Recombinant human Peroxiredoxin 6/PRDX6 protein

Catalog Number: ATGP0356

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-224aa

UniProt No.
P30041

NCBI Accession No.
NP_004896

Alternative Names
1-Cys peroxiredoxin, 1-Cys PRX, 24 kDa protein, Acidic calcium-independent phospholipase A2, AiPLA2, Antioxidant protein 2, Glutathione-dependent peroxiredoxin Liver 2D page spot 40, Lysophosphatidylcholine acyltransferase 5, Non-selenium glutathione peroxidase, NSGPx, Red blood cells page spot 12, AOP2, KIAA0106, LPCAT-5

PRODUCT SPECIFICATION

Molecular Weight
27.1 kDa (244aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
iquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% 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
His-Tag

Application
SDS-PAGE, Enzyme Activity

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

Recombinant human Peroxiredoxin 6/PRDX6 protein

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Description

Peroxiredoxin 6, also known as PRDX6, is a member of the thiol-specific antioxidant protein family. This protein is a bifunctional enzyme with two distinct active sites. It is involved in redox regulation of the cell and can reduce H2O2 and short chain organic, fatty acid, and phospholipid hydroperoxides. It may play a role in the regulation of phospholipid turnover as well as in protection against oxidative injury. Recombinant human peroxiredoxin 6 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

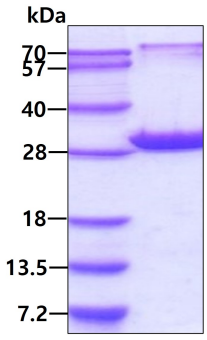
<MGSSHHHHHH SSGLVPRGSH> MPGGLLLGDV APNFEANTTV GRIRFHDFLG DSWGILFSHP RDFTPVCTTE LGRAAKLAPE FAKRNVKLIA LSIDSVEDHL AWSKDINAYN CEEPTEKLPF PIIDDRNREL AILLGMLDPA EKDEKGMPVT ARVVFVFGPD KKLKLSILYP ATTGRNFDEI LRVVISLQLT AEKRVATPVD WKDGDSVMVL PTIPEEEAKK LFPKGVFTKE LPSGKKYLRY TPQP

General References

Davison EJ., et al. (2009). Proteomics. 9(18):4284-97.
Wu J., et al. (2009). Chem Res Toxicol. 22(4):668-75.

DATA

SDS-PAGE



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