

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 MgCl ₂ , 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

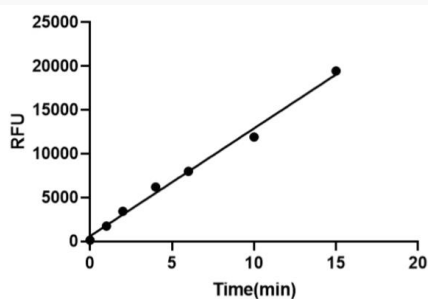
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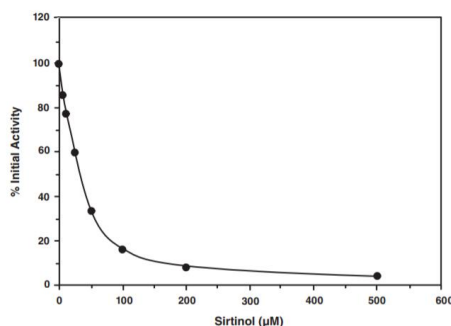
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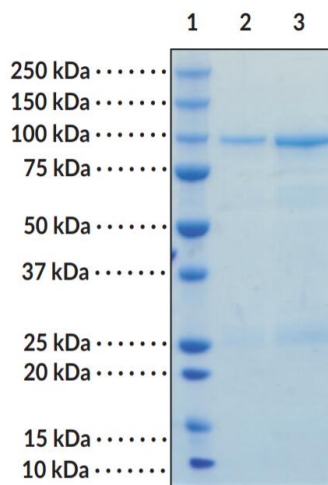
SIRT1 Activity Assay



Inhibition of SIRT1 by Sirtinol (IC₅₀ = 38 μM)



SDS-PAGE Analysis of SIRT1



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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