

Recombinant Human SODC Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50915

Size: 10ug, 100ug

Protein Name: Superoxide dismutase [Cu-Zn] (EC 1.15.1.1) (EC 1.8.-.-) (Hydrogen sulfide oxidase) (Superoxide dismutase 1) (hSod1)

Synonym: SOD1

UniProt ID: P00441

UniProt Link: www.uniprot.org/uniprotkb/P00441/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 154 AA

Molecular Weight: 16 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MATKAVCVLKGDGPVQGIINFEQKESNGPVKVGSIKGLTEGLHGFHVHEFGDNTAGCTSAGPHFN
PLSRKHGGPKDEERHVGDLGNVTADKDGADVSIEDSVISLSGDHCIIIGRTLTVHEKADDLGKGGNE
ESTKTGNAGSRLACGVIGIAQ

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Superoxide dismutase [Cu-Zn] (EC 1.15.1.1) (EC 1.8.-.-) (Hydrogen sulfide oxidase) (Superoxide dismutase 1) (hSod1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Destroys radicals which are normally produced within the cells and which are toxic to biological systems (PubMed:18948262, PubMed:24140062). Catalyzes the oxidation of hydrogen sulfide (H₂S) to sulfate, playing an important role in detoxifying H₂S and limiting the accumulation of reactive sulfur species (RSS) such as persulfides and polysulfides (PubMed:36630448).

Subcellular Localization: Cytoplasm . Nucleus . Note=Predominantly cytoplasmic; the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.