

Recombinant Human Sirtuin 1, GST-tagged

Cat. No. SIRT1-4874H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human SIRT1 (193-end) was expressed in E. coli cells using an N-terminal GST tag.
Species	Human
Source	E.coli
ProteinLength	193-end a.a.
Description	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. 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.
Applications	Western Blot
Molecular Weight	105 kDa
Expression System	E. coli
Form	Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1mM PMSF, 25 % glycerol.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	> 80 %
Concentration	0.2 ug/ul
Sequences	193-end
Storage	Store product at -70°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.
Pathways	E2F transcription factor network; Energy Metabolism; FoxO family signaling; HIF-2-alpha transcription factor network; Regulation of Androgen receptor activity; Regulation of retinoblastoma protein; Signaling events mediated by HDAC Class I; Signaling events mediated by HDAC Class III

GENE INFORMATION

Gene Name	SIRT1 sirtuin 1 [Homo sapiens]
Official Symbol	SIRT1
Synonyms	SIRT1; sirtuin 1; SIR2L1; NAD-dependent deacetylase sirtuin-1; hSIR2; hSIRT1; SIR2alpha; sir2-like 1; sirtuin type 1; OTTHUMP00000019691; OTTHUMP00000198112; SIR2-like protein 1; EC 3.5.1.-; sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae); sirtuin (silent mating type information regulation 2, S. cerevisiae, homolog) 1; NAD-dependent deacetylase sirtuin-1
Gene ID	23411
mRNA Refseq	NM_001142498

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Protein Refseq	NP_001135970
MIM	604479
UniProt ID	Q96EB6
Chromosome Location	10q21
Function	NAD binding; NAD+ ADP-ribosyltransferase activity; NAD-dependent histone deacetylase activity; deacetylase activity; histone binding; hydrolase activity; identical protein binding; metal ion binding; p53 binding; protein C-terminus binding; protein domain specific binding; transcription corepressor activity; zinc ion binding; HLH domain binding

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