

HDAC7 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13647b**Specification**

HDAC7 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q8WUI4](#)**HDAC7 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 51564**Other Names**

Histone deacetylase 7, HD7, Histone deacetylase 7A, HD7a, HDAC7, HDAC7A

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13647b was selected from the C-term region of HDAC7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HDAC7 Antibody (C-term) Blocking peptide - Protein Information**Name** HDAC7**Synonyms** HDAC7A**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). Serves as a corepressor of RARA, causing its deacetylation and inhibition of RARE DNA element binding (PubMed:28167758). In association with RARA, plays a role in the repression of microRNA-10a and thereby in the inflammatory response (PubMed:28167758).

Cellular 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

HDAC7 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

HDAC7 Antibody (C-term) Blocking peptide - Images

HDAC7 Antibody (C-term) Blocking peptide - 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.

HDAC7 Antibody (C-term) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Margariti, A., et al. Circ. Res. 106(7):1202-1211(2010) Hutt, D.M., et al. Nat. Chem. Biol. 6(1):25-33(2010) Malik, S., et al. Mol. Cell. Biol. 30(2):399-412(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)