

Superoxide Dismutase-1 Active Protein | SOD1 active protein

Recombinant Human Superoxide Dismutase-1

CATALOG # AAA38724	HOST Escherichia coli
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PRODUCT SYNONYMS

Superoxide Dismutase-1; Recombinant Human Superoxide Dismutase-1; SOD1 Human; Superoxide Dismutase 1 Human Recombinant; Superoxide dismutase [Cu-Zn]; EC 1.15.1.1; SOD1; SOD; ALS; ALS1; IPOA; SOD1 active protein

PRODUCT SPECIFICATIONS

Host	Escherichia coli
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	SOD1 filtered solution (1 mg/mL) contains 20mM Tris-HCl pH-7.5 and 10% glycerol.
Sequence	MATKAVCVLK GDGPVQGIIN FEQKESNGPV KVGWSIKGLT EGLHGFHVHE FGDNTAGCTS AGPHFNPLSR KHGGPKDEER HVGDLGNVTA DKDGVADVSI EDSVISLSGD HCIIGRTLTVV HEKADDLGKG GNEESTKTGN AGSRLACGVI GIAQ
Sequence Length	154
Physical Appearance	Sterile filtered colorless solution.
Biological Activity	Specific activity is > 500 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 25°C.
Preparation and Storage	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

ADDITIONAL INFORMATION

Related Product Information for SOD1 active protein	Description: Recombinant Human Cu/Zn Superoxide Dismutase produced in E Coli is a single monomeric non-glycosylated polypeptide chain containing 154 amino acids and having a total molecular mass of 15.9 kDa. The SOD1 is purified by proprietary chromatographic techniques. Introduction: Human Cu/Zn Superoxide Dismutase (SOD1) catalyzes the reaction between superoxide anions and hydrogen to yield molecular oxygen and hydrogen peroxide. The enzyme protects the cell against dangerous levels of superoxide. SOD1 binds copper and zinc ions and is 1 of 3 isozymes accountable for destroying free superoxide radicals in the body. The encoded protein neutralizes supercharged oxygen molecules, which can damage cells if their levels are not controlled. Mutations in SOD1 cause a form of familial amyotrophic lateral sclerosis.
Product Categories/Family for SOD1 active protein	Recombinant & Natural Proteins ; Recombinant Proteins ; Superoxide Dismutase

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507149
NCBI GeneID	6647
NCBI Accession #	NP_000445.1
NCBI GenBank Nucleotide #	NM_000454.4

UniProt Accession #	P00441; Q16669; Q16711; Q16838; Q16839; Q16840; Q6NR85; A6NHJ0; D3DSE4
Molecular Weight	15,936 Da
NCBI Official Full Name	superoxide dismutase
NCBI Official Synonym Full Names	superoxide dismutase 1, soluble
NCBI Official Symbol	SOD1
NCBI Official Synonym Symbols	ALS; SOD; ALS1; IPOA; hSod1; HEL-S-44; homodimer
NCBI Protein Information	superoxide dismutase [Cu-Zn]; superoxide dismutase [Cu-Zn]; Cu/Zn superoxide dismutase; SOD, soluble; epididymis secretory protein Li 44; indophenoloxidase A; superoxide dismutase, cystolic
UniProt Protein Name	Superoxide dismutase [Cu-Zn]
UniProt Gene Name	SOD1
UniProt Synonym Gene Names	hSod1
UniProt Entry Name	SODC_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/escherichia-coli-sod1-active-protein/superoxide-dismutase-1/38724>