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.

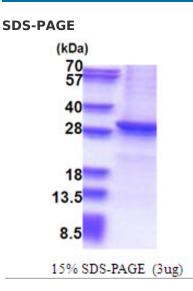
Amino acid Sequence

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.