Supplementary Table 1 **Kinome selectivity profile of CCT244747**

CCT244747 was tested at 1 μM (140 enzymes) and 10 μM (121 enzymes) for inhibition of human kinases in a radiometric protein phosphorylation assay (MRC Protein Phosphorylation Unit, Dundee University, UK). Assays were conducted in the presence of ATP at the approximate $K_{m,}$ATP for each kinase. Results are quoted as % control kinase activity remaining (100% = no inhibition, 0% = complete inhibition). Kinases inhibited by >50% at each concentration are highlighted. n.d. = not determined

Kinase	% Activity remaining		Kinase	% Activity remaining		Kinase	% Activity remaining		Kinase	% Activity remaining	
	1 μM	10 μM		1 μM	10 μM		1 μM	10 μM		1 μM	10 μM
MKK1	80	38	PKCγ	90	80	AMPK	12	14	TBK1	71	55
MKK2	76	57	PKCz	121	79	AMPK (hum)	5	n.d.	PIM1	72	22
MKK6	71	91	PKD1	106	38	MARK1	95	80	PIM2	98	77
ERK1	96	71	STK33	59	16	MARK2	111	57	PIM3	58	17
ERK2	101	80	MSK1	86	41	MARK3	98	69	SRPK1	89	88
ERK5	86	85	MNK1	94	90	MARK4	105	83	EF2K	94	87
JNK1	104	93	MNK2	98	112	BRSK1	11	53	EIF2AK3	101	93
JNK2	98	79	MAPKAP-K2	112	104	BRSK2	23	14	HIPK1	95	107
JNK3	113	97	MAPKAP-K3	96	80	MELK	109	62	HIPK2	89	82
p38a MAPK	102	85	PRAK	78	97	NUAK1	29	7	HIPK3	96	111
p38b MAPK	96	92	CAMKKb	103	71	SIK2	80	n.d	CLK2	95	50
p38g MAPK	89	109	CAMK1	92	95	SIK3	89	n.d	PAK2	100	70
p38d MAPK	87	73	SmMLCK	80	103	TSSK1	72	n.d	PAK4	87	70
ERK8	101	11	PHK	86	46	CK1γ2	101	n.d.	PAK5	93	61
RSK1	4	14	DAPK1	95	98	CK1δ	76	22	PAK6	77	43
RSK2	9	34	CHK1	17	6	CK2	110	87	MST2	67	30
PDK1	76	76	CHK2	81	31	TTBK1	98	n.d.	MST3	89	n.d.
PKBa	98	87	GSK3b	90	52	TTBK2	100	n.d.	MST4	83	42
PKBb	81	67	CDK2-Cyclin A	114	91	DYRK1A	91	79	GCK	102	56
SGK1	79	22	CDK9-Cyclin T1	84	n.d.	DYRK2	100	100	MAP4K3	45	n.d
S6K1	55	85	PLK1	88	104	DYRK3	98	79	MAP4K5	46	n.d.
PKA	104	78	Aurora A	84	48	NEK2a	58	64	MINK1	90	67
ROCK 2	92	40	Aurora B	42	53	NEK6	97	96	MEKK1	92	99
PRK2	87	86	TLK1	95	93	IKKb	96	86	MLK1	92	48
PKCa	115	102	LKB1	96	64	IKKe	78	84	MLK3	68	69

Kinase	% Activity remaining		Kinase	% Activity remaining		Kinase	% Activity remaining		Kinase	% Activity remaining	
	1 μM	10 μM		1 μM	10 μM		1 μM	10 μM		1 μM	10 μM
TESK1	110	n.d.	WNK1	95	75	JAK2	71	41	EPH-B4	96	88
TAO1	87	75	ULK1	60	n.d	SYK	93	63	FGF-R1	107	39
ASK1	95	67	ULK2	42	n.d.	ZAP70	104	103	HER4	101	94
TAK1	97	53	TGFBR1	122	n.d.	TIE2	102	90	IGF-1R	100	73
IRAK1	17	9	Src	81	72	BRK	98	91	IR	98	84
IRAK4	61	25	Lck	60	20	EPH-A2	59	24	IRR	103	89
RIPK2	97	71	CSK	83	94	EPH-A4	73	41	TrkA	13	28
OSR1	115	106	YES1	93	39	EPH-B1	100	71	DDR2	95	n.d.
TTK	81	74	ABL	83	58	EPH-B2	110	63	VEG-FR	90	31
MPSK1	91	91	BTK	88	60	EPH-B3	68	23	PDGFRA	60	n.d.