10320 Camino Santa Fe, Suite G
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Anti-HDAC7/Histone Deacetylase 7 Rabbit Monoclonal Antibody

Catalog # ABO13700

Specification

Anti-HDAC7/Histone Deacetylase 7 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q8WUI4
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-HDAC7/Histone Deacetylase 7 Rabbit Monoclonal Antibody . Tested in WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-HDAC7/Histone Deacetylase 7 Rabbit Monoclonal Antibody - Additional Information

Gene ID 51564

Other Names
Histone deacetylase 7, HD7, 3.5.1.98, 3.5.1.-, HDAC7, HDAC7A

Calculated MW
102927 MW KDa

Application Details
WB 1:1000-1:2000
FC 1:100

Subcellular Localization
Nucleus. Cytoplasm. In the nucleus, it associates with distinct subnuclear dot-like structures. Shuttles between the nucleus and the cytoplasm. Treatment with EDN1 results in shuttling from the nucleus to the perinuclear region. The export to cytoplasm depends on the interaction with the 14-3-3 protein YWHAE and is due to its phosphorylation.

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human HDAC7

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

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Anti-HDAC7/Histone Deacetylase 7 Rabbit Monoclonal Antibody - Protein Information

Name HDAC7

Synonyms HDAC7A

Function
Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4) (By similarity). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events (By similarity). Histone deacetylases act via the formation of large multiprotein complexes (By similarity). Involved in muscle maturation by repressing transcription of myocyte enhancer factors such as MEF2A, MEF2B and MEF2C (By similarity). During muscle differentiation, it shuttles into the cytoplasm, allowing the expression of myocyte enhancer factors (By similarity). May be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene (PubMed:12239305). Positively regulates the transcriptional repressor activity of FOXP3 (PubMed:17360565). Serves as a corepressor of RARA, causing its deacetylation and inhibition of RARE DNA element binding (PubMed:28167758). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:28167758). Also acetylates non-histone proteins, such as ALKBH5 (PubMed:37369679).

Cellular Location
Nucleus. Cytoplasm Note=In the nucleus, it associates with distinct subnuclear dot-like structures (PubMed:11262386). Shuttles between the nucleus and the cytoplasm (PubMed:16980613). In muscle cells, it shuttles into the cytoplasm during myocyte differentiation (By similarity). The export to cytoplasm depends on the interaction with the 14-3-3 protein YWHAE and is due to its phosphorylation (PubMed:16980613) {ECO:0000250|UniProtKB:Q8C2B3, ECO:0000269|PubMed:11262386, ECO:0000269|PubMed:16980613}

Anti-HDAC7/Histone Deacetylase 7 Rabbit Monoclonal 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

Anti-HDAC7/Histone Deacetylase 7 Rabbit Monoclonal Antibody - Images

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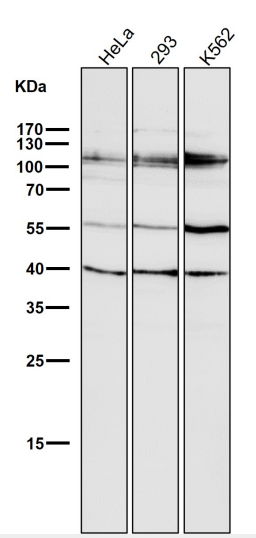
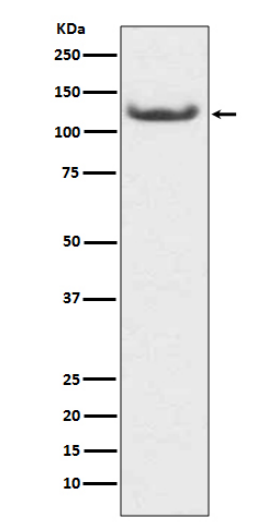


All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Western blot analysis of HDAC7 expression in HeLa cell lysate.