

HDAC1, Human. Rabbit Polyclonal Antibody , Human

BACKGROUND

Acetylation of the tail of histone is known to cause chromatin to adopt a more 'open' 3D conformation, allowing trans factors greater access to DNA. Histone acetyltransferases (HATs), complexes interact with sequence-specific activator proteins and target specific genes. In addition to histones, HATs acetylate non-histone proteins, implicating them in a wide variety of regulatory roles for these enzymes. By comparison, histone deacetylation promotes a more 'closed' chromatin conformation and in general leads to repression of gene activity. Mammalian histone deacetylases are divided into three classes on the basis of their similarity to various the yeast deacetylases. Class I (HDACs 1, 2, 3 and 8) related to the yeast Rpd3-like proteins, class II (HDACs 4, 5, 6, 7, 9 and 10) related to yeast Hda1-like proteins and class III related to the yeast protein Sir2. Inhibitors of HDAC have enormous potential as cancer therapeutic agents.

ORDERING INFORMATION

CATALOG NUMBER
X1879P

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
IgG

APPLICATIONS
Western Blot

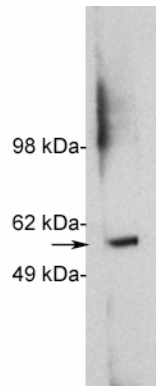
IMMUNOGEN

Synthetic peptide derived from the human histone deacetylase 1 protein.

SPECIES REACTIVITY

Human

Legend: Western blot using Exalpha's X1879P, rabbit polyclonal at 1 µg/ml on HeLa cell extract (20 µg/lane). Blots were developed with goat anti-rabbit Ig (1:75k) and Pierce's Supersignal West Femto system.



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

Antibody tested using HeLa cell lysate.

COMMENTS

Antibody can be used for Western blotting (1-5 µg/ml). Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Marmorstein, R. et al. (2001) Cell. Mol. Life Sci. 58, 693-703.
2. Gray, S.G. and Ekstrom, T.J. (2001) Exp. Cell Res. 262, 75-83.
3. Thiagalingam, S. et al. (2003) Ann. N. Y. Acad. Sci. 983, 84-100.
4. Viguishin, D.M. and Coombes, R.C. (2004) Curr. Cancer Drug Targets 4, 205-218.
5. J Virol. 2006 Dec 6; Mapping of key functions of the herpes simplex virus 1 US3 protein kinase: the US3 protein can form functional heteromultimeric structures derived from overlapping truncated polypeptides. Alice P W Poon, Bernard Roizman
6. J Biol Chem. 2006 Nov 22; Molecular mechanisms of trans-activation and doxorubicin mediated repression of survivin gene in cancer cells. Pierre-Olivier Esteve, Hang Gyeong Chin, Sriharsa Pradhan
7. Curr Drug Targets. 2006 Nov ;7(11):1553-60: The role of NAD+ dependent histone deacetylases (sirtuins) in ageing. Johannes Trapp, Manfred Jung
8. Circ Res. 2006 Nov 2; Transcriptional Silencing of the Death Gene BNIP3 by Cooperative Action of NF-B and Histone Deacetylase 1 in Ventricular Myocytes. James Shaw, Tong Zhang, Marek Rzeszutek, Natalia Yurkova, Delphine Baetz, James R Davie, Lorrie A Kirshenbau

LAST MODIFIED 2/7/2008

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