

# Recombinant human Peroxiredoxin 5/PRDX5 protein

Catalog Number: ATGP3798

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

53-214aa

### UniProt No.

P30044

### NCBI Accession No.

NP\_036226

### Alternative Names

Alu corepressor 1, Antioxidant enzyme B166, AOEB166, Liver tissue 2D-page spot 71B, PLP, Peroxiredoxin V, Prx-V, Peroxisomal antioxidant enzyme, TPx type VI, Thioredoxin peroxidase PMP20, Thioredoxin-dependent peroxiredoxin 5, ACR1, AOEB166, PRXV, SBBI10

### Additional Information

ATGP0339 has been replaced with a catalog number ATGP3798.

## PRODUCT SPECIFICATION

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### Molecular Weight

17 kDa (162aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM HEPES buffer (pH 7.4)

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Specific activity is >9,000pmol/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

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

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repeated freezing and thawing cycles.

## BACKGROUND

### Description

Peroxiredoxin 5, also known as PRDX5, is a member of the peroxiredoxin family of antioxidant enzymes, which reduces hydrogen peroxide and alkyl hydroperoxides with reducing equivalents provided through the thioredoxin system. This protein may play an antioxidant protective role in different tissues under normal conditions and during inflammatory processes. It has been reported that PRDX5 is involved in intracellular redox signaling. Recombinant human PRDX5, was expressed in E.coli and purified by using conventional chromatography techniques.

### Amino acid Sequence

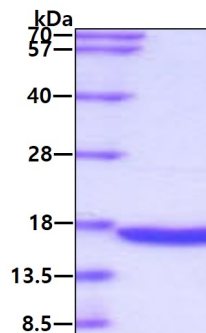
MAPIKVGDAI PAVEVFEGEP GNKVNLAELF KGKKGVLFGV PGAFTPGCSK THLPGFVEQA EALKAKGVQV VACLSVNDAF VTGEWGRAHKAEGKVRLLAD PTGAFGKETD LLLDDSLVSI FGNRRLKRFS MVVQDGIVKA LNVEPDGTGL TCSLAPNIIS QL

### General References

Yamashita H., et al. (1999) J Biol Chem. 274(42):29897-904 Declercq JP., et al. (2001) J Mol Biol. 311(4):751-9

## DATA

### SDS-PAGE



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