

SOD1

Recombinant Human Superoxide Dismutase

Catalog No.	CSI12860 CSI12861 CSI12862	Quantity:	20 µg 100 µg 1.0 mg
Alternate Names:	Superoxide dismutase [Cu-Zn], EC 1.15.1.1, SOD1, SOD, ALS, ALS1, IPOA.		
Description:	<p>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.</p> <p>Recombinant Human Cu/Zn Superoxide Dismutase produced in <i>E.Coli</i> is a homodimer, non-glycosylated polypeptide chain containing 2 x 154 amino acids.</p>		
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.		
Gene ID:	6647		
Source:	<i>E. coli</i>		
Molecular Mass:	31,608 Dalton		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated (1 mg/ml) solution in PBS, pH 7.4.		
Purity:	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.		
Purification:	The Cu/Zn SOD is purified by proprietary chromatographic techniques.		
Biological Activity:	The potency per mg was tested by Pyrogalllic Acid method and was found to be more than 10,000 Units/mg.		
Amino Acid Sequence:	The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Thr-Lys-Ala-Val.		
Reconstitution:	It is recommended to reconstitute the lyophilized SOD in sterile 18 MΩ-cm H ₂ O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.		
Storage & Stability:	<p>Lyophilized SOD although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SOD should be stored at 4°C between 2-7 days and for future use below -18°C.</p> <p>For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.</p>		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

