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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
Calculated MW	71445
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~~1/10000
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

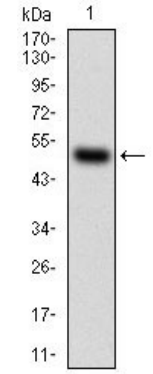

Figure 1: Western blot analysis using HDAC10 mAb against human HDAC10 (AA: 18-219) recombinant protein. (Expected MW is 48.6 kDa)

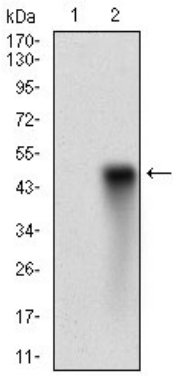

Figure 2: Western blot analysis using HDAC10 mAb against HEK293 (1) and HDAC10 (AA: 18-219)-hIgGFc transfected HEK293 (2) cell lysate.

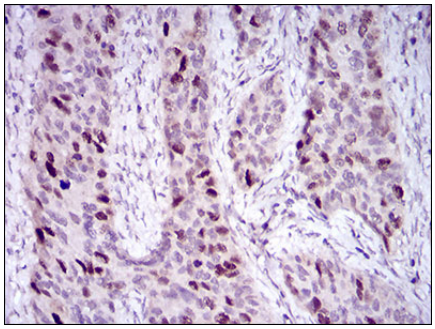

Figure 3: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using HDAC10 mouse mAb with DAB staining.

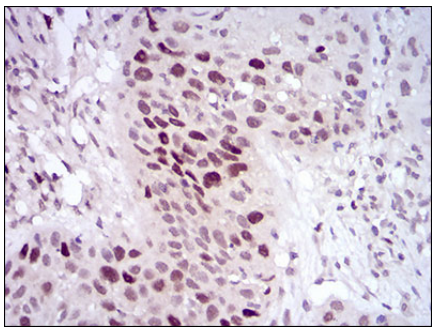

Figure 4: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using HDAC10 mouse mAb with DAB staining.