

Supplementary file 1

Investigating the function and targeting of MET protein as an oncogene kinase in pancreatic ductal adenocarcinoma: A microarray data integration

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Table S1. List of Human Protein Kinases obtained from KinHub database.

xName	Manning Name	HGNC Name	Kinase Name	Group	Family	SubFamily	Uniprot ID
ABL1	ABL	ABL1	Tyrosine-protein kinase ABL1	TK	Abl		P00519
ACK	ACK	TNK2	Activated CDC42 kinase 1	TK	Ack		Q07912
ACTR2	ACTR2	ACVR2A	Activin receptor type-2A	TKL	STKR	STKR2	P27037
ACTR2B	ACTR2B	ACVR2B	Activin receptor type-2B	TKL	STKR	STKR2	Q13705
ADCK4	ADCK4	ADCK4	Uncharacterized aarF domain-containing protein kinase 4	Atypical	ABC1	ABC1-A	Q96D53
Trbl	Trbl	TRIB1	Tribbles homolog 1	CAMK	Trbl		Q96RU8
BRSK2	BRSK2	BRSK2	Serine/threonine-protein kinase BRSK2	CAMK	CAMKL	BRSK	Q8IWQ3
Wnk2	Wnk2	WNK2	Serine/threonine-protein kinase WNK2	Other	WNK		Q9Y3S1
AKT1	AKT1	AKT1	RAC-alpha serine/threonine-protein kinase	AGC	Akt		P31749

AKT2	AKT2	AKT2	RAC-beta serine/threonine-protein kinase	AGC	Akt		P31751
AKT3	AKT3	AKT3	RAC-gamma serine/threonine-protein kinase	AGC	Akt		Q9Y243
CaMK1g	CaMK1g	CAMK1G	Calcium/calmodulin-dependent protein kinase type 1G	CAMK	CAMK1		Q96NX5
ALK	ALK	ALK	ALK tyrosine kinase receptor	TK	ALK		Q9UM73
ALK1	ALK1	ACVRL1	Serine/threonine-protein kinase receptor R3	TKL	STKR	STKR1	P37023
ALK2	ALK2	ACVR1	Activin receptor type-1	TKL	STKR	STKR1	Q04771
BMPR1A	BMPR1A	BMPR1A	Bone morphogenetic protein receptor type-1A	TKL	STKR	STKR1	P36894
ALK4	ALK4	ACVR1B	Activin receptor type-1B	TKL	STKR	STKR1	P36896
TGFbR1	TGFbR1	TGFBR1	TGF-beta receptor type-1	TKL	STKR	STKR1	P36897
BMPR1B	BMPR1B	BMPR1B	Bone morphogenetic protein receptor type-1B	TKL	STKR	STKR1	O00238
AMPKa1	AMPKa1	PRKAA1	5'-AMP-activated protein kinase catalytic subunit alpha-1	CAMK	CAMKL	AMPK	Q13131
AMPKa2	AMPKa2	PRKAA2	5'-AMP-activated protein kinase catalytic subunit alpha-2	CAMK	CAMKL	AMPK	P54646
ANPa	ANPa	NPR1	Atrial natriuretic peptide receptor 1	RGC	RGC		P16066
ANPb	ANPb	NPR2	Atrial natriuretic peptide receptor 2	RGC	RGC		P20594
ARAF	ARAF	ARAF	Serine/threonine-protein kinase A-Raf	TKL	RAF		P10398
ABL2	ARG	ABL2	Abelson tyrosine-protein kinase 2	TK	Abl		P42684
ATM	ATM	ATM	Serine-protein kinase ATM	Atypical	PIKK	ATM	Q13315
ATR	ATR	ATR	Serine/threonine-protein kinase ATR	Atypical	PIKK	ATR	Q13535
AurC	AurC	AURKC	Aurora kinase C	Other	Aur		Q9UQB9
AXL	AXL	AXL	Tyrosine-protein kinase receptor UFO	TK	Axl		P30530

BARK1	BARK1	ADRBK1	Beta-adrenergic receptor kinase 1	AGC	GRK	BARK	P25098
BCKDK	BCKDK	BCKDK	[3-methyl-2-oxobutanoate dehydrogenase [lipoamide]] kinase	Atypical	PDHK		O14874
GCK	GCK	MAP4K2	Mitogen-activated protein kinase kinase kinase 2	STE	STE20	KHS	Q12851
BLK	BLK	BLK	Tyrosine-protein kinase Blk	TK	Src		P51451
BRAF	BRAF	BRAF	Serine/threonine-protein kinase B-raf	TKL	RAF		P15056
BRK	BRK	PTK6	Protein-tyrosine kinase 6	TK	Src		Q13882
BTK	BTK	BTK	Tyrosine-protein kinase BTK	TK	Tec		Q06187
BUBR1	BUBR1	BUB1B	Mitotic checkpoint serine/threonine-protein kinase BUB1 beta	Other	BUB		O60566
CDK7	CDK7	CDK7	Cyclin-dependent kinase 7	CMGC	CDK	CDK7	P50613
CaMK1a	CaMK1a	CAMK1	Calcium/calmodulin-dependent protein kinase type 1	CAMK	CAMK1		Q14012
CaMK2a	CaMK2a	CAMK2A	Calcium/calmodulin-dependent protein kinase type II subunit alpha	CAMK	CAMK2		Q9UQM7
CaMK2b	CaMK2b	CAMK2B	Calcium/calmodulin-dependent protein kinase type II subunit beta	CAMK	CAMK2		Q13554
CaMK2g	CaMK2g	CAMK2G	Calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma	CAMK	CAMK2		Q13555
CaMK4	CaMK4	CAMK4	Calcium/calmodulin-dependent protein kinase type IV	CAMK	CAMK1		Q16566
VACAMKL	VACAMKL	CAMKV	CaM kinase-like vesicle-associated protein	CAMK	CAMK-Unique		Q8NCB2
DCAMKL1	DCAMKL1	DCLK1	Serine/threonine-protein kinase DCLK1	CAMK	DCAMKL		O15075
CASK	CASK	CASK	Peripheral plasma membrane protein CASK	CAMK	CASK		O14936

CDC2	CDC2	CDK1	Cyclin-dependent kinase 1	CMG C	CDK	CDC2	P06493
CDC7	CDC7	CDC7	Cell division cycle 7-related protein kinase	Other	CDC7		O0031 1
CDK2	CDK2	CDK2	Cyclin-dependent kinase 2	CMG C	CDK	CDK2	P24941
CDK3	CDK3	CDK3	Cyclin-dependent kinase 3	CMG C	CDK	CDK2	Q0052 6
CDK4	CDK4	CDK4	Cyclin-dependent kinase 4	CMG C	CDK	CDK4	P11802
CDK5	CDK5	CDK5	Cyclin-dependent kinase 5	CMG C	CDK	CDK5	Q0053 5
CDK6	CDK6	CDK6	Cyclin-dependent kinase 6	CMG C	CDK	CDK4	Q0053 4
CDK8	CDK8	CDK8	Cyclin-dependent kinase 8	CMG C	CDK	CDK8	P49336
PKG1	PKG1	PRKG1	cGMP-dependent protein kinase	AGC	PKG		Q1397 6
PKG2	PKG2	PRKG2	cGMP-dependent protein kinase 2	AGC	PKG		Q1323 7
CHED	CHED	CDK13	Cyclin-dependent kinase 13	CMG C	CDK	CRK7	Q1400 4
CHK1	CHK1	CHEK1	Serine/threonine-protein kinase Chk1	CAM K	CAMKL	CHK1	O1475 7
CHK2	CHK2	CHEK2	Serine/threonine-protein kinase Chk2	CAM K	RAD53		O9601 7
CK1a	CK1a	CSNK1A1	Casein kinase I isoform alpha	CK1	CK1		P48729
CK1d	CK1d	CSNK1D	Casein kinase I isoform delta	CK1	CK1		P48730
CK1e	CK1e	CSNK1E	Casein kinase I isoform epsilon	CK1	CK1		P49674
CK1g2	CK1g2	CSNK1G2	Casein kinase I isoform gamma-2	CK1	CK1		P78368
CK1g3	CK1g3	CSNK1G3	Casein kinase I isoform gamma-3	CK1	CK1		Q9Y6 M4
CK2a1	CK2a1	CSNK2A1	Casein kinase II subunit alpha	CMG C	CK2		P68400
CK2a2	CK2a2	CSNK2A2	Casein kinase II subunit alpha'	CMG C	CK2		P19784
CLK1	CLK1	CLK1	Dual specificity protein kinase CLK1	CMG C	CLK		P49759
CLK2	CLK2	CLK2	Dual specificity protein kinase CLK2	CMG C	CLK		P49760
CLK3	CLK3	CLK3	Dual specificity protein kinase CLK3	CMG C	CLK		P49761
COT	COT	MAP3K8	Mitogen-activated protein kinase kinase 8	STE	STE-Unique		P41279

FMS	FMS	CSF1R	Macrophage colony-stimulating factor 1 receptor	TK	PDGFR		P07333
CSK	CSK	CSK	Tyrosine-protein kinase CSK	TK	Csk		P41240
MARK3	MARK3	MARK3	MAP/microtubule affinity-regulating kinase 3	CAMK	CAMKL	MARK	P27448
CYGD	CYGD	GUCY2D	Retinal guanylyl cyclase 1	RGC	RGC		Q02846
CYGF	CYGF	GUCY2F	Retinal guanylyl cyclase 2	RGC	RGC		P51841
DAPK1	DAPK1	DAPK1	Death-associated protein kinase 1	CAMK	DAPK		P53355
DAPK2	DAPK2	DAPK2	Death-associated protein kinase 2	CAMK	DAPK		Q9UIK4
DLK	DLK	MAP3K12	Mitogen-activated protein kinase kinase 12	TKL	MLK	LZK	Q12852
DMPK1	DMPK1	DMPK	Myotonin-protein kinase	AGC	DMPK	GEK	Q09013
DMPK2	DMPK2	CDC42BPG	Serine/threonine-protein kinase MRCK gamma	AGC	DMPK	GEK	Q6DT37
DNAPK	DNAPK	PRKDC	DNA-dependent protein kinase catalytic subunit	Atypical	PIKK	DNAPK	P78527
DYRK1B	DYRK1B	DYRK1B	Dual specificity tyrosine-phosphorylation-regulated kinase 1B	CMGC	DYRK	DYRK1	Q9Y463
DYRK2	DYRK2	DYRK2	Dual specificity tyrosine-phosphorylation-regulated kinase 2	CMGC	DYRK	DYRK2	Q92630
DYRK4	DYRK4	DYRK4	Dual specificity tyrosine-phosphorylation-regulated kinase 4	CMGC	DYRK	DYRK2	Q9NR20
eEF2K	eEF2K	EEF2K	Eukaryotic elongation factor 2 kinase	Atypical	Alpha	eEF2K	O00418
EGFR	EGFR	EGFR	Epidermal growth factor receptor	TK	EGFR		P00533
PKR	PKR	EIF2AK2	Interferon-induced	Other	PEK		P19525
MARK2	MARK2	MARK2	Serine/threonine-protein kinase MARK2	CAMK	CAMKL	MARK	Q7KZI7
EphA1	EphA1	EPHA1	Ephrin type-A receptor 1	TK	Eph		P21709
EphA2	EphA2	EPHA2	Ephrin type-A receptor 2	TK	Eph		P29317

EphA3	EphA3	EPHA3	Ephrin type-A receptor 3	TK	Eph		P29320
EphA4	EphA4	EPHA4	Ephrin type-A receptor 4	TK	Eph		P54764
EphA5	EphA5	EPHA5	Ephrin type-A receptor 5	TK	Eph		P54756
EphA8	EphA8	EPHA8	Ephrin type-A receptor 8	TK	Eph		P29322
EphB1	EphB1	EPHB1	Ephrin type-B receptor 1	TK	Eph		P54762
EphB2	EphB2	EPHB2	Ephrin type-B receptor 2	TK	Eph		P29323
EphB3	EphB3	EPHB3	Ephrin type-B receptor 3	TK	Eph		P54753
EphB4	EphB4	EPHB4	Ephrin type-B receptor 4	TK	Eph		P54760
EphB6	EphB6	EPHB6	Ephrin type-B receptor 6	TK	Eph		O15197
Erk1	Erk1	MAPK3	Mitogen-activated protein kinase 3	CMG C	MAPK	ERK1	P27361
Erk2	Erk2	MAPK1	Mitogen-activated protein kinase 1	CMG C	MAPK	ERK1	P28482
Erk3	Erk3	MAPK6	Mitogen-activated protein kinase 6	CMG C	MAPK	ERK3	Q16659
Erk4	Erk4	MAPK4	Mitogen-activated protein kinase 4	CMG C	MAPK	ERK3	P31152
FAK	FAK	PTK2	Focal adhesion kinase 1	TK	FAK		Q05397
FER	FER	FER	Tyrosine-protein kinase Fer	TK	Fer		P16591
FES	FES	FES	Tyrosine-protein kinase Fes/Fps	TK	Fer		P07332
FGFR1	FGFR1	FGFR1	Fibroblast growth factor receptor 1	TK	FGFR		P11362
FGFR2	FGFR2	FGFR2	Fibroblast growth factor receptor 2	TK	FGFR		P21802
FGFR3	FGFR3	FGFR3	Fibroblast growth factor receptor 3	TK	FGFR		P22607
FGFR4	FGFR4	FGFR4	Fibroblast growth factor receptor 4	TK	FGFR		P22455
FGR	FGR	FGR	Tyrosine-protein kinase Fgr	TK	Src		P09769
FLT3	FLT3	FLT3	Receptor-type tyrosine-protein kinase FLT3	TK	PDGFR		P36888
FLT1	FLT1	FLT1	Vascular endothelial growth factor receptor 1	TK	VEGFR		P17948
FLT4	FLT4	FLT4	Vascular endothelial growth factor receptor 3	TK	VEGFR		P35916

FRAP	FRAP	MTOR	Serine/threonine-protein kinase mTOR	Atypical	PIKK	FRAP	P42345
FYN	FYN	FYN	Tyrosine-protein kinase Fyn	TK	Src		P06241
GAK	GAK	GAK	Cyclin-G-associated kinase	Other	NAK		O14976
GPRK4	GPRK4	GRK4	G protein-coupled receptor kinase 4	AGC	GRK	GRK	P32298
GPRK5	GPRK5	GRK5	G protein-coupled receptor kinase 5	AGC	GRK	GRK	P34947
GPRK6	GPRK6	GRK6	G protein-coupled receptor kinase 6	AGC	GRK	GRK	P43250
Trb2	Trb2	TRIB2	Tribbles homolog 2	CAMK	Trbl		Q92519
GSK3A	GSK3A	GSK3A	Glycogen synthase kinase-3 alpha	CMGC	GSK		P49840
GSK3B	GSK3B	GSK3B	Glycogen synthase kinase-3 beta	CMGC	GSK		P49841
HCK	HCK	HCK	Tyrosine-protein kinase HCK	TK	Src		P08631
ErbB2	HER2/ErbB2	ERBB2	Receptor tyrosine-protein kinase erbB-2	TK	EGFR		P04626
ErbB3	HER3/ErbB3	ERBB3	Receptor tyrosine-protein kinase erbB-3	TK	EGFR		P21860
ErbB4	HER4/ErbB4	ERBB4	Receptor tyrosine-protein kinase erbB-4	TK	EGFR		Q15303
HIPK1	HIPK1	HIPK1	Homeodomain-interacting protein kinase 1	CMGC	DYRK	HIPK	Q86Z02
HPK1	HPK1	MAP4K1	Mitogen-activated protein kinase kinase kinase 1	STE	STE20	KHS	Q92918
HSER	HSER	GUCY2C	Heat-stable enterotoxin receptor	RGC	RGC		P25092
IGF1R	IGF1R	IGF1R	Insulin-like growth factor 1 receptor	TK	InsR		P08069
IKKa	IKKa	CHUK	Inhibitor of nuclear factor kappa-B kinase subunit alpha	Other	IKK		O15111
IKKb	IKKb	IKBKB	Inhibitor of nuclear factor kappa-B kinase subunit beta	Other	IKK		O14920
ILK	ILK	ILK	Integrin-linked protein kinase	TKL	MLK	ILK	Q13418
INSR	INSR	INSR	Insulin receptor	TK	InsR		P06213
IRAK1	IRAK1	IRAK1	Interleukin-1 receptor-associated kinase 1	TKL	IRAK		P51617
IRAK2	IRAK2	IRAK2	Interleukin-1 receptor-associated kinase-like 2	TKL	IRAK		O43187

IRAK3	IRAK3	IRAK3	Interleukin-1 receptor-associated kinase 3	TKL	IRAK		Q9Y616
IRE1	IRE1	ERN1	Serine/threonine-protein kinase/endoribonuclease IRE1	Other	IRE		O75460
IRR	IRR	INSRR	Insulin receptor-related protein	TK	InsR		P14616
ITK	ITK	ITK	Tyrosine-protein kinase ITK/TSK	TK	Tec		Q08881
JAK1	JAK1	JAK1	Tyrosine-protein kinase JAK1	TK	Jak		P23458
JAK2	JAK2	JAK2	Tyrosine-protein kinase JAK2	TK	Jak		O60674
JAK3	JAK3	JAK3	Tyrosine-protein kinase JAK3	TK	Jak		P52333
JNK1	JNK1	MAPK8	Mitogen-activated protein kinase 8	CMG C	MAPK	JNK	P45983
JNK2	JNK2	MAPK9	Mitogen-activated protein kinase 9	CMG C	MAPK	JNK	P45984
JNK3	JNK3	MAPK10	Mitogen-activated protein kinase 10	CMG C	MAPK	JNK	P53779
KHS1	KHS1	MAP4K5	Mitogen-activated protein kinase kinase kinase 5	STE	STE20	KHS	Q9Y4K4
IKKe	IKKe	IKBKE	Inhibitor of nuclear factor kappa-B kinase subunit epsilon	Other	IKK		Q14164
NuaK1	NuaK1	NUAK1	NUAK family SNF1-like kinase 1	CAM K	CAMKL	NuaK	O60285
MAST3	MAST3	MAST3	Microtubule-associated serine/threonine-protein kinase 3	AGC	MAST		O60307
Fused	Fused	STK36	Serine/threonine-protein kinase 36	Other	ULK		Q9NR P7
PIM3	PIM3	PIM3	Serine/threonine-protein kinase pim-3	CAM K	PIM		Q86V86
KIT	KIT	KIT	Mast/stem cell growth factor receptor Kit	TK	PDGFR		P10721
CDKL2	CDKL2	CDKL2	Cyclin-dependent kinase-like 2	CMG C	CDKL		Q92772
CDKL1	CDKL1	CDKL1	Cyclin-dependent kinase-like 1	CMG C	CDKL		Q00532
KSR1	KSR1	KSR1	Kinase suppressor of Ras 1	TKL	RAF	KSR	Q8IVT5
LCK	LCK	LCK	Tyrosine-protein kinase Lck	TK	Src		P06239
LIMK2	LIMK2	LIMK2	LIM domain kinase 2	TKL	LISK	LIMK	P53671

LKB1	LKB1	STK11	Serine/threonine-protein kinase STK11	CAMK	CAMKL	LKB	Q15831
LTK	LTK	LTK	Leukocyte tyrosine kinase receptor	TK	ALK		P29376
LYN	LYN	LYN	Tyrosine-protein kinase Lyn	TK	Src		P07948
MAK	MAK	MAK	Serine/threonine-protein kinase MAK	CMGC	RCK		P20794
MAPKAPK2	MAPKAPK2	MAPKAPK2	MAP kinase-activated protein kinase 2	CAMK	MAPKAPK	MK2	P49137
MAPKAPK3	MAPKAPK3	MAPKAPK3	MAP kinase-activated protein kinase 3	CAMK	MAPKAPK	MK2	Q16644
MAPKAPK5	MAPKAPK5	MAPKAPK5	MAP kinase-activated protein kinase 5	CAMK	MAPKAPK	MK5	Q8IW41
MARK1	MARK1	MARK1	Serine/threonine-protein kinase MARK1	CAMK	CAMKL	MARK	Q9P0L2
MAST2	MAST2	MAST2	Microtubule-associated serine/threonine-protein kinase 2	AGC	MAST		Q6P0Q8
MAP2K1	MAP2K1	MAP2K1	Dual specificity mitogen-activated protein kinase kinase 1	STE	STE7		Q02750
MAP2K2	MAP2K2	MAP2K2	Dual specificity mitogen-activated protein kinase kinase 2	STE	STE7		P36507
MAP2K5	MAP2K5	MAP2K5	Dual specificity mitogen-activated protein kinase kinase 5	STE	STE7		Q13163
MAP2K6	MAP2K6	MAP2K6	Dual specificity mitogen-activated protein kinase kinase 6	STE	STE7		P52564
MAP3K1	MAP3K1	MAP3K1	Mitogen-activated protein kinase kinase kinase 1	STE	STE11		Q13233
MAP3K2	MAP3K2	MAP3K2	Mitogen-activated protein kinase kinase kinase 2	STE	STE11		Q9Y2U5
MAP3K3	MAP3K3	MAP3K3	Mitogen-activated protein kinase kinase kinase 3	STE	STE11		Q99759

MAP3K4	MAP3K4	MAP3K4	Mitogen-activated protein kinase kinase 4	STE	STE11		Q9Y6R4
MAP3K5	MAP3K5	MAP3K5	Mitogen-activated protein kinase kinase 5	STE	STE11		Q99683
MER	MER	MERTK	Tyrosine-protein kinase Mer	TK	Axl		Q12866
MET	MET	MET	Hepatocyte growth factor receptor	TK	Met		P08581
MISR2	MISR2	AMHR2	Anti-Muellerian hormone type-2 receptor	TKL	STKR	STKR2	Q16671
MAP2K7	MAP2K7	MAP2K7	Dual specificity mitogen-activated protein kinase kinase 7	STE	STE7		O14733
smMLCK	smMLCK	MYLK	Myosin light chain kinase	CAMK	MLCK		Q15746
MLK1	MLK1	MAP3K9	Mitogen-activated protein kinase kinase 9	TKL	MLK	MLK	P80192
MLK2	MLK2	MAP3K10	Mitogen-activated protein kinase kinase 10	TKL	MLK	MLK	Q02779
DYRK1A	DYRK1A	DYRK1A	Dual specificity tyrosine-phosphorylation-regulated kinase 1A	CMGC	DYRK	DYRK1	Q13627
MNK1	MNK1	MKNK1	MAP kinase-interacting serine/threonine-protein kinase 1	CAMK	MAPKAPK	MNK	Q9BUB5
MNK2	MNK2	MKNK2	MAP kinase-interacting serine/threonine-protein kinase 2	CAMK	MAPKAPK	MNK	Q9HBH9
MOS	MOS	MOS	Proto-oncogene serine/threonine-protein kinase mos	Other	MOS		P00540
MAP2K3	MAP2K3	MAP2K3	Dual specificity mitogen-activated protein kinase kinase 3	STE	STE7		P46734
MAP2K4	MAP2K4	MAP2K4	Dual specificity mitogen-activated protein kinase kinase 4	STE	STE7		P45985
MRCKb	MRCKb	CDC42BPB	Serine/threonine-protein kinase MRCK beta	AGC	DMPK	GEK	Q9Y5S2

MSK1	MSK1	RPS6KA5	Ribosomal protein S6 kinase alpha-5	AGC	RSK	MSK	O75582
MSK2	MSK2	RPS6KA4	Ribosomal protein S6 kinase alpha-4	AGC	RSK	MSK	O75676
MST1	MST1	STK4	Serine/threonine-protein kinase 4	STE	STE20	MST	Q13043
MST2	MST2	STK3	Serine/threonine-protein kinase 3	STE	STE20	MST	Q13188
MST3	MST3	STK24	Serine/threonine-protein kinase 24	STE	STE20	YSK	Q9Y6E0
MUSK	MUSK	MUSK	Muscle	TK	Musk		O15146
MYT1	MYT1	PKMYT1	Membrane-associated tyrosine- and threonine-specific cdc2-inhibitory kinase	Other	WEE		Q99640
NDR1	NDR1	STK38	Serine/threonine-protein kinase 38	AGC	NDR		Q15208
NEK1	NEK1	NEK1	Serine/threonine-protein kinase Nek1	Other	NEK		Q96PY6
NEK2	NEK2	NEK2	Serine/threonine-protein kinase Nek2	Other	NEK		P51955
NEK3	NEK3	NEK3	Serine/threonine-protein kinase Nek3	Other	NEK		P51956
NIK	NIK	MAP3K14	Mitogen-activated protein kinase kinase 14	STE	STE-Unique		Q99558
NLK	NLK	NLK	Serine/threonine-protein kinase NLK	CMGC	MAPK	nmo	Q9UBE8
NEK4	NEK4	NEK4	Serine/threonine-protein kinase Nek4	Other	NEK		P51957
IRAK4	IRAK4	IRAK4	Interleukin-1 receptor-associated kinase 4	TKL	IRAK		Q9NWZ3
PIK3R4	PIK3R4	PIK3R4	Phosphoinositide 3-kinase regulatory subunit 4	Other	VPS15		Q99570
ROCK2	ROCK2	ROCK2	Rho-associated protein kinase 2	AGC	DMPK	ROCK	O75116
p38a	p38a	MAPK14	Mitogen-activated protein kinase 14	CMGC	MAPK	p38	Q16539
p70S6K	p70S6K	RPS6KB1	Ribosomal protein S6 kinase beta-1	AGC	RSK	RSKp70	P23443
p70S6Kb	p70S6Kb	RPS6KB2	Ribosomal protein S6 kinase beta-2	AGC	RSK	RSKp70	Q9UBS0
PAK1	PAK1	PAK1	Serine/threonine-protein kinase PAK 1	STE	STE20	PAKA	Q13153
PAK2	PAK2	PAK2	Serine/threonine-protein kinase PAK 2	STE	STE20	PAKA	Q13177

PAK3	PAK3	PAK3	Serine/threonine-protein kinase PAK 3	STE	STE20	PAKA	O75914
PKCh	PKCh	PRKCH	Protein kinase C eta type	AGC	PKC	PKCh	P24723
PCTAIR E1	PCTAIRE1	CDK16	Cyclin-dependent kinase 16	CMG C	CDK	PCTAIRE	Q00536
PCTAIR E2	PCTAIRE2	CDK17	Cyclin-dependent kinase 17	CMG C	CDK	PCTAIRE	Q00537
PCTAIR E3	PCTAIRE3	CDK18	Cyclin-dependent kinase 18	CMG C	CDK	PCTAIRE	Q07002
PDGFRa	PDGFRa	PDGFRA	Platelet-derived growth factor receptor alpha	TK	PDGFR		P16234
PDGFRb	PDGFRb	PDGFRB	Platelet-derived growth factor receptor beta	TK	PDGFR		P09619
PDK1	PDK1	PDPK1	3-phosphoinositide-dependent protein kinase 1	AGC	PDK1		O15530
PDHK1	PDHK1	PDK1	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1	Atypical	PDHK		Q15118
PDHK2	PDHK2	PDK2	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 2	Atypical	PDHK		Q15119
PDHK3	PDHK3	PDK3	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 3	Atypical	PDHK		Q15120
PDHK4	PDHK4	PDK4	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 4	Atypical	PDHK		Q16654
PEK	PEK	EIF2AK3	Eukaryotic translation initiation factor 2-alpha kinase 3	Other	PEK	PEK	Q9NZJ5
PFTAIRE1	PFTAIRE1	CDK14	Cyclin-dependent kinase 14	CMG C	CDK	PFTAIRE	O94921
PHKg1	PHKg1	PHKG1	Phosphorylase b kinase gamma catalytic chain	CAM K	PHK		Q16816
PHKg2	PHKg2	PHKG2	Phosphorylase b kinase gamma catalytic chain	CAM K	PHK		P15735
PIM1	PIM1	PIM1	Serine/threonine-protein kinase pim-1	CAM K	PIM		P11309
PIM2	PIM2	PIM2	Serine/threonine-protein kinase pim-2	CAM K	PIM		Q9P1W9

CDK10	CDK10	CDK10	Cyclin-dependent kinase 10	CMG C	CDK	CDK10	Q1513 1
CDK9	CDK9	CDK9	Cyclin-dependent kinase 9	CMG C	CDK	CDK9	P50750
PITSLRE	PITSLRE	CDK11B	Cyclin-dependent kinase 11B	CMG C	CDK	CDK11	P21127
MELK	MELK	MELK	Maternal embryonic leucine zipper kinase	CAM K	CAMKL	MELK	Q1468 0
MRCKa	MRCKa	CDC42B PA	Serine/threonine-protein kinase MRCK alpha	AGC	DMPK	GEK	Q5VT2 5
PKACa	PKACa	PRKAC A	cAMP-dependent protein kinase catalytic subunit alpha	AGC	PKA		P17612
PKACb	PKACb	PRKACB	cAMP-dependent protein kinase catalytic subunit beta	AGC	PKA		P22694
PKACg	PKACg	PRKAC G	cAMP-dependent protein kinase catalytic subunit gamma	AGC	PKA		P22612
PKCa	PKCa	PRKCA	Protein kinase C alpha type	AGC	PKC	PKCa	P17252
PKCb	PKCb	PRKCB	Protein kinase C beta type	AGC	PKC	PKCa	P05771
PKCd	PKCd	PRKCD	Protein kinase C delta type	AGC	PKC	PKCd	Q0565 5
PKCe	PKCe	PRKCE	Protein kinase C epsilon type	AGC	PKC	PKCh	Q0215 6
PKCg	PKCg	PRKCG	Protein kinase C gamma type	AGC	PKC	PKCa	P05129
PKCi	PKCi	PRKCI	Protein kinase C iota type	AGC	PKC	PKCi	P41743
PKD1	PKD1	PRKD1	Serine/threonine-protein kinase D1	CAM K	PKD		Q1513 9
PKCt	PKCt	PRKCQ	Protein kinase C theta type	AGC	PKC	PKCd	Q0475 9
PKCz	PKCz	PRKCZ	Protein kinase C zeta type	AGC	PKC	PKCi	Q0551 3
PRKX	PRKX	PRKX	cAMP-dependent protein kinase catalytic subunit PRKX	AGC	PKA		P51817
HIPK3	HIPK3	HIPK3	Homeodomain-interacting protein kinase 3	CMG C	DYRK	HIPK	Q9H42 2
PLK1	PLK1	PLK1	Serine/threonine-protein kinase PLK1	Other	PLK		P53350
PLK3	PLK3	PLK3	Serine/threonine-protein kinase PLK3	Other	PLK		Q9H4B 4

PKN1	PKN1	PKN1	Serine/threonine-protein kinase N1	AGC	PKN		Q16512
PKN2	PKN2	PKN2	Serine/threonine-protein kinase N2	AGC	PKN		Q16513
PRKY	PRKY	PRKY	Serine/threonine-protein kinase PRKY	AGC	PKA		O43930
PRP4	PRP4	PRPF4B	Serine/threonine-protein kinase PRP4 homolog	CMG C	DYRK	PRP4	Q13523
PSKH1	PSKH1	PSKH1	Serine/threonine-protein kinase H1 RAF proto-oncogene	CAM K	PSK		P11801
RAF1	RAF1	RAF1	serine/threonine-protein kinase Proto-oncogene	TKL	RAF		P04049
RET	RET	RET	tyrosine-protein kinase receptor Ret	TK	Ret		P07949
RHOK	RHOK	GRK1	Rhodopsin kinase	AGC	GRK	GRK	Q15835
RIPK1	RIPK1	RIPK1	Receptor-interacting serine/threonine-protein kinase 1	TKL	RIPK		Q13546
RIPK2	RIPK2	RIPK2	Receptor-interacting serine/threonine-protein kinase 2	TKL	RIPK		O43353
RIPK3	RIPK3	RIPK3	Receptor-interacting serine/threonine-protein kinase 3	TKL	RIPK		Q9Y572
ROCK1	ROCK1	ROCK1	Rho-associated protein kinase 1	AGC	DMPK	ROCK	Q13464
RON	RON	MST1R	Macrophage-stimulating protein receptor Tyrosine-protein kinase	TK	Met		Q04912
ROR1	ROR1	ROR1	transmembrane receptor ROR1 Tyrosine-protein kinase	TK	Ror		Q01973
ROR2	ROR2	ROR2	transmembrane receptor ROR2 Proto-oncogene	TK	Ror		Q01974
ROS	ROS	ROS1	tyrosine-protein kinase ROS	TK	Sev		P08922
RSK3	RSK1	RPS6KA2	Ribosomal protein S6 kinase alpha-2	AGC	RSK	RSKp90	Q15349
RSK2	RSK2	RPS6KA3	Ribosomal protein S6 kinase alpha-3	AGC	RSK	RSKp90	P51812
RSK1	RSK3	RPS6KA1	Ribosomal protein S6 kinase alpha-1	AGC	RSK	RSKp90	Q15418

RYK	RYK	RYK	Tyrosine-protein kinase RYK	TK	Ryk		P34925
PLK4	PLK4	PLK4	Serine/threonine-protein kinase PLK4	Other	PLK		O00444
p38b	p38b	MAPK11	Mitogen-activated protein kinase 11	CMG C	MAPK	p38	Q15759
p38g	p38g	MAPK12	Mitogen-activated protein kinase 12	CMG C	MAPK	p38	P53778
p38d	p38d	MAPK13	Mitogen-activated protein kinase 13	CMG C	MAPK	p38	O15264
MAST1	MAST1	MAST1	Microtubule-associated serine/threonine-protein kinase 1	AGC	MAST		Q9Y2H9
SGK1	SGK	SGK1	Serine/threonine-protein kinase Sgk1	AGC	SGK		O00141
SLK	SLK	SLK	STE20-like serine/threonine-protein kinase	STE	STE20	SLK	Q9H2G2
PLK2	PLK2	PLK2	Serine/threonine-protein kinase PLK2	Other	PLK		Q9NY Y3
MLK3	MLK3	MAP3K11	Mitogen-activated protein kinase kinase 11	TKL	MLK	MLK	Q16584
SRC	SRC	SRC	Proto-oncogene tyrosine-protein kinase Src	TK	Src		P12931
SRPK1	SRPK1	SRPK1	SRSF protein kinase 1	CMG C	SRPK		Q96SB4
SRPK2	SRPK2	SRPK2	SRSF protein kinase 2	CMG C	SRPK		P78362
CDKL5	CDKL5	CDKL5	Cyclin-dependent kinase-like 5	CMG C	CDKL		O76039
TAO2	TAO2	TAOK2	Serine/threonine-protein kinase TAO2	STE	STE20	TAO	Q9UL54
SYK	SYK	SYK	Tyrosine-protein kinase SYK	TK	Syk		P43405
TAK1	TAK1	MAP3K7	Mitogen-activated protein kinase kinase 7	TKL	MLK	TAK1	O43318
BMPR2	BMPR2	BMPR2	Bone morphogenetic protein receptor type-2	TKL	STKR	STKR2	Q13873
TEC	TEC	TEC	Tyrosine-protein kinase Tec	TK	Tec		P42680
TIE2	TIE2	TEK	Angiopoietin-1 receptor	TK	Tie		Q02763
TESK1	TESK1	TESK1	Dual specificity testis-specific protein kinase 1	TKL	LISK	TESK	Q15569

TGFbR2	TGFbR2	TGFBR2	TGF-beta receptor type-2	TKL	STKR	STKR2	P37173
TIE1	TIE1	TIE1	Tyrosine-protein kinase receptor Tie-1	TK	Tie		P35590
TTN	TTN	TTN	Titin	CAMK	MLCK		Q8WZ42
TLK1	TLK1	TLK1	Serine/threonine-protein kinase tousled-like 1	Other	TLK		Q9UKI8
TLK2	TLK2	TLK2	Serine/threonine-protein kinase tousled-like 2	Other	TLK		Q86UE8
TNK1	TNK1	TNK1	Non-receptor tyrosine-protein kinase TNK1	TK	Ack		Q13470
Trio	Trio	TRIO	Triple functional domain protein	CAMK	Trio		O75962
TRKA	TRKA	NTRK1	High affinity nerve growth factor receptor	TK	Trk		P04629
TRKB	TRKB	NTRK2	BDNF/NT-3 growth factors receptor	TK	Trk		Q16620
TRKC	TRKC	NTRK3	NT-3 growth factor receptor	TK	Trk		Q16288
TRRAP	TRRAP	TRRAP	Transformation/transcription domain-associated protein	Atypical	PIKK	TRRAP	Q9Y4A5
TTK	TTK	TTK	Dual specificity protein kinase TTK	Other	TTK		P33981
TXK	TXK	TXK	Tyrosine-protein kinase TXK	TK	Tec		P42681
TYK2	TYK2	TYK2	Non-receptor tyrosine-protein kinase TYK2	TK	Jak		P29597
TYRO3	TYRO3	TYRO3	Tyrosine-protein kinase receptor TYRO3	TK	Axl		Q06418
ULK1	ULK1	ULK1	Serine/threonine-protein kinase ULK1	Other	ULK		O75385
ULK2	ULK2	ULK2	Serine/threonine-protein kinase ULK2	Other	ULK		Q8IYT8
VRK1	VRK1	VRK1	Serine/threonine-protein kinase VRK1	CK1	VRK		Q99986
VRK2	VRK2	VRK2	Serine/threonine-protein kinase VRK2	CK1	VRK		Q86Y07
Wee1	Wee1	WEE1	Wee1-like protein kinase	Other	WEE		P30291
YES	YES	YES1	Tyrosine-protein kinase Yes	TK	Src		P07947
YSK1	YSK1	STK25	Serine/threonine-protein kinase 25	STE	STE20	YSK	O00506

ZAP70	ZAP70	ZAP70	Tyrosine-protein kinase ZAP-70	TK	Syk		P43403
LZK	LZK	MAP3K13	Mitogen-activated protein kinase kinase kinase 13	TKL	MLK	LZK	O43283
DDR1	DDR1	DDR1	Epithelial discoidin domain-containing receptor 1	TK	DDR		Q08345
ADCK1	ADCK1	ADCK1	Uncharacterized aarF domain-containing protein kinase 1	Atypical	ABC1	ABC1-B	Q86TW2
KDR	KDR	KDR	Vascular endothelial growth factor receptor 2	TK	VEGFR		P35968
ALK7	ALK7	ACVR1C	Activin receptor type-1C	TKL	STKR	STKR1	Q8NER5
AurB	AurB	AURKB	Aurora kinase B	Other	Aur		Q96GD4
AurA	AurA	AURKA	Aurora kinase A	Other	Aur		O14965
Erk5	Erk5	MAPK7	Mitogen-activated protein kinase 7	CMGC	MAPK	ERK5	Q13164
BUB1	BUB1	BUB1	Mitotic checkpoint serine/threonine-protein kinase BUB1	Other	BUB		O43683
DDR2	DDR2	DDR2	Discoidin domain-containing receptor 2	TK	DDR		Q16832
CCK4	CCK4	PTK7	Inactive tyrosine-protein kinase 7	TK	CCK4		Q13308
LIMK1	LIMK1	LIMK1	LIM domain kinase 1	TKL	LISK	LIMK	P53667
LMR1	LMR1	AATK	Serine/threonine-protein kinase LMTK1	TK	Lmr		Q6ZMQ8
LMR2	LMR2	LMTK2	Serine/threonine-protein kinase LMTK2	TK	Lmr		Q8IWI2
LMR3	LMR3	LMTK3	Serine/threonine-protein kinase LMTK3	TK	Lmr		Q96Q04
EphA7	EphA7	EPHA7	Ephrin type-A receptor 7	TK	Eph		Q15375
BMX	BMX	BMX	Cytoplasmic tyrosine-protein kinase BMX	TK	Tec		P51813
CTK	CTK	MATK	Megakaryocyte-associated tyrosine-protein kinase	TK	Csk		P42679
FRK	FRK	FRK	Tyrosine-protein kinase FRK	TK	Src		P42685
NEK6	NEK6	NEK6	Serine/threonine-protein kinase Nek6	Other	NEK		Q9HC98

NEK7	NEK7	NEK7	Serine/threonine-protein kinase Nek7	Other	NEK		Q8TDX7
AAK1	AAK1	AAK1	AP2-associated protein kinase 1	Other	NAK		Q2M2I8
ChaK1	ChaK1	TRPM7	Transient receptor potential cation channel subfamily M member 7	Atypical	Alpha	ChaK	Q96QT4
PYK2	PYK2	PTK2B	Protein-tyrosine kinase 2-beta	TK	FAK		Q14289
SRM	SRM	SRMS	Tyrosine-protein kinase Srms	TK	Src		Q9H3Y6
LOK	LOK	STK10	Serine/threonine-protein kinase 10	STE	STE20	SLK	O94804
KHS2	KHS2	MAP4K3	Mitogen-activated protein kinase kinase kinase 3	STE	STE20	KHS	Q8IVH8
OSR1	OSR1	OXR1	Serine/threonine-protein kinase OSR1	STE	STE20	FRAY	O95747
PAK6	PAK6	PAK6	Serine/threonine-protein kinase PAK 6	STE	STE20	PAKB	Q9NQU5
PAK4	PAK4	PAK4	Serine/threonine-protein kinase PAK 4	STE	STE20	PAKB	O96013
MST4	MST4	STK26	Serine/threonine-protein kinase MST4	STE	STE20	YSK	Q9P289
STLK3	STLK3	STK39	STE20/SPS1-related proline-alanine-rich protein kinase	STE	STE20	FRAY	Q9UEW8
STLK5	STLK5	STRADA	STE20-related kinase adapter protein alpha	STE	STE20	STLK	Q7RTN6
STLK6	STLK6	STRADB	STE20-related kinase adapter protein beta	STE	STE20	STLK	Q9C0K7
TAO3	TAO3	TAOK3	Serine/threonine-protein kinase TAO3	STE	STE20	TAO	Q9H2K8
TAO1	TAO1	TAOK1	Serine/threonine-protein kinase TAO1	STE	STE20	TAO	Q7L7X3
HGK	ZC1/HGK	MAP4K4	Mitogen-activated protein kinase kinase kinase 4	STE	STE20	MSN	O95819
TNIK	ZC2/TNIK	TNIK	TRAF2 and NCK-interacting protein kinase	STE	STE20	MSN	Q9UKE5
MINK	ZC3/MINK	MINK1	Misshapen-like kinase 1	STE	STE20	MSN	Q8N4C8
NRK	ZC4/NRK	NRK	Nik-related protein kinase	STE	STE20	MSN	Q7Z2Y5
LATS1	LATS1	LATS1	Serine/threonine-protein kinase LATS1	AGC	NDR		O95835

LATS2	LATS2	LATS2	Serine/threonine-protein kinase LATS2	AGC	NDR		Q9NR M7
CDK11	CDK11	CDK19	Cyclin-dependent kinase 19	CMG C	CDK	CDK8	Q9BW U1
NIM1	NIM1	NIM1K	Serine/threonine-protein kinase NIM1	CAM K	CAMKL	NIM1	Q8IY8 4
ULK3	ULK3	ULK3	Serine/threonine-protein kinase ULK3	Other	ULK		Q6PH R2
CLIK1L	CLIK1L	PDIK1L	Serine/threonine-protein kinase PDIK1L	Other	NKF4		Q8N16 5
TTBK2	TTBK2	TTBK2	Tau-tubulin kinase 2	CK1	TTBK		Q6IQ5 5
SCYL1	SCYL1	SCYL1	N-terminal kinase-like protein	Other	SCY1		Q96K G9
MASTL	MASTL	MASTL	Serine/threonine-protein kinase greatwall	AGC	MAST		Q96G X5
PINK1	PINK1	PINK1	Serine/threonine-protein kinase PINK1	Other	NKF2		Q9BX M7
ULK4	ULK4	ULK4	Serine/threonine-protein kinase ULK4	Other	ULK		Q96C4 5
MLKL	MLKL	MLKL	Mixed lineage kinase domain-like protein	TKL	TKL-Unique		Q8NB1 6
DCAMK L3	DCAMKL3	DCLK3	Serine/threonine-protein kinase DCLK3	CAM K	DCAM KL		Q9C09 8
SgK493	SgK493	PKDCC	Protein kinase domain-containing protein	Other	SgK493		Q504Y 2
PFTAIR E2	PFTAIRE2	CDK15	Cyclin-dependent kinase 15	CMG C	CDK	PFTAI RE	Q96Q4 0
STK33	STK33	STK33	Serine/threonine-protein kinase 33	CAM K	STK33		Q9BY T3
PRPK	PRPK	TP53RK	TP53-regulating kinase	Other	Bud32		Q96S4 4
Erk7	Erk7	MAPK15	Mitogen-activated protein kinase 15	CMG C	MAPK	ERK7	Q8TD0 8
CDKL4	CDKL4	CDKL4	Cyclin-dependent kinase-like 4	CMG C	CDKL		Q5MA I5
SCYL3	SCYL3	SCYL3	Protein-associating with the carboxyl-terminal domain of ezrin	Other	SCY1		Q8IZE 3
YANK3	YANK3	STK32C	Serine/threonine-protein kinase 32C	AGC	YANK		Q86U X6
NEK9	NEK9	NEK9	Serine/threonine-protein kinase Nek9	Other	NEK		Q8TD1 9

TSSK3	TSSK3	TSSK3	Testis-specific serine/threonine-protein kinase 3	CAMK	TSSK		Q96PN8
NuaK2	NuaK2	NUAK2	NUAK family SNF1-like kinase 2	CAMK	CAMKL	NuaK	Q9H093
RSKL2	RSKL2	RPS6KL1	Ribosomal protein S6 kinase-like 1	AGC	RSKL		Q9Y6S9
TSSK2	TSSK2	TSSK2	Testis-specific serine/threonine-protein kinase 2	CAMK	TSSK		Q96PF2
SCYL2	SCYL2	SCYL2	SCY1-like protein 2	Other	SCY1		Q6P3W7
NEK8	NEK8	NEK8	Serine/threonine-protein kinase Nek8	Other	NEK		Q86SG6
BARK2	BARK2	ADRBK2	Beta-adrenergic receptor kinase 2	AGC	GRK	BARK	P35626
NRBP1	NRBP1	NRBP1	Nuclear receptor-binding protein	Other	NRBP		Q9UHY1
PKD2	PKD2	PRKD2	Serine/threonine-protein kinase D2	CAMK	PKD		Q9BZL6
YANK2	YANK2	STK32B	Serine/threonine-protein kinase 32B	AGC	YANK		Q9NY57
CaMKK2	CaMKK2	CAMKK2	Calcium/calmodulin-dependent protein kinase kinase 2	Other	CAMK	CAMK-K-Meta	Q96RR4
CCRK	CCRK	CDK20	Cyclin-dependent kinase 20	CMGC	CDK		Q8IZL9
CLK4	CLK4	CLK4	Dual specificity protein kinase CLK4	CMGC	CLK		Q9HAZ1
CRK7	CRK7	CDK12	Cyclin-dependent kinase 12	CMGC	CDK	CRK7	Q9NYV4
DRAK1	DRAK1	STK17A	Serine/threonine-protein kinase 17A	CAMK	DAPK		Q9UEE5
DRAK2	DRAK2	STK17B	Serine/threonine-protein kinase 17B	CAMK	DAPK		O94768
DYRK3	DYRK3	DYRK3	Dual specificity tyrosine-phosphorylation-regulated kinase 3	CMGC	DYRK	DYRK2	O43781
PKD3	PKD3	PRKD3	Serine/threonine-protein kinase D3	CAMK	PKD		O94806
GCN2	GCN2	EIF2AK4	Eukaryotic translation initiation factor 2-alpha kinase 4	Other	PEK	GCN2	Q9P2K8
SgK494	SgK494		Uncharacterized serine/threonine-protein kinase SgK494	AGC	RSKR		Q96LW2
SgK495	SgK495	STK40	Serine/threonine-protein kinase 40	CAMK	SgK495		Q8N2I9

CLIK1	CLIK1	STK35	Serine/threonine-protein kinase 35	Other	NKF4		Q8TD R2
HH498	HH498	TNNI3K	Serine/threonine-protein kinase TNNI3K	TKL	MLK	HH498	Q59H1 8
HIPK2	HIPK2	HIPK2	Homeodomain-interacting protein kinase 2	CMG C	DYRK	HIPK	Q9H2 X6
HRI	HRI	EIF2AK1	Eukaryotic translation initiation factor 2-alpha kinase 1	Other	PEK		Q9BQI 3
ICK	ICK	ICK	Serine/threonine-protein kinase ICK	CMG C	RCK		Q9UPZ 9
IRE2	IRE2	ERN2	Serine/threonine-protein kinase/endoribonuclease IRE2	Other	IRE		Q76MJ 5
PASK	PASK	PASK	PAS domain-containing serine/threonine-protein kinase	CAM K	CAMKL	PASK	Q96RG 2
NDR2	NDR2	STK38L	Serine/threonine-protein kinase 38-like	AGC	NDR		Q9Y2 H1
QSK	QSK	SIK3	Serine/threonine-protein kinase SIK3	CAM K	CAMKL	QIK	Q9Y2 K2
HUNK	HUNK	HUNK	Hormonally up-regulated neu tumor-associated kinase	CAM K	CAMKL	HUNK	P57058
MAP3K6	MAP3K6	MAP3K6	Mitogen-activated protein kinase kinase kinase 6	STE	STE11		O9538 2
ZAK	ZAK		Mitogen-activated protein kinase kinase kinase MLT	TKL	MLK	ZAK	Q9NY L2
MOK	MOK	MOK	MAPK/MAK/MRK overlapping kinase	CMG C	RCK		Q9UQ 07
MPSK1	MPSK1	STK16	Serine/threonine-protein kinase 16	Other	NAK		O7571 6
MSSK1	MSSK1	SRPK3	SRSF protein kinase 3	CMG C	SRPK		Q9UPE 1
Wnk1	Wnk1	WNK1	Serine/threonine-protein kinase WNK1	Other	WNK		Q9H4 A3
CDKL3	CDKL3	CDKL3	Cyclin-dependent kinase-like 3	CMG C	CDKL		Q8IV W4
PAK5	PAK5	PAK7	Serine/threonine-protein kinase PAK 7	STE	STE20	PAKB	Q9P28 6
PKN3	PKN3	PKN3	Serine/threonine-protein kinase N3	AGC	PKN		Q6P5Z 2
QIK	QIK	SIK2	Serine/threonine-protein kinase SIK2	CAM K	CAMKL	QIK	Q9H0 K1

MARK4	MARK4	MARK4	MAP/microtubule affinity-regulating kinase 4	CAMK	CAMKL	MARK	Q96L34
SgK496	SgK496	DSTYK	Dual serine/threonine and tyrosine protein kinase	Other	Dusty		Q6XUX3
RSKL1	RSKL1	RPS6KC1	Ribosomal protein S6 kinase delta-1	AGC	RSKL		Q96S38
RSK4	RSK4	RPS6KA6	Ribosomal protein S6 kinase alpha-6	AGC	RSK	RSKp90	Q9UK32
NRBP2	NRBP2	NRBP2	Nuclear receptor-binding protein 2	Other	NRBP		Q9NSY0
SgK071	SgK071	STKLD1	Protein kinase-like protein SgK071	Other	SgK071		Q8NE28
SGK2	SGK2	SGK2	Serine/threonine-protein kinase Sgk2	AGC	SGK		Q9HBY8
SSTK	SSTK	TSSK6	Testis-specific serine/threonine-protein kinase 6	CAMK	TSSK		Q9BXA6
SGK3	SGK3	SGK3	Serine/threonine-protein kinase Sgk3	AGC	SGK		Q96BR1
TTBK1	TTBK1	TTBK1	Tau-tubulin kinase 1	CK1	TTBK		Q5TCY1
DCAMKL2	DCAMKL2	DCLK2	Serine/threonine-protein kinase DCLK2	CAMK	DCAMKL		Q8N568
Slob	Slob	PXK	PX domain-containing protein kinase-like protein	Other	Slob		Q7Z7A4
PBK	PBK	PBK	Lymphokine-activated killer T-cell-originated protein kinase	Other	TOPK		Q96KB5
SuRTK106	SuRTK106	STYK1	Tyrosine-protein kinase STYK1	TK	TK-Unique		Q6J9G0
TBK1	TBK1	TBK1	Serine/threonine-protein kinase TBK1	Other	IKK		Q9UHD2
TESK2	TESK2	TESK2	Dual-specificity testis-specific protein kinase 2	TKL	LISK	TESK	Q96S53
Trad	Trad	KALRN	HCG2039851	CAMK	Trio		O60229
TSSK4	TSSK4	TSSK4	Testis-specific serine/threonine-protein kinase 4	CAMK	TSSK		Q6SA08
VRK3	VRK3	VRK3	Inactive serine/threonine-protein kinase VRK3	CK1	VRK		Q8IV63
caMLCK	caMLCK	MYLK3	Myosin light chain kinase 3	CAMK	MLCK		Q32MK0

SPEG	SPEG	SPEG	Striated muscle preferentially expressed protein kinase	CAMK	Trio		Q15772
CK1a2	CK1a2	CSNK1A1L	Casein kinase I isoform alpha-like	CK1	CK1		Q8N752
ANKRD3	ANKRD3	RIPK4	Receptor-interacting serine/threonine-protein kinase 4	TKL	RIPK		P57078
NEK5	NEK5	NEK5	Serine/threonine-protein kinase Nek5	Other	NEK		Q6P3R8
CaMK1d	CaMK1d	CAMK1D	Calcium/calmodulin-dependent protein kinase type 1D	CAMK	CAMK1		Q8IU85
MAP3K19	MAP3K8	MAP3K19	Mitogen-activated protein kinase kinase kinase 19	STE	STE11		Q56UN5
NEK11	NEK11	NEK11	Serine/threonine-protein kinase Nek11	Other	NEK		Q8NG66
GPRK7	GPRK7	GRK7	G protein-coupled receptor kinase 7	AGC	GRK	GRK	Q8WTQ7
SgK069	SgK069	SBK2	Serine/threonine-protein kinase SBK2	Other	NKF1		P0C263
HIPK4	HIPK4	HIPK4	Homeodomain-interacting protein kinase 4	CMGC	DYRK	HIPK	Q8NE63
MYO3B	MYO3B	MYO3B	Myosin-IIIb	STE	STE20	NinaC	Q8WXR4
Wnk4	Wnk4	WNK4	Serine/threonine-protein kinase WNK4	Other	WNK		Q96J92
SgK110	SgK110	SBK3	Putative uncharacterized serine/threonine-protein kinase SgK110	Other	NKF1		P0C264
BRSK1	BRSK1	BRSK1	Serine/threonine-protein kinase BRSK1	CAMK	CAMKL	BRSK	Q8TDC3
Obscn	Obscn	OBSCN	Obscurin	CAMK	Trio		Q5VST9
PSKH2	PSKH2	PSKH2	Serine/threonine-protein kinase H2	CAMK	PSK		Q96QS6
SIK	SIK	SIK1	Serine/threonine-protein kinase SIK1	CAMK	CAMKL	QIK	P57059
KSR2	KSR2	KSR2	Kinase suppressor of Ras 2	TKL	RAF		Q6VAB6
RIOK3	RIOK3	RIOK3	Serine/threonine-protein kinase RIO3	Atypical	RIO	RIO3	O14730
ADCK3	ADCK3	ADCK3	Chaperone activity of bc1 complex-like	Atypical	ABC1	ABC1-A	Q8NI60

RIOK1	RIOK1	RIOK1	Serine/threonine-protein kinase RIO1	Atypical	RIO	RIO1	Q9BRS2
YANK1	YANK1	STK32A	Serine/threonine-protein kinase 32A	AGC	YANK		Q8WU08
SNRK	SNRK	SNRK	SNF-related serine/threonine-protein kinase	CAMK	CAMKL	SNRK	Q9NRH2
EphA10	EphA10	EPHA10	Ephrin type-A receptor 10	TK	Eph		Q5JZY3
SgK196	SgK196	POMK	Protein kinase-like protein SgK196	Other	Other-Unique		Q9H5K3
MYO3A	MYO3A	MYO3A	Myosin-IIIa	STE	STE20	NinaC	Q8NEV4
Wnk3	Wnk3	WNK3	Serine/threonine-protein kinase WNK3	Other	WNK		Q9BYP7
SgK223	SgK223		Tyrosine-protein kinase SgK223	Other	NKF3		Q86YV5
NEK10	NEK10	NEK10	Serine/threonine-protein kinase Nek10	Other	NEK		Q6ZWH5
EphA6	EphA6	EPHA6	Ephrin type-A receptor 6	TK	Eph		Q9UF33
CK1g1	CK1g1	CSNK1G1	Casein kinase I isoform gamma-1	CK1	CK1		Q9HCP0
SgK269	SgK269	PEAK1	Pseudopodium-enriched atypical kinase 1	Other	NKF3		Q9H792
SBK	SBK	SBK1	Serine/threonine-protein kinase SBK1	Other	NKF1		Q52WX2
SgK396	SgK396	STK31	Serine/threonine-protein kinase 31	Other	Other-Unique		Q9BXU1
SgK288	SgK288	ANKK1	Ankyrin repeat and protein kinase domain-containing protein 1	TKL	RIPK		Q8NFD2
KIS	KIS	UHMK1	Serine/threonine-protein kinase Kist	Other	KIS		Q8TAS1
CaMK1b	CaMK1b	PNCK	Calcium/calmodulin-dependent protein kinase type 1B	CAMK	CAMK1		Q6P2M8
TBCK	TBCK	TBCK	TBC domain-containing protein kinase-like protein	Other	TBCK		Q8TEA7
SMG1	SMG1	SMG1	Serine/threonine-protein kinase SMG1	Atypical	PIKK	SMG1	Q96Q15
skMLCK	skMLCK	MYLK2	Myosin light chain kinase 2	CAMK	MLCK		Q9H1R3
MAP3K7	MAP3K7	MAP3K15	Mitogen-activated protein kinase kinase 15	STE	STE11		Q6ZN16

LRRK2	LRRK2	LRRK2	Leucine-rich repeat serine/threonine-protein kinase 2	TKL	LRRK		Q5S007
MLK4	MLK4		Mitogen-activated protein kinase kinase kinase MLK4	TKL	MLK	MLK	Q5TCX8
Haspin	Haspin	GSG2	Serine/threonine-protein kinase haspin	Other	Haspin		Q8TF76
Trb3	Trb3	TRIB3	Tribbles homolog 3	CAMK	Trbl		Q96RU7
CRIK	CRIK	CIT	Citron Rho-interacting kinase	AGC	DMPK		O14578
CaMKK1	CaMKK1	CAMKK1	Calcium/calmodulin-dependent protein kinase kinase 1	Other	CAMK	CAMK	Q8N5S9
LRRK1	LRRK1	LRRK1	Leucine-rich repeat serine/threonine-protein kinase 1	TKL	LRRK		Q38SD2
SgK307	SgK307	TEX14	Inactive serine/threonine-protein kinase TEX14	Other	NKF5		Q8IW B6
MAST4	MAST4	MAST4	Microtubule-associated serine/threonine-protein kinase 4	AGC	MAST		O15021
CaMK2d	CaMK2d	CAMK2D	Calcium/calmodulin-dependent protein kinase type II subunit delta	CAMK	CAMK2		Q13557
BIKE	BIKE	BMP2K	BMP-2-inducible protein kinase	Other	NAK		Q9NS Y1
TSSK1	TSSK1	TSSK1B	Testis-specific serine/threonine-protein kinase 1	CAMK	TSSK		Q9BX A7
SgK424	SgK424	TEX14	Inactive serine/threonine-protein kinase TEX14	Other	NKF5		Q8IW B6
SgK085	SgK085	MYLK4	Myosin light chain kinase family member 4	CAMK	MLCK		Q86Y V6
ADCK2	ADCK2	ADCK2	Uncharacterized aarF domain-containing protein kinase 2	Atypical	ABC1	ABC1-C	Q7Z695
DAPK3	DAPK3	DAPK3	Death-associated protein kinase 3	CAMK	DAPK		O43293
Wee1B	Wee1B	WEE2	Wee1-like protein kinase 2	Other	WEE		P0C1S8
RNAseL	RNAseL	RNASEL	2-5A-dependent ribonuclease	Other	Other-Unique		Q05823
ChaK2	ChaK2	TRPM6	Transient receptor potential cation	Atypical	Alpha	ChaK	Q9BX84

			channel subfamily M member 6					
RIOK2	RIOK2	RIOK2	Serine/threonine-protein kinase RIO2	Atypical	RIO	RIO2		Q9BVS4
AlphaK2	AlphaK2	ALPK2	Alpha-protein kinase 2	Atypical	Alpha			Q86TB3
AlphaK3	AlphaK3	ALPK1	Alpha-protein kinase 1	Atypical	Alpha			Q96QP1
BRD2	BRD2	BRD2	Bromodomain-containing protein 2	Atypical	BRD			P25440
BRD3	BRD3	BRD3	Bromodomain-containing protein 3	Atypical	BRD			Q15059
BRD4	BRD4	BRD4	BRD4 protein	Atypical	BRD			O60885
BRDT	BRDT	BRDT	Bromodomain testis-specific protein	Atypical	BRD			Q58F21
AlphaK1	AlphaK1	ALPK3	Alpha-protein kinase 3	Atypical	Alpha			Q96L96
ADCK5	ADCK5	ADCK5	Uncharacterized aarF domain-containing protein kinase 5	Atypical	ABC1	ABC1-D		Q3MI X3
TIF1a	TIF1a	TRIM24	Transcription intermediary factor 1-alpha	Atypical	TIF1			O15164
TIF1b	TIF1b	TRIM28	Transcription intermediary factor 1-beta	Atypical	TIF1			Q13263
TIF1g	TIF1g	TRIM33	E3 ubiquitin-protein ligase TRIM33	Atypical	TIF1			Q9UP N9
JAK1_b	Domain2_JAK1	JAK1	Tyrosine-protein kinase JAK1	TK	JakB			P23458
JAK2_b	Domain2_JAK2	JAK2	Tyrosine-protein kinase JAK2	TK	JakB			O60674
JAK3_b	Domain2_JAK3	JAK3	Tyrosine-protein kinase JAK3	TK	JakB			P52333
MSK1_b	Domain2_MSK1	RPS6KA5	Ribosomal protein S6 kinase alpha-5	CAMK	RSKb	MSKb		O75582
MSK2_b	Domain2_MSK2	RPS6KA4	Ribosomal protein S6 kinase alpha-4	CAMK	RSKb	MSKb		O75676
RSK3_b	Domain2_RSK1	RPS6KA2	Ribosomal protein S6 kinase alpha-2	CAMK	RSKb	RSKb		Q15349
RSK2_b	Domain2_RSK2	RPS6KA3	Ribosomal protein S6 kinase alpha-3	CAMK	RSKb	RSKb		P51812
RSK1_b	Domain2_RSK3	RPS6KA1	Ribosomal protein S6 kinase alpha-1	CAMK	RSKb	RSKb		Q15418
TYK2_b	Domain2_TYK2	TYK2	Non-receptor tyrosine-protein kinase TYK2	TK	JakB			P29597
GCN2_b	Domain2_GCN2	EIF2AK4	Eukaryotic translation initiation factor 2-alpha kinase 4	STE	STE-Unique			Q9P2K8

RSK4_b	Domain2_R SK4	RPS6KA 6	Ribosomal protein S6 kinase alpha-6 Striated muscle	CAM K	RSKb	RSKb	Q9UK 32
SPEG_b	Domain2_S PEG	SPEG	preferentially expressed protein kinase	CAM K	Trio		Q1577 2
Obscn_b	Domain2_O bscn	OBSCN	Obscurin	CAM K	Trio		Q5VST 9
PAN3	PAN3	PAN3	PAB-dependent poly(A)-specific ribonuclease subunit 3	Other	PAN3		Q58A4 5
FASTK	FASTK	FASTK	Fas-activated serine/threonine kinase	Atypi cal	FAST		Q1429 6
G11	G11	STK19	Serine/threonine- protein kinase 19	Atypi cal	G11		P49842
TAF1	TAF1	TAF1	Transcription initiation factor TFIID subunit 1	Atypi cal	TAF1		P21675
TAF1L	TAF1L	TAF1L	Transcription initiation factor TFIID subunit 1-like	Atypi cal	TAF1		Q8IZX 4
BCR	BCR	BCR	Breakpoint cluster region protein	Atypi cal	BCR		P11274
ABR	ABR	ABR	Active breakpoint cluster region-related protein	Atypi cal	BCR		Q1297 9
TIF1D	TIF1D	TRIM66	Tripartite motif- containing protein 66	Atypi cal	TIF1		B5MCJ 9
GTF2F1	GTF2F1		nan	Atypi cal	GTF2F1		Q6IBK 5
Col4A3B P	Col4A3BP	COL4A3 BP	Collagen type IV alpha-3-binding protein	Atypi cal	Col4A3 BP		Q9Y5P 4
BLVRA	BLVRA	BLVRA	Biliverdin reductase A	Atypi cal	BLVRA		P53004
BAZ1A	BAZ1A	BAZ1A	Bromodomain adjacent to zinc finger domain protein 1A	Atypi cal	BAZ		Q9NR L2
BAZ1B	BAZ1B	BAZ1B	Tyrosine-protein kinase BAZ1B	Atypi cal	BAZ		Q9UIG 0