

Superoxide Dismutase-2 Active Protein | SOD2 active protein

Recombinant Human Superoxide Dismutase-2

CATALOG # AAA38823	HOST E Coli
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PRODUCT SYNONYMS

Superoxide Dismutase-2; Recombinant Human Superoxide Dismutase-2; SOD2 Human; Superoxide Dismutase-2 Human Recombinant; MNSOD; MVCD6; IPOB; Mn superoxide dismutase; EC=1.15.1.1; SOD2 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% as determined by SDS-PAGE.
Form/Format	SOD2 Human solution containing 20mM Tris-HCl pH-8 & 20% glycerol. Sterile filtered colorless solution.
Concentration	0.5 mg/ml (varies by lot)
Sequence	MGSSHHH HHHSSGLVPR GSHMKH SLPDLPYDYG ALEPHINAQI MQLHHSKHHA AYVNNLNVT EKYQEALAKG DVTAQIALQP ALKFNGGGHI NHSIFWTNLS PNGGGEPKGE LLEAIKRDGF SFDKFKEKLT AASVGVQGS G WGLGFNKER GHLQIAACP N QDPLQGT TGL IPLLGIDVWE HAYYLQYKNV RPDYLKAIWN VINWENVTER YMACKK
Sequence Length	222
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.

ADDITIONAL INFORMATION

Related Product Information for SOD2 active protein	Description: SOD2 Human Recombinant produced in E Coli is a single, non-glycosylated, polypeptide chain containing 219 amino acids (25-222 a.a.) and having a molecular mass of 24.4kDa. SOD2 protein is fused to a 20 amino acid His-Tag at N-terminus and purified by standard chromatography. 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.
Product Categories/Family for SOD2 active protein	Recombinant & Natural Proteins ; Recombinant Proteins ; Superoxide Dismutase

NCBI AND UNIPROT INFORMATION

NCBI GI #	67782305
NCBI GeneID	6648
NCBI Accession #	NP_000627.2
NCBI GenBank Nucleotide #	NM_000636.2
UniProt Accession #	P04179; P78434; Q16792; Q5TCM1; Q96EE6; Q9P2Z3; B2R7R1; B3KUK2; B4DL20; B4E3K9; E1P5A9

Molecular Weight	19,730 Da
NCBI Official Full Name	superoxide dismutase
NCBI Official Synonym Full Names	superoxide dismutase 2, mitochondrial
NCBI Official Symbol	SOD2
NCBI Official Synonym Symbols	IPOB; MNSOD; MVCD6
NCBI Protein Information	superoxide dismutase [Mn], mitochondrial; superoxide dismutase [Mn], mitochondrial; Mn superoxide dismutase; indophenoloxidase B; manganese-containing superoxide dismutase; mangano-superoxide dismutase
UniProt Protein Name	Superoxide dismutase [Mn], mitochondrial
UniProt Gene Name	SOD2
UniProt Entry Name	SODM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-sod2-active-protein/superoxide-dismutase-2/38823>