

HDAC10 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2001a

Product Information

Application WB, IHC, E **Primary Accession Q969S8** Reactivity Human Host Mouse Clonality Monoclonal **Clone Names** 3B6B8 Isotype IgG2a 71445 **Calculated MW**

Description The protein encoded by this gene belongs to the histone deacetylase family,

members of which deacetylate lysine residues on the N-terminal part of the core histones. Histone deacetylation modulates chromatin structure, and plays an important role in transcriptional regulation, cell cycle progression, and developmental events. Alternatively spliced transcript variants encoding

different isoforms have been found for this gene.

Immunogen Purified recombinant fragment of human HDAC10 (AA: 18-219) expressed in

E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide.

Additional Information

Gene ID 83933

Other Names Histone deacetylase 10, HD10, 3.5.1.98, HDAC10

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/1000

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions HDAC10 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name HDAC10

Function Polyamine deacetylase (PDAC), which acts preferentially on

N(8)-acetylspermidine, and also on acetylcadaverine and acetylputrescine

(PubMed:28516954). Exhibits attenuated catalytic activity toward N(1),N(8)-diacetylspermidine and very low activity, if any, toward N(1)-acetylspermidine (PubMed:28516954). Histone deacetylase activity has been observed in vitro (PubMed:11677242, PubMed:11726666, PubMed:11739383, PubMed:11861901). Has also been shown to be involved in MSH2 deacetylation (PubMed:26221039). The physiological relevance of protein/histone deacetylase activity is unclear and could be very weak (PubMed:28516954). May play a role in the promotion of late stages of autophagy, possibly autophagosome-lysosome fusion and/or lysosomal exocytosis in neuroblastoma cells (PubMed:23801752, PubMed:29968769). May play a role in homologous recombination (PubMed:21247901). May promote DNA mismatch repair (PubMed:26221039).

Cellular Location Cytoplasm. Nucleus Note=Excluded from nucleoli.

Tissue Location Widely expressed with high levels in liver and kidney.

References

1. J Biol Chem. 2013 Sep 27;288(39):28021-33.2. Biochem Biophys Res Commun. 2007 Nov 23;363(3):776-81.

Images

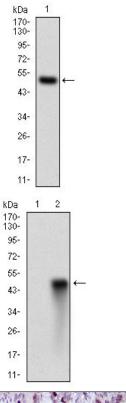


Figure 1: Western blot analysis using HDAC10 mAb against human HDAC10 (AA: 18-219) recombinant protein. (Expected MW is 48.6 kDa)

Figure 2: Western blot analysis using HDAC10 mAb against HEK293 (1) and HDAC10 (AA: 18-219)-hIgGFc transfected HEK293 (2) cell lysate.

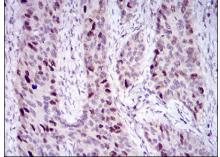


Figure 3: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using HDAC10 mouse mAb with DAB staining.

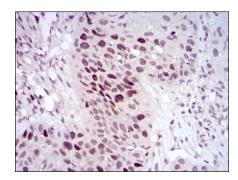


Figure 4: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using HDAC10 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.