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HDAC1 Blocking Peptide(C-term)

Synthetic peptide
Catalog # BP19738b

Specification

HDAC1 Blocking Peptide(C-term) - Product Information

Primary Accession	Q13547
Other Accession	Q4QQW4, O09106, Q32PJ8, NP_004955.2

HDAC1 Blocking Peptide(C-term) - Additional Information

Gene ID 3065

Other Names
Histone deacetylase 1, HD1, HDAC1, RPD3L1

Target/Specificity
The synthetic peptide sequence is selected from aa 436-450 of HUMAN HDAC1

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.

HDAC1 Blocking Peptide(C-term) - Protein Information

Name HDAC1 (HGNC:4852)

Synonyms RPD3L1

Function
Responsible for the deacetylation of lysine

HDAC1 Blocking Peptide(C-term) - Background

Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis.

HDAC1 Blocking Peptide(C-term) - References

Yang, Z., et al. Clin. Chem. Lab. Med. 48(12):1785-1791(2010)
Grausenburger, R., et al. J. Immunol. 185(6):3489-3497(2010)
Miller, K.M., et al. Nat. Struct. Mol. Biol. 17(9):1144-1151(2010)
Brandt, S., et al. Int. J. Biochem. Cell Biol. 42(9):1472-1481(2010)
Leone, V., et al. Oncogene 29(30):4341-4351(2010)

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. Deacetylates SP proteins, SP1 and SP3, and regulates their function. Component of the BRG1-RB1-HDAC1 complex, which negatively regulates the CREST-mediated transcription in resting neurons. Upon calcium stimulation, HDAC1 is released from the complex and CREBBP is recruited, which facilitates transcriptional activation. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Deacetylates 'Lys-310' in RELA and thereby inhibits the transcriptional activity of NF-kappa-B. Deacetylates NR1D2 and abrogates the effect of KAT5-mediated relieving of NR1D2 transcription repression activity. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. Involved in CIART-mediated transcriptional repression of the circadian transcriptional activator: CLOCK-ARNTL/BMAL1 heterodimer. Required for the transcriptional repression of circadian target genes, such as PER1, mediated by the large PER complex or CRY1 through histone deacetylation.

Cellular Location
Nucleus.

Tissue Location
Ubiquitous, with higher levels in heart, pancreas and testis, and lower levels in kidney and brain

HDAC1 Blocking Peptide(C-term) - Protocols

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

- Blocking Peptides