

Correlation Analysis of Protein Expression of 10 HDAC/Sirtuin Isoenzymes with Sensitivities of 23 Anticancer Drugs in 17 Cancer Cell Lines and Potentiation of Drug Activity by Co-Treatment with HDAC Inhibitors

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Table S1. Relative HDAC/Sirt isoenzyme protein expression of various cancer cell lines.

Table S2. R and p-values of Pearson correlation matrix for HDAC isoenzyme protein expression.

Table S3. R and p-values of Spearman correlation matrix for HDAC isoenzyme protein expression.

Table S4. R and p-values of Pearson correlation matrix for HDAC isoenzyme mRNA expression with data of the NCI 60 cancer cell line program.

Table S5. Doubling times in hours of cancer cell lines.

Table S6. R and p-values of univariate correlation of HDAC isoenzyme protein expression with anticancer drug potency expressed as GI₅₀ values and the doubling time of cancer cells.

Table S7. R and p-values of Pearson correlation of HDAC isoenzyme mRNA expression with data of the NCI 60 cancer cell line program with anticancer drug potency expressed as GI₅₀ values.

Table S8. Localization of HDAC isoenzymes across the chromosomes and corresponding reference sequence; from on UCSC Genome Browser.

Figure S1. Representative electropherogram showing the total protein content of the panel of 17 cancer cell lines used as internal controls in all Western blotting, as developed according to the TGX Stain Free Gels systems from Bio-Rad.

Figure S2. Western blots for the panel of 17 cancer cell lines for HDAC1, marked with antibody #5356 from Cell Signaling Technology.

Figure S3. Western blots for the panel of 17 cancer cell lines for HDAC2, marked with antibody #5113 from Cell Signaling Technology.

Figure S4. Western blots for the panel of 17 cancer cell lines for HDAC4, marked with antibody #7628 from Cell Signaling Technology.

Figure S5. Western blots for the panel of 17 cancer cell lines for HDAC6, marked with antibody #7558 from Cell Signaling Technology.

Figure S6. Western blots for the panel of 17 cancer cell lines for Sirt1, marked with antibody #9475 from Cell Signaling Technology.

Figure S7. Western blots for the panel of 17 cancer cell lines for Sirt2, marked with antibody #12650 from Cell Signaling Technology.

Figure S8. Western blots for the panel of 17 cancer cell lines for Sirt3, marked with antibody #5490 from Cell Signaling Technology.

Figure S9. Western blots for the panel of 17 cancer cell lines for Sirt5, marked with antibody #8782 from Cell Signaling Technology.

Figure S10. Western blots for the panel of 17 cancer cell lines for Sirt6, marked with antibody #12486 from Cell Signaling Technology.

Figure S11. Western blots for the panel of 17 cancer cell lines for Sirt7, marked with antibody #5360 from Cell Signaling Technology.

Figure S12. Univariate correlation matrix of the Spearman correlation coefficients for the expression of HDAC/Sirt isoenzyme proteins.

Figure S13. Univariate correlation matrix of the Spearman correlation coefficients with the NCI data for the expression of HDAC/Sirt isoenzyme mRNA.

Figure S14. Univariate correlation matrix of the Spearman correlation coefficients for the expression of the HDAC/Sirt isoenzyme protein with anticancer drug potency expressed as GI₅₀ values and the doubling time of cancer cells.

Figure S15. Univariate correlation matrix of the Spearman correlation coefficients with the NCI data for the expression of the HDAC/Sirt isoenzyme mRNA with anticancer drug potency expressed as GI₅₀.

Figure S16. Univariate correlation matrix of the Pearson with FDR correction correlation for the expression of HDAC/Sirt isoenzyme proteins.

Figure S17. Univariate correlation matrix of the Pearson with FDR correction correlation with the NCI data for the expression of HDAC/Sirt isoenzyme mRNA.

Figure S18. Univariate correlation matrix of the Pearson with FDR correction correlation for the expression of the HDAC/Sirt isoenzyme protein with anticancer drug potency expressed as GI₅₀ values and the doubling time of cancer cells.

Figure S19. Univariate correlation matrix of the Pearson with FDR correction correlation for the expression of the HDAC/Sirt isoenzyme protein with anticancer drug potency expressed as GI₅₀.

Table S1. Relative HDAC/Sirt isoenzyme protein expression of various cancer cell lines (relative to the mean expression over all cell lines) of $n \geq 3$ independent determinations.

HDAC1	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_19	0.7098	1.4577	1.1490	0.6941	1.1442	1.6578	1.0719	2.2210	1.2739
19_1_26	1.1100	1.0000	1.0600	0.5000	0.8700	0.6500	1.0100	0.7700	1.5200
19_1_30	0.4700	2.1000	0.6900	0.4400	1.1200	1.2000	1.2000	2.8000	1.2600
19_1_32	0.5170	1.7850	1.4300	0.6460	0.9490	1.1800	1.0940	2.1200	1.3600
19_1_45	0.5980	2.2470	1.6030	0.6380	0.9710	1.2930	0.8380	(outlier)	1.0070
Mean	0.6810	1.7180	1.1860	0.5836	1.0110	1.1960	1.0430	1.9780	1.2840
Std. Deviation	0.2565	0.5034	0.3524	0.1080	0.1172	0.3609	0.1334	0.8591	0.1863
HDAC1	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_19	1.0092	1.6329	1.0189	(outlier)	0.9998	(outlier)	0.3375	0.4917	
19_1_26	1.1400	2.2700	1.3400	1.0400	1.6100	0.3600	0.2700	0.4700	
19_1_30	1.0300	1.6100	0.6900	0.3300	(outlier)	1.0200	0.4100	0.4400	
19_1_32	0.6740	1.5270	0.9500	0.3860	0.9710	0.4010	0.2610	0.7500	
19_1_45	1.1950	1.8620	1.1840	0.9350	1.2010	0.3620	0.2630	0.6460	
Mean	1.0100	1.7800	1.0370	0.6728	1.1950	0.5358	0.3083	0.5595	
Std. Deviation	0.2027	0.3006	0.2458	0.3667	0.2947	0.3234	0.0651	0.1329	
HDAC2	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_26	1.2100	0.7100	1.5800	0.8500	1.1000	1.9600	0.8300	1.0000	0.9700
19_1_30	0.8500	1.0600	0.7900	1.0400	1.0900	2.4500	0.5700	0.4300	0.3100
19_1_32	1.6010	1.3650	1.4670	1.0880	0.6870	1.3620	0.7240	1.2060	0.7640
19_1_45	1.8990	1.1250	1.0420	1.2180	0.8300	1.2990	0.8610	(outlier)	0.8820
19_1_58	1.6210	(outlier)	1.7610	0.8770	0.8800	1.7030	0.9370	0.6500	(outlier)
Mean	1.4360	1.0650	1.3280	1.0150	0.9174	1.7550	0.7844	0.8215	0.7315
Std. Deviation	0.4094	0.2706	0.4005	0.1528	0.1770	0.4717	0.1422	0.3476	0.2934
HDAC2	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	

19_1_26	1.2700	1.0200	1.4300	1.1600	0.4200	0.9700	0.0900	0.4400	
19_1_30	1.5300	0.9300	1.3200	0.9700	(outlier)	0.5600	0.4500	0.5400	
19_1_32	0.6030	0.8840	1.6430	1.0190	0.6010	1.4880	0.3040	0.1940	
19_1_45	1.0620	0.7310	1.0830	0.9310	0.6080	1.9330	0.3870	0.4960	
19_1_58	0.8410	0.7690	1.3940	0.9930	0.5450	1.3500	0.4590	0.3500	
Mean	1.0610	0.8668	1.3740	1.0150	0.5435	1.2600	0.3380	0.4040	
Std. Deviation	0.3612	0.1181	0.2022	0.0875	0.0870	0.5213	0.1519	0.1372	
HDAC4	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_15	1.4710	0.4620	0.5550	0.9530	0.8600	1.2820	0.7190	1.9270	0.2920
19_1_19	1.3769	0.3783	0.8203	1.0207	1.6994	2.0632	1.1484	1.5772	0.4595
19_1_26	1.2500	0.1100	1.2400	0.6800	2.1100	1.9500	0.9700	1.6100	0.8300
19_1_30	1.0494	0.5055	0.3900	0.6197	2.0948	1.9577	1.0241	1.4057	0.4340
Mean	1.2870	0.3639	0.7513	0.8184	1.6910	1.8130	0.9654	1.6300	0.5039
Std. Deviation	0.1824	0.1773	0.3709	0.1981	0.5857	0.3579	0.1804	0.2173	0.2296
HDAC4	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_15	0.7680	0.2140	1.7750	1.0090	1.6740	1.0580	0.7760	1.2070	
19_1_19	0.4242	0.3090	1.4307	(outlier)	2.3726	(outlier)	0.5775	0.9938	
19_1_26	0.7400	0.3300	1.4300	0.9000	1.7500	0.1800	0.3500	0.5700	
19_1_30	0.5455	0.2474	1.5795	0.7668	(outlier)	1.9391	0.7906	1.3559	
Mean	0.6194	0.2751	1.5540	0.8919	1.9320	1.0590	0.6235	1.0320	
Std. Deviation	0.1635	0.0538	0.1634	0.1213	0.3833	0.8796	0.2066	0.3418	
HDAC6	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_26	1.0700	0.1100	1.1500	1.1100	1.0000	1.0300	0.3900	2.7900	1.2000
19_1_30	1.5600	0.8300	0.2300	1.1700	0.6200	0.3500	0.0300	3.6400	0.1300
19_1_32	0.8500	0.7350	1.7720	1.4050	0.8340	1.0010	0.2120	2.5380	0.4930
19_1_45	1.7940	0.6040	1.6500	1.6880	0.7980	1.1120	0.3040	(outlier)	0.3640
19_1_58	1.1200	(outlier)	0.4380	3.7970	0.5010	0.3520	0.1960	4.4810	(outlier)
19_1_72	1.2900	0.1700	0.3000	3.9800	0.4600	0.7600	0.0100	3.8200	0.1200

Mean	1.2810	0.4898	0.9233	2.1920	0.7022	0.7675	0.1903	3.4540	0.4614
Std. Deviation	0.3456	0.3299	0.6935	1.3310	0.2103	0.3433	0.1493	0.7911	0.4423
HDAC6	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_26	1.2300	0.8900	0.2700	0.6600	1.9600	0.4200	0.5800	1.1600	
19_1_30	0.6200	0.3400	0.1100	0.3900	(outlier)	4.1500	0.8600	1.8900	
19_1_32	1.0080	0.9380	0.2440	0.1060	3.1210	0.1720	0.7230	0.8460	
19_1_45	1.0700	1.0460	0.1340	0.6580	1.5870	1.5620	0.9190	1.5370	
19_1_58	1.0560	0.6370	0.1730	0.4740	1.9300	0.5390	0.2080	0.7560	
19_1_72	0.3000	0.5600	0.0100	(outlier)	4.1500	(outlier)	0.0000	1.0600	
Mean	0.8807	0.7352	0.1568	0.4576	2.5500	1.3690	0.5483	1.2080	
Std. Deviation	0.3493	0.2677	0.0948	0.2289	1.0660	1.6430	0.3695	0.4320	
Sirt1	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_15	0.4120	1.6240	0.9320	1.6920	1.2130	0.6530	0.5790	4.5220	0.3390
19_1_19	0.3902	0.7098	1.1877	1.1766	1.0739	0.6264	0.6444	5.8579	1.2907
19_1_26	0.4200	0.4600	1.5700	1.1300	1.5500	1.0100	0.7600	4.2300	1.2900
19_1_30	0.4400	1.4100	0.5200	0.9000	1.4400	1.0100	0.9100	3.9200	1.1800
19_1_32	0.3180	0.8890	1.0630	1.0220	1.3400	0.9460	1.0210	2.6500	1.4330
19_1_45	0.4490	1.0030	1.3830	1.2130	1.1640	0.7020	0.7960	(outlier)	1.3010
Mean	0.4049	1.0160	1.1090	1.1890	1.2970	0.8246	0.7851	4.2360	1.1390
Std. Deviation	0.0474	0.4345	0.3672	0.2715	0.1793	0.1829	0.1639	1.1540	0.4000
Sirt1	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_15	1.1230	0.6940	0.4240	1.5420	0.5470	0.4480	0.1520	0.1070	
19_1_19	1.0535	0.8406	0.3642	(outlier)	0.9501	(outlier)	0.2156	0.2864	
19_1_26	1.0200	0.6900	0.3500	1.0600	0.6800	0.4100	0.1400	0.2400	
19_1_30	1.0900	0.9500	0.4700	1.1000	(outlier)	0.8400	0.0100	0.3000	
19_1_32	1.2450	1.2300	0.6210	0.7600	1.1210	0.5170	0.3880	0.4360	
19_1_45	1.4160	1.0050	0.7110	1.4170	1.1540	1.0510	0.4110	0.3920	
Mean	1.1580	0.9016	0.4900	1.1760	0.8904	0.6532	0.2194	0.2936	
Std. Deviation	0.1483	0.2061	0.1457	0.3100	0.2685	0.2797	0.1548	0.1164	

Sirt2	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_15	2.2040	1.5450	0.7370	1.1980	0.4020	0.3710	0.4310	0.5970	0.5390
19_1_19	2.3136	1.3385	0.7097	1.1276	0.7356	0.5985	0.6322	0.6294	0.6601
19_1_26	1.9500	1.2800	0.5800	1.0000	0.5600	0.2200	0.4100	0.6700	0.8100
19_1_30	1.6800	1.3100	0.7400	1.0000	0.5600	0.2200	0.6200	0.6200	0.6300
Mean	2.0370	1.3680	0.6917	1.0810	0.5644	0.3524	0.5233	0.6291	0.6598
Std. Deviation	0.2825	0.1202	0.0757	0.0983	0.1363	0.1789	0.1191	0.0305	0.1126
Sirt2	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_15	0.8520	0.6610	1.0370	0.2600	1.2110	1.3990	2.2160	1.3400	
19_1_19	0.4892	0.8161	1.0412	(outlier)	1.5604	(outlier)	2.0139	1.5539	
19_1_26	0.8000	0.9100	0.8800	0.3200	1.2100	1.1600	2.8300	1.4300	
19_1_30	0.7600	0.6800	1.0800	0.2500	(outlier)	1.4200	2.8300	1.4600	
Mean	0.7253	0.7668	1.0100	0.2767	1.3270	1.3260	2.4720	1.4460	
Std. Deviation	0.1618	0.1178	0.0885	0.0379	0.2020	0.1444	0.4210	0.0882	
Sirt3	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_15	0.4510	1.2340	2.1540	0.7810	1.7850	1.0310	0.6790	2.7330	0.5960
19_1_19	0.3494	1.2609	2.3490	0.8142	2.3233	1.1651	0.4160	3.6066	0.4640
19_1_26	0.1900	0.8300	2.6700	0.4400	2.3000	0.8100	0.5100	4.0000	0.8900
19_1_30	0.2800	1.4900	2.4500	0.4800	2.4000	0.6500	0.4800	3.6500	0.6300
Mean	0.3176	1.2040	2.4060	0.6288	2.2020	0.9140	0.5212	3.4970	0.6450
Std. Deviation	0.1103	0.2744	0.2148	0.1961	0.2813	0.2289	0.1123	0.5392	0.1783
Sirt3	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_15	1.1450	1.0630	0.8270	0.5850	0.5420	0.3500	0.6780	0.3670	
19_1_19	0.8486	1.2747	0.5198	(outlier)	0.8610	(outlier)	0.3953	0.2197	
19_1_26	0.9400	1.2000	0.6700	0.4800	0.5200	0.1300	0.3100	0.1100	
19_1_30	0.9700	0.8800	0.8800	0.4400	(outlier)	0.6100	0.4100	0.1500	
Mean	0.9759	1.1040	0.7242	0.5017	0.6410	0.3633	0.4483	0.2117	

Std. Deviation	0.1240	0.1734	0.1628	0.0749	0.1908	0.2403	0.1593	0.1130	
Sirt5	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_26	0.4200	0.8000	0.8300	0.3900	1.2900	1.3000	0.6400	1.1900	1.4000
19_1_30	0.3633	1.0639	1.4179	0.8495	1.4616	1.0524	0.5443	1.1173	0.8794
19_1_32	0.3380	0.8150	1.1070	0.5470	1.5360	1.8940	0.4940	0.8590	0.7400
19_1_45	0.4940	0.7060	0.9230	0.5960	1.0890	1.4650	0.9230	(outlier)	0.8200
19_1_58	0.3910	(outlier)	0.7220	0.2560	1.1170	1.9540	0.7260	0.7550	(outlier)
Mean	0.4013	0.8462	1.0000	0.5277	1.2990	1.5330	0.6655	0.9803	0.9598
Std. Deviation	0.0602	0.1529	0.2731	0.2244	0.1999	0.3865	0.1694	0.2067	0.2989
Sirt5	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_26	0.6000	1.3200	2.5700	1.5100	0.8500	0.2400	0.8000	0.8600	
19_1_30	0.1699	0.7653	3.9278	0.8666	(outlier)	1.2612	0.7343	0.3736	
19_1_32	0.5660	1.1120	3.0010	1.0620	1.1380	0.1000	0.6930	0.9990	
19_1_45	0.4840	0.9950	3.4530	1.6050	1.0550	0.2210	0.7560	0.8220	
19_1_58	0.3390	0.9430	3.0780	1.3600	1.0840	0.0600	0.7200	0.6180	
Mean	0.4318	1.0270	3.2060	1.2810	1.0320	0.3764	0.7407	0.7345	
Std. Deviation	0.1776	0.2059	0.5111	0.3096	0.1260	0.5005	0.0403	0.2435	
Sirt6	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_32	0.7760	1.1420	1.4870	0.7000	2.2410	0.7930	1.0940	2.1080	1.4580
19_1_45	0.4640	0.8140	1.2050	0.7320	2.3420	0.8330	0.8550	(outlier)	1.9230
19_1_58	0.8490	(outlier)	1.9420	0.5920	1.7530	0.7430	0.7240	1.9720	(outlier)
19_1_72	0.7200	0.7600	2.2200	0.6900	2.3000	0.5700	0.8300	3.1100	1.6100
19_1_82	0.8380	(outlier)	1.5191	(outlier)	1.6232	0.8631	0.8990	2.0122	1.0736
Mean	0.7294	0.9053	1.6750	0.6785	2.0520	0.7604	0.8804	2.3010	1.5160
Std. Deviation	0.1572	0.2067	0.4028	0.0604	0.3371	0.1156	0.1357	0.5426	0.3529
Sirt6	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_32	1.1520	0.6430	0.4390	0.2120	0.3900	1.0670	0.5740	0.7260	

19_1_45	1.2960	0.7280	0.5580	0.2850	0.4490	1.8270	0.6600	0.7480	
19_1_58	1.0760	0.6180	0.5230	0.2100	0.6340	2.4640	1.1580	0.6000	
19_1_72	1.3000	0.5800	0.3400	(outlier)	0.3600	(outlier)	0.7900	0.6800	
19_1_82	1.3071	0.7015	0.8264	0.5547	0.5203	1.5664	0.6416	0.8422	
Mean	1.2260	0.6541	0.5373	0.3154	0.4707	1.7310	0.7647	0.7192	
Std. Deviation	0.1060	0.0605	0.1822	0.1633	0.1100	0.5815	0.2333	0.0891	
Sirt7	EFM-19	MCF-7	MT-3	SiSo	Kyse-70	Kyse-510	Kyse-520	A427	EPLC-272H
19_1_30	0.6800	1.6800	0.4900	0.6700	0.3800	1.4100	1.2200	2.0900	0.8400
19_1_32	0.4450	1.5310	1.1300	0.9530	0.4550	1.2640	1.2890	1.8840	1.1710
19_1_45	0.5420	1.6400	1.1230	0.9550	0.4790	1.2480	1.1500	(outlier)	0.9690
19_1_58	0.8260	(outlier)	1.7810	1.0290	0.7030	0.8000	0.8850	1.3670	(outlier)
19_1_72	0.8900	1.6000	1.7400	1.1700	0.7200	1.0600	0.9900	1.8500	0.8600
19_1_82	0.7290	(outlier)	1.4020	(outlier)	0.5380	1.5260	0.9850	1.3330	0.7610
Mean	0.6853	1.6130	1.2780	0.9554	0.5458	1.2180	1.0870	1.7050	0.9202
Std. Deviation	0.1685	0.0635	0.4793	0.1823	0.1381	0.2586	0.1569	0.3369	0.1587
Sirt7	LCLC-103H	BHY	DanG	Pa-Tu-8902	YAPC	5637	RT-4	RT-112	
19_1_30	1.5700	1.2200	0.6800	1.5100	(outlier)	0.9100	0.7200	0.5300	
19_1_32	1.4070	1.2940	0.7820	0,651	1.0300	0.4980	0.5250	0.6890	
19_1_45	1.6870	1.0910	0.7600	1.6890	0,813	1.1410	0.5880	0.5840	
19_1_58	1.3310	1.1720	0.7750	1.5100	1.0840	1.2940	0.9960	0.5910	
19_1_72	1.3000	1.2200	0.7200	(outlier)	1.0400	(outlier)	0.7100	0.8500	
19_1_82	1.7020	1.1110	0.5560	1.8060	1.0210	0.6810	0.5580	0.7500	
Mean	1.5000	1.1850	0.7122	1.6290	1.0440	0.9048	0.6828	0.6657	
Std. Deviation	0.1777	0.0759	0.0856	0.1452	0.0279	0.3251	0.1730	0.1202	

Table S2. R and p-values of Pearson correlation matrix for HDAC isoenzyme protein expression.

	HDAC1		HDAC2		HDAC4		HDAC6	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	1.000	0.000	0.209	0.473	0.032	0.913	0.226	0.438
HDAC2	0.209	0.473	1.000	0.000	0.166	0.570	-0.229	0.430
HDAC4	0.032	0.913	0.166	0.570	1.000	0.000	0.374	0.188
HDAC6	0.226	0.438	-0.229	0.430	0.374	0.188	1.000	0.000
Sirt1	0.627	0.016	0.024	0.936	0.265	0.361	0.708	0.005
Sirt2	-0.526	0.053	-0.588	0.027	-0.300	0.298	-0.032	0.915
Sirt3	0.643	0.013	0.155	0.596	0.206	0.479	0.410	0.146
Sirt5	0.181	0.536	0.389	0.169	0.455	0.102	-0.282	0.328
Sirt6	0.228	0.434	0.139	0.634	0.172	0.557	0.323	0.260
Sirt7	0.730	0.003	0.274	0.343	-0.236	0.417	0.303	0.292
	Sirt1		Sirt2		Sirt3		Sirt5	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	0.627	0.016	-0.526	0.053	0.643	0.013	0.181	0.536
HDAC2	0.024	0.936	-0.588	0.027	0.155	0.596	0.389	0.169
HDAC4	0.265	0.361	-0.300	0.298	0.206	0.479	0.455	0.102
HDAC6	0.708	0.005	-0.032	0.915	0.410	0.146	-0.282	0.328
Sirt1	1.000	0.000	-0.404	0.152	0.840	0.000	-0.083	0.778
Sirt2	-0.404	0.152	1.000	0.000	-0.465	0.094	-0.186	0.525
Sirt3	0.840	0.000	-0.465	0.094	1.000	0.000	0.077	0.793
Sirt5	-0.083	0.778	-0.186	0.525	0.077	0.793	1.000	0.000
Sirt6	0.665	0.009	-0.333	0.245	0.774	0.001	-0.213	0.464
Sirt7	0.605	0.022	-0.371	0.192	0.482	0.081	-0.255	0.379
	Sirt6		Sirt7					
Isoenzyme	R	p	R	p				
HDAC1	0.228	0.434	0.730	0.003				
HDAC2	0.139	0.634	0.274	0.343				
HDAC4	0.172	0.557	-0.236	0.417				
HDAC6	0.323	0.260	0.303	0.292				
Sirt1	0.665	0.009	0.605	0.022				

Sirt2	-0.333	0.245	-0.371	0.192				
Sirt3	0.774	0.001	0.482	0.081				
Sirt5	-0.213	0.464	-0.255	0.379				
Sirt6	1.000	0.000	0.248	0.393				
Sirt7	0.248	0.393	1.000	0.000				

Table S3. R and p-values of Spearman correlation matrix for HDAC isoenzyme protein expression.

	HDAC1		HDAC2		HDAC4		HDAC6	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	1.000	0.000	0.191	0.513	0.064	0.829	0.033	0.911
HDAC2	0.191	0.513	1.000	0.000	0.059	0.840	-0.165	0.573
HDAC4	0.064	0.829	0.059	0.840	1.000	0.000	0.314	0.274
HDAC6	0.033	0.911	-0.165	0.573	0.314	0.274	1.000	0.000
Sirt1	0.455	0.102	0.174	0.553	0.002	0.994	0.371	0.191
Sirt2	-0.446	0.110	-0.393	0.164	-0.301	0.296	0.090	0.759
Sirt3	0.719	0.004	0.341	0.233	-0.051	0.864	0.015	0.958
Sirt5	0.525	0.054	0.248	0.392	0.446	0.110	-0.266	0.358
Sirt6	-0.007	0.982	0.130	0.659	-0.015	0.958	0.125	0.670
Sirt7	0.710	0.004	0.301	0.296	-0.275	0.342	0.182	0.533
	Sirt1		Sirt2		Sirt3		Sirt5	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	0.455	0.102	-0.446	0.110	0.719	0.004	0.525	0.054
HDAC2	0.174	0.553	-0.393	0.164	0.341	0.233	0.248	0.392
HDAC4	0.002	0.994	-0.301	0.296	-0.051	0.864	0.446	0.110
HDAC6	0.371	0.191	0.090	0.759	0.015	0.958	-0.266	0.358
Sirt1	1.000	0.000	-0.473	0.088	0.776	0.001	0.037	0.899
Sirt2	-0.473	0.088	1.000	0.000	-0.512	0.061	-0.301	0.296
Sirt3	0.776	0.001	-0.512	0.061	1.000	0.000	0.459	0.098
Sirt5	0.037	0.899	-0.301	0.296	0.459	0.098	1.000	0.000
Sirt6	0.459	0.098	-0.354	0.215	0.424	0.131	-0.297	0.303
Sirt7	0.495	0.072	-0.332	0.246	0.604	0.022	-0.059	0.840
	Sirt6		Sirt7					
Isoenzyme	R	p	R	p				
HDAC1	-0.007	0.982	0.710	0.004				
HDAC2	0.130	0.659	0.301	0.296				
HDAC4	-0.015	0.958	-0.275	0.342				
HDAC6	0.125	0.670	0.182	0.533				
Sirt1	0.459	0.098	0.495	0.072				

Sirt2	-0.354	0.215	-0.332	0.246				
Sirt3	0.424	0.131	0.604	0.022				
Sirt5	-0.297	0.303	-0.059	0.840				
Sirt6	1.000	0.000	0.266	0.358				
Sirt7	0.266	0.358	1.000	0.000				

Table S4. R and p-values of Pearson correlation matrix for HDAC isoenzyme mRNA expression with data of the NCI 60 cancer cell line program.

	HDAC1		HDAC2		HDAC4		HDAC6	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	1.000	0.000	0.354	0.006	0.192	0.145	0.364	0.005
HDAC2	0.354	0.006	1.000	0.000	0.197	0.135	0.139	0.290
HDAC4	0.192	0.145	0.197	0.135	1.000	0.000	0.258	0.049
HDAC6	0.364	0.005	0.139	0.290	0.258	0.049	1.000	0.000
Sirt1	0.269	0.039	0.269	0.038	0.076	0.566	0.316	0.014
Sirt2	-0.165	0.211	-0.242	0.063	-0.079	0.552	-0.050	0.706
Sirt3	0.083	0.531	0.102	0.438	0.150	0.255	0.036	0.782
Sirt5	-0.138	0.296	-0.115	0.382	0.003	0.983	0.032	0.810
Sirt6	0.182	0.168	-0.078	0.552	-0.061	0.645	-0.033	0.802
Sirt7	0.069	0.605	-0.043	0.743	0.037	0.783	0.028	0.830
	Sirt1		Sirt2		Sirt3		Sirt5	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	0.269	0.039	-0.165	0.211	0.083	0.531	-0.138	0.296
HDAC2	0.269	0.038	-0.242	0.063	0.102	0.438	-0.115	0.382
HDAC4	0.076	0.566	-0.079	0.552	0.150	0.255	0.003	0.983
HDAC6	0.316	0.014	-0.050	0.706	0.036	0.782	0.032	0.810
Sirt1	1.000	0.000	-0.016	0.905	0.197	0.132	0.055	0.675
Sirt2	-0.016	0.905	1.000	0.000	0.080	0.541	0.252	0.053
Sirt3	0.197	0.132	0.080	0.541	1.000	0.000	-0.024	0.854
Sirt5	0.055	0.675	0.252	0.053	-0.024	0.854	1.000	0.000
Sirt6	-0.001	0.992	0.005	0.971	-0.103	0.434	0.174	0.184
Sirt7	0.079	0.551	-0.025	0.851	0.142	0.278	-0.057	0.666
	Sirt6		Sirt7					
Isoenzyme	R	p	R	p				
HDAC1	0.182	0.168	0.069					
HDAC2	-0.078	0.552	-0.043					
HDAC4	-0.061	0.645	0.037					
HDAC6	-0.033	0.802	0.028					
Sirt1	-0.001	0.992	0.079					

Sirt2	0.005	0.971	-0.025					
Sirt3	-0.103	0.434	0.142					
Sirt5	0.174	0.184	-0.057					
Sirt6	1.000	0.000	0.089					
Sirt7	0.089	0.497	1.000					

Table S5. Doubling times in hours of cancer cell lines [mean \pm SD of n=5 independent determinations].

	doubling time [h]
EFM-19	90.1 \pm 66.1
MCF-7	50.5 \pm 6.7
MT-3	44.8 \pm 14.3
SiSo	24.2 \pm 0.9
Kyse-70	26.4 \pm 1.5
Kyse-510	21.8 \pm 3.2
Kyse-520	29.8 \pm 5.8
A427	28.0 \pm 1.9
EPLC-272H	100.9 \pm 13.8
LCLC-103H	22.1 \pm 2.2
BHY	28.6 \pm 2.7
DanG	29.7 \pm 3.0
Pa-Tu-8902	22.3 \pm 1.6
YAPC	42.9 \pm 3.0
5637	21.5 \pm 1.2
RT-4	45.4 \pm 7.0
RT-112	26.8 \pm 2.9

Table S6. R and p-values of univariate correlation of HDAC isoenzyme protein expression with anticancer drug potency expressed as GI₅₀ values and the doubling time of cancer cells.

	Azacitidine		Bortezomib		Busulfan		Camptothecin	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	0.141	0.661	-0.524	0.183	-0.455	0.137	-0.025	0.939
HDAC2	-0.078	0.809	0.240	0.567	-0.486	0.109	0.377	0.227
HDAC4	-0.431	0.161	0.704	0.051	-0.400	0.198	0.311	0.325
HDAC6	-0.179	0.577	0.246	0.557	-0.287	0.367	-0.438	0.154
Sirt1	-0.342	0.277	0.116	0.785	-0.299	0.345	-0.272	0.393
Sirt2	0.337	0.284	-0.444	0.270	0.683	0.014	-0.287	0.367
Sirt3	-0.315	0.319	-0.129	0.760	-0.256	0.422	-0.262	0.411
Sirt5	-0.229	0.473	-0.173	0.682	-0.203	0.526	0.466	0.127
Sirt6	-0.475	0.118	0.293	0.481	-0.205	0.523	-0.426	0.168
Sirt7	0.246	0.441	-0.226	0.590	-0.228	0.475	-0.092	0.775

	Carboplatin		Chlorambucil		Cisplatin		Colchicine	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	0.317	0.315	-0.132	0.683	0.273	0.391	0.087	0.789
HDAC2	-0.601	0.039	-0.175	0.587	-0.543	0.068	-0.136	0.673
HDAC4	0.177	0.583	0.249	0.436	0.180	0.577	-0.090	0.780
HDAC6	0.170	0.598	-0.560	0.058	0.204	0.525	-0.277	0.384
Sirt1	0.075	0.816	-0.419	0.175	0.092	0.777	-0.170	0.598
Sirt2	0.205	0.523	-0.080	0.805	0.058	0.857	0.028	0.930
Sirt3	0.103	0.750	-0.216	0.499	-0.012	0.969	0.083	0.797
Sirt5	-0.068	0.834	0.274	0.389	-0.134	0.677	0.049	0.881
Sirt6	-0.139	0.667	-0.327	0.299	-0.210	0.512	0.076	0.815
Sirt7	0.082	0.801	-0.430	0.163	0.146	0.651	-0.209	0.514

	Doxorubicin		Etoposide		5-Fluorouracil		Hydroxyurea	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	-0.084	0.795	-0.455	0.137	-0.186	0.562	-0.082	0.799
HDAC2	-0.194	0.546	-0.469	0.124	-0.366	0.241	-0.515	0.086
HDAC4	0.196	0.542	-0.312	0.324	-0.438	0.155	0.022	0.947
HDAC6	-0.425	0.169	-0.204	0.524	-0.056	0.863	0.266	0.403
Sirt1	-0.298	0.347	-0.269	0.397	-0.234	0.464	0.066	0.839

Sirt2	-0.034	0.916	0.761	0.004	0.249	0.435	0.628	0.029
Sirt3	-0.030	0.927	-0.198	0.537	-0.465	0.128	0.047	0.884
Sirt5	0.034	0.916	-0.117	0.718	-0.554	0.062	-0.207	0.518
Sirt6	0.001	0.996	-0.169	0.599	-0.310	0.327	-0.058	0.859
Sirt7	-0.366	0.242	-0.304	0.336	0.191	0.552	-0.018	0.956

	Imatinib		Lomustine		Melphalan		Methotrexate	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	-0.210	0.617	0.472	0.143	-0.110	0.735	0.067	0.837
HDAC2	0.344	0.404	0.115	0.737	-0.326	0.301	-0.137	0.672
HDAC4	-0.442	0.273	-0.362	0.274	0.173	0.591	-0.101	0.755
HDAC6	-0.327	0.428	-0.471	0.144	-0.327	0.300	-0.258	0.418
Sirt1	-0.526	0.180	-0.251	0.457	-0.090	0.780	-0.019	0.952
Sirt2	0.091	0.830	0.291	0.385	0.040	0.902	-0.314	0.321
Sirt3	-0.414	0.307	-0.256	0.448	0.186	0.562	-0.109	0.736
Sirt5	-0.467	0.243	0.365	0.270	0.003	0.992	-0.153	0.635
Sirt6	-0.226	0.591	-0.502	0.115	0.182	0.572	-0.061	0.849
Sirt7	-0.043	0.920	0.259	0.441	-0.362	0.247	0.070	0.828

	Oxaliplatin		Podophyllotoxin		Taxol		Thiotepa	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	0.102	0.753	-0.064	0.844	-0.112	0.730	-0.433	0.159
HDAC2	0.421	0.172	-0.291	0.358	-0.217	0.497	-0.444	0.148
HDAC4	0.614	0.034	0.164	0.611	0.427	0.167	-0.376	0.229
HDAC6	-0.107	0.740	-0.077	0.811	-0.096	0.766	-0.398	0.200
Sirt1	-0.235	0.462	0.004	0.990	-0.044	0.892	-0.327	0.299
Sirt2	-0.185	0.565	-0.364	0.245	-0.281	0.376	0.561	0.058
Sirt3	-0.217	0.497	0.035	0.913	0.208	0.516	-0.211	0.511
Sirt5	0.814	0.001	-0.145	0.653	0.024	0.941	-0.210	0.513
Sirt6	-0.524	0.080	0.094	0.771	0.293	0.356	-0.133	0.681
Sirt7	-0.194	0.546	-0.313	0.322	-0.538	0.071	-0.248	0.437

	Topotecan		Vinblastin		Doubling time	
Isoenzyme	R	p	R	p	R	p
HDAC1	-0.049	0.909	-0.325	0.303	0.166	0.572

HDAC2	0.666	0.071	-0.173	0.591	-0.307	0.286
HDAC4	0.660	0.075	-0.199	0.536	-0.261	0.368
HDAC6	-0.194	0.644	-0.600	0.039	-0.107	0.716
Sirt1	-0.161	0.703	-0.340	0.280	-0.130	0.658
Sirt2	-0.259	0.536	-0.229	0.474	0.495	0.072
Sirt3	-0.206	0.624	-0.218	0.496	0.088	0.765
Sirt5	0.801	0.017	-0.154	0.633	0.000	0.999
Sirt6	-0.496	0.211	-0.012	0.970	-0.178	0.544
Sirt7	-0.313	0.450	-0.284	0.370	0.139	0.634

Table S7. R and p-values of Pearson correlation of HDAC isoenzyme mRNA expression with data of the NCI 60 cancer cell line program with anticancer drug potency expressed as GI₅₀ values.

	Azacitidine		Bortezomib		Busulfan		Camptothecin	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	-0.064	0.632	-0.018	0.893	-0.030	0.824	-0.092	0.489
HDAC2	-0.035	0.793	0.104	0.433	-0.055	0.676	-0.115	0.380
HDAC4	0.046	0.728	-0.116	0.382	-0.197	0.135	-0.077	0.562
HDAC6	0.130	0.321	-0.015	0.911	-0.116	0.376	0.031	0.816
Sirt1	-0.070	0.595	-0.011	0.932	0.028	0.834	-0.084	0.521
Sirt2	-0.034	0.794	0.050	0.706	-0.204	0.118	-0.370	0.004
Sirt3	0.026	0.846	-0.123	0.353	-0.082	0.535	-0.032	0.806
Sirt5	0.161	0.219	0.010	0.942	-0.081	0.539	0.070	0.595
Sirt6	-0.027	0.837	-0.060	0.652	-0.121	0.356	0.141	0.284
Sirt7	-0.061	0.641	0.052	0.698	-0.003	0.983	-0.037	0.778

	Carboplatin		Chlorambucil		Cisplatin		Colchicine	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	0.091	0.495	-0.076	0.567	0.023	0.864	-0.156	0.242
HDAC2	0.030	0.822	-0.096	0.466	-0.145	0.268	-0.286	0.028
HDAC4	0.045	0.736	-0.061	0.644	-0.021	0.876	-0.062	0.641
HDAC6	-0.006	0.961	-0.108	0.411	0.187	0.153	0.054	0.685
Sirt1	-0.045	0.736	-0.071	0.592	-0.046	0.725	-0.037	0.780
Sirt2	-0.179	0.170	-0.281	0.030	-0.092	0.483	0.123	0.355
Sirt3	0.150	0.253	-0.046	0.726	0.041	0.757	0.173	0.191
Sirt5	0.117	0.372	-0.016	0.902	0.177	0.176	-0.031	0.816
Sirt6	0.105	0.425	0.051	0.701	0.200	0.125	0.137	0.301
Sirt7	-0.077	0.556	0.017	0.898	-0.083	0.530	-0.022	0.871

	Doxorubicin		Etoposide		5-Fluorouracil		Hydroxyurea	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	-0.039	0.770	0.078	0.560	-0.315	0.015	-0.119	0.369
HDAC2	0.150	0.252	-0.014	0.913	-0.173	0.187	-0.125	0.341
HDAC4	-0.103	0.439	-0.099	0.454	-0.082	0.536	0.038	0.773
HDAC6	-0.066	0.619	-0.079	0.550	0.193	0.140	0.018	0.891
Sirt1	-0.115	0.381	-0.202	0.122	-0.127	0.333	-0.016	0.906

Sirt2	0.030	0.819	0.051	0.701	-0.162	0.215	-0.171	0.192
Sirt3	-0.144	0.271	-0.151	0.248	-0.003	0.985	0.000	0.999
Sirt5	-0.013	0.919	-0.198	0.130	0.112	0.396	-0.055	0.677
Sirt6	-0.126	0.336	-0.315	0.014	0.018	0.889	0.034	0.795
Sirt7	-0.143	0.275	0.000	0.999	-0.135	0.302	-0.083	0.531

	Imatinib		Lomustine		Melphalan		Methotrexate	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	-0.235	0.073	-0.149	0.259	-0.090	0.499	-0.322	0.013
HDAC2	0.015	0.910	-0.127	0.332	-0.055	0.675	-0.187	0.153
HDAC4	-0.091	0.493	-0.153	0.246	-0.125	0.347	-0.086	0.519
HDAC6	-0.178	0.177	-0.272	0.035	-0.203	0.120	-0.017	0.896
Sirt1	-0.020	0.883	-0.320	0.013	-0.161	0.220	-0.131	0.320
Sirt2	0.142	0.285	-0.149	0.255	-0.254	0.050	-0.071	0.587
Sirt3	0.102	0.444	-0.030	0.818	-0.063	0.633	-0.002	0.987
Sirt5	0.072	0.590	-0.121	0.359	-0.047	0.720	-0.088	0.504
Sirt6	-0.166	0.208	-0.209	0.109	0.038	0.776	-0.101	0.442
Sirt7	0.062	0.644	0.189	0.148	0.020	0.882	-0.178	0.172

	Oxaliplatin		Paclitaxel		Thiotepa		Topotecan	
Isoenzyme	R	p	R	p	R	p	R	p
HDAC1	-0.192	0.144	-0.091	0.491	-0.093	0.486	-0.171	0.196
HDAC2	-0.136	0.304	0.129	0.327	-0.168	0.200	-0.200	0.125
HDAC4	-0.086	0.516	-0.136	0.305	-0.065	0.625	-0.055	0.680
HDAC6	0.206	0.118	-0.118	0.371	-0.009	0.947	0.001	0.991
Sirt1	0.022	0.866	-0.158	0.227	-0.056	0.672	-0.090	0.492
Sirt2	-0.284	0.029	0.051	0.700	-0.283	0.029	-0.331	0.010
Sirt3	-0.048	0.716	-0.134	0.309	0.008	0.951	-0.041	0.757
Sirt5	0.157	0.234	-0.044	0.740	-0.046	0.729	0.050	0.704
Sirt6	0.095	0.474	-0.218	0.094	0.006	0.965	0.089	0.501
Sirt7	-0.090	0.497	-0.181	0.166	-0.066	0.615	-0.061	0.641

	Trichostatin A		Vorinostat					
Isoenzyme	R	p	R	p				
HDAC1	-0.396	0.161	-0.264	0.362				

HDAC2	0.308	0.285	0.278	0.336				
HDAC4	0.315	0.273	0.387	0.171				
HDAC6	-0.280	0.332	-0.031	0.916				
Sirt1	-0.479	0.083	-0.398	0.158				
Sirt2	0.020	0.946	0.015	0.959				
Sirt3	-0.418	0.137	-0.389	0.169				
Sirt5	0.179	0.539	0.106	0.718				
Sirt6	-0.371	0.192	-0.468	0.092				
Sirt7	-0.333	0.244	-0.217	0.456				

Table S8. Localization of HDAC isoenzymes across the chromosomes and corresponding reference sequence; from on UCSC Genome Browser.

Isoenzyme	Localisation	RefSeq
HDAC1	1p35.2-p35.1	NM_004964
HDAC2	6q21	NM_001527
HDAC4	2q37.3	NM_006037
HDAC6	Xp11.23	MN_006044
Sirt1	10q21.3	NM_012238
Sirt2	19q13.2	NM_034146
Sirt3	11p15.5	NM_001370314
Sirt5	6p24.1	NM_012241
Sirt6	19p13.3	NM_016539
Sirt7	17q25.3	NM_016538

Figure S1. Representative electropherogram showing the total protein content of the panel of 17 cancer cell lines used as internal controls in all Western blotting, as developed according to the TGX Stain Free Gels systems from Bio-Rad. Below are pre-stained protein-ladder, Page ruler [™] from Thermo Fisher #26616.

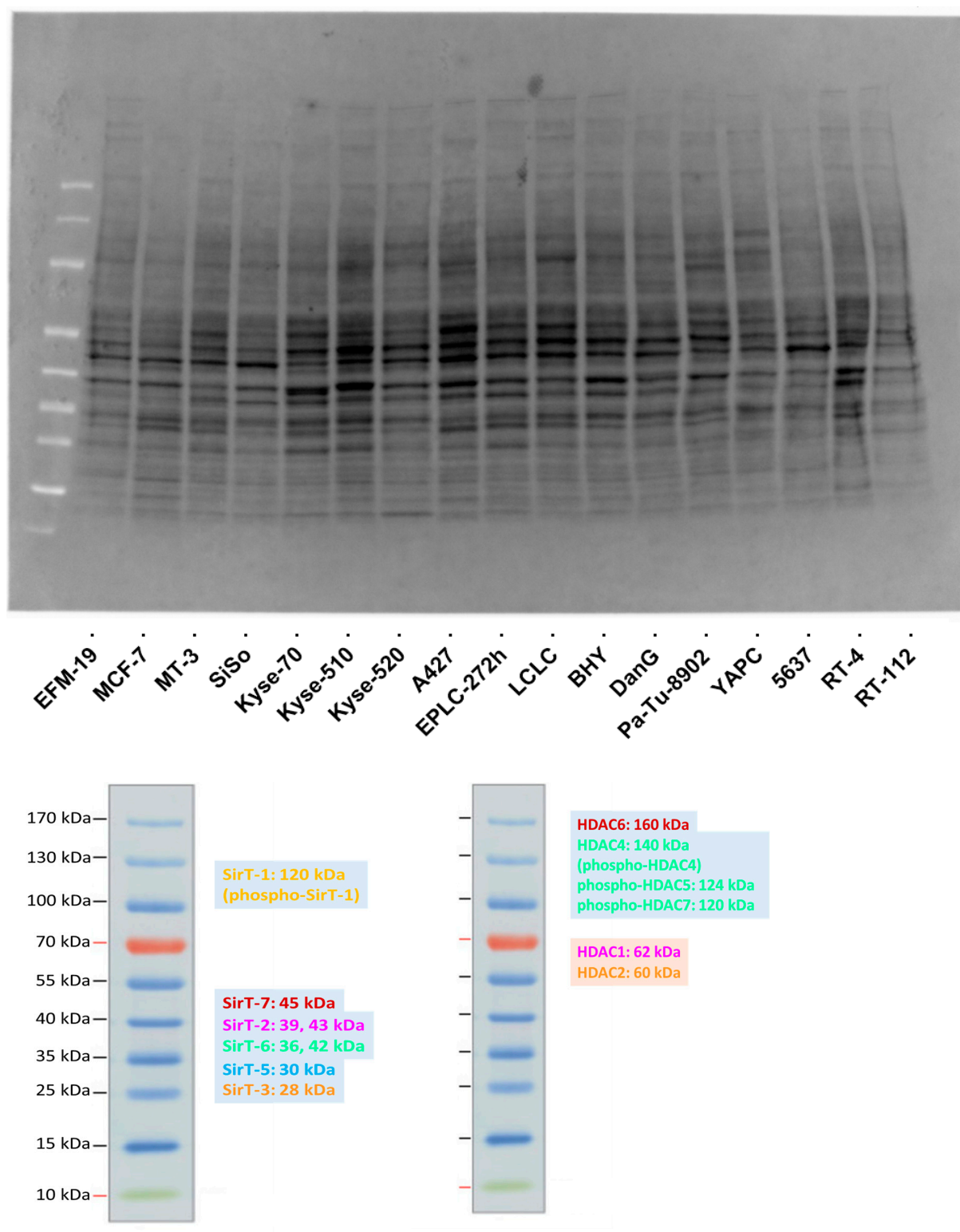
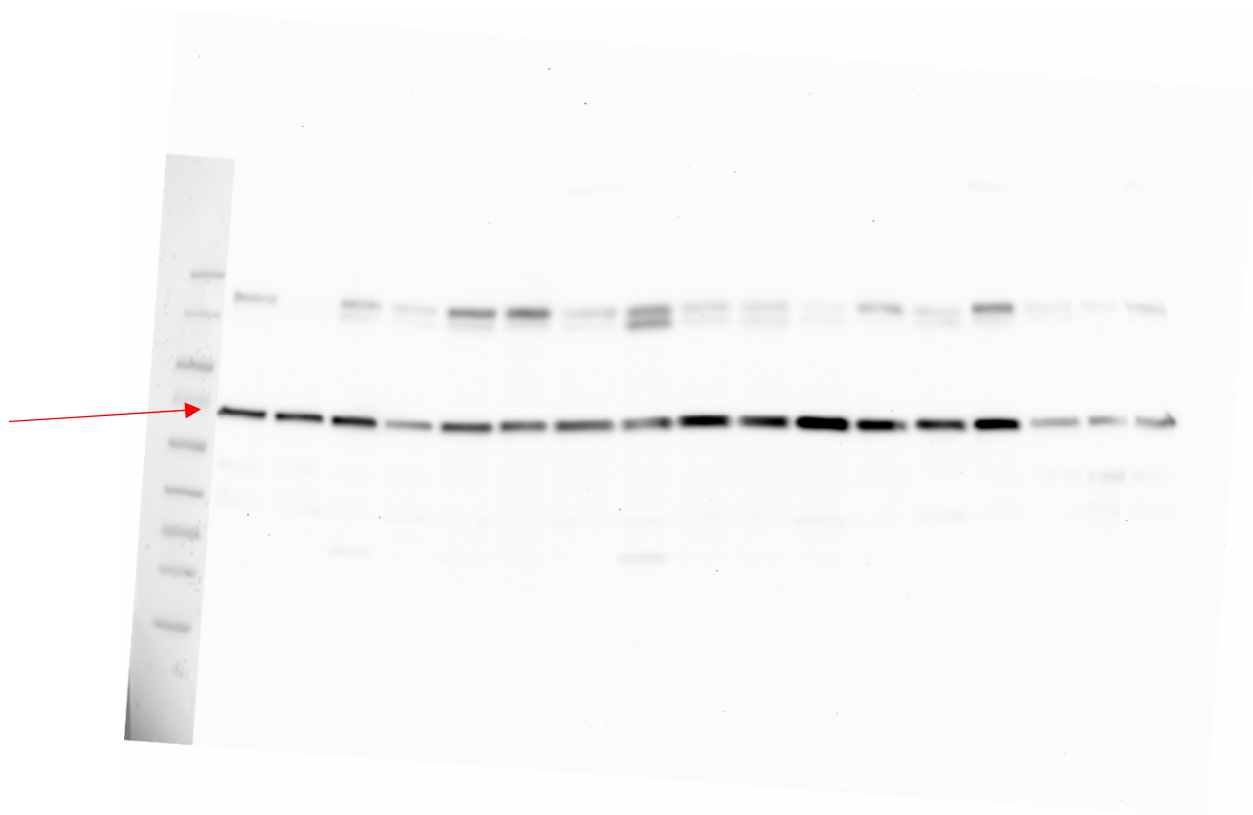


Figure S2. Western blots for the panel of 17 cancer cell lines for HDAC1, marked with antibody #5356 from Cell Signaling Technology (below: manufacture's quality control blot). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#5356

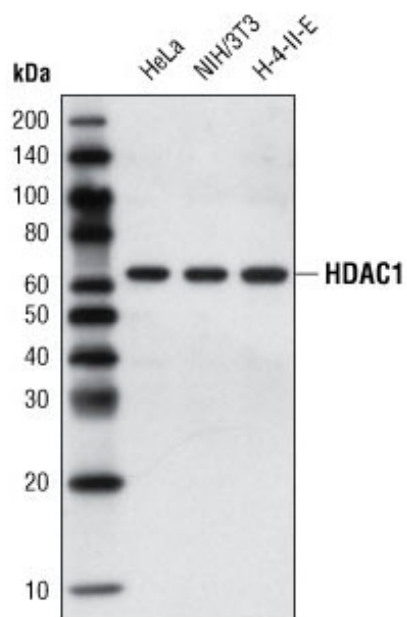
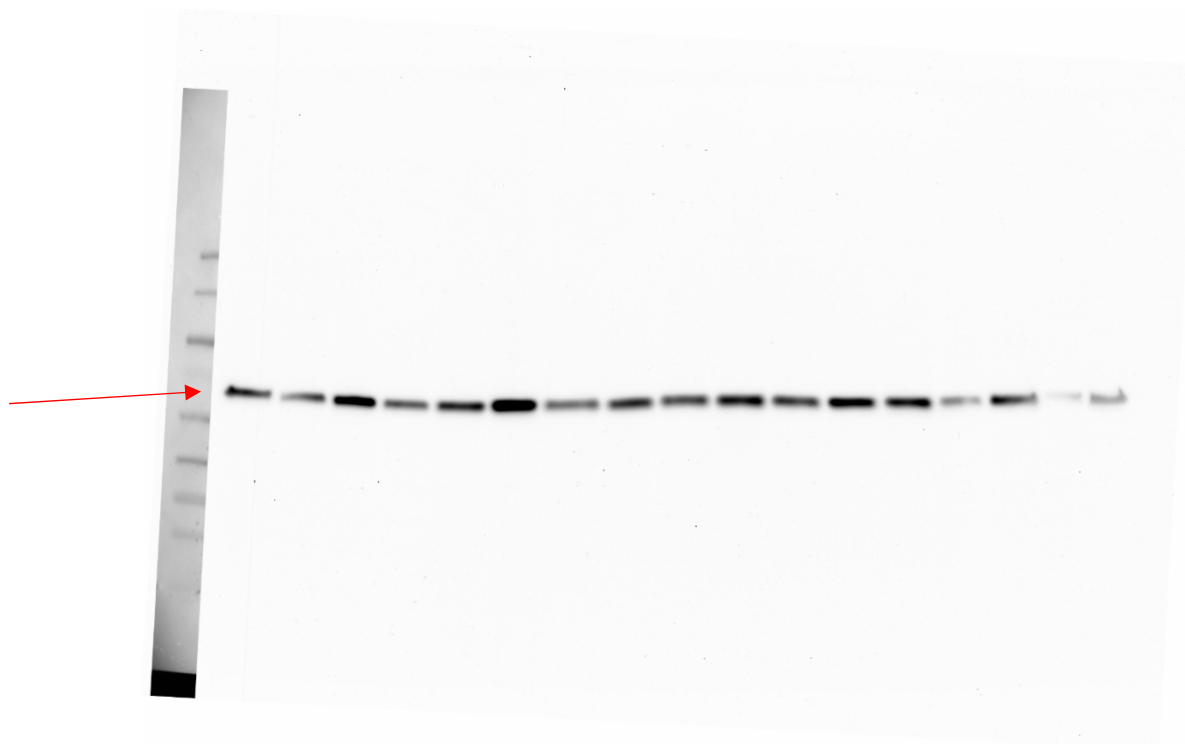


Figure S3. Western blots for the panel of 17 cancer cell lines for HDAC2, marked with antibody #5113 from Cell Signaling Technology (below: manufacture's quality control blot). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#5113

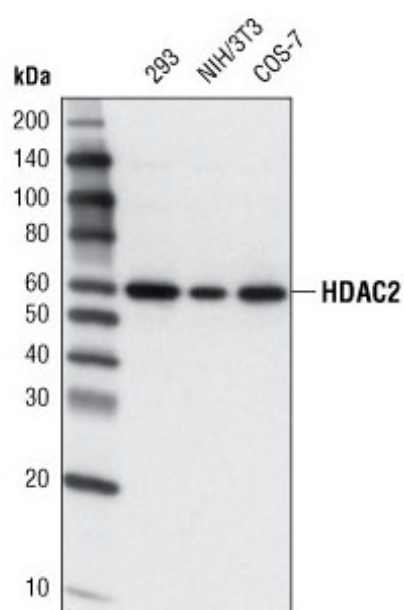
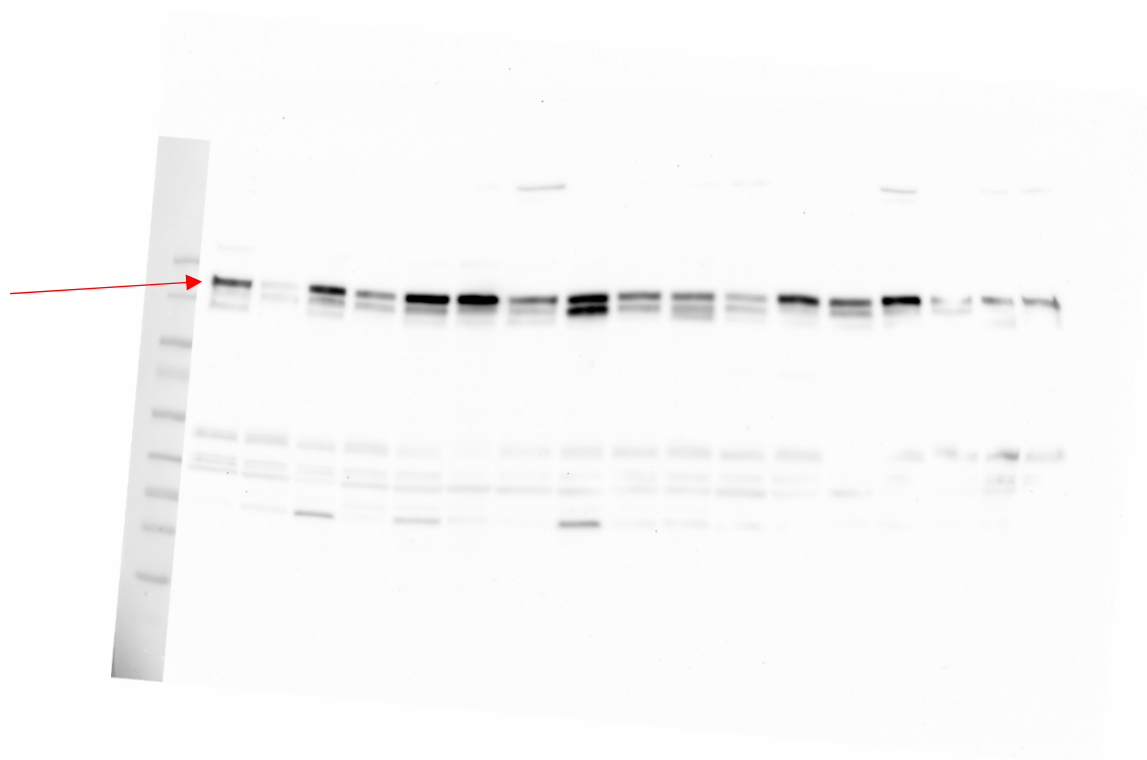


Figure S4. Western blots for the panel of 17 cancer cell lines for HDAC4, marked with antibody #7628 from Cell Signaling Technology (below: manufacture's quality control blot). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#7628

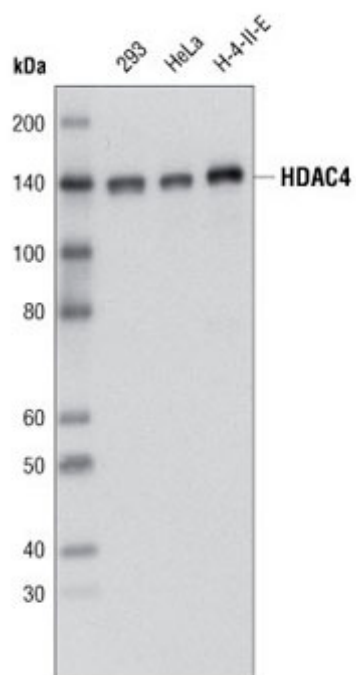
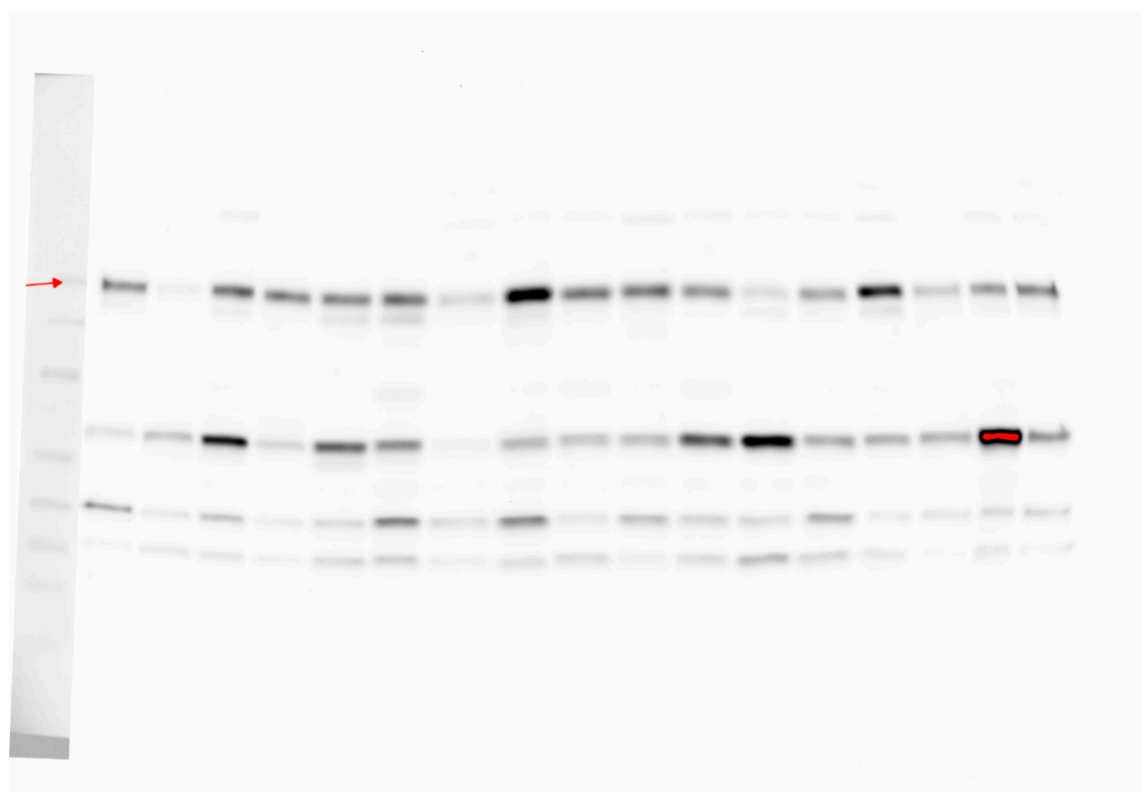


Figure S5. Western blots for the panel of 17 cancer cell lines for HDAC6, marked with antibody #7558 from Cell Signaling Technology (below: manufacture's quality control blot). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#7558

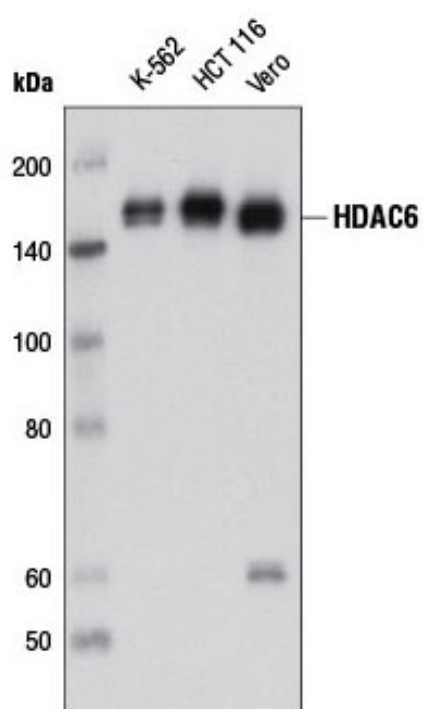
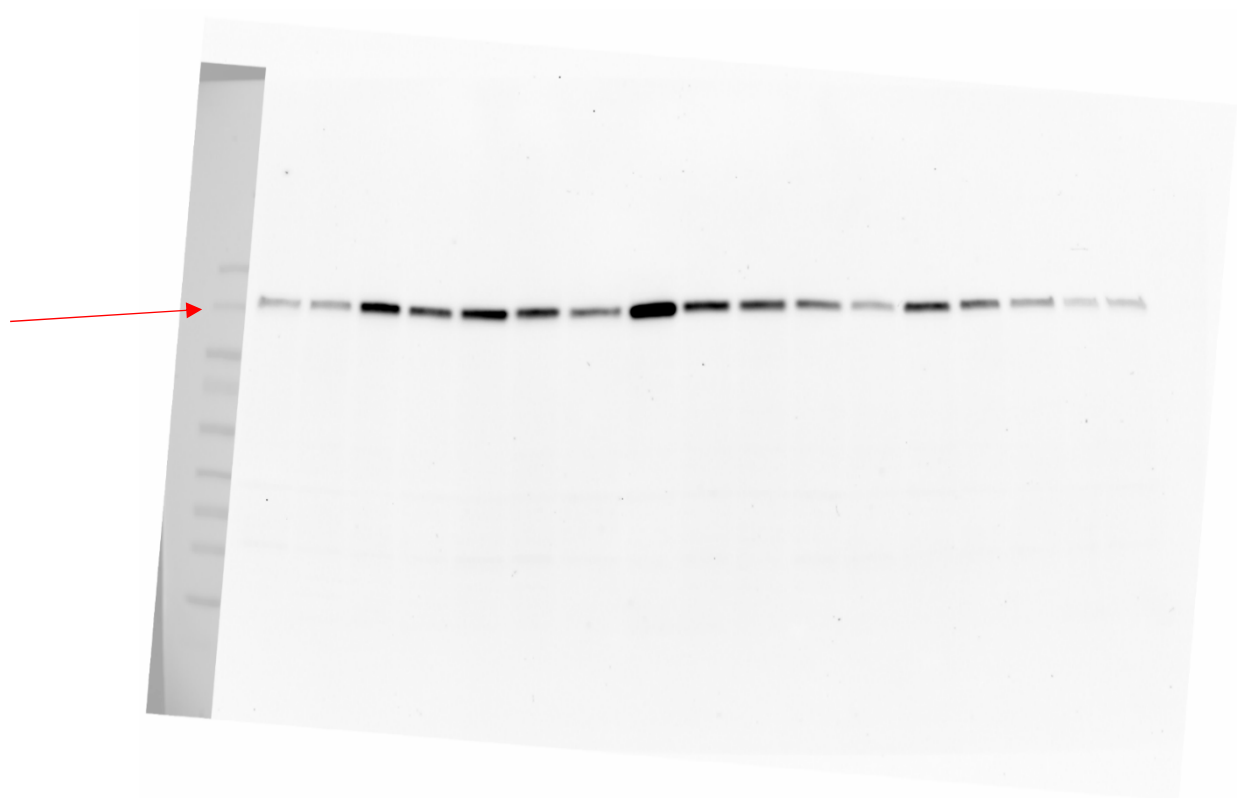


Figure S6. Western blots for the panel of 17 cancer cell lines for Sirt1, marked with antibody #9475 from Cell Signaling Technology (below: manufacture's quality control blot). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#9475

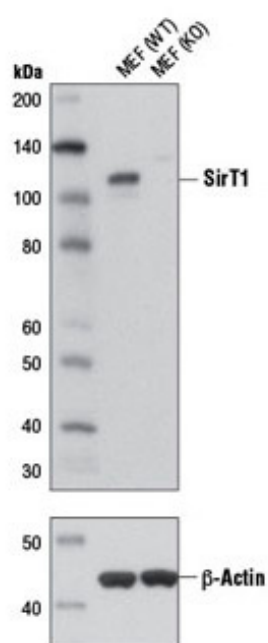
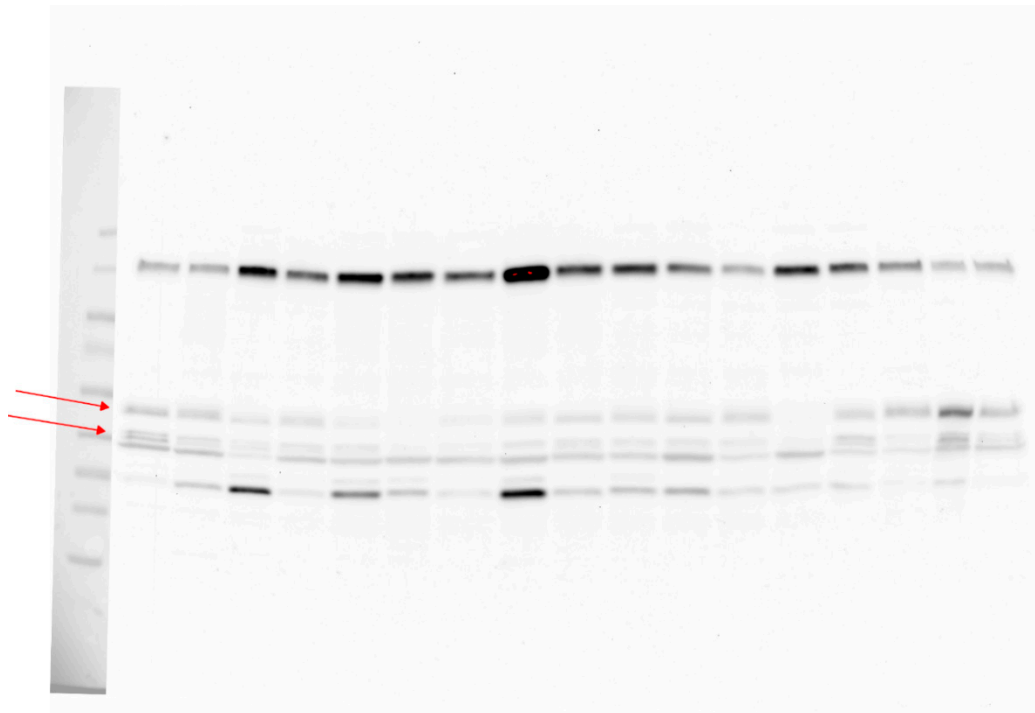


Figure S7. Western blots for the panel of 17 cancer cell lines for Sirt2, marked with antibody #12650 from Cell Signaling Technology (below: manufacture's quality control blot). Arrows indicate the bands used for the analysis. The order of cell lines is shown in Figure S1.



#12650

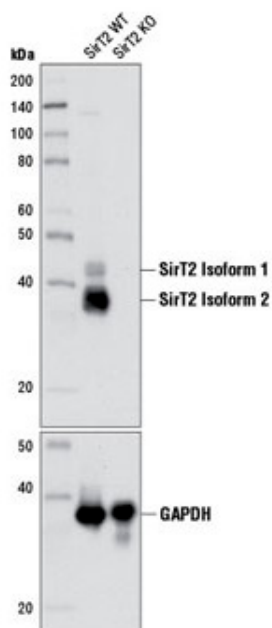
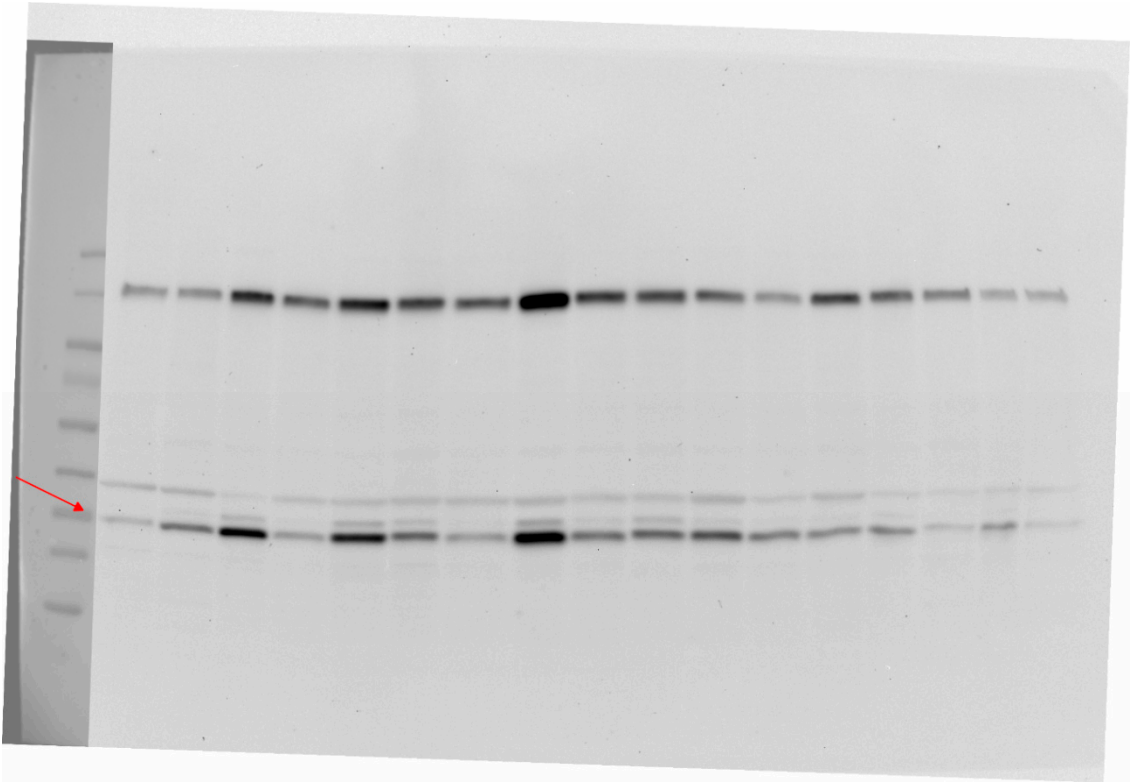


Figure S8. Western blots for the panel of 17 cancer cell lines for Sirt3, marked with antibody #5490 from Cell Signaling Technology (below: manufacture’s quality control blots). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#5490

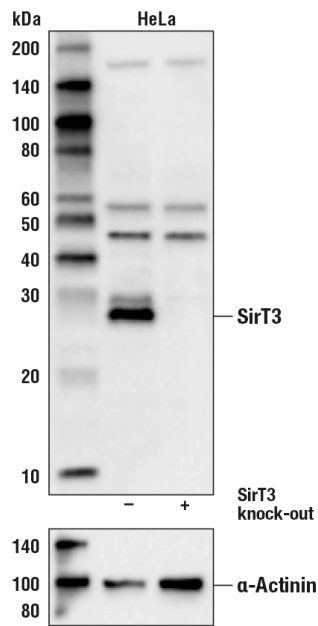
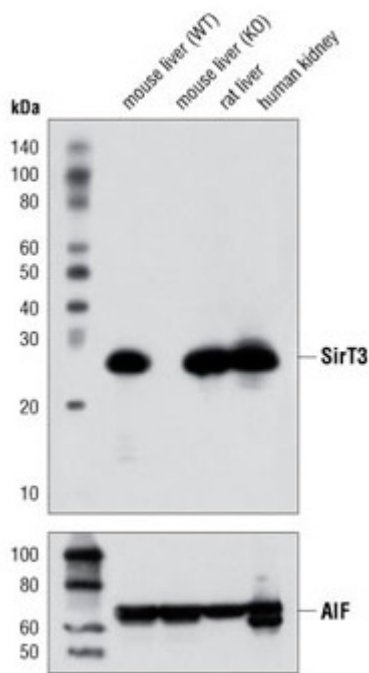
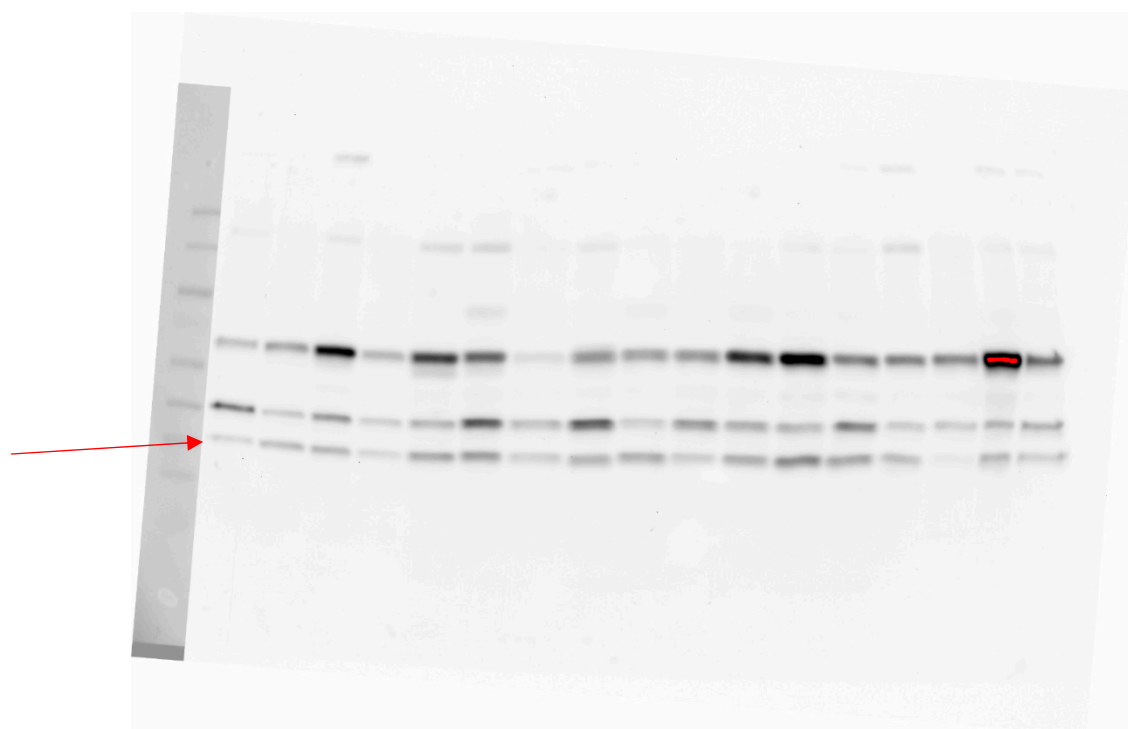


Figure S9. Western blots for the panel of 17 cancer cell lines for Sirt5, marked with antibody #8782 from Cell Signaling Technology (below: manufacture's quality control blot). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#8782

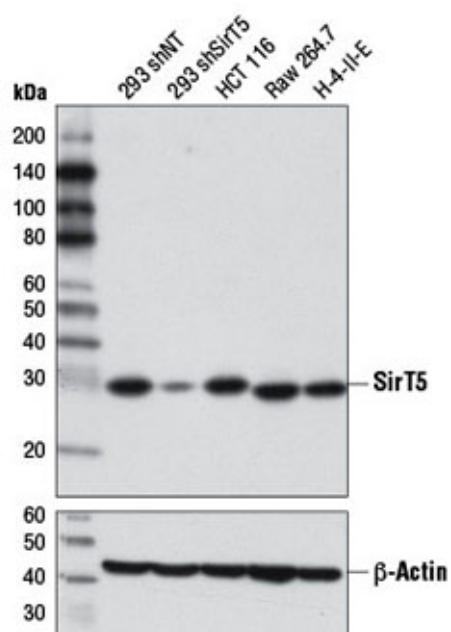
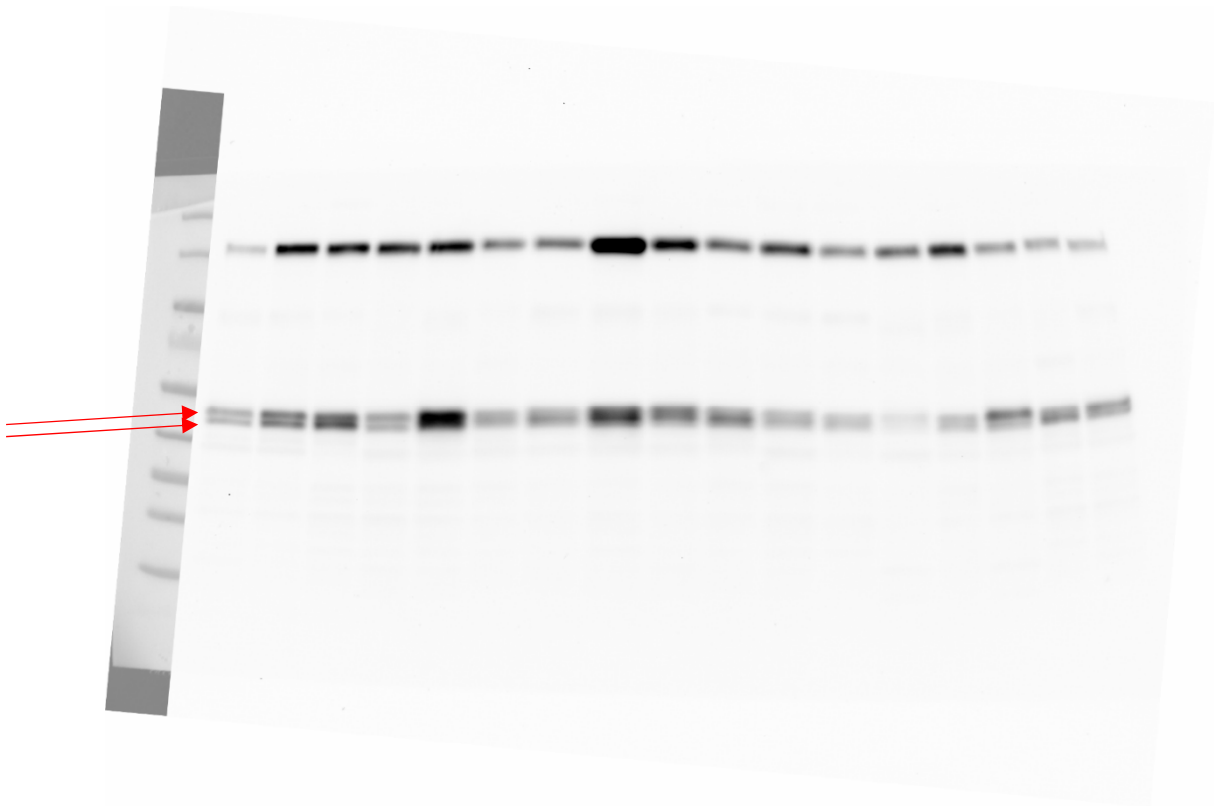


Figure S10. Western blots for the panel of 17 cancer cell lines for Sirt6, marked with antibody #12486 from Cell Signaling Technology (below: manufacture’s quality control blots). Arrows indicate the bands used for the analysis. The order of cell lines is shown in Figure S1.



#12486

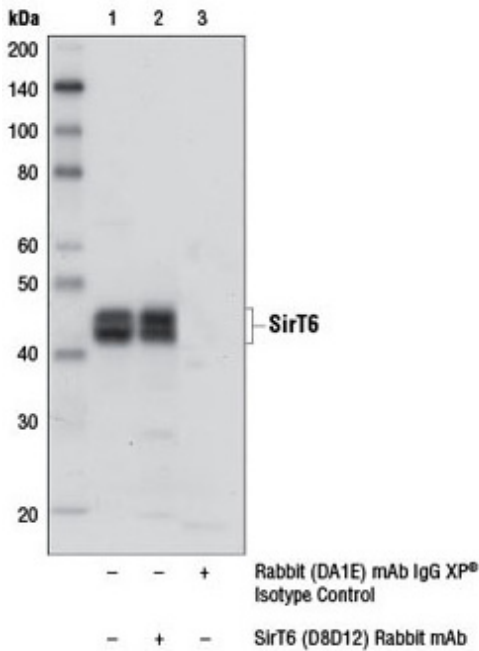
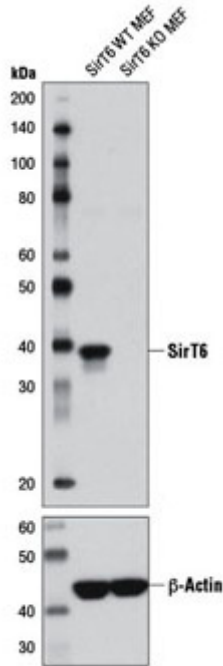
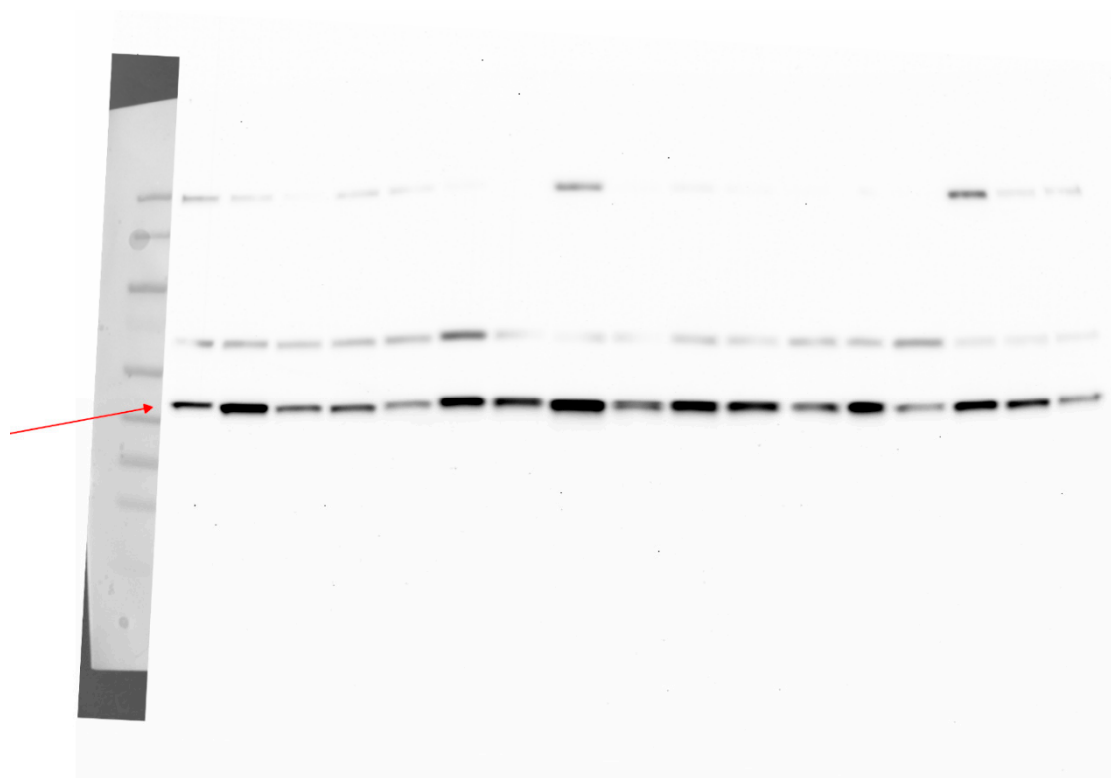


Figure S11. Western blots for the panel of 17 cancer cell lines for Sirt7, marked with antibody #5360 from Cell Signaling Technology (below: manufacture's quality control blot). Arrow indicates the band used for the analysis. The order of cell lines is shown in Figure S1.



#5360

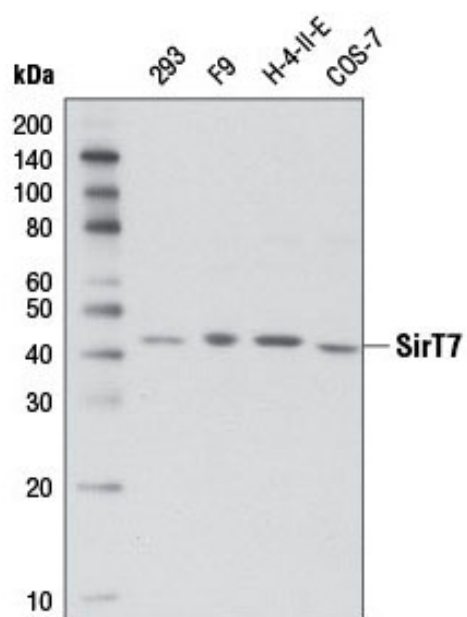


Figure S12. Univariate correlation matrix of the Spearman correlation coefficients for the expression of HDAC/Sirt isoenzyme proteins [statistics: ◆ $p < 0.05$, ● not significant]. Positive correlations are depicted in blue, negative in red (see scale-bar).

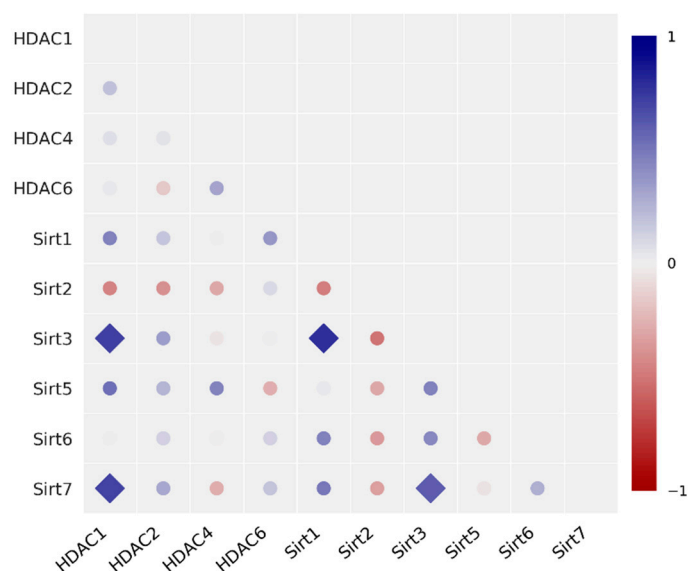


Figure S13. Univariate correlation matrix of the Spearman correlation coefficients with the NCI data for the expression of HDAC/Sirt isoenzyme mRNA [statistics: ◆ $p < 0.05$, ● not significant]. Positive correlations are depicted in blue, negative in red (see scale-bar).

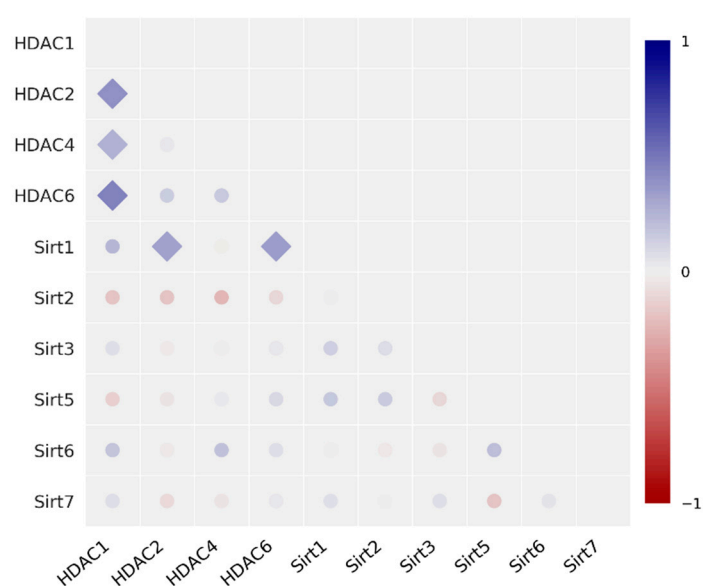


Figure S14. Univariate correlation matrix of the Spearman correlation coefficients for the expression of the HDAC/Sirt isoenzyme protein with anticancer drug potency expressed as GI₅₀ values and the doubling time of cancer cells [statistics: ◆ p<0.05, ● not significant]. Positive correlations are depicted in blue, negative in red (see scale-bar).

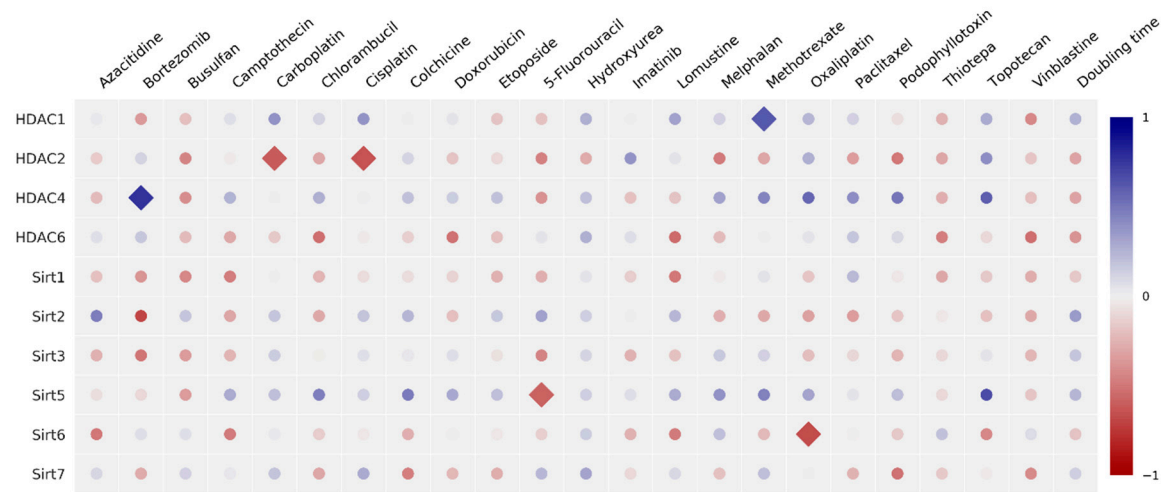


Figure S15. Univariate correlation matrix of the Spearman correlation coefficients correlation coefficients with the NCI data for the expression of the HDAC/Sirt isoenzyme mRNA with anticancer drug potency expressed as GI₅₀ [statistics: ◆ p<0.05, ● not significant]. Positive correlations are depicted in blue, negative in red (see scale-bar).

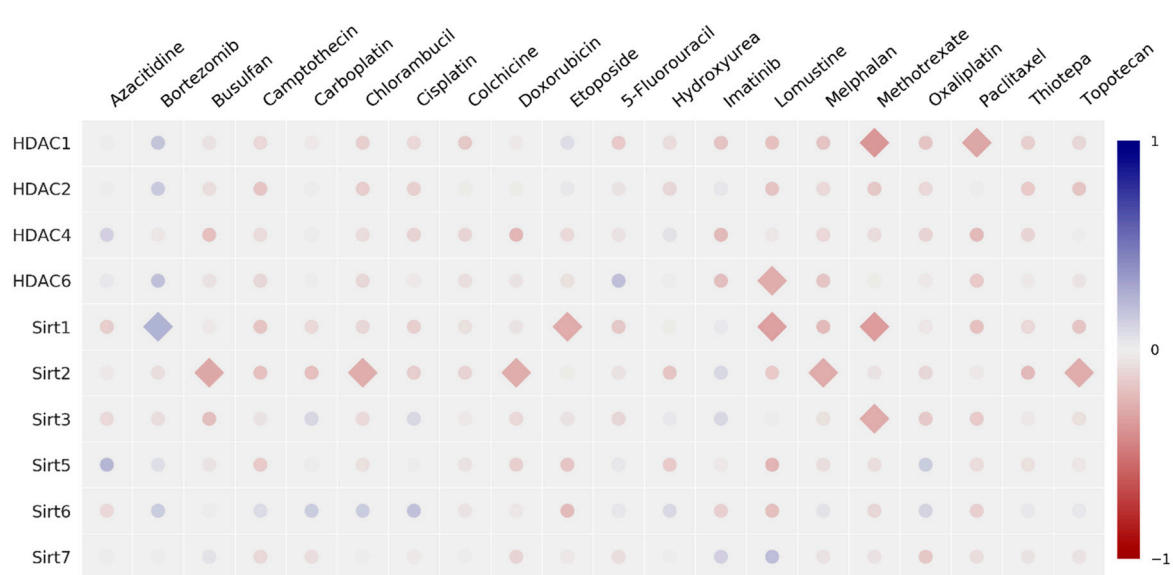


Figure S16. Univariate correlation matrix of the Pearson with FDR correction correlation for the expression of HDAC/Sirt isoenzyme proteins.

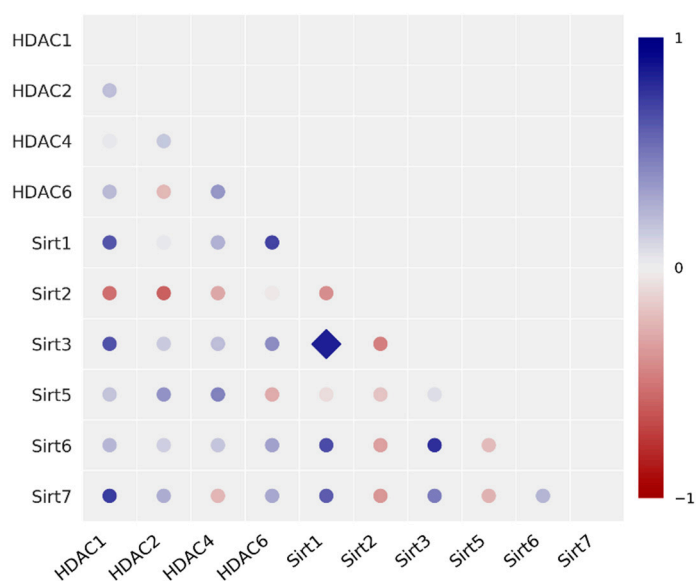


Figure S17. Univariate correlation matrix of the Pearson with FDR correction correlation with the NCI data for the expression of HDAC/Sirt isoenzyme mRNA.

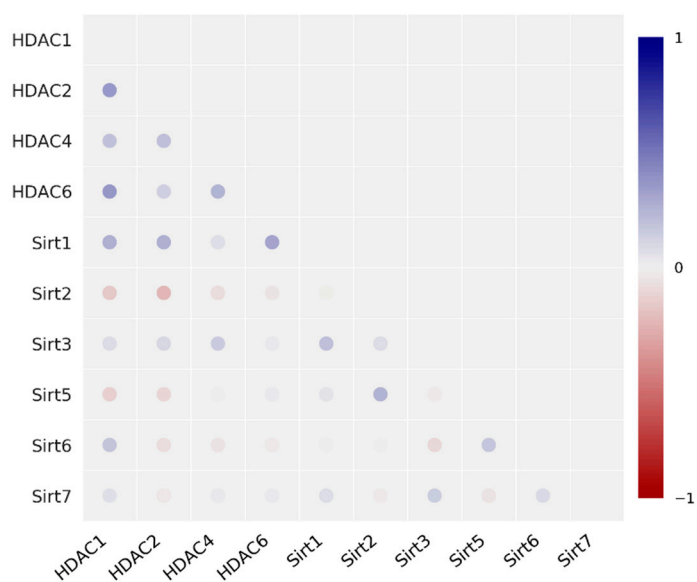


Figure S18. Univariate correlation matrix of the Pearson with FDR correction correlation for the expression of the HDAC/Sirt isoenzyme protein with anticancer drug potency expressed as GI_{50} values and the doubling time of cancer cells [statistics: ◆ $p < 0.05$, ● not significant]. Positive correlations are depicted in blue, negative in red (see scale-bar).

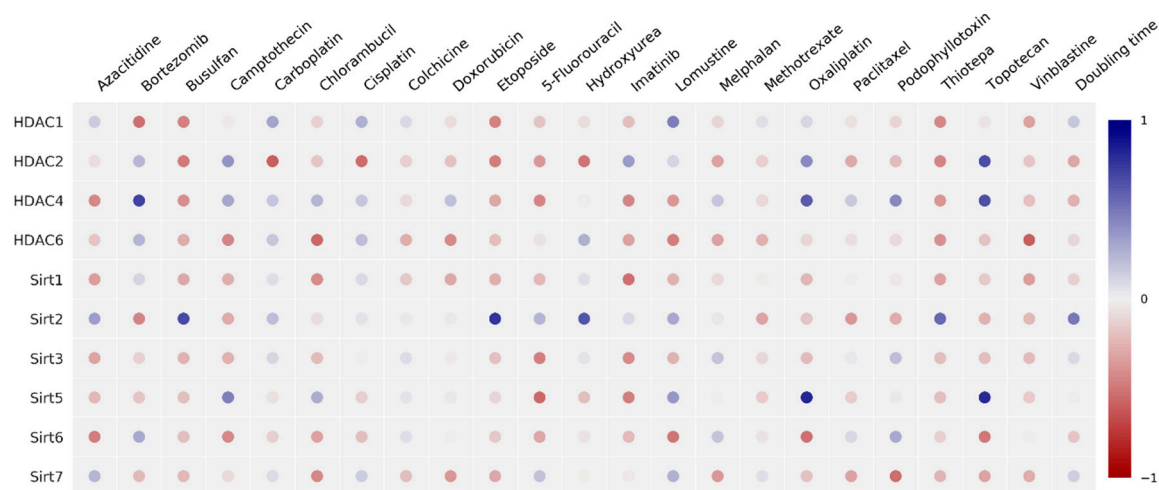


Figure S19. Univariate correlation matrix of the Pearson with FDR correction correlation for the expression of the HDAC/Sirt isoenzyme protein with anticancer drug potency expressed as GI_{50} [statistics: ◆ $p < 0.05$, ● not significant]. Positive correlations are depicted in blue, negative in red (see scale-bar).

