

List A							
Wild type Kinases							
1	ABL1	101	DRAK1/STK17A	201	MEK2	301	RET
2	ABL2/ARG	102	DYRK1/DYRK1A	202	MEK3	302	RIPK2
3	ACK1	103	DYRK1B	203	MEK5	303	RIPK3
4	AKT1	104	DYRK2	204	MEKK1	304	RIPK4
5	AKT2	105	DYRK3	205	MEKK2	305	RIPK5
6	AKT3	106	DYRK4	206	MEKK3	306	ROCK1
7	ALK	107	EGFR	207	MEKK6	307	ROCK2
8	ALK1/ACVRL1	108	EPHA1	208	MELK	308	RON/MST1R
9	ALK2/ACVR1	109	EPHA2	209	MINK/MINK1	309	ROS/ROS1
10	ALK3/BMPR1A	110	EPHA3	210	MKK4	310	RSK1
11	ALK4/ACVR1B	111	EPHA4	211	MKK6	311	RSK2
12	ALK5/TGFBFR1	112	EPHA5	212	MKK7	312	RSK3
13	ALK6/BMPR1B	113	EPHA6	213	MLCK/MYLK	313	RSK4
14	ARAF	114	EPHA7	214	MLCK2/MYLK2	314	SBK1
15	ARK5/NUAK1	115	EPHA8	215	MLK1/MAP3K9	315	SGK1
16	ASK1/MAP3K5	116	EPHB1	216	MLK2/MAP3K10	316	SGK2
17	Aurora A	117	EPHB2	217	MLK3/MAP3K11	317	SGK3/SGKL
18	Aurora B	118	EPHB3	218	MLK4	318	SIK1
19	Aurora C	119	EPHB4	219	MNK1	319	SIK2
20	AXL	120	ERBB2/HER2	220	MNK2	320	SIK3
21	BLK	121	ERBB4/HER4	221	MRCKa/CDC42BPA	321	SLK/STK2
22	BMPR2	122	ERK1/MAPK3	222	MRCk/CDC42BPB	322	SNARK/NUAK2
23	BMX/ETK	123	ERK2/MAPK1	223	MSK1/RPS6KA5	323	SNRK
24	BRAF	124	ERK5/MAPK7	224	MSK2/RPS6KA4	324	SRMS
25	BRK	125	ERK7/MAPK15	225	MSSK1/STK23	325	SRPK1
26	BRSK1	126	ERN1/IRE1	226	MST1/STK4	326	SRPK2
27	BRSK2	127	ERN2/IRE2	227	MST2/STK3	327	SSTK/TSSK6
28	BTK	128	FAK/PTK2	228	MST3/STK24	328	STK16
29	CAMK1a	129	FER	229	MST4	329	STK21/CIT
30	CAMK1b	130	FES/FPS	230	MUSK	330	STK22D/TSSK1
31	CAMK1d	131	FGFR1	231	MYLK3	331	STK25/YSK1
32	CAMK1g	132	FGFR2	232	MYLK4	332	STK32B/YANK2
33	CAMK2a	133	FGFR3	233	MYO3A	333	STK32C/YANK3
34	CAMK2b	134	FGFR4	234	MYO3B	334	STK33
35	CAMK2d	135	FGR	235	NEK1	335	STK38/NDR1
36	CAMK2g	136	FLT1/VEGFR1	236	NEK2	336	STK38L/NDR2
37	CAMK4	137	FLT3	237	NEK3	337	STK39/STLK3
38	CAMKK1	138	FLT4/VEGFR3	238	NEK4	338	SYK
39	CAMKK2	139	FMS	239	NEK5	339	TAK1
40	CDC7/DBF4	140	FRK/PTK5	240	NEK6	340	TAOK1
41	CDK1/cyclin A	141	FYN	241	NEK7	341	TAOK2
42	CDK1/cyclin B	142	GCK/MAP4K2	242	NEK8	342	TAOK3/JIK
43	CDK1/cyclin E	143	GLK/MAP4K3	243	NEK9	343	TBK1
44	CDK2/cyclin A1	144	GRK1	244	NEK11	344	TEC
45	CDK2/cyclin A	145	GRK2	245	NIM1	345	TESK1
46	CDK2/cyclin E	146	GRK3	246	NLK	346	TESK2
47	CDK2/cyclin E2	147	GRK4	247	OSR1/OXSR1	347	TGFBR2
48	CDK2/cyclin O	148	GRK5	248	P38a/MAPK14	348	TIE2/TEK
49	CDK3/cyclin E	149	GRK6	249	P38b/MAPK11	349	TLK1
50	CDK3/cyclin E2	150	GRK7	250	P38d/MAPK13	350	TLK2
51	CDK4/cyclin D1	151	GSK3a	251	P38g/MAPK12	351	TNIK
52	CDK4/cyclin D3	152	GSK3b	252	p70S6K/RPS6KB1	352	TNK1
53	CDK5/p25	153	Haspin	253	p70S6Kb/RPS6KB2	353	TRKA
54	CDK5/p35	154	HCK	254	PAK1	354	TRKB
55	CDK6/cyclin D1	155	HGK/MAP4K4	255	PAK2	355	TRKC
56	CDK6/cyclin D3	156	HIPK1	256	PAK3	356	TSSK2
57	CDK7/cyclin H	157	HIPK2	257	PAK4	357	TSSK3/STK22C
58	CDK8/cyclin C	158	HIPK3	258	PAK5	358	TTBK1
59	CDK9/cyclin K	159	HIPK4	259	PAK6	359	TTBK2
60	CDK9/cyclin T1	160	HPK1/MAP4K1	260	PASK	360	TXK
61	CDK9/cyclin T2	161	IGF1R	261	PBK/TOPK	361	TYK1/LTK
62	CDK12/cyclin K	162	IKKa/CHUK	262	PDGFRA	362	TYK2
63	CDK13/cyclin K	163	IKKb/IKKB	263	PDGFRb	363	TYRO3/SKY
64	CDK14 (PFTK1)/cyclin Y	164	IKKe/IKBKE	264	PDK1/PDPK1	364	ULK1
65	CDK16/cyclin Y	165	IR	265	PEAK1	365	ULK2
66	CDK17/cyclin Y (PCTK2)	166	IRAK1	266	PHKq1	366	ULK3
67	CDK18/cyclin Y	167	IRAK4	267	PHKq2	367	VRK1
68	CDK19/cyclin C	168	IRR/INSRR	268	PIM1	368	VRK2
69	CHK1	169	ITK	269	PIM2	369	WEE1
70	CHK2	170	JAK1	270	PIM3	370	WNK1
71	CK1a1	171	JAK2	271	PKA	371	WNK2
72	CK1a1L	172	JAK3	272	PKAc	372	WNK3
73	CK1d	173	JNK1	273	PKAcg	373	YES/YES1
74	CK1epsilon	174	JNK2	274	PKCa	374	YSK4/MAP3K19
75	CK1g1	175	JNK3	275	PKCb1	375	ZAK/MLTK
76	CK1g2	176	KDR/VEGFR2	276	PKCb2	376	ZAP70
77	CK1g3	177	KHS/MAP4K5	277	PKCd	377	ZIP/DAPK3
78	CK2a	178	KSR1	278	PKCepsilon	378	AMPK(A1/B1/G1)
79	CK2a2	179	KSR2	279	PKCeta	379	AMPK(A1/B1/G2)
80	c-Kit	180	LATS1	280	PKCg	380	AMPK(A1/B1/G3)
81	CLK1	181	LATS2	281	PKClota	381	AMPK(A1/B2/G1)
82	CLK2	182	LCK	282	PKCmu/PRKD1	382	AMPK(A1/B2/G2)
83	CLK3	183	LCK2/ICK	283	PKCnu/PRKD3	383	AMPK(A1/B2/G3)
84	CLK4	184	LIMK1	284	PKCtheta	384	AMPK(A2/B1/G1)
85	c-MER	185	LIMK2	285	PKCzeta	385	AMPK(A2/B1/G2)
86	c-MET	186	LKB1	286	PKD2/PRKD2	386	AMPK(A2/B1/G3)
87	COT1/MAP3K8	187	LOK/STK10	287	PKG1a	387	AMPK(A2/B2/G1)
88	CSK	188	LRRK2	288	PKG1b	388	AMPK(A2/B2/G2)
89	c-Src	189	LYN	289	PKG2/PRKG2	389	AMPK(A2/B2/G3)
90	CTK/MATK	190	LYN B	290	PKMYT1	390	EEF2K
91	DAPK1	191	MAK	291	PKN1/PRK1	391	E1F2AK1/HRI
92	DAPK2	192	MAPKAPK2	292	PKN2/PRK2	392	E1F2AK2
93	DCAMKL1	193	MAPKAPK3	293	PKN3/PRK3	393	E1F2AK3/PERK
94	DCAMKL2	194	MAPKAPK5/PRAK	294	PLK1	394	E1F2AK4/GCN2
95	DDR1	195	MARK1	295	PLK2	395	mTOR/FRAP1
96	DDR2	196	MARK2/PAR-1Ba	296	PLK3	396	PDK1/PDHK1
97	DLK/MAP3K12	197	MARK3	297	PLK4/SAK	397	PDK2/PDHK2
98	DMPK	198	MARK4	298	PRKX	398	PDK3/PDHK3
99	DMPK2/CDC42BPG	199	MASTL	299	PYK2	399	PDK4/PDHK4
100	DNA-PK	200	MEK1	300	RAF1	400	TRPM7/CHAK1

List B					
Mutant Kinases					
1	ABL1 (E255K)	79	c-Kit (V560G/D816V)	157	FLT3 (ITD)
2	ABL1 (E255V)	80	c-Kit (V560G/N822K)	158	FLT3 (ITD)-NPOS
3	ABL1 (F317I)	81	c-Kit (V654A)	159	FLT3 (ITD)-W51
4	ABL1 (F317L)	82	c-Kit (Y823D)	160	FLT3 (F594_R595insR)
5	ABL1 (G250E)	83	c-MER (A708S)	161	FLT3 (F594_R595insREY)
6	ABL1 (H396P)	84	c-MET (D1228H)	162	FLT3 (R595_E596insEY)
7	ABL1 (M351T)	85	c-MET (D1228N)	163	FLT3 (Y591_V592insVDFREYEYD)
8	ABL1 (Q252H)	86	c-MET (F1200I)	164	FYN (Y531F)
9	ABL1 (T315I)	87	c-MET (K1244R)	165	JAK2 (V617F)
10	ABL1 (V299L)	88	c-MET (M1250T)	166	KSR1 (A635F)
11	ABL1 (Y253F)	89	c-MET (P991S)	167	KSR1 (L639F)
12	ABL1 (Y253H)	90	c-MET (T992I)	168	KSR2 (R676S)
13	AKT1 (E17K)	91	c-MET (T1173I)	169	LRRK2 (G2019S)
14	AKT2 (E17K)	92	c-MET (V1092I)	170	LRRK2 (I2020T)
15	AKT3 (E17K)	93	c-MET (Y1230A)	171	LRRK2 (R1441C)
16	AKT3 (G171R)	94	c-MET (Y1230C)	172	MEK1 (P124L)
17	ALK (C1156Y)	95	c-MET (Y1230D)	173	MELK (T460M)
18	ALK (L1152R)	96	c-MET (Y1230H)	174	p38a (T106M)
19	ALK (L1196M)	97	c-MET (Y1235D)	175	PDGFRa (D842V)
20	ALK (F1174L)	98	c-MET (M1250I)	176	PDGFRa (T674I)
21	ALK (F1174L)-NPM1	99	cMET-TFG (Tex5Mex15)	177	PDGFRa-FIP1L1
22	ALK (F1174S)	100	c-Src (T341M)	178	PDGFRa (V561D)
23	ALK (G1202R)	101	DDR2 (N456S)	179	PDGFRb-TPM3
24	ALK (G1269A)	102	DDR2 (T654M)	180	PKD2 (G870E)
25	ALK (G1269S)	103	EGFR (A763_Y764insFHEA)	181	PKMzeta
26	ALK (R1275Q)	104	EGFR (C775S/T790M/L858R)	182	PKN1-TECR (Tex1Pex10)
27	ALK (S1206R)	105	EGFR (C797A)	183	RET (A883F)
28	ALK (T1151M)	106	EGFR (C797S)	184	RET (E762Q)
29	ALK (T1151-L1152insT)	107	EGFR (C797S/L858R)	185	RET (G691S)
30	ALK (F1174L)-EML4	108	EGFR (d746)	186	RET (L790F)
31	ALK-KLCT (Kex8Aex20)	109	EGFR (d746-750)	187	RET (M918T)
32	ALK-KIF5B (Kex24Aex20)	110	EGFR (d746-750/C775S/T790M/L858R)	188	RET (R749T)
33	ALK-NPM1	111	EGFR (d746-750/C797A)	189	RET (R813Q)
34	ALK-TFG	112	EGFR (d746-750/C797S)	190	RET (R912P)
35	ALK-TFG (Tex4Aex20)	113	EGFR (d746-750/T790M)	191	RET (S891A)
36	ALK-TPM1	114	EGFR (d746-750/T790M/C797S)	192	RET (S904F)
37	ALK-TPM3	115	EGFR (d747-749)	193	RET (S904A)
38	ALK2 (Q207D)	116	EGFR (d747-749/A750P)	194	RET (V778I)
39	ALK2 (R206H)	117	EGFR (d747-752/P753S)	195	RET (V804E)
40	AXL (R499C)	118	EGFR (d752-759)	196	RET (V804L)
41	BRAF (d485-489/P490Y)	119	EGFR (D761Y)	197	RET (V804M)
42	BRAF (G464V)	120	EGFR (D770GY)	198	RET (Y791F)
43	BRAF (G469A)	121	EGFR (D770_N771insNPG)	199	RET (Y806H)
44	BRAF (K601E)	122	EGFR (G719C)	200	RET-BCR
45	BRAF (L597V)	123	EGFR (G719D)	201	RET-CCDC6 (PTC1)
46	BRAF (T599_V600insT)	124	EGFR (G719S)	202	RET-PRKAR1A (PTC2)
47	BRAF (V599E)	125	EGFR (L747S)	203	RET-NCOA4 (PTC3)
48	BRAF (V600A)	126	EGFR (L858R)	204	ROS1 (G2032R)
49	BRAF (V600D)	127	EGFR (L861Q)	205	ROS1-GOPC
50	BRAF (V600K)	128	EGFR (T790M)	206	ROS1-TPM3
51	BRAF (R506_K507insVLR)	129	EGFR (T790M/C797S)	207	RSK2 (I416V)
52	BRAF-FAM131B (Fex2Bex9)	130	EGFR (T790M/C797S/L858R)	208	RSK2 (L608F)
53	BRAF-KIAA1549 (Kex15Bex9)	131	EGFR (T790M, L858R)	209	TIE2 (A1124V)
54	BRAF-KIAA1549 (Kex16Bex9)	132	ERBB2 (D769H)	210	TIE2 (P883A)
55	BRAF-SRGAP3 (Sex12Bex9)	133	ERBB2 (D769Y)	211	TIE2 (R849W)
56	BTk (C481S)	134	ERBB2 (P780_Y781insGSP)	212	TIE2 (Y897C)
57	BTk (E41K)	135	ERBB2 (R896C)	213	TIE2 (Y897S)
58	BTk (P190K)	136	ERBB2 (V777L)	214	TIE2 (Y1108F)
59	CDK12(R722C)/cyclin K	137	ERBB2 (V777_G778insCG)	215	TRKA (F589L)
60	CHK2 (I157T)	138	FGFR1 (V561M)	216	TRKA (G595R)
61	CK1epsilon (R178C)	139	FGFR1OP-FGFR1	217	TRKA (G595R/A608D)
62	c-Kit (d557-558)	140	FGFR2 (E565G)	218	TRKA (G595R/L657M)
63	c-Kit (A829P)	141	FGFR2 (K526E)	219	TRKA (G595R/G667A)
64	c-Kit (D816E)	142	FGFR2 (K641R)	220	TRKA (G595R/G667C)
65	c-Kit (D816F)	143	FGFR2 (K659N)	221	TRKA (G595R/G667S)
66	c-Kit (D816H)	144	FGFR2 (N549H)	222	TRKA (A608D)
67	c-Kit (D816I)	145	FGFR2 (R612I)	223	TRKA (L657M)
68	c-Kit (D816V)	146	FGFR2 (V564F)	224	TRKA (G667C)
69	c-Kit (D816Y)	147	FGFR3 (V555M)	225	TRKA-TFG (TRK-T3)
70	c-Kit (D820E)	148	FGFR3 (G697C)	226	TRKA-TPM3
71	c-Kit (D820Y)	149	FGFR3 (K650E)	227	TRKA-TPR
72	c-Kit (K642E)	150	FGFR3 (K650M)	228	TRKC (G623E)
73	c-Kit (T670I)	151	FGFR3 (K650Q)	229	TRKC (G623R)
74	c-Kit (V559A)	152	FGFR4 (N535K)	230	TRKC (G623R/L686M)
75	c-Kit (V559D)	153	FGFR4 (V550E)	231	TRKC (L686M)
76	c-Kit (V559D/V654A)	154	FGFR4 (V550L)	232	YES1 (T348I)
77	c-Kit (V559D/T670I)	155	FGFR4 (V550M)	233	ZAP70 (Y319F)
78	c-Kit (V560G)	156	FLT3 (D835Y)		

List C			
Lipid Kinases			
1	PI3K (p110a(E542K)/p85a)	11	PI4K2A
2	PI3K (p110a(E545K)/p85a)	12	PI4Ka
3	PI3K (p110a(H1047R)/p85a)	13	PI4Kb
4	PI3K (p110a/p65a)	14	PIP5K1A
5	PI3Ka (p110a/p85a)	15	PIP5K1C
6	PI3Kb (p110b/p85a)	16	SPHK1
7	PI3Kd (p110d/p85a)	17	SPHK2
8	PI3Kq (p120g)		
9	PI3KC2a		
10	PI3KC3		

List D	
Special Kinase	
1	TTK