

Supplemental Figure S1

List of genes targeted by the siRNA library

Gene name	Protein name	Gene ID
Aak1	AP2 associated kinase 1	269774
Abl1	v-Abl Abelson murine leukemia oncogene 1	11350
Abl2	Abelson tyrosine-protein kinase 2	11352
Acvr1	Activin receptor type 1	11477
Acvr1b	Activin receptor type-1B	11479
Acvr1c	Activin receptor type-1C	269275
Acvr2a	Activin receptor IIA	11480
Acvr2b	Activin receptor IIB	11481
Acvr11	Activin receptor-like kinase 1	11482
Adck1	aarF domain-containing protein kinase 1	72113
Adck2	aarF domain-containing protein kinase 2	57869
Adck4	aarF domain-containing protein kinase 4	76889
Adck5	aarF domain-containing protein kinase 5	268822
Adk	Adenosine kinase	11534
Adpgk	ADP-dependent glucokinase	72141
Adrbk1	Adrenergic receptor kinase beta 1	110355
Adrbk2	Beta-adrenergic receptor kinase 2	320129
Ak1	Adenylate kinase 1	11636
Ak2	Adenylate kinase 2	11637
Ak3	Adenylate kinase 3	56248
Ak5	Adenylate kinase 5	229949
Akt1	Thymoma viral proto-oncogene 1	11651
Akt2	Thymoma viral proto-oncogene 2	11652
Akt3	Thymoma viral proto-oncogene 3	23797
Aldh18a1	Aldehyde dehydrogenase 18 family member A1	56454
Alk	Anaplastic lymphoma kinase	11682
Alpk2	Alpha-kinase 2	225638
Alpk3	Alpha-kinase 3	116904
Amhr2	Anti-Mullerian hormone type 2 receptor	110542
Ankk1	Ankyrin repeat and kinase domain containing 1	244859
Araf	v-Raf murine sarcoma 3611 viral oncogene homolog	11836
Atm	Ataxia telangiectasia mutated	11920
Aurka	Aurora kinase A	20878
Aurkb	Aurora kinase B	20877
Axl	AXL receptor tyrosine kinase	26362
Bckdk	Branched chain ketoacid dehydrogenase kinase	12041
Bcr	Breakpoint cluster region homolog	110279
Blk	B lymphoid kinase	12143
Bmp2k	BMP2 inducible kinase	140780
Bmpr1a	Bone morphogenetic protein receptor type 1A	12166
Bmpr1b	Bone morphogenetic protein receptor type-1B	12167
Bmpr2	Bone morphogenetic protein receptor type-2	12168
Bmx	BMX non-receptor tyrosine kinase	12169
Brd2	Bromodomain-containing protein 2	14312
Brd3	Bromodomain-containing protein 3	67382
Brd4	Bromodomain-containing protein 4	57261
Brdt	Bromodomain testis-specific protein	114642
Brsk1	BR serine/threonine kinase 1	381979
Brsk2	BR serine/threonine kinase 2	75770
Btk	Bruton agammaglobulinemia tyrosine kinase	12229
Bub1	Budding uninhibited by benzimidazoles 1 homolog	12235
Bub1b	Budding uninhibited by benzimidazoles 1 homolog beta	12236
Cabc1	Chaperone, ABC1 activity of bc1 complex like	67426
Calm1	Calmodulin 1	12313
Camk1	Calcium/calmodulin-dependent protein kinase I	52163
Camk1d	Calcium/calmodulin-dependent protein kinase type 1D	227541

Camk1g	Calcium/calmodulin-dependent protein kinase I gamma	215303
Camk2a	Calcium/calmodulin-dependent protein kinase type II alpha	12322
Camk2b	Calcium/calmodulin-dependent protein kinase type II beta	12323
Camk2d	Calcium/calmodulin-dependent protein kinase II delta	108058
Camk2g	Calcium/calmodulin-dependent protein kinase II gamma	12325
Camk4	Calcium/calmodulin-dependent protein kinase IV	12326
Camkk1	Calcium/calmodulin-dependent protein kinase kinase 1	55984
Camkv	CaM kinase-like vesicle-associated	235604
Cask	Calcium/calmodulin-dependent serine protein kinase	12361
Ccl12	Chemokine (C-C motif) ligand 12	20293
Ccnb1	Cyclin B1	268697
Ccnd1	Cyclin D1	12443
Ccne1	Cyclin E1	12447
Cdc20	Cyclin-dependent kinase 20	105278
Cdc42bpb	Cdc42 binding protein kinase beta	217866
Cdc42bpg	Cdc42 binding protein kinase gamma	240505
Cdc7	Cell division cycle 7	12545
Cdk1	Cyclin-dependent kinase 1	12534
Cdk10	Cyclin-dependent kinase 10	234854
Cdk12	Cyclin-dependent kinase 12	69131
Cdk13	Cyclin-dependent kinase 13	69562
Cdk15	Cyclin-dependent kinase 15	271697
Cdk19	Cyclin-dependent kinase 19	78334
Cdk2	Cyclin-dependent kinase 2	12566
Cdk4	Cyclin-dependent kinase 4	12567
Cdk5	Cyclin-dependent kinase 5	12568
Cdk6	Cyclin-dependent kinase 6	12571
Cdk7	Cyclin-dependent kinase 7	12572
Cdk9	Cyclin-dependent kinase 9	107951
Cdkl1	Cyclin-dependent kinase-like 1	71091
Cdkl2	Cyclin-dependent kinase-like 2	53886
Cdkl4	Cyclin-dependent kinase-like 4	381113
Cerk	Ceramide kinase	223753
Chek1	Checkpoint kinase 1	12649
Chek2	Checkpoint kinase 2	50883
Chka	Choline kinase alpha	12660
Chuk	Conserved helix-loop-helix ubiquitous kinase	12675
Cit	Citron kinase	12704
Ckm	Creatine kinase, muscle	12715
Ckmt1	Creatine kinase, mitochondrial 1, ubiquitous	12716
Ckmt2	Creatine kinase, mitochondrial 2	76722
Clk2	CDC-like kinase 2	12748
Clk3	CDC-like kinase 3	102414
Clk4	CDC-like kinase 4	12750
Cmpk	Cytidylate kinase	66588
Coasy	Coenzyme A synthase	71743
Col4a3bp	Collagen type IV alpha-3-binding protein	68018
Crkl	Crk-like protein	12929
Csf1r	Colony stimulating factor 1 receptor	12978
Csk	c-Src tyrosine kinase	12988
Csnk1a1	Casein kinase 1 alpha 1	93687
Csnk1d	Casein kinase 1 delta	104318
Csnk1e	Casein kinase 1 epsilon	27373
Csnk1g1	Casein kinase 1 gamma-1	214897
Csnk1g2	Casein kinase 1 gamma 2	103236
Csnk2a1	Casein kinase II subunit alpha	12995
Csnk2a2	Casein kinase II alpha'	13000
Csnk2b	Casein kinase II beta	13001
Dapk1	Death associated protein kinase 1	69635
Dapk2	Death-associated kinase 2	13143

Dapk3	Death-associated kinase 3	13144
Dcamk1	Doublecortin and CaM kinase-like 1	13175
Dcamk2	Doublecortin and CaM kinase-like 2	70762
Dcamk3	Doublecortin and CaM kinase-like 3	245038
Dck	Deoxycytidine kinase	13178
Ddr1	Discoidin domain receptor family member 1	12305
Ddr2	Discoidin domain receptor family member 2	18214
Dgka	Diacylglycerol kinase alpha	13139
Dgkb	Diacylglycerol kinase beta	217480
Dgkd	Diacylglycerol kinase delta	227333
Dgke	Diacylglycerol kinase epsilon	56077
Dgkg	Diacylglycerol kinase gamma	110197
Dgkh	Diacylglycerol kinase eta	380921
Dgki	Diacylglycerol kinase iota	320127
Dgkq	Diacylglycerol kinase theta	110524
Dgkz	Diacylglycerol kinase zeta	104418
Dguok	Deoxyguanosine kinase	27369
Dlgh1	Discs large homolog 1	13383
Dlgh2	Discs large homolog 2	23859
Dlgh3	Discs large homolog 3	53310
Dlgh4	Discs large homolog 4	13385
Dmpk	Myotonin-protein kinase	13400
Dyrk1a	Dual specificity tyrosine-phosphorylation-regulated kinase 1a	13548
Dyrk1b	Dual specificity tyrosine-phosphorylation-regulated kinase 1b	13549
Dyrk2	Dual specificity tyrosine-phosphorylation-regulated kinase 2	69181
Dyrk3	Dual specificity tyrosine-phosphorylation-regulated kinase 3	226419
Dyrk4	Dual specificity tyrosine-phosphorylation-regulated kinase 4	101320
Eef2k	Eukaryotic elongation factor-2 kinase	13631
Egfr	Epidermal growth factor receptor	13649
Eif2ak1	Eukaryotic translation initiation factor 2 alpha kinase 1	15467
Eif2ak2	Eukaryotic translation initiation factor 2 alpha kinase 2	19106
Eif2ak3	Eukaryotic translation initiation factor 2 alpha kinase 3	13666
Epha1	Eph receptor A1	13835
Epha10	Eph receptor A10	230735
Epha2	Eph receptor A2	13836
Epha3	Eph receptor A3	13837
Epha4	Eph receptor A4	13838
Epha7	Eph receptor A7	13841
Epha8	Eph receptor A8	13842
Ephb1	Eph receptor B1	270190
Ephb2	Eph receptor B2	13844
Ephb3	Eph receptor B3	13845
Ephb4	Eph receptor B4	13846
Ephb6	Eph receptor B6	13848
ErbB2	Receptor tyrosine-protein kinase ErbB-2	13866
ErbB3	Receptor tyrosine-protein kinase ErbB-3	13867
ErbB4	Receptor tyrosine-protein kinase ErbB-4	13869
Ern1	Endoplasmic reticulum to nucleus signalling 1	78943
Etnk1	Ethanolamine kinase 1	75320
Etnk2	Ethanolamine kinase 2	214253
Exosc10	Exosome component 10	50912
Fer	Tyrosine-protein kinase Fer	14158
Fes	Feline sarcoma oncogene	14159
Fgfr2	Fibroblast growth factor receptor 2	14183
Fgfr3	Fibroblast growth factor receptor 3	14184
Fgfr4	Fibroblast growth factor receptor 4	14186
Fgfr1	Fibroblast growth factor receptor-like 1	116701
Fgr	Tyrosine-protein kinase Fgr	14191
Flt1	FMS-like tyrosine kinase 1	14254
Flt3	FMS-like tyrosine kinase 3	14255

Flt4	FMS-like tyrosine kinase 4	14257
Fn3k	Fructosamine 3 kinase	63828
Frap1	FK506 binding protein 12-rapamycin associated protein 1	56717
Frk	Tyrosine-protein kinase Frk	14302
Fuk	Fucokinase	234730
Fxn	Frataxin	14297
Fyn	Tyrosine-protein kinase Fyn	14360
Gak	Cyclin G-associated kinase	231580
Galk1	Galactokinase 1	14635
Galk2	Galactokinase 2	69976
Gck	Glucokinase	103988
Gk2	Glycerol kinase 2	14626
Gm1078	Protein Gm1078	381835
Gne	Glucosamine	50798
Grk1	G protein-coupled receptor kinase 1	24013
Grk4	G protein-coupled receptor kinase 4	14772
Grk5	G protein-coupled receptor kinase 5	14773
Gsg2	Germ cell-specific gene 2	14841
Gsk3a	Glycogen synthase kinase 3 alpha	606496
Gsk3b	Glycogen synthase kinase 3 beta	56637
Gucy2c	Guanylate cyclase 2c	14917
Gucy2e	Guanylate cyclase 2e	14919
Gucy2f	Guanylate cyclase 2f	245650
Gyk	Glycerol kinase	14933
Hck	Hemopoietic cell kinase	15162
Hipk1	Homeodomain interacting protein kinase 1	15257
Hipk3	Homeodomain interacting protein kinase 3	15259
Hipk4	Homeodomain interacting protein kinase 4	233020
Hk1	Hexokinase 1	15275
Hk2	Hexokinase 2	15277
Hspb8	Heat shock protein beta-8	80888
Hunk	Hormonally upregulated Neu-associated kinase	26559
Ick	Intestinal cell kinase	56542
Igf1r	Insulin-like growth factor 1 receptor	16001
Igf2r	Insulin-like growth factor 2 receptor	16004
Ihpk1	Inositol hexaphosphate kinase 1	27399
Ikbkb	Inhibitor of kappaB kinase beta	16150
Ikbke	Inhibitor of kappaB kinase epsilon	56489
Ilk	Integrin linked kinase	16202
Insr	Insulin receptor	16337
Insr	Insulin receptor-related receptor	23920
Ip6k3	Inositol hexakisphosphate kinase 3	271424
Ipmk	Inositol polyphosphate multikinase	69718
Irak1	Interleukin-1 receptor-associated kinase 1	16179
Irak2	Interleukin-1 receptor-associated kinase 2	108960
Irak3	Interleukin-1 receptor-associated kinase 3	73914
Irak4	Interleukin-1 receptor-associated kinase 4	266632
Itk	IL2-inducible T-cell kinase	16428
Itpk1	Inositol 1,3,4-triphosphate 5/6 kinase	217837
Itpka	Inositol 1,4,5-trisphosphate 3-kinase A	228550
Itpkb	Inositol 1,4,5-trisphosphate 3-kinase B	320404
Itpkc	Inositol 1,4,5-trisphosphate 3-kinase C	233011
Jak1	Janus kinase 1	16451
Jak2	Janus kinase 2	16452
Jak3	Janus kinase 3	16453
Kdr	Kinase insert domain protein receptor	16542
Khk	Ketohexokinase	16548
Kit	Kit oncogene	16590
Ksr1	Kinase suppressor of ras 1	16706
Ksr2	Kinase suppressor of Ras 2	333050

Lats2	Large tumor suppressor 2	50523
Lck	Lymphocyte protein tyrosine kinase	16818
Limk1	LIM-domain kinase 1	16885
Limk2	LIM-domain kinase 2	16886
Lmtk2	Lemur tyrosine kinase 2	231876
Lmtk3	Lemur tyrosine kinase 3	381983
LOC621325	Similar to Yeast Sps1/Ste20-related kinase 4 isoform 1	621325
LOC624990	Similar to WNK lysine deficient protein kinase 3 isoform 1	624990
Lrrk2	Leucine-rich repeat kinase 2	66725
Ltk	Leukocyte tyrosine kinase	17005
Lyn	Tyrosine-protein kinase Lyn	17096
Magj3	Membrane-associated guanylate kinase 3	99470
Mak	Male germ cell-associated kinase	17152
Map2k1	Mitogen activated protein kinase kinase 1	26395
Map2k2	Mitogen activated protein kinase kinase 2	26396
Map2k3	Mitogen activated protein kinase kinase 3	26397
Map2k4	Mitogen activated protein kinase kinase 4	26398
Map2k5	Mitogen activated protein kinase kinase 5	23938
Map2k6	Mitogen activated protein kinase kinase 6	26399
Map2k7	Mitogen activated protein kinase kinase 7	26400
Map3k1	Mitogen activated protein kinase kinase kinase 1	26401
Map3k10	Mitogen activated protein kinase kinase kinase 10	269881
Map3k11	Mitogen-activated protein kinase kinase kinase 11	26403
Map3k12	Mitogen activated protein kinase kinase kinase 12	26404
Map3k13	Mitogen-activated protein kinase kinase kinase 13	71751
Map3k14	Mitogen-activated protein kinase kinase kinase 14	53859
Map3k2	Mitogen activated protein kinase kinase kinase 2	26405
Map3k3	Mitogen activated protein kinase kinase kinase 3	26406
Map3k4	Mitogen activated protein kinase kinase kinase 4	26407
Map3k5	Mitogen activated protein kinase kinase kinase 5	26408
Map3k6	Mitogen-activated protein kinase kinase kinase 6	53608
Map3k7	Mitogen-activated protein kinase kinase kinase 7	26409
Map3k8	Mitogen activated protein kinase kinase kinase 8	26410
Map3k9	Mitogen-activated protein kinase kinase kinase 9	338372
Map4k1	Mitogen activated protein kinase kinase kinase kinase 1	26411
Map4k2	Mitogen activated protein kinase kinase kinase kinase 2	26412
Map4k3	Mitogen-activated protein kinase kinase kinase kinase 3	225028
Map4k4	Mitogen-activated protein kinase kinase kinase kinase 4	26921
Map4k5	Mitogen-activated protein kinase kinase kinase kinase 5	399510
Mapk1	Mitogen activated protein kinase 1	26413
Mapk10	Mitogen activated protein kinase 10	26414
Mapk11	Mitogen-activated protein kinase 11	19094
Mapk12	Mitogen-activated protein kinase 12	29857
Mapk13	Mitogen activated protein kinase 13	26415
Mapk14	Mitogen activated protein kinase 14	26416
Mapk3	Mitogen activated protein kinase 3	26417
Mapk4	Mitogen-activated protein kinase 4	225724
Mapk6	Mitogen-activated protein kinase 6	50772
Mapk7	Mitogen activated protein kinase 7	23939
Mapk8	Mitogen activated protein kinase 8	26419
Mapk9	Mitogen activated protein kinase 9	26420
Mapkapk2	MAP kinase-activated protein kinase 2	17164
Mapkapk3	MAP kinase-activated protein kinase 3	102626
Mapkapk5	MAP kinase-activated protein kinase 5	17165
Mark1	MAP/microtubule affinity-regulating kinase 1	226778
Mark2	MAP/microtubule affinity-regulating kinase 2	13728
Mark3	MAP/microtubule affinity-regulating kinase 3	17169
Mark4	MAP/microtubule affinity-regulating kinase 4	232944
Mast1	Microtubule associated serine/threonine kinase 1	56527
Mast2	Microtubule associated serine/threonine kinase 2	17776

Mast4	Microtubule associated serine/threonine kinase 4	328329
Mastl	Microtubule associated serine/threonine kinase-like	67121
Matk	Megakaryocyte-associated tyrosine kinase	17179
Melk	Maternal embryonic leucine zipper kinase	17279
Mertk	Tyrosine-protein kinase Mer	17289
Met	Met protein	17295
Mknk1	MAP kinase-interacting serine/threonine kinase 1	17346
Mknk2	MAP kinase-interacting serine/threonine kinase 2	17347
MLk4	Mitogen-activated protein kinase kinase kinase Mlk4	234878
Mltk	Mitogen-activated protein kinase kinase kinase Mlt	65964
Mos	Moloney sarcoma oncogene	17451
Mpp1	Membrane protein, palmitoylated	17524
Mpp2	MAGUK p55 subfamily member 2	50997
Mpp3	MAGUK p55 subfamily member 3	13384
Mst1r	Macrophage stimulating 1 receptor (c-met-related tyrosine kinase)	19882
Mst4	Serine/threonine-protein kinase MST4	70415
Mulk	Multiple substrate lipid kinase	69923
Musk	Muscle, skeletal, receptor tyrosine kinase	18198
Mvk	Mevalonate kinase	17855
Mylk	Myosin light chain kinase	107589
Mylk2	Myosin light chain kinase 2, skeletal/cardiac muscle	228785
Mylk3	Myosin light chain kinase 3	213435
Mylk4	Myosin light chain kinase family member 4	238564
Myo3b	Myosin IIIB	269282
Myt1	Membrane-associated tyrosine- and threonine-specific cdc2-inhibitory kinase	268930
Nadk	NAD kinase	192185
Nagk	N-acetylglucosamine kinase	56174
Nags	N-acetylglutamate synthase	217214
Nek1	NIMA-related protein kinase 1	18004
Nek11	NIMA-related protein kinase 11	208583
Nek3	NIMA-related protein kinase 3	23954
Nek4	NIMA-related protein kinase 4	23955
Nek5	NIMA-related protein kinase 5	330721
Nek6	NIMA-related protein kinase 6	59126
Nek7	NIMA-related protein kinase 7	59125
Nek8	NIMA-related protein kinase 8	140859
Nek9	NIMA-related protein kinase 9	217718
Nim1	Serine/threonine-protein kinase Nim1	245269
Nlk	Nemo-like kinase	18099
Nme5	Expressed in non-metastatic cells 5	75533
Nme6	Expressed in non-metastatic cells 6	54369
Nme7	Non-metastatic cells 7	171567
Npr1	Natriuretic peptide receptor 1	18160
Npr2	Natriuretic peptide receptor 2	230103
Nrbp	Nuclear receptor binding protein	192292
Nrbp2	Nuclear receptor binding protein 2	223649
Nrk	Nik-related protein kinase	27206
Ntrk1	Neurotrophic tyrosine kinase receptor type 1	18211
Ntrk2	Neurotrophic tyrosine kinase receptor type 2	18212
Ntrk3	Neurotrophic tyrosine kinase receptor type 3	18213
Nuak1	NUAK family SNF1-like kinase 1	77976
Nuak2	NUAK family SNF1-like kinase 2	74137
Oxsr1	Oxidative-stress responsive 1	108737
Pak1	p21 (CDKN1A)-activated kinase 1	18479
Pak2	p21 (CDKN1A)-activated kinase 2	224105
Pak3	p21 (CDKN1A)-activated kinase 3	18481
Pak4	p21 (CDKN1A)-activated kinase 4	70584
Pak6	p21 (CDKN1A)-activated kinase 6	214230
Pak7	p21 (CDKN1A)-activated kinase 7	241656
Pank1	Pantothenate kinase 1	75735

Pank2	Pantothenate kinase 2	74450
Pank3	Pantothenate kinase 3	211347
Pank4	Pantothenate kinase 4	269614
Pask	PAS domain containing serine/threonine kinase	269224
Pbk	PDZ-binding kinase	52033
Pctk1	PCTAIRE-motif protein kinase 1	18555
Pctk2	PCTAIRE-motif protein kinase 2	237459
Pctk3	PCTAIRE-motif protein kinase 3	18557
Pdgfra	Platelet-derived growth factor receptor alpha	18595
Pdgfrb	Platelet-derived growth factor receptor beta	18596
Pdgfrl	Platelet-derived growth factor receptor-like	68797
Pdik1l	PDLIM1-interacting kinase 1 like	230809
Pdk1	Pyruvate dehydrogenase kinase isoenzyme 1	228026
Pdk2	Pyruvate dehydrogenase kinase isoenzyme 2	18604
Pdk3	Pyruvate dehydrogenase kinase isoenzyme 3	236900
Pdk4	Pyruvate dehydrogenase kinase isoenzyme 4	27273
Pdpk1	3-phosphoinositide dependent protein kinase-1	18607
Pdxk	Pyridoxal kinase	216134
Peak1	Pseudopodium-enriched atypical kinase 1	244895
Pfkb1	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 1	18639
Pfkb2	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2	18640
Pfkb3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	170768
Pfkb4	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4	270198
Pfkl	Phosphofructokinase, liver	18641
Pfkm	Phosphofructokinase, muscle	18642
Pfkp	Phosphofructokinase, platelet	56421
Pftk1	PFTAIRE protein kinase 1	18647
Pgk2	Phosphoglycerate kinase 2	18663
Phka1	Phosphorylase kinase alpha 1	18679
Phka2	Phosphorylase kinase alpha 2	110094
Phkb	Phosphorylase kinase beta	102093
Phkg1	Phosphorylase kinase gamma 1	18682
Phkg2	Phosphorylase b kinase gamma catalytic chain, liver/testis isoform	68961
Pi4k2a	Phosphatidylinositol 4-kinase type 2 alpha	84095
Pi4k2b	Phosphatidylinositol 4-kinase type 2 beta	67073
Pik3c2a	Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit alpha	18704
Pik3c2b	Protein Pik3c2b	240752
Pik3c2g	Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit gamma	18705
Pik3c3	Phosphatidylinositol 3-kinase catalytic subunit type 3	225326
Pik3ca	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit alpha	18706
Pik3cb	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta	74769
Pik3cd	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit delta	18707
Pik3cg	Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma	30955
Pik3r4	Phosphoinositide 3-kinase regulatory subunit 4	75669
Pik4ca	Phosphatidylinositol 4-kinase, catalytic, alpha polypeptide	224020
Pik4cb	Phosphatidylinositol 4-kinase beta	107650
Pim1	Proviral integration site 1	18712
Pim3	Proviral integration site 3	223775
Pink1	PTEN induced putative kinase 1	68943
Pip5k1b	Phosphatidylinositol 4-phosphate 5-kinase type-1 beta	18719
Pip5k1c	Phosphatidylinositol 4-phosphate 5-kinase type-1 gamma	18717
Pip5k2a	Phosphatidylinositol-4-phosphate 5-kinase type-2 alpha	18718
Pip5k2b	Phosphatidylinositol 5-phosphate 4-kinase type-2 beta	108083
Pip5k2c	Phosphatidylinositol 5-phosphate 4-kinase type-2 gamma	117150
Pip5k3	Phosphatidylinositol-3-phosphate/phosphatidylinositol 5-kinase type III	18711
Pip5kl1	Phosphatidylinositol-4-phosphate 5-kinase-like 1	227733
Pkdcc	Protein kinase domain-containing protein, cytoplasmic	106522
Pklr	Pyruvate kinase	18770
Pkn1	Protein kinase N1	320795
Pkn2	Protein kinase N2	109333

Pkn3	Protein kinase N3	263803
Plk1	Polo-like kinase 1	18817
Plk2	Polo-like kinase 2	20620
Plk3	Polo-like kinase 3	12795
Pmvk	Phosphomevalonate kinase	68603
Prkaa1	5'-AMP-activated protein kinase catalytic subunit alpha-1	105787
Prkaa2	5'-AMP-activated protein kinase catalytic subunit alpha-2	108079
Prkaca	cAMP-dependent protein kinase catalytic subunit alpha	18747
Prkacb	cAMP-dependent protein kinase catalytic subunit beta	18749
Prkca	Protein kinase C alpha	18750
Prkcb1	Protein kinase C beta 1	18751
Prkcc	Protein kinase C gamma	18752
Prkcd	Protein kinase C delta	18753
Prkce	Protein kinase C epsilon	18754
Prkch	Protein kinase C eta	18755
Prkci	Protein kinase C iota	18759
Prkcm	Protein kinase C mu	18760
Prkcn	Protein kinase C nu	75292
Prkcq	Protein kinase C theta	18761
Prkcz	Protein kinase C zeta	18762
Prkd2	Protein kinase D2	101540
Prkdc	DNA-dependent protein kinase catalytic subunit	19090
Prkg1	cGMP-dependent protein kinase 1	19091
Prkg2	cGMP-dependent protein kinase	19092
Prkx	cAMP-dependent protein kinase catalytic subunit Prkx	19108
Prpf4b	PRP4 pre-mRNA processing factor 4 homolog B	19134
Prps1	Phosphoribosyl pyrophosphate synthetase 1	19139
Prps2	Phosphoribosyl pyrophosphate synthetase 2	110639
Pskh1	Serine/threonine-protein kinase H1	244631
Ptk2	Focal adhesion kinase 1	14083
Ptk2b	PTK2 protein tyrosine kinase 2-beta	19229
Ptk6	PTK6 protein tyrosine kinase 6	20459
Ptk7	PTK7 protein tyrosine kinase 7	71461
Pxk	PX domain-containing protein kinase	218699
Raf1	Raf proto-oncogene serine/threonine-protein kinase	110157
Rage	Renal tumor antigen	26448
Rbks	Ribokinase	71336
Ret	Ret proto-oncogene	19713
Riok1	RIO kinase 1	71340
Riok2	RIO kinase 2	67045
Riok3	RIO kinase 3	66878
Ripk1	Receptor-interacting serine/threonine-protein kinase 1	19766
Ripk2	Receptor-interacting serine/threonine-protein kinase 2	192656
Ripk3	Receptor-interacting serine/threonine-protein kinase 3	56532
Ripk4	Receptor-interacting serine/threonine-protein kinase 4	72388
Ripk5	Receptor-interacting serine/threonine-protein kinase 5	213452
Rnasel	2-5A-dependent ribonuclease	24014
Rock1	Rho-associated coiled-coil forming kinase 1	19877
Rock2	Rho-associated coiled-coil forming kinase 2	19878
Ror1	Receptor tyrosine kinase-like orphan receptor 1	26563
Ror2	Receptor tyrosine kinase-like orphan receptor 2	26564
Ros1	Ros1 proto-oncogene	19886
Rps6ka1	Ribosomal protein S6 kinase	20111
Rps6ka2	Ribosomal protein S6 kinase alpha-2	20112
Rps6ka3	Ribosomal protein S6 kinase alpha-3	110651
Rps6ka4	Ribosomal protein S6 kinase alpha-4	56613
Rps6ka5	Ribosomal protein S6 kinase alpha-5	73086
Rps6ka6	Ribosomal protein S6 kinase alpha-6	67071
Rps6kb2	Ribosomal protein S6 kinase beta-2	58988
Rps6kc1	Ribosomal protein S6 kinase delta-1	320119

Rps6k1	Ribosomal protein S6 kinase-like 1	238323
Ryk	Tyrosine-protein kinase Ryk	20187
Sbk1	SH3-binding kinase 1	104175
Scap1	Src kinase-associated phosphoprotein 1	78473
Scap2	Src kinase-associated phosphoprotein 2	54353
Scyl1	SCY1-like 1	78891
Scyl2	SCY1-like 2	213326
Scyl3	SCY1-like 3	240880
Sephs2	Selenophosphate synthetase 2	20768
Sgk	Serum/glucocorticoid regulated kinase	20393
Sgk071	Probable inactive protein kinase-like protein Sgk071 homolog	279029
Sgk2	Serum/glucocorticoid regulated kinase 2	27219
Sgk223	Tyrosine-protein kinase Sgk223	244418
Sgk3	Serum/glucocorticoid regulated kinase 3	170755
Sik3	Serine/threonine-protein kinase Sik3	70661
Slk	STE20-like kinase	20874
Smg1	Serine/threonine-protein kinase Smg1	233789
Snf1lk	SNF1-like kinase	17691
Snf1lk2	SNF1-like kinase 2	235344
Snrk	SNF-related serine/threonine-protein kinase	20623
Sphk1	Sphingosine kinase 1	20698
Sphk2	Sphingosine kinase 2	56632
Src	Neuronal proto-oncogene tyrosine-protein kinase Src	20779
Srms	Src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristyla	20811
Srpk1	Serine/arginine-rich protein specific kinase 1	20815
Srpk2	Serine/arginine-rich protein specific kinase 2	20817
Stk10	Serine/threonine kinase 10	20868
Stk11	Serine/threonine kinase 11	20869
Stk16	Serine/threonine kinase 16	20872
Stk17b	Serine/threonine kinase 17b	98267
Stk19	Serine/threonine kinase 19	54402
Stk23	Serine/threonine kinase 23	56504
Stk24	Serine/threonine kinase 24	223255
Stk25	Serine/threonine kinase 25	59041
Stk3	Serine/threonine kinase 3	56274
Stk31	Serine/threonine kinase 31	77485
Stk32b	Serine/threonine kinase 32b	64293
Stk32c	Serine/threonine kinase 32c	57740
Stk33	Serine/threonine kinase 33	117229
Stk35	Serine/threonine kinase 35	67333
Stk36	Serine/threonine kinase 36	269209
Stk38	Serine/threonine kinase 38	106504
Stk38l	Serine/threonine kinase 38-like	232533
Stk39	Serine/threonine kinase 39	53416
Stk4	Serine/threonine kinase 4	58231
Stk40	Serine/threonine kinase 40	74178
Strada	STE20-related kinase adapter protein alpha	72149
Stradb	STE20-related kinase adapter protein beta	227154
Styk1	Serine/threonine/tyrosine kinase 1	243659
Syk	Spleen tyrosine kinase	20963
Taf1	Transcription initiation factor TFIID subunit 1	270627
Taok1	TAO kinase 1	216965
Taok3	Serine/threonine-protein kinase Tao3	330177
Tbck	TBC domain-containing protein kinase-like protein	271981
Tbk1	TANK-binding kinase 1	56480
Tec	Tyrosine-protein kinase Tec	21682
Tek	Endothelial-specific receptor tyrosine kinase	21687
Tesk1	Testis specific protein kinase 1	21754
Tesk2	Testis-specific kinase 2	230661
Tex14	Testis expressed gene 14	83560

Tgfr1	TGF-beta receptor type-1	21812
Tgfr2	TGF-beta receptor type-2	21813
Tie1	Tyrosine kinase receptor 1	21846
Tjp2	Tight junction protein ZO-2	21873
Tk2	Thymidine kinase 2, mitochondrial	57813
Tlk1	Tousled-like kinase 1	228012
Tlk2	Tousled-like kinase 2	24086
Tnk	TRAF2 and NCK interacting kinase	69014
Tnk1	Non-receptor tyrosine-protein kinase Tnk1	83813
Tnk2	Activated CDC42 kinase 1	51789
Tnni3k	TNNI3 interacting kinase	435766
Tpk1	Thiamin pyrophosphokinase	29807
Trib1	Tribbles homolog 1	211770
Trib2	Tribbles homolog 2	217410
Trim27	Tripartite motif protein 27	19720
Trim28	Tripartite motif protein 28	21849
Trim33	Tripartite motif protein 33	94093
Trpm6	Transient receptor potential cation channel subfamily M member 6	225997
Trpm7	Transient receptor potential cation channel subfamily M member 7	58800
Tssk2	Testis-specific serine kinase 2	22115
Tssk3	Testis-specific serine kinase 3	58864
Tssk4	Testis-specific serine kinase 4	71099
Tssk6	Testis-specific serine kinase 6	83984
Ttk	Ttk protein kinase	22137
Ttn	Titin	22138
Twf2	Twinfilin-2	23999
Txk	TXK tyrosine kinase	22165
Tyk2	Tyrosine kinase 2	54721
Tyro3	TYRO3 protein tyrosine kinase 3	22174
Uck1	Uridine-cytidine kinase 1	22245
Uck2	Uridine-cytidine kinase 2	80914
Uckl1	Uridine-cytidine kinase 1-like 1	68556
Uhm1	Serine/threonine-protein kinase Kist	16589
Ulk1	Unc-51 like kinase 1	22241
Ulk2	Unc-51 like kinase 2	29869
Vrk1	Vaccinia related kinase 1	22367
Vrk2	Vaccinia related kinase 2	69922
Vrk3	Vaccinia related kinase 3	101568
Wee1	Wee1-like protein kinase	22390
Wnk1	WNK lysine deficient protein kinase 1	232341
Wnk2	WNK lysine deficient protein kinase 2	75607
Wnk4	WNK lysine deficient protein kinase 4	69847
Xylb	Xylulokinase homolog	102448
Yes1	Tyrosine-protein kinase Yes	22612
Zap70	Tyrosine-protein kinase Zap70	22637