

Recombinant Human Histone deacetylase 1(HDAC1)

Catalog No: #AP70385

Package Size: #AP70385-1 20ug #AP70385-2 100ug #AP70385-3 1mg

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	Recombinant Human Histone deacetylase 1(HDAC1)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-482aaSequence Info:Full Length
Accession No.	Q13547
Calculated MW	71.1 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	MAQTQGTRRKVCYYYDGDVGNYYYYGQGHMPKPHRIMTHNLLLNLYGLYRKMEIYRPHKANAEEMTKYHSDD YIKFLRSIRPDNMSEYSKQMQRFNVGEDCPVFDGLFEFCQLSTGGSVASAVKLNKQQTDIAVNWAGGLHHA KSEASGFCYVNDIVLAILELLKYHQRVLYIDIDIHHGDGVVEEAFYTTDRVMTVSFHKYGEYFPGTGDLRDIGAGK GKYAVNYPLRDGIDDESIEAIFKPVMSKVMEMFQPSAVVLQCGSDSLSGDRLGCFNLTIKGHAKCVEFVKSF NLPMLMLGGGGYTIRNVARCWYETAVALDTEIPNELPYNDYFEYFGPDFKLHISPSNMTNQNTNEYLEKIKQ RLFENLRMLPHAPGVQMQAIPEDAIPESGDEDEDDPKRISICSSDKRIACEEEFSDSEEEGEGGRKNSSNF KKAKRVKTEDEKEKDPEEKKEVTEEEKTKEEKPEAKGVKEEVKLA
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

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. 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,GFI1,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

References

Structural and functional characterization of a cell cycle associated HDAC1,2 complex reveals the structural basis for complex assembly and nucleosome targeting. Itoh T., Fairall L., Muskett F.W., Milano C.P., Watson P.J., Arnaudo N., Saleh A., Millard C.J., El-Mezgueldi M., Martino F., Schwabe J.W. Nucleic Acids Res. 43:2033-2044(2015) Research Topic: Immunology

Note: This product is for in vitro research use only and is not intended for use in humans or animals.