

Rabbit Anti-phospho-HDAC7 (Ser486) antibody

SL10330R

Product Name:	phospho-HDAC7 (Ser486)
Chinese Name:	磷酸化组蛋白去乙酰化酶7抗体
Alias:	HDAC7 (phospho S486); HDAC7 (phospho Ser486); p-HDAC7 (Ser486); HD 7a; HD7a; HDAC 7; HDAC 7A; HDAC7; HDAC7A; Histone deacetylase 7; Histone deacetylase 7A; DKFZP586J0917; OTTHUMP00000202813; OTTHUMP00000202814; FLJ99588; HDAC7_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	119kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human HDAC7 around the phosphorylation site of Ser486:AQ(p-S)SP
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 belongs to class II of the histone deacetylase/acuc/apha family. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. This protein does not bind DNA directly, but through transcription factors MEF2C and MEF2D. It seems to interact in a multiprotein complex with RbAp48 and HDAC3. [provided by RefSeq, Jul 2008]

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.

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. Interacts with KAT5 and EDNRA. Interacts with KDM5B. Interacts with ZMYND15. Interacts with PML (isoform PML-4).

Subcellular Location:

Nucleus. Cytoplasm. Note=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 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:

Belongs to the histone deacetylase family. HD type 2 subfamily.

SWISS:

P56524

Gene ID:

9759

Database links:

Entrez Gene: 9759 Human

Entrez Gene: 208727 Mouse

Entrez Gene: 363287 Rat

Omim: 605314 Human

SwissProt: P56524 Human

SwissProt: Q6NZM9 Mouse

SwissProt: Q99P99 Rat

Unigene: 20516 Human

Unigene: 318567 Mouse

Unigene: 23483 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.