

Recombinant Human Cu/Zn Superoxide Dismutase Homodimer

ORDERING INFORMATION

Catalog Number	Size
13002P-20	20ug
13002P-100	100ug
13002P-1000	1000ug

Formulation: Lyophilized white powder from a sterile-filtered solution (1mg/ml) in PBS, pH 7.4 Purified by proprietary chromatographic techniques.

BACKGROUND

Cu/Zn Superoxide Dismutase (SOD1) catalyzes the reaction between superoxide anions and hydrogen to yield molecular oxygen and hydrogen peroxide. It protects a cell from dangerous levels of superoxide. SOD1 binds copper and zinc ions and is one of three isozymes responsible for destroying free superoxide radicals. Mutations in SOD1 cause a form of familial amyotrophic lateral sclerosis (ALS).

DESCRIPTION

Recombinant Human Cu/Zn SOD1 produced in E. coli is a homodimer non-glycosylated polypeptide chain containing 2 x 154 amino acids with a molecular weight of 31.6kDa.

SPECIFICATION SUMMARY

Source: *Escherichia coli*

Purity: Greater than 95% as determined by SDS- PAGE and RP-HPLC.

Accession number: P00441

Amino acid sequence:

MATKAVCVLK GDGPVQGIIN FEQKESNGPV
KVGSIKGLT EGLHGFHVHE FGDNTAGCTS
AGPHFNPLSR KHGGPKDEER HVGDLGNVTA
DKDGVADVSI EDSVISLSGD HCIIGRTLVV
HEKADDLGKG GNEESTKTGN
AGSRLACGVIGIAQ

SOLUBILITY

Reconstitute lyophilized product in sterile distilled H₂O to no less than 100ug/ml which can be further diluted in other aqueous solutions as needed.

STORAGE AND STABILITY

Although lyophilized product is stable at room temperature for 3 weeks, it is best stored at or below -20°C. After reconstitution, product should be stored at or below -20°C. Addition of a carrier protein (such as 0.1% HSA or BSA) is recommended for long-term storage.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.