

# **Human Recombinant PRDX 3**

**CATALOG #**: 6320-100 100 μg

ALTERNATE NAMES: Thioredoxin-dependent peroxide Reductase,

mitochondrial, PRDX3, PRX III, Antioxidant protein 1

(AOP-1).

SOURCE: E.Coli

**PURITY:** > 95% by SDS - PAGE

**MOL. WEIGHT:** 21.5 kDa (195 aa – 63-256 aa).

**FORMULATION:** 1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0)

containing 10% glycerol.

## STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

#### **DESCRIPTION:**

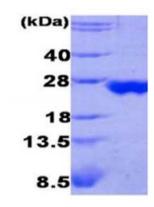
Peroxiredoxin-3 (Prdx3) is a mitochondrial member of the antioxidant family of thioredoxin peroxidases that uses mitochondrial thioredoxin-2 (Trx2) as a source of reducing equivalents to scavenge hydrogen peroxide ( $H_2O_2$ ). It acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol.

## **AMINO ACID SEQUENCE:**

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

## **BIOLOGICAL ACTIVITY:**

Specific activity: approximately 82-83 pmole/min/µg. Enzymatic activity was confirmed by measuring the remaining peroxide after incubation of PRDX3 and peroxide for 20 min at room temperature. Specific activity is defined as the amount of hydroperoxide that 1 µg of enzyme can reduce at 25°C for 1 minute.



15% SDS-PAGE (3ug)

Human Recombinant PRDX 3

#### **RELATED PRODUCTS:**

- Human Recombinant PRDX 2 (Cat. No. 6319-100)
- Human Recombinant PRDX 5 (Cat. No. 6321-100)
- Human Recombinant PRDX 6 (Cat. No. 6322-100)
- Human Recombinant PRDX 1 (Cat. No. 6323-100)
- Human Recombinant PRDX 4 (Cat. No. 6324-100)
- Human Recombinant Thioredoxin 1 (Cat. No. 6305-100)
- Human Recombinant Thioredoxin 2 (Cat. No. 6318-100)

FOR RESEARCH USE ONLY! Not to be used in humans.

