SIRT1 recombinant protein

SIRT1, Active

CATALOG #	HOST	APPLICATIONS
AAA73137	**Sf9 insect cells using baculovirus**	**SIRT Assay**

PRODUCT SYNONYMS

SIRT1; Active; SIRT1 recombinant protein

PRODUCT SPECIFICATIONS

Host	Sf9 insect cells using baculovirus
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	193-end
Sequence Length	4110
Applicable Applications for SIRT1 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 SIRT1 was determined to be >70% by densitometry. Approx. MW 84kDa.

Application Data
The specific activity of SIRT1 was determined to be 1785 RLU/min/ng as per activity assay protocol.

ADDITIONAL INFORMATION

Related Product Information for SIRT1 recombinant protein	Description: Recombinant human SIRT1 (193-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal His tag. Scientific Background: SIRT1 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 SIRT1 being a member of class I. SIRT1 is a stress-response and chromatin-silencing factor (1). It is an NAD (+)-dependent histone deacetylase involved in various nuclear events such as transcription, DNA replication, and DNA repair. SIRT1 protein binds and deacetylates the p53 protein (2). Expression of wild type SIRT1 in human cells reduces the transcriptional activity of p53 indicating that SIRT1 is involved in the regulation of p53 function via deacetylation.

Product Categories/Family for SIRT1 recombinant protein	Enzymes; Active Histone Deacetylases
References	1. Tanny, J. C. et al: An enzymatic activity in the yeast Sir2 protein that is essential for gene silencing. Cell 99: 735-745, 1999. 2. Vaziri, H. et al: hSIR2-SIRT1 functions as an NAD-dependent p53 deacetylase. Cell 107: 149-159, 2001.

NCBI AND UNIPROT INFORMATION

NCBI GI #	215982795
NCBI GeneID	23411
NCBI Accession #	NM_012238.4
NCBI GenBank Nucleotide #	NM_012238
UniProt Accession #	Q96EB6; Q2XNF6; Q5JVQ0; Q9GZR9; Q9Y6F0
Molecular Weight	~84 kDa
NCBI Official Full Name	Homo sapiens sirtuin 1 (SIRT1), transcript variant 1, mRNA
NCBI Official Synonym Full Names	sirtuin 1
NCBI Official Symbol	SIRT1
NCBI Official Synonym Symbols	SIR2; SIR2L1; SIR2alpha
NCBI Protein Information	NAD-dependent protein deacetylase sirtuin-1
UniProt Protein Name	NAD-dependent protein deacetylase sirtuin-1
UniProt Gene Name	**SIRT1**
UniProt Synonym Gene Names	SIR2L1; hSIRT1; hSIR2; 75SirT1

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/sirt1-recombinant-protein-sf9-insect-cells-using-baculovirus-sirt-assay/73137