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**Product Name: HDAC7 Rabbit Polyclonal Antibody****Catalog #: APRab11951**

For research use only.

**Summary**

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

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	103kDa

**Antigen Information**

<b>Gene Name</b>	HDAC7
<b>Alternative Names</b>	HDAC7; HDAC7A; Histone deacetylase 7; HD7; Histone deacetylase 7A; HD7a
<b>Gene ID</b>	51564.0
<b>SwissProt ID</b>	Q8WUI4
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human HDAC7A. AA range:121-170

**Background**

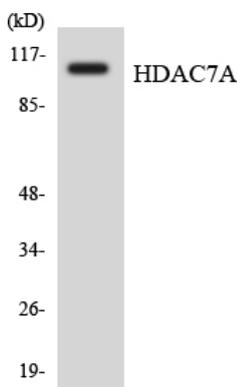
Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone

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.,

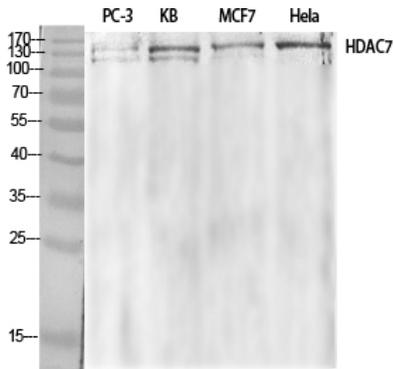
## Research Area

Protein\_Acetylation

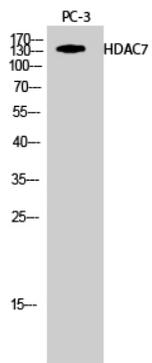
## Image Data



Western blot analysis of the lysates from HepG2 cells using HDAC7A antibody.



Western Blot analysis of various cells using HDAC7 Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of PC-3 cells using HDAC7 Polyclonal Antibody diluted at 1 : 1000