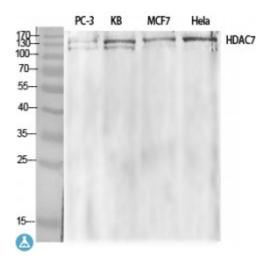


## Anti-HDAC7 antibody



**Description** Rabbit polyclonal to HDAC7.

Model STJ93484

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, WB

Immunogen Synthesized peptide derived from human HDAC7 around the non-

phosphorylation site of S155.

**Immunogen Region** 90-170 aa

**Gene ID** <u>51564</u>

Gene Symbol HDAC7

**Dilution range** WB 1:500-1:2000ELISA 1:10000

**Specificity** HDAC7 Polyclonal Antibody detects endogenous levels of HDAC7 protein.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

**Protein Name** Histone deacetylase 7 HD7 Histone deacetylase 7A HD7a

Molecular Weight 103 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:14067OMIM:606542</u>

Alternative Names Histone deacetylase 7 HD7 Histone deacetylase 7A HD7a

**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 . May be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene. Positively regulates the transcriptional

repressor activity of FOXP3.

Sequence and Domain Family The nuclear export sequence mediates the shuttling between the nucleus and

the cytoplasm.

**Cellular 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.

**Post-translational** 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.

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**Modifications** 

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