Document Version: V2.0

Recombinant Rat SODC Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52251

Size: 10ug, 100ug

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

Synonym: Sod1

UniProt ID: P07632

UniProt Link: www.uniprot.org/uniprotkb/P07632/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 154 AA

Molecular Weight: 16 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAMKAVCVLKGDGPVQGVIHFEQKASGEPVVVSGQITGLTEGEHGFHVHQYGDNTQGCTTAGPHF
NPHSKKHGGPADEERHVGDLGNVAAGKDGVANVSIEDRVISLSGEHSIIGRTMVVHEKQDDLGKGG
NEESTKTGNAGSRLACGVIGIAQ

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 ℃ or -80 ℃. 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) 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. 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.

Subcellular Localization: Cytoplasm . Nucleus .

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.