# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 254-495aa

**UniProt No.** Q96EB6

NCBI Accession No. NP\_036370

### **Alternative Names**

NAD-dependent protein deacetylase sirtuin-1, Regulatory protein SIR2 homolog 1, SIR2-like protein 1, hSIR2, SIR2L1, Sirtuin, Silent mating type information regulation 2 homolog 1 (S. cerevisiae)

## **PRODUCT SPECIFICATION**

### **Molecular Weight**

31.6 kDa (280aa)

#### Concentration

0.5mg/ml (determined by Bradford assay)

#### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.4M urea

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application SDS-PAGE, Denatured

## **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

SIRT1 is 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. Alternative splicing results in multiple transcript



variants. Recombinant human SIRT1 protein, fused to His-tag at N-terminus, was expressed in E. coli.

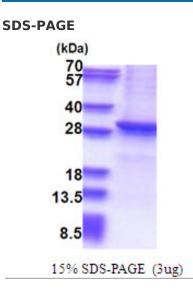
#### **Amino acid Sequence**

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHMKK IIVLTGAGVS VSCGIPDFRS RDGIYARLAV DFPDLPDPQA MFDIEYFRKD PRPFFKFAKE IYPGQFQPSL CHKFIALSDK EGKLLRNYTQ NIDTLEQVAG IQRIIQCHGS FATASCLICK YKVDCEAVRG DIFNQVVPRC PRCPADEPLA IMKPEIVFFG ENLPEQFHRA MKYDKDEVDL LIVIGSSLKV RPVALIPSSI PHEVPQILIN REPLPHLHFD VELLGDCDVI INELCHRLGG

## **General References**

Langley E., et al. (2002) EMBO J. 21:2383-2396.

# DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.