

## Human Recombinant PRDX 4

<b>CATALOG #:</b>	6324-100	100 µg
<b>ALTERNATE NAMES:</b>	Peroxiredoxin 4, PRX-4, AOE37-2, PRDX4.	
<b>SOURCE:</b>	E.Coli	
<b>PURITY:</b>	> 90% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	28.8 kDa (255 aa – 38-271 aa + His Tag (NT)).	
<b>FORMULATION:</b>	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:

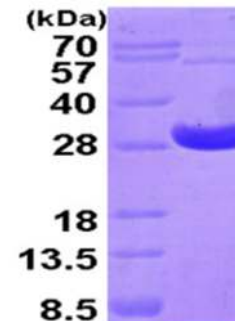
Peroxiredoxin-4 in humans is encoded by the PRDX4 gene. The protein encoded by this gene is an antioxidant enzyme and belongs to the peroxiredoxin family. It is localized to the cytoplasm. Peroxidases of the peroxiredoxin family reduce hydrogen peroxide and alkyl hydroperoxides to water and alcohol with the use of reducing equivalents derived from thiol-containing donor molecules. This protein has been found to play a regulatory role in the activation of the transcription factor NF-kappa B.

### AMINO ACID SEQUENCE:

MGSSHHHHHH SSGLVPRGSH MWETEERPT REEECHFYAG GQVYPGEASR  
VSVADHSLHL SKAKISKAP YWEGTAVIDG EFKELKLDY RGKYLVFFFY PLDFTFVCPT  
EIIAFGDRLE EFRSINTEVV ACSVDSQFTH LAWINTPRRQ GGLGPIRIPL LSDLTHQISK  
DYGVYLED SG HTLRGLFIID DKGILRQITL NDLPVGRSVD ETLRLVQAFQ YTDKHGEVCP  
AGWKPGSETI IPDPAGKLY FDKLN

### BIOLOGICAL ACTIVITY:

Specific activity: approximately 230-310 pmole/min/µg. Enzymatic activity was confirmed by measuring the remaining peroxide after incubation of PRDX 4 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 (3µg)

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### RELATED PRODUCTS:

- Human Recombinant PRDX 2 (Cat. No. 6319-100)
- Human Recombinant PRDX 3 (Cat. No. 6320-100)
- 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 Thioredoxin 1 (Cat. No. 6305-100)
- Human Recombinant Thioredoxin 2 (Cat. No. 6318-100)

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