HDAC8 (B-4): sc-365620

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 TFID subunit TAF II p250. Mammalian HDAC8, isolated from human kidney, is a histone deacetylase that shares homology to other HDACs but has different tissue distribution. HDAC8 is localized to the nucleus and plays a role in the development of a broad range of tissues and in the etiology of cancer.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: HDAC8 (human) mapping to Xq13.1.

SOURCE
HDAC8 (B-4) is a mouse monoclonal antibody specific for an epitope map between amino acids 2-28 at the N-terminus of HDAC8 of human origin.

PRODUCT
Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
Blocking peptide available for competition studies, sc-365620 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS
HDAC8 (B-4) is recommended for detection of HDAC8 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HDAC8 siRNA (h): sc-35548, HDAC8 shRNA Plasmid (h): sc-35548-SH and HDAC8 shRNA (h) Lentiviral Particles: sc-35548-V.

Molecular Weight of HDAC8: 44 kDa.

Positive Controls: SUP-T1 whole cell lysate: sc-364796, AN3 CA cell lysate: sc-24662 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

DATA
HDAC8 (B-4): sc-365620. Western blot analysis of HDAC8 expression in SUP-T1 (A), NTERA-2 cl.D1 (B) and AN3 CA (C) whole cell lysates.

SELECT PRODUCT CITATIONS

See HDAC8 (E-5): sc-17778 for HDAC8 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.