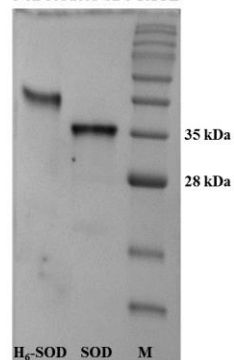


Recombinant Human Superoxide Dismutase (SOD)

CATALOG #:	4802-20	20 µg
	4802-100	100 µg
	4802-1000	1 mg
SOURCE:	<i>E. coli</i>	
PURITY:	≥ 95% as determined by SDS-PAGE and HPLC	
ENDOTOXIN:	Less than 0.1 ng/mg of human Superoxide Dismutase	
MOLECULAR WEIGHT:	16.8 kDa (monomer), 33.6 kDa (homodimer)	
FORM:	Lyophilized	
FORMULATION:	Sterile Filtered lyophilized (freeze-dried) powder from 50 mM Tris, 100 mM NaCl, pH 8.0.	
SPECIFIC ACTIVITY:	≥ 40,000 U/mg, Measured by using SOD activity assay kit (Cat. No. K335-100) and calculated from its Xanthine Oxidase activity inhibition (IC50).	
RECONSTITUTION:	Reconstitute in H ₂ O to a concentration ≥ 100 µg/ml. The solution can then be diluted into other aqueous buffers.	
STORAGE CONDITIONS:	Lyophilized Superoxide Dismutase is best stored desiccated below -18 °C. Reconstituted solution should be stored at -20 °C for future use. Please prevent freeze-thaw cycles.	
DESCRIPTION:	Superoxide Dismutase (SOD) is an oxidoreductase that 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. 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 and having a total molecular mass of 33.6 kDa, and a monomeric mass of 16.8 kDa. The Cu/Zn SOD is purified by proprietary chromatographic techniques.	
UNIT DEFINITION:	One unit is defined as the amount of enzyme that inhibits Xanthine Oxidase (XO) activity by 50% (IC50 (µg)) under the assay conditions (Cat. No. K335-100).	

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Non-reduced SDS-PAGE



SDS-PAGE (15%) of purified human recombinant SOD protein. Lane 1: 10 µg Tagged protein
Lane 2: 10 µg untagged protein
Lane 3: Marker

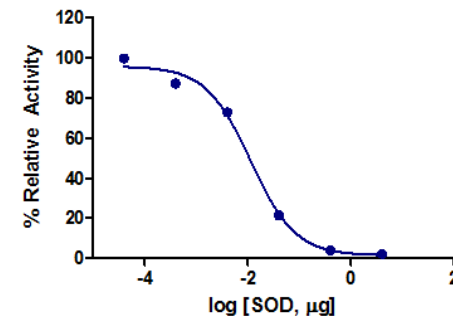
SEC analysis of Cu-Zn Superoxide Dismutase human recombinant (SOD, Cat. No. 4802) using a Superdex 200 HR 10/30 column at 0.5 ml/min in 50 mM Tris and 0.25 M NaCl pH 7.5 monitored at 215 nm. Homodimeric SOD (33.6 kDa) elutes at a retention time of ~32 min (The peak at ~42.55 min is probably due to the presence of trace amounts of Cu).

RELATED PRODUCTS:

- Superoxide Dismutase 1 (72B1) Monoclonal Antibody (**Cat. No. 6168-100**)
- Superoxide Dismutase 2 (2A1) Monoclonal Antibody (**Cat. No. 6169-100**)
- Superoxide Dismutase 3 (1H12) Monoclonal Antibody (**Cat. No. 6170-100**)
- Superoxide Dismutase (SOD) Activity Assay Kit (**Cat. No. K335-100**)
- Superoxide Dismutase, human recombinant (**Cat. No. 4802-50**)
- SOD2, human recombinant (**Cat. No. 6360-100**)
- Bacterial Recombinant SODA (**Cat. No. 6361-100**)
- SOD1 Antibody (**Cat. No. 3458-100**)
- SOD1 Blocking Peptide (**Cat. No. 3458BP-50**)

FOR RESEARCH USE ONLY! Not to be used on humans

For research use only



BioVision's rhSOD is biologically active. Activity tests were carried using SOD activity assay kit (K335-100). The activity assay kit showed that the calculated activity was > 40,000 U/mg.

