

Table S1

Library I of cell-permeable kinase inhibitors

Plate Location	Inhibitor	Description	PubChem Compound ID#	Replicon Assay Inhibition (50%)	Poliovirus Inhibition in Cell Culture
A2	AG 1024	A specific inhibitor of insulin-like growth factor-1 (IGF-1) and insulin receptor tyrosine kinase activity (IC ₅₀ = 10 nM)	2044		
A3	AGL 2043	A potent, selective, and reversible inhibitor of type III receptor tyrosine kinases PDGFR (IC ₅₀ = 800 nM in 3T3 cells; 90 nM against purified PDGFb-receptor), Flt3, and Kit (IC ₅₀ = 1-3 μM).	9817165		
A4	Akt Inhibitor IV	A compound that inhibits Akt phosphorylation/activation by targeting the ATP binding site of a kinase upstream of Akt, but downstream of PI3K. Blocks Akt-mediated FOXO1a nuclear export (IC ₅₀ = 625 nM) and cell proliferation (IC ₅₀ < 1.25 μM) in 786-O cells.	5719375	+	+
A5	Akt Inhibitor V, Triciribine	A selective compound that inhibits the cellular phosphorylation/activation of Akt1/2/3. It does not inhibit known upstream activators of Akt, i.e. PI3K or PDK.	290486		
A6	Akt Inhibitor VIII, Isozyme-Selective, Akti-1/2	A compound that potently and selectively inhibits Akt1/Akt2 activity (IC ₅₀ = 58 nM, 210 nM, and 2.12 μM for Akt1, Akt2, and Akt3, respectively, in <i>in vitro</i> kinase assays).	10196499	+	-
A7	Akt Inhibitor X	A selective inhibitor of the phosphorylation of Akt and its <i>in vitro</i> kinase activity (complete inhibition <5 μM) with minimal effect on PI 3-K, PDK1, or SGK1.	16760284		
A8	PDK1/Akt/Flt Dual Pathway Inhibitor	Shown to directly inhibit both PDK1 and Akt activities in <i>in vitro</i> kinase assays in a dose-dependent manner and block cellular phosphorylation of Akt at both	5113385	+	toxic

		Ser ⁴⁷³ and Thr ³⁰⁸ (Average IC ₅₀ = 1.05, 1.91, and 0.43 μM for AML with wild-type Flt3, single mutant ITD/D835, and double mutant Flt3-ITD-TDK, respectively)			
A9	Aurora Kinase Inhibitor II	A compound that acts as a potent, selective inhibitor of Aurora kinases (IC ₅₀ = 310 nM and 240 nM for Aurora A and B, respectively, 1.25 μM in MCF7 cells).	6610278		
A10	Bcr-abl Inhibitor	An allosteric inhibitor of cellular Bcr-abl activity and Bcr-abl-dependent cellular functions. Exhibits potent and selective antiproliferative activity toward Bcr-abl-expressing cells (IC ₅₀ = 138 nM, 194 nM, 268 nM and 273 nM in Ba/F3.p210, Ba/F3.p ^{185Y253H} , SUP-B15 and Ba/F3.p ^{210E255V} , and K562, respectively)	5311510		
A11	Bisindolylmaleimide I	A highly selective and reversible protein kinase C (PKC) inhibitor (K _i = 10 nM) that is structurally similar to staurosporine. Shows high selectivity for PKCα-, β _I -, β _{II} -, γ-, δ-, and ε-isozymes.	2396		
B2	Bisindolylmaleimide IV	A potent, cell permeable, and selective inhibitor of PKC (IC ₅₀ = 87 nM).	2399		
B3	BPIQ-I	A potent and specific inhibitor of the tyrosine kinase activity of the epidermal growth factor receptor (EGFR; IC ₅₀ = 25 pM).	2427		
B4	Chelerythrine Chloride	Potent, selective, inhibitor of protein kinase C (IC ₅₀ = 660 nM). Acts on the catalytic domain of PKC. A competitive inhibitor with respect to the phosphate acceptor and a non-competitive inhibitor with respect to ATP.	72311	+	-
B5	Compound 56	The most potent and specific inhibitor of the tyrosine kinase activity of the EGFR (IC ₅₀ = 6 pM).	2857		

B6	DNA-PK Inhibitor II	A potent, specific inhibitor of DNA-PK ($IC_{50} = 230$ nM). It is highly selective towards DNA-PK over PI3K-related kinases ($IC_{50} = 13$ μ M for PI3K and > 100 μ M for ATM and ATR) and has no effect on PARP-1.	9860529		
B7	DNA-PK Inhibitor III	An inhibitor of DNA-PK ($IC_{50} = 120$ nM) and PI 3-Kinase catalytic subunit p110b ($IC_{50} = 135$ nM).	9859309		
B8	PI-103	A compound that acts as a potent inhibitor of DNA-PK, PI3-K, and mTOR ($IC_{50} = 2, 8, 88, 48, 150, 26, 20,$ and 83 nM for DNA-PK, p110a, p110b, p110d, p110g, PI3-KC2b, mTORC1, and mTORC2, respectively).	9884685	+	+
B9	Diacylglycerol Kinase Inhibitor II	Inhibits diacylglycerol kinase in isolated platelet membranes ($IC_{50} = 300$ nM) and in intact platelets ($IC_{50} = 120$ nM) by binding to the catalytic domain.	657356		
B10	DMBI	A potent inhibitor of the tyrosine kinase activities of the PDGF b-receptor (b-PDGFR; $IC_{50} = 4$ μ M in PAC-1 cells) and FGFR1 ($IC_{50} = 5$ μ M for inhibition of tyrosine phosphorylation of p90).	5353593		
B11	EGFR/ErbB-2 Inhibitor	A potent, reversible inhibitor of EGFR and c-erbB2 ($IC_{50} = 20$ nM & 79 nM, respectively), members of the type I growth factor receptor family.	9843206		
C2	EGFR Inhibitor	A potent, and highly selective inhibitor of EGFR and some EGFR mutants ($IC_{50} = 21$ nM, 63 nM, and 4 nM for EGFRwt, EGFR ^{L858R} and EGFR ^{L861Q} , respectively) vs. erbB4/Her4 ($IC_{50} = 7.64$ μ M) and a panel of 55 other kinases.	9549299		
C3	EGFR/ErbB-2/ErbB-4 Inhibitor	A potent and irreversible inhibitor of erbB kinase ($IC_{50} = 0.3, 1.1,$ and 0.5 nM for erbB-1, erbB-2, and erbB-4, respectively).	11566580		
C4	Flt-3 Inhibitor	A potent, and highly selective Flt-3 inhibitor ($IC_{50} = 42$ nM) with little effect against a panel of 22 other kinases	1048845	+	-

		(IC ₅₀ >3 μM).			
C5	Flt-3 Inhibitor II	A more selective inhibitor of Flt3 over PDGFR either in cell-based receptor autophosphorylation (IC ₅₀ = 40 nM vs. 300 nM) or in cell-free kinase reactions (IC ₅₀ = 33 nM vs. 171 nM).	11601743	+	+
C6	cFMS Receptor Tyrosine Kinase Inhibitor	A potent, selective inhibitor of cFMS kinase activity (IC ₅₀ = 30 nM) with minimal inhibition towards a panel of 26 other kinases (IC ₅₀ > 5 μM).	11617559		
C7	Gö 6976	A more selective PKC inhibitor (PKC; IC ₅₀ = 7.9 nM for rat brain) that exhibits greater selectivity towards Ca ²⁺ -dependent PKC α-isozyme (IC ₅₀ = 2.3 nM) and PKC _{β1} (IC ₅₀ = 6.2 nM).	3501	+	-
C8	Gö 6983	A potent inhibitor of PKC that inhibits several PKC isoforms (IC ₅₀ = 7 nM for PKC _α and PKC _β ; 6 nM for PKC _γ ; 10 nM for PKC _δ ; and 60 nM for PKC _ζ). Gö 6983 does not effectively inhibit PKC _μ (IC ₅₀ = 20 μM) and can thus be used to differentiate PKC _μ from other PKC isoforms	3499		
C9	GTP-14564	A potent and specific inhibitor of class III receptor tyrosine kinases (IC ₅₀ = 0.3 μM for c-fms, c-kit, wt-FLT3 and ITD-FLT3; 1.0 μM for PDGFRβ).	3385203		
C10	Herbimycin A, Streptomyces sp.	A potent protein tyrosine kinase inhibitor. Inhibits p60 ^{v-src} (IC ₅₀ = 12 μM) and PDGF-induced phospholipase D activation (IC ₅₀ = 8 μg/ml). Also inhibits c-Src related bone resorption (IC ₅₀ = 70 nM)	16760502		
C11	Flt-3 Inhibitor III	A potent inhibitor of Flt3 (IC ₅₀ = 50 nM). It inhibits c-Kit, KDR, c-Abl, Cdk1, c-Src, and Tie-2 only at much higher concentrations (IC ₅₀ = 0.26, 0.91, 1.2, 2.1, 2.8, and 8.0 μM, respectively).	11772958		
D2	IGF-1R Inhibitor II	An inhibitor of IGF-1R autophosphorylation (IC ₅₀ = 12 μM in inhibiting ligand-induced	9549305		

		autophosphorylation in MCF-7 cells and < 1 μ M in a cell-free kinase assay).			
D3	IRAK-1/4 Inhibitor	A potent and selective inhibitor of interleukin-1 receptor-associated kinases (IC_{50} = 300 nM and 200 nM for IRAK-1 and -4).	11983295		
D4	JAK Inhibitor I	A potent inhibitor of JAK1 (IC_{50} = 15 nM for murine JAK1), JAK2 (IC_{50} = 1 nM), JAK3 (K_i = 5 nM), and Tyk2 (IC_{50} = 1 nM).	5494425		
D5	JAK3 Inhibitor II	A potent, specific inhibitor of JAK3 (IC_{50} = 5.6 μ M). Has no effect on either JAK1 or JAK2.	3795		
D6	JAK3 Inhibitor IV	A potent and selective inhibitor of Janus tyrosine kinase-3 (JAK3; pIC_{50} = 7.1). A weak inhibitor of other tyrosine kinases (pIC_{50} = 5.6 for EGF-R; 4.4 for JAK1).	176406		
D7	JAK3 Inhibitor VI	A potent inhibitor of JAK3 (IC_{50} = 27 nM) and displays ~16-fold greater selectivity over JAK2.	16760524	+	+
D8	Lck Inhibitor	A potent, selective inhibitor of Lck (IC_{50} at 5 μ M ATP = < 1 nM, 2 nM, 70 nM, 1.57 μ M and 1.98 μ M for Lck ₆₄₋₅₀₉ Y ³⁹⁴ , Lckcd pY ³⁹⁴ , Src, Kdr and Tie-2, respectively; IC_{50} at 1 mM ATP = 16 μ M, 66 nM, 126 nM, 420 nM and 5.18 μ M for Lck ₆₄₋₅₀₉ Y ³⁹⁴ , Blk, Fyn, Lyn and Csk, respectively).	6603792		
D9	LY 294002	A potent and specific phosphatidylinositol 3-kinase (PI3-K) inhibitor (IC_{50} = 1.4 μ M).	3973		
D10	LY 303511	A negative control compound for the PI 3-kinase inhibitor LY 294002 (Cat. No. 440202).	3971		
D11	Met Kinase Inhibitor	A potent, reversible inhibitor of Met kinase activity (IC_{50} = 20 nM). Exhibits > 60-fold selectivity over Flk and > 400-fold selectivity over Ron, FGFR-1, c-Src, Cdk2, PDGFRb, EGFR, and Tie-2.	9549297	+	-

E2	PD 158780	A potent inhibitor of the EGFR tyrosine kinase activity (IC ₅₀ = 8 pM).	4707		
E3	PD 174265	A potent reversible, and selective inhibitor of EGFR tyrosine kinase activity (IC ₅₀ = 450 pM).	4709		
E4	PDGF Receptor Tyrosine Kinase Inhibitor II	A highly selective inhibitor of platelet-derived growth factor receptor (PDGFR) tyrosine kinase (IC ₅₀ = 1.1 μM in Swiss 3T3 cells for PDGFR).	5330548		
E5	PDGF Receptor Tyrosine Kinase Inhibitor III	A potent and selective inhibitor of PDGF receptor family of tyrosine kinases (IC ₅₀ = 50 nM for α-PDGFR; 0.80 nM for β-PDGFR; 50 nM for c-Kit; 230 nM for Flt3).	10907042	+	+
E6	PDGF Receptor Tyrosine Kinase Inhibitor IV	A potent antiproliferative properties in several human tumor cell lines (IC ₅₀ < 33 nM). Shown to act as reversible inhibitor of PDGFR (IC ₅₀ = 4.2 nM and 45 nM for -β and -α, respectively) and c-Abl (IC ₅₀ = 22 nM).	9797370		
E7	PDGF RTK Inhibitor	A potent and reversible inhibitor of PDGFR (IC ₅₀ = 4 and 7.6 nM in ligand-induced cellular PDGFR phosphorylation and in <i>in vitro</i> kinase activity, respectively).	16760609		
E8	PKR Inhibitor	A potent inhibitor of RNA-induced PKR autophosphorylation (IC ₅₀ = 210 nM) and rescue PKR-dependent translation block (IC ₅₀ = 100 nM).	6490494	+	-
E9	PKR Inhibitor, Negative Control	A negative control compound for PKR Inhibitor (cat. No.527450)	16760619		
E10	PI 3-Kg Inhibitor	An inhibitor of phosphatidylinositol 3-kinase γ (PI 3-Kg) (K _i = 7.8 nM; IC ₅₀ = 8 nM, 60 nM, 270 nM, 300 nM for p110-γ, α, β and δ-isoforms, respectively).	5289247		
E11	PI 3-Kβ Inhibitor II	A potent inhibitor of PI 3-Kg (K _i = 180 nM; IC ₅₀ = 250 nM). Exhibits great selectivity over PI 3-Kα (IC ₅₀ = 4.5 μM), PI 3-Kβ and δ (IC ₅₀ > 20 μM).	5287855		

F2	PP3	A negative control compound for the Src family protein tyrosine kinase inhibitor PP2 (Cat. No. 529573). However, it inhibits the activity of EGFR kinase ($IC_{50} = 2.7 \mu M$).	4879		
F3	PP1 Analog II, 1NM-PP1	A potent selective inhibitor of mutant kinases over wild-type. ($IC_{50} = 3.2 nM$ for T339G, c-Fyn-as1 vs. $1.0 \mu M$ for c-Fyn; $4.3 nM$ for I338G, v-src-as1 vs. $28 \mu M$ for v-src; $5 nM$ for F80G, CDK2-as1 vs. $29 \mu M$ for CDK2; $8 nM$ for F89G, CAMK IIa-as1 vs. $24 \mu M$ for CAMKII; $120 nM$ for T315A, c-Abl-as2 vs. $3.4 \mu M$ for c-Abl). Shown to activate mutants of Ire1, a transmembrane kinase.	5154691		
F4	PKCbII/EGFR Inhibitor	A potent inhibitor of EGFR and PKC isozymes a, bI, and bII ($IC_{50} = 700 nM$, $1.9 \mu M$, $3.8 \mu M$, and $410 nM$, respectively).	6711154	+	-
F5	PKCb Inhibitor	A potent inhibitor of PKC _b isozymes ($IC_{50} = 5 nM$ and $21 nM$ for human PKC _{bII} and bI) and displays greater selectivity over PKC _{a, g,} and e ($IC_{50} = 331 nM$, $> 1 \mu M$, and $2.8 \mu M$, respectively).	6419755		
F6	Rapamycin	A selective inhibitor of phosphorylation and activation of p70 S6 kinase ($IC_{50} = 50 pM$). Shown to inhibit later signaling events such as p110 ^{Rb} phosphorylation, p34 ^{cdk1} kinase activation, and cyclin A synthesis.	16760631	+	-
F7	Rho Kinase Inhibitor III, Rockout	A selective inhibitor of Rho kinase activity ($IC_{50} = 25 \mu M$).	644354		
F8	Rho Kinase Inhibitor IV	A glycol analog of Rho-Kinase Inhibitor (Cat. No. 555550) that inhibits ROCK with an improved selectivity ($IC_{50} = 11.8 nM$, $> 10 \mu M$, $> 10 \mu M$, $3.26 \mu M$, $2.35 \mu M$, and $2.57 \mu M$ for ROCKII, PKA, PKC, PKG, Aurora A, and CaMKII, respectively).	16760635		

F9	Staurosporine, N-benzoyl-	A broad-spectrum, reversible inhibitor of PKC (a, b and g), PDGFRb, VEGFR2, Syk, PKCh, PKCd, Flk-1, Flt3, Cdk1/B, PKA, c-Kit, c-Fgr, c-Src, VEGFR1, and EGFR (IC ₅₀ = 22 nM, 50 nM, 86 nM, 95 nM, 160 nM, 330 nM, 390 nM, 528 nM, 570 nM, 570 nM, 600 nM, 790 nM, 800 nM, 912 nM, and 1.0 μM, respectively).	16760627	+	-
F10	Src Kinase Inhibitor I	A potent, selective, dual site inhibitor of Src family tyrosine kinases (IC ₅₀ = 44 nM and 88 nM for Src and Lck, respectively).	1474853		
F11	SU11652	A potent inhibitor of tyrosine kinase activity of PDGFRb (IC ₅₀ = 3 nM), VEGFR2 (IC ₅₀ = 27 nM), FGFR1 (IC ₅₀ = 170 nM), and Kit family members (IC ₅₀ ~ 10-500 nM) over EGFR (IC ₅₀ >20 μM).	5329103	+	toxic
G2	Syk Inhibitor	A potent Syk inhibitor (IC ₅₀ = 14 nM).	6419747		
G3	Syk Inhibitor II	A potent, selective inhibitor of Syk (IC ₅₀ = 41 nM), while affecting PKC _e , PKC _{βII} , ZAP-70, Btk, and Itk only at much higher concentrations (IC ₅₀ = 5.1, 11, 11.2, 15.5, and 22.6 μM, respectively).	16760670		
G4	Syk Inhibitor III	A selective inhibitor of Syk kinase activity (IC ₅₀ = 2.5 μM).	672296	+	-
G5	TGF-b RI Kinase Inhibitor	An inhibitor of TGF-b Receptor I kinase (IC ₅₀ = 51 nM). Shown to inhibit TGF-b-dependent cellular growth (IC ₅₀ = 89 nM in NIH 3T3 mouse fibroblasts) and transcription activation (IC ₅₀ = 47 nM in mink lung cells).	447966	+	-
G6	TGF-b RI Inhibitor III	A potent, reversible, and selective inhibitor of activin receptor-like kinase 4 (IC ₅₀ = 129 nM), 5 (IC ₅₀ = 47 nM), and 7.	16079009		
G7	AG 9	A negative control compound for inhibition of EGFR (IC ₅₀ >1250 μM for EGFR kinase). Has been shown to inhibit IL-2 stimulated Tyk-2	2063		

		phosphorylation in ConA-activated T cells.			
G8	AG 490	A potent inhibitor of EGFR kinase autophosphorylation (IC ₅₀ = 100 nM).	5328779		
G9	AG 112	Inhibits EGFR tyrosine kinase (IC ₅₀ = 125 nM).	5328804		
G10	AG 1295	Selectively inhibits platelet-derived growth factor (PDGF) receptor kinase (IC ₅₀ = 500 nM) and PDGF-dependent DNA synthesis (IC ₅₀ = 2.5 μM) in Swiss/3T3 cells.	2048		
G11	AG 1296	Inhibits PDGF receptor kinase and blocks signaling of human PDGF a-receptors (IC ₅₀ = 1.0 μM) and b-receptors (IC ₅₀ = 800 nM) as well as of the related stem cell factor receptor <i>c-kit</i> (80% inhibition at 5 μM).	2049		
H2	AG 1478	A very potent and selective inhibitor of EGFR kinase (IC ₅₀ = 3 nM) versus HER2-neu (IC ₅₀ >100 μM) and platelet-derived growth factor receptor kinase (IC ₅₀ >100 μM).	2051		
H3	VEGF Receptor 2 Kinase Inhibitor I	A highly selective, indolin-2-one class of receptor tyrosine kinase (RTK) inhibitor (IC ₅₀ = 70 nM for murine vascular endothelial growth factor receptor 2 (VEGF-R2; KDR/Flk-1).	6419834		
H4	VEGF Receptor Tyrosine Kinase Inhibitor II	A potent inhibitor of the kinase activities of KDR, Flt-1 and c-Kit (IC ₅₀ = 20 nM, 180 nM and 240 nM, respectively), and minimally inhibit c-Src and EGF-R activities (IC ₅₀ = 7 μM and 7.3 μM).	9797919	+	-
H5	VEGF Receptor Tyrosine Kinase Inhibitor III, KRN633	An inhibitor of VEGFR kinase activity (IC ₅₀ = 170 nM, 160 nM, and 125 nM for VEGFR-1, VEGFR-2, VEGFR-3, respectively). Inhibits PDGFR-a and c-Kit only at higher concentrations (IC ₅₀ = 0.97 μM and 4.33 μM, respectively).	9549295	+	-
H6	VEGF Receptor 2 Kinase Inhibitor II	A indolin-2-one class of receptor tyrosine kinase (RTK) inhibitor [IC ₅₀ = 70 nM for VEGF-R2 (KDR/Flk-1), 920	5329155		

		nM for PDGF-Rb, 4.92 μ M for p60 ^{c-src} , and 13.3 μ M for FGF-R1].			
H7	VEGF Receptor 2 Kinase Inhibitor III	An inhibitor of VEGF-R (KDR/Flk-1) and PDGF-R tyrosine kinases (IC ₅₀ = 1.04 μ M and 20 μ M in NIH 3T3 cells overexpressing Flk-1; K _m = 530 nM for ATP).	5329098		
H8	VEGF Receptor 2 Kinase Inhibitor IV	A potent inhibitor of VEGFR-2 (KDR/Flk-1; IC ₅₀ = 19 nM). Displays ~2-fold greater selectivity for VEGFR-2 over PDGFRb (IC ₅₀ = 34 nM) and 10-fold greater selectivity over VEGFR-1 (Flt-1) and VEGFR-3 (Flt-4; IC ₅₀ = 190 nM) tyrosine kinase activity.	5329468		
H9	DNA-PK Inhibitor V	A potent, selective, and ATP-competitive inhibitor of DNA-PK (IC ₅₀ = 0.27 μ M). Inhibits the PI-3 kinase catalytic subunit p110-isozymes at higher concentrations (IC ₅₀ = 32 μ M, 3.7 μ M, 22 μ M and ~ 100 μ M for α , β , δ and γ , respectively). Only weakly inhibits a panel of several other kinases, including, ATM, ATR, CK2, GRK2, mTOR, PI-3KC2 α , PI-3KC2 β , PI-3KC2 γ and PI-4K β , even at concentrations as high as 50 μ M.	16760391		
H10	Aurora Kinase Inhibitor III	A potent, but non-selective inhibitor of Aurora A (IC ₅₀ = 42 nM). At higher concentrations, also inhibits the activities of other kinases, such as Lck, Bmx, IGF-1R, and Syk (IC ₅₀ = 131, 386, 591, and 887 nM, respectively).	9549303	+	-
H11	Staurosporine, Streptomyces sp.	A potent and broad spectrum inhibitor of protein kinases. Inhibits protein kinase A (IC ₅₀ = 7 nM), CaM kinase (IC ₅₀ = 20 nM), myosin light chain kinase (IC ₅₀ = 1.3 nM), protein kinase C (IC ₅₀ = 700 pM), and protein kinase G (IC ₅₀ = 8.5 nM).	451705	+	-

Table S2

Library II of cell-permeable kinase inhibitors

Plate Location	Inhibitor	Description	PubChem Compound ID#	Replicon Assay Inhibition (50%)	Poliovirus Inhibition in Cell Culture
A2	KN-62	$K_i = 900 \text{ nM}$ for $\text{Ca}^{++}/\text{CaM}$ Kinase II ¹	16760529		
A3	ATM Kinase Inhibitor	$\text{IC}_{50} = 13 \text{ nM}$; $K_i = 2.2 \text{ nM}^1$	5278396		
A4	ATM/ATR Kinase Inhibitor	$\text{IC}_{50} \sim 200 \text{ nM}^1$	6605258	+	-
A5	Alsterpaullone	$\text{IC}_{50} = 35 \text{ nM}$ for Cdk1/ B ² $\text{IC}_{50} = 4 \text{ nM}$ for GSK-3b ¹	5005498		
A6	Alsterpaullone, 2-Cyanoethyl	$\text{IC}_{50} = 230 \text{ pM}$ for Cdk1/B ¹ $\text{IC}_{50} = 800 \text{ pM}$ for GSK-3b ¹ $\text{IC}_{50} = 30 \text{ nM}$ for cdk5/p25 ¹	16760286		
A7	Aloisine A, RP107	$\text{IC}_{50} = 150 \text{ nM}$ for Cdk1/B ² $\text{IC}_{50} = 120 \text{ nM}$ for Cdk2/A ² $\text{IC}_{50} = 400 \text{ nM}$ for Cdk2/E ² $\text{IC}_{50} = 160 \text{ nM}$ for Cdk5/p35 ² $\text{IC}_{50} = 500 \text{ nM}$ for GSK3a ²	5326843		
A8	Aloisine, RP106	$\text{IC}_{50} = 700 \text{ nM}$ for CDK1/B ¹ $\text{IC}_{50} = 1.5 \text{ mM}$ CDK5/p25 ¹ $\text{IC}_{50} = 920 \text{ nM}$ for GSK-3 ¹	3641059		
A9	Aminopurvalanol A	$\text{IC}_{50} = 33 \text{ nM}$ for Cdk1/B and Cdk2/A ^{1,2} $\text{IC}_{50} = 28 \text{ nM}$ for Cdk2/E ^{1,2} $\text{IC}_{50} = 20 \text{ nM}$ for Cdk5/p35 ^{1,2}	6604931		
A10	AMPK Inhibitor, Compound C	$K_i = 109 \text{ nM}$ in the presence of 5mM ATP and absence of AMP ¹	11524144		
A11	Aurora Kinase Inhibitor III	$\text{IC}_{50} = 42 \text{ nM}$ for Aurora A ¹ $\text{IC}_{50} = 131 \text{ nM}$ for Lck ¹ $\text{IC}_{50} = 386 \text{ nM}$ for Bmx ¹ $\text{IC}_{50} = 591 \text{ nM}$ for IGF-1R ¹ $\text{IC}_{50} = 887 \text{ nM}$ for Syk ¹	9549303		
B2	Aurora Kinase/Cdk Inhibitor	$\text{IC}_{50} = 11 \text{ nM}$ for Aurora A ² $\text{IC}_{50} = 15 \text{ nM}$ for Aurora B ² $\text{IC}_{50} = 9 \text{ nM}$ for Cdk1/B ² $\text{IC}_{50} = 4 \text{ nM}$ for Cdk2/A ² $\text{IC}_{50} = 3 \text{ nM}$ for Cdk2/E ²	16760303		

B3	Indirubin-3'-monoxime	IC ₅₀ = 180nM for Cdk1 ^{1,2} IC ₅₀ = 100 nM for Cdk5 ^{1,2} IC ₅₀ = 22 nM for GSKb ^{1,2}	<u>5326739</u>		
B4	BAY 11-7082	IC ₅₀ < 10 mM	<u>5353431</u>		
B5	Bohemine	IC ₅₀ = 1mM for Cdk1 ²	<u>2422</u>		
B6	Cdk1 Inhibitor	IC ₅₀ = 5.8mM for Cdk1 ² IC ₅₀ = 25mM for Cdk5 ²	<u>5472558</u>		
B7	Cdk1 Inhibitor, CGP74514A	IC ₅₀ =25 nM for Cdk1 ²	<u>2794188</u>		
B8	Cdk1/2 Inhibitor III	IC ₅₀ =600 pM for Cdk1/B ¹ IC ₅₀ = 500 pM for Cdk2/A ¹	<u>5330812</u>	+	-
B9	Cdk1/5 Inhibitor	IC ₅₀ = 600 nM for Cdk1/B ¹ IC ₅₀ = 400 nM for Cdk5/p25 ¹ IC ₅₀ = 1 mM for GSK-3b ¹	<u>438981</u>		
B10	Casein Kinase I Inhibitor, D4476	IC ₅₀ = 500 nM for ALK5 ¹ IC ₅₀ = 12 mM for p38a MAPK ¹ IC ₅₀ = 0.3 mM for CK1d ¹ IC ₅₀ = 200 nM for CK1 (S. pombe) ¹	<u>6419753</u>		
B11	Casein Kinase II Inhibitor III, TBCA	IC ₅₀ = 110 nM for CK2 ¹	<u>16760346</u>		
C2	Cdk4 Inhibitor	IC ₅₀ = 76 nM for Cdk4/D1 ¹ IC ₅₀ = 520 nM for Cdk2/E ¹ IC ₅₀ = 2.1 mM for Cdk1/B ¹	<u>5330797</u>		
C3	Cdk4 Inhibitor II, NSC 625987	IC ₅₀ =200 nM for Cdk4/D1 ¹	<u>3004085</u>		
C4	Cdk4 Inhibitor III	IC ₅₀ = 6 mM for Cdk4/D1 ¹ IC ₅₀ >200mM for Cdk2/A ¹	<u>481747</u>	+	toxic
C5	Cdc2-Like Kinase Inhibitor, TG003	IC ₅₀ = 15 nM for mClk4 ¹ IC ₅₀ = 20 nm for mClk1 ¹ IC ₅₀ = 200 nM for mClk2 ¹	<u>1893668</u>		
C6	Chk2 Inhibitor II	IC ₅₀ = 15 nM for Chk2 ¹ IC ₅₀ = 12 mM for Cdk1/B ¹ IC ₅₀ = 17 mM for CK1 ¹	<u>9969021</u>		
C7	Compound 52	IC ₅₀ = 7 mM for Cdc28p ¹ IC ₅₀ = 2 mM for Pho85p ¹	<u>2856</u>		

C8	Cdk2 Inhibitor III	IC ₅₀ = 500 nM for Cdk2/A and Cdk2/E ¹ IC ₅₀ = 4.2 mM for Cdk1/B ¹ IC ₅₀ = 215 mM for Cdk4/D1 ¹	<u>6918386</u>		
C9	Cdk2 Inhibitor IV, NU6140	IC ₅₀ = 6.6 mM for Cdk1/B ¹ IC ₅₀ = 0.41 mM for Cdk2/A ¹ IC ₅₀ = 5.5 mM for Cdk4/D ¹ IC ₅₀ =15 mM for Cdk5/p25 ¹ IC ₅₀ = 3.9 mM for Cdk7/B ¹	<u>10202471</u>	-	-
C10	Cdk/Crk Inhibitor	IC ₅₀ = 48 nM for Cdk1/B ¹ IC ₅₀ = 15 nM for Cdk2/E ¹ IC ₅₀ = 9 nM for Cdk3/E ¹ IC ₅₀ = 10nM for Cdk5/p35 ¹ IC ₅₀ = 71 nM for Cdk7/H/MAT1 ¹ IC ₅₀ = 839 nM for Cdk4/D1 ¹ IC ₅₀ = 282 nM for Cdk6/D3 ¹ IC ₅₀ = 754 nM for GSK-3b ¹	<u>9549301</u>		
C11	ERK Inhibitor III	N/A	<u>5339183</u>		
D2	ROCK Inhibitor, Y-27632	K _i = 140 nM for p160Rock (ROCK-I) ¹	<u>9797929</u>		
D3	ERK Inhibitor II, FR180204	IC ₅₀ = 510 nM for ERK1 ¹ IC ₅₀ = 330 nM for ERK2 ¹	<u>11493598</u>		
D4	ERK Inhibitor II, Negative control	Inactive for ERK1 and ERK2 ¹	<u>16760417</u>		
D5	Fascaplysin, Synthetic	IC ₅₀ = 350nM for Cdk4/D1 ¹ IC ₅₀ = 3.4 mM for Cdk6/D1 ¹	<u>73292</u>	+	toxic
D6	GSK-3b Inhibitor I	IC ₅₀ = 2 mM ^{2,3} IC ₅₀ = 673 nM for Flt-3 ^{2,3} IC ₅₀ =1.4-5.5 mM for various PKC isoforms ^{2,3}	<u>4124851</u>		
D7	GSK-3b Inhibitor II	IC ₅₀ = 390 nM for GSK-3 ¹	<u>6539732</u>		
D8	GSK-3b Inhibitor VIII	IC ₅₀ = 104 nM for GSK-3 ¹	<u>448014</u>		
D9	GSK-3 Inhibitor IX	IC ₅₀ = 5 nM for GSK-3a/b ¹ IC ₅₀ = 83 nM for Cdk5/p25 ¹ IC ₅₀ = 300 nM for Cdk2/A ¹ IC ₅₀ = 320 nM for Cdk1/B ¹	<u>5287844</u>		
D10	GSK-3 Inhibitor X	IC ₅₀ = 10 nM for GSK-3a/b ¹ IC ₅₀ = 2.4 mM for Cdk5/p25 ¹ IC ₅₀ = 4.3 mM for	<u>6538818</u>		

		Cdk2/A ¹			
D11	GSK-3b Inhibitor XI	K _i = 25 nM for GSK-3b ¹	<u>10020713</u>		
E2	SU6656	IC ₅₀ = 280 nM for Src ¹ IC ₅₀ = 170 nM for Fyn ¹ IC ₅₀ = 20 nM for Yes ¹ IC ₅₀ = 130 nM for Lyn ¹	<u>5312137</u>		
E3	GSK-3 Inhibitor XIII	K _i = 24 nM for GSK-3 ¹	<u>6419766</u>		
E4	Isogranulatimide	IC ₅₀ = 100 nm for Chk1 ¹ IC ₅₀ = 500 nM for GSK-3b ¹ IC ₅₀ = 3 mM for Chk2 ¹	<u>6419741</u>		
E5	IC261	IC ₅₀ = 0.7-1.3 mM for CK1d ² IC ₅₀ = 0.6-1.4 mM for CK1e ² IC ₅₀ = 11-21mM for CK1a ₁ ²	<u>3674</u>		
E6	IKK-2 Inhibitor IV	IC ₅₀ = 18 nM for IKK-2 ¹	<u>9903786</u>		
E7	Indirubin Derivative E804	IC ₅₀ = 430 nM for Src ¹ IC ₅₀ = 210 nM for Cdk1/E ¹ IC ₅₀ = 540 nM for Cdk2/A ¹ IC ₅₀ = 1.65 mM for Cdk1/B ¹	<u>6419764</u>	+	+
E8	JNK Inhibitor II	IC ₅₀ = 110nM for JNK1 and JNK2 ^{2,3} IC ₅₀ = 150-190 nM for JNK3 ^{2,3}	<u>8515</u>		
E9	JNK Inhibitor, Negative Control	IC ₅₀ = 18 mM for JNK2 ¹ IC ₅₀ = 24 mM for JNK3 ¹	<u>11665831</u>		
E10	JNK Inhibitor V	IC ₅₀ = 150 nM for hJNK1 ¹ IC ₅₀ = 220 nM for hJNK2 ¹ IC ₅₀ = 70 nM for hJNK3 ¹	<u>11422035</u>	+	-
E11	JNK Inhibitor IX	pIC ₅₀ = 6.5 for JNK2 ¹ pIC ₅₀ = 6.7 for JNK3 ¹	<u>16760525</u>		
F2	MK2a Inhibitor	K _i ^{app} = 330 nM for p38a-dependent phosphorylation ¹	<u>11382492</u>		
F3	JNK Inhibitor VIII	K _i = 2nM for JNK1 ¹ K _i = 4 nM for JNK2 ¹ K _i = 52 nM for JNK3 ¹	<u>11624601</u>		
F4	K-252a, Nocardiosis sp.	K _i = 18 nM for PKA ² K _i = 25 nM for PKC ² K _i = 20 nM for PKG ²	<u>490561</u>	+	-
F5	Kenpaullone	IC ₅₀ =230 nM for GSK-3b ² IC ₅₀ =470 nM	<u>3820</u>		

		for Lck ² IC ₅₀ =400 nM for Cdk1/B ² IC ₅₀ =680 nM for Cdk2/A ² IC ₅₀ = 850 nM for Cdk5/p25 ²			
F6	KN-93	K _i = 370 nM for CaMKII ²	<u>5312122</u>	+	-
F7	MEK Inhibitor I	IC ₅₀ = 12 nM for MEK ¹ IC ₅₀ >1 mM for MKK3 and MKK4 ¹	<u>9951490</u>		
F8	MEK Inhibitor II	IC ₅₀ = 380 nM for MEK1 ¹	<u>389898</u>		
F9	MEK1/2 Inhibitor	IC ₅₀ = 180 nM for MEK1 ² IC ₅₀ = 220 nM for MEK2 ²	<u>9549284</u>		
F10	MNK1 Inhibitor	IC ₅₀ = 2.2 mM for MNK1 ¹	<u>11644425</u>		
F11	NF-kB Activation Inhibitor	IC ₅₀ = 11 nM for the inhibition of NFKB activation in Jurkat cells transfected with pNFKB-Luc ¹	<u>509554</u>		
G2	p38 MAP Kinase Inhibitor III	IC ₅₀ = 380 nM for p38a ¹	<u>6419739</u>	+	-
G3	p38 MAP Kinase Inhibitor	IC ₅₀ = 35 nM for p38MAPK ¹	<u>4665</u>		
G4	PD 98059	N/A	<u>4713</u>		
G5	PD 169316	IC ₅₀ = 89 nM for p38 MAPK ²	<u>4712</u>		
G6	SB220025	IC ₅₀ = 60 nM for p38 MAP Kinase ³	<u>5164</u>		
G7	Purvalanol A	IC ₅₀ = 4 nM for Cdc2/B ¹ IC ₅₀ = 70 nm for CDK2/A ¹ IC ₅₀ = 35 nM for CDK2/E ¹ IC ₅₀ = 75 nM for CDK5/p35 ¹	<u>4987</u>	+	-
G8	GSK3b Inhibitor XII, TWS119	IC ₅₀ = 30 nM for GSK-3b ¹	<u>9549289</u>		
G9	H-89, Dihydrochloride	K _i = 48 nM for PKA ² IC ₅₀ = 270 nM for ROCK-II ³	<u>5702541</u>		
G10	SB 202474, Negative control for p38 MAPK inhibition studies	Inactive compound on p38 MAPK ¹	<u>5162</u>		

G11	SB 202190	$K_i = 16 \text{ nM}$ for p38MAPK ² $IC_{50} = 350 \text{ nM}$ for p38b ³	<u>5353940</u>		
H2	SB 203580	$IC_{50} = 34 \text{ nM}$ for p38MAPK ⁴ $IC_{50} = 600 \text{ nM}$ in cells ⁵	<u>176155</u>		
H3	HA 1077, DihydrochlorideFasudil	$K_i = 1.6 \text{ mM}$ for PKA ¹ $K_i = 1.6 \text{ mM}$ for PKG ¹ $K_i = 36 \text{ mM}$ for MLCK ¹ $IC_{50} = 10.7 \text{ mM}$ for ROCK ²	<u>16219471</u>		
H4	SB 218078	$IC_{50} = 15 \text{ nM}$ for Chk1 ¹ $K_i = 15 \text{ nM}$ for Chk1 ² $K_i = 23 \text{ nM}$ for CDK1 ² $K_i = 5.6 \text{ nM}$ for CDK2 ² $K_i = 16 \text{ nM}$ for CDK4 ²	<u>3387354</u>	+	-
H5	SC-68376	$IC_{50} = 2\text{-}5 \text{ mM}$ for p38 MAPK ¹	<u>5174</u>		
H6	SKF-86002	$IC_{50} = 1.30 \pm 1 \mu\text{M}$ inhibiting IL-1 production by LPS-stimulated human monocytes ³	<u>5228</u>		
H7	Sphingosine Kinase Inhibitor	$IC_{50} = 500 \text{ nM}$ for hSK ¹	<u>16760659</u>	-	-
H8	Staurosporine, Streptomyces sp.	$IC_{50} = 20 \text{ nM}$ for CaM kinase ^{1,2,3} $IC_{50} = 0.7 \text{ nM}$ for PKC ^{1,2,3} $IC_{50} = 1.3 \text{ nM}$ for MLCK ^{1,2,3} $IC_{50} = 8.5 \text{ nM}$ for PKG ^{1,2,3} $IC_{50} = 7 \text{ nM}$ for PKA ^{1,2,3}	<u>451705</u>	+	-
H9	STO-609	$IC_{50} = \sim 10 \text{ mg/ml}$ for CaM-KII ¹ $IC_{50} = 120 \text{ ng/ml}$ for CaM-KKa ¹ $IC_{50} = 40 \text{ ng/ml}$ for CaM-KKb ¹	<u>16760660</u>		
H10	SU9516	$IC_{50} = 22 \text{ nM}$ for Cdk2/A ¹ $IC_{50} = 40 \text{ nM}$ for Cdk1/B ¹ $IC_{50} = 22 \text{ nM}$ for Cdk4/D1 ¹	<u>5289419</u>		
H11	Tpl2 Kinase Inhibitor	$IC_{50} = 50 \text{ nM}$ for Tpl2 Kinase	<u>9549300</u>	+	-