

**PRDX3 Blocking Peptide (C-term)**  
**Synthetic peptide**  
**Catalog # BP20728c****Specification**

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**PRDX3 Blocking Peptide (C-term) - Product Information**Primary Accession [P30048](#)**PRDX3 Blocking Peptide (C-term) - Additional Information****Gene ID** 10935**Other Names**

Thioredoxin-dependent peroxide reductase, mitochondrial, Antioxidant protein 1, AOP-1, HBC189, Peroxiredoxin III, Prx-III, Peroxiredoxin-3, Protein MER5 homolog, PRDX3, AOP1

**Target/Specificity**

The synthetic peptide sequence is selected from aa 229-242 of HUMAN PRDX3

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PRDX3 Blocking Peptide (C-term) - Protein Information****Name** PRDX3**Synonyms** AOP1**Function**

Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides (PubMed: [7733872](http://www.uniprot.org/citations/7733872) target="\_blank">7733872</a>, PubMed: [17707404](http://www.uniprot.org/citations/17707404) target="\_blank">17707404</a>, PubMed: [29438714](http://www.uniprot.org/citations/29438714) target="\_blank">29438714</a>, PubMed: [33889951](http://www.uniprot.org/citations/33889951) target="\_blank">33889951</a>). Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol (PubMed: [12492477](http://www.uniprot.org/citations/12492477) target="\_blank">12492477</a>). Required for the maintenance of physical strength (By similarity).

**Cellular Location**

Mitochondrion. Cytoplasm. Early endosome. Note=Localizes to early endosomes in a RPS6KC1-dependent manner.

### **PRDX3 Blocking Peptide (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

### **PRDX3 Blocking Peptide (C-term) - Images**

### **PRDX3 Blocking Peptide (C-term) - Background**

Involved in redox regulation of the cell. Protects radical-sensitive enzymes from oxidative damage by a radical- generating system. Acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol.

### **PRDX3 Blocking Peptide (C-term) - References**

Tsuji K.,et al.Biochem. J. 307:377-381(1995).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.  
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.  
Deloukas P.,et al.Nature 429:375-381(2004).