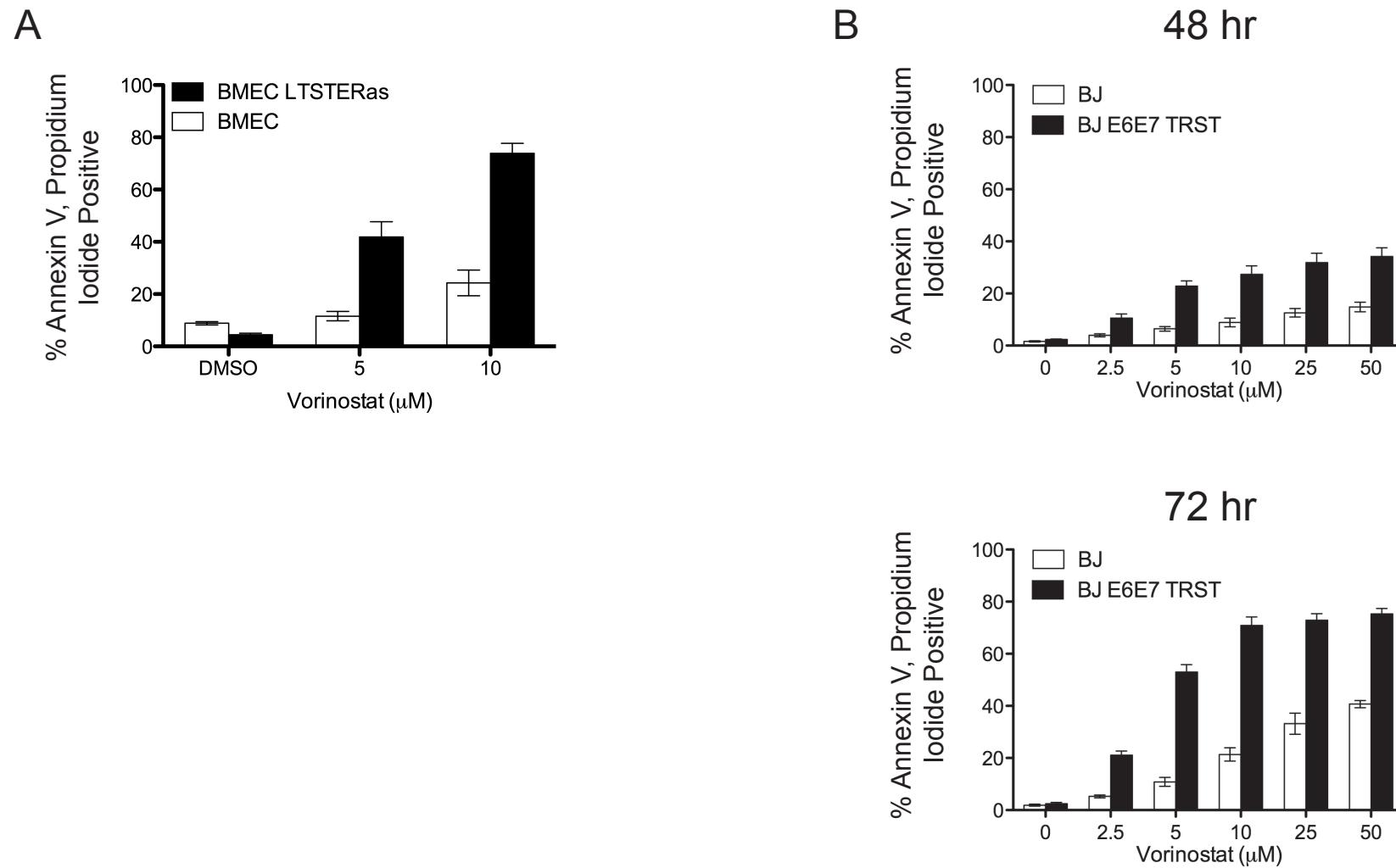


SUPPLEMENTARY FIGURES

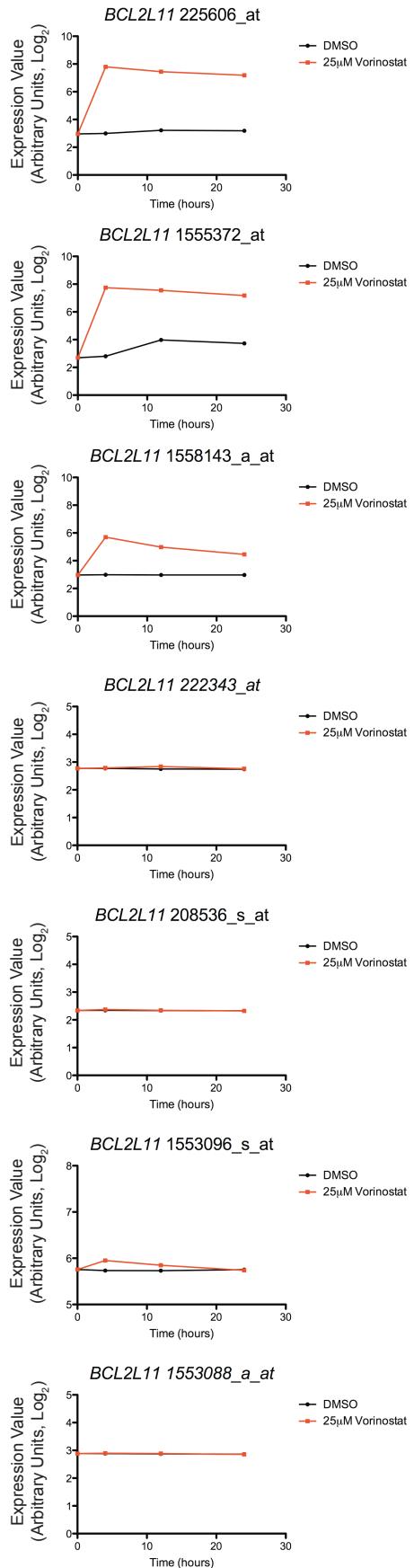
Supp. Fig. 1. (A) BMEC and BMEC BJ LTSTERas cells were incubated with vehicle (DMSO) or with 10 or 25 μ M vorinostat for 48 hrs, harvested, stained with annexin-V-APC and propidium iodide, and analysed by flow cytometry. The percentage of total cells staining positive for annexin-V-APC binding / PI uptake is shown. Data are presented as mean \pm SEM from three separate experiments. **(B)** BJ and BJ E6E7 TRST cells were incubated with 0, 2.5, 5, 10, 25 and 50 μ M vorinostat for 48 and 72 hrs and the percentage of cell death was measured by annexin-V-APC binding and propidium iodide uptake by flow cytometry. Data are presented as mean (% AnnV+/PI+ double positive) \pm SEM of 5 independent experiments.

Supp. Fig. 2. Responses of 7 Affymetrix HG U133 plus 2.0 probe sets targeting *BCL2L11* in BJ and BJ LTSTERas fibroblasts. Transcriptional responses of *BCL2L11* in BJ and BJ LTSTERas fibroblasts following DMSO- (black) and 25 μ M vorinostat-treatment (red). Log₂ transformed expression intensities of seven HG U133 plus 2.0 probe sets corresponding to *BCL2L11* are shown. Probe set IDs are indicated in the title of each panel. Normalized probe set intensity values (Y-axis) are shown, which allows direct comparison of basal expression (Time 0hr) and log₂ transcriptional responses over time between cell types (BJ and BJ LTSTERas). Data represent the summarized probe set intensities from three independent microarray time course experiments.

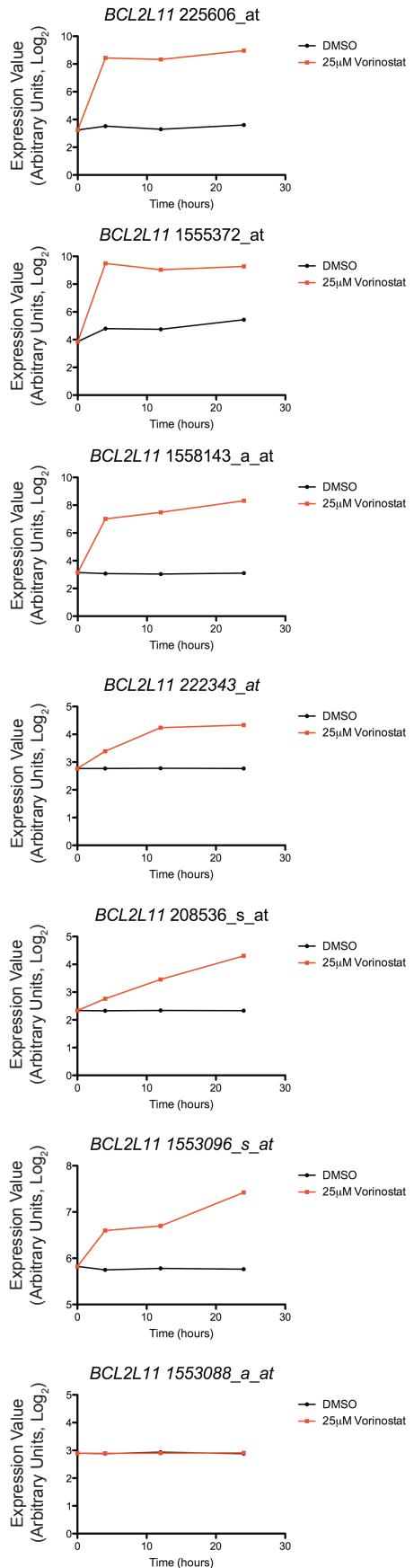


Supplementary Figure 1

BJ



BJ LTSTERas



Supplementary Figure 2

Supplementary Table 1. Gene Ontology biological process terms over-represented in genes that are induced by vorinostat in BJ LTSTERas cells and repressed in BJ cells p<0.05

GO Accession	GO Term	Count	% Total	EASE
GO:0008632	apoptotic program	5	4.10%	0.002357186
GO:0006260	DNA replication	7	5.74%	0.003200373
GO:0006281	DNA repair	7	5.74%	0.007455047
GO:0006259	DNA metabolic process	12	9.84%	0.008019879
GO:0051348	negative regulation of transferase activity	4	3.28%	0.008217799
GO:0043086	negative regulation of catalytic activity	4	3.28%	0.018768446
GO:0051338	regulation of transferase activity	6	4.92%	0.020159042
GO:0043549	regulation of kinase activity	6	4.92%	0.02288518
GO:0012501	programmed cell death	11	9.02%	0.030193479
GO:0032944	regulation of mononuclear cell proliferation	3	2.46%	0.036431565
GO:0006915	apoptosis	11	9.02%	0.039420601
GO:0050670	regulation of lymphocyte proliferation	3	2.46%	0.040215216
GO:0000079	regulation of cyclin-dependent protein kinase activity	3	2.46%	0.046767451
GO:0045786	negative regulation of progression through cell cycle	5	4.10%	0.047478569

Supplementary Table 2. Gene Ontology biological process terms over-represented in genes that are induced by vorinostat in BJ LTSTERas cells and unchanged in BJ cells p<0.05

GO Accession	GO Term	Count	% Total	EASE
GO:0006888	ER to Golgi vesicle-mediated transport	11	1.14%	0.00100352
GO:0007242	intracellular signaling cascade	94	9.70%	0.003099069
GO:0007264	small GTPase mediated signal transduction	36	3.72%	0.008681954
GO:0008202	steroid metabolic process	17	1.75%	0.012314798
GO:0012502	induction of programmed cell death	20	2.06%	0.013021849
GO:0048193	Golgi vesicle transport	12	1.24%	0.016068731
GO:0043068	positive regulation of programmed cell death	22	2.27%	0.017216584
GO:0019395	fatty acid oxidation	6	0.62%	0.018710224
GO:0043065	positive regulation of apoptosis	22	2.27%	0.019439932
GO:0009064	glutamine family amino acid metabolic process	7	0.72%	0.020396763
GO:0008632	apoptotic program	10	1.03%	0.020999991
GO:0044270	nitrogen compound catabolic process	9	0.93%	0.022263713
GO:0007050	cell cycle arrest	10	1.03%	0.024224036
GO:0006796	phosphate metabolic process	60	6.19%	0.024523132
GO:0015031	protein transport	45	4.64%	0.030712213
GO:0016192	vesicle-mediated transport	35	3.61%	0.031563249
GO:0006464	protein modification process	102	10.53%	0.032839207
GO:0019752	carboxylic acid metabolic process	38	3.92%	0.033383507
GO:0043412	biopolymer modification	104	10.73%	0.034038177
GO:0008610	lipid biosynthetic process	21	2.17%	0.041103783
GO:0006694	steroid biosynthetic process	9	0.93%	0.041936958
GO:0009112	nucleobase metabolic process	4	0.41%	0.04217483
GO:0008206	bile acid metabolic process	4	0.41%	0.044311172
GO:0016310	phosphorylation	50	5.16%	0.046115052
GO:0009615	response to virus	10	1.03%	0.0461995

Supplementary Table 3. Gene Ontology biological process terms over-represented in genes that are hyper-induced by vorinostat in BJ LTSTERas cells p<0.05

GO Accession	GO Term	Count	% Total	EASE
GO:0007242	intracellular signaling cascade	62	11.25%	6.66E-04
GO:0051649	establishment of cellular localization	40	7.26%	0.001875616
GO:0007264	small GTPase mediated signal transduction	24	4.36%	0.006047776
GO:0046907	intracellular transport	32	5.81%	0.006758283
GO:0006796	phosphate metabolic process	40	7.26%	0.007820526
GO:0007243	protein kinase cascade	21	3.81%	0.009972866
GO:0016310	phosphorylation	34	6.17%	0.011188195
GO:0045184	establishment of protein localization	32	5.81%	0.012453905
GO:0043281	regulation of caspase activity	6	1.09%	0.01772116
GO:0015031	protein transport	29	5.26%	0.024455607
GO:0016197	endosome transport	5	0.91%	0.028691201
GO:0008632	apoptotic program	7	1.27%	0.028917113
GO:0044271	nitrogen compound biosynthetic process	8	1.45%	0.033181677
GO:0051336	regulation of hydrolase activity	11	2.00%	0.038027413
GO:0016049	cell growth	11	2.00%	0.039229982
GO:0016192	vesicle-mediated transport	22	3.99%	0.042628943
GO:0007005	mitochondrion organization and biogenesis	7	1.27%	0.043408298
GO:0009890	negative regulation of biosynthetic process	5	0.91%	0.047297269
GO:0007010	cytoskeleton organization and biogenesis	22	3.99%	0.047360603
GO:0008361	regulation of cell size	11	2.00%	0.047726012