

Supplementary information, Table S1 The ratios of quantifiable histone K_{hib} sites between HDAC3 overexpressed 293T cells and control 293T cells.

The control 293T cells were transfected with an empty vector PCDNA3.1 in DMEM, and labeled with ¹³C₆¹⁵N₂-lysine, while the HDAC3 overexpressed 293T cells were transferred with a vector encoding PCDNA3.1-FLAG-HDAC3 in DMEM, and labeled with ¹²C₆-lysine. Two pools of cells were harvested and the extracted proteins were mixed, digested, enriched with anti-K_{hib} antibody, and then analyzed by HPLC-MS/MS. All the K_{hib} site ratios were normalized by the quantified histone proteins expression levels.

K_{hib} sites	Peptide sequence	Normalized Ratio L(HDAC3 overexpression)/H(control)
H1.2K74	ALAAAGYDVEK _{hib} NNSR	0.70
H1.2K74	GTLVQTK _{hib} GTGASGSFK	0.60
H2AK95	NDEELNK _{hib} LLGK	0.67
H2BK109	LLLPGELAK _{hib} HAVSEGTK	0.58
H2BK5	PEPSK _{hib} SAPAPK	1.15
H2BK44	K _{hib} ESYSIYVYK	0.61
H3K18	K _{hib} QLATK(ac)AAR	0.66
H3K56	YQK _{hib} STELLIR	0.67
H3K79	EIAQDFK _{hib} TDLR	0.82
H3K122	VTIMPK _{hib} DIQLAR	0.63
H4K31	DNIQGITK _{hib} PAIR	0.60
H4K77	DAVTYTEHAK _{hib} R	0.52
H4K91	TVTAM(ox)DVVYALK _{hib} R	0.58