

Product datasheet

Recombinant human HDAC7 protein ab101660

2 Images

Overview

Product name	Recombinant human HDAC7 protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Baculovirus
Amino Acid Sequence	
Accession	Q8WU4
Species	Human
Molecular weight	80 kDa including tags
Amino acids	501 to 952

Specifications

Our [Abpromise guarantee](#) covers the use of **ab101660** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Biological activity The Specific activity of ab101660 was determined to be 80 RLU/min/ng.

Applications Functional Studies
Western blot

Purity > 90 % SDS-PAGE.

Form Liquid

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
Preservative: None
Constituents: 25% Glycerol, 50mM Tris HCl, 150mM Sodium chloride, 10mM Glutathione, 0.25mM DTT, 0.1mM EDTA, 0.1mM PMSF, pH 7.5

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

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.

Sequence similarities

Belongs to the histone deacetylase family. HD type 2 subfamily.

Domain

The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm.

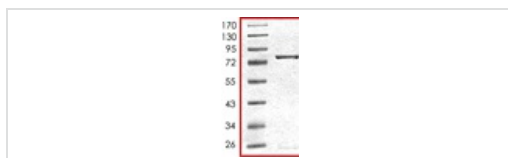
Post-translational modifications

May be phosphorylated by CaMK1. Phosphorylated by the PKC kinases PKN1 and PKN2, impairing nuclear import.

Cellular localization

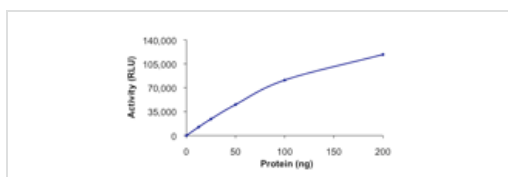
Nucleus. Cytoplasm. In the nucleus, it associates with distinct subnuclear dot-like structures. Shuttles between the nucleus and the cytoplasm. Treatment with EDN1 results in shuttling from the nucleus to the perinuclear region. The export to cytoplasm depends on the interaction with the 14-3-3 protein YWHAE and may be due to its phosphorylation.

Images



SDS-PAGE - HDAC7 protein (ab101660)

SDS-PAGE showing ab101660 at approximately 80kDa.



Functional Studies - HDAC7 protein (ab101660)

The Specific activity of ab101660 was determined to be 80 RLU/min/ng.

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