

## Active Recombinant Human SIRT3, His-tagged

Cat. No. SIRT3-346H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human SIRT3(Ser101-Lys399), fused with an N-terminal Met and 6-His tag, was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	101-399 a.a.
<b>Description</b>	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. Two alternatively spliced transcript variants that encode different proteins have been described for this gene.
<b>Predicted N Terminal</b>	Met
<b>Form</b>	Supplied as a 0.2 µm filtered solution in Tris, NaCl, Brij-35 and Glycerol.
<b>Bio-activity</b>	Measured by its ability to remove the acetyl group from a fluorogenic peptide substrate Ac-RGK(Ac)-AMC in a coupled assay.

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<b>Molecular Mass</b>	Predicted Molecular Mass: 34 kDaSDS-PAGE: 30-33 kDa, reducing conditions
<b>Endotoxin</b>	< 1.0 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain at 5 µg per lane.
<b>Storage</b>	Avoid repeated freeze-thaw cycles.6 months from date of receipt, -20 to -70 °C as supplied.3 months, -20 to -70 °C under sterile conditions after opening.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">SIRT3 sirtuin 3 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	SIRT3
<b>Synonyms</b>	SIRT3; sirtuin (silent mating type information regulation 2 homolog) 3 (S. cerevisiae); SIR2L3; NAD-dependent deacetylase sirtuin-3, mitochondrial; EC 3.5.1.-; SIR2-like protein 3; hSIRT3; mitochondrial nicotinamide adenine dinucleotide-dependent deacetylase 2; silent mating type information regulation 2, S.cerevisiae, homolog 3; sir2-like 3; sirtuin (silent mating type information regulation 2, S.cerevisiae, homolog) 3; sirtuin 3; sirtuin type 3
<b>Gene ID</b>	<a href="#">23410</a>
<b>mRNA Refseq</b>	<a href="#">NM_001017524</a>
<b>Protein Refseq</b>	<a href="#">NP_001017524</a>
<b>MIM</b>	<a href="#">604481</a>

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<b>UniProt ID</b>	Q9NTG7
<b>Chromosome Location</b>	11p15.5
<b>Pathway</b>	Energy Metabolism; Mitochondrial biogenesis; Organelle biogenesis and maintenance
<b>Function</b>	NOT NAD+ ADP-ribosyltransferase activity; NAD-dependent histone deacetylase activity (H3-K14 specific); protein binding

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