SUPPLEMENTARY DATA FOR:

Studies on the Antiproliferative Effects of Tropolone Derivatives in Jurkat T-Lymphocyte Cells

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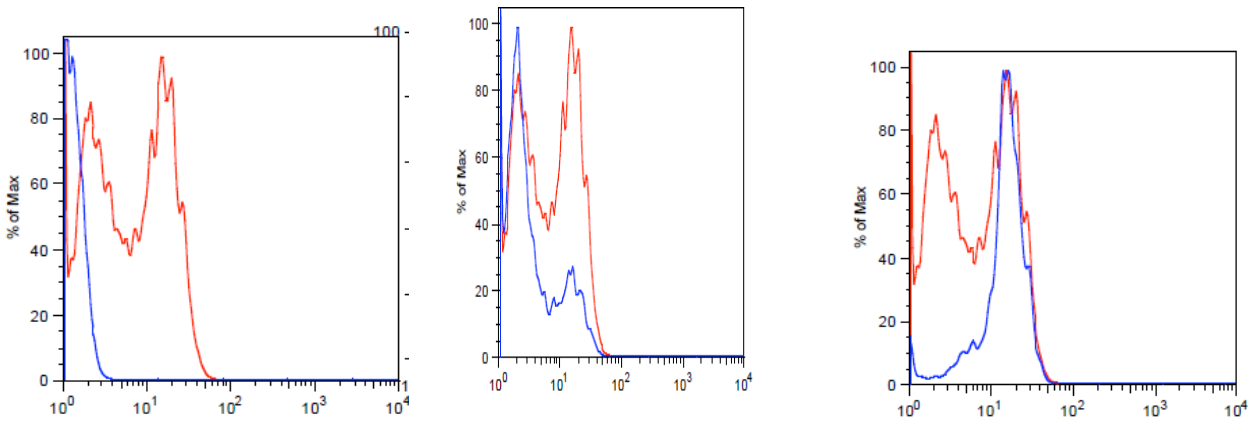
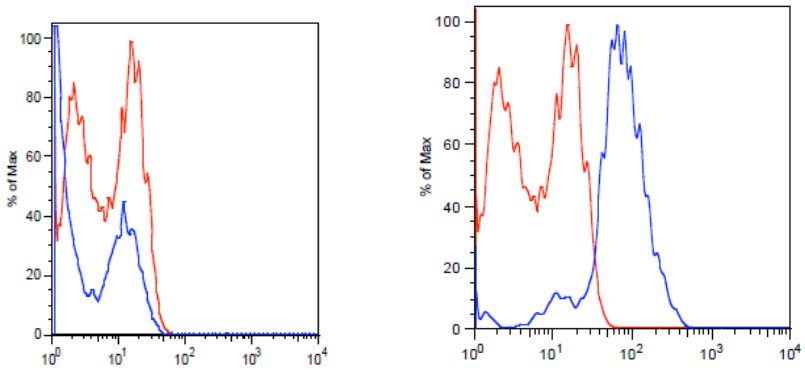


a) Experimental/compensation controls [2^o antibody (blue); untreated control (red)]

b) Compound **4**

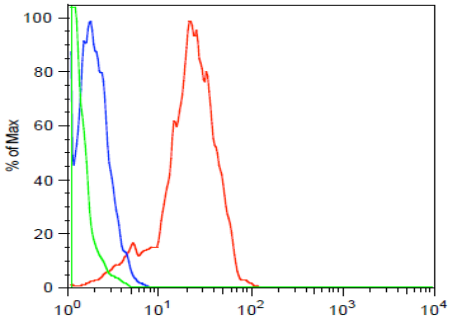
c) Compound **1**



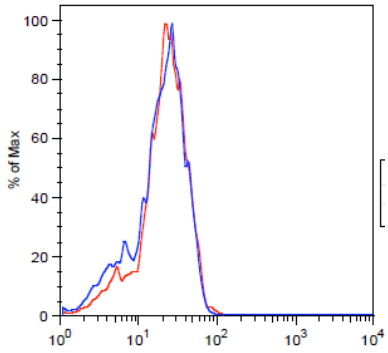
d) Compound **2**

e) Vorinostat

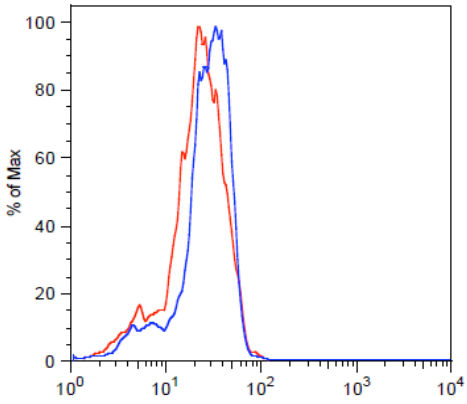
Figure S1a. Modulation of histone H3K9Ac antibodies in Jurkat cells after a 12h treatment with 10 µM HDACi. **Note:** Untreated control for pertinent HDACi treatments represented in red and HDACi represented in blue on the corresponding histograms.



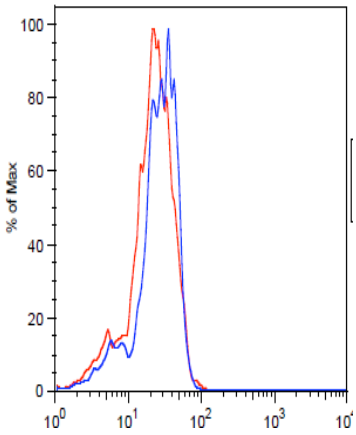
Experimental/compensation controls [unlabeled cells (green); 2^o antibody (blue); untreated control (red)].



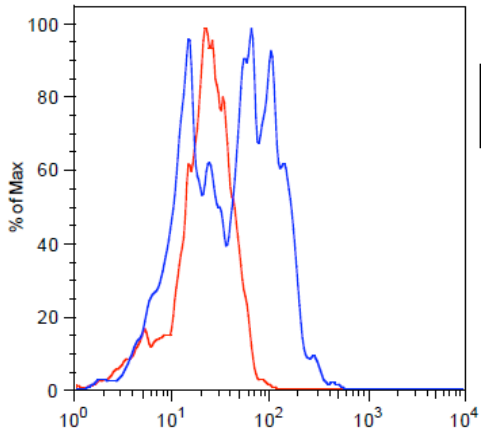
Compound **4**



Compound **1**

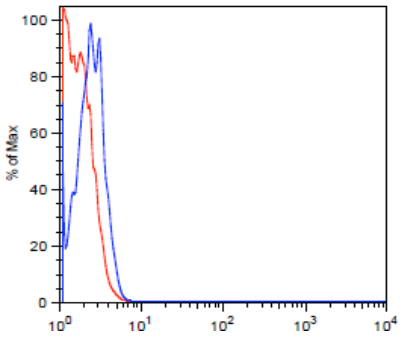


Compound **2**

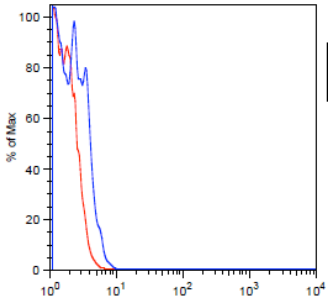


Vorinostat

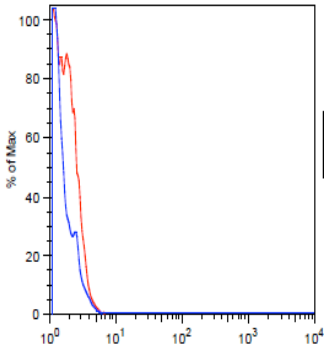
Figure S1b. Modulation of histone H3K23Ac antibodies in Jurkat cells after a 12h treatment with 10 µM HDACi. **Note:** Untreated control for pertinent HDACi treatments represented in red and HDACi represented in blue on the corresponding histograms.



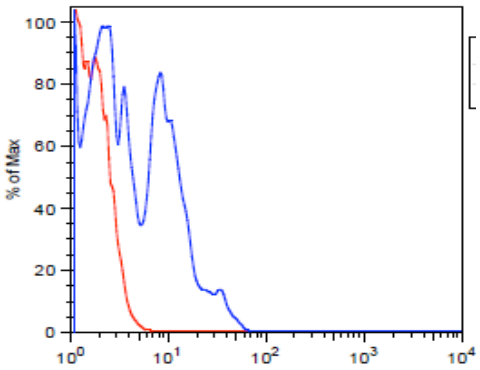
Compound **1**



Compound **2**



Compound **4**



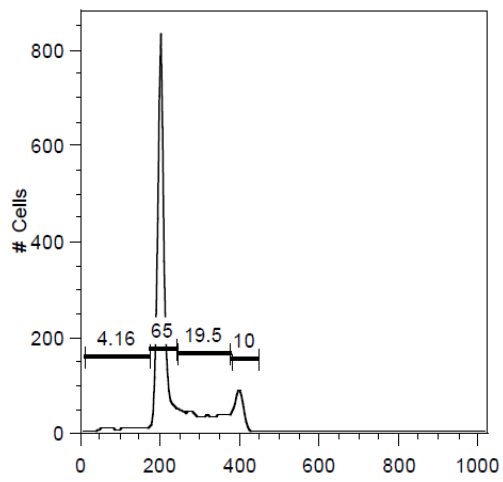
Vorinostat

Figure S2. Evaluation of p21 expression in Jurkat cells after a **24h** treatment with **10** µM HDACi. **Note:** Untreated control for pertinent HDACi treatments represented in red and HDACi represented in blue on the corresponding histograms.

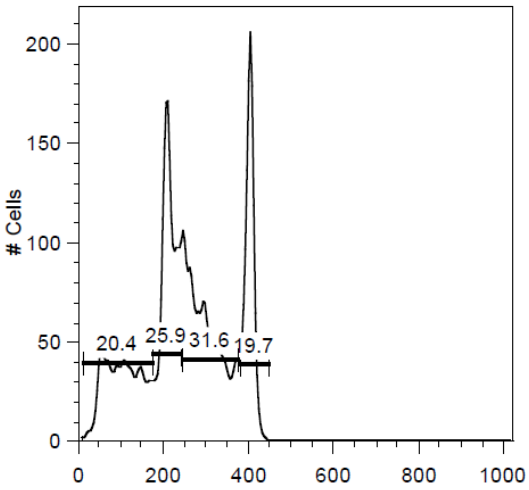
Table S1. Time-dependent antiproliferative effects of tropolones and vorinostat on cell cycle progression

Time-dependent analysis of the antiproliferative effects of tropolones on cell cycle progression as measured via FACS analysis in Jurkat cells after a 24h treatment.				
Treatment	**24h**			
	%<G0/G1	**%G1**	**%S**	**%G2-M**
Control	2.39	60.90	20.90	14.30
10 µM Vorinostat	48.90	7.46	19.90	12.30
10 µM Compound **1**	13.90	70.20	13.30	1.81
10 µM Compound **2**	13.90	66.50	15.80	2.58
10 µM Compound **4**	1.62	63.00	20.60	13.50

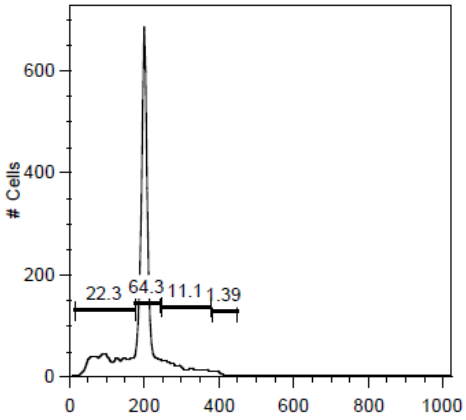
Time-dependent analysis of the antiproliferative effects of tropolones on cell cycle progression as measured via FACS analysis in Jurkat cells after a 36h treatment.				
Treatment	**36h**			
	%<G0/G1	**%G1**	**%S**	**%G2-M**
Control	1.80	59.10	23.00	14.20
10 µM Vorinostat	60.80	6.90	15.60	14.90
10 µM Compound **1**	18.50	64.20	13.30	2.97
10 µM Compound **2**	13.40	65.90	14.60	4.35
10 µM Compound **4**	1.22	60.70	21.80	14.60



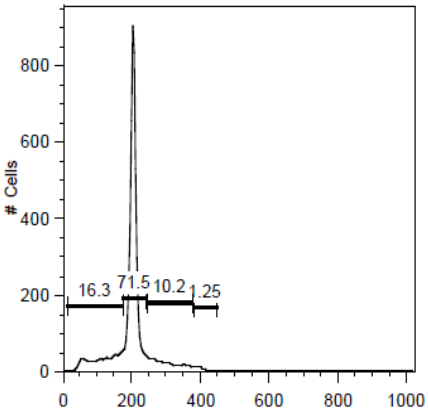
Control



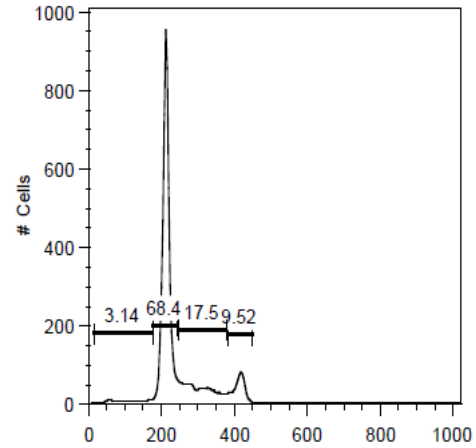
10 µM Vorinostat



10 µM Compound **1**

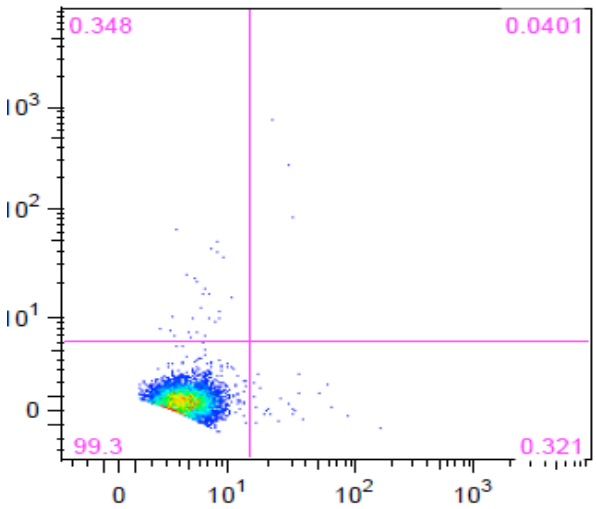


10 µM Compound **2**

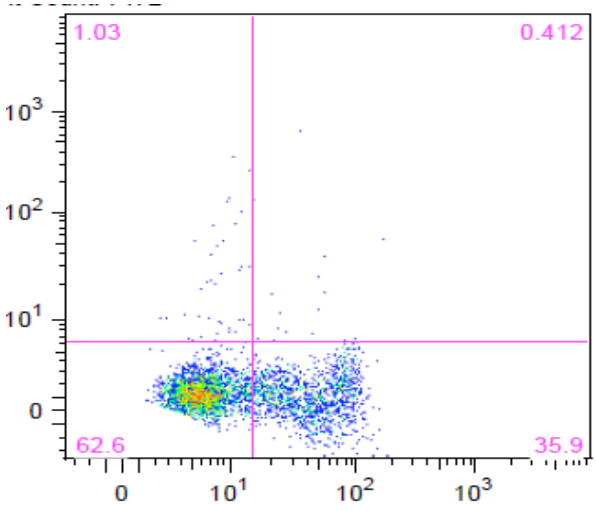


10 µM Compound **4**

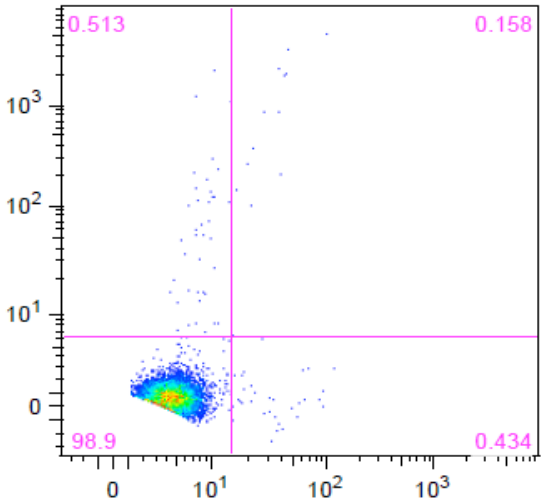
Figure S3. Histograms for cell cycle analysis



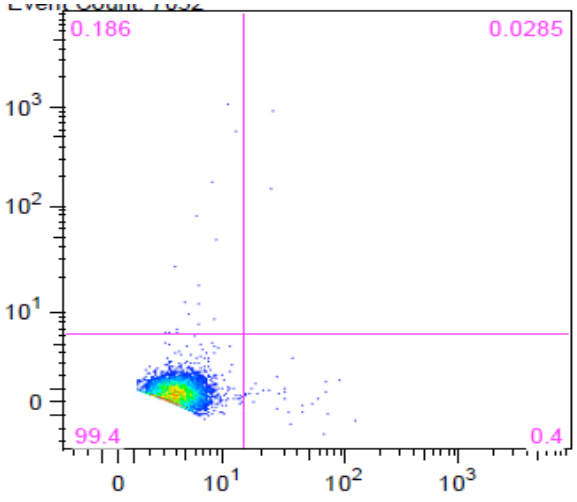
a) Control



b) Vorinostat



c) Compound **1**



d) Compound **2**

Figure S4: Evaluation of Caspase 8 activation in Jurkat cells after a 24h treatment with 10 µM HDACi: y axis represents PI response whereas x axis represents caspase-8-carboxyfluorescein (FAM) response. Quadrant 1 (bottom left) represents intact (live) cells (FAM^-, PI^-); Quadrant 2 (bottom right) represents caspases-8 responsive cells (FAM^+, PI^-).

Table S2. Time-dependent analysis of caspase-3/7 activation in Jurkat cells

Treatment		Caspase-3/7 Activity (Mean RLU)		
	6h	12h	24h	48h
Control	59,417	69,935	136,627	109,510
Vorinostat	53,518	157,988	125,484	95,463
Compound **1**	88,661	97,513	76,948	105,357
Compound **2**	73,949	110,650	80,438	71,048

Table S3. Standard deviation values for caspase-3/7 analysis in Jurkat cells

Treatment	6h	12h	24h	48h
Control	10002.74	7003.63	31846.96	4710.453
Vorinostat	7939.778	8869.66	20509.97	10357.53
Compound **1**	11860.49	6312.14	5292.832	7390.019
Compound **2**	21813.73	10670.77	8117.586	6650.594