Recombinant Human Superoxide Dismutase 1, Soluble, GST-tagged

Cat. No. SOD1-1635H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human SOD1 was expressed in E. coli cells using an N-terminal GST tag.
Species	Human
Source	E.coli
Description	SOD1 (superoxide dismutase 1) is the major soluble cytoplasmic enzyme responsible for destroying harmful free superoxide radicals in the body thereby providing defence against oxygen free-radical toxicity. Soluble cytoplasmic SOD1 is a copper- and zinc-containing enzyme and the SOD1 gene maps to chromosome 21q22. Mutations in the SOD1 gene have been implicated to be the cause of familial amyotrophic lateral sclerosis, increased age-related muscle mass loss, early development of cataracts, macular degeneration, thymic involution, hepatocellular carcinoma, and shortned lifespan.
Applications	Western Blot
Molecular Weight	45 kDa
Expression System	E. coli
Form	Recombinant protein stored in 50 mM Tris-HCL, pH 7.5, 150 mM NaCl, 0.1 mM PMSF, 0.25 mM DTT, 10 mM gluthione, 0.1 mM EDTA, 25 % glycerol.

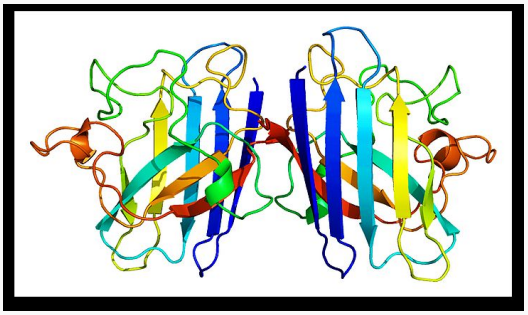
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	> 90 %
Concentration	0.2 ug/ul
Sequences	Full-length
Storage	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Pathways	Amyotrophic lateral sclerosis (ALS); Huntington"s disease; Prion diseases; Hemostasis

GENE INFORMATION

Gene Name	SOD1 superoxide dismutase 1, soluble [Homo sapiens]
Official Symbol	SOD1
Synonyms	SOD1; superoxide dismutase 1, soluble; ALS; SOD; ALS1; IPOA; homodimer; SOD, soluble; indophenoloxidase A; Cu/Zn superoxide dismutase; superoxide dismutase, cystolic; EC 1.15.1.1; Superoxide dismutase [Cu-Zn]
Gene ID	6647
mRNA Refseq	NM_000454
Protein Refseq	NP_000445
MIM	147450

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UniProt ID	P00441
Chromosome Location	21q22.11
Function	antioxidant activity; chaperone binding; copper ion binding; metal ion binding; protein homodimerization activity; protein phosphatase 2B binding; superoxide dismutase activity; zinc ion binding
PDB rendering based on 1azv.	

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