

List A							
Wild type Kinases							
1	ABL1	99	DYRK1B	197	MEK3	295	RET
2	ABL2/ARG	100	DYRK2	198	MEK5	296	RIPK2
3	ACK1	101	DYRK3	199	MEKK1	297	RIPK3
4	AKT1	102	DYRK4	200	MEKK2	298	RIPK4
5	AKT2	103	EGFR	201	MEKK3	299	RIPK5
6	AKT3	104	EPHA1	202	MEKK6	300	ROCK1
7	ALK	105	EPHA2	203	MELK	301	ROCK2
8	ALK1/ACVRL1	106	EPHA3	204	MINK/MINK1	302	RON/MST1R
9	ALK2/ACVR1	107	EPHA4	205	MKK4	303	ROS/ROS1
10	ALK3/BMPR1A	108	EPHA5	206	MKK6	304	RSK1
11	ALK4/ACVR1B	109	EPHA6	207	MKK7	305	RSK2
12	ALK5/TGFBFR1	110	EPHA7	208	MLCK/MYLK	306	RSK3
13	ALK6/BMPR1B	111	EPHA8	209	MLCK2/MYLK2	307	RSK4
14	ARAF	112	EPHB1	210	MLK1/MAP3K9	308	SBK1
15	ARK5/NUAK1	113	EPHB2	211	MLK2/MAP3K10	309	SGK1
16	ASK1/MAP3K5	114	EPHB3	212	MLK3/MAP3K11	310	SGK2
17	Aurora A	115	EPHB4	213	MLK4	311	SGK3/SGKL
18	Aurora B	116	ERBB2/HER2	214	MNK1	312	SIK1
19	Aurora C	117	ERBB4/HER4	215	MNK2	313	SIK2
20	AXL	118	ERK1/MAPK3	216	MRCKa/CDC42BPA	314	SIK3
21	BLK	119	ERK2/MAPK1	217	MRCKb/CDC42BPB	315	SLK/STK2
22	BMPR2	120	ERK5/MAPK7	218	MSK1/RPS6KA5	316	SNARK/NUAK2
23	BMX/ETK	121	ERK7/MAPK15	219	MSK2/RPS6KA4	317	SNRK
24	BRAF	122	ERN1/IRE1	220	MSSK1/STK23	318	SRMS
25	BRK	123	ERN2/IRE2	221	MST1/STK4	319	SRPK1
26	BRSK1	124	FAK/PTK2	222	MST2/STK3	320	SRPK2
27	BRSK2	125	FER	223	MST3/STK24	321	SSTK/TSSK6
28	BTK	126	FES/FPS	224	MST4	322	STK16
29	CAMK1a	127	FGFR1	225	MUSK	323	STK21/CIT
30	CAMK1b	128	FGFR2	226	MYLK3	324	STK22D/TSSK1
31	CAMK1d	129	FGFR3	227	MYLK4	325	STK25/YSK1
32	CAMK1g	130	FGFR4	228	MYO3A	326	STK32B/YANK2
33	CAMK2a	131	FGR	229	MYO3B	327	STK32C/YANK3
34	CAMK2b	132	FLT1/VEGFR1	230	NEK1	328	STK33
35	CAMK2d	133	FLT3	231	NEK2	329	STK38/NDR1
36	CAMK2g	134	FLT4/VEGFR3	232	NEK3	330	STK38L/NDR2
37	CAMK4	135	FMS	233	NEK4	331	STK39/STLK3
38	CAMKK1	136	FRK/PTK5	234	NEK5	332	SYK
39	CAMKK2	137	FYN	235	NEK6	333	TAK1
40	CDC7/DBF4	138	GCK/MAP4K2	236	NEK7	334	TAOK1
41	CDK1/cyclin A	139	GLK/MAP4K3	237	NEK8	335	TAOK2
42	CDK1/cyclin B	140	GRK1	238	NEK9	336	TAOK3/JIK
43	CDK1/cyclin E	141	GRK2	239	NEK11	337	TBK1
44	CDK2/cyclin A1	142	GRK3	240	NIM1	338	TEC
45	CDK2/cyclin A	143	GRK4	241	NLK	339	TESK1
46	CDK2/cyclin E	144	GRK5	242	OSR1/OXSR1	340	TESK2
47	CDK2/cyclin E2	145	GRK6	243	P38a/MAPK14	341	TGFBFR2
48	CDK2/cyclin O	146	GRK7	244	P38b/MAPK11	342	TIE2/TEK
49	CDK3/cyclin E	147	GSK3a	245	P38d/MAPK13	343	TLK1
50	CDK3/cyclin E2	148	GSK3b	246	P38g/MAPK12	344	TLK2
51	CDK4/cyclin D1	149	Haspin	247	p70S6K/RPS6KB1	345	TNIK
52	CDK4/cyclin D3	150	HCK	248	p70S6Kb/RPS6KB2	346	TNK1
53	CDK5/p25	151	HGK/MAP4K4	249	PAK1	347	TRKA
54	CDK5/p35	152	HIPK1	250	PAK2	348	TRKB
55	CDK6/cyclin D1	153	HIPK2	251	PAK3	349	TRKC
56	CDK6/cyclin D3	154	HIPK3	252	PAK4	350	TSSK2
57	CDK7/cyclin H	155	HIPK4	253	PAK5	351	TSSK3/STK22C
58	CDK9/cyclin K	156	HPK1/MAP4K1	254	PAK6	352	TTBK1
59	CDK9/cyclin T1	157	IGF1R	255	PASK	353	TTBK2
60	CDK9/cyclin T2	158	IKKa/CHUK	256	PBK/TOPK	354	TXK
61	CDK14 (PFTK1)/cyclin Y	159	IKKb/IKBKB	257	PDGFRa	355	TYK1/LTK
62	CDK16/cyclin Y	160	IKKe/IKBKE	258	PDGFRb	356	TYK2
63	CDK17/cyclin Y (PCTK2)	161	IR	259	PDK1/PDPK1	357	TYRO3/SKY
64	CDK18/cyclin Y	162	IRAK1	260	PEAK1	358	ULK1
65	CDK19/cyclin C	163	IRAK4	261	PHKg1	359	ULK2
66	CHK1	164	IRR/INSRR	262	PHKg2	360	ULK3
67	CHK2	165	ITK	263	PIM1	361	VRK1
68	CK1a1	166	JAK1	264	PIM2	362	VRK2
69	CK1a1L	167	JAK2	265	PIM3	363	WEE1
70	CK1d	168	JAK3	266	PKA	364	WNK1
71	CK1epsilon	169	JNK1	267	PKAcb	365	WNK2
72	CK1g1	170	JNK2	268	PKAcg	366	WNK3
73	CK1g2	171	JNK3	269	PKCa	367	YES/YES1
74	CK1g3	172	KDR/VEGFR2	270	PKCb1	368	YSK4/MAP3K19
75	CK2a	173	KHS/MAP4K5	271	PKCb2	369	ZAK/MLTK
76	CK2a2	174	KSR1	272	PKCd	370	ZAP70
77	c-Kit	175	KSR2	273	PKCepsilon	371	ZIPK/DAPK3
78	CLK1	176	LATS1	274	PKCeta	372	AMPK(A1/B1/G1)
79	CLK2	177	LATS2	275	PKCg	373	AMPK(A1/B1/G2)
80	CLK3	178	LCK	276	PKCiota	374	AMPK(A1/B1/G3)
81	CLK4	179	LCK2/ICK	277	PKCmu/PRKD1	375	AMPK(A1/B2/G1)
82	c-MER	180	LIMK1	278	PKCnu/PRKD3	376	AMPK(A2/B1/G1)
83	c-MET	181	LIMK2	279	PKCtheta	377	AMPK(A2/B2/G1)
84	COT1/MAP3K8	182	LKB1	280	PKCzeta	378	AMPK(A2/B2/G2)
85	CSK	183	LOK/STK10	281	PKD2/PRKD2	379	AMPK(A2/B2/G3)
86	c-Src	184	LRRK2	282	PKG1a	380	EEF2K
87	CTK/MATK	185	LYN	283	PKG1b	381	EIF2AK1/HRI
88	DAPK1	186	LYN B	284	PKG2/PRKG2	382	EIF2AK2
89	DAPK2	187	MAK	285	PKN1/PRK1	383	EIF2AK3/PERK
90	DCAMKL1	188	MAPKAPK2	286	PKN2/PRK2	384	EIF2AK4/GCN2
91	DCAMKL2	189	MAPKAPK3	287	PKN3/PRK3	385	mTOR/FRAP1
92	DDR1	190	MAPKAPK5/PRAK	288	PLK1	386	PDK1/PDHK1
93	DDR2	191	MARK1	289	PLK2	387	PDK2/PDHK2
94	DLK/MAP3K12	192	MARK2/PAR-1Ba	290	PLK3	388	PDK3/PDHK3
95	DMPK	193	MARK3	291	PLK4/SAK	289	PDK4/PDHK4
96	DMPK2/CDC42BPG	194	MARK4	292	PRKX	390	TRPM7/CHAK1
97	DRAK1/STK17A	195	MEK1	293	PYK2		
98	DYRK1/DYRK1A	196	MEK2	294	RAF1		

List B					
Mutant Kinases					
1	ABL1 (E255K)	71	c-Kit (V559D/V654A)	141	FGFR3 (K650Q)
2	ABL1 (E255V)	72	c-Kit (V559D/T670I)	142	FGFR4 (N535K)
3	ABL1 (F317I)	73	c-Kit (V560G)	143	FGFR4 (V550E)
4	ABL1 (F317L)	74	c-Kit (V560G/D816V)	144	FGFR4 (V550L)
5	ABL1 (G250E)	75	c-Kit (V560G/N822K)	145	FGFR4 (V550M)
6	ABL1 (H396P)	76	c-Kit (V654A)	146	FLT3 (D835Y)
7	ABL1 (M351T)	77	c-Kit (Y823D)	147	FLT3 (ITD)
8	ABL1 (Q252H)	78	c-MER (A708S)	148	FLT3 (ITD)-NPOS
9	ABL1 (T315I)	79	c-MET (D1228H)	149	FLT3 (ITD)-W51
10	ABL1 (V299L)	80	c-MET (D1228N)	150	FLT3 (F594_R595insR)
11	ABL1 (Y253F)	81	c-MET (F1200I)	151	FLT3 (F594_R595insREY)
12	ABL1 (Y253H)	82	c-MET (M1250T)	152	FLT3 (R595_E596insEY)
13	AKT1 (E17K)	83	c-MET (P991S)	153	FLT3 (Y591_V592insVDFREYEYD)
14	AKT2 (E17K)	84	c-MET (T992I)	154	FYN (Y531F)
15	AKT3 (E17K)	85	c-MET (T1173I)	155	JAK2 (V617F)
16	AKT3 (G171R)	86	c-MET (V1092I)	156	KSR1 (A635F)
17	ALK (C1156Y)	87	c-MET (Y1230A)	157	KSR1 (L639F)
18	ALK (L1152R)	88	c-MET (Y1230C)	158	KSR2 (R676S)
19	ALK (L1196M)	89	c-MET (Y1230D)	159	LRRK2 (G2019S)
20	ALK (F1174L)	90	c-MET (Y1230H)	160	LRRK2 (T2020T)
21	ALK (F1174L)-NPM1	91	c-MET (Y1235D)	161	LRRK2 (R1441C)
22	ALK (F1174S)	92	c-Src (T341M)	162	MEK1 (P124L)
23	ALK (G1202R)	93	DDR2 (N456S)	163	MELK (T460M)
24	ALK (G1269A)	94	DDR2 (T654M)	164	p38a (T106M)
25	ALK (G1269S)	95	EGFR (A763_Y764insFHEA)	165	PDGFRa (D842V)
26	ALK (R1275Q)	96	EGFR (C797A)	166	PDGFRa (T674I)
27	ALK (S1206R)	97	EGFR (C797S)	167	PDGFRa-FIP1L1
28	ALK (T1151M)	98	EGFR (C797S/L858R)	168	PDGFRa (V561D)
29	ALK (T1151-L1152insT)	99	EGFR (d746)	169	PDGFRb-TPM3
30	ALK (F1174L)-EML4	100	EGFR (d746-750)	170	PKD2 (G870E)
31	ALK-NPM1	101	EGFR (d746-750/C797A)	171	RET (A883F)
32	ALK-TFG	102	EGFR (d746-750/C797S)	172	RET (E762Q)
33	ALK-TPM3	103	EGFR (d746-750/T790M)	173	RET (G691S)
34	ALK2 (Q207D)	104	EGFR (d746-750/T790M/C797S)	174	RET (L790F)
35	ALK2 (R206H)	105	EGFR (d747-749)	175	RET (M918T)
36	AXL (R499C)	106	EGFR (d747-749/A750P)	176	RET (R749T)
37	BRAF (d485-489/P490Y)	107	EGFR (d747-752/P753S)	177	RET (R813Q)
38	BRAF (G464V)	108	EGFR (d752-759)	178	RET (S891A)
39	BRAF (G469A)	109	EGFR (D761Y)	179	RET (S904F)
40	BRAF (K601E)	110	EGFR (D770G)	180	RET (S904A)
41	BRAF (L597V)	111	EGFR (D770_N771insNPG)	181	RET (V778I)
42	BRAF (T599_V600insT)	112	EGFR (G719C)	182	RET (V804E)
43	BRAF (V599E)	113	EGFR (G719D)	183	RET (V804L)
44	BRAF (V600A)	114	EGFR (G719S)	184	RET (V804M)
45	BRAF (V600D)	115	EGFR (L747S)	185	RET (Y791F)
46	BRAF (V600K)	116	EGFR (L858R)	186	RET (Y806H)
47	BRAF (R506_K507insVLR)	117	EGFR (L861Q)	187	RET-BCR
48	BRAF-FAM131B (Fex2Bex9)	118	EGFR (T790M)	188	RET-CCDC6 (PTC1)
49	BRAF-KIAA1549 (Kex15Bex9)	119	EGFR (T790M/C797S)	189	RET-PRKAR1A (PTC2)
50	BRAF-KIAA1549 (Kex16Bex9)	120	EGFR (T790M/C797S/L858R)	190	RET-NCOA4 (PTC3)
51	BRAF-SRGA3 (Sex12Bex9)	121	EGFR (T790M, L858R)	191	ROS1 (G2032R)
52	BTK (C481S)	122	ERBB2 (D769H)	192	ROS1-GOPC
53	BTK (E41K)	123	ERBB2 (D769Y)	193	ROS1-TPM3
54	BTK (P190K)	124	ERBB2 (P780_Y781insGSP)	194	RSK2 (I416V)
55	CHK2 (I157T)	125	ERBB2 (R896C)	195	RSK2 (L608F)
56	CK1epsilon (R178C)	126	ERBB2 (V777L)	196	TIE2 (A1124V)
57	c-Kit (d557-558)	127	ERBB2 (V777_G778insCG)	197	TIE2 (P883A)
58	c-Kit (A829P)	128	FGFR1 (V561M)	198	TIE2 (R849W)
59	c-Kit (D816E)	129	FGFR1OP-FGFR1	199	TIE2 (Y897C)
60	c-Kit (D816F)	130	FGFR2 (E565G)	200	TIE2 (Y897S)
61	c-Kit (D816H)	131	FGFR2 (K526E)	201	TIE2 (Y1108F)
62	c-Kit (D816I)	132	FGFR2 (K641R)	202	TRKA (G595R)
63	c-Kit (D816V)	133	FGFR2 (K659N)	203	TRKA (G667C)
64	c-Kit (D816Y)	134	FGFR2 (N549H)	204	TRKA-TFG (TRK-T3)
65	c-Kit (D820E)	135	FGFR2 (R612T)	205	TRKA-TPM3
66	c-Kit (D820Y)	136	FGFR2 (V564F)	206	TRKA-TPR
67	c-Kit (K642E)	137	FGFR3 (V555M)	207	YES1 (T348I)
68	c-Kit (T670I)	138	FGFR3 (G697C)	208	ZAP70 (Y319F)
69	c-Kit (V559A)	139	FGFR3 (K650E)		
70	c-Kit (V559D)	140	FGFR3 (K650M)		

List C	
Special Kinase	
1	DNA-PK

List D	
Lipid Kinases	
1	PI3K (p110a(E542K)/p85a)
2	PI3K (p110a(E545K)/p85a)
3	PI3K (p110a(H1047R)/p85a)
4	PI3K (p110a/p65a)
5	PI3Ka (p110a/p85a)
6	PI3Kb (p110b/p85a)
7	PI3Kd (p110d/p85a)
8	PI3Kq (p120q)
9	PI3KC2a
10	PI3KC3
11	PI4K2A
12	PI4Ka
13	PI4Kb
14	PIP5K1A
15	PIP5K1C
16	SPHK1
17	SPHK2