Active Recombinant Human SOD1

Cat. No. SOD1-1432H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Superoxide Dismutase produced in E. coli. is a stable dimer of two identical subunits, non-glycosylated, containing 308 amino acid residues, two pairs of disulfide bonds and having a combined molecular mass of 31.6kDa.
Species	Human
Source	E.coli
Description	Cu/Zn Human Superoxide Dismutase is a stable dimer of identical subunits with a combined molecular mass of 31.6kD. This enzyme dismutes the superoxide radical to molecular oxygen. This enzyme has been expressed in E. coli and purified using sequential chromatography steps.
Form	Lyophilized from a 0.2μm filtered solution in 50mM Phosphate buffer, pH7.4.
Bio-activity	≥7000U/mg
Endotoxin	≤1EU/μg, determined by the LAL method.
Purity	≥95%, as determined by reduced SDS-PAGE Dimer ≥90%, as determined by SEC-HPLC.
Usage	FOR RESEARCH ONLY
Storage	Lyophilized samples are stable for greater than six months from date of receipt at -20 centigrade to -70 centigrade. The reconstituted samples can be stored under sterile

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	conditions at 2-8 centigrade for one month or at -20 centigrade to -70 centigrade for three months without detectable loss of activity. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended to reconstitute the lyophilized rHuSOD in sterile ddH2O.

GENE INFORMATION

Gene Name	SOD1 superoxide dismutase 1, soluble [Homo sapiens]
Official Symbol	SOD1
Synonyms	ALS; SOD; ALS1; IPOA; hSod1; HEL-S-44; homodimer; superoxide dismutase [Cu-Zn]; Cu/Zn superoxide dismutase; SOD, soluble;epididymis secretory protein Li 44; indophenoloxidase A; superoxide dismutase, cystolic
Gene ID	6647
mRNA Refseq	NM_000454
Protein Refseq	NP_000445
MIM	147450
UniProt ID	P00441
Chromosome Location	21q22.11
Pathway	AGE/RAGE pathway, organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Detoxification of Reactive Oxygen Species, organism-specific biosystem

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Function	Rac GTPase binding; chaperone binding; copper ion binding

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