Recombinant human Sirtuin 3/SIRT3 protein

Catalog Number: ATGP0650

PRODUCT INFORMATION

Expression system
E.coli

Domain
118-399aa

UniProt No.
Q9NTG7

NCBI Accession No.
NP_036371.1

Alternative Names
NAD-dependent protein deacetylase sirtuin-3 mitochondrial, hSIRT3, Regulatory protein SIR2 homolog 3, SIR2-like protein 3, SIR2L3

PRODUCT SPECIFICATION

Molecular Weight
33.5 kDa (303aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

Purity
> 95% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

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
NAD-dependent deacetylase sirtuin-3, mitochondrial, also known as SIRT3, belongs to the sirtuin family of proteins. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have a range of molecular functions and have emerged as important proteins in aging, stress resistance and metabolic regulation. SIRT3 exhibits NAD+-dependent deacetylase activity in the mitochondria. Over-expression of SIRT3 results in increased levels of the mitochondrial uncoupling protein 1.

Recombinant human Sirtuin 3/SIRT3 protein

Catalog Number: ATGP0650

SIRT3 protein levels are also elevated in certain breast cancers. Recombinant human SIRT3 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

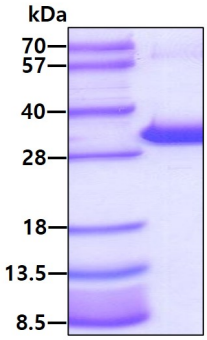
<MGSSHHHHHH SSGLVPRGSH M>SDKGKLSLQ DVAELIRARA CQRVVVMVGA GISTPSGIPD FRSPGSGLYS NLQQYDLPYP EAIFELPFFF HNPKPFFTLA KELYPGNYKP NVTHYFLRLL HDKGLLLRLY TQNIDGLERV SGIPASKLVE AHGTFASATC TVCQRPFPGE DIRADVMADR VPRCPVCTGV VKPDIVFFGE PLPQRFLLHV VDFPMADLLL ILGTSLEVEP FASLTEAVRS SVPRLLINRD LVGPLAWHPR SRDVAQLGDV VHGVESLVEL LGWTEEMRDL VQRETGKLDG PDK

General References

Schewr B., et al. (2002) J Cell Biol. 158(4):647-57.
Kim H S., et al. (2010) Cancer Cell. 17(1):41-52.

DATA

SDS-PAGE



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