

**Title:** The Power Decoder simulator for the evaluation of pooled shRNA screen performance

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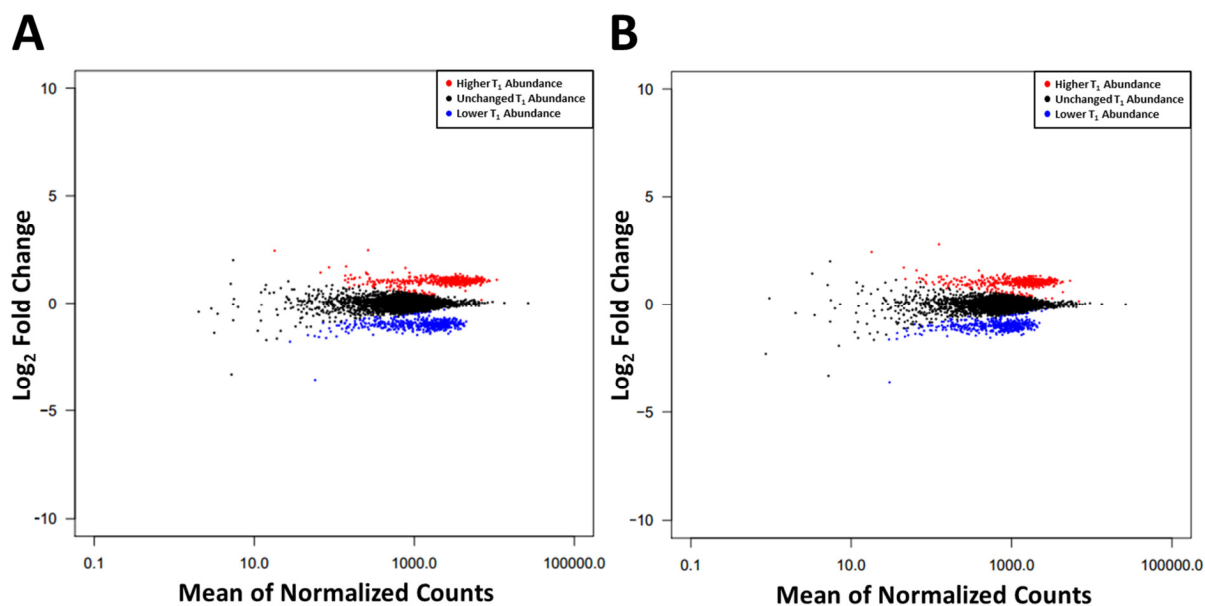
### **Supplemental Materials**

The open-source software described in the paper, as well as installation instructions and sample data sets, can be accessed on SourceForge.net at

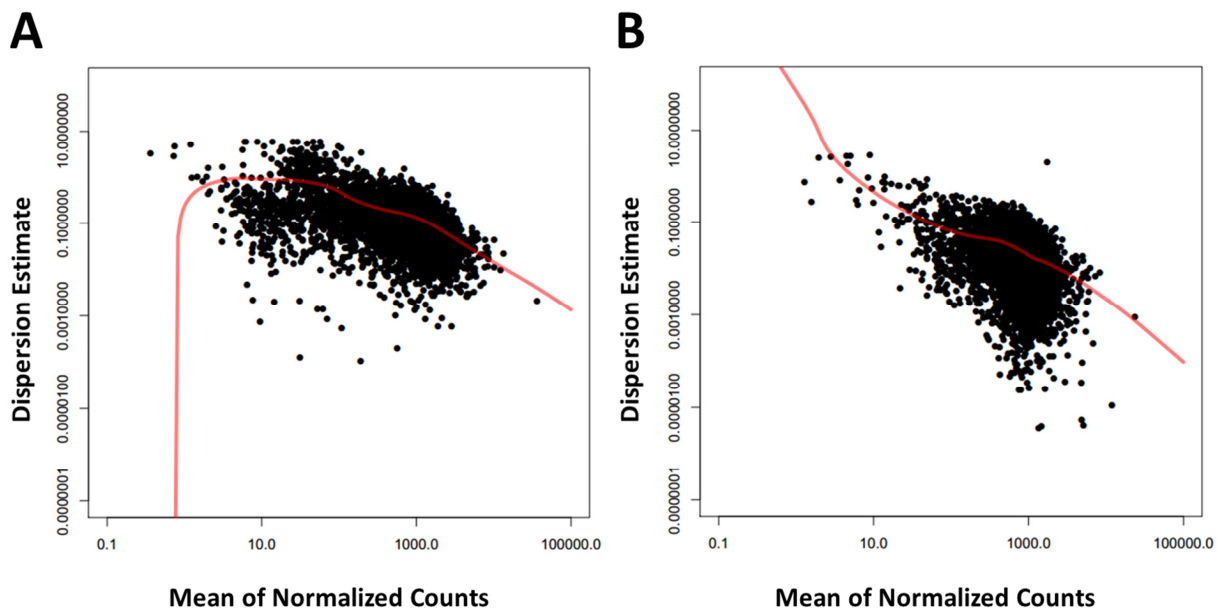
<http://sourceforge.net/p/powerdecoder/code/HEAD/tree/trunk/>

## Supplemental Figures

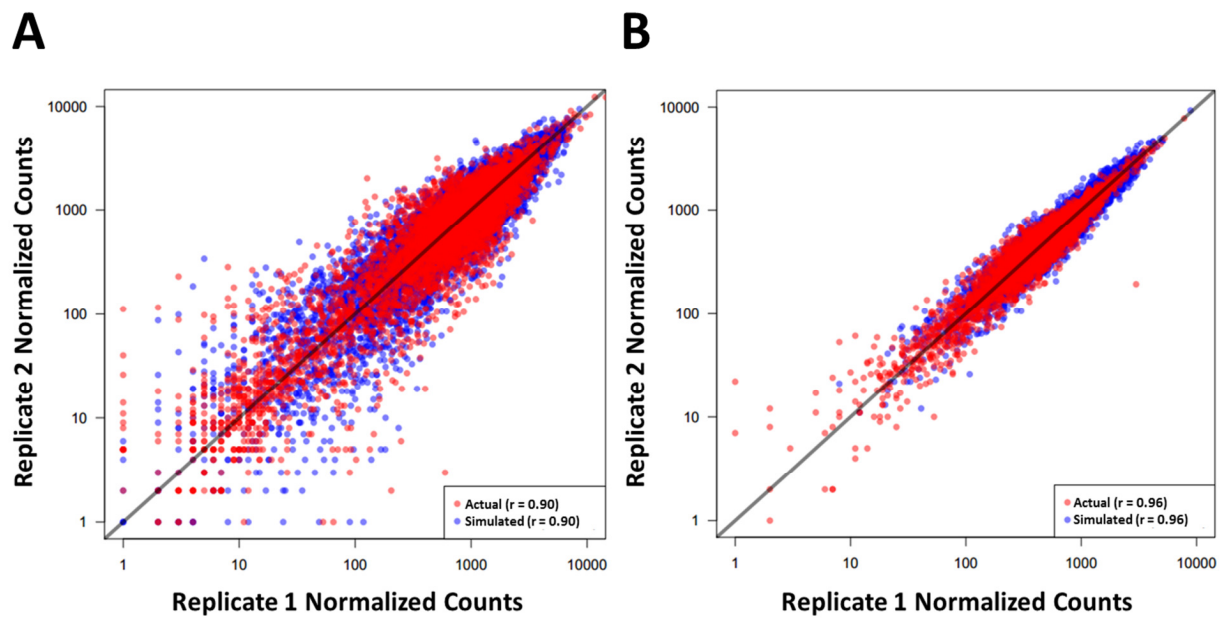
**Figure S1.** Normalization of engineered screen data. MA plots of  $T_0$  raw (**A**) and a representative example of normalized (**B**) shRNA pooled screen data for Screen 500\_2x. shRNAs in the two 480-reagent subsets are shown in red and blue, while shRNAs in the main 4,675-reagent set are shown in black. As intended, normalization shifts the red and blue series back toward the bulk of the black series.



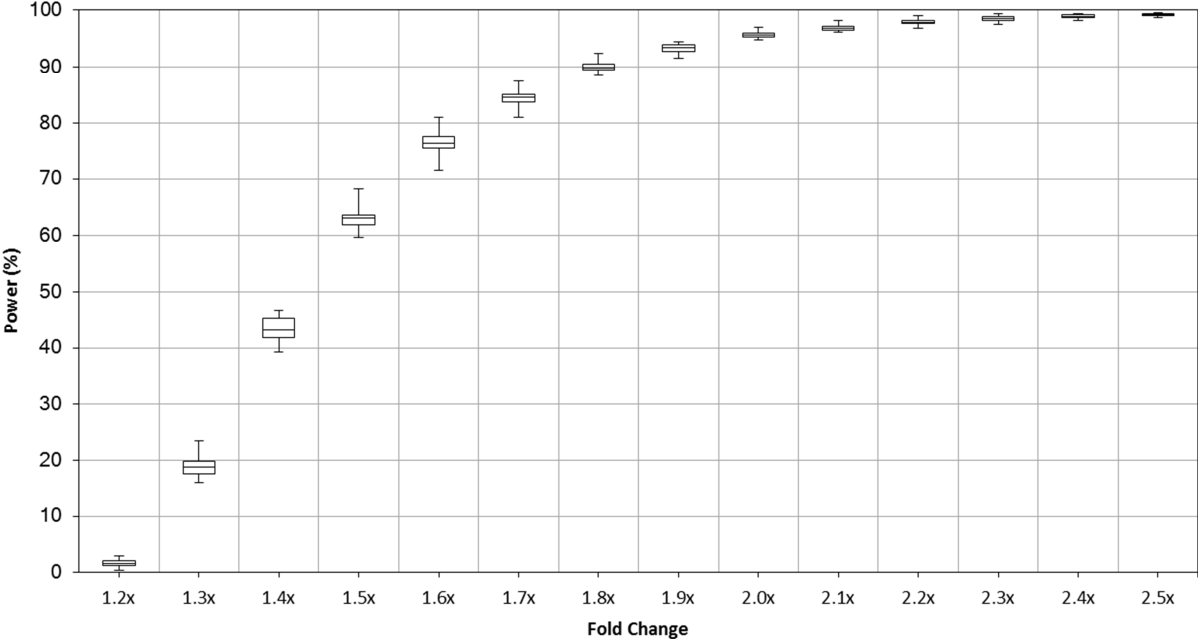
**Figure S2.** The mean-dispersion relationship of actual biological replicate counts for shRNAs in NGS data. Mean-dispersion relationship for representative examples of normalized experimental data from **(A)** Screen 100\_2x and **(B)** Screen 500\_2x. The dispersion parameter for each individual shRNA graphed as a function of mean number of counts for that shRNA. The red line is a regression line fitted through the points using the DESeq software, and can be used to model biological noise.



**Figure S3.** Simulated replicate noise compared to actual biological replicate noise. Comparison of replicate noise of representative examples of normalized actual (red) and simulated (blue) data for **(A)** Screen 100\_2x and **(B)** Screen 500\_2x. For each graph, the number of counts for each shRNA in biological replicate 1 is plotted as a function of the number of counts for the corresponding shRNA in biological replicate 2.



**Figure S4.** Power as a function of fold change. Box plots represent powers derived from DESeq analysis of 30 simulated NGS experiments per fold change.



## Supplemental Tables

**Table S1.** shRNA library composition

shRNA	Target gene	Library
V2LHS_100148	C8orf37	Depleted
V2LHS_100410	C1QTNF9	Depleted
V2LHS_100888	SCAF4	Depleted
V2LHS_100893	DOCK2	Depleted
V2LHS_100917	NCAPH	Depleted
V2LHS_102235	DAAM2	Depleted
V2LHS_103078	SLC22A10	Depleted
V2LHS_103320	SPRED3	Depleted
V2LHS_103392	ZNF28	Depleted
V2LHS_103851	C1orf174	Depleted
V2LHS_110990	KIAA0355	Depleted
V2LHS_111028	RNF213	Depleted
V2LHS_112102	ANXA1	Depleted
V2LHS_113578	ECM2	Depleted
V2LHS_114001	GAB1	Depleted
V2LHS_114059	Gas1	Depleted
V2LHS_114341	TOR1AIP1	Depleted
V2LHS_114679	ERLEC1	Depleted
V2LHS_115181	ZNF12	Depleted
V2LHS_115236	CDH9	Depleted
V2LHS_115972	C20orf111	Depleted
V2LHS_116045	PDZD11	Depleted
V2LHS_116074	FAM178B	Depleted
V2LHS_116079	MRPL37	Depleted
V2LHS_116173	YTHDC2	Depleted
V2LHS_116230	ARMCX5	Depleted
V2LHS_116272	C12orf43	Depleted
V2LHS_116276	RANBP17	Depleted
V2LHS_116312	TTC23	Depleted
V2LHS_116564	Der1	Depleted
V2LHS_116727	HMGNS	Depleted
V2LHS_116785	ZBP1	Depleted
V2LHS_116857	ITFG1	Depleted
V2LHS_11686	ZBTB24	Depleted
V2LHS_116860	ITFG1	Depleted
V2LHS_116885	STMN4	Depleted
V2LHS_116956	NDEL1	Depleted
V2LHS_117018	COL21A1	Depleted
V2LHS_117148	HNRNPC	Depleted
V2LHS_117330	CCM2	Depleted
V2LHS_117345	C19orf12	Depleted

V2LHS_117362	TEX101	Depleted
V2LHS_117463	SH3BGRL2	Depleted
V2LHS_117549	GRWD1	Depleted
V2LHS_117805	MND1	Depleted
V2LHS_117806	MND1	Depleted
V2LHS_117924	C3orf20	Depleted
V2LHS_117986	ARMC4	Depleted
V2LHS_118188	FCRL3	Depleted
V2LHS_118577	PPP1R36	Depleted
V2LHS_118685	ANO4	Depleted
V2LHS_118747	LRRTM1	Depleted
V2LHS_118832	DYNC2H1	Depleted
V2LHS_118952	TTC39A	Depleted
V2LHS_119919	C7orf55	Depleted
V2LHS_120049	FAM151B	Depleted
V2LHS_120197	GRAMD2	Depleted
V2LHS_120243	SLX4	Depleted
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V2LHS_120639	OR6T1	Depleted
V2LHS_120752	OR8K3	Depleted
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V2LHS_67406	C14orf2	Depleted
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V2LHS_71746	Vgll2	Depleted
V2LHS_71855	Samd10	Depleted
V2LHS_71962	OR5P3	Depleted
V2LHS_71977	NLRP5	Depleted
V2LHS_72017	CBLN4	Depleted
V2LHS_72018	CBLN4	Depleted
V2LHS_72320	PHTF2	Depleted
V2LHS_73271	BCAN	Depleted
V2LHS_7360	KLRC1	Depleted
V2LHS_78953	STARD3	Depleted
V2LHS_80578	FAF2	Depleted
V2LHS_86666	PTPLAD2	Depleted
V2LHS_90718	IBTK	Depleted
V2LHS_91982	C12orf35	Depleted
V2LHS_9227	WNT16	Depleted
V2LHS_93490	KRT14	Depleted
V2LHS_94667	AZGP1	Depleted
V2LHS_95003	UPK1B	Depleted
V2LHS_95044	Zbtb25	Depleted
V2LHS_95081	CLDN10	Depleted
V2LHS_9526	CXorf26	Depleted
V2LHS_95556	SEC24D	Depleted
V2LHS_95855	FAM13A	Depleted
V2LHS_95949	COBLL1	Depleted
V2LHS_96000	DOLK	Depleted
V2LHS_96103	Cnksr2	Depleted
V2LHS_96119	FASTKD2	Depleted
V2LHS_96122	ZNF510	Depleted
V2LHS_96177	TRAPPC8	Depleted
V2LHS_96588	CNOT6	Depleted
V2LHS_96706	Rwdd3	Depleted
V2LHS_96736	KIAA1429	Depleted
V2LHS_96771	C20orf4	Depleted
V2LHS_96790	KRT23	Depleted
V2LHS_96816	TRAF3IP2	Depleted
V2LHS_96833	TBC1D10B	Depleted
V2LHS_96860	ZZZ3	Depleted
V2LHS_97065	SCCPDH	Depleted
V2LHS_97250	C14orf166	Depleted

V2LHS_97417	GOLT1B	Depleted
V2LHS_97730	INSIG2	Depleted
V2LHS_97731	INSIG2	Depleted
V2LHS_98198	FANCF	Depleted
V2LHS_98489	RABL5	Depleted
V2LHS_98561	IL25	Depleted
V2LHS_98802	C17orf39	Depleted
V2LHS_98877	NABP2	Depleted
V2LHS_98979	METTL16	Depleted
V2LHS_99105	COL18A1	Depleted
V2LHS_99285	HNRNPK	Depleted
V2LHS_99331	TEX12	Depleted
V2LHS_99437	PUS7L	Depleted
V2LHS_99479	N4BP2L1	Depleted
V2LHS_99846	TAGAP	Depleted
V2LHS_99926	ZFP82	Depleted
V2LHS_100487	KY	Enriched
V2LHS_101112	HSF5	Enriched
V2LHS_101114	HSF5	Enriched
V2LHS_10154	GIMAP5	Enriched
V2LHS_10179	UTP6	Enriched
V2LHS_10218	LRRRC59	Enriched
V2LHS_102243	TDRD6	Enriched
V2LHS_104018	OR10R2	Enriched
V2LHS_111618	IGFBP1	Enriched
V2LHS_111780	LTBP1	Enriched
V2LHS_11180	PAQR8	Enriched
V2LHS_113258	CSTF2	Enriched
V2LHS_113267	CSTF3	Enriched
V2LHS_113888	FLII	Enriched
V2LHS_114284	GRSF1	Enriched
V2LHS_114364	C1orf144	Enriched
V2LHS_114478	C1QTNF5, MFRP	Enriched
V2LHS_115430	Zfp110, ZNF274	Enriched
V2LHS_11548	MPZ	Enriched
V2LHS_115803	PIGP	Enriched
V2LHS_116102	MRPL51	Enriched
V2LHS_117002	APOLD1	Enriched
V2LHS_117063	CD1E	Enriched
V2LHS_118686	IQUB	Enriched
V2LHS_12057	CTCFL	Enriched
V2LHS_120883	OR4S2	Enriched
V2LHS_12176	ZBTB47	Enriched
V2LHS_12517	SLBP	Enriched
V2LHS_12549	DCTN6	Enriched
V2LHS_12700	ORC6	Enriched
V2LHS_12824	TBC1D5	Enriched



V2LHS_130329	CALML4	Enriched
V2LHS_131107	IL12A	Enriched
V2LHS_131306	PC	Enriched
V2LHS_131819	FRZB	Enriched
V2LHS_131887	GBAS	Enriched
V2LHS_132258	IFIT1	Enriched
V2LHS_132259	IFIT1	Enriched
V2LHS_132658	ARCN1	Enriched
V2LHS_133279	IFNA8	Enriched
V2LHS_133338	IL13	Enriched
V2LHS_133503	ITIH2	Enriched
V2LHS_134079	LSP1	Enriched
V2LHS_134153	TACSTD2	Enriched
V2LHS_134217	MAGEB2	Enriched
V2LHS_134488	RWDD1	Enriched
V2LHS_134627	HMP19	Enriched
V2LHS_134684	KLHL5	Enriched
V2LHS_13501	COPS6	Enriched
V2LHS_135199	FAM13B	Enriched
V2LHS_135299	ZNF644	Enriched
V2LHS_135310	MRPL35	Enriched
V2LHS_135409	PRR16	Enriched
V2LHS_135643	BRD9	Enriched
V2LHS_135655	ZSCAN18	Enriched
V2LHS_135775	FKRP	Enriched
V2LHS_136068	NOX5	Enriched
V2LHS_136284	CEP97	Enriched
V2LHS_136317	RIC3	Enriched
V2LHS_136322	METTL21D	Enriched
V2LHS_136410	SH3TC2	Enriched
V2LHS_13667	KLHDC5	Enriched
V2LHS_136686	C3orf36	Enriched
V2LHS_137027	ZXDC	Enriched
V2LHS_137128	SPG11	Enriched
V2LHS_137281	CEP63	Enriched
V2LHS_137566	PDCD1LG2	Enriched
V2LHS_137926	FAM176A	Enriched
V2LHS_138025	SLA2	Enriched
V2LHS_138224	Zmynd15	Enriched
V2LHS_138302	PRPF38A	Enriched
V2LHS_138529	TMEM79	Enriched
V2LHS_138639	CHCHD6	Enriched
V2LHS_138665	ZNF397	Enriched
V2LHS_139000	CSRNP1	Enriched
V2LHS_139009	BBS4	Enriched
V2LHS_139509	CRAMP1L	Enriched
V2LHS_139649	RANBP10	Enriched

V2LHS_140411	FAM167A	Enriched
V2LHS_141102	FAM171A1	Enriched
V2LHS_141105	FAM171A1	Enriched
V2LHS_142004	AGBL1	Enriched
V2LHS_142496	PLEKHG7	Enriched
V2LHS_142560	FGD6	Enriched
V2LHS_143072	BSPH1	Enriched
V2LHS_14475	GZF1	Enriched
V2LHS_14502	KBTBD3	Enriched
V2LHS_14787	SZT2	Enriched
V2LHS_149886	Srsf1	Enriched
V2LHS_15011	DUOXA1	Enriched
V2LHS_150160	C9	Enriched
V2LHS_150318	CD1D	Enriched
V2LHS_150394	CD63	Enriched
V2LHS_150395	Cd63	Enriched
V2LHS_150684	CNN3	Enriched
V2LHS_150924	HAPLN1	Enriched
V2LHS_151518	FBLN1	Enriched
V2LHS_151585	MATN1	Enriched
V2LHS_151639	CD46	Enriched
V2LHS_151871	MNDA	Enriched
V2LHS_151903	MPV17	Enriched
V2LHS_152160	NDN	Enriched
V2LHS_152413	NVL	Enriched
V2LHS_152804	SEPW1	Enriched
V2LHS_153237	SNAPC4	Enriched
V2LHS_153307	Snx2	Enriched
V2LHS_154019	THBS1	Enriched
V2LHS_154782	ZNF395	Enriched
V2LHS_15515	TMED7	Enriched
V2LHS_155620	IPO9	Enriched
V2LHS_155689	HAUS2	Enriched
V2LHS_15593	KIAA0556	Enriched
V2LHS_156079	BTBD7	Enriched
V2LHS_15681	OCIAD2	Enriched
V2LHS_157896	ZNF669	Enriched
V2LHS_158063	ZNF671	Enriched
V2LHS_158893	EFS	Enriched
V2LHS_160909	FGD2	Enriched
V2LHS_16249	ZNF573	Enriched
V2LHS_16732	PEX11B	Enriched
V2LHS_168844	DUSP28	Enriched
V2LHS_168897	PITPNB	Enriched
V2LHS_170134	PLS1	Enriched
V2LHS_171078	PEX19	Enriched
V2LHS_171268	RASGRF1	Enriched

V2LHS_171284	RBBP8	Enriched
V2LHS_171909	Vbp1	Enriched
V2LHS_171951	VIP	Enriched
V2LHS_171978	VSNL1	Enriched
V2LHS_172128	ZNF267	Enriched
V2LHS_172209	ZNF132	Enriched
V2LHS_172219	ZNF133	Enriched
V2LHS_172304	ZNF189	Enriched
V2LHS_172404	SCG2	Enriched
V2LHS_173517	PIGG	Enriched
V2LHS_173520	PIGG	Enriched
V2LHS_173595	TEX10	Enriched
V2LHS_173628	TBC1D8B	Enriched
V2LHS_174104	TRNAU1AP	Enriched
V2LHS_174117	FAM120C	Enriched
V2LHS_174261	SLC25A38	Enriched
V2LHS_174334	ACSM5	Enriched
V2LHS_174537	C14orf119	Enriched
V2LHS_174540	C14orf119	Enriched
V2LHS_174547	C14orf118, RGD1308907	Enriched
V2LHS_174737	ZNF587	Enriched
V2LHS_174776	Mrpl20	Enriched
V2LHS_174894	DET1	Enriched
V2LHS_175066	LRRN3	Enriched
V2LHS_175177	C5orf22	Enriched
V2LHS_175333	LSG1	Enriched
V2LHS_175433	IL26	Enriched
V2LHS_175463	LRP2BP	Enriched
V2LHS_175469	HJURP	Enriched
V2LHS_17554	A2ML1	Enriched
V2LHS_175574	DOK5	Enriched
V2LHS_175643	VIMP	Enriched
V2LHS_176004	GSDMB	Enriched
V2LHS_176219	ETAA1	Enriched
V2LHS_176291	FAM105A	Enriched
V2LHS_17630	WDR66	Enriched
V2LHS_176441	MRPL50	Enriched
V2LHS_176493	MTMR12	Enriched
V2LHS_176719	Epb4.1l4b, Epb41l4b	Enriched
V2LHS_176785	ATAT1	Enriched
V2LHS_176920	PCNXL2	Enriched
V2LHS_176983	WWC2	Enriched
V2LHS_177017	FOXRED2	Enriched
V2LHS_177468	LRCH3	Enriched
V2LHS_177529	Zc3h10	Enriched
V2LHS_177650	Tbrg1	Enriched
V2LHS_177653	TBRG1	Enriched

V2LHS_177788	FAM104A	Enriched
V2LHS_177925	SERAC1	Enriched
V2LHS_177933	FRAS1	Enriched
V2LHS_178395	KIAA1737	Enriched
V2LHS_178658	IGSF22	Enriched
V2LHS_178735	PROX2	Enriched
V2LHS_178743	FAM177A1	Enriched
V2LHS_179336	AQPEP	Enriched
V2LHS_179340	PLAC1L	Enriched
V2LHS_179377	C1orf101	Enriched
V2LHS_179406	DPY19L2	Enriched
V2LHS_17972	METTL21C	Enriched
V2LHS_179811	CABLES2	Enriched
V2LHS_180022	TDRD9	Enriched
V2LHS_180072	ISCA2	Enriched
V2LHS_180084	AGPHD1	Enriched
V2LHS_180085	AGPHD1	Enriched
V2LHS_180114	C16orf87	Enriched
V2LHS_180153	ZBPB2	Enriched
V2LHS_180323	FSIP2	Enriched
V2LHS_180329	LYPD6	Enriched
V2LHS_180427	PAGE3	Enriched
V2LHS_180828	OTOL1	Enriched
V2LHS_180833	OR5H6	Enriched
V2LHS_181143	FAM216B	Enriched
V2LHS_181188	SERTM1	Enriched
V2LHS_182322	DNAJB12	Enriched
V2LHS_182591	QSER1	Enriched
V2LHS_182939	VSTM1	Enriched
V2LHS_183302	WNT4	Enriched
V2LHS_18355	TLE3	Enriched
V2LHS_189013	ZNF91	Enriched
V2LHS_19022	ZNF688	Enriched
V2LHS_19146	TMEM56	Enriched
V2LHS_19393	DNAJC19	Enriched
V2LHS_196190	GPX8	Enriched
V2LHS_196625	IGSF6	Enriched
V2LHS_196788	IVNS1ABP	Enriched
V2LHS_197404	SND1-IT1	Enriched
V2LHS_197628	Pdcd10	Enriched
V2LHS_197814	MFAP3	Enriched
V2LHS_198861	AGR2	Enriched
V2LHS_199021	TRAM1	Enriched
V2LHS_199050	RBMS3	Enriched
V2LHS_200463	AP2S1	Enriched
V2LHS_203573	FGD3	Enriched
V2LHS_203883	ITGB3BP	Enriched

V2LHS_206060	ISCU	Enriched
V2LHS_20765	KBTBD3	Enriched
V2LHS_21038	CABP4	Enriched
V2LHS_212103	HEPACAM2	Enriched
V2LHS_214166	NOXRED1	Enriched
V2LHS_214413	ZBTB11	Enriched
V2LHS_214638	GPRIN1	Enriched
V2LHS_216983	LYRM7	Enriched
V2LHS_217945	TRMT10C	Enriched
V2LHS_218062	LACTB	Enriched
V2LHS_218205	IWS1	Enriched
V2LHS_218308	ZNF84	Enriched
V2LHS_218390	THG1L	Enriched
V2LHS_218527	TSPAN4	Enriched
V2LHS_218535	SLC24A6	Enriched
V2LHS_21855	C15orf32	Enriched
V2LHS_218609	TMPO	Enriched
V2LHS_218610	BRIX1	Enriched
V2LHS_218760	BCOR	Enriched
V2LHS_218918	C5orf22	Enriched
V2LHS_218932	WDR52	Enriched
V2LHS_219027	WDR44	Enriched
V2LHS_21906	MKKS	Enriched
V2LHS_219270	PSMD10	Enriched
V2LHS_219392	CDKAL1	Enriched
V2LHS_219634	PPL	Enriched
V2LHS_219811	Pcdh17	Enriched
V2LHS_219876	DIRC2	Enriched
V2LHS_219967	WLS	Enriched
V2LHS_220040	WIPI1	Enriched
V2LHS_220070	ZPLD1	Enriched
V2LHS_220253	CMTM6	Enriched
V2LHS_220686	CXorf48	Enriched
V2LHS_220779	ORC1	Enriched
V2LHS_220987	ENOX1	Enriched
V2LHS_221014	TMEM176A	Enriched
V2LHS_221027	HAUS4	Enriched
V2LHS_221084	Gm5512, RMND1	Enriched
V2LHS_221199	FGD6	Enriched
V2LHS_221312	ITIH5	Enriched
V2LHS_221360	TATDN3	Enriched
V2LHS_221407	ACTBL2	Enriched
V2LHS_221644	DCAF6	Enriched
V2LHS_221743	RPP30	Enriched
V2LHS_221759	TMEM60	Enriched
V2LHS_221814	LRP2BP	Enriched
V2LHS_222213	CHN2	Enriched

V2LHS_222259	SDHAF2	Enriched
V2LHS_222299	TMEM87B	Enriched
V2LHS_222382	ZNF764	Enriched
V2LHS_222434	SEC62	Enriched
V2LHS_222550	ZNF132	Enriched
V2LHS_222741	CLEC14A	Enriched
V2LHS_222981	LTV1	Enriched
V2LHS_223300	CCDC73	Enriched
V2LHS_223321	PLS1	Enriched
V2LHS_223462	MKX	Enriched
V2LHS_231147	DEM1	Enriched
V2LHS_232746	ZNF546	Enriched
V2LHS_23284	OR14C36	Enriched
V2LHS_233950	SLITRK6	Enriched
V2LHS_234010	TNIP2	Enriched
V2LHS_234203	TMEM134	Enriched
V2LHS_234211	NMD3	Enriched
V2LHS_234237	FAM118B	Enriched
V2LHS_234358	OR2B2	Enriched
V2LHS_234882	COQ10B	Enriched
V2LHS_235014	C10orf118	Enriched
V2LHS_235115	DENND3	Enriched
V2LHS_235135	OXR1	Enriched
V2LHS_235613	FAM175B	Enriched
V2LHS_23638	KRT36	Enriched
V2LHS_236541	GOLM1	Enriched
V2LHS_23658	NCOA7	Enriched
V2LHS_236780	CCDC121	Enriched
V2LHS_236867	SLITRK6	Enriched
V2LHS_236871	ITGA8	Enriched
V2LHS_237153	IL12A	Enriched
V2LHS_237411	POMC	Enriched
V2LHS_23753	STX16	Enriched
V2LHS_237758	1110018J18Rik, AAED1, LOC498685	Enriched
V2LHS_237898	SNX27	Enriched
V2LHS_237960	FAM24A	Enriched
V2LHS_238012	SIKE1	Enriched
V2LHS_238239	ITIH4	Enriched
V2LHS_239138	TANK	Enriched
V2LHS_239767	PARS2	Enriched
V2LHS_239988	CTNNA1	Enriched
V2LHS_240071	CEP57L1	Enriched
V2LHS_240336	ZNF441	Enriched
V2LHS_240410	SAGE1	Enriched
V2LHS_240491	C4orf47	Enriched
V2LHS_240500	KIAA0556	Enriched
V2LHS_240541	ZNF627	Enriched

V2LHS_240779	CD81	Enriched
V2LHS_240898	MUM1L1	Enriched
V2LHS_241166	PLXNA2	Enriched
V2LHS_241233	TMEM68	Enriched
V2LHS_241616	ZNF445	Enriched
V2LHS_24166	NCAN	Enriched
V2LHS_241767	HIST1H4K	Enriched
V2LHS_241839	EID2B	Enriched
V2LHS_241855	SREK1IP1	Enriched
V2LHS_241893	CXorf61	Enriched
V2LHS_241919	ZNF513	Enriched
V2LHS_242779	YPEL4	Enriched
V2LHS_242962	GPR39, LYPD1	Enriched
V2LHS_242967	EBAG9	Enriched
V2LHS_244761	RIBC1	Enriched
V2LHS_24497	HENMT1	Enriched
V2LHS_246267	NREP	Enriched
V2LHS_246649	ARHGEF19	Enriched
V2LHS_246980	NRXN1	Enriched
V2LHS_247035	MRAP2	Enriched
V2LHS_247951	ERI2	Enriched
V2LHS_250215	PDZK1IP1	Enriched
V2LHS_250508	C6orf72	Enriched
V2LHS_251013	SLC17A9	Enriched
V2LHS_251440	ARPC1A	Enriched
V2LHS_252502	C1D	Enriched
V2LHS_25411	DEPDC4	Enriched
V2LHS_254984	TBC1D1	Enriched
V2LHS_255610	VPRBP	Enriched
V2LHS_257476	STARD3	Enriched
V2LHS_257994	SPIN1	Enriched
V2LHS_258502	FTL, ZNF385B	Enriched
V2LHS_259783	NF2	Enriched
V2LHS_261039	LRRRC8B	Enriched
V2LHS_261980	SNIP1	Enriched
V2LHS_262537	VCAM1	Enriched
V2LHS_263096	SRSF6	Enriched
V2LHS_263143	ZNF341	Enriched
V2LHS_26401	RNF26, SYNC	Enriched
V2LHS_264104	CCDC80	Enriched
V2LHS_264824	TET2	Enriched
V2LHS_264915	CCDC3	Enriched
V2LHS_264992	ZNF426	Enriched
V2LHS_265370	CDSN	Enriched
V2LHS_266855	APOL2	Enriched
V2LHS_267598	TMEM63B	Enriched
V2LHS_267774	FAM19A4	Enriched

V2LHS_268104	INSIG2	Enriched
V2LHS_269116	MYEF2	Enriched
V2LHS_269922	COL17A1	Enriched
V2LHS_270209	ZNF580	Enriched
V2LHS_27184	THOC5	Enriched
V2LHS_27389	SLC9B2	Enriched
V2LHS_27719	Pkp4	Enriched
V2LHS_27723	Pkp4	Enriched
V2LHS_27835	MED20	Enriched
V2LHS_28103	SLC22A13	Enriched
V2LHS_28957	ZNF276	Enriched
V2LHS_29082	SKA3	Enriched
V2LHS_29290	ZNF439	Enriched
V2LHS_29460	CEP112	Enriched
V2LHS_31213	CCL17	Enriched
V2LHS_31238	CCL18	Enriched
V2LHS_31260	CCL5	Enriched
V2LHS_31298	CCL2	Enriched
V2LHS_31299	CCL2	Enriched
V2LHS_31708	RAVER1	Enriched
V2LHS_31855	Lin54	Enriched
V2LHS_32993	REG1A	Enriched
V2LHS_33092	RDX	Enriched
V2LHS_33166	RCN1	Enriched
V2LHS_33219	OR1E1	Enriched
V2LHS_33224	FAM98A	Enriched
V2LHS_33234	OR1G1	Enriched
V2LHS_33399	HIST1H4E	Enriched
V2LHS_33479	SGSM2	Enriched
V2LHS_35984	Zfc3h1	Enriched
V2LHS_37051	MAGEA8	Enriched
V2LHS_38283	SDK1	Enriched
V2LHS_41943	BPIFC	Enriched
V2LHS_43511	SPAG6	Enriched
V2LHS_45868	MEPE	Enriched
V2LHS_46683	SPAG9	Enriched
V2LHS_47165	Gm5161, Gm8587, Snrpa	Enriched
V2LHS_52938	PER2	Enriched
V2LHS_56799	CCL25	Enriched
V2LHS_56999	RGS4	Enriched
V2LHS_57022	Tnrc6b	Enriched
V2LHS_58337	GJD2	Enriched
V2LHS_58560	ZNF287	Enriched
V2LHS_59099	CNTNAP5	Enriched
V2LHS_59254	GDF3	Enriched
V2LHS_59435	OR10Z1	Enriched
V2LHS_59611	MRPL42	Enriched



V2LHS_60150	WDR37	Enriched
V2LHS_60273	CCDC56	Enriched
V2LHS_60837	PLEKHB1	Enriched
V2LHS_62042	DSC2	Enriched
V2LHS_62175	CDH15	Enriched
V2LHS_62231	CD8B	Enriched
V2LHS_62628	TCL1B	Enriched
V2LHS_62748	LMAN1	Enriched
V2LHS_62885	LCP2	Enriched
V2LHS_63040	PPP1R21	Enriched
V2LHS_63202	KRTAP8-1	Enriched
V2LHS_63248	IVL	Enriched
V2LHS_6335	RPS7	Enriched
V2LHS_64291	CRB3	Enriched
V2LHS_64528	NEFL	Enriched
V2LHS_64679	WFDC10A	Enriched
V2LHS_64704	ZNF225	Enriched
V2LHS_65016	PYGO1	Enriched
V2LHS_65067	ZNF17, ZNF548	Enriched
V2LHS_65304	SEC61A1	Enriched
V2LHS_65502	SNX10	Enriched
V2LHS_65692	UBIAD1	Enriched
V2LHS_65850	CADM3	Enriched
V2LHS_66370	CDH19	Enriched
V2LHS_67163	TMSB10	Enriched
V2LHS_67917	FAM212A	Enriched
V2LHS_68101	AP1M2	Enriched
V2LHS_68676	FAM189A2	Enriched
V2LHS_68798	GRAP2	Enriched
V2LHS_68803	THADA	Enriched
V2LHS_69611	MALL	Enriched
V2LHS_70133	KTI12	Enriched
V2LHS_70435	MRVI1	Enriched
V2LHS_70619	FLRT1	Enriched
V2LHS_70981	DSCR3	Enriched
V2LHS_71100	CCDC34	Enriched
V2LHS_71142	TMEM41A	Enriched
V2LHS_71398	PCNT	Enriched
V2LHS_71567	ERGIC1	Enriched
V2LHS_71792	C20orf160	Enriched
V2LHS_73641	RASGRP3	Enriched
V2LHS_73695	FAM115A	Enriched
V2LHS_73858	C20orf85	Enriched
V2LHS_74465	LEPROTL1	Enriched
V2LHS_74615	ASXL1	Enriched
V2LHS_76758	SGCB	Enriched
V2LHS_76819	SGCG	Enriched

V2LHS_79901	ESYT1	Enriched
V2LHS_8021	GCFC2	Enriched
V2LHS_81160	GREM2	Enriched
V2LHS_81324	SLC38A10	Enriched
V2LHS_82762	GP1BA	Enriched
V2LHS_85381	Olf239, Olf255, Olf1090, Olf1091, Olf1092, Olf1093, Olf1095, OR10H3	Enriched
V2LHS_85785	BTNL3	Enriched
V2LHS_86605	KIAA0922	Enriched
V2LHS_87299	HERPUD2	Enriched
V2LHS_87876	ZFYVE20	Enriched
V2LHS_91329	EML5	Enriched
V2LHS_92446	SGCD	Enriched
V2LHS_94512	ANXA5	Enriched
V2LHS_95276	SPOCK2	Enriched
V2LHS_95519	PSMD6	Enriched
V2LHS_95752	FAM20B	Enriched
V2LHS_96826	CLIP3	Enriched
V2LHS_97160	OTUD6B	Enriched
V2LHS_97212	ELOVL1	Enriched
V2LHS_97500	WNT16	Enriched
V2LHS_9774	ZCCHC2	Enriched
V2LHS_98116	JUP	Enriched
V2LHS_98169	ANAPC1, LOC285074	Enriched
V2LHS_98414	MICAL1	Enriched
V2LHS_98652	MRP63	Enriched
V2LHS_99249	SEH1L	Enriched
V2LHS_100809	MYLK3	Kinase
V2LHS_100859	MAP3K1	Kinase
V2LHS_100862	MAP3K1	Kinase
V2LHS_100863	MAP3K1	Kinase
V2LHS_100945	LMTK3	Kinase
V2LHS_101561	Pdik1l	Kinase
V2LHS_101745	EPHA4	Kinase
V2LHS_101750	Epha4	Kinase
V2LHS_101877	NIM1	Kinase
V2LHS_102069	AK5	Kinase
V2LHS_102271	TTBK1	Kinase
V2LHS_102318	DGKB	Kinase
V2LHS_1032	Ilk	Kinase
V2LHS_104881	CALM2	Kinase
V2LHS_1112	CSK	Kinase
V2LHS_112519	Dck	Kinase
V2LHS_112523	DCK	Kinase
V2LHS_112524	Dck	Kinase
V2LHS_112599	BMPR1B	Kinase
V2LHS_112601	BMPR1B	Kinase
V2LHS_112605	BMPR2	Kinase

V2LHS_112633	BUB1B	Kinase
V2LHS_112634	BUB1B	Kinase
V2LHS_112635	BUB1B	Kinase
V2LHS_112688	CAMK2B	Kinase
V2LHS_112695	CAMK2D	Kinase
V2LHS_112696	CAMK2D	Kinase
V2LHS_112697	CAMK2D	Kinase
V2LHS_112906	CDK6	Kinase
V2LHS_112911	CDK8	Kinase
V2LHS_112994	CHEK1	Kinase
V2LHS_112996	CHEK1	Kinase
V2LHS_113011	CHKA	Kinase
V2LHS_113012	CHKA	Kinase
V2LHS_113017	CHUK	Kinase
V2LHS_113018	CHUK	Kinase
V2LHS_113019	CHUK	Kinase
V2LHS_113021	CHUK	Kinase
V2LHS_113215	MAPK14	Kinase
V2LHS_113218	MAPK14	Kinase
V2LHS_113220	MAPK14	Kinase
V2LHS_113362	DGKA	Kinase
V2LHS_113368	Dgkg	Kinase
V2LHS_113370	DGKG	Kinase
V2LHS_113379	DAPK3	Kinase
V2LHS_113459	Dlg2	Kinase
V2LHS_113585	DYRK1A	Kinase
V2LHS_113769	ERN1	Kinase
V2LHS_113770	ERN1	Kinase
V2LHS_113771	ERN1	Kinase
V2LHS_113824	FES	Kinase
V2LHS_113893	FLT1	Kinase
V2LHS_113897	FLT1	Kinase
V2LHS_113965	FRK	Kinase
V2LHS_113967	Frk	Kinase
V2LHS_113970	FRK	Kinase
V2LHS_114032	GALK2	Kinase
V2LHS_114230	GRK6	Kinase
V2LHS_114290	GSK3B	Kinase
V2LHS_114291	GSK3B	Kinase
V2LHS_114293	GSK3B	Kinase
V2LHS_114731	MINK1	Kinase
V2LHS_115020	NLK	Kinase
V2LHS_115023	Nlk	Kinase
V2LHS_115226	SGK2	Kinase
V2LHS_115242	TAOK3	Kinase
V2LHS_115244	TAOK3	Kinase
V2LHS_115245	TAOK3	Kinase

V2LHS_115251	AK3	Kinase
V2LHS_115293	IP6K2	Kinase
V2LHS_115825	VRK3	Kinase
V2LHS_115830	CRIM1	Kinase
V2LHS_115834	CRIM1	Kinase
V2LHS_115906	PRKD2	Kinase
V2LHS_115907	PRKD2	Kinase
V2LHS_117169	STK31	Kinase
V2LHS_117170	STK31	Kinase
V2LHS_117171	STK31	Kinase
V2LHS_117188	MARK4	Kinase
V2LHS_117192	MARK4	Kinase
V2LHS_117266	UCK1	Kinase
V2LHS_117267	UCK1	Kinase
V2LHS_117433	RPS6KL1	Kinase
V2LHS_117524	RIOK1	Kinase
V2LHS_117527	RIOK1	Kinase
V2LHS_117660	TSSK1B	Kinase
V2LHS_118232	ALPK2	Kinase
V2LHS_118425	ZAK	Kinase
V2LHS_1185	STK33	Kinase
V2LHS_118969	MAP3K9	Kinase
V2LHS_119612	HIPK2	Kinase
V2LHS_119851	NEK10	Kinase
V2LHS_120025	DCLK2	Kinase
V2LHS_120494	KSR2	Kinase
V2LHS_12364	AURKA, AURKAPS1	Kinase
V2LHS_1242	FPGT-TNNI3K, TNNI3K	Kinase
V2LHS_12504	TRIM27	Kinase
V2LHS_1251	KSR1	Kinase
V2LHS_130235	IKBKB	Kinase
V2LHS_130452	ADCK5	Kinase
V2LHS_130454	ADCK5	Kinase
V2LHS_130498	CDK18	Kinase
V2LHS_130499	CDK18	Kinase
V2LHS_130500	CDK18	Kinase
V2LHS_130975	GUK1	Kinase
V2LHS_131070	IGF1R	Kinase
V2LHS_131071	IGF1R	Kinase
V2LHS_131072	IGF1R	Kinase
V2LHS_131240	NPR2	Kinase
V2LHS_132106	GUCY2F	Kinase
V2LHS_132369	IRAK1	Kinase
V2LHS_132372	IRAK2	Kinase
V2LHS_132374	IRAK2	Kinase
V2LHS_132477	ADRBK1	Kinase
V2LHS_132497	AK2	Kinase

V2LHS_132502	Akt2	Kinase
V2LHS_132657	ARAF	Kinase
V2LHS_133007	HCK	Kinase
V2LHS_133010	HCK	Kinase
V2LHS_133532	ITPKB	Kinase
V2LHS_133534	ITPKB	Kinase
V2LHS_133559	JAK1	Kinase
V2LHS_133562	JAK1	Kinase
V2LHS_133563	JAK1	Kinase
V2LHS_133709	KDR	Kinase
V2LHS_133711	KDR	Kinase
V2LHS_133712	KDR	Kinase
V2LHS_133714	KDR	Kinase
V2LHS_134105	LTK	Kinase
V2LHS_134140	LYN	Kinase
V2LHS_134142	LYN	Kinase
V2LHS_134144	Lyn	Kinase
V2LHS_134621	FPGT-TNNI3K, TNNI3K	Kinase
V2LHS_134623	FPGT-TNNI3K, TNNI3K	Kinase
V2LHS_134634	CAMK2A	Kinase
V2LHS_134635	CAMK2A	Kinase
V2LHS_13468	TRIM27	Kinase
V2LHS_134765	CDKL3	Kinase
V2LHS_134769	CDKL3	Kinase
V2LHS_1359	MAP3K12, PCBP2	Kinase
V2LHS_136512	PANK3	Kinase
V2LHS_136515	PANK3	Kinase
V2LHS_137168	ALPK1	Kinase
V2LHS_137169	ALPK1	Kinase
V2LHS_137333	ITPKC	Kinase
V2LHS_137339	TRIB1	Kinase
V2LHS_137340	TRIB1	Kinase
V2LHS_137534	COASY	Kinase
V2LHS_138103	SGK196	Kinase
V2LHS_138864	WNK4	Kinase
V2LHS_138866	WNK4	Kinase
V2LHS_139500	DYRK4	Kinase
V2LHS_139832	PSTK	Kinase
V2LHS_139856	KSR2	Kinase
V2LHS_139857	KSR2	Kinase
V2LHS_140653	NRK	Kinase
V2LHS_140676	HIPK1	Kinase
V2LHS_140950	NEK5	Kinase
V2LHS_140951	Nek5	Kinase
V2LHS_140954	NEK5	Kinase
V2LHS_1430	TRIO	Kinase
V2LHS_1432	TRIO	Kinase

V2LHS_1435	PLK4	Kinase
V2LHS_1500	EIF2AK1	Kinase
V2LHS_150029	BLK	Kinase
V2LHS_150031	BLK	Kinase
V2LHS_150062	BMX	Kinase
V2LHS_150063	BMX	Kinase
V2LHS_150067	BMX	Kinase
V2LHS_150092	BRDT	Kinase
V2LHS_150093	BRDT	Kinase
V2LHS_150095	BRDT	Kinase
V2LHS_150194	CALM2	Kinase
V2LHS_150195	CALM2	Kinase
V2LHS_150477	CDK2	Kinase
V2LHS_150483	CDK7	Kinase
V2LHS_150484	CDK7	Kinase
V2LHS_150486	CDK7	Kinase
V2LHS_150487	CDK7	Kinase
V2LHS_150588	CKB	Kinase
V2LHS_150598	CKMT2	Kinase
V2LHS_150603	CKS1B	Kinase
V2LHS_150605	CKS1B	Kinase
V2LHS_150973	CSNK1A1	Kinase
V2LHS_150979	CSNK1D	Kinase
V2LHS_150990	CSNK2A1	Kinase
V2LHS_150997	CSNK2A2	Kinase
V2LHS_15109	BUB1	Kinase
V2LHS_151167	DGUOK	Kinase
V2LHS_151186	MPP3	Kinase
V2LHS_151336	EFNA5	Kinase
V2LHS_151339	EFNA5	Kinase
V2LHS_151453	ERBB3	Kinase
V2LHS_151568	Mark3	Kinase
V2LHS_151569	MARK3	Kinase
V2LHS_151570	MARK3	Kinase
V2LHS_151571	MARK3	Kinase
V2LHS_15164	BRAF	Kinase
V2LHS_15167	BRAF	Kinase
V2LHS_15168	BRAF	Kinase
V2LHS_151699	MAP3K3	Kinase
V2LHS_15179	BMPR1A	Kinase
V2LHS_15183	BMPR1A	Kinase
V2LHS_15184	BMPR1A	Kinase
V2LHS_151897	MPP1	Kinase
V2LHS_151951	MAP3K10	Kinase
V2LHS_151956	MST1R	Kinase
V2LHS_152207	NEK2	Kinase
V2LHS_152208	NEK2	Kinase

V2LHS_152297	NME3	Kinase
V2LHS_152388	NTRK1	Kinase
V2LHS_152393	NTRK3	Kinase
V2LHS_152621	PAK1	Kinase
V2LHS_152627	Pak2	Kinase
V2LHS_152634	Pak3	Kinase
V2LHS_152707	PCK1	Kinase
V2LHS_152727	CDK17	Kinase
V2LHS_152729	Cdk17	Kinase
V2LHS_152730	CDK17	Kinase
V2LHS_152807	Map2k4, MAP2K4P1	Kinase
V2LHS_153502	SRPK1	Kinase
V2LHS_153513	SRPK2	Kinase
V2LHS_153599	NEK4	Kinase
V2LHS_153601	NEK4	Kinase
V2LHS_153602	NEK4	Kinase
V2LHS_153603	NEK4	Kinase
V2LHS_153607	AURKA	Kinase
V2LHS_153611	CDKL5	Kinase
V2LHS_153614	CDKL5	Kinase
V2LHS_153615	CDKL5	Kinase
V2LHS_153617	AURKC	Kinase
V2LHS_153621	AURKC, H19	Kinase
V2LHS_153622	Rps6kb1	Kinase
V2LHS_153624	RPS6KB1	Kinase
V2LHS_153625	RPS6KB1	Kinase
V2LHS_153701	SYK	Kinase
V2LHS_153702	SYK	Kinase
V2LHS_153703	SYK	Kinase
V2LHS_153705	2310003L22Rik, SYK	Kinase
V2LHS_153758	MAP3K7	Kinase
V2LHS_153874	TEC	Kinase
V2LHS_154358	MYO3A	Kinase
V2LHS_154619	NAGK	Kinase
V2LHS_154620	NAGK	Kinase
V2LHS_154640	MKNK2	Kinase
V2LHS_154641	MKNK2	Kinase
V2LHS_154729	Bmp2k	Kinase
V2LHS_155076	TRPM6	Kinase
V2LHS_155078	TRPM6	Kinase
V2LHS_155132	TRPM7	Kinase
V2LHS_155135	TRPM7	Kinase
V2LHS_15550	MAST4	Kinase
V2LHS_15552	MAST4	Kinase
V2LHS_15557	ALK	Kinase
V2LHS_156131	N4BP2	Kinase
V2LHS_156133	N4BP2	Kinase

V2LHS_15620	ACVR1B	Kinase
V2LHS_15621	ACVR1B	Kinase
V2LHS_15623	MAST4	Kinase
V2LHS_156310	ETNK2	Kinase
V2LHS_156313	ETNK2	Kinase
V2LHS_156349	PANK4	Kinase
V2LHS_156350	PANK4	Kinase
V2LHS_156457	AGK	Kinase
V2LHS_15650	ULK3	Kinase
V2LHS_156888	FN3KRP	Kinase
V2LHS_157060	LRRK1	Kinase
V2LHS_157878	NEK11	Kinase
V2LHS_157879	NEK11	Kinase
V2LHS_158091	THNSL1	Kinase
V2LHS_158871	GSG2	Kinase
V2LHS_158872	GSG2	Kinase
V2LHS_158902	PKIB	Kinase
V2LHS_158905	PKIB	Kinase
V2LHS_159912	TBCK	Kinase
V2LHS_159913	TBCK	Kinase
V2LHS_159915	NEK9	Kinase
V2LHS_159916	NEK9	Kinase
V2LHS_159919	NEK9	Kinase
V2LHS_159928	MYLK2	Kinase
V2LHS_159970	PSKH2	Kinase
V2LHS_159971	PSKH2	Kinase
V2LHS_159973	PSKH2	Kinase
V2LHS_159974	PSKH2	Kinase
V2LHS_160137	GK2	Kinase
V2LHS_160138	GK2	Kinase
V2LHS_1616	ALPK3	Kinase
V2LHS_16186	DTYMK	Kinase
V2LHS_162397	CDC42BPA	Kinase
V2LHS_162398	CDC42BPA	Kinase
V2LHS_162399	CDC42BPA	Kinase
V2LHS_163173	IPPK	Kinase
V2LHS_1643	MERTK	Kinase
V2LHS_1645	MERTK	Kinase
V2LHS_16875	RIOK3	Kinase
V2LHS_168769	MERTK	Kinase
V2LHS_16878	RIOK3	Kinase
V2LHS_16880	RIOK3	Kinase
V2LHS_169662	LIMK2	Kinase
V2LHS_169803	PDGFRB	Kinase
V2LHS_169804	PDK1	Kinase
V2LHS_169805	PDK1	Kinase
V2LHS_169809	PDK1	Kinase



V2LHS_169811	PDK2	Kinase
V2LHS_169815	PDK2	Kinase
V2LHS_169816	PDK4	Kinase
V2LHS_169818	PDK4	Kinase
V2LHS_169821	PDK4	Kinase
V2LHS_169824	PDPK1, PDPK2	Kinase
V2LHS_169888	PFKFB1	Kinase
V2LHS_169889	PFKFB1	Kinase
V2LHS_169890	PFKFB1	Kinase
V2LHS_169891	PFKFB1	Kinase
V2LHS_169893	PFKFB1	Kinase
V2LHS_169898	PFKL	Kinase
V2LHS_169903	PFKP	Kinase
V2LHS_169956	PHKA1	Kinase
V2LHS_169959	PHKA1	Kinase
V2LHS_169997	PIK3C2A	Kinase
V2LHS_1700	SRPK3	Kinase
V2LHS_170005	PIK3C2B	Kinase
V2LHS_170007	PIK3C2B	Kinase
V2LHS_170018	PIM1	Kinase
V2LHS_170019	PIM1	Kinase
V2LHS_170021	PIK3CG	Kinase
V2LHS_170022	PIK3CG	Kinase
V2LHS_170024	PIK3CG	Kinase
V2LHS_170027	PI4KA	Kinase
V2LHS_170034	PI4KB	Kinase
V2LHS_170051	PKM	Kinase
V2LHS_170174	EXOSC10	Kinase
V2LHS_170175	EXOSC10	Kinase
V2LHS_17021	RIPK2	Kinase
V2LHS_170398	PRKACA	Kinase
V2LHS_170408	PRKACB	Kinase
V2LHS_170417	PRKAG1	Kinase
V2LHS_170420	PRKAG1	Kinase
V2LHS_170425	PRKAR1A	Kinase
V2LHS_170426	PRKAR1A	Kinase
V2LHS_170429	PRKAR2B	Kinase
V2LHS_170430	Prkar2b	Kinase
V2LHS_170431	PRKAR2B	Kinase
V2LHS_170433	PRKCA	Kinase
V2LHS_170435	PRKCA	Kinase
V2LHS_170440	PRKCB	Kinase
V2LHS_170441	PRKCB	Kinase
V2LHS_170442	PRKCB	Kinase
V2LHS_170449	PRKCG	Kinase
V2LHS_170450	PRKCG	Kinase
V2LHS_170453	PRKCI	Kinase

V2LHS_170454	PRKCI	Kinase
V2LHS_170459	PKN1	Kinase
V2LHS_170464	PRKD1	Kinase
V2LHS_170465	PRKD1	Kinase
V2LHS_170466	PRKD1	Kinase
V2LHS_170467	PRKD1	Kinase
V2LHS_170471	PRKCSH	Kinase
V2LHS_170474	PRKCSH	Kinase
V2LHS_170489	MAPK4	Kinase
V2LHS_170495	MAPK6	Kinase
V2LHS_170499	MAPK8	Kinase
V2LHS_170501	Mapk8	Kinase
V2LHS_170503	MAPK8	Kinase
V2LHS_170506	MAPK11	Kinase
V2LHS_170511	MAPK9	Kinase
V2LHS_170513	MAPK9	Kinase
V2LHS_170514	MAPK9	Kinase
V2LHS_170515	MAPK9	Kinase
V2LHS_170520	MAPK10	Kinase
V2LHS_170521	MAPK10	Kinase
V2LHS_170523	MAPK13	Kinase
V2LHS_170525	MAPK13	Kinase
V2LHS_170527	MAPK13	Kinase
V2LHS_170531	MAP2K1	Kinase
V2LHS_170548	MAP2K6	Kinase
V2LHS_170550	MAP2K6	Kinase
V2LHS_170553	EIF2AK2	Kinase
V2LHS_170554	EIF2AK2	Kinase
V2LHS_170588	PRPS2	Kinase
V2LHS_170876	TWF1	Kinase
V2LHS_170879	Gm4887, Twf1	Kinase
V2LHS_171092	ALDH18A1	Kinase
V2LHS_171093	ALDH18A1	Kinase
V2LHS_171096	ALDH18A1	Kinase
V2LHS_171097	ALDH18A1	Kinase
V2LHS_171213	Raf1	Kinase
V2LHS_171214	RAF1	Kinase
V2LHS_171626	TTK	Kinase
V2LHS_171628	TTK	Kinase
V2LHS_171630	TTK	Kinase
V2LHS_171702	TYK2	Kinase
V2LHS_171969	VRK1	Kinase
V2LHS_171972	VRK1	Kinase
V2LHS_172007	WEE1	Kinase
V2LHS_172009	Wee1	Kinase
V2LHS_172837	CLK1, PPIL3	Kinase
V2LHS_172853	PLK3	Kinase

V2LHS_172854	PLK3	Kinase
V2LHS_172916	DLG1	Kinase
V2LHS_172917	DLG1	Kinase
V2LHS_172999	PTK2B	Kinase
V2LHS_173081	FLT3	Kinase
V2LHS_17311	HIPK4	Kinase
V2LHS_173257	PRKAR2A	Kinase
V2LHS_173260	Prkar2a	Kinase
V2LHS_173262	PRKAR2A	Kinase
V2LHS_173443	SNRK	Kinase
V2LHS_173445	SNRK	Kinase
V2LHS_173447	SNRK	Kinase
V2LHS_173822	MAP4K4	Kinase
V2LHS_173824	MAP4K4	Kinase
V2LHS_174175	UCKL1	Kinase
V2LHS_174177	UCKL1	Kinase
V2LHS_174178	UCKL1	Kinase
V2LHS_17422	RIPK1	Kinase
V2LHS_174320	ULK4	Kinase
V2LHS_174321	ULK4	Kinase
V2LHS_174322	ULK4	Kinase
V2LHS_174323	ULK4	Kinase
V2LHS_174324	ULK4	Kinase
V2LHS_175087	RFK	Kinase
V2LHS_175088	RFK	Kinase
V2LHS_175091	RFK	Kinase
V2LHS_175109	RIOK2	Kinase
V2LHS_175422	STK32B	Kinase
V2LHS_175426	STK32B	Kinase
V2LHS_175427	STK32B	Kinase
V2LHS_175543	PI4K2A	Kinase
V2LHS_175545	PI4K2A	Kinase
V2LHS_175546	PI4K2A	Kinase
V2LHS_175547	PI4K2A	Kinase
V2LHS_175901	PBK	Kinase
V2LHS_176052	CSNK1A1	Kinase
V2LHS_176053	CSNK1A1	Kinase
V2LHS_176124	STRADB	Kinase
V2LHS_176126	STRADB	Kinase
V2LHS_176128	STRADB	Kinase
V2LHS_177043	PANK2	Kinase
V2LHS_177044	PANK2	Kinase
V2LHS_177045	PANK2	Kinase
V2LHS_177047	PANK2	Kinase
V2LHS_17714	EPHB6	Kinase
V2LHS_17715	EPHB6	Kinase
V2LHS_17717	EPHB6	Kinase

V2LHS_17735	EPHA7	Kinase
V2LHS_17738	EPHA7	Kinase
V2LHS_17739	EPHA7	Kinase
V2LHS_17742	EPHB1	Kinase
V2LHS_17762	EPHB2	Kinase
V2LHS_17763	EPHB2	Kinase
V2LHS_17765	EPHB3	Kinase
V2LHS_177826	MASTL	Kinase
V2LHS_177827	MASTL	Kinase
V2LHS_177829	MASTL	Kinase
V2LHS_178486	TPD52L3	Kinase
V2LHS_178537	TP53RK	Kinase
V2LHS_178600	STK32C	Kinase
V2LHS_17861	EPHA4	Kinase
V2LHS_17961	EPHA2	Kinase
V2LHS_179675	WNK3	Kinase
V2LHS_179929	STRADA	Kinase
V2LHS_180422	PNCK	Kinase
V2LHS_180465	CDKL4	Kinase
V2LHS_180559	DGKK	Kinase
V2LHS_1826	TESK2	Kinase
V2LHS_1831	STK25	Kinase
V2LHS_1843	DLG2	Kinase
V2LHS_184616	BRD3	Kinase
V2LHS_184621	BRD3	Kinase
V2LHS_18490	KCNH8	Kinase
V2LHS_18519	TLK1	Kinase
V2LHS_18524	KCNH8	Kinase
V2LHS_18527	KCNH8	Kinase
V2LHS_185598	TK2	Kinase
V2LHS_18724	UHMK1	Kinase
V2LHS_18725	UHMK1	Kinase
V2LHS_18726	Uhmk1	Kinase
V2LHS_18749	Dmpk	Kinase
V2LHS_1877	MAP4K1	Kinase
V2LHS_188172	DYRK1B	Kinase
V2LHS_188466	ANKK1	Kinase
V2LHS_189774	FN3K	Kinase
V2LHS_19098		0 Kinase
V2LHS_191146	FGFR1	Kinase
V2LHS_191807	CDKN1B	Kinase
V2LHS_192049	AKT1	Kinase
V2LHS_1922	HIPK3	Kinase
V2LHS_192793	PAK6	Kinase
V2LHS_192880	ATM	Kinase
V2LHS_1932	CHEK2	Kinase
V2LHS_19368	PRKX	Kinase

V2LHS_193688	ANKK1	Kinase
V2LHS_19369	PRKX	Kinase
V2LHS_193796	SIK3	Kinase
V2LHS_194103	SIK3	Kinase
V2LHS_19417	MAP2K7	Kinase
V2LHS_194182	FGFR1	Kinase
V2LHS_194185	DYRK1B, Dyrk1c	Kinase
V2LHS_194190	CDK10	Kinase
V2LHS_194207	ANKK1	Kinase
V2LHS_1945	IRAK3	Kinase
V2LHS_194658	ANKK1	Kinase
V2LHS_19536	ACVR1C	Kinase
V2LHS_19539	ACVR1C	Kinase
V2LHS_1963	PRKD3	Kinase
V2LHS_196508	ABL1, BCR	Kinase
V2LHS_196805	CHEK2	Kinase
V2LHS_196809	ABL1	Kinase
V2LHS_196812	BRD2	Kinase
V2LHS_1970	MAP3K3	Kinase
V2LHS_197050	COL4A3BP	Kinase
V2LHS_19708	PLK1	Kinase
V2LHS_197088	COL4A3BP	Kinase
V2LHS_19709	PLK1	Kinase
V2LHS_19711	PLK1	Kinase
V2LHS_197306	MAP3K12, PCBP2	Kinase
V2LHS_197329	NEK6	Kinase
V2LHS_197398	MAK	Kinase
V2LHS_19754	WNK2	Kinase
V2LHS_197675	MAK	Kinase
V2LHS_197682	PAK4	Kinase
V2LHS_197938	MOK	Kinase
V2LHS_197974	MAP4K5	Kinase
V2LHS_198054	MAK	Kinase
V2LHS_198066	MAP3K4	Kinase
V2LHS_198098	BCKDK	Kinase
V2LHS_198127	MAP3K2	Kinase
V2LHS_198158	COL4A3BP	Kinase
V2LHS_198333	IRAK3	Kinase
V2LHS_198456	PIK3R5	Kinase
V2LHS_198489	TRIO	Kinase
V2LHS_198510	MAP3K5	Kinase
V2LHS_198530	PRKD3	Kinase
V2LHS_19863	PIP4K2A	Kinase
V2LHS_198649	SPEG	Kinase
V2LHS_198745	ABL1, BCR	Kinase
V2LHS_198762	MAP3K2	Kinase
V2LHS_19908	PIK3R2	Kinase

V2LHS_19910	PIK3R2	Kinase
V2LHS_19933	PIK3CD	Kinase
V2LHS_199668	MERTK	Kinase
V2LHS_19970	PIK3CD	Kinase
V2LHS_199736	STK25	Kinase
V2LHS_199919	PLK4	Kinase
V2LHS_200176	DUSP21	Kinase
V2LHS_200198	RPS6KA5	Kinase
V2LHS_200203	RBKS	Kinase
V2LHS_200259	PGK2	Kinase
V2LHS_200305	AKT3	Kinase
V2LHS_200588	TRIB2	Kinase
V2LHS_200606	AK7, GAB3	Kinase
V2LHS_200678	EGFR	Kinase
V2LHS_200726	RBKS	Kinase
V2LHS_200909	MYO3B	Kinase
V2LHS_200998	SPHK1	Kinase
V2LHS_200999	Trib2	Kinase
V2LHS_201012	ALPK3	Kinase
V2LHS_201187	EGFR	Kinase
V2LHS_201299	PGK2	Kinase
V2LHS_201363	CSNK1G1	Kinase
V2LHS_20148	IGF1R	Kinase
V2LHS_201530	PAK7	Kinase
V2LHS_201567	EPHA6	Kinase
V2LHS_201569	MAST3	Kinase
V2LHS_201612	Map3k7	Kinase
V2LHS_201697	DYRK4	Kinase
V2LHS_201703	SIK2	Kinase
V2LHS_201709	ABL2	Kinase
V2LHS_201713	Map2k5	Kinase
V2LHS_201716	MAP3K1	Kinase
V2LHS_201718	Cdk12	Kinase
V2LHS_201731	EPHB2	Kinase
V2LHS_201744	PXK	Kinase
V2LHS_201764	C9orf96	Kinase
V2LHS_201780	DCLK3	Kinase
V2LHS_201790	DCLK3	Kinase
V2LHS_201802	ABL2	Kinase
V2LHS_201818	TAOK2	Kinase
V2LHS_201822	MAPKAPK5	Kinase
V2LHS_201856	MAP4K4	Kinase
V2LHS_201860	CIT	Kinase
V2LHS_201871	MAPKAPK5	Kinase
V2LHS_201881	MAPKAPK2	Kinase
V2LHS_201904	TNIK	Kinase
V2LHS_201931	MAP3K7	Kinase

V2LHS_201935	TTBK2	Kinase
V2LHS_201951	BRSK2	Kinase
V2LHS_201958	CDK12	Kinase
V2LHS_201960	CIT	Kinase
V2LHS_201999	PDIK1L	Kinase
V2LHS_202014	STRADA	Kinase
V2LHS_202028	CDK16	Kinase
V2LHS_202047	MINK1	Kinase
V2LHS_202065	PRKY	Kinase
V2LHS_202069	MAST3	Kinase
V2LHS_202083	BRSK2	Kinase
V2LHS_202094	PXK	Kinase
V2LHS_202113	TNIK	Kinase
V2LHS_202115	STK36	Kinase
V2LHS_202139	STK33	Kinase
V2LHS_202160	NEK8	Kinase
V2LHS_202178	CDC42BPG	Kinase
V2LHS_202180	IKBKB	Kinase
V2LHS_202199	SIK2	Kinase
V2LHS_202203	LMTK3	Kinase
V2LHS_202210	MAP3K7	Kinase
V2LHS_202245	NEK8	Kinase
V2LHS_202269	PEAK1	Kinase
V2LHS_202291	TAOK2	Kinase
V2LHS_202305	STK19	Kinase
V2LHS_202316	KSR1	Kinase
V2LHS_202328	TNIK	Kinase
V2LHS_202338	PIK3R4	Kinase
V2LHS_202339	PEAK1	Kinase
V2LHS_202348	NEK3	Kinase
V2LHS_202353	MAP4K4	Kinase
V2LHS_202355	CDK19	Kinase
V2LHS_202375	MAST1	Kinase
V2LHS_202412	PEAK1	Kinase
V2LHS_202455	STK38L	Kinase
V2LHS_202466	CDKN2B	Kinase
V2LHS_202469	CDKN1A	Kinase
V2LHS_202478	CAMK2G	Kinase
V2LHS_202494	Zap70	Kinase
V2LHS_202526	PDIK1L	Kinase
V2LHS_202534	CDK19	Kinase
V2LHS_202535	AXL	Kinase
V2LHS_202539	EIF2AK4	Kinase
V2LHS_202541	KIAA1804	Kinase
V2LHS_202561	PXK	Kinase
V2LHS_202579	TSSK4	Kinase
V2LHS_202607	KIAA1804	Kinase

V2LHS_202608	TTBK2	Kinase
V2LHS_202640	MLKL	Kinase
V2LHS_202659	CAMK2G	Kinase
V2LHS_202680	CAMKK1	Kinase
V2LHS_202692	TTBK2	Kinase
V2LHS_202701	MAPK7	Kinase
V2LHS_202706	BRSK1	Kinase
V2LHS_202735	SMG1	Kinase
V2LHS_202752	CDK12	Kinase
V2LHS_202758	MAST4	Kinase
V2LHS_202770	DDR1	Kinase
V2LHS_202781	MAP4K4	Kinase
V2LHS_202787	CDKN2C	Kinase
V2LHS_202818	XRCC6BP1	Kinase
V2LHS_202823	PRKY	Kinase
V2LHS_202839	NEK1	Kinase
V2LHS_202887	CIT	Kinase
V2LHS_202888	SIK2	Kinase
V2LHS_202904	SMG1	Kinase
V2LHS_202928	NIM1	Kinase
V2LHS_202935	AATK	Kinase
V2LHS_202940	HIPK1	Kinase
V2LHS_202951	NEK1	Kinase
V2LHS_202958	STK38L	Kinase
V2LHS_202959	PAK7	Kinase
V2LHS_202967	WNK3	Kinase
V2LHS_202977	MAP3K9	Kinase
V2LHS_202992	TSSK4	Kinase
V2LHS_202996	TAOK1	Kinase
V2LHS_203006	PIK3R4	Kinase
V2LHS_203014	DYRK4	Kinase
V2LHS_203033	SMG1	Kinase
V2LHS_203055	CDK19	Kinase
V2LHS_203109	UHMK1	Kinase
V2LHS_203111	MAP3K1	Kinase
V2LHS_203118	CDKN1A	Kinase
V2LHS_203134	DCLK3	Kinase
V2LHS_203143	PSKH1	Kinase
V2LHS_203144	DCLK2	Kinase
V2LHS_203147	MLKL	Kinase
V2LHS_203152	XRCC6BP1	Kinase
V2LHS_203156	MAP2K5	Kinase
V2LHS_203175	ADCK4	Kinase
V2LHS_203200	CSNK1A1L	Kinase
V2LHS_203202	WNK3	Kinase
V2LHS_203223	MAP3K1	Kinase
V2LHS_203248	CDKN2C	Kinase



V2LHS_203251	PAK7	Kinase
V2LHS_203257	MLKL	Kinase
V2LHS_203280	SIK2	Kinase
V2LHS_203295	CAMKK1	Kinase
V2LHS_203341	SGK223	Kinase
V2LHS_203382	DSTYK	Kinase
V2LHS_203395	RET	Kinase
V2LHS_203399	MAPKAPK5	Kinase
V2LHS_203426	DCLK3	Kinase
V2LHS_203452	ULK3	Kinase
V2LHS_203482	STK36	Kinase
V2LHS_203484	CDC42BPG	Kinase
V2LHS_203529	CDC42BPG	Kinase
V2LHS_203561	C9orf96	Kinase
V2LHS_203572	PIK3R4	Kinase
V2LHS_203586	TSSK4	Kinase
V2LHS_203597	STYK1	Kinase
V2LHS_205451	PRKAR1B	Kinase
V2LHS_205604	DGKH	Kinase
V2LHS_20894	FLT4	Kinase
V2LHS_212506	TRIM27	Kinase
V2LHS_212556	PACSIN1	Kinase
V2LHS_214336	EIF2AK2	Kinase
V2LHS_215825	PNKP	Kinase
V2LHS_2162	MAP4K5	Kinase
V2LHS_217769	Pacsin1	Kinase
V2LHS_217930	Mapk8	Kinase
V2LHS_217986	MAPK1	Kinase
V2LHS_218130	MAPK9	Kinase
V2LHS_218181	PRKAR1A	Kinase
V2LHS_218226	PRKCA	Kinase
V2LHS_218699	MAP2K1	Kinase
V2LHS_219063	PFKP	Kinase
V2LHS_219857	PFKFB1	Kinase
V2LHS_2201	MAP3K4	Kinase
V2LHS_220372	DGKK	Kinase
V2LHS_2204	Map3k5	Kinase
V2LHS_2205	MAP3K5	Kinase
V2LHS_220512	PRKACB	Kinase
V2LHS_221210	TWF1	Kinase
V2LHS_221319	PI4K2B	Kinase
V2LHS_221738	CDKL4	Kinase
V2LHS_221747	PI4KA	Kinase
V2LHS_221840	PDXK	Kinase
V2LHS_222271	TPD52L3	Kinase
V2LHS_222846	PRKCSH	Kinase
V2LHS_222899	Prkar1a	Kinase

V2LHS_222913	ULK4	Kinase
V2LHS_223346	MAP2K1	Kinase
V2LHS_223596	DSTYK	Kinase
V2LHS_223944	CMPK1	Kinase
V2LHS_223990	FRK	Kinase
V2LHS_224076	EFNB3	Kinase
V2LHS_224395	CRIM1	Kinase
V2LHS_224550	HIPK2	Kinase
V2LHS_224879	DSTYK	Kinase
V2LHS_2250	SYK	Kinase
V2LHS_225012	MARK4	Kinase
V2LHS_225895	ZAK	Kinase
V2LHS_225997	TAOK3	Kinase
V2LHS_226052	IP6K2	Kinase
V2LHS_226281	BMPR2	Kinase
V2LHS_226859	UCK1	Kinase
V2LHS_228143	MLKL	Kinase
V2LHS_228990	PDPK1	Kinase
V2LHS_230370	CDKN1A	Kinase
V2LHS_231208	PRKDC	Kinase
V2LHS_231711	Nuak1	Kinase
V2LHS_232168	TEX14	Kinase
V2LHS_232235	STK11	Kinase
V2LHS_232378	NUCKS1	Kinase
V2LHS_232742	TEK	Kinase
V2LHS_232918	NUAK1	Kinase
V2LHS_233106	ADK	Kinase
V2LHS_233108	IPPK	Kinase
V2LHS_233271	ADCK2	Kinase
V2LHS_234020	ITPKB	Kinase
V2LHS_234767	TRIB1	Kinase
V2LHS_235462	ACVR2A	Kinase
V2LHS_235590	CDK18	Kinase
V2LHS_235668	PSKH1	Kinase
V2LHS_235718	CDADC1	Kinase
V2LHS_236766	AKIP1, NUAK2	Kinase
V2LHS_236956	ADRBK1	Kinase
V2LHS_237454	HCK	Kinase
V2LHS_237611	NEK5	Kinase
V2LHS_237948	AKT2	Kinase
V2LHS_237994	ZAK	Kinase
V2LHS_238359	AXL	Kinase
V2LHS_238806	SMG1	Kinase
V2LHS_238831	MAP3K6	Kinase
V2LHS_238906	PRPF4B	Kinase
V2LHS_238923	WNK2	Kinase
V2LHS_238927	COL4A3BP	Kinase

V2LHS_238932	SCYL3	Kinase
V2LHS_238955	CAMKK1	Kinase
V2LHS_238966	RIOK3	Kinase
V2LHS_238988	MARK2	Kinase
V2LHS_238991	TTBK1	Kinase
V2LHS_239001	MINK1	Kinase
V2LHS_239042	ZAK	Kinase
V2LHS_239070	UHMK1	Kinase
V2LHS_239083	COL4A3BP	Kinase
V2LHS_239113	RIOK3	Kinase
V2LHS_239144	SCYL3	Kinase
V2LHS_239154	RIOK3	Kinase
V2LHS_239175	SCYL3	Kinase
V2LHS_239639	PDXK	Kinase
V2LHS_2398	BCKDK	Kinase
V2LHS_239860	MAP4K3	Kinase
V2LHS_2399	BCKDK	Kinase
V2LHS_239918	DTYMK	Kinase
V2LHS_239997	HIPK4	Kinase
V2LHS_240053	IPMK	Kinase
V2LHS_240239	BRAF	Kinase
V2LHS_240995	ROR1	Kinase
V2LHS_241062	CDK20	Kinase
V2LHS_241082	HIPK4	Kinase
V2LHS_241090	IPMK	Kinase
V2LHS_2413	PDPK1, PDPK2	Kinase
V2LHS_241402	RPS6KA1	Kinase
V2LHS_241437	PLK1	Kinase
V2LHS_241576	CDK20	Kinase
V2LHS_241668	RIPK1	Kinase
V2LHS_24212	Csnk1g3	Kinase
V2LHS_24213	CSNK1G3	Kinase
V2LHS_24215	CSNK1G3	Kinase
V2LHS_242196	CASK	Kinase
V2LHS_242214	IPMK	Kinase
V2LHS_242401	BRAF	Kinase
V2LHS_242663	SKAP1	Kinase
V2LHS_242715	EPHB1	Kinase
V2LHS_2431	ICK	Kinase
V2LHS_243560	TK2	Kinase
V2LHS_24387	CDK13	Kinase
V2LHS_24388	CDK13	Kinase
V2LHS_24390	CDK13	Kinase
V2LHS_24391	CDK13	Kinase
V2LHS_24392	CDK13	Kinase
V2LHS_244017	CRKL	Kinase
V2LHS_244125	CDK5R1	Kinase

V2LHS_244194	NUP62	Kinase
V2LHS_244383	Ip6k1	Kinase
V2LHS_245619	UCK2	Kinase
V2LHS_245624	HUS1	Kinase
V2LHS_245649	EFNA4	Kinase
V2LHS_245746	TK2	Kinase
V2LHS_246159	ILK	Kinase
V2LHS_246500	IP6K1	Kinase
V2LHS_246504	Gtf2h1	Kinase
V2LHS_247253	RIPK4	Kinase
V2LHS_247642	PDGFRL	Kinase
V2LHS_247649	SCYL1	Kinase
V2LHS_247743	TRIB3	Kinase
V2LHS_248262	PTK2	Kinase
V2LHS_248408	Efna3	Kinase
V2LHS_248524	CDC42BPB	Kinase
V2LHS_24861	CDK20	Kinase
V2LHS_249588	GUCY2C	Kinase
V2LHS_249917	DLG2	Kinase
V2LHS_250223	MOK	Kinase
V2LHS_250513	STK25	Kinase
V2LHS_251052	ITPK1	Kinase
V2LHS_252882	PMVK	Kinase
V2LHS_253236	ALPK3	Kinase
V2LHS_253397	PRKAR1B	Kinase
V2LHS_25430	IRAK2	Kinase
V2LHS_25432	IRAK2	Kinase
V2LHS_255162	EIF2AK4	Kinase
V2LHS_255271	ZAP70	Kinase
V2LHS_256515	PDXK	Kinase
V2LHS_258334	PGK1	Kinase
V2LHS_258435	INSR	Kinase
V2LHS_259460	GK	Kinase
V2LHS_261809	MASTL	Kinase
V2LHS_261818	BMX	Kinase
V2LHS_261831	FLT3	Kinase
V2LHS_261847	ACVR2B	Kinase
V2LHS_261889	HIPK2	Kinase
V2LHS_261898	ULK4	Kinase
V2LHS_261913	DAPK3	Kinase
V2LHS_261946	TAOK1	Kinase
V2LHS_262090	STK40	Kinase
V2LHS_262100	MTOR	Kinase
V2LHS_262111	PRKX	Kinase
V2LHS_262112	NEK1	Kinase
V2LHS_262129	MAPK10	Kinase
V2LHS_262130	DYRK3	Kinase

V2LHS_262147	TNIK	Kinase
V2LHS_262148	CKS2	Kinase
V2LHS_262156	CDKN2D	Kinase
V2LHS_262163	NEK1	Kinase
V2LHS_262250	TNIK	Kinase
V2LHS_262262	PRKAG1	Kinase
V2LHS_262276	MAP2K7	Kinase
V2LHS_262288	PDK1	Kinase
V2LHS_262296	CDKN2C	Kinase
V2LHS_262311	CDKL5	Kinase
V2LHS_262313	EPHA6	Kinase
V2LHS_262328	PLK1	Kinase
V2LHS_262353	PRKCG	Kinase
V2LHS_262468	BRSK1	Kinase
V2LHS_262486	DSTYK	Kinase
V2LHS_262494	MARK3	Kinase
V2LHS_262582	LYN	Kinase
V2LHS_262630	PRKACB	Kinase
V2LHS_262636	STYK1	Kinase
V2LHS_262685	CLK2, CLK2P	Kinase
V2LHS_262700	DAPK2	Kinase
V2LHS_262715	PRKAG1	Kinase
V2LHS_262742	EIF2AK2	Kinase
V2LHS_262745	MAP2K1	Kinase
V2LHS_262746	DDR1	Kinase
V2LHS_262809	Dclk2	Kinase
V2LHS_262840	ADRBK1	Kinase
V2LHS_262926	FGFR2	Kinase
V2LHS_262959	MAP4K2	Kinase
V2LHS_262962	AGK	Kinase
V2LHS_262977	PRKCI	Kinase
V2LHS_262979	CDKN1B	Kinase
V2LHS_263029	SRPK2	Kinase
V2LHS_263076	PTK7	Kinase
V2LHS_263222	TAB1	Kinase
V2LHS_263235	MAP3K1	Kinase
V2LHS_263240	KALRN	Kinase
V2LHS_263294	BRSK1	Kinase
V2LHS_263305	RIOK2	Kinase
V2LHS_263309	EIF2AK2	Kinase
V2LHS_263364	DDR1	Kinase
V2LHS_263378	MAPKAPK2	Kinase
V2LHS_263639	AK3	Kinase
V2LHS_265276	BOLA2, LOC100271836, LOC440354, LOC595101, SMG1	Kinase
V2LHS_27012	STK16	Kinase
V2LHS_27043	CASK	Kinase
V2LHS_27067	MKNK1	Kinase

V2LHS_27071	MKNK1	Kinase
V2LHS_27072	MKNK1	Kinase
V2LHS_27119	PDXK	Kinase
V2LHS_271832	NRK	Kinase
V2LHS_27293	MAPKAPK5	Kinase
V2LHS_27295	MAPKAPK5	Kinase
V2LHS_27423	Camk1	Kinase
V2LHS_27424	CAMK1	Kinase
V2LHS_27426	CAMK1	Kinase
V2LHS_27432	DGKD	Kinase
V2LHS_27433	DGKD	Kinase
V2LHS_274865	PSKH1	Kinase
V2LHS_27519	IKBKAP	Kinase
V2LHS_27524	IKBKAP	Kinase
V2LHS_275526	MAPK10	Kinase
V2LHS_275659	EXOSC10	Kinase
V2LHS_275787	MAPK10	Kinase
V2LHS_27605	IKBKG	Kinase
V2LHS_27736	PIK3R3	Kinase
V2LHS_27739	PIK3R3	Kinase
V2LHS_27740	PIK3R3	Kinase
V2LHS_278143	LIMK2	Kinase
V2LHS_27888	MAP4K3	Kinase
V2LHS_27889	MAP4K3	Kinase
V2LHS_27891	MAP4K3	Kinase
V2LHS_27979	CDC42BPA	Kinase
V2LHS_28393	Stk17b	Kinase
V2LHS_28601	AURKB	Kinase
V2LHS_28602	AURKB	Kinase
V2LHS_28606	AURKB	Kinase
V2LHS_28870	COMMD3	Kinase
V2LHS_28871	COMMD3	Kinase
V2LHS_29093	FUK	Kinase
V2LHS_29890	IPMK	Kinase
V2LHS_30157	STK32A	Kinase
V2LHS_30754	MARK1	Kinase
V2LHS_30755	MARK1	Kinase
V2LHS_30756	MARK1	Kinase
V2LHS_31109	ETNK1	Kinase
V2LHS_31111	ETNK1	Kinase
V2LHS_31598	PIKFYVE	Kinase
V2LHS_31983	RYK	Kinase
V2LHS_31986	RYK	Kinase
V2LHS_32012	RPS6KA1	Kinase
V2LHS_32013	RPS6KA1	Kinase
V2LHS_32140	ROS1	Kinase
V2LHS_32143	ROS1	Kinase

V2LHS_32144	ROS1	Kinase
V2LHS_32604	DYRK2	Kinase
V2LHS_32605	DYRK2	Kinase
V2LHS_32988	ULK1	Kinase
V2LHS_33057	ULK1	Kinase
V2LHS_33174	PIP5K1B	Kinase
V2LHS_33176	PIP5K1B	Kinase
V2LHS_33177	PIP5K1B	Kinase
V2LHS_33181	PIP4K2B	Kinase
V2LHS_33182	Pip4k2b	Kinase
V2LHS_33273	NME5	Kinase
V2LHS_33276	NME5	Kinase
V2LHS_33601	CDKL1	Kinase
V2LHS_33603	CDKL1	Kinase
V2LHS_33678	PIK3R1	Kinase
V2LHS_33679	PIK3R1	Kinase
V2LHS_35548	TAOK2	Kinase
V2LHS_35747	SCYL3	Kinase
V2LHS_35748	SCYL3	Kinase
V2LHS_35750	SCYL3	Kinase
V2LHS_35842	Gsk3a	Kinase
V2LHS_35846	GSK3A	Kinase
V2LHS_36019	STK17A	Kinase
V2LHS_36021	STK17A	Kinase
V2LHS_36022	STK17A	Kinase
V2LHS_36045	MAPKAPK2	Kinase
V2LHS_36238	MAGI1	Kinase
V2LHS_36274	PRKAB2	Kinase
V2LHS_36276	PRKAB2	Kinase
V2LHS_36413	DCLK1	Kinase
V2LHS_36415	DCLK1	Kinase
V2LHS_36418	Dclk1	Kinase
V2LHS_36420	PDK3	Kinase
V2LHS_36423	PDK3	Kinase
V2LHS_36730	MAP3K13	Kinase
V2LHS_36733	MAP3K13	Kinase
V2LHS_36780	Mpp2	Kinase
V2LHS_36817	MOS	Kinase
V2LHS_36820	DGKI	Kinase
V2LHS_36821	DGKI	Kinase
V2LHS_36825	Dgki	Kinase
V2LHS_37234	LCK	Kinase
V2LHS_37751	Mapk3	Kinase
V2LHS_37925	PAK7	Kinase
V2LHS_38098	GTF2H1	Kinase
V2LHS_38106	PANK1	Kinase
V2LHS_38326	GRK4	Kinase

V2LHS_38327	GRK4	Kinase
V2LHS_38454	CAMK1D	Kinase
V2LHS_40119	SBK1	Kinase
V2LHS_41022	LATS1	Kinase
V2LHS_41024	LATS1	Kinase
V2LHS_41025	LATS1	Kinase
V2LHS_41326	MAP3K6	Kinase
V2LHS_41798	MAPKAPK3	Kinase
V2LHS_41799	MAPKAPK3	Kinase
V2LHS_41801	MAPKAPK3	Kinase
V2LHS_41802	MAPKAPK3	Kinase
V2LHS_41897	BRD4	Kinase
V2LHS_41898	BRD4	Kinase
V2LHS_42386	TGFBR1	Kinase
V2LHS_42670	TAF1	Kinase
V2LHS_42846	Uck2	Kinase
V2LHS_42886	GAK	Kinase
V2LHS_42888	GAK	Kinase
V2LHS_42891	GAK	Kinase
V2LHS_43109	FER	Kinase
V2LHS_43326	ERBB4	Kinase
V2LHS_43327	ERBB4	Kinase
V2LHS_43328	ERBB4	Kinase
V2LHS_43329	ERBB4	Kinase
V2LHS_43354	EPHA1	Kinase
V2LHS_43357	EPHA1	Kinase
V2LHS_43360	EPHA3	Kinase
V2LHS_43730	CSF1R	Kinase
V2LHS_43734	CSF1R	Kinase
V2LHS_43735	CSF1R	Kinase
V2LHS_43899	CRKL	Kinase
V2LHS_43900	Crkl	Kinase
V2LHS_43908	RPS6KC1	Kinase
V2LHS_43911	RPS6KC1	Kinase
V2LHS_43931	MAP3K8	Kinase
V2LHS_43933	MAP3K8	Kinase
V2LHS_43934	MAP3K8	Kinase
V2LHS_45409	NRBP2	Kinase
V2LHS_45410	NRBP2	Kinase
V2LHS_45411	NRBP2	Kinase
V2LHS_46934	RPS6KB2	Kinase
V2LHS_46938	RPS6KB2	Kinase
V2LHS_46947	MAP3K14	Kinase
V2LHS_46992	KALRN	Kinase
V2LHS_47000	CDKL2	Kinase
V2LHS_47001	CDKL2	Kinase
V2LHS_47002	CDKL2	Kinase



V2LHS_47250	MAPK1	Kinase
V2LHS_47254	MAPK1	Kinase
V2LHS_47379	RPS6KA3	Kinase
V2LHS_47380	RPS6KA3	Kinase
V2LHS_47382	RPS6KA3	Kinase
V2LHS_47383	RPS6KA3	Kinase
V2LHS_47609	MAP4K2	Kinase
V2LHS_47787	PRPF4B	Kinase
V2LHS_47788	PRPF4B	Kinase
V2LHS_47795	PIK3C2G	Kinase
V2LHS_47796	PIK3C2G	Kinase
V2LHS_47820	PFKFB3	Kinase
V2LHS_47823	PFKFB3	Kinase
V2LHS_47824	PFKFB4	Kinase
V2LHS_47827	PFKFB4	Kinase
V2LHS_47872	CPNE3	Kinase
V2LHS_47948	ROR2	Kinase
V2LHS_47949	ROR2	Kinase
V2LHS_48445	Calm3	Kinase
V2LHS_48446	CALM3	Kinase
V2LHS_48449	CALM3	Kinase
V2LHS_48629	CDK14	Kinase
V2LHS_48630	CDK14	Kinase
V2LHS_48954	HUS1	Kinase
V2LHS_48955	HUS1	Kinase
V2LHS_48958	HUS1	Kinase
V2LHS_49036	ADRBK2	Kinase
V2LHS_49235	ABL2	Kinase
V2LHS_49239	ABL2	Kinase
V2LHS_49900	NUP62	Kinase
V2LHS_50273	GOLGA5	Kinase
V2LHS_50274	GOLGA5	Kinase
V2LHS_50448	XYLB	Kinase
V2LHS_50465	OXSR1	Kinase
V2LHS_50467	Oxsr1	Kinase
V2LHS_50468	OXSR1	Kinase
V2LHS_51202	MAGI2	Kinase
V2LHS_51380	WNK1	Kinase
V2LHS_53107	CDK5R1	Kinase
V2LHS_55961	TGFBR1	Kinase
V2LHS_55964	TGFBR1	Kinase
V2LHS_56404	VRK2	Kinase
V2LHS_56405	Vrk2	Kinase
V2LHS_56438	TYRO3	Kinase
V2LHS_56442	TYRO3	Kinase
V2LHS_56671	TESK1	Kinase
V2LHS_56674	TESK1	Kinase

V2LHS_56676	TESK1	Kinase
V2LHS_56690	STK4	Kinase
V2LHS_56692	STK4	Kinase
V2LHS_56704	SGK1	Kinase
V2LHS_56727	STK4	Kinase
V2LHS_56745	STK3	Kinase
V2LHS_56747	STK3	Kinase
V2LHS_56749	STK3	Kinase
V2LHS_56763	STK4	Kinase
V2LHS_57326	PTK2	Kinase
V2LHS_57562	PRKCQ	Kinase
V2LHS_57563	PRKCQ	Kinase
V2LHS_57566	PRKCQ	Kinase
V2LHS_57567	PRKCQ	Kinase
V2LHS_57588	PRKG2	Kinase
V2LHS_57590	PRKG2	Kinase
V2LHS_57599	Prkch	Kinase
V2LHS_57616	PKN2	Kinase
V2LHS_57636	PRKCH	Kinase
V2LHS_57638	PRKAA2	Kinase
V2LHS_57639	PRKAA2	Kinase
V2LHS_57641	PRKAA2	Kinase
V2LHS_57645	PRKAB1	Kinase
V2LHS_57647	PRKAB1	Kinase
V2LHS_57654	PRKCD	Kinase
V2LHS_57658	PRKCD	Kinase
V2LHS_57674	Prkaa2	Kinase
V2LHS_57694	PRKAA1	Kinase
V2LHS_57699	PRKAA1	Kinase
V2LHS_57900	SCYL1	Kinase
V2LHS_5794	CIB2	Kinase
V2LHS_58228	CLK4	Kinase
V2LHS_58229	CLK4	Kinase
V2LHS_58230	CLK4	Kinase
V2LHS_58233	CLK4	Kinase
V2LHS_58606	SRMS	Kinase
V2LHS_58667	Pfkfb2	Kinase
V2LHS_58678	PHKG1	Kinase
V2LHS_58679	PHKG1	Kinase
V2LHS_58888	GRK7	Kinase
V2LHS_58889	GRK7	Kinase
V2LHS_58979	PDGFRA	Kinase
V2LHS_58980	PDGFRA	Kinase
V2LHS_58981	Pdgfra	Kinase
V2LHS_59072	CDK16	Kinase
V2LHS_59159	RIPK4	Kinase
V2LHS_59298	AK4	Kinase

V2LHS_59300	AK4	Kinase
V2LHS_59892	TAOK1	Kinase
V2LHS_60480	PIK3R4	Kinase
V2LHS_60490	SMG1	Kinase
V2LHS_60491	LOC440354, LOC595101, SMG1, SMG1P1	Kinase
V2LHS_60529	IKBKE	Kinase
V2LHS_60532	IKBKE	Kinase
V2LHS_61648	JAK2	Kinase
V2LHS_61653	JAK2	Kinase
V2LHS_61802	GUCY2C	Kinase
V2LHS_61866	MTOR	Kinase
V2LHS_61896	EFNA3	Kinase
V2LHS_62038	MAST1	Kinase
V2LHS_62084	DAPK1	Kinase
V2LHS_62089	DAPK1	Kinase
V2LHS_62123	MUSK	Kinase
V2LHS_62188	CDK5	Kinase
V2LHS_63241	ITK	Kinase
V2LHS_63242	ITK	Kinase
V2LHS_63243	ITK	Kinase
V2LHS_63244	ITK	Kinase
V2LHS_63245	ITK	Kinase
V2LHS_63527	KIAA1804	Kinase
V2LHS_63564	KIAA1804	Kinase
V2LHS_63729	NTRK2	Kinase
V2LHS_63731	NTRK2	Kinase
V2LHS_63734	NTRK2	Kinase
V2LHS_63971	Nrbp, NRBP1	Kinase
V2LHS_63972	NRBP1	Kinase
V2LHS_64494	CDK15	Kinase
V2LHS_64495	CDK15	Kinase
V2LHS_64496	CDK15	Kinase
V2LHS_64497	CDK15	Kinase
V2LHS_64866	PKN3	Kinase
V2LHS_64867	PKN3	Kinase
V2LHS_65365	NME7	Kinase
V2LHS_65366	NME7	Kinase
V2LHS_65367	NME7	Kinase
V2LHS_65370	NME7	Kinase
V2LHS_65428	AMHR2	Kinase
V2LHS_65862	BCR, BCRP3	Kinase
V2LHS_65935	EPHA8	Kinase
V2LHS_66025	EEF2K	Kinase
V2LHS_66315	TRIB3	Kinase
V2LHS_66656	RNASEL	Kinase
V2LHS_66667	RPS6KA2	Kinase
V2LHS_66854	DLG3	Kinase

V2LHS_671	CSNK1G1	Kinase
V2LHS_67948	ROCK2	Kinase
V2LHS_68173	EIF2AK3	Kinase
V2LHS_68177	Eif2ak3	Kinase
V2LHS_68219	MAP4K4	Kinase
V2LHS_68613	GNE	Kinase
V2LHS_68622	TJP2	Kinase
V2LHS_68872	AKT3	Kinase
V2LHS_68897	PKDCC	Kinase
V2LHS_69297	PAPSS1	Kinase
V2LHS_69371	PAPSS1	Kinase
V2LHS_69601	YES1	Kinase
V2LHS_69602	YES1	Kinase
V2LHS_69603	YES1	Kinase
V2LHS_69605	YES1	Kinase
V2LHS_70606	ROCK1, ROCK1P1	Kinase
V2LHS_70609	ROCK1	Kinase
V2LHS_70726	PRKCE	Kinase
V2LHS_70832	SHPK, TRPV1	Kinase
V2LHS_70835	SHPK	Kinase
V2LHS_71286	Sgk3	Kinase
V2LHS_71287	SGK3	Kinase
V2LHS_71288	SGK3	Kinase
V2LHS_71289	SGK3	Kinase
V2LHS_71309	CDC42BPB	Kinase
V2LHS_71311	CDC42BPB	Kinase
V2LHS_71312	CDC42BPB	Kinase
V2LHS_71313	CDC42BPB	Kinase
V2LHS_71333	TBK1	Kinase
V2LHS_71334	TBK1	Kinase
V2LHS_71618	MAPK15	Kinase
V2LHS_71619	MAPK15	Kinase
V2LHS_71621	MAPK15	Kinase
V2LHS_71809	STK39	Kinase
V2LHS_71810	STK39	Kinase
V2LHS_71811	STK39	Kinase
V2LHS_71812	STK39	Kinase
V2LHS_72249	CAMK1G	Kinase
V2LHS_72250	CAMK1G	Kinase
V2LHS_73518	SLK	Kinase
V2LHS_74077	FGFRL1	Kinase
V2LHS_75400	PKLR	Kinase
V2LHS_75427	PHKA2	Kinase
V2LHS_75431	PHKA2	Kinase
V2LHS_75441	PHKB	Kinase
V2LHS_75456	PHKG2	Kinase
V2LHS_75488	PGK1, RGD1560402	Kinase

V2LHS_75582	PFKM	Kinase
V2LHS_76045	NME1	Kinase
V2LHS_76050	NME1	Kinase
V2LHS_763	RBKS	Kinase
V2LHS_76542	MET	Kinase
V2LHS_76544	MET	Kinase
V2LHS_76746	Kcnh2	Kinase
V2LHS_76943	KHK	Kinase
V2LHS_76969	KIT	Kinase
V2LHS_76970	KIT	Kinase
V2LHS_76971	Kdr, KIT	Kinase
V2LHS_76974	KIT	Kinase
V2LHS_77136	CDK19	Kinase
V2LHS_77246	INSR	Kinase
V2LHS_77581	PIM2	Kinase
V2LHS_77679	RIPK3	Kinase
V2LHS_77937	TLK2	Kinase
V2LHS_78529	PKIA	Kinase
V2LHS_78857	ULK2	Kinase
V2LHS_78858	ULK2	Kinase
V2LHS_78859	ULK2	Kinase
V2LHS_79317	ZAP70	Kinase
V2LHS_81432	LMBR1	Kinase
V2LHS_81433	LMBR1	Kinase
V2LHS_820	PIM3	Kinase
V2LHS_82518	HK1	Kinase
V2LHS_82524	HK2	Kinase
V2LHS_82525	HK2	Kinase
V2LHS_82529	HK2	Kinase
V2LHS_82623	GUCY2D	Kinase
V2LHS_82956	GK	Kinase
V2LHS_83314	NEK3	Kinase
V2LHS_83386	NADK	Kinase
V2LHS_83390	NADK	Kinase
V2LHS_83489	FGFR3	Kinase
V2LHS_83493	FGFR3	Kinase
V2LHS_83508	FXN	Kinase
V2LHS_84432	DDR1	Kinase
V2LHS_84433	DDR1	Kinase
V2LHS_85493	DBF4	Kinase
V2LHS_85542	BRD3	Kinase
V2LHS_85545	BRD3	Kinase
V2LHS_85617	FASTK	Kinase
V2LHS_85662	HUNK	Kinase
V2LHS_85663	HUNK	Kinase
V2LHS_85664	HUNK	Kinase
V2LHS_86036	LATS2	Kinase

V2LHS_864	MAPK10	Kinase
V2LHS_87042	TSKS	Kinase
V2LHS_87125	PRKCA	Kinase
V2LHS_87444	PASK	Kinase
V2LHS_87445	PASK	Kinase
V2LHS_88027	MAST2	Kinase
V2LHS_88826	CDK4	Kinase
V2LHS_88828	CDK4	Kinase
V2LHS_88951	MYLK	Kinase
V2LHS_88953	MYLK	Kinase
V2LHS_88978	MYLK4	Kinase
V2LHS_89194	BTK	Kinase
V2LHS_89366	ATM	Kinase
V2LHS_89368	ATM	Kinase
V2LHS_89374	TSSK2	Kinase
V2LHS_89921	ACVRL1	Kinase
V2LHS_903	MAP2K5	Kinase
V2LHS_90829	WNK2	Kinase
V2LHS_90833	WNK2	Kinase
V2LHS_91309	PLK2	Kinase
V2LHS_91338	ACVRL1	Kinase
V2LHS_91514	STK38	Kinase
V2LHS_91517	STK38	Kinase
V2LHS_91772	CASK	Kinase
V2LHS_91774	CASK	Kinase
V2LHS_92993	MVK	Kinase
V2LHS_93140	STK11	Kinase
V2LHS_93160	TEK	Kinase
V2LHS_93212	AK1	Kinase
V2LHS_94267	ACVR1	Kinase
V2LHS_94273	Acvr2b	Kinase
V2LHS_94361	Adk	Kinase
V2LHS_94659	ATR	Kinase
V2LHS_94661	Atr	Kinase
V2LHS_94774	PRKDC	Kinase
V2LHS_94971	SRP72	Kinase
V2LHS_94974	SRP72	Kinase
V2LHS_95407	MELK	Kinase
V2LHS_95409	MELK	Kinase
V2LHS_95410	MELK	Kinase
V2LHS_95411	MELK	Kinase
V2LHS_95563	CDC42BPA	Kinase
V2LHS_95638	NUAK1	Kinase
V2LHS_96016	AAK1	Kinase
V2LHS_96061	ICK	Kinase
V2LHS_96062	ICK	Kinase
V2LHS_96066	ICK	Kinase

V2LHS_97682	IRAK4	Kinase
V2LHS_97685	IRAK4	Kinase
V2LHS_97974	PRKAG2	Kinase
V2LHS_98065	RELA	Kinase
V2LHS_98066	RELA	Kinase
V2LHS_98229	NUCKS1	Kinase
V2LHS_98232	NUCKS1	Kinase
V2LHS_98271	Hipk2	Kinase
V2LHS_98272	HIPK2	Kinase
V2LHS_98358	IPPK	Kinase
V2LHS_98419	CERK	Kinase
V2LHS_98421	CERK	Kinase
V2LHS_98424	CERK	Kinase
V2LHS_98761	CAMKV	Kinase
V2LHS_98766	CAMKV	Kinase
V2LHS_98860	PRKCH	Kinase
V2LHS_99293	PDPK1	Kinase
V2LHS_99386	ADPGK	Kinase
V2LHS_99387	ADPGK	Kinase
V2LHS_99388	ADPGK	Kinase
V2LHS_99516	TSSK3	Kinase
V2LHS_99973	Nek7	Kinase
V2LHS_99974	NEK7	Kinase
V3LHS_300064	HK3	Kinase
V3LHS_300065	HK3	Kinase
V3LHS_300066	HK3	Kinase
V3LHS_300067	HK3	Kinase
V3LHS_300068	HK3	Kinase
V3LHS_300069	HK3	Kinase
V3LHS_300422	Rela	Kinase
V3LHS_300538	STK10	Kinase
V3LHS_300587	PRKAG1	Kinase
V3LHS_300589	Prkag1	Kinase
V3LHS_300888	WNK3	Kinase
V3LHS_300889	WNK3	Kinase
V3LHS_300890	WNK3	Kinase
V3LHS_300891	WNK3	Kinase
V3LHS_300893	WNK3	Kinase
V3LHS_301102	SRMS	Kinase
V3LHS_301103	SRMS	Kinase
V3LHS_301541	SPHK1	Kinase
V3LHS_301543	SPHK1	Kinase
V3LHS_301544	SPHK1	Kinase
V3LHS_302121	ETNK1	Kinase
V3LHS_302174	FLT1	Kinase
V3LHS_302176	FLT1	Kinase
V3LHS_302177	FLT1	Kinase

V3LHS_302179	FLT1	Kinase
V3LHS_302214	CSNK1A1L	Kinase
V3LHS_302215	CSNK1A1L	Kinase
V3LHS_302225	ATR	Kinase
V3LHS_302573	PIK3R5	Kinase
V3LHS_302575	PIK3R5	Kinase
V3LHS_302576	PIK3R5	Kinase
V3LHS_302577	PIK3R5	Kinase
V3LHS_302617	CRKL	Kinase
V3LHS_302618	CRKL	Kinase
V3LHS_302620	CRKL	Kinase
V3LHS_302636	THNSL1	Kinase
V3LHS_302638	THNSL1	Kinase
V3LHS_302639	THNSL1	Kinase
V3LHS_302640	THNSL1	Kinase
V3LHS_302716	PRKD3	Kinase
V3LHS_302718	PRKD3	Kinase
V3LHS_302719	PRKD3	Kinase
V3LHS_302720	Prkd3	Kinase
V3LHS_302774	EPHB3	Kinase
V3LHS_302776	EPHB3	Kinase
V3LHS_303250	ADCK4	Kinase
V3LHS_303254	ADCK4	Kinase
V3LHS_303255	ADCK4	Kinase
V3LHS_303374	ABL1	Kinase
V3LHS_303375	ABL1, BCR, ETV6	Kinase
V3LHS_303402	JAK1	Kinase
V3LHS_303404	JAK1	Kinase
V3LHS_303537	RAF1	Kinase
V3LHS_303538	RAF1, RAP1A	Kinase
V3LHS_303542	RAF1, RAP1A	Kinase
V3LHS_303630	MKNK2	Kinase
V3LHS_303694	UCKL1	Kinase
V3LHS_303980	PGK1	Kinase
V3LHS_303981	PGK1	Kinase
V3LHS_303983	PGK1	Kinase
V3LHS_303984	PGK1	Kinase
V3LHS_304082	COASY	Kinase
V3LHS_304083	COASY	Kinase
V3LHS_304084	COASY	Kinase
V3LHS_304085	COASY	Kinase
V3LHS_304125	Dstyk	Kinase
V3LHS_304127	DSTYK	Kinase
V3LHS_304129	DSTYK	Kinase
V3LHS_304130	Dstyk	Kinase
V3LHS_304151	ACVR1C	Kinase
V3LHS_304166	PIK3R4	Kinase



V3LHS_304168	PIK3R4	Kinase
V3LHS_304635	EXOSC10	Kinase
V3LHS_304636	EXOSC10	Kinase
V3LHS_304637	EXOSC10	Kinase
V3LHS_304640	EXOSC10	Kinase
V3LHS_304742	PIK3R2	Kinase
V3LHS_304743	PIK3R2	Kinase
V3LHS_304744	PIK3R2	Kinase
V3LHS_304745	PIK3R2	Kinase
V3LHS_304746	PIK3R2	Kinase
V3LHS_304766	ROS1	Kinase
V3LHS_304767	ROS1	Kinase
V3LHS_304806	Pank2	Kinase
V3LHS_305144	EPHA10	Kinase
V3LHS_305148	Epha10	Kinase
V3LHS_305174	AK2, RGD1562178	Kinase
V3LHS_305176	AK2	Kinase
V3LHS_305178	AK2	Kinase
V3LHS_305179	AK2	Kinase
V3LHS_305273	PLK2	Kinase
V3LHS_305276	PLK2	Kinase
V3LHS_305650	MAPK13	Kinase
V3LHS_305651	MAPK13	Kinase
V3LHS_305666	IGF2R	Kinase
V3LHS_305667	IGF2R	Kinase
V3LHS_305669	IGF2R	Kinase
V3LHS_305739	CSNK2B	Kinase
V3LHS_305740	CSNK2B	Kinase
V3LHS_305741	CSNK2B	Kinase
V3LHS_305742	CSNK2B	Kinase
V3LHS_305780	Tgfbr1	Kinase
V3LHS_305782	TGFBR1	Kinase
V3LHS_305784	TGFBR1	Kinase
V3LHS_305815	MOS	Kinase
V3LHS_306040	STK32B	Kinase
V3LHS_306041	STK32B	Kinase
V3LHS_306042	STK32B	Kinase
V3LHS_306043	Stk32b	Kinase
V3LHS_306189	MPP1	Kinase
V3LHS_306190	Mpp1	Kinase
V3LHS_306191	MPP1	Kinase
V3LHS_306714	ROR1	Kinase
V3LHS_306779	SRPK3	Kinase
V3LHS_306824	CDK11A, CDK11B	Kinase
V3LHS_306857	TEK	Kinase
V3LHS_306858	TEK	Kinase
V3LHS_306859	TEK	Kinase

V3LHS_306895	Lmbr1	Kinase
V3LHS_306896	LMBR1	Kinase
V3LHS_306897	LMBR1	Kinase
V3LHS_307065	CDK3	Kinase
V3LHS_307088	MAP3K15	Kinase
V3LHS_307223	PFKP	Kinase
V3LHS_307224	PFKP	Kinase
V3LHS_307225	PFKP	Kinase
V3LHS_307227	PFKP	Kinase
V3LHS_307302	PRKACG	Kinase
V3LHS_307303	PRKACG	Kinase
V3LHS_307304	PRKACG	Kinase
V3LHS_307306	PRKACG	Kinase
V3LHS_307364	PIP4K2B	Kinase
V3LHS_307568	CDK13	Kinase
V3LHS_307594	CAMKK1	Kinase
V3LHS_307597	CAMKK1	Kinase
V3LHS_307598	CAMKK1	Kinase
V3LHS_307690	CDKL4	Kinase
V3LHS_307692	CDKL4	Kinase
V3LHS_307695	CDKL4	Kinase
V3LHS_307912	PFKFB1	Kinase
V3LHS_307914	PFKFB1	Kinase
V3LHS_308063	NUAK1	Kinase
V3LHS_308292	ABL2	Kinase
V3LHS_308293	ABL2	Kinase
V3LHS_308296	ABL2	Kinase
V3LHS_308571	PI4KA	Kinase
V3LHS_308572	PI4KA	Kinase
V3LHS_308573	PI4KA	Kinase
V3LHS_308643	TSSK6	Kinase
V3LHS_308672	MAPK3	Kinase
V3LHS_308859	DGKG	Kinase
V3LHS_308860	DGKG	Kinase
V3LHS_308861	Dgkg	Kinase
V3LHS_308863	DGKG	Kinase
V3LHS_309038	GSK3B	Kinase
V3LHS_309039	GSK3B	Kinase
V3LHS_309040	GSK3B	Kinase
V3LHS_309142	PIP4K2A	Kinase
V3LHS_309143	PIP4K2A	Kinase
V3LHS_309144	PIP4K2A	Kinase
V3LHS_309145	PIP4K2A	Kinase
V3LHS_309146	PIP4K2A	Kinase
V3LHS_309153	RBKS	Kinase
V3LHS_309154	RBKS	Kinase
V3LHS_309157	Rbks	Kinase

V3LHS_309990	EPHA8	Kinase
V3LHS_309992	EPHA8	Kinase
V3LHS_309993	Epha6, Epha8	Kinase
V3LHS_310018	CAMK2A	Kinase
V3LHS_310117	Pi4k2a	Kinase
V3LHS_310118	PI4K2A	Kinase
V3LHS_310122	PI4K2A	Kinase
V3LHS_310261	Stk36	Kinase
V3LHS_310385	CDKN2D	Kinase
V3LHS_310386	CDKN2D	Kinase
V3LHS_310387	CDKN2D	Kinase
V3LHS_310389	CDKN2D	Kinase
V3LHS_310443	PRKCH	Kinase
V3LHS_310445	PRKCH	Kinase
V3LHS_310446	PRKCH	Kinase
V3LHS_310490	ERBB3	Kinase
V3LHS_310491	ERBB3	Kinase
V3LHS_310492	ERBB3	Kinase
V3LHS_310655	Nek7	Kinase
V3LHS_310656	NEK7	Kinase
V3LHS_310657	NEK7	Kinase
V3LHS_310658	NEK7	Kinase
V3LHS_310898	CDK16	Kinase
V3LHS_311274	Cdk5r1	Kinase
V3LHS_311275	Cdk5r1	Kinase
V3LHS_311346	Ckb	Kinase
V3LHS_311459	PLK1	Kinase
V3LHS_311462	PLK1	Kinase
V3LHS_311463	PLK1	Kinase
V3LHS_311583	Mpp2	Kinase
V3LHS_311697	ERN1	Kinase
V3LHS_311698	ERN1	Kinase
V3LHS_312001	MAP3K11	Kinase
V3LHS_312004	MAP3K11	Kinase
V3LHS_312500	CAMK2D	Kinase
V3LHS_312503	CAMK2D	Kinase
V3LHS_312504	CAMK2D	Kinase
V3LHS_312661	MTOR	Kinase
V3LHS_312664	MTOR	Kinase
V3LHS_312918	Csf1r	Kinase
V3LHS_312920	CSF1R	Kinase
V3LHS_312921	CSF1R	Kinase
V3LHS_312922	CSF1R	Kinase
V3LHS_312923	CSF1R	Kinase
V3LHS_312940	COMMD3, COMMD3-BMI1	Kinase
V3LHS_312941	COMMD3, COMMD3-BMI1	Kinase
V3LHS_312942	COMMD3, COMMD3-BMI1	Kinase

V3LHS_312943	COMMD3, COMMD3-BMI1	Kinase
V3LHS_312944	COMMD3, COMMD3-BMI1	Kinase
V3LHS_312966	PKMYT1	Kinase
V3LHS_313110	CALM3	Kinase
V3LHS_313112	CALM3	Kinase
V3LHS_313389	PSKH2	Kinase
V3LHS_313392	PSKH2	Kinase
V3LHS_313655	MAST4	Kinase
V3LHS_313656	MAST4	Kinase
V3LHS_313657	MAST4	Kinase
V3LHS_313658	MAST4	Kinase
V3LHS_313716	RIOK2	Kinase
V3LHS_313719	RIOK2	Kinase
V3LHS_314001	CDK11B	Kinase
V3LHS_314002	CDK11A, CDK11B	Kinase
V3LHS_314003	CDK11A, CDK11B	Kinase
V3LHS_314418	RIPK2	Kinase
V3LHS_314947	MPP3	Kinase
V3LHS_314951	MPP3	Kinase
V3LHS_315390	GK2	Kinase
V3LHS_315391	GK2	Kinase
V3LHS_315392	GK2	Kinase
V3LHS_315393	GK2	Kinase
V3LHS_315551	TAOK2	Kinase
V3LHS_315629	PAK2	Kinase
V3LHS_315630	PAK2	Kinase
V3LHS_315685	CAMK2N1	Kinase
V3LHS_315686	CAMK2N1	Kinase
V3LHS_315687	CAMK2N1	Kinase
V3LHS_315689	CAMK2N1	Kinase
V3LHS_315718	IP6K2	Kinase
V3LHS_315740	ITPKA	Kinase
V3LHS_315927	MAPK8	Kinase
V3LHS_315928	MAPK8	Kinase
V3LHS_315931	MAPK8	Kinase
V3LHS_315988	NEK11	Kinase
V3LHS_315989	NEK11	Kinase
V3LHS_315990	NEK11	Kinase
V3LHS_315993	NEK11	Kinase
V3LHS_316017	TP53RK	Kinase
V3LHS_316018	TP53RK	Kinase
V3LHS_316019	TP53RK	Kinase
V3LHS_316020	TP53RK	Kinase
V3LHS_316271	CLK1, PPIL3	Kinase
V3LHS_316279	CLK2, CLK2P	Kinase
V3LHS_316282	CLK2	Kinase
V3LHS_316283	CLK2	Kinase

V3LHS_316285	RPS6KA4	Kinase
V3LHS_316556	PIK3CG	Kinase
V3LHS_316558	PIK3CG	Kinase
V3LHS_316559	PIK3CG	Kinase
V3LHS_316560	Pik3cg	Kinase
V3LHS_316561	PIK3CG	Kinase
V3LHS_316562	CALM1	Kinase
V3LHS_316564	CALM1	Kinase
V3LHS_316565	Calm1	Kinase
V3LHS_316566	Calm1	Kinase
V3LHS_316568	ULK1	Kinase
V3LHS_316709	DMPK	Kinase
V3LHS_316966	MAPK14	Kinase
V3LHS_316968	MAPK14	Kinase
V3LHS_316970	MAPK14	Kinase
V3LHS_317055	Dgki	Kinase
V3LHS_317056	DGKI	Kinase
V3LHS_317057	Dgki	Kinase
V3LHS_317059	DGKI	Kinase
V3LHS_317060	DGKI	Kinase
V3LHS_317130	ETNK2	Kinase
V3LHS_317131	ETNK2	Kinase
V3LHS_317132	ETNK2	Kinase
V3LHS_317265	BMX	Kinase
V3LHS_317267	BMX	Kinase
V3LHS_317268	BMX	Kinase
V3LHS_317304	EIF2AK2	Kinase
V3LHS_317305	EIF2AK2	Kinase
V3LHS_317306	EIF2AK2	Kinase
V3LHS_317308	EIF2AK2	Kinase
V3LHS_317309	EIF2AK2	Kinase
V3LHS_317619	CDK18	Kinase
V3LHS_317621	CDK18	Kinase
V3LHS_317628	STK3	Kinase
V3LHS_317630	STK3	Kinase
V3LHS_317631	STK3	Kinase
V3LHS_317632	STK3	Kinase
V3LHS_317767	PRKAR2B	Kinase
V3LHS_317768	PRKAR2B	Kinase
V3LHS_317937	UCK1	Kinase
V3LHS_317938	UCK1	Kinase
V3LHS_317939	UCK1	Kinase
V3LHS_318271	PKN2	Kinase
V3LHS_318367	MARK2	Kinase
V3LHS_318369	MARK2	Kinase
V3LHS_318371	MARK2	Kinase
V3LHS_318575	PRKCA	Kinase

V3LHS_318577	PRKCA	Kinase
V3LHS_318578	PRKCA	Kinase
V3LHS_318580	PRKCA	Kinase
V3LHS_318635	CDADC1	Kinase
V3LHS_318859	PGK2	Kinase
V3LHS_318860	PGK2	Kinase
V3LHS_318861	PGK2	Kinase
V3LHS_319394	CDK15	Kinase
V3LHS_319395	CDK15	Kinase
V3LHS_319396	CDK15	Kinase
V3LHS_319399	CDK15	Kinase
V3LHS_319583	DDR2	Kinase
V3LHS_319584	DDR2	Kinase
V3LHS_319585	DDR2	Kinase
V3LHS_319586	DDR2	Kinase
V3LHS_319829	PINK1	Kinase
V3LHS_319834	PINK1	Kinase
V3LHS_319890	INSR	Kinase
V3LHS_319894	INSR	Kinase
V3LHS_320007	TRIO	Kinase
V3LHS_320009	TRIO	Kinase
V3LHS_320010	TRIO	Kinase
V3LHS_320290	MINK1	Kinase
V3LHS_320291	MINK1	Kinase
V3LHS_320298	DGKK	Kinase
V3LHS_320299	DGKK	Kinase
V3LHS_320301	DGKK	Kinase
V3LHS_320506	ITK	Kinase
V3LHS_320507	ITK	Kinase
V3LHS_320554	VRK3	Kinase
V3LHS_320577	TAF1	Kinase
V3LHS_320582	TAF1	Kinase
V3LHS_320594	CDKL3	Kinase
V3LHS_320595	CDKL3	Kinase
V3LHS_320598	CDKL3	Kinase
V3LHS_320618	DAPK3	Kinase
V3LHS_320619	DAPK3	Kinase
V3LHS_320621	DAPK3	Kinase
V3LHS_320622	DAPK3	Kinase
V3LHS_320829	ITPK1	Kinase
V3LHS_320831	ITPK1	Kinase
V3LHS_320950	CERK	Kinase
V3LHS_321230	RIOK3	Kinase
V3LHS_321233	RIOK3	Kinase
V3LHS_321433	Tnk2	Kinase
V3LHS_321434	TNK2	Kinase
V3LHS_322058	PKM	Kinase

V3LHS_322059	PKM	Kinase
V3LHS_322060	PKM	Kinase
V3LHS_322061	PKM	Kinase
V3LHS_322109	MLKL	Kinase
V3LHS_322110	MLKL	Kinase
V3LHS_322112	MLKL	Kinase
V3LHS_322113	MLKL	Kinase
V3LHS_322114	MLKL	Kinase
V3LHS_322119	NIM1	Kinase
V3LHS_322122	NIM1	Kinase
V3LHS_322123	NIM1	Kinase
V3LHS_322223	EPHA6	Kinase
V3LHS_322224	EPHA6	Kinase
V3LHS_322225	Epha6	Kinase
V3LHS_322231	CDKN1A	Kinase
V3LHS_322232	CDKN1A	Kinase
V3LHS_322234	CDKN1A	Kinase
V3LHS_322258	AK5	Kinase
V3LHS_322259	AK5	Kinase
V3LHS_322262	AK5	Kinase
V3LHS_322263	AK5	Kinase
V3LHS_322285	ADRBK2	Kinase
V3LHS_322286	ADRBK2	Kinase
V3LHS_322287	ADRBK2	Kinase
V3LHS_322288	ADRBK2	Kinase
V3LHS_322360	N4BP2	Kinase
V3LHS_322361	N4BP2	Kinase
V3LHS_322365	N4BP2	Kinase
V3LHS_322473	PKIB	Kinase
V3LHS_322474	PKIB	Kinase
V3LHS_322475	PKIB	Kinase
V3LHS_322476	PKIB	Kinase
V3LHS_322555	TWF2	Kinase
V3LHS_322577	EPHA2	Kinase
V3LHS_322611	PRKCI	Kinase
V3LHS_322612	PRKCI	Kinase
V3LHS_322613	PRKCI	Kinase
V3LHS_322614	PRKCI	Kinase
V3LHS_322615	PRKCI	Kinase
V3LHS_322820	KCNH8	Kinase
V3LHS_322822	KCNH8	Kinase
V3LHS_322824	KCNH8	Kinase
V3LHS_322950	NEK5	Kinase
V3LHS_322951	NEK5	Kinase
V3LHS_322952	NEK5	Kinase
V3LHS_322953	NEK5	Kinase
V3LHS_323072	GUCY2C	Kinase

V3LHS_323076	GUCY2C	Kinase
V3LHS_323077	GUCY2C	Kinase
V3LHS_323107	LTK	Kinase
V3LHS_323441	PAPSS2	Kinase
V3LHS_323444	PAPSS2	Kinase
V3LHS_323446	PAPSS2	Kinase
V3LHS_323704	TAOK3	Kinase
V3LHS_323706	TAOK3	Kinase
V3LHS_323707	TAOK3	Kinase
V3LHS_323708	TAOK3	Kinase
V3LHS_323833	Map4k1	Kinase
V3LHS_323834	MAP4K1	Kinase
V3LHS_323855	NME4	Kinase
V3LHS_323858	NME4	Kinase
V3LHS_323889	PANK1	Kinase
V3LHS_323904	PRPS2	Kinase
V3LHS_323905	PRPS2	Kinase
V3LHS_323906	PRPS2	Kinase
V3LHS_324492	MYLK	Kinase
V3LHS_324564	NME6	Kinase
V3LHS_324566	NME6	Kinase
V3LHS_324568	NME6	Kinase
V3LHS_324774	GRK1	Kinase
V3LHS_324776	GRK1	Kinase
V3LHS_324777	GRK1	Kinase
V3LHS_324855	IRAK4	Kinase
V3LHS_324856	IRAK4	Kinase
V3LHS_324859	IRAK4	Kinase
V3LHS_324860	IRAK4	Kinase
V3LHS_324958	NUP62	Kinase
V3LHS_325020	MAGI2	Kinase
V3LHS_325022	MAGI2	Kinase
V3LHS_325024	MAGI2	Kinase
V3LHS_325025	MAGI2	Kinase
V3LHS_325230	ADRBK1	Kinase
V3LHS_325231	ADRBK1	Kinase
V3LHS_325400	ACVR2A	Kinase
V3LHS_325401	ACVR2A	Kinase
V3LHS_325557	AKT2	Kinase
V3LHS_325679	NEK1	Kinase
V3LHS_325680	NEK1	Kinase
V3LHS_325681	NEK1, Sox13	Kinase
V3LHS_325682	NEK1	Kinase
V3LHS_325803	PTK2	Kinase
V3LHS_325804	PTK2	Kinase
V3LHS_325806	PTK2	Kinase
V3LHS_325807	Ptk2	Kinase



V3LHS_325899	CDK10	Kinase
V3LHS_325918	TSKS	Kinase
V3LHS_325920	TSKS	Kinase
V3LHS_325921	TSKS	Kinase
V3LHS_326034	TTK	Kinase
V3LHS_326035	TTK	Kinase
V3LHS_326037	TTK	Kinase
V3LHS_326038	TTK	Kinase
V3LHS_326107	HIPK3	Kinase
V3LHS_326167	CDC42BPB	Kinase
V3LHS_326168	CDC42BPB	Kinase
V3LHS_326169	CDC42BPB	Kinase
V3LHS_326171	CDC42BPB	Kinase
V3LHS_326416	CDC42BPA	Kinase
V3LHS_326424	GK, GK3P	Kinase
V3LHS_326425	GK, GK3P	Kinase
V3LHS_326426	GK, GK3P	Kinase
V3LHS_326427	GK, GK3P, Gyk, Gyk1	Kinase
V3LHS_326591	CSNK1E	Kinase
V3LHS_326592	CSNK1E	Kinase
V3LHS_326593	Csnk1e	Kinase
V3LHS_326594	CSNK1E	Kinase
V3LHS_326800	EPHA5	Kinase
V3LHS_326801	EPHA5	Kinase
V3LHS_326803	EPHA5	Kinase
V3LHS_326804	EPHA5	Kinase
V3LHS_326805	EPHA5	Kinase
V3LHS_327146	GALK1	Kinase
V3LHS_327147	GALK1	Kinase
V3LHS_327148	GALK1	Kinase
V3LHS_327149	GALK1	Kinase
V3LHS_327150	GALK1	Kinase
V3LHS_327151	GALK1	Kinase
V3LHS_327200	RPS6KC1	Kinase
V3LHS_327244	CDK11A	Kinase
V3LHS_327347	CDC42BPA	Kinase
V3LHS_327349	CDC42BPA	Kinase
V3LHS_327351	CDC42BPA	Kinase
V3LHS_327445	RIPK4	Kinase
V3LHS_327482	PIK3R1	Kinase
V3LHS_327483	PIK3R1	Kinase
V3LHS_327485	PIK3R1	Kinase
V3LHS_327539	JAK2	Kinase
V3LHS_327543	JAK2	Kinase
V3LHS_328124	Pck2	Kinase
V3LHS_328126	Pck2	Kinase
V3LHS_328132	MAP3K6	Kinase

V3LHS_328354	STYK1	Kinase
V3LHS_328594	CDK1	Kinase
V3LHS_328802	Map4k3	Kinase
V3LHS_328804	MAP4K3	Kinase
V3LHS_328805	MAP4K3	Kinase
V3LHS_328806	MAP4K3	Kinase
V3LHS_328976	SGK1	Kinase
V3LHS_328979	SGK1	Kinase
V3LHS_328981	SGK1	Kinase
V3LHS_329061	CKM	Kinase
V3LHS_329062	CKM	Kinase
V3LHS_329063	CKM	Kinase
V3LHS_329064	CKM	Kinase
V3LHS_329066	Ckm	Kinase
V3LHS_329306	STK33	Kinase
V3LHS_329307	STK33	Kinase
V3LHS_329308	STK33	Kinase
V3LHS_329347	IPMK	Kinase
V3LHS_329349	IPMK	Kinase
V3LHS_329350	IPMK	Kinase
V3LHS_329520	MAP3K3	Kinase
V3LHS_329521	MAP3K3	Kinase
V3LHS_329522	MAP3K3	Kinase
V3LHS_329524	MAP3K3	Kinase
V3LHS_329651	AXL	Kinase
V3LHS_329652	AXL	Kinase
V3LHS_329653	Axl	Kinase
V3LHS_329807	PKN3	Kinase
V3LHS_329808	PKN3	Kinase
V3LHS_329810	PKN3	Kinase
V3LHS_329811	PKN3	Kinase
V3LHS_330127	CDK11A, CDK11B	Kinase
V3LHS_330130	CDK11A, CDK11B	Kinase
V3LHS_330131	CDK11A, CDK11B	Kinase
V3LHS_330188	HIPK2	Kinase
V3LHS_330191	HIPK2	Kinase
V3LHS_330192	HIPK2	Kinase
V3LHS_330194	PDPK1, PDPK2	Kinase
V3LHS_330196	PDPK1, PDPK2	Kinase
V3LHS_330199	MAP3K8	Kinase
V3LHS_330201	MAP3K8	Kinase
V3LHS_330246	Magi1	Kinase
V3LHS_330413	TAF1L	Kinase
V3LHS_330604	AK3	Kinase
V3LHS_330605	AK3	Kinase
V3LHS_330644	LATS1	Kinase
V3LHS_330646	LATS1	Kinase

V3LHS_330648	LATS1	Kinase
V3LHS_330649	LATS1	Kinase
V3LHS_330877	SKAP1	Kinase
V3LHS_330878	SKAP1	Kinase
V3LHS_330881	Dnah5, Dnahc5, SKAP1	Kinase
V3LHS_331302	HIPK4	Kinase
V3LHS_331303	HIPK4	Kinase
V3LHS_331304	HIPK4	Kinase
V3LHS_331527	PDXK	Kinase
V3LHS_331530	PDXK	Kinase
V3LHS_331602	ADCK1	Kinase
V3LHS_331603	ADCK1	Kinase
V3LHS_331863	Pfkm	Kinase
V3LHS_331864	Pfkm	Kinase
V3LHS_331866	PFKM	Kinase
V3LHS_332062	HSPB8	Kinase
V3LHS_332215	FLT3	Kinase
V3LHS_332216	FLT3	Kinase
V3LHS_332217	FLT3	Kinase
V3LHS_332219	FLT3	Kinase
V3LHS_332239	NME1	Kinase
V3LHS_332240	NME1	Kinase
V3LHS_332241	NME1	Kinase
V3LHS_332265	CDK14	Kinase
V3LHS_332268	CDK14	Kinase
V3LHS_332419	Mapkapk3	Kinase
V3LHS_332421	MAPKAPK3	Kinase
V3LHS_332908	GNE	Kinase
V3LHS_332910	GNE	Kinase
V3LHS_332913	GNE	Kinase
V3LHS_333009	EFNA5	Kinase
V3LHS_333010	Efna5	Kinase
V3LHS_333013	Efna5	Kinase
V3LHS_333212	MAP4K2	Kinase
V3LHS_333215	MAP4K2	Kinase
V3LHS_333229	STK35	Kinase
V3LHS_333309	SIK2	Kinase
V3LHS_333310	SIK2	Kinase
V3LHS_333311	SIK2	Kinase
V3LHS_333341	LCK	Kinase
V3LHS_333871	ALK	Kinase
V3LHS_333872	ALK	Kinase
V3LHS_333875	ALK	Kinase
V3LHS_333876	ALK	Kinase
V3LHS_334044	CDK5R2	Kinase
V3LHS_334045	CDK5R2	Kinase
V3LHS_334047	CDK5R2	Kinase

V3LHS_334048	CDK5R2	Kinase
V3LHS_334404	MAP4K5	Kinase
V3LHS_334407	MAP4K5	Kinase
V3LHS_334408	MAP4K5	Kinase
V3LHS_334847	AURKC	Kinase
V3LHS_334849	AURKC	Kinase
V3LHS_334931	MYO3B	Kinase
V3LHS_334997	FER	Kinase
V3LHS_334998	FER	Kinase
V3LHS_335000	FER	Kinase
V3LHS_335001	FER, Fert2	Kinase
V3LHS_335002	FER	Kinase
V3LHS_335008	MAP2K7	Kinase
V3LHS_335010	MAP2K7	Kinase
V3LHS_335075	CDK11A, CDK11B	Kinase
V3LHS_335076	CDK11A	Kinase
V3LHS_335370	CHKA	Kinase
V3LHS_335372	CHKA	Kinase
V3LHS_335473	TBK1	Kinase
V3LHS_335476	TBK1	Kinase
V3LHS_335550	PSTK	Kinase
V3LHS_335552	PSTK	Kinase
V3LHS_335553	PSTK	Kinase
V3LHS_335655	TLK1	Kinase
V3LHS_335779	TYRO3	Kinase
V3LHS_335782	TYRO3	Kinase
V3LHS_336353	AK7	Kinase
V3LHS_336354	AK7	Kinase
V3LHS_336356	AK7	Kinase
V3LHS_336357	AK7	Kinase
V3LHS_336642	CDK2	Kinase
V3LHS_336769	ZAK	Kinase
V3LHS_336771	ZAK	Kinase
V3LHS_336773	ZAK	Kinase
V3LHS_336853	PRKCD	Kinase
V3LHS_336854	PRKCD	Kinase
V3LHS_336865	NEK8	Kinase
V3LHS_336866	NEK8	Kinase
V3LHS_336869	Nek8	Kinase
V3LHS_336870	NEK8	Kinase
V3LHS_336948	PKLR	Kinase
V3LHS_336949	PKLR	Kinase
V3LHS_336950	PkIr	Kinase
V3LHS_337056	GALK2	Kinase
V3LHS_337823	TRIB1	Kinase
V3LHS_337824	TRIB1	Kinase
V3LHS_337951	NTRK2	Kinase

V3LHS_337952	NTRK2	Kinase
V3LHS_338235	KSR2	Kinase
V3LHS_338237	KSR2	Kinase
V3LHS_338240	KSR2	Kinase
V3LHS_338396	PFKFB3	Kinase
V3LHS_338398	PFKFB3	Kinase
V3LHS_338399	PFKFB3	Kinase
V3LHS_338400	PFKFB3	Kinase
V3LHS_338478	MAP3K4	Kinase
V3LHS_338479	MAP3K4	Kinase
V3LHS_338549	ROCK1	Kinase
V3LHS_338550	ROCK1	Kinase
V3LHS_338552	ROCK1	Kinase
V3LHS_338604	EFNA4	Kinase
V3LHS_338605	EFNA4	Kinase
V3LHS_338710	BCR, BCRP2	Kinase
V3LHS_338728	MVK	Kinase
V3LHS_338729	MVK	Kinase
V3LHS_338730	MVK	Kinase
V3LHS_338731	MVK	Kinase
V3LHS_339044	PNKP	Kinase
V3LHS_339045	PNKP	Kinase
V3LHS_339046	PNKP	Kinase
V3LHS_339047	PNKP	Kinase
V3LHS_339048	PNKP	Kinase
V3LHS_339049	PNKP	Kinase
V3LHS_339400	KDR	Kinase
V3LHS_339401	KDR	Kinase
V3LHS_339405	VRK1	Kinase
V3LHS_339407	Vrk1	Kinase
V3LHS_339408	VRK1	Kinase
V3LHS_339409	VRK1	Kinase
V3LHS_339434	UHMK1	Kinase
V3LHS_339476	PIM1	Kinase
V3LHS_339477	PIM1	Kinase
V3LHS_339652	TNIK	Kinase
V3LHS_339653	TNIK	Kinase
V3LHS_339654	TNIK	Kinase
V3LHS_339656	TNIK	Kinase
V3LHS_339657	TNIK	Kinase
V3LHS_339696	PFKFB2	Kinase
V3LHS_339697	PFKFB2	Kinase
V3LHS_339698	PFKFB2	Kinase
V3LHS_339700	PFKFB2	Kinase
V3LHS_339765	CHEK1	Kinase
V3LHS_339796	Rps6ka1	Kinase
V3LHS_339797	RPS6KA1	Kinase

V3LHS_339798	RPS6KA1	Kinase
V3LHS_339827	MAST3	Kinase
V3LHS_339830	MAST3	Kinase
V3LHS_339831	MAST3	Kinase
V3LHS_340227	PRKCB	Kinase
V3LHS_340228	PRKCB	Kinase
V3LHS_340230	PRKCB	Kinase
V3LHS_340231	PRKCB	Kinase
V3LHS_340232	Prkcb	Kinase
V3LHS_340278	PRKAB2	Kinase
V3LHS_340280	PRKAB2	Kinase
V3LHS_340403	MARK3	Kinase
V3LHS_340404	MARK3	Kinase
V3LHS_340405	MARK3	Kinase
V3LHS_340407	MARK3	Kinase
V3LHS_340408	MARK3	Kinase
V3LHS_340514	RIPK1	Kinase
V3LHS_340705	DGKA	Kinase
V3LHS_340709	DGKA	Kinase
V3LHS_340988	PIK3R3	Kinase
V3LHS_340990	PIK3R3	Kinase
V3LHS_340992	PIK3R3	Kinase
V3LHS_341074	BMPR1A	Kinase
V3LHS_341075	BMPR1A	Kinase
V3LHS_341077	Bmpr1a	Kinase
V3LHS_341129	Tssk4	Kinase
V3LHS_341130	TSSK4	Kinase
V3LHS_341133	TSSK4	Kinase
V3LHS_341158	PANK4	Kinase
V3LHS_341248	PIK3CB	Kinase
V3LHS_341249	Pik3cb	Kinase
V3LHS_341250	PIK3CB	Kinase
V3LHS_341251	PIK3CB	Kinase
V3LHS_341339	MARK1	Kinase
V3LHS_341343	MARK1	Kinase
V3LHS_341639	STK25	Kinase
V3LHS_341640	STK25	Kinase
V3LHS_341643	STK25	Kinase
V3LHS_341782	DYRK2	Kinase
V3LHS_341783	DYRK2	Kinase
V3LHS_341784	DYRK2	Kinase
V3LHS_341785	DYRK2	Kinase
V3LHS_341787	DYRK2	Kinase
V3LHS_341836	AURKB	Kinase
V3LHS_341837	AURKB	Kinase
V3LHS_341839	AURKB	Kinase
V3LHS_341840	AURKB	Kinase

V3LHS_341841	AURKB	Kinase
V3LHS_342135	MAPKAPK2	Kinase
V3LHS_342136	Mapkapk2	Kinase
V3LHS_342138	MAPKAPK2	Kinase
V3LHS_342139	MAPKAPK2	Kinase
V3LHS_342189	PHKA1	Kinase
V3LHS_342192	PHKA1	Kinase
V3LHS_342421	ULK3	Kinase
V3LHS_342422	ULK3	Kinase
V3LHS_342447	AK4	Kinase
V3LHS_342534	RIPK3	Kinase
V3LHS_342539	RIPK3	Kinase
V3LHS_342686	NAGK	Kinase
V3LHS_342688	NAGK	Kinase
V3LHS_342710	STK38L	Kinase
V3LHS_342712	STK38L	Kinase
V3LHS_342714	STK38L	Kinase
V3LHS_342876	NLK, RGD1561440	Kinase
V3LHS_342878	NLK, RGD1561440	Kinase
V3LHS_342914	STK32A	Kinase
V3LHS_342918	STK32A	Kinase
V3LHS_343527	IP6K2	Kinase
V3LHS_343528	IP6K2	Kinase
V3LHS_343529	IP6K2	Kinase
V3LHS_343530	IP6K2	Kinase
V3LHS_343689	GRK6	Kinase
V3LHS_343690	GRK6	Kinase
V3LHS_344018	MYO3A	Kinase
V3LHS_344247	AURKA	Kinase
V3LHS_344351	CDK11A	Kinase
V3LHS_344352	CDK11A	Kinase
V3LHS_344356	CDK11A, Cdk11b, RGD1566355	Kinase
V3LHS_344390	SPEG	Kinase
V3LHS_344391	SPEG	Kinase
V3LHS_344392	SPEG	Kinase
V3LHS_344394	SPEG	Kinase
V3LHS_344531	IP6K3	Kinase
V3LHS_344532	IP6K3	Kinase
V3LHS_344612	MAPK6	Kinase
V3LHS_344613	MAPK6	Kinase
V3LHS_344623	HK2	Kinase
V3LHS_344626	HK2	Kinase
V3LHS_344836	CLK1, PPIL3	Kinase
V3LHS_344944	BRDT	Kinase
V3LHS_345012	ALPK3	Kinase
V3LHS_345013	ALPK3	Kinase
V3LHS_345083	Hunk	Kinase

V3LHS_345084	HUNK	Kinase
V3LHS_345087	HUNK	Kinase
V3LHS_345088	Hunk	Kinase
V3LHS_345089	Dclk2	Kinase
V3LHS_345091	DCLK2	Kinase
V3LHS_345093	DCLK2	Kinase
V3LHS_345238	COL4A3BP	Kinase
V3LHS_345241	COL4A3BP	Kinase
V3LHS_345294	Ryk	Kinase
V3LHS_345296	RYK	Kinase
V3LHS_345516	YES1	Kinase
V3LHS_345518	YES1	Kinase
V3LHS_345521	YES1	Kinase
V3LHS_345590	Pip4k2b	Kinase
V3LHS_345591	Pip4k2b	Kinase
V3LHS_345592	PIP4K2B	Kinase
V3LHS_345637	Magi3	Kinase
V3LHS_345639	MAGI3	Kinase
V3LHS_345709	MARK4	Kinase
V3LHS_345710	Mark3, Mark4	Kinase
V3LHS_345711	MARK4	Kinase
V3LHS_345712	MARK4	Kinase
V3LHS_345750	KIT	Kinase
V3LHS_345751	KIT	Kinase
V3LHS_345754	KIT	Kinase
V3LHS_345790	RPS6KL1	Kinase
V3LHS_345910	LMTK2	Kinase
V3LHS_345911	LMTK2	Kinase
V3LHS_345914	XRCC6BP1	Kinase
V3LHS_345915	XRCC6BP1	Kinase
V3LHS_345916	XRCC6BP1	Kinase
V3LHS_346160	PANK2	Kinase
V3LHS_346161	PANK2	Kinase
V3LHS_346162	PANK2	Kinase
V3LHS_346183	SLK	Kinase
V3LHS_346294	GALK2	Kinase
V3LHS_346389	MAGI1	Kinase
V3LHS_346390	MAGI1	Kinase
V3LHS_346482	EPHA4	Kinase
V3LHS_346483	EPHA4	Kinase
V3LHS_346484	EPHA4	Kinase
V3LHS_346622	BMPR1B	Kinase
V3LHS_346623	BMPR1B	Kinase
V3LHS_346625	BMPR1B	Kinase
V3LHS_346633	Prkd2	Kinase
V3LHS_346697	EIF2AK1	Kinase
V3LHS_346698	EIF2AK1	Kinase



V3LHS_346769	PLK4	Kinase
V3LHS_346770	PLK4	Kinase
V3LHS_346771	PLK4	Kinase
V3LHS_346772	PLK4	Kinase
V3LHS_346773	PLK4	Kinase
V3LHS_346807	CSNK1G3	Kinase
V3LHS_346809	CSNK1G3	Kinase
V3LHS_346811	CSNK1G3	Kinase
V3LHS_346861	MASTL	Kinase
V3LHS_346863	MASTL	Kinase
V3LHS_346864	MASTL	Kinase
V3LHS_346940	PHKG2	Kinase
V3LHS_347013	BRD3	Kinase
V3LHS_347025	MYLK	Kinase
V3LHS_347027	MYLK	Kinase
V3LHS_347028	MYLK	Kinase
V3LHS_347244	PAK1	Kinase
V3LHS_347245	PAK1	Kinase
V3LHS_347265	STK4	Kinase
V3LHS_347268	STK4	Kinase
V3LHS_347270	STK4	Kinase
V3LHS_347293	FXN	Kinase
V3LHS_347294	FXN	Kinase
V3LHS_347295	FXN	Kinase
V3LHS_347296	FXN	Kinase
V3LHS_347306	IKBKG	Kinase
V3LHS_347307	IKBKG	Kinase
V3LHS_347308	IKBKG	Kinase
V3LHS_347309	IKBKG	Kinase
V3LHS_347310	IKBKG	Kinase
V3LHS_347311	IKBKG	Kinase
V3LHS_347643	SCYL1	Kinase
V3LHS_347644	SCYL1	Kinase
V3LHS_347706	IRAK2	Kinase
V3LHS_347707	IRAK2	Kinase
V3LHS_347854	AATK	Kinase
V3LHS_347933	ACVR2B	Kinase
V3LHS_347934	ACVR2B	Kinase
V3LHS_347936	Acvr2b	Kinase
V3LHS_347992	GUCY2D	Kinase
V3LHS_347994	GUCY2D	Kinase
V3LHS_348115	CDKN1C	Kinase
V3LHS_348116	CDKN1C	Kinase
V3LHS_348117	CDKN1C	Kinase
V3LHS_348119	CDKN1C	Kinase
V3LHS_348120	CDKN1C	Kinase
V3LHS_348187	NUAK2	Kinase

V3LHS_348189	NUAK2	Kinase
V3LHS_348244	CSNK1D	Kinase
V3LHS_348245	CSNK1D	Kinase
V3LHS_348369	SGK223	Kinase
V3LHS_348497	KIAA1804	Kinase
V3LHS_348500	KIAA1804	Kinase
V3LHS_348528	PRKAA1	Kinase
V3LHS_348529	PRKAA1	Kinase
V3LHS_348531	PRKAA1	Kinase
V3LHS_348532	PRKAA1	Kinase
V3LHS_348533	PRKAA1	Kinase
V3LHS_348592	WNK1	Kinase
V3LHS_348647	STK11	Kinase
V3LHS_348649	STK11	Kinase
V3LHS_348650	STK11	Kinase
V3LHS_348763	KHK	Kinase
V3LHS_348766	KHK	Kinase
V3LHS_348767	KHK	Kinase
V3LHS_348894	TPK1	Kinase
V3LHS_349177	RET	Kinase
V3LHS_349195	WNK4	Kinase
V3LHS_349198	WNK4	Kinase
V3LHS_349199	WNK4	Kinase
V3LHS_349218	SMG1	Kinase
V3LHS_349220	SMG1	Kinase
V3LHS_349221	BOLA2, LOC100271836, LOC440354, LOC595101, SMG1	Kinase
V3LHS_349222	SMG1	Kinase
V3LHS_349235	BMP2K	Kinase
V3LHS_349379	PIKFYVE	Kinase
V3LHS_349479	CDK12	Kinase
V3LHS_349483	Cdk12	Kinase
V3LHS_349515	CKS1B, Gm6531	Kinase
V3LHS_349565	RFK	Kinase
V3LHS_349566	RFK, RGD1563242	Kinase
V3LHS_349605	TGFBR2	Kinase
V3LHS_349784	RPS6KB2	Kinase
V3LHS_349829	BTK	Kinase
V3LHS_349831	BTK	Kinase
V3LHS_349847	DGKQ	Kinase
V3LHS_349848	DGKQ	Kinase
V3LHS_349849	DGKQ	Kinase
V3LHS_349850	DGKQ	Kinase
V3LHS_349852	DGKQ	Kinase
V3LHS_349854	STK19	Kinase
V3LHS_349950	EIF2AK3	Kinase
V3LHS_350080	PMVK	Kinase
V3LHS_350081	PMVK	Kinase

V3LHS_350082	Pmvk	Kinase
V3LHS_350083	PMVK	Kinase
V3LHS_350170	NEK9	Kinase
V3LHS_350171	NEK9	Kinase
V3LHS_350172	NEK9	Kinase
V3LHS_350175	NEK9	Kinase
V3LHS_350194	EIF2AK4	Kinase
V3LHS_350196	EIF2AK4	Kinase
V3LHS_350197	EIF2AK4	Kinase
V3LHS_350469	ATM	Kinase
V3LHS_350470	ATM	Kinase
V3LHS_350471	ATM, NPAT	Kinase
V3LHS_350765	LYN	Kinase
V3LHS_350767	LYN	Kinase
V3LHS_350768	LYN	Kinase
V3LHS_350795	TAB1	Kinase
V3LHS_350836	AMHR2	Kinase
V3LHS_350837	AMHR2	Kinase
V3LHS_350839	AMHR2	Kinase
V3LHS_351150	HUS1	Kinase
V3LHS_351151	HUS1	Kinase
V3LHS_351153	HUS1	Kinase
V3LHS_351352	CRIM1	Kinase
V3LHS_351354	CRIM1	Kinase
V3LHS_351355	Crim1	Kinase
V3LHS_351356	CRIM1	Kinase
V3LHS_351357	CRIM1	Kinase
V3LHS_351541	PIP5K1A, PIP5K1P1	Kinase
V3LHS_351544	PIP5K1A	Kinase
V3LHS_351545	PIP5K1A	Kinase
V3LHS_351546	PIP5K1A, PIPSL	Kinase
V3LHS_351548	CDC7	Kinase
V3LHS_351550	CDC7	Kinase
V3LHS_351551	CDC7	Kinase
V3LHS_351637	CSK	Kinase
V3LHS_351640	CSK	Kinase
V3LHS_351641	CSK	Kinase
V3LHS_351642	CSK	Kinase
V3LHS_351732	PEAK1	Kinase
V3LHS_351733	PEAK1	Kinase
V3LHS_351734	PEAK1	Kinase
V3LHS_351737	PEAK1	Kinase
V3LHS_351804	CMPK1	Kinase
V3LHS_351879	CDK20	Kinase
V3LHS_351881	CDK20	Kinase
V3LHS_352034	MAPK15	Kinase
V3LHS_352035	MAPK15	Kinase

V3LHS_352036	MAPK15	Kinase
V3LHS_352037	MAPK15	Kinase
V3LHS_352038	MAPK15	Kinase
V3LHS_352226	MAST2	Kinase
V3LHS_352227	MAST2	Kinase
V3LHS_352228	MAST2	Kinase
V3LHS_352229	MAST2	Kinase
V3LHS_352231	MAST2	Kinase
V3LHS_352286	TGFBR2	Kinase
V3LHS_352287	TGFBR2	Kinase
V3LHS_352446	TGFBR3	Kinase
V3LHS_352448	TGFBR3	Kinase
V3LHS_352450	TGFBR3	Kinase
V3LHS_352630	PI4KA, PI4KAP1, PI4KAP2	Kinase
V3LHS_352878	EPHA3	Kinase
V3LHS_353202	XYLB	Kinase
V3LHS_353203	XYLB	Kinase
V3LHS_353204	XYLB	Kinase
V3LHS_353205	XYLB	Kinase
V3LHS_353397	PIP5KL1	Kinase
V3LHS_353398	PIP5KL1	Kinase
V3LHS_353400	PIP5KL1	Kinase
V3LHS_353490	PHKG1	Kinase
V3LHS_353658	PRKAB1	Kinase
V3LHS_353661	PRKAB1	Kinase
V3LHS_353981	IKBKAP	Kinase
V3LHS_353983	IKBKAP	Kinase
V3LHS_353985	IKBKAP	Kinase
V3LHS_354115	FGFRL1	Kinase
V3LHS_354116	FGFRL1	Kinase
V3LHS_354119	FGFRL1	Kinase
V3LHS_354120	ACVR1B	Kinase
V3LHS_354121	ACVR1B	Kinase
V3LHS_354132	DGKH	Kinase
V3LHS_354133	DGKH	Kinase
V3LHS_354135	DGKH	Kinase
V3LHS_354158	ADK	Kinase
V3LHS_354159	ADK	Kinase
V3LHS_354161	ADK	Kinase
V3LHS_354162	ADK	Kinase
V3LHS_354670	CERK	Kinase
V3LHS_354671	CERK	Kinase
V3LHS_354942	IKBKE	Kinase
V3LHS_354991	FASTK	Kinase
V3LHS_355031	Braf	Kinase
V3LHS_355032	BRAF	Kinase
V3LHS_355035	BRAF	Kinase

V3LHS_355087	TYK2	Kinase
V3LHS_355088	TYK2	Kinase
V3LHS_355090	TYK2	Kinase
V3LHS_355091	TYK2	Kinase
V3LHS_355292	ICK	Kinase
V3LHS_355296	ICK	Kinase
V3LHS_355766	NTRK2	Kinase
V3LHS_355933	CSNK2A1, CSNK2A1P	Kinase
V3LHS_356067	Dlg4	Kinase
V3LHS_356068	DLG4	Kinase
V3LHS_356069	DLG4	Kinase
V3LHS_356070	DLG4	Kinase
V3LHS_356071	DLG4	Kinase
V3LHS_356547	Irak3	Kinase
V3LHS_356549	IRAK3	Kinase
V3LHS_356550	IRAK3	Kinase
V3LHS_356551	IRAK3	Kinase
V3LHS_356552	IRAK3	Kinase
V3LHS_356568	SRC	Kinase
V3LHS_356569	SRC	Kinase
V3LHS_356602	TESK1	Kinase
V3LHS_356605	TESK1	Kinase
V3LHS_356606	TESK1	Kinase
V3LHS_356648	Cdk19	Kinase
V3LHS_356649	CDK19	Kinase
V3LHS_356652	CDK19	Kinase
V3LHS_356812	WNK2	Kinase
V3LHS_356813	WNK2	Kinase
V3LHS_356814	WNK2	Kinase
V3LHS_356815	WNK2	Kinase
V3LHS_356977	DCLK3	Kinase
V3LHS_356979	DCLK3	Kinase
V3LHS_356980	DCLK3	Kinase
V3LHS_357001	IPPK	Kinase
V3LHS_357002	IPPK	Kinase
V3LHS_357435	KSR1	Kinase
V3LHS_357437	KSR1	Kinase
V3LHS_357438	KSR1	Kinase
V3LHS_357440	KSR1	Kinase
V3LHS_357471	PACSIN1	Kinase
V3LHS_357475	PACSIN1	Kinase
V3LHS_357645	CDK9	Kinase
V3LHS_357647	CDK9	Kinase
V3LHS_357726	CHUK	Kinase
V3LHS_357727	CHUK	Kinase
V3LHS_357729	CHUK	Kinase
V3LHS_358215	EPHB1	Kinase

V3LHS_358218	ROCK2	Kinase
V3LHS_358220	ROCK2	Kinase
V3LHS_358460	TJP2	Kinase
V3LHS_358461	TJP2	Kinase
V3LHS_358462	TJP2	Kinase
V3LHS_358463	TJP2	Kinase
V3LHS_358464	TJP2	Kinase
V3LHS_358465	TJP2	Kinase
V3LHS_358591	KALRN	Kinase
V3LHS_358593	Kalrn	Kinase
V3LHS_358595	KALRN	Kinase
V3LHS_358713	CAMKV	Kinase
V3LHS_358714	CAMKV	Kinase
V3LHS_358716	CAMKV	Kinase
V3LHS_358719	AKT1	Kinase
V3LHS_358720	AKT1	Kinase
V3LHS_358752	FUK	Kinase
V3LHS_358753	FUK	Kinase
V3LHS_358942	PDGFRL	Kinase
V3LHS_358943	PDGFRL	Kinase
V3LHS_358944	PDGFRL	Kinase
V3LHS_358945	PDGFRL	Kinase
V3LHS_358946	PDGFRL	Kinase
V3LHS_359046	RPS6KA6	Kinase
V3LHS_359047	RPS6KA6	Kinase
V3LHS_359062	DAPK2	Kinase
V3LHS_359065	DAPK2	Kinase
V3LHS_359066	DAPK2	Kinase
V3LHS_359184	BUB1B	Kinase
V3LHS_359185	BUB1B	Kinase
V3LHS_359186	BUB1B	Kinase
V3LHS_359187	BUB1B	Kinase
V3LHS_359417	SPHK1	Kinase
V3LHS_359868	GCK	Kinase
V3LHS_359869	GCK	Kinase
V3LHS_359871	GCK	Kinase
V3LHS_360031	MELK	Kinase
V3LHS_360032	MELK	Kinase
V3LHS_360034	MELK	Kinase
V3LHS_360823	PI4K2B	Kinase
V3LHS_360861	CASK	Kinase
V3LHS_360862	CASK	Kinase
V3LHS_361195	PRKCE	Kinase
V3LHS_361695	PXK	Kinase
V3LHS_361697	PXK	Kinase
V3LHS_361699	PXK	Kinase
V3LHS_361700	PXK	Kinase

V3LHS_361881	DYRK1B	Kinase
V3LHS_361884	DYRK1B	Kinase
V3LHS_361962	EGFR	Kinase
V3LHS_361964	EGFR	Kinase
V3LHS_361965	EGFR	Kinase
V3LHS_362287	NPR2	Kinase
V3LHS_362288	NPR2	Kinase
V3LHS_362290	Npr2	Kinase
V3LHS_362378	Prkaca	Kinase
V3LHS_362659	GRK4	Kinase
V3LHS_362660	GRK4	Kinase
V3LHS_362661	GRK4	Kinase
V3LHS_362663	GRK4	Kinase
V3LHS_362664	GRK4	Kinase
V3LHS_362798	Efnb1, EFNB3	Kinase
V3LHS_362800	EFNB3	Kinase
V3LHS_362839	Fgr	Kinase
V3LHS_362840	FGR	Kinase
V3LHS_362844	BRSK1	Kinase
V3LHS_362846	BRSK1	Kinase
V3LHS_362847	BRSK1	Kinase
V3LHS_362848	BRSK1	Kinase
V3LHS_362849	BRSK1	Kinase
V3LHS_362902	EPHA10	Kinase
V3LHS_363360	CDK7	Kinase
V3LHS_363361	CDK7	Kinase
V3LHS_363364	CDK7	Kinase
V3LHS_363440	PSKH1	Kinase
V3LHS_363444	PSKH1	Kinase
V3LHS_363598	TWF1	Kinase
V3LHS_363655	YSK4	Kinase
V3LHS_363656	YSK4	Kinase
V3LHS_363657	YSK4	Kinase
V3LHS_363658	YSK4	Kinase
V3LHS_363727	PRKCG	Kinase
V3LHS_363729	PRKCG	Kinase
V3LHS_363731	PRKCG	Kinase
V3LHS_363910	FGFR2	Kinase
V3LHS_364005	PRPS1L1	Kinase
V3LHS_364010	PRPS1L1	Kinase
V3LHS_364053	STK17B	Kinase
V3LHS_364054	STK17B	Kinase
V3LHS_364056	Stk17b	Kinase
V3LHS_364135	DLG2	Kinase
V3LHS_364138	DLG2	Kinase
V3LHS_364140	DLG2	Kinase
V3LHS_364152	PHKB	Kinase

V3LHS_364153	PHKB	Kinase
V3LHS_364154	PHKB	Kinase
V3LHS_364155	PHKB	Kinase
V3LHS_364519	ZAP70	Kinase
V3LHS_364520	ZAP70	Kinase
V3LHS_364521	ZAP70	Kinase
V3LHS_364523	ZAP70	Kinase
V3LHS_364524	ZAP70	Kinase
V3LHS_364628	PIK3CA	Kinase
V3LHS_364629	PIK3CA	Kinase
V3LHS_364630	Pik3ca	Kinase
V3LHS_364654	SGK3	Kinase
V3LHS_364655	SGK3	Kinase
V3LHS_364656	SGK3	Kinase
V3LHS_364657	SGK3	Kinase
V3LHS_364659	Sgk3	Kinase
V3LHS_365003	CLK2	Kinase
V3LHS_365008	CLK2	Kinase
V3LHS_365353	BLK	Kinase
V3LHS_365354	BLK	Kinase
V3LHS_365399	Pkdcc	Kinase
V3LHS_365402	PKDCC	Kinase
V3LHS_365497	PRKD1	Kinase
V3LHS_365498	PRKD1	Kinase
V3LHS_365500	PRKD1	Kinase
V3LHS_365603	ILK	Kinase
V3LHS_365604	ILK	Kinase
V3LHS_365606	ILK	Kinase
V3LHS_365607	ILK	Kinase
V3LHS_365757	RPS6KB2	Kinase
V3LHS_365759	RPS6KB2	Kinase
V3LHS_366009	CIT	Kinase
V3LHS_366011	CIT	Kinase
V3LHS_366013	CIT	Kinase
V3LHS_366123	DTYMK	Kinase
V3LHS_366125	DTYMK	Kinase
V3LHS_366126	DTYMK	Kinase
V3LHS_366127	DTYMK	Kinase
V3LHS_366143	SYK	Kinase
V3LHS_366144	Syk	Kinase
V3LHS_366147	SYK	Kinase
V3LHS_366148	SYK	Kinase
V3LHS_366291	PNCK	Kinase
V3LHS_366471	CAMK1	Kinase
V3LHS_366472	CAMK1	Kinase
V3LHS_366473	CAMK1	Kinase
V3LHS_366474	CAMK1	Kinase



V3LHS_366534	HK1	Kinase
V3LHS_366535	HK1	Kinase
V3LHS_366536	HK1	Kinase
V3LHS_366537	HK1	Kinase
V3LHS_366539	HK1	Kinase
V3LHS_366545	PRKX	Kinase
V3LHS_366546	PRKX	Kinase
V3LHS_366549	PRKX	Kinase
V3LHS_366709	FRK	Kinase
V3LHS_366710	FRK	Kinase
V3LHS_366711	FRK	Kinase
V3LHS_366712	WEE1	Kinase
V3LHS_366716	WEE1	Kinase
V3LHS_366717	Wee1	Kinase
V3LHS_366737	MAPK7	Kinase
V3LHS_366738	Mapk7	Kinase
V3LHS_366740	MAPK7	Kinase
V3LHS_366815	MAP3K5	Kinase
V3LHS_366817	MAP3K5	Kinase
V3LHS_366820	MAP3K5	Kinase
V3LHS_367749	Bckdk	Kinase
V3LHS_367750	BCKDK	Kinase
V3LHS_367804	STK38	Kinase
V3LHS_367805	STK38	Kinase
V3LHS_367866	CPNE3	Kinase
V3LHS_367868	CPNE3	Kinase
V3LHS_367870	Cpne3	Kinase
V3LHS_367955	C9orf96	Kinase
V3LHS_367957	C9orf96	Kinase
V3LHS_367958	C9orf96	Kinase
V3LHS_368348	CAMK2B	Kinase
V3LHS_368859	PTK6	Kinase
V3LHS_368862	PTK6	Kinase
V3LHS_368863	PTK6	Kinase
V3LHS_369022	MKNK1	Kinase
V3LHS_369023	MKNK1	Kinase
V3LHS_369024	MKNK1	Kinase
V3LHS_369026	MKNK1	Kinase
V3LHS_369027	DLG3	Kinase
V3LHS_369028	DLG3	Kinase
V3LHS_369029	DLG3	Kinase
V3LHS_369031	DLG3	Kinase
V3LHS_369217	ACVR1	Kinase
V3LHS_369326	MYLK4	Kinase
V3LHS_369328	MYLK4	Kinase
V3LHS_369329	MYLK4	Kinase
V3LHS_369423	GRK6	Kinase

V3LHS_369482	Ephb6	Kinase
V3LHS_369484	EPHB6	Kinase
V3LHS_369485	EPHB6	Kinase
V3LHS_369487	EPHB6	Kinase
V3LHS_369622	PDK1	Kinase
V3LHS_369623	PDK1	Kinase
V3LHS_369624	PDK1	Kinase
V3LHS_369625	Pdk1	Kinase
V3LHS_370370	PRKY	Kinase
V3LHS_370844	PKIA	Kinase
V3LHS_370845	PKIA	Kinase
V3LHS_370846	PKIA	Kinase
V3LHS_370923	MAP3K7	Kinase
V3LHS_370924	MAP3K7	Kinase
V3LHS_370925	MAP3K7	Kinase
V3LHS_371037	Kcnh2	Kinase
V3LHS_371038	KCNH2	Kinase
V3LHS_371039	KCNH2	Kinase
V3LHS_371040	KCNH2	Kinase
V3LHS_371086	DGKD	Kinase
V3LHS_371088	DGKD	Kinase
V3LHS_371130	PDIK1L	Kinase
V3LHS_371317	CKS2	Kinase
V3LHS_371318	CKS2	Kinase
V3LHS_371319	CKS2	Kinase
V3LHS_371431	CDKL1	Kinase
V3LHS_371432	CDKL1	Kinase
V3LHS_371433	CDKL1	Kinase
V3LHS_371434	CDKL1	Kinase
V3LHS_371435	CDKL1	Kinase
V3LHS_371436	CDKL1	Kinase
V3LHS_371562	ADCK5	Kinase
V3LHS_371703	TSSK2	Kinase
V3LHS_371706	TSSK2	Kinase
V3LHS_371707	TSSK2	Kinase
V3LHS_371801	TWF1	Kinase
V3LHS_371802	TWF1	Kinase
V3LHS_371803	TWF1	Kinase
V3LHS_371804	TWF1	Kinase
V3LHS_371900	SHPK	Kinase
V3LHS_371901	SHPK	Kinase
V3LHS_371902	SHPK	Kinase
V3LHS_371903	SHPK	Kinase
V3LHS_371905	GOLGA5	Kinase
V3LHS_371908	GOLGA5	Kinase
V3LHS_371953	CDK10	Kinase
V3LHS_371954	CDK10	Kinase

V3LHS_372035	PIK3C3	Kinase
V3LHS_372037	PIK3C3	Kinase
V3LHS_372077	PIK3C2A	Kinase
V3LHS_372078	PIK3C2A	Kinase
V3LHS_372082	PIK3C2A	Kinase
V3LHS_372105	CDKN1B	Kinase
V3LHS_372106	CDKN1B	Kinase
V3LHS_372107	CDKN1B	Kinase
V3LHS_372108	CDKN1B	Kinase
V3LHS_372137	ACVRL1	Kinase
V3LHS_372138	ACVRL1	Kinase
V3LHS_372140	ACVRL1	Kinase
V3LHS_372141	ACVRL1	Kinase
V3LHS_372192	Tk2	Kinase
V3LHS_372195	TK2	Kinase
V3LHS_372202	MERTK	Kinase
V3LHS_372203	MERTK	Kinase
V3LHS_372205	MERTK	Kinase
V3LHS_372207	MERTK	Kinase
V3LHS_372245	PANK3	Kinase
V3LHS_372246	PANK3	Kinase
V3LHS_372385	CKMT2	Kinase
V3LHS_372387	CKMT2	Kinase
V3LHS_372388	CKMT2	Kinase
V3LHS_372389	CKMT2	Kinase
V3LHS_372459	TAOK1	Kinase
V3LHS_372460	TAOK1	Kinase
V3LHS_372461	TAOK1	Kinase
V3LHS_372462	TAOK1	Kinase
V3LHS_372463	TAOK1	Kinase
V3LHS_372466	CDK11A, CDK11B	Kinase
V3LHS_372556	MAP2K5	Kinase
V3LHS_372557	MAP2K5	Kinase
V3LHS_372558	MAP2K5	Kinase
V3LHS_372559	MAP2K5	Kinase
V3LHS_372577	PIKFYVE	Kinase
V3LHS_372578	Pikfyve	Kinase
V3LHS_372579	PIKFYVE	Kinase
V3LHS_372580	PIKFYVE	Kinase
V3LHS_372583	CSNK1G2	Kinase
V3LHS_372584	CSNK1G2	Kinase
V3LHS_372585	CSNK1G2	Kinase
V3LHS_372773	PRKCZ	Kinase
V3LHS_372820	Gucy2f	Kinase
V3LHS_372821	GUCY2F	Kinase
V3LHS_372822	GUCY2F	Kinase
V3LHS_372860	Prkdc	Kinase

V3LHS_372861	PRKDC	Kinase
V3LHS_372862	PRKDC	Kinase
V3LHS_372899	PRKAR1A	Kinase
V3LHS_372900	PRKAR1A	Kinase
V3LHS_372901	Prkar1a	Kinase
V3LHS_372902	PRKAR1A	Kinase
V3LHS_373363	NEK3	Kinase
V3LHS_373364	NEK3	Kinase
V3LHS_373365	NEK3	Kinase
V3LHS_373367	NEK3	Kinase
V3LHS_373651	MAK	Kinase
V3LHS_373652	MAK	Kinase
V3LHS_373974	PRKAG3	Kinase
V3LHS_373976	PRKAG3	Kinase
V3LHS_373987	CALM2	Kinase
V3LHS_373988	CALM2	Kinase
V3LHS_373989	Caln2	Kinase
V3LHS_373990	CALM2	Kinase
V3LHS_374310	PFKL	Kinase
V3LHS_374312	PFKL	Kinase
V3LHS_374313	PFKL	Kinase
V3LHS_374376	Srpk1	Kinase
V3LHS_374380	SRPK1	Kinase
V3LHS_374388	RIOK1	Kinase
V3LHS_374391	RIOK1	Kinase
V3LHS_374392	RIOK1	Kinase
V3LHS_374441	SRP72	Kinase
V3LHS_374442	SRP72	Kinase
V3LHS_374445	SRP72	Kinase
V3LHS_374446	SRP72	Kinase
V3LHS_374740	TRPM6	Kinase
V3LHS_374741	TRPM6	Kinase
V3LHS_374742	TRPM6	Kinase
V3LHS_374743	TRPM6	Kinase
V3LHS_374782	CDK4	Kinase
V3LHS_374810	CIB2	Kinase
V3LHS_374811	CIB2	Kinase
V3LHS_374812	CIB2	Kinase
V3LHS_374896	AKT3	Kinase
V3LHS_374897	AKT3	Kinase
V3LHS_374900	AKT3	Kinase
V3LHS_375015	JAK3	Kinase
V3LHS_375155	STK32C	Kinase
V3LHS_375157	Stk32c	Kinase
V3LHS_375159	STK32C	Kinase
V3LHS_375268	Tssk3	Kinase
V3LHS_375315	Prkaa2	Kinase

V3LHS_375317	Prkaa2	Kinase
V3LHS_375319	PRKAA2	Kinase
V3LHS_375567	MAP4K4	Kinase
V3LHS_375568	MAP4K4	Kinase
V3LHS_375570	MAP4K4	Kinase
V3LHS_375745	TRPM7	Kinase
V3LHS_375747	TRPM7	Kinase
V3LHS_375749	TRPM7	Kinase
V3LHS_375750	TRPM7	Kinase
V3LHS_375976	GRK7	Kinase
V3LHS_375978	GRK7	Kinase
V3LHS_375979	GRK7	Kinase
V3LHS_375980	GRK7	Kinase
V3LHS_376195	PRKAR2A	Kinase
V3LHS_376197	PRKAR2A	Kinase
V3LHS_376199	PRKAR2A	Kinase
V3LHS_376200	PRKAR2A	Kinase
V3LHS_376239	EFNA3	Kinase
V3LHS_376241	EFNA3	Kinase
V3LHS_376242	MAP3K12	Kinase
V3LHS_376245	MAP3K12	Kinase
V3LHS_376310	PIP5K1C	Kinase
V3LHS_376313	Pip5k1c	Kinase
V3LHS_376348	PCK1	Kinase
V3LHS_376349	PCK1	Kinase
V3LHS_376351	PCK1	Kinase
V3LHS_376457	ERN2	Kinase
V3LHS_376459	ERN2	Kinase
V3LHS_376671	DYRK1A	Kinase
V3LHS_376672	Dyrk1a	Kinase
V3LHS_376757	Cdkn2c	Kinase
V3LHS_376759	Cdkn2c	Kinase
V3LHS_377046	PRKCSH	Kinase
V3LHS_377047	PRKCSH	Kinase
V3LHS_377049	PRKCSH	Kinase
V3LHS_377051	PRKCSH	Kinase
V3LHS_377182	MAPK1	Kinase
V3LHS_377183	MAPK1	Kinase
V3LHS_377279	AK1	Kinase
V3LHS_377280	AK1	Kinase
V3LHS_377524	ACVR1B	Kinase
V3LHS_377526	ACVR1B	Kinase
V3LHS_377625	MUSK	Kinase
V3LHS_377626	MUSK	Kinase
V3LHS_377848	IGF1R	Kinase
V3LHS_377851	Igf1r	Kinase
V3LHS_377852	IGF1R	Kinase

V3LHS_377901	AAK1	Kinase
V3LHS_377902	AAK1	Kinase
V3LHS_377903	AAK1	Kinase
V3LHS_377905	AAK1	Kinase
V3LHS_377906	AAK1	Kinase
V3LHS_378003	BRD4	Kinase
V3LHS_378100	PFKFB4	Kinase
V3LHS_378101	PFKFB4	Kinase
V3LHS_378102	PFKFB4	Kinase
V3LHS_378283	PI4KA, PI4KAP2	Kinase
V3LHS_378286	PI4KA, PI4KAP1, PI4KAP2	Kinase
V3LHS_378614	CDKL2	Kinase
V3LHS_378619	CDKL2	Kinase
V3LHS_378937	NADK	Kinase
V3LHS_378940	NADK	Kinase
V3LHS_379203	NME5	Kinase
V3LHS_379207	NME5	Kinase
V3LHS_379907	NRBP2	Kinase
V3LHS_379908	NRBP2	Kinase
V3LHS_379909	NRBP2	Kinase
V3LHS_379910	NRBP2	Kinase
V3LHS_379927	TNK1	Kinase
V3LHS_380012	MAP3K13	Kinase
V3LHS_380014	MAP3K13	Kinase
V3LHS_380167	ADPGK	Kinase
V3LHS_380168	ADPGK	Kinase
V3LHS_380169	ADPGK	Kinase
V3LHS_380214	TESK2	Kinase
V3LHS_380217	TESK2	Kinase
V3LHS_380293	TRIM27	Kinase
V3LHS_380294	TRIM27	Kinase
V3LHS_380830	TSSK1B	Kinase
V3LHS_380831	TSSK1B	Kinase
V3LHS_380932	DCK	Kinase
V3LHS_380933	Dck	Kinase
V3LHS_380937	DCK	Kinase
V3LHS_381052	PIM2	Kinase
V3LHS_381166	STK17A	Kinase
V3LHS_381167	STK17A	Kinase
V3LHS_381169	STK17A	Kinase
V3LHS_381230	PAK6	Kinase
V3LHS_381508	MET	Kinase
V3LHS_381756	BUB1	Kinase
V3LHS_381757	BUB1	Kinase
V3LHS_381759	BUB1	Kinase
V3LHS_381999	ALDH18A1	Kinase
V3LHS_382000	ALDH18A1	Kinase

V3LHS_382001	ALDH18A1	Kinase
V3LHS_382004	Aldh18a1	Kinase
V3LHS_382041	YSK4	Kinase
V3LHS_382479	TTBK2	Kinase
V3LHS_382480	TTBK2	Kinase
V3LHS_382482	TTBK2	Kinase
V3LHS_382930	OXS1	Kinase
V3LHS_382931	OXS1	Kinase
V3LHS_382933	OXS1	Kinase
V3LHS_383140	ADCK2	Kinase
V3LHS_383142	ADCK2	Kinase
V3LHS_383312	NEK4	Kinase
V3LHS_383313	NEK4	Kinase
V3LHS_383315	NEK4	Kinase
V3LHS_383317	NEK4	Kinase
V3LHS_383600	MOK	Kinase
V3LHS_383818	FN3KRP	Kinase
V3LHS_383819	FN3KRP	Kinase
V3LHS_383821	FN3KRP	Kinase
V3LHS_383823	FN3KRP	Kinase
V3LHS_383853	SGK196	Kinase
V3LHS_383963	PRPF4B	Kinase
V3LHS_384241	DUSP21	Kinase
V3LHS_384250	ROR2	Kinase
V3LHS_384251	ROR2	Kinase
V3LHS_384255	ROR2	Kinase
V3LHS_384315	STK31	Kinase
V3LHS_384316	STK31	Kinase
V3LHS_384458	MAPK10	Kinase
V3LHS_384463	MAPK10	Kinase
V3LHS_384753	MAP3K1	Kinase
V3LHS_384754	MAP3K1	Kinase
V3LHS_384769	PRKACB	Kinase
V3LHS_384770	PRKACB	Kinase
V3LHS_384771	PRKACB	Kinase
V3LHS_384898	ALPK1	Kinase
V3LHS_384899	ALPK1	Kinase
V3LHS_385333	STK24	Kinase
V3LHS_385490	NUCKS1	Kinase
V3LHS_385491	NUCKS1	Kinase
V3LHS_385493	NUCKS1	Kinase
V3LHS_385494	NUCKS1	Kinase
V3LHS_385495	NUCKS1	Kinase
V3LHS_385857	PIP5K1B	Kinase
V3LHS_385859	Pip5k1b	Kinase
V3LHS_385860	PIP5K1B	Kinase
V3LHS_385861	PIP5K1B	Kinase

V3LHS_385862	PIP5K1B	Kinase
V3LHS_385921	ALPK2	Kinase
V3LHS_385922	ALPK2	Kinase
V3LHS_385923	ALPK2	Kinase
V3LHS_385926	ALPK2	Kinase
V3LHS_385928	FN3K	Kinase
V3LHS_385932	FN3K	Kinase
V3LHS_386029	MAP3K9	Kinase
V3LHS_386031	MAP3K9	Kinase
V3LHS_386032	MAP3K9	Kinase
V3LHS_386037	NTRK1	Kinase
V3LHS_386167	MAPK9	Kinase
V3LHS_386168	MAPK9	Kinase
V3LHS_386169	MAPK9	Kinase
V3LHS_386170	Mapk9	Kinase
V3LHS_386232	BC016579, UCK2	Kinase
V3LHS_386233	Uck2	Kinase
V3LHS_386234	UCK2	Kinase
V3LHS_386235	UCK2	Kinase
V3LHS_386521	EPHB2	Kinase
V3LHS_386522	EPHB2	Kinase
V3LHS_386523	EPHB2	Kinase
V3LHS_386643	PI4KB	Kinase
V3LHS_386645	Pi4kb	Kinase
V3LHS_386647	PI4KB	Kinase
V3LHS_386661	PRPS1	Kinase
V3LHS_386663	Prps1	Kinase
V3LHS_386664	PRPS1	Kinase
V3LHS_386707	SNRK	Kinase
V3LHS_386708	Snrk	Kinase
V3LHS_386730	ULK4	Kinase
V3LHS_386731	ULK4	Kinase
V3LHS_386733	ULK4	Kinase
V3LHS_386734	ULK4	Kinase
V3LHS_386825	MAP2K4	Kinase
V3LHS_386826	MAP2K4, MAP2K4P1	Kinase
V3LHS_386892	PAPSS1	Kinase
V3LHS_386894	PAPSS1	Kinase
V3LHS_386895	PAPSS1	Kinase
V3LHS_386896	PAPSS1	Kinase
V3LHS_387079	Cdk8, RGD1560888	Kinase
V3LHS_387081	CDK8	Kinase
V3LHS_387082	CDK8	Kinase
V3LHS_387090	DGKB	Kinase
V3LHS_387092	DGKB	Kinase
V3LHS_387146	BCR	Kinase
V3LHS_387214	Camk2g	Kinase



V3LHS_387215	CAMK2G	Kinase
V3LHS_387216	CAMK2G	Kinase
V3LHS_387217	CAMK2G	Kinase
V3LHS_387219	CAMK2G	Kinase
V3LHS_387305	PDK3	Kinase
V3LHS_387306	DDAH1, PDK3	Kinase
V3LHS_387307	PDK3	Kinase
V3LHS_387308	PDK3	Kinase
V3LHS_387328	PKN1	Kinase
V3LHS_387329	PKN1	Kinase
V3LHS_387331	PKN1	Kinase
V3LHS_387332	PKN1	Kinase
V3LHS_387357	CDC42BPG	Kinase
V3LHS_387359	CDC42BPG	Kinase
V3LHS_387446	MYLK	Kinase
V3LHS_387447	MYLK	Kinase
V3LHS_387449	MYLK	Kinase
V3LHS_387518	LRRK1	Kinase
V3LHS_387795	RPS6KB1	Kinase
V3LHS_387797	RPS6KB1	Kinase
V3LHS_387810	LIMK2	Kinase
V3LHS_387811	LIMK2	Kinase
V3LHS_387812	LIMK2	Kinase
V3LHS_387851	Brd2	Kinase
V3LHS_388172	EPHA8	Kinase
V3LHS_388788	ULK2	Kinase
V3LHS_388790	ULK2	Kinase
V3LHS_388793	ULK2	Kinase
V3LHS_388885	PIM3	Kinase
V3LHS_388886	PIM3	Kinase
V3LHS_389068	DGUOK	Kinase
V3LHS_389069	DGUOK	Kinase
V3LHS_389077	NRBP1	Kinase
V3LHS_389078	NRBP1	Kinase
V3LHS_389079	Nrbp, NRBP1	Kinase
V3LHS_389080	NRBP1	Kinase
V3LHS_389081	NRBP1	Kinase
V3LHS_389177	ITPKC	Kinase
V3LHS_389180	ITPKC	Kinase
V3LHS_389181	Ccb12, ITPKC	Kinase
V3LHS_389182	ITPKC	Kinase
V3LHS_389299	Hck	Kinase
V3LHS_389302	HCK	Kinase
V3LHS_389545	ANKK1	Kinase
V3LHS_389546	ANKK1	Kinase
V3LHS_389549	ANKK1	Kinase
V3LHS_389562	LIMK1	Kinase

V3LHS_389564	LIMK1	Kinase
V3LHS_389665	NEK6	Kinase
V3LHS_389667	NEK6	Kinase
V3LHS_389670	MAP2K3	Kinase
V3LHS_389708	EPHA7	Kinase
V3LHS_389709	EPHA7	Kinase
V3LHS_389710	EPHA7	Kinase
V3LHS_389908	IP6K1	Kinase
V3LHS_389909	IP6K1	Kinase
V3LHS_389911	Ip6k1	Kinase
V3LHS_389912	Ip6k1	Kinase
V3LHS_389913	IP6K1	Kinase
V3LHS_390159	IKBKB	Kinase
V3LHS_390160	IKBKB	Kinase
V3LHS_390161	IKBKB	Kinase
V3LHS_390162	IKBKB	Kinase
V3LHS_390499	PHKA2	Kinase
V3LHS_390501	PHKA2	Kinase
V3LHS_390505	BMP2K	Kinase
V3LHS_390507	BMP2K	Kinase
V3LHS_390817	Lats2	Kinase
V3LHS_390818	LATS2	Kinase
V3LHS_390916	MAPKAPK5	Kinase
V3LHS_390919	MAPKAPK5	Kinase
V3LHS_390937	CDK5	Kinase
V3LHS_390938	CDK5	Kinase
V3LHS_390939	CDK5	Kinase
V3LHS_390942	CDK5	Kinase
V3LHS_391419	RIOK3	Kinase
V3LHS_391421	RIOK3	Kinase
V3LHS_391422	RIOK3	Kinase
V3LHS_391424	RIOK3	Kinase
V3LHS_391597	LMTK3	Kinase
V3LHS_391599	LMTK3	Kinase
V3LHS_391600	LMTK3	Kinase
V3LHS_391601	LMTK3	Kinase
V3LHS_391602	LMTK3	Kinase
V3LHS_391792	RPS6KA3	Kinase
V3LHS_391793	RPS6KA3	Kinase
V3LHS_391794	RPS6KA3	Kinase
V3LHS_391796	RPS6KA3	Kinase
V3LHS_391808	NME3	Kinase
V3LHS_391809	NME3	Kinase
V3LHS_391811	NME3	Kinase
V3LHS_391941	AAK1	Kinase
V3LHS_391942	AAK1	Kinase
V3LHS_391943	AAK1	Kinase

V3LHS_392240	MYLK2	Kinase
V3LHS_392354	SPHK2	Kinase
V3LHS_392355	SPHK2	Kinase
V3LHS_392357	SPHK2	Kinase
V3LHS_392655	BMPR2	Kinase
V3LHS_392657	BMPR2	Kinase
V3LHS_392658	Bmpr2	Kinase
V3LHS_392659	Bmpr2	Kinase
V3LHS_392675	GUK1	Kinase
V3LHS_392920	DDR1	Kinase
V3LHS_392923	DDR1	Kinase
V3LHS_393095	Dyrk3	Kinase
V3LHS_393097	DYRK3	Kinase
V3LHS_393098	DYRK3	Kinase
V3LHS_393099	DYRK3	Kinase
V3LHS_393150	PIP4K2C	Kinase
V3LHS_393300	PLK3	Kinase
V3LHS_393670	TEX14	Kinase
V3LHS_393849	MAP2K6	Kinase
V3LHS_393850	Map2k6	Kinase
V3LHS_393854	Map2k6	Kinase
V3LHS_393920	ErbB4	Kinase
V3LHS_393921	ERBB4	Kinase
V3LHS_393922	ERBB4	Kinase
V3LHS_393924	ERBB4	Kinase
V3LHS_393965	CDK11A, CDK11B	Kinase
V3LHS_394078	MST1R	Kinase
V3LHS_394150	TRIM27	Kinase
V3LHS_394154	TRIM27	Kinase
V3LHS_394271	PIK3C2B	Kinase
V3LHS_394619	CSNK1A1	Kinase
V3LHS_394620	CSNK1A1, CSNK1A1P1	Kinase
V3LHS_394621	CSNK1A1	Kinase
V3LHS_394622	CSNK1A1	Kinase
V3LHS_394623	CSNK1A1	Kinase
V3LHS_395100	PAK4	Kinase
V3LHS_395103	PAK4	Kinase
V3LHS_395130	PRKAR1B	Kinase
V3LHS_395131	PRKAR1B	Kinase
V3LHS_395132	PRKAR1B	Kinase
V3LHS_395134	PRKAR1B	Kinase
V3LHS_395436	IP6K2	Kinase
V3LHS_395437	IP6K2	Kinase
V3LHS_395438	IP6K2	Kinase
V3LHS_395439	IP6K2	Kinase
V3LHS_395440	IP6K2	Kinase
V3LHS_395534	FES	Kinase

V3LHS_395595	PRKCQ	Kinase
V3LHS_395597	PRKCQ	Kinase
V3LHS_395599	PRKCQ	Kinase
V3LHS_395600	PRKCQ	Kinase
V3LHS_395601	TLK2	Kinase
V3LHS_395605	TLK2	Kinase
V3LHS_395632	MAST1	Kinase
V3LHS_395633	MAST1	Kinase
V3LHS_395634	MAST1	Kinase
V3LHS_395785	DCLK1	Kinase
V3LHS_395786	DCLK1	Kinase
V3LHS_395787	DCLK1	Kinase
V3LHS_395788	DCLK1	Kinase
V3LHS_395799	SIK1	Kinase
V3LHS_395800	SIK1	Kinase
V3LHS_395867	DYRK4	Kinase
V3LHS_395870	DYRK4	Kinase
V3LHS_395879	PRKG1	Kinase
V3LHS_396190	NEK10	Kinase
V3LHS_396191	AGK	Kinase
V3LHS_396192	AGK	Kinase
V3LHS_396194	AGK	Kinase
V3LHS_396356	DLG1	Kinase
V3LHS_396360	DLG1	Kinase
V3LHS_396361	DLG1	Kinase
V3LHS_396404	PDGFRB	Kinase
V3LHS_396405	PDGFRB	Kinase
V3LHS_396407	PDGFRB	Kinase
V3LHS_396450	DBF4	Kinase
V3LHS_396451	DBF4	Kinase
V3LHS_396452	DBF4	Kinase
V3LHS_396453	DBF4	Kinase
V3LHS_396497	VRK2	Kinase
V3LHS_396499	VRK2	Kinase
V3LHS_396500	Vrk2	Kinase
V3LHS_396501	VRK2	Kinase
V3LHS_396502	VRK2	Kinase
V3LHS_396565	LRRK2	Kinase
V3LHS_396566	LRRK2	Kinase
V3LHS_396568	LRRK2	Kinase
V3LHS_396788	GSG2	Kinase
V3LHS_396789	GSG2	Kinase
V3LHS_396791	GSG2	Kinase
V3LHS_396811	MAP3K10	Kinase
V3LHS_396814	Map3k10	Kinase
V3LHS_396815	MAP3K10	Kinase
V3LHS_396842	SCYL3	Kinase

V3LHS_396843	SCYL3	Kinase
V3LHS_397203	PTK7	Kinase
V3LHS_397250	Hipk1	Kinase
V3LHS_397251	HIPK1	Kinase
V3LHS_397253	HIPK1	Kinase
V3LHS_397255	HIPK1	Kinase
V3LHS_397405	CAMK2A	Kinase
V3LHS_397879	FPGT-TNNI3K, TNNI3K	Kinase
V3LHS_397880	FPGT-TNNI3K, TNNI3K	Kinase
V3LHS_397886	RET	Kinase
V3LHS_397888	RET	Kinase
V3LHS_397889	RET	Kinase
V3LHS_397901	PDK2	Kinase
V3LHS_397902	Pdk2	Kinase
V3LHS_397961	CDKL5	Kinase
V3LHS_397964	CDKL5	Kinase
V3LHS_398219	MAGI3	Kinase
V3LHS_398221	MAGI3	Kinase
V3LHS_398222	MAGI3	Kinase
V3LHS_398223	MAGI3	Kinase
V3LHS_398340	STK39, Tktl2	Kinase
V3LHS_398341	STK39	Kinase
V3LHS_398343	STK39	Kinase
V3LHS_398344	STK39	Kinase
V3LHS_398357	CSNK1G1	Kinase
V3LHS_398359	CSNK1G1	Kinase
V3LHS_398361	CSNK1G1	Kinase
V3LHS_398482	NME7	Kinase
V3LHS_398483	NME7	Kinase
V3LHS_398484	NME7	Kinase
V3LHS_398711	GSK3A	Kinase
V3LHS_398713	GSK3A	Kinase
V3LHS_398776	TTBK1	Kinase
V3LHS_398777	TTBK1	Kinase
V3LHS_398779	TTBK1	Kinase
V3LHS_398780	TTBK1	Kinase
V3LHS_399018	PRKAG2	Kinase
V3LHS_399020	PRKAG2	Kinase
V3LHS_399134	GTF2H1	Kinase
V3LHS_399136	GTF2H1	Kinase
V3LHS_399137	GTF2H1	Kinase
V3LHS_399287	ITPKB	Kinase
V3LHS_399289	ITPKB	Kinase
V3LHS_399291	ITPKB	Kinase
V3LHS_399768	NEK2	Kinase
V3LHS_399776	PRKAG1	Kinase
V3LHS_400027	CSNK1A1L	Kinase

V3LHS_400028	CSNK1A1L	Kinase
V3LHS_400061	PDK4	Kinase
V3LHS_400062	PDK4	Kinase
V3LHS_400065	PDK4	Kinase
V3LHS_400176	ABL1	Kinase
V3LHS_400219	UCKL1	Kinase
V3LHS_400220	UCKL1	Kinase
V3LHS_400377	PIK3R2	Kinase
V3LHS_400694	MAP3K15	Kinase
V3LHS_400830	NUAK1	Kinase
V3LHS_400914	TSSK6	Kinase
V3LHS_401207	CDKN2D	Kinase
V3LHS_401269	TRIB3	Kinase
V3LHS_401335	CDK5R1	Kinase
V3LHS_401336	CDK5R1	Kinase
V3LHS_401337	CDK5R1	Kinase
V3LHS_401342	CKB	Kinase
V3LHS_401379	MPP2	Kinase
V3LHS_401380	MPP2	Kinase
V3LHS_401607	CALM3	Kinase
V3LHS_401933	TAOK2	Kinase
V3LHS_401935	TAOK2	Kinase
V3LHS_401954	Itpka	Kinase
V3LHS_401955	ITPKA	Kinase
V3LHS_401990	TP53RK	Kinase
V3LHS_402032	RPS6KA4	Kinase
V3LHS_402033	Rps6ka4	Kinase
V3LHS_402062	ULK1	Kinase
V3LHS_402206	CDK18	Kinase
V3LHS_402249	PRKAR2B	Kinase
V3LHS_402250	PRKAR2B	Kinase
V3LHS_402251	PRKAR2B	Kinase
V3LHS_402274	UCK1	Kinase
V3LHS_402352	BRD2	Kinase
V3LHS_402390	CDADC1	Kinase
V3LHS_402448	PGK2	Kinase
V3LHS_402646	ITK	Kinase
V3LHS_402647	ITK	Kinase
V3LHS_402648	ITK	Kinase
V3LHS_402698	ITPK1	Kinase
V3LHS_402727	CERK	Kinase
V3LHS_402728	CERK	Kinase
V3LHS_402744	TPK1	Kinase
V3LHS_402745	TPK1	Kinase
V3LHS_402746	TPK1	Kinase
V3LHS_402905	CDKN1A	Kinase
V3LHS_403015	PTK2B	Kinase

V3LHS_403016	PTK2B	Kinase
V3LHS_403039	LTK	Kinase
V3LHS_403155	NME4	Kinase
V3LHS_403165	PANK1	Kinase
V3LHS_403166	PANK1	Kinase
V3LHS_403167	PANK1	Kinase
V3LHS_403398	ACVR2A	Kinase
V3LHS_403516	CDC42BPB	Kinase
V3LHS_403697	RIPK4	Kinase
V3LHS_403698	RIPK4	Kinase
V3LHS_403699	RIPK4	Kinase
V3LHS_403700	RIPK4	Kinase
V3LHS_403789	PAK7	Kinase
V3LHS_403790	PAK7	Kinase
V3LHS_403791	PAK7	Kinase
V3LHS_403985	STK33	Kinase
V3LHS_403987	STK33	Kinase
V3LHS_404030	AXL	Kinase
V3LHS_404082	CDK6	Kinase
V3LHS_404083	CDK6	Kinase
V3LHS_404085	CDK6	Kinase
V3LHS_404106	MAP3K8	Kinase
V3LHS_404107	MAP3K8	Kinase
V3LHS_404156	AK3	Kinase
V3LHS_404158	AK3	Kinase
V3LHS_404232	TPD52L3	Kinase
V3LHS_404475	MAPKAPK3	Kinase
V3LHS_404618	SIK2	Kinase
V3LHS_404654	TPD52L3	Kinase
V3LHS_405001	TYRO3	Kinase
V3LHS_405002	TYRO3	Kinase
V3LHS_405119	ZAK	Kinase
V3LHS_405147	PKLR	Kinase
V3LHS_405148	PKLR	Kinase
V3LHS_405278	TRIB1	Kinase
V3LHS_405354	PFKFB3	Kinase
V3LHS_405388	EFNA4	Kinase
V3LHS_405389	EFNA4	Kinase
V3LHS_405554	RPS6KA1	Kinase
V3LHS_405616	MAPK11	Kinase
V3LHS_405620	PRKAB2	Kinase
V3LHS_405722	BMPR1A	Kinase
V3LHS_405736	PANK4	Kinase
V3LHS_405802	STK25	Kinase
V3LHS_405883	MAPKAPK2	Kinase
V3LHS_405991	NLK	Kinase
V3LHS_406223	IP6K3	Kinase

V3LHS_406309	ALPK3	Kinase
V3LHS_406362	MAGI1	Kinase
V3LHS_406386	Csnk2a2	Kinase
V3LHS_406466	FAM227B, GALK2	Kinase
V3LHS_406534	PDGFRA	Kinase
V3LHS_406746	NUAK2	Kinase
V3LHS_406747	AKIP1, NUAK2	Kinase
V3LHS_406932	CKS1B	Kinase
V3LHS_406934	CKS1B	Kinase
V3LHS_406950	RFK	Kinase
V3LHS_406997	STK19	Kinase
V3LHS_407173	CKMT2	Kinase
V3LHS_407226	CDC7	Kinase
V3LHS_407245	CMPK1	Kinase
V3LHS_407246	CMPK1	Kinase
V3LHS_407394	CAMKK2	Kinase
V3LHS_407517	PHKG1	Kinase
V3LHS_407615	FGFRL1	Kinase
V3LHS_407678	CERK	Kinase
V3LHS_408016	Wnk2	Kinase
V3LHS_408038	IPPK	Kinase
V3LHS_408227	EPHB1	Kinase
V3LHS_408228	EPHB1	Kinase
V3LHS_408333	FUK	Kinase
V3LHS_408334	FUK	Kinase
V3LHS_408336	FUK	Kinase
V3LHS_408658	PI4K2B	Kinase
V3LHS_408661	PI4K2B	Kinase
V3LHS_408741	PRKCE	Kinase
V3LHS_408815	EGFR	Kinase
V3LHS_408943	EFNB3	Kinase
V3LHS_408944	EFNB3	Kinase
V3LHS_408971	CDKN2B	Kinase
V3LHS_408972	CDKN2B	Kinase
V3LHS_409024	PSKH1	Kinase
V3LHS_409284	BLK	Kinase
V3LHS_409295	PKDCC	Kinase
V3LHS_409296	PKDCC	Kinase
V3LHS_409421	PBK	Kinase
V3LHS_409422	PBK	Kinase
V3LHS_409515	SNRK	Kinase
V3LHS_409516	SNRK	Kinase
V3LHS_409613	BCKDK	Kinase
V3LHS_409632	CPNE3, ZNF677	Kinase
V3LHS_409797	ACVR1	Kinase
V3LHS_409798	ACVR1	Kinase
V3LHS_409799	ACVR1	Kinase



V3LHS_409816	MYLK4	Kinase
V3LHS_409946	LCK	Kinase
V3LHS_409970	PRKY	Kinase
V3LHS_409972	PRKY	Kinase
V3LHS_409983	IRAK1	Kinase
V3LHS_410082	Kcnh2	Kinase
V3LHS_410087	DGKD	Kinase
V3LHS_410092	PDIK1L	Kinase
V3LHS_410093	PDIK1L	Kinase
V3LHS_410095	PDIK1L	Kinase
V3LHS_410110	CKS2	Kinase
V3LHS_410198	SHPK, TRPV1	Kinase
V3LHS_410199	CDK10	Kinase
V3LHS_410219	CDKN1B	Kinase
V3LHS_410220	Cdkn1b	Kinase
V3LHS_410230	TK2	Kinase
V3LHS_410309	PCK2	Kinase
V3LHS_410614	CIB2	Kinase
V3LHS_410717	TSSK3	Kinase
V3LHS_410718	TSSK3	Kinase
V3LHS_410887	EFNA3	Kinase
V3LHS_410897	PCK1	Kinase
V3LHS_410973	GAK	Kinase
V3LHS_410974	GAK	Kinase
V3LHS_411242	NADK	Kinase
V3LHS_411437	ADPGK	Kinase
V3LHS_411537	TSSK1B	Kinase
V3LHS_411590	PIM2	Kinase
V3LHS_411593	PIM2	Kinase
V3LHS_411836	AK4	Kinase
V3LHS_411837	AK4	Kinase
V3LHS_411838	AK4	Kinase
V3LHS_412361	MAP3K9	Kinase
V3LHS_412513	PAPSS1	Kinase
V3LHS_412645	RPS6KB1	Kinase
V3LHS_412646	RPS6KB1	Kinase
V3LHS_412826	DGUOK	Kinase
V3LHS_412827	DGUOK	Kinase
V3LHS_412893	CDK17	Kinase
V3LHS_412895	CDK17	Kinase
V3LHS_412924	LIMK1	Kinase
V3LHS_412937	FGFR3	Kinase
V3LHS_412939	FGFR3	Kinase
V3LHS_412995	IKBKB	Kinase
V3LHS_413105	LATS2	Kinase
V3LHS_413262	CKMT1B	Kinase
V3LHS_413322	MYLK2	Kinase

V3LHS_413402	GUK1	Kinase
V3LHS_413445	DDR1	Kinase
V3LHS_413482	PIP4K2C	Kinase
V3LHS_413770	DAPK1	Kinase
V3LHS_413985	MAP3K10	Kinase
V3LHS_413990	SCYL3	Kinase
V3LHS_413992	SCYL3	Kinase
V3LHS_413993	SCYL3	Kinase
V3LHS_414107	RPS6KA2	Kinase
V3LHS_414215	CSNK1G1	Kinase
V3LHS_414218	STK16	Kinase
V3LHS_414228	NME7	Kinase
V3LHS_414234	CAMK1G	Kinase
V3LHS_414235	CAMK1G	Kinase
V3LHS_633760	RELA	Kinase
V3LHS_633761	Rela	Kinase
V3LHS_633762	RELA	Kinase
V3LHS_633764	RELA	Kinase
V3LHS_633766	RELA	Kinase
V3LHS_633767	Rela	Kinase
V3LHS_633768	RELA	Kinase
V3LHS_633781	NEK2	Kinase
V3LHS_633783	NEK2	Kinase
V3LHS_633785	NEK2	Kinase
V3LHS_633786	NEK2	Kinase
V3LHS_633787	STK10	Kinase
V3LHS_633788	STK10	Kinase
V3LHS_633789	STK10	Kinase
V3LHS_633790	STK10	Kinase
V3LHS_633792	STK10	Kinase
V3LHS_633793	STK10	Kinase
V3LHS_633839	SRMS	Kinase
V3LHS_633840	SRMS	Kinase
V3LHS_633842	SRMS	Kinase
V3LHS_633843	SRMS	Kinase
V3LHS_633844	SRMS	Kinase
V3LHS_633847	LOC684112, SIK3	Kinase
V3LHS_633848	SIK3	Kinase
V3LHS_633850	SIK3	Kinase
V3LHS_633851	SIK3	Kinase
V3LHS_633864	TEC	Kinase
V3LHS_633865	TEC	Kinase
V3LHS_633867	TEC	Kinase
V3LHS_633868	TEC	Kinase
V3LHS_633869	TEC	Kinase
V3LHS_633870	Tec	Kinase
V3LHS_633871	TEC	Kinase

V3LHS_633967	FLT1	Kinase
V3LHS_633972	Atr	Kinase
V3LHS_633973	ATR	Kinase
V3LHS_633974	ATR	Kinase
V3LHS_633975	ATR	Kinase
V3LHS_633977	PRKG2	Kinase
V3LHS_633978	PRKG2	Kinase
V3LHS_633979	PRKG2	Kinase
V3LHS_633980	PRKG2	Kinase
V3LHS_633981	PRKG2	Kinase
V3LHS_633983	Prkg2	Kinase
V3LHS_633984	PRKG2	Kinase
V3LHS_634037	EPHB3	Kinase
V3LHS_634039	EPHB3	Kinase
V3LHS_634041	EPHB3	Kinase
V3LHS_634044	EPHB3	Kinase
V3LHS_634088	ADCK4	Kinase
V3LHS_634089	ADCK4	Kinase
V3LHS_634090	ADCK4	Kinase
V3LHS_634114	RAF1	Kinase
V3LHS_634115	RAF1	Kinase
V3LHS_634117	RAF1, RAP1A	Kinase
V3LHS_634119	MKNK2	Kinase
V3LHS_634120	MKNK2	Kinase
V3LHS_634121	MKNK2	Kinase
V3LHS_634122	MKNK2	Kinase
V3LHS_634124	MKNK2	Kinase
V3LHS_634127	MKNK2	Kinase
V3LHS_634173	ACVR1C	Kinase
V3LHS_634174	ACVR1C	Kinase
V3LHS_634176	ACVR1C	Kinase
V3LHS_634178	ACVR1C	Kinase
V3LHS_634179	ACVR1C	Kinase
V3LHS_634226	EXOSC10	Kinase
V3LHS_634227	EXOSC10	Kinase
V3LHS_634230	EXOSC10	Kinase
V3LHS_634283	EPHA10	Kinase
V3LHS_634284	EPHA10	Kinase
V3LHS_634286	EPHA10	Kinase
V3LHS_634287	EPHA10	Kinase
V3LHS_634296	PLK2	Kinase
V3LHS_634339	MOS	Kinase
V3LHS_634342	MOS	Kinase
V3LHS_634343	MOS	Kinase
V3LHS_634344	MOS	Kinase
V3LHS_634345	MOS	Kinase
V3LHS_634348	MOS	Kinase

V3LHS_634375	ROR1	Kinase
V3LHS_634376	ROR1	Kinase
V3LHS_634378	ROR1	Kinase
V3LHS_634380	Ror1	Kinase
V3LHS_634381	ROR1	Kinase
V3LHS_634382	SRPK3	Kinase
V3LHS_634383	Srpk1, Srpk2, SRPK3	Kinase
V3LHS_634385	SRPK3	Kinase
V3LHS_634386	SRPK3	Kinase
V3LHS_634387	Srpk2, SRPK3	Kinase
V3LHS_634388	SRPK3	Kinase
V3LHS_634400	CDK3	Kinase
V3LHS_634401	CDK3	Kinase
V3LHS_634402	CDK3	Kinase
V3LHS_634404	CDK3	Kinase
V3LHS_634405	CDK3	Kinase
V3LHS_634407	CDK3	Kinase
V3LHS_634408	MAP3K15	Kinase
V3LHS_634410	MAP3K15	Kinase
V3LHS_634412	MAP3K15	Kinase
V3LHS_634415	MAP3K15	Kinase
V3LHS_634524	NUAK1	Kinase
V3LHS_634526	NUAK1	Kinase
V3LHS_634529	NUAK1	Kinase
V3LHS_634584	TSSK6	Kinase
V3LHS_634587	TSSK6	Kinase
V3LHS_634590	TSSK6	Kinase
V3LHS_634592	MAPK3	Kinase
V3LHS_634594	MAPK3	Kinase
V3LHS_634595	MAPK3	Kinase
V3LHS_634596	MAPK3	Kinase
V3LHS_634597	MAPK3	Kinase
V3LHS_634598	MAPK3	Kinase
V3LHS_634635	Ntrk3	Kinase
V3LHS_634636	NTRK3	Kinase
V3LHS_634638	FGFR1	Kinase
V3LHS_634640	FGFR1	Kinase
V3LHS_634641	FGFR1	Kinase
V3LHS_634642	FGFR1	Kinase
V3LHS_634644	FGFR1	Kinase
V3LHS_634645	FGFR1	Kinase
V3LHS_634747	CAMK2A	Kinase
V3LHS_634748	CAMK2A	Kinase
V3LHS_634749	CAMK2A	Kinase
V3LHS_634750	CAMK2A	Kinase
V3LHS_634751	CAMK2A	Kinase
V3LHS_634780	STK36	Kinase

V3LHS_634781	STK36	Kinase
V3LHS_634785	STK36	Kinase
V3LHS_634829	TRIB3	Kinase
V3LHS_634836	TRIB3	Kinase
V3LHS_634845	CDK16	Kinase
V3LHS_634847	CDK16	Kinase
V3LHS_634848	CDK16	Kinase
V3LHS_634849	CDK16	Kinase
V3LHS_634852	CDK16	Kinase
V3LHS_634861	NRK	Kinase
V3LHS_634864	NRK	Kinase
V3LHS_634868	NRK	Kinase
V3LHS_634902	FYN	Kinase
V3LHS_634903	FYN	Kinase
V3LHS_634905	FYN	Kinase
V3LHS_634906	FYN	Kinase
V3LHS_634927	MAP3K11	Kinase
V3LHS_634929	MAP3K11	Kinase
V3LHS_634932	MAP3K11	Kinase
V3LHS_634934	MAP3K11	Kinase
V3LHS_634986	Grk5	Kinase
V3LHS_634988	GRK5	Kinase
V3LHS_634989	GRK5	Kinase
V3LHS_634990	GRK5	Kinase
V3LHS_635000	Prkcz	Kinase
V3LHS_635002	MTOR	Kinase
V3LHS_635005	MTOR	Kinase
V3LHS_635007	MTOR	Kinase
V3LHS_635008	MTOR	Kinase
V3LHS_635046	PKMYT1	Kinase
V3LHS_635047	PKMYT1	Kinase
V3LHS_635050	PKMYT1	Kinase
V3LHS_635130	RIOK2	Kinase
V3LHS_635132	RIOK2	Kinase
V3LHS_635133	RIOK2	Kinase
V3LHS_635135	RIOK2	Kinase
V3LHS_635137	RIOK2	Kinase
V3LHS_635169	RIPK2	Kinase
V3LHS_635170	RIPK2	Kinase
V3LHS_635233	CLK4	Kinase
V3LHS_635234	CLK4	Kinase
V3LHS_635236	Clk4	Kinase
V3LHS_635240	CLK4	Kinase
V3LHS_635241	CLK4	Kinase
V3LHS_635339	ERBB2	Kinase
V3LHS_635340	ERBB2	Kinase
V3LHS_635341	ERBB2	Kinase

V3LHS_635342	ERBB2	Kinase
V3LHS_635343	ERBB2	Kinase
V3LHS_635344	ERBB2	Kinase
V3LHS_635374	Clk2, CLK2P	Kinase
V3LHS_635378	CLK2	Kinase
V3LHS_635379	CLK2	Kinase
V3LHS_635380	Clk2, CLK2P	Kinase
V3LHS_635382	RPS6KA4	Kinase
V3LHS_635384	RPS6KA4	Kinase
V3LHS_635385	RPS6KA4	Kinase
V3LHS_635386	RPS6KA4	Kinase
V3LHS_635426	ULK1	Kinase
V3LHS_635429	ULK1	Kinase
V3LHS_635431	ULK1	Kinase
V3LHS_635442	DMPK	Kinase
V3LHS_635443	DMPK	Kinase
V3LHS_635447	DMPK	Kinase
V3LHS_635466	IRAK1	Kinase
V3LHS_635467	IRAK1	Kinase
V3LHS_635468	IRAK1	Kinase
V3LHS_635469	Irak1	Kinase
V3LHS_635649	PKN2	Kinase
V3LHS_635650	PKN2	Kinase
V3LHS_635651	PKN2	Kinase
V3LHS_635653	PKN2	Kinase
V3LHS_635656	Pkn2	Kinase
V3LHS_635658	PKN2	Kinase
V3LHS_635777	IRAK1	Kinase
V3LHS_635786	DDR2	Kinase
V3LHS_635787	DDR2	Kinase
V3LHS_635792	DDR2	Kinase
V3LHS_635793	DDR2	Kinase
V3LHS_635796	TBCK	Kinase
V3LHS_635797	TBCK	Kinase
V3LHS_635798	TBCK	Kinase
V3LHS_635800	TBCK	Kinase
V3LHS_635802	TBCK	Kinase
V3LHS_635803	TBCK	Kinase
V3LHS_635840	INSR	Kinase
V3LHS_635841	INSR	Kinase
V3LHS_635842	INSR	Kinase
V3LHS_635844	INSR	Kinase
V3LHS_635845	INSR	Kinase
V3LHS_635846	INSR	Kinase
V3LHS_635847	INSR	Kinase
V3LHS_635932	VRK3	Kinase
V3LHS_635933	VRK3	Kinase

V3LHS_635934	VRK3	Kinase
V3LHS_635936	VRK3	Kinase
V3LHS_635941	TAF1	Kinase
V3LHS_635942	TAF1	Kinase
V3LHS_635945	TAF1	Kinase
V3LHS_635990	TNK2	Kinase
V3LHS_635992	TNK2	Kinase
V3LHS_635993	TNK2	Kinase
V3LHS_635994	TNK2	Kinase
V3LHS_636032	MAPK4	Kinase
V3LHS_636034	MAPK4	Kinase
V3LHS_636036	MAPK4	Kinase
V3LHS_636038	MAPK4	Kinase
V3LHS_636049	TWF2	Kinase
V3LHS_636050	TWF2	Kinase
V3LHS_636051	TWF2	Kinase
V3LHS_636052	TWF2	Kinase
V3LHS_636056	TWF2	Kinase
V3LHS_636066	EPHA2	Kinase
V3LHS_636070	EPHA2	Kinase
V3LHS_636154	PTK2B	Kinase
V3LHS_636155	PTK2B	Kinase
V3LHS_636158	Ptk2b	Kinase
V3LHS_636159	PTK2B	Kinase
V3LHS_636160	PTK2B	Kinase
V3LHS_636161	LTK	Kinase
V3LHS_636164	LTK	Kinase
V3LHS_636165	LTK	Kinase
V3LHS_636167	LTK	Kinase
V3LHS_636168	LTK	Kinase
V3LHS_636218	Map4k1	Kinase
V3LHS_636220	MAP4K1	Kinase
V3LHS_636221	MAP4K1	Kinase
V3LHS_636224	MAP4K1	Kinase
V3LHS_636225	MAP4K1	Kinase
V3LHS_636280	MAPK12	Kinase
V3LHS_636282	MAPK12	Kinase
V3LHS_636283	MAPK12	Kinase
V3LHS_636284	MAPK12	Kinase
V3LHS_636287	MAPK12	Kinase
V3LHS_636312	Grk1	Kinase
V3LHS_636317	GRK1	Kinase
V3LHS_636328	NUP62	Kinase
V3LHS_636332	IL4I1, NUP62	Kinase
V3LHS_636386	ACVR2A	Kinase
V3LHS_636388	ACVR2A	Kinase
V3LHS_636391	ACVR2A	Kinase

V3LHS_636393	Acvr2a	Kinase
V3LHS_636396	AKT2	Kinase
V3LHS_636398	AKT2	Kinase
V3LHS_636400	AKT2	Kinase
V3LHS_636452	HIPK3	Kinase
V3LHS_636454	HIPK3	Kinase
V3LHS_636456	HIPK3	Kinase
V3LHS_636457	HIPK3	Kinase
V3LHS_636459	HIPK3	Kinase
V3LHS_636460	Hipk3	Kinase
V3LHS_636498	BRD4	Kinase
V3LHS_636499	Brd4	Kinase
V3LHS_636500	BRD4	Kinase
V3LHS_636501	BRD4	Kinase
V3LHS_636503	BRD4	Kinase
V3LHS_636538	RPS6KC1	Kinase
V3LHS_636539	RPS6KC1	Kinase
V3LHS_636540	RPS6KC1	Kinase
V3LHS_636542	RPS6KC1	Kinase
V3LHS_636592	RIPK4	Kinase
V3LHS_636593	RIPK4	Kinase
V3LHS_636596	RIPK4	Kinase
V3LHS_636598	RIPK4	Kinase
V3LHS_636602	PIK3R1	Kinase
V3LHS_636604	PIK3R1	Kinase
V3LHS_636623	MAP3K6	Kinase
V3LHS_636625	MAP3K6	Kinase
V3LHS_636626	Map3k6	Kinase
V3LHS_636629	MAP3K6	Kinase
V3LHS_636663	STYK1	Kinase
V3LHS_636664	STYK1	Kinase
V3LHS_636667	STYK1	Kinase
V3LHS_636688	CDK1	Kinase
V3LHS_636691	CDK1	Kinase
V3LHS_636710	EPHB4	Kinase
V3LHS_636711	EPHB4	Kinase
V3LHS_636712	EPHB4	Kinase
V3LHS_636713	EPHB4	Kinase
V3LHS_636714	EPHB4	Kinase
V3LHS_636728	MST4	Kinase
V3LHS_636729	2610018G03Rik, MST4	Kinase
V3LHS_636730	MST4	Kinase
V3LHS_636731	MST4	Kinase
V3LHS_636732	MST4	Kinase
V3LHS_636735	Sgk1	Kinase
V3LHS_636738	SGK1	Kinase
V3LHS_636741	SGK1	Kinase



V3LHS_636783	INSRR	Kinase
V3LHS_636785	INSRR	Kinase
V3LHS_636787	INSRR	Kinase
V3LHS_636789	INSRR	Kinase
V3LHS_636790	INSRR	Kinase
V3LHS_636824	CDK6	Kinase
V3LHS_636825	CDK6	Kinase
V3LHS_636826	CDK6	Kinase
V3LHS_636830	Cdk6	Kinase
V3LHS_636832	MAP3K2	Kinase
V3LHS_636834	MAP3K2	Kinase
V3LHS_636835	MAP3K2	Kinase
V3LHS_636836	MAP3K2	Kinase
V3LHS_636837	MAP3K2	Kinase
V3LHS_636839	MAP3K2	Kinase
V3LHS_636864	FLT4	Kinase
V3LHS_636866	FLT4	Kinase
V3LHS_636900	TAF1L	Kinase
V3LHS_636901	Taf1, TAF1L	Kinase
V3LHS_636902	TAF1L	Kinase
V3LHS_636903	TAF1L	Kinase
V3LHS_636906	TAF1L	Kinase
V3LHS_636907	TAF1L	Kinase
V3LHS_636908	Taf1, TAF1L	Kinase
V3LHS_636954	Camk2b	Kinase
V3LHS_636955	RPS6KA5	Kinase
V3LHS_636956	RPS6KA5	Kinase
V3LHS_636957	RPS6KA5	Kinase
V3LHS_636958	RPS6KA5	Kinase
V3LHS_636960	RPS6KA5	Kinase
V3LHS_636961	RPS6KA5	Kinase
V3LHS_637000	ADCK1	Kinase
V3LHS_637003	ADCK1	Kinase
V3LHS_637004	ADCK1	Kinase
V3LHS_637006	ADCK1	Kinase
V3LHS_637039	HSPB8	Kinase
V3LHS_637040	HSPB8	Kinase
V3LHS_637041	HSPB8	Kinase
V3LHS_637043	HSPB8	Kinase
V3LHS_637044	HSPB8	Kinase
V3LHS_637159	SRPK2	Kinase
V3LHS_637160	SRPK2	Kinase
V3LHS_637162	CXCL12, SRPK2	Kinase
V3LHS_637163	SRPK2	Kinase
V3LHS_637165	SRPK2	Kinase
V3LHS_637166	SRPK2	Kinase
V3LHS_637208	STK35	Kinase

V3LHS_637210	STK35	Kinase
V3LHS_637211	STK35	Kinase
V3LHS_637213	STK35	Kinase
V3LHS_637214	STK35	Kinase
V3LHS_637235	LCK	Kinase
V3LHS_637236	LCK	Kinase
V3LHS_637306	ALK	Kinase
V3LHS_637307	ALK	Kinase
V3LHS_637411	AURKC	Kinase
V3LHS_637413	AURKC	Kinase
V3LHS_637416	AURKC	Kinase
V3LHS_637418	MYO3B	Kinase
V3LHS_637419	MYO3B	Kinase
V3LHS_637421	MYO3B	Kinase
V3LHS_637423	MYO3B	Kinase
V3LHS_637424	MYO3B	Kinase
V3LHS_637425	MYO3B	Kinase
V3LHS_637426	MYO3B	Kinase
V3LHS_637427	MYO3B	Kinase
V3LHS_637431	MAP2K7	Kinase
V3LHS_637432	MAP2K7	Kinase
V3LHS_637433	MAP2K7	Kinase
V3LHS_637435	MAP2K7	Kinase
V3LHS_637454	TLK1	Kinase
V3LHS_637455	TLK1	Kinase
V3LHS_637456	TLK1	Kinase
V3LHS_637461	TLK1	Kinase
V3LHS_637471	TYRO3	Kinase
V3LHS_637472	TYRO3	Kinase
V3LHS_637474	TYRO3	Kinase
V3LHS_637476	TYRO3	Kinase
V3LHS_637477	TYRO3	Kinase
V3LHS_637478	Nlrp12, PTK2B	Kinase
V3LHS_637551	EEF2K	Kinase
V3LHS_637552	EEF2K	Kinase
V3LHS_637554	EEF2K	Kinase
V3LHS_637558	EEF2K	Kinase
V3LHS_637569	CDK2	Kinase
V3LHS_637571	CDK2	Kinase
V3LHS_637573	CDK2	Kinase
V3LHS_637575	CDK2	Kinase
V3LHS_637618	PRKCD	Kinase
V3LHS_637621	PRKCD	Kinase
V3LHS_637622	PRKCD	Kinase
V3LHS_637623	PRKCD	Kinase
V3LHS_637634	NEK8	Kinase
V3LHS_637635	NEK8	Kinase

V3LHS_637638	NEK8	Kinase
V3LHS_637640	NEK8	Kinase
V3LHS_637641	NEK8	Kinase
V3LHS_637693	Sbk1	Kinase
V3LHS_637694	SBK1	Kinase
V3LHS_637695	SBK1	Kinase
V3LHS_637697	SBK1	Kinase
V3LHS_637698	Sbk1	Kinase
V3LHS_637699	SBK1	Kinase
V3LHS_637700	SBK1	Kinase
V3LHS_637800	BRSK2	Kinase
V3LHS_637802	BRSK2	Kinase
V3LHS_637804	BRSK2	Kinase
V3LHS_637805	BRSK2	Kinase
V3LHS_637806	BRSK2	Kinase
V3LHS_637807	BRSK2	Kinase
V3LHS_637842	CHEK2	Kinase
V3LHS_637843	CHEK2	Kinase
V3LHS_637845	CHEK2	Kinase
V3LHS_637846	CHEK2	Kinase
V3LHS_637847	CHEK2	Kinase
V3LHS_637848	CHEK2	Kinase
V3LHS_637849	CHEK2	Kinase
V3LHS_637954	CHEK1	Kinase
V3LHS_637955	CHEK1	Kinase
V3LHS_637956	CHEK1	Kinase
V3LHS_637957	CHEK1	Kinase
V3LHS_637959	CHEK1	Kinase
V3LHS_638000	MAPK11	Kinase
V3LHS_638001	MAPK11	Kinase
V3LHS_638003	MAPK11	Kinase
V3LHS_638007	MAPK11	Kinase
V3LHS_638034	RIPK1	Kinase
V3LHS_638036	RIPK1	Kinase
V3LHS_638037	RIPK1	Kinase
V3LHS_638038	RIPK1	Kinase
V3LHS_638040	RIPK1	Kinase
V3LHS_638124	STK40	Kinase
V3LHS_638126	STK40	Kinase
V3LHS_638128	STK40	Kinase
V3LHS_638129	STK40	Kinase
V3LHS_638130	STK40	Kinase
V3LHS_638295	RIPK3	Kinase
V3LHS_638296	RIPK3	Kinase
V3LHS_638298	RIPK3	Kinase
V3LHS_638300	RIPK3	Kinase
V3LHS_638301	RIPK3	Kinase

V3LHS_638352	STK32A	Kinase
V3LHS_638354	STK32A	Kinase
V3LHS_638355	STK32A	Kinase
V3LHS_638359	STK32A	Kinase
V3LHS_638360	STK32A	Kinase
V3LHS_638362	CLK3	Kinase
V3LHS_638366	CLK3	Kinase
V3LHS_638426	GRK6	Kinase
V3LHS_638427	Grk6	Kinase
V3LHS_638430	GRK6	Kinase
V3LHS_638454	MYO3A	Kinase
V3LHS_638455	MYO3A	Kinase
V3LHS_638456	MYO3A	Kinase
V3LHS_638457	MYO3A	Kinase
V3LHS_638458	MYO3A	Kinase
V3LHS_638459	MYO3A	Kinase
V3LHS_638500	AURKA, AURKAPS1	Kinase
V3LHS_638501	AURKA	Kinase
V3LHS_638502	AURKA	Kinase
V3LHS_638503	AURKA	Kinase
V3LHS_638505	AURKA, AURKAPS1	Kinase
V3LHS_638542	MAPK6	Kinase
V3LHS_638546	Mapk6	Kinase
V3LHS_638548	MAPK6	Kinase
V3LHS_638550	MAPK6	Kinase
V3LHS_638551	MAPK6	Kinase
V3LHS_638589	CLK1, PPIL3	Kinase
V3LHS_638590	CLK1	Kinase
V3LHS_638591	CLK1, PPIL3	Kinase
V3LHS_638592	CLK1	Kinase
V3LHS_638593	CLK1, PPIL3	Kinase
V3LHS_638622	RNASEL	Kinase
V3LHS_638623	RNASEL	Kinase
V3LHS_638624	RNASEL	Kinase
V3LHS_638625	RNASEL	Kinase
V3LHS_638626	RNASEL	Kinase
V3LHS_638627	RNASEL	Kinase
V3LHS_638674	CSNK2A2	Kinase
V3LHS_638675	CSNK2A2	Kinase
V3LHS_638676	CSNK2A2	Kinase
V3LHS_638677	CSNK2A2	Kinase
V3LHS_638679	CSNK2A2	Kinase
V3LHS_638681	RPS6KL1	Kinase
V3LHS_638684	RPS6KL1	Kinase
V3LHS_638685	RPS6KL1	Kinase
V3LHS_638687	RPS6KL1	Kinase
V3LHS_638697	LMTK2	Kinase

V3LHS_638698	LMTK2	Kinase
V3LHS_638703	LMTK2	Kinase
V3LHS_638705	LMTK2	Kinase
V3LHS_638707	SLK	Kinase
V3LHS_638709	SLK	Kinase
V3LHS_638710	SLK	Kinase
V3LHS_638712	SLK	Kinase
V3LHS_638745	BMPR1B	Kinase
V3LHS_638747	BMPR1B	Kinase
V3LHS_638748	BMPR1B	Kinase
V3LHS_638752	BMPR1B	Kinase
V3LHS_638754	Prkd2	Kinase
V3LHS_638757	PRKD2	Kinase
V3LHS_638759	PRKD2	Kinase
V3LHS_638761	EIF2AK1	Kinase
V3LHS_638763	EIF2AK1	Kinase
V3LHS_638766	EIF2AK1	Kinase
V3LHS_638768	EIF2AK1	Kinase
V3LHS_638787	PHKG2	Kinase
V3LHS_638788	PHKG2	Kinase
V3LHS_638790	PHKG2	Kinase
V3LHS_638791	PHKG2	Kinase
V3LHS_638793	PHKG2	Kinase
V3LHS_638803	Brd3	Kinase
V3LHS_638805	BRD3	Kinase
V3LHS_638807	BRD3	Kinase
V3LHS_638848	SCYL1	Kinase
V3LHS_638849	SCYL1	Kinase
V3LHS_638852	SCYL1	Kinase
V3LHS_638854	SCYL1	Kinase
V3LHS_638883	AATK	Kinase
V3LHS_638884	AATK	Kinase
V3LHS_638885	AATK	Kinase
V3LHS_638887	AATK	Kinase
V3LHS_638888	AATK	Kinase
V3LHS_638889	Aatk	Kinase
V3LHS_638890	AATK	Kinase
V3LHS_638901	GUCY2D	Kinase
V3LHS_638902	GUCY2D	Kinase
V3LHS_638904	GUCY2D, Gucy2e	Kinase
V3LHS_638906	GUCY2D	Kinase
V3LHS_638934	NUAK2	Kinase
V3LHS_638937	NUAK2	Kinase
V3LHS_638944	Csnk1d	Kinase
V3LHS_638945	CSNK1D	Kinase
V3LHS_638946	CSNK1D	Kinase
V3LHS_638947	Csnk1d	Kinase

V3LHS_638958	SGK223	Kinase
V3LHS_638959	SGK223	Kinase
V3LHS_638960	SGK223	Kinase
V3LHS_638961	SGK223	Kinase
V3LHS_638962	SGK223	Kinase
V3LHS_638964	SGK223	Kinase
V3LHS_638992	WNK1	Kinase
V3LHS_638993	WNK1	Kinase
V3LHS_638994	WNK1	Kinase
V3LHS_638999	WNK1	Kinase
V3LHS_639000	STK11	Kinase
V3LHS_639003	STK11	Kinase
V3LHS_639062	ROR1	Kinase
V3LHS_639063	Ror1	Kinase
V3LHS_639064	ROR1	Kinase
V3LHS_639083	CDK12	Kinase
V3LHS_639085	CDK12	Kinase
V3LHS_639086	CDK12	Kinase
V3LHS_639087	CDK12	Kinase
V3LHS_639089	CDK12	Kinase
V3LHS_639143	RPS6KB2	Kinase
V3LHS_639145	RPS6KB2	Kinase
V3LHS_639146	RPS6KB2	Kinase
V3LHS_639149	BTK	Kinase
V3LHS_639151	BTK	Kinase
V3LHS_639152	BTK	Kinase
V3LHS_639153	BTK	Kinase
V3LHS_639154	BTK	Kinase
V3LHS_639157	STK19	Kinase
V3LHS_639158	STK19	Kinase
V3LHS_639159	STK19	Kinase
V3LHS_639160	STK19	Kinase
V3LHS_639173	EIF2AK3	Kinase
V3LHS_639174	EIF2AK3	Kinase
V3LHS_639175	EIF2AK3	Kinase
V3LHS_639176	EIF2AK3	Kinase
V3LHS_639177	EIF2AK3	Kinase
V3LHS_639179	EIF2AK3	Kinase
V3LHS_639180	EIF2AK3	Kinase
V3LHS_639241	TAB1	Kinase
V3LHS_639242	TAB1	Kinase
V3LHS_639244	TAB1	Kinase
V3LHS_639245	TAB1	Kinase
V3LHS_639248	TAB1	Kinase
V3LHS_639261	AMHR2	Kinase
V3LHS_639263	AMHR2	Kinase
V3LHS_639264	AMHR2	Kinase

V3LHS_639265	AMHR2	Kinase
V3LHS_639289	SGK2	Kinase
V3LHS_639290	SGK2	Kinase
V3LHS_639292	SGK2	Kinase
V3LHS_639293	SGK2	Kinase
V3LHS_639294	SGK2	Kinase
V3LHS_639295	SGK2	Kinase
V3LHS_639296	SGK2	Kinase
V3LHS_639424	TGFBR2	Kinase
V3LHS_639425	TGFBR2	Kinase
V3LHS_639427	TGFBR2	Kinase
V3LHS_639470	EPHA3	Kinase
V3LHS_639471	EPHA3	Kinase
V3LHS_639472	EPHA3	Kinase
V3LHS_639473	EPHA3	Kinase
V3LHS_639475	EPHA3	Kinase
V3LHS_639519	PHKG1	Kinase
V3LHS_639521	PHKG1	Kinase
V3LHS_639522	PHKG1	Kinase
V3LHS_639523	PHKG1	Kinase
V3LHS_639524	PHKG1	Kinase
V3LHS_639526	PHKG1	Kinase
V3LHS_639537	PRKAB1	Kinase
V3LHS_639538	PRKAB1	Kinase
V3LHS_639540	Prkab1	Kinase
V3LHS_639541	PRKAB1	Kinase
V3LHS_639542	PRKAB1	Kinase
V3LHS_639544	PRKAB1	Kinase
V3LHS_639719	IKBKE	Kinase
V3LHS_639720	IKBKE	Kinase
V3LHS_639721	IKBKE	Kinase
V3LHS_639722	IKBKE	Kinase
V3LHS_639723	IKBKE	Kinase
V3LHS_639725	IKBKE	Kinase
V3LHS_639726	IKBKE	Kinase
V3LHS_639743	FASTK	Kinase
V3LHS_639747	Fastk	Kinase
V3LHS_639748	FASTK	Kinase
V3LHS_639834	LOC407835, MAP2K2	Kinase
V3LHS_639835	LOC407835, MAP2K2	Kinase
V3LHS_639836	LOC407835, MAP2K2	Kinase
V3LHS_639838	LOC407835, MAP2K2	Kinase
V3LHS_639839	LOC407835, MAP2K2	Kinase
V3LHS_639850	CSNK2A1, CSNK2A1P	Kinase
V3LHS_639852	CSNK2A1, CSNK2A1P	Kinase
V3LHS_639854	CSNK2A1, CSNK2A1P	Kinase
V3LHS_639855	CSNK2A1, CSNK2A1P	Kinase

V3LHS_639856	CSNK2A1, CSNK2A1P	Kinase
V3LHS_639857	Csnk2a1, CSNK2A1P	Kinase
V3LHS_639929	SRC	Kinase
V3LHS_639931	SRC	Kinase
V3LHS_639932	SRC	Kinase
V3LHS_639936	SRC	Kinase
V3LHS_639945	CAMKK2	Kinase
V3LHS_639946	CAMKK2	Kinase
V3LHS_639947	CAMKK2	Kinase
V3LHS_639948	CAMKK2	Kinase
V3LHS_639950	CAMKK2	Kinase
V3LHS_639952	CAMKK2	Kinase
V3LHS_639994	CDK9	Kinase
V3LHS_639996	CDK9	Kinase
V3LHS_640036	ROCK2	Kinase
V3LHS_640039	ROCK2	Kinase
V3LHS_640041	ROCK2	Kinase
V3LHS_640102	Akt1	Kinase
V3LHS_640103	AKT1	Kinase
V3LHS_640106	AKT1	Kinase
V3LHS_640108	AKT1	Kinase
V3LHS_640109	Akt1	Kinase
V3LHS_640126	RPS6KA6	Kinase
V3LHS_640127	RPS6KA6	Kinase
V3LHS_640130	RPS6KA6	Kinase
V3LHS_640132	RPS6KA6	Kinase
V3LHS_640133	RPS6KA6	Kinase
V3LHS_640135	DAPK2	Kinase
V3LHS_640136	DAPK2	Kinase
V3LHS_640139	DAPK2	Kinase
V3LHS_640140	DAPK2	Kinase
V3LHS_640141	Dapk2	Kinase
V3LHS_640233	CAMK1D	Kinase
V3LHS_640234	CAMK1D	Kinase
V3LHS_640236	CAMK1D	Kinase
V3LHS_640238	CAMK1D	Kinase
V3LHS_640239	CAMK1D	Kinase
V3LHS_640282	PRKCE	Kinase
V3LHS_640286	PRKCE	Kinase
V3LHS_640287	PRKCE	Kinase
V3LHS_640328	PAK3	Kinase
V3LHS_640331	PAK3	Kinase
V3LHS_640332	PAK3	Kinase
V3LHS_640333	PAK3	Kinase
V3LHS_640336	PAK3	Kinase
V3LHS_640337	PAK3	Kinase
V3LHS_640362	DYRK1B	Kinase



V3LHS_640364	DYRK1B	Kinase
V3LHS_640365	DYRK1B	Kinase
V3LHS_640367	DYRK1B	Kinase
V3LHS_640368	Dyrk1b	Kinase
V3LHS_640415	PRKACA	Kinase
V3LHS_640416	PRKACA	Kinase
V3LHS_640417	Prkaca	Kinase
V3LHS_640418	PRKACA	Kinase
V3LHS_640419	PRKACA	Kinase
V3LHS_640421	PRKACA	Kinase
V3LHS_640435	NTRK3	Kinase
V3LHS_640436	NTRK3	Kinase
V3LHS_640437	Ntrk2, NTRK3	Kinase
V3LHS_640438	NTRK3	Kinase
V3LHS_640439	NTRK3	Kinase
V3LHS_640464	FGR	Kinase
V3LHS_640467	FGR	Kinase
V3LHS_640470	FGR	Kinase
V3LHS_640471	FGR	Kinase
V3LHS_640670	PIK3CA	Kinase
V3LHS_640671	PIK3CA	Kinase
V3LHS_640790	PBK	Kinase
V3LHS_640791	PBK	Kinase
V3LHS_640793	PBK	Kinase
V3LHS_640795	PBK	Kinase
V3LHS_640799	PNCK	Kinase
V3LHS_640804	PNCK	Kinase
V3LHS_640806	PNCK	Kinase
V3LHS_640807	PNCK	Kinase
V3LHS_640828	MAPK7	Kinase
V3LHS_640830	MAPK7	Kinase
V3LHS_640831	MAPK7	Kinase
V3LHS_640832	MAPK7	Kinase
V3LHS_641003	CAMK2B	Kinase
V3LHS_641004	CAMK2B	Kinase
V3LHS_641005	CAMK2B	Kinase
V3LHS_641006	CAMK2B	Kinase
V3LHS_641010	CAMK2B	Kinase
V3LHS_641011	CAMK2B	Kinase
V3LHS_641063	MAP2K3	Kinase
V3LHS_641064	MAP2K3	Kinase
V3LHS_641065	MAP2K3	Kinase
V3LHS_641071	PTK6	Kinase
V3LHS_641074	PTK6	Kinase
V3LHS_641075	PTK6	Kinase
V3LHS_641300	STRADB	Kinase
V3LHS_641301	STRADB	Kinase

V3LHS_641302	STRADB	Kinase
V3LHS_641303	STRADB	Kinase
V3LHS_641304	STRADB	Kinase
V3LHS_641305	STRADB	Kinase
V3LHS_641307	STRADB	Kinase
V3LHS_641328	ADCK5	Kinase
V3LHS_641329	ADCK5	Kinase
V3LHS_641330	ADCK5	Kinase
V3LHS_641332	ADCK5	Kinase
V3LHS_641333	ADCK5	Kinase
V3LHS_641334	ADCK5	Kinase
V3LHS_641335	ADCK5	Kinase
V3LHS_641352	CDK10	Kinase
V3LHS_641355	CDK10	Kinase
V3LHS_641356	PIK3C3	Kinase
V3LHS_641358	PIK3C3	Kinase
V3LHS_641360	PIK3C3	Kinase
V3LHS_641362	PIK3C3	Kinase
V3LHS_641373	PIK3C2A	Kinase
V3LHS_641375	PIK3C2A	Kinase
V3LHS_641379	PIK3C2A	Kinase
V3LHS_641380	PIK3C2A	Kinase
V3LHS_641441	CSNK1G2	Kinase
V3LHS_641442	CSNK1G2	Kinase
V3LHS_641443	CSNK1G2	Kinase
V3LHS_641444	CSNK1G2	Kinase
V3LHS_641463	PRKCZ	Kinase
V3LHS_641464	PRKCZ	Kinase
V3LHS_641465	PRKCZ	Kinase
V3LHS_641472	Gucy2f	Kinase
V3LHS_641479	GUCY2F	Kinase
V3LHS_641615	PRKAG3	Kinase
V3LHS_641616	PRKAG3	Kinase
V3LHS_641617	PRKAG3	Kinase
V3LHS_641618	PRKAG3	Kinase
V3LHS_641619	PRKAG3	Kinase
V3LHS_641649	Srpk1	Kinase
V3LHS_641651	Srpk1	Kinase
V3LHS_641652	SRPK1	Kinase
V3LHS_641656	Srpk1	Kinase
V3LHS_641658	TRIB2	Kinase
V3LHS_641659	TRIB2	Kinase
V3LHS_641660	TRIB2	Kinase
V3LHS_641661	TRIB2	Kinase
V3LHS_641663	TRIB2	Kinase
V3LHS_641689	CDK4	Kinase
V3LHS_641690	CDK4	Kinase

V3LHS_641691	CDK4	Kinase
V3LHS_641695	CDK4	Kinase
V3LHS_641721	JAK3	Kinase
V3LHS_641722	JAK3	Kinase
V3LHS_641723	JAK3	Kinase
V3LHS_641724	JAK3	Kinase
V3LHS_641726	JAK3	Kinase
V3LHS_641727	JAK3	Kinase
V3LHS_641729	JAK3	Kinase
V3LHS_641730	JAK3	Kinase
V3LHS_641731	STK32C	Kinase
V3LHS_641735	Stk32a, Stk32b, STK32C	Kinase
V3LHS_641738	STK32C	Kinase
V3LHS_641747	MKNK2	Kinase
V3LHS_641835	MAP3K12	Kinase
V3LHS_641837	MAP3K12	Kinase
V3LHS_641838	Map3k12	Kinase
V3LHS_641839	MAP3K12	Kinase
V3LHS_641840	MAP3K12	Kinase
V3LHS_641842	MAP3K12	Kinase
V3LHS_641879	ERN2	Kinase
V3LHS_641880	ERN2	Kinase
V3LHS_641882	ERN2	Kinase
V3LHS_641886	ERN2	Kinase
V3LHS_641888	ERN2	Kinase
V3LHS_641966	MYLK3	Kinase
V3LHS_641967	MYLK3	Kinase
V3LHS_641969	MYLK3	Kinase
V3LHS_641970	MYLK3	Kinase
V3LHS_641971	MYLK3	Kinase
V3LHS_641972	MYLK3	Kinase
V3LHS_641973	MYLK3	Kinase
V3LHS_641975	MYLK3	Kinase
V3LHS_642032	MUSK	Kinase
V3LHS_642033	MUSK	Kinase
V3LHS_642034	MUSK	Kinase
V3LHS_642035	MUSK	Kinase
V3LHS_642036	Musk	Kinase
V3LHS_642038	MUSK	Kinase
V3LHS_642068	BRD4	Kinase
V3LHS_642172	FGFR4	Kinase
V3LHS_642173	FGFR4	Kinase
V3LHS_642174	FGFR4	Kinase
V3LHS_642175	FGFR4	Kinase
V3LHS_642176	FGFR4	Kinase
V3LHS_642178	FGFR4	Kinase
V3LHS_642221	VRK3	Kinase

V3LHS_642231	PIK3CD	Kinase
V3LHS_642232	PIK3CD	Kinase
V3LHS_642235	Pik3cd	Kinase
V3LHS_642237	PIK3CD	Kinase
V3LHS_642254	ARAF	Kinase
V3LHS_642255	ARAF	Kinase
V3LHS_642257	ARAF	Kinase
V3LHS_642258	ARAF	Kinase
V3LHS_642259	ARAF	Kinase
V3LHS_642261	Araf	Kinase
V3LHS_642264	TNK1	Kinase
V3LHS_642266	TNK1	Kinase
V3LHS_642269	TNK1	Kinase
V3LHS_642302	MAP3K13	Kinase
V3LHS_642304	MAP3K13	Kinase
V3LHS_642307	MAP3K13	Kinase
V3LHS_642308	MAP3K13	Kinase
V3LHS_642310	MAP3K13	Kinase
V3LHS_642311	MAP3K13	Kinase
V3LHS_642314	TESK2	Kinase
V3LHS_642315	TESK2	Kinase
V3LHS_642318	TESK2	Kinase
V3LHS_642319	TESK2	Kinase
V3LHS_642320	TESK2	Kinase
V3LHS_642421	PIM2	Kinase
V3LHS_642423	PIM2	Kinase
V3LHS_642424	PIM2	Kinase
V3LHS_642426	PIM2	Kinase
V3LHS_642427	PIM2	Kinase
V3LHS_642457	Pak6	Kinase
V3LHS_642458	PAK6	Kinase
V3LHS_642459	PAK6	Kinase
V3LHS_642460	PAK6	Kinase
V3LHS_642461	PAK6	Kinase
V3LHS_642462	Map3k12, Pak6	Kinase
V3LHS_642480	PRKAG2	Kinase
V3LHS_642481	MET	Kinase
V3LHS_642482	MET	Kinase
V3LHS_642486	MET	Kinase
V3LHS_642487	MET	Kinase
V3LHS_642496	BC030499, SGK494	Kinase
V3LHS_642497	SGK494	Kinase
V3LHS_642499	SGK494	Kinase
V3LHS_642500	SGK494	Kinase
V3LHS_642502	SGK494	Kinase
V3LHS_642591	TTBK2	Kinase
V3LHS_642592	TTBK2	Kinase

V3LHS_642595	TTBK2	Kinase
V3LHS_642596	TTBK2	Kinase
V3LHS_642598	TTBK2	Kinase
V3LHS_642666	ADCK2	Kinase
V3LHS_642670	ADCK2	Kinase
V3LHS_642671	ADCK2	Kinase
V3LHS_642672	ADCK2	Kinase
V3LHS_642726	PIK3C2G	Kinase
V3LHS_642727	PIK3C2G	Kinase
V3LHS_642728	PIK3C2G	Kinase
V3LHS_642729	PIK3C2G	Kinase
V3LHS_642733	PIK3C2G	Kinase
V3LHS_642768	SGK196	Kinase
V3LHS_642769	SGK196	Kinase
V3LHS_642770	SGK196	Kinase
V3LHS_642771	SGK196	Kinase
V3LHS_642772	SGK196	Kinase
V3LHS_642774	SGK196	Kinase
V3LHS_642776	SGK196	Kinase
V3LHS_642777	SGK196	Kinase
V3LHS_642786	Prpf4b	Kinase
V3LHS_642787	PRPF4B	Kinase
V3LHS_642788	PRPF4B	Kinase
V3LHS_642789	PRPF4B	Kinase
V3LHS_642793	PRPF4B	Kinase
V3LHS_642812	DUSP21	Kinase
V3LHS_642813	DUSP21	Kinase
V3LHS_642816	DUSP21	Kinase
V3LHS_642817	DUSP21	Kinase
V3LHS_642819	DUSP21	Kinase
V3LHS_642820	DUSP21	Kinase
V3LHS_642821	DUSP21	Kinase
V3LHS_642822	MAP3K14	Kinase
V3LHS_642823	MAP3K14	Kinase
V3LHS_642825	MAP3K14	Kinase
V3LHS_642827	MAP3K14	Kinase
V3LHS_642843	ALPK1	Kinase
V3LHS_642846	ALPK1	Kinase
V3LHS_642847	ALPK1	Kinase
V3LHS_642850	ALPK1	Kinase
V3LHS_642880	PASK	Kinase
V3LHS_642881	PASK	Kinase
V3LHS_642882	PASK	Kinase
V3LHS_642883	PASK	Kinase
V3LHS_642884	PASK	Kinase
V3LHS_642886	PASK	Kinase
V3LHS_642890	STK24	Kinase

V3LHS_642891	STK24	Kinase
V3LHS_642893	LOC501266, STK24	Kinase
V3LHS_642957	NTRK1	Kinase
V3LHS_642958	NTRK1	Kinase
V3LHS_642959	NTRK1	Kinase
V3LHS_642961	NTRK1	Kinase
V3LHS_642963	NTRK1	Kinase
V3LHS_642964	NTRK1	Kinase
V3LHS_643018	MAP2K4	Kinase
V3LHS_643021	MAP2K4, MAP2K4P1	Kinase
V3LHS_643042	ABL1, BCR	Kinase
V3LHS_643043	BCR	Kinase
V3LHS_643044	BCR, BCRP3	Kinase
V3LHS_643047	BCR	Kinase
V3LHS_643048	BCR	Kinase
V3LHS_643049	BCR	Kinase
V3LHS_643074	PKN1	Kinase
V3LHS_643077	PKN1	Kinase
V3LHS_643080	PKN1	Kinase
V3LHS_643083	CDC42BPG	Kinase
V3LHS_643085	CDC42BPG	Kinase
V3LHS_643089	CDC42BPG	Kinase
V3LHS_643090	CDC42BPG	Kinase
V3LHS_643091	CDC42BPG	Kinase
V3LHS_643101	LRRK1	Kinase
V3LHS_643103	LRRK1	Kinase
V3LHS_643104	LRRK1	Kinase
V3LHS_643142	Brd2	Kinase
V3LHS_643176	Clk3	Kinase
V3LHS_643178	Clk3	Kinase
V3LHS_643250	PIM3	Kinase
V3LHS_643253	PIM3	Kinase
V3LHS_643256	PIM3	Kinase
V3LHS_643258	PIM3	Kinase
V3LHS_643295	LIMK1	Kinase
V3LHS_643297	LIMK1	Kinase
V3LHS_643300	LIMK1	Kinase
V3LHS_643301	LIMK1	Kinase
V3LHS_643312	NEK6	Kinase
V3LHS_643314	NEK6	Kinase
V3LHS_643316	NEK6	Kinase
V3LHS_643317	NEK6	Kinase
V3LHS_643318	NEK6	Kinase
V3LHS_643319	NEK6	Kinase
V3LHS_643321	MAP2K3	Kinase
V3LHS_643322	MAP2K3	Kinase
V3LHS_643538	STRADA	Kinase

V3LHS_643539	STRADA	Kinase
V3LHS_643540	STRADA	Kinase
V3LHS_643541	STRADA	Kinase
V3LHS_643542	STRADA	Kinase
V3LHS_643543	STRADA	Kinase
V3LHS_643618	AAK1	Kinase
V3LHS_643619	AAK1	Kinase
V3LHS_643624	Aak1	Kinase
V3LHS_643625	AAK1	Kinase
V3LHS_643626	AAK1	Kinase
V3LHS_643627	AAK1	Kinase
V3LHS_643663	MYLK2	Kinase
V3LHS_643664	MYLK2	Kinase
V3LHS_643666	MYLK2	Kinase
V3LHS_643668	MYLK2	Kinase
V3LHS_643719	PLK3	Kinase
V3LHS_643720	Grm2, PLK3	Kinase
V3LHS_643722	PLK3	Kinase
V3LHS_643723	PLK3	Kinase
V3LHS_643724	PLK3	Kinase
V3LHS_643725	PLK3	Kinase
V3LHS_643743	TEX14	Kinase
V3LHS_643745	TEX14	Kinase
V3LHS_643746	TEX14	Kinase
V3LHS_643747	TEX14	Kinase
V3LHS_643748	TEX14	Kinase
V3LHS_643749	TEX14	Kinase
V3LHS_643750	TEX14	Kinase
V3LHS_643801	MST1R	Kinase
V3LHS_643802	MST1R	Kinase
V3LHS_643804	MST1R	Kinase
V3LHS_643805	MST1R	Kinase
V3LHS_643806	MST1R	Kinase
V3LHS_643934	PAK4	Kinase
V3LHS_643937	PAK4	Kinase
V3LHS_643941	DAPK1	Kinase
V3LHS_643942	DAPK1	Kinase
V3LHS_643943	DAPK1	Kinase
V3LHS_643944	DAPK1	Kinase
V3LHS_643945	DAPK1	Kinase
V3LHS_643946	DAPK1	Kinase
V3LHS_643948	DAPK1	Kinase
V3LHS_643949	MATK	Kinase
V3LHS_643950	MATK	Kinase
V3LHS_643951	MATK	Kinase
V3LHS_643953	MATK	Kinase
V3LHS_643954	MATK	Kinase

V3LHS_643955	MATK	Kinase
V3LHS_643973	FES	Kinase
V3LHS_643974	FES	Kinase
V3LHS_643975	FES	Kinase
V3LHS_643978	FES	Kinase
V3LHS_643979	Fes	Kinase
V3LHS_643980	FES	Kinase
V3LHS_643982	TLK2	Kinase
V3LHS_643983	TLK2	Kinase
V3LHS_643986	TLK2	Kinase
V3LHS_643988	TLK2	Kinase
V3LHS_643989	MAST1	Kinase
V3LHS_643994	MAST1	Kinase
V3LHS_644005	SIK1	Kinase
V3LHS_644008	SIK1	Kinase
V3LHS_644010	SIK1	Kinase
V3LHS_644021	PRKG1	Kinase
V3LHS_644024	PRKG1	Kinase
V3LHS_644025	PRKG1	Kinase
V3LHS_644026	PRKG1	Kinase
V3LHS_644102	NEK10	Kinase
V3LHS_644103	NEK10	Kinase
V3LHS_644105	NEK10	Kinase
V3LHS_644107	NEK10	Kinase
V3LHS_644110	NEK10	Kinase
V3LHS_644128	PDGFRB	Kinase
V3LHS_644131	PDGFRB	Kinase
V3LHS_644162	LRRK2	Kinase
V3LHS_644164	LRRK2	Kinase
V3LHS_644165	LRRK2	Kinase
V3LHS_644166	LRRK2	Kinase
V3LHS_644167	LRRK2	Kinase
V3LHS_644168	LRRK2	Kinase
V3LHS_644169	LRRK2	Kinase
V3LHS_644178	CAMK4	Kinase
V3LHS_644179	CAMK4	Kinase
V3LHS_644181	CAMK4	Kinase
V3LHS_644182	Camk4	Kinase
V3LHS_644183	CAMK4	Kinase
V3LHS_644215	PTK7	Kinase
V3LHS_644218	PTK7	Kinase
V3LHS_644219	PTK7	Kinase
V3LHS_644221	PTK7	Kinase
V3LHS_644232	RPS6KA2	Kinase
V3LHS_644236	RPS6KA2	Kinase
V3LHS_644238	RPS6KA2	Kinase
V3LHS_644286	FPGT-TNNI3K, TNNI3K	Kinase



V3LHS_644289	FPGT-TNNI3K, TNNI3K	Kinase
V3LHS_644290	FPGT-TNNI3K, TNNI3K	Kinase
V3LHS_644348	STK16	Kinase
V3LHS_644350	STK16	Kinase
V3LHS_644351	STK16	Kinase
V3LHS_644352	STK16	Kinase
V3LHS_644353	STK16	Kinase
V3LHS_644357	CAMK1G	Kinase
V3LHS_644358	CAMK1G	Kinase
V3LHS_644359	Camk1g	Kinase
V3LHS_644360	CAMK1G	Kinase
V3LHS_644362	CAMK1G	Kinase
V3LHS_644363	Camk1g	Kinase
V3LHS_644383	PRKAG2	Kinase
V3LHS_644385	PRKAG2	Kinase
V3LHS_644387	PRKAG2	Kinase
V3LHS_644388	PRKAG2	Kinase
V3LHS_644408	Epha1	Kinase
V3LHS_644410	EPHA1	Kinase
V3LHS_644412	EPHA1	Kinase
V3LHS_644413	EPHA1	Kinase
V3LHS_644415	EPHA1	Kinase
V3LHS_644462	NEK2	Kinase
V3LHS_644474	SIK3	Kinase
V3LHS_644475	SIK3	Kinase
V3LHS_644476	TEC	Kinase
V3LHS_644477	TEC	Kinase
V3LHS_644490	FLT1	Kinase
V3LHS_644493	ATR	Kinase
V3LHS_644505	Ephb3	Kinase
V3LHS_644516	ADCK4	Kinase
V3LHS_644517	ADCK4	Kinase
V3LHS_644571	SRPK3	Kinase
V3LHS_644609	TSSK6	Kinase
V3LHS_644618	NTRK3	Kinase
V3LHS_644619	NTRK3	Kinase
V3LHS_644622	FGFR1	Kinase
V3LHS_644640	CAMK2A	Kinase
V3LHS_644641	CAMK2A	Kinase
V3LHS_644649	STK36	Kinase
V3LHS_644655	TRIB3	Kinase
V3LHS_644658	CDK16	Kinase
V3LHS_644659	CDK16	Kinase
V3LHS_644663	NRK	Kinase
V3LHS_644676	MAP3K11	Kinase
V3LHS_644688	GRK5	Kinase
V3LHS_644692	PRKCZ	Kinase

V3LHS_644694	MTOR	Kinase
V3LHS_644695	MTOR	Kinase
V3LHS_644702	PKMYT1	Kinase
V3LHS_644724	RIPK2	Kinase
V3LHS_644760	ERBB2	Kinase
V3LHS_644761	ERBB2	Kinase
V3LHS_644765	Clk2	Kinase
V3LHS_644767	RPS6KA4	Kinase
V3LHS_644773	ULK1	Kinase
V3LHS_644813	BRD2	Kinase
V3LHS_644824	TAB1	Kinase
V3LHS_644825	TAB1	Kinase
V3LHS_644836	TBCK	Kinase
V3LHS_644862	CHEK1	Kinase
V3LHS_644870	TNK2	Kinase
V3LHS_644871	TNK2	Kinase
V3LHS_644878	MAPK4	Kinase
V3LHS_644884	EPHA2	Kinase
V3LHS_644904	LTK	Kinase
V3LHS_644905	LTK	Kinase
V3LHS_644912	FLT4	Kinase
V3LHS_644913	FLT4	Kinase
V3LHS_644922	MST4	Kinase
V3LHS_644923	MST4	Kinase
V3LHS_644930	MAPK12	Kinase
V3LHS_644940	NUP62	Kinase
V3LHS_644965	BRD4	Kinase
V3LHS_644966	Brd4	Kinase
V3LHS_644989	MAP3K6	Kinase
V3LHS_644990	MAP3K6	Kinase
V3LHS_644999	STYK1	Kinase
V3LHS_645000	STYK1	Kinase
V3LHS_645006	CDK1	Kinase
V3LHS_645009	EPHB4	Kinase
V3LHS_645010	EPHB4	Kinase
V3LHS_645035	CDK6	Kinase
V3LHS_645036	CDK6	Kinase
V3LHS_645038	MAP3K2	Kinase
V3LHS_645060	ADCK1	Kinase
V3LHS_645061	ADCK1	Kinase
V3LHS_645068	HSPB8	Kinase
V3LHS_645090	SRPK2	Kinase
V3LHS_645091	SRPK2	Kinase
V3LHS_645141	MAP2K7	Kinase
V3LHS_645142	MAP2K7	Kinase
V3LHS_645147	TLK1	Kinase
V3LHS_645170	CDK2	Kinase

V3LHS_645178	PRKCD	Kinase
V3LHS_645208	BRSK2	Kinase
V3LHS_645213	CHEK2	Kinase
V3LHS_645214	CHEK2	Kinase
V3LHS_645241	MAPK11	Kinase
V3LHS_645242	MAPK11	Kinase
V3LHS_645251	RIPK1	Kinase
V3LHS_645268	STK40	Kinase
V3LHS_645269	STK40	Kinase
V3LHS_645286	ALPK1	Kinase
V3LHS_645299	RIPK3	Kinase
V3LHS_645311	CLK3	Kinase
V3LHS_645312	CLK3	Kinase
V3LHS_645331	MYO3A	Kinase
V3LHS_645335	AURKA, AURKAPS1	Kinase
V3LHS_645341	RPS6KA5	Kinase
V3LHS_645353	RNASEL	Kinase
V3LHS_645364	RPS6KL1	Kinase
V3LHS_645365	RPS6KL1	Kinase
V3LHS_645371	SLK	Kinase
V3LHS_645374	EXOSC10	Kinase
V3LHS_645375	EXOSC10	Kinase
V3LHS_645380	EIF2AK1	Kinase
V3LHS_645381	EIF2AK1	Kinase
V3LHS_645384	PHKG2	Kinase
V3LHS_645385	PHKG2	Kinase
V3LHS_645396	CDK12	Kinase
V3LHS_645397	CDK12	Kinase
V3LHS_645400	GUCY2D	Kinase
V3LHS_645401	GUCY2D	Kinase
V3LHS_645410	CSNK1D	Kinase
V3LHS_645411	CSNK1D	Kinase
V3LHS_645420	STK11	Kinase
V3LHS_645421	STK11	Kinase
V3LHS_645438	TGFBR2	Kinase
V3LHS_645448	RPS6KB2	Kinase
V3LHS_645449	RPS6KB2	Kinase
V3LHS_645451	BTK	Kinase
V3LHS_645454	EIF2AK3	Kinase
V3LHS_645455	EIF2AK3	Kinase
V3LHS_645467	SGK2	Kinase
V3LHS_645470	STK24	Kinase
V3LHS_645471	STK24	Kinase
V3LHS_645496	CAMKK2	Kinase
V3LHS_645497	CAMKK2	Kinase
V3LHS_645513	PHKG1	Kinase
V3LHS_645552	IKBKE	Kinase

V3LHS_645554	FASTK	Kinase
V3LHS_645562	MAPK3	Kinase
V3LHS_645572	LOC407835, MAP2K2	Kinase
V3LHS_645575	CSNK2A1	Kinase
V3LHS_645576	CSNK2A1	Kinase
V3LHS_645587	SRC	Kinase
V3LHS_645588	SRC	Kinase
V3LHS_645630	AKT1	Kinase
V3LHS_645672	PRKCE	Kinase
V3LHS_645673	PRKCE	Kinase
V3LHS_645688	PRKD2	Kinase
V3LHS_645689	PRKD2	Kinase
V3LHS_645693	DYRK1B	Kinase
V3LHS_645701	PRKACA	Kinase
V3LHS_645735	FPGT-TNNI3K, TNNI3K	Kinase
V3LHS_645768	PBK	Kinase
V3LHS_645769	PBK	Kinase
V3LHS_645773	MAPK7, MFAP4	Kinase
V3LHS_645782	SCYL1	Kinase
V3LHS_645816	MAP2K3	Kinase
V3LHS_645817	MAP2K3	Kinase
V3LHS_645818	PTK6	Kinase
V3LHS_645819	PTK6	Kinase
V3LHS_645830	GRK6	Kinase
V3LHS_645831	GRK6	Kinase
V3LHS_645851	LCK	Kinase
V3LHS_645859	IRAK1	Kinase
V3LHS_645874	DMPK	Kinase
V3LHS_645878	STRADB	Kinase
V3LHS_645885	CDK10	Kinase
V3LHS_645886	PIK3C3	Kinase
V3LHS_645938	SRPK1	Kinase
V3LHS_645940	TRIB2	Kinase
V3LHS_645944	PRKG1	Kinase
V3LHS_645945	PRKG1	Kinase
V3LHS_645950	CDK4	Kinase
V3LHS_645951	CDK4	Kinase
V3LHS_645957	STK32C	Kinase
V3LHS_646009	TLK2	Kinase
V3LHS_646010	Tlk2	Kinase
V3LHS_646037	FGFR4	Kinase
V3LHS_646046	VRK3	Kinase
V3LHS_646047	VRK3	Kinase
V3LHS_646050	PIK3CD	Kinase
V3LHS_646051	PIK3CD	Kinase
V3LHS_646056	ARAF	Kinase
V3LHS_646057	ARAF	Kinase

V3LHS_646058	TNK1	Kinase
V3LHS_646087	PIM2	Kinase
V3LHS_646090	PAK6	Kinase
V3LHS_646091	PAK6	Kinase
V3LHS_646098	MET	Kinase
V3LHS_646118	TTBK2	Kinase
V3LHS_646130	FGR	Kinase
V3LHS_646160	PRPF4B	Kinase
V3LHS_646161	PRPF4B	Kinase
V3LHS_646164	MAP3K14	Kinase
V3LHS_646165	MAP3K14	Kinase
V3LHS_646172	PASK	Kinase
V3LHS_646204	MAP2K4, MAP2K4P1	Kinase
V3LHS_646205	Map2k4	Kinase
V3LHS_646210	BCR	Kinase
V3LHS_646218	PKN1	Kinase
V3LHS_646223	LRRK1	Kinase
V3LHS_646261	LIMK1	Kinase
V3LHS_646262	NEK6	Kinase
V3LHS_646314	STRADA	Kinase
V3LHS_646315	STRADA	Kinase
V3LHS_646340	MYLK2	Kinase
V3LHS_646358	PLK3	Kinase
V3LHS_646365	TEX14	Kinase
V3LHS_646366	TEX14	Kinase
V3LHS_646375	MST1R	Kinase
V3LHS_646376	MST1R	Kinase
V3LHS_646381	MAP4K1	Kinase
V3LHS_646396	PAK4	Kinase
V3LHS_646398	DAPK1	Kinase
V3LHS_646399	MATK	Kinase
V3LHS_646406	FES	Kinase
V3LHS_646408	MAST1	Kinase
V3LHS_646412	SIK1	Kinase
V3LHS_646435	PDGFRB	Kinase
V3LHS_646440	CAMK4	Kinase
V3LHS_646441	CAMK4	Kinase
V3LHS_646448	PTK7	Kinase
V3LHS_646449	PTK7	Kinase
V3LHS_646452	CAMK1D, RGD1560691	Kinase
V3LHS_646453	CAMK1D	Kinase
V3LHS_646454	RPS6KA2	Kinase
V3LHS_646477	STK16	Kinase
V3LHS_646478	STK16	Kinase
V3LHS_646489	EPHA1	Kinase
V3LHS_646516	SIK3	Kinase
V3LHS_646517	ACVR1C	Kinase

V3LHS\_646518 AKT2

Kinase

**Table S2.** Summary of screens

Experiment	Enrichment/Depletion Magnitude	Average Independent Integrations per shRNA	Fold Representation in PCR Amplification	Log <sub>2</sub> Ratio of Enrichment/Depletion
Screen 100_2x	2	100	100	1
Screen 100_4x	4	100	100	2
Screen 500_1.5xPCR_100	1.5	500	100	0.585
Screen 500_2xPCR_100	2	500	100	1
Screen 500_1.5x	1.5	500	500	0.585
Screen 500_2x	2	500	500	1

**Table S3.** Summary of actual screen data analysis with 3 replicates**A. shRNA counts**

Experiment	Total Present <sup>1</sup>		True Positives		False Positives		True Negatives		False Negatives	
	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$
Screen 100_2x	5598	1.10	259	4.13	49	0.51	4610	0.51	680	4.53
Screen 100_4x	5595	0.55	714	5.00	61	0.53	4596	0.53	224	5.20
Screen 500_1.5xPCR_100	5600	0.79	31	3.57	10	1.10	4650	1.10	909	3.83
Screen 500_2xPCR_100	5603	0.37	327	6.54	39	1.06	4624	1.06	613	6.52
Screen 500_1.5x	5604	0.18	549	8.59	49	1.13	4614	1.13	392	8.66
Screen 500_2x	5603	0.00	877	3.71	65	0.63	4598	0.63	63	3.71

<sup>1</sup>Number of shRNA with > 50 perfect alignments in NGS data

**B. Percentages**

Experiment	Power (%)		Specificity (%)		False Positive Rate (%)		False Negative Rate (%)	
	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$
Screen 100_2x	27.60	0.45	98.95	0.01	1.05	0.01	72.40	0.45
Screen 100_4x	76.10	0.55	98.68	0.01	1.32	0.01	23.90	0.55
Screen 500_1.5xPCR_100	3.34	0.38	99.78	0.02	0.22	0.02	96.66	0.38
Screen 500_2xPCR_100	34.79	0.69	99.16	0.02	0.84	0.02	65.21	0.69
Screen 500_1.5x	58.35	0.92	98.95	0.02	1.05	0.02	41.65	0.92
Screen 500_2x	93.26	0.39	98.60	0.01	1.40	0.01	6.74	0.39



**Table S4.** Screen statistics for all, enriched, and depleted hits

Replicates	Experiment	Total Present		True Positives		False Positives		True Negatives		False Negatives		Power (%)		Specificity (%)		False Positive Rate (%)		False Negative Rate (%)		Enriched True Positives		Enriched False Negatives		Enriched False Negative Rate (%)	
		Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$
2	Screen 100_2x	5591	1.19	121	3.16	36.40	1.26	4619	1.26	815	3.71	12.93	0.34	99.22	0.03	0.78	0.03	87.07	0.34	30	1.54	384	2.66	92.66	0.37
2	Screen 100_4x	5590	0.37	613	5.53	69.93	1.53	4584	1.53	323	5.61	65.49	0.60	98.50	0.03	1.50	0.03	34.51	0.60	255	3.69	118	3.04	31.67	0.74
2	Screen 500_1.5xPCR_100	5598	0.79	9	1.55	17.73	1.59	4641	1.59	930	1.56	0.94	0.17	99.62	0.03	0.38	0.03	99.06	0.17	4	0.76	470	1.08	99.11	0.16
2	Screen 500_2xPCR_100	5600	0.37	317	4.36	54.83	0.97	4606	0.97	622	4.37	33.73	0.46	98.82	0.02	1.18	0.02	66.27	0.46	94	2.90	252	3.02	72.92	0.67
2	Screen 500_1.5x	5603	0.25	273	7.81	32.27	1.41	4630	1.41	668	7.80	28.96	0.83	99.31	0.03	0.69	0.03	71.04	0.83	95	4.13	297	5.49	75.82	0.95
2	Screen 500_2x	5602	0.00	784	5.64	59.17	0.97	4603	0.97	156	5.64	83.45	0.60	98.73	0.02	1.27	0.02	16.55	0.60	356	4.22	47	3.39	11.62	0.76
3	Screen 100_2x	5598	1.10	259	4.13	48.73	0.51	4610	0.51	680	4.53	27.60	0.45	98.95	0.01	1.05	0.01	72.40	0.45	84	3.09	300	2.35	78.17	0.68
3	Screen 100_4x	5595	0.55	714	5.00	61.30	0.53	4596	0.53	224	5.20	76.10	0.55	98.68	0.01	1.32	0.01	23.90	0.55	313	3.90	75	2.26	19.26	0.55
3	Screen 500_1.5xPCR_100	5600	0.79	31	3.57	10.30	1.10	4650	1.10	909	3.83	3.34	0.38	99.78	0.02	0.22	0.02	96.66	0.38	7	1.28	451	2.67	98.38	0.28
3	Screen 500_2xPCR_100	5603	0.37	327	6.54	39.27	1.06	4624	1.06	613	6.52	34.79	0.69	99.16	0.02	0.84	0.02	65.21	0.69	93	3.97	241	3.43	72.21	1.04
3	Screen 500_1.5x	5604	0.18	549	8.59	48.83	1.13	4614	1.13	392	8.66	58.35	0.92	98.95	0.02	1.05	0.02	41.65	0.92	223	5.57	149	4.50	40.04	1.14
3	Screen 500_2x	5603	0.00	877	3.71	65.07	0.63	4598	0.63	63	3.71	93.26	0.39	98.60	0.01	1.40	0.01	6.74	0.39	417	2.25	15	2.14	3.50	0.49

Replicates	Experiment	Enriched Power (%)		Depleted True		Depleted False		Depleted False		Depleted Power (%)	
		Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$	Average	$\sigma$
2	Screen 100_2x	7.34	0.37	91	2.20	431	1.88	82.62	0.37	17.38	0.37
2	Screen 100_4x	68.33	0.74	357	2.92	205	3.69	36.40	0.52	63.60	0.52
2	Screen 500_1.5xPCR_100	0.89	0.16	5	1.08	460	0.84	99.01	0.23	0.99	0.23
2	Screen 500_2xPCR_100	27.08	0.67	223	3.02	370	3.00	62.40	0.38	37.60	0.38
2	Screen 500_1.5x	24.18	0.95	178	5.49	371	4.11	67.63	0.79	32.37	0.79
2	Screen 500_2x	88.38	0.76	428	3.39	109	4.22	20.25	0.65	79.75	0.65
3	Screen 100_2x	21.83	0.68	175	2.02	380	3.33	68.41	0.35	31.59	0.35
3	Screen 100_4x	80.74	0.55	401	2.29	150	4.14	27.17	0.59	72.83	0.59
3	Screen 500_1.5xPCR_100	1.62	0.28	24	2.67	458	1.65	95.03	0.54	4.97	0.54
3	Screen 500_2xPCR_100	27.79	1.04	234	3.43	372	3.96	61.37	0.53	38.63	0.53
3	Screen 500_1.5x	59.96	1.14	326	4.50	243	5.63	42.70	0.78	57.30	0.78
3	Screen 500_2x	96.50	0.49	460	2.14	48	2.25	9.49	0.42	90.51	0.42