

Rabbit anti-Human, Mouse HDAC7 Polyclonal Antibody | anti-HDAC7 antibody

HDAC7 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322106	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

HDAC7; Polyclonal Antibody; HDAC7 Antibody; DKFZP586J0917; FLJ99588; HD 7a; HD7; HD7a; HDAC 7; HDAC 7A; Hdac7; HDAC7_HUMAN; HDAC7A; Histone deacetylase 7; Histone deacetylase 7A; OTTHUMP00000202813; OTTHUMP00000202814; anti-HDAC7 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	HDAC7 antibody detects endogenous levels of total HDAC7
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	954
Applicable Applications for anti-HDAC7 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human HDAC7
Subcellular Location	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 may be due to its phosphorylation.
Predicted Cross Reactivity	Horse, Dog
Similarity	Horse (91%), Dog (82%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemisry)
AAA322106 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of HDAC7 expression in HUVEC cell extract.The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA322106 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-HDAC7 antibody

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. Involved in muscle maturation by repressing transcription of myocyte enhancer factors such as MEF2A, MEF2B and MEF2C. 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. Positively regulates the transcriptional repressor activity of FOXP3 (PubMed:17360565).

Subunit Structure: Interacts with HDAC1, HDAC2, HDAC3, HDAC4, HDAC5, NCOR1, NCOR2, SIN3A, SIN3B, RBBP4, RBBP7, MTA1L1, SAP30 and MBD3. Interacts with the 14-3-3 protein YWHAE, MEF2A, MEF2B and MEF2C (By similarity). Interacts with KAT5 and EDNRA. Interacts with KDM5B. Interacts with ZMYND15 (By similarity). Interacts with PML (isoform PML-4). Interacts with FOXP3.

Post-translational Modifications: May be phosphorylated by CaMK1. Phosphorylated by the PKC kinases PKN1 and PKN2, impairing nuclear import. Phosphorylation at Ser-155 by MARK2, MARK3 and PRKD1 promotes interaction with 14-3-3 proteins and export from the nucleus. Phosphorylation at Ser-155 is a prerequisite for phosphorylation at Ser-181.

Similarity: The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm. Belongs to the histone deacetylase family. HD type 2 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	148539870
NCBI GeneID	51564
NCBI Accession #	NP_001091886.1
NCBI GenBank Nucleotide #	NM_001098416.3
UniProt Accession #	Q8WUI4; Q6P1W9; Q6W9G7; Q7Z4K2; Q7Z5I1; Q96K01; Q9BR73; Q9H7L0; Q9NW41; B3KY08; B4DWI0; B4E0Q5
Molecular Weight	Observed: 103 kDa Predicted: 103 kDa
NCBI Official Full Name	histone deacetylase 7 isoform d
NCBI Official Synonym Full Names	histone deacetylase 7

NCBI Official Symbol	HDAC7
NCBI Official Synonym Symbols	HD7; HD7A; HDAC7A
NCBI Protein Information	histone deacetylase 7
UniProt Protein Name	Histone deacetylase 7
UniProt Gene Name	HDAC7
UniProt Synonym Gene Names	HDAC7A; HD7; HD7a

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/hdac7-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/322106>