Recombinant mouse SOD2/Mn-SOD protein

Catalog Number: ATGP3076

PRODUCT INFORMATION

Expression system
E.coli

Domain
25-222aa

UniProt No.
P09671

NCBI Accession No.
NP_038699

Alternative Names
Superoxide dismutase [Mn] mitochondrial, Superoxide dismutase [Mn], mitochondrial, superoxide dismutase 2, mitochondrial, MnSOD, Sod-2

PRODUCT SPECIFICATION

Molecular Weight
24.6 kDa (221aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol, 1mM DTT

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
Sod2 also known as superoxide dismutase [Mn], mitochondrial, is a member of the iron/manganese superoxide dismutase family. It is a mitochondrial matrix protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this protein have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Recombinant mouse Sod2,

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fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

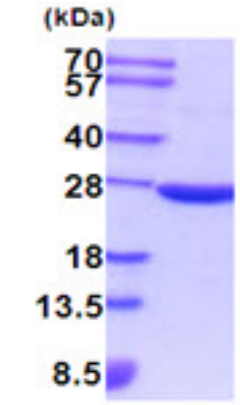
MGSSHHHHHH SSGLVPRGSH MGSKHSLPDL PYDYGALEPH INAQIMQLHH SKHHAAYVNN LNATEEKYHE ALAKGDVTTQ VALQPALKFN GGGHINHTIF WTNLSPKGGG EPKGELLEAI KRDFGSFEKF KEKLTAVSVG VQGSGWGWLG FNKEQGRLQI AACSNQDPLQ GTTGLIPLLG IDVWEHAYYL QYKNVRPDYL KAIWNVINWE NVTERYTACK K

General References

Cheng Y., et al. (2014) J. Neuroimmunol. 269 (1-2), 38-43

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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