9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

SOD2 Human

Superoxide Dismutase-2 Human Recombinant
RCP2190

Product Overview

Name	SOD2 Human
Description	
Superoxide Dismutase-2 Human Recombinant	
Accession (Primary)	P04179
Synonyms	
MNSOD, MVCD6, IPOB, Mn superoxide dismutase, EC=1.15.1.1.	
Introduction	
SOD2 is part of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. SOD2 binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in SOD2 gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. SOD2 destroys radicals which are usually produced within the cells and which are toxic to biological systems.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile filtered colorless solution.	
Formulation	
SOD2 Human solution containing 20mM Tris-HCl pH-8 & 20% glycerol.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	
Greater than 95% as determined by SDS-PAGE.	
Amino acid sequence	
MGSSHHHHHH SSGLVPRGSH MKHSLPDLPY DYGALEPHIN AQIMQLHHSK HHAAYVNNLN VTEEKYQEAL AKGDVTAQIA LQPALKFNGG GHINHSIFWT NLSPNGGGEP KGELLEAIKR DFGSFDKFKE KLTAASVGVQ GSGWGWLGFN KERGHLQIAA CPNQDPLQGT TGLIPLLGID VWEHAYYLQY KNVRPDYLKA IWNVINWENV TERYMACKK.	

9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

Biological Activity

Specific activity is > 1,200 units/mg, in which one unit will inhibit the rate of reduction of cytochrome c by 50% in a coupled system, using xanthine and Xanthine oxidase at pH 7.8 at 25C in a 1.5 ml reaction volume.

Precautions

SOD2 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P04179)