

SIRT3, 118-399aa, Human, His tag, E.coli

Cat.NO.: TP03945

3th Edition

Synonyms:NAD-dependent deacetylase sirtuin-3, mitochondrial, SIR2L3, Sirtuin3

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

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

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

Sequences:

MGSSHHHHHSSGLVPRGSHMSDKGKLSLQDVAELIRARACQRVVVMVGAGISTPSGIPDFRSPGSGLYSNLQQY
DLPYPEAIFELPFFFHNPKEPFFTLAKELYPGNYKPNVTHYFLRLLHDKGLLLRLYTQNIDGLERVSGIPASKLVEAHGT
FASATCTVCQRPFPGEDIRADVMADRVPKPVCTGVVVKPDIVFFGEPLPQRFLHVVDFPMADLLLILGTSLEVEPF
ASLTEAVRSSVPRLLINRDLVGPLAWHPRSRDVAQLGDVVHGVESLVELLWTEEMRDLVQRETGKLDGPK

Purity:> 95% by HPLC

Concentration:1mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.