

# Recombinant human Peroxiredoxin 2/PRDX2 protein

Catalog Number: ATGP0268

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-198aa

### UniProt No.

P32119

### NCBI Accession No.

NP\_005800.3

### Alternative Names

Peroxiredoxin 2, NKEFB, PRP, PRX2, PRXII, TDPX1, TSA, PRDX2, Peroxiredoxin 2, MGC4104, Natural killer cell enhancing factor B, Natural Killer Enhancing Factor B, NKEF B, PRDX 2, TDPX1, Thiol Specific Antioxidant 1, Thiol specific antioxidant protein, Thioredoxin Dependent Peroxide Reductase 1, Thioredoxin Peroxidase 1, Torin.

## PRODUCT SPECIFICATION

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### Molecular Weight

21.8 kDa (198aa) 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

> 90% by SDS-PAGE

### Endotoxin level

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

### 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 minute.

### 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 repeated freezing and thawing cycles.

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## BACKGROUND

### Description

Peroxiredoxin 2, also known as PRDX2, is a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. Peroxiredoxin 2 may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8 (+) T-cells. If Peroxiredoxin 2 protection is inadequate against peroxidases, the resulting protein and DNA damage may result in neurological disease such as Alzheimer's or DNA damage leading to cancer. Recombinant human Peroxiredoxin 2 protein was expressed in *E. coli* and purified by using conventional chromatography.

### Amino acid Sequence

MASGNARIGK PAPDFKATAV VDGAFKEVKL SDYKGGYVVL FFYPLDFTFV CPTEIIAFSN RAEDFRKLGK EVLGVSVDSQ  
FTHLAWINTP RKEGGLGPLN IPLLADVTRR LSEDYGVLKT DEGIAYRGLF IIDGKGVLRQ ITVNDLPVGR SVDEALRLVQ  
AFQYTDEHGE VCPAGWKPGS DTIKPNVDDS KEYFSKHN

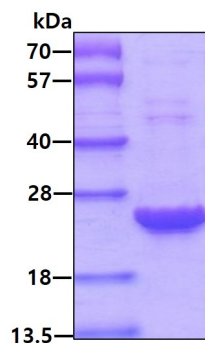
### General References

Kim K., et al. (2009), *Oncol Rep*, 21(6):1391-6.

Kim JH., et al. (2008). *Clin Cancer Res*. 14(8):2326-33.

## DATA

### SDS-PAGE



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