

Custom and Pre-Selected Kinase Profiling
to fit your Budget and Needs!

Kinase Profiling Book

As of April 12, 2024

128

Tyrosine
Kinases

197

Serine/Threonine
Kinases

27

Lipid
Kinases

Carna Biosciences, Inc.

Profiling Assays available from Carna Biosciences, Inc.

As of April 12, 2024

Page	Kinase Name	Assay Platform
5	ABL(ABL1)	MSA
5	ABL(ABL1)[E255K]	MSA
5	ABL(ABL1)[T315I]	MSA
5	ACK(TNK2)	MSA
5	AKT1	MSA
6	AKT2	MSA
6	AKT3	MSA
6	ALK	MSA
6	ALK[C1156Y]	MSA
6	ALK[F1174L]	MSA
7	ALK[G1202R]	MSA
7	ALK[G1269A]	MSA
7	ALK[L1196M]	MSA
7	ALK[R1275Q]	MSA
7	ALK[T1151_L1152insT]	MSA
8	EML4-ALK	MSA
8	NPM1-ALK	MSA
8	AMPKα1/B1/v1(PRKAA1/B1/G1)	MSA
8	AMPKα2/B1/v1(PRKAA2/B1/G1)	MSA
8	ARG(ABL2)	MSA
9	AurA(AURKA)	MSA
9	AurA(AURKA)/TPX2	MSA
9	AurB(AURKB)/INCENP	MSA
9	AurC(AURKC)	MSA
9	AXL	MSA
10	BLK	MSA
10	BMX	MSA
10	BRK(PTK6)	MSA
10	BRSK1	MSA
10	BRSK2	MSA
11	BTK	MSA
11	BTK[C481S]	MSA
11	BUB1/BUB3	MSA
11	CaMK1α(CAMK1)	MSA
11	CaMK1δ(CAMK1D)	MSA
12	CaMK2α(CAMK2A)	MSA
12	CaMK2β(CAMK2B)	MSA
12	CaMK2γ(CAMK2G)	MSA
12	CaMK2δ(CAMK2D)	MSA
12	CaMK4	MSA
13	CDC7/ASK	MSA
13	CDK1(CDC2)/CycB1	MSA
13	CDK2/CycA2	MSA
13	CDK2/CycE1	MSA
13	CDK3/CycE1	MSA
14	CDK4/CycD3	MSA
14	CDK5/p25	MSA
14	CDK6/CycD3	MSA
14	CDK7/CycH/MAT1	MSA
14	CDK9/CycT1	MSA
15	CGK2(PRKG2)	MSA
15	CHK1(CHEK1)	MSA
15	CHK2(CHEK2)	MSA
15	CK1α(CSNK1A1)	MSA
15	CK1γ1(CSNK1G1)	MSA
16	CK1γ2(CSNK1G2)	MSA
16	CK1γ3(CSNK1G3)	MSA
16	CK1δ(CSNK1D)	MSA
16	CK1ε(CSNK1E)	MSA
16	CK2α1/β(CSNK2A1/B)	MSA
17	CK2α2/β(CSNK2A2/B)	MSA
17	CLK1	MSA
17	CLK2	MSA
17	CLK3	MSA
17	CRIK(CIT)	MSA
18	CSK	MSA
18	DAPK1	MSA
18	DCAMKL2	MSA
18	DDR1	MSA
18	DDR2	MSA
19	DGKa(DGKA)	ADP-Glo
19	DGKβ(DGKB)	ADP-Glo
19	DGKγ(DGKG)	ADP-Glo
19	DGKδ(DGKD)	ADP-Glo
19	DGKε(DGKE)	ADP-Glo
20	DGKζ(DGKZ)	ADP-Glo
20	DGKη(DGKH)	ADP-Glo
20	DGKθ(DGKQ)	ADP-Glo
20	DGKi(DGKI)	ADP-Glo
20	DGKk(DGKK)	ADP-Glo
21	DYRK1A	MSA
21	DYRK1B	MSA
21	DYRK2	MSA
21	DYRK3	MSA
21	EEF2K	MSA

Page	Kinase Name	Assay Platform
22	EGFR	MSA
22	EGFR[C797S/L858R]	MSA
22	EGFR[d746-750]	MSA
22	EGFR[d746-750/C797S]	MSA
22	EGFR[d746-750/T790M]	MSA
23	EGFR[d746-750/T790M/C797S]	MSA
23	EGFR[D770_N771insNPG]	MSA
23	EGFR[L858R]	MSA
23	EGFR[L861Q]	MSA
23	EGFR[T790M]	MSA
24	EGFR[T790M/C797S/L858R]	MSA
24	EGFR[T790M/L858R]	MSA
24	EPHA1	MSA
24	EPHA2	MSA
24	EPHA3	MSA
25	EPHA4	MSA
25	EPHA5	MSA
25	EPHA6	MSA
25	EPHA7	MSA
25	EPHA8	MSA
26	EPHB1	MSA
26	EPHB2	MSA
26	EPHB3	MSA
26	EPHB4	MSA
26	Erk1(MAPK3)	MSA
27	Erk2(MAPK1)	MSA
27	Erk5(MAPK7)	MSA
27	FAK(PTK2)	MSA
27	FER	MSA
27	FES	MSA
28	FGFR1	MSA
28	FGFR1[V561M]	MSA
28	FGFR2	MSA
28	FGFR2[V564I]	MSA
28	FGFR3	MSA
29	FGFR3[K650E]	MSA
29	FGFR3[K650M]	MSA
29	FGFR3[V555L]	MSA
29	FGFR3[V555M]	MSA
29	FGFR4	MSA
30	FGFR4[N535K]	MSA
30	FGFR4[V550E]	MSA
30	FGFR4[V550L]	MSA
30	FGR	MSA
30	FLT1	MSA
30	FLT3	MSA
31	FLT4	MSA
31	FLT4	MSA
31	FMS(CSF1R)	MSA
31	FRK	MSA
31	FYN[isoform a]	MSA
32	FYN[isoform b]	MSA
32	GSK3α(GSK3A)	MSA
32	GSK3β(GSK3B)	MSA
32	Haspin(GSG2)	MSA
32	HCK	MSA
33	HER2(ERBB2)	MSA
33	HER4(ERBB4)	MSA
33	HGK(MAP4K4)	MSA
33	HIPK1	MSA
33	HIPK2	MSA
34	HIPK3	MSA
34	HIPK4	MSA
34	HPK1(MAP4K1)	MSA
34	IGF1R	MSA
34	IKKα(CHUK)	IMAP
35	IKKβ(IKBKB)	MSA
35	IKKε(IKBKE)	MSA
35	INSR	MSA
35	IRAK1	IMAP
35	IRAK4	MSA
36	IRR(INSRR)	MSA
36	ITK	MSA
36	JAK1	MSA
36	JAK2	MSA
36	JAK3	MSA
37	JNK1(MAPK8)	MSA
37	JNK2(MAPK9)	MSA
37	JNK3(MAPK10)	MSA
37	KDR	MSA
37	KIT	MSA
38	KIT[D816E]	MSA
38	KIT[D816V]	MSA
38	KIT[D816Y]	MSA
38	KIT[T670I]	MSA
38	KIT[V560G]	MSA

Page	Kinase Name	Assay Platform
39	KIT[V654A]	MSA
39	LATS1/MOBKL1A	MSA
39	LATS2/MOBKL1A	MSA
39	LCK	MSA
39	LOK(STK10)	MSA
40	LTK	MSA
40	LYNa	MSA
40	LYNb	MSA
40	MAP4K2	MSA
40	MAPKAPK2	MSA
41	MAPKAPK3	MSA
41	MAPKAPK5	MSA
41	MARK1	MSA
41	MARK2	MSA
41	MARK3	MSA
42	MARK4	MSA
42	MELK	MSA
42	MER(MERTK)	MSA
42	MET	MSA
42	MET[D1228H]	MSA
43	MET[M1250T]	MSA
43	MET[Y1235D]	MSA
43	MINK(MINK1)	MSA
43	MNK1(MKNK1)	MSA
43	MNK2(MKNK2)	MSA
44	MRCKα(CDC42BPA)	MSA
44	MRCKβ(CDC42BPA)	MSA
44	MSK1(RPS6KA5)	MSA
44	MSK2(RPS6KA4)	MSA
44	MSSK1(STK23)	MSA
45	MST1(STK4)	MSA
45	MST2(STK3)	MSA
45	MST3(STK24)	MSA
45	MST4	MSA
45	MUSK	MSA
46	NDR1(STK38)	MSA
46	NDR2(STK38L)	MSA
46	NEK1	MSA
46	NEK2	MSA
46	NEK4	MSA
47	NEK6	MSA
47	NEK7	MSA
47	NEK9	MSA
47	NIM1K(MGC42105)	MSA
47	NuaK1	MSA
48	NuaK2	MSA
48	p38α(MAPK14)	MSA
48	p38β(MAPK11)	MSA
48	p38γ(MAPK12)	MSA
48	p38δ(MAPK13)	MSA
49	p70S6K(RPS6KB1)	MSA
49	p70S6KB(RPS6KB2)	MSA
49	PAK1	MSA
49	PAK2	MSA
49	PAK4	MSA
50	PAK5(PAK7)	MSA
50	PAK6	MSA
50	PASK	MSA
50	PBK	MSA
50	PDGFRα(PDGFR)	MSA
51	PDGFRα(PDGFR)[D842V]	MSA
51	PDGFRα(PDGFR)[T674I]	MSA
51	PDGFRα(PDGFR)[V561D]	MSA
51	PDGFRβ(PDGFRB)	MSA
51	PDHK2(PDK2)	MSA
52	PDHK4(PDK4)	MSA
52	PK1(PDPK1)	MSA
52	PEK(EIF2AK3)	IMAP
52	PGK(PRKG1)	MSA
52	PHKG1	MSA
53	PHKG2	MSA
53	PIK3CA/PIK3R1	ADP-Glo
53	PIK3CA[E542K]/PIK3R1	ADP-Glo
53	PIK3CA[E545K]/PIK3R1	ADP-Glo
53	PIK3CA[H1047R]/PIK3R1	ADP-Glo
54	PIK3CA[P539R]/PIK3R1	ADP-Glo
54	PIK3CA[R88Q]/PIK3R1	ADP-Glo
54	PIK3CB/PIK3R1	ADP-Glo
54	PIK3CD/PIK3R1	ADP-Glo
54	PIKFYVE(PIP5K3)	ADP-Glo
55	PIM1	MSA
55	PIM2	MSA
55	PIM3	MSA
55	PIP4K2A	ADP-Glo
55	PIP4K2B	ADP-Glo
56	PIP5K1A	ADP-Glo
56	PIP5K1B	ADP-Glo
56	PIP5K1C	ADP-Glo
56	PIP5K1L	ADP-Glo
56	PKAcα(PRKACA)	MSA

Page	Kinase Name	Assay Platform
57	PKAcβ(PRKACB)	MSA
57	PKAcγ(PRKACG)	MSA
57	PKCα(PRKCA)	MSA
57	PKCβ1(PRKCB1)	MSA
57	PKCβ2(PRKCB2)	MSA
58	PKCγ(PRKCG)	MSA
58	PKCδ(PRKCD)	MSA
58	PKCε(PRKCE)	MSA
58	PKCζ(PRKCZ)	MSA
58	PKCη(PRKCH)	MSA
59	PKCθ(PRKCO)	MSA
59	PKCι(PRKCI)	MSA
59	PKD1(PRKD1)	MSA
59	PKD2(PRKD2)	MSA
59	PKD3(PRKD3)	MSA
60	PKN1	IMAP
60	PKR(EIF2AK2)	IMAP
60	PLK1	MSA
60	PLK2	IMAP
60	PLK3	MSA
61	PRIX	MSA
61	PYK2(PTK2B)	MSA
61	QIK(SNF1LK2)	MSA
61	RET	MSA
61	RET[G691S]	MSA
62	RET[M918T]	MSA
62	RET[S891A]	MSA
62	RETY791F1	MSA
62	ROCK1	MSA
62	ROCK2	MSA
63	RON(MST1R)	MSA
63	ROS(ROS1)	MSA
63	RSK1(RPS6KA1)	MSA
63	RSK2(RPS6KA3)	MSA
63	RSK3(RPS6KA2)	MSA
64	RSK4(RPS6KA6)	MSA
64	SGK	MSA
64	SGK2	MSA
64	SGK3(SGKL)	MSA
64	SIK(SNF1LK)	MSA
65	skMLCK(MYLK2)	MSA
65	SLK	MSA
65	SPHK1	ADP-Glo
65	SPHK2	ADP-Glo
65	SRC	MSA
66	SRM(SRMS)	MSA
66	SRPK1	IMAP
66	SRPK2	MSA
66	SYK	MSA
66	TAK1-TAB1(MAP3K7)	MSA
67	TAOK2	MSA
67	TBK1	MSA
67	TEC	MSA
67	TIE2(TEK)	MSA
67	TNIK	MSA
68	TNK1	MSA
68	TRKA(NTRK1)	MSA
68	TRKB(NTRK2)	MSA
68	TRKC(NTRK3)	MSA
68	TSSK1	MSA
69	TSSK2	MSA
69	TSSK3	MSA
69	TXK	MSA
69	TYK2	MSA
69	TYRO3	MSA
70	WNK1	MSA
70	WNK2	MSA
70	WNK3	MSA
70	YES(YES1)	MSA
70	YES(YES1)[T348I]	MSA
71	ZAP70	MSA

<< Cascade Assay >>

Page	Kinase Name	Assay Platform
72	BRAF	MSA
72	BRAF[V600E]	MSA
72	COT(MAP3K8)	MSA
72	DLK(MAP3K12)	MSA
72	MAP2K1	MSA
73	MAP2K2	MSA
73	MAP2K3	MSA
73	MAP2K4	MSA
73	MAP2K5	MSA
73	MAP2K6	MSA
74	MAP2K7	MSA
74	MAP3K1	MSA
74	MAP3K2	MSA
74	MAP3K3	MSA
74	MAP3K4	MSA
75	MAP3K5	MSA
75	MLK1(MAP3K9)	MSA
75	MLK2(MAP3K10)	MSA
75	MLK3(MAP3K11)	MSA
75	MOS	MSA
76	RAF1	MSA

- The Kinase Company -

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ABL(ABL1)

Product code: 08-001

Full-length human ABL [2-1130(end) amino acids of accession number NP_005148.2] was expressed as N-terminal His-tagged protein (126 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : ABLtide
 ATP (μ M) Km app / Bin : 16 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 75
 IC50 at 1 mM ATP (nM) : 1300

ABL(ABL1)[E255K]

Product code: 08-094

Full-length human ABL [2-1130(end) amino acids and E255K of accession number NP_005148.2] was expressed as N-terminal His-tagged protein (126 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : ABLtide
 ATP (μ M) Km app / Bin : 17 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 140
 IC50 at 1 mM ATP (nM) : 4500

ABL(ABL1)[T315I]

Product code: 08-093

Full-length human ABL [2-1130(end) amino acids and T315I of accession number NP_005148.2] was expressed as N-terminal His-tagged protein (126 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : ABLtide
 ATP (μ M) Km app / Bin : 4 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 6.4
 IC50 at 1 mM ATP (nM) : 890

ACK(TNK2)

Product code: 08-196

Human ACK, catalytic domain [110-476 amino acids of accession number NP_005772.3] was expressed as N-terminal GST-fusion protein (69 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : WASP peptide
 ATP (μ M) Km app / Bin : 97 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.2
 IC50 at 1 mM ATP (nM) : 3.8

AKT1

Product code: 01-101

Human AKT1, catalytic domain [104-480(end) amino acids and G478S of accession number NP_005154.2] was co-expressed as N-terminal GST-fusion protein (70 kDa) with His-tagged PDK1 [1-556(end) amino acids of accession number NP_002604.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Crosstide
 ATP (μ M) Km app / Bin : 31 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.7
 IC50 at 1 mM ATP (nM) : 22

AKT2

Product code: 01-102

Human AKT2, catalytic domain [120-481(end) amino acids of accession number NP_001617.1] was co-expressed as N-terminal GST-fusion protein (69 kDa) with His-tagged PDK1 [1-556(end) amino acids of accession number NP_002604.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Crosstide
 ATP (μ M) Km app / Bin : 110 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 5.2
 IC50 at 1 mM ATP (nM) : n.a.

AKT3

Product code: 01-103

Human AKT3, catalytic domain [108-479(end) amino acids of accession number NP_005456.1] was co-expressed as N-terminal GST-fusion protein (70 kDa) with His-tagged PDK1 [1-556(end) amino acids of accession number NP_002604.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Crosstide
 ATP (μ M) Km app / Bin : 54 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.2
 IC50 at 1 mM ATP (nM) : n.a.

ALK

Product code: 08-518

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srectide
 ATP (μ M) Km app / Bin : 57 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.5
 IC50 at 1 mM ATP (nM) : 15

ALK[C1156Y]

Product code: 08-530

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and C1156Y, I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srectide
 ATP (μ M) Km app / Bin : 64 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.9
 IC50 at 1 mM ATP (nM) : 11

ALK[F1174L]

Product code: 08-519

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and F1174L, I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srectide
 ATP (μ M) Km app / Bin : 49 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.4
 IC50 at 1 mM ATP (nM) : 21

ALK[G1202R]

Product code: 08-544

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and G1202R, I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 31 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 7.3
 IC50 at 1 mM ATP (nM) : 69

ALK[G1269A]

Product code: 08-537

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and G1269A, I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.36
 IC50 at 1 mM ATP (nM) : 1.6

ALK[L1196M]

Product code: 08-529

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and L1196M, I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 57 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.66
 IC50 at 1 mM ATP (nM) : 4.3

ALK[R1275Q]

Product code: 08-520

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and R1275Q, I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 84 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.3
 IC50 at 1 mM ATP (nM) : 16

ALK[T1151_L1152insT]

Product code: 08-539

Human ALK , cytoplasmic domain [1058-1620(end) amino acids and T1151_L1152insT, I1461V, K1491R, D1529E of accession number NP_004295.2] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 110 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 6.5
 IC50 at 1 mM ATP (nM) : 16

EML4-ALK

Product code: [08-516](#)

Fused gene of human fusion EML4-ALK [1-1059 amino acids of accession number BAF73611.1] was expressed as N-terminal GST-fusion protein (145 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 43 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.9
 IC50 at 1 mM ATP (nM) : 16

NPM1-ALK

Product code: [08-517](#)

Fused gene of human fusion NPM1-ALK [1-680 amino acids of accession number BAA08343.1] was expressed as N-terminal GST-fusion protein (103kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 57 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.4
 IC50 at 1 mM ATP (nM) : 14

AMPK α 1/ β 1/ γ 1(PRKAA1/B1/G1)

Product code: [02-113](#)

Full-length human AMPK α 1 [1-550(end) amino acids of accession number NP_006242.4] was co-expressed as N-terminal GST-fusion protein (90 kDa) with GST-PRKAB1 [1-270(end) amino acids of accession number NP_006244.2] and PRKAG1 [1-331(end) amino acids of accession number NP_002724.1] using baculovirus expression system. GST-AMPK α 1/ β 1/ γ 1 was purified by using glutathione sepharose chromatography and activated with His-tagged CaMKK1. Activated GST-AMPK α 1/ β 1/ γ 1 was purified by using glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : SAMS peptide
 ATP (μ M) Km app / Bin : 130 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.41
 IC50 at 1 mM ATP (nM) : 0.87

AMPK α 2/ β 1/ γ 1(PRKAA2/B1/G1)

Product code: [02-114](#)

Full-length human AMPK α 2 [1-552(end) amino acids of accession number NP_006243.2] was co-expressed as N-terminal GST-fusion protein (89 kDa) with GST-PRKAB1 [1-270(end) amino acids of accession number NP_006244.2] and PRKAG1 [1-331(end) amino acids of accession number NP_002724.1] using baculovirus expression system. GST-AMPK α 2/ β 1/ γ 1 was purified by using glutathione sepharose chromatography and activated with His-tagged CaMKK1. Activated GST-AMPK α 2/ β 1/ γ 1 was purified by using glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : SAMS peptide
 ATP (μ M) Km app / Bin : 100 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.79
 IC50 at 1 mM ATP (nM) : n.a.

ARG(ABL2)

Product code: [08-102](#)

Full-length human ARG [2-1161(end) amino acids of accession number NP_001161708.1] was expressed as N-terminal GST-fusion protein (153 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : ABLtide
 ATP (μ M) Km app / Bin : 24 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 27
 IC50 at 1 mM ATP (nM) : 400

AurA(AURKA)

Product code: [05-101](#)

Full-length human AurA [1-403(end) amino acids of accession number NP_940835.1] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Kemptide
ATP (μ M) Km app / Bin	: 27 / 25
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 1.8
IC50 at 1 mM ATP (nM)	: 17

AurA(AURKA)/TPX2

Product code: [05-101](#)

Full-length human AurA [1-403(end) amino acids of accession number NP_940835.1] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Kemptide
ATP (μ M) Km app / Bin	: 1.7 / 2
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 6.1
IC50 at 1 mM ATP (nM)	: n.a.

AurB(AURKB)/INCENP

Product code: [05-102](#)

Full-length human AurB [1-344(end) amino acids and M298T of accession number NP_004208.2] was co-expressed as N-terminal GST-fusion protein (66 kDa) with His-tagged INCENP(INBOX) [803-918(end) amino acids of accession number NP_001035784.1] using baculovirus expression system.

Assay platform	: MSA
Substrate	: Kemptide
ATP (μ M) Km app / Bin	: 16 / 25
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 7.1
IC50 at 1 mM ATP (nM)	: 62

AurC(AURKC)

Product code: [05-103](#)

Full-length human AurC [1-275(end) amino acids of accession number NP_003151.2] was expressed as N-terminal GST-fusion protein (59 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Kemptide
ATP (μ M) Km app / Bin	: 24 / 25
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 3.1
IC50 at 1 mM ATP (nM)	: 18

AXL

Product code: [08-107](#)

Human AXL, cytoplasmic domain [464-885(end) amino acids of accession number NP_001690.2] was expressed as N-terminal GST-fusion protein (74 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: CSKtide
ATP (μ M) Km app / Bin	: 32 / 50
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 1.1
IC50 at 1 mM ATP (nM)	: 7.9

BLK

Product code: 08-164

Full-length human BLK [1-505(end) amino acids of accession number NP_001706.2] was expressed as N-terminal GST-fusion protein (85 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 62 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.6
 IC50 at 1 mM ATP (nM) : 17

BMX

Product code: 08-179

Full-length human BMX [1-675(end) amino acids of accession number NP_001712.1] was expressed as N-terminal GST-fusion protein (105 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 75 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 10
 IC50 at 1 mM ATP (nM) : 45

BRK(PTK6)

Product code: 08-165

Full-length human BRK [2-451(end) amino acids of accession number NP_005966.1] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 250 / 250
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 260
 IC50 at 1 mM ATP (nM) : 390

BRSK1

Product code: 02-115

Full-length human BRSK1 [1-778(end) amino acids of accession number NP_115806.1] was expressed as N-terminal GST-fusion protein (112 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 30 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.27
 IC50 at 1 mM ATP (nM) : 0.57

BRSK2

Product code: 02-116

Full-length human BRSK2 [1-674(end) amino acids of accession number ABA17261.1] was expressed as N-terminal GST-fusion protein (102 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 31 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.31
 IC50 at 1 mM ATP (nM) : n.a.

BTK

Product code: 08-180

Full-length human BTK [2-659(end) amino acids of accession number NP_000052.1] was expressed as N-terminal GST-fusion protein (103 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 22 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 24
 IC50 at 1 mM ATP (nM) : 93

BTK[C481S]

Product code: 08-547

Full-length human BTK [2-659(end) amino acids and C481S of accession number NP_000052.1] was expressed as N-terminal GST-fusion protein (103 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 37
 IC50 at 1 mM ATP (nM) : 170

BUB1/BUB3

Product code: 05-187

Full-length human BUB1 [1-1085(end) amino acids of accession number NP_004327] was co-expressed as N-terminal GST-fusion protein (149 kDa) with DYKDDDDK tagged BUB3 [1-328 (end) amino acids of accession number NP_004716] using baculovirus expression system.

Assay platform : MSA
 Substrate : H2A peptide
 ATP (μ M) Km app / Bin : 2.9 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 300
 IC50 at 1 mM ATP (nM) : n.a.

CaMK1 α (CAMK1)

Product code: 02-104

Full-length human CaMK1 α [1-370(end) amino acids of accession number NP_003647.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 750 / 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 16
 IC50 at 1 mM ATP (nM) : 16

CaMK1 δ (CAMK1D)

Product code: 02-106

Full-length human CaMK1 δ [1-357(end) amino acid of accession number NP_065130.1] was expressed as N-terminal GST-fusion protein (67 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Synapsin peptide
 ATP (μ M) Km app / Bin : 11 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.5
 IC50 at 1 mM ATP (nM) : n.a.

CaMK2 α (CAMK2A)

Product code: [02-109](#)

Full-length human CaMK2 α [1-478(end) amino acids of accession number NP_741960.1] was expressed as N-terminal GST-fusion protein (81 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 33 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.75
 IC50 at 1 mM ATP (nM) : 3.2

CaMK2 β (CAMK2B)

Product code: [02-110](#)

Full-length human CaMK2 β [1-503 amino acids of accession number NP_742078.1] was expressed as N-terminal GST-fusion protein (83 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 19 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.54
 IC50 at 1 mM ATP (nM) : 5.8

CaMK2 γ (CAMK2G)

Product code: [02-112](#)

Full-length human CaMK2 γ [1-518(end) amino acids of accession number NP_751910.1] was expressed as N-terminal GST-fusion protein (85 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 23 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.39
 IC50 at 1 mM ATP (nM) : 1.1

CaMK2 δ (CAMK2D)

Product code: [02-111](#)

Full-length human CaMK2 δ [1-478 amino acids of accession number NP_742113.1] was expressed as N-terminal GST-fusion protein (81 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 6.3 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.26
 IC50 at 1 mM ATP (nM) : 0.64

CaMK4

Product code: [02-108](#)

Full-length human CaMK4 [1-473(end) amino acids of accession number NP_001735.1] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 20 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 140
 IC50 at 1 mM ATP (nM) : 1000

CDC7/ASK

Product code: [05-109](#)

Full-length human CDC7 [1-574(end) amino acids of accession number NP_003494.1] was co-expressed as N-terminal GST-fusion protein (92 kDa) with Dbf4(ASK) [1-674(end) amino acids of accession number NP_006707.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : MCM2 peptide
 ATP (μ M) Km app / Bin : 2.8 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 16
 IC50 at 1 mM ATP (nM) : 1600

CDK1(CDC2)/CycB1

Product code: [04-102](#)

Full-length human CDK1 [1-297(end) amino acids of accession number NP_001777.1] was co-expressed as N-terminal GST-fusion protein (61 kDa) with CyclinB1 [1-433(end) amino acids of accession number NP_114172.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Modified Histone H1
 ATP (μ M) Km app / Bin : 34 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.3
 IC50 at 1 mM ATP (nM) : 32

CDK2/CycA2

Product code: [04-103](#)

Full-length human CDK2 [1-298(end) amino acids of accession number NP_001789.2] was co-expressed as N-terminal GST-tagged protein (61 kDa) with GST-CyclinA2 [1-432(end) amino acids of accession number NP_001228.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Modified Histone H1
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 7.1

CDK2/CycE1

Product code: [04-165](#)

Full-length human CDK2 [1-298(end) amino acids of accession number NP_001789.2] was co-expressed as N-terminal GST-tagged protein (61 kDa) with CyclinE1 [1-410(end) amino acids of accession number NP_001229.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Modified Histone H1
 ATP (μ M) Km app / Bin : 130 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.8
 IC50 at 1 mM ATP (nM) : 10

CDK3/CycE1

Product code: [04-104](#)

Full-length human CDK3 [1-305(end) amino acids of accession number NP_001249.1] was co-expressed as N-terminal GST-fusion protein (62kDa) with CyclinE1 [1-410(end) amino acids of accession number NP_001229.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Modified Histone H1
 ATP (μ M) Km app / Bin : 1000 / 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.4
 IC50 at 1 mM ATP (nM) : 3.4

CDK4/CycD3

Product code: 04-105

Full-length human CDK4 [1-303(end) amino acids of accession number NP_000066.1] was co-expressed as N-terminal GST-fusion protein (61 kDa) with human GST-CyclinD3 [1-292(end) amino acids and S259A of accession number NP_001751.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 200 / 200
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 13
 IC50 at 1 mM ATP (nM) : 52

CDK5/p25

Product code: 04-106

Full-length human CDK5 [1-292(end) amino acids of accession number NP_004926.1] was co-expressed as N-terminal GST-fusion protein (60 kDa) with p25 [99-307(end) amino acids of accession number NP_003876.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Modified Histone H1
 ATP (μ M) Km app / Bin : 10 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.5
 IC50 at 1 mM ATP (nM) : 86

CDK6/CycD3

Product code: 04-107

Full-length human CDK6 [1-326(end) amino acids of accession number NP_001250.1] was co-expressed as N-terminal GST-fusion protein (64 kDa) with human GST-CyclinD3 [1-292(end) amino acids and S259A of accession number NP_001751.1] using baculovirus expression system. GST-CDK6/CycD3 was purified by using glutathione sepharose chromatography and activated with His-CDK7/CycH/MAT1. Activated GST-CDK6/CycD3 was purified using glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 330 / 300
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 58
 IC50 at 1 mM ATP (nM) : 110

CDK7/CycH/MAT1

Product code: 04-108

Full-length human CDK7 [1-346(end) amino acids of accession number NP_001790.1] was co-expressed as N-terminal GST-fusion protein (66 kDa) with CyclinH [1-323(end) amino acids of accession number NP_001230.1] and MAT1 [1-309(end) amino acids of accession number NP_002422.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : CTD3 peptide
 ATP (μ M) Km app / Bin : 32 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 17
 IC50 at 1 mM ATP (nM) : 120

CDK9/CycT1

Product code: 04-110

Full-length human CDK9 [1-372(end) amino acids of accession number NP_001252.1] was co-expressed as N-terminal GST-fusion protein (70 kDa) with His-CyclinT1 [1-726(end) amino acids of accession number NP_001231.2] using baculovirus expression system.

Assay platform : MSA
 Substrate : CDK9 substrate
 ATP (μ M) Km app / Bin : 9.4 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 5.2
 IC50 at 1 mM ATP (nM) : 130

CGK2(PRKG2)

Product code: 01-143

Full-length human CGK2 [1-762(end) amino acids of accession number NP_006250.1] was expressed as N-terminal GST-fusion protein (114 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Kemptide
 ATP (μ M) Km app / Bin : 24 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.88
 IC50 at 1 mM ATP (nM) : n.a.

CHK1(CHEK1)

Product code: 02-117

Full-length human CHK1 [1-476(end) amino acids and I471V of accession number NP_001265.2] was expressed as N-terminal GST-fusion protein (81 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 50 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.24
 IC50 at 1 mM ATP (nM) : 1.1

CHK2(CHEK2)

Product code: 02-162

Full-length human CHK2 [1-543(end) amino acids of accession number NP_009125.1] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 51 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 11
 IC50 at 1 mM ATP (nM) : 25

CK1 α (CSNK1A1)

Product code: 03-101

Full-length human CK1 α [1-337(end) amino acids of accession number NP_001883.4] was expressed as N-terminal GST-fusion protein (66 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CKtide
 ATP (μ M) Km app / Bin : 4.1 / 5
 Metal : Mg
 Reference compound : 5-Iodotubercidin
 IC50 at ATP Bin (nM) : 150
 IC50 at 1 mM ATP (nM) : >10000

CK1 γ 1(CSNK1G1)

Product code: 03-105

Full-length human CK1 γ 1 [1-422(end) amino acids of accession number NP_071331.2] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CKtide
 ATP (μ M) Km app / Bin : 6.3 / 5
 Metal : Mg
 Reference compound : 5-Iodotubercidin
 IC50 at ATP Bin (nM) : 1300
 IC50 at 1 mM ATP (nM) : n.a.

CK1 γ 2(CSNK1G2)

Product code: [03-106](#)

Full-length human CK1 γ 2 [1-415(end) amino acids of accession number NP_001310.3] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: CKtide
ATP (μ M) Km app / Bin	: 10 / 10
Metal	: Mg
Reference compound	: 5-Iodotubercidin
IC50 at ATP Bin (nM)	: 510
IC50 at 1 mM ATP (nM)	: n.a.

CK1 γ 3(CSNK1G3)

Product code: [03-107](#)

Full-length human CK1 γ 3 [1-447(end) amino acids of accession number NP_004375.2] was expressed as N-terminal GST-fusion protein (78 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: CKtide
ATP (μ M) Km app / Bin	: 3.2 / 5
Metal	: Mg
Reference compound	: 5-Iodotubercidin
IC50 at ATP Bin (nM)	: 920
IC50 at 1 mM ATP (nM)	: n.a.

CK1 δ (CSNK1D)

Product code: [03-103](#)

Human CK1 δ , catalytic domain [1-294 amino acids of accession number NP_001884.2] was expressed as N-terminal GST-fusion protein (61 kDa) using E. coli expression system.

Assay platform	: MSA
Substrate	: CKtide
ATP (μ M) Km app / Bin	: 7.7 / 10
Metal	: Mg
Reference compound	: 5-Iodotubercidin
IC50 at ATP Bin (nM)	: 25
IC50 at 1 mM ATP (nM)	: 570

CK1 ϵ (CSNK1E)

Product code: [03-104](#)

Human CK1 ϵ , catalytic domain [1-348 amino acids of accession number NP_001885.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: CKtide
ATP (μ M) Km app / Bin	: 16 / 25
Metal	: Mg
Reference compound	: 5-Iodotubercidin
IC50 at ATP Bin (nM)	: 300
IC50 at 1 mM ATP (nM)	: 5800

CK2 α 1/ β (CSNK2A1/B)

Product code: [05-184](#)

Full-length human CK2 α 1 [1-391(end) amino acids of accession number NP_001886.1] was co-expressed as N-terminal GST-fusion protein (72 kDa) with human His-tagged CK2 β [1-215 amino acids of accession number NP_001311.3] using baculovirus expression system.

Assay platform	: MSA
Substrate	: CK2tide
ATP (μ M) Km app / Bin	: 2.9 / 5
Metal	: Mg
Reference compound	: TBB
IC50 at ATP Bin (nM)	: 60
IC50 at 1 mM ATP (nM)	: 4800

CK2 α 2/ β (CSNK2A2/B)

Product code: [05-185](#)

Full-length human CK2 α 2 [1-350(end) amino acids of accession number NP_001887.1] was co-expressed as N-terminal GST-fusion protein (68 kDa) with human His-tagged CK2 β [1-215 amino acids of accession number NP_001311.3] using baculovirus expression system.

Assay platform : MSA
 Substrate : CK2tide
 ATP (μ M) Km app / Bin : 2.1 / 5
 Metal : Mg
 Reference compound : TBB
 IC50 at ATP Bin (nM) : 50
 IC50 at 1 mM ATP (nM) : n.a.

CLK1

Product code: [04-126](#)

Human CLK1, catalytic domain [129-484(end) amino acids of accession number NP_004062.2] was expressed as N-terminal GST-fusion protein (69 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 11 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 9.6
 IC50 at 1 mM ATP (nM) : 60

CLK2

Product code: [04-127](#)

Full-length human CLK2 [1-499(end) amino acids of accession number NP_001281267.1] was expressed as N-terminal GST-fusion protein (87 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 140 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 4.6
 IC50 at 1 mM ATP (nM) : 28

CLK3

Product code: [04-128](#)

Full-length human CLK3 [1-490(end) amino acids of accession number NP_003983.2] was expressed as N-terminal GST-fusion protein (86 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 75 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 820
 IC50 at 1 mM ATP (nM) : n.a.

CRIK(CIT)

Product code: [01-104](#)

Human citron kinase (CRIK), catalytic domain [1-449 amino acids of accession number NP_009105.1] was expressed as N-terminal GST fusion protein (77 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Histone H3 peptide
 ATP (μ M) Km app / Bin : 7.8 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 31
 IC50 at 1 mM ATP (nM) : n.a.

CSK

Product code: [08-111](#)

Full-length human CSK [1-450(end) amino acids of accession number NP_004374.1] was expressed as N-terminal GST-fusion protein (78 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 4.8 / 5
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 53
 IC50 at 1 mM ATP (nM) : 1500

DAPK1

Product code: [02-134](#)

Human DAPK1, catalytic domain [1-289 amino acids of accession number NP_004929.1] was expressed as N-terminal GST-fusion protein (60 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DAPK1tide
 ATP (μ M) Km app / Bin : 1.1 / 1
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.9
 IC50 at 1 mM ATP (nM) : 490

DCAMKL2

Product code: [02-140](#)

Full-length human DCAMKL2 [1-695(end) amino acids of accession number NP_689832.1] was expressed as N-terminal GST-fusion protein (103 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 120 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 22
 IC50 at 1 mM ATP (nM) : n.a.

DDR1

Product code: [08-113](#)

Human DDR1, cytoplasmic domain [444-876(end) amino acids of accession number NP_001945.3] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : IRS1
 ATP (μ M) Km app / Bin : 94 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 4.0
 IC50 at 1 mM ATP (nM) : 3.1

DDR2

Product code: [08-114](#)

Human DDR2, cytoplasmic domain [422-855(end) amino acids of accession number NP_006173.2] was expressed as N-terminal GST-fusion protein (77 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : IRS1
 ATP (μ M) Km app / Bin : 38 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.2
 IC50 at 1 mM ATP (nM) : 0.77

DGK α (DGKA)

Product code: [12-401-20N](#)

Full-length human DGK α [1-735(end) amino acids of accession number NP_958852.1] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (87 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : Diacylglycerol
 ATP (μ M) Km app / Bin : 130 / 100
 Metal : Mg
 Reference compound : Non-disclosable
 IC50 at ATP Bin (nM) : Non-disclosable
 IC50 at 1 mM ATP (nM) : n.a.

DGK β (DGKB)

Product code: [12-402-20N](#)

Full-length human DGK β [1-803(end) amino acids of accession number NP_001337638.1] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (95 kDa) using baculovirus expression system. The protein was purified by using DYKDDDDK tag antibody agarose and activated with ATP. Activated protein was purified by using gel filtration.

Assay platform : ADP-Glo
 Substrate : Diacylglycerol
 ATP (μ M) Km app / Bin : 61 / 50
 Metal : Mg
 Reference compound : Non-disclosable
 IC50 at ATP Bin (nM) : Non-disclosable
 IC50 at 1 mM ATP (nM) : n.a.

DGK γ (DGKG)

Product code: [12-403-20N](#)

Full-length human DGK γ [1-791(end) amino acids and T142S and R316K of accession number NP_001337.2] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (94 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : Diacylglycerol
 ATP (μ M) Km app / Bin : 55 / 50
 Metal : Mg
 Reference compound : Non-disclosable
 IC50 at ATP Bin (nM) : Non-disclosable
 IC50 at 1 mM ATP (nM) : n.a.

DGK δ (DGKD)

Product code: [12-404-20N](#)

Catalytic domain of human DGK δ [1-1141 amino acids of accession number NP_690618.2] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (131 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : Diacylglycerol
 ATP (μ M) Km app / Bin : 120 / 100
 Metal : Mg
 Reference compound : Non-disclosable
 IC50 at ATP Bin (nM) : Non-disclosable
 IC50 at 1 mM ATP (nM) : n.a.

DGK ϵ (DGKE)

Product code: [12-415-20N](#)

Truncated human DGK ϵ [48-567(end) amino acids of accession number NP_003638.1] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (63 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : Diacylglycerol
 ATP (μ M) Km app / Bin : 120 / 100
 Metal : Mg
 Reference compound : Non-disclosable
 IC50 at ATP Bin (nM) : Non-disclosable
 IC50 at 1 mM ATP (nM) : n.a.

DGKζ(DGKZ)

Product code: [12-410-20N](#)

Full-length human DGKζ [1-929(end) amino acids of accession number NP_003637.2] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (109 kDa) using baculovirus expression system.

Assay platform	: ADP-Glo
Substrate	: Diacylglycerol
ATP (μM) Km app / Bin	: 25 / 25
Metal	: Mg
Reference compound	: Non-disclosable
IC50 at ATP Bin (nM)	: Non-disclosable
IC50 at 1 mM ATP (nM)	: n.a.

DGKη(DGKH)

Product code: [12-406-20N](#)

Catalytic domain of human DGKη [1-1147 amino acids of accession number NP_821077.1] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (131 kDa) using baculovirus expression system.

Assay platform	: ADP-Glo
Substrate	: Diacylglycerol
ATP (μM) Km app / Bin	: 24 / 25
Metal	: Mg
Reference compound	: Non-disclosable
IC50 at ATP Bin (nM)	: Non-disclosable
IC50 at 1 mM ATP (nM)	: n.a.

DGKθ(DGKQ)

Product code: [12-409-20N](#)

Full-length human DGKθ [1-942(end) amino acids of accession number NP_001338.2] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (106 kDa) using baculovirus expression system.

Assay platform	: ADP-Glo
Substrate	: Diacylglycerol
ATP (μM) Km app / Bin	: 37 / 50
Metal	: Mg
Reference compound	: Non-disclosable
IC50 at ATP Bin (nM)	: Non-disclosable
IC50 at 1 mM ATP (nM)	: n.a.

DGKι(DGKI)

Product code: [12-407-20N](#)

Full-length human DGKι [1-1065(end) amino acids of accession number NP_004708.1] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (122 kDa) using baculovirus expression system.

Assay platform	: ADP-Glo
Substrate	: Diacylglycerol
ATP (μM) Km app / Bin	: 34 / 50
Metal	: Mg
Reference compound	: Non-disclosable
IC50 at ATP Bin (nM)	: Non-disclosable
IC50 at 1 mM ATP (nM)	: n.a.

DGKκ(DGKK)

Product code: [12-408-20N](#)

Full-length human DGKκ [1-1271(end) amino acids and D1118N of accession number NP_001013764.1] was expressed as N-terminal DYKDDDDK tagged, biotinylated protein (146 kDa) using baculovirus expression system.

Assay platform	: ADP-Glo
Substrate	: Diacylglycerol
ATP (μM) Km app / Bin	: 17 / 25
Metal	: Mg
Reference compound	: Non-disclosable
IC50 at ATP Bin (nM)	: Non-disclosable
IC50 at 1 mM ATP (nM)	: n.a.

DYRK1A

Product code: 04-130

Full-length human DYRK1A [1-763(end) amino acids of accession number NP_001387.2] was expressed as N-terminal GST-fusion protein (112 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 16 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 7.8
 IC50 at 1 mM ATP (nM) : 120

DYRK1B

Product code: 04-131

Full-length human DYRK1B [1-629(end) amino acids of accession number NP_004705.1] was expressed as N-terminal GST-fusion protein (96 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 59 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.2
 IC50 at 1 mM ATP (nM) : 32

DYRK2

Product code: 04-132

Full-length human DYRK2 [1-528(end) amino acids of accession number NP_003574.1] was expressed as N-terminal GST-fusion protein (87 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 7.7 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 130
 IC50 at 1 mM ATP (nM) : 6300

DYRK3

Product code: 04-133

Full-length human DYRK3 [1-588(end) amino acids of accession number NP_003573.2] was expressed as N-terminal GST-fusion protein (93 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 6.8 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 17
 IC50 at 1 mM ATP (nM) : 1200

EEF2K

Product code: 10-113

Full-length human EEF2K [1-725(end) amino acids of accession number NP_037434.1] was expressed as N-terminal GST-fusion protein (109 kDa) using E. coli expression system.

Assay platform : MSA
 Substrate : EEF2Ktide
 ATP (μ M) Km app / Bin : 12 / 10
 Metal : Mg
 Reference compound : A-484954
 IC50 at ATP Bin (nM) : 330
 IC50 at 1 mM ATP (nM) : n.a.

EGFR

Product code: [08-115](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 2.7 / 5
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 53
 IC50 at 1 mM ATP (nM) : 7700

EGFR[C797S/L858R]

Product code: [08-563](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids and C797S/L858R of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 4.1 / 5
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 8.8
 IC50 at 1 mM ATP (nM) : 270

EGFR[d746-750]

Product code: [08-527](#)

Human EGFR, cytoplasmic domain [669-745, 751-1210(end) amino acids of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 19 / 25
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 13
 IC50 at 1 mM ATP (nM) : 93

EGFR[d746-750/C797S]

Product code: [08-564](#)

Human EGFR, cytoplasmic domain [669-745, 751-1210(end) amino acids and C797S of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 8.2 / 10
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 8.0
 IC50 at 1 mM ATP (nM) : 130

EGFR[d746-750/T790M]

Product code: [08-528](#)

Human EGFR, cytoplasmic domain [669-745, 751-1210(end) amino acids and T790M of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 5.4 / 5
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.52
 IC50 at 1 mM ATP (nM) : 9.7

EGFR[d746-750/T790M/C797S]

Product code: [08-565](#)

Human EGFR, cytoplasmic domain [669-745, 751-1210(end) amino acids and T790M/C797S of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Src tide
 ATP (μ M) Km app / Bin : 1.8 / 2
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.84
 IC50 at 1 mM ATP (nM) : 14

EGFR[D770_N771insNPG]

Product code: [08-553](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids and D770_N771insNPG of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Src tide
 ATP (μ M) Km app / Bin : 2.3 / 5
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 18
 IC50 at 1 mM ATP (nM) : 930

EGFR[L858R]

Product code: [08-502](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids and L858R of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Src tide
 ATP (μ M) Km app / Bin : 9.8 / 10
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 11
 IC50 at 1 mM ATP (nM) : 360

EGFR[L861Q]

Product code: [08-513](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids and L861Q of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Src tide
 ATP (μ M) Km app / Bin : 7.5 / 10
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 68
 IC50 at 1 mM ATP (nM) : 2200

EGFR[T790M]

Product code: [08-194](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids and T790M of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Src tide
 ATP (μ M) Km app / Bin : 0.9 / 1
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.8
 IC50 at 1 mM ATP (nM) : 190

EGFR[T790M/C797S/L858R]

Product code: [08-559](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids and T790M/C797S/L858R of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 0.85 / n.a.
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : n.a.
 IC50 at 1 mM ATP (nM) : 37

EGFR[T790M/L858R]

Product code: [08-510](#)

Human EGFR, cytoplasmic domain [669-1210(end) amino acids and T790M/L858R of accession number NP_005219.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 1.9 / 2
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 56

EPHA1

Product code: [08-119](#)

Human EPHA1, cytoplasmic domain [586-976(end) amino acids of accession number NP_005223.3] was expressed as N-terminal GST-fusion protein (71 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 22 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 20
 IC50 at 1 mM ATP (nM) : 340

EPHA2

Product code: [08-121](#)

Human EPHA2, cytoplasmic domain [572-976(end) amino acids of accession number NP_004422.2] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 67 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 160
 IC50 at 1 mM ATP (nM) : 530

EPHA3

Product code: [08-122](#)

Human EPHA3, cytoplasmic domain [579-983(end) amino acids of accession number NP_005224.2] was expressed as N-terminal GST-fusion protein (72 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 170 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 37
 IC50 at 1 mM ATP (nM) : 76

EPHA4

Product code: [08-123](#)

Human EPHA4, cytoplasmic domain [586-986(end) amino acids of accession number NP_004429.1] was expressed as N-terminal GST-fusion protein (72 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 52 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 50
 IC50 at 1 mM ATP (nM) : 330

EPHA5

Product code: [08-124](#)

Human EPHA5, catalytic domain [662-948 amino acids of accession number NP_004430.3] was expressed as N-terminal GST-fusion protein (59 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 56 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 34
 IC50 at 1 mM ATP (nM) : 220

EPHA6

Product code: [08-125](#)

Human EPHA6, cytoplasmic domain [683-1130(end) amino acids of accession number NP_001073917.2] was expressed as N-terminal GST-fusion protein (77 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 17
 IC50 at 1 mM ATP (nM) : 60

EPHA7

Product code: [08-126](#)

Human EPHA7, cytoplasmic domain [595-998(end) amino acids of accession number NP_004431.1] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 58 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 48
 IC50 at 1 mM ATP (nM) : 480

EPHA8

Product code: [08-127](#)

Human EPHA8, catalytic domain [571-924 amino acids of accession number NP_065387.1] was expressed as N-terminal GST-fusion protein (67 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 69 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 61
 IC50 at 1 mM ATP (nM) : 240

EPHB1

Product code: 08-128

Human EPHB1, cytoplasmic domain [578-984(end) amino acids of accession number NP_004432.1] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 29 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 53
 IC50 at 1 mM ATP (nM) : 760

EPHB2

Product code: 08-129

Human EPHB2, cytoplasmic domain [581-987(end) amino acids of accession number NP_004433.2] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 86 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 73
 IC50 at 1 mM ATP (nM) : 400

EPHB3

Product code: 08-130

Human EPHB3, cytoplasmic domain [596-998(end) amino acids of accession number NP_004434.2] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 49 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2000
 IC50 at 1 mM ATP (nM) : >10000

EPHB4

Product code: 08-131

Human EPHB4, cytoplasmic domain [577-987(end) amino acids of accession number NP_004435.3] was expressed as N-terminal GST-protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 56 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 230
 IC50 at 1 mM ATP (nM) : 1500

Erk1(MAPK3)

Product code: 04-142

Full-length human Erk1 [1-379(end) amino acids of accession number NP_002737.1] was expressed as N-terminal GST-fusion protein (70 kDa) using E.coli expression system. GST-Erk1 was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K1. Activated GST-Erk1 was purified using glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : Modified Erktide
 ATP (μ M) Km app / Bin : 34 / 50
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 37
 IC50 at 1 mM ATP (nM) : 400

Erk2(MAPK1)

Product code: [04-143](#)

Full-length human Erk2 [1-360(end) amino acids of accession number NP_002736.3] was expressed as N-terminal GST-fusion protein (69 kDa) using E.coli expression system. GST-Erk2 was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K1. Activated GST-Erk2 was purified using glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : Modified Erktide
 ATP (μ M) Km app / Bin : 33 / 50
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 21
 IC50 at 1 mM ATP (nM) : 180

Erk5(MAPK7)

Product code: [04-146](#)

Human Erk5, catalytic domain [1-398 amino acids of accession number NP_002740.2] was expressed as N-terminal GST-fusion protein (72 kDa) using E. coli expression system. GST-Erk5 was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K5. Activated GST-Erk5 was purified by using Ni-NTA affinity chromatography.

Assay platform : MSA
 Substrate : EGFR-derived peptide
 ATP (μ M) Km app / Bin : 450 / 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 280
 IC50 at 1 mM ATP (nM) : 280

FAK(PTK2)

Product code: [08-137](#)

Truncated human FAK[376-1052(end) amino acids of accession number NP_722560.1] was expressed as N-terminal GST-fusion protein (103 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 25 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 47
 IC50 at 1 mM ATP (nM) : 230

FER

Product code: [08-139](#)

Full-length human FER [1-822(end) amino acids of accession number NP_005237.1] was expressed as N-terminal GST-fusion protein (122 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 26 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 12

FES

Product code: [08-140](#)

Full-length human FES [1-413, 416-822(end) amino acids of accession number NP_001996.1] was expressed as N-terminal GST-fusion protein (120 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 43 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.9
 IC50 at 1 mM ATP (nM) : 25

FGFR1

Product code: [08-133](#)

Human FGFR1, cytoplasmic domain [398-822(end) amino acids of accession number NP_075598.2] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 89 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.3
 IC50 at 1 mM ATP (nM) : 12

FGFR1[V561M]

Product code: [08-536](#)

Human FGFR1, cytoplasmic domain [398-822(end) amino acids and V561M of accession number NP_075598.2] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 33 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.14
 IC50 at 1 mM ATP (nM) : 1.3

FGFR2

Product code: [08-134](#)

Human FGFR2, cytoplasmic domain [399-821(end) amino acids of accession number NP_000132.3] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 66 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.4
 IC50 at 1 mM ATP (nM) : 5.4

FGFR2[V564I]

Product code: [08-546](#)

Human FGFR2, cytoplasmic domain [399-821(end) amino acids and V564I of accession number NP_000132.3] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 21 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.0
 IC50 at 1 mM ATP (nM) : 47

FGFR3

Product code: [08-135](#)

Human FGFR3, cytoplasmic domain [436-806(end) amino acids of accession number NP_000133.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 43 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.6
 IC50 at 1 mM ATP (nM) : 15

FGFR3[K650E]

Product code: 08-501

Human FGFR3, cytoplasmic domain [436-806(end) amino acids and K650E of accession number NP_000133.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 41 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.2
 IC50 at 1 mM ATP (nM) : 14

FGFR3[K650M]

Product code: 08-199

Human FGFR3, cytoplasmic domain [436-806(end) amino acids and K650M of accession number NP_000133.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 17 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.68
 IC50 at 1 mM ATP (nM) : 17

FGFR3[V555L]

Product code: 08-548

Human FGFR3, cytoplasmic domain [436-806(end) amino acids and V555L of accession number NP_000133.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 29 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.49
 IC50 at 1 mM ATP (nM) : 9.4

FGFR3[V555M]

Product code: 08-543

Human FGFR3, cytoplasmic domain [436-806(end) amino acids and V555M of accession number NP_000133.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 37 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.21
 IC50 at 1 mM ATP (nM) : 1.8

FGFR4

Product code: 08-136

Human FGFR4, cytoplasmic domain [460-802(end) amino acids of accession number NP_002002.3] was expressed as N-terminal GST-fusion protein (65 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 230 / 250
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 43
 IC50 at 1 mM ATP (nM) : 120

FGFR4[N535K]

Product code: [08-524](#)

Human FGFR4, cytoplasmic domain [460-802(end) amino acids and N535K of accession number NP_002002.3] was expressed as N-terminal GST-fusion protein (65 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 30 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 160
 IC50 at 1 mM ATP (nM) : 1200

FGFR4[V550E]

Product code: [08-525](#)

Human FGFR4, cytoplasmic domain [460-802(end) amino acids and V550E of accession number NP_002002.3] was expressed as N-terminal GST-fusion protein (65 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 210 / 200
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 370
 IC50 at 1 mM ATP (nM) : 1300

FGFR4[V550L]

Product code: [08-526](#)

Human FGFR4, cytoplasmic domain [460-802(end) amino acids and V550L of accession number NP_002002.3] was expressed as N-terminal GST-fusion protein (65 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 160 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 10
 IC50 at 1 mM ATP (nM) : 44

FGR

Product code: [08-166](#)

Full-length human FGR [1-529(end) amino acids of accession number NP_005239.1] was expressed as N-terminal GST-fusion protein (86 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 34 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.3
 IC50 at 1 mM ATP (nM) : 16

FLT1

Product code: [08-189](#)

Human FLT1, cytoplasmic domain [781-1338(end) amino acids of accession number NP_002010.1] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 140 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.2
 IC50 at 1 mM ATP (nM) : 6.8

FLT3

Product code: [08-154](#)

Human FLT3, cytoplasmic domain [564-993(end) amino acids of accession number NP_004110.2] was expressed as N-terminal GST-fusion protein (77 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 94 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.20
 IC50 at 1 mM ATP (nM) : 0.34

FLT4

Product code: [08-190](#)

Human FLT4, cytoplasmic domain [798-1298(end) amino acids of accession number NP_002011.1] was expressed as N-terminal GST-fusion protein (83 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 72 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.66
 IC50 at 1 mM ATP (nM) : 2.4

FMS(CSF1R)

Product code: [08-155](#)

Human FMS, cytoplasmic domain [538-972(end) amino acids of accession number NP_005202.2] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 26 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.26
 IC50 at 1 mM ATP (nM) : 0.70

FRK

Product code: [08-167](#)

Human FRK, catalytic domain [223-505(end) amino acids of accession number NP_002022.1] was expressed as N-terminal GST-fusion protein (60 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 62 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.4
 IC50 at 1 mM ATP (nM) : 40

FYN[isoform a]

Product code: [08-168](#)

Full-length human FYN [isoform a] [1-537(end) amino acids of accession number NP_002028.1] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 36 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.9
 IC50 at 1 mM ATP (nM) : 24

FYN[isoform b]

Product code: 08-531

Full-length human FYN [isoform b] [1-534(end) amino acids of accession number NP_694592.1] was expressed as N-terminal GST-fusion protein (87 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 20 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.8
 IC50 at 1 mM ATP (nM) : 42

GSK3 α (GSK3A)

Product code: 04-140

Full-length human GSK3 α [1-483(end) amino acids of accession number NP_063937.2] was expressed as N-terminal GST-fusion protein (78 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CREBtide-p
 ATP (μ M) Km app / Bin : 12 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 15
 IC50 at 1 mM ATP (nM) : 400

GSK3 β (GSK3B)

Product code: 04-141

Full-length human GSK3 β [1-420(end) amino acids of accession number NP_001139628.1] was expressed as N-terminal GST-fusion protein (74 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CREBtide-p
 ATP (μ M) Km app / Bin : 9.1 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 9.2
 IC50 at 1 mM ATP (nM) : 240

Haspin(GSG2)

Product code: 05-111

Full-length human Haspin [1-798(end) amino acids of accession number NP_114171.2] was expressed as N-terminal GST-fusion protein (116 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Histone H3 peptide
 ATP (μ M) Km app / Bin : 140 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 5.8
 IC50 at 1 mM ATP (nM) : n.a.

HCK

Product code: 08-169

Truncated human HCK [25-526(end) amino acids of accession number NP_002101.2] was expressed as N-terminal GST-fusion protein (84 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 11 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.1
 IC50 at 1 mM ATP (nM) : 22

HER2(ERBB2)

Product code: 08-016

Human HER2, cytoplasmic domain [676-1255(end) amino acids and P1170A of accession number NP_004439.2] was expressed as N-terminal His-tagged protein (67 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 3.5 / 5
 Metal : Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 90
 IC50 at 1 mM ATP (nM) : >10000

HER4(ERBB4)

Product code: 08-118

Human HER4, cytoplasmic domain [676-1308(end) amino acids of accession number NP_005226.1] was expressed as N-terminal GST-fusion protein (99 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 34
 IC50 at 1 mM ATP (nM) : 1000

HGK(MAP4K4)

Product code: 07-137

Human HGK, catalytic domain [1-328 amino acids of accession number NP_004825.2] was expressed as N-terminal GST-fusion protein (64 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Moesin-derived peptide
 ATP (μ M) Km app / Bin : 9.4 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 23

HIPK1

Product code: 04-135

Human HIPK1, catalytic domain [158-555 amino acids of accession number NP_689909.2] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 4.4 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 570
 IC50 at 1 mM ATP (nM) : n.a.

HIPK2

Product code: 04-136

Full-length human HIPK2 [1-1198(end) amino acids of accession number NP_073577.3] was expressed as N-terminal GST-fusion protein (158 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 5.9 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 170
 IC50 at 1 mM ATP (nM) : n.a.

HIPK3

Product code: 04-137

Human HIPK3, catalytic domain [161-562 amino acids of accession number NP_005725.3] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 7.3 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 120
 IC50 at 1 mM ATP (nM) : >10000

HIPK4

Product code: 04-138

Full-length human HIPK4 [1-616(end) amino acids of accession number NP_653286.2] was expressed as N-terminal GST-fusion protein (96 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 7 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 71
 IC50 at 1 mM ATP (nM) : >10000

HPK1(MAP4K1)

Product code: 07-410

Human HPK1, catalytic domain [1-346 amino acids of accession number NP_009112.1] was expressed as N-terminal DYKDDDDK tagged protein (41 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K2 peptide
 ATP (μ M) Km app / Bin : 22 / 25
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 6.9
 IC50 at 1 mM ATP (nM) : 32

IGF1R

Product code: 08-141

Human IGF1R, cytoplasmic domain [959-1367(end) amino acids of accession number NP_000866.1] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : IRS1
 ATP (μ M) Km app / Bin : 63 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 40
 IC50 at 1 mM ATP (nM) : 150

IKK α (CHUK)

Product code: 05-112

Full-length human IKK α [1-745(end) amino acids of accession number NP_001269.3] was expressed as N-terminal GST-fusion protein (111 kDa) using baculovirus expression system.

Assay platform : IMAP
 Substrate : I κ B α peptide
 ATP (μ M) Km app / Bin : 41 / 40
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 310
 IC50 at 1 mM ATP (nM) : n.a.

IKK β (IKKBK)

Product code: 05-084

Truncated human IKK β [1-662 amino acids of accession number NP_001547.1] was expressed as N-terminal His-tagged protein (77 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Modified I κ B α -derived peptide
ATP (μ M) Km app / Bin	: 16 / 25
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 410
IC50 at 1 mM ATP (nM)	: >10000

IKK ϵ (IKBKE)

Product code: 05-114

Full-length human IKK ϵ [1-716(end) amino acids of accession number NP_054721.1] was expressed as N-terminal GST-fusion protein (108 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: I κ B α peptide
ATP (μ M) Km app / Bin	: 9.5 / 10
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 0.79
IC50 at 1 mM ATP (nM)	: n.a.

INSR

Product code: 08-142

Human INSR, catalytic domain [1005-1310 amino acids of accession number NP_000199.1] was expressed as N-terminal GST-fusion protein (62 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: IRS1
ATP (μ M) Km app / Bin	: 58 / 50
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 12
IC50 at 1 mM ATP (nM)	: 70

IRAK1

Product code: 09-101

Truncated human IRAK1 [194-712(end) amino acids of accession number NP_001560.2] was expressed as N-terminal GST-fusion protein (83 kDa) using baculovirus expression system.

Assay platform	: IMAP
Substrate	: SRPKtide
ATP (μ M) Km app / Bin	: 27 / 25
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 54
IC50 at 1 mM ATP (nM)	: n.a.

IRAK4

Product code: 09-145

Full-length human IRAK4 [1-460(end) amino acids of accession number NP_057207.2] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: IRAK1 peptide
ATP (μ M) Km app / Bin	: 920 / 1000
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 11
IC50 at 1 mM ATP (nM)	: 11

IRR(INSRR)

Product code: 08-143

Human IRR, cytoplasmic domain [953-1297(end) amino acids of accession number NP_055030.1] was expressed as N-terminal GST-fusion protein (66 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : IRS1
 ATP (μ M) Km app / Bin : 64 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 15
 IC50 at 1 mM ATP (nM) : 98

ITK

Product code: 08-181

Full-length human ITK [2-620(end) amino acids of accession number NP_005537.3] was expressed as N-terminal GST-fusion protein (99 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srcctide
 ATP (μ M) Km app / Bin : 6.1 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.2
 IC50 at 1 mM ATP (nM) : 200

JAK1

Product code: 08-144

Human JAK1, catalytic domain [850-1154(end) amino acids of accession number NP_002218.2] was expressed as N-terminal GST-fusion protein (62 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : JAK1 substrate peptide
 ATP (μ M) Km app / Bin : 68 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.71
 IC50 at 1 mM ATP (nM) : 10

JAK2

Product code: 08-045

Human JAK2, catalytic domain [826-1132(end) amino acids of accession number NP_004963.1] was expressed as N-terminal His-tagged protein (39 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srcctide
 ATP (μ M) Km app / Bin : 13 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.34
 IC50 at 1 mM ATP (nM) : 6.0

JAK3

Product code: 08-046

Human JAK3, catalytic domain [795-1124(end) amino acids of accession number NP_000206.2] was expressed as N-terminal His-tagged protein (41 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srcctide
 ATP (μ M) Km app / Bin : 3.5 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.20
 IC50 at 1 mM ATP (nM) : 12

JNK1(MAPK8)

Product code: 04-163

Human JNK1, catalytic domain [2-364 amino acids of accession number NP_620634.1] was expressed as N-terminal GST-fusion protein (69 kDa) using E. coli expression system. GST-JNK1 was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K4 and MAP2K7. Activated GST-JNK1 was purified using glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : Modified Erktide
 ATP (μ M) Km app / Bin : 29 / 100
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 99
 IC50 at 1 mM ATP (nM) : 770

JNK2(MAPK9)

Product code: 04-164

Human JNK2, catalytic domain [1-364 amino acids of accession number NP_002743.3] was expressed as N-terminal GST-fusion protein (69 kDa) using E. coli expression system. GST-JNK2 was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K4 and MAP2K7. Activated GST-JNK2 was purified using Ni-NTA chromatography.

Assay platform : MSA
 Substrate : Modified Erktide
 ATP (μ M) Km app / Bin : 21 / 50
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 110
 IC50 at 1 mM ATP (nM) : 1600

JNK3(MAPK10)

Product code: 04-150

Full-length human JNK3 [1-426(end) amino acids of accession number NP_620446.1] was expressed as N-terminal GST-fusion protein (75 kDa) using E.coli expression system. GST-JNK3 was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K4 and MAP2K7. Activated GST-JNK3 was purified using glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : Modified Erktide
 ATP (μ M) Km app / Bin : 6 / 25
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 26
 IC50 at 1 mM ATP (nM) : 730

KDR

Product code: 08-191

Human KDR, cytoplasmic domain [790-1356(end) amino acids of accession number NP_002244.1] was expressed as N-terminal GST-fusion protein (90 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 74 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3.1
 IC50 at 1 mM ATP (nM) : 13

KIT

Product code: 08-156

Human KIT, cytoplasmic domain [544-976(end) amino acids of accession number NP_000213.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 370 / 400
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.2
 IC50 at 1 mM ATP (nM) : 2.0

KIT[D816E]

Product code: [08-541](#)

Human KIT, cytoplasmic domain [544-976(end) amino acids and D816E of accession number NP_000213.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 40 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.7
 IC50 at 1 mM ATP (nM) : 1.3

KIT[D816V]

Product code: [08-505](#)

Human KIT, cytoplasmic domain [544-976(end) amino acids and D816V of accession number NP_000213.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 14 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.18
 IC50 at 1 mM ATP (nM) : 2.8

KIT[D816Y]

Product code: [08-534](#)

Human KIT, cytoplasmic domain [544-976(end) amino acids and D816Y of accession number NP_000213.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 22 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.27
 IC50 at 1 mM ATP (nM) : 2.1

KIT[T670I]

Product code: [08-195](#)

Human KIT, cytoplasmic domain [544-976(end) amino acids and T670I of accession number NP_000213.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 100 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.80
 IC50 at 1 mM ATP (nM) : 3.4

KIT[V560G]

Product code: [08-504](#)

Human KIT, cytoplasmic domain [544-976(end) amino acids and V560G of accession number NP_000213.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 110 / 250
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.2
 IC50 at 1 mM ATP (nM) : 1.6

KIT[V654A]

Product code: 08-511

Human KIT, cytoplasmic domain [544-976(end) amino acids and V654A of accession number NP_000213.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 220 / 250
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 4.5
 IC50 at 1 mM ATP (nM) : 8.2

LATS1/MOBKL1A

Product code: 01-523

Human LATS1, catalytic domain [589-1130(end) amino acids of accession number NP_004681.1] was co-expressed as N-terminal GST-fusion protein (90 kDa) with human His-tagged MOBKL1A [1-216(end) amino acids of accession number NP_775739.1] and human BTN-MST2 [1-491(end) amino acids of accession number NP_006272.2] using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 23 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 4.2
 IC50 at 1 mM ATP (nM) : 11

LATS2/MOBKL1A

Product code: 01-524

Human LATS2, catalytic domain [553-1088(end) amino acids of accession number NP_055387.2] was co-expressed as N-terminal GST-fusion protein (89 kDa) with human His-tagged MOBKL1A [1-216(end) amino acids of accession number NP_775739.1] and human BTN-MST2 [1-491(end) amino acids of accession number NP_006272.2] using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 38 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.7
 IC50 at 1 mM ATP (nM) : 4.0

LCK

Product code: 08-170

Full-length human LCK [1-509(end) amino acids of accession number NP_005347.2] was expressed as N-terminal GST-fusion protein (85 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 14 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.5
 IC50 at 1 mM ATP (nM) : 14

LOK(STK10)

Product code: 07-315

Full-length human LOK [1-968(end) amino acids of accession number BAA35073.1] was expressed as N-terminal GST-fusion protein using baculovirus expression system. GST-LOK was purified by using glutathione sepharose chromatography. GST-LOK was cleaved by PreScission protease and GST-free LOK (114 kDa) was collected as flow-through fraction from glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : Moesin-derived peptide
 ATP (μ M) Km app / Bin : 100 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.49
 IC50 at 1 mM ATP (nM) : n.a.

LTK

Product code: [08-106](#)

Human LTK, catalytic domain [498-796 amino acids of accession number NP_002335.2] was expressed as N-terminal GST-fusion protein (60 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 49 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.0
 IC50 at 1 mM ATP (nM) : 7.1

LYNa

Product code: [08-171](#)

Full-length human LYNa [1-512(end) amino acids of accession number NP_002341.1] was expressed as N-terminal GST-fusion protein (86 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 14 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.0
 IC50 at 1 mM ATP (nM) : 22

LYNb

Product code: [08-172](#)

Full-length human LYNb [1-491(end) amino acids of accession number NP_001104567.1] was expressed as N-terminal GST-fusion protein (83 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 18 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.0
 IC50 at 1 mM ATP (nM) : 21

MAP4K2

Product code: [07-111](#)

Full-length human MAP4K2 [1-820(end) amino acid of accession number NP_004570.2] was expressed as N-terminal GST-fusion protein (119 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K2 peptide
 ATP (μ M) Km app / Bin : 93 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.3
 IC50 at 1 mM ATP (nM) : 0.87

MAPKAPK2

Product code: [02-142](#)

Full-length human MAPKAPK2 [1-400(end) amino acids of accession number NP_116584.2] was co-expressed as N-terminal GST-fusion protein (73 kDa) with human His-tagged p38 β [1-364(end) amino acids of accession number NP_002742.3] and human His-tagged MAP2K6 [1-334(end) amino acids of accession number NP_002749.2] using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 3.6 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 80
 IC50 at 1 mM ATP (nM) : 9300

MAPKAPK3

Product code: [02-143](#)

Full-length human MAPKAPK3 [1-382(end) amino acids of accession number NP_004626.1] was co-expressed as N-terminal GST-fusion protein (70 kDa) with human His-tagged p38 β [1-364(end) amino acids of accession number NP_002742.3] and human His-tagged MAP2K6 [1-334(end) amino acids of accession number NP_002749.2] using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 13 / 10
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 410
 IC50 at 1 mM ATP (nM) : n.a.

MAPKAPK5

Product code: [02-144](#)

Full-length human MAPKAPK5 [1-471(end) amino acids of accession number NP_003659.2] was co-expressed as N-terminal GST-fusion protein (81 kDa) with human His-tagged p38 β [1-364(end) amino acids of accession number NP_002742.3] and human His-tagged MAP2K6 [1-334(end) amino acids of accession number NP_002749] using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 12 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 320
 IC50 at 1 mM ATP (nM) : n.a.

MARK1

Product code: [02-120](#)

Full-length human MARK1 [1-795(end) amino acids of accession number AAF72103.1] was expressed as N-terminal GST-fusion protein (116 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 8 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.17
 IC50 at 1 mM ATP (nM) : n.a.

MARK2

Product code: [02-121](#)

Full-length human MARK2 [1-745(end) amino acids of accession number NP_059672.2] was expressed as N-terminal GST-fusion protein (110 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 8.8 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.12
 IC50 at 1 mM ATP (nM) : n.a.

MARK3

Product code: [02-122](#)

Full-length human MARK3 [1-729(end) amino acids of accession number NP_002367.4] was expressed as N-terminal GST-fusion protein (108 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 5 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.20
 IC50 at 1 mM ATP (nM) : n.a.

MARK4

Product code: 02-123

Full-length human MARK4 [1-688(end) amino acids of accession number NP_113605.2] was expressed as N-terminal GST-fusion protein (103 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 12 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.12
 IC50 at 1 mM ATP (nM) : 5.6

MELK

Product code: 02-124

Truncated human MELK [1-493 amino acids of accession number NP_055606.1] was expressed as N-terminal GST-fusion protein (83 kDa) using E. coli expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 38 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.81
 IC50 at 1 mM ATP (nM) : n.a.

MER(MERTK)

Product code: 08-108

Human MER, cytoplasmic domain [528-999(end) amino acids of accession number NP_006334.2] was expressed as N-terminal GST-fusion protein (80 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 36 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.61
 IC50 at 1 mM ATP (nM) : 5.3

MET

Product code: 08-151

Human MET, cytoplasmic domain [956-1390(end) amino acids of accession number NP_000236.2] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 67
 IC50 at 1 mM ATP (nM) : 730

MET[D1228H]

Product code: 08-540

Human MET, cytoplasmic domain [956-1390(end) amino acids and D1228H of accession number NP_000236.2] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 25 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 59
 IC50 at 1 mM ATP (nM) : 1200

MET[M1250T]

Product code: [08-545](#)

Human MET, cytoplasmic domain [956-1390(end) amino acids and M1250T of accession number NP_000236.2] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 17 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 86
 IC50 at 1 mM ATP (nM) : 1900

MET[Y1235D]

Product code: [08-198](#)

Human MET, cytoplasmic domain [956-1390(end) amino acids and Y1235D of accession number NP_000236.2] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 71 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 79
 IC50 at 1 mM ATP (nM) : 390

MINK(MINK1)

Product code: [07-139](#)

Human MINK, catalytic domain [1-314 amino acids of accession number NP_056531.1] was expressed as N-terminal GST-fusion protein (63 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Modified Erktide
 ATP (μ M) Km app / Bin : 16 / 50
 Metal : Mg
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 5.5
 IC50 at 1 mM ATP (nM) : 4.7

MNK1(MKNK1)

Product code: [02-145](#)

Full-length human MNK1 [1-424(end) amino acids and T344D of accession number NP_001129025.1] was expressed as N-terminal GST-fusion protein (74 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : RS peptide
 ATP (μ M) Km app / Bin : 460 / 450
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 21
 IC50 at 1 mM ATP (nM) : n.a.

MNK2(MKNK2)

Product code: [02-146](#)

Full-length human MNK2 [1-465(end) amino acids and T379D of accession number NP_951009.1] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : RS peptide
 ATP (μ M) Km app / Bin : 110 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 7.5
 IC50 at 1 mM ATP (nM) : 44

MRCK α (CDC42BPA)

Product code: [01-107](#)

Truncated human MRCK α [1-574 amino acids of accession number NP_003598.2] was expressed as N-terminal GST-fusion protein (93 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: DAPK1tide
ATP (μ M) Km app / Bin	: 0.45 / 1
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 2.2
IC50 at 1 mM ATP (nM)	: n.a.

MRCK β (CDC42BPB)

Product code: [01-108](#)

Truncated human MRCK β [1-473 amino acids of accession number NP_006026.3] was expressed as N-terminal GST-fusion protein (82 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: DAPK1tide
ATP (μ M) Km app / Bin	: 0.67 / 1
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 3.6
IC50 at 1 mM ATP (nM)	: n.a.

MSK1(RPS6KA5)

Product code: [01-147](#)

Full-length human MSK1 [1-802(end) amino acids of accession number NP_004746.2] was co-expressed as N-terminal GST-fusion protein (117 kDa) with human His-tagged Erk2 [1-360 amino acids of accession number NP_002736.3] using baculovirus expression system.

Assay platform	: MSA
Substrate	: Crosstide
ATP (μ M) Km app / Bin	: 13 / 10
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 1.6
IC50 at 1 mM ATP (nM)	: 30

MSK2(RPS6KA4)

Product code: [01-148](#)

Full-length human MSK2 [1-772(end) amino acids of accession number NP_003933.1] was co-expressed as N-terminal GST-fusion protein (114 kDa) with human His-tagged Erk2 [1-360 amino acids of accession number NP_002736.3] using baculovirus expression system.

Assay platform	: MSA
Substrate	: Crosstide
ATP (μ M) Km app / Bin	: 40 / 50
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 4.3
IC50 at 1 mM ATP (nM)	: 20

MSSK1(STK23)

Product code: [04-159](#)

Full-length human MSSK1 [1-567(end) amino acids of accession number NP_055185.2] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: DYRKtide-F
ATP (μ M) Km app / Bin	: 56 / 50
Metal	: Mg
Reference compound	: K252a
IC50 at ATP Bin (nM)	: 220
IC50 at 1 mM ATP (nM)	: n.a.

MST1(STK4)

Product code: 07-116

Full-length human MST1 [1-487(end) amino acids of accession number NP_006273.1] was expressed as N-terminal GST-fusion protein (83 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : IRS1
 ATP (μ M) Km app / Bin : 50 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 0.55

MST2(STK3)

Product code: 07-117

Full-length human MST2 [1-491(end) amino acids of accession number NP_006272.2] was expressed as N-terminal GST-fusion protein (83 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : IRS1
 ATP (μ M) Km app / Bin : 69 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 6.7
 IC50 at 1 mM ATP (nM) : 3.1

MST3(STK24)

Product code: 07-118

Full-length human MST3 [1-431(end) amino acids of accession number NP_001027467.2] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Moesin-derived peptide
 ATP (μ M) Km app / Bin : 66 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.9
 IC50 at 1 mM ATP (nM) : n.a.

MST4

Product code: 07-119

Full-length human MST4 [1-416(end) amino acids of accession number NP_057626.2] was expressed as N-terminal GST-fusion protein (74 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Moesin-derived peptide
 ATP (μ M) Km app / Bin : 76 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 6.3
 IC50 at 1 mM ATP (nM) : n.a.

MUSK

Product code: 08-153

Human MUSK, catalytic domain [527-869(end) amino acids of accession number NP_005583.1] was expressed as N-terminal GST fusion protein (66 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 14 / 10
 Metal : Mg+Mn
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.1
 IC50 at 1 mM ATP (nM) : 2.6

NDR1(STK38)

Product code: 01-125

Full-length human NDR1[1-465(end) amino acids of accession number NP_009202.1] was co-expressed as N-terminal GST-fusion protein (81kDa) with human His-tagged MOBKL1A [1-216(end) amino acids of accession number NP_775739.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 12 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.8
 IC50 at 1 mM ATP (nM) : n.a.

NDR2(STK38L)

Product code: 01-126

Full-length human NDR2 [1-464(end) amino acids of accession number NP_055815.1] was co-expressed as N-terminal GST-fusion protein (81 kDa) with human His-tagged MOBKL1A [1-216(end) amino acids of accession number NP_775739.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 7.6 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.1
 IC50 at 1 mM ATP (nM) : n.a.

NEK1

Product code: 05-123

Human NEK1, catalytic domain [1-505 amino acids of accession number NP_036356.1] was expressed as N-terminal GST-fusion protein (85 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CDK7 peptide
 ATP (μ M) Km app / Bin : 64 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 51
 IC50 at 1 mM ATP (nM) : 650

NEK2

Product code: 05-226

Full-length human NEK2 [1-445(end) amino acids of accession number NP_002488.1] was expressed as N-terminal His-tagged protein (55 kDa) using baculovirus expression system. His-tagged NEK2 was purified by using Ni-NTA affinity chromatography. Purified His-NEK2 was digested by recombinant His-TEV protease, and His-tag free NEK2 (ca. 52 kDa) was collected as flow-through fraction from Ni-NTA affinity chromatography.

Assay platform : MSA
 Substrate : CDK7 peptide
 ATP (μ M) Km app / Bin : 65 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 3700
 IC50 at 1 mM ATP (nM) : >10000

NEK4

Product code: 05-128

Full-length human NEK4 [1-841(end) amino acids of accession number NP_003148.2] was expressed as N-terminal GST-fusion protein (122 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 51 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 120
 IC50 at 1 mM ATP (nM) : n.a.

NEK6

Product code: 05-130

Full-length human NEK6 [1-313(end) amino acids of accession number NP_055212.2] was expressed as N-terminal GST-fusion protein (63 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CDK7 peptide
 ATP (μ M) Km app / Bin : 69 / 75
 Metal : Mg
 Reference compound : PKR Inhibitor
 IC50 at ATP Bin (nM) : 19000
 IC50 at 1 mM ATP (nM) : >10000

NEK7

Product code: 05-131

Full-length human NEK7 [1-302(end) amino acids of accession number NP_598001.1] was expressed as N-terminal GST-fusion protein (62 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CDK7 peptide
 ATP (μ M) Km app / Bin : 40 / 50
 Metal : Mg
 Reference compound : PKR Inhibitor
 IC50 at ATP Bin (nM) : 8500
 IC50 at 1 mM ATP (nM) : >10000

NEK9

Product code: 05-133

Truncated human NEK9 [1-346, 733-979(end) amino acids of accession number NP_149107.4] was expressed as N-terminal GST-fusion protein (93 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CDK7 peptide
 ATP (μ M) Km app / Bin : 190 / 200
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 150
 IC50 at 1 mM ATP (nM) : 400

NIM1K(MGC42105)

Product code: 02-175

Full-length human NIM1K [1-436(end) amino acids of accession number NP_699192.1] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 21 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 300
 IC50 at 1 mM ATP (nM) : n.a.

NuaK1

Product code: 02-126

Full-length human NuaK1 [1-661(end) amino acids of accession number NP_055655.1] was expressed as N-terminal GST-fusion protein (102 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CHKtide
 ATP (μ M) Km app / Bin : 59 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 3.4

NuaK2

Product code: [02-127](#)

Full-length human NuaK2 [1-628(end) amino acids of accession number NP_112214.3] was expressed as N-terminal GST-fusion protein (98kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: CHKtide
ATP (μ M) Km app / Bin	: 26 / 25
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 2.2
IC50 at 1 mM ATP (nM)	: 2.3

p38 α (MAPK14)

Product code: [04-152](#)

Truncated human p38 α [9-352 amino acids of accession number NP_620581.1] was expressed as N-terminal GST-fusion protein (66 kDa) using E. coli expression system. GST-p38 α was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K6. Activated GST-p38 α was purified using glutathione sepharose chromatography.

Assay platform	: MSA
Substrate	: Modified Erktide
ATP (μ M) Km app / Bin	: 150 / 150
Metal	: Mg
Reference compound	: SB202190
IC50 at ATP Bin (nM)	: 6.3
IC50 at 1 mM ATP (nM)	: 22

p38 β (MAPK11)

Product code: [04-153](#)

Full-length human p38 β [1-364(end) amino acids of accession number NP_002742.3] was expressed as N-terminal GST-fusion protein (69 kDa) using E. coli expression system.

Assay platform	: MSA
Substrate	: Modified Erktide
ATP (μ M) Km app / Bin	: 63 / 75
Metal	: Mg
Reference compound	: SB202190
IC50 at ATP Bin (nM)	: 16
IC50 at 1 mM ATP (nM)	: 110

p38 γ (MAPK12)

Product code: [04-155](#)

Full-length human p38 γ [1-367(end) amino acids of accession number NP_002960.2] was expressed as N-terminal GST-fusion protein (69 kDa) using E. coli expression system. GST-p38 γ was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K6. Activated GST-p38 γ was purified using glutathione sepharose chromatography.

Assay platform	: MSA
Substrate	: Modified Erktide
ATP (μ M) Km app / Bin	: 13 / 10
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 88
IC50 at 1 mM ATP (nM)	: 2800

p38 δ (MAPK13)

Product code: [04-154](#)

Full-length human p38 δ [1-365(end) amino acids of accession number NP_002745.1] was expressed as N-terminal GST-fusion protein (69 kDa) using E. coli expression system. GST-p38 δ was purified by using glutathione sepharose chromatography and activated with His-tagged MAP2K6. Activated GST-p38 δ was purified using glutathione sepharose chromatography.

Assay platform	: MSA
Substrate	: Modified Erktide
ATP (μ M) Km app / Bin	: 5.8 / 5
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 220
IC50 at 1 mM ATP (nM)	: >10000

p70S6K(RPS6KB1)

Product code: 01-154

Human p70S6K, catalytic domain [1-421 amino acids and T412E of accession number NP_003152.1] was expressed as N-terminal GST-fusion protein (75 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K2 peptide
 ATP (μ M) Km app / Bin : 14 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.1
 IC50 at 1 mM ATP (nM) : 9.8

p70S6K β (RPS6KB2)

Product code: 01-155

Full-length human p70S6K β [1-482(end) amino acids of accession number NP_003943.2] was expressed as N-terminal GST-fusion protein (81 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K2 peptide
 ATP (μ M) Km app / Bin : 3.3 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.7
 IC50 at 1 mM ATP (nM) : n.a.

PAK1

Product code: 07-123

Full-length human PAK1 [1-545(end) amino acids of accession number NP_002567.3] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : LIMKtide
 ATP (μ M) Km app / Bin : 300 / 300
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 4.0
 IC50 at 1 mM ATP (nM) : 11

PAK2

Product code: 07-124

Full-length human PAK2 [1-524(end) amino acids of accession number NP_002568.2] was expressed as N-terminal GST-fusion protein (85 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DAPK1tide
 ATP (μ M) Km app / Bin : 81 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 4.5
 IC50 at 1 mM ATP (nM) : 22

PAK4

Product code: 07-126

Full-length human PAK4 [1-591(end) amino acids of accession number NP_005875.1] was expressed as N-terminal GST-fusion protein (91 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 2.5 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 12
 IC50 at 1 mM ATP (nM) : n.a.

PAK5(PAK7)

Product code: 07-127

Human PAK5, catalytic domain [425-719(end) amino acids of accession number NP_065074.1] was expressed as N-terminal GST-fusion protein (60 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DAPK1tide
 ATP (μ M) Km app / Bin : 1.9 / 1
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.5
 IC50 at 1 mM ATP (nM) : 290

PAK6

Product code: 07-128

Full-length human PAK6 [1-681(end) amino acids of accession number NP_064553.1] was expressed as N-terminal GST-fusion protein (102 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 3.7 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.2
 IC50 at 1 mM ATP (nM) : n.a.

PASK

Product code: 02-128

Human PASK, catalytic domain [949-1323(end) amino acids of accession number NP_055963.2] was expressed as N-terminal GST-fusion protein (69 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 9.7 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 13
 IC50 at 1 mM ATP (nM) : 190

PBK

Product code: 05-168

Full-length human PBK [1-322(end) amino acids of accession number NP_060962.2] was expressed as N-terminal GST-fusion protein (63 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Histone H3 peptide
 ATP (μ M) Km app / Bin : 33 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 69
 IC50 at 1 mM ATP (nM) : 720

PDGFR α (PDGFRA)

Product code: 08-157

Human PDGFR α , cytoplasmic domain [550-1089(end) amino acids of accession number NP_006197.1] was expressed as N-terminal GST-fusion protein(89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 28 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.30
 IC50 at 1 mM ATP (nM) : 1.4

PDGFR α (PDGFRA)[D842V]

Product code: 08-506

Human PDGFR α , cytoplasmic domain [550-1089(end) amino acids and D842V of accession number NP_006197.1] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 21 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.25
 IC50 at 1 mM ATP (nM) : 1.9

PDGFR α (PDGFRA)[T674I]

Product code: 08-503

Human PDGFR α , cytoplasmic domain [550-1089(end) amino acids and T674I of accession number NP_006197.1] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 11 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.12
 IC50 at 1 mM ATP (nM) : 1.1

PDGFR α (PDGFRA)[V561D]

Product code: 08-507

Human PDGFR α , cytoplasmic domain [550-1089(end) amino acids and V561D of accession number NP_006197.1] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 35 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.32
 IC50 at 1 mM ATP (nM) : 1.6

PDGFR β (PDGFRB)

Product code: 08-158

Human PDGFR β , cytoplasmic domain [557-1106(end) amino acids of accession number NP_002600.1] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 23 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.27
 IC50 at 1 mM ATP (nM) : 0.62

PDHK2(PDK2)

Product code: 10-140

Full-length human PDHK2 [1-407(end) amino acids of accession number NP_002602.2] was expressed as N-terminal GST-fusion protein (74 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PDHKtide
 ATP (μ M) Km app / Bin : 28 / 25
 Metal : Mg+K
 Reference compound : VER-246608
 IC50 at ATP Bin (nM) : 33
 IC50 at 1 mM ATP (nM) : n.a.

PDHK4(PDK4)

Product code: 10-125

Full-length human PDHK4 [1-411(end) amino acids of accession number NP_002603.1] was expressed as N-terminal GST-fusion protein (73 kDa) using E.coli expression system.

Assay platform	: MSA
Substrate	: PDHKtide
ATP (μ M) Km app / Bin	: 19 / 25
Metal	: Mg+K
Reference compound	: VER-246608
IC50 at ATP Bin (nM)	: 120
IC50 at 1 mM ATP (nM)	: n.a.

PDK1(PDPK1)

Product code: 01-132

Full-length human PDK1 [1-556(end) amino acids of accession number NP_002604.1] was expressed as N-terminal GST-fusion protein (91 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: T308tide
ATP (μ M) Km app / Bin	: 9.6 / 10
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 9.2
IC50 at 1 mM ATP (nM)	: 12

PEK(EIF2AK3)

Product code: 05-155

Human PEK, cytoplasmic domain [536-1116(end) amino acids of accession number NP_004827.3] was expressed as N-terminal GST-fusion protein (94 kDa) using E.coli expression system.

Assay platform	: IMAP
Substrate	: SRPKtide
ATP (μ M) Km app / Bin	: 13 / 10
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 3600
IC50 at 1 mM ATP (nM)	: n.a.

PGK(PRKG1)

Product code: 01-142

Full-length human PGK [1-686(end) amino acids of accession number NP_006249.1] was expressed as N-terminal GST-fusion protein (105 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Kempptide
ATP (μ M) Km app / Bin	: 8.2 / 10
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 2.1
IC50 at 1 mM ATP (nM)	: n.a.

PHKG1

Product code: 02-152

Full-length human PHKG1 [1-387(end) amino acids of accession number NP_006204.1] was expressed as N-terminal GST-fusion protein (72 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: GS peptide
ATP (μ M) Km app / Bin	: 71 / 75
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 0.22
IC50 at 1 mM ATP (nM)	: n.a.

PHKG2

Product code: 02-153

Full-length human PHKG2 [1-406(end) amino acids of accession number NP_000285.1] was expressed as N-terminal GST-fusion protein (74 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 8.1 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.74
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CA/PIK3R1

Product code: 11-401-20N

Full-length human PIK3CA[1-1068(end) amino acids of accession number NP_006209.2] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (128 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 89 / 100
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 22
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CA[E542K]/PIK3R1

Product code: 11-413-20N

Full-length human PIK3CA[1-1068(end) amino acids and E542K of accession number NP_006209.2] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (128 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 42 / 50
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 12
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CA[E545K]/PIK3R1

Product code: 11-414-20N

Full-length human PIK3CA[1-1068(end) amino acids and E545K of accession number NP_006209.2] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (128 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 44 / 50
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 11
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CA[H1047R]/PIK3R1

Product code: 11-415-20N

Full-length human PIK3CA[1-1068(end) amino acids and H1047R of accession number NP_006209.2] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (128 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 78 / 75
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 10
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CA[P539R]/PIK3R1

Product code: [11-412-20N](#)

Full-length human PIK3CA[1-1068(end) amino acids and P539R of accession number NP_006209.2] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (128 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 37 / 50
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 8.7
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CA[R88Q]/PIK3R1

Product code: [11-411-20N](#)

Full-length human PIK3CA[1-1068(end) amino acids and R88Q of accession number NP_006209.2] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (128 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 42 / 50
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 16
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CB/PIK3R1

Product code: [11-402-20N](#)

Full-length human PIK3CB[1-1070(end) amino acids of accession number NP_006210.1] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (126 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 88 / 100
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 22
 IC50 at 1 mM ATP (nM) : n.a.

PIK3CD/PIK3R1

Product code: [11-403-20N](#)

Full-length human PIK3CD[1-1044(end) amino acids of accession number NP_005017.3] was co-expressed as N-terminal DYKDDDDK tagged, biotinylated protein (123 kDa) with PIK3R1[1-724(end) amino acids of accession number NP_852664.1] using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4,5)P2
 ATP (μ M) Km app / Bin : 37 / 50
 Metal : Mg
 Reference compound : PI-103
 IC50 at ATP Bin (nM) : 24
 IC50 at 1 mM ATP (nM) : n.a.

PIKFYVE(PIP5K3)

Product code: [11-118](#)

Full-length human PIKFYVE [1-2098(end) amino acids and S696N, L932S, Q995L, T998S, S1033A and Q1183K of accession number NP_055855.2] was expressed as N-terminal GST-fusion protein (265 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(3)P
 ATP (μ M) Km app / Bin : 36 / 50
 Metal : Mg
 Reference compound : AG-183
 IC50 at ATP Bin (nM) : 3900
 IC50 at 1 mM ATP (nM) : n.a.

PIM1

Product code: [02-054](#)

Full-length human PIM1 [1-313(end) amino acids of accession number NP_002639.1] was expressed as N-terminal His-tagged protein (39 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K2 peptide
 ATP (μ M) Km app / Bin : 640 / 500
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 10
 IC50 at 1 mM ATP (nM) : 20

PIM2

Product code: [02-155](#)

Full-length human PIM2 [1-311(end) amino acids of accession number NP_006866.2] was expressed as N-terminal GST-fusion protein (61 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K2 peptide
 ATP (μ M) Km app / Bin : 4 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 14
 IC50 at 1 mM ATP (nM) : 480

PIM3

Product code: [02-156](#)

Full-length human PIM3 [1-326(end) amino acids and V300A of accession number NP_001001852.2] was expressed as N-terminal GST-fusion protein (63 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K2 peptide
 ATP (μ M) Km app / Bin : 130 / 150
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.36
 IC50 at 1 mM ATP (nM) : 0.71

PIP4K2A

Product code: [11-115](#)

Full-length human PIP4K2A [1-406(end) amino acids of accession number NP_005019] was expressed as N-terminal GST-fusion protein (73 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(5)P
 ATP (μ M) Km app / Bin : 20 / 25
 Metal : Mg
 Reference compound : AG-183
 IC50 at ATP Bin (nM) : 7600
 IC50 at 1 mM ATP (nM) : n.a.

PIP4K2B

Product code: [11-116](#)

Full-length human PIP4K2B [1-416(end) amino acids of accession number NP_003550] was expressed as N-terminal GST-fusion protein (74 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(5)P
 ATP (μ M) Km app / Bin : 18 / 25
 Metal : Mn
 Reference compound : AG-183
 IC50 at ATP Bin (nM) : 48000
 IC50 at 1 mM ATP (nM) : n.a.

PIP5K1A

Product code: 11-111

Full-length human PIP5K1A [1-549(end) amino acids of accession number NP_003548.1] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4)P
 ATP (μ M) Km app / Bin : 28 / 25
 Metal : Mg
 Reference compound : AG-183
 IC50 at ATP Bin (nM) : 10000
 IC50 at 1 mM ATP (nM) : n.a.

PIP5K1B

Product code: 11-112

Full-length human PIP5K1B [1-540(end) amino acids of accession number NP_003549.1] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4)P
 ATP (μ M) Km app / Bin : 95 / 100
 Metal : Mg
 Reference compound : AG-183
 IC50 at ATP Bin (nM) : 4300
 IC50 at 1 mM ATP (nM) : n.a.

PIP5K1C

Product code: 11-113

Full-length human PIP5K1C [1-668(end) amino acids of accession number NP_036530] was expressed as N-terminal GST-fusion protein (101 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4)P
 ATP (μ M) Km app / Bin : 33 / 50
 Metal : Mg
 Reference compound : AG-183
 IC50 at ATP Bin (nM) : 1900
 IC50 at 1 mM ATP (nM) : n.a.

PIP5KL1

Product code: 11-114

Full-length human PIP5KL1 [1-394(end) amino acids of accession number NP_001128691.1] was expressed as N-terminal GST-fusion protein (72 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : PI(4)P
 ATP (μ M) Km app / Bin : 1 / 1
 Metal : Mg
 Reference compound : AG-183
 IC50 at ATP Bin (nM) : 2200
 IC50 at 1 mM ATP (nM) : n.a.

PKAC α (PRKACA)

Product code: 01-127

Full-length human PKAC α [1-351(end) amino acids of accession number NP_002721.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Kemptide
 ATP (μ M) Km app / Bin : 2.6 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.80
 IC50 at 1 mM ATP (nM) : 86

PKAC β (PRKACB)

Product code: [01-128](#)

Full-length human PKAC β [1-351(end) amino acids of accession number NP_002722.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Kemptide
ATP (μ M) Km app / Bin	: 4.7 / 5
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 1.0
IC50 at 1 mM ATP (nM)	: 37

PKAC γ (PRKACG)

Product code: [01-129](#)

Full-length human PKAC γ [1-351(end) amino acids of accession number NP_002723.2] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Kemptide
ATP (μ M) Km app / Bin	: 4.5 / 5
Metal	: Mg
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 3.1
IC50 at 1 mM ATP (nM)	: n.a.

PKC α (PRKCA)

Product code: [01-133](#)

Full-length human PKC α [1-672(end) amino acids of accession number NP_002728.1] was expressed as N-terminal GST-fusion protein (104 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: PKC peptide
ATP (μ M) Km app / Bin	: 36 / 50
Metal	: Mg+Ca
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 0.33
IC50 at 1 mM ATP (nM)	: 3.6

PKC β 1(PRKCB1)

Product code: [01-134](#)

Full-length human PKC β 1 [1-671(end) amino acids of accession number NP_997700.1] was expressed as N-terminal GST-fusion protein (104 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: PKC peptide
ATP (μ M) Km app / Bin	: 79 / 75
Metal	: Mg+Ca
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 0.71
IC50 at 1 mM ATP (nM)	: n.a.

PKC β 2(PRKCB2)

Product code: [01-165](#)

Full-length human PKC β 2 [1-673(end) amino acids of accession number NP_002729.2] was expressed as N-terminal GST-fusion protein (104 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: PKC peptide
ATP (μ M) Km app / Bin	: 41 / 50
Metal	: Mg+Ca
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 0.43
IC50 at 1 mM ATP (nM)	: n.a.

PKC γ (PRKCG)

Product code: 01-137

Full-length human PKC γ [1-697(end) amino acids of accession number NP_002730.1] was expressed as N-terminal GST-fusion protein (106 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PKC peptide
 ATP (μ M) Km app / Bin : 74 / 75
 Metal : Mg+Ca
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.1
 IC50 at 1 mM ATP (nM) : 11

PKC δ (PRKCD)

Product code: 01-135

Full-length human PKC δ [1-676(end) amino acids of accession number NP_006245.2] was expressed as N-terminal GST-fusion protein (105 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PKC peptide
 ATP (μ M) Km app / Bin : 26 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.22
 IC50 at 1 mM ATP (nM) : n.a.

PKC ϵ (PRKCE)

Product code: 01-136

Full-length human PKC ϵ [1-737(end) amino acids of accession number NP_005391.1] was expressed as N-terminal GST-fusion protein (111 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PKC peptide
 ATP (μ M) Km app / Bin : 16 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.37
 IC50 at 1 mM ATP (nM) : 1.8

PKC ζ (PRKCZ)

Product code: 01-141

Full-length human PKC ζ [1-592(end) amino acids of accession number NP_002735.3] was expressed as N-terminal GST-fusion protein (94kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PKC peptide
 ATP (μ M) Km app / Bin : 11 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 55
 IC50 at 1 mM ATP (nM) : n.a.

PKC η (PRKCH)

Product code: 01-138

Full-length human PKC η [1-683(end) amino acids of accession number NP_006246.2] was expressed as N-terminal GST-fusion protein (105 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PKC peptide
 ATP (μ M) Km app / Bin : 36 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.92
 IC50 at 1 mM ATP (nM) : n.a.

PKC θ (PRKCQ)

Product code: 01-140

Full-length human PKC θ [1-706(end) amino acids and P330L of accession number NP_006248.1] was expressed as N-terminal GST-fusion protein (109 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PKC peptide
 ATP (μ M) Km app / Bin : 18 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.72
 IC50 at 1 mM ATP (nM) : n.a.

PKC ι (PRKCI)

Product code: 01-139

Full-length human PKC ι [1-587(end) amino acids of accession number NP_002731.3] was expressed as N-terminal GST-fusion protein (94 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : PKC peptide
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 13
 IC50 at 1 mM ATP (nM) : n.a.

PKD1(PRKD1)

Product code: 02-157

Full-length human PKD1 [1-912(end) amino acids of accession number NP_002733.1] was expressed as N-terminal GST-fusion protein (129 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 25 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.1
 IC50 at 1 mM ATP (nM) : n.a.

PKD2(PRKD2)

Product code: 02-158

Full-length human PKD2 [1-878(end) amino acids of accession number NP_057541.2] was expressed as N-terminal GST-fusion protein (124 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 26 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.1
 IC50 at 1 mM ATP (nM) : 16

PKD3(PRKD3)

Product code: 02-159

Full-length human PKD3 [1-890(end) amino acids of accession number NP_005804.1] was expressed as N-terminal GST-fusion protein (127 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 34 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.80
 IC50 at 1 mM ATP (nM) : n.a.

PKN1

Product code: [01-144](#)

Full-length human PKN1 [1-942(end) amino acids of accession number NP_002732.3] was expressed as N-terminal GST-fusion protein (132 kDa) using baculovirus expression system.

Assay platform : IMAP
 Substrate : S6K peptide
 ATP (μ M) Km app / Bin : 19 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.15
 IC50 at 1 mM ATP (nM) : n.a.

PKR(EIF2AK2)

Product code: [05-156](#)

Human PKR , catalytic domain [252-551(end) amino acids of accession number NP_002750.1] was expressed as N-terminal GST-fusion protein (62 kDa) using baculovirus expression system.

Assay platform : IMAP
 Substrate : SRPKtide
 ATP (μ M) Km app / Bin : 13 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 87
 IC50 at 1 mM ATP (nM) : n.a.

PLK1

Product code: [05-157](#)

Full-length human PLK1 [1-603(end) amino acids of accession number NP_005021.2] was expressed as N-terminal GST-fusion protein (95 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CDC25ctide
 ATP (μ M) Km app / Bin : 5.6 / 5
 Metal : Mg
 Reference compound : GW843682X
 IC50 at ATP Bin (nM) : 3.6
 IC50 at 1 mM ATP (nM) : 47

PLK2

Product code: [05-158](#)

Full-length human PLK2 [1-685(end) amino acids of accession number NP_006613.2] was expressed as N-terminal GST-fusion protein (105 kDa) using baculovirus expression system.

Assay platform : IMAP
 Substrate : CHK2 peptide
 ATP (μ M) Km app / Bin : 30 / 30
 Metal : Mg
 Reference compound : GW843682X
 IC50 at ATP Bin (nM) : 4.8
 IC50 at 1 mM ATP (nM) : n.a.

PLK3

Product code: [05-159](#)

Human PLK3, catalytic domain [58-340 amino acids of accession number NP_004064.2] was expressed as N-terminal GST-fusion protein (59 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CDC25ctide
 ATP (μ M) Km app / Bin : 6.8 / 5
 Metal : Mg
 Reference compound : GW843682X
 IC50 at ATP Bin (nM) : 33
 IC50 at 1 mM ATP (nM) : 450

PRKX

Product code: [01-130](#)

Full-length human PRKX [1-358(end) amino acids of accession number NP_005035.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Kemptide
 ATP (μ M) Km app / Bin : 20 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.59
 IC50 at 1 mM ATP (nM) : n.a.

PYK2(PTK2B)

Product code: [08-138](#)

Full-length human PYK2 [1-967(end) amino acids of accession number NP_775267.1] was expressed as N-terminal GST-fusion protein (138 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 56 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.2
 IC50 at 1 mM ATP (nM) : 4.9

QIK(SNF1LK2)

Product code: [02-129](#)

Full-length human QIK(SNF1LK2) [1-926(end) amino acids of accession number NP_056006.1] was expressed as N-terminal GST-fusion protein (132 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : AMARA peptide
 ATP (μ M) Km app / Bin : 42 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.4
 IC50 at 1 mM ATP (nM) : 2.9

RET

Product code: [08-159](#)

Human RET, cytoplasmic domain [658-1114(end) amino acids of accession number NP_066124.1] was expressed as N-terminal GST-fusion protein(79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 7.5 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.3
 IC50 at 1 mM ATP (nM) : 20

RET[G691S]

Product code: [08-522](#)

Human RET, cytoplasmic domain [658-1114(end) amino acids and G691S of accession number NP_066124.1] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 13 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.1
 IC50 at 1 mM ATP (nM) : 24

RET[M918T]

Product code: [08-508](#)

Human RET, cytoplasmic domain [658-1114(end) amino acids and M918T of accession number NP_066124.1] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 4.2 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.4
 IC50 at 1 mM ATP (nM) : 81

RET[S891A]

Product code: [08-523](#)

Human RET, cytoplasmic domain [658-1114(end) amino acids and S891A of accession number NP_066124.1] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 11 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.44
 IC50 at 1 mM ATP (nM) : 9.6

RET[Y791F]

Product code: [08-521](#)

Human RET, cytoplasmic domain [658-1114(end) amino acids and Y791F of accession number NP_066124.1] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 29 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.5
 IC50 at 1 mM ATP (nM) : 26

ROCK1

Product code: [01-109](#)

Human ROCK1, catalytic domain [1-477 amino acids of accession number NP_005397.1] was expressed as N-terminal GST-fusion protein (82 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : LIMKtide
 ATP (μ M) Km app / Bin : 3.1 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.6
 IC50 at 1 mM ATP (nM) : 73

ROCK2

Product code: [01-110](#)

Human ROCK2, catalytic domain [1-553 amino acids of accession number NP_004841.2] was expressed as N-terminal GST-fusion protein (91 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : LIMKtide
 ATP (μ M) Km app / Bin : 7.4 / 5
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.92
 IC50 at 1 mM ATP (nM) : 21

RON(MST1R)

Product code: 08-152

Human RON, cytoplasmic domain [979-1400(end) amino acids of accession number NP_002438.1] was expressed as N-terminal GST-fusion protein (75kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 27 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 37
 IC50 at 1 mM ATP (nM) : 550

ROS(ROS1)

Product code: 08-163

Human ROS, cytoplasmic domain [1883-2347(end) amino acids of accession number NP_002935.2] was expressed as N-terminal GST-fusion protein (79 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : IRS1
 ATP (μ M) Km app / Bin : 37 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.4
 IC50 at 1 mM ATP (nM) : 1.0

RSK1(RPS6KA1)

Product code: 01-149

Full-length human RSK1 [1-735(end) amino acids of accession number NP_002944.2] was expressed as N-terminal GST-fusion protein (110 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K peptide(N-FL)
 ATP (μ M) Km app / Bin : 21 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.14
 IC50 at 1 mM ATP (nM) : 2.5

RSK2(RPS6KA3)

Product code: 01-150

Full-length human RSK2 [1-740(end) amino acids of accession number NP_004577.1] was expressed as N-terminal GST-fusion protein (111 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K peptide(N-FL)
 ATP (μ M) Km app / Bin : 14 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.10
 IC50 at 1 mM ATP (nM) : 2.1

RSK3(RPS6KA2)

Product code: 01-151

Full-length human RSK3 [1-733(end) amino acids of accession number NP_066958.2] was expressed as N-terminal GST-fusion protein (111 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K peptide(N-FL)
 ATP (μ M) Km app / Bin : 9.9 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.11
 IC50 at 1 mM ATP (nM) : 1.7

RSK4(RPS6KA6)

Product code: [01-152](#)

Full-length human RSK4 [1-745(end) amino acids of accession number NP_055311.1] was expressed as N-terminal GST-fusion protein (111 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : S6K peptide(N-FL)
 ATP (μ M) Km app / Bin : 20 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.051
 IC50 at 1 mM ATP (nM) : 0.56

SGK

Product code: [01-158](#)

Truncated human SGK [61-431(end) amino acids and S422D of accession number NP_005618.2] was co-expressed as N-terminal GST-fusion protein (68 kDa) with His-tagged PDK1 [1-556(end) amino acids of accession number NP_002604.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 52 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 10
 IC50 at 1 mM ATP (nM) : 99

SGK2

Product code: [01-159](#)

Full-length human SGK2 [1-367(end) amino acids and S356D of accession number NP_733794.1] was co-expressed as N-terminal GST-fusion protein (68 kDa) with His-tagged PDK1 [1-556(end) amino acids of accession number NP_002604.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 58 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 30
 IC50 at 1 mM ATP (nM) : n.a.

SGK3(SGKL)

Product code: [01-160](#)

Truncated human SGK3 [119-496(end) amino acids and S486D of accession number NP_037389.4] was co-expressed as N-terminal GST-fusion protein (68 kDa) with His-tagged PDK1 [1-556(end) amino acids of accession number NP_002604.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : SGKtide
 ATP (μ M) Km app / Bin : 17 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 42
 IC50 at 1 mM ATP (nM) : n.a.

SIK(SNF1LK)

Product code: [02-131](#)

Full-length human SIK [1-783(end) amino acids of accession number NP_775490.2] was expressed as N-terminal GST-fusion protein (112 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : AMARA peptide
 ATP (μ M) Km app / Bin : 47 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.8
 IC50 at 1 mM ATP (nM) : 1.0

skMLCK(MYLK2)

Product code: [02-150](#)

Full-length human skMLCK [1-596(end) amino acids of accession number NP_149109.1] was expressed as N-terminal GST-fusion protein (93 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MLCtide
 ATP (μ M) Km app / Bin : 820 / 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 51
 IC50 at 1 mM ATP (nM) : 51

SLK

Product code: [07-129](#)

Full-length human SLK [1-1152(end) amino acids and S5N of accession number NP_055535.1] was expressed as N-terminal GST-fusion protein (160 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Moesin-derived peptide
 ATP (μ M) Km app / Bin : 36 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.32
 IC50 at 1 mM ATP (nM) : n.a.

SPHK1

Product code: [11-105](#)

Full-length human SPHK1 [1-384(end) amino acids of accession number NP_001136074.1] was expressed as N-terminal GST-fusion protein (69 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : Sphingosine
 ATP (μ M) Km app / Bin : 5.9 / 5
 Metal : Mg
 Reference compound : PF-543
 IC50 at ATP Bin (nM) : 17
 IC50 at 1 mM ATP (nM) : n.a.

SPHK2

Product code: [11-106](#)

Full-length human SPHK2 [1-618(end) amino acids of accession number NP_001191089.1] was expressed as N-terminal GST-fusion protein (92 kDa) using baculovirus expression system.

Assay platform : ADP-Glo
 Substrate : Sphingosine
 ATP (μ M) Km app / Bin : 200 / 200
 Metal : Mg
 Reference compound : PF-543
 IC50 at ATP Bin (nM) : 1400
 IC50 at 1 mM ATP (nM) : n.a.

SRC

Product code: [08-173](#)

Full-length human SRC [1-536(end) amino acids of accession number NP_005408.1] was expressed as N-terminal GST-fusion protein (87 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 31 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 5.3
 IC50 at 1 mM ATP (nM) : 33

SRM(SRMS)

Product code: 08-174

Human SRM, catalytic domain [215-488(end) amino acids of accession number NP_543013.1] was expressed as N-terminal GST-fusion protein (58kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 38 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 290
 IC50 at 1 mM ATP (nM) : 5000

SRPK1

Product code: 04-160

Full-length human SRPK1 [1-655(end) amino acids and V504 deletion of accession number NP_003128.3] was expressed as N-terminal GST-fusion protein (101 kDa) using E. coli expression system.

Assay platform : IMAP
 Substrate : SRPKtide
 ATP (μ M) Km app / Bin : 200 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 85
 IC50 at 1 mM ATP (nM) : n.a.

SRPK2

Product code: 04-161

Full-length human SRPK2 [1-688(end) amino acids of accession number NP_872633.1] was expressed as N-terminal GST-fusion protein (104 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : DYRKtide-F
 ATP (μ M) Km app / Bin : 14 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 600
 IC50 at 1 mM ATP (nM) : n.a.

SYK

Product code: 08-176

Full-length human SYK [1-635(end) amino acids of accession number NP_003168.2] was expressed as N-terminal GST-fusion protein (99 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyntide
 ATP (μ M) Km app / Bin : 59 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.29
 IC50 at 1 mM ATP (nM) : 0.63

TAK1-TAB1(MAP3K7)

Product code: 09-019

Fused gene of human TAK1 [1-303 amino acids of accession number NP_663304.1] and human TAB1 [437-504 amino acids of accession number NP_006107.1] was expressed as N-terminal His-tagged protein (45kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : LRRKtide
 ATP (μ M) Km app / Bin : 37 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 12
 IC50 at 1 mM ATP (nM) : 27

TAOK2

Product code: [07-133](#)

Human TAOK2, catalytic domain [1-319 amino acid of accession number NP_004774.1] was expressed as N-terminal GST-fusion protein (63 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : TAOKtide
 ATP (μ M) Km app / Bin : 39 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 24
 IC50 at 1 mM ATP (nM) : 100

TBK1

Product code: [05-115](#)

Full-length human TBK1 [1-729(end) amino acids of accession number NP_037386.1] was expressed as N-terminal GST-fusion protein (111 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CKtide
 ATP (μ M) Km app / Bin : 21 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.2
 IC50 at 1 mM ATP (nM) : 6.2

TEC

Product code: [08-182](#)

Human TEC, catalytic domain [359-631(end) amino acids of accession number NP_003206.2] was expressed as N-terminal GST-fusion protein (59 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srectide
 ATP (μ M) Km app / Bin : 55 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 20
 IC50 at 1 mM ATP (nM) : 220

TIE2(TEK)

Product code: [08-185](#)

Human TIE2, cytoplasmic domain [771-1124(end) amino acids of accession number NP_000450.1] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Blk/Lyotide
 ATP (μ M) Km app / Bin : 94 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 100
 IC50 at 1 mM ATP (nM) : 190

TNIK

Product code: [07-138](#)

Human TNIK, catalytic domain [1-314 amino acids of accession number NP_055843.1] was expressed as N-terminal GST-fusion protein (62 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Moesin-derived peptide
 ATP (μ M) Km app / Bin : 16 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 11

TNK1

Product code: 08-104

Human TNK1, catalytic domain [106-390 amino acids of accession number Q13470-2] was expressed as N-terminal GST-fusion protein (58 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 71 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.55
 IC50 at 1 mM ATP (nM) : 1.7

TRKA(NTRK1)

Product code: 08-186

Human TRKA, cytoplasmic domain [436-790(end) amino acids of accession number NP_001012331.1] was expressed as N-terminal GST-fusion protein (67 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 65 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.34
 IC50 at 1 mM ATP (nM) : 0.64

TRKB(NTRK2)

Product code: 08-187

Human TRKB, cytoplasmic domain [456-822(end) amino acids of accession number NP_001018074.1] was expressed as N-terminal GST-fusion protein (69 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 80 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.29
 IC50 at 1 mM ATP (nM) : 0.55

TRKC(NTRK3)

Product code: 08-197

Human TRKC, cytoplasmic domain [456-825(end) amino acids of accession number NP_002521.2] was expressed as N-terminal GST-fusion protein (69 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 47 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.32
 IC50 at 1 mM ATP (nM) : 1.0

TSSK1

Product code: 02-364

Full-length human TSSK1 [1-367(end) amino acids of accession number NP_114417.1] was expressed as N-terminal GST-fusion protein using baculovirus expression system. GST-TSSK1 was purified by using glutathione sepharose chromatography. GST-TSSK1 was cleaved by PreScission protease and GST-free TSSK1 (42 kDa) was collected as flow-through fraction from glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 11 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 0.19
 IC50 at 1 mM ATP (nM) : 0.95

TSSK2

Product code: 02-165

Full-length human TSSK2 [1-358(end) amino acids of accession number NP_443732.3] was expressed as N-terminal GST-fusion protein (68 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 8.8 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 4.7
 IC50 at 1 mM ATP (nM) : n.a.

TSSK3

Product code: 02-166

Full-length human TSSK3 [2-268(end) amino acids of accession number NP_443073.1] was expressed as N-terminal GST-fusion protein (57 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : GS peptide
 ATP (μ M) Km app / Bin : 45 / 50
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 12
 IC50 at 1 mM ATP (nM) : n.a.

TXK

Product code: 08-183

Human TXK, catalytic domain [260-527(end) amino acids of accession number NP_003319.2] was expressed as N-terminal GST-fusion protein (58 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 110 / 100
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 45
 IC50 at 1 mM ATP (nM) : 220

TYK2

Product code: 08-147

Human TYK2, catalytic domain [871-1187(end) amino acids of accession number NP_003322.3] was expressed as N-terminal GST-fusion protein (63 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 18 / 25
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.0
 IC50 at 1 mM ATP (nM) : 7.0

TYRO3

Product code: 08-109

Human TYRO3, cytoplasmic domain of [453-890(end) amino acids of accession number NP_006284.2] was expressed as N-terminal GST fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : CSKtide
 ATP (μ M) Km app / Bin : 80 / 75
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.3
 IC50 at 1 mM ATP (nM) : 2.9

WNK1

Product code: 05-179

Human WNK1, catalytic domain [1-491 amino acids of accession number NP_061852.1] was expressed as N-terminal GST-fusion protein (81 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : SPAKtide
 ATP (μ M) Km app / Bin : 140 / 150
 Metal : Mg+Mn
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 4500
 IC50 at 1 mM ATP (nM) : n.a.

WNK2

Product code: 05-180

Human WNK2, catalytic domain [166-489 amino acids of accession number NP_006639.3] was expressed as N-terminal GST-fusion protein (65 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : SPAKtide
 ATP (μ M) Km app / Bin : 48 / 50
 Metal : Mg+Mn
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 2300
 IC50 at 1 mM ATP (nM) : n.a.

WNK3

Product code: 05-181

Human WNK3, catalytic domain [1-434 amino acids of accession number NP_065973.2] was expressed as N-terminal GST-fusion protein (76 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : SPAKtide
 ATP (μ M) Km app / Bin : 48 / 50
 Metal : Mg+Mn
 Reference compound : K252a
 IC50 at ATP Bin (nM) : 1300
 IC50 at 1 mM ATP (nM) : n.a.

YES(YES1)

Product code: 08-175

Full-length human YES [1-543(end) amino acids of accession number NP_005424.1] was expressed as N-terminal GST-fusion protein (88 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 13 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 2.4
 IC50 at 1 mM ATP (nM) : 23

YES(YES1)[T348I]

Product code: 08-533

Full-length human YES [1-543(end) amino acids and T348I of accession number NP_005424.1] was expressed as N-terminal GST-fusion protein (89 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : Srctide
 ATP (μ M) Km app / Bin : 8.5 / 10
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at ATP Bin (nM) : 1.4
 IC50 at 1 mM ATP (nM) : 45

ZAP70

Product code: 08-177

Full-length human ZAP70 [1-619(end) amino acids of accession number NP_001070] was expressed as N-terminal GST-fusion protein (97 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: Blk/Lyntide
ATP (μ M) Km app / Bin	: 3.3 / 5
Metal	: Mg+Mn
Reference compound	: Staurosporine
IC50 at ATP Bin (nM)	: 0.76
IC50 at 1 mM ATP (nM)	: 34

BRAF

Product code: [09-122](#)

Human BRAF, catalytic domain [433-726 amino acid of accession number NP_004324.2] was expressed as N-terminal GST-fusion protein (60 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (µM) : 1000
 Metal : Mg
 Reference compound : ZM336372
 IC50 at 1 mM ATP (nM) : >10000
 * MAP2K1/Erk2/Modified Erktide

BRAF[V600E]

Product code: [09-144](#)

Human BRAF, catalytic domain [433-726 amino acids and V600E of accession number NP_004324.2] was expressed as N-terminal GST-fusion protein (60 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (µM) : 1000
 Metal : Mg
 Reference compound : ZM336372
 IC50 at 1 mM ATP (nM) : 662
 * MAP2K1/Erk2/Modified Erktide

COT(MAP3K8)

Product code: [07-301](#)

Human COT, catalytic domain [30-397 amino acids of accession number NP_005195.2] was expressed as N-terminal GST-fusion protein using baculovirus expression system. GST-COT was purified by using glutathione sepharose chromatography. GST-COT was cleaved by PreScission protease and GST-free COT (42 kDa) was collected as flow-through fraction from glutathione sepharose chromatography.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (µM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 120
 * MAP2K1/Erk2/Modified Erktide

DLK(MAP3K12)

Product code: [09-111](#)

Human DLK, catalytic domain [1-520 amino acid of accession number NP_006292.3] was expressed as N-terminal GST-fusion protein (86 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K4/MAP2K7
 Cascade Assay *
 ATP (µM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 460
 * (MAP2K4/MAP2K7)/JNK2/Modified Erktide

MAP2K1

Product code: [07-141](#)

Full-length human MAP2K1 [1-393(end) amino acids of accession number NP_002746.1] was co-expressed as N-terminal GST-fusion protein (71 kDa) with human His-tagged RAF1 [306-648(end) amino acids and Y340D and Y341D of accession number NP_002871.1] using baculovirus expression system.

Assay platform : MSA
 Substrate : Erk2
 Cascade Assay *
 ATP (µM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 58
 * Erk2/Modified Erktide

MAP2K2

Product code: 07-142

Full-length human MAP2K2 [1-400(end) amino acids of accession number NP_109587.1] was co-expressed as N-terminal GST-fusion protein (71 kDa) with human His-tagged RAF1 [306-648(end) amino acids and Y340D and Y341D of accession number NP_002871.1] using baculovirus expression system.

Assay platform	: MSA
Substrate	: Erk2 Cascade Assay *
ATP (μM)	: 1000
Metal	: Mg
Reference compound	: Staurosporine
IC50 at 1 mM ATP (nM)	: 54
* Erk2/Modified Erktide	

MAP2K3

Product code: 07-143

Full-length human MAP2K3 [1-347(end) amino acids of accession number NP_659731.1] was co-expressed as N-terminal GST-fusion protein (67 kDa) with human His-tagged MLK3 [99-398 amino acids of accession number NP_002410.1] using baculovirus expression system.

Assay platform	: MSA
Substrate	: p38α Cascade Assay *
ATP (μM)	: 1000
Metal	: Mg
Reference compound	: Staurosporine
IC50 at 1 mM ATP (nM)	: 790
* p38α/Modified Erktide	

MAP2K4

Product code: 07-144

Full-length human MAP2K4 [1-399(end) amino acids of accession number NP_003001.1] was co-expressed as N-terminal GST-fusion protein (71 kDa) with human His-tagged MAP3K3 [1-626(end) amino acids of accession number NP_002392.2] using baculovirus expression system.

Assay platform	: MSA
Substrate	: JNK2 Cascade Assay *
ATP (μM)	: 1000
Metal	: Mg
Reference compound	: Staurosporine
IC50 at 1 mM ATP (nM)	: 4600
* JNK2/Modified Erktide	

MAP2K5

Product code: 07-145

Full-length human MAP2K5 [1-448(end) amino acids of accession number NP_660143.1] was co-expressed as N-terminal GST-fusion protein (77 kDa) with human His-tagged MAP3K3 [1-626(end) amino acids of accession number NP_002392.2], CDC37 and HSP90 using baculovirus expression system.

Assay platform	: MSA
Substrate	: Erk5 Cascade Assay *
ATP (μM)	: 1000
Metal	: Mg
Reference compound	: Staurosporine
IC50 at 1 mM ATP (nM)	: 62
* Erk5/EGFR-derived peptide	

MAP2K6

Product code: 07-146

Full-length human MAP2K6 [2-334(end) amino acids of accession number NP_002749.2] was co-expressed as N-terminal GST-fusion protein (64 kDa) with human His-tagged MLK3 [99-398 amino acids of accession number NP_002410.1] using baculovirus expression system.

Assay platform	: MSA
Substrate	: p38α Cascade Assay *
ATP (μM)	: 1000
Metal	: Mg
Reference compound	: Staurosporine
IC50 at 1 mM ATP (nM)	: 140
* p38α/Modified Erktide	

MAP2K7

Product code: 07-148

Full-length human MAP2K7 [1-419(end) amino acids of accession number NP_660186.1] was co-expressed as N-terminal GST-fusion protein (75 kDa) with human His-tagged MAP3K3 [1-626(end) amino acids of accession number NP_002392.2] using baculovirus expression system.

Assay platform : MSA
 Substrate : JNK2
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 1100
 * JNK2/Modified Erktide

MAP3K1

Product code: 07-103

Human MAP3K1, catalytic domain [1193-1512(end) amino acids of accession number NP_005912.1] was expressed as N-terminal GST-fusion protein (62 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 160
 * MAP2K1/Erk2/Modified Erktide

MAP3K2

Product code: 07-104

Human MAP3K2, catalytic domain [336-619(end) amino acids of accession number NP_006600.3] was expressed as N-terminal GST-fusion protein (59 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K4/MAP2K7
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 45
 * (MAP2K4/MAP2K7)/JNK2/Modified Erktide

MAP3K3

Product code: 07-105

Full-length human MAP3K3 [1-626(end) amino acids of accession number NP_002392.2] was expressed as N-terminal GST-fusion protein (98 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K6
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 72
 * MAP2K6/p38α/Modified Erktide

MAP3K4

Product code: 07-106

Human MAP3K4, catalytic domain [1312-1608(end) amino acids of accession number NP_005913.2] was expressed as N-terminal GST-fusion protein (61 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K6
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 100
 * MAP2K6/p38α/Modified Erktide

MAP3K5

Product code: [07-107](#)

Human MAP3K5, catalytic domain [654-971 amino acids of accession number NP_005914.1] was expressed as N-terminal GST-tagged protein (62 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K6
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 14
 * MAP2K6/p38α/Modified Erktide

MLK1(MAP3K9)

Product code: [09-115](#)

Human MLK1, catalytic domain [110-422 amino acids of accession number NP_149132.2] was expressed as N-terminal GST-fusion protein (62kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 11
 * MAP2K1/Erk2/Modified Erktide

MLK2(MAP3K10)

Product code: [09-116](#)

Human MLK2, catalytic domain and leucine-zipper domain [75-462 amino acids of accession number NP_002437.2] was expressed as N-terminal GST-fusion protein (71kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 45
 * MAP2K1/Erk2/Modified Erktide

MLK3(MAP3K11)

Product code: [09-017](#)

Human MLK3, catalytic domain [99-398 amino acids of accession number NP_002410.1] was expressed as N-terminal His-tagged protein (37kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 4.8
 * MAP2K1/Erk2/Modified Erktide

MOS

Product code: [05-118](#)

Full-length, human MOS [1-346(end) amino acids of accession number NP_005363.1] was expressed as N-terminal GST-fusion protein (65 kDa) using baculovirus expression system.

Assay platform : MSA
 Substrate : MAP2K1
 Cascade Assay *
 ATP (μM) : 1000
 Metal : Mg
 Reference compound : Staurosporine
 IC50 at 1 mM ATP (nM) : 32
 * MAP2K1/Erk2/Modified Erktide

RAF1

Product code: 09-125

Human RAF1, catalytic domain [306-648(end) amino acids and Y340D and Y341D of accession number NP_002871.1] was expressed as N-terminal GST-fusion protein (66 kDa) using baculovirus expression system.

Assay platform	: MSA
Substrate	: MAP2K1 Cascade Assay *
ATP (μM)	: 1000
Metal	: Mg
Reference compound	: ZM336372
IC50 at 1 mM ATP (nM)	: 2800
* MAP2K1/Erk2/Modified Erktide	

Assay methods

Test compounds preparation

The test compound is dissolved in and diluted with dimethylsulfoxide (DMSO) to achieve 100-fold higher concentration which is specified by the sponsor. Then the solution is further 25-fold diluted with assay buffer to make the final test compound solution (4x compound solution). Reference compounds for the assay control are prepared similarly.

Assay reagents and procedures

Mobility Shift Assay (MSA)

- 1) 4x Substrate/ATP/Metal/Additive solution is prepared with kit buffer (20 mmol/L(M) HEPES, 0.01% Triton X-100, 5 mM DTT, pH7.5), and 2x kinase solution is prepared with assay buffer (20 mM HEPES, 0.01% Triton X-100, 1 mM DTT, pH7.5).
- 2) 5 μ L of 4x compound solution, 5 μ L of 4x Substrate/ATP/Metal/Additive solution, and 10 μ L of 2x kinase solution are mixed and incubated in a well of polypropylene 384 well microplate for 1 or 5 hour(s)* at room temperature. (*; depend on kinase)
- 3) 70 μ L of Termination Buffer (127 mM HEPES, 0.01% Triton X-100, 26.7 mM EDTA-2Na, 1% DMSO, pH7.5) is added to the well.
- 4) The reaction mixture is applied to LabChip™ system (Revvity) or BioPhase™ 8800 system (AB Sciex), and the product and substrate peptide peaks are separated and quantitated.
- 5) The kinase reaction is evaluated by the product ratio calculated from peak heights (when using LabChip™ system) or area (when using BioPhase™ 8800 system) of product(P) and substrate(S) peptides (P/(P+S)).

Mobility Shift Assay (MSA) with pre-incubation

- 1) 4x Substrate/ATP/Metal/Additive solution is prepared with kit buffer (20 mM HEPES, 0.01% Triton X-100, 5 mM DTT, pH7.5), and 2x kinase solution is prepared with assay buffer (20 mM HEPES, 0.01% Triton X-100, 1 mM DTT, pH7.5).
- 2) 5 μ L of 4x compound solution and 10 μ L of 2x kinase solution are mixed and incubated in a well of polypropylene 384 well microplate for 30 minutes at room temperature.
- 3) 5 μ L of 4x Substrate/ATP/Metal/Additive solution is added to the well, and incubated for 1 hour at room temperature.
- 4) 70 μ L of Termination Buffer (127 mM HEPES, 0.01% Triton X-100, 26.7 mM EDTA-2Na, 1% DMSO, pH7.5) is added to the well.
- 5) The reaction mixture is applied to LabChip™ system (Revvity) or BioPhase™ 8800 system (AB Sciex), and the product and substrate peptide peaks are separated and quantitated.
- 6) The kinase reaction is evaluated by the product ratio calculated from peak heights (when using LabChip™ system) or area (when using BioPhase™ 8800 system) of product(P) and substrate(S) peptides (P/(P+S)).

ADP-Glo™ Kinase Assay

- 1) 4x compound solution and 4x ATP solution are prepared with assay buffer (50 mM MOPS, 1 mM DTT, pH7.2). 4x Substrate solution and 4x kinase/Metal solution are prepared with MOPS based buffer containing individual kinase specific additives.
- 2) 5 μ L of 4x compound solution, 5 μ L of 4x Substrate solution, 5 μ L of 4x ATP solution, and 5 μ L of 4x kinase/Metal solution are mixed and incubated in a well of polystyrene 384 well black microplate for 1 hour at room temperature.
- 3) 20 μ L of ADP-Glo™ Reagent (Promega) is added to the well, and incubated for over 40 minutes.
- 4) 40 μ L of Kinase Detection Reagent (Promega) is added to the well, and incubated for over 40 minutes.
- 5) The kinase reaction is evaluated by the endpoint luminescence of the well.

IMAP™ Assay

- 1) 4x Substrate/ATP/Metal solution and 2x kinase solution are prepared with assay buffer (20 mM HEPES, 0.01% Tween-20, 2 mM DTT, pH7.4).
- 2) 5 μ L of 4x compound solution, 5 μ L of 4x Substrate/ATP/Metal solution, and 10 μ L of 2x kinase solution are mixed and incubated in a well of polystyrene 384 well black microplate for 1 hour at room temperature.
- 3) 60 μ L of IMAP binding reagent (IMAP™ Screening Express kit; Molecular Devices) is added to the well, and incubated for over 30 minutes.
- 4) The kinase reaction is evaluated by the fluorescence polarization at 485 nm for excitation and 530 nm for emission of the well.

Data analysis

The readout value of reaction control (complete reaction mixture) is set as a 0% inhibition, and the readout value of background (Enzyme(-)) is set as a 100% inhibition, then the percent inhibition of each test solution is calculated.

IC₅₀ value is calculated from concentration vs. %Inhibition curves by fitting to a four parameter logistic curve.

Reaction conditions

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
ABL	MSA	ABLTide	1000	16	25	1000	Mg	5	-	-	Staurosporine	1
ABL[E255K]	MSA	ABLTide	1000	17	25	1000	Mg	5	-	-	Staurosporine	1
ABL[T315I]	MSA	ABLTide	1000	4.0	5	1000	Mg	5	-	-	Staurosporine	1
ACK	MSA	WASP peptide	1000	97	100	1000	Mg	5	-	-	Staurosporine	5
AKT1	MSA	Crosstide	1000	31	50	1000	Mg	5	-	-	Staurosporine	1
AKT2	MSA	Crosstide	1000	110	100	-	Mg	5	-	-	Staurosporine	1
AKT3	MSA	Crosstide	1000	54	50	-	Mg	5	-	-	Staurosporine	1
ALK	MSA	Srctide	1000	57	50	1000	Mg	5	-	-	Staurosporine	1
ALK[C1156Y]	MSA	Srctide	1000	64	75	1000	Mg	5	-	-	Staurosporine	1
ALK[F1174L]	MSA	Srctide	1000	49	50	1000	Mg	5	-	-	Staurosporine	1
ALK[G1202R]	MSA	Srctide	1000	31	50	1000	Mg	5	-	-	Staurosporine	1
ALK[G1269A]	MSA	Srctide	1000	27	25	1000	Mg	5	-	-	Staurosporine	1
ALK[L1196M]	MSA	Srctide	1000	57	75	1000	Mg	5	-	-	Staurosporine	1
ALK[R1275Q]	MSA	Srctide	1000	84	100	1000	Mg	5	-	-	Staurosporine	1
ALK[T1151_L1152insT]	MSA	Srctide	1000	110	100	1000	Mg	5	-	-	Staurosporine	1
EML4-ALK	MSA	Srctide	1000	43	50	1000	Mg	5	-	-	Staurosporine	5
NPM1-ALK	MSA	Srctide	1000	57	50	1000	Mg	5	-	-	Staurosporine	1
AMPK α 1/ β 1/ γ 1	MSA	SAMS peptide	1000	130	150	1000	Mg	5	-	-	Staurosporine	1
AMPK α 2/ β 1/ γ 1	MSA	SAMS peptide	1000	100	100	-	Mg	5	-	-	Staurosporine	1
ARG	MSA	ABLTide	1000	24	25	1000	Mg	5	-	-	Staurosporine	1
AurA	MSA	Kemptide	1000	27	25	1000	Mg	5	-	-	Staurosporine	1
AurA/TPX2	MSA	Kemptide	1000	1.7	2	-	Mg	5	TPX2	200 nM	Staurosporine	1
AurB/INCENP	MSA	Kemptide	1000	16	25	1000	Mg	5	-	-	Staurosporine	1
AurC	MSA	Kemptide	1000	24	25	1000	Mg	5	-	-	Staurosporine	1
AXL	MSA	CSKTide	1000	32	50	1000	Mg	5	-	-	Staurosporine	1
BLK	MSA	Srctide	1000	62	75	1000	Mg	5	-	-	Staurosporine	1
BMX	MSA	Srctide	1000	75	75	1000	Mg	5	-	-	Staurosporine	1
BRK	MSA	Blk/Lyntide	1000	250	250	1000	Mg	5	-	-	Staurosporine	5
BRSK1	MSA	CHKtide	1000	30	25	1000	Mg	5	-	-	Staurosporine	1
BRSK2	MSA	CHKtide	1000	31	50	-	Mg	5	-	-	Staurosporine	1
BTK	MSA	Srctide	1000	22	25	1000	Mg	5	-	-	Staurosporine	1
BTK[C481S]	MSA	Srctide	1000	27	25	1000	Mg	5	-	-	Staurosporine	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
BUB1/BUB3	MSA	H2A peptide	1000	2.9	5	-	Mg	5	-	-	Staurosporine	1
CaMK1 α	MSA	GS peptide	1000	750	1000	1000	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	5
CaMK1 δ	MSA	Synapsin peptide	1000	11	10	-	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	5
CaMK2 α	MSA	GS peptide	1000	33	50	1000	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	1
CaMK2 β	MSA	GS peptide	1000	19	25	1000	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	1
CaMK2 γ	MSA	GS peptide	1000	23	25	1000	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	1
CaMK2 δ	MSA	GS peptide	1000	6.3	5	1000	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	1
CaMK4	MSA	GS peptide	1000	20	25	1000	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	1
CDC7/ASK	MSA	MCM2 peptide	1000	2.8	5	1000	Mg	10	-	-	Staurosporine	5
CDK1(CDC2)/CycB1	MSA	Modified Histone H1	1000	34	50	1000	Mg	5	-	-	Staurosporine	1
CDK2/CycA2	MSA	Modified Histone H1	1000	27	25	1000	Mg	5	-	-	Staurosporine	1
CDK2/CycE1	MSA	Modified Histone H1	1000	130	150	1000	Mg	5	-	-	Staurosporine	1
CDK3/CycE1	MSA	Modified Histone H1	1000	1000	1000	1000	Mg	5	-	-	Staurosporine	1
CDK4/CycD3	MSA	DYRKtide-F	1000	200	200	1000	Mg	5	-	-	Staurosporine	5
CDK5/p25	MSA	Modified Histone H1	1000	10	10	1000	Mg	5	-	-	Staurosporine	1
CDK6/CycD3	MSA	DYRKtide-F	1000	330	300	1000	Mg	5	-	-	Staurosporine	5
CDK7/CycH/MAT1	MSA	CTD3 peptide	1000	32	50	1000	Mg	5	-	-	Staurosporine	5
CDK9/CycT1	MSA	CDK9 substrate	1000	9.4	10	1000	Mg	5	-	-	Staurosporine	5
CGK2	MSA	Kemptide	1000	24	25	-	Mg	5	cGMP	5 μ M	Staurosporine	1
CHK1	MSA	CHKtide	1000	50	50	1000	Mg	5	-	-	Staurosporine	1
CHK2	MSA	CHKtide	1000	51	50	1000	Mg	5	-	-	Staurosporine	1
CK1 α	MSA	CKtide	1000	4.1	5	1000	Mg	5	-	-	5-Iodotubercidin	5
CK1 γ 1	MSA	CKtide	1000	6.3	5	-	Mg	5	-	-	5-Iodotubercidin	1
CK1 γ 2	MSA	CKtide	1000	10	10	-	Mg	5	-	-	5-Iodotubercidin	1
CK1 γ 3	MSA	CKtide	1000	3.2	5	-	Mg	5	-	-	5-Iodotubercidin	1
CK1 δ	MSA	CKtide	1000	7.7	10	1000	Mg	5	-	-	5-Iodotubercidin	1
CK1 ϵ	MSA	CKtide	1000	16	25	1000	Mg	5	-	-	5-Iodotubercidin	5
CK2 α 1/ β	MSA	CK2tide	1000	2.9	5	-	Mg	5	-	-	TBB	1
CK2 α 2/ β	MSA	CK2tide	1000	2.1	5	-	Mg	5	-	-	TBB	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
CLK1	MSA	DYRKtide-F	1000	11	10	-	Mg	5	-	-	Staurosporine	1
CLK2	MSA	DYRKtide-F	1000	140	150	1000	Mg	5	-	-	Staurosporine	1
CLK3	MSA	DYRKtide-F	1000	75	75	-	Mg	5	-	-	Staurosporine	1
CRIK	MSA	Histone H3 peptide	1000	7.8	10	-	Mg	5	-	-	Staurosporine	5
CSK	MSA	Srctide	1000	4.8	5	1000	Mg, Mn	5, 1	-	-	Staurosporine	5
DAPK1	MSA	DAPK1tide	1000	1.1	1	1000	Mg	5	-	-	Staurosporine	1
DCAMKL2	MSA	GS peptide	1000	120	150	-	Mg	5	-	-	Staurosporine	5
DDR1	MSA	IRS1	1000	94	100	1000	Mg	5	-	-	Staurosporine	5
DDR2	MSA	IRS1	1000	38	50	1000	Mg	5	-	-	Staurosporine	5
DGK α	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	130	100	-	Mg	5	-	-	Non-disclosable	1
DGK β	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	61	50	-	Mg	5	-	-	Non-disclosable	1
DGK γ	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	55	50	-	Mg	5	-	-	Non-disclosable	1
DGK δ	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	120	100	-	Mg	5	-	-	Non-disclosable	1
DGK ϵ	ADP-Glo	Diacylglycerol, POPS	775000, 1600000	120	100	-	Mg	5	-	-	Non-disclosable	1
DGK ζ	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	25	25	-	Mg	5	-	-	Non-disclosable	1
DGK η	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	24	25	-	Mg	5	-	-	Non-disclosable	1
DGK θ	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	37	50	-	Mg	5	-	-	Non-disclosable	1
DGK ι	ADP-Glo	Diacylglycerol, POPS	850000, 6750000	34	50	-	Mg	5	-	-	Non-disclosable	1
DGK κ	ADP-Glo	Diacylglycerol, POPS	67500, 800000	17	25	-	Mg	1	-	-	Non-disclosable	1
DYRK1A	MSA	DYRKtide-F	1000	16	25	1000	Mg	5	-	-	Staurosporine	1
DYRK1B	MSA	DYRKtide-F	1000	59	50	1000	Mg	5	-	-	Staurosporine	1
DYRK2	MSA	DYRKtide-F	1000	7.7	10	1000	Mg	5	-	-	Staurosporine	1
DYRK3	MSA	DYRKtide-F	1000	6.8	5	1000	Mg	5	-	-	Staurosporine	1
EEF2K	MSA	EEF2Ktide	1000	12	10	-	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	A-484954	5
EGFR	MSA	Srctide	1000	2.7	5	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[C797S/L858R]	MSA	Srctide	1000	4.1	5	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[d746-750]	MSA	Srctide	1000	19	25	1000	Mg, Mn	5, 1	-	-	Staurosporine	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
EGFR[d746-750/C797S]	MSA	Srctide	1000	8.2	10	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[d746-750/T790M]	MSA	Srctide	1000	5.4	5	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[d746-750/T790M/C797S]	MSA	Srctide	1000	1.8	2	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[D770_N771insNPG]	MSA	Srctide	1000	2.3	5	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[L858R]	MSA	Srctide	1000	9.8	10	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[L861Q]	MSA	Srctide	1000	7.5	10	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[T790M]	MSA	Srctide	1000	0.90	1	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[T790M/C797S/L858R]	MSA	Srctide	1000	0.85	-	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EGFR[T790M/L858R]	MSA	Srctide	1000	1.9	2	1000	Mg, Mn	5, 1	-	-	Staurosporine	1
EPHA1	MSA	Blk/Lyntide	1000	22	25	1000	Mg	5	-	-	Staurosporine	1
EPHA2	MSA	Blk/Lyntide	1000	67	75	1000	Mg	5	-	-	Staurosporine	1
EPHA3	MSA	Blk/Lyntide	1000	170	150	1000	Mg	5	-	-	Staurosporine	1
EPHA4	MSA	Blk/Lyntide	1000	52	50	1000	Mg	5	-	-	Staurosporine	1
EPHA5	MSA	Blk/Lyntide	1000	56	50	1000	Mg	5	-	-	Staurosporine	1
EPHA6	MSA	Blk/Lyntide	1000	27	25	1000	Mg	5	-	-	Staurosporine	1
EPHA7	MSA	Blk/Lyntide	1000	58	50	1000	Mg	5	-	-	Staurosporine	1
EPHA8	MSA	Blk/Lyntide	1000	69	75	1000	Mg	5	-	-	Staurosporine	1
EPHB1	MSA	Blk/Lyntide	1000	29	25	1000	Mg	5	-	-	Staurosporine	1
EPHB2	MSA	Blk/Lyntide	1000	86	100	1000	Mg	5	-	-	Staurosporine	1
EPHB3	MSA	Blk/Lyntide	1000	49	50	1000	Mg	5	-	-	Staurosporine	1
EPHB4	MSA	Blk/Lyntide	1000	56	50	1000	Mg	5	-	-	Staurosporine	1
Erk1	MSA	Modified Erktide	1000	34	50	1000	Mg	5	-	-	K252a	1
Erk2	MSA	Modified Erktide	1000	33	50	1000	Mg	5	-	-	K252a	1
Erk5	MSA	EGFR-derived peptide	1000	450	1000	1000	Mg	5	-	-	Staurosporine	5
FAK	MSA	Blk/Lyntide	1000	25	25	1000	Mg	5	-	-	Staurosporine	5
FER	MSA	Srctide	1000	26	25	1000	Mg	5	-	-	Staurosporine	1
FES	MSA	Srctide	1000	43	50	1000	Mg	5	-	-	Staurosporine	1
FGFR1	MSA	CSKtide	1000	89	100	1000	Mg	5	-	-	Staurosporine	1
FGFR1[V561M]	MSA	CSKtide	1000	33	50	1000	Mg	5	-	-	Staurosporine	1
FGFR2	MSA	CSKtide	1000	66	75	1000	Mg	5	-	-	Staurosporine	1
FGFR2[V564I]	MSA	CSKtide	1000	21	25	1000	Mg	5	-	-	Staurosporine	1
FGFR3	MSA	CSKtide	1000	43	50	1000	Mg	5	-	-	Staurosporine	1
FGFR3[K650E]	MSA	CSKtide	1000	41	50	1000	Mg	5	-	-	Staurosporine	1
FGFR3[K650M]	MSA	CSKtide	1000	17	25	1000	Mg	5	-	-	Staurosporine	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
FGFR3[V555L]	MSA	CSKtide	1000	29	25	1000	Mg	5	-	-	Staurosporine	1
FGFR3[V555M]	MSA	CSKtide	1000	37	50	1000	Mg	5	-	-	Staurosporine	1
FGFR4	MSA	CSKtide	1000	230	250	1000	Mg	5	-	-	Staurosporine	1
FGFR4[N535K]	MSA	CSKtide	1000	30	25	1000	Mg	5	-	-	Staurosporine	1
FGFR4[V550E]	MSA	CSKtide	1000	210	200	1000	Mg	5	-	-	Staurosporine	1
FGFR4[V550L]	MSA	CSKtide	1000	160	150	1000	Mg	5	-	-	Staurosporine	1
FGR	MSA	Srctide	1000	34	50	1000	Mg	5	-	-	Staurosporine	1
FLT1	MSA	CSKtide	1000	140	150	1000	Mg	5	-	-	Staurosporine	1
FLT3	MSA	Srctide	1000	94	100	1000	Mg	5	-	-	Staurosporine	1
FLT4	MSA	CSKtide	1000	72	75	1000	Mg	5	-	-	Staurosporine	1
FMS	MSA	Srctide	1000	26	25	1000	Mg	5	-	-	Staurosporine	1
FRK	MSA	Srctide	1000	62	75	1000	Mg	5	-	-	Staurosporine	1
FYN[isoform a]	MSA	Srctide	1000	36	50	1000	Mg	5	-	-	Staurosporine	1
FYN[isoform b]	MSA	Srctide	1000	20	25	1000	Mg	5	-	-	Staurosporine	1
GSK3 α	MSA	CREBtide-p	1000	12	10	1000	Mg	5	-	-	Staurosporine	1
GSK3 β	MSA	CREBtide-p	1000	9.1	10	1000	Mg	5	-	-	Staurosporine	1
Haspin	MSA	Histone H3 peptide	1000	140	150	-	Mg	5	-	-	Staurosporine	1
HCK	MSA	Srctide	1000	11	10	1000	Mg	5	-	-	Staurosporine	1
HER2	MSA	Srctide	1000	3.5	5	1000	Mn	5	-	-	Staurosporine	1
HER4	MSA	Srctide	1000	27	25	1000	Mg	5	-	-	Staurosporine	1
HGK	MSA	Moesin-derived peptide	1000	9.4	10	1000	Mg	5	-	-	Staurosporine	1
HIPK1	MSA	DYRKtide-F	1000	4.4	5	-	Mg	5	-	-	Staurosporine	1
HIPK2	MSA	DYRKtide-F	1000	5.9	5	-	Mg	5	-	-	Staurosporine	1
HIPK3	MSA	DYRKtide-F	1000	7.3	5	1000	Mg	5	-	-	Staurosporine	1
HIPK4	MSA	DYRKtide-F	1000	7.0	5	1000	Mg	5	-	-	Staurosporine	1
HPK1	MSA	S6K2 peptide	1000	22	25	1000	Mg	1.25	-	-	K252a	1
IGF1R	MSA	IRS1	1000	63	75	1000	Mg	5	-	-	Staurosporine	1
IKK α	IMAP	I κ B α peptide	100	41	40	-	Mg	10	-	-	Staurosporine	1
IKK β	MSA	Modified I κ B α -derived peptide	1000	16	25	1000	Mg	5	-	-	Staurosporine	1
IKK ϵ	MSA	I κ B α peptide	1000	9.5	10	-	Mg	5	-	-	Staurosporine	5
INSR	MSA	IRS1	1000	58	50	1000	Mg	5	-	-	Staurosporine	1
IRAK1	IMAP	SRPKtide	100	27	25	-	Mg	2.5	-	-	Staurosporine	1
IRAK4	MSA	IRAK1 peptide	1000	920	1000	1000	Mg	5	-	-	Staurosporine	5

Kinase	Platform	Substrate		ATP (μM)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
IRR	MSA	IRS1	1000	64	75	1000	Mg	5	-	-	Staurosporine	1
ITK	MSA	Srctide	1000	6.1	10	1000	Mg	5	-	-	Staurosporine	1
JAK1	MSA	JAK1 substrate peptide	1000	68	75	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	5
JAK2	MSA	Srctide	1000	13	10	1000	Mg	5	-	-	Staurosporine	1
JAK3	MSA	Srctide	1000	3.5	5	1000	Mg	5	-	-	Staurosporine	1
JNK1	MSA	Modified Erktide	1000	29	100	1000	Mg	5	-	-	K252a	1
JNK2	MSA	Modified Erktide	1000	21	50	1000	Mg	5	-	-	K252a	1
JNK3	MSA	Modified Erktide	1000	6.0	25	1000	Mg	5	-	-	K252a	1
KDR	MSA	CSKtide	1000	74	75	1000	Mg	5	-	-	Staurosporine	1
KIT	MSA	Srctide	1000	370	400	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	1
KIT[D816E]	MSA	Srctide	1000	40	50	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	1
KIT[D816V]	MSA	Srctide	1000	14	10	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	1
KIT[D816Y]	MSA	Srctide	1000	22	25	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	1
KIT[T670I]	MSA	Srctide	1000	100	100	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	1
KIT[V560G]	MSA	Srctide	1000	110	250	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	1
KIT[V654A]	MSA	Srctide	1000	220	250	1000	Mg	5	Sodium orthovanadate	25 μM	Staurosporine	1
LATS1/MOBKL1A	MSA	SGKtide	1000	23	25	1000	Mg	5	-	-	Staurosporine	5
LATS2/MOBKL1A	MSA	SGKtide	1000	38	50	1000	Mg	5	-	-	Staurosporine	5
LCK	MSA	Srctide	1000	14	10	1000	Mg	5	-	-	Staurosporine	1
LOK	MSA	Moesin-derived peptide	1000	100	100	-	Mg	5	-	-	Staurosporine	5
LTK	MSA	Srctide	1000	49	50	1000	Mg	5	-	-	Staurosporine	1
LYNa	MSA	Srctide	1000	14	10	1000	Mg	5	-	-	Staurosporine	1
LYNb	MSA	Srctide	1000	18	25	1000	Mg	5	-	-	Staurosporine	1
MAP4K2	MSA	S6K2 peptide	1000	93	100	1000	Mg	5	-	-	Staurosporine	1
MAPKAPK2	MSA	GS peptide	1000	3.6	5	1000	Mg	5	-	-	Staurosporine	1
MAPKAPK3	MSA	GS peptide	1000	13	10	-	Mg	5	-	-	K252a	1
MAPKAPK5	MSA	GS peptide	1000	12	10	-	Mg	5	-	-	Staurosporine	1
MARK1	MSA	CHKtide	1000	8.0	10	-	Mg	5	-	-	Staurosporine	1
MARK2	MSA	CHKtide	1000	8.8	10	-	Mg	5	-	-	Staurosporine	1
MARK3	MSA	CHKtide	1000	5.0	5	-	Mg	5	-	-	Staurosporine	1
MARK4	MSA	CHKtide	1000	12	10	1000	Mg	5	-	-	Staurosporine	1
MELK	MSA	GS peptide	1000	38	50	-	Mg	5	-	-	Staurosporine	5
MER	MSA	CSKtide	1000	36	50	1000	Mg	5	-	-	Staurosporine	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
MET	MSA	Srctide	1000	27	25	1000	Mg	5	-	-	Staurosporine	1
MET[D1228H]	MSA	Srctide	1000	25	25	1000	Mg	5	-	-	Staurosporine	1
MET[M1250T]	MSA	Srctide	1000	17	25	1000	Mg	5	-	-	Staurosporine	1
MET[Y1235D]	MSA	Srctide	1000	71	75	1000	Mg	5	-	-	Staurosporine	1
MINK	MSA	Modified Erktide	1000	16	50	1000	Mg	5	-	-	K252a	5
MNK1	MSA	RS peptide	1000	460	450	-	Mg	5	-	-	Staurosporine	1
MNK2	MSA	RS peptide	1000	110	100	1000	Mg	5	-	-	Staurosporine	1
MRCK α	MSA	DAPK1tide	1000	0.45	1	-	Mg	5	-	-	Staurosporine	5
MRCK β	MSA	DAPK1tide	1000	0.67	1	-	Mg	5	-	-	Staurosporine	1
MSK1	MSA	Crosstide	1000	13	10	1000	Mg	5	-	-	Staurosporine	1
MSK2	MSA	Crosstide	1000	40	50	1000	Mg	5	-	-	Staurosporine	5
MSSK1	MSA	DYRKtide-F	1000	56	50	-	Mg	5	-	-	K252a	5
MST1	MSA	IRS1	1000	50	50	1000	Mg	5	Cantharidin	20 μ M	Staurosporine	5
MST2	MSA	IRS1	1000	69	75	1000	Mg	5	Cantharidin	10 μ M	Staurosporine	5
MST3	MSA	Moesin-derived peptide	1000	66	75	-	Mg	5	-	-	Staurosporine	5
MST4	MSA	Moesin-derived peptide	1000	76	75	-	Mg	5	-	-	Staurosporine	5
MUSK	MSA	CSKtide	1000	14	10	1000	Mg, Mn	5, 1	-	-	Staurosporine	5
NDR1	MSA	SGKtide	1000	12	10	-	Mg	5	-	-	Staurosporine	5
NDR2	MSA	SGKtide	1000	7.6	10	-	Mg	5	-	-	Staurosporine	5
NEK1	MSA	CDK7 peptide	1000	64	75	1000	Mg	5	-	-	Staurosporine	5
NEK2	MSA	CDK7 peptide	1000	65	75	1000	Mg	5	-	-	Staurosporine	1
NEK4	MSA	GS peptide	1000	51	50	-	Mg	5	-	-	Staurosporine	1
NEK6	MSA	CDK7 peptide	1000	69	75	1000	Mg	5	-	-	PKR Inhibitor	5
NEK7	MSA	CDK7 peptide	1000	40	50	1000	Mg	5	-	-	PKR Inhibitor	5
NEK9	MSA	CDK7 peptide	1000	190	200	1000	Mg	5	-	-	Staurosporine	5
NIM1K	MSA	CHKtide	1000	21	25	-	Mg	5	-	-	Staurosporine	1
NuaK1	MSA	CHKtide	1000	59	50	1000	Mg	5	-	-	Staurosporine	1
NuaK2	MSA	CHKtide	1000	26	25	1000	Mg	5	-	-	Staurosporine	1
p38 α	MSA	Modified Erktide	1000	150	150	1000	Mg	5	-	-	SB202190	1
p38 β	MSA	Modified Erktide	1000	63	75	1000	Mg	5	-	-	SB202190	1
p38 γ	MSA	Modified Erktide	1000	13	10	1000	Mg	5	-	-	Staurosporine	1
p38 δ	MSA	Modified Erktide	1000	5.8	5	1000	Mg	5	-	-	Staurosporine	1
p70S6K	MSA	S6K2 peptide	1000	14	10	1000	Mg	5	-	-	Staurosporine	1
p70S6K β	MSA	S6K2 peptide	1000	3.3	5	-	Mg	5	-	-	Staurosporine	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
PAK1	MSA	LIMKtide	1000	300	300	1000	Mg	5	-	-	Staurosporine	1
PAK2	MSA	DAPK1tide	1000	81	100	1000	Mg	5	-	-	Staurosporine	1
PAK4	MSA	SGKtide	1000	2.5	5	-	Mg	5	-	-	Staurosporine	5
PAK5	MSA	DAPK1tide	1000	1.9	1	1000	Mg	5	-	-	Staurosporine	1
PAK6	MSA	SGKtide	1000	3.7	5	-	Mg	5	-	-	Staurosporine	5
PASK	MSA	GS peptide	1000	9.7	10	1000	Mg	5	-	-	Staurosporine	5
PBK	MSA	Histone H3 peptide	1000	33	50	1000	Mg	5	-	-	Staurosporine	5
PDGFR α	MSA	CSKtide	1000	28	25	1000	Mg	5	-	-	Staurosporine	1
PDGFR α [D842V]	MSA	CSKtide	1000	21	25	1000	Mg	5	-	-	Staurosporine	1
PDGFR α [T674I]	MSA	CSKtide	1000	11	10	1000	Mg	5	-	-	Staurosporine	5
PDGFR α [V561D]	MSA	CSKtide	1000	35	50	1000	Mg	5	-	-	Staurosporine	1
PDGFR β	MSA	CSKtide	1000	23	25	1000	Mg	5	-	-	Staurosporine	1
PDHK2	MSA	PDHKtide	1000	28	25	-	Mg, K	5, 3	-	-	VER-246608	5
PDHK4	MSA	PDHKtide	1000	19	25	-	Mg, K	5, 25	-	-	VER-246608	5
PDK1	MSA	T308tide	1000	9.6	10	1000	Mg	5	PIFtide, Cantharidin	2 μ M, 20 μ M	Staurosporine	5
PEK	IMAP	SRPKtide	100	13	10	-	Mg	5	-	-	Staurosporine	1
PGK	MSA	Kemptide	1000	8.2	10	-	Mg	5	cGMP	5 μ M	Staurosporine	5
PHKG1	MSA	GS peptide	1000	71	75	-	Mg	5	-	-	Staurosporine	5
PHKG2	MSA	GS peptide	1000	8.1	10	-	Mg	5	-	-	Staurosporine	1
PIK3CA/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	89	100	-	Mg	5	-	-	PI-103	1
PIK3CA[E542K]/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	42	50	-	Mg	5	-	-	PI-103	1
PIK3CA[E545K]/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	44	50	-	Mg	5	-	-	PI-103	1
PIK3CA[H1047R]/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	78	75	-	Mg	5	-	-	PI-103	1
PIK3CA[P539R]/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	37	50	-	Mg	5	-	-	PI-103	1
PIK3CA[R88Q]/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	42	50	-	Mg	5	-	-	PI-103	1
PIK3CB/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	88	100	-	Mg	5	-	-	PI-103	1
PIK3CD/PIK3R1	ADP-Glo	PI(4,5)P2, POPS	10000, 5000	37	50	-	Mg	5	-	-	PI-103	1
PIKFYVE	ADP-Glo	PI(3)P, POPS	10000, 20000	36	50	-	Mg	5	-	-	AG-183	1

Kinase	Platform	Substrate		ATP (μM)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
PIM1	MSA	S6K2 peptide	1000	640	500	1000	Mg	5	-	-	Staurosporine	1
PIM2	MSA	S6K2 peptide	1000	4.0	5	1000	Mg	5	-	-	Staurosporine	5
PIM3	MSA	S6K2 peptide	1000	130	150	1000	Mg	5	-	-	Staurosporine	1
PIP4K2A	ADP-Glo	PI(5)P, POPS	10000, 20000	20	25	-	Mg	5	-	-	AG-183	1
PIP4K2B	ADP-Glo	PI(5)P, POPS	10000, 20000	18	25	-	Mn	0.25	-	-	AG-183	1
PIP5K1A	ADP-Glo	PI(4)P, POPS	10000, 20000	28	25	-	Mg	5	-	-	AG-183	1
PIP5K1B	ADP-Glo	PI(4)P, POPS	10000, 20000	95	100	-	Mg	5	-	-	AG-183	1
PIP5K1C	ADP-Glo	PI(4)P, POPS	10000, 20000	33	50	-	Mg	5	-	-	AG-183	1
PIP5KL1	ADP-Glo	PI(4)P, POPS	10000, 20000	1.0	1	-	Mg	5	-	-	AG-183	1
PKAC α	MSA	Kemptide	1000	2.6	5	1000	Mg	5	-	-	Staurosporine	1
PKAC β	MSA	Kemptide	1000	4.7	5	1000	Mg	5	-	-	Staurosporine	1
PKAC γ	MSA	Kemptide	1000	4.5	5	-	Mg	5	-	-	Staurosporine	5
PKC α	MSA	PKC peptide	1000	36	50	1000	Mg, Ca	5, 0.05	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC β 1	MSA	PKC peptide	1000	79	75	-	Mg, Ca	5, 0.05	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC β 2	MSA	PKC peptide	1000	41	50	-	Mg, Ca	5, 0.05	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC γ	MSA	PKC peptide	1000	74	75	1000	Mg, Ca	5, 0.05	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC δ	MSA	PKC peptide	1000	26	25	-	Mg	5	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC ϵ	MSA	PKC peptide	1000	16	25	1000	Mg	5	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC ζ	MSA	PKC peptide	1000	11	10	-	Mg	5	-	-	Staurosporine	1
PKC η	MSA	PKC peptide	1000	36	50	-	Mg	5	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC θ	MSA	PKC peptide	1000	18	25	-	Mg	5	Phosphatidylserine, Diacyl Glycerol	50 $\mu\text{g}/\text{mL}$, 5 $\mu\text{g}/\text{mL}$	Staurosporine	1
PKC ι	MSA	PKC peptide	1000	27	25	-	Mg	5	-	-	Staurosporine	1
PKD1	MSA	GS peptide	1000	25	25	-	Mg	5	-	-	Staurosporine	1
PKD2	MSA	GS peptide	1000	26	25	1000	Mg	5	-	-	Staurosporine	1
PKD3	MSA	GS peptide	1000	34	50	-	Mg	5	-	-	Staurosporine	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
PKN1	IMAP	S6K peptide	100	19	25	-	Mg	1	-	-	Staurosporine	1
PKR	IMAP	SRPKtide	100	13	10	-	Mg	5	-	-	Staurosporine	1
PLK1	MSA	CDC25ctide	1000	5.6	5	1000	Mg	5	-	-	GW843682X	5
PLK2	IMAP	CHK2 peptide	50	30	30	-	Mg	10	-	-	GW843682X	1
PLK3	MSA	CDC25ctide	1000	6.8	5	1000	Mg	5	-	-	GW843682X	1
PRKX	MSA	Kemptide	1000	20	25	-	Mg	5	-	-	Staurosporine	5
PYK2	MSA	Blk/Lyntide	1000	56	50	1000	Mg	5	-	-	Staurosporine	1
QIK	MSA	AMARA peptide	1000	42	50	1000	Mg	5	-	-	Staurosporine	1
RET	MSA	CSKtide	1000	7.5	10	1000	Mg	5	-	-	Staurosporine	1
RET[G691S]	MSA	CSKtide	1000	13	10	1000	Mg	5	-	-	Staurosporine	1
RET[M918T]	MSA	CSKtide	1000	4.2	5	1000	Mg	5	-	-	Staurosporine	1
RET[S891A]	MSA	CSKtide	1000	11	10	1000	Mg	5	-	-	Staurosporine	1
RET[Y791F]	MSA	CSKtide	1000	29	25	1000	Mg	5	-	-	Staurosporine	1
ROCK1	MSA	LIMKtide	1000	3.1	5	1000	Mg	5	-	-	Staurosporine	1
ROCK2	MSA	LIMKtide	1000	7.4	5	1000	Mg	5	-	-	Staurosporine	1
RON	MSA	Srctide	1000	27	25	1000	Mg	5	-	-	Staurosporine	1
ROS	MSA	IRS1	1000	37	50	1000	Mg	5	-	-	Staurosporine	1
RSK1	MSA	S6K peptide(N-FL)	1000	21	25	1000	Mg	5	-	-	Staurosporine	1
RSK2	MSA	S6K peptide(N-FL)	1000	14	10	1000	Mg	5	-	-	Staurosporine	1
RSK3	MSA	S6K peptide(N-FL)	1000	9.9	10	1000	Mg	5	-	-	Staurosporine	1
RSK4	MSA	S6K peptide(N-FL)	1000	20	25	1000	Mg	5	-	-	Staurosporine	1
SGK	MSA	SGKtide	1000	52	50	1000	Mg	5	-	-	Staurosporine	1
SGK2	MSA	SGKtide	1000	58	50	-	Mg	5	-	-	Staurosporine	1
SGK3	MSA	SGKtide	1000	17	25	-	Mg	5	-	-	Staurosporine	1
SIK	MSA	AMARA peptide	1000	47	50	1000	Mg	5	-	-	Staurosporine	5
skMLCK	MSA	MLCtide	1000	820	1000	1000	Mg	5	CaCl ₂ , Calmodulin	1 mM, 10 μ g/ml	Staurosporine	1
SLK	MSA	Moesin-derived peptide	1000	36	50	-	Mg	5	-	-	Staurosporine	5
SPHK1	ADP-Glo	Sphingosine, POPS	10000, 20000	5.9	5	-	Mg	5	-	-	PF-543	1
SPHK2	ADP-Glo	Sphingosine, POPS	10000, 20000	200	200	-	Mg	5	-	-	PF-543	1
SRC	MSA	Srctide	1000	31	50	1000	Mg	5	-	-	Staurosporine	1
SRM	MSA	Blk/Lyntide	1000	38	50	1000	Mg	5	-	-	Staurosporine	1
SRPK1	IMAP	SRPKtide	100	200	100	-	Mg	10	-	-	Staurosporine	1

Kinase	Platform	Substrate		ATP (μ M)			Metal		Additive		Reference compound	Reaction time (hour)
		Name	(nM)	Km	Km Bin	1mM	Name	(mM)	Name	Concentration		
SRPK2	MSA	DYRKtide-F	1000	14	10	-	Mg	5	-	-	Staurosporine	5
SYK	MSA	Blk/Lyntide	1000	59	50	1000	Mg	5	-	-	Staurosporine	1
TAK1-TAB1	MSA	LRRKtide	1000	37	50	1000	Mg	1.25	-	-	Staurosporine	1
TAOK2	MSA	TAOKtide	1000	39	50	1000	Mg	5	Cantharidin	10 μ M	Staurosporine	5
TBK1	MSA	CKtide	1000	21	25	1000	Mg	5	-	-	Staurosporine	1
TEC	MSA	Srctide	1000	55	50	1000	Mg	5	-	-	Staurosporine	1
TIE2	MSA	Blk/Lyntide	1000	94	100	1000	Mg	5	-	-	Staurosporine	1
TNIK	MSA	Moesin-derived peptide	1000	16	25	1000	Mg	5	-	-	Staurosporine	1
TNK1	MSA	CSKtide	1000	71	75	1000	Mg	5	-	-	Staurosporine	5
TRKA	MSA	CSKtide	1000	65	75	1000	Mg	5	-	-	Staurosporine	1
TRKB	MSA	Srctide	1000	80	75	1000	Mg	5	-	-	Staurosporine	1
TRKC	MSA	Srctide	1000	47	50	1000	Mg	5	-	-	Staurosporine	1
TSSK1	MSA	GS peptide	1000	11	10	1000	Mg	5	-	-	Staurosporine	1
TSSK2	MSA	GS peptide	1000	8.8	10	-	Mg	5	-	-	Staurosporine	5
TSSK3	MSA	GS peptide	1000	45	50	-	Mg	5	-	-	Staurosporine	5
TXK	MSA	Srctide	1000	110	100	1000	Mg	5	-	-	Staurosporine	5
TYK2	MSA	Srctide	1000	18	25	1000	Mg	5	-	-	Staurosporine	5
TYRO3	MSA	CSKtide	1000	80	75	1000	Mg	5	-	-	Staurosporine	1
WNK1	MSA	SPAKtide	1000	140	150	-	Mg, Mn	5, 3	-	-	K252a	5
WNK2	MSA	SPAKtide	1000	48	50	-	Mg, Mn	5, 3	-	-	K252a	5
WNK3	MSA	SPAKtide	1000	48	50	-	Mg, Mn	5, 3	-	-	K252a	5
YES	MSA	Srctide	1000	13	10	1000	Mg	5	-	-	Staurosporine	1
YES[T348I]	MSA	Srctide	1000	8.5	10	1000	Mg	5	-	-	Staurosporine	1
ZAP70	MSA	Blk/Lyntide	1000	3.3	5	1000	Mg, Mn	5, 1	-	-	Staurosporine	1

Reaction conditions of Cascade assay

Kinase	Platform	Substrate						ATP (μ M)	Metal		Reference compound	Reaction time (hour)
		MAP2K		MAPK		Peptide			Name	(mM)		
		Name	(nM)	Name	(nM)	Name	(nM)					
BRAF	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	ZM336372	1
BRAF[V600E]	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	ZM336372	1
COT	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
DLK	MSA	MAP2K4, MAP2K7	0.5, 0.5	JNK2	50	Modified Erktide	1000	1000	Mg	5	Staurosporine	5
MAP2K1	MSA	-	-	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MAP2K2	MSA	-	-	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MAP2K3	MSA	-	-	p38 α	10	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MAP2K4	MSA	-	-	JNK2	50	Modified Erktide	1000	1000	Mg	5	Staurosporine	5
MAP2K5	MSA	-	-	Erk5	50	EGFR-derived peptide	1000	1000	Mg	5	Staurosporine	5
MAP2K6	MSA	-	-	p38 α	10	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MAP2K7	MSA	-	-	JNK2	50	Modified Erktide	1000	1000	Mg	5	Staurosporine	5
MAP3K1	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MAP3K2	MSA	MAP2K4, MAP2K7	0.5, 0.5	JNK2	50	Modified Erktide	1000	1000	Mg	5	Staurosporine	5
MAP3K3	MSA	MAP2K6	1	p38 α	10	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MAP3K4	MSA	MAP2K6	1	p38 α	10	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MAP3K5	MSA	MAP2K6	1	p38 α	10	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MLK1	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MLK2	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MLK3	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
MOS	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	Staurosporine	1
RAF1	MSA	MAP2K1	1	Erk2	2.5	Modified Erktide	1000	1000	Mg	5	ZM336372	1

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