

Recombinant Human SOD1 Protein

Cat. No. SOD1-029H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human SOD1 protein without tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	154
Description	The protein encoded by this gene binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occurring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. In addition, this protein contains an antimicrobial peptide that displays antibacterial, antifungal, and anti-MRSA activity against E. coli, E. faecalis, S. aureus, S. aureus MRSA LPV+, S. agalactiae, and yeast C. krusei. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene.
Form	Solution
Molecular Mass	15.9 kDa
AA Sequence	MATKAVCVLKGDGPVQGIINFEQKESNGPVKVGSIKGLTEGLHGFHVHEFGDNTA GCTSAGPHFNPLSRKHGGPKDEERHVGDLGNVTADKDGVADVSIEDSVISLSGDHC

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	IIGRTLVVHEKADDLGKGGNEESTKTGNAGSRLACGVIGIAQ
Purity	> 95%
Applications	WB; ELISA; FACS; FC
Stability	This bioreagent is stable at 4 centigrade (short-term) and -70 centigrade(long-term). After reconstitution, sample may be stored at 4 centigrade for 2-7 days and below -18 centigrade for future use.
Storage	4°C
Concentration	1 mg/mL
Storage Buffer	Tris-HCl (pH 7.5). Sterile-filtered colorless solution.
Reconstitution	Reconstitute in sterile distilled H2O to no less than 100 µg/mL; dilute reconstituted stock further in other aqueous solutions if needed. Please review COA for lot-specific instructions. Final measurements should be determined by the end-user for optimal performance.

GENE INFORMATION

Gene Name	SOD1 superoxide dismutase 1, soluble [Homo sapiens (human)]
Official Symbol	SOD1
Synonyms	SOD1; superoxide dismutase 1, soluble; ALS, ALS1, amyotrophic lateral sclerosis 1 (adult); superoxide dismutase [Cu-Zn]; IPOA; SOD, soluble; indophenoloxidase A; Cu/Zn superoxide dismutase; superoxide dismutase, cystolic; ALS; SOD; ALS1; hSod1; homodimer;

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Gene ID	6647
mRNA Refseq	NM_000454
Protein Refseq	NP_000445
MIM	147450
UniProt ID	P00441

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