

Recombinant e.coli sodA protein

Catalog Number: ATGP1037

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-206aa

UniProt No.

P00448

NCBI Accession No.

NP_418344

Alternative Names

Superoxide dismutase manganese, Superoxide dismutase, manganese, MnSOD

PRODUCT SPECIFICATION

Molecular Weight

25.2 kDa (226aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

Purity

> 95% by SDS-PAGE

Biological Activity

Specific activity is > 300unit/mg, in which one unit will inhibit the rate of reduction of cytochrome c by 50% in a coupled system, using xanthine and Xanthine oxidase at pH 7.5 at 25C.

Tag

His-Tag

Application

Enzyme Activity, SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Superoxide dismutase, Mn, also known as sodA, is a member of the iron/manganese superoxide dismutase family. SodA destroys radicals which are normally produced within the cells and which are toxic to biological systems. It works by catalyzing the dismutation of the superoxide radical O₂⁻ to O₂ and H₂O₂, which are then

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metabolized to H₂O and O₂ by catalase and glutathione peroxidase. Recombinant E. coli sodA protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

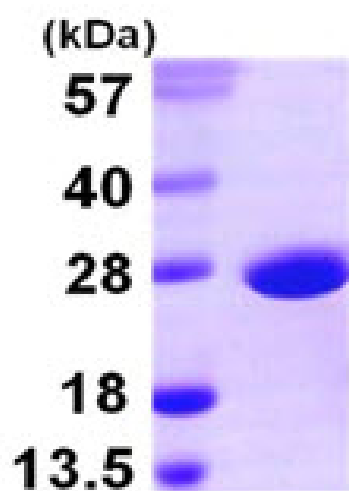
MGSSHHHHHH SGLVPRGSH MSYTLPSLPY AYDALEPHFD KQTMEIHHTK HHQTYVNNAN AALESLEPEFA NLPVEELITK
LDQLPADKKT VLRNNAGGHA NHSLFWKGLK KGTTLQGDLEK AAIERDFGSV DNFKAEFEKA AASRFGSGWA WLVLKGDKLA
VVSTANQDSP LMGEAISGAS GFPIMGLDVW EHAYYLKFQN RRPDYIKEFW NVVNWDEAAA RFAAKK

General References

Barrister J V., et al. (1987) Crit Rev Biochem. 22:11-180.
ujika I., et al. (1991) Acta Histochem Cytochem. 24:489-495.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)