

# Recombinant Human Cu/Zn Superoxide Dismutase, His

Catalog No: #AP60408

Package Size: #AP60408-1 100ug #AP60408-2 500ug

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## Description

Product Name	Recombinant Human Cu/Zn Superoxide Dismutase, His
Host Species	Escherichia coli.
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Other Names	SOD1
Uniprot	P00441
GeneID	6647
Calculated MW	Approximately 39.9 kDa, a homodimer, non-glycosylated polypeptide chain containing 2 x 189 amino acids with Met, Gly and 10 x His at N-terminus.
Target Sequence	MGHHHHHHHH HHSSGHIEGR HMTYARAAAR QARALEATKA VCVLKGDGPV QGIINFEQKE SNGPVKVGWS IKGLTEGLHG FHVHEFGDNT AGCTSAGPHF NPLSRKHGGP KDEERHVGDL GNVTADKDGVS ADVSIEDSVI SLSGDHCIIIG RTLVVHEKAD DLGKGGNEES TKTGNAGSRL ACGVIGIAQ
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.- 12 months from date of receipt, -20 to -70 °C as supplied.- 1 month, 2 to 8 °C under sterile conditions after reconstitution.- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

## Background

Superoxide dismutase catalyzes the reaction between superoxide anions and hydrogen to yield molecular oxygen and hydrogen peroxide. Cu/Zn superoxide dismutase also named as SOD1, is an enzyme encoded by the SOD1 gene in humans, located on chromosome 21. The SOD1 binds Cu and Zn ions and is one of three SODs responsible for destroying free superoxide radicals in the body. It has been shown to interact with CCS and Bcl-2. The malfunction of SOD1 may increase the risk of illnesses like age-related muscle mass loss (sarcopenia), early development of cataracts, macular degeneration, thymic involution, hepatocellular carcinoma, shortened lifespan, keratoconus and amyotrophic lateral sclerosis.

Note: This product is for in vitro research use only