

**PRDX3 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2926a**

**Specification**

**PRDX3 Antibody (N-term) - Product Information**

Application	<b>WB, IHC-P, FC,E</b>
Primary Accession	<a href="#">P30048</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit Ig</b>
Calculated MW	<b>27693</b>
Antigen Region	<b>66-94</b>

**PRDX3 Antibody (N-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**

This PRDX3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-94 amino acids from the N-terminal region of human PRDX3.

**Dilution**

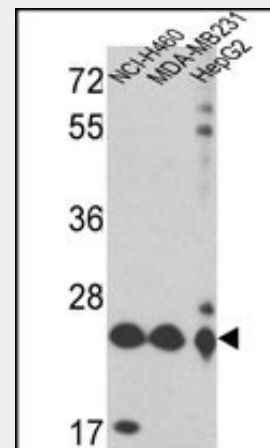
WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**Format**

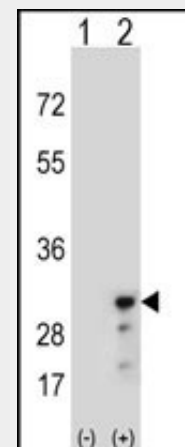
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



Western blot analysis of PRDX3 Antibody (N-term) (Cat. #AP2926a) in NCI-H460,MDA-MB231,HepG2 cell line lysates (35ug/lane). PRDX3 (arrow) was detected using the purified Pab.(2ug/ml)



Western blot analysis of PRDX3 (arrow) using rabbit polyclonal PRDX3 Antibody (N-term) (Cat. #AP2926a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PRDX3 gene.

### Precautions

PRDX3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### PRDX3 Antibody (N-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>). 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>).

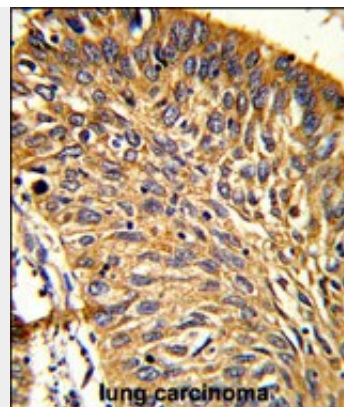
### Cellular Location

Mitochondrion  
{ECO:0000250|UniProtKB:P35705}.  
Cytoplasm. Early endosome.  
Note=Localizes to early endosomes in a RPS6KC1-dependent manner.

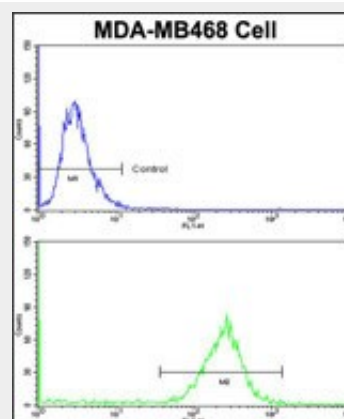
### PRDX3 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with PRDX3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of MDA-MB468 cells using PRDX3 Antibody (N-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### PRDX3 Antibody (N-term) - Background

PRDX3 is a protein with antioxidant function and is localized in the mitochondrion. This protein is involved in redox regulation of the cell and protects radical-sensitive enzymes from oxidative damage by a radical-generating system. It acts synergistically with MAP3K13 to regulate the activation of NF-kappa-B in the cytosol.

### PRDX3 Antibody (N-term) - References

Cox,A.G., et.al., Biochemistry 48 (27),  
6495-6501 (2009)