

SIRT5 recombinant protein

SIRT5, Active

CATALOG # AAA73141	HOST Sf9 insect cells using baculovirus	APPLICATIONS SIRT Assay
------------------------------	---	-----------------------------------

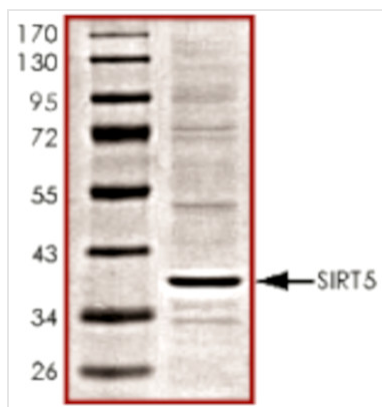
PRODUCT SYNONYMS

SIRT5; Active; SIRT5 recombinant protein

PRODUCT SPECIFICATIONS

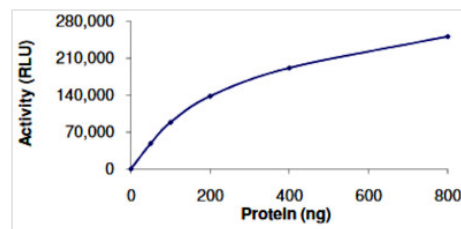
Host	Sf9 insect cells using baculovirus
Purity/Purification	>75%
Form/Format	50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.
Concentration	0.1 ug/uL (varies by lot)
Sequence Positions	Full Length
Sequence Length	4538
Applicable Applications for SIRT5 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 SIRT5 was determined to be >75% by densitometry. Approx. MW 39kDa



Application Data

The specific activity of SIRT5 was determined to be 23 RLU/min/ng as per activity assay protocol.

ADDITIONAL INFORMATION

Related Product Information for SIRT5 recombinant protein	Description: Recombinant full length human SIRT5 was expressed by baculovirus in Sf9 insect cells using an N-terminal His tag. Scientific Background: SIRT5 is a member of the sirtuin family of proteins which are homologs to the yeast Sir2 protein. Sirtuin family contain a sirtuin core domain and are grouped into four classes with SIRT5 being a member of class III. SIRT5 consists of eight exons and is found in two isoforms which encode a 310 aa and a 299 aa protein, respectively. Human SIRT5 is most predominantly expressed in heart muscle cells and in lymphoblasts. Fluorescence in situ hybridization analysis localized the human SIRT5 gene to chromosome 6p23. SIRT5 can deacetylate cytochrome c, a protein of the mitochondrial intermembrane space with a central function in oxidative metabolism as well as apoptosis initiation (1).
Product Categories/Family for SIRT5 recombinant protein	Enzymes; Active Histone Deacetylases
References	1. Schlicker C. et al: Substrates and regulation mechanisms for the human mitochondrial sirtuins Sirt3 and Sirt5. J Mol Biol. 2008 Oct 10;382 (3):790-801. 2. Mahlkecht, U. et al: Assignment of the NAD-dependent deacetylase sirtuin 5 gene (SIRT5) to human chromosome band 6p23 by in situ hybridization. Cytogenet Genome Res. 2006;112 (3-4):208-12.

NCBI AND UNIPROT INFORMATION

NCBI GI #	338827624
NCBI GeneID	23408
NCBI Accession #	NM_012241.4
NCBI GenBank Nucleotide #	NM_012241
Molecular Weight	39 kDa
NCBI Official Full Name	Homo sapiens sirtuin 5 (SIRT5), transcript variant 1, mRNA
NCBI Official Synonym Full Names	sirtuin 5
NCBI Official Symbol	SIRT5
NCBI Official Synonym Symbols	SIR2L5
NCBI Protein Information	NAD-dependent protein deacylase sirtuin-5, mitochondrial
UniProt Protein Name	NAD-dependent protein deacylase sirtuin-5, mitochondrial
UniProt Gene Name	SIRT5

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.