

Product datasheet

Recombinant Human SIRT7 protein ab95246

[1 References](#) [1 Image](#)

Description

Product name	Recombinant Human SIRT7 protein
Purity	> 75 % SDS-PAGE.
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human

Specifications

Our **Abpromise guarantee** covers the use of **ab95246** in the following tested applications.

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

Applications	SDS-PAGE Functional Studies
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.395% Tris HCl, 0.05% Tween, 20% Glycerol (glycerin, glycerine), 0.58% Sodium chloride
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General Info

Function	NAD-dependent protein deacetylase that specifically mediates deacetylation of histone H3 at 'Lys-18' (H3K18Ac). In contrast to other histone deacetylases, displays selectivity for a single histone mark, H3K18Ac, directly linked to control of gene expression. H3K18Ac is mainly present around the transcription start site of genes and has been linked to activation of nuclear hormone receptors. SIRT7 thereby acts as a transcription repressor. Moreover, H3K18 hypoacetylation has
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been reported as a marker of malignancy in various cancers and seems to maintain the transformed phenotype of cancer cells. These data suggest that SIRT7 may play a key role in oncogenic transformation by suppresses expression of tumor suppressor genes by locus-specific deacetylation of H3K18Ac at promoter regions. Also required to restore the transcription of ribosomal RNA (rRNA) at the exit from mitosis: promotes the association of RNA polymerase I with the rDNA promoter region and coding region. Stimulates transcription activity of the RNA polymerase I complex. May also deacetylate p53/TP53 and promotes cell survival, however such data need additional confirmation.

Sequence similarities

Belongs to the sirtuin family. Class IV subfamily.
Contains 1 deacetylase sirtuin-type domain.

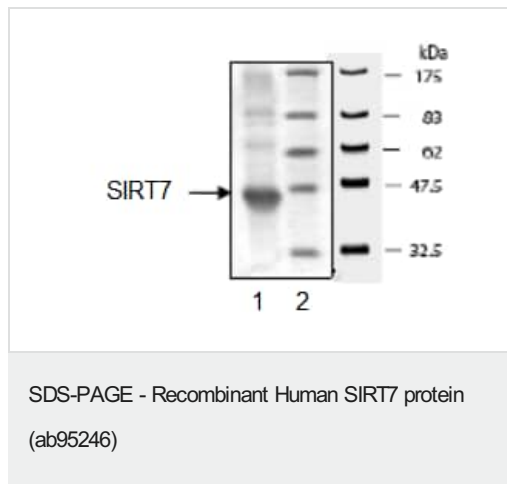
Post-translational modifications

Phosphorylated during mitosis.

Cellular localization

Cytoplasm. Nucleus, nucleolus. Located close to the nuclear membrane when in the cytoplasm. Associated with chromatin. Associated with rDNA promoter and transcribed region. Associated with nucleolar organizer regions during mitosis.

Images



ab95246 at 4 µg analysed on a 10% gel by SDS PAGE followed by coomassie staining (lane 1). ab95246 is >75% pure and has a molecular weight of 46 kDa. Lane 2 contains the protein molecular weight markers.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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