

Supplementals

Modelling acquired resistance to DOT1L inhibition exhibits the adaptive potential of *KMT2A*-rearranged Acute Lymphoblastic Leukemia

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Supplementary methods

Cell line culturing conditions

All cell lines, including the generated pinometostat-resistant daughter lines were cultured in RPMI-1640 medium containing GlutaMAX™ supplemented with 10% fetal calf serum, 100 IU/ml Penicillin and Streptomycin, and 0.125µg/ml Amphotericin B (Life Technologies), at 37°C under a 5% CO₂ containing atmosphere. Cell lines passed every 3-4 days and routinely tested for the absence of mycoplasma and DNA fingerprinted to assure cell line authenticity.

Immunoblotting

For the presence of histone modifications, protein was isolated by using the flow-through of RNA isolation using the RNeasy Mini Kit (Qiagen), as described previously.¹ For the expression levels of other proteins, protein was extracted using RIPA buffer supplemented with protease inhibitors (ThermoScientific). Protein extractions were resolved on precast TGX™ gels and transferred to an 0.2 µm nitrocellulose membrane using a Transblot

Turbo Transfer System (Bio-Rad). Blots were then probed with antibodies against H3K79Me2, H3K79Ac, H4K20Ac (cat. nrs. 39143, 39565, 61531, Active Motif), H3K79Me3 (cat.nr. 4260, Cell signaling), H1K25Me3 (cat.nr. 68370, Epigentek), H3K122A, total H3 (cat. nrs. ab33309, ab10799, Abcam), CD133 (PROM1), or GAPDH (cat. nrs. 64326S, 97166S, Cell Signaling). Proteins were visualized using an Odyssey Infrared Imaging System (LI-COR), and protein expression was quantified using the Odyssey software Image Studio Lite ver 4.0.

RNA sequencing (RNA-seq)

RNA was isolated from leukemic cells using the RNeasy Mini Kit (Qiagen) and RNA samples were sequenced in quadruplicate on a NextSeq® 500 System (Illumina®). QC was performed with fastQC (<http://www.bioinformatics.babraham.ac.uk/projects/fastqc>) and reads were aligned against the human genome assembly (hg19) with STAR.² Gene expression levels were quantified using the featureCounts function of the Subread package³ and read counts were used to identify differential gene expression using DESeq2 (v3.12).⁴ Genes were considered differentially expressed between sample groups at a false discovery rate (FDR) adjusted *p*-values of <0.05.

Read counts were used for Gene Set Enrichment Analysis (GSEA) using the GSEA version 4.1.0 software with the Hallmarks gene set database⁵. The heatmap of genes with the most differential GSEA scores was created using the GenePattern software using the Heat Map Image Module⁶, and Venn diagrams were created using the interactive Venny tool.⁷

Chromatin Immunoprecipitation sequencing (ChIP-seq)

Up to 20 million leukemic cells were crosslinked and lysed using the SimpleChIP kit (Cell Signaling Technology®) according to the manufacturer's recommendations and subsequently sonicated using a Bioruptor sonicator (Diagenode) to generate 150-300 bp fragment size. Next, immunoprecipitation and antibody-protein-DNA precipitation were performed according to the guidelines of the manufacturer.

Antibodies against KMT2A (Bethyl labs; cat.nr. A300-086-A), AFF1 (Abcam; cat.nr. ab31812), H3K4Me3, H3K27Ac and H3K79Me2 (Diagenode; cat. nrs. pAB-003-050, C15410196 and C15410051) were used. ChIP-seq DNA libraries were generated using the NEB Next Ultra DNA library preparation kit for Illumina (New England Biolabs) according to the manufacturer's recommendations and sequenced paired-end on a NextSeq® 500 System (Illumina®). Following QC analysis by fastQC (<https://www.bioinformatics.babraham.ac.uk/projects/fastqc/>), reads were trimmed using trim_galore (https://www.bioinformatics.babraham.ac.uk/projects/trim_galore/). Reads were then aligned to the human genome, hg19, with bowtie2.⁸ Duplicate reads were removed using DeepTools alignmentSieve, with the flag `-ignore duplicates`.⁹ BigWigs were generated using the DeepTools bamCoverage command, with the flags `-extendReads -normalize using RPKM`, and visualized in the UCSC genome browser.¹⁰ Peaks were called using the Homer tool findPeaks,¹¹ with the input track provided for background correction, using the `-style histone` flag. KMT2A::AFF1 peaks were generated from the overlap of KMT2A and AFF1 peaks, after which overlapping peaks closer than 5 kb were stitched together. Heatmaps were generated using DeepTools.

Assay for Transposase-Accessible Chromatin sequencing (ATAC-seq)

100.000 SEM cells or SEM^{PINO_RES} cells were viable sent in duplicate and further processed by Active Motif. Samples were sequenced on a NextSeq® 500 System (Illumina®) and analyzed as for ChIP-seq, except that duplicate read removal with DeepTools alignmentSieve included the –ATAC shift flag to correct for adapter insertion.

Flow cytometry (FACS) analysis

All FACS analysis experiments were performed on a CytoFlex Flow Cytometer (Beckman Coulter). For flow cytometric assays determining the protein expression cells were blocked with Human TruStain FcX™ (BioLegend) and subsequently labeled with ViaKrome 808 (Beckman Coulter) to select for viable cells, as well as with CD133(PROM1)-FITC, CD33-APC (BD Biosciences, cat. nrs. 567029, 551378) or CD85k(LILRB4)-PE (BioLegend, cat. nr. 333008) according to the manufacturer's recommendation. Raw CytoFLEX data were processed using the CytExpert software version2.3 (Beckman Coulter) or FlowJo™ software version7.6.5 (BD Biosciences).

RNA interference

Electroporation was performed in 400 µL culture medium without antibiotics containing 4×10^6 /mL cells in 4 mm cuvettes at 350 V for 10 milliseconds using a Gene Pulser Xcell™ Electroporation System (Bio-Rad) in the presence of 10 nM siRNAs directed against *DOT1L*, *HOXA9* (siGENOME SMARTpool Dharmacon™/Horizon),

KMT2A::AFF1 (named siMA6) targeting the *KMT2A* exon 9–*AFF1* exon 4 *KMT2A::AFF1* fusion site characteristic for SEM cells¹² or AML1-MTG8 fusion gene (named siAGF1), not present in *KMT2A*-rearranged acute leukemias, as non-targeting control.¹³

Quantitative reverse-transcription PCR analysis

RNA, isolated using the RNeasy Mini Kit (QIAGEN), was reverse transcribed and the obtained cDNA was used for quantitative reverse-transcription PCR (qRT-PCR) analysis as described previously,¹⁴ and is described in the supplemental methods. The sequences of the used primers were designed to detect the target genes *KM2TA::AFF1* (forward: 5'-ACAGAAAAAGTGG CTCCCCG-3'; reverse: 5'-TATTGCTGTCAAAGGAGGCGG-3'),¹ *DOT1L* (forward 5'-GGCCCAGATGATTGATGAGA-3'; reverse 5'-CATTCATCCACTTCCTGAACTC-3'), *HOXA9* (forward 5'-GCGCCTTCTCTGAAAAC-3'; reverse 5'-TGCTCGGTCTTT GTTGA), and the references genes *B2M* (forward 5'-ATGCGGCATCTTCAA-3'; reverse 5'-GGAGCATTCACTTGTCTT-3'), and *GUS* (forward: 5'-GCGCCGACTT CTCTG-3'; reverse: 5'-CTCCGGCAGGATCAC-3').

Mod Spec® mass spectrometry

The quantification of >80 different histone post-translational modifications (PTMs) by Mod Spec® mass spectrometry was outsourced to Active Motif (Mod Spec® Service: <https://www.activemotif.com/catalog/1235/mod-spec>). For this, histones were acid extracted, derivatized via propionylation and digested with trypsin. Newly formed N-termini were propionylated as previously described,¹⁵ and measured 3 separate times using the Thermo Scientific TSQ Quantum Ultra mass spectrometer coupled with an

UltiMate 3000 Dionex nano-liquid chromatography system. The data was quantified using Skyline,¹⁶ and represents the percent of each modification within the total pool of that amino acid residue.

High-throughput drug screening

For high-throughput drug screening, leukemic cells were semi-automatically seeded in 384-well plates at 10,000 cells/well (Corning) using a MultidropTM dispenser (Thermo Fisher Scientific). Drugs were added using a SciClone ALH3000 liquid handling robot (Caliper Life Sciences) to a final concentration of 1 nM, 10 nM, 100 nM, or 1000 nM. All tested drugs came from commercially available drug libraries, including the Enzo SCREEN-WELL[®] epigenetics library (BML-2836, 41 compounds; Enzo Life Sciences), the Cayman epigenetics library (11076, 64 compounds; Cayman Chemical), the Sequoia FDA approved anti-neoplastic drug library (165 compounds Sequoia Research Products), the MCE Cell Cycle/DNA Damage Compound Library (HY-L0043; 387 compounds; MedChem Express) and an additional 22 compounds of interest (purchased from Selleckchem). All compounds tested are listed in Supplementary Table 1. Cell viability upon drug exposure was assessed by 4-day thiazolyl blue tetrazolium bromide (MTT; Sigma-Aldrich) assays as previously described,¹⁷ and normalized against DMSO (i.e., no drug) controls. Normalized cell viabilities at the various concentrations of each compound were used to calculate IC₅₀ values using GraphPad Prism8, version 8.3.4.

Cell viability assays

For the validation of the hits from the high-throughput drug screening as well as evaluation of the chemotherapeutic agents currently used in the treatment of *KMT2A*-rearranged infant ALL cell viability assays were performed using flow cytometry with the 7-AAD viability dye (BioLegend) to discriminate between viable and dead cells. Expanded dose response curves were made using the Tecan D300 Digital Dispenser (Tecan) to dispense venetoclax, prednisolone, dexamethasone, vincristine, daunorubicin, cladribine, cytarabine (all purchased from Selleckchem), and L-asparaginase (Oncospar).

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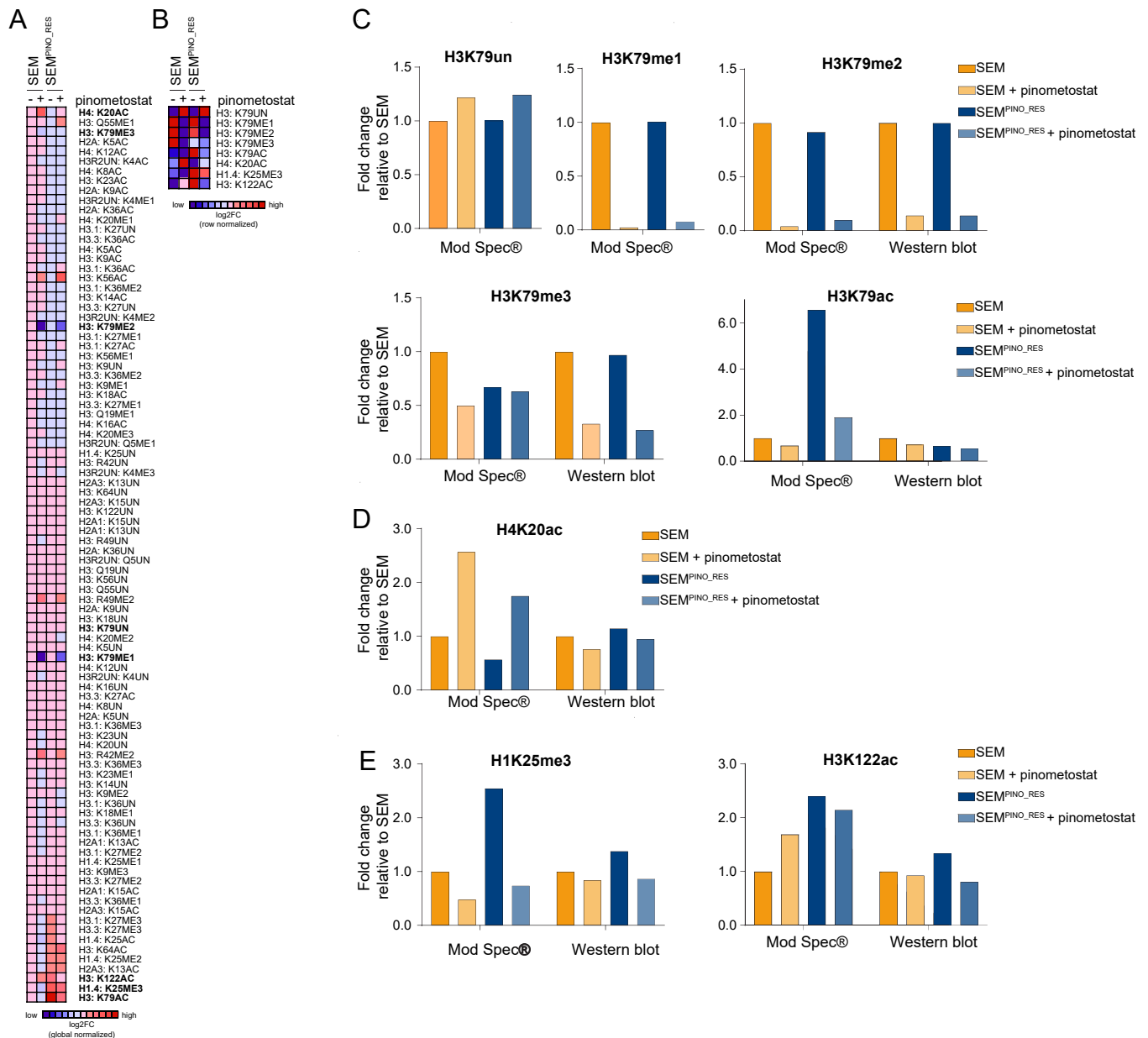


Figure S1: Global histone modification differences assessment. Related to Figure 1

Mod Spec®, a mass spectrometry-based measurement for the relative abundance of over 80 distinct histone marks, was performed on SEM and SEM^{PINO_RES} in the presence and absence of pinometostat.

A. Heatmap showing the log₂ fold change (log₂FC) comparisons of histone modification level of SEM + 7 days 50μM pinometostat, SEM^{PINO_RES} or SEM^{PINO_RES} + 7 days 50μM pinometostat, relative to SEM, based on the percentages of each histone mark modification within the total pool of modifications measured by Mod Spec® at a specific amino acid residue, ranked from lowest to highest log₂FC with global normalization. This analysis confirmed no differences in the levels of H3K79 mono-, di-, and tri-methylation (i.e., H3K79me1, H3K79me2, and H3K79me3, respectively) between SEM and SEM^{PINO_RES}, and showed equal reduction of these histone marks upon pinometostat exposure in both cell lines. In addition, some histone modifications appeared to be present at differential levels between SEM and SEM^{PINO_RES}, including higher levels of histone 4 lysine 20 acetylation (H4K20ac) in SEM, and higher levels of histone 1 lysine 25 tri-methylation (H1K25me3) and histone 3 lysine 122 acetylation (H3K122ac) in SEM^{PINO_RES}. **B.** Heatmap showing the log₂FC comparisons of all H3K79 histone modifications measured by Mod Spec® of SEM + 7 days 50μM pinometostat, SEM^{PINO_RES} or SEM^{PINO_RES} + 7 days 50μM pinometostat, relative to SEM, as well as the histone modifications showing the highest log₂FC, H4:K20ac, H1K25me3 and H3:K122ac, with row normalization. **C.** Fold change of histone modification level of SEM + 7 days 50μM pinometostat, SEM^{PINO_RES} or SEM^{PINO_RES} + 7 days 50μM pinometostat relative to the level in SEM, measured by Mod Spec® or by immunoblot analysis for all H3K79 histone modifications. **D.** fold change of histone modification level of SEM + 7 days 50μM pinometostat, SEM^{PINO_RES} or SEM^{PINO_RES} + 7 days 50μM pinometostat compared to the level in SEM, measured by mass spec or by immunoblot analysis for histone modification most reduced in SEM^{PINO_RES} H4K20ac. **E.** fold change of histone modification level of SEM + 7 days 50μM pinometostat, SEM^{PINO_RES} or SEM^{PINO_RES} + 7 days 50μM pinometostat compared to the level in SEM, measured by mass spec or by immunoblot analysis for the histone modifications most enhanced in SEM^{PINO_RES}, H1K25me3 and H3K122ac. This reveals that the differences found for H4:K20ac, H1K25me3 and H3:K122ac could not be validated by immunoblot analyses. Moreover, these data demonstrated that the global landscape of histone modifications between SEM cells and SEM^{PINO_RES} largely remained similar. The only histone modification that is downregulated in response to pinometostat exposure appeared to be H3K79 methylation, demonstrating the specificity of this agent.

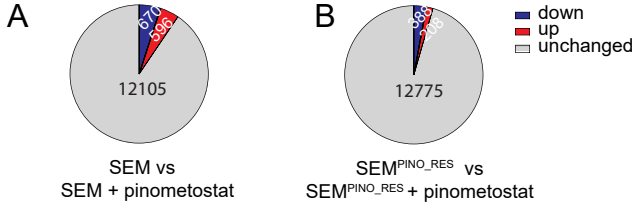


Figure S2: Gene expression comparisons of SEM and SEM^{PINO_RES} treated with pinometostat compared to untreated cells. Related to Figure 2
A-B. Pie charts showing the number of genes that are significantly downregulated (blue), upregulated (red), or remain unchanged (gray) between **A** SEM and SEM treated for 7 days with 50 uM pinometostat and **B** between SEM and SEM^{PINO_RES} treated for 7 days with 50 uM pinometostat, 4 biological replicates each.

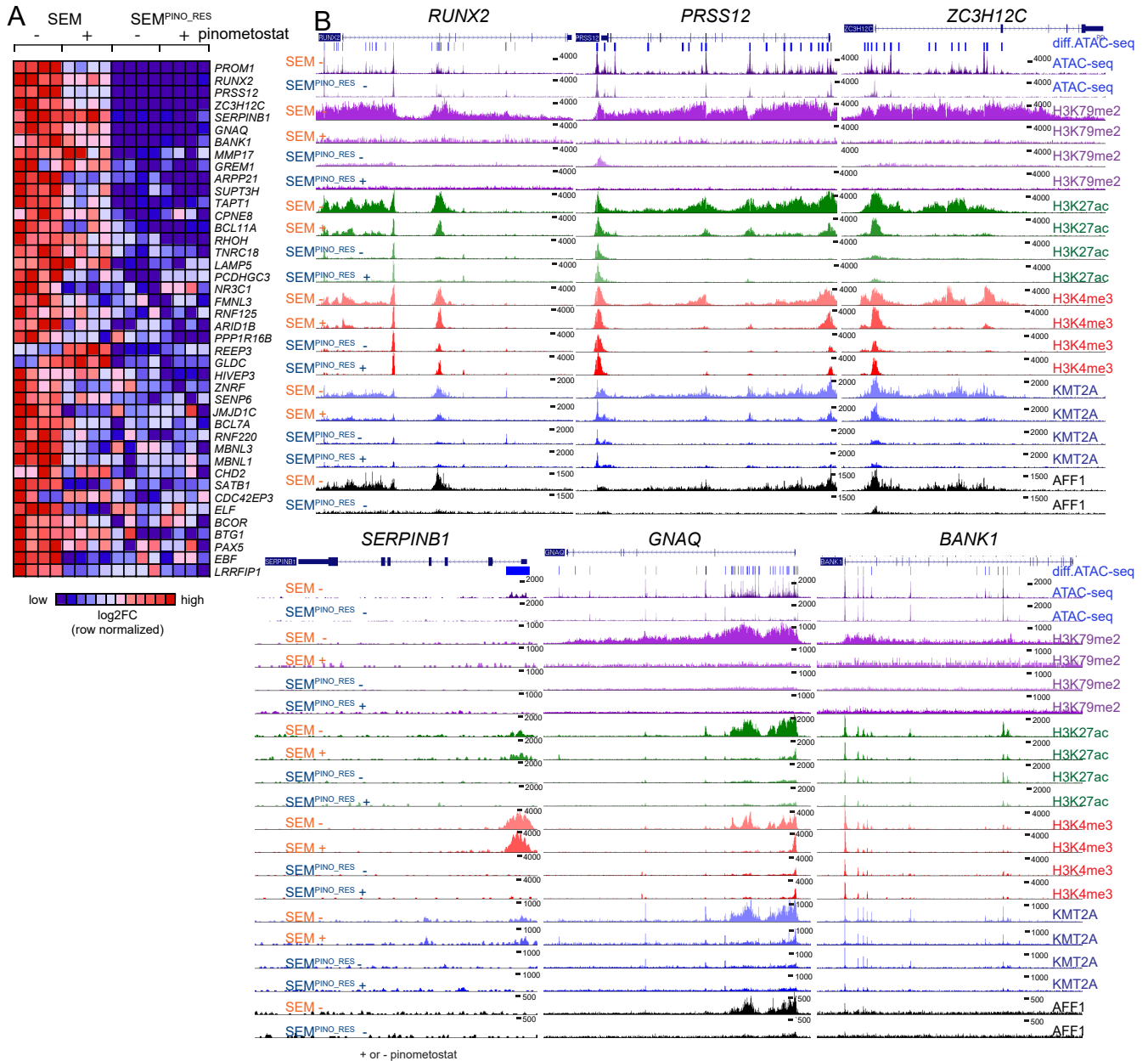


Figure S3: RNA expression in SEM^{PINO_RES} of genes previously associated with KMT2A-rearranged leukemias and/or high levels of H3K79Me2 reduced in SEM^{PINO_RES}. Related to Figure 3

A Heatmap of RNA expression of putative KMT2A fusion target genes downregulated in SEM^{PINO_RES} compared to SEM cells. Normalized counts of RNaseq shown of SEM and SEM^{PINO_RES}, both untreated or treated 7 days with 50µM pinometostat, 4 biological replicates each, mean with standard deviation (SD).

B ATACseq differences between untreated SEM and SEM^{PINO_RES} cells at *PRSS12*, *ZCH12C*, *SERPINB1*, *GNAQ* and *BANK1*. Blue lines indicate significant decrease of chromatin accessibility in SEM^{PINO_RES} cells compared to SEM, grey lines indicate equal chromatin accessibility in both cell lines. 2 biological replicates; ChIPseq tracks showing H3K79me2, H3K27ac, H3K4me3, KMT2A in SEM and SEM^{PINO_RES} cells after 7 days treatment + or - 50µM pinometostat and AFF1 in untreated SEM and SEM^{PINO_RES} cells at genes *PRSS12*, *ZCH12C*, *SERPINB1*, *GNAQ* and *BANK1*

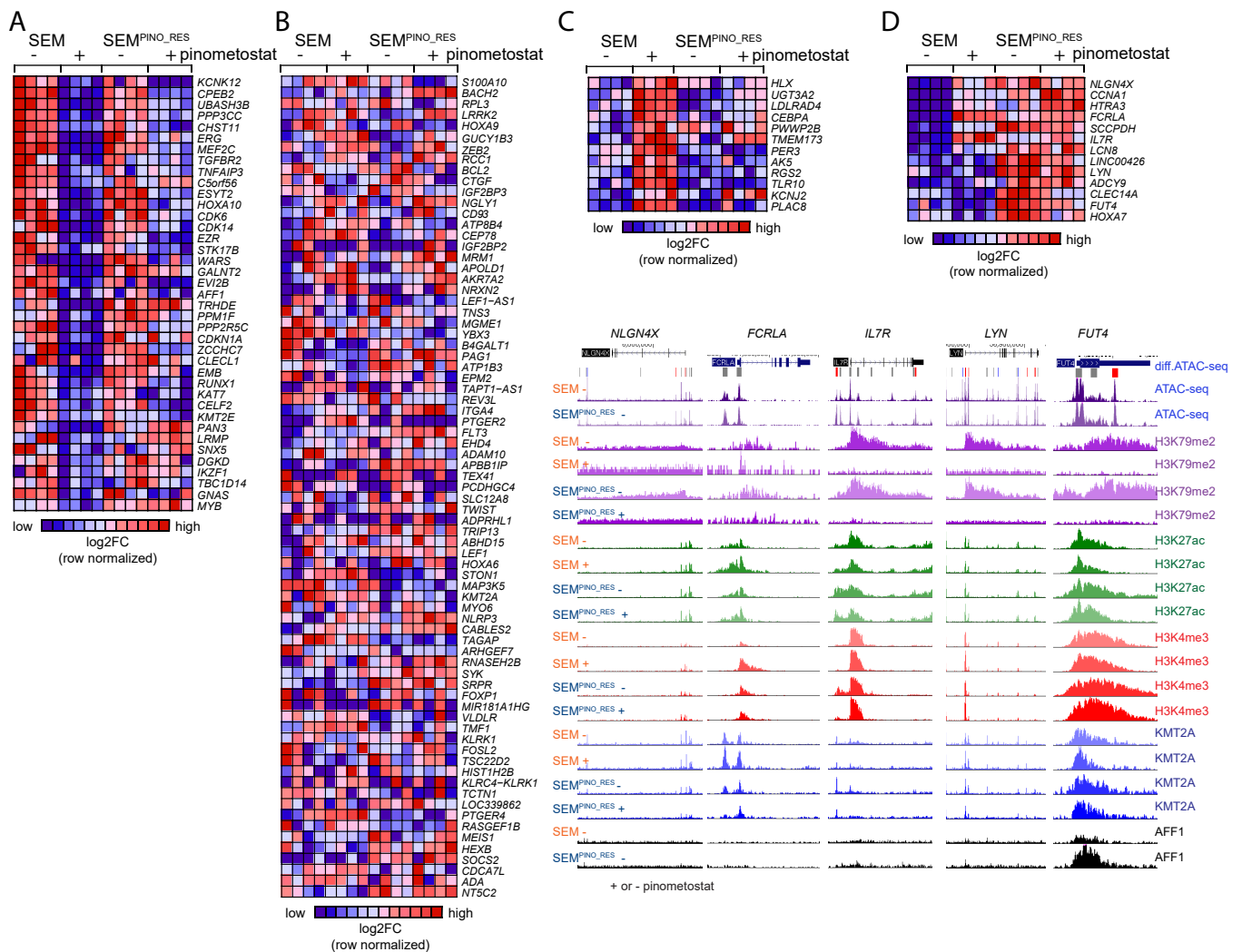


Figure S4: Putative KMT2A fusion target genes with no transcriptional changes or upregulated in SEM^{PINO_RES} compared to SEM. Related to Figure 4

A-D Normalized counts of RNAseq shown of SEM and SEM^{PINO_RES}, both untreated or treated 7 days with 50µM pinometostat, 4 biological replicates each.

A. Heatmap of RNA expression of putative KMT2A fusion target genes with no transcriptional changes between SEM and SEM^{PINO_RES}, yet downregulated in SEM treated with pinometostat compared to untreated SEM cells. **B.** Heatmap of RNA expression of putative KMT2A fusion target genes with no transcriptional changes between SEM and SEM^{PINO_RES} and no differences in SEM treated with pinometostat compared to untreated SEM cells. **C.** Heatmap of RNA expression of putative KMT2A fusion target genes with no transcriptional changes between SEM and SEM^{PINO_RES}, yet upregulated in SEM treated with pinometostat compared to untreated SEM cells. **D.** Heatmap of RNA expression of putative KMT2A fusion target genes upregulated in SEM^{PINO_RES} compared to SEM cells.

E. ATACseq and ChIPseq tracks of SEM and SEM^{PINO_RES} cells for the putative KMT2A fusion target genes significantly upregulated in SEM^{PINO_RES} compared to SEM cells. Blue lines of the ATACseq indicate significant more open chromatin access in SEM compared to SEM^{PINO_RES} cells. 2 biological replicates; ChIPseq tracks show H3K79me2, H3K27ac, H3K4me3, KMT2A in SEM and SEM^{PINO_RES} cells after 7 days treatment + or - 50µM pinometostat and AFF1 in untreated SEM and SEM^{PINO_RES} cells at the putative KMT2A fusion target genes significantly upregulated in SEM^{PINO_RES} compared to SEM cells.

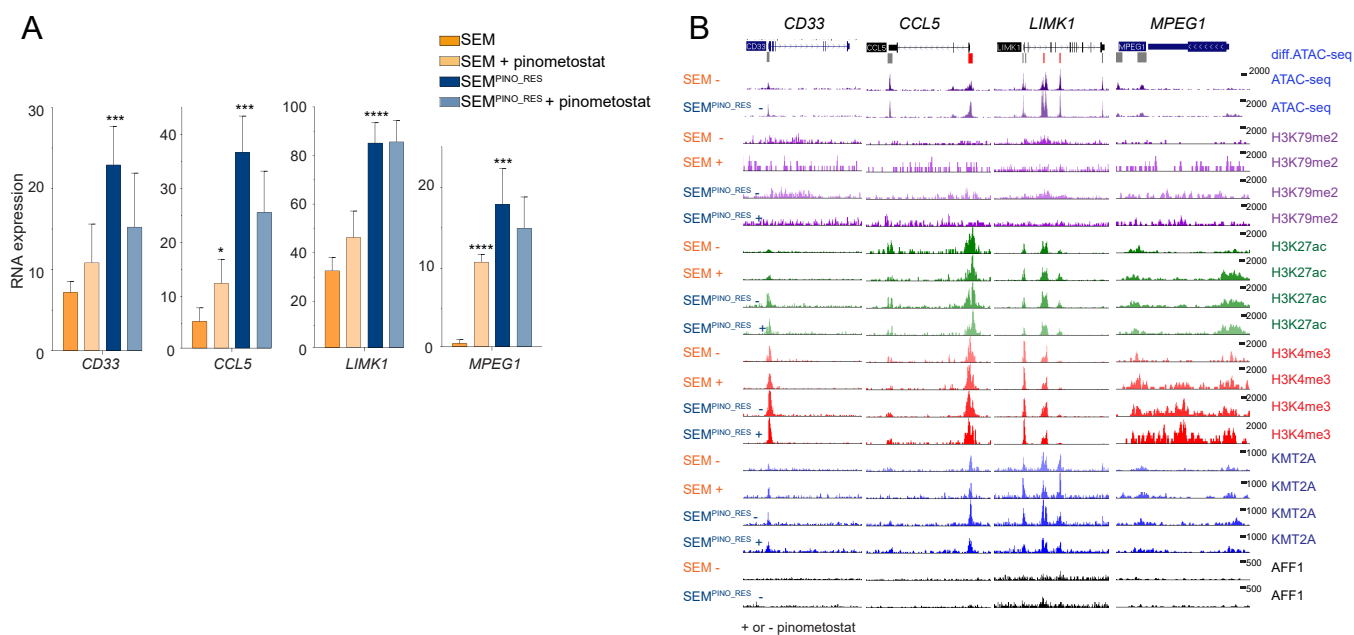


Figure S5: Myeloid associated genes upregulated in SEM^{PINO_RES} compared to SEM. Related to Figure 5

A *CD33*, *CCL5*, *LIMK1* and *MPEG1* RNA expression of SEM and SEM^{PINO_RES} after 7 days treatment + or - 50 μ M pinometostat. Mean of normalized counts of RNAseq data with SD depicted, 4 biological replicates each. *p* values calculated with unpaired t-test, * *p*<0.05, ** *p*<0.005, *** *p*<0.0005, **** *p*<0.0001.

B ATACseq differences between untreated SEM and SEM^{PINO_RES} cells at *CD33*, *CCL5*, *LIMK1* and *MPEG1*. Red lines indicate significant increase of chromatin accessibility in SEM^{PINO_RES} cells compared to SEM, grey lines indicate equal chromatin accessibility in both cell lines. 2 biological replicates; ChIPseq tracks showing H3K79me2, H3K27ac, H3K4me3, KMT2A in SEM and SEM^{PINO_RES} cells after 7 days treatment + or - 50 μ M pinometostat and AFF1 in untreated SEM and SEM^{PINO_RES} cells at genes *CD33*, *CCL5*, *LIMK1* and *MPEG1*.

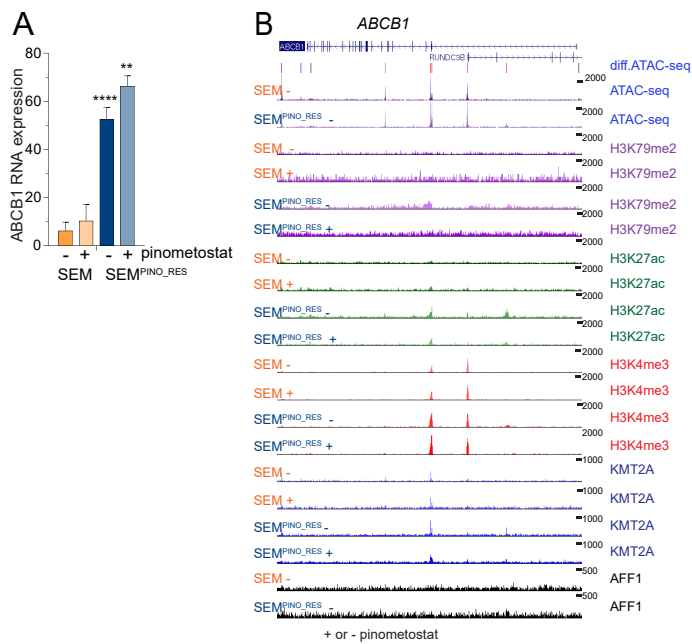


Figure S6: Validation of sensitizing hits nimustine, carmustine and BIX01294 reveals cell line specificity. Related to Figure 6

A. *ABCB1* expression of SEM and SEM^{PINO_RES} after 7 days treatment + or - 50 μ M pinometostat. Mean of normalized counts of RNAseq data with SD depicted, 4 biological replicates each. *p* values calculated with unpaired t-test, * *p*<0.05, * *p*<0.05, ** *p*<0.005, *** *p*<0.0005, **** *p*<0.0001. **B.** ATACseq differences between untreated SEM and SEM^{PINO_RES} cells at *ABCB1*. Red lines indicate significant increase of chromatin accessibility in SEM^{PINO_RES} cells compared to SEM, grey lines indicate equal chromatin accessibility in both cell lines. 2 biological replicates; ChIPseq tracks showing H3K79me2, H3K27ac, H3K4me3, KMT2A in SEM and SEM^{PINO_RES} cells after 7 days treatment + or - 50 μ M pinometostat and AFF1 in untreated SEM and SEM^{PINO_RES} cells at genes *ABCB1*.

GOT2	DYRK1A					GCN1	EDEM1	LGR6	TSC22D3
GPATCH4	DYRK2					GCSAM	EHPB1L1	TRMT1L	LY6E
GPC4	DZIP1					GDF11	EIF1	TSPAN1	LY86
GPM6B	EBF1					GIGYF1	EIF2S3	UBR7	MACROD1
GPR153	ECHDC3					GIMAP2	EIF4EBP1	TTI1	MAG1
GPR173	EFNB1					GLCC11	ELF1	ASCC3	CSRNP1
GPR85	EIF4A2					GLIPR1	ELK1	UHRF1	MAPK3
GRINA	EIF4EBP3					GMCL1	EMB	USF1	PPP1R16B
GSE1	ELF1					GNA11	EMP1	USP28	ARRDC3
GSPT1	ELOVL6					GNPAT	EMP3	PNRC2	MEF2C
GSTK1	EMP1					GOLGA4	ENO1	WDR5B	MGAT5
GSTZ1	ENC1					GPD2	EPT1	XPO7	MIF
GTF3A	ENO1					GPLD1	ERBB2IP	XRCC2	MIR3654
GUSB	ENO2					GPM6B	ERG	ZDHHC6	MIR4426
GYG1	ENTPD1					GPR146	ESYT1	ZFC3H1	MIR663AHG
HAP1	EPHA3					GPR85	ESYT2	ZFP30	MLLT11
HDAC9	EPHB4					GRAMD4	ETF1	RRM2	MMP14
HDGF	ERBB2IP					GRID1	ETS2	ZNF738	MRPL23
HDHD1	ESD					GTF2I	ETV5	ZNF780B	MTMR14
HENMT1	ESYT1					GUCY1A2	EVI2B	ZNF782	MXD4
HGSNAT	ETS2					GYG1	EVL		MYL12A
HHLA3	ETV4					H19	EZR		MYLK
HIRA	ETV5					HAL	FAM101B		MZT2B
HLA-A	EYA1					KIAA1211	FAM107B		NAB2
HLA-B	EYA4					HDAC7	FAM117A		NACA
HLA-C	FADS1					HEATR5A	FAM118A		NACA2
HMMR	FAM101B					HECW1	FAM20B		VAT1
HMOX2	FAM111B					HELLS	FAM214B		NIPSNAP1
HNRNPAB	FAM117B					HHLA3	FAM35A		NMB
HOXA7	FAM120C					HIBCH	FAM3C		NME4
HR	FAM129A					HILPDA	FAM49A		CRMP1
HSPB1	FAM129B					HK1	FAM60A		NTN3
HSF1	FAM134B					SLC12A7	FAM8A1		MEF2A
HSPA8	FAM134C					HLX	FBXO11		ORAI2
HSPB1	FAM162A					HMMR	FBXO31		P2RX1
HSPE1	FAM171B					HNRNPH1	FBXO7		PACS2
HSPH1	FAM53B					HPGD	FCGR7		PAXIP1-AS1
HTATIP2	FAM63B					HPSE2	FERMT3		PDF
HTR7	FAM89A					HS6ST1	FGFR1		PK1
HTRA3	FAM90A1					HSP90AA1	FHL1		PECAM1
HYAL3	FAN1					HSPA4L	FKBP8		PEL1
ICAM3	FARP1					HSPA8	FLJ10038		PENT
ID2	FASN					HSPH1	FMNL2		PER3
IFI30	FBXO16					HTRA3	FMNL3		PEX10
IFRD1	FBXO44					IDH1	FNBP1		HIVEP3
IGFBP7	FGFBP2					IER3	FNDC3B		PHLPP1
IGLL1	FGFR1					IIFT172	FOXN3		PIK3IP1
IKZF2	FHL1					IGIP	FSCN1		PITPNC1
IL12RB1	FKBP15					IKBKAP	FUT4		PIWIL4
IL1B	FLNA					IKZF2	G3BP2		ADGRL3
IL7R	FMNL3					IL7R	GAB2		PLCB1
IMPDH1	FNIP2					ILDR2	GALNT2		PLD4
INPP5D	FOXF2					ILK	GARS		PLEKHO1
IPCEF1	FOXN2					IINCENP	GAS7		PLP2
IRAK1	FOXO1					IINSIG2	GDPD5		POLR2I
IRF5	FOXO3					IINTS8	GFPT1		PPHLN1
ISG20	FOXP4					IPO13	GLG1		PM1H
ITGA11	FRMPD1					IQSEC1	GMFB		PIK3C2B
ITGAX	FSCN1					ISCU	GMFG		PPP1R15A
ITPKA	FSTL1					ITGA9	GMPS		PPP2R5C
KAT2A	FTH1					ITGAL	GNA12		PPP3CC
KCNMB2	FUT11					JMJD1C-AS	GNAI1		PRKAB1
KCNMB3	FYN					KANK2	GNAQ		PRKCE
KIAA1549	GAB2					KANSL1L	GNAS		PROSER1
KIF26B	GABPA					KCNJ2	GNB1		PRR7
KIR3DX1	GALM					KCNMB2	GNB4		PRSS57
KLC2	GAPDH					KCNMB3	GNG2		TXNIP
KLHL5	GATM					KCNQ3	GNL1		PTPN14
KLK1	GBE1					KDM2A	GOLPH3		PTPN7
LAMTOR4	GGT7					CLCN5	GOT1		PTPRK
LAPTM4B	GINS3					KIAA0125	GPCPD1		PVRL2
LARP1	GJC1					KIAA0907	GPSM3		PYCR1
LAS1L	GLDC					KIAA0922	GPT2		QSOX1
LAT2	GM2A					KIAA1456	GRB2		R3HCC1L
LCN6	GNAI3					KIF15	GRK6		RAB27A
LCN8	GNAQ					KIF20A	GSN		RABGAP1L
LDB3	GNE					KIF21A	GTF3C4		RANBP9
LGALS9	GNG2					KIFC1	GYPC		RASSF3
LGR5	GPC1					VAT1L	H1FX		RBM3
LILRA2	GPCPD1					LAIR1	H3F3B		RCBTB2
LILRB4	GPI					LAMA2	HAR1A		RERE
LIMK1	GPR155					LDLRAD4	HBEGF		RGS1
LINC00426	GPR63					LFNG	HDAC9		RGS13
LINC00462	GPRC5C					LG12	HES6		GPCPD1
LINC00997	GRB10					LGR4	HEXA		FHL1
LINC00998	GREM1					LILRB4	HIF1A		RHOF
LMO2	GSN					LIMD1	HIPK3		PGK1
OC10192884	GSTA4					LIX1L	HIST1H4H		RNASET2
LOC646762	GYPC					LMO7	HIVEP2		RNF11
LONRF1	H1FX					LOC1001311	HLA-A		RNF126
LRFN1	HACD2					LOC101927	HLA-DOA		RNF135
LRRC15	HACD4					LOC153684	HLA-DQB1		ROBO1
LRWD1	HACE1					LOC730101	HLA-DRB1		RPL10
LSM3	HADH					LPIN2	HLA-DRB6		RPL10A
LTC4S	HCFC2					LRFN1	HLA-E		RPL11
LTK	HDAC4					LRP11	HMGA1		RPL12
LY86	HEG1					LRRC27	HMGA2		RPL13
LYAR	HES6					LRRC1	HMHA1		RPL15
LYN	HEXIM1					LTBP1	HNRNPDL		RPL18
LYZ	HINT3					LTBP2	HOMER1		RPL18A
MACC1	HIP1					LUC7L	HOXA10		RPL22
MAD1L1	HIPK1					LUC7L3	HOXA7		RPL23

MAF1	HIPK3					LYRM7	HSD17B12	RPL24
MAG1	HIVEP3					LYST	HSPA1B	RPL29
MAN1C1	HK2					LYZ	HSPA6	RPL3
MAP2K3	HLA-DMA					IMACC1	HSPA9	RPL30
MAPT	HLA-DMB					MAGEF1	HSPG2	RPL31
MARS	HLA-DOA					MAGEH1	HUNK	RPL32
MCM7	HMG2					MAG1	HVCN1	RPL34
MCOLN2	HMG3					MAG3	ICAM3	RPL35
MCTP2	HMGCR					MARK1	IGF1R	RPL36
MDH2	HMG2					MAST3	IGFBP2	RPL37
MEPCE	HOMER2					MBTPS1	IKZF1	RPL4
MGRN1	HOPX					MCOLN2	IL2RG	RPL5
MICALL1	HOBX7					ME3	IMPAD1	RPLP2
MKRN1	HSD17B12					METTL25	INHBE	RPS11
MLF2	HSPA13					METTL3	INSR	RPS15
MMP24-AS1	HSPA1A					METTL7A	IRAK1	RPS2
MOGS	HSPA1B					MEX3A	IRF1	RPS23
MON1A	HSPA6					MGAT3	ITGA2	RPS24
MPEG1	HSPB7					MINK1	ITGA6	RPS4X
MREG	HSPG2					MIS18BP1	ITGB5	RREB1
MRPL12	HUNK					MITF	ITPR1	RSL1D1
MRPL28	IFITM1					MKI67	ITPRIP	RUFY3
MRPL33	IGF1R					MLEC	IZUMO4	RUNX1
MRPS17	IGFBP2					MLLT4	JADE3	DDAH2
MRPS33	IKZF3					MME	JAK1	S100A1
MS4A1	IKZF4					BHLHE41	JMJD1C	S100A10
MTIF2	IL1RAP					MOGS	JOSD1	SAMD4A
MTIF3	ING5					MPEG1	JUN	HLA-DOA
MTMR11	IQGAP1					MPHOSPH1	JUND	SEPN1
MYBBP1A	IQGAP2					MRE11A	JUP	HOMER2
MYEOV2	IRS1					MRPL24	KAT7	SH2D2A
MYLK	IRS2					MSL3	KCNK12	SH3D21
MYOM1	ITGA2					MTIF3	KIAA0195	SLA2
MZB1	ITGA2B					MYEF2	KIAA0355	RHOH
NAMPT	ITGB1					MYLK3	KIF21B	SLC15A3
NCF4	ITGB2					MYOF	KLF10	CCDC69
NDST1	ITGB5					MYOM1	KLF12	SLC25A26
NDUFAF3	ITGB8					NASP	KLF6	SLC25A29
NDUFAF6	ITM2C					NBPF1	KLF9	SLC2A4RG
NDUFB2	IZUMO4					NCAPD2	KLHL15	SLC38A1
NES	JAK1					NCAPD3	KLRF2	SLC39A8
NEURL1B	JAM2					NCBP1	KMT2E	SLC3A2
NFIB	JARID2					NDFIP1	KPNA1	SLC44A2
NFKB2	JMJD1C					NDRG1	KPNA4	SLC52A2
NHP2L1	JUN					NEURL1B	KSR1	SLC7A7
NIN1	JUP					NEURL4	LAPTM4B	SMARCA2
NKD2	KCNMA1					NFE2	LAPTM5	SMDT1
NLGN4X	KCTD12					NKD2	LCK	SMYD3
NLRC5	KCTD18					NKTR	LCP1	SNX8
NME1	KDM3A					NLGN4X	LGALS3BP	H1FX
NOG	KDM4B					NOG	LIMK2	SOX4
NOLC1	KDM4C					NPEPPS	LINC00938	SPHK1
NOM1	KIAA0195					NR2F6	LINC01215	SPP1
NOP16	KIAA1033					NRCAM	LINC01237	SRPK3
NOP2	KIAA1211					NREP	LINC01534	ST3GAL4
NPM3	KIF3C					NSUN6	LINC01578	ST6GAL1
NQO1	KIF7					NUDT9	LINC-PINT	STC2
NR3C2	KLF13					NUP210	LITAF	STK17B
NR4A1	KLF3					OMA1	LOC101927497	SUN2
NRAP	KLF6					OPN3	LOC102546299	SYT1
NSMAF	KLF7					OSTM1	LOC728175	SYTL1
NSMF	KLF9					OXTR	LPAR6	GAB2
NSUN5	KLHL14					PAQR3	LPIN1	TAF1D
NUB1	KLHL15					PARP2	LPXN	TAGLN2
NUDT19	KLHL24					PATZ1	LRIG1	TBC1D15
NUP205	KLHL9					PAXBP1	LRMP	TCF12
OAF	KLRF2					PCDH18	LRP1	TEF
OAS2	KRAS					PCDH9	LRRRC8C	TIE1
ODC1	KRBA1					PDCC7	LRRFIP1	TMSB4X
ORC5	KSR1					PDGFRB	LRRFIP2	TNFRSF1B
OSBP2	LAMP5					PDIA4	MAP1LC3B	TNKS1BP1
OSCAR	LASP1					PER3	MAP2K2	TOMM20
P2RX7	LAT					PEX3	MAP3K2	TPD52
PARP12	LBH					PFKFB3	MAP4K4	TPM4
PAXIP1	LCK					PFKFB4	MAP7D1	TRIB3
PCNXL3	LDOC1L					PFN2	MAPKAPK2	TRIM52-AS1
PDAP1	LGR6					PGD	MARCKSL1	TSKU
PGCD5	LINC01108					PGM2	MBNL1	TTF1
PDIA4	LINC01534					PHF19	MBNL3	UBASH3B
PDPN	LINC01578					PHLPP2	MBP	UBXN6
PDZD7	LITAF					PIF1	MDK	UCN2
PEX3	LMAN1					PIGF	MED12L	ENO1
PGP	LMNB1					PIM2	MED13L	UNC93B1
PHB	LNPEP					PIP5K1B	MEF2A	UXS1
PIK3CG	OC100129034					PLA2G12A	MEF2C	VASP
PITPNA	OC101928358					PLAC8	MEGF10	CD109
PITPNM2	LOC93622					PLCB1	MF12	VPS51
PIWIL4	LPAR1					PLD3	MFN2	HDAC9
PLCB1	LPCAT1					PLD4	MGAT5	VWA5A
PLD4	LRIG1					PLEKHB2	MICAL1	WARS
PLEK	LRP1					PLOD1	MIF	WASF3
PLEKHG3	LRP5					PLXND1	MOAP1	YDJC
PLOD3	LRRC2					PODXL	MPC1	ZMIZ1
PMPCB	LRRFIP1					POLR2H	MPP6	ZCCHC7
PMS2P1	LSP1					PPP19A	MSN	ZFH33
PNKD	LXN					PPP2R1B	MTHFD1L	LRRFIP1
PODXL	MAML2					PPP2R5D	MTMR10	ZNF787
POLR1D	MAML3					PPWD1	MTMR12	ZYX
POLR2I	MAN2A1					PRDM11	MUL1	
POLR2J	MAP4K5					PRDM8	MXRA7	
POLR3H	MAPK14					PREPL	MYB	

POM121	MARCHF1					PRICKLE1	MYBL2
POMP	MARCKS					PRIMPOL	MYH9
PON2	MARCKSL1					PRKAR2B	MYL12A
POP7	MBNL1					PRKCB	MYL12B
POR	MBNL3					PRKOD	MYO7B
POU2AF1	MCAM					PRKG1	N4BP3
PPHLN1	MDGA2					PRKX	NAA25
PIIB	MDK					PRKXP1	NAB2
PPM1G	MED12L					PRPF38B	NBEAL2
PPM1H	MED13					PRRC2A	NCF1B
PPP1R35	MED13L					PTPN12	NCK2
PPP2R4	MEF2A					PTX3	NEK6
PPRC1	MEGF6					PWWP2B	NFATC3
PPT1	MEGF9					PYGL	NFIL3
PRKAR2B	MESP1					PYGO1	NIPA1
PRKCD	METRN					RAD54L	NIPA2
PRKX	MFAP3L					RAPGEF2	NOP10
PSMB8	MFGE8					RASGRP2	NR1D2
PSMB9	MF12					RASSF4	NR1H2
PSMC2	MFSD6					RBM4B	NR3C1
PSME2	MGMT					RBM5	NRAS
PSME3	MIDN					RCBTB1	NRSN2
PSMG1	MIR210HG					RCCD1	OAS3
PSPH	MLC1					REPIN1	OAZ1
PTCRA	MMP17					RFC4	OGFRL1
PTGES2	MOB3A					RFC5	OPTN
PTPN12	MPC1					RGMA	ORAI2
PTPN7	MRC2					RGS2	OSBPL8
PTPRK	MTFR1L					RGS4	P2RY11
PTRRU	MTMR10					RHOBTB2	PAN3
PTRH2	MTMR12					RIMBP3	PAQR4
PUS7	MUL1					RMND5B	PARVG
PYCR1	MVB12B					RNF144A	PBX3
PYGL	MXRA8					RNF170	PCBP4
RAB31	MYC					RNF20	PCDHGC3
RABEP1	MYH10					RORA	PCK2
RABGAP1L	MYO15B					RPAP1	PDE7A
RAG2	N4BP2					RPGRIP1L	PDLIM7
RAP1GAP2	NAP1L5					P4HA1	PELI1
RAPGEF3	NCK2					RUFY1	PELI2
RASGRP2	NCR3LG1					RUNX3	PER2
RBM28	NDRG1					S100A4	PEX10
RCCD1	NDUFA6					SAFB	PGK1
REEP4	NEDD4L					SAMD9L	PHGDH
REPIN1	NEK6					SAMHD1	PHIP
RFC3	NEK7					SAPCD2	PHLPP1
RFX5	NELL1					SART3	PI16
RFXAP	NELL2					SCAMP1	PI4KAP2
RHOC	NFATC3					SCCPDH	PIK3C2B
RNF170	NFIC					SDCCAG8	PIK3CG
RNFT1	NFYA					SEL1L3	PIP4K2A
RNH1	NHSL1					SELPLG	PITPNC1
ROMO1	NIPA1					SEMA4B	PKDCC
RPP38	NKX3-1					SEMA4C	PLCH1
RPS6KA5	NPC1					REEP3	PLEKHO1
RRS1	NPR1					SETD1B	PLXNC1
RSBN1L	NPW					SFR1	POMP
RTCB	NR2C2					SFXN2	PPM1A
S100A11	NR3C1					SGOL2	PPM1F
SAPCD2	NRSN2					SH2D3C	PPP1R15A
SBDS	NUCB2					CD38	PPP1R16B
SCARB1	NUDT10					SHISA2	PPP2R5C
SCARF1	OAS3					SIGLEC10	PPP3CA
SCCPDH	OCIA2					SKP2	PPP3CC
SCYL1	OPHN1					SLA	PPP3R1
SDR39U1	OSBPL8					CDCA3	PPP4R1
SEC11A	OTUD1					SLC16A10	PPP6R1
SEL1L3	P4HA1					SLC25A25-A	PRDX1
SEPTIN10	PABPC4L					SLC25A30	PRKAA1
SERPINB12	PALLD					SLC25A41	PRKAB1
SFXN2	PARD6G					SLC26A9	PRKCE
SFXN3	PARP15					SLC27A4	PRKCQ
SGCE	PAX5					HK2	PRKD2
SH3BGR1	PCBP4					SLC2A9	PRNP
SH3TC1	PCDHGA11					SLC30A4	PROM1
SLA	PCDHGA12					SLC40A1	PRSS12
SLC12A9	PCDHGC3					SLC48A1	PSAP
SLC25A13	PCED1A					SLC4A4	PSAT1
SLC25A22	PCGF2					SLC4A8	PSMB10
SLC25A23	PCGF6					SLC5A3	PSMD7
SLC25A32	PCYT1B					SLC5A6	PSME4
SLC25A41	PDGFD					SLC8A1	PTBP3
SLC29A1	PDIK1L					SLIT2	PTGS1
SLC35B4	PDK3					SLITRK6	PTK2
SLC35C1	PELI2					SMAD3	PTP4A3
SLC35C2	PFKL					SMC1A	PTPN1
SLC39A13	PGBD5					SMIM14	PTPN7
SLC39A14	PGK1					SNCB	PTPN9
SLC48A1	PGM1					SNRNP40	PVT1
SLC4A2	PHF14					SNTB2	PWAR5
SLC4A8	PHF2					SORBS2	PXK
SLC52A2	PHIP					SORL1	PYCR1
SLC5A6	PHKB					GSTCD	R3HDM4
SLC7A6	PIK3C2B					SPAG5	RABGAP1L
SLC7A7	PIK3R6					SPDL1	RAI1
SMAD3	PIM1					SPIB	RAP1B
SMIM3	PKM					SPOCK3	RASA3
SND1	PLAUR					SPP1	RASSF1
SNHG6	PLCB2					SPTLC3	RASSF3
SNX14	PLCG1					SRGAP3	RBM3
SOX4	PLCH1					SRGN	RBM38

SPA17	PLEKHB1					SRI	RBMS1
SPG20	PLOD2					SRSF1	RCBTB2
SPIRE1	PLXNA1					SSBP2	RDX
SPRYD3	PLXNB1					ST3GAL6	RELB
SPTBN2	PLXNB2					STAU2	RERE
SRGN	PNRC1					STEAP3	RFTN1
SRI	PNRC2					STIP1	RGL1
SRM	PPARA					STRA13	RGS1
SRPK2	PPFIA4					SUSD6	RHOA
SSBP1	PPM1M					SYNPO	RHOB
STAG3L2	PPP1CB					TADA2A	RICTOR
STAU2	PPP1R16B					TAF1A	RIMS3
STEAP3	PPP3CA					TBC1D30	RLTPR
STIM2	PRDX2					TBC1D9	RMND5A
STS	PREX1					TBCCD1	RNASET2
STYXL1	PRKAA1					TBCK	RNF11
SUOX	PRKCQ					TCOF1	RNF139
SUSD6	PROM1					TCONS_000	RNF187
SYNGR2	PRSS12					TECPR1	RNF213
SYNPO2L	PRUNE2					TENM3	RNF220
SYVN1	PSD3					TENM4	ROBO1
TAF6	PSIP1					TET2	RPL10
TAP2	PTBP3					ZNF395	RPL22
TBL2	PTCH1					TFRC	RPL4
TCL1A	PTK7					TGFA	RPS6KA3
TCOF1	PTP4A3					THSD7A	RRAS2
TEC	PTPRJ					TIMMDC1	RUNX1
TECPR1	PTPRR					TJP2	RUNX2
TENM4	PVT1					TLR10	SARS
TES	PWARS					TLR4	SATB1
TEX19	PXDN					TMEM106C	SBF2-AS1
TEX40	QKI					TMEM119	SCPEP1
TIE1	RAB28					TMEM165	SELT
TIGD5	RAB34					TMEM170B	SEMA3A
TIMP2	RAI1					TMEM173	SENP2
TMCC1-AS1	RAI14					TMEM50B	SEPTIN1
TMEM119	RAPGEF6					TOB1-AS1	SEPTIN6
TMEM120B	RASAL2					TONSL	SEPTIN9
TMEM147	RBSN					TOP1	SERINC5
TMEM209	RC3H2					TOP2A	SERPINB8
TMEM248	RCHY1					TP53111	SESN2
TMEM8A	RCSD1					TPP2	SESTD1
TNFRSF8	RDX					TRIM25	SETX
TNPO3	REC8					TRIM4	SH2D4B
TOB2P1	REEP3					TRIM56	SH3BP2
TOP1MT	REBP					TRIM58	SH3GL1
TPRN	RHBDD1					TRMU	SH3KBP1
TRAIIP	RHOA					TSPAN12	SHMT2
TRAP1	RHOB					TST	SHOC2
TRIM24	RHOBTB1					TTC21B	SIAH2
TRIM72	RHOBTB3					TTC28	SIRT7
TRIP6	RHOH					TTI1	SKA2
TRMT10B	RIF1					TTPA	SKIL
TRMU	RIT1					TUBB4A	SLAIN1
TRPM4	RLF					UBE2C	SLAMF1
TSPAN12	RNASE6					UBE4B	SLC16A7
TSPAN33	RNASET2					UBFD1	SLC17A5
TSPAN4	RNF125					UGDH	SLC1A5
TST	RNF130					UGT3A2	SLC38A1
TTC26	RNF145					ULK3	SLC39A8
TTC7A	RNF150					USF1	SLC3A2
TXNRD2	RNF213					USP28	SLC41A3
UACA	RNF220					UST	SLC43A1
UBE2L6	RNF24					UTP14A	SLC4A7
UBL3	ROR1					VDAC3	SLC7A1
UCN2	RPH3AL					VEGFC	SLC7A11
UNC119	RPS6KA3					VGLL3	SLC7A5
UQCC2	RRAS2					TUBA1A	SLC7A7
USMG5	RRM2					VNN1	SMAGP
USP30-AS1	RUNX2					VPREB3	SMARCA2
VAMP8	RXRA					VSIG10	SMIM7
VDAC3	RYBP					WSB1	SNORA71B
VKORC1L1	S100A6					ZBTB40	SNX10
VPREB3	SACS					ZC3H12B	SNX30
VSIG10L	SALL2					ZFHX2	SNX5
WASF3	SATB1					ZFP62	SNX8
WBSR22	SBF1					ZGRF1	SORCS2
WWC3	SBF2-AS1					ZMYND19	SOWAHD
YDJC	SCD					ZNF106	SPNS3
YWHAG	SCD5					ZNF189	SPRY4
ZC3H12D	SCN9A					ZNF211	SREBF2
ZC3HAV1	SECISBP2L					ZNF286A	SRSF5
ZC3HC1	SEMA3A					ZNF311	SRSF6
ZCWPW1	SEMA3F					ZNF318	ST3GAL1
ZDHHC2	SEMA6C					ZNF37BP	ST6GAL1
ZFHX3	SENP6					ZNF436	STAT3
ZFPM2	SEPTIN8					ZNF445	STAT5A
ZGRF1	SERINC2					ZNF45	STIM2
ZMYND19	SERINC5					ZNF503-AS2	STK10
ZNF117	SERPINB1					ZNF547	STK17A
ZNF208	SERPINE2					ZNF565	STK17B
ZNF223	SESN1					ZNF608	STRN4
ZNF440	SESN3					ZNF616	STT3B
ZNF45	SF3B1					ZNF638	SUCLG2
ZNHIT1	SFMBT2					ZNF704	SUMO3
ZYX	SFT2D2					ZNF730	SUN2
	SGK1					ZNF737	SUPT3H
	SH3YL1					ZNF738	SYT1
	SHFM1					ZNF804A	SYTL1
	SHOC2					ZNF91	TAB3
	SIGIRR					ZNRD1	TACC1

SIK2	ZSCAN31	TAF9
SIRPA	ZWILCH	TAGLN2
SIRT1	ZWINT	TAPT1
SIT1		TARS
SLAMF1		TBC1D14
SLAMF8		TBKBP1
SLC12A6		TBL1X
SLC12A7		TBL1XR1
SLC16A2		TCTA
SLC16A3		TGFBR1
SLC23A2		TGFBR2
SLC25A1		TGFBRAP1
SLC26A2		TM6SF1
SLC27A2		TM9SF3
SLC2A3		TMC8
SLC2A5		TMED2
SLC37A2		TMEM167B
SLC4A7		TMEM87A
SLC8A3		TNFAIP3
SLC9A3R1		TNFRSF1B
SLCO4C1		TNKS1BP1
SMAGP		TNRC18
SMIM15		TOMM20
SNN		TPBG
SNX18		TPD52
SNX20		TPH2
SNX30		TPM4
SNX9		TRAM2
SORBS1		TRDMT1
SORBS3		TRHDE
SORCS2		TRIB3
SOS1		TRIM52-AS1
SOWAHD		TRPM2
SP1		TSC22D3
SP7		TSPAN13
SPARC		TSPAN17
SPNS2		TTC38
SPNS3		TUBA4A
SPRY2		TWISTNB
SPTLC2		TWSG1
SREBF2		TXNIP
SREK1		UBALD2
SSFA2		UBASH3B
ST8SIA5		UBE2E1
STAG2		UBE2J1
STARD13		UBQLN1
STAT3		UNC13B
STAT5A		UNC5B
STK10		UNC93B1
STX6		USP1
SUCLG2		USP3
SUPT3H		USP38
SYN1		VASP
SYNJ2		VAV3
SYNRG		VEGFB
TAB3		VPS37B
TACC1		VPS51
TAPT1		WAPAL
TARSL2		WARS
TBKBP1		WDR13
TESK1		WDR45B
TEX30		WIPF1
TFCP2		XBP1
TGFB1		XYLT1
THEMIS2		YARS
TIAM1		YES1
TIMP1		YPEL5
TK1		YTHDF1
TLE3		ZBTB2
TLN1		ZC3H12C
TLR1		ZCCHC7
TLR9		ZFAND3
TMC8		ZNF217
TMED2		ZNF274
TMEM136		ZNF423
TMEM185B		ZNF516
TMEM216		ZNRF1
TMEM245		
TMEM45A		
TMPO		
TMSB15A		
TNRC18		
TNRC6B		
TNS1		
TOLLIP-AS1		
TOM1L1		
TOX		
TPCN1		
TRIB2		
TRIM14		
TRIM9		
TRO		
TRPM2		
TRPT1		
TRRAP		
TRUB1		
TSC22D1		
TSC22D3		
TSPAN14		
TSPYL1		
TSPYL4		

TTC33							
TTC38							
TLL5							
TTYH3							
TUBA1A							
TUBA8							
TUBGCP3							
TUBGCP5							
TXNIP							
UBR7							
UBXN7							
UFL1							
UNC13B							
UNC5B							
USE1							
VAMP5							
VAT1							
VAT1L							
VAV1							
VAV3							
VCAN							
VEGFA							
VEGFB							
VIM							
VKORC1							
VPS36							
WAPAL							
WASF2							
WDFY1							
WDFY3							
WDR66							
WDR76							
WDTC1							
YES1							
YPEL5							
ZAP70							
ZBTB1							
ZBTB17							
ZBTB41							
ZC3H12C							
ZC4H2							
ZCCHC24							
ZDBF2							
ZFAND4							
ZMIZ1							
ZMYM2							
ZNF114							
ZNF160							
ZNF217							
ZNF24							
ZNF264							
ZNF292							
ZNF337-AS1							
ZNF395							
ZNF423							
ZNF451							
ZNF629							
ZNF649							
ZNF675							
ZNF709							
ZNF711							
ZNF714							
ZNF718							
ZNF84							
ZNRF1							
ZP3							

Supplementary Table S2: Normalized cell viability of the various concentrations of each compound

Compound	Origin	SEM SEM ^{PNO_RES}		SEM SEM ^{PNO_RES}		SEM SEM ^{PNO_RES}		SEM SEM ^{PNO_RES}		SEM SEM ^{PNO_RES}		SEM SEM ^{PNO_RES}		SEM SEM ^{PNO_RES}		SEM SEM ^{PNO_RES}	
		1nM	1nM	10 nM	10 nM	10 nM	10 nM	100 nM	100 nM	100 nM	100 nM	100 nM	100 nM	100 nM	100 nM	100 nM	100 nM
MLN4924	added drug, Selleckchem	105	102	99	106	91	123	97	107	5	6	64	88				
AMC-357	added drug, Selleckchem	80	98	98	96	76	108	91	94	74	112	85	94				
C-DIM12	added drug, Selleckchem	96	95	102	98	90	116	97	101	73	108	81	89				
LBH589	added drug, Selleckchem	76	78	90	92	43	59	59	70	0	0	0	0				
Ipatasertib	added drug, Selleckchem	106	100	103	104	95	125	97	112	68	75	83	95				
MK-2206	added drug, Selleckchem	101	104	100	100	88	99	90	92	38	43	69	57				
AZD8055	added drug, Selleckchem	72	76	87	89	38	50	52	60	17	30	29	26				
SBI-0640756	added drug, Selleckchem	106	102	104	102	97	115	97	104	1	0	0	0				
iBET151	added drug, Selleckchem	86	84	93	87	60	72	61	66	0	0	1	0				
Palbociclib	added drug, Selleckchem	103	102	104	100	82	95	92	97	25	41	46	43				
AZD6738	added drug, Selleckchem	99	104	103	100	75	106	98	101	6	12	27	35				
Talazoparib	added drug, Selleckchem	66	86	86	83	52	70	68	78	15	15	43	63				
EPZ5676	added drug, Selleckchem	85	95	93	91	87	98	89	94	86	120	94	92				
VEB21	added drug, Selleckchem	115	111	104	95	104	109	100	102	37	38	71	59				
MRT68921	added drug, Selleckchem	93	97	98	90	85	101	92	85	22	9	48	34				
Abemaciclib	added drug, Selleckchem	109	112	109	101	86	96	95	108	23	35	54	42				
GSK-J4 HCl	added drug, Selleckchem	109	108	110	104	106	126	103	105	97	12	90	66				
ANA-12	added drug, Selleckchem	88	104	105	98	94	113	92	102	68	93	91	96				
CYC-065	added drug, Selleckchem	106	105	105	105	106	106	105	104	23	175	77	160				
JQ1	added drug, Selleckchem	111	105	115	107	49	114	54	106	0	180	0	161				
ABT199	added drug, Selleckchem	4	82	1	30	0	6	0	0	0	0	0	0				
ABT-263	added drug, Selleckchem	91	91	83	87	5	52	1	12	0	0	0	0				
Pimelic Diphenylamide 106	Cayman Epigenetic screening library	84	90	89	83	85	106	89	93	57	106	80	95				
3-Deazaneplanocin A	Cayman Epigenetic screening library	75	99	90	93	32	54	52	69	8	16	11	9				
2,4-DPD	Cayman Epigenetic screening library	76	97	85	96	77	103	88	98	73	130	78	98				
2-PCPA (hydrochloride)	Cayman Epigenetic screening library	78	93	89	95	75	110	91	92	71	114	85	93				
I-DET	Cayman Epigenetic screening library	76	95	95	95	59	89	77	91	0	0	5	4				
UNC0638	Cayman Epigenetic screening library	69	95	96	91	74	111	96	95	74	116	86	92				
4-iodo-SAHA	Cayman Epigenetic screening library	74	99	97	95	68	107	88	104	0	0	0	-1				
UNC0321 (trifluoroacetate salt)	Cayman Epigenetic screening library	72	96	92	85	67	109	80	97	0	2	2	10				
isoliquiritigenin	Cayman Epigenetic screening library	77	96	93	97	72	104	86	97	1	12	12	15				
CAY10603	Cayman Epigenetic screening library	80	100	98	89	72	105	83	89	0	0	1	2				
Pictilisib	Cayman Epigenetic screening library	96	94	101	101	69	99	75	94	23	37	50	46				
(S)-HDAC-42	Cayman Epigenetic screening library	86	90	84	85	46	75	49	63	0	0	0	-1				
trans-Resveratrol	Cayman Epigenetic screening library	91	88	93	90	90	98	91	93	104	133	94	93				
DMOG	Cayman Epigenetic screening library	89	93	94	89	90	99	89	96	102	135	92	98				
Ci-Amidine	Cayman Epigenetic screening library	81	95	89	92	83	99	87	92	88	128	85	101				
Sodium Butyrate	Cayman Epigenetic screening library	85	94	95	91	85	102	93	94	91	122	93	96				
Anacardic Acid	Cayman Epigenetic screening library	88	98	94	99	83	102	86	97	91	112	92	95				
Tubastatin A (trifluoroacetate salt)	Cayman Epigenetic screening library	86	95	91	95	85	101	92	94	64	77	81	92				
Nicotinamide	Cayman Epigenetic screening library	90	99	96	89	90	102	86	92	98	111	88	97				
Zebularine	Cayman Epigenetic screening library	87	99	97	94	88	97	93	96	98	126	94	90				
S-Adenosylhomocysteine	Cayman Epigenetic screening library	92	96	92	85	85	98	87	89	85	104	69	89				
MS-275	Cayman Epigenetic screening library	80	102	94	84	67	93	76	78	0	0	1	-1				
Trichostatin A	Cayman Epigenetic screening library	83	93	92	93	39	90	73	86	0	0	0	0				
CCG-100602	Cayman Epigenetic screening library	84	96	93	94	77	104	92	95	92	128	90	93				
CAY10398	Cayman Epigenetic screening library	81	88	93	94	78	104	88	90	81	117	81	95				
Oxamflatin	Cayman Epigenetic screening library	83	99	93	98	74	108	80	89	0	2	1	3				
Saleramide	Cayman Epigenetic screening library	82	95	99	90	79	102	97	104	86	146	98	106				
Garcinol	Cayman Epigenetic screening library	82	96	98	98	81	103	94	94	89	119	99	97				
BIX01294 (hydrochloride hydrate)	Cayman Epigenetic screening library	78	91	96	89	80	95	92	87	88	119	84	84				
Valproic Acid (sodium salt)	Cayman Epigenetic screening library	80	97	87	91	80	100	88	94	88	125	88	102				
Splitomicin	Cayman Epigenetic screening library	80	96	91	94	77	102	90	93	89	136	89	97				
HNHA	Cayman Epigenetic screening library	101	89	94	93	100	98	93	97	116	124	109	96				
Benzenebutanoic Acid (sodium salt)	Cayman Epigenetic screening library	100	91	92	93	100	93	90	90	103	136	101	93				
(-)-Neplanocin A	Cayman Epigenetic screening library	84	95	89	97	7	22	7	19	4	13	4	3				
1-Naphthoic Acid	Cayman Epigenetic screening library	100	100	94	94	83	109	89	94	97	110	91	94				
2',3'-triacetyl-5-Azacytidine	Cayman Epigenetic screening library	96	91	96	97	103	103	89	90	111	105	91	98				
UNC0224	Cayman Epigenetic screening library	93	95	97	96	98	97	87	95	87	107	91	109				
Ellagic Acid	Cayman Epigenetic screening library	101	98	96	96	91	106	92	88	91	111	101	91				
Suramin (sodium salt)	Cayman Epigenetic screening library	100	88	95	90	93	94	90	84	110	119	96	79				
Tenovin-1	Cayman Epigenetic screening library	103	91	93	91	95	91	88	94	68	92	76	75				
CBHA	Cayman Epigenetic screening library	101	95	93	93	76	95	63	77	1	2	1	0				
GDC0994	Cayman Epigenetic screening library	106	110	106	100	104	108	101	98	86	105	94	90				
Lortatib	Cayman Epigenetic screening library	102	96	98	86	94	93	89	85	85	96	85	87				
RG-108	Cayman Epigenetic screening library	90	93	94	93	91	96	94	93	121	136	101	97				
CAY10433	Cayman Epigenetic screening library	93	91	95	90	86	103	96	97	88	115	98	95				
Sinefungin	Cayman Epigenetic screening library	91	89	89	87	87	90	90	87	78	111	95	92				
Piceatannol	Cayman Epigenetic screening library	95	90	92	97	87	92	90	90	100	111	97	99				
EX-527	Cayman Epigenetic screening library	92	98	96	96	87	103	98	104	95	118	103	98				
Scriptaid	Cayman Epigenetic screening library	89	103	97	79	79	95	82	94	0	0	1	2				
MS023	Cayman Epigenetic screening library	111	109	106	102	94	101	90	100	39	59	54	47				
JGB1741	Cayman Epigenetic screening library	88	100	93	87	86	93	93	87	89	120	94	85				
Tenovin-6	Cayman Epigenetic screening library	90	93	94	84	98	92	100	92	86	117	93	89				
M 344	Cayman Epigenetic screening library	93	91	96	95	81	98	82	93	0	0	2	0				
Selinexor	Cayman Epigenetic screening library	109	108	103	108	83	119	77	102	1	2	4	2				
Mirin	Cayman Epigenetic screening library	87	91	98	97	86	101	97	96	89	117	99	103				
Chidamide	Cayman Epigenetic screening library	81	94	100	95	68	98	85	91	1	1	21	8				
SAHA	Cayman Epigenetic screening library	87	95	92	88	79	101	90	87	2	2	15	8				
f-Amidine (trifluoroacetate salt)	Cayman Epigenetic screening library	82	95	99	96	83	107	96	98	88	119	91	93				
Suberohydroxamic Acid	Cayman Epigenetic screening library	87	101	99	101	82	107	94	96	58	90	75	91				
Apicidin	Cayman Epigenetic screening library	89	102	102	98	82	107	95	108	51	80	83	86				
3-amino Benzamide	Cayman Epigenetic screening library	75	97	101	102	83	111	96	102	75	110	90	94				
HC Toxin	Cayman Epigenetic screening library	40	0	46	0	79	0	0	0	0	0	0	0				
Phthalazine pyrazole	Cayman Epigenetic screening library	87	101	98	97	69	91	89	90	2	14	46	42				
AGK2	Cayman Epigenetic screening library	90	100	95	96	88	106	102	103	94	141	99	116				
2,4-Pyridinedicarboxylic Acid	Enzo SCREEN-WELL® epigenetics library	88	86	102	88	89	83	90	81	90	91	88	93				
5-Aza-2'-deoxycytidine (Decitabine)	Enzo SCREEN-WELL® epigenetics library	92	91	95	89	48	61	56	72	22	25	24	39				
AGK2	Enzo SCREEN-WELL® epigenetics library	97	93	102	92	102	83	99	87	103	102	90	101				
Aminoresveratrol sulfate	Enzo SCREEN-WELL® epigenetics library	98	98	104	97	98	100	105	94	98	69	103	88				
Anacardic acid	Enzo SCREEN-WELL® epigenetics library	104	92	107	93	100	96	103	94	108	89	99	91				
Apicidin	Enzo SCREEN-WELL® epigenetics library	93	96	93	92	19	67	38	81	0	0	0	0				
B2	Enzo SCREEN-WELL® epigenetics library	99	101	106	98	106	100	109	102								

Valproic acid hydroxamate	Enzo SCREEN-WELL® epigenetics library			104	96	96	91	95	90	92	95	100	85	95	89		
Vorinostat (SAHA)	Enzo SCREEN-WELL® epigenetics library			94	101	102	99	93	101	88	94	0	1	1	2		
Hesperadin	MCE Cell Cycle/DNA Damage Compound Library	89	95	87		93		0		3		0	0	0	-4	4	
AZD1152	MCE Cell Cycle/DNA Damage Compound Library	99	105	94		100		97		98		60	92	-3	1		
SJ2-043	MCE Cell Cycle/DNA Damage Compound Library	124	120	117		110		90		96		-1	8	-3	0		
PF1-1	MCE Cell Cycle/DNA Damage Compound Library	94	91	94		89		91		94		10	77	-3	0		
ML18054	MCE Cell Cycle/DNA Damage Compound Library	104	103	99		105		73		79		10	10	-3	2		
Triapine	MCE Cell Cycle/DNA Damage Compound Library	94	92	98		94		91		89		0	16	-3	0		
Mocetinosat	MCE Cell Cycle/DNA Damage Compound Library	109	102	106		103		52		46		0	0	-3	0		
ZM-447439	MCE Cell Cycle/DNA Damage Compound Library	96	99	98		97		95		95		49	85	-3	1		
BIX-01294	MCE Cell Cycle/DNA Damage Compound Library	103	113	103		107		97		107		93	102	-2	0		
AMG 900	MCE Cell Cycle/DNA Damage Compound Library	98	99	0		1		1		1		1	1	-2	2		
TG-101348	MCE Cell Cycle/DNA Damage Compound Library	99	89	100		96		87		85		15	67	-2	0		
Etoposide	MCE Cell Cycle/DNA Damage Compound Library	88	96	89		91		49		20		2	23	-2	0		
CCT241533 (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	112	113	112		107		54		103		32	86	-2	0		
CI-994	MCE Cell Cycle/DNA Damage Compound Library	101	95	98		98		101		95		65	63	-1	0		
Fosbretabulin (disodium)	MCE Cell Cycle/DNA Damage Compound Library	92	90	88		90		85		84		1	0	-1	0		
GSK-J4	MCE Cell Cycle/DNA Damage Compound Library	90	99	96		108		99		94		100	88	-1	2		
NMS-873	MCE Cell Cycle/DNA Damage Compound Library	108	107	102		104		85		83		64	64	-1	-1		
Dacnostat	MCE Cell Cycle/DNA Damage Compound Library	87	101	77		81		1		3		-1	1	-1	0		
Ros3280	MCE Cell Cycle/DNA Damage Compound Library	89	97	92		85		0		31		0	0	-1	1		
SRT 1720 (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	83	89	88		95		96		90		87	84	-1	0		
UNC1999	MCE Cell Cycle/DNA Damage Compound Library	103	98	103		97		103		102		102	108	-1	12		
Vorinostat	MCE Cell Cycle/DNA Damage Compound Library	109	110	107		111		104		104		71	65	-1	-1		
CHR-6494	MCE Cell Cycle/DNA Damage Compound Library	100	100	94		90		49		69		25	41	-1	0		
Mitomycin C	MCE Cell Cycle/DNA Damage Compound Library	100	100	83		70		5		3		0	0	-1	0		
AT77519 (trifluoroacetate)	MCE Cell Cycle/DNA Damage Compound Library	86	92	102		97		103		94		2	84	-1	0		
DBeQ	MCE Cell Cycle/DNA Damage Compound Library	93	93	98		91		95		84		98	104	-1	-1		
HMN-214	MCE Cell Cycle/DNA Damage Compound Library	90	88	89		87		66		72		1	1	-1	0		
Aisertib	MCE Cell Cycle/DNA Damage Compound Library	88	87	81		83		21		20		1	1	-1	3		
AT9283	MCE Cell Cycle/DNA Damage Compound Library	101	97	91		98		10		0		5	-1	-1	0		
Flavopiridol (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	104	102	105		97		75		81		4	0	-1	0		
M344	MCE Cell Cycle/DNA Damage Compound Library	91	92	87		80		70		71		0	0	-1	0		
Ros3306	MCE Cell Cycle/DNA Damage Compound Library	95	93	94		94		90		96		92	88	-1	3		
GSK-1070916	MCE Cell Cycle/DNA Damage Compound Library	101	96	100		103		1		79		0	0	-1	0		
PIK-75	MCE Cell Cycle/DNA Damage Compound Library	109	104	101		96		23		40		1	0	0	1		
4SC-202 (free base)	MCE Cell Cycle/DNA Damage Compound Library	99	100	93		98		91		88		0	1	0	0		
Bromosporine	MCE Cell Cycle/DNA Damage Compound Library	85	90	94		87		0		76		17	32	0	0		
Aurora A inhibitor	MCE Cell Cycle/DNA Damage Compound Library	93	94	87		92		91		90		32	42	0	0		
Epothilone D	MCE Cell Cycle/DNA Damage Compound Library	86	96	80		95		0		0		1	0	0	0		
Lexibulin	MCE Cell Cycle/DNA Damage Compound Library	111	102	105		102		0		10		0	0	0	0		
Pimelic Diphenylamide 106 (analog)	MCE Cell Cycle/DNA Damage Compound Library	94	101	93		106		94		96		96	96	0	0		
Entinostat	MCE Cell Cycle/DNA Damage Compound Library	107	107	104		104		62		60		0	1	0	0		
RGFP966	MCE Cell Cycle/DNA Damage Compound Library	83	91	97		91		80		100		2	9	0	-1		
ACY-1215	MCE Cell Cycle/DNA Damage Compound Library	105	101	99		100		101		106		101	87	0	-1		
TAK-901	MCE Cell Cycle/DNA Damage Compound Library	89	93	87		93		10		91		0	42	0	1		
Praocinostat	MCE Cell Cycle/DNA Damage Compound Library	97	93	88		92		50		28		0	0	-1	0		
D-64131	MCE Cell Cycle/DNA Damage Compound Library	97	103	101		99		27		49		0	0	0	0		
THZ1 (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	90	93	87		88		14		73		0	2	0	0		
AZD1152-HOPA	MCE Cell Cycle/DNA Damage Compound Library	89	89	89		95		13		90		0	62	0	1		
Nocodazole	MCE Cell Cycle/DNA Damage Compound Library	90	93	88		90		1		0		0	0	0	0		
ENMD-2076 (Tartrate)	MCE Cell Cycle/DNA Damage Compound Library	101	99	89		97		49		72		5	3	0	0		
b-AP15	MCE Cell Cycle/DNA Damage Compound Library	116	113	110		119		96		102		0	15	0	-1		
β-Lapachone	MCE Cell Cycle/DNA Damage Compound Library	94	96	87		89		96		97		93	99	0	0		
Topotecan (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	91	0	75		85		0		1		0	0	-1	0		
OTX-015	MCE Cell Cycle/DNA Damage Compound Library	104	100	104		97		56		75		1	6	0	0		
XL228	MCE Cell Cycle/DNA Damage Compound Library	90	97	77		94		1		3		0	0	-1	0		
Flavopiridol	MCE Cell Cycle/DNA Damage Compound Library	106	109	104		107		113		89		6	1	0	0		
RG2833	MCE Cell Cycle/DNA Damage Compound Library	106	97	104		101		107		108		64	67	0	0		
CP-466722	MCE Cell Cycle/DNA Damage Compound Library	100	103	101		110		96		97		65	76	0	1		
ENMD-2076	MCE Cell Cycle/DNA Damage Compound Library	111	106	109		108		71		93		25	52	0	1		
Epirubicin (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	98	94	70		97		1		45		1	1	0	0		
Gemcitabine	MCE Cell Cycle/DNA Damage Compound Library	84	82	1		0		0		0		1	0	-1	0		
Panobinostat	MCE Cell Cycle/DNA Damage Compound Library	5	54	0		4		0		0		1	0	0	0		
SB-743921	MCE Cell Cycle/DNA Damage Compound Library	109	108	0		29		0		0		0	0	0	0		
ELR510444	MCE Cell Cycle/DNA Damage Compound Library	91	92	69		66		1		-1		0	0	-1	0		
Melphalan	MCE Cell Cycle/DNA Damage Compound Library	94	91	93		88		92		93		62	65	0	0		
CX-5461	MCE Cell Cycle/DNA Damage Compound Library	105	105	101		105		93		100		35	61	1	0		
Trichostatin A	MCE Cell Cycle/DNA Damage Compound Library	99	99	101		102		102		105		60	79	1	0		
SU9516	MCE Cell Cycle/DNA Damage Compound Library	113	103	106		107		109		105		76	93	1	0		
ARRY-520 (R enantiomer)	MCE Cell Cycle/DNA Damage Compound Library	96	94	1		34		0		1		2	1	1	0		
WAY-262611	MCE Cell Cycle/DNA Damage Compound Library	106	102	101		109		101		99		37	40	1	0		
PHA-767491 (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	103	100	98		100		108		97		86	76	1	0		
SNS-314	MCE Cell Cycle/DNA Damage Compound Library	101	99	93		92		-1		0		0	1	2	0		
Vinblastine (sulfate)	MCE Cell Cycle/DNA Damage Compound Library	78	93	1		10		1		0		0	1	0	0		
Gemcitabine (elaidate)	MCE Cell Cycle/DNA Damage Compound Library	85	64	1		0		1		0		1	0	1	0		
FRAX486	MCE Cell Cycle/DNA Damage Compound Library	110	112	109		109		108		101		70	85	1	0		
UNC 0631	MCE Cell Cycle/DNA Damage Compound Library	84	92	78		82		87		92		78	88	1	0		
SP2509	MCE Cell Cycle/DNA Damage Compound Library	102	100	98		103		82		-1		1	1	1	1		
Tozasertib	MCE Cell Cycle/DNA Damage Compound Library	90	95	85		91		1		63		0	1	1	2		
Pirarubicin (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	104	97	96		99		14		60		0	1	1	0		
SN-38	MCE Cell Cycle/DNA Damage Compound Library	88	86	0		10		0		0		0	0	-1	0		
Clofarabine	MCE Cell Cycle/DNA Damage Compound Library	108	103	59		29		-1		0		0	0	1	-1		
Rigosertib (sodium)	MCE Cell Cycle/DNA Damage Compound Library	89	87	95		86		78		80		1	0	1	1		
Belinostat	MCE Cell Cycle/DNA Damage Compound Library	102	106	99		101		74		78		1	0	1	1		
Resminostat (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	100	100	101		102		94		101		2	1	1	0		
PR-619	MCE Cell Cycle/DNA Damage Compound Library	98	90	94		97		94		85		97	97	1	1		
PF-03814735	MCE Cell Cycle/DNA Damage Compound Library	91	95	87		92		11		20		1	0	1	0		
CDK-IN-2	MCE Cell Cycle/DNA Damage Compound Library	92	98	97		98		83		92		2	-1	-1	0		
UNC0379	MCE Cell Cycle/DNA Damage Compound Library	97	103	102		103		103		99		103	99	1	30		
JIB-04	MCE Cell Cycle/DNA Damage Compound Library	95	100	97		105		102		103		82	83	1	1		
Scriptaid	MCE Cell Cycle/DNA Damage Compound Library	89	91	97		84		56		48		0	-1	1	0		
Triciribine	MCE Cell Cycle/DNA Damage Compound Library	103	102	103		101		73		57		5	4	1	1		
Daurorubicin (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	90	102	6		71		1		3		0	1	1	0		
Dinaciclib	MCE Cell Cycle/DNA Damage Compound Library	106	99	98		94		-1		1		0	0	1	0		
Droxinostat	MCE Cell Cycle/DNA Damage Compound Library	95	93	93		99		90		92		66	79	1	20		
Teniposide	MCE Cell Cycle/DNA Damage Compound Library	84	86	26		69		0		9		0	1	-1	0		
6-Thioguanine	MCE Cell Cycle/DNA Damage Compound Library	109	115	108		111		98		102		6	9	1	4		
Danuserib	MCE Cell Cycle/DNA Damage Compound Library	104	102	105		103		59		95		1	44	1	3		
Pralatrexate	MCE Cell Cycle/DNA Damage Compound Library	99	100	1		1		2		1		1	0	2	1		
AZ20	MCE Cell Cycle/DNA Damage Compound Library	103	96	103		97		60		91		0	5	2	2		
Mitoxantrone (dihydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	26	68	5		35		0		1		1	0	2	1		
Decitabine	MCE Cell Cycle/DNA Damage Compound Library	103	100	90		96		42		65		8	18	2	5		
ETP-46464	MCE Cell Cycle/DNA Damage Compound Library	106	104	107		110		94		102		29	64	2	4		
Furvalanol A	MCE Cell Cycle/DNA Damage Compound Library	118	104	112		104		102		102		100	97	3	6		
Amsacrine	MCE Cell Cycle/DNA Damage Compound Library	92	89	76													

Carmofur	MCE Cell Cycle/DNA Damage Compound Library	83	95	84	90	92	95	78	77	40	44
SLx-2119	MCE Cell Cycle/DNA Damage Compound Library	109	110	104	110	105	102	103	96	44	49
Parthenolide	MCE Cell Cycle/DNA Damage Compound Library	108	107	100	108	106	103	102	102	46	59
GSK343	MCE Cell Cycle/DNA Damage Compound Library	89	95	90	98	92	98	92	96	47	75
Rucaparib (phosphate)	MCE Cell Cycle/DNA Damage Compound Library	96	97	106	103	99	104	95	113	48	80
Tricliabendazole	MCE Cell Cycle/DNA Damage Compound Library	102	98	102	100	102	108	100	95	51	62
T007097	MCE Cell Cycle/DNA Damage Compound Library	98	101	101	104	97	104	98	99	54	54
5-Fluorouracil	MCE Cell Cycle/DNA Damage Compound Library	117	118	111	108	111	109	102	93	54	50
A-966492	MCE Cell Cycle/DNA Damage Compound Library	93	88	88	89	93	88	92	99	55	81
Tubastatin-A	MCE Cell Cycle/DNA Damage Compound Library	104	98	101	103	101	94	105	100	64	71
BML-277	MCE Cell Cycle/DNA Damage Compound Library	103	100	102	98	107	105	99	99	65	72
Balaglitazone	MCE Cell Cycle/DNA Damage Compound Library	91	93	87	88	88	86	77	83	65	69
IPA-3	MCE Cell Cycle/DNA Damage Compound Library	89	87	86	87	90	97	98	91	66	68
Amodiaquin (dihydrochloride dihydrate)	MCE Cell Cycle/DNA Damage Compound Library	82	91	87	95	93	95	87	89	68	71
Remodelin (hydrobromide)	MCE Cell Cycle/DNA Damage Compound Library	87	90	93	90	91	91	92	102	69	73
ISRIB (trans-isomer)	MCE Cell Cycle/DNA Damage Compound Library	91	89	91	92	90	94	84	79	70	77
Miriplatin	MCE Cell Cycle/DNA Damage Compound Library	89	99	94	96	92	88	78	81	70	71
SGC0946	MCE Cell Cycle/DNA Damage Compound Library	86	99	91	95	85	94	74	87	72	79
Velparib (dihydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	87	92	83	90	89	101	87	99	78	87
NU 7026	MCE Cell Cycle/DNA Damage Compound Library	109	101	101	101	105	103	101	101	78	92
DMAT	MCE Cell Cycle/DNA Damage Compound Library	111	103	108	104	107	104	110	104	81	93
Nelarabine	MCE Cell Cycle/DNA Damage Compound Library	95	91	90	92	100	92	97	94	83	89
GW9662	MCE Cell Cycle/DNA Damage Compound Library	99	102	99	100	102	105	104	98	87	73
LDN-57444	MCE Cell Cycle/DNA Damage Compound Library	117	107	108	110	117	104	118	112	104	101
Troglitazone	MCE Cell Cycle/DNA Damage Compound Library	99	102	94	102	104	99	102	100	81	85
Ellagic acid	MCE Cell Cycle/DNA Damage Compound Library	87	95	94	86	89	93	89	93	81	90
TG003	MCE Cell Cycle/DNA Damage Compound Library	89	91	90	93	90	93	90	92	82	87
Fasudil (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	99	105	104	107	106	107	101	101	83	85
AMI-1	MCE Cell Cycle/DNA Damage Compound Library	94	96	91	97	97	96	94	92	85	100
G007-LK	MCE Cell Cycle/DNA Damage Compound Library	92	86	88	86	91	93	83	94	87	97
Teprone	MCE Cell Cycle/DNA Damage Compound Library	88	94	86	98	89	98	85	99	87	90
Oxolinic acid	MCE Cell Cycle/DNA Damage Compound Library	101	109	102	106	101	115	102	100	88	95
Sodium phenylbutyrate	MCE Cell Cycle/DNA Damage Compound Library	92	92	81	94	94	93	88	96	90	95
Folic acid (calcium salt pentahydrate)	MCE Cell Cycle/DNA Damage Compound Library	95	88	91	94	92	96	96	97	100	99
SBE13 (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	100	106	98	100	101	95	96	102	93	87
Altretamine	MCE Cell Cycle/DNA Damage Compound Library	87	95	87	90	92	94	92	99	94	92
Ciprofibrate	MCE Cell Cycle/DNA Damage Compound Library	83	88	88	91	89	100	95	95	94	94
Levomoflate (calcium)	MCE Cell Cycle/DNA Damage Compound Library	92	90	89	96	94	96	94	89	94	96
L-165041	MCE Cell Cycle/DNA Damage Compound Library	95	98	94	93	98	94	93	97	94	104
PJ34 (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	108	99	104	94	107	99	105	107	94	103
JW 55	MCE Cell Cycle/DNA Damage Compound Library	96	104	106	98	101	103	98	104	96	104
Rosiglitazone (maleate)	MCE Cell Cycle/DNA Damage Compound Library	94	92	92	96	97	93	96	96	96	88
Purvalanol B	MCE Cell Cycle/DNA Damage Compound Library	94	111	104	103	98	102	102	103	98	99
SCR7	MCE Cell Cycle/DNA Damage Compound Library	103	104	106	104	103	103	104	115	99	99
CW-069	MCE Cell Cycle/DNA Damage Compound Library	104	102	100	105	100	108	103	98	99	108
Orotic acid	MCE Cell Cycle/DNA Damage Compound Library	104	106	106	118	105	99	100	103	99	98
GW 501516	MCE Cell Cycle/DNA Damage Compound Library	90	95	90	91	90	97	96	94	100	96
LFM-A13	MCE Cell Cycle/DNA Damage Compound Library	89	99	100	101	94	96	96	97	101	99
Thio-TEPA	MCE Cell Cycle/DNA Damage Compound Library	106	103	104	102	105	100	105	105	102	97
SRT 2104	MCE Cell Cycle/DNA Damage Compound Library	86	91	85	93	93	97	89	97	102	104
Capecitabine	MCE Cell Cycle/DNA Damage Compound Library	101	106	107	102	101	98	100	99	102	102
Hydroxyfasudil (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	105	105	107	121	108	102	103	98	102	104
Valproic acid (sodium salt)	MCE Cell Cycle/DNA Damage Compound Library	96	96	112	101	107	101	94	96	102	100
Roslitazone	MCE Cell Cycle/DNA Damage Compound Library	103	102	102	102	103	107	102	102	103	97
Levoleucovorin (Calcium)	MCE Cell Cycle/DNA Damage Compound Library	99	100	101	103	109	103	111	106	103	108
TPP 22	MCE Cell Cycle/DNA Damage Compound Library	103	102	105	108	104	105	101	102	103	109
GSK-J1	MCE Cell Cycle/DNA Damage Compound Library	112	103	108	104	104	96	107	107	103	93
GSK3787	MCE Cell Cycle/DNA Damage Compound Library	106	105	101	105	102	102	99	101	103	106
Clofibrate	MCE Cell Cycle/DNA Damage Compound Library	99	112	104	105	104	100	107	105	104	106
Ifostamide	MCE Cell Cycle/DNA Damage Compound Library	103	109	99	106	104	101	108	106	104	98
GSK-J2	MCE Cell Cycle/DNA Damage Compound Library	102	113	106	118	106	102	108	108	105	111
PYZD-4409	MCE Cell Cycle/DNA Damage Compound Library	100	99	100	95	99	99	93	110	105	104
PYR-41	MCE Cell Cycle/DNA Damage Compound Library	104	109	104	107	114	98	110	102	108	97
Trifluorothymidine	MCE Cell Cycle/DNA Damage Compound Library	83	101	93	101	92	87	21	6	-6	-2
Podophyllotoxin	MCE Cell Cycle/DNA Damage Compound Library	111	100	97	100	1	1	2	-4	-4	-1
BRD4770	MCE Cell Cycle/DNA Damage Compound Library	107	109	105	109	102	115	98	103	-3	2
PF-3758309	MCE Cell Cycle/DNA Damage Compound Library	105	105	86	105	25	88	12	31	-3	7
MLN0905	MCE Cell Cycle/DNA Damage Compound Library	93	95	89	95	4	5	1	1	-3	5
AZD-5438	MCE Cell Cycle/DNA Damage Compound Library	114	116	112	116	110	118	13	24	-3	1
Amonafide	MCE Cell Cycle/DNA Damage Compound Library	98	111	91	111	107	102	94	93	-2	-1
4'-Demethylepipodophyllotoxin	MCE Cell Cycle/DNA Damage Compound Library	104	108	105	108	105	102	2	1	-2	1
RITA	MCE Cell Cycle/DNA Damage Compound Library	94	99	78	99	7	-3	3	-3	-2	1
Vincristine (sulfate)	MCE Cell Cycle/DNA Damage Compound Library	74	100	-2	100	2	7	0	-5	-2	-2
GSK 525762A	MCE Cell Cycle/DNA Damage Compound Library	100	108	106	108	89	102	3	17	-2	0
Dam02	MCE Cell Cycle/DNA Damage Compound Library	92	92	88	92	83	90	3	53	-1	0
(+)-JQ-1	MCE Cell Cycle/DNA Damage Compound Library	104	95	104	95	101	87	5	4	-1	0
Voistatib	MCE Cell Cycle/DNA Damage Compound Library	108	106	106	106	107	115	88	110	102	108
AZD6738	MCE Cell Cycle/DNA Damage Compound Library	93	90	102	90	82	101	5	27	-1	1
WP1130	MCE Cell Cycle/DNA Damage Compound Library	102	108	104	108	88	103	103	104	-1	2
LMK-235	MCE Cell Cycle/DNA Damage Compound Library	109	108	110	108	96	84	-2	2	-1	2
SB1317	MCE Cell Cycle/DNA Damage Compound Library	87	91	98	91	94	92	3	2	-1	0
MS436	MCE Cell Cycle/DNA Damage Compound Library	93	96	86	96	90	88	87	95	-1	9
MK-4827 (tosylate)	MCE Cell Cycle/DNA Damage Compound Library	100	99	103	99	102	82	101	101	-1	28
BMH-21	MCE Cell Cycle/DNA Damage Compound Library	92	87	81	87	66	65	14	14	-1	1
GSK461364	MCE Cell Cycle/DNA Damage Compound Library	81	91	83	91	3	-1	0	-1	-1	3
I-BET151	MCE Cell Cycle/DNA Damage Compound Library	81	89	91	89	65	78	2	6	-1	1
PCI-24781	MCE Cell Cycle/DNA Damage Compound Library	93	102	89	102	60	60	0	-3	-1	0
Methotrexate	MCE Cell Cycle/DNA Damage Compound Library	101	96	98	96	-2	1	4	0	0	5
SNS-032	MCE Cell Cycle/DNA Damage Compound Library	96	101	107	101	107	105	1	82	0	0
Geldanamycin	MCE Cell Cycle/DNA Damage Compound Library	106	104	101	104	104	8	6	0	3	2
Uramustine	MCE Cell Cycle/DNA Damage Compound Library	106	100	86	100	86	91	68	88	0	0
Reversine	MCE Cell Cycle/DNA Damage Compound Library	107	103	105	103	89	88	0	0	0	0
Ispinesib	MCE Cell Cycle/DNA Damage Compound Library	90	88	86	88	3	-8	-4	2	0	1
CCT129202	MCE Cell Cycle/DNA Damage Compound Library	95	96	92	96	92	94	45	62	0	2
MK-5108	MCE Cell Cycle/DNA Damage Compound Library	113	107	111	107	91	100	38	39	0	-7
ABT-751	MCE Cell Cycle/DNA Damage Compound Library	110	96	102	96	101	101	-2	1	0	3
Cabazitaxel	MCE Cell Cycle/DNA Damage Compound Library	93	93	-2	93	3	-1	-1	1	-2	1
ARRY-520	MCE Cell Cycle/DNA Damage Compound Library	121	103	0	103	-2	4	1	4	1	-1
Oxaliplatin	MCE Cell Cycle/DNA Damage Compound Library	107	106	105	106	88	76	13	10	1	1
TG101209	MCE Cell Cycle/DNA Damage Compound Library	105	101	102	101	95	102	15	41	1	1
CHIR-124	MCE Cell Cycle/DNA Damage Compound Library	96	91	91	91	30	71	1	2	1	-7
PHA-848125	MCE Cell Cycle/DNA Damage Compound Library	93	85	90	85	62	73	7	10	1	1
Epothilone B	MCE Cell Cycle/DNA Damage Compound Library	98	94	1	94	1	-1	3	1	1	1
LY203618	MCE Cell Cycle/DNA Damage Compound Library	95	94	98	94	83	102	7	21	1	-6
AZD-7762	MCE Cell Cycle/DNA Damage Compound Library	52	84	27	84	4	2	-2	-2	1	0
Campathecin	MCE Cell Cycle/DNA Damage Compound Library	102	104	42	104	-5	-9	3	2	1	1
NVP-AUY922	MCE Cell Cycle/DNA Damage Compound Library	95	90	84	90	-4	9	4	7	1	8
Ganetespib	MCE Cell Cycle/DNA Damage Compound Library	102	102	92	102	7	16	3	8	1	9
Alvespimycin (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	108	98	104	98	27	75	3	17	1	0
Irinotecan (hydrochloride trihydrate)	MCE Cell Cycle/DNA Damage Compound Library	104	99	93	99	78	100	1	11	2	1
GSK1324726A	MCE Cell Cycle/DNA Damage Compound Library	90	95	87	95	14	23	-1	-3	-2	-2
CCT 137690	MCE Cell Cycle/DNA Damage Compound Library	105	102	100	102	89	99	-1	-3	2	1
TAK-960	MCE Cell Cycle/DNA Damage Compound Library	105	96	102	96	2	0	2	0	2	0
Cytarabine	MCE Cell Cycle/DNA Damage Compound Library	105	104	107	104	19	25	0	2	-1	1
MC1568	MCE Cell Cycle/DNA Damage Compound Library	108	103	101	103	100	108	84	96	2	2
APTO-253	MCE Cell Cycle/DNA Damage Compound Library	111	99	104	99	99	97	6	59	2	5
Irinotecan (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	122	104	104	104	112	106	54	86	2	5
Vinblastine	MCE Cell Cycle/DNA Damage Compound Library	115	115	108	115	105	115	21	11	3	2
BIIB021	MCE Cell Cycle/DNA Damage Compound Library	110	96	100	96	78	88	8	11	3	2
BI 2536	MCE Cell Cycle/DNA Damage Compound Library	95	98	87	98	0	37	2	0	3	-3
CB-5083	MCE Cell Cycle/DNA Damage Compound Library	94	97	95	97	84	89	1	0	3	1
NMS-1286937	MCE Cell Cycle/DNA Damage Compound Library	93	92	104	92	-1	-5	-1	-2	3	0
17-AAG	MCE Cell Cycle/DNA Damage Compound Library	82	90	85	90	84	83	35	48	3	10
VE-821	MCE Cell Cycle/DNA Damage Compound										

5-BrdU	MCE Cell Cycle/DNA Damage Compound Library	107	112	107	112	110	114	50	57	4	18
100 nM Nimustine	MCE Cell Cycle/DNA Damage Compound Library	99	106	87	106	95	92	93	56	4	1
NVP-LCQ195	MCE Cell Cycle/DNA Damage Compound Library	96	95	101	95	98	91	13	29	4	0
CX-4945	MCE Cell Cycle/DNA Damage Compound Library	88	91	93	91	93	96	82	90	4	0
Gemotabine (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	95	95	93	95	-3	-1	-1	2	4	7
Ikanubicin (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	55	79	1	79	1	0	1	2	4	-2
THZ1	MCE Cell Cycle/DNA Damage Compound Library	96	87	90	87	21	97	-2	15	4	-2
Femetrexed (disodium hemipenta hydrate)	MCE Cell Cycle/DNA Damage Compound Library	113	101	109	101	8	15	-3	-2	4	3
AZ3146	MCE Cell Cycle/DNA Damage Compound Library	91	93	94	93	93	96	80	77	4	3
Roscovitine	MCE Cell Cycle/DNA Damage Compound Library	91	87	97	87	4	97	101	102	4	2
VE-822	MCE Cell Cycle/DNA Damage Compound Library	113	103	106	103	64	96	-1	-4	5	0
MK-1775	MCE Cell Cycle/DNA Damage Compound Library	112	106	107	106	69	96	4	2	5	1
MK-4827	MCE Cell Cycle/DNA Damage Compound Library	90	93	91	93	96	83	77	89	5	23
AT7519 (Hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	99	95	93	95	104	99	67	92	5	35
Colchicine	MCE Cell Cycle/DNA Damage Compound Library	100	98	97	98	4	1	-3	-4	5	-5
6-Mercaptopurine	MCE Cell Cycle/DNA Damage Compound Library	109	94	100	94	91	99	68	53	5	6
CX-4945 (sodium salt)	MCE Cell Cycle/DNA Damage Compound Library	100	91	98	91	101	103	99	97	5	1
PHA-793887	MCE Cell Cycle/DNA Damage Compound Library	104	104	106	104	108	107	49	102	5	55
BML-103 (dihydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	90	86	68	86	2	0	0	-2	5	-1
BML-210	MCE Cell Cycle/DNA Damage Compound Library	95	88	94	88	93	96	90	86	6	0
Flouxuridine	MCE Cell Cycle/DNA Damage Compound Library	101	100	41	100	41	100	2	-4	6	1
JO-1 (carboxylic acid)	MCE Cell Cycle/DNA Damage Compound Library	112	99	103	99	107	96	86	89	6	13
Doxorubicin (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	104	101	88	101	8	58	1	0	6	1
GW843682X	MCE Cell Cycle/DNA Damage Compound Library	93	86	91	86	93	93	6	-5	7	0
Fludarabine (phosphate)	MCE Cell Cycle/DNA Damage Compound Library	107	95	98	95	100	95	101	94	7	14
TH287	MCE Cell Cycle/DNA Damage Compound Library	107	103	107	103	105	102	47	35	8	0
BMS-265246	MCE Cell Cycle/DNA Damage Compound Library	94	90	80	90	62	73	17	30	11	9
GSK-923295	MCE Cell Cycle/DNA Damage Compound Library	120	112	109	112	108	107	5	21	11	14
LY2835219	MCE Cell Cycle/DNA Damage Compound Library	104	103	102	103	104	97	43	61	11	7
KU-57788	MCE Cell Cycle/DNA Damage Compound Library	93	96	86	96	95	94	99	89	12	31
NU2058	MCE Cell Cycle/DNA Damage Compound Library	104	102	101	102	106	100	95	99	16	72
Palbociclib (isethionate)	MCE Cell Cycle/DNA Damage Compound Library	101	102	101	102	97	101	41	61	17	19
Tenovin-1	MCE Cell Cycle/DNA Damage Compound Library	90	98	94	98	89	90	41	46	18	9
FH535	MCE Cell Cycle/DNA Damage Compound Library	91	96	96	96	96	75	79	16	12	9
Olefinib	MCE Cell Cycle/DNA Damage Compound Library	93	91	89	93	80	89	81	95	19	76
SGI-1027	MCE Cell Cycle/DNA Damage Compound Library	89	93	94	93	85	95	86	91	21	90
Palbociclib	MCE Cell Cycle/DNA Damage Compound Library	115	101	106	101	106	112	56	73	22	28
Kenpaullone	MCE Cell Cycle/DNA Damage Compound Library	107	94	105	94	111	97	86	89	23	29
Pyrimethamine	MCE Cell Cycle/DNA Damage Compound Library	109	102	112	102	99	114	105	110	25	44
NG 52	MCE Cell Cycle/DNA Damage Compound Library	97	94	101	94	89	95	89	91	27	28
GSK2606414	MCE Cell Cycle/DNA Damage Compound Library	91	94	82	94	86	81	83	89	28	43
GSK26962A	MCE Cell Cycle/DNA Damage Compound Library	102	98	87	98	79	82	54	64	31	48
Busulfan	MCE Cell Cycle/DNA Damage Compound Library	89	100	99	100	83	102	84	89	34	43
VER-155008	MCE Cell Cycle/DNA Damage Compound Library	86	98	89	86	89	96	83	84	35	52
P005091	MCE Cell Cycle/DNA Damage Compound Library	91	102	99	102	96	101	90	99	36	50
PFI-4	MCE Cell Cycle/DNA Damage Compound Library	111	114	110	114	116	109	109	108	39	67
KU-60019	MCE Cell Cycle/DNA Damage Compound Library	123	119	111	119	109	108	112	125	40	48
Pyrifostatin (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	101	101	101	101	99	103	103	102	44	84
Betulinic acid	MCE Cell Cycle/DNA Damage Compound Library	105	96	105	96	105	110	91	90	44	47
OF-1	MCE Cell Cycle/DNA Damage Compound Library	98	101	108	101	93	103	87	96	46	71
GSK503	MCE Cell Cycle/DNA Damage Compound Library	100	98	92	98	92	94	83	93	54	74
GSK-5959	MCE Cell Cycle/DNA Damage Compound Library	97	93	94	93	92	97	88	93	56	70
CGK733	MCE Cell Cycle/DNA Damage Compound Library	92	87	94	87	60	89	85	86	60	21
UNC0642	MCE Cell Cycle/DNA Damage Compound Library	105	103	104	103	112	110	107	98	62	89
UF010	MCE Cell Cycle/DNA Damage Compound Library	113	107	110	107	102	107	110	110	63	60
KU-55933	MCE Cell Cycle/DNA Damage Compound Library	101	91	87	91	101	94	101	92	66	74
Wortmannin	MCE Cell Cycle/DNA Damage Compound Library	117	104	105	104	111	101	99	97	69	77
GSK126	MCE Cell Cycle/DNA Damage Compound Library	105	108	110	108	103	115	93	106	70	86
MN-64	MCE Cell Cycle/DNA Damage Compound Library	102	96	97	96	89	90	87	90	71	87
ZLN005	MCE Cell Cycle/DNA Damage Compound Library	111	98	102	98	100	102	100	102	71	58
Ftalenustine	MCE Cell Cycle/DNA Damage Compound Library	97	100	93	100	88	100	90	96	72	0
EPZ-5438	MCE Cell Cycle/DNA Damage Compound Library	87	90	92	85	90	85	90	88	74	82
BIBR 1532	MCE Cell Cycle/DNA Damage Compound Library	93	93	93	93	81	81	81	90	44	47
Thiazovivin	MCE Cell Cycle/DNA Damage Compound Library	114	109	111	109	110	113	102	105	74	84
BRD7116	MCE Cell Cycle/DNA Damage Compound Library	107	104	103	104	101	100	96	103	78	72
Y-27632 (dihydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	81	91	85	91	95	91	93	84	79	88
ML-323	MCE Cell Cycle/DNA Damage Compound Library	99	104	97	104	102	99	101	102	81	89
Zebularine	MCE Cell Cycle/DNA Damage Compound Library	94	96	94	96	92	94	92	94	82	79
BRD73954	MCE Cell Cycle/DNA Damage Compound Library	94	96	90	96	91	95	89	91	83	88
EPZ04777	MCE Cell Cycle/DNA Damage Compound Library	92	103	93	103	94	103	102	94	87	103
EPZ011989	MCE Cell Cycle/DNA Damage Compound Library	110	104	110	104	106	106	98	99	90	108
Lomustine	MCE Cell Cycle/DNA Damage Compound Library	96	97	104	97	94	97	96	98	92	54
Vidarabine	MCE Cell Cycle/DNA Damage Compound Library	96	93	96	93	93	90	84	89	93	92
Temozolomide	MCE Cell Cycle/DNA Damage Compound Library	91	85	99	85	95	91	91	92	94	75
CDK9-IN-1	MCE Cell Cycle/DNA Damage Compound Library	108	103	110	103	103	105	100	101	94	85
Cyclophosphamide	MCE Cell Cycle/DNA Damage Compound Library	113	104	103	104	103	102	103	101	97	112
Palifosfamide	MCE Cell Cycle/DNA Damage Compound Library	107	98	103	98	105	105	109	95	97	101
Estramustine (phosphate sodium)	MCE Cell Cycle/DNA Damage Compound Library	104	98	101	98	110	108	103	104	100	104
Folinic acid (Calcium)	MCE Cell Cycle/DNA Damage Compound Library	96	95	85	95	91	108	99	104	101	111
Tegafur	MCE Cell Cycle/DNA Damage Compound Library	94	92	100	92	100	98	106	96	101	101
UNC 669	MCE Cell Cycle/DNA Damage Compound Library	86	96	93	96	95	86	83	92	91	91
Levomofolic acid	MCE Cell Cycle/DNA Damage Compound Library	99	93	99	93	92	98	95	91	99	98
Gemfibrozil	MCE Cell Cycle/DNA Damage Compound Library	98	90	97	90	100	91	97	92	90	93
Cytidine	MCE Cell Cycle/DNA Damage Compound Library	104	92	95	92	86	97	95	92	87	92
GSK429286A	MCE Cell Cycle/DNA Damage Compound Library	94	92	84	92	93	96	84	92	80	87
SGC707	MCE Cell Cycle/DNA Damage Compound Library	93	93	89	93	94	91	90	88	95	96
(R)-(-)-JQ1 Enantiomer	MCE Cell Cycle/DNA Damage Compound Library	109	116	108	116	109	106	104	97	82	99
GSK2801	MCE Cell Cycle/DNA Damage Compound Library	96	95	97	95	95	111	95	92	85	93
Trimethoprim	MCE Cell Cycle/DNA Damage Compound Library	94	92	99	92	95	98	85	85	99	90
Carboplatin	MCE Cell Cycle/DNA Damage Compound Library	97	93	97	93	97	93	98	87	69	97
UNC1215	MCE Cell Cycle/DNA Damage Compound Library	103	93	93	93	100	91	97	101	102	95
Doxifluridine	MCE Cell Cycle/DNA Damage Compound Library	104	96	99	96	102	96	101	99	100	98
UPF 1069	MCE Cell Cycle/DNA Damage Compound Library	96	95	88	95	86	87	91	92	88	97
Pioglitazone (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	104	88	102	88	99	99	99	92	91	89
GSK0660	MCE Cell Cycle/DNA Damage Compound Library	93	98	103	98	99	112	93	96	80	99
PU-WS13	MCE Cell Cycle/DNA Damage Compound Library	98	95	109	95	97	99	89	96	87	91
Forodesine (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	100	93	102	93	99	86	90	92	96	97
E11	MCE Cell Cycle/DNA Damage Compound Library	96	95	95	95	89	90	85	86	81	91
WDR5-0103	MCE Cell Cycle/DNA Damage Compound Library	94	91	95	91	90	97	96	93	89	98
Fenofibrate	MCE Cell Cycle/DNA Damage Compound Library	106	100	96	100	106	106	99	101	81	90
XAV-939	MCE Cell Cycle/DNA Damage Compound Library	107	99	113	99	110	110	111	121	100	96
EPZ-5676	MCE Cell Cycle/DNA Damage Compound Library	103	102	103	102	103	104	92	99	86	99
Hydroxyurea	MCE Cell Cycle/DNA Damage Compound Library	106	107	104	107	111	108	101	104	90	99
A-365	MCE Cell Cycle/DNA Damage Compound Library	113	104	109	104	105	105	102	98	86	99
Sirtinol	MCE Cell Cycle/DNA Damage Compound Library	91	94	95	94	99	94	94	96	102	100
Bezafibrate	MCE Cell Cycle/DNA Damage Compound Library	100	95	95	95	99	97	103	97	97	101
Wy-14643	MCE Cell Cycle/DNA Damage Compound Library	96	91	94	91	97	91	88	92	97	101
Flumequine	MCE Cell Cycle/DNA Damage Compound Library	95	90	98	90	102	95	94	96	87	101
Tipiracil (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	105	99	99	99	104	104	101	96	101	102
MM-102 (trifluoroacetate)	MCE Cell Cycle/DNA Damage Compound Library	104	88	101	88	93	102	94	101	95	103
TZ9	MCE Cell Cycle/DNA Damage Compound Library	115	109	110	109	108	99	104	104	96	105
WIKI4	MCE Cell Cycle/DNA Damage Compound Library	101	90	102	90	93	102	99	102	95	109
L189	MCE Cell Cycle/DNA Damage Compound Library	104	100	108	100	107	105	103	100	103	109
EX-527	MCE Cell Cycle/DNA Damage Compound Library	106	105	112	105	109	106	107	118	104	104
RG108	MCE Cell Cycle/DNA Damage Compound Library	106	101	98	101	104	98	98	93	104	97
TBB	MCE Cell Cycle/DNA Damage Compound Library	106	100	104	100	97	106	105	105	104	103
Cisplatin	MCE Cell Cycle/DNA Damage Compound Library	104	97	112	97	109	99	103	100	106	102
Lomeguatrib	MCE Cell Cycle/DNA Damage Compound Library	107	96	111	96	111	111	96	103	108	103
TM6E	MCE Cell Cycle/DNA Damage Compound Library	106	114	110	114	107	109	106	117	108	115
PFI-2 (hydrochloride)	MCE Cell Cycle/DNA Damage Compound Library	119	114	117	114	116	103	119	112	109	108
Adenine	MCE Cell Cycle/DNA Damage Compound Library	109	93	108	93	108	104	105	95	110	109
Sodium Butyrate	MCE Cell Cycle/DNA Damage Compound Library	109	100	107	100	104	106	103	110	10	

7-EPI-TAXOL	Sequoia FDA approved anti-neoplastic drug library	88	96	88	93	1	3	29	30	1	2	0	2
7-ETHYL-10-HYDROXYCAMPOTHT	Sequoia FDA approved anti-neoplastic drug library	1	3	3	4	0	1	1	2	0	1	0	1
A-76962	Sequoia FDA approved anti-neoplastic drug library	114	103	113	101	116	106	115	103	112	89	120	101
ABIRATERONE	Sequoia FDA approved anti-neoplastic drug library	108	110	104	102	103	107	102	99	105	88	96	95
ABIRATERONE ACETATE	Sequoia FDA approved anti-neoplastic drug library	105	101	110	107	99	100	104	104	98	95	98	120
ABT263	Sequoia FDA approved anti-neoplastic drug library	78	93	72	83	0	53	0	12	0	0	0	0
ABT-888	Sequoia FDA approved anti-neoplastic drug library	112	112	106	113	115	103	109	102	112	106	112	114
ACLARUBICIN HCL	Sequoia FDA approved anti-neoplastic drug library	91	94	90	97	94	44	97	44	73	0	84	-1
ADRIAMYCIN	Sequoia FDA approved anti-neoplastic drug library	70	51	85	86	2	1	9	13	0	0	0	0
AFATINIB	Sequoia FDA approved anti-neoplastic drug library	93	87	99	91	97	89	93	91	82	48	81	63
ALARELIN ACETATE	Sequoia FDA approved anti-neoplastic drug library	103	101	106	105	107	104	101	99	105	114	102	116
AMG-458	Sequoia FDA approved anti-neoplastic drug library	99	103	108	108	95	92	94	99	30	43	49	67
ANASTROZOLE	Sequoia FDA approved anti-neoplastic drug library	106	98	104	104	110	102	102	106	105	104	106	112
APREPITANT	Sequoia FDA approved anti-neoplastic drug library	108	97	110	101	107	113	101	106	113	98	107	101
AS703026	Sequoia FDA approved anti-neoplastic drug library	104	121	101	112	95	111	88	109	73	69	84	104
AT7519	Sequoia FDA approved anti-neoplastic drug library	106	107	107	104	102	99	105	99	5	1	61	74
AXITINIB	Sequoia FDA approved anti-neoplastic drug library	111	106	110	106	115	105	108	106	59	11	73	40
AZD-4547	Sequoia FDA approved anti-neoplastic drug library	110	103	106	102	105	107	105	105	69	45	80	85
AZD-6244	Sequoia FDA approved anti-neoplastic drug library	109	124	115	116	106	113	101	107	86	86	102	104
AZD-8055	Sequoia FDA approved anti-neoplastic drug library	78	83	87	83	35	47	44	56	17	25	19	24
BAY 80-7550	Sequoia FDA approved anti-neoplastic drug library	105	98	104	101	103	105	99	97	107	122	103	111
BLEOMYCIN SULPHATE	Sequoia FDA approved anti-neoplastic drug library	59	49	86	89	9	5	41	54	2	1	5	5
BMS-777607	Sequoia FDA approved anti-neoplastic drug library	97	92	107	90	92	89	97	94	49	50	68	67
BMS-794833	Sequoia FDA approved anti-neoplastic drug library	87	97	96	105	37	67	54	84	23	35	29	66
BORTEZOMIB	Sequoia FDA approved anti-neoplastic drug library	0	0	0	0	0	0	0	0	0	0	0	0
BOSUTINIB Isomer 1	Sequoia FDA approved anti-neoplastic drug library	99	95	100	95	103	85	100	89	29	26	58	32
BRIVANIB ALANINATE	Sequoia FDA approved anti-neoplastic drug library	113	113	109	120	121	121	104	106	108	83	111	107
BUSERELIN ACETATE	Sequoia FDA approved anti-neoplastic drug library	100	87	98	98	108	94	102	92	97	91	94	109
CANERTINIB DIHCL	Sequoia FDA approved anti-neoplastic drug library	98	94	102	95	95	91	98	94	63	60	82	76
CARMUSTINE	Sequoia FDA approved anti-neoplastic drug library	100	106	110	102	108	101	107	103	110	134	109	56
CCG-63802	Sequoia FDA approved anti-neoplastic drug library	96	122	107	114	103	116	102	111	87	33	99	69
CCG-63808	Sequoia FDA approved anti-neoplastic drug library	110	113	113	113	114	110	103	108	108	67	106	106
CDDO Methyl ester	Sequoia FDA approved anti-neoplastic drug library	111	93	107	90	70	70	82	76	0	0	0	0
CEDIRANIB	Sequoia FDA approved anti-neoplastic drug library	89	101	98	108	95	103	99	102	70	66	91	86
CISPLATIN	Sequoia FDA approved anti-neoplastic drug library	111	122	108	111	117	118	104	107	117	113	108	109
CLADRIBINE	Sequoia FDA approved anti-neoplastic drug library	83	99	67	76	0	0	0	0	0	0	1	0
CLOFARABINE	Sequoia FDA approved anti-neoplastic drug library	15	72	17	35	0	1	0	1	0	1	0	1
CP-690550	Sequoia FDA approved anti-neoplastic drug library	111	107	108	100	108	107	102	105	116	118	108	104
CRIZOTINIB	Sequoia FDA approved anti-neoplastic drug library	111	110	110	112	107	107	113	103	75	6	86	12
CYC-116	Sequoia FDA approved anti-neoplastic drug library	105	121	99	102	83	93	81	91	3	7	4	6
CYT387	Sequoia FDA approved anti-neoplastic drug library	105	101	105	103	101	106	107	104	58	50	87	72
CYTARABINE	Sequoia FDA approved anti-neoplastic drug library	80	92	77	76	13	30	14	14	1	2	3	2
DASATINIB	Sequoia FDA approved anti-neoplastic drug library	98	88	105	88	88	81	93	89	69	67	81	84
Daurin02	Sequoia FDA approved anti-neoplastic drug library	90	98	105	100	3	9	39	66	0	0	0	3
DAUNORUBICINHCl	Sequoia FDA approved anti-neoplastic drug library	71	47	86	88	1	1	7	9	0	1	0	1
Dideoxycytidine	Sequoia FDA approved anti-neoplastic drug library	112	109	115	101	106	101	104	104	119	102	109	114
DOCETAXEL	Sequoia FDA approved anti-neoplastic drug library	8	23	47	79	1	2	3	3	1	2	0	1
DOVITINIB LACTATE	Sequoia FDA approved anti-neoplastic drug library	53	54	67	72	16	36	35	57	6	9	9	12
DOXIFLURIDINE	Sequoia FDA approved anti-neoplastic drug library	104	109	98	108	104	111	98	103	98	99	104	104
DOXORUBICIN HYDROCHLORIDE	Sequoia FDA approved anti-neoplastic drug library	85	62	88	90	2	1	12	18	0	0	0	0
ELACRIDAR	Sequoia FDA approved anti-neoplastic drug library	99	108	104	106	108	102	103	100	97	95	95	104
ELACRIDAR HCl	Sequoia FDA approved anti-neoplastic drug library	112	102	105	98	108	99	105	99	102	93	102	98
ENOCITABINE	Sequoia FDA approved anti-neoplastic drug library	94	98	97	97	96	80	98	83	38	38	60	34
EPIRUBICIN HYDROCHLORIDE	Sequoia FDA approved anti-neoplastic drug library	99	93	103	98	14	4	58	42	0	1	0	1
EPTAPLATIN	Sequoia FDA approved anti-neoplastic drug library	93	101	103	97	92	89	97	89	6	66	15	85
ERLOTINIB	Sequoia FDA approved anti-neoplastic drug library	106	121	104	109	107	111	99	103	96	100	97	104
ERLOTINIB HCl	Sequoia FDA approved anti-neoplastic drug library	101	102	108	109	100	104	96	105	78	83	89	91
ERLOTINIB MESYLATE	Sequoia FDA approved anti-neoplastic drug library	94	95	102	93	90	93	101	90	90	79	95	80
ESTRAMUSTINE SODIUM PHOSPH	Sequoia FDA approved anti-neoplastic drug library	91	95	94	104	90	91	91	98	72	71	82	89
ETOPOSIDE	Sequoia FDA approved anti-neoplastic drug library	92	89	99	96	14	24	51	79	2	3	1	7
EXEMESTANE	Sequoia FDA approved anti-neoplastic drug library	106	115	104	116	107	107	104	115	110	105	103	111
FASUDIL HCl	Sequoia FDA approved anti-neoplastic drug library	108	102	106	108	101	104	99	105	102	97	110	103
FLAVOPIRIDOL	Sequoia FDA approved anti-neoplastic drug library	106	114	111	104	74	109	107	105	0	67	105	0
FLUDARABINE	Sequoia FDA approved anti-neoplastic drug library	104	99	108	99	104	104	105	99	8	1	30	2
FLUDARABINE PHOSPHATE	Sequoia FDA approved anti-neoplastic drug library	106	119	104	103	105	94	98	106	4	12	35	16
FORETINIB	Sequoia FDA approved anti-neoplastic drug library	28	46	44	71	13	33	35	60	1	3	1	3
FORMESTANE	Sequoia FDA approved anti-neoplastic drug library	110	108	109	103	109	109	108	102	105	100	108	107
GDC-0941	Sequoia FDA approved anti-neoplastic drug library	92	107	99	95	68	71	78	81	22	28	37	39
GEFITINIB	Sequoia FDA approved anti-neoplastic drug library	120	115	114	108	115	114	111	106	103	73	113	90
GEMCITABINE HYDROCHLORIDE	Sequoia FDA approved anti-neoplastic drug library	2	3	3	2	1	2	1	1	1	2	0	3
GOSERELIN ACETATE	Sequoia FDA approved anti-neoplastic drug library	91	87	99	93	97	89	102	91	86	93	90	104
GSK-2118436	Sequoia FDA approved anti-neoplastic drug library	100	93	104	92	102	97	106	96	97	89	95	106
GSK-1120212	Sequoia FDA approved anti-neoplastic drug library	97	98	97	107	76	94	85	91	78	87	82	95
GSK-1120212 DMSO	Sequoia FDA approved anti-neoplastic drug library	90	109	99	102	73	90	82	102	79	70	78	93
GSK-1904529A	Sequoia FDA approved anti-neoplastic drug library	86	94	94	91	79	84	93	82	62	58	75	64
GSK-2126458	Sequoia FDA approved anti-neoplastic drug library	39	46	59	66	16	22	30	39	4	0	7	0
IDARUBICIN HCl	Sequoia FDA approved anti-neoplastic drug library	5	4	13	16	0	0	0	0	0	0	0	0
IDOXURIDINE	Sequoia FDA approved anti-neoplastic drug library	113	107	109	108	105	102	100	99	45	46	77	67
IMATINIB BASE	Sequoia FDA approved anti-neoplastic drug library	95	98	103	93	89	99	99	94	96	91	103	91
IMATINIB MESYLATE	Sequoia FDA approved anti-neoplastic drug library	111	98	102	90	106	100	103	103	107	101	100	98
IRINOTECAN HCl (trihydrate)	Sequoia FDA approved anti-neoplastic drug library	108	96	104	110	102	100	98	104	22	21	52	70
LAPATINIB	Sequoia FDA approved anti-neoplastic drug library	106	104	107	103	99	107	100	99	100	116	100	107
LAPATINIB TOSYLATE	Sequoia FDA approved anti-neoplastic drug library	99	92	102	94	96	85	98	88	96	93	95	90
LBH-589	Sequoia FDA approved anti-neoplastic drug library	0	1	0	1	0	1	0	0	0	1	0	1
LDK378	Sequoia FDA approved anti-neoplastic drug library	106	94	101	94	100	93	97	88	77	32	79	42
LEE011	Sequoia FDA approved anti-neoplastic drug library	88	97	97	100	89	92	97	93	46	46	75	101
LENALIDOMIDE	Sequoia FDA approved anti-neoplastic drug library	104	114	110	104	100	110	106	110	82	79	115	116
LEUPROLIDE ACETATE	Sequoia FDA approved anti-neoplastic drug library	105	98	111	93	110	97	107	97	119	97	109	105
LOMEQUATRIB	Sequoia FDA approved anti-neoplastic drug library	109	101	113	95	108	100	117	102	111	98	117	122
LONASTINE	Sequoia FDA approved anti-neoplastic drug library	109	105	114	105	115	105	112	102	129	101	115	83
LONDAMINE	Sequoia FDA approved anti-neoplastic drug library	106	103	113	105	112	107	106	105	115	103	109	115
LY-294002	Sequoia FDA approved anti-neoplastic drug library	103	121	101	105	109	111	105	103	82	73	88	84
LY-404039	Sequoia FDA approved anti-neoplastic drug library	111	113	117	104	112	117	115	119	102	113	118	123
LY-450139	Sequoia FDA approved anti-neoplastic drug library	107	101	112	99	105	100	108	96	98	95	103	98
MASITINIB	Sequoia FDA approved anti-neoplastic drug library	108	103	107	100	107	97	107	100	102	94	101	100
MDV-3100	Sequoia FDA approved anti-neoplastic drug library	95	91	102	95	92	86	92	87	91	75	90	86
MELPHALAN	Sequoia FDA approved anti-neoplastic drug library	109	93	108	108	105	98	101	98	68	11	96	26
MGCD-265	Sequoia FDA approved anti-neoplastic drug library	96	97	98	96	64	84	72	87	21	30	31	65
MITOMYCIN C	Sequoia FDA approved anti-neoplastic drug library	60	88	59	58	2	5	4	3	0	1	1	1
MITOXANTHRONE HCl	Sequoia FDA approved anti-neoplastic drug library	29	5	52	33	2	5	1	0	1	0	0	0
MK-0822	Sequoia FDA approved anti-neoplastic drug library	104	99	107	104	104	100	100	99	100	101	104	99
MONENSIN SODIUM	Sequoia FDA approved anti-neoplastic drug library	98	102	103	99	5	7	12	5	1	0	1	1
MOTESANIB	Sequoia FDA approved anti-neoplastic drug library	108	113	110	102	103	101	105	100	100	97	104	103
NAFARELIN ACETATE	Sequoia FDA approved anti-neoplastic drug library	96	94	103	93								

SARACATINIB	Sequoia FDA approved anti-neoplastic drug library	98	91	97	95	87	85	92	84	72	68	63	81
SATRAPLATIN	Sequoia FDA approved anti-neoplastic drug library	97	98	103	98	83	86	81	89	2	5	4	4
SB-408124	Sequoia FDA approved anti-neoplastic drug library	114	117	110	105	120	116	112	104	143	121	117	120
SORAFENIB TOLSYLATE	Sequoia FDA approved anti-neoplastic drug library	76	92	77	93	21	44	41	64	23	48	28	69
ST-836 HCl	Sequoia FDA approved anti-neoplastic drug library	112	108	98	108	111	114	101	110	98	119	97	122
SU-11274	Sequoia FDA approved anti-neoplastic drug library	102	105	107	94	89	91	89	90	73	50	89	87
SUNITINIB	Sequoia FDA approved anti-neoplastic drug library	89	98	92	97	25	43	42	66	13	21	19	40
SUNITINIB MALATE	Sequoia FDA approved anti-neoplastic drug library	72	79	80	80	19	35	41	60	10	14	14	25
TANDUTINIB	Sequoia FDA approved anti-neoplastic drug library	102	104	106	102	96	91	102	95	30	29	57	60
TARIQUIDAR	Sequoia FDA approved anti-neoplastic drug library	107	102	109	108	106	105	100	102	107	82	96	92
TEGAFUR	Sequoia FDA approved anti-neoplastic drug library	105	98	111	104	107	101	106	101	124	115	110	109
TENIPOSIDE	Sequoia FDA approved anti-neoplastic drug library	48	31	70	87	2	3	9	14	1	1	1	2
TOK-001	Sequoia FDA approved anti-neoplastic drug library	105	104	114	105	111	105	114	107	104	80	112	100
TOPOTECAN HCL	Sequoia FDA approved anti-neoplastic drug library	74	99	82	108	1	3	3	6	0	1	0	1
TOREMIFENE CITRATE	Sequoia FDA approved anti-neoplastic drug library	105	98	104	98	115	91	105	96	109	89	104	97
Trametinib	Sequoia FDA approved anti-neoplastic drug library	98	94	104	92	97	74	92	84	56	61	66	77
TRAMETINIB	Sequoia FDA approved anti-neoplastic drug library	94	113	98	106	73	108	85	103	68	191	75	164
TRIPTORELIN ACETATE	Sequoia FDA approved anti-neoplastic drug library	97	93	99	93	100	89	103	91	101	81	94	88
VADIMEZAN	Sequoia FDA approved anti-neoplastic drug library	107	99	110	103	105	104	102	106	98	96	112	105
VALRUBICIN	Sequoia FDA approved anti-neoplastic drug library	102	95	105	98	47	45	77	87	0	0	2	4
VANDETANIB	Sequoia FDA approved anti-neoplastic drug library	99	105	102	99	97	97	102	99	76	54	90	74
VATALANIB HCl	Sequoia FDA approved anti-neoplastic drug library	110	102	106	99	111	99	107	97	120	102	116	105
VINBLASTINE SULFATE	Sequoia FDA approved anti-neoplastic drug library	2	2	32	11	1	2	3	1	0	0	1	0
VINCRIStINE SULPHATE	Sequoia FDA approved anti-neoplastic drug library	1	2	31	45	1	1	3	1	0	0	0	1
VINDESINE SULFATE	Sequoia FDA approved anti-neoplastic drug library	8	4	71	81	1	2	37	19	1	0	1	1
VINOESLBINE BITATRATE	Sequoia FDA approved anti-neoplastic drug library	59	75	95	102	1	2	37	30	2	0	1	2
VX-680	Sequoia FDA approved anti-neoplastic drug library	94	92	98	90	4	4	31	41	1	2	0	3
YM155	Sequoia FDA approved anti-neoplastic drug library	87	95	111	101	1	1	89	92	0	0	0	16
Zebularine	Sequoia FDA approved anti-neoplastic drug library	98	91	103	97	102	98	103	96	100	86	97	105
ZOSUQUIDAR	Sequoia FDA approved anti-neoplastic drug library	96	94	98	88	93	90	87	86	75	88	89	86