HDAC8 (E-5): sc-17778

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 acetyltransferases, including GCN5, PCAF (p300/CBP-associated factor), p300/CBP, HAT1 and the TFIID 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.

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

SOURCE
HDAC8 (E-5) is a mouse monoclonal antibody raised against amino acids 1-145 of HDAC8 of human origin.

PRODUCT
Each vial contains 200 µg IgG2b, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HDAC8 (E-5) is available conjugated to agarose (sc-17778 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-17778 HRP), 200 µg/ml, for WB, HICP and ELISA; to either phycoerythrin (sc-17778 PE), fluorescein (sc-17778 FITC), Alexa Fluor® 488 (sc-17778 AF488), Alexa Fluor® 546 (sc-17778 AF546), Alexa Fluor® 594 (sc-17778 AF594) or Alexa Fluor® 647 (sc-17778 AF647), 200 µg/ml, for WB (RGB), IF, HICP and FCM; and to either Alexa Fluor® 680 (sc-17778 AF680) or Alexa Fluor® 790 (sc-17778 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

APPLICATIONS
HDAC8 (E-5) is recommended for detection of HDAC8 of human origin by Western Blotting (starting dilution 1:200, 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 paraaffin-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: MOLT-4 cell lysate: sc-2233, TF-1 cell lysate: sc-2412 or HDAC8 (h2): 293T Lysate: sc-177327.

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

SELECT PRODUCT CITATIONS

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