

**Recombinant Protein Technical Manual** 

Recombinant Human Peroxiredoxin-4/PRDX4 Protein (His Tag) RPES1723

### Product Data:

Product SKU: RPES1723

Species: Human

**Size:** 10µg

Expression host: E. coli

**Uniprot:** Q13162

# **Protein Information:**

Molecular Mass:	33.8 kDa
AP Molecular Mass:	30 kDa
Tag:	N-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu m$ filtered solution of 20mM PB, 150mM NaCl, 1mM DTT, pH 7.2.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Peroxiredoxin-4; Antioxidant Enzyme AOE372; AOE37-2; Peroxiredoxin IV; Prx-IV; Thioredoxin Peroxidase AO372; Thioredoxin-Dependent Peroxide Reductase A0372; PRDX4

## **Immunogen Information:**

#### Sequence: Trp38-Asn271

#### **Background:**

Peroxiredoxin-4 (PRDX4) is a member of the AhpC/TSA family. PRDX4 is a cytoplasmic protein and contains one thioredoxin domain. PRDX4 exists in homodimer or heterodimer with PRDX1. PRDX4 reduces hydrogen peroxide and alkyl hydroperoxides to water and alcohol with the use of reducing equivalents derived from thiol-containing donor molecules. In addition, PRDX4 is probably involved in redox regulation of the cell, regulating the activation of NF-kappa-B in the cytosol by a modulation of I-kappa-B-alpha phosphorylation.