

scanMAX Kinase Assay Panel

451 assays - the most comprehensive kinase assay panel

The largest commercial kinase panel available, scanMAX contains a set of 451 kinases covering AGC, CAMK, CMGC, CK1, STE, TK, TKL, lipid and atypical kinase families, plus important mutant forms. scanMAX is an ideal choice for all stages of drug discovery and development, from lead discovery & hit identification to lead optimization, preclinical and compound safety.

Kinome-wide annotation of compound selectivity enables informed decisions about therapeutic opportunities and potential off-target liabilities which could otherwise be missed in smaller kinase panels. Panel includes: 448 human kinases, 3 pathogen kinases, 54 disease relevant mutants, 130 tyrosine kinase assays, and 20 lipid kinases.

Panel Highlights & Benefits

- More than 80% coverage of the human protein kinome
- High-quality reproducible data
- Rapid turnaround time
- Broad dynamic range: can detect compounds with Kds <100 pM to >10 mM
- Flexible - Standard and custom panels
- Activation-state specific assays
- Detection of multiple inhibitor types (e.g. type I, II & non-ATP competitive)

451 Kinase Assays

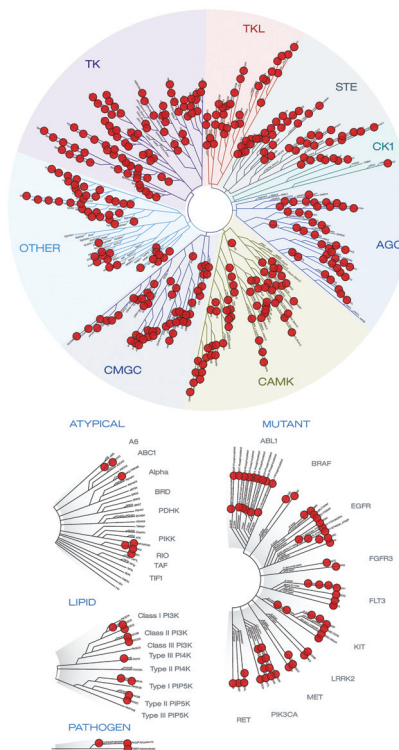


Figure 1. Red circles represent the kinases currently available in the KINOMEScan™ panel.

KINOMEScan Gene Symbol	Entrez Gene Symbol	KINOMEScan Gene Symbol	Entrez Gene Symbol
AAK1	AAK1	ACVR1B	ACVR1B
ABL1(E255K)-phosphorylated	ABL1	ACVR2A	ACVR2A
ABL1(F317I)-nonphosphorylated	ABL1	ACVR2B	ACVR2B
ABL1(F317I)-phosphorylated	ABL1	ACVRL1	ACVRL1
ABL1(F317L)-nonphosphorylated	ABL1	ADCK3	CABC1
ABL1(F317L)-phosphorylated	ABL1	ADCK4	ADCK4
ABL1(H396P)-nonphosphorylated	ABL1	AKT1	AKT1
ABL1(H396P)-phosphorylated	ABL1	AKT2	AKT2
ABL1(M351T)-phosphorylated	ABL1	AKT3	AKT3
ABL1(Q252H)-nonphosphorylated	ABL1	ALK	ALK
ABL1(Q252H)-phosphorylated	ABL1	AMPK-alpha1	PRKAA1
ABL1(T315I)-nonphosphorylated	ABL1	AMPK-alpha2	PRKAA2
ABL1(T315I)-phosphorylated	ABL1	ANKK1	ANKK1
ABL1(Y253F)-phosphorylated	ABL1	ARK5	NUAK1
ABL1-nonphosphorylated	ABL1	ASK1	MAP3K5
ABL1-phosphorylated	ABL1	ASK2	MAP3K6
ABL2	ABL2	AURKA	AURKA
ACVR1	ACVR1	AURKB	AURKB

KINOMEScan Gene Symbol	Entrez Gene Symbol	KINOMEScan Gene Symbol	Entrez Gene Symbol
AURKC	AURKC	CSNK1A1L	CSNK1A1L
AXL	AXL	CSNK1D	CSNK1D
BIKE	BMP2K	CSNK1E	CSNK1E
BLK	BLK	CSNK1G1	CSNK1G1
BMPR1A	BMPR1A	CSNK1G2	CSNK1G2
BMPR1B	BMPR1B	CSNK1G3	CSNK1G3
BMPR2	BMPR2	CSNK2A1	CSNK2A1
BMX	BMX	CSNK2A2	CSNK2A2
BRAF	BRAF	CTK	MATK
BRAF(V600E)	BRAF	DAPK1	DAPK1
BRK	PTK6	DAPK2	DAPK2
BRSK1	BRSK1	DAPK3	DAPK3
BRSK2	BRSK2	DCAMKL1	DCLK1
BTK	BTK	DCAMKL2	DCLK2
BUB1	BUB1	DCAMKL3	DCLK3
CAMK1	CAMK1	DDR1	DDR1
CAMK1D	CAMK1D	DDR2	DDR2
CAMK1G	CAMK1G	DLK	MAP3K12
CAMK2A	CAMK2A	DMPK	DMPK
CAMK2B	CAMK2B	DMPK2	CDC42BPG
CAMK2D	CAMK2D	DRAK1	STK17A
CAMK2G	CAMK2G	DRAK2	STK17B
CAMK4	CAMK4	DYRK1A	DYRK1A
CAMKK1	CAMKK1	DYRK1B	DYRK1B
CAMKK2	CAMKK2	DYRK2	DYRK2
CASK	CASK	EGFR	EGFR
CDC2L1	CDK11B	EGFR(E746-A750del)	EGFR
CDC2L2	CDC2L2	EGFR(G719C)	EGFR
CDC2L5	CDK13	EGFR(G719S)	EGFR
CDK2	CDK2	EGFR(L747-E749del, A750P)	EGFR
CDK3	CDK3	EGFR(L747-S752del, P750S)	EGFR
CDK4-cyclinD1	CDK4	EGFR(L747-T751del, Sins)	EGFR
CDK4-cyclinD3	CDK4	EGFR(L858R)	EGFR
CDK5	CDK5	EGFR(L858R,T790M)	EGFR
CDK7	CDK7	EGFR(L861Q)	EGFR
CDK8	CDK8	EGFR(S752-I759del)	EGFR
CDK9	CDK9	EGFR(T790M)	EGFR
CDK11	CDK19	EIF2AK1	EIF2AK1
CDKL1	CDKL1	EPHA1	EPHA1
CDKL2	CDKL2	EPHA2	EPHA2
CDKL3	CDKL3	EPHA3	EPHA3
CDKL5	CDKL5	EPHA4	EPHA4
CHEK1	CHEK1	EPHA5	EPHA5
CHEK2	CHEK2	EPHA6	EPHA6
CIT	CIT	EPHA7	EPHA7
CLK1	CLK1	EPHA8	EPHA8
CLK2	CLK2	EPHB1	EPHB1
CLK3	CLK3	EPHB2	EPHB2
CLK4	CLK4	EPHB3	EPHB3
CSF1R	CSF1R	EPHB4	EPHB4
CSF1R-autoinhibited	CSF1R	EPHB6	EPHB6
CSK	CSK	ERBB2	ERBB2
CSNK1A1	CSNK1A1	ERBB3	ERBB3

KINOMEScan Gene Symbol	Entrez Gene Symbol	KINOMEScan Gene Symbol	Entrez Gene Symbol
ERBB4	ERBB4	IRAK4	IRAK4
ERK1	MAPK3	ITK	ITK
ERK2	MAPK1	JAK1(JH1domain-catalytic)	JAK1
ERK3	MAPK6	JAK1(JH2domain-pseudokinase)	JAK1
ERK4	MAPK4	JAK2(JH1domain-catalytic)	JAK2
ERK5	MAPK7	JAK3(JH1domain-catalytic)	JAK3
ERK8	MAPK15	JNK1	MAPK8
ERN1	ERN1	JNK2	MAPK9
FAK	PTK2	JNK3	MAPK10
FER	FER	KIT	KIT
FES	FES	KIT-autoinhibited	KIT
FGFR1	FGFR1	KIT(A829P)	KIT
FGFR2	FGFR2	KIT(D816H)	KIT
FGFR3	FGFR3	KIT(D816V)	KIT
FGFR3(G697C)	FGFR3	KIT(L576P)	KIT
FGFR4	FGFR4	KIT(V559D)	KIT
FGR	FGR	KIT(V559D,T670I)	KIT
FLT1	FLT1	KIT(V559D,V654A)	KIT
FLT3	FLT3	LATS1	LATS1
FLT3-autoinhibited	FLT3	LATS2	LATS2
FLT3(D835H)	FLT3	LCK	LCK
FLT3(D835Y)	FLT3	LIMK1	LIMK1
FLT3(ITD)	FLT3	LIMK2	LIMK2
FLT3(K663Q)	FLT3	LKB1	STK11
FLT3(N841I)	FLT3	LOK	STK10
FLT3(R834Q)	FLT3	LRRK2	LRRK2
FLT4	FLT4	LRRK2(G2019S)	LRRK2
FRK	FRK	LTK	LTK
FYN	FYN	LYN	LYN
GAK	GAK	LZK	MAP3K13
GCN2(Kin.Dom.2.S808G)	EIF2AK4	MAK	MAK
GRK1	GRK1	MAP3K1	MAP3K1
GRK4	GRK4	MAP3K15	MAP3K15
GRK7	GRK7	MAP3K2	MAP3K2
GSK3A	GSK3A	MAP3K3	MAP3K3
GSK3B	GSK3B	MAP3K4	MAP3K4
HASPIN	GSG2	MAP4K2	MAP4K2
HCK	HCK	MAP4K3	MAP4K3
HIPK1	HIPK1	MAP4K4	MAP4K4
HIPK2	HIPK2	MAP4K5	MAP4K5
HIPK3	HIPK3	MAPKAPK2	MAPKAPK2
HIPK4	HIPK4	MAPKAPK5	MAPKAPK5
HPK1	MAP4K1	MARK1	MARK1
HUNK	HUNK	MARK2	MARK2
ICK	ICK	MARK3	MARK3
IGF1R	IGF1R	MARK4	MARK4
IKK-alpha	CHUK	MAST1	MAST1
IKK-beta	IKBKB	MEK1	MAP2K1
IKK-epsilon	IKBKE	MEK2	MAP2K2
INSR	INSR	MEK3	MAP2K3
INSRR	INSRR	MEK4	MAP2K4
IRAK1	IRAK1	MEK5	MAP2K5
IRAK3	IRAK3	MEK6	MAP2K6

KINOMEScan Gene Symbol	Entrez Gene Symbol	KINOMEScan Gene Symbol	Entrez Gene Symbol
MELK	MELK	PCTK3	CDK18
MERTK	MERTK	PDGFRA	PDGFRA
MET	MET	PDGFRB	PDGFRB
MET(M1250T)	MET	PDPK1	PDPK1
MET(Y1235D)	MET	PFCDPK1(P.falciiparum)	CDPK1
MINK	MINK1	PFPK5(P.falciiparum)	MAL13P1.279
MKK7	MAP2K7	PFTAIRE2	CDK15
MKNK1	MKNK1	PFTK1	CDK14
MKNK2	MKNK2	PHKG1	PHKG1
MLCK	MYLK3	PHKG2	PHKG2
MLK1	MAP3K9	PIK3C2B	PIK3C2B
MLK2	MAP3K10	PIK3C2G	PIK3C2G
MLK3	MAP3K11	PIK3CA	PIK3CA
MRCKA	CDC42BPA	PIK3CA(C420R)	PIK3CA
MRCKB	CDC42BPB	PIK3CA(E542K)	PIK3CA
MST1	STK4	PIK3CA(E545A)	PIK3CA
MST1R	MST1R	PIK3CA(E545K)	PIK3CA
MST2	STK3	PIK3CA(H1047L)	PIK3CA
MST3	STK24	PIK3CA(H1047Y)	PIK3CA
MST4	MST4	PIK3CA(I800L)	PIK3CA
MTOR	MTOR	PIK3CA(M1043I)	PIK3CA
MUSK	MUSK	PIK3CA(Q546K)	PIK3CA
MYLK	MYLK	PIK3CB	PIK3CB
MYLK2	MYLK2	PIK3CD	PIK3CD
MYLK4	MYLK4	PIK3CG	PIK3CG
MYO3A	MYO3A	PIK4CB	PI4KB
MYO3B	MYO3B	PIM1	PIM1
NDR1	STK38	PIM2	PIM2
NDR2	STK38L	PIM3	PIM3
NEK1	NEK1	PIP5K1A	PIP5K1A
NEK2	NEK2	PIP5K1C	PIP5K1C
NEK3	NEK3	PIP5K2B	PIP4K2B
NEK4	NEK4	PIP5K2C	PIP4K2C
NEK5	NEK5	PKAC-alpha	PRKACA
NEK6	NEK6	PKAC-beta	PRKACB
NEK7	NEK7	PKMYT1	PKMYT1
NEK9	NEK9	PKN1	PKN1
NEK11	NEK11	PKN2	PKN2
NIM1	MGC42105	PKNB(M.tuberculosis)	pknB
NLK	NLK	PLK1	PLK1
OSR1	OXSR1	PLK2	PLK2
p38-alpha	MAPK14	PLK3	PLK3
p38-beta	MAPK11	PLK4	PLK4
p38-delta	MAPK13	PRKCD	PRKCD
p38-gamma	MAPK12	PRKCE	PRKCE
PAK1	PAK1	PRKCH	PRKCH
PAK2	PAK2	PRKCI	PRKCI
PAK3	PAK3	PRKCQ	PRKCQ
PAK4	PAK4	PRKD1	PRKD1
PAK6	PAK6	PRKD2	PRKD2
PAK7	PAK7	PRKD3	PRKD3
PCTK1	CDK16	PRKG1	PRKG1
PCTK2	CDK17	PRKG2	PRKG2

KINOMEScan Gene Symbol	Entrez Gene Symbol	KINOMEScan Gene Symbol	Entrez Gene Symbol
PRKR	EIF2AK2	STK35	STK35
PRKX	PRKX	STK36	STK36
PRP4	PRPF4B	STK39	STK39
PYK2	PTK2B	SYK	SYK
QSK	KIAA0999	TAK1	MAP3K7
RAF1	RAF1	TAOK1	TAOK1
RET	RET	TAOK2	TAOK2
RET(M918T)	RET	TAOK3	TAOK3
RET(V804L)	RET	TBK1	TBK1
RET(V804M)	RET	TEC	TEC
RIOK1	RIOK1	TESK1	TESK1
RIOK2	RIOK2	TGFBR1	TGFBR1
RIOK3	RIOK3	TGFBR2	TGFBR2
RIPK1	RIPK1	TIE1	TIE1
RIPK2	RIPK2	TIE2	TEK
RIPK4	RIPK4	TLK1	TLK1
RIPK5	DSTYK	TLK2	TLK2
ROCK1	ROCK1	TNIK	TNIK
ROCK2	ROCK2	TNK1	TNK1
ROS1	ROS1	TNK2	TNK2
RPS6KA4(Kin.Dom.1-N-terminal)	RPS6KA4	TNNI3K	TNNI3K
RPS6KA4(Kin.Dom.2-C-terminal)	RPS6KA4	TRKA	NTRK1
RPS6KA5(Kin.Dom.1-N-terminal)	RPS6KA5	TRKB	NTRK2
RPS6KA5(Kin.Dom.2-C-terminal)	RPS6KA5	TRKC	NTRK3
RSK1(Kin.Dom.1-N-terminal)	RPS6KA1	TRPM6	TRPM6
RSK1(Kin.Dom.2-C-terminal)	RPS6KA1	TSSK1B	TSSK1B
RSK2(Kin.Dom.1-N-terminal)	RPS6KA3	TTK	TTK
RSK2(Kin.Dom.2-C-terminal)	RPS6KA3	TXK	TXK
RSK3(Kin.Dom.1-N-terminal)	RPS6KA2	TYK2(JH1domain-catalytic)	TYK2
RSK3(Kin.Dom.2-C-terminal)	RPS6KA2	TYK2(JH2domain-pseudokinase)	TYK2
RSK4(Kin.Dom.1-N-terminal)	RPS6KA6	TYRO3	TYRO3
RSK4(Kin.Dom.2-C-terminal)	RPS6KA6	ULK1	ULK1
S6K1	RPS6KB1	ULK2	ULK2
SBK1	SBK1	ULK3	ULK3
SgK110	SgK110	VEGFR2	KDR
SGK	SGK1	VRK2	VRK2
SGK3	SGK3	WEE1	WEE1
SIK	SIK1	WEE2	WEE2
SIK2	SIK2	WNK1	WNK1
SLK	SLK	WNK3	WNK3
SNARK	NUAK2	YANK1	STK32A
SNRK	SNRK	YANK2	STK32B
SRC	SRC	YANK3	STK32C
SRMS	SRMS	YES	YES1
SRPK1	SRPK1	YSK1	STK25
SRPK2	SRPK2	YSK4	YSK4
SRPK3	SRPK3	ZAK	ZAK
STK16	STK16	ZAP70	ZAP70
STK33	STK33		