

## Active Recombinant Mouse Sirt3 protein, His-tagged

Cat. No. Sirt3-1375M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Active Recombinant Mouse Sirt3 protein(Q8R104)(5-257 aa), fused with N-terminal His tag, was expressed in E.coli.
<b>Species</b>	Mouse
<b>Source</b>	E.coli
<b>ProteinLength</b>	5-257 aa
<b>Form</b>	100mM NaHCO <sub>3</sub> , 500mM NaCl, pH8.3, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
<b>Bio-activity</b>	Sirtuin 3 (SIRT3) also known as NAD-dependent deacetylase sirtuin-3isamember of the mammalian sirtuin family of proteins. SIRT3 is a solubleproteinlocated in the mitochondrial matrix, and contains a mitochondrial processing peptide at the N-terminus. It is a key regulator of succinate dehydrogenase(SDH), which catalyzes the oxidation of succinate to fumarate. Increased succinate concentrations and the specific G protein-coupled receptor 91 (GPR91) areinvolved in the activation of hepatic stellate cells (HSCs). SIRT3 agonists could help treat metabolic disorders such as obesity, metabolic syndrome andtype2 diabetes. Besides, Dihydrolipoyl Transacetylase (DLAT) has been identified as an interact or of SIRT3, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse SIRT3 and recombinant mouse DLAT. Briefly, SIRT3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samplesof 100uL were then transferred to DLAT-

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coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-SIRT3pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µl stop solution to the wells and read at 450nm immediately. The binding activity of SIRT3 and DLAT was shown, and this effect was in a dose dependent manner.

**Molecular Mass** 32.2kDa

**Purity** > 90%

**Storage** Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.

**Reconstitution** Reconstitute in ddH<sub>2</sub>O to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## GENE INFORMATION

**Gene Name** [Sirt3 sirtuin 3 \(silent mating type information regulation 2, homolog\) 3 \(S. cerevisiae\)](#) [[Mus musculus](#)]

**Official Symbol** [Sirt3](#)

**Synonyms** SIRT3; sirtuin 3 (silent mating type information regulation 2, homolog) 3 (S. cerevisiae); NAD-dependent deacetylase sirtuin-3; mSIR2L3; SIR2-like protein 3; SIRT3L mitochondrial; mitochondrial protein lysine deacetylase; silent mating type information regulation 2, (S.cerevisiae, homolog)-like 3; Sir2I3; AI848213; 2310003L23Rik;

**Gene ID** [64384](#)

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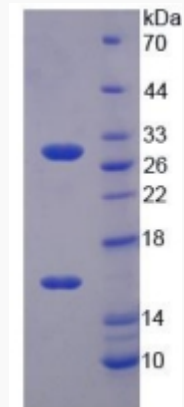
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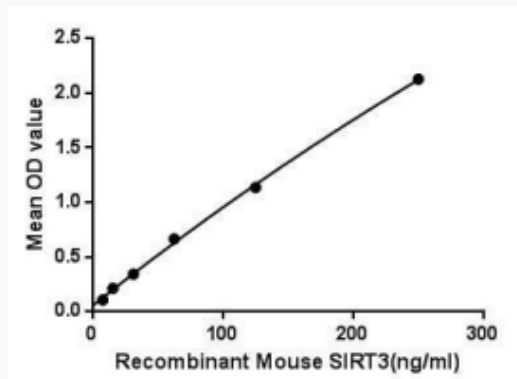
mRNA Refseq [NM\\_001127351](#)

Protein Refseq [NP\\_001120823](#)

**SDS-PAGE**



**Activity**



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