

## 32-2729: PRDX4 Recombinant Protein

**Alternative Name :** EC 1.11.1.15, AOE37-2, Peroxiredoxin-IV, Prx-IV, Thioredoxin peroxidase A0372, Thioredoxin-dependent peroxide reductase A0372, Antioxidant enzyme AOE372.

### Description

Source : Escherichia Coli. PRDX4 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 255 amino acids (38-271 a.a.) and having a molecular mass of 28.8kDa. PRDX4 protein is fused to a 20 amino acid His-Tag at N-terminus and purified by standard chromatography. PRDX4 is an antioxidant enzyme that is part of the peroxiredoxin family. PRDX4 is localized to the cytoplasm. PRDX4 reduces hydrogen peroxide and alkyl hydroperoxides to water and alcohol with the use of reducing equivalents derived from thiol-containing donor molecules. PRDX4 has a regulatory part in the activation of the transcription factor NF-kappaB. PRDX4 participates in redox regulation of the cell. PRDX4 regulates the activation of NF-kappa-B in the cytosol by a modulation of I-kappa-B-alpha phosphorylation.

### Product Info

**Amount :** 25 µg  
**Purification :** Greater than 95% as determined by SDS-PAGE.  
**Content :** PRDX4 Human solution containing 20mM Tris HCL pH-8, & 10% glycerol.  
**Storage condition :** PRDX4 Human although stable at 4°C for 1 week, should be stored desiccated below -18°C. Please prevent freeze thaw cycles.  
**Amino Acid :** MGSSHHHHHH SSSLVPRGSH MWETEERPT REECHFYAG QVYPGEASR VSVADHSLHL  
SKAKISKAP YWEGTAVIDG EFKELKLDY RGKYLVFFFY PLDFTFVCPT EIIAFGDRLE EFRSINTEVV  
ACSVDSQFTH LAWINTPRRQ GGLGPIRIPL LSDLTHQISK DYGVYLEDSG HTLRGLFIID DKGILRQITL  
NDLPVGRSVD ETLRLVQAFQ YTDKHGEVCP AGWKPGSETI IPDPAGKLY FDKLN.

### Application Note

Specific activity: approximately 230-310 pmole/min/µg. Enzymatic activity was confirmed by measuring the remaining peroxide after incubation of PRDX4 and peroxide for 20 min at room temperature. Specific activity is defined as the amount of hydroperoxide that 1ug of enzyme can reduce at 25 C for 1 minute.

