

32-4918: Recombinant Human Superoxide Dismutase His Tag

Alternative Name : Superoxide dismutase [Cu-Zn],EC 1.15.1.1,SOD1,SOD,ALS,ALS1,IPOA.

Description

Source : Escherichia Coli. SOD Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 189 amino acids with a 10 X His at N-terminus and having a molecular mass of 40.0kDa.The SOD Human is purified by proprietary chromatographic techniques. 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 Info

Amount :	100 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE and HPLC analyses.
Content :	Lyophilized from a 0.2um filtered concentrated solution in PBS, pH 7.4.
Storage condition :	Lyophilized SOD Human although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SOD Human should be stored at 4°C between 2-7 days and for future use below -18°C.Please prevent freeze-thaw cycles.
Amino Acid :	MGHHHHHHHH HHSSGHIEGR HMTYARAAAR QARALEATKA VCVLKGDGPV QGIINFEQKE SNGPVKVVGS IKGLTEGLHG FHVHEFGDNT AGCTSAGPHF NPLSRKHGGP KDEERHVGDL GNVTADKDGV ADVSIEDSVI SLSGDHCIIG RTLVVHEKAD DLGKGGNEES TKTGNAGSRL ACGVIGIAQ

Application Note

It is recommended to reconstitute the lyophilized SOD in sterile 18M Ω cm H₂O not less than 100 Ω µg/ml, which can then be further diluted to other aqueous solutions. Fully biologically active when compared to standard. The specific activity was tested by Pyrogallic Acid method and was found to be more than 10,000Units/mg.