

## Recombinant Human SIRT1

Cat. No. SIRT1-30565TH Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant fragment: Human Sirtuin 1 , amino acids 193- 741,with an N-terminal enzyme tag.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	193-741 a.a.
<b>Description</b>	<p>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.</p>
<b>Tissue specificity</b>	Widely expressed.
<b>Biological activity</b>	<p>Specific Activity: 8 U/ug. One Unit =1 pmol/min, Assay condition: 25 mM Tris/Cl, pH8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl<sub>2</sub>, and 0.1 mg/ml BSA, 30 uM BPS HDAC substrate, 200 uM NAD<sup>+</sup> and 20 ng/ul Sirtuin 1. Incubation condition: 30 min at 30oC.</p>

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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

<b>Form</b>	Liquid
<b>Purity</b>	>90% by SDS-PAGE
<b>Storage buffer</b>	Preservative: None Constituents: 0.05% Tween 20, 50mM Tris, 2.7mM Potassium chloride, 138mM Sodium chloride, pH 8.0
<b>Storage</b>	Aliquot and store at -80°C. Avoid repeated freeze / thaw cycles.
<b>Sequence Similarities</b>	Belongs to the sirtuin family. Contains 1 deacetylase sirtuin-type domain.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">SIRT1 sirtuin 1 [ Homo sapiens ]</a>
<b>Official Symbol</b>	<a href="#">SIRT1</a>
<b>Synonyms</b>	SIRT1; sirtuin 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; SIR2L1;
<b>Gene ID</b>	<a href="#">23411</a>
<b>mRNA Refseq</b>	<a href="#">NM_001142498</a>
<b>Protein Refseq</b>	<a href="#">NP_001135970</a>
<b>MIM</b>	<a href="#">604479</a>
<b>Uniprot ID</b>	<a href="#">Q96EB6</a>

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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

<b>Chromosome Location</b>	10q21
<b>Pathway</b>	E2F transcription factor network, organism-specific biosystem; Energy Metabolism, organism-specific biosystem; FoxO family signaling, organism-specific biosystem; HIF-2-alpha transcription factor network, organism-specific biosystem; Regulation of Androgen receptor activity, organism-specific biosystem;
<b>Function</b>	HLH domain binding; NOT NAD+ ADP-ribosyltransferase activity; NAD+ binding; NAD-dependent histone deacetylase activity; NAD-dependent histone deacetylase activity (H3-K9 specific);

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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