

SelectScreen® Kinase Profiling Service  
Activity Assay Selectivity Data

Kinase	Kinase Selectivity Results - % Inhibition at ATP Km, app									
	Compound (1X concentration)									
	BAY-43-9006 (10,000 nM)	BIRB-796 (10,000 nM)	BMS-354825 (10,000 nM)	Gleevec® (10,000 nM)	Go-6983 (10,000 nM)	H-89 (10,000 nM)	Iressa® (10,000 nM)	NH125 (10,000 nM)	PI-103 (10,000 nM)	PP2 (10,000 nM)
ABL1	42	20	10	10	10	10	10	10	10	10
ABL1 E255K	35	-8	102	88	21	3	56	-4	-11	87
ABL1 G250E	26	0	102	80	24	0	49	0	-4	86
ABL1 T315I	23	59	57	4	46	10	28	14	10	46
ABL1 Y231F	42	11	103	85	32	69	27	17	20	59
ABL2 (Arg)	20	6	103	88	29	8	74	10	9	85
ADRB1B (ALK5)	10	1	60	35	15	8	-5	-14	-8	37
ADRBK1 (GRK2)	-3	2	1	-3	3	3	1	-1	0	2
ADRBK2 (GRK3)	-4	3	1	-5	2	28	-1	19	0	-1
AKT1 (PKB alpha)	5	4	1	13	9	55	4	2	4	4
AKT2 (PKB beta)	0	18	11	4	25	35	1	7	0	4
AKT3 (PKB gamma)	2	8	4	6	82	73	1	4	10	11
ALK	7	-5	7	5	59	3	27	-32	2	36
AMPK A1/B1/G1	9	6	1	4	35	2	16	-20	1	14
AMPK A2/B2/G2	7	-2	3	2	33	1	20	4	4	3
AURKA (Aurora A)	22	10	18	53	12	48	13	-4	-3	28
AURKB (Aurora B)	78	2	14	9	15	59	33	17	-1	6
AURKC (Aurora C)	32	8	8	4	14	38	8	17	1	13
AXL	34	10	12	11	60	11	54	24	13	5
BLK	16	11	109	74	45	8	58	19	3	58
BMX	1	4	20	24	24	9	17	19	-1	44
BRAF	38	78	39	78	33	38	44	-5	9	44
BRAF V599E	58	54	55	54	16	30	51	-11	30	87
BRK1 (SAD1)	-3	3	1	-1	63	77	38	16	6	28
BRK1 (BRK)	10	0	10	13	5	1	50	16	6	28
CAMK1 (CaMK1)	-21	-4	-7	5	35	-18	-32	25	11	-23
CAMK1D (CaMK1 delta)	24	15	5	5	75	14	11	3	1	7
CAMK2A (CaMKII alpha)	0	3	2	2	49	15	6	63	9	8
CAMK2B (CaMKII beta)	8	5	7	5	26	35	6	6	2	9
CAMK2D (CaMKII delta)	6	9	8	10	62	29	33	70	6	-2
CAMK4 (CaMKIV)	-18	4	-3	-9	17	-1	6	40	-5	6
CDC42 BPA (MIRCKA)	-2	4	0	-7	46	13	6	40	-3	2
CDC42 BPB (MIRCKA)	-10	-2	1	-2	36	27	1	50	1	-5
CDK1/cyclin B	1	3	4	5	22	16	1	35	10	10
CDK2/cyclin A	-18	-4	-10	-16	16	20	-7	3	9	8
CDK5/p25	-11	9	4	10	8	6	3	15	10	7
CDK5/p35	-1	-5	3	-2	18	20	-9	6	4	4
CDK7/cyclin H/MNAT1	4	1	0	-1	63	56	-3	31	-8	3
CDK9/cyclin T1	3	-17	19	-15	24	84	-6	26	7	-22
CHEK1 (CHK1)	0	0	3	4	34	2	71	4	-11	1
CHEK2 (CHK2)	-14	5	6	8	68	68	37	8	19	10
CHK1 (CHK1)	-5	-1	-8	-8	7	14	-7	3	-4	-5
CHK2 (CHK2)	-4	-2	-2	-2	30	10	-15	10	5	7
CLK1	19	-8	5	10	88	29	8	29	10	22
CLK2	3	-9	4	7	47	7	6	12	3	12
CSF1R (FMS)	38	27	101	104	76	26	44	32	13	10
CSK	15	73	103	95	29	29	9	29	7	4
CSNK1A1 (CK1 alpha 1)	4	-2	0	7	6	3	3	-19	-3	33
CSNK1D (CK1 delta)	-1	2	2	10	7	5	5	15	15	42
CSNK1E (CK1 epsilon)	-11	0	13	10	24	11	14	-20	2	26
CSNK1G1 (CK1 gamma 1)	7	-10	-1	1	6	-3	-30	-23	-2	-6
CSNK1G2 (CK1 gamma 2)	1	12	17	1	-1	-2	-37	-11	0	6
CSNK1G3 (CK1 gamma 3)	1	5	2	7	3	4	-18	-5	2	3
CSNK1A1 (CK2 alpha 1)	5	-1	2	3	1	1	2	5	3	3
CSNK2A2 (CK2 alpha 2)	1	-13	-1	9	23	9	-29	9	13	9
DAPI1	6	14	8	1	8	21	2	16	3	2
DAPI2 (ZPK)	3	-4	5	6	14	3	25	38	2	2
DCAMK2 (CK2)	1	-10	3	2	16	12	4	2	-1	-1
DNA-PK	1	2	2	15	2	17	31	100	69	69
DYRK1A	1	-4	2	0	80	6	6	-6	7	7
DYRK2	-3	-5	0	0	66	11	5	2	7	7
DYRK3	5	1	1	0	15	55	29	-20	18	-3
DYRK4	-6	1	1	-2	-5	-5	-5	-5	-5	-3
EEF2K	11	2	2	12	6	6	6	46	4	10
EGFR (ErbB1)	43	67	101	101	33	3	93	2	33	33
EGFR (ErbB1) L858R	30	31	91	91	59	11	106	-2	2	81
EGFR (ErbB1) L861Q	29	57	98	98	36	35	33	1	-1	25
EGFR (ErbB1) T790M	0	61	100	100	57	40	57	0	-2	73
EGFR (ErbB3) T790M L858R	0	3	60	58	57	5	58	5	1	58
EPHA1	-6	4	102	102	57	29	8	7	100	100
EPHA2	81	80	103	103	47	46	87	4	4	103
EPHA4	65	65	77	77	27	7	77	27	27	77
EPHA5	60	68	102	102	77	25	7	13	-1	84
EPHA8	58	53	101	101	74	23	13	38	-17	-2
EPH2	42	80	101	101	32	12	4	6	6	102
EPH3	3	25	101	101	20	6	76	5	3	17
EPH4	36	57	100	100	13	11	10	12	-1	11
ERBB2 (HER2)	38	40	100	100	15	3	5	5	5	59
ERBB4 (HER4)	3	2	99	99	74	-1	89	-9	6	63
FER	14	5	18	32	51	9	19	-15	-4	8
FES (FP5)	0	13	27	28	51	47	15	-37	6	41
FGFR1	50	24	27	28	65	24	65	26	6	63
FGFR2	57	36	65	65	85	30	30	7	5	80
FGFR3	46	15	19	12	66	15	0	31	2	31
FGFR3 Y359E	11	25	65	65	74	74	67	6	3	74
FGFR4	17	4	3	6	5	-4	-15	76	0	47
FGR	51	63	101	101	44	17	85	84	4	100
FLT1 (VEGFR1)	81	69	100	100	24	4	-12	-2	6	65
FLT3	87	77	100	100	67	63	34	34	34	65
FLT3 D835Y	87	7	29	33	88	76	93	63	20	50
FLT4 (VEGFR3)	57	57	16	31	9	33	38	45	3	75
FRAP1 (BTK)	4	2	2	4	1	4	1	10	10	10
FRK (PTK9)	57	51	103	103	36	15	70	11	10	100
FYN	2	7	102	102	58	12	6	5	-9	99
GRK4	-3	15	3	-8	23	40	-30	2	-1	-21
GRK5	-4	-2	-1	-4	12	5	-1	-2	-1	-1
GRK6	2	2	-5	-4	41	35	-1	-3	-1	6
GRK7	9	8	0	12	37	40	1	-2	2	11
GSK2 (Rapin)	0	-8	-4	3	17	38	0	5	24	21
GSK3A (GSK3 alpha)	0	-5	-1	-2	115	6	11	-2	15	15
GSK3B (GSK3 beta)	23	6	0	18	100	8	7	-18	5	3
HCK	11	16	101	101	56	25	74	-4	-4	100
HIPK1 (Msk1)	14	-1	2	2	73	2	2	-1	10	6
HIPK2	37	0	22	7	71	2	2	4	2	2
HIPK3 (YAK1)	25	2	2	5	29	1	6	1	18	0
HIPK4	39	0	4	47	19	0	51	19	11	8
IAPP18	2	0	8	8	8	17	8	16	2	1
IKBK8 (IKK beta)	3	5	1	0	5	10	-1	3	-1	-1
IKBK9 (IKK epsilon)	3	-1	6	0	13	-7	-3	-1	-7	-2
INSR	4	2	4	2	17	2	0	4	1	10
INSR (IR)	-1	-1	8	6	3	-6	41	11	4	4
IRAK1	54	26	18	61	-2	43	35	-7	-9	2
IRAK4	-9	-4	-7	12	-2	12	44	-3	-2	3
ITK	7	5	1	-2	-2	-4	6	12	6	6
JAK1	5	9	17	-1	58	19	8	8	3	19
JAK2	7	1	26	3	55	2	3	3	2	10
JAK2 JH1 JH2	5	17	26	3	55	2	3	3	2	10
JAK2 JH1 JH2 V817F	-19	5	-4	-4	-1	-2	-2	1	1	36
JAK3	0	-10	7	4	39	3	6	-1	-1	-1
KDR (VEGFR2)	8	19	21	21	100	58	73	26	-2	0
KIT	68	16	63	63	24	2	2	-3	0	46
KIT T670I	63	16	2	35	14	9	6	-12	0	13
LCK	50	10	102	102	63	31	38	45	5	88
LRK2	66	19	74	74	66	21	60	9	1	26
LRK2 G2919S	49	9	74	47	82	55	59	10	17	17
LTK (TYK1)	-1	3	7	28	4	38	8	10	24	10
LYN A	66	77	101	101	26	37	93	49	-1	100
LYN B	63	63	100	100	26	35	68	49	7	66
MAP2K1 (MEK1)	4	13	21	18	10	19	0	1	9	13
MAP2K2 (MEK2)	3	8	19	13	22	22	8	1	9	34
MAP3K (MKS)	66	100	2	3	4	2	7	1	0	-7
MAP3K (GOT)	0	3	9	-3	47	3	10	59	2	32
MAP3K (MLK1)	0	-1	22	5	67	33	0	43	-3	14

0%-40% inhibition  
40%-80% inhibition  
80% inhibition

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Gleevec® is a registered trademark of Novartis AG  
Iressa® is a registered trademark of AstraZeneca PLC



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MAP4K4 (HGK)	35	76	60	60	45	56	15	21		
MAP4K6 (HBS1)	76	7	2	2	29	69	36	6		
MAPK1 (ERK2)	7	5	5	5	14	14	6	6		
MAPK10 (LNK3)	-3	-46	3	8	-5	15	11	11		
MAPK11 (p38 beta)	57	63	99	7	17	7	30	-4		
MAPK12 (p38 gamma)	15	74	16	14	3	1	-7	-5		
MAPK13 (p38 delta)	-3	74	16	11	6	2	6	0		
MAPK14 (p38 alpha)	68	94	70	2	23	20	6	33		
MAPK14 (p38 alpha) Direct	81	100	95	8	15	55	-18	-1		
MAPK3 (ERK1)	13	7	4	-1	11	13	2	2		
MAPK8 (JNK1)	-28	14	8	0	13	-12	6	5		
MAPK9 (JNK2)	-10	93	29	14	-11	23	0	-13		
MAPKAPK2	-2	0	-1	-1	0	-2	-11	-2		
MAPKAPK3	8	36	27	14	6	14	-2	-14		
MAPKAPK5 (PRAK)	-3	7	9	0	10	0	0	0		
MARK1 (MARK)	3	-3	7	2	53	53	8	8		
MARK2	0	-5	2	2	48	48	4	4		
MARK3	13	14	43	15	77	73	15	3		
MARK4	10	11	57	14	75	73	16	7		
MATK (RYL)	-9	9	6	50	-1	46	26	-3		
MELK	3	10	9	50	3	46	32	41		
MERTK (CMER)	4	2	21	17	28	13	72	6		
MET (cMet)	7	4	16	15	3	53	50	6		
MET RT2581	-8	-2	-2	-2	12	12	6	7		
MNK1	-33	73	72	42	85	28	40	-3		
MNK1 (MNK1)	52	21	13	14	9	4	39	20		
MST1B (RON)	6	-5	-4	-4	55	7	8	-1		
MST2	-10	-13	14	-23	49	38	4	9		
MUSK	55	36	14	11	6	0	-2	6		
MYLK2 (pMLCK)	10	0	1	16	17	16	24	0		
NEK1	-2	13	0	20	2	4	18	20		
NEK2	1	2	-2	-9	-10	-12	-8	-4		
NEK4	-1	9	10	0	0	0	-7	4		
NEK5	-29	5	4	-22	-16	-5	0	-1		
NEK7	-7	-1	4	-11	-22	-12	3	-1		
NEK9	-1	10	-2	-2	-8	-3	-7	-9		
NTRK1 (TRKA)	63	65	25	19	41	6	26	6		
NTRK2 (TRKB)	56	70	24	-17	20	8	59	2		
NTRK3 (TRKC)	3	77	28	3	77	3	5	59		
NUAK1 (ARK5)	-6	20	19	60	91	44	-4	11		
PAK1	4	12	9	5	33	14	-12	6		
PAK4 (PAK65)	0	1	10	10	4	4	-18	6		
PAK3	9	5	11	28	17	5	-11	5		
PAK4	-24	2	-9	28	11	18	2	8		
PAK6	-7	-4	-7	15	4	5	10	9		
PAK7 (pAK1264)	0	-6	3	17	15	0	-8	14		
PASK	-1	8	3	5	12	4	54	8		
PDGFRA (PDGFR alpha)	88	5	103	87	32	18	-2	59		
PDGFRA 6847	59	7	102	86	64	63	-8	100		
PDGFRA T074	87	17	48	17	11	1	-11	6		
PDGFRA V561D	101	7	103	89	69	27	40	4		
PDGFRB (PDGFR beta)	102	20	100	89	46	15	9	72		
PKA	10	4	10	10	26	36	36	28		
PKA Direct	-5	-4	-3	-3	53	-4	-4	5		
PKHG1	6	21	9	-3	72	36	58	3		
PKHG2	-4	2	-4	-1	48	20	12	-1		
PKAK (PKK alpha)	-4	-4	-4	-4	14	1	1	-1		
PKKB (PKK beta)	2	14	2	23	6	18	8	1		
PKK3A (PKK-C2 alpha)	16	3	-5	0	5	6	0	23		
PKK3B (PKK-C2 beta)	9	9	9	9	4	4	4	4		
PKK3C (NVPS34)	-15	1	-18	-19	-33	-50	-30	-24		
PKK3CA/PRK31 (p110 alpha/p85 alpha)	-11	-11	-9	-16	6	-22	8	100		
PKK3CD/PRK31 (p110 delta/p85 alpha)	-10	6	-21	-23	-4	-20	0	100		
PKK3E (p110 gamma)	8	21	6	-8	11	0	-14	8		
PIM1	-19	10	3	-5	89	2	45	-14		
PIM2	-4	11	5	3	20	7	-10	2		
PNV (PRK1)	-10	0	0	-2	6	-13	19	4		
PLK1	2	2	3	3	7	-3	2	-2		
PLK2	9	2	17	2	2	-1	-27	2		
PLK3	8	-1	-17	8	1	-8	-217	-8		
PRKAA (PKA)	-5	-4	-3	-3	38	38	0	-9		
PRKCA (PKC alpha)	39	-2	6	-12	101	33	0	-14		
PRKCB1 (PKC beta 1)	-3	13	20	-10	101	20	0	-12		
PRKCB2 (PKC beta 2)	-22	10	16	-10	100	28	11	-1		
PRKCD (PKC delta)	-11	6	4	-12	101	60	-11	14		
PRKCE (PKC epsilon)	-2	-5	2	-12	103	53	15	10		
PRKCG (PKC gamma)	-8	6	6	-7	127	67	7	-3		
PRKCH (PKC theta)	-18	2	8	-16	103	2	0	-1		
PRCKI (PKC iota)	-18	6	6	-12	3	-2	-12	-2		
PRKCN (PKC zeta)	-6	0	17	7	72	67	66	8		
PRKCO (PKC theta)	-22	11	18	-23	45	24	1	17		
PRKQZ (PKC zeta)	-14	5	4	-12	72	5	-5	-11		
PRKDI (PKC mu)	-7	5	3	14	48	26	2	-4		
PRKD2 (PKD2)	-1	-4	4	11	48	38	71	19		
PRKI1	-5	4	4	-2	72	79	4	-10		
PRKG2 (PKG2)	9	12	10	23	81	68	31	10		
PRX	-6	3	-2	27	97	-1	-2	-1		
PRXF (PAK)	7	20	21	29	40	62	13	-2		
PTK2B (FAK)	3	49	8	4	32	18	-16	-11		
PTK6 (Btk)	1	13	100	24	20	-1	4	15		
RAF1 (CRAP) Y340D Y341D	97	56	80	87	26	44	25	37		
RET	88	55	68	25	43	6	48	-5		
RET V904L	96	19	5	7	29	33	17	-4		
RET Y781F	98	67	77	31	47	27	66	14		
ROCK1	-13	7	4	-4	99	6	-3	-10		
ROCK2	4	6	-5	-3	85	-3	5	1		
ROS1	0	7	50	64	18	21	16	19		
RPS8KA1 (RSK1)	-1	22	4	9	100	85	26	39		
RPS8KA2 (RSK2)	19	31	5	0	83	52	3	-1		
RPS8KA3 (RSK3)	4	15	5	-12	111	86	15	10		
RPS8KA4 (MSK2)	3	-8	9	96	103	-13	11	2		
RPS8KA5 (MSK1)	-2	15	8	24	90	36	-6	7		
RPS8KA6 (RSK4)	8	12	7	13	105	79	49	22		
RPS8KB1 (p70S6K)	5	6	1	6	99	0	27	7		
SGK (SGK1)	6	23	12	19	67	36	5	-9		
SGK2	-11	6	2	85	90	-3	25	-1		
SGK1 (SGK3)	-11	12	1	68	6	4	27	5		
SNF1LK2	8	12	98	10	61	47	75	0		
SPHK1	7	28	2	-2	14	7	-5	8		
SPHK2	8	-4	10	-8	12	16	-3	8		
SRC	15	7	101	16	27	15	48	3		
SRC N1	28	-1	104	19	22	12	-1	101		
SRRS (Srm)	12	12	97	4	16	1	-27	-2		
SRPK	-1	-1	3	4	49	8	-1	8		
SRPK2	-7	0	-12	9	22	6	0	2		
STK2B (TSSK2)	3	2	2	9	3	-8	-11	-3		
STK22 (TSSK1)	0	3	0	9	29	29	1	-2		
STK23 (MSSK1)	16	-4	3	0	50	-2	2	2		
STK24 (MST3)	6	13	31	-7	94	44	14	22		
STK25 (YSK1)	-22	2	14	-10	97	26	-5	13		
STK1 (MST2)	-13	-6	-5	-2	96	6	13	-2		
STK4 (MST1)	-22	2	9	-23	79	1	-9	12		
SYK	3	2	76	40	15	21	-40	19		
TAK1 (TAK1)	65	3	18	18	59	8	-26	3		
TBK1	3	7	16	23	3	11	50	3		
TEK (Tke2)	41	8	21	14	8	5	-8	23		
TKX	8	31	96	18	8	4	86	23		
TRKB	5	6	59	12	5	12	12	1		
TYRO3 (RSE)	13	70	83	8	21	27	-15	1		
YES1	32	23	102	39	19	9	45	8		
ZAP70	-1	8	5	17	20	0	-11	20		

7%-40% inhibition  
40%-80% inhibition  
-80% inhibition

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	Compound (1X concentration)									
	BAY-43-9006 (1000 nM)	BIRB-796 (1000 nM)	BMS-354825 (1000 nM)	Gleevec® (1000 nM)	Go-6983 (1000 nM)	H-89 (1000 nM)	Yessa® (1000 nM)	NH125 (1000 nM)	PI-103 (1000 nM)	PP2 (1000 nM)
ABL1	5	-6	102	67	6	4	13	-7	-12	73
ABL1 E255K	5	-6	102	67	6	4	13	-7	-12	73
ABL1 G250E	6	-4	102	58	4	4	10	-18	-8	70
ABL1 T315I	-2	-28	107	6	11	6	4	1	7	6
ABL1 Y253F	10	4	102	51	4	24	-14	-11	-15	25
ABL2 (Ara)	9	-3	102	55	11	8	28	-7	7	69
ADRB1B (ALKB)	-2	-9	12	-3	0	4	2	-7	-9	38
ADRBK1 (GRK2)	-1	3	1	-5	0	4	2	1	2	0
ADRBK2 (GRK3)	-2	3	1	-1	-3	2	2	1	0	-1
AKT1 (PKB alpha)	5	2	1	6	0	41	3	-2	0	2
AKT2 (PKB beta)	9	16	9	1	4	15	-1	-3	2	0
AKT3 (PKB gamma)	7	7	6	-9	38	30	0	-7	2	0
ALK	20	8	2	0	18	6	7	-7	9	11
AMPK A1B1G1	5	2	-3	2	56	29	3	-7	0	4
AMPK A2B1G1	12	3	0	2	65	6	-4	2	2	8
AURKA (Aurora A)	0	0	0	21	5	2	-2	-4	-3	2
AURKB (Aurora B)	38	5	7	1	2	15	5	-2	-1	4
AURKC (Aurora C)	9	-5	5	-11	2	5	7	0	10	5
AXL	7	8	3	2	19	5	6	5	11	5
BLK	-1	15	113	29	6	3	10	-7	-2	61
BMX	-2	8	20	-4	0	8	-4	-1	-1	79
BRAF	53	24	51	24	20	24	17	5	4	33
BRAF V599E	53	18	77	71	7	9	18	-13	39	46
BRK1 (SAD1)	-2	2	-1	-7	20	28	9	5	7	9
BRK2	6	5	2	9	2	6	10	5	0	76
CAMK1 (CaMK1)	12	-5	101	4	-8	-32	-11	13	-13	-10
CAMK1D (CaMK1 delta)	-1	9	19	-5	19	-2	-1	-1	-3	0
CAMK2A (CaMKII alpha)	6	0	-5	-2	2	2	-2	5	16	0
CAMK2B (CaMKII beta)	1	1	2	1	2	4	2	5	3	-4
CAMK2D (CaMKII delta)	5	8	5	5	38	10	-5	-6	-5	-7
CAMK4 (CaMKIV)	-4	6	-3	-3	-1	-4	-1	-7	-2	2
CDC42 BPA (MIRCKA)	-8	3	0	-11	8	1	0	1	0	0
CDC42 BPB (MIRCKA)	-4	-4	-2	-4	9	-2	-4	-1	1	-6
CDK1/cyclin B	0	5	1	2	2	4	-1	8	10	3
CDK2/cyclin A	-10	4	8	-15	-2	-2	-5	-2	0	-2
CDK2/cyclin B	-2	14	8	3	43	43	37	-5	9	17
CDK5/p35	-5	1	0	-1	0	-2	-2	-5	4	-2
CDK7/cyclin H/MNAT1	2	-1	-2	-4	41	6	-8	13	-4	0
CDK9/cyclin T1	-13	-26	12	-18	38	4	-5	-6	-4	-15
CHEK1 (CHK1)	4	24	51	3	0	24	17	5	4	33
CHEK2 (CHK2)	9	0	0	-21	19	5	19	5	9	-4
CHUK (IKK alpha)	-18	5	-1	4	14	-2	-14	-6	8	-8
CLK1	5	-2	4	8	65	3	6	8	5	17
CLK2	29	-1	-2	14	85	7	2	11	11	10
CLK3	6	2	3	0	6	3	0	1	6	1
CSF1R (FMS)	34	22	97	27	23	11	8	7	12	46
CSK	-2	14	103	3	9	10	0	0	6	65
CSNK1A1 (CK1 alpha 1)	7	0	2	5	1	1	7	-4	-4	15
CSNK1D (CK1 delta)	-2	2	0	3	3	2	2	0	4	61
CSNK1E (CK1 epsilon)	-11	3	5	-11	13	8	5	1	5	72
CSNK1G1 (CK1 gamma 1)	5	-2	-4	14	2	2	-10	-14	-12	-12
CSNK1G2 (CK1 gamma 2)	-3	11	13	0	-3	-3	-10	-8	-2	-2
CSNK1G3 (CK1 gamma 3)	3	6	1	0	9	1	8	-5	2	4
CSNK1L (CK2 alpha 1)	3	2	1	2	1	1	1	1	1	1
CSNK2A2 (CK2 alpha 2)	3	0	-1	3	24	20	-7	12	-4	-4
DAPK1	0	4	1	-1	8	-4	0	0	9	0
DAPK2	2	1	-1	-7	1	1	0	-1	32	-1
DCAMK2 (CK2)	5	1	3	2	7	1	2	-1	3	-1
DNA-PK	0	0	3	5	9	4	2	2	36	26
DYRK1A	0	-3	0	1	29	12	2	4	5	-3
DYRK2	-3	-2	-1	-1	20	8	8	20	3	7
DYRK3	1	1	0	3	7	16	0	-11	9	-2
DYRK4	-6	1	0	-6	-4	-2	-2	-6	-3	-4
EEF2K	0	1	0	-2	6	10	7	5	7	19
EGFR (ErbB1)	6	19	71	4	7	0	18	-8	6	50
EGFR (ErbB1) L858R	5	7	58	2	19	0	58	-5	-1	54
EGFR (ErbB1) L861Q	1	18	92	7	5	0	33	-4	-2	51
EGFR (ErbB1) T790M	0	12	103	3	16	12	16	-2	-1	20
EGFR (ErbB3) T790M L858R	0	27	13	4	20	15	72	-6	-1	84
EPHA1	-4	5	89	2	15	13	4	3	4	97
EPHA2	21	18	92	11	26	15	25	3	3	79
EPHA4	13	13	103	-4	6	7	28	16	16	79
EPHA5	23	18	101	29	16	11	24	-3	-1	74
EPHA8	12	60	101	26	17	16	38	-2	-5	66
EPHB1	11	6	101	1	11	17	20	-2	-4	73
EPHB2	14	34	100	7	5	2	22	4	5	44
EPHB3	-1	7	85	6	5	3	5	3	3	70
EPHB4	5	13	100	5	0	-4	31	-1	0	70
ERBB2 (HER2)	-3	6	8	-3	1	1	70	-2	-2	45
ERBB4 (HER4)	1	-1	6	26	8	2	19	6	-8	38
FER	16	5	6	12	11	1	2	-13	-3	6
FES (FP5)	-2	4	-3	4	4	12	4	-12	11	5
FGFR1	14	8	4	-4	27	4	-7	-4	-8	14
FGFR2	58	9	18	7	35	13	11	6	6	29
FGFR3	21	9	-5	6	18	15	-5	12	6	12
FGFR3 Y359E	54	5	5	5	20	20	16	-1	1	40
FGFR4	10	5	3	12	-16	-11	-12	-2	-4	1
FGR	6	27	101	50	11	5	43	-9	-7	60
FLT1 (VEGFR1)	62	10	8	6	70	5	0	-7	-3	6
FLT3	36	17	36	6	66	25	10	3	5	22
FLT3 D835Y	91	8	12	5	62	32	52	5	21	14
FLT4 (VEGFR3)	10	20	6	13	30	10	13	2	3	49
FRAP1 (FTRD)	0	0	3	-6	1	5	-16	0	0	56
FRK (PTK5)	19	22	101	19	3	21	10	9	9	39
FYN	-4	7	101	16	3	6	1	2	2	86
GRR4	-5	10	8	-3	-2	-27	-8	-8	-9	-23
GRK5	-3	-2	-4	-2	1	0	-2	-4	-4	1
GRK6	1	6	-1	3	6	4	-1	-4	-5	0
GRK7	3	8	1	8	6	8	1	-2	1	3
GSK2 (Rapin)	-2	-5	-3	-1	11	11	75	-1	12	25
GSK3A (GSK3 alpha)	-3	2	0	-10	35	4	7	-1	9	15
GSK3B (GSK3 beta)	21	3	-2	16	-5	-2	-12	-5	-3	-3
HCK	-1	1	101	9	11	12	22	-7	-2	85
HIPK1 (Msk)	2	0	0	0	22	0	-2	0	7	-4
HIPK2	8	-2	-1	-5	5	2	2	8	2	2
HIPK3 (YAK1)	0	0	3	3	5	1	2	6	0	0
HIPK4	20	1	10	11	3	1	10	9	12	1
IKK1B	2	8	6	0	-2	4	-1	3	3	-1
IKK1C (IKK beta)	1	3	0	0	2	1	-1	-3	1	-1
IKK2 (IKK epsilon)	-1	-3	-2	1	3	3	0	-7	-6	-3
INSR	3	6	2	3	12	8	8	-5	-1	10
INSR (IR)	0	8	7	5	1	-2	4	-3	11	5
IRAK1	7	2	14	-3	-3	52	-9	-11	-11	-2
IRAK4	-4	-4	-8	-8	3	0	-2	0	2	-2
ITK	2	1	4	-10	3	0	3	13	13	2
JAK1	-4	5	3	-7	11	0	14	6	14	0
JAK2	2	3	44	1	11	-1	0	-5	-5	1
JAK2 JH1 JH2	7	0	9	-3	2	-1	-3	-8	-8	0
JAK2 JH1 JH2 V817F	-9	4	9	-5	1	-3	-10	5	1	-3
JAK3	-12	6	25	3	35	1	0	-10	-10	-4
KDR (VEGFR2)	69	39	15	25	39	20	23	-6	-4	58
KIT	0	60	0	65	16	14	0	1	1	26
KIT T670I	43	4	-3	10	12	19	2	-4	7	5
LCK	18	18	102	78	17	17	34	0	2	60
LRK2	17	17	10	4	19	9	18	7	11	5
LRK2 G2918S	-12	3	10	4	41	-12	-2	-4	24	16
LTK (TYK1)	1	3	1	1	6	4	4	1	11	4
LYN A	24	38	101	82	7	9	57	-2	-2	89
LYN B	13	3	101	5	14	5	49	0	-2	66
MAP2K1 (MEK1)	0	17	11	5	6	8	-2	5	10	8
MAP2K2 (MEK2)	1	6	13	4	16	14	3	3	2	22
MAP3K (MKK5)	17	3	3	3	13	0	-5	17	2	39
MAP3K (CK1)	6	1	6	-13	30	47	30	17	2	34
MAP3K (MLK1)	3	1	1	-2	13	5	1	15	-1	4

0%-40% inhibition  
40%-60% inhibition  
60% inhibition

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SelectScreen® Kinase Profiling Service  
Activity Assay Selectivity Data

Kinase	Kinase Selectivity Results - % Inhibition at ATP Km, app									
	Compound (1X concentration)									
	BAY-43-9006 (1000 nM)	BIRB-796 (1000 nM)	BMS-354825 (1000 nM)	Gleevec® (1000 nM)	Go-6983 (1000 nM)	H-89 (1000 nM)	Jessa® (1000 nM)	NH125 (1000 nM)	PI-103 (1000 nM)	PP2 (1000 nM)
MAP4K2 (GSK)	17	55	31	16	12	11	13	13	16	16
MAP4K4 (HGK)	36	0	66	-5	30	12	18	-22	-10	10
MAP4K6 (HBS1)	-11	7	8	5	2	4	7	-2	-11	2
MAPK1 (ERK2)	-11	19	-2	-2	6	5	8	8	8	8
MAPK10 (LNK3)	56	32	10	7	17	14	-2	-9	-2	11
MAPK11 (p38 beta)	8	47	-8	5	2	3	-1	-8	-1	8
MAPK12 (p38 gamma)	-4	24	20	5	5	4	-1	5	5	1
MAPK13 (p38 delta)	11	56	22	-15	17	12	19	-12	-7	15
MAPK14 (p38 alpha)	46	4	75	2	7	4	19	2	2	11
MAPK14 (p38 alpha) Direct	-8	3	0	0	0	1	-1	1	-1	1
MAPK8 (ERK1)	-30	9	3	-12	11	10	5	-5	-5	-1
MAPK8 (JNK1)	-15	71	20	-1	6	5	-13	2	8	8
MAPK9 (JNK2)	-8	-11	2	-5	2	-2	-4	-6	-1	-1
MAPKAPK2	7	26	17	7	3	5	4	-15	-15	1
MAPKAPK3	0	10	9	1	-1	-3	-2	-1	-1	-1
MAPKAPK5 (PRAK)	8	3	0	-5	19	20	6	6	10	8
MARK2	5	3	2	-2	21	17	4	3	9	9
MARK3	13	14	14	-3	33	30	12	6	5	12
MARK4	8	7	15	12	33	25	6	1	2	10
MATK (RYL)	-5	4	2	4	3	3	-4	-1	-6	-1
MELK	3	5	3	3	34	34	-3	34	28	1
MERTK (CMER)	10	1	4	-1	13	9	16	4	7	13
MET (cMet)	12	-2	16	3	12	2	14	5	4	5
MET RT2581	-2	-3	5	5	5	4	6	6	6	6
MINK1	1	-11	19	5	38	18	5	-1	3	4
MKNK1 (MKN1)	32	3	9	2	4	2	76	-1	-2	1
MST1B (RCN)	9	3	0	-4	7	16	0	-8	1	5
MST2	-3	17	16	-8	13	17	3	8	7	0
MUSK	78	16	12	5	-4	-1	-5	6	-8	-8
MYLK2 (pMLCK)	14	3	6	6	16	9	-2	2	1	-7
NEK1	6	1	0	0	6	0	-4	0	16	2
NEK2	0	3	-1	-1	-9	-9	-15	-8	-9	-11
NEK4	-3	4	4	4	0	2	0	-6	-5	2
NEK5	-20	2	3	-19	-1	2	3	3	0	3
NEK7	-3	3	2	-3	-1	10	5	1	0	5
NEK9	-1	1	-4	-3	-7	-11	-9	-15	-2	-5
NTRK1 (TRKA)	29	46	13	8	6	6	3	-1	-1	-11
NTRK2 (TRKB)	13	33	2	-16	15	11	4	1	4	18
NTRK3 (TRKC)	46	31	6	6	0	-2	31	2	6	12
NUAK1 (ARK5)	-11	-12	-6	-3	22	0	-1	0	13	0
PAK1	15	0	0	5	3	8	-2	-4	7	1
PAK1 (PAK65)	44	1	2	-2	-7	9	4	0	1	8
PAK3	8	18	13	5	10	9	-9	5	5	5
PAK4	-25	2	1	-22	11	4	-4	-7	4	3
PAK6	-14	-20	10	-2	2	6	4	-20	18	6
PAK7 (AKA1264)	1	-5	-2	-3	3	5	-11	1	-5	4
PASK	4	2	0	0	5	3	-3	2	6	3
PDGFRA (PDGFR alpha)	31	-5	26	37	17	-2	18	-8	2	28
PDGFRA (PDGFR beta)	18	3	65	28	17	17	13	3	9	9
PDGFRA T0247	41	4	2	5	5	-4	18	-6	-8	72
PDGFRA TOTAL	41	4	2	5	5	-4	18	-6	-8	72
PDGFRA V561D	10	46	101	153	67	80	64	4	5	65
PDGFRB (PDGFR beta)	78	10	54	70	13	13	1	-8	-4	32
PKA	15	8	8	15	4	7	3	-2	4	4
PKA Direct	-9	-5	-7	0	-3	-6	4	-3	0	4
PKH1	1	15	7	-6	22	8	2	-2	2	-1
PKH2	1	-3	-2	-2	2	10	7	0	-1	3
PKA (PKA alpha)	6	7	1	1	2	2	2	0	3	3
PKA (PKA beta)	-1	14	10	6	21	5	13	15	8	4
PKC3A (PKC C2 alpha)	7	10	12	11	15	3	9	14	82	11
PKC3B (PKC C2 beta)	-2	8	9	-3	2	5	13	5	13	13
PKC3C (NVPS34)	-17	-16	-6	-1	-13	-30	5	-24	15	-11
PKC3A/PRK31 (p110 alpha/p85 alpha)	-12	-23	-9	-9	-8	-3	-20	-11	100	-18
PKC3C/PRK31 (p110 delta/p85 alpha)	-6	-15	-13	-11	-15	-12	-13	-6	100	-20
PKC3C (p110 gamma)	8	-11	-7	-18	-12	-4	-12	-4	100	-18
PIM1	-16	7	2	-14	44	-4	-14	-4	25	-5
PIM2	2	0	-6	-4	5	5	-9	0	1	-11
PKN1 (PRK1)	-7	2	6	-3	29	26	0	26	0	1
PLK1	3	5	-2	6	7	47	-5	-6	6	-5
PLK2	1	1	1	7	0	2	0	0	-3	4
PLK3	4	-10	-14	5	3	4	-4	-84	3	-3
PRKAA (PKA)	-4	2	4	53	4	8	-4	-12	12	19
PRKCA (PKC alpha)	26	1	2	152	8	-1	-15	-4	-17	4
PRKCB1 (PKC beta 1)	-9	11	-19	-19	0	-2	-18	-14	7	7
PRKCB2 (PKC beta 2)	-8	8	7	-29	104	2	2	1	3	3
PRKCD (PKC delta)	-16	6	4	-17	100	15	0	4	-11	2
PRKCE (PKC epsilon)	5	2	7	-1	99	-2	11	-10	-5	-5
PRKCG (PKC gamma)	-10	5	3	-10	122	32	5	-4	-4	4
PRKCH (PKC theta)	-7	7	7	-20	100	6	-4	-5	0	0
PRCK1 (PKC zeta)	-20	9	5	-12	9	-4	12	14	-1	-1
PRKCN (PKC delta)	6	7	-13	-16	26	49	18	-15	-16	8
PRKCO (PKC theta)	-11	15	10	-16	20	3	19	17	2	2
PRKCG (PKC zeta)	-8	4	0	-15	2	-7	-4	-11	-9	-13
PRKDI (PKC mu)	-9	8	5	-1	12	53	26	8	-6	11
PRKD2 (PKD2)	5	-4	6	2	14	14	5	15	4	4
PRKI1	0	5	8	-3	26	38	5	-3	-1	5
PRKG2 (PKG2)	10	9	9	12	66	78	0	0	3	6
PRX	-6	5	-8	-8	12	101	6	-5	-2	0
PTK2 (FAK)	10	9	14	10	8	23	6	-2	-1	11
PTK2B (FAK2)	-2	18	1	-4	8	3	4	-4	5	5
PTK6 (Btk)	-4	0	62	6	1	9	21	1	9	66
RAF1 (CRAF) Y340 Y341D	81	34	57	64	21	39	5	16	27	63
RET	84	13	25	3	7	7	28	4	-2	13
RET V904L	61	5	7	-7	7	17	6	-8	-2	6
RET Y781F	54	17	47	8	17	3	7	16	6	62
ROCK1	-10	7	3	-11	-3	-3	-17	-1	-13	-1
ROCK2	4	1	-13	-3	3	70	-3	-1	3	-1
ROS1	-1	4	3	3	3	9	3	3	9	11
RPS8K1 (RSK1)	-3	5	0	3	38	42	3	4	3	-3
RPS8K2 (RSK2)	8	5	1	-3	38	38	15	-3	-1	8
RPS8K4 (MSK2)	11	9	5	-3	104	57	6	7	9	5
RPS8K4 (MSK1)	0	-5	2	2	62	80	2	2	1	2
RPS8K5 (MSK1)	0	11	8	3	65	84	-3	-4	-1	0
RPS8K4 (RSK4)	8	-1	-2	-1	15	15	-5	-5	11	16
RPS8K1 (p70S6K)	-9	3	-1	-16	71	77	5	5	8	-7
SGK (SGK1)	9	17	16	8	19	35	-1	-12	-13	0
SGK2	-3	-6	-10	-11	23	48	-5	0	-3	0
SGK1 (SGK3)	-4	0	-3	-1	21	42	3	4	4	5
SNF1LK2	9	19	86	9	21	16	29	-2	-1	75
SPHK1	8	2	1	6	6	2	11	-3	-2	2
SRPK2	3	-7	3	7	5	4	3	2	4	0
SRC	3	12	102	0	12	14	10	4	4	85
SRC N1	-2	13	103	9	9	12	-3	-1	87	87
SRS (Srm)	3	12	59	8	7	3	4	-6	0	57
SRPK1	1	2	1	5	6	5	1	6	6	6
SRPK2	-3	-1	-1	-12	9	4	-1	9	2	1
STK2B (TSSK2)	3	7	1	5	0	-8	-2	3	-1	-1
STK22 (TSSK1)	10	10	12	0	2	0	-3	0	0	0
STK23 (MSSK1)	2	3	3	-1	-5	0	0	3	1	1
STK24 (MST3)	8	19	14	-9	70	19	4	20	24	14
STK25 (YSK1)	-11	5	-14	-14	61	15	-8	-2	-1	-77
STK3 (MST2)	-15	-13	-3	-7	17	17	-4	6	17	11
STK4 (MST1)	-11	3	4	-29	16	-9	10	9	-8	-8
TYK	2	0	24	8	17	17	16	6	7	16
TAK1 (TAK1)	22	0	-10	20	10	10	10	3	-5	-5
TEK (Tke)	13	5	7	6	4	13	0	1	1	9
TKX	14	-2	19	-2	2	6	50	-2	-5	85
TRK2	10	10	17	7	17	6	0	-4	0	0
TYRO3 (RSE)	5	24	9	0	9	6	-6	-4	6	7
YES1	17	21	101	9	5	7	7	2	6	16
ZAP70	8	4	2	7	13	19	2	2	8	8

7%-40% inhibition  
40%-80% inhibition  
80% inhibition

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SelectScreen® Kinase Profiling Service  
Activity Assay Selectivity Data

Kinase	Kinase Selectivity Results - % Inhibition at ATP Km, app									
	PTK767 (10,000 nM)	Ro-31-8220 (10,000 nM)	Roscovitine (10,000 nM)	SB 202190 (10,000 nM)	Compound (1X concentration) Staurosporine (10,000 nM)	Sunitinib (10,000 nM)	Tarceva (10,000 nM)	Tyrphostin AG1478 (10,000 nM)	Y27632 (10,000 nM)	
ABL1	0	0	0	0	0	0	0	0	0	0
ABL1 E255K	2	37	7	13	88	81	72	85	6	6
ABL1 G250E	0	31	3	11	97	85	58	85	1	1
ABL1 T315I	1	75	4	8	103	87	75	83	6	6
ABL1 Y233F	0	43	11	35	82	82	85	83	7	7
ABL2 (Ara)	4	34	13	28	97	69	77	83	8	8
ADRB1 (ALKB)	-8	-4	4	28	9	3	-7	9	3	3
ADRB1 (GRK2)	-2	-2	2	58	75	-2	-4	2	5	5
ADRB2 (GRK3)	-9	15	-1	-2	73	-18	-1	-1	6	6
AKT1 (PKB alpha)	4	28	2	8	105	23	-3	-1	10	10
AKT2 (PKB beta)	8	75	0	10	103	60	-8	3	2	2
AKT3 (PKB gamma)	2	65	0	10	85	32	-1	2	4	4
ALK	12	81	57	19	84	80	20	45	18	18
AMPK A1/B1/G1	3	72	7	2	102	85	2	16	13	13
AMPK A2/B2/G2	2	42	2	-2	105	2	-4	7	3	3
AURKA (Aurora A)	44	11	-4	-1	89	67	25	44	6	6
AURKB (Aurora B)	12	45	0	-2	100	25	51	69	15	15
AURKC (Aurora C)	3	28	8	0	103	52	20	42	12	12
AXL	-5	-5	6	11	103	52	20	42	12	12
BLK	-3	76	-2	10	101	51	32	69	1	1
BMX	-5	44	-8	3	99	13	6	22	7	7
BRAF	31	28	38	38	101	78	3	53	22	22
BRAF V599E	52	45	27	56	88	76	-13	47	-1	-1
BRK1 (SAD1)	-1	85	2	7	100	85	2	39	77	77
BRK2	-2	77	2	4	101	73	11	33	10	10
CAMK1 (CaMK1)	11	65	3	-42	85	75	4	29	15	15
CAMK1D (CaMK1 delta)	-8	27	1	-11	105	84	21	23	0	0
CAMK2A (CaMKII alpha)	-1	85	2	0	100	81	0	13	2	2
CAMK2B (CaMKII beta)	7	65	8	3	95	61	-2	-1	1	1
CAMK2D (CaMKII delta)	9	99	9	10	89	91	14	23	20	20
CAMK4 (CaMKIV)	-1	-5	1	-3	100	72	4	9	2	2
CDC42 BPA (MIRCKA)	-10	0	0	40	103	5	0	2	81	81
CDC42 BPB (MIRCKB)	-1	-15	-6	-2	96	-1	-7	-2	17	17
CDK1/cyclin B	3	83	85	3	101	18	-1	2	17	17
CDK2/cyclin A	4	13	85	0	95	9	-8	-3	39	39
CDK5/p35	4	28	85	-1	108	48	-8	10	8	8
CDK5/p38	-5	24	88	4	105	49	-12	-2	38	38
CDK7/cyclin H/MNAT1	-10	100	100	-2	99	92	-1	-7	18	18
CDK9/cyclin T1	-15	100	96	25	99	98	0	-17	44	44
CHEK1 (CHK1)	-4	77	3	4	103	78	3	2	4	4
CHEK2 (CHK2)	-14	25	13	6	105	81	-3	27	11	11
CHUK (IKK alpha)	3	29	-6	32	99	34	9	0	38	38
CLK1	3	28	85	10	105	73	-6	11	46	46
CLK2	21	100	88	5	98	93	12	19	15	15
CLK3	8	-1	11	20	65	16	-9	1	80	80
CSF1R (FMS)	28	27	2	26	101	34	20	54	4	4
CSK	2	17	10	73	98	72	10	41	9	9
CSPK1A1 (CK1 alpha 1)	2	-6	18	56	17	54	2	9	3	3
CSPK1D (CK1 delta)	3	3	47	30	12	31	3	7	7	7
CSPK1E (CK1 epsilon)	10	37	44	72	23	22	2	9	12	12
CSPK1G1 (CK1 gamma 1)	-2	-6	22	22	6	65	-2	-1	3	3
CSPK1G2 (CK1 gamma 2)	-4	-12	57	9	42	71	-19	8	7	7
CSPK1G3 (CK1 gamma 3)	1	3	36	15	22	78	8	7	14	14
CSPK1A1 (CK2 alpha 1)	0	4	3	3	12	12	1	4	9	9
CSPK1A2 (CK2 alpha 2)	1	16	-5	-11	42	24	-11	24	17	17
DAPK1	10	43	-2	8	97	81	1	17	-2	-2
DAPK3 (ZPK)	3	7	0	2	101	74	-4	4	4	4
DCAMK2 (DCK2)	3	0	2	7	105	4	-14	2	42	42
DNA-PK	13	50	5	-1	-5	-6	2	46	59	59
DYRK1A	1	0	45	-2	99	57	-2	4	38	38
DYRK1B	1	26	79	5	103	79	-6	-2	2	2
DYRK3	-1	87	-8	20	97	65	6	35	15	15
DYRK4	-6	-7	-2	-9	24	-8	-2	-2	3	3
EEF2K	-1	7	6	2	1	-10	-2	10	0	0
EGFR (ErbB1)	3	38	8	74	84	17	10	25	25	25
EGFR (ErbB1) L858R	2	42	7	75	88	11	10	97	-1	-1
EGFR (ErbB1) L859R	-1	29	11	75	97	8	10	97	-3	-3
EGFR (ErbB1) T790M	7	77	5	64	104	63	72	86	16	16
EGFR (ErbB3) T790M L858R	3	75	14	63	100	62	15	84	8	8
EPHA1	2	91	12	51	89	58	12	81	15	15
EPHA2	-7	70	19	51	101	39	10	21	24	24
EPHA4	-3	49	9	-9	97	41	37	74	7	7
EPHA5	15	41	14	33	88	64	16	66	15	15
EPHA8	4	17	16	40	97	36	30	77	17	17
EPHB1	-3	73	15	25	97	15	15	67	67	67
EPHB2	3	58	7	17	86	78	23	74	3	3
EPHB3	-1	9	18	46	8	-9	6	8	8	8
EPHB4	1	55	4	16	88	70	17	75	-1	-1
ERBB2 (HER2)	8	28	0	27	95	68	48	8	5	5
ERBB4 (HER4)	2	48	8	52	89	68	73	95	-9	-9
FER	10	64	18	9	95	93	6	13	1	1
FES (FP5)	-1	73	38	-1	100	74	-15	9	-2	-2
FGFR1	-3	73	6	2	100	78	73	6	16	16
FGFR2	7	89	10	8	110	83	6	55	7	7
FGFR3	11	21	13	21	98	76	13	18	11	11
FGFR3 Y359E	15	15	4	1	108	38	51	11	68	68
FGFR4	15	42	-1	-10	87	54	-19	-6	13	13
FGR	2	65	7	99	94	84	47	82	7	7
FLT1 (VEGFR1)	28	68	10	12	104	78	16	21	9	9
FLT3	1	10	16	7	100	44	44	66	11	11
FLT3 D835Y	-1	100	20	10	90	92	32	90	20	20
FLT4 (VEGFR3)	30	69	9	22	93	65	45	78	0	0
FRAP1 (BTD9)	1	35	1	3	103	23	3	9	0	0
FRK (PTK5)	66	8	4	46	85	27	25	77	2	2
FYN	6	18	3	4	100	80	18	37	1	1
GRK4	-4	33	-16	-4	99	58	10	-4	6	6
GRK5	-5	35	3	-1	98	48	1	0	3	3
GRK6	-3	20	8	-4	88	73	3	8	5	5
GRK7	-2	31	14	3	100	77	2	8	5	5
GSK2 (Rapin)	4	38	8	26	98	72	7	10	13	13
GSK3A (GSK3 alpha)	-10	100	24	62	88	88	-9	5	31	31
GSK3B (GSK3 beta)	14	100	7	65	101	44	-3	10	4	4
HCK	-5	32	10	24	100	80	34	84	6	6
HIPK1 (Msh)	0	28	28	3	53	75	-1	2	1	1
HIPK2	1	83	10	3	78	89	0	5	2	2
HIPK3 (YAK1)	0	73	7	3	53	68	-2	-1	4	4
HIPK4	2	1	59	0	70	76	-2	30	79	79
IGF1R	2	16	13	-2	97	7	-5	7	2	2
IKBK6 (IKK beta)	1	14	0	3	81	11	3	5	27	27
IKBK6 (IKK epsilon)	-3	40	-2	-5	101	62	14	-1	10	10
INSR	2	23	17	13	98	85	2	2	10	10
INSR (IR)	4	8	16	2	85	80	0	-8	4	4
IRAK1	6	23	4	55	98	85	3	71	10	10
IRAK4	-2	69	16	-1	102	75	4	47	4	4
ITK	-6	6	8	3	55	78	-4	3	1	1
JAK1	44	-31	13	-1	110	68	38	50	16	16
JAK2	26	23	-2	3	99	63	56	30	5	5
JAK2 JH1 JH2	27	-3	2	2	108	46	7	2	10	10
JAK2 JH1 JH2 V817F	0	-11	-2	-6	95	53	11	6	1	1
JAK3	-2	-32	-9	1	102	54	6	26	8	8
KDR (VEGFR2)	88	100	14	50	101	86	77	88	21	21
KIT	5	41	7	17	95	70	19	19	5	5
KIT T670I	2	-34	-1	-2	86	90	24	40	5	5
LCK	10	76	10	37	102	97	51	75	9	9
LRK1	8	10	10	10	100	100	100	100	100	100
LRK2 G291S	15	100	24	15	100	100	68	82	26	26
LTK (TYK1)	0	7	23	11	100	84	28	61	27	27
LYN A	63	49	11	46	100	34	73	81	10	10
LYN B	43	43	7	3	103	65	77	87	10	10
MAP2K1 (MEK1)	6	28	24	11	100	86	11	7	5	5
MAP2K2 (MEK2)	1	36	29	14	100	82	0	15	15	15
MAP2K3 (MKK5)	0	29	24	21	100	82	0	15	15	15
MAP2K4 (GSK3)	0	29	42	25	100	82	0	15	15	15
MAP3K3 (MLK1)	-3	97	7	78	85	76	2	42	6	6

0%-40% inhibition  
40%-80% inhibition  
80% inhibition

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SelectScreen® Kinase Profiling Service  
Activity Assay Selectivity Data

Kinase	Kinase Selectivity Results - % Inhibition at ATP Km, app									
	PTK-767 (10,000 nM)	Ro-31-8220 (10,000 nM)	Roscovitine (10,000 nM)	SB 202190 (10,000 nM)	Compound (1X concentration) Staurosporine (10,000 nM)	Sutent (10,000 nM)	Tarceva (10,000 nM)	Tyrosphosin AG1478 (10,000 nM)	Y27632 (10,000 nM)	%
MAP4K2 (GSK)	8	101	21	63	100	91	50	86	32	
MAP4K4 (HGK)	4	102	22	20	100	93	18	87	15	
MAP4K6 (HBS1)	-5	17	22	2	68	5	-4	7	1	
MAPK1 (ERK2)	-24	7	43	46	-6	-4	-7	1	4	
MAPK10 (LNK3)	2	17	-1	32	11	-17	-3	12	18	
MAPK11 (p38 beta)	-1	7	8	12	31	-4	-4	4	3	
MAPK12 (p38 gamma)	-3	9	2	7	88	-9	-7	-5	6	
MAPK13 (p38 delta)	7	44	14	103	60	-7	16	67	18	
MAPK14 (p38 alpha)	5	9	9	39	5	-23	9	47	4	
MAPK14 (p38 alpha) Direct	-8	35	14	60	60	-16	0	9	1	
MAPK3 (ERK1)	-24	23	6	18	66	-19	-5	0	14	
MAPK8 (JNK1)	-20	4	10	54	40	16	7	6	6	
MAPK9 (JNK2)	-4	6	2	3	89	-6	3	-3	-2	
MAPKAPK2	4	8	1	35	22	2	4	15	6	
MAPKAPK3	3	-1	0	3	82	3	49	3	1	
MAPKAPK5 (PRAK)	2	67	13	9	102	71	-6	4	21	
MARK2	0	75	7	1	97	43	18	23	3	
MARK3	14	62	15	9	103	91	24	15	22	
MARK4	6	75	14	8	101	88	14	14	19	
MATK (HLY)	-7	-12	-3	2	89	2	-11	3	-1	
MELK	3	78	16	4	103	65	30	37	14	
MERTK (CMER)	0	62	14	22	101	98	10	59	9	
MET (cMet)	12	76	12	26	97	43	18	23	3	
MET RT261	-13	51	7	1	97	114	-4	9	3	
MNK1	-8	10	8	45	100	88	34	74	37	
MNKK1 (MNK1)	-7	12	8	9	99	15	16	83	38	
MST1B (RON)	-6	84	4	9	101	48	-2	10	10	
MST2	-13	113	15	16	98	73	18	6	28	
MUSK	5	27	20	6	88	89	-12	7	-3	
MYLK2 (aMMLCK)	1	59	-2	11	95	88	11	16	15	
NEK1	4	29	0	3	93	43	3	22	5	
NEK2	-3	-24	-7	-7	46	43	-3	4	6	
NEK4	5	-1	3	1	85	-4	1	1	0	
NEK5	-19	-42	9	-4	8	-20	5	5	3	
NEK7	-14	51	7	1	97	-14	-4	3	8	
NEK9	-10	-5	-8	1	78	-4	7	-6	-5	
NTRK1 (TRKA)	7	84	5	8	100	96	4	10	6	
NTRK2 (TRKB)	-6	84	13	11	102	90	-8	16	13	
NTRK3 (TRKC)	6	34	5	7	100	83	10	22	0	
NUAK1 (ARK5)	1	81	-13	9	99	98	-3	59	29	
PAK1	12	20	-5	-3	97	-8	0	18	-5	
PAK2 (PAK65)	-7	-5	7	1	103	4	-5	0	7	
PAK3	0	7	4	5	96	17	-10	1	7	
PAK4	-13	57	30	-5	102	77	-9	39	2	
PAK4	-9	14	29	0	103	20	1	4	0	
PAK7 (AKA1264)	3	29	2	29	97	75	-2	6	2	
PASK	2	75	4	48	89	3	1	17	4	
PDGFRA (PDGFR alpha)	26	23	6	7	93	83	-2	19	0	
PDGFRA (R427)	0	4	3	113	89	89	24	17	0	
PDGFRA Total	-2	58	5	7	95	87	59	40	11	
PDGFRA V561D	64	83	1	12	102	87	10	50	7	
PDGFRB (PDGFR beta)	70	78	1	3	95	50	0	8	1	
PKA	2	4	1	14	84	75	-3	2	2	
PKA Direct	-11	87	-2	-13	89	18	1	20	1	
PKG1	-10	87	11	4	101	90	8	33	24	
PKG2	-3	12	29	0	100	3	12	5	0	
PKA (PKA alpha)	5	12	6	-3	7	9	3	6	0	
PKKB (PKB beta)	2	-1	13	5	45	2	15	23	6	
PKC2A (PKC C2 alpha)	11	13	22	18	8	15	15	45	10	
PKC2B (PKC C2 beta)	13	44	16	15	30	48	40	73	11	
PKC3 (NVPS34)	-7	-13	-4	2	4	-28	-14	-29	-13	
PKC3A (PKC C3 alpha)	-1	2	-13	-4	-8	-19	-3	-6	-1	
PKC3D (PKC C3 delta)	-1	0	-4	-4	-13	-12	7	4	-3	
PKC3G (p110 gamma)	7	4	2	-4	18	7	6	9	4	
PIM1	-22	29	25	3	98	3	-7	34	3	
PIM2	-5	32	3	4	97	-2	1	-6	4	
PNK (PRK1)	-11	102	-1	8	101	87	1	-6	4	
PLK1	3	14	9	8	86	-2	2	-2	2	
PLK2	5	-6	2	1	81	16	-1	24	1	
PLK3	6	-10	3	15	31	-2	18	-5	14	
PRKACA (PKA)	-5	103	7	64	98	45	0	19	24	
PRKCA (PKC alpha)	-6	103	-2	5	100	-19	15	-4	29	
PRKCB1 (PKC beta 1)	-14	102	4	76	100	-28	7	1	40	
PRKCB2 (PKC beta 2)	-17	106	6	52	100	-25	-3	7	7	
PRKCD (PKC delta)	-10	103	3	9	101	5	5	1	31	
PRKCE (PKC epsilon)	-6	106	-5	10	103	-3	-6	-6	94	
PRKCG (PKC gamma)	-11	114	15	8	105	5	0	1	31	
PRKCH (PKC theta)	-14	114	-4	15	103	32	-4	11	100	
PRCK (PKC zeta)	-12	74	-1	5	98	-33	-3	-5	19	
PRKDN (PKD3)	-12	101	17	83	103	80	6	25	59	
PRKCG (PKC theta)	-11	109	11	9	100	70	-1	2	17	
PRKCE (PKC zeta)	-14	84	-1	54	94	-28	3	-17	17	
PRKDI (PKC mu)	1	87	12	54	89	15	35	41	41	
PRKDE (PKD2)	2	88	5	75	102	52	5	29	29	
PRKFI	-11	26	-1	11	101	52	-3	3	3	
PRKG2 (PKG2)	-7	27	8	19	96	59	-5	11	83	
PRRX	-4	16	1	45	103	65	3	-2	30	
PTK2 (FAK)	8	43	40	2	101	93	19	16	7	
PTK2B (FAK2)	-1	13	20	3	102	74	5	1	10	
PTK6 (Btk)	64	-9	4	72	79	65	2	92	6	
RAF1 (CRAF) Y340D Y341D	29	38	41	37	98	95	3	54	28	
RET	49	77	2	27	101	90	70	9	2	
RET V904L	-5	4	5	10	100	91	-7	7	74	
RET Y791F	67	46	8	12	101	93	62	80	79	
ROCK1	-15	65	8	5	102	45	8	-6	103	
ROCK2	27	18	0	6	100	58	5	1	37	
ROST	2	9	9	14	101	71	4	36	31	
RPS6KA1 (RSK1)	7	107	22	31	98	80	4	10	81	
RPS6KA2 (RSK2)	-1	100	24	17	101	86	30	57	84	
RPS6KA3 (RSK3)	0	112	14	1	103	86	-2	16	85	
RPS6KA4 (MSK2)	0	96	-12	36	104	84	-15	-6	76	
RPS6KA5 (MSK1)	8	98	0	27	99	60	-3	-2	65	
RPS6KA6 (RSK4)	18	35	23	18	108	85	7	56	56	
RPS6KB1 (p70S6K)	-14	100	-9	28	100	83	5	-6	39	
SGK (SGK1)	13	99	6	7	98	85	13	8	9	
SGK2	18	99	3	23	101	74	2	2	15	
SGK3 (SGK3)	67	4	4	23	98	43	23	10	15	
SNF1LK2	22	43	11	37	101	83	43	51	21	
SPHK1	8	0	12	9	9	6	14	2	8	
SRPK2	8	18	-5	9	11	-2	19	9	3	
SRC	2	32	11	24	100	85	37	70	11	
SRC N1	1	21	16	36	102	85	50	76	9	
SRMS (Srm)	4	39	3	32	95	29	2	27	3	
SRPK1	7	1	38	3	82	35	-5	1	82	
SRPK2	-7	81	32	-3	73	14	-1	8	1	
STK2B (TSSK2)	4	-3	1	1	99	41	9	-1	7	
STK22 (TSSK1)	0	41	4	-4	98	5	2	2	3	
STK23 (MSSK1)	4	4	33	5	62	5	2	2	21	
STK24 (MST3)	4	99	13	19	99	82	18	26	17	
STK25 (YSK1)	-15	104	-2	16	97	72	8	-4	19	
STK3 (MST2)	2	50	7	4	98	7	2	37	25	
STK4 (MST1)	-11	90	-7	-14	88	89	3	21	31	
SYK	-1	58	21	16	100	74	59	18	18	
TAK1 (TAO1)	-8	29	-2	10	98	101	10	59	32	
TBK1	1	67	1	3	98	88	26	30	10	
TEK (Tke2)	22	16	9	8	98	8	17	8	8	
TKX	3	-206	1	77	99	50	69	76	75	
TYK2	1	60	1	2	103	84	1	16	31	
TYRO3 (RSE)	-4	62	11	7	101	91	11	47	9	
YES1	4	30	7	13	100	83	21	64	2	
ZAP70	-1	25	12	8	92	84	2	18	18	

7%-40% inhibition  
40%-80% inhibition  
->80% inhibition

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SelectScreen® Kinase Profiling Service  
Activity Assay Selectivity Data

Kinase	Kinase Selectivity Results - % Inhibition at ATP Km, app									
	PTK-787 (1000 nM)	Ro-31-8220 (1000 nM)	Roscovitine (1000 nM)	SB 202190 (1000 nM)	Compound (1X concentration) Staurosporine (1000 nM)	Sunitinib (1000 nM)	Tarceva (1000 nM)	Tyrphostin AG1478 (1000 nM)	Y27632 (1000 nM)	
ABL1	0	0	0	0	0	0	0	0	0	
ABL1 E255K	4	6	1	4	91	80	23	2	2	
ABL1 G250E	-3	3	1	4	93	66	17	44	0	
ABL1 T315I	1	22	2	3	93	74	15	35	0	
ABL1 Y253F	-3	8	5	5	91	73	38	74	4	
ABL2 (Ara)	-6	10	12	10	91	20	33	45	6	
ADRB1 (ALKB)	1	3	1	1	94	54	10	1	2	
ADRB1 (GRK2)	0	7	1	1	92	4	4	1	2	
ADRB2 (GRK3)	-4	2	-1	-2	92	-5	0	-2	-1	
AKT1 (PKB alpha)	13	47	3	2	97	9	2	-1	-2	
AKT2 (PKB beta)	3	33	-1	-4	94	20	-6	2	1	
AKT3 (PKB gamma)	-5	32	0	5	96	18	-1	-1	3	
ALK	1	38	16	8	97	93	5	16	6	
AMPK A1B1G1	0	78	2	4	103	95	1	9	2	
AMPK A2B1G1	-2	86	1	-1	101	92	1	6	10	
AURKA (Aurora A)	13	-4	-5	-2	98	38	4	9	0	
AURKB (Aurora B)	5	8	4	2	100	25	15	19	1	
AURKC (Aurora C)	-3	7	-1	3	95	44	3	3	-4	
AXL	0	48	-2	7	98	97	10	7	9	
BLK	-5	23	-1	-3	101	80	0	28	1	
BMX	-5	7	-8	3	95	0	3	7	3	
BRAF	11	19	20	10	102	38	19	29	15	
BRAF V599E	-4	16	7	5	99	20	-19	18	-10	
BRSK1 (SAD1)	-4	63	2	9	100	58	1	9	28	
BRSK2	5	-3	1	1	100	15	4	15	8	
CAMK1 (CaMK1)	1	2	-4	-5	92	27	18	-1	-11	
CAMK1D (CaMK1 delta)	-19	55	-10	0	100	29	6	0	-10	
CAMK2A (CaMKII alpha)	0	57	-5	0	100	73	4	0	-5	
CAMK2B (CaMKII beta)	3	28	-3	3	95	3	1	-1	2	
CAMK2D (CaMKII delta)	5	27	-10	0	99	92	12	-6	8	
CAMK4 (CaMKIV)	-15	3	3	-2	81	43	5	-4	-1	
CDC42 BPA (MIRCKA)	-13	-3	-2	-4	101	9	1	1	81	
CDC42 BPB (MIRCKA)	-4	-5	-4	-6	98	-12	-5	-5	8	
CDK1/cyclin B	1	99	94	-6	100	5	2	3	3	
CDK2/cyclin A	0	27	61	-2	94	-4	1	6	2	
CDK2/cyclin B	-1	75	-1	1	100	18	6	18	38	
CDK5/p35	-5	68	71	0	100	19	3	-1	-4	
CDK7/cyclin H/MNAT1	-6	73	68	9	90	85	-1	-12	8	
CDK9/cyclin T1	-18	100	49	4	95	16	-22	-23	-11	
CHEK1 (CHK1)	-3	13	20	10	103	63	-1	-4	3	
CHEK2 (CHK2)	-19	46	-6	4	103	95	2	3	3	
CHUK (IKK alpha)	-9	13	-5	9	79	0	1	2	-3	
CLK1	-4	26	6	0	95	41	-1	2	1	
CLK2	18	100	48	12	98	94	14	4	7	
CLK3	-3	1	1	1	19	-3	0	0	26	
CSF1 (FMS)	24	46	3	4	100	104	4	22	-1	
CSK	5	6	6	5	96	2	14	17	8	
CSNK1A1 (CK1 alpha 1)	5	1	3	16	4	25	5	4	0	
CSNK1D (CK1 delta)	0	2	9	56	3	62	1	6	1	
CSNK1E (CK1 epsilon)	0	13	4	33	6	55	3	5	12	
CSNK1G1 (CK1 gamma 1)	0	-1	-3	0	2	28	1	-5	1	
CSNK1G2 (CK1 gamma 2)	0	9	3	14	51	8	2	3	3	
CSNK1G3 (CK1 gamma 3)	3	8	1	11	3	50	9	1	10	
CSNK1L (CK1 alpha 1)	7	2	1	7	7	4	1	4	3	
CSNK2A2 (CK2 alpha 2)	3	20	0	12	20	9	4	17	3	
DAPK1	-8	6	2	3	100	92	-3	1	4	
DAPK2 (ZPK)	5	1	2	0	99	38	1	1	-1	
DCAMK2 (CK2)	-1	2	-4	0	96	17	-2	17	6	
DNA-PK	7	18	7	4	1	2	0	8	25	
DYRK1A	-1	-1	8	0	93	16	0	3	58	
DYRK2	-2	-2	33	0	91	-1	10	3	10	
DYRK3	-2	47	-3	15	82	25	1	6	15	
DYRK4	-6	-1	-2	1	5	-8	-1	-4	0	
EEF2K	-2	11	3	3	95	1	2	0	7	
EGFR (ErbB1)	1	8	3	2	93	1	3	2	2	
EGFR (ErbB1) L858R	0	17	14	38	88	101	84	3	3	
EGFR (ErbB1) L861Q	-4	4	8	31	85	-1	39	26	-4	
EGFR (ErbB1) T790M	-2	74	4	20	101	16	66	6	6	
EGFR (ErbB1) T790M L858R	-2	88	12	23	95	27	70	69	-5	
EPHA1	5	46	9	19	93	22	3	36	13	
EPHA2	3	27	12	27	87	8	9	32	21	
EPHA4	17	12	5	12	93	5	13	26	5	
EPHA5	8	14	10	18	87	27	6	15	15	
EPHA8	8	11	13	18	81	5	5	32	18	
EPHB1	10	18	10	8	88	51	6	23	8	
EPHB2	-1	10	1	6	70	-44	5	24	2	
EPHB3	2	4	6	13	4	-4	4	6	5	
EPHB4	-2	11	0	0	44	25	1	28	0	
ERBB2 (HER2)	0	0	-1	0	69	3	27	60	0	
ERBB4 (HER4)	3	11	7	14	53	5	24	77	8	
FER	8	15	0	1	95	82	3	1	-1	
FES (FP5)	-2	8	1	-2	100	63	-2	2	-1	
FGFR1	-2	41	6	-2	96	64	0	6	3	
FGFR2	4	34	2	5	102	76	10	16	0	
FGFR3	11	6	1	12	94	58	8	8	2	
FGFR3 Y359E	-1	-4	7	-5	106	18	14	14	67	
FGFR4	0	-18	-6	-9	75	19	-9	9	17	
FGR	-4	15	2	10	99	94	-11	30	2	
FLT1 (VEGFR1)	46	31	1	10	97	45	-9	8	9	
FLT3	4	3	8	1	100	8	26	26	3	
FLT3 D835Y	5	6	10	10	100	37	63	9	9	
FLT4 (VEGFR3)	65	76	4	5	92	5	11	35	4	
FRAP (mTOR)	29	-33	3	8	93	5	7	9	2	
FRK (PTK5)	29	-3	-1	10	95	63	7	37	-3	
FYN	0	-1	2	-1	99	45	5	13	-2	
GRK4	-6	87	-26	-17	80	18	13	-17	-7	
GRK5	-3	59	0	3	95	10	0	0	0	
GRK6	1	58	-1	-4	92	40	0	-2	-2	
GRK7	-3	57	1	9	99	41	3	4	-1	
GSK2 (Rapin)	-11	8	4	21	95	16	-3	0	2	
GSK3A (GSK3 alpha)	-3	105	12	7	97	8	1	6	32	
GSK3B (GSK3 beta)	17	102	0	40	98	19	-1	1	0	
HCK	-8	6	8	7	103	54	6	62	6	
HIPK1 (Msk1)	-1	41	1	0	13	44	2	15	1	
HIPK2	-1	57	3	0	32	66	1	1	2	
HIPK3 (YAK1)	8	23	3	2	16	19	-7	-7	2	
HIPK4	0	12	0	-2	25	38	-2	5	25	
IGF1R	0	6	-2	1	80	0	0	0	-3	
IKBK (IKK beta)	0	3	-2	0	57	3	4	0	4	
IKBK1 (IKK epsilon)	0	9	-4	-2	100	24	1	1	-2	
INSR	0	11	12	13	54	16	5	9	13	
INSR (IR)	2	1	7	-1	62	69	5	1	0	
IRAK1	-1	-2	-6	-5	93	80	-10	23	-2	
IRAK4	-4	21	0	5	99	67	5	5	3	
ITK	2	6	1	3	94	6	-3	-1	3	
JAK1	2	54	9	-5	100	38	9	-3	-3	
JAK2	8	25	-3	-3	97	44	15	9	-2	
JAK2 JH1 JH2	-1	-2	-4	-3	106	11	-2	1	2	
JAK2 JH1 JH2 V817F	-1	6	-3	-3	97	26	4	3	9	
JAK3	-5	87	7	8	97	45	35	2	2	
KDR (VEGFR2)	89	92	8	23	99	90	19	61	15	
KIT	66	3	2	2	97	2	12	12	2	
KIT T670I	0	-1	-2	-3	84	69	5	18	5	
LCK	-4	20	7	20	102	34	17	41	0	
LRK1	-10	43	-4	-3	100	35	44	45	41	
LRK2 G291S	16	51	5	13	100	66	28	45	60	
LTK (TYK1)	0	3	1	101	68	4	20	3	3	
LYN A	18	10	11	12	100	32	26	75	6	
LYN B	17	4	5	4	100	4	5	75	0	
MAP2K1 (MEK1)	-2	3	4	0	99	12	5	2	2	
MAP2K2 (MEK2)	-3	8	13	8	95	68	5	15	11	
MAP2K3 (MKK5)	-3	4	4	5	100	2	2	-4	5	
MAP3K (GOT)	-14	2	17	14	94	45	2	-9	19	
MAP3K (MLK1)	-1	77	1	30	88	32	4	7	-1	

0%-40% inhibition  
40%-80% inhibition  
80% inhibition

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SelectScreen® Kinase Profiling Service  
Activity Assay Selectivity Data

Kinase	Kinase Selectivity Results - % Inhibition at ATP Km, app									
	PTK-767 (1000 nM)	Ro-31-8220 (1000 nM)	Roscovitine (1000 nM)	SB 202190 (1000 nM)	Compound (1X concentration)	Sutent (1000 nM)	Tarceva (1000 nM)	Tyrphostin AG1478 (1000 nM)	Y27632 (1000 nM)	
MAP4K2 (GSK)	-2	97	9	20	100	96	9	37	13	
MAP4K4 (HGK)	-2	97	9	20	100	96	9	37	13	
MAP4K6 (HBS1)	-9	88	4	15	100	98	-5	36	3	
MAPK1 (ERK2)	2	2	4	3	23	5	1	3	3	
MAPK10 (LNK3)	-16	7	0	7	5	-10	6	5	5	
MAPK11 (p38 beta)	10	16	-3	79	15	0	-1	0	17	
MAPK12 (p38 gamma)	1	2	8	3	59	5	9	8	2	
MAPK13 (p38 delta)	-3	4	0	5	52	-2	-3	0	5	
MAPK14 (p38 alpha)	-16	9	9	58	18	-7	12	17	26	
MAPK14 (p38 alpha) Direct	5	6	2	32	10	-2	-2	16	11	
MAPK9 (ERK1)	-4	5	3	11	16	-6	0	2	-1	
MAPK8 (JNK1)	-3	1	9	12	28	-17	3	5	10	
MAPK9 (JNK2)	-17	0	4	23	11	-12	14	7	9	
MAPKAPK2	-12	2	1	0	51	-3	4	-2	-3	
MAPKAPK3	3	3	0	38	3	-1	7	4	13	
MAPKAPK5 (PRAK)	1	-4	1	0	38	0	15	0	-1	
MARK1 (MARK)	4	29	8	9	102	63	2	7	8	
MARK2	2	28	7	3	96	66	0	7	8	
MARK3	6	57	11	11	102	66	19	14	9	
MARK4	9	53	11	12	102	79	18	20	8	
MATK (NYL)	-2	-5	-5	-2	68	-5	-1	10	7	
MELK	5	-5	-5	3	113	62	1	10	2	
MERTK (CMER)	1	32	7	10	89	58	3	12	7	
MET (cMet)	9	30	6	3	23	22	2	9	1	
MEK1/2/3	-8	20	3	3	74	23	-7	6	2	
MNK1	-25	31	4	23	111	82	14	18	21	
MKNK1 (MNK1)	3	-1	-2	4	87	0	40	41	56	
MST1B (RON)	3	18	4	0	95	30	-2	6	3	
MST2	-17	8	0	0	98	60	5	5	12	
MUSK	4	-1	-3	-5	85	100	0	0	-5	
MYLK2 (pMLCK)	1	23	-10	-10	78	63	3	-2	6	
NEK1	2	1	-1	19	42	1	0	3	2	
NEK2	2	-10	-6	-2	4	3	3	-9	4	
NEK4	-3	-1	0	-1	46	0	6	1	-1	
NEKB	-18	4	1	-3	4	-17	4	4	-1	
NEK7	-11	-16	8	2	-5	-2	-5	3	8	
NEK9	-3	-7	-8	-2	31	-2	5	-7	-8	
NTRK1 (TRKA)	5	71	4	2	101	67	6	2	6	
NTRK2 (TRKB)	-8	12	12	102	96	-2	8	14	8	
NTRK3 (TRKC)	6	87	-3	13	102	82	1	10	2	
NUAK1 (ARK5)	15	29	-11	-12	88	91	-13	-16	-16	
PAK1	3	-7	3	5	94	3	-5	5	3	
PAK4 (PAK65)	-10	5	5	7	100	4	1	0	2	
PAK3	0	7	1	5	97	33	-5	3	2	
PAK4	-11	29	16	22	101	98	4	9	-9	
PAK6	-13	18	0	0	103	85	-17	4	2	
PAK7 (p60A1264)	1	6	7	7	47	6	5	5	3	
PASK	-1	62	-2	12	84	3	0	6	3	
PDGFRA (PDGFR alpha)	10	7	2	-1	89	83	-16	8	-6	
PDGFRA T0427	10	65	2	-1	111	82	54	28	2	
PDGFRA T074	1	20	5	4	82	106	10	9	7	
PDGFRA V561D	54	61	-1	48	105	100	50	55	24	
PDGFRB (PDGFR beta)	40	19	3	1	97	77	6	6	0	
PKA	11	28	2	1	82	82	1	0	0	
PKA Direct	-11	45	-3	-10	89	6	59	5	-14	
PKG1	-6	70	0	2	101	94	6	5	6	
PKG2	-1	2	4	2	49	-7	-8	4	0	
PKA (PKA alpha)	11	4	4	11	4	-7	0	7	7	
PKKB (PKB beta)	10	8	-2	9	15	19	9	1	1	
PKC2A (PKC C2 alpha)	12	11	15	12	3	7	11	7	7	
PKC2B (PKC C2 beta)	13	13	0	0	3	0	16	26	3	
PKC3 (NVPS34)	-22	-20	-5	3	-11	-29	-11	-29	-11	
PK3CA/PK3R1 (p110 alpha/p85 alpha)	-22	-17	-18	1	-20	-4	-17	-3	-3	
PK3CD/PK3R1 (p110 delta/p85 alpha)	7	2	-21	-8	-27	-18	-11	-10	-19	
PK3CG (p110 gamma)	-3	-9	1	-3	13	4	2	2	-18	
PIM1	-19	82	24	25	94	2	26	4	0	
PIM2	-13	58	-12	8	94	-1	-2	-8	2	
PNV (PRK1)	-4	-17	6	3	68	10	16	1	44	
PLK1	7	9	-5	8	47	1	5	-3	1	
PLK2	2	1	2	1	58	2	3	1	-1	
PLK3	0	14	4	13	10	12	23	-5	13	
PRKACA (PKA)	-6	38	-3	24	28	3	21	6	6	
PRKCA (PKC alpha)	-9	69	-4	2	100	7	18	4	6	
PRKCB1 (PKC beta 1)	-17	102	-3	44	100	-12	16	3	27	
PRKCB2 (PKC beta 2)	-13	100	0	13	100	0	1	1	28	
PRKCD (PKC delta)	-16	102	-1	3	101	-7	4	2	49	
PRKCE (PKC epsilon)	11	102	-4	5	103	2	-6	-6	62	
PRKCG (PKC gamma)	-21	119	21	8	112	-3	5	10	36	
PRKCH (PKC theta)	-21	105	-3	4	108	-10	8	1	21	
PRCK1 (PKC zeta)	-18	25	-1	76	-17	-4	-4	1	1	
PRKCN (PKC delta)	-11	95	2	34	105	68	6	6	15	
PRKCO (PKC theta)	-16	102	0	4	108	15	0	5	56	
PRKG2 (PKC zeta)	-19	27	-3	2	56	-11	-15	3	1	
PRKD1 (PKC mu)	-12	85	7	19	87	30	9	11	8	
PRKD2 (PKD)	-3	79	-2	15	101	21	1	4	10	
PRKI1	-2	17	0	17	95	24	-3	4	38	
PRKG2 (PKG2)	14	88	7	5	86	19	-5	6	44	
PRX	-10	44	-1	16	102	17	4	-2	47	
PTK2 (FAK)	4	3	10	1	97	77	7	8	1	
PTK2B (FAK2)	-5	3	4	2	96	67	1	1	1	
PTK6 (Btk)	16	4	4	23	41	21	4	48	3	
RAF1 (CRAF) Y340D Y341D	10	5	14	27	93	46	13	39	14	
RET	10	23	6	4	108	66	23	4	4	
RET V904L	-2	3	3	4	100	66	1	3	16	
RET Y781F	39	14	3	89	98	34	35	27	27	
ROCK1	-20	15	-10	-4	103	11	8	-10	26	
ROCK2	-5	4	0	2	102	7	8	2	63	
ROST	-4	63	8	13	102	25	6	10	13	
RPS8KA1 (RSK1)	0	107	2	-2	100	64	3	1	38	
RPS8KA2 (RSK2)	-8	100	6	15	100	78	-1	10	28	
RPS8KA3 (RSK3)	-3	102	9	-3	106	84	2	7	82	
RPS8KA4 (MSK2)	-1	100	-13	-25	102	73	-11	-6	35	
RPS8KA5 (MSK1)	5	99	-2	27	100	25	-4	-1	17	
RPS8KA6 (RSK4)	7	95	8	30	105	7	20	20	37	
RPS8KB1 (p70S6K)	-19	102	-7	11	101	66	-3	-11	12	
SGK (SGK1)	7	95	-1	3	98	66	8	-2	0	
SGK2	8	91	-1	16	95	27	3	1	11	
SGK1 (SGK3)	1	94	0	15	93	1	0	6	0	
SNF1LK2	13	22	8	11	89	54	15	20	7	
SPHK1	10	11	0	4	0	10	4	7	7	
SPHK2	-13	8	0	-3	-12	13	-6	-2	2	
SRC	1	6	7	6	87	57	6	40	7	
SRC N1	-14	1	10	6	102	54	17	39	7	
SRRS (Srm)	8	6	7	7	75	12	3	7	7	
SRRK1	5	1	7	2	54	8	1	2	57	
SRRK2	-10	32	3	-2	20	-8	-1	8	-1	
STRK2B (TSSK2)	8	-2	-1	-1	97	15	15	1	0	
STRK2D (TSSK1)	3	0	3	-2	108	60	5	3	1	
STRK3 (MSSK1)	-4	-3	2	0	15	0	0	0	54	
STK24 (MST3)	3	90	7	4	99	80	16	16	8	
STK25 (YSK1)	-24	97	-5	17	99	23	4	-6	14	
STK3 (MST2)	-11	84	0	-11	93	63	11	0	-17	
STK4 (MST1)	-20	91	-9	-9	89	91	7	0	-7	
SYK	2	3	10	15	101	42	-3	22	19	
TAK1/2 (TAK1)	-8	64	-5	8	91	31	2	2	19	
TBK1	0	45	-1	3	100	54	4	5	2	
TEK (Tke2)	8	1	3	3	89	8	-7	4	2	
TYK	-4	-1	-2	28	94	19	27	23	29	
TYK2	-1	56	1	1	99	56	5	5	4	
TYRO3 (RSE)	-1	18	3	7	100	89	6	12	7	
YES1	1	2	1	-1	88	92	5	27	11	
ZAP70	-1	12	4	-1	86	92	5	27	18	

7%-40% inhibition  
40%-80% inhibition  
->80% inhibition

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