

SIRT7 recombinant protein

SIRT7, Active

CATALOG # AAA73143	HOST Sf9 insect cells using baculovirus	APPLICATIONS SIRT Assay
------------------------------	---	-----------------------------------

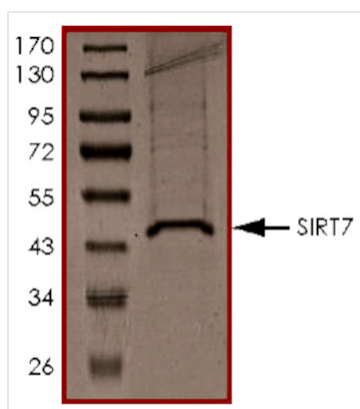
PRODUCT SYNONYMS

SIRT7; Active; SIRT7 recombinant protein

PRODUCT SPECIFICATIONS

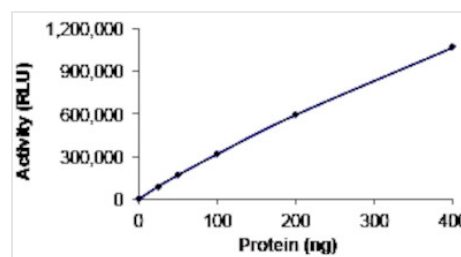
Host	Sf9 insect cells using baculovirus
Purity/Purification	>90%
Form/Format	50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.
Concentration	0.1 ug/ul (varies by lot)
Sequence Positions	Full Length
Sequence Length	1749
Applicable Applications for SIRT7 recombinant protein	SIRT Assay
Species	Human
Tag	HIS tag
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	Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



Application Data

The purity of SIRT7 was determined to be >90% by densitometry. Approx. MW 46kDa



Application Data

The specific activity of SIRT7 was determined to be 160 RLU/min/ng as per activity assay protocol

ADDITIONAL INFORMATION

Related Product Information for SIRT7 recombinant protein	Description: Full-length recombinant human SIRT7 was expressed by baculovirus in Sf9 insect cells using an N-terminal His tag. Scientific Background: SIRT7 is a member of the class IV of sirtuin family of proteins which are homologs to the yeast Sir2 protein and play a role in cell differentiation, proliferation, apoptosis, metabolism, and senescence. SIRT7 associates with active rRNA genes and histones. Overexpression of SIRT7 increases pol I-mediated transcription whereas knockdown of SIRT7 or inhibition of its catalytic activity results in decreased association of pol I with rDNA and reduced pol I transcription (1). Depletion of SIRT7 stops cell proliferation and triggers apoptosis. SIRT7 deacetylates p53 and increases cellular resistance to cytotoxic and oxidative stress (2).
Product Categories/Family for SIRT7 recombinant protein	Enzymes; Active Histone Deacetylases
References	1. Ford, E. et al: Mammalian Sir2 homolog SIRT7 is an activator of RNA polymerase I transcription. Genes Dev. 20: 1075-1080, 2006. 2. Vakhrusheva, O. et al Sirt7 increases stress resistance of cardiomyocytes and prevents apoptosis and inflammatory cardiomyopathy in mice. Circ. Res. 102: 703-710, 2008.

NCBI AND UNIPROT INFORMATION

NCBI GI #	300795299
NCBI GeneID	51547
NCBI Accession #	NM_016538.2
NCBI GenBank Nucleotide #	NM_016538
UniProt Accession #	Q9NRC8 ; Q3MIK4 ; Q9NSZ6 ; Q9NUS6 ; A8K2K0 ; B3KSU8
Molecular Weight	~46 kDa
NCBI Official Full Name	Homo sapiens sirtuin 7 (SIRT7), mRNA
NCBI Official Synonym Full Names	sirtuin 7
NCBI Official Symbol	SIRT7
NCBI Official Synonym Symbols	SIR2L7
NCBI Protein Information	NAD-dependent protein deacetylase sirtuin-7
UniProt Protein Name	NAD-dependent protein deacetylase sirtuin-7
UniProt Gene Name	SIRT7
UniProt Synonym Gene Names	SIR2L7

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/sirt7-recombinant-protein-sf9-insect-cells-using-baculovirus-sirt-assay/73143>