

Recombinant Human HDAC1 Protein (1-482 aa), His-SUMO-tagged

Cat. No. HDAC1-549H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human HDAC1 Protein (1-482 aa) is produced by E. coli expression system. This protein is fused with a 6xHis-SUMO tag at the N-terminal. Research Area: Immunology. Protein Description: Full Length.
Species	Human
Source	E.coli
ProteinLength	1-482 aa
Description	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/GFI/KDM1A/HDAC complex that suppresses, via histone

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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.

Form Tris-based buffer, 50% glycerol

Molecular Mass 71.1 kDa

AA Sequence

MAQTQGTRRKVCYYYDGDVGNYYYGQGHMPKPHRIRMTHNLLLNYGLYRKMEIYR
 PHKANAEEMTKYHSDDYIKFLRSIRPDNMSEYSKQMQRFNVGEDCPVFDGLFEFCQ
 LSTGGSVASAVKLNKQQTDAVNWAGGLHHAKKSEASGFCYVNDIVLAILELLKYHQ
 RVLYIDIDIHHGDGVVEAFYTTDRVMTVSFHKYGEYFPGTGDLRDIGAGKGKYYAVN
 YPLRDGIDDESIEAIFKPVMSKVMEMFQPSAVVLQCGSDSLSGDRLGCFNLTIKGHA
 KCVEFVKSFNLPMLMLGGGGYTIRNVARCWYETAVALDTEIPNELPYNDYFEYFGP
 DFKLHISPSNMTNQNTNEYLEKIKQRLFENLRMLPHAPGVQMQAIPEDAIPESGDE
 DEDDPDKRISICSSDKRIACEEEFSDSEEEGEGGRKNSSNFKKAKRVKTEDEKEKDP
 EEKKEVTEEEKTKEEKPEAKGVKEEVKLA

Purity > 90% as determined by SDS-PAGE.

Notes Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.

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 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.

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Concentration A hardcopy of COA with concentration instruction is sent along with the products.

GENE INFORMATION

Gene Name HDAC1 histone deacetylase 1 [Homo sapiens]

Official Symbol HDAC1

Synonyms HDAC1; RPD3L1; GON 10; HD1; RPD3; GON-10; DKFZp686H12203;

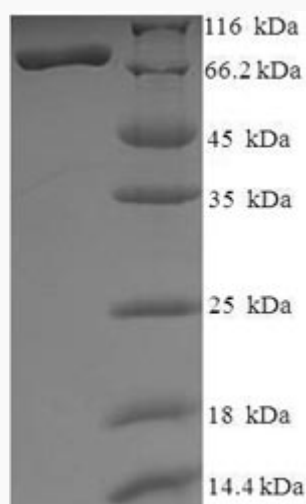
Gene ID 3065

mRNA Refseq NM_004964

Protein Refseq NP_004955

MIM 601241

UniProt ID Q13547



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(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

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