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 acetylases, 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-17778HRP), 200 µg/ml, for WB, to Alexa Fluor® 488 (sc-17778 AF488) or Alexa Fluor® 647 (sc-17778 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

**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 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: MOLT-4 cell lysate: sc-2233, TF-1 cell lysate: sc-2412 or HDAC8 (h2): 293T Lysate: sc-177327.

**STORAGE**

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

**RESEARCH USE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.

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