

SOD2, 25-222aa, Human, His tag, E.coli

Cat.NO.: TP04002

3th Edition

Synonyms:IPOB, MNSOD, MVCD6, Superoxide dismutase [Mn], mitochondrial IPO B, Manganese SOD, Manganese superoxide dismutase, Mn SOD, SOD 2, SOD2, Superoxide dismutase [Mn] mitochondrial, Superoxide dismutase 2 mitochondrial, Superoxide Dismutase-2

Description:SOD2 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 human SOD2 protein was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol

Molecular Weight:24.4kDa (219aa), confirmed by MALDI-TOF.

Sequences:

MGSSHHHHHHSSGLVPRGSHMKHSLPDLPYDYGALEPHINAQIMQLHHSKHHAAYVNNLNVTEEKYQEALAKGDV
TAQIALQPALKFNNGGGHINHSIFWTNLSPNGGGEPKGELLEAIKRDFGSFDKFKELTAASVGVQGGSGWGLGFNK
ERHGLQIAACPNDPLQGTGLIPLLIDVWEHAYYLQYKNVRPDYKAIWNVINWENVTERYMACKK

Purity:> 95% by HPLC

Concentration:0.5 mg/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.