For Research Use Only

Recombinant Mouse SOD1 protein (rFc Tag)

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Catalog Number: Eg9090

Basic Information

Species:
Mouse

Purity:
>90 %, SDS-PAGE

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Mouse SOD1 protein Ala2-Gln154 (Accession# P08228) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
20655

Accession:
P08228

Predicted Molecular Mass:
41.4 kDa

SDS-PAGE:
43-49 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

The enzymatic function of Cu/Zn Superoxide Dismutase (SOD1), previously known as hemocuprein and IPOA, was first characterized in 1969. SOD1 is commonly known for its ROS scavenging activity, but recent work has uncovered additional roles in modulating metabolism, maintaining redox balance, and regulating transcription. In disease contexts, SOD1 is best-known for its role in a familial form of amyotrophic lateral sclerosis (fALS). In addition, SOD1 is overexpressed in numerous cancer types, including lung adenocarcinoma, non-small-cell lung cancer , and 70% of primary breast cancers.

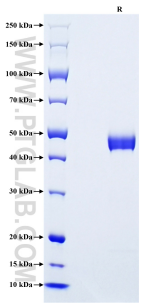
References

1. Kruman, I I et al. Experimental neurology vol. 160,1 (1999): 28-39.
2. Banks, C J, and J L Andersen. Redox biology vol. 26 (2019): 101270.
3. McCord, J M, and I Fridovich. The Journal of biological chemistry vol. 244,22 (1969): 6049-55.

Synonyms

EC:1.15.1.1, Superoxide dismutase [Cu-Zn]

Selected Validation Data



Purity of Recombinant Mouse SOD1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.