

# Recombinant mouse Peroxiredoxin 2/PRDX2 protein

Catalog Number: ATGP3684

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-198aa

### UniProt No.

Q61171

### NCBI Accession No.

NP\_035693

### Alternative Names

Protector protein, PRP, PrxII, Prx II-1, Tdpx1, TDX1, Thiol specific antioxidant protein, Thioredoxin dependent peroxide reductase 1, Thioredoxin peroxidase, Thioredoxin reductase, TPx, TR, Trx dependent peroxide reductase 1, TSA

## PRODUCT SPECIFICATION

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### Molecular Weight

24.3 kDa (222aa) Confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by absorbance at 280nm)

### Formulation

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

### Purity

> 90% by SDS-PAGE

### Biological Activity

Specific activity is > 3,000pmol/min/ug, Activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25C for minute.

### 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

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### Description

Prdx2, also known as peroxiredoxin-2, is a member of the peroxiredoxin family of antioxidant enzymes, which

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reduce hydrogen peroxide and alkyl hydroperoxides. Prdx2 may play an antioxidant protective role in cells, and may contribute to the antiviral activity of CD8 (+) T-cells. If Prdx2 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 mouse Prdx2, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

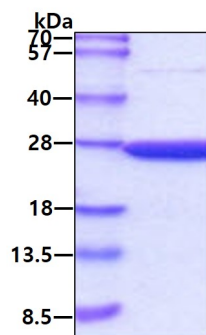
<MGSSHHHHHH SSGLVPRGSH MGSH>MASGNA QIGKSAPDFT ATAVVDGAFK EIKLSDYRGK YVVLFFYPLD FTFVCPTEII  
AFSDHAEDFR KLGCEVLGVS VDSQFTHLAW INTPRKEGGL GPLNIPLAD VTKSLSQNYG VLKNDEGIAY RGLFIIDAKG  
VLRQITVNDL PVGRSVDEAL RLVQAFQYTD EHGEVCPAGW KPGSDTIKPN VDDSKEYFSK HN

## General References

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