10320 Camino Santa Fe, Suite G
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HDAC10 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2001a

Specification

HDAC10 Antibody - Product Information

Application	**WB, IHC, E**
Primary Accession	Q969S8
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a**
Calculated MW	**71.4kDa KDa**

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.

HDAC10 Antibody - 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.

HDAC10 Antibody - 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.

HDAC10 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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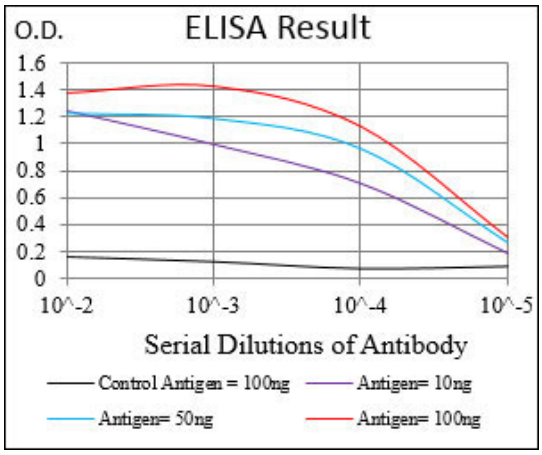

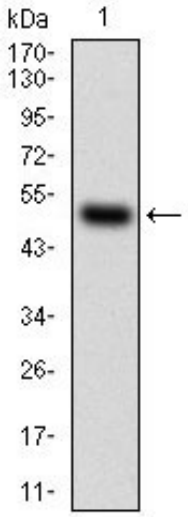

Figure 1: Western blot analysis using HDAC10 mAb against human HDAC10 (AA: 18-219) recombinant protein. (Expected MW is 48.6 kDa)

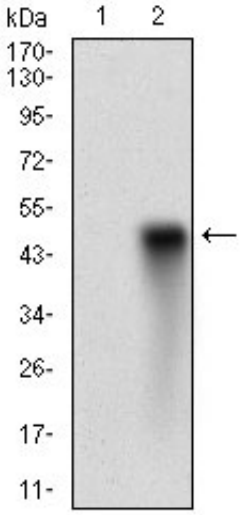

Figure 2: Western blot analysis using HDAC10 mAb against HEK293 (1) and HDAC10 (AA: 18-219)-hIgGFc transfected HEK293 (2) cell lysate.

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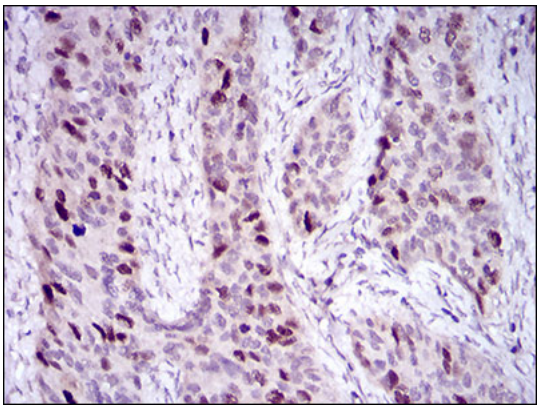

Figure 3: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using HDAC10 mouse mAb with DAB staining.

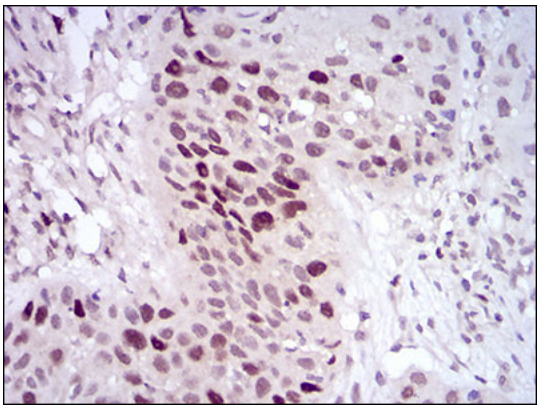

Figure 4: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using HDAC10 mouse mAb with DAB staining.

HDAC10 Antibody - References

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