

Datasheet for ABIN6239915  
**SIRT3 Protein (AA 5-257) (His tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	50 µg
Target:	SIRT3
Protein Characteristics:	AA 5-257
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This SIRT3 protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

## Product Details

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 90 %

**Biological Activity Comment:** Sirtuin 3 (SIRT3) also known as NAD-dependent deacetylase sirtuin-3 is a member of the mammalian sirtuin family of proteins. SIRT3 is a soluble protein located 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) are involved in the activation of hepatic stellate cells (HSCs). SIRT3 agonists could help treat metabolic disorders such as obesity, metabolic syndrome and type 2 diabetes. Besides, Dihydrolipoyl Transacetylase (DLAT) has been identified as an interactor 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).

## Product Details

Duplicate samples of 100uL were then transferred to DLAT-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-SIRT3 pAb, 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 in Figure 1, and this effect was in a dose dependent manner. The binding activity of SIRT3 with DLAT.

## Target Details

Target:	SIRT3
Abstract:	<a href="#">SIRT3 Products</a>
Background:	Alternative Names: SIR2L3, Silent Mating Type Information Regulation 2 Homolog 3, NAD-dependent protein deacetylase sirtuin-3, mitochondrial, SIR2-like protein 3, Regulatory protein SIR2 homolog 3
Molecular Weight:	16&29kDa
UniProt:	<a href="#">Q8R104</a>

## Application Details

Application Notes:	Isoelectric Point: 6.4
Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

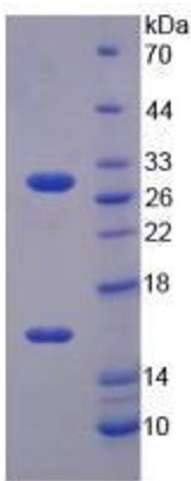


Image 1.