

Sod2,25-222aa , Mouse, His tag, E.coli

Cat.NO.: TP04003

3th Edition

Synonyms:Superoxide dismutase [Mn], mitochondrial , superoxide dismutase 2, mitochondrial, MnSOD, Sod-2

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

Form:Liquid, In Phosphate buffered saline (pH7.4) containing 10% glycerol, 1mM DTT

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

Sequences:

MGSSHHHHHSSGLVPRGSHMGSKHSLPDLPYDYGALEPHINAQIMQLHHSKHHAAYVNNLNATEEKYHEALAKG
DVTTQVALQPALKFNGGGHINHTIFWTNLSPKGGGEPKGELLEAIKRDFGSFEKFKEKLTAVSVGVQGSWGWL
FNKEQGRLQIAACSNQDPLQGTTGLIPLLIDVWEHAYYLQYKNVRPDYKAIWNVINWENVTERYTACKK

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.