10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HDAC11 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1111a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q96DB2
Other Accession	NP_079103
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	39183
Antigen Region	1-30

Additional Information

Gene ID	79885
Other Names	Histone deacetylase 11, HD11, HDAC11
Target/Specificity	This HDAC11 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human HDAC11.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HDAC11 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HDAC11
Function	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes.

Cellular Location	Nucleus.
Tissue Location	Weakly expressed in most tissues. Strongly expressed in brain, heart, skeletal muscle, kidney and testis

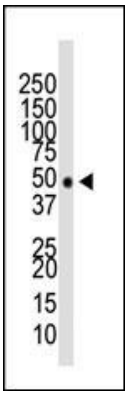
Background

HDAC11 is responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. The predominantly nuclear HDAC11, which interacts with HDAC6, is weakly expressed in most tissues, and strongly expressed in brain, heart, skeletal muscle, kidney and testis. Its activity is inhibited by trapoxin, a known histone deacetylase inhibitor.

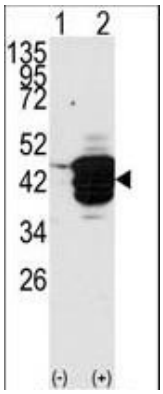
References

Voelter-Mahlknecht S, et al., Int J Mol Med. 2005 Oct;16(4):589-98.
Bradbury CA, et al., Leukemia. 2005 Oct;19(10):1751-9.
Gregoretti IV, et al., J Mol Biol. 2004 Apr 16;338(1):17-31.
Gao, L., et al., J. Biol. Chem. 277(28):25748-25755 (2002).

Images

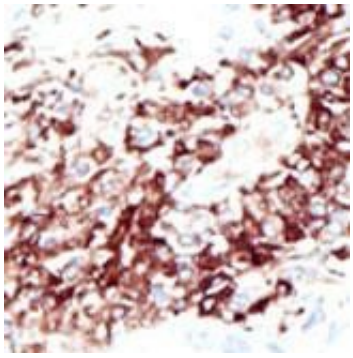


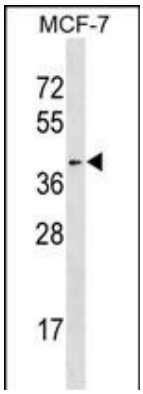
Western blot analysis of anti-HDAC11 Pab (Cat. #AP1111a) in mouse brain tissue lysate. HDAC11 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Western blot analysis of HDAC11 (arrow) using HDAC11 Antibody (N-term) (Cat.#AP1111a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the HDAC11 gene (Lane 2) (Origene Technologies).

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.





HDAC11 Antibody (M1) (Cat. #AP1111a) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the HDAC11 antibody detected the HDAC11 protein (arrow).

Citations

- Differential histone deacetylase mRNA expression patterns in amyotrophic lateral sclerosis.