

32-8045: Recombinant Human Superoxide Dismutase [Cu-Zn]/SOD1/Cu-Zn SOD (N-6His)

Gene : SOD1
Gene ID : 6647
Uniprot ID : P00441

Description

Source: E.coli.
MW :18.1kD.

Recombinant Human SOD1 is produced by our E.coli expression system and the target gene encoding Met1-Gln154 is expressed with a 6His tag at the N-terminus. Superoxide Dismutase [Cu-Zn] (SOD1) is a soluble cytoplasmic and mitochondrial intermembrane space protein that belongs to the Cu-Zn superoxide dismutase family. SOD1 binds copper and zinc ions and is one of three isozymes responsible for destroying free superoxide radicals in the body. SOD1 neutralizes supercharged oxygen molecules, which can damage cells if their levels are not controlled. The enzyme protects the cell against dangerous levels of superoxide. Zinc binding promotes dimerization and stabilizes the native form. Mutations in SOD1 cause a form of familial amyotrophic lateral sclerosis. Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1) which is a familial form of amyotrophic lateral sclerosis, a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis.

Product Info

Amount : 10 µg / 50 µg
Content : Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.
Storage condition : Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Amino Acid : MGSSHHHHHHSSGLVPRGSHMATKAVCVLKGDPVQGIINFEQKESNGPVKVGSIKGLTEGLHGFHVHEFG
DNTAGCTSAGPHFNPLSRKHGGPKDEERHVGDLGNVTADKDGADVSIEDSVISLSDGHCIIIGRTLTVHEKAD
DLGKGGNEESTKTGNAGSRLACGVIGIAQ

Application Note

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.