27
0.99	4540850	4004936	1.13
0.98	4859005	5982329	0.81

0.98	4859005	5982329	0.81
0.99	2.48E+07	3.83E+07	0.65
0.99	2.48E+07	3.83E+07	0.65
0.86	2912538	1665712	1.75
0.95	2325021	2172306	1.07
0.98	8530076	6607449	1.29
0.9	5438336	3872733	1.40
0.94	5236106	5103426	1.03
0.96	8143376	7517751	1.08
0.85	690417	597184	1.16
0.95	5203734	4758334	1.09
1	6992456	6992456	1.00
0.98	4401581	3876689	1.14
0.98	4401581	3876689	1.14
0.99	5076481	3355940	1.51
0.99	6737423	5924773	1.14
0.94	1.60E+07	1.30E+07	1.23
0.98	1.53E+07	1.33E+07	1.15
0.91	1734200	1852430	0.94
0.91	1734200	1852430	0.94
0.95	2574032	2027001	1.27
0.95	2574032	2027001	1.27
0.91	4010215	3541860	1.13
0.97	5078585	4111968	1.24
0.99	3.39E+07	2.81E+07	1.21
0.96	1039352	949141	1.10
0.94	1864781	1674115	1.11
0.99	831869	686557	1.21
0.98	2119994	1902288	1.11
0.93	4883115	5308069	0.92
1	9882529	8948692	1.10
1	4.50E+07	4.50E+07	1.00
0.99	2383502	2398316	0.99
0.87	742421	745584	1.00
0.99	4050919	3226618	1.26
0.98	5903900	4742628	1.24
1	3.86E+07	3.22E+07	1.20
0.9	2947692	3137910	0.94
0.77	258248	1673117	0.15
0.98	1561136	1216104	1.28
0.98	1561136	1216104	1.28
1	8385756	7677953	1.09
1	8385756	7677953	1.09
1	1.14E+07	1.05E+07	1.09
1	2.22E+07	2.02E+07	1.10
1	2.22E+07	2.02E+07	1.10
0.98	3.79E+07	2.98E+07	1.27
0.98	3.79E+07	2.98E+07	1.27
1	9601887	9850164	0.97
1	9601887	9850164	0.97
1	9601887	9850164	0.97

0.93	1.38E+07	1.18E+07	1.17
0.96	936959	956152	0.98
0.98	2220722	1974706	1.12
1	1.31E+07	1.22E+07	1.07
0.81	1.34E+07	1.31E+07	1.02
0.89	1.47E+07	1.74E+07	0.84
1	3.13E+07	2.66E+07	1.18
0.96	4.66E+07	4.36E+07	1.07
0.95	2679013	2867494	0.93
0.99	3928942	4016587	0.98
1	1.13E+07	1.08E+07	1.05
0.99	1.77E+07	1.54E+07	1.15
0.98	1.73E+07	1.88E+07	0.92
1	7.98E+07	7.31E+07	1.09
0.97	1816892	1835156	0.99
0.97	1816892	1835156	0.99
0.98	6329738	5509122	1.15
0.87	589042	516824	1.14
0.87	589042	516824	1.14
0.86	1569359	1811005	0.87
0.95	1968030	1823187	1.08
0.96	6128272	5317819	1.15
0.96	6128272	5317819	1.15
0.98	1848755	1753573	1.05
0.94	961007	886134	1.08
0.94	2178832	2212590	0.98
0.97	2878834	2541800	1.13
0.98	5360335	5555485	0.96
0.98	6459742	6259888	1.03
0.98	1.86E+07	1.68E+07	1.11
1	1.99E+07	2.06E+07	0.97
0.98	1.90E+07	2.47E+07	0.77
1	2.93E+07	3.12E+07	0.94
0.95	3.90E+07	4.71E+07	0.83
0.99	6678628	5548061	1.20
0.99	3364126	2905428	1.16
1	1.21E+07	1.11E+07	1.09
0.92	1.23E+07	1.05E+07	1.17
0.97	4671507	3944757	1.18
0.99	3.80E+07	3.26E+07	1.17
0.95	2783846	2411324	1.15
0.91	5957933	4326360	1.38
0.99	4939982	4361769	1.13
0.99	4939982	4361769	1.13
0.99	6260993	5252260	1.19
0.95	5777823	6134259	0.94
0.95	5777823	6134259	0.94
0.96	2.37E+07	1.69E+07	1.40
1	1.50E+08	1.38E+08	1.09
0.99	2433465	2180334	1.12
0.56	1407750	2431240	0.58

1	1.40E+07	1.53E+07	0.92
0.97	1.91E+07	1.62E+07	1.18
0.97	806218	778723	1.04
0.89	6651839	6937988	0.96
0.72	1.45E+07	1.20E+07	1.21
0.96	6128164	5257402	1.17
0.93	6005130	6305418	0.95
0.96	2.46E+07	1.97E+07	1.25
0.99	5.07E+07	5.34E+07	0.95
0.99	1481722	1338440	1.11
0.97	2613987	4232284	0.62
0.99	3935211	5306646	0.74
0.98	1.11E+07	1.14E+07	0.97
1	1.70E+07	1.57E+07	1.08
0.99	3702335	3645197	1.02
0.99	3702335	3645197	1.02
0.94	3660509	6377120	0.57
0.94	3660509	6377120	0.57
0.99	8925237	1.03E+07	0.87
0.98	3554753	2648362	1.34
0.98	3554753	2648362	1.34
1	4.36E+07	3.92E+07	1.11
0.98	2458988	2237936	1.10
0.83	2451867	1.01E+07	0.24
0.99	934898	1040187	0.90
0.72	2951806	3491387	0.85
0.99	5904470	5170133	1.14
0.93	9640769	9073587	1.06
0.96	1.15E+07	1.15E+07	1.00
1	3.71E+07	3.61E+07	1.03
0.8	1.24E+07	799454	15.51
0.95	1988546	1830591	1.09
0.98	2096012	1902729	1.10
0.99	3022951	3023726	1.00
0.99	3022951	3023726	1.00
0.99	3099635	3112731	1.00
0.99	3099635	3112731	1.00
0.97	1.33E+07	1.13E+07	1.18
0.98	1.17E+07	1.19E+07	0.98
0.98	1.17E+07	1.19E+07	0.98
1	1.56E+07	1.68E+07	0.93
0.96	2.13E+07	1.69E+07	1.26
1	2.62E+07	2.23E+07	1.17
0.93	2.36E+07	2.30E+07	1.03
0.93	2.36E+07	2.30E+07	1.03
0.93	2.36E+07	2.30E+07	1.03
1	2.78E+07	2.52E+07	1.10
1	2.78E+07	2.52E+07	1.10
1	2.78E+07	2.52E+07	1.10
1	2.78E+07	2.52E+07	1.10
1	3.32E+07	3.07E+07	1.08

1	3.32E+07	3.07E+07	1.08
1	6.01E+07	4.90E+07	1.23
0.92	1.15E+07	1.84E+07	0.63
0.92	1.09E+07	8970200	1.22
0.92	1.09E+07	8970200	1.22
0.83	1.12E+07	1.30E+07	0.86
0.96	994918	785719	1.27
0.98	3291169	2602811	1.26
0.88	6838008	4906968	1.39
0.96	1.44E+07	1.14E+07	1.26
0.96	1.44E+07	1.14E+07	1.26
1	5.12E+07	4.35E+07	1.18
1	5.12E+07	4.35E+07	1.18
1	5.12E+07	4.35E+07	1.18
0.99	795096	633569	1.25
0.72	1824566	1970771	0.93
0.99	2773854	2375655	1.17
0.86	6260484	6189918	1.01
0.86	2.77E+07	2.34E+07	1.18
0.82	2835996	1882360	1.51
0.99	4706236	4219490	1.12
0.99	4933477	4708863	1.05
0.09	4535935	964949	4.70
0.87	1843120	1592413	1.16
0.98	2802827	2640786	1.06
0.98	9130123	6625392	1.38
0.94	1881907	1663921	1.13
0.98	3184602	2776275	1.15
0.99	1.39E+07	1.31E+07	1.06
0.99	1582418	1997735	0.79
1	9.96E+07	8.71E+07	1.14
0.98	3377608	3308539	1.02
0.92	5573810	7512319	0.74
0.9	1.59E+07	3433997	4.63
0.99	1.68E+07	1.43E+07	1.17
0.97	3824094	3803631	1.01
0.98	1.70E+07	1.47E+07	1.16
0.95	2.24E+07	2.22E+07	1.01
1	5.32E+07	4.48E+07	1.19
1	1.63E+08	1.44E+08	1.13
1	2.13E+08	1.85E+08	1.15
1	2.13E+08	1.85E+08	1.15
1	4.55E+08	4.47E+08	1.02
0.97	2803991	2460987	1.14
0.96	1701302	1753881	0.97
1	3566047	3566047	1.00
1	2.59E+07	2.45E+07	1.06
1	2.59E+07	2.45E+07	1.06
0.97	656079	871802	0.75
0.97	1785299	1654212	1.08
0.99	2463943	2124763	1.16

0.99	2463943	2124763	1.16
0.99	2463943	2124763	1.16
0.92	2010308	2272572	0.88
0.96	4881969	4128611	1.18
0.92	1.97E+07	1.70E+07	1.16
0.99	2.14E+07	2.11E+07	1.01
0.99	2.14E+07	2.11E+07	1.01
0.94	503663	439844	1.15
0.88	2426319	2106435	1.15
0.98	3436991	3370304	1.02
0.83	4107141	3770290	1.09
0.95	6160973	4374555	1.41
0.99	4947816	5309340	0.93
0.96	5020554	5328517	0.94
1	8387499	6877382	1.22
0.98	8735172	7006045	1.25
1	7981756	7078715	1.13
1	1.46E+07	1.39E+07	1.05
0.97	8057569	6705626	1.20
0.99	8947806	8036558	1.11
1	3.26E+07	2.92E+07	1.12
0.99	3.53E+07	3.27E+07	1.08
0.99	3.53E+07	3.27E+07	1.08
0.74	1726431	1607016	1.07
0.99	7944797	7261822	1.09
0.89	3464598	1.14E+07	0.30
0.99	1.57E+07	1.52E+07	1.03
0.99	1.57E+07	1.52E+07	1.03
1	3.27E+07	3.11E+07	1.05
1	4.66E+07	3.79E+07	1.23
0.98	6.26E+07	7.61E+07	0.82
1	9.94E+07	1.00E+08	0.99
1	1.28E+08	1.23E+08	1.04
1	1.30E+08	1.24E+08	1.05
0.92	1.25E+07	7769723	1.61
0.95	2288063	2478849	0.92
0.98	4127563	3921086	1.05
0.85	272970	449132	0.61
0.99	4095235	3678265	1.11
0.87	9166898	6185294	1.48
1	1.15E+07	1.14E+07	1.01
0.92	1.16E+07	2.06E+07	0.56
0.96	6428415	5365317	1.20
0.96	2.16E+07	2.05E+07	1.05
0.96	2.81E+07	2.51E+07	1.12
0.96	2.81E+07	2.51E+07	1.12
1	1.51E+08	1.36E+08	1.11
0.96	984801	826480	1.19
0.94	1166478	935465	1.25
0.96	1665008	1264887	1.32
0.98	2834146	2671962	1.06

0.98	1828130	1228341	1.49
0.72	2656452	3274286	0.81
0.99	3.56E+07	3.65E+07	0.98
0.91	2956368	3480891	0.85
0.91	2956368	3480891	0.85
0.96	1398114	1368350	1.02
0.98	1512481	1476149	1.02
0.99	5304082	4558201	1.16
0.79	3832522	3617882	1.06
0.95	6713849	5655147	1.19
0.99	1278683	1633306	0.78
0.99	1278683	1633306	0.78
0.94	1870136	2063465	0.91
0.96	2543730	2419791	1.05
1	6388954	5148938	1.24
1	1.24E+07	1.02E+07	1.22
0.93	1.31E+07	1.90E+07	0.69
0.99	2633651	2431052	1.08
0.59	322355	127837	2.52
0.84	1.69E+07	1.87E+07	0.90
0.84	1.69E+07	1.87E+07	0.90
0.99	1393199	1465324	0.95
0.98	1247250	1553799	0.80
0.81	1.70E+07	9231738	1.84
0.95	3669043	3099940	1.18
0.95	1.15E+07	3558329	3.23
0.99	860732	967289	0.89
0.85	5300760	5731050	0.92
0.98	1419828	1236162	1.15
0.99	2.02E+07	1.80E+07	1.12
0.99	2.02E+07	1.80E+07	1.12
0.99	3979815	2819205	1.41
0.93	488703	314801	1.55
0.98	877548	932894	0.94
0.98	877548	932894	0.94
0.99	3947817	4124617	0.96
0.98	1.39E+07	1.39E+07	1.00
0.89	969257	790158	1.23
0.98	4.87E+07	2.07E+07	2.35
0.83	1.89E+07	2.30E+07	0.82
0.98	4925720	4962532	0.99
0.94	1110084	947785	1.17
0.98	2610635	2267964	1.15
0.98	2610635	2267964	1.15
0.97	2812298	2369899	1.19
0.97	3110831	2556630	1.22
0.99	2784440	2668762	1.04
0.99	3349035	3030149	1.11
0.97	7897271	6369493	1.24
1	1.92E+07	1.61E+07	1.19
0.99	1.79E+07	1.69E+07	1.06

1	2.85E+07	2.42E+07	1.18
0.97	1737573	1587746	1.09
0.9	460732	420499	1.10
0.93	2293197	1977194	1.16
0.9	2226327	2131111	1.04
1	1829167	2039292	0.90
0.94	2726989	3086211	0.88
1	9230695	9230695	1.00
0.98	1.23E+07	1.35E+07	0.91
0.98	1.23E+07	1.35E+07	0.91
0.88	1282382	1331009	0.96
0.97	1804865	1563985	1.15
0.97	2320468	2068026	1.12
0.97	2320468	2068026	1.12
0.85	2.30E+08	3209482	71.66
0.97	7931948	7339254	1.08
0.98	9187579	7272694	1.26
0.99	9444136	7570257	1.25
1	1.33E+07	1.04E+07	1.28
0.99	2.13E+07	1.68E+07	1.27
1	3.47E+07	2.96E+07	1.17
1	4.97E+07	4.49E+07	1.11
0.88	1534124	1232526	1.24
0.97	1716461	1605911	1.07
0.97	1716461	1605911	1.07
0.5	2871046	1740267	1.65
0.9	1890691	1766624	1.07
0.89	2074820	2019007	1.03
0.98	5646575	5549509	1.02
0.97	7992054	8155508	0.98
0.96	8863037	9563562	0.93
1	1.00E+07	9639241	1.04
1	1.90E+07	1.88E+07	1.01
1	2.21E+07	2.01E+07	1.10
1	2.55E+07	2.46E+07	1.04
0.99	3.13E+07	4.07E+07	0.77
1	7.45E+07	6.85E+07	1.09
0.97	1.11E+08	1.17E+08	0.95
1	1.74E+08	1.60E+08	1.09
0.92	1826751	1773317	1.03
0.92	1955467	1995919	0.98
0.83	4790933	4871560	0.98
0.83	4790933	4871560	0.98
0.98	7961583	6421898	1.24
0.84	2.17E+07	2841661	7.64
0.98	6013985	6300264	0.95
0.96	1816800	1333715	1.36
1	1869335	1946861	0.96
0.98	3901145	3015124	1.29
0.96	4492418	3564557	1.26
1	3.05E+07	2.63E+07	1.16

0.77	3.59E+07	2.01E+08	0.18
0.99	5746953	4746835	1.21
0.99	6532260	5933852	1.10
0.95	2884170	2389308	1.21
0.94	859514	1069613	0.80
0.91	2171479	4424316	0.49
1	1.07E+07	1.02E+07	1.05
0.96	2694270	2648738	1.02
0.94	530550	417449	1.27
0.98	821791	718264	1.14
0.97	2335569	2037541	1.15
0.89	5875798	5354716	1.10
1	7767188	7227110	1.07
0.96	1.13E+07	8876402	1.27
0.99	1.79E+07	1.63E+07	1.10
0.98	734738	633903	1.16
0.94	1315960	1251124	1.05
0.87	1834121	1749394	1.05
1	5659597	4749875	1.19
0.89	2.14E+07	2.27E+07	0.94
0.83	7818528	2.15E+07	0.36
0.83	7818528	2.15E+07	0.36
0.98	3344559	3381708	0.99
0.98	3344559	3381708	0.99
1	2.70E+07	2.04E+07	1.32
0.99	2806594	2511395	1.12
0.97	6675992	7596395	0.88
0.99	1.02E+07	1.14E+07	0.89
0.99	1.02E+07	1.14E+07	0.89
0.91	1.17E+07	1.31E+07	0.89
0.96	3.58E+07	2.83E+07	1.27
1	6.66E+07	5.35E+07	1.24
1	6.66E+07	5.35E+07	1.24
0.98	762661	683064	1.12
0.97	996277	819862	1.22
0.98	1730221	998437	1.73
0.93	1974380	1345356	1.47
0.98	1532985	1464898	1.05
0.98	2112069	1828804	1.15
0.93	5529708	6844237	0.81
0.97	2.47E+07	2.41E+07	1.02
0.99	1307852	1190343	1.10
0.95	5188982	5256888	0.99
0.99	5734878	5593027	1.03
0.97	1444854	1425432	1.01
0.97	1444854	1425432	1.01
0.95	2495915	2242477	1.11
0.98	1.19E+07	1.06E+07	1.12
0.99	1.49E+07	1.27E+07	1.17
0.99	3.87E+07	3.36E+07	1.15
0.94	3.93E+07	3.48E+07	1.13

1	6.88E+07	6.65E+07	1.03
0.84	988411	729452	1.36
0.8	3287658	4824091	0.68
0.92	1.41E+07	1.07E+07	1.32
0.97	1.29E+07	1.22E+07	1.06
1	1.43E+07	1.26E+07	1.13
0.99	3.08E+07	2.94E+07	1.05
0.83	8987356	7992862	1.12
0.9	3254972	2901421	1.12
0.88	6951519	5315108	1.31
0.88	6951519	5315108	1.31
0.99	7664520	6572638	1.17
0.99	7664520	6572638	1.17
0.98	1.33E+07	1.04E+07	1.28
0.97	1.33E+07	1.06E+07	1.25
0.88	6837963	1.14E+07	0.60
0.89	1.66E+07	1.71E+07	0.97
1	2.50E+07	2.15E+07	1.16
0.98	5.72E+07	4.45E+07	1.29
0.99	7.41E+07	5.82E+07	1.27
1	7.82E+07	6.50E+07	1.20
0.99	1.89E+08	1.46E+08	1.29
0.99	1.81E+08	1.59E+08	1.14
0.99	1.81E+08	1.59E+08	1.14
0.75	1356238	1723305	0.79
0.94	1974247	1876816	1.05
0.94	2569269	3213379	0.80
0.98	5960980	5761913	1.03
0.93	657739	769739	0.85
0.99	5498244	4837607	1.14
0.97	1.36E+07	9893002	1.37
0.91	5920545	5774363	1.03
0.94	1.92E+07	1.62E+07	1.19
0.97	2.21E+07	2.08E+07	1.06
0.97	3.45E+07	3.07E+07	1.12
0.9	4698982	2873400	1.64
0.92	2952037	2723409	1.08
0.74	2137109	1647305	1.30
0.97	2608938	2179970	1.20
0.73	5148225	3699293	1.39
0.92	2.05E+07	2.17E+07	0.94
1	5.27E+07	5.00E+07	1.05
0.98	6.87E+07	5.81E+07	1.18
0.99	1659508	1529723	1.08
1	1.24E+07	1.04E+07	1.19
1	1.24E+07	1.04E+07	1.19
0.98	4.32E+07	3.95E+07	1.09
1	1.61E+07	1.61E+07	1.00
0.89	1.75E+07	1.10E+07	1.59
0.93	5785604	5703437	1.01
0.74	1.43E+07	2.04E+07	0.70

0.97	2222224	2124348	1.05
0.99	1.32E+08	7.62E+07	1.73
0.99	4210468	3752817	1.12
0.96	1.18E+07	1.02E+07	1.16
0.96	1.18E+07	1.02E+07	1.16
0.34	3094081	2048290	1.51
0.92	6607865	4868127	1.36
1	6044070	5845266	1.03
0.98	8415628	7573726	1.11
0.99	1.49E+07	1.35E+07	1.10
0.96	1.67E+07	1.67E+07	1.00
0.86	2.78E+07	5.25E+07	0.53
0.96	2017171	2084131	0.97
0.8	8372603	3213074	2.61
0.92	5413176	5662817	0.96
0.94	1463533	1561536	0.94
0.93	2950003	2926936	1.01
0.98	7076540	7263615	0.97
0.82	1.51E+07	1.28E+07	1.18
0.75	9579529	1.39E+07	0.69
0.9	2520812	2123811	1.19
0.95	8366684	9145410	0.91
0.99	1114569	1036087	1.08
0.87	1.33E+08	4.50E+07	2.96
0.99	6499550	6035540	1.08
0.82	1366078	1861461	0.73
1	1.30E+07	1.16E+07	1.12
0.96	1078074	859883	1.25
0.96	1078074	859883	1.25
0.8	1212161	1069039	1.13
0.9	3121594	2770705	1.13
1	4699054	3878539	1.21
0.99	1.98E+07	1.82E+07	1.09
0.99	2.62E+07	2.39E+07	1.10
0.99	2.62E+07	2.39E+07	1.10
1	6.21E+07	4.86E+07	1.28
1	6.21E+07	4.86E+07	1.28
0.86	2047431	1638752	1.25
0.94	2471304	2091035	1.18
0.91	2963405	3841426	0.77
0.99	2.77E+07	2.63E+07	1.05
0.98	1697391	1294483	1.31
0.98	1981486	1690177	1.17
0.99	2284067	2165881	1.05
0.98	2506450	2566621	0.98
0.99	2896467	2764075	1.05
0.86	3300881	3497744	0.94
0.99	6668767	6864210	0.97
0.99	7439725	7672824	0.97
0.99	1.23E+07	1.13E+07	1.09
1	2.08E+07	2.06E+07	1.01

1	2.08E+07	2.06E+07	1.01
0.9	2981540	2617541	1.14
0.99	1.71E+07	1.59E+07	1.08
0.19	2.41E+07	2.55E+07	0.95
1	1.14E+08	9.80E+07	1.16
1	1.14E+08	9.80E+07	1.16
0.9	1094634	925983	1.18
0.99	3623547	3537993	1.02
1	3.80E+07	4.00E+07	0.95
0.99	4.84E+07	4.81E+07	1.01
0.83	820062	823691	1.00
0.98	8873577	6429113	1.38
0.98	3806727	4081067	0.93
0.92	3022540	2253462	1.34
1	2.94E+07	2.86E+07	1.03
1	2.94E+07	2.86E+07	1.03
0.99	1658998	1489900	1.11
0.99	1658998	1489900	1.11
0.97	2973600	2841807	1.05
0.97	2973600	2841807	1.05
0.97	2973600	2841807	1.05
0.99	3681229	3421211	1.08
0.88	3936684	3478562	1.13
0.96	681736	707369	0.96
0.98	1531941	1899491	0.81
0.73	1408056	1183765	1.19
1	4.24E+07	3.85E+07	1.10
1	4.24E+07	3.85E+07	1.10
1	4.24E+07	3.85E+07	1.10
0.97	601795	504736	1.19
0.96	2809133	2192939	1.28
0.99	1.41E+07	1.83E+07	0.77
0.99	1.70E+07	2.23E+07	0.76
1	4.94E+07	6.61E+07	0.75
0.97	571519	659911	0.87
0.97	883064	845957	1.04
0.98	1565452	1411491	1.11
0.99	1465776	1483061	0.99
0.96	1716904	1957567	0.88
1	8475698	7431255	1.14
0.99	1.14E+07	1.00E+07	1.14
1	1.89E+07	1.68E+07	1.13
0.99	6.75E+07	6.14E+07	1.10
0.99	6.75E+07	6.14E+07	1.10
0.82	1.17E+08	1.13E+08	1.04
0.85	1441136	1185561	1.22
0.99	2682218	2091435	1.28
0.79	3205888	3145056	1.02
0.88	3966518	3546110	1.12
0.94	3995291	4267690	0.94
0.87	5261680	4321181	1.22

0.87	5261680	4321181	1.22
0.94	1.37E+07	1.33E+07	1.03
0.94	2473244	2590816	0.95
0.98	1207476	930347	1.30
0.98	1207476	930347	1.30
0.95	2314036	1979344	1.17
0.99	2569703	2345799	1.10
0.99	2569703	2345799	1.10
0.99	2607949	2416033	1.08
0.85	2832991	2666248	1.06
0.99	3844965	3112315	1.24
0.98	4224691	4445126	0.95
0.97	7806227	7048274	1.11
1	9649369	7983209	1.21
1	1.69E+07	1.49E+07	1.13
1	2.79E+07	2.76E+07	1.01
1	7.89E+07	6.73E+07	1.17
0.94	2250595	2487664	0.90
0.97	3882570	4858727	0.80
1	2.89E+07	2.96E+07	0.98
0.98	1772156	1461389	1.21
0.85	3488101	2494943	1.40
0.96	2.13E+07	2.66E+07	0.80
0.88	571089	570345	1.00
0.95	944742	980948	0.96
0.97	6443706	7635892	0.84
0.97	6443706	7635892	0.84
0.99	906857	618314	1.47
0.98	3777321	2669702	1.41
0.99	6206596	4683556	1.33
0.92	7716865	5689616	1.36
0.99	8547895	6321405	1.35
0.99	8547895	6321405	1.35
0.97	3996576	3477368	1.15
0.98	1.91E+07	1.55E+07	1.23
0.99	4.74E+07	4.97E+07	0.95
0.99	4.74E+07	4.97E+07	0.95
0.99	5.07E+07	5.16E+07	0.98
0.92	8.72E+07	7.45E+07	1.17
1	2.14E+08	1.88E+08	1.14
0.98	5714855	4233140	1.35
0.99	8718392	8117172	1.07
0.92	798302	782867	1.02
0.99	1.74E+07	1.84E+07	0.95
0.99	1611100	1187136	1.36
0.88	3964079	3072316	1.29
0.93	2.01E+07	1.54E+07	1.31
0.98	2117283	2135959	0.99
0.98	2117283	2135959	0.99
0.98	895030	1555622	0.58
0.99	2612002	3332673	0.78

0.99	2612002	3332673	0.78
1	4298153	5007488	0.86
0.98	8311774	7184833	1.16
0.93	3442743	7194258	0.48
0.98	1.78E+07	1.62E+07	1.10
0.92	2138125	1884244	1.13
0.96	1855003	1965518	0.94
0.96	1855003	1965518	0.94
0.99	1.06E+07	9426105	1.12
0.98	1.53E+07	9957659	1.54
1	2.22E+07	1.74E+07	1.28
0.88	2679383	2615060	1.02
0.94	2913913	2669458	1.09
0.98	3227970	3780620	0.85
0.99	2.05E+07	2.15E+07	0.95
0.97	1852169	1840747	1.01
0.93	5873647	5440030	1.08
0.97	1.37E+07	1.27E+07	1.08
0.93	1.53E+07	2.02E+07	0.76
0.92	1547241	1054224	1.47
0.97	1463374	1238695	1.18
0.96	2036089	1709991	1.19
0.97	2727080	3140437	0.87
0.97	2727080	3140437	0.87
0.99	1.03E+07	9714016	1.06
0.87	1.52E+07	1.14E+07	1.33
0.99	1.29E+07	1.19E+07	1.08
1	2.30E+07	1.99E+07	1.16
0.93	2973543	2587179	1.15
0.92	1513335	710756	2.13
0.95	582808	647229	0.90
0.98	741213	684537	1.08
0.98	741213	684537	1.08
0.98	3378426	2681309	1.26
0.96	3160701	2931420	1.08
0.96	3160701	2931420	1.08
0.93	4215392	3161350	1.33
0.94	3142577	3205236	0.98
0.97	4430650	3234138	1.37
0.98	5351275	5186884	1.03
0.98	9660942	1.00E+07	0.97
0.98	2986900	3059127	0.98
0.92	1031303	885735	1.16
0.96	3065882	2785979	1.10
1	8648188	8216205	1.05
0.99	3488320	3272553	1.07
0.98	1635481	970631	1.68
0.96	2572676	2595768	0.99
0.99	2.61E+07	2.01E+07	1.30
0.98	1639709	1577206	1.04
0.98	2474389	2416393	1.02

0.94	4654250	4180746	1.11
0.94	4654250	4180746	1.11
0.99	6126193	5624664	1.09
1	6496817	5984483	1.09
1	6496817	5984483	1.09
1	7689835	7626350	1.01
0.98	1.04E+07	9188792	1.13
0.99	1.78E+07	1.38E+07	1.29
0.83	1231842	816653	1.51
0.93	1228400	1047464	1.17
0.98	1370512	1140793	1.20
0.99	9263182	9367168	0.99
1	9.17E+07	9.14E+07	1.00
1	1.96E+08	1.62E+08	1.21
1	1.96E+08	1.62E+08	1.21
0.99	3365097	3035165	1.11
0.99	4894146	4338421	1.13
0.99	5619173	5004341	1.12
0.92	6247392	8403359	0.74
0.96	1.40E+07	1.43E+07	0.98
0.96	1.40E+07	1.43E+07	0.98
1	1.89E+07	1.85E+07	1.02
1	1.89E+07	1.85E+07	1.02
1	3.31E+07	3.21E+07	1.03
1	3.31E+07	3.21E+07	1.03
1	3.31E+07	3.21E+07	1.03
1	3.36E+07	3.34E+07	1.01
0.95	703033	675402	1.04
0.97	830443	727521	1.14
0.86	5250171	6459897	0.81
0.99	962745	1016280	0.95
0.87	1199844	1260430	0.95
0.98	3036092	3041874	1.00
0.94	2.32E+07	2.78E+07	0.83
0.94	2.73E+07	2.91E+07	0.94
0.96	1755333	1409217	1.25
0.88	727518	742827	0.98
0.97	1278256	1324514	0.97
0.98	1546105	1500892	1.03
0.96	1779380	1680747	1.06
0.96	1638841	1682669	0.97
0.98	3290934	3505521	0.94
0.99	4627900	4284075	1.08
0.99	5454512	4448533	1.23
0.95	758682	677443	1.12
0.99	1398071	1017289	1.37
0.99	5908629	4924507	1.20
0.94	4161670	4936899	0.84
0.94	4161670	4936899	0.84
0.85	492782	1405602	0.35
0.95	751752	2041983	0.37

0.96	1084677	3411530	0.32
0.97	1965667	6208419	0.32
0.98	1.10E+07	1.20E+07	0.92
0.98	1.10E+07	1.20E+07	0.92
0.95	1542483	1910986	0.81
0.99	3875164	3278901	1.18
0.98	4097713	4184555	0.98
0.88	3692529	5835530	0.63
0.36	3988737	1171207	3.41
0.96	1426650	1175674	1.21
0.97	9455534	8089079	1.17
0.97	9455534	8089079	1.17
1	8283408	8887383	0.93
0.95	1.94E+07	1.22E+07	1.59
1	1.48E+07	1.49E+07	0.99
1	8.00E+07	8.51E+07	0.94
0.96	2576269	2077180	1.24
0.97	1958356	2270936	0.86
0.95	4744777	4043983	1.17
0.99	9166691	7647135	1.20
0.99	9166691	7647135	1.20
0.99	9488269	9092923	1.04
0.74	8673195	9768491	0.89
0.95	1.08E+07	9769559	1.11
0.97	1.27E+07	1.07E+07	1.19
0.97	1.27E+07	1.14E+07	1.11
0.91	1.33E+07	1.27E+07	1.05
0.91	1.33E+07	1.27E+07	1.05
0.92	1.11E+07	1.32E+07	0.84
0.98	1.51E+07	1.33E+07	1.14
0.99	1.76E+07	1.67E+07	1.05
0.98	1.89E+07	1.74E+07	1.09
0.99	2.43E+07	1.90E+07	1.28
0.99	9143787	8270924	1.11
0.99	9143787	8270924	1.11
0.96	456590	401552	1.14
0.96	456590	401552	1.14
0.94	3326507	2959762	1.12
0.82	3191805	3517760	0.91
0.98	4523478	4627557	0.98
0.99	1277334	1053765	1.21
0.97	1027597	1096750	0.94
0.74	731535	778641	0.94
0.98	1558116	1144165	1.36
0.91	877341	782718	1.12
0.87	5098462	7662148	0.67
0.87	5098462	7662148	0.67
0.99	1.80E+07	1.72E+07	1.05
0.99	1154138	1029172	1.12
0.94	1.58E+07	1.07E+07	1.48
0.94	1.58E+07	1.07E+07	1.48

0.91	1018153	1210786	0.84
0.97	2068825	2138232	0.97
1	3334417	3972669	0.84
1	1.83E+07	1.47E+07	1.24
0.95	812233	802914	1.01
0.99	6633179	5726732	1.16
0.9	485174	489512	0.99
0.92	8412504	9462300	0.89
0.93	2044280	1646785	1.24
0.87	4.43E+08	8.30E+07	5.34
1	1794278	1794278	1.00
0.95	1.05E+07	7984081	1.32
1	1.71E+07	1.44E+07	1.19
1	1.71E+07	1.44E+07	1.19
0.99	2.43E+07	1.97E+07	1.23
0.97	5253081	2600978	2.02
0.81	2642346	2263542	1.17
0.96	3905311	3006272	1.30
0.96	5262657	5056397	1.04
0.86	5966105	5770920	1.03
0.86	5966105	5770920	1.03
0.97	8774607	6677663	1.31
0.97	8774607	6677663	1.31
0.97	8774607	6677663	1.31
0.78	1.06E+07	6876795	1.54
0.95	1.37E+07	1.32E+07	1.04
0.99	1.08E+08	9.53E+07	1.13
0.99	1211558	995731	1.22
0.99	1712452	1515372	1.13
0.91	1484114	1543889	0.96
0.99	2758886	2643748	1.04
0.99	8252346	7017835	1.18
0.99	9318791	7570916	1.23
1	1.14E+07	1.01E+07	1.13
0.99	1.02E+07	1.02E+07	1.00
0.99	3470583	3274017	1.06
0.99	6727676	6283126	1.07
0.99	5526705	4663738	1.19
0.99	5526705	4663738	1.19
0.87	8207424	1.08E+07	0.76
0.98	6834792	7508415	0.91
0.97	1.12E+07	1.23E+07	0.91
0.98	1.06E+07	1.51E+07	0.70
0.89	1.89E+07	1.76E+07	1.07
0.96	1.92E+07	1.94E+07	0.99
0.98	1.47E+07	1.48E+07	0.99
0.96	772204	800340	0.96
0.88	5432994	5818354	0.93
0.74	4198404	1.25E+07	0.34
0.98	1879457	1991241	0.94
1	8.43E+07	8.52E+07	0.99

0.98	1.01E+07	9339610	1.08
0.89	445776	499021	0.89
0.99	4838861	4159100	1.16
0.99	1.56E+07	1.33E+07	1.17
0.99	1.56E+07	1.33E+07	1.17
0.97	913214	830543	1.10
0.95	1217653	1051310	1.16
0.95	1217653	1051310	1.16
0.96	2252046	2507641	0.90
0.98	1.85E+07	1.82E+07	1.02
0.99	4.34E+07	4.14E+07	1.05
0.9	5548587	5398743	1.03
0.91	8041290	6776253	1.19
0.84	9996894	7589795	1.32
0.98	2.13E+07	1.77E+07	1.20
0.99	1.04E+08	8.94E+07	1.16
0.98	2000231	1812438	1.10
0.99	7799773	7235305	1.08
0.98	3786176	5933569	0.64
0.98	3786176	5933569	0.64
0.76	5153731	4986369	1.03
0.76	5153731	4986369	1.03
0.95	8493607	8644540	0.98
0.99	6.44E+07	6.62E+07	0.97
0.89	581631	442689	1.31
0.99	940805	882191	1.07
0.99	1348569	1237232	1.09
0.77	4775473	3047522	1.57
0.96	4738927	4913978	0.96
1	1371080	1109927	1.24
0.96	2644610	1711630	1.55
0.86	3175943	1946385	1.63
0.99	9084626	6535804	1.39
0.98	1.35E+07	1.09E+07	1.24
1	2.30E+07	1.90E+07	1.21
0.98	4.39E+07	3.57E+07	1.23
0.97	7466278	7391685	1.01
0.94	7419073	8400184	0.88
0.99	1.20E+07	1.04E+07	1.15
0.99	1.20E+07	1.04E+07	1.15
0.98	1971684	1627580	1.21
0.99	7208178	5924658	1.22
0.96	8476345	8070823	1.05
0.96	690760	666644	1.04
0.98	3521388	3140954	1.12
1	1.84E+07	1.56E+07	1.18
1	1.84E+07	1.56E+07	1.18
0.8	4001327	3492371	1.15
0.81	4.05E+07	3.72E+07	1.09
0.99	1343163	1642244	0.82
0.96	1675778	1802821	0.93

0.99	3010311	2714708	1.11
0.98	2845332	3527691	0.81
0.67	2566997	4444035	0.58
0.98	4599954	5061517	0.91
0.97	1.14E+07	1.13E+07	1.01
1	1.45E+08	1.56E+08	0.93
0.97	1026580	986984	1.04
0.77	3514461	3239184	1.08
0.8	700775	382057	1.83
0.95	2.36E+07	2.36E+07	1.00
0.93	1203492	970187	1.24
0.93	1203492	970187	1.24
0.97	8423390	7623436	1.10
0.94	1.23E+07	9294980	1.32
0.91	9508095	9584993	0.99
0.98	1.19E+07	9883420	1.20
0.98	1.59E+07	1.14E+07	1.39
0.87	1.09E+08	9.15E+07	1.19
0.47	3360919	1930216	1.74
0.97	1092771	1389536	0.79
0.98	5049338	4331532	1.17
0.97	6009361	4698851	1.28
0.98	1.49E+07	1.58E+07	0.94
0.93	693540	1048449	0.66
0.94	2250595	2487664	0.90
0.98	2078853	3224028	0.64
0.97	3882570	4858727	0.80
0.98	6834792	7508415	0.91
0.98	1.06E+07	1.51E+07	0.70
1	2.89E+07	2.96E+07	0.98
0.99	4.98E+07	1.05E+08	0.47
0.99	2574811	2552874	1.01
0.98	4354271	3826265	1.14
0.98	4354271	3826265	1.14
0.85	4567089	3627067	1.26
0.93	8188790	6348766	1.29
1	1.13E+08	9.63E+07	1.17
1	1.13E+08	9.63E+07	1.17
1	1.13E+08	9.63E+07	1.17
0.52	7294424	2123995	3.43
1	8984848	7915994	1.14
0.95	2158297	1710205	1.26
0.96	1231018	1013621	1.21
0.96	1984099	1607047	1.23
0.96	1984099	1607047	1.23
0.99	1.59E+07	1.50E+07	1.06
0.99	1.59E+07	1.50E+07	1.06
0.87	1.54E+07	1.91E+07	0.81
0.71	572569	264121	2.17
0.93	1326895	1398090	0.95
0.93	1326895	1398090	0.95

0.92	1496967	1616711	0.93
0.8	2138086	2167038	0.99
0.97	9878891	7939094	1.24
0.97	2844218	4086278	0.70
0.97	2844218	4086278	0.70
0.99	1909611	1647407	1.16
0.99	1909611	1647407	1.16
0.98	1712174	2073930	0.83
0.98	1712174	2073930	0.83
0.99	5114681	5896543	0.87
0.92	3113024	3328439	0.94
0.91	4338813	4414665	0.98
1	2.94E+07	2.67E+07	1.10
0.75	1416027	3906927	0.36
1	1.32E+08	1.28E+08	1.03
0.98	8552434	1.10E+07	0.78
0.91	1118787	1464991	0.76
0.84	3200518	3534381	0.91
0.93	6891394	7371748	0.93
0.99	2006152	1881479	1.07
0.86	4346527	3629604	1.20
0.85	9686243	7350859	1.32
1	1.47E+07	1.31E+07	1.12
0.94	1.19E+07	1.32E+07	0.90
1	2.96E+07	2.75E+07	1.08
1	8312475	8207358	1.01
0.93	2058223	1140086	1.81
0.93	2058223	1140086	1.81
0.93	2058223	1140086	1.81
0.94	2541897	1825397	1.39
0.81	2345879	1873280	1.25
0.98	5516348	4213361	1.31
0.98	8544750	7336048	1.16
0.98	8544750	7336048	1.16
0.99	5668021	5646786	1.00
0.92	5024570	2692949	1.87
0.92	7195606	6821355	1.05
0.99	7102285	7306562	0.97
0.99	2178158	1707265	1.28
0.96	2953962	2815832	1.05
1	3356711	3209287	1.05
1	2.36E+07	2.09E+07	1.13
0.92	805032	731457	1.10
0.91	273703	241580	1.13
0.94	580825	481672	1.21
0.96	9105822	7205176	1.26
0.98	9961698	9471341	1.05
0.85	8919976	9883125	0.90
0.99	1.11E+07	1.00E+07	1.11
0.98	1.50E+07	1.62E+07	0.93
0.98	1.50E+07	1.62E+07	0.93

1	4.05E+07	3.62E+07	1.12
0.99	4.36E+07	3.69E+07	1.18
0.97	5.06E+07	4.76E+07	1.06
1	9.17E+07	8.69E+07	1.06
0.87	999359	732453	1.36
0.94	1.48E+07	1.33E+07	1.11
0.9	528738	680632	0.78
0.78	3374803	2286726	1.48
0.92	2.95E+07	8.08E+07	0.37
0.99	2473727	2705131	0.91
0.96	1912166	1962112	0.97
0.81	8423864	7510747	1.12
0.81	8423864	7510747	1.12
0.99	1.66E+07	1.29E+07	1.29
0.97	1.09E+07	1.40E+07	0.78
0.84	1481720	1365691	1.08
0.89	1439862	1677653	0.86
0.94	1656121	1728781	0.96
0.87	7655500	4698978	1.63
1	5448390	5433809	1.00
0.98	7151517	6648703	1.08
1	1.55E+07	1.50E+07	1.03
0.9	1.54E+07	1.52E+07	1.01
0.95	1.64E+07	2.02E+07	0.81
0.89	4535165	3026722	1.50
0.89	4535165	3026722	1.50
0.89	4535165	3026722	1.50
0.93	3007026	4442318	0.68
0.97	2.83E+07	3.20E+07	0.88
0.97	2.83E+07	3.20E+07	0.88
0.99	5.57E+07	4.57E+07	1.22
0.98	8086342	7550830	1.07
0.9	2293233	1893633	1.21
0.73	8373412	3110204	2.69
0.99	8883863	8861631	1.00
0.99	1154138	1029172	1.12
0.93	1890903	1790622	1.06
0.99	8378607	7280544	1.15
0.97	1.43E+07	1.08E+07	1.32
0.98	6125919	3500986	1.75
0.98	6125919	3500986	1.75
0.99	7850464	5418948	1.45
0.99	8397595	5839058	1.44
0.94	9485281	7888903	1.20
0.98	3453200	3792190	0.91
0.75	1.22E+07	1.69E+07	0.72
0.99	4415051	3776929	1.17
0.93	1072692	918528	1.17
0.99	8891909	7896500	1.13
0.94	1484230	1437910	1.03
0.91	2673895	2966419	0.90

0.98	3215007	3000790	1.07
0.98	3474377	3414083	1.02
0.89	5674694	6659170	0.85
0.94	1620936	1312910	1.23
0.93	2724570	2482665	1.10
0.97	1.54E+07	1.77E+07	0.87
1	2.60E+08	2.18E+08	1.19
0.49	1425305	1020667	1.40
0.98	2356582	2324144	1.01
1	2932174	2943388	1.00
0.97	2927551	3335376	0.88
1	1.05E+07	9849605	1.07
1	1.05E+07	9849605	1.07
0.99	2.83E+07	2.81E+07	1.01
0.99	2.83E+07	2.81E+07	1.01
0.99	2.18E+08	1.96E+08	1.11
0.98	974022	1801073	0.54
0.93	5528171	5475348	1.01
0.9	2647441	2272548	1.16
0.93	3634784	2663165	1.36
0.79	4105830	4894873	0.84
0.98	6045391	6753256	0.90
0.95	4744777	4043983	1.17
0.99	9166691	7647135	1.20
0.99	9166691	7647135	1.20
0.95	1.08E+07	9769559	1.11
0.97	1.27E+07	1.07E+07	1.19
0.97	1.27E+07	1.14E+07	1.11
0.97	1.34E+07	1.18E+07	1.14
0.91	1.33E+07	1.27E+07	1.05
0.91	1.33E+07	1.27E+07	1.05
0.99	1.76E+07	1.67E+07	1.05
0.98	1.89E+07	1.74E+07	1.09
0.99	2.43E+07	1.90E+07	1.28
1	1.43E+07	1.42E+07	1.01
0.88	1.19E+07	1.05E+07	1.13
0.95	3094424	2670025	1.16
0.97	598383	646834	0.93
0.72	9095780	1.20E+07	0.76
0.86	6547502	5921295	1.11
0.98	8144120	7985958	1.02
0.93	2714247	2414557	1.12
0.8	3893922	3678791	1.06
0.86	3959550	3686454	1.07
0.96	6744538	6258697	1.08
0.99	7080668	6956453	1.02
0.25	1479864	9383068	0.16
0.8	1.36E+07	1.38E+07	0.99
0.64	1.29E+07	1.70E+07	0.76
1	2.21E+07	2.26E+07	0.98
0.36	3.45E+07	3.61E+07	0.96

0.22	3.72E+07	4.18E+07	0.89
0.24	2.75E+07	4.30E+07	0.64
0.64	7.67E+07	8.08E+07	0.95
0.17	5.20E+07	8.14E+07	0.64
0.82	1.17E+08	1.13E+08	1.04
0.13	8.09E+07	1.20E+08	0.67
0.38	2.13E+08	2.30E+08	0.93
1	3.49E+07	3.09E+07	1.13
0.96	1.35E+07	7959768	1.70
1	1.08E+07	1.01E+07	1.07
1	1.08E+07	1.01E+07	1.07
0.97	1944486	1727806	1.13
0.87	2953859	1850624	1.60
0.9	2542638	3591532	0.71
0.99	1.21E+07	1.07E+07	1.13
0.72	7647064	1.28E+07	0.60
0.96	3593184	3370874	1.07
0.99	2.08E+07	1.88E+07	1.11
0.94	1347626	1157724	1.16
0.98	1615935	1827973	0.88
1	1.38E+07	1.82E+07	0.76
0.99	7176981	6777928	1.06
1	2.02E+07	1.63E+07	1.24
1	2.02E+07	1.63E+07	1.24
1	2.30E+07	1.79E+07	1.28
0.98	5717356	8605832	0.66
0.99	1.07E+07	8627803	1.24
1	5.32E+07	4.30E+07	1.24
0.97	1468503	1365435	1.08
0.97	2830155	3763860	0.75
1	8715437	8469032	1.03
0.98	5714175	4530300	1.26
0.85	1.08E+07	9283604	1.16
0.93	901239	697872	1.29
0.93	901239	697872	1.29
1	1.09E+07	8979771	1.21
1	3.27E+07	3.24E+07	1.01
0.89	3113752	3476284	0.90
0.96	8993790	9152147	0.98
0.93	866326	862382	1.00
0.9	3433700	1460925	2.35
0.98	2348346	1867999	1.26
0.99	2234029	2034047	1.10
0.97	671053	648568	1.03
0.97	2087187	1776737	1.17
1	4673056	3946342	1.18
0.97	2.23E+07	2.35E+07	0.95
0.71	2.51E+08	9707426	25.86
0.98	5592573	4118753	1.36
0.91	5558477	4797346	1.16
0.98	6208260	5088637	1.22

0.98	6208260	5088637	1.22
0.99	7760548	6943088	1.12
0.99	2.01E+07	1.83E+07	1.10
0.96	567455	478151	1.19
0.99	2066412	1666494	1.24
0.99	2.51E+07	1.79E+07	1.40
1	4.73E+07	4.25E+07	1.11
1	1521641	1518692	1.00
0.98	4782475	3238623	1.48
0.84	4142089	3773271	1.10
0.96	1671767	1602502	1.04
0.96	1671767	1602502	1.04
0.8	1.11E+07	7475951	1.48
0.99	1.43E+07	1.11E+07	1.29
0.98	2057415	1807472	1.14
0.89	2723287	3427163	0.79
0.77	1231430	1129535	1.09
0.92	7583222	7339371	1.03
0.89	451902	518544	0.87
0.98	2418346	2493596	0.97
1	1.66E+07	1.55E+07	1.07
1	1.73E+07	1.69E+07	1.02
1	2.05E+07	1.88E+07	1.09
0.99	2916416	3172705	0.92
0.99	9940832	9465691	1.05
0.99	1.20E+07	1.12E+07	1.07
0.9	348410	402929	0.86
0.99	4421054	4058043	1.09
0.97	3.85E+07	3.19E+07	1.21
0.97	3.85E+07	3.19E+07	1.21
1	7.65E+07	7.47E+07	1.02
0.96	374499	357218	1.05
0.99	5.41E+07	4.57E+07	1.18
0.98	1769023	1789276	0.99
0.99	7831591	8014402	0.98
0.97	1994347	1608924	1.24
0.89	490110	599762	0.82
0.82	2232144	1707396	1.31
0.94	2723062	2003258	1.36
1	7801328	7527243	1.04
0.95	9941890	1.00E+07	0.99
0.97	8662988	9234862	0.94
0.97	8662988	9234862	0.94
0.92	2683530	2686369	1.00
0.98	2383169	2159178	1.10
0.98	2383169	2159178	1.10
0.93	1713198	2118426	0.81
0.8	727905	1255657	0.58
0.97	2437752	3001980	0.81
0.87	2810626	4758540	0.59
0.94	3709077	2952262	1.26

0.94	3709077	2952262	1.26
0.92	9146884	7200841	1.27
0.92	1.69E+07	1.49E+07	1.13
0.47	675148	1152153	0.59
0.98	9204752	5683168	1.62
0.87	1879267	1673214	1.12
0.94	4440993	4306505	1.03
0.96	1132759	832996	1.36
0.91	5722036	4162681	1.37
0.96	8206198	1.05E+07	0.78
0.96	8206198	1.05E+07	0.78
0.94	1.75E+07	2.06E+07	0.85
0.94	1.75E+07	2.06E+07	0.85
1	1.87E+07	1.59E+07	1.18
0.97	3726684	3313153	1.12
0.98	3540004	3599598	0.98
1	1.28E+07	1.29E+07	0.99
1	1.28E+07	1.29E+07	0.99
0.99	4892234	5221748	0.94
0.89	2723287	3427163	0.79
0.98	1.05E+07	8277381	1.27
0.96	2921038	2971460	0.98
0.97	1660717	1280489	1.30
0.99	2552851	2167503	1.18
0.98	1.05E+07	5635597	1.86
0.98	2166738	1937984	1.12
0.95	2946844	4996024	0.59
0.99	1.06E+07	9068038	1.17
1	6170520	5690985	1.08
0.96	5832699	6172745	0.94
1	1.10E+08	1.13E+08	0.97
1	1.10E+07	1.13E+07	0.97
1	1.10E+07	1.13E+07	0.97
1	1.24E+07	1.26E+07	0.98
0.84	1028993	1189847	0.86
0.98	1582339	1622515	0.98
0.98	2473439	2310002	1.07
0.82	683571	598961	1.14
0.95	742071	621533	1.19
0.75	4471331	4376716	1.02
0.99	7868240	6094067	1.29
0.98	5168840	3675581	1.41
0.96	7121399	6489331	1.10
1	1.16E+07	1.08E+07	1.07
0.98	1.55E+07	1.35E+07	1.15
0.98	1.55E+07	1.35E+07	1.15
0.99	2.22E+07	1.79E+07	1.24
0.99	1355811	1305816	1.04
0.99	1355811	1305816	1.04
0.94	6037464	7098605	0.85
0.99	7764554	1.35E+07	0.58

0.97	1.30E+07	1.70E+07	0.76
0.98	2.60E+07	4.19E+07	0.62
0.98	2.60E+07	4.19E+07	0.62
0.96	3.51E+07	4.37E+07	0.80
0.99	4.04E+07	5.76E+07	0.70
0.76	5.96E+07	8.23E+07	0.72
0.76	5.96E+07	8.23E+07	0.72
0.94	8.12E+07	8.87E+07	0.92
0.73	7.05E+07	9.87E+07	0.71
0.98	1.63E+08	2.03E+08	0.80
0.98	1.63E+08	2.03E+08	0.80
0.99	3852083	3133652	1.23
0.96	1004494	984060	1.02
0.98	1393864	1428249	0.98
0.97	1794185	1524753	1.18
0.91	2967497	2514704	1.18
0.94	3257230	2552192	1.28
0.84	5408175	3348270	1.62
0.99	4540760	4089608	1.11
0.99	7060904	6908325	1.02
0.99	6839660	7556367	0.91
1	1.03E+07	9171218	1.12
0.99	1.36E+07	1.11E+07	1.23
1	1.30E+07	1.30E+07	1.00
0.99	1.49E+07	1.47E+07	1.01
1	1.70E+07	1.63E+07	1.04
0.99	2.03E+07	1.69E+07	1.20
0.99	2.03E+07	1.69E+07	1.20
1	2.21E+07	2.00E+07	1.11
0.96	3.78E+07	2.97E+07	1.27
0.97	4.77E+07	4.25E+07	1.12
0.99	2.50E+07	5.92E+07	0.42
1	8.36E+07	8.03E+07	1.04
1	8.36E+07	8.03E+07	1.04
1	8749075	8935796	0.98
1	3.09E+07	2.98E+07	1.04
1	2.90E+07	3.00E+07	0.97
1	3.76E+07	3.59E+07	1.05
0.99	1.17E+07	9303195	1.26
0.98	1.26E+07	1.07E+07	1.18
0.95	888365	854752	1.04
0.88	255332	204032	1.25
0.97	2207203	2102340	1.05
0.99	3968219	3697744	1.07
1	8749075	8935796	0.98
1	3.09E+07	2.98E+07	1.04
1	2.90E+07	3.00E+07	0.97
1	3.76E+07	3.59E+07	1.05
0.65	2201657	3089363	0.71
0.95	7367087	6512760	1.13
0.98	1.32E+07	9578957	1.38

0.95	382608	330008	1.16
0.9	2390654	2648353	0.90
0.96	3780684	3388233	1.12
1	1.53E+07	1.49E+07	1.03
1	1.53E+07	1.49E+07	1.03
0.98	2.56E+07	2.37E+07	1.08
0.93	2782966	2531318	1.10
0.97	4294041	4254373	1.01
0.99	2.80E+07	2.32E+07	1.21
0.99	4377903	4458832	0.98
0.93	1.06E+07	8357197	1.27
0.93	1.06E+07	8357197	1.27
0.97	1.75E+07	1.67E+07	1.05
0.93	2647888	2588580	1.02
0.96	1424004	1315313	1.08
0.87	1.24E+07	1520549	8.15
0.9	6902844	1.33E+07	0.52
0.91	1.12E+07	9687144	1.16
0.95	2076415	1569725	1.32
0.95	2076415	1569725	1.32
0.98	2350295	2179006	1.08
1	4051608	3476416	1.17
0.99	1.13E+07	9711359	1.16
1	1.31E+07	1.15E+07	1.14
1	1.27E+07	1.16E+07	1.09
0.94	1.67E+07	1.56E+07	1.07
0.96	2.40E+07	2.02E+07	1.19
0.97	3.35E+07	2.90E+07	1.16
0.98	5.97E+07	4.62E+07	1.29
1	1.30E+08	1.20E+08	1.08
0.9	8481264	8986869	0.94
0.94	3318259	3049131	1.09
0.98	3362238	3188188	1.05
0.98	3362238	3188188	1.05
0.99	2779329	2192755	1.27
0.97	5072565	6415854	0.79
0.99	6920448	6089003	1.14
0.8	437150	257485	1.70
0.75	2458973	1636359	1.50
0.99	3413279	2889639	1.18
0.98	3724261	2967169	1.26
0.75	1366261	3271260	0.42
0.96	4740224	3441229	1.38
0.9	6847138	4485335	1.53
1	5594525	4519497	1.24
0.99	5283726	4523568	1.17
0.97	3.95E+07	4.93E+07	0.80
0.99	5.69E+07	5.94E+07	0.96
0.99	7.67E+07	7.25E+07	1.06
1	1443092	1152562	1.25
0.99	5082320	5038171	1.01

0.97	5392428	4168221	1.29
0.98	5523959	5951674	0.93
0.97	1.18E+07	1.03E+07	1.15
0.97	1.18E+07	1.03E+07	1.15
0.94	1.55E+07	1.67E+07	0.93
0.95	2559229	1956289	1.31
0.77	2133625	2455680	0.87
0.93	8324410	6474896	1.29
0.97	7825605	7759412	1.01
0.98	1531941	1899491	0.81
0.79	8407220	1.37E+07	0.61
0.98	1.55E+07	1.38E+07	1.12
0.18	2678178	1.82E+07	0.15
0.99	3.96E+07	3.25E+07	1.22
0.99	3.96E+07	3.25E+07	1.22
1	8280638	7957227	1.04
1	9083761	9046048	1.00
0.93	2.72E+07	7.26E+07	0.37
0.92	594119	463926	1.28
0.97	1.36E+07	1.36E+07	1.00
0.96	3355760	3164085	1.06
0.98	2026224	1522253	1.33
0.89	1547850	1462765	1.06
0.89	2100417	2277857	0.92
0.91	540701	621684	0.87
0.97	1613446	1193553	1.35
0.97	3364923	2769984	1.21
0.82	4014580	3646042	1.10
0.99	2.85E+07	2.47E+07	1.15
0.99	2.85E+07	2.47E+07	1.15
0.93	910076	1052202	0.86
0.91	1091338	1349803	0.81
0.98	2.33E+07	2.02E+07	1.15
0.76	496644	4263277	0.12
0.93	832872	1068691	0.78
0.93	832872	1068691	0.78
0.98	6873101	6424668	1.07
0.98	3.19E+07	3.02E+07	1.06
0.96	1119246	1046110	1.07
0.94	2668948	2712713	0.98
0.93	3260872	3462949	0.94
0.87	4229607	3863536	1.09
0.99	4722205	4842135	0.98
0.98	6150071	6334244	0.97
0.98	6150071	6334244	0.97
0.93	6827860	6834797	1.00
1	8397695	7478586	1.12
1	8658455	8366736	1.03
0.89	1.05E+07	8994640	1.17
1	1.47E+07	1.46E+07	1.01
0.96	3.28E+07	2.94E+07	1.12

1	3.25E+07	3.26E+07	1.00
1	1.34E+08	1.13E+08	1.19
0.77	959667	713699	1.34
0.73	2167181	2059749	1.05
0.99	4669246	6243245	0.75
0.99	4669246	6243245	0.75
1	1.65E+07	1.06E+07	1.56
0.99	1.36E+07	1.27E+07	1.07
0.99	1.92E+07	2.37E+07	0.81
0.98	3.71E+07	2.48E+07	1.50
0.98	3.71E+07	2.48E+07	1.50
0.99	3711232	3670725	1.01
0.97	1924689	2666431	0.72
0.98	1.83E+07	1.67E+07	1.10
0.99	4037917	2793601	1.45
0.99	4877920	4247552	1.15
1	5800824	5516008	1.05
1	1.19E+07	8326169	1.43
1	3.71E+07	2.92E+07	1.27
1	3.71E+07	2.92E+07	1.27
1	4.02E+07	3.48E+07	1.16
1	4.02E+07	3.48E+07	1.16
1	9765980	8746983	1.12
1	9765980	8746983	1.12
0.84	7192761	8109670	0.89
0.98	9153158	5148465	1.78
0.98	1.22E+07	9771067	1.25
0.91	2564872	2182525	1.18
0.97	4807557	3917558	1.23
0.98	8577046	7606214	1.13
0.87	2.23E+07	2.00E+07	1.12
0.99	3.82E+07	3.30E+07	1.16
1	1.08E+08	9.70E+07	1.11
0.99	3.60E+08	3.11E+08	1.16
1	4.20E+08	3.97E+08	1.06
1	8.07E+08	7.76E+08	1.04
0.86	5636459	4334124	1.30
0.99	7200178	7495803	0.96
0.98	1842579	1970621	0.94
0.98	1842579	1970621	0.94
0.98	1836195	2084965	0.88
0.94	2554998	2586863	0.99
0.97	3268387	3002565	1.09
0.99	6932049	6904913	1.00
1	3.72E+08	3.62E+08	1.03
0.95	1170313	1174348	1.00
0.82	4307257	3168247	1.36
0.82	4307257	3168247	1.36
0.99	4544584	3852301	1.18
0.99	4544584	3852301	1.18
0.94	1.15E+07	1.08E+07	1.06

0.99	1.68E+07	1.18E+07	1.42
0.99	1.68E+07	1.18E+07	1.42
1	2.26E+07	2.08E+07	1.09
0.99	1182436	1131500	1.05
1	1.04E+07	1.06E+07	0.98
1	1.04E+07	1.06E+07	0.98
0.98	9500915	8363270	1.14
1	2.05E+07	1.86E+07	1.10
0.97	7410774	7022599	1.06
0.97	7410774	7022599	1.06
0.92	8695553	7176520	1.21
0.99	1.54E+07	1.42E+07	1.08
0.53	4483714	4311612	1.04
0.99	2.55E+07	2.35E+07	1.09
0.94	1108800	975279	1.14
0.98	2571347	1672037	1.54
0.98	2571347	1672037	1.54
0.97	3635890	3480731	1.04
0.97	2282866	2521444	0.91
0.95	4202813	4927820	0.85
0.99	7077688	6404286	1.11
0.91	6960946	9224726	0.75
0.99	1.66E+07	1.44E+07	1.15
1	1.59E+07	1.46E+07	1.09
0.99	2.61E+07	2.28E+07	1.14
0.99	3.65E+07	3.47E+07	1.05
0.99	4.06E+07	3.53E+07	1.15
0.99	4.63E+07	4.33E+07	1.07
0.98	4453690	4179369	1.07
0.95	2725485	2988360	0.91
1	1.39E+07	1.36E+07	1.02
0.99	3132477	2892943	1.08
0.99	2.74E+07	2.67E+07	1.03
0.89	2.54E+07	4.37E+07	0.58
0.94	567105	476381	1.19
0.94	567105	476381	1.19
0.99	2779317	2636652	1.05
0.98	2746404	2900904	0.95
0.86	5250171	6459897	0.81
1	1.21E+07	1.18E+07	1.03
0.76	2.43E+07	1.57E+07	1.55
0.77	295647	580882	0.51
0.93	1201235	962161	1.25
0.96	3273638	3010890	1.09
0.9	1.50E+07	1.48E+07	1.01
0.98	322768	2663610	0.12
1	2732665	2732665	1.00
0.96	518535	428027	1.21
0.94	4506376	6328192	0.71
0.92	1.22E+07	1.64E+07	0.74
1	6608266	6608266	1.00

1	3885821	2383093	1.63
0.93	1996036	3090875	0.65
0.99	7026345	5545364	1.27
0.98	8645391	8208631	1.05
0.78	1.47E+07	1.18E+07	1.25
0.92	9699225	1.34E+07	0.72
0.94	514491	732042	0.70
0.99	1539159	1621073	0.95
0.99	1804389	1634857	1.10
0.95	1971100	1683675	1.17
0.89	9023546	9498128	0.95
0.98	1297330	1289770	1.01
0.99	3153774	2760409	1.14
0.99	3153774	2760409	1.14
0.97	673845	800875	0.84
0.97	6973151	6404373	1.09
0.97	6973151	6404373	1.09
0.93	1619402	2153556	0.75
0.99	3265985	2822824	1.16
0.96	2716883	2854149	0.95
0.99	8541470	7134034	1.20
0.91	8409085	9402151	0.89
0.98	6640041	5637531	1.18
0.99	5.77E+07	5.12E+07	1.13
0.96	2303383	2122258	1.09
0.78	1.07E+07	4296822	2.49
0.95	2680666	2284746	1.17
0.95	2680666	2284746	1.17
0.99	3120410	2555543	1.22
0.99	3120410	2555543	1.22
0.99	3779396	3977728	0.95
1	3.40E+07	3.36E+07	1.01
0.85	3743468	2753759	1.36
0.96	4783772	4069513	1.18
0.89	3375008	3194416	1.06
0.95	665821	589126	1.13
1	6085836	5513193	1.10
0.94	1065651	1002527	1.06
0.99	3101609	3010957	1.03
1	3.43E+07	3.18E+07	1.08
0.9	3.34E+07	3.70E+07	0.90
1	1732947	1611249	1.08
0.98	2889079	2564372	1.13
0.87	2352887	3067184	0.77
0.99	3810950	3115853	1.22
0.93	3730808	3123017	1.19
0.95	3748062	4798296	0.78
0.98	1.27E+07	1.32E+07	0.96
1	2818944	2616844	1.08
0.9	8164977	9251264	0.88
0.9	8164977	9251264	0.88

1	1.98E+07	1.91E+07	1.04
0.96	1418041	1166964	1.22
0.95	2704450	2075877	1.30
0.97	3369342	2629544	1.28
0.97	3369342	2629544	1.28
0.94	1.25E+07	1.02E+07	1.23
0.94	1.25E+07	1.02E+07	1.23
0.94	4819892	4467393	1.08
0.99	1270938	1162027	1.09
0.98	1487750	1468376	1.01
1	8217159	7840010	1.05
0.99	7318783	1.11E+07	0.66
0.98	2.04E+07	1.96E+07	1.04
0.97	2.23E+07	2.43E+07	0.92
1	3.12E+07	3.00E+07	1.04
0.98	3.11E+07	3.30E+07	0.94
0.98	3.11E+07	3.30E+07	0.94
0.97	8.45E+07	8.59E+07	0.98
0.88	1952722	1348483	1.45
0.93	1.49E+07	1.35E+07	1.10
1	3.55E+07	3.05E+07	1.16
0.96	2.42E+07	3.16E+07	0.77
0.99	2307002	1919582	1.20
0.95	2969913	2282544	1.30
0.93	7185671	6892685	1.04
0.96	2735686	2327563	1.18
0.97	3284800	3040163	1.08
0.86	1.82E+07	2.39E+07	0.76
0.86	1.82E+07	2.39E+07	0.76
0.87	2.50E+07	3.07E+07	0.81
0.99	3.51E+07	3.62E+07	0.97
0.98	1201499	1410730	0.85
0.99	9000003	7942826	1.13
1	6246453	5362416	1.16
1	6246453	5362416	1.16
1	6246453	5362416	1.16
0.99	5542384	4796733	1.16
0.99	5542384	4796733	1.16
1	2.08E+07	1.81E+07	1.15
1	2.08E+07	1.81E+07	1.15
0.94	2.34E+07	2.53E+07	0.92
0.95	2653818	2302579	1.15
0.99	1943021	1605467	1.21
0.96	1.08E+07	9335810	1.16
0.99	1.35E+07	1.15E+07	1.17
0.99	1.35E+07	1.15E+07	1.17
0.38	1.16E+07	9291667	1.25
0.98	1.61E+07	1.26E+07	1.28
1	5.26E+08	4.97E+08	1.06
0.91	3136808	3322193	0.94
0.99	5878497	5264465	1.12

0.95	1024139	909881	1.13
0.97	1940003	1838306	1.06
0.96	4603475	4833531	0.95
1	2.29E+07	2.28E+07	1.00
1	2.29E+07	2.28E+07	1.00
0.95	1219266	973010	1.25
1	2.17E+07	1.67E+07	1.30
0.99	3755917	3658261	1.03
0.94	1554821	1484856	1.05
1	1363441	1363441	1.00
1	2654396	2654396	1.00
0.96	6460527	6869521	0.94
1	1.10E+07	1.10E+07	1.00
0.99	1.06E+07	1.14E+07	0.93
0.96	1.44E+07	1.54E+07	0.94
0.96	1.44E+07	1.54E+07	0.94
1	1.84E+07	1.84E+07	1.00
0.9	1468168	2490561	0.59
0.93	2829809	4635227	0.61
0.86	1549596	2216831	0.70
0.86	1549596	2216831	0.70
0.9	2703110	1233440	2.19
0.97	1.46E+07	1.22E+07	1.20
0.88	7479684	5734108	1.30
0.88	7479684	5734108	1.30
0.95	911946	884175	1.03
0.82	2235389	1878759	1.19
0.94	513007	516173	0.99
0.98	6390625	6147298	1.04
1	7467256	6884204	1.08
0.97	8995465	7254407	1.24
1	6.03E+07	5.33E+07	1.13
1	6.03E+07	5.33E+07	1.13
0.99	1529048	1370227	1.12
0.94	799629	574167	1.39
0.98	2154937	1620842	1.33
0.99	4046871	3591787	1.13
0.97	2359892	3610700	0.65
0.96	4251696	3839354	1.11
1	5228752	4542433	1.15
1	5228752	4542433	1.15
0.99	9741682	8555893	1.14
0.99	9741682	8555893	1.14
0.89	6271095	9105232	0.69
0.98	9628700	9451165	1.02
0.98	9628700	9451165	1.02
0.9	1.33E+07	1.11E+07	1.20
1	1.34E+07	1.19E+07	1.13
1	1.34E+07	1.19E+07	1.13
1	1.34E+07	1.19E+07	1.13
0.99	1.09E+07	1.45E+07	0.75

0.8	3611331	4050393	0.89
0.99	6247922	9929060	0.63
0.98	904418	783942	1.15
1	1239549	1092280	1.13
0.99	1034766	1116873	0.93
0.99	8170562	7423146	1.10
0.97	4238859	3349359	1.27
1	1.11E+07	1.02E+07	1.09
1	1.11E+07	1.02E+07	1.09
0.97	6.55E+07	1.23E+07	5.33
0.94	1.12E+07	7239553	1.55
0.99	2.64E+07	2.35E+07	1.12
0.99	6917691	6282915	1.10
0.92	3226833	1996053	1.62
0.92	3226833	1996053	1.62
0.94	2250595	2487664	0.90
0.97	3882570	4858727	0.80
0.97	3469593	4212389	0.82
0.94	1815136	1856563	0.98
0.81	1.30E+07	7091734	1.83
0.95	1220693	1153113	1.06
0.95	1220693	1153113	1.06
0.99	4314853	3411632	1.26
0.94	4522330	4247978	1.06
0.97	6008041	6339167	0.95
0.99	1.00E+07	8905423	1.12
0.92	5783603	1.11E+07	0.52
0.83	1.39E+07	1.63E+07	0.85
0.93	1.64E+07	2.20E+07	0.75
0.93	1.64E+07	2.20E+07	0.75
0.99	9713294	8605020	1.13
0.98	2.43E+07	2.31E+07	1.05
0.9	1.27E+07	1.84E+07	0.69
0.9	1.27E+07	1.84E+07	0.69
0.97	1029680	1071559	0.96
0.98	1.31E+07	1.35E+07	0.97
0.99	4696123	4538245	1.03
0.95	2.67E+07	4.30E+07	0.62
0.96	900904	694034	1.30
0.98	4219564	3388373	1.25
0.93	8574667	8459833	1.01
0.9	1647593	1414819	1.16
1	1.86E+07	1.70E+07	1.09
0.81	2376459	2453152	0.97
0.94	4616131	2974792	1.55
0.98	2494003	2179701	1.14
0.99	6650308	6035057	1.10
0.99	8639949	7261316	1.19
0.99	8639949	7261316	1.19
0.97	8262823	8102016	1.02
0.97	5307233	4706594	1.13

0.95	2521705	2256283	1.12
0.92	917857	872362	1.05
0.99	2.33E+07	2.01E+07	1.16
0.99	2.33E+07	2.01E+07	1.16
0.9	1701972	1413613	1.20
0.97	1671144	1742519	0.96
0.83	1052935	2598857	0.41
0.97	5695475	3459452	1.65
0.98	7188749	5196724	1.38
0.99	7421592	5247929	1.41
0.99	1.01E+07	7731594	1.31
0.88	2.16E+07	1.43E+07	1.51
0.99	4.64E+07	4.07E+07	1.14
0.97	1311297	918693	1.43
0.99	4.06E+07	3.49E+07	1.16
1	1.28E+07	1.17E+07	1.09
0.97	906129	803974	1.13
0.99	3058740	2801533	1.09
0.99	3058740	2801533	1.09
1	4310548	3630801	1.19
1	4310548	3630801	1.19
0.99	5522417	4969857	1.11
0.89	492556	426245	1.16
0.92	1142408	916774	1.25
0.79	2202197	1305392	1.69
0.79	2202197	1305392	1.69
0.99	1837666	2122185	0.87
0.96	2.99E+07	2.50E+07	1.20
0.98	2.87E+07	2.79E+07	1.03
0.99	1.10E+08	1.12E+08	0.98
0.86	2.76E+07	3590198	7.69
1	1.50E+07	1.18E+07	1.27
0.93	693540	1048449	0.66
0.94	2250595	2487664	0.90
0.98	2078853	3224028	0.64
0.97	3882570	4858727	0.80
0.98	6834792	7508415	0.91
0.97	1.12E+07	1.23E+07	0.91
0.98	1.06E+07	1.51E+07	0.70
0.92	1685278	1610773	1.05
0.94	4028163	3773231	1.07
0.99	2056494	1680849	1.22
0.88	1109248	544925	2.04
0.93	3641496	2864997	1.27
0.99	2.48E+07	3.83E+07	0.65
0.99	2.48E+07	3.83E+07	0.65
0.98	2679221	2446144	1.10
0.99	3166250	2910128	1.09
1	1.17E+07	1.10E+07	1.06
0.85	1344405	1267165	1.06
0.95	2120879	1643482	1.29

0.99	2.34E+07	2.27E+07	1.03
0.91	4490951	3766898	1.19
0.99	3.37E+07	3.06E+07	1.10
1	4.81E+07	4.65E+07	1.03
0.97	1.53E+08	1.51E+08	1.01
0.9	3831592	3370675	1.14
0.99	3859397	3572899	1.08
0.99	3602078	2653341	1.36
0.99	1.02E+07	8306526	1.23
0.93	2.46E+07	2.52E+07	0.98
0.93	2.46E+07	2.52E+07	0.98
1	3.98E+07	2.88E+07	1.38
0.93	1951588	2609154	0.75
0.94	1165954	940434	1.24
0.98	2268552	2083720	1.09
0.98	1403814	1201595	1.17
0.91	2299367	3070062	0.75
0.98	4445909	4417367	1.01
0.72	8129925	1.12E+07	0.73
0.99	1.82E+07	1.79E+07	1.02
0.99	3.05E+07	5.09E+07	0.60
0.98	1606552	1728858	0.93
0.99	6516297	6175470	1.06
1	1.33E+07	1.25E+07	1.06
0.99	1.58E+07	1.35E+07	1.17
0.84	3.93E+07	3.32E+07	1.18
0.93	5497563	6868481	0.80
0.99	8639798	3.24E+07	0.27
0.98	4293268	4501723	0.95
0.99	2959155	2906505	1.02
0.95	5561970	5756645	0.97
0.98	4971066	6460221	0.77
0.98	4971066	6460221	0.77
1	5.95E+07	5.02E+07	1.19
0.98	3210377	2783978	1.15
0.99	3055385	2817566	1.08
0.99	3.13E+07	3.24E+07	0.97
0.84	1603986	1642938	0.98
0.93	4345523	4391063	0.99
0.94	2.97E+07	2.59E+07	1.15
0.98	2835260	2566772	1.10
0.98	2835260	2566772	1.10
1	5.95E+07	5.02E+07	1.19
0.94	1741677	2137116	0.81
0.97	1555486	2218729	0.70
0.96	5318951	4517246	1.18
0.96	1.75E+07	1.43E+07	1.22
0.96	1.75E+07	1.43E+07	1.22
0.97	1.62E+07	1.59E+07	1.02
0.94	1648611	1033664	1.59
0.95	1706983	1524128	1.12

0.97	4762464	4233767	1.12
0.97	4762464	4233767	1.12
0.97	6982363	6797198	1.03
0.62	142969	71076	2.01
0.81	8126870	5268550	1.54
0.27	6.63E+07	6.16E+07	1.08
1	8.89E+07	8.55E+07	1.04
0.99	2.70E+08	2.64E+08	1.02
0.99	2.70E+08	2.64E+08	1.02
0.99	3.80E+08	3.69E+08	1.03
0.98	4074346	3607182	1.13
0.92	1.52E+07	1.65E+07	0.92
0.97	5273010	5351583	0.99
0.87	1.17E+07	1.06E+07	1.10
0.99	3.17E+07	3954697	8.02
0.96	3188361	2424475	1.32
0.94	3803515	3359716	1.13
0.98	1.06E+07	8907373	1.19
1	3.56E+07	2.77E+07	1.29
0.96	4383444	5327162	0.82
0.96	4383444	5327162	0.82
1	6625688	6625688	1.00
0.86	2963988	2456380	1.21
0.9	3725915	2826252	1.32
0.87	3756941	3539278	1.06
0.91	1643889	1816190	0.91
0.82	4894289	5690893	0.86
0.97	7967679	8150935	0.98
0.89	2.21E+08	1.00E+07	22.10
0.94	6385607	6096034	1.05
0.87	1214955	373443	3.25
0.97	4.68E+07	2952421	15.85
0.83	1701706	1865997	0.91
1	3.98E+07	3.29E+07	1.21
0.98	5192122	5793652	0.90
0.97	9069675	8850156	1.02
0.98	1.93E+07	1.67E+07	1.16
0.92	1.15E+07	1.84E+07	0.63
0.97	1818181	1885823	0.96
0.83	6374173	7914339	0.81
0.98	1.08E+07	9961541	1.08
0.99	1.15E+07	1.31E+07	0.88
0.99	1.15E+07	1.31E+07	0.88
0.96	1.09E+07	8454504	1.29
0.9	1.20E+07	8432332	1.42
0.97	802257	618494	1.30
0.99	2765373	2547465	1.09
0.99	2765373	2547465	1.09
0.99	3207836	2601318	1.23
0.95	3445541	3383807	1.02
0.92	8632371	7677311	1.12

0.99	9490256	8498015	1.12
1	3332754	3012715	1.11
0.97	1.97E+07	7080694	2.78
0.95	4631153	4325495	1.07
0.96	9777948	8900807	1.10
0.98	4020530	3186198	1.26
0.99	4178227	4756005	0.88
0.93	1792033	1893830	0.95
0.92	2985087	2367493	1.26
0.98	4941197	4709245	1.05
1	8106687	7034377	1.15
0.99	1.33E+07	1.37E+07	0.97
1	2.21E+07	1.82E+07	1.21
1	2.21E+07	1.82E+07	1.21
1	3.80E+07	3.15E+07	1.21
1	4.42E+07	3.67E+07	1.20
1	4.30E+07	4.17E+07	1.03
0.99	4.91E+07	4.58E+07	1.07
0.99	5.05E+07	4.66E+07	1.08
0.95	758682	677443	1.12
0.95	5650649	5013856	1.13
0.99	9056014	7001476	1.29
0.98	9000635	9550918	0.94
0.91	707942	533065	1.33
0.79	986575	929346	1.06
0.84	2638779	2775389	0.95
0.97	1269720	1137229	1.12
0.97	1269720	1137229	1.12
0.96	1203509	1857918	0.65
0.96	2302305	2084476	1.10
0.99	4380239	3234760	1.35
0.99	6814892	5821105	1.17
0.99	1.62E+07	1.38E+07	1.17
0.97	4271984	4110261	1.04
0.99	4484284	4664214	0.96
0.99	4484284	4664214	0.96
0.98	1389052	1266658	1.10
0.98	1389052	1266658	1.10
0.94	2230354	1298366	1.72
0.94	2230354	1298366	1.72
0.96	1869776	1498071	1.25
0.98	7220056	6074666	1.19
0.95	7336377	6993903	1.05
0.98	9645523	8148039	1.18
0.99	1.40E+07	1.16E+07	1.21
0.98	3139703	3819768	0.82
0.99	7900801	6827155	1.16
1	1.26E+07	1.27E+07	0.99
0.98	5322376	4255456	1.25
0.9	7525449	5368099	1.40
0.96	7833201	7264542	1.08

0.9	7121148	8140599	0.87
0.92	7541594	8273303	0.91
1	1.69E+07	1.53E+07	1.10
1	1.69E+07	1.53E+07	1.10
0.99	1751627	1669466	1.05
0.98	2164887	2026922	1.07
0.98	1138040	1110556	1.02
0.97	1957299	1692275	1.16
0.99	2349442	2362877	0.99
0.94	7171738	5829467	1.23
0.99	5064771	4192384	1.21
0.96	1.51E+07	1.15E+07	1.31
0.92	2821856	2749242	1.03
0.97	2387516	2546581	0.94
0.97	2387516	2546581	0.94
0.98	6330546	6077629	1.04
0.99	3685580	3755558	0.98
0.99	3685580	3755558	0.98
0.98	7162340	4404114	1.63
1	6520558	5705236	1.14
0.98	7702416	6651365	1.16
0.92	7391219	1.10E+07	0.67
0.98	1.20E+07	1.12E+07	1.07
0.98	1.41E+07	1.23E+07	1.15
0.96	3138269	2.07E+07	0.15
0.11	1.33E+07	3.69E+07	0.36
0.97	2344751	2372560	0.99
0.97	2403327	2571473	0.93
0.89	3529577	3966645	0.89
0.9	3583540	5197304	0.69
0.99	9732658	1.08E+07	0.90
0.92	1.23E+07	1.18E+07	1.04
0.98	1.00E+07	1.21E+07	0.83
0.98	1.00E+07	1.21E+07	0.83
1	2.54E+07	2.34E+07	1.09
1	2.62E+07	2.45E+07	1.07
0.99	2.87E+07	2.88E+07	1.00
0.98	3.39E+07	3.24E+07	1.05
0.99	3.66E+07	3.25E+07	1.13
0.99	6.03E+07	6.41E+07	0.94
1	4.33E+07	3.64E+07	1.19
0.97	2455567	2092418	1.17
0.61	2151309	858768	2.51
0.9	1329122	2014645	0.66
1	3735824	3044672	1.23
0.98	6273355	5371682	1.17
0.98	6273355	5371682	1.17
0.99	1.75E+07	1.70E+07	1.03
0.99	1.75E+07	1.70E+07	1.03
1	2.20E+07	1.83E+07	1.20
0.89	1340433	1250555	1.07

0.61	4361192	8869777	0.49
0.99	1705479	1316304	1.30
0.93	2224598	1730425	1.29
1	5669843	4898261	1.16
0.99	6649204	5829355	1.14
1	7496454	6153972	1.22
1	1.80E+07	1.51E+07	1.19
0.91	2659629	2629330	1.01
0.96	3439985	2771570	1.24
0.97	1682416	1163700	1.45
0.97	1682416	1163700	1.45
0.81	1099660	1250305	0.88
0.89	1889369	1808401	1.04
0.97	7793842	6841383	1.14
0.99	831808	738128	1.13
0.99	4318495	3868186	1.12
0.98	1409693	947967	1.49
0.96	1036174	1051735	0.99
0.93	3099218	2701571	1.15
0.93	3099218	2701571	1.15
0.99	1.32E+07	1.20E+07	1.10
0.99	3022288	2800325	1.08
0.99	1182935	1422510	0.83
0.99	8746133	7801193	1.12
0.92	1679607	1260042	1.33
0.99	4.99E+07	4.42E+07	1.13
0.96	1925409	1152535	1.67
0.93	4663714	4638548	1.01
0.93	4663714	4638548	1.01
0.93	1036252	1378298	0.75
0.92	2685383	2351693	1.14
0.98	4087040	3667773	1.11
0.97	1.56E+07	1.05E+07	1.49
0.99	1.21E+07	1.19E+07	1.02
0.99	2487349	2162623	1.15
0.99	3581365	3035468	1.18
0.99	4422897	4076308	1.09
0.96	7885900	6313688	1.25
1	7801698	6743855	1.16
0.96	981746	845170	1.16
0.98	1.08E+07	8348568	1.29
0.92	2312052	2085426	1.11
0.92	2312052	2085426	1.11
0.98	338275	6645974	0.05
0.74	2836022	3706102	0.77
0.99	7203017	6678177	1.08
0.99	7203017	6678177	1.08
0.99	9368090	8267468	1.13
0.8	1.08E+08	1683225	64.16
0.94	767047	553359	1.39
0.9	644295	560821	1.15

0.97	965535	1475287	0.65
0.96	2074338	1631361	1.27
0.98	2645293	2458786	1.08
0.99	3381222	3107291	1.09
0.98	4421444	4136078	1.07
0.97	4134834	4217989	0.98
0.99	5863275	5786041	1.01
1	7215701	6534418	1.10
0.99	8474710	6800801	1.25
1	9848174	9153279	1.08
1	1.49E+07	1.33E+07	1.12
1	1.49E+07	1.33E+07	1.12
0.98	3.71E+07	3.27E+07	1.13
0.22	1.18E+08	4.05E+07	2.91
1	5.71E+07	5.45E+07	1.05
0.87	5.07E+07	6.24E+07	0.81
1	1.25E+08	1.10E+08	1.14
0.99	2773795	2851900	0.97
0.8	4666293	4130386	1.13
0.95	1.25E+07	1.00E+07	1.25
0.89	1798310	1702425	1.06
0.97	1913059	1802138	1.06
0.98	2224642	1512813	1.47
0.98	2224642	1512813	1.47
0.96	1885069	1501556	1.26
0.99	4981897	5197280	0.96
0.94	2831763	2261299	1.25
0.97	3448892	3151133	1.09
0.98	4067682	3844578	1.06
0.94	4981564	4337854	1.15
0.98	3.90E+07	3.58E+07	1.09

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Supplemental Table 2. Genetic mutations in the tested cancer cell lines.

Cell line	Mutations
HeLa(1)	CTNNB1
DU145(2)	CDKN2A; RB1; STK11; TP53
MCF7(2)	CDKN2A; PIK3CA
H157(3)	CDKN2A; KRAS; PTEN; TP53; STK11

In HeLa cells, the mutation in CTNNB1 (in Wnt/CTNNB1 pathway) may augment the malignant signaling of the Pten/PI3K/mTOR cascade (Lague, M.N., et al., *Carcinogenesis*, 29, 2062-2072, 2008). In Du145 and H157 cells, the mutation in TP53 may deregulate the innate negative control of mTOR activity in these cells (Feng, Z., et al., *Proc Natl Acad Sci U S A*, 102, 8204-8209, 2005). In addition, PIK3CA and Pten are direct upstream regulators of the mTOR pathway (Guertin, D.A. and Sabatini, D.M., *Cancer Cell*, 12, 9-22, 2007). The mutations in PIK3CA and Pten in MCF7 and H157 cells, respectively, could enhance the mTOR cancerous signal in these cells.

Reference:

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2. Ikediobi ON, Davies H, Bignell G, et al. Mutation analysis of 24 known cancer genes in the NCI-60 cell line set. *Mol Cancer Ther* 2006; 5: 2606-12.
3. The COSMIC database of The Sanger Institute