

## 32-2730: PRDX5 Recombinant Protein

**Alternative Name :** Peroxiredoxin-5 mitochondrial,Prx-V,Peroxisomal antioxidant enzyme,Thioredoxin reductase,Thioredoxin peroxidase PMP20,Antioxidant enzyme B166,TPx type VI,Liver tissue 2D-page spot 71B,Alu corepressor 1,PLP,ACR1,B166,PRXV,PMP20,PRDX6,SB

### Description

Source : Escherichia Coli. PRDX5 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 162 amino acids (53-214 a.a.) and having a molecular mass of 17 kDa.The PRDX5 is purified by proprietary chromatographic techniques. PRDX5 belongs to the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides with reducing equivalents supplied through the thioredoxin system. PRDX5 has an antioxidant protective function in different tissues under normal conditions and during inflammatory processes. Peroxiredoxin-5 interacts with peroxisome receptor 1 and is involved in intracellular redox signaling. PRDX5 is involved in intracellular redox signaling. Peroxiredoxin-5 is a significant antioxidant protein of lung epithelial cells for its expression in the human lung increases during inflammation. PRDX5 expression is upregulated in osteoarthritis. PRDX5 may be significant in mitochondrial genome stability. Peroxiredoxin-5 has a protective role in human tendon cells against oxidative stress by reducing apoptosis and upholding collagen synthesis.

### Product Info

**Amount :** 20 µg  
**Purification :** Greater than 95.0% as determined by SDS-PAGE.  
**Content :** The PRDX5 solution contains 20mM HEPES buffer (pH 7.4).  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles. .  
**Amino Acid :** MAPIKVGDAI PAVEVFEGEP GNKVNLAELF KGKKGVLFV PGAFTPGCSK THLPGFVEQA EALKAKGVQV VACLSVNDAF VTGEWGRAHK AEGKVRLLAD PTGAFGKETD LLLDDSLVSI FGNRRLLKRF S MVVQDGIVKA LNVEPDGTGL TCSLAPNIIS QL.

### Application Note

The specific activity was found to be approximately 117-136 pmole/min/µg.

