Recombinant human Peroxiredoxin 3/PRDX3 protein

Catalog Number: ATGP0321

PRODUCT INFORMATION

Expression system
E.coli

Domain
63-256aa

UniProt No.
P30048

NCBI Accession No.
NP_006784

Alternative Names
Thioredoxin-dependent peroxide reductase mitochondrial, Thioredoxin-dependent peroxide reductase mitochondrial, PRDX3, PRX III, Antioxidant protein 1 (AOP-1), Peroxiredoxin 3, Thioredoxin-dependent peroxide reductase, mitochondrial Antioxidant Protein 1, AOP1, MER5, PRX3, SP22, Peroxiredoxin-3

PRODUCT SPECIFICATION

Molecular Weight
21.5 kDa (195aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity
> 95% by SDS-PAGE

Biological Activity
Specific activity is >2,000pmol/min/ug. Enzymatic activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25C for 1minute.

Tag
Non-Tagged

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
Peroxiredoxin 3, also known as PRDX3, is a member of the peroxiredoxin family of antioxidant enzymes, which

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reduce hydrogen peroxide and alkyl hydroperoxides. Peroxiredoxin 3 is specifically localized in mitochondria and believed to play important roles in the regulation of cellular redox status by serving as a primary line of defense against H2O2 produced during respiration. Recombinant human Peroxiredoxin 3 protein was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

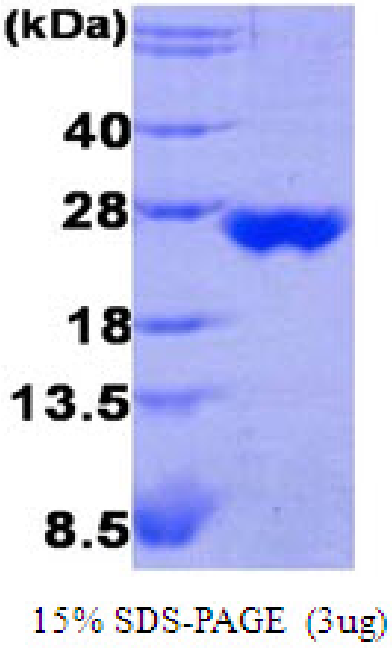
MPAVTQHAPY FKGTAVVNGE FKDLSLDDFK GKYLVLFFYP LDFTFVCPTE IVAFSDKANE FHDVNCEVVA VSVDSHFSHL AWINTPRKNG GLGHMNIALL SDLTKQISRD YGVLLEGSGL ALRGLFIIDP NGVIKHLSVN DLPVGRSVEE TLRLVKAFQY VETHGEVCPA NWTPDSPTIK PSPAASKEYF QKVNQ

General References

Cox AG., et al. (2009). Biochemistry. 48(27):6495-501
Rhee SG., et al. (2005). Free Radic Biol Med. 38(12):1543-52

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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