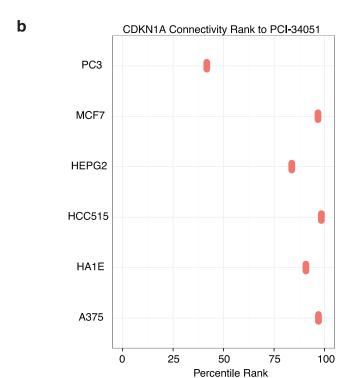
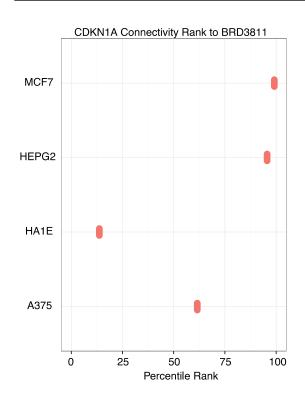
## a Expression Similarity between PCI-34501 Treatment and Gene Overexpression

Rank Order	Gene	Percentile Rank
1	CDKN1A	96.0
2	DLX3	92.5
3	CD40	91.2
4	MAGEB6	90.6
5	PRKCE	89.4
6	TXNIP	88.7
7	KLF6	87.7
8	CDKN1B	87.1
9	NFE2L2	86.9
10	GADD45B	85.8
11	EBF1	85.6
12	OVOL2	85.4
13	RELB	85.4
14	GATA2	85.0
15	POU5F1	84.9
16	HOXA9	84.8
17	TLE1	84.7
18	ISX	84.4
19	PHB	83.6
20	RARG	83.2

## Expression Similarity between BRD3811 Treatment and Gene Overexpression

Rank Order	Gene	Percentile Rank
1	ZBTB20	82.7
2	MAGEB6	78.7
3	GADD45B	77.7
4	PHB	76.8
5	LYN	76.4
6	SF1	76.2
7	LTBR	75.3
8	KLF6	75.2
9	PCGF3	74.9
10	SATB2	73.8
11	S1PR3	72.4
12	GATA2	72.3
13	BCL10	72.1
14	HOXA5	69.9
15	RASD1	69.9
16	OVOL2	68.3
17	ZNF366	68.2
18	PRDM1	67.4
19	MEIS2	67.1
20	FOXA3	67.0
•••	•••	•••
25	CDKN1A	65.9





Supplementary Figure 4. PCI-34051 treatment is highly correlated with p21 (CDKN1A) overexpression. (a) Average percentile rank by gene expression signature similarity across multiple cell types. Treatment with PCI-34051 is highly correlated with p21 (CDKN1A) overexpression (96th percentile on average) while treatment with BRD3811 is not (66 percentile on average). Percentile ranks are relative to a total of 430 overexpressed genes. (b) PCI-34051 treatment produced a replicable expression signature in 6 cell lines while BRD3811 treatment was replicable in only 4. For the cell lines in which the compound treatments were reproducible, PCI-34051 treatment was more similar to p21 overexpression than was BRD3811 treatment.