

Table S1. The list of cDNAs and putative positive clones

No.	Kinase	No.	No.	No.			
1	BMPR1A / ALK3	101	BIKE	201	CDK5R2	301	MAP3K8
2	p70S6K1	102	PKCb	202	CKLiK	302	PRKAB1
3	p70S6K1 T389E	103	MKK3	203	IHPK3	303	PRKCSH
4	p70S6K1 T389A	104	ICK	204	FUK	304	ADK
5	BRD3	105	RSKL2	205	MAP2K1	305	NJMU-R1
6	BRSK1	106	HIPK2	206	PCK1	306	MAP3K11
7	Src Y527F	107	ITPK1	207	PFKM	307	PRKRA
8	Pak2	108	CASK(ORF+UTR)	208	PIK3R1	308	PCTK1
9	p38	109	GIT2	209	PRKAR1A	309	NAGK
10	Pak3	110	SNARK	210	PRKD2	310	PGK1
11	Pak1	111	SNFILK	211	TBK1	311	CAMKK2
12	CAMK2alpha	112	MST1	212	UMP-CMPK	312	PCTK1
13	PASK	113	TTK	213	FASTK	313	LIMK2
14	MEKK1	114	PAK7	214	IRAK1	314	CCRK
15	MEKK1	115	CINP	215	DYRK3	315	MAPK10
16	MKK7	116	CTK	216	HGS	316	CAMK2B
17	GAA1 / GPAA1	117	STK32A	217	DGKZ	317	CDKL5
18	RPK118 / RPS6KC1	118	Nuak2	218	CKS2	318	CAMK1G
19	PCTAIRE1	119	c-raf	219	PRKCD	319	PHKG1
20	PCTAIRE3	120	PTP4A3	220	FN3K	320	SPHK1
21	PRL3	121	MARK4	221	IKBKG	321	AK3L1
22	hNeK11L(K61R)	122	ALK7	222	AK1	322	PTK2B
23	DOK4	123	AAK1	223	CNK1	323	STK19
24	Myt1	124	CHK2	224	PRKAG1	324	CKMT1
25	Nek2A	125	TSSK1	225	ZAK	325	CDKN1B
26	SBK	126	MEK1	226	MAP3K7IP1	326	RPS6KB1
27	TESK1	127	EphA2	227	BCKDK	327	CDKN2C
28	TESK2	128	PRKCN	228	SNRK	328	CDKN3
29	ULK1	129	ACK1	229	MAP2K3	329	CALM3
30	Tyk2	130	ACTR2	230	NEK2	330	ILK
31	NDR2	131	AKT1	231	PRKCABP	331	CDK5
32	PINK1	132	ALS2CR2	232	PACSIN3	332	SKP1A
33	PINK1	133	BRD2	233	ASK	333	RIPK2
34	PKN2-GFP	134	BUB1	234	PANK4	334	DAPK3
35	ERK8	135	C20orf97	235	MAPKAPK5	335	CKB
36	ERK8(K42R)	136	CABC1	236	CDK2	336	CKB
37	Rac1	137	CAMK2G	237	MAP2K6	337	PRKCSH
38	Cdc42	138	CDK9	238	UCK1	338	CCRK
39	RhoA	139	CHUK	239	IKBKAP	339	CSNK1A1
40	CaMK I	140	CSK	240	PLK1	340	GALK2
41	CaMK IV	141	CSNK1E	241	RIOK1	341	LYK5
42	CaMK II α	142	CSNK1G1	242	NUCKS	342	WSB1
43	CaMK I 1-294	143	CSNK2A1	243	TOPK	343	CALM1
44	CaMK I 1-317	144	EEF2K	244	CALM1	344	CAMK1G
45	CaMK I 1-317	145	ERBB3	245	AKAP10	345	PDPK1
46	CaMK I 1-290	146	FES	246	MELK	346	PRKAG1
47	CaMK I 1-290	147	FGFR1	247	SPHK2	347	PRKAR1B
48	TAK1	148	FGFR4	248	PTK9	348	CDKN2C
49	TAK1(K63W)	149	FGR	249	PDK2	349	CDK5
50	PDHK1	150	FYN	250	CSNK2B	350	CKMT1
51	PDK1	151	GALK1	251	CDK7	351	NUCKS
52	PDK1 DEAD	152	GPRK2L	252	PMVK	352	PDXK
53	Tlk1(VH113)	153	H11	253	PTK6	353	PRKCH
54	Tlk2(KT46)	154	HCK	254	GUK1	354	NAGK

55	CK I D	155	IHPK2	255	DTYMK	355	PGK1
56	CK2 α	156	IKBKE	256	URKL1	356	AKAP9
57	Hapsin	157	LCK	257	SKP2	357	AK2
58	Hapsin	158	MAP2K1IP1	258	MAPKAPK3	358	PKMYT1
59	HLPK1	159	MAP3K13	259	STK19	359	SPHK1
60	TrkC	160	MAP3K3	260	PTK9L	360	CSNK2B
61	PKC- α	161	MAP3K7	261	PLK2	361	AKAP7
62	PKC- δ	162	MAPK13	262	AK3	362	AK1
63	PKC- ϵ	163	MAPK7	263	CSNK1D	363	STK25
64	PKC- ζ	164	MAPK9	264	STK25	364	CDKN1B
65	RAGE1	165	MAPKAPK2	265	MAPKAP1	365	DOK5
66	RAGE3	166	MARK2	266	PKMYT1	366	CDKN2D
67	RAGE4	167	MATK	267	VRK3	367	CAMK1
68	ALK	168	MLH1	268	CALM2	368	VRK3
69	ALK1	169	MPP1	269	MAP3K8	369	GAK
70	ALK4	170	MST4	270	PRKCDBP	370	PKM2
71	AMPK- α 1	171	NDUFA10	271	DYRK3	371	CDK4
72	AMPK- α 2	172	NEK4	272	PKM2	372	MAP2K2
73	DIK/RIP4/ANKRD3	173	NEK6	273	DGKA	373	CDK7
74	ALK7	174	NME7	274	PRKAA1	374	SGK
75	ALK5	175	NRBP	275	RPS6KA1	375	LRRK1
76	IRE1	176	PAK4	276	ZAK	376	NTRK3
77	MLK1	177	PDK4	277	PDPK1	377	MAP3K11
78	MLK2	178	PLAU	278	PACSIN2	378	PLK1
79	MLK3	179	PRKACB	279	PKM2	379	PCTK3
80	D/N MLK1	180	PRKCB1	280	GK	380	SPHK2
81	D/N MLK2	181	PRKCG	281	RPS6KA4	381	TP53RK
82	D/N MLK3	182	PRKCL2	282	MARK3	382	MVK
83	Erk2	183	PRPS1	283	GUK1	383	PDK3
84	GSK3 β	184	PRPS2	284	SPHK1	384	PFKL
85	PKC- α catalytic domai	185	RAF1	285	PANK2	385	PIP5K1C
86	PKC- β catalytic domai	186	RIOK3	286	SRPK1	386	PTK9L
87	PKC- ζ catalytic domai	187	RPS6KA5	287	ZAK	387	UCK1
88	PKC- ϵ catalytic domai	188	SGKL	288	HRI	388	FLJ11149
89	CHK1	189	SSTK	289	DGUOK	389	CSNK1G2
90	p38g	190	STK16	290	LIM	390	MKNK2
91	MKK4	191	STK17B	291	MAP3K8	391	LIMK2
92	MKK7b	192	STK3	292	ADCK2	392	PRKAB1
93	Akt3	193	SYK	293	STK25	393	PIK4CA
94	JNK1(MARK8)	194	TNK1	294	MAP2K5	394	BMX
95	PDHK2	195	TRA1	295	MAP3K8	395	ADCK4
96	PBK	196	TRAP1	296	PIK3R2	396	AK3L1
97	TOLLIP	197	TRIM28	297	STK11	397	CARKL
98	YWHAE	198	VRK2	298	DGUOK	398	PRKAG2
99	JNK2d	199	AURKB	299	CLK3	399	AK5
100	STK36	200	CAMK2A	300	SGK	400	ILK

No.	No.	No. Phosphatase	No.
401 MINK	501 NEK9	1 CDKN3	101 DUSP12
402 MAP2K6	502 TRRAP	2 DUSP6	102 MKPX
403 FRK	503 MAP3K2	3 PP	103 PTPN7
404 NTRK2	504 MAP3K2/MEKK2	4 PPP1R7	104 branching-enzyme interacting DUSP
405 MARK3	505 ACVR2	5 PPP1R1B	105 serine/threonine/tyrosine interacting-like 1
406 CLK3	506 PYK2	6 PPP1R8	106 PTPRO
407 MAPK11	507 JNK3(MAPK10)	7 ENPP6	107 PTP non-receptor type 18
408 PKLR	508 Slob	8 PPP3CC	108 PTPase-alpha
409 TEK	509 p38a	9 THTPA	109 PTPRM
410 MAPK14	510 FLJ10074	10 PPP2R1A	110 PTPRB
411 PFKP	511 CK1g2	11 ACP1	111 PTPRH
412 AK3	512 PANK3	12 PPP5C	112 IAR/receptor-like PTP
413 GK2	513 WBP2	13 PSTPIP1	113 PTP non-receptor type 4
414 STK22C	514 MST2	14 PR48	114 PTPRO
415 CAMKK1	515 EphA4	15 PPA2	115 hematopoietic cell phosphatase
416 PIP5K2B	516 SGK3	16 PSTPIP2	116 PTPRT
417 ADCK4	517 CDK5R1	17 PTPN1	117 PTPRS
418 ZAP70	518 TIE2	18 PPP2R2D	118 PTPN2 (1-1256)
419 CDK6	519 CKMT2	19 PTPN4	119 PTPRZ1
420 PIP5K3	520 PFKFB4	20 PPP2R5D	120 PTPN13
421 GK	521 PDHK4	21 PPP1R12C	121 PTPN3 (1233-1916) WT =2742(full)
422 MAP2K3	522 MAPK6	22 PTPN9	122 PTPRE (1-2387) full length
423 PHKB	523 PIK3R3	23 FLJ32332	123 PTPRK
424 MGC45419	524 PDHK1	24 PR48	124 PTPN14
425 CAMK1G	525 EphA7	25 INPP1	125 CDC25C
426 CAMK2D	526 TSSK3	26 ACYP2	126 ACP1
427 TLK1	527 MAP4K2/GCK	27 DUSP22	127 sphoserine/threonine/ty rosine interactionprotein
428 MAP3K14	528 NIK	28 PPM1D	
429 STK24	529 JNK2 (MAPK9)	29 RNGTT	
430 ADRBK1	530 PDK1	30 PPM1F	
431 STK32B	531 JAK3	31 PPP2CB	
432 TIE	532 MLKL	32 PFKFB4	
433 CAMK1D	533 GSK3A	33 ALPP	
434 PIK3CG	534 MAST1	34 ACP6	
435 PRKACG	535 ALK2	35 PPM1A	
436 FASTK	536 PAK6	36 PTPNS1	
437 PGK2	537 TESK1	37 PTPRA	
438 AXL	538 BARK1	38 FBP1	
439 HK3	539 ADRBK2	39 PPM1B	
440 FLT3LG	540 PRKCL1	40 PHPT1	
441 EK1	541 HSA250839	41 PPP2R2B	
442 K1H9	542 TIE1	42 PPP3R1	
443 MAST205	543 EphA8	43 PPP3CA	
444 DRAK1	544 FLT1	44 DUSP10	
445 EIF2AK4	545 p70S6K	45 PTPNS1L2	
446 DDR2	546 PDHK3	46 PHACTR4	
447 SAST	547	47 PPP1R12B	
448 KPI2 (LMTK2)	548	48 PPP2CA	
449 KPI2	549	49 PSTPIP2	
450 SRM	550	50 PPP3CB	
451 PKCa		51 ACYP1	
452 Trad		52 PNKP	
453 STK39		53 MINPP1	
454 MAP3K10/MLK2		54 DUSP3	

455	PRKAG2/AMPK	55	PPP2CB
456	MRCKb	56	PPP6C
457	STLK5	57	DUSP14
458	IKKb	58	PTPNS1
459	EphB4	59	PTEN
460	JNK1 (MAPK8)	60	PTPN9
461	NEK4	61	DUSP6
462	ULK1	62	PPP3CB
463	ERBB2	63	PTN
464	NEK2	64	PTPN12
465	AKT2	65	DUSP11
466	PTK2	66	MTMR9
467	CDC7	67	PTPRR
468	PKACa	68	EPM2A
469	RIOK2	69	PPP2R1A
470	PKN3	70	PPP2R2A
471	DYRK4	71	FLJ20442
472	EVA1	72	MK-STYX
473	PLK2	73	DUSP5
474	MYT1	74	FLJ20300
475	PLK4	75	PPM1A
476	ADCK5	76	MGC1136
477	HER3/ErbB3	77	PPP1CB
478	PAK1	78	DUSP1
479	MAST4	79	SET
480	LATS1	80	PTPN11
481	MAST2	81	PTPN2
482	CSNK1G3	82	hypothetical protin / RIKEN
483	MNK1	83	myotubularin related protein 8
484	PRKX	84	DUSP23
485	RSK1	85	hSSH-1L
486	RYK	86	PTPRO
487	Haspin	87	DUSP15
488	PLAUR	88	KIAA1075 protein
489	IHPK1	89	KIAA protein
490	CHK2	90	DUSP13
491	NRBP1	91	tensin
492	MSK2	92	MMAC1
493	MASTL	93	PTP4A2
494	ADCK3(CABC1)	94	KAP1
495	GADD45G	95	DUSP1
496	TGFbR1	96	DUSP2
497	CK2a2	97	DUSP3
498	MAP3K4	98	DUSP6
499	LKB1 (STK11)	99	DSUP7
500	p70S6Kb	100	DUSP9