

**Kinase 清單**

AAK1	ABL1(E255K)-phosphorylated	ABL1(F317I)-nonphosphorylated	ABL1(F317I)-phosphorylated	ABL1(F317L)-nonphosphorylated
ABL1(F317L)-phosphorylated	ABL1(H396P)-nonphosphorylated	ABL1(H396P)-phosphorylated	ABL1(M351T)-phosphorylated	ABL1(Q252H)-nonphosphorylated
ABL1(Q252H)-phosphorylated	ABL1(T315I)-nonphosphorylated	ABL1(T315I)-phosphorylated	ABL1(Y253F)-phosphorylated	ABL1-nonphosphorylated
ABL1-phosphorylated	ABL2	ACVR1	ACVR1B	ACVR1B/BMPR2
ACVR1C/ACVR2	ACVR1C/ACVR2B	ACVR2/ACVR1	ACVR2A	ACVR2B
ACVRL1	ACVRL1/ACVR2	ACVRL1/ACVR2B	ACVRL1/BMPR2	ADCK3
ADCK4	AKT1	AKT2	AKT3	ALK
ALK(1151Tins)	ALK(C1156Y)	ALK(F1174L)	ALK(L1196M)	AMPK-alpha1
AMPK-alpha2	ANKK1	ARK5	ASK1	ASK2
AURKA	AURKB	AURKC	AXL	BIKE
BLK	BMPR1A	BMPR1A/ACVR2	BMPR1A/ACVR2B	BMPR1A/BMPR2
BMPR1B	BMPR1B/ACVR2	BMPR1B/ACVR2B	BMPR1B/BMPR2	BMPR2
BMX	BRAF	BRAF(V600E)	BRK	BRSK1
BRSK2	BTK	BUB1	CAMK1	CAMK1B
CAMK1D	CAMK1G	CAMK2A	CAMK2B	CAMK2D
CAMK2G	CAMK4	CAMKK1	CAMKK2	CASK
CDC2L1	CDC2L2	CDC2L5	CDK1	CDK10
CDK11	CDK12	CDK2	CDK20	CDK3
CDK4	CDK4-cyclinD1	CDK4-cyclinD1(F93L)	CDK4-cyclinD3	CDK5
CDK6	CDK7	CDK8	CDK9	CDKL1
CDKL2	CDKL3	CDKL5	CHEK1	CHEK2
cINSRa	cINSRb	CIT	c-KIT	CLK1
CLK2	CLK3	CLK4	c-MET/c-MET	c-Ret-GFR $\alpha$ 1
c-Ret-GFR $\alpha$ 2	CSF1R	CSF1R/CSF1R	CSF1R-autoinhibited	CSF3R-JAK1
CSK	CSNK1A1	CSNK1A1L	CSNK1D	CSNK1E
CSNK1G1	CSNK1G2	CSNK1G3	CSNK2A1	CSNK2A2
CTK	DAPK1	DAPK2	DAPK3	DCAMKL1
DCAMKL2	DCAMKL3	DDR1	DDR2(T654M)	DLK
DMPK	DMPK2	DRAK1	DRAK2	DYRK1A
DYRK1B	DYRK2	EGFR	EGFR(E746-A750del)	EGFR(G719C)
EGFR(G719S)	EGFR(L747-E749del, A750P)	EGFR(L747-S752del, P753S)	EGFR(L747-T751del,Sins)	EGFR(L858R)
EGFR(L858R,T790M)	EGFR(L861Q)	EGFR(S752-I759del)	EGFR(T790M)	EGFR/EGFR
EGFR/ErbB2	EIF2AK1	EPHA1	EPHA2	EPHA3
EphA4	EphA5	EPHA6	EphA7	EPHA8

EphB1	EphB2	EphB3	EphB4	EPHB6
ErbB1	ERBB2	ErbB2/ErbB3	ErbB2/ErbB4	ErbB2-ErbB3
ERBB3	ErbB4	ErbB4/ErbB4	ERK1	ERK1(Q122L)
ERK2	ERK3	ERK4	ERK5	ERK8
ERN1	FAK	FER	FES	FGFR1
FGFR1- $\beta$ -Klotho	FGFR2	FGFR2(N550K)	FGFR3	FGFR3(G380R)/FGFR3(G380R)
FGFR3(G697C)	FGFR3(K650E)	FGFR3(V555M)	FGFR3/FGFR3	FGFR4
FGFR4	FGFR4- $\beta$ -Klotho	FGR	FLT1	FLT3
FLT3(D835H)	FLT3(D835V)	FLT3(D835Y)	FLT3(ITD)	FLT3(ITD,D835V)
FLT3(ITD,F691L)	FLT3(K663Q)	FLT3(N841I)	FLT3(R834Q)	FLT3-autoinhibited
FLT4	FRK	FYN	GAK	GCN2(Kin.Dom.2,S808G)
GHR-JAK1	GHR-JAK2	GRK1	GRK2	GRK3
GRK4	GRK7	GSK3A	GSK3B	HASPIN
HCK	HIPK1	HIPK2	HIPK3	HIPK4
HPK1	HUNK	ICK	IGF1R	IKK-alpha
IKK-beta	IKK-epsilon	INSR	INSRa	INSRb
INSRR	IRAK1	IRAK2	IRAK3	IRAK4
ITK	JAK1(JH1domain-catalytic)	JAK1(JH2domain-pseudokinase)	JAK2(JH1domain-catalytic)	JAK3
JAK3(JH1domain-catalytic)	JNK1	JNK2	JNK3	KDR
KDR/KDR	KIT	KIT(A829P)	KIT(D816H)	KIT(D816V)
KIT(L576P)	KIT(V559D)	KIT(V559D,T670I)	KIT(V559D,V654A)	KIT-autoinhibited
LATS1	LATS2	LCK	LIMK1	LIMK2
LKB1	LOK	LRRK2	LRRK2(G2019S)	LTK
LYN	LZK	MAK	MAP3K1	MAP3K15
MAP3K2	MAP3K3	MAP3K4	MAP4K2	MAP4K3
MAP4K4	MAP4K5	MAPKAPK2	MAPKAPK5	MARK1
MARK2	MARK3	MARK4	MAST1	MEK1
MEK2	MEK3	MEK4	MEK5	MEK6
MELK	MERTK	MET	MET(M1250T)	MET(Y1235D)
MINK	mINSRa	mINSRb	MKK7	MKNK1
MKNK2	MLCK	MLK1	MLK2	MLK3
MLKL	MLKL(full-length)	MRCKA	MRCKB	MST1
MST1R	MST2	MST3	MST4	MTOR
MUSK	MYLK	MYLK2	MYLK4	MYO3A
MYO3B	NDR1	NDR2	NEK1	NEK10

NEK11	NEK2	NEK3	NEK4	NEK5
NEK6	NEK7	NEK9	NIM1	NLK
OSR1	p38-alpha	p38-beta	p38-delta	p38-gamma
PAK1	PAK2	PAK3	PAK4	PAK6
PAK7	PASK	PCTK1	PCTK2	PCTK3
PDGFRa	PDGFRb	PDPK1	PFCDPK1(P.falciparum)	PFPK5(P.falciparum)
PFTAIRES2	PFTK1	PHKG1	PHKG2	PI3Kδ
PIK3C2B	PIK3C2G	PIK3CA	PIK3CA(C420R)	PIK3CA(E542K)
PIK3CA(E545A)	PIK3CA(E545K)	PIK3CA(H1047L)	PIK3CA(H1047Y)	PIK3CA(I800L)
PIK3CA(M1043I)	PIK3CA(Q546K)	PIK3CB	PIK3CD	PIK3CG
PIK4CB	PIKFYVE	PIM1	PIM2	PIM3
PIP5K1A	PIP5K1C	PIP5K2B	PIP5K2C	PKAC-alpha
PKAC-alpha(L206R)	PKAC-beta	PKMYT1	PKN1	PKN2
PKNB(M.tuberculosis)	PLK1	PLK2	PLK3	PLK4
PRKCD	PRKCE	PRKCH	PRKCI	PRKCQ
PRKD1	PRKD2	PRKD3	PRKG1	PRKG2
PRKR	PRKX	PRLR-JAK1	PRLR-JAK2	PRP4
PYK2	QSK	RAF1	RET	RET(A883F)
RET(M918T)	RET(V804E)	RET(V804L)	RET(V804M)	rhTrkA-rhP75
RIOK1	RIOK2	RIOK3	RIPK1	RIPK1
RIPK2	RIPK3	RIPK3	RIPK4	RIPK5
ROCK1	ROCK2	ROS1	RPS6KA4(Kin.Dom.1-N-terminal)	RPS6KA4(Kin.Dom.2-C-terminal)
RPS6KA5(Kin.Dom.1-N-terminal)	RPS6KA5(Kin.Dom.2-C-terminal)	RSK1(Kin.Dom.1-N-terminal)	RSK1(Kin.Dom.2-C-terminal)	RSK2(Kin.Dom.1-N-terminal)
RSK2(Kin.Dom.2-C-terminal)	RSK3(Kin.Dom.1-N-terminal)	RSK3(Kin.Dom.2-C-terminal)	RSK4(Kin.Dom.1-N-terminal)	RSK4(Kin.Dom.2-C-terminal)
rTrkA-rP75	S6K1	SBK1	SGK	SgK110
SGK2	SGK3	SIK	SIK1	SIK2
SLK	SNARK	SNRK	SRC	SRMS
SRPK1	SRPK2	SRPK3	STK16	STK33
STK35	STK36	STK39	SYK	TAK1
TAOK1	TAOK2	TAOK3	TBK1	TEC
TESK1	TGFBR1	TGFBR1/ACVR2	TGFBR1/ACVR2B	TGFBR1/TGFBR2
TGFBR2	TIE1	TIE2	Tie2	TLK1
TLK2	TNIK	TNK1	TNK2	TNNI3K
TrkA	TrkA-P75	TrkB	TrkB-P75	TrkC
TrkC-P75	TRPM6	TSSK1B	TSSK3	TTK

TXK	TYK2	TYK2(JH1domain-catalytic)	TYK2(JH2domain-pseudokinase)	TYRO3
ULK1	ULK2	ULK3	VEGFR2	VPS34
VRK2	WEE1	WEE2	WNK1	WNK2
WNK3	WNK4	YANK1	YANK2	YANK3
YES	YES1	YSK1	YSK4	ZAK
ZAP70				