
Product Name: Histone deacetylase 7a Rabbit Polyclonal Antibody**Catalog #: APRab12049**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	105kDa

Antigen Information

Gene Name	HDAC7
Alternative Names	HDAC7; HDAC7A; Histone deacetylase 7; HD7; Histone deacetylase 7A; HD7a
Gene ID	51564.0
SwissProt ID	Q8WUI4
Immunogen	The antiserum was produced against synthesized peptide derived from human HDAC7. AA range:901-950

Background

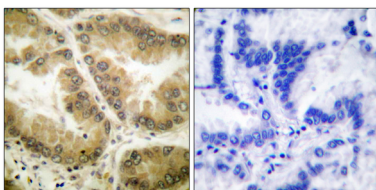
Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone

acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene has sequence homology to members of the histone deacetylase family. This gene is orthologous to mouse HDAC7 gene whose protein promotes repression mediated via the transcriptional corepressor SMRT. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],catalytic activity:Hydrolysis of an N(6)-acetyl-lysine residue of a histone to yield a deacetylated histone.,domain:The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm.,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.,miscellaneous:Its activity is inhibited by Trichostatin A (TSA), a known histone deacetylase inhibitor.,PTM:May be phosphorylated by CaMK1.,sequence caution:Intron retention.,similarity:Belongs to the histone deacetylase family. Type 2 subfamily.,subcellular location: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.,subunit: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 HTATIP and EDNRA. Interacts with KDM5B.,

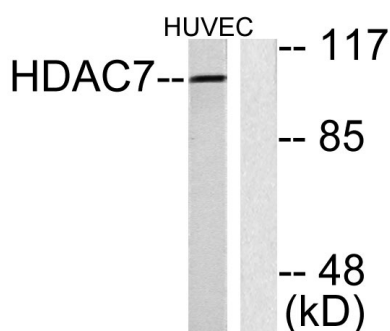
Research Area

Protein_Acetylation

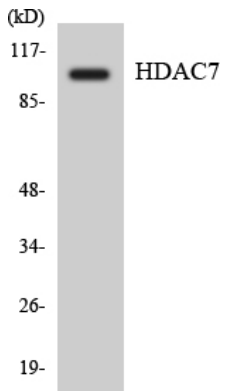
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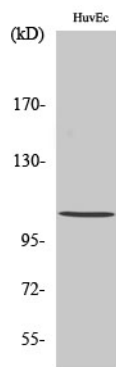
Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using HDAC7 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HUVEC cells, using HDAC7 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from COLO205 cells using HDAC7 antibody.



Western Blot analysis of various cells using Histone deacetylase 7a Polyclonal Antibody