



WT KINASE ASSAYS LIST

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
ABL1	ABL1	ABL proto-oncogene 1, non-receptor tyrosine kinase	c-ABL, JTK7, p150	TK
AKT1	AKT1	AKT serine/threonine kinase 1	AKT, PKB, PRKBA, RAC	AGC
AKT2	AKT2	AKT serine/threonine kinase 2	-	AGC
AKT3	AKT3	AKT serine/threonine kinase 3	PKBG, PRKBG, "protein kinase B, gamma", RAC-gamma	AGC
ALK	ALK	ALK receptor tyrosine kinase	CD246, Anaplastic lymphoma kinase	TK
ALK2	ACVR1	activin A receptor type 1	ACVR1A, ALK2, SKR1, ACVRLK2	TKL
ALK4	ACVR1B	activin A receptor type 1B	ActRIB, ALK4, SKR2, ACVRLK4	TKL
ALK5	TGFBR1	transforming growth factor beta receptor 1	"activin A receptor type II-like kinase, 53kDa", ACVRLK4, ESS1, MSSE	TKL
ALK6	BMPR1B	bone morphogenetic protein receptor type 1B	CDw293	TKL
AMPK: A1B1G1	PRKAA1	protein kinase AMP-activated catalytic subunit alpha 1	"AMPK, alpha, 1", AMPKa1	CAMK
AMPK: A2B1G1	PRKAA2	protein kinase AMP-activated catalytic subunit alpha 2	AMPK, AMPKa2	CAMK
AMPK: A1B2G1	PRKAA1	protein kinase AMP-activated catalytic subunit alpha 1	"AMPK, alpha, 1", AMPKa1	CAMK
AMPK: A2B2G1	PRKAA2	protein kinase AMP-activated catalytic subunit alpha 2	AMPK, AMPKa2	CAMK
ARG	ABL2	ABL proto-oncogene 2, non-receptor tyrosine kinase	"Abelson-related gene", ABLL	TK
ARK5	NUAK1	NUAK family kinase 1	"AMP-activated protein kinase family member 5", KIAA0537	CAMK



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNONYMS	FAMILY
ASK1	MAP3K5	mitogen-activated protein kinase kinase kinase 5	"apoptosis signal regulating kinase 1", MAPKKK5, MEKK5	STE
ASK2	MAP3K6	mitogen-activated protein kinase kinase kinase 6	"apoptosis signal regulating kinase 2", MAPKKK6, MEKK6	STE
ATM	ATM	ATM serine/threonine kinase	ATA, "ataxia telangiectasia mutated", ATC, ATD, ATDC, TEL1	Lipid
ATR	ATR	ATR serine/threonine kinase	FRP1, MEC1, "MEC1, mitosis entry checkpoint 1, homolog (S. cerevisiae)", SCKL, SCKL1	Lipid
AURORA-A	AURKA	aurora kinase A	AIK, ARK1, AurA, BTAK, PPP1R47, "protein phosphatase 1, regulatory subunit 47", STK7, STK15, STK6	Other
AURORA-B	AURKB	aurora kinase B	Aik2, AIM-1, ARK2, AurB, "aurora-1", IPL1, PPP1R48, "protein phosphatase 1, regulatory subunit 48", STK5, STK12	Other
AURORA-C	AURKC	aurora kinase C	ARK3, AurC, STK13	Other
AXL	AXL	AXL receptor tyrosine kinase	"UFO JTK11 Tyro7 ARK"	TK
BLK	BLK	BLK proto-oncogene, Src family tyrosine kinase	MGC10442	TK
BMPR2	BMPR2	bone morphogenetic protein receptor type 2	"BRK-3 T-ALK BMPR3 BMPR-II"	TKL
BMX	BMX	BMX non-receptor tyrosine kinase	"BTK-like on X chromosome", ETK, PSCTK3	TK
BRAF	BRAF	B-Raf proto-oncogene, serine/threonine kinase	BRAF1	TKL
BRK	PTK6	protein tyrosine kinase 6	BRK	TK
BRSK1	BRSK1	BR serine/threonine kinase 1	KIAA1811	CAMK



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
BRSK2	BRSK2	BR serine/threonine kinase 2	PEN11B, "serine/threonine kinase 29", C11orf7, STK29	CAMK
BTK	BTK	Bruton tyrosine kinase	ATK, PSCTK1, XLA, AGMX1, IMD1	TK
CAMK1a	CAMK1	calcium/calmodulin dependent protein kinase I	CaMKI	CAMK
CAMK1B	PNCK	calcium/calmodulin dependent protein kinase I	MGC45419, CaMK1b	CAMK
CAMK1D	CAMK1D	calcium/calmodulin dependent protein kinase ID	CKLiK	CAMK
CAMK2A	CAMK2A	calcium/calmodulin dependent protein kinase II alpha	CAMKA, "CaMK-II alpha subunit", CaMKIINalpha, KIAA0968	CAMK
CAMK2B	CAMK2B	calcium/calmodulin dependent protein kinase II beta	CAMKB, "CaM kinase II beta subunit", CAM2, CAMK2, "proline rich calmodulin-dependent protein kinase"	CAMK
CAMK2D	CAMK2D	calcium/calmodulin dependent protein kinase II delta	CAMKD	CAMK
CAMK2G	CAMK2G	calcium/calmodulin dependent protein kinase II gamma	CAMKG	CAMK
CAMK4	CAMK4	calcium/calmodulin dependent protein kinase IV	"calcium/calmodulin-dependent protein kinase type IV catalytic chain", "CAM kinase IV", CaMK-GR	CAMK
CAMKK1	CAMKK1	calcium/calmodulin dependent protein kinase kinase 1	"DKFZp761Mo423 CAMKKA MGC34095"	Other
CDK1-CLNB	CDK1	cyclin dependent kinase 1	CDC28A, CDC2	CMGC
CDK2-CLNA	CDK2	cyclin dependent kinase 2	-	CMGC
CDK2-CLNE	CDK2	cyclin dependent kinase 2	-	CMGC
CDK3-CLNE1	CDK3	cyclin dependent kinase 3	-	CMGC
CDK4-CLND1	CDK4	cyclin dependent kinase 4	PSK-J3	CMGC
CDK5-p25	CDK5	cyclin dependent kinase 5	PSSALRE	CMGC
CDK5-p35	CDK5	cyclin dependent kinase 5	PSSALRE	CMGC



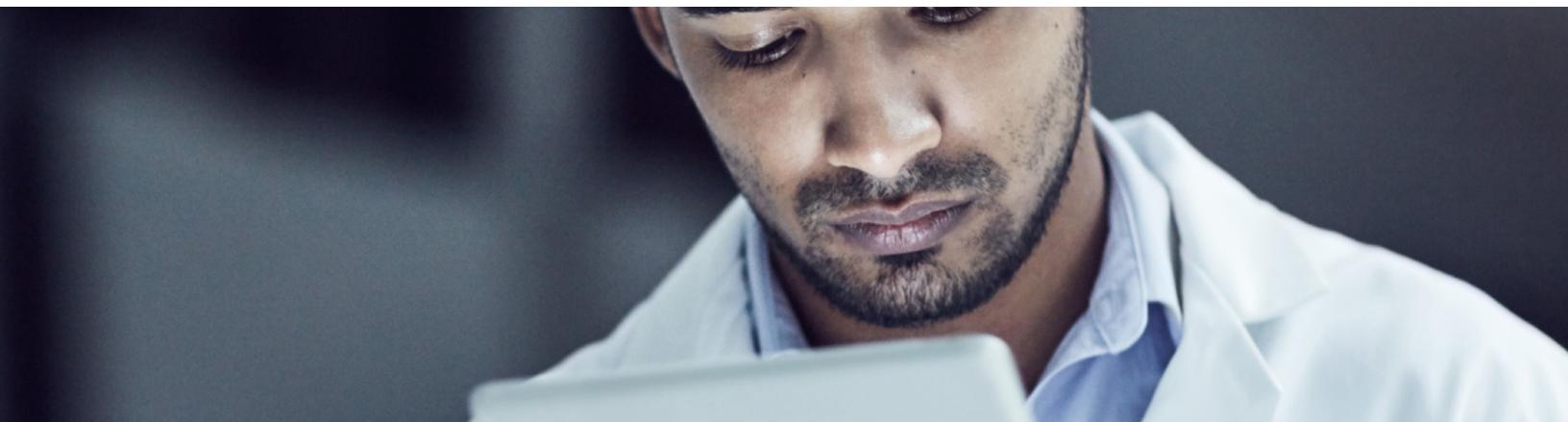
WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
CDK6-CLND3	CDK6	cyclin dependent kinase 6	PLSTIRE	CMGC
CDK7-CLNH-MAT1	CDK7	cyclin dependent kinase 7	CAK, CAK1, CDKN7, MO15, STK1	CMGC
CDK9-CLNT1	CDK9	cyclin dependent kinase 9	C-2k, PITALRE, TAK, CDC2L4	CMGC
CDK12-CLNK				
CHEK1	CHEK1	checkpoint kinase 1	CHK1	CAMK
CHEK2	CHEK2	checkpoint kinase 2	bA444G7, CDS1, CHK2, HuCds1, PP1425, RAD53	CAMK
CK1-ALPHA1	CSNK1A1	casein kinase 1 alpha 1	CK1, CK1a, CK1alpha, CK1a, CK1alpha, "clock regulator kinase"	CK1
CK1-DELTA	CSNK1D	casein kinase 1 delta	CK1D, CK1delta, HCK1D	CK1
CK1-EPSILON	CSNK1E	casein kinase 1 epsilon	CK1E, CK1epsilon, HCK1E	CK1
CK1-GAMMA1	CSNK1G1	casein kinase 1 gamma 1	CK1gamma1	CK1
CK1-GAMMA2	CSNK1G2	casein kinase 1 gamma 2	CK1g2	CK1
CK1-GAMMA3	CSNK1G3	casein kinase 1 gamma 3	-	CK1
CK2	CSNK2A1	casein kinase 2 alpha 1	Cka1, Cka2	Other
CK2A2	CSNK2A2	casein kinase 2 alpha 2	CK2alpha, CSNK2A1	Other
CLK1	CLK1	CDC like kinase 1	-	CMGC
CLK2	CLK2	CDC like kinase 2	clk2	CMGC
CLK3	CLK3	CDC like kinase 3	clk3	CMGC
CLK4	CLK4	CDC like kinase 4	-	CMGC
COT	MAP3K8	mitogen-activated protein kinase kinase kinase 8	c-COT, EST, MEKK8, Tpl-2, ESTF	STE
CRAF	RAF1	Raf-1 proto-oncogene, serine/threonine kinase	c-Raf, "C-Raf proto-oncogene, serine/threonine kinase", CRAF, Raf-1	TKL
CRIK	CIT	citron rho-interacting serine/threonine kinase	CITK, CRIK, KIAA0949, "serine/threonine kinase 21", STK21	AGC



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
CSK	CSK	C-terminal Src kinase	-	TK
DAPK1	DAPK1	death associated protein kinase 1	DAPK, ROCO3	CAMK
DAPK3	DAPK3	death associated protein kinase 3	ZIP, ZIPK	CAMK
DCAMKL1	DCLK1	doublecortin like kinase 1	DCDC3A, DCLK, KIAA0369	CAMK
DCAMKL2	DCLK2	doublecortin like kinase 2	DCDC3, DCDC3B, DCK2, MGC45428	CAMK
DDR1	DDR1	discoidin domain receptor tyrosine kinase 1	CD167, RTK6, CAK, EDDR1, NEP, NTRK4, PTK3A	TK
DDR2	DDR2	discoidin domain receptor tyrosine kinase 2	TKT, NTRK3, TYRO10	TK
DGKa	DGKA	diacylglycerol kinase alpha	DGK-alpha, DAGK, DAGK1	Lipid
DGKb	DGKB	diacylglycerol kinase beta	"KIAA0718 DGK DGK-BETA"	Lipid
DGKz	DGKZ	diacylglycerol kinase zeta	"DAGK5, hDGKzeta, DGK-ZETA, DAGK6"	Lipid
DNA-PK	PRKDC	protein kinase, DNA-activated, catalytic polypeptide	"DNA-dependent protein kinase", DNA-PKcs, DNAPK, DNPK1, p350, XRCC7, HYRC, HYRC1	Lipid
DRAK1/STK17A	STK17A	serine/threonine kinase 17a	DRAK1	CAMK
DRAK2	STK17B	serine/threonine kinase 17b	DRAK2	CAMK
DYRK1A	DYRK1A	dual specificity tyrosine phosphorylation regulated kinase 1A	DYRK, DYRK1, MNBH	CMGC
DYRK1B	DYRK1B	dual specificity tyrosine phosphorylation regulated kinase 1B	"minibrain-related kinase", MIRK	CMGC
DYRK2	DYRK2	dual specificity tyrosine phosphorylation regulated kinase 2	-	CMGC



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
DYRK3	DYRK3	dual specificity tyrosine phosphorylation regulated kinase 3	"dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 5", hYAK3-2, "protein kinase Dyrk3", RED, REDK, "regulatory erythroid kinase"	CMGC
DYRK4	DYRK4	dual specificity tyrosine phosphorylation regulated kinase 4	-	CMGC
EGFR	EGFR	epidermal growth factor receptor	"erb-b2 receptor tyrosine kinase 1", ERBB1, "erythroblastic leukemia viral (v-erb-b) oncogene homolog (avian)", ERBB	TK
EIF2AK1	HRI	eukaryotic translation initiation factor 2 alpha kinase 1	"heme regulated initiation factor 2 alpha kinase", HRI, KIAA1369	Other
EIF2AK2	PKR	eukaryotic translation initiation factor 2 alpha kinase 2	EIF2AK1, PKR, PPP1R83, "protein phosphatase 1, regulatory subunit 83", PRKR	Other
EIF2AK4 (GCN2)	EIF2AK4	eukaryotic translation initiation factor 2 alpha kinase 4	"GCN2, KIAA1338"	Other
EPH-A1	EPHA1	EPH receptor A1	EPH, EPHT, EPHT1	TK
EPH-A2	EPHA2	EPH receptor A2	ECK	TK
EPH-A3	EPHA3	EPH receptor A3	HEK, HEK4, ETK, ETK1, TYRO4	TK
EPH-A4	EPHA4	EPH receptor A4	Hek8, TYRO1	TK
EPH-A5	EPHA5	EPH receptor A5	CEK7, EHK1, Hek7, TYRO4	TK
EPH-A6	EPHA6	EPH receptor A6	FLJ35246	TK
EPH-A7	EPHA7	EPH receptor A7	Hek11	TK
EPH-A8	EPHA8	EPH receptor A8	Hek3, EEK	TK
EPH-B1	EPHB1	EPH receptor B1	Hek6, EPHT2	TK
EPH-B2	EPHB2	EPH receptor B2	Hek5, Tyro5, DRT, EPHT3, ERK	TK
EPH-B3	EPHB3	EPH receptor B3	Hek2, Tyro6, ETK2	TK
EPH-B4	EPHB4	EPH receptor B4	Tyro11, HTK	TK



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNONYMS	FAMILY
ERBB2-HER2	ERBB2	erb-b2 receptor tyrosine kinase 2	CD340, HER-2, HER2, NGL, "human epidermal growth factor receptor 2", NEU, "neuro/glioblastoma derived oncogene homolog"	TK
ERBB4-HER4	ERBB4	erb-b2 receptor tyrosine kinase 4	ALS19, HER4, "human epidermal growth factor receptor 4"	TK
ERK5	MAPK7	mitogen-activated protein kinase 7	BMK1, "BMK1 kinase", ERK5, "extracellular-signal-regulated kinase 5", PRKM7	CMGC
FAK	PTK2	protein tyrosine kinase 2	FADK, FAK, FAK1, PPP1R71, "protein phosphatase 1, regulatory subunit 71"	TK
FER	FER	FER tyrosine kinase	"phosphoprotein NCP94", PPP1R74, "protein phosphatase 1, regulatory subunit 74", TYK3	TK
FES	FES	FES proto-oncogene, tyrosine kinase	"c-fes/fps protein", FPS, "Oncogene FES, feline sarcoma virus"	TK
FGFR1	FGFR1	fibroblast growth factor receptor 1	BFGFR, CD331, CEK, FLG, H2, H3, H4, H5, N-SAM, FLT2, KAL2 "Pfeiffer syndrome"	TK
FGFR2	FGFR2	fibroblast growth factor receptor 2	CD332, CEK3, "Crouzon syndrome", ECT1, K-SAM, "Pfeiffer syndrome", TK14, TK25, BEK, CFD, KGFR	TK
FGFR3	FGFR3	fibroblast growth factor receptor 3	CD333, CEK2, JTK4, ACH	TK
FGFR4	FGFR4	fibroblast growth factor receptor 4	CD334, JTK2	TK
FGR	FGR	FGR proto-oncogene, Src family tyrosine kinase	c-fgr, p55c-fgr, SRC2	TK
FLT1	FLT1	fms related tyrosine kinase 1	"vascular endothelial growth factor receptor 1", "vascular permeability factor receptor", VEGFR1, FLT	TK
FLT3	FLT3	fms related tyrosine kinase 3	CD135, FLK2, STK1	TK
FLT4	FLT4	fms related tyrosine kinase 4	PCL, VEGFR3	TK
FMS	CSF1R	colony stimulating factor 1 receptor	C-FMS, CD115, CSFR	TK



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNONYMS	FAMILY
FRAP1	MTOR	mechanistic target of rapamycin kinase	"FKBP12-rapamycin complex-associated protein 1", FLJ44809, "mammalian target of rapamycin", RAPT1, "rapamycin and FKBP12 target 1", "rapamycin associated protein FRAP2", RAPT1, FRAP, FRAP1, FRAP2	Lipid
FYN	FYN	FYN proto-oncogene, Src family tyrosine kinase	MGC45350, SLK, SYN	TK
GCK	MAP4K2	mitogen-activated protein kinase kinase kinase 2	BL44, RAB8IP	STE
GAK	GAK	cyclin G associated kinase	DNAJC26	Other
GRK3	GRK3	G protein-coupled receptor kinase 3	BARK2, ADRBK2	AGC
GRK5	GRK5	G protein-coupled receptor kinase 5	GPRK5	AGC
GRK6	GRK6	G protein-coupled receptor kinase 6	GPRK6	AGC
GRK7	GRK7	G protein-coupled receptor kinase 7	GPRK7	AGC
GSK3-ALPHA	GSK3A	glycogen synthase kinase 3 alpha	-	CMGC
GSK3-BETA	GSK3B	glycogen synthase kinase 3 beta	-	CMGC
HASPIN	GSG2	histone H3 associated protein kinase	"germ cell associated 2 (haspin)", GSG2	Other
HCK	HCK	HCK proto-oncogene, Src family tyrosine kinase	JTK9, "hemopoietic cell kinase"	TK
HGK	MAP4K4	mitogen-activated protein kinase kinase kinase kinase 4	FLH21957, "hepatocyte progenitor kinase-like/germinal center kinase-like kinase", "HPK/GCK-like kinase", NIK	STE
HIPK1	HIPK1	homeodomain interacting protein kinase 1	KIAA0630, MGC26642, MGC33446, MGC33548, Myak, Nbak2	CMGC
HIPK2	HIPK2	homeodomain interacting protein kinase 2	-	CMGC
HIPK3	HIPK3	homeodomain interacting protein kinase 3	DYRK6, FIST3, PKY, YAK1	CMGC
HIPK4	HIPK4	homeodomain interacting protein kinase 4	FLJ32818	CMGC
HPK1	MAP4K1	mitogen-activated protein kinase kinase kinase kinase 1	"hematopoietic progenitor kinase 1"	STE



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
ICK	CILK1	ciliogenesis associated kinase 1	"MRK LCK2 KIAAo936 MGC46090"	CMGC
IGF1R	IGF1R	insulin like growth factor 1 receptor	CD221, IGFIR, IGFR, JTK13, MGC18216	TK
IKK-ALPHA	CHUK	conserved helix-loop-helix ubiquitous kinase	"I-kappa-B kinase", IkBKA, IKK-alpha, IKK1, IKKA, "inhibitor of nuclear factor kappa-B kinase subunit alpha", NFKBIKA, TCF16	Other
IKK-BETA	IKBKB	inhibitor of nuclear factor kappa B kinase subunit beta	IKK-beta, IKK2, IKKB, NFKBIKB	Other
IKK-EPSILON	IKBKE	inhibitor of nuclear factor kappa B kinase subunit epsilon	IKK-i, IKKE, KIAAo151	Other
INSR	INSR	insulin receptor	CD220	TK
IRAK1	IRAK1	interleukin 1 receptor associated kinase 1	IRAK, pelle	TKL
IRAK4	IRAK4	interleukin 1 receptor associated kinase 4	NY-REN-64	TKL
IRE1	ERN1	endoplasmic reticulum to nucleus signaling 1	"IRE1 IRE1P"	Other
IRR	INSRR	insulin receptor related receptor	IRR	TK
ITK	ITK	IL2 inducible T-cell kinase	EMT, LYK, PSCTK2	TK
JAK1	JAK1	Janus kinase 1	JAK1A, JTK3, JAK1B	TK
JAK2	JAK2	Janus kinase 2	JTK10	TK
JAK3	JAK3	Janus kinase 3	JAK-3, JAK3_HUMAN, JAKL, L-JAK, "leukocyte Janus kinase", LJAK, "tyrosine-protein kinase JAK3"	TK
JNK1	MAPK8	mitogen-activated protein kinase 8	JNK, "JUN N-terminal kinase", SAPK1, PRKM8	CMGC
JNK2	MAPK9	mitogen-activated protein kinase 9	"Jun kinase", p54a, SAPK, PRKM9	CMGC
JNK3	MAPK10	mitogen-activated protein kinase 10	p493F12, p54bSAPK, PRKM10	CMGC



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
KDR	KDR	kinase insert domain receptor	CD309, "fetal liver kinase 1", FLK1, "vascular endothelial growth factor receptor 2", VEGFR, VEGFR2	TK
KIT	KIT	KIT proto-oncogene receptor tyrosine kinase	C-Kit, CD117, SCFR, PBT	TK
LATS1	LATS1	large tumor suppressor kinase 1	WARTS	AGC
LATS2	LATS2	large tumor suppressor kinase 2	-	AGC
LCK	LCK	LCK proto-oncogene, Src family tyrosine kinase	-	TK
LIMK1	LIMK1	LIM domain kinase 1	LIMK	TKL
LKB1	STK11	serine/threonine kinase 11	PJS, "polarization-related protein LKB1"	CAMK
LOK	STK10	serine/threonine kinase 10	LOK, "lymphocyte-oriented kinase", PRO2729	STE
LRRK2	LRRK2	leucine rich repeat kinase 2	DKFZp434H2111, FLJ45829, RIPK7, ROCO2, PARK8	TKL
LTK	LTK	leukocyte receptor tyrosine kinase	TYK1	TK
LYNA	LYN	LYN proto-oncogene, Src family tyrosine kinase	JTK8	TK
LYNB	LYN	LYN proto-oncogene, Src family tyrosine kinase	JTK8	TK
MAP2K5	MAP2K5	mitogen-activated protein kinase kinase 5	HsT17454, MAPKK5, MEK5, PRKM5	STE
MAP4K3	MAP4K3	mitogen-activated protein kinase kinase kinase kinase 3	GLK, MAPKKKK3, RAB8IPL1	STE
MAP4K5	MAP4K5	mitogen-activated protein kinase kinase kinase kinase 5	GCKR, "germinal center kinase-related", KHS, KHS1	STE
MAPK1	MAPK1	mitogen-activated protein kinase 1	ERK, ERK2, MAPK2, p41mapk, PRKM1, PRKM2	CMGC
MAPK3	MAPK3	mitogen-activated protein kinase 3	ERK1, p44erk1, p44mapk, PRKM3	CMGC
MAPKAPK2	MAPKAPK2	mitogen-activated protein kinase-activated protein kinase 2	-	CAMK



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
MAPKAPK3	MAPKAPK3	mitogen-activated protein kinase-activated protein kinase 3	3PK, MAPKAP3	CAMK
MARK1	MARK1	microtubule affinity regulating kinase 1	MARK, PAR-1C	CAMK
MARK3	MARK3	microtubule affinity regulating kinase 3	CTAK1, KP78, PAR-1A	CAMK
MARK4	MARK4	microtubule affinity regulating kinase 4	FLJ90097, KIAA1860, Nblao0650, PAR-1D	CAMK
MEK1	MAP2K1	mitogen-activated protein kinase kinase 1	MAPKK1, MEK1, PRKMK1	STE
MEK2	MAP2K2	mitogen-activated protein kinase kinase 2	PRKMK2	STE
MEK3	MAP2K3	mitogen-activated protein kinase kinase 3	"dual specificity mitogen activated protein kinase kinase 3", "MAPK/ERK kinase 3", MAPKK3, MKK3, PRKMK3	STE
MEKK3	MAP3K3	mitogen-activated protein kinase kinase kinase 3	"MAPK/ERK kinase kinase 3", MAPKKK3	STE
MELK	MELK	maternal embryonic leucine zipper kinase	KIAAo175	CAMK
MER	MERTK	MER proto-oncogene, tyrosine kinase	c-Eyk, RP38, Tyro12	TK
MET	MET	MET proto-oncogene, receptor tyrosine kinase	DFNB97, "hepatocyte growth factor receptor", HGFR, RCCP2	TK
MINK	MINK1	misshapen like kinase 1	B55, MAP4K6, "misshapen/NIK-related kinase", YSK2, ZC3	STE
MKNK1	MKNK1	MAP kinase interacting serine/threonine kinase 1	MNK1	CAMK
MKK4	Map2K4	mitogen-activated protein kinase kinase 4	SERK1, MEK4, JNKK1, PRKMK4, MKK4	STE
MKK7	Map2K7	mitogen-activated protein kinase kinase 7	MKK7, Jnkk2	STE
MLK1	MAP3K9	mitogen-activated protein kinase kinase kinase 9	MEKK9, PRKE1	TKL
MLK2	MAP3K10	mitogen-activated protein kinase kinase kinase 10	MEKK10, "mixed lineage kinase 2", "MKN28 derived nonreceptor_type serine/threonine kinase", MST	TKL
MLK3	MAP3K11	mitogen-activated protein kinase kinase kinase 11	MEKK11, SPRK, PTK1	TKL



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
MNK2	MKNK2	MAP kinase interacting serine/threonine kinase 2	"Putative map kinase interacting kinase", GPRK7	CAMK
MRCK-ALPHA	CDC42BPA	CDC42 binding protein kinase alpha	FLJ23347, KIAAo451, MRCK, MRCKA, "myotonic dystrophy kinase-related Cdc42-binding kinase", PK428	AGC
MRCK-BETA	CDC42BPB	CDC42 binding protein kinase beta	KIAA1124, MRCKB	AGC
MSK1	RPS6KA5	ribosomal protein S6 kinase A5	RLPK	AGC
MSK2	RPS6KA4	ribosomal protein S6 kinase A4	RSK-B	AGC
MSSK1	SRPK3	SRSF protein kinase 3	STK23	CMGC
MST1	STK4	serine/threonine kinase 4	"kinase responsive to stress 2", KRS2, "mammalian sterile 20-like 1", "yeast Ste20-like", YSK3	STE
MST2	STK3	serine/threonine kinase 3	KRS1	STE
MST3	STK24	serine/threonine kinase 24	MST3B, STE20, "sterile 20-like kinase 3", STK3	STE
MST4	STK26	serine/threonine kinase 26	MASK, "STE20-like kinase 4"	STE
MUSK	MUSK	muscle associated receptor tyrosine kinase	-	TK
MYLK2	MYLK2	skeletal muscle myosin light chain kinase	MYLK2,KMLC,MLCK,MLCK2,skMLCK	CAMK
MYO3A	MYO3A	myosin IIIA	DFNB30	STE
MYO3B	MYO3B	myosin IIIB	-	STE
NDR2	STK38L	serine/threonine kinase 38 like	KIAAo965, NDR2, "nuclear Dbf2-related 2"	AGC
NDRG1	NDRG1	N-myc downstream regulated 1	DRG1, NDR1, RTP, TDD5, CAP43	AGC
NEK1	NEK1	NIMA related kinase 1	KIAA1901, NY-REN-55	Other
NEK2	NEK2	NIMA related kinase 2	"HsPK 21", NEK2A, NLK1, PPP1R111, "protein phosphatase 1, regulatory subunit 111", RP67	Other



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
NEK3	NEK3	NIMA related kinase 3	"glycogen synthase A kinase", HSPK36, "hydroxyl-alkyl-protein kinase", MGC29949, "phosphorylase B kinase kinase", "serine/threonine-protein kinase NEK3"	Other
NEK4	NEK4	NIMA related kinase 4	NRK2, pp12301, STK2, "serine/threonine protein kinase-2"	Other
NEK5	NEK5	NIMA related kinase 5	NIMA (never in mitosis gene a)-related kinase 5	Other
NEK6	NEK6	NIMA related kinase 6	"putative serine-threonine protein kinase", SID6-1512	Other
NEK7	NEK7	NIMA related kinase 7	-	Other
NEK9	NEK9	NIMA related kinase 9	DKFZp434D0935, MGC16714, Nek8, NERCC	Other
NIK	MAP3K14	mitogen-activated protein kinase kinase kinase 14	serine/threonine protein-kinase, NIK, HSNIK, FTDCR1B, HS	STE
NUAK2	NUAK2	NUAK family kinase 2	FLJ90349, SNARK, "SNF1/AMP activated protein kinase"	CAMK
P38-ALPHA	MAPK14	mitogen-activated protein kinase 14	Mxi2, p38, "p38 MAP kinase", PRKM14, PRKM15, CSBP1, CSBP2	CMGC
P38-BETA	MAPK11	mitogen-activated protein kinase 11	p38-2, p38Beta, SAPK2, PRKM11	CMGC
P38-DELTA	MAPK13	mitogen-activated protein kinase 13	p38delta, SAPK4, PRKM13	CMGC
P38-GAMMA	MAPK12	mitogen-activated protein kinase 12	ERK6, p38gamma, PRKM12, SAPK3	CMGC
P70S6K1	RPS6KB1	ribosomal protein S6 kinase B1	p70(S6K)-alpha, PS6K, S6K1, STK14A	AGC
P70S6K2	RPS6KB2	ribosomal protein S6 kinase B2	KLS, P70-BETA, p70S6Kb, STK14B	AGC
PAK1	PAK1	p21 (RAC1) activated kinase 1	"STE20 homolog, yeast"	STE
PAK2	PAK2	p21 (RAC1) activated kinase 2	PAK65, PAKgamma, "S6/H4 kinase"	STE
PAK3	PAK3	p21 (RAC1) activated kinase 3	bPAK, hPAK3, MRX30, MRX47	STE
PAK4	PAK4	p21 (RAC1) activated kinase 4	-	STE



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
PAK5	PAK5	p21 (RAC1) activated kinase 5	KIAA1264, PAK7	STE
PAK6	PAK6	p21 (RAC1) activated kinase 6	PAK5	STE
PAR-1B-ALPHA	MARK2	microtubule affinity regulating kinase 2	"ELKL motif kinase 1", PAR-1, PAR-1B, Par1b, "Ser/Thr protein kinase PAR-1B", EMK1	CAMK
PASK	PASK	PAS domain containing serine/threonine kinase	KIAAo135, PASKIN, STK37	CAMK
PBK	PBK	PDZ binding kinase	"cancer/testis antigen 84", CT84, FLJ14385, Nori-3, SPK, "T-LAK cell-originated protein kinase", TOPK	Other
PDGFR-ALPHA	PDGFRA	platelet derived growth factor receptor alpha	CD140a, GAS9, PDGFR2	TK
PDGFR-BETA	PDGFRB	platelet derived growth factor receptor beta	CD140b, JTK12, PDGFR1	TK
PDK1	PDPK1	3-phosphoinositide dependent protein kinase 1	"P _k B kinase"	AGC
PERK	EIF2AK3	eukaryotic translation initiation factor 2 alpha kinase 3	PEK	Other
PHK-GAMMA1	PHKG1	phosphorylase kinase catalytic subunit gamma 1	PHKG	CAMK
PHK-GAMMA2	PHKG2	phosphorylase kinase catalytic subunit gamma 2	-	CAMK
PI ₃ K-ALPHA	PIK3CA	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha	PI ₃ K	Lipid
PI ₃ K-BETA	PIK3CB	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	PIK3C1	Lipid
PI ₃ K-DELTA	PIK3CD	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	p110D, "phosphatidylinositol 3-kinase, catalytic, delta polypeptide", "phosphoinositide-3-kinase C"	Lipid
PI ₃ K-GAMMA	PIK3CG	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	-	Lipid
PI4K-BETA	PI4KB	phosphatidylinositol 4-kinase beta	pi4K92, PIK4CB	Lipid



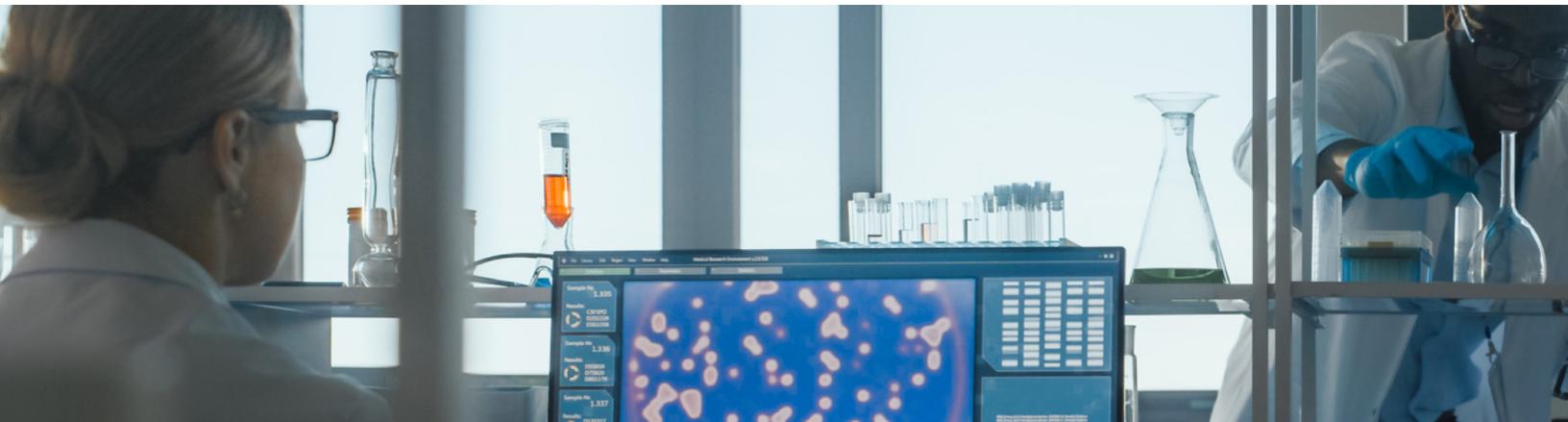
WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
PIKFYVE	PIKFYVE	phosphoinositide kinase, FYVE-type zinc finger containing	MGC40423, KIAA0981, PIKfyve, PIP5K, p235, ZFYVE29, FAB1	Lipid
PIM1	PIM1	Pim-1 proto-oncogene, serine/threonine kinase	PIM, "pim-1 oncogene"	CAMK
PIM2	PIM2	Pim-2 proto-oncogene, serine/threonine kinase	"pim-2 oncogene"	CAMK
PIM3	PIM3	Pim-3 proto-oncogene, serine/threonine kinase	"pim-3 oncogene"	CAMK
PIP4K2A	PIP4K2A	phosphatidylinositol-5-phosphate 4-kinase type 2 alpha	PIP5KIIA, PIP5KIIalpha	Lipid
PIP5K1A	PIP5K1A	phosphatidylinositol-4-phosphate 5-kinase type 1 alpha		Lipid
PKA	PRKACA	protein kinase cAMP-activated catalytic subunit alpha	PKACa	AGC
PKACB	PRKACB	protein kinase cAMP-activated catalytic subunit beta	PKACb	AGC
PKC-ALPHA	PRKCA	protein kinase C alpha	PKCA	AGC
PKC-BETA1	PRKCB	protein kinase C beta	PKCB, PRKCB1, PRKCB2 "protein kinase C, beta 1"	AGC
PKC-BETA2	PRKCB	protein kinase C beta	PKCB, PRKCB1, PRKCB2 "protein kinase C, beta 1"	AGC
PKC-DELTA	PRKCD	protein kinase C delta	-	AGC
PKC-EPSILON	PRKCE	protein kinase C epsilon	-	AGC
PKC-ETA	PRKCH	protein kinase C eta	PKCL, PRKCL	AGC
PKC-GAMMA	PRKCG	protein kinase C gamma	MGC57564, "PKC-gamma", PKCC, PKCG, SCA14	AGC
PKC-IOTA	PRKCI	protein kinase C iota	PKCI, DXS1179E	AGC
PKC-THETA	PRKCQ	protein kinase C theta	-	AGC
PKC-ZETA	PRKCZ	protein kinase C zeta	PKC2	AGC
PKN1	PKN1	protein kinase N1	DBK, MGC46204, PAK1, PKN, PRK1, PRKCL1	AGC



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNONYMS	FAMILY
PKN2	PKN2	protein kinase N2	"cardiolipin-activated protein kinase Pak2", Pak-2, PRK2, STK7, PRKCL2	AGC
PKN3	PKN3	protein kinase N3	"PKNbeta UTDP4-1"	AGC
PLK1	PLK1	polo like kinase 1	PLK, "polo-like kinase (Drosophila)"	Other
PLK2	PLK2	polo like kinase 2	"serum-inducible kinase", SNK	Other
PLK3	PLK3	polo like kinase 3	FNK, PRK, CNK	Other
PLK4	PLK4	polo like kinase 4	Sak, STK18	Other
PRAK	MAPKAPK5	mitogen-activated protein kinase-activated protein kinase 5	-	CAMK
PRKD1	PRKD1	protein kinase D1	PKC-mu, PKCM, PKD, PRKCM	CAMK
PRKD2	PRKD2	protein kinase D2	DKFZP586Eo820, HSPC187, PKD2	CAMK
PRKD3	PRKD3	protein kinase D3	EPK2, PRKCN	CAMK
PRKG1	PRKG1	protein kinase, cGMP-dependent, type I	PGK, PKG, PRKG1B, PRKGR1B	AGC
PRKG2	PRKG2	protein kinase, cGMP-dependent, type II	cGKII, PRKGR2	AGC
PRKX	PRKX	protein kinase, X-linked	PKX1	AGC
PTK5	FRK	fyn related Src family tyrosine kinase	GTK, RAK	TK
PYK2	PTK2B	protein tyrosine kinase 2 beta	CADTK, CAKB, PTK, RAFTK, FAK2	TK
QIK (SNF1LK2)	SIK2	salt inducible kinase 2	DKFZp434K1115, KIAA0781, LOH11CR1I, QIK, SNF1LK2	CAMK
RET	RET	ret proto-oncogene	"cadherin-related family member 16", CDHF12, CDHR16, PTC, "rearranged during transfection", "RET receptor tyrosine kinase", RET51, HSCR1, MEN2A, MEN2B, MTC1	TK
RIPK1	RIPK1	receptor interacting serine/threonine kinase 1	"RIP RIP1 RIP-1"	TKL



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNONYMS	FAMILY
RIPK2	RIPK2	receptor interacting serine/threonine kinase 2	CARD3, CARDIAK, RICK, RIP2	TKL
RIPK3	RIPK3	receptor interacting serine/threonine kinase 3	RIP3	TKL
ROCK1	ROCK1	Rho associated coiled-coil containing protein kinase 1	p160ROCK	AGC
ROCK2	ROCK2	Rho associated coiled-coil containing protein kinase 2	-	AGC
RON	MST1R	macrophage stimulating 1 receptor	"c-met-related tyrosine kinase", CD136, CDw136, PTK8, RON	TK
ROS	ROS1	ROS proto-oncogene 1, receptor tyrosine kinase	c-ros-1, MCF3, ROS	TK
RSK1	RPS6KA1	ribosomal protein S6 kinase A1	HU-1, p90Rsk, RSK, RSK1	AGC
RSK2	RPS6KA3	ribosomal protein S6 kinase A3	HU-3, RSK, RSK2, CLS, MRX19	AGC
RSK3	RPS6KA2	ribosomal protein S6 kinase A2	HU-2, RSK, RSK3	AGC
RSK4	RPS6KA6	ribosomal protein S6 kinase A6	RSK4	AGC
SGK1	SGK1	serum/glucocorticoid regulated kinase 1	SGK	AGC
SGK2	SGK2	serum/glucocorticoid regulated kinase 2	SGK2, serine/threonine kinase 2	AGC
SGK3	SGK3	serum/glucocorticoid regulated kinase family member 3	SGK2, SGKL	AGC
SLK	SLK	STE20 like kinase	KIAA0204, se20-9, STK2	STE
SNF1LK	SIK1	salt inducible kinase 1	msk, "myocardial SNF1-like kinase"	CAMK
SNF1LK2	SIK2, QIK	salt inducible kinase 2	DKFZp434K1115, KIAA0781, LOH11CR1I, QIK	CAMK
SPHK1	SPHK1	sphingosine kinase 1	SPHK	Lipid
SPHK2	SPHK2	sphingosine kinase 2	-	Lipid
SRC	SRC	SRC proto-oncogene, non-receptor tyrosine kinase	ASV, c-src, SRC1	TK
SRMS	SRMS	src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites	dJ697K14.1, PTK70, SRM, C20orf148	TK
SRPK1	SRPK1	SRSF protein kinase 1	"serine/arginine-rich splicing factor kinase 1", SFRSK1, "SR protein kinase 1"	CMGC



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
SRPK2	SRPK2	SRSF protein kinase 2	"serine/arginine-rich splicing factor kinase 2", SFRSK2, "SR protein kinase 2"	CMGC
SSTK	TSSK6	testis specific serine kinase 6	"SSTK FLJ24002 CT72"	CAMK
STK16	STK16	serine/threonine kinase 16	MPSK, PKL12	Other
STK25	STK25	serine/threonine kinase 25	SOK1, YSK1	STE
STK33	STK33	serine/threonine kinase 33	-	CAMK
SYK	SYK	spleen associated tyrosine kinase	-	TK
TAK1/TAB1	MAP3K7	mitogen-activated protein kinase kinase kinase 7	MEKK7, "TGF-beta activated kinase 1", TAK1	STE
TAOK2	TAOK2	TAO kinase 2	KIAAo881, MAP3K17, PSK, PSK1, TAO1, TAO2	STE
TAOK3	TAOK3	TAO kinase 3	DPK, JIK, MAP3K18	STE
TBK1	TBK1	TANK binding kinase 1	NAK	Other
TEC	TEC	tec protein tyrosine kinase	PSCTK4	TK
TESK1				
TIE2	TEK	TEK receptor tyrosine kinase	CD202b, TIE2, VMCM1, VMCM	TK
TLK1	TLK1	tousled like kinase 1	"KIAAo137 PKU-BETA"	Other
TNIK	TNIK	TRAF2 and NCK interacting kinase	KIAAo551	STE
TNK1	TNK1	tyrosine kinase non receptor 1	-	TK
TNK2	TNK2	tyrosine kinase non receptor 2	ACK, ACK1, "activated Cdc42-associated kinase 1", p21cdc42Hs	TK
TRKA	NTRK1	neurotrophic receptor tyrosine kinase 1	"high affinity nerve growth factor receptor", MTC, TRK, TRKA	TK
TRKB	NTRK2	neurotrophic receptor tyrosine kinase 2	TRKB	TK



WT KINASE ASSAYS LIST (CONTINUED)

ASSAY NAME	APPROVED NAME	LONG NAME	SYNOMYS	FAMILY
TRKC	NTRK3	neurotrophic receptor tyrosine kinase 3	TRKC	TK
TSSK1	TSSK1B	testis specific serine kinase 1B	FKSG81, SPOGA4, STK22D, TSSK1	CAMK
TSSK2	TSSK2	testis specific serine kinase 2	FLJ38613, SPOGA2, STK22B	CAMK
TSSK3	TSSK3	testis specific serine kinase 3	SPOGA3, STK22C	CAMK
TTBK1	TTBK1	tau tubulin kinase 1	TTBK1,BDTK,KIAA1855	CK1
TTBK2	TTBK2	tau tubulin kinase 2	TTBK2,SCA11,TTBK,KIAAo847	CK1
TTK	TTK	TTK protein kinase	"cancer/testis antigen 96", CT96, "monopolar spindle 1 kinase", MPH1, MPS1, MPS1L1	Other
TXK	TXK	TXK tyrosine kinase	BTKL, PSCTK5, RLK, TKL, PTK4	TK
TYK2	TYK2	tyrosine kinase 2	JTK1	TK
TYRO3	TYRO3	TYRO3 protein tyrosine kinase	Brt, Dtk, Etk-2, Rek, Sky, Tif, RSE	TK
ULK1	ULK1	unc-51 like autophagy activating kinase 1	ATG1, "ATG1 autophagy related 1 homolog (S. cerevisiae)", ATG1A	Other
ULK3	ULK3	unc-51 like kinase 3	DKFZP434C131, FLJ90566	Other
VPS34	PIK3C3	phosphatidylinositol 3-kinase catalytic subunit type 3	Vps34	Lipid
WEE1	WEE1	WEE1 G2 checkpoint kinase	WEE1A	Other
WNK1	WNK1	WNK lysine deficient protein kinase 1	WNK1,HSAN2,HSN2,KDP,PPP1R167, PRKWNK1,PSK,p65	Other
Yank2	STK32B	serine/threonine kinase 32B	-	AGC
YES	YES1	YES proto-oncogene 1, Src family tyrosine kinase	c-yes, HsT441, Yes	TK
ZAP70	ZAP70	zeta chain of T-cell receptor associated protein kinase 70	STD, "tyrosine-protein kinase ZAP-70", ZAP-70, SRK	TK

Making tomorrow safer than today