

HDAC6 (h): 293 Lysate: sc-111004

BACKGROUND

In the intact cell, DNA closely associates with histones and other nuclear proteins to form chromatin. The remodeling of chromatin is believed to be a critical component of transcriptional regulation and a major source of this remodeling is brought about by the acetylation of nucleosomal histones. Acetylation of lysine residues in the amino terminal tail domain of histone results in an allosteric change in the nucleosomal conformation and an increased accessibility to transcription factors by DNA. Conversely, the deacetylation of histones is associated with transcriptional silencing. Several mammalian proteins have been identified as nuclear histone acetylases, including GCN5, PCAF (p300/CBP associated factor), p300/CBP, HAT1, and the TFIID subunit TAF II p250. Mammalian HDAC1 (also designated HD1), HDAC2 (also designated Rpd3) and HDAC3-6, have been identified as histone deacetylases.

REFERENCES

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- Taunton, J., et al. 1996. A mammalian histone deacetylase related to the yeast transcriptional regulator Rpd3p. *Science* 272: 408-411.
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- Grozinger, C.M., et al. 1999. Three proteins define a class of human histone deacetylases related to yeast Hda1p. *Proc. Natl. Acad. Sci. USA* 96: 4868-4873.

CHROMOSOMAL LOCATION

Genetic locus: HDAC6 (human) mapping to Xp11.23.

PRODUCT

HDAC6 (h): 293 Lysate represents a lysate of human HDAC6 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

HDAC6 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive HDAC6 antibodies. Recommended use: 10-20 µl per lane.

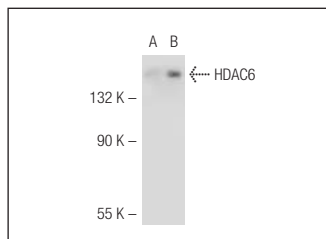
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

HDAC6 (S-14): sc-5255 is recommended as a positive control antibody for Western Blot analysis of enhanced human HDAC6 expression in HDAC6 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

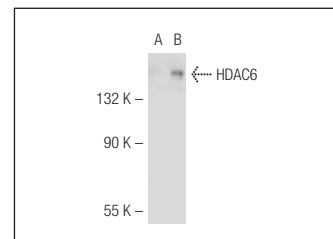
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

DATA



HDAC6 (S-14): sc-5255. Western blot analysis of HDAC6 expression in non-transfected: sc-117752 (A) and human HDAC6 transfected: sc-111004 (B) 293T whole cell lysates.



HDAC6 (D-11): sc-28386. Western blot analysis of HDAC6 expression in non-transfected: sc-117752 (A) and human HDAC6 transfected: sc-111004 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.