Recombinant Human SIRT1 Protein, GST-tagged

Cat. No. SIRT1-30H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human SIRT1(193-747) protein with a N-terminal GST-tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	193-747
Description	This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Alternative splicing results in multiple transcript variants.
Molecular Mass	89.2 kDa
Purity	≥70% estimated by SDS-PAGE
Unit Definition	One unit is defined as the amount of enzyme required to produce 1 pmole of 7-amino-4-methylcoumarin per minute at 25 centigrade in 50 mM Tris-HCl, pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl2, containing 125 μM p53 peptide amino acids 379-

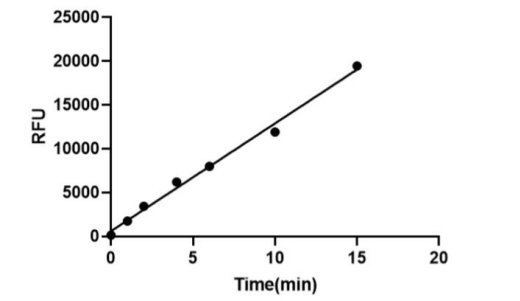
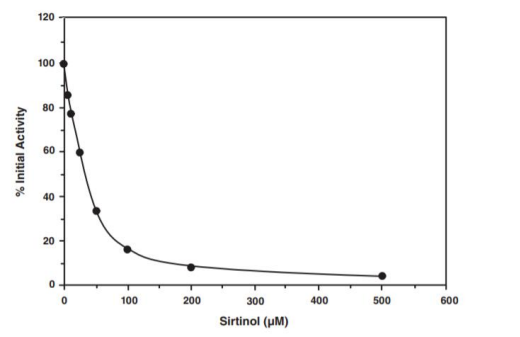
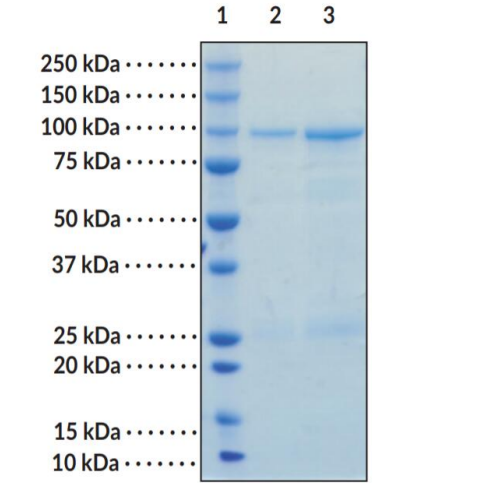
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	382 (Arg-His-Lys-Lys (e-acetyl)-AMC), and 3 mM NAD+.
Stability	≥ 1 year
Storage	Store it at -80 centigrade
Storage Buffer	50 mM sodium phosphate, pH 7.2, with 100 mM sodium chloride and 20% glycerol

GENE INFORMATION

Gene Name	SIRT1 sirtuin 1 [Homo sapiens (human)]
Official Symbol	SIRT1
Synonyms	SIRT1; sirtuin 1; SIR2; SIR2L1; SIR2alpha; NAD-dependent protein deacetylase sirtuin-1; NAD-dependent protein deacylase sirtuin-1; SIR2-like protein 1; regulatory protein SIR2 homolog 1; sirtuin type 1
Gene ID	23411
mRNA Refseq	NM_001142498
Protein Refseq	NP_001135970
MIM	604479
UniProt ID	Q96EB6

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SIRT1 Activity Assay	
Inhibition of SIRT1 by Sirtinol (IC50 = 38 μM)	
SDS-PAGE Analysis of SIRT1	

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Lane 1: MW Markers; Lane 2: SIRT1 (2 μg); Lane 3: SIRT1 (4 μg). Representative gel image shown; actual purity may vary between each batch.

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