

Active Recombinant Human SIRT4 protein, His-tagged

Cat. No. SIRT4-25H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human SIRT4 protein(Q9Y6E7)(28-314 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	28-314 aa
Form	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Sirtuin 4, also known as SIRT4, is a member of the sirtuin family. SIRT4 is a mitochondrial ADP-ribosyltransferase that inhibits mitochondrial glutamate dehydrogenase 1 activity, thereby downregulating insulin secretion in response to amino acids. It has been shown that SIRT4 regulates fatty acid oxidation and mitochondrial gene expression in liver and muscle cells. Besides, Heat Shock 60kD Protein 1, Chaperonin (HSPD1) has been identified as an interactor of SIRT4, thus a binding ELISA assay was conducted to detect the interaction of recombinant human SIRT4 and recombinant human HSPD1. Briefly, SIRT4 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μL were then transferred to HSPD1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-SIRT4 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and

 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

washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μ stop solution to the wells and read at 450nm immediately. The binding activity of SIRT4 and HSPD1 was shown, and this effect was in a dose dependent manner.

Molecular Mass	35.9kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method).
Purity	> 97%
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 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	SIRT4 sirtuin 4 [Homo sapiens]
Official Symbol	SIRT4
Synonyms	SIRT4; sirtuin 4; sirtuin (silent mating type information regulation 2 homolog) 4 (S. cerevisiae) , sirtuin (silent mating type information regulation 2, S. cerevisiae, homolog) 4; NAD-dependent ADP-ribosyltransferase sirtuin-4; SIR2L4; sir2-like 4; sirtuin type 4; SIR2-like protein 4; MGC57437; MGC130046; MGC130047;
Gene ID	23409
mRNA Refseq	NM_012240

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

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

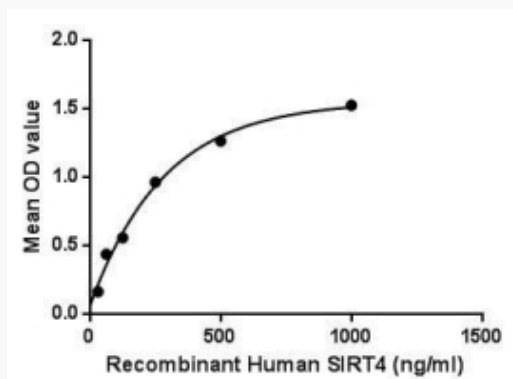
 45-1 Ramsey Road, Shirley, NY 11967, USA

Protein Refseq NP_036372

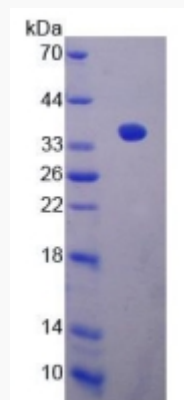
MIM 604482

UniProt ID Q9Y6E7

Activity



SDS-PAGE



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