

HDAC7 recombinant protein

Recombinant HDAC7 (518-991) protein

CATALOG #
AAA59740

HOST
Baculovirus

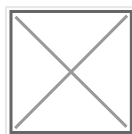
PRODUCT SYNONYMS

HDAC7; Recombinant HDAC7 (518-991) protein; Histone Deacetylase 7; HD7; HD7A; HDAC7A; HDAC7 recombinant protein

PRODUCT SPECIFICATIONS

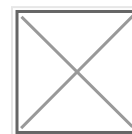
Host	Baculovirus
Form/Format	Recombinant HDAC7 (518-991) protein is supplied in 25mM HEPES pH7.5, 300mM NaCl, 10% Glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



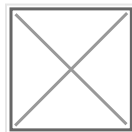
Application Data

HDAC-Glo Class IIa Assay for HDAC7 activity Assay was performed using HDAC-Glo Class IIa Assay from Promega. 3.5 uM substrate was incubated with HDAC7 proteins and 1/20,000 developer reagent at room temperature, then luminescence was detected after incubation for 20 min.



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SDS-PAGE

Recombinant HDAC7 (518-991) protein gel. HDAC7 (518-991) protein was run on a 10% SDS-PAGE gel and stained with Coomassie Blue. MW: 54.1 kDa Purity: >90%

ADDITIONAL INFORMATION

Related Product Information for HDAC7 recombinant protein	Short Description: Recombinant HDAC7 (518-991) protein includes amino acids 518-991 of human HDAC7 protein (accession number NP_056216.2); it was expressed in Sf9 cells and contains an N-terminal DYKDDDDK-Tag with a molecular weight of 54.1 kDa. The purity of HDAC7 protein is >85% by SDS-PAGE. It is useful for the study of enzyme kinetics, and chromatin regulation during transcription. Background: HDAC7 (Histone Deacetylase 7) is a member of the class IIa mammalian histone deacetylases (HDACs) involved in regulating chromatin structure during transcription. These enzymes catalyze the removal of acetyl groups from lysine residues of histones and other cellular proteins. Lysine N-epsilon-acetylation is a dynamic, reversible and tightly regulated protein and histone modification that plays a major role in regulation of gene expression in various cellular functions. It consists of the transfer of an acetyl moiety from an acetyl coenzyme A to the e-amino group of a lysine residue.In vivo, acetylation is controlled by the antagonistic activities of histone acetyltransferases (HATs) and histone deacetylases (HDACs). The HDACs are grouped into four classes, on the basis of similarity to yeast counterparts: HDAC class I (HDAC1, HDAC2, HDAC3 and HDAC8), class II (HDAC4, HDAC5, HDAC6, HDAC7, 9 and 10), class III (SIRT1-7) and class IV (HDAC11).HDAC7 is 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). HDAC7 may be involved in Epstein-Barr virus (EBV) latency, possibly by repressing the viral BZLF1 gene. HDAC7 positively regulates the transcriptional repressor activity of FOXP3.
Product Categories/Family for HDAC7 recombinant protein	Recombinant Proteins; Histone Deacetylase (HDAC); Transcription

NCBI AND UNIPROT INFORMATION

NCBI GI #	169234807
NCBI GeneID	51564
NCBI Accession #	NP_056216.2
NCBI GenBank Nucleotide #	NM_015401.3
UniProt Accession #	Q8WUI4; Q6P1W9; Q6W9G7; Q7Z4K2; Q7Z5I1; Q96K01; Q9BR73; Q9H7L0; Q9NW41; B3KY08; B4DWI0; B4E0Q5
Molecular Weight	102,927 Da
NCBI Official Full Name	histone deacetylase 7 isoform a
NCBI Official Synonym Full Names	histone deacetylase 7
NCBI Official Symbol	HDAC7
NCBI Official Synonym Symbols	HD7A; HDAC7A
NCBI Protein Information	histone deacetylase 7; HD7; histone deacetylase 7A
UniProt Protein Name	Histone deacetylase 7
UniProt Gene Name	HDAC7
UniProt Synonym Gene Names	HDAC7A; HD7; HD7a
UniProt Entry Name	HDAC7_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.