

**PRDX6 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2927c**

**Specification**

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**PRDX6 Antibody (Center) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P30041</a>
Other Accession	<a href="#">O35244</a> , <a href="#">O2PFL9</a> , <a href="#">O77834</a> , <a href="#">NP_004896</a>
Reactivity	Human
Predicted	Bovine, Monkey, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	25035
Antigen Region	103-132

**PRDX6 Antibody (Center) - Additional Information**

**Gene ID** 9588

**Other Names**

Peroxiredoxin-6, 1-Cys peroxiredoxin, 1-Cys PRX, 24 kDa protein, Acidic calcium-independent phospholipase A2, aiPLA2, 311-, Antioxidant protein 2, Liver 2D page spot 40, Non-selenium glutathione peroxidase, NSGPx, Red blood cells page spot 12, PRDX6, AOP2, KIAA0106

**Target/Specificity**

This PRDX6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-132 amino acids from the Central region of human PRDX6.

**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 purified through a protein A column, followed by peptide affinity purification.

**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.

**Precautions**

PRDX6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**PRDX6 Antibody (Center) - Protein Information**

**Name** PRDX6**Synonyms** AOP2, KIAA0106

**Function** Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively (PubMed:[9497358](#), PubMed:[10893423](#)). Can reduce H<sub>2</sub>O<sub>2</sub> and short chain organic, fatty acid, and phospholipid hydroperoxides (PubMed:[10893423](#)). Also has phospholipase activity, can therefore either reduce the oxidized sn-2 fatty acyl group of phospholipids (peroxidase activity) or hydrolyze the sn-2 ester bond of phospholipids (phospholipase activity) (PubMed:[10893423](#), PubMed:[26830860](#)). These activities are dependent on binding to phospholipids at acidic pH and to oxidized phospholipids at cytosolic pH (PubMed:[10893423](#)). Plays a role in cell protection against oxidative stress by detoxifying peroxides and in phospholipid homeostasis (PubMed:[10893423](#)). Exhibits acyl-CoA-dependent lysophospholipid acyltransferase which mediates the conversion of lysophosphatidylcholine (1-acyl-sn-glycero-3-phosphocholine or LPC) into phosphatidylcholine (1,2-diacyl-sn-glycero-3-phosphocholine or PC) (PubMed:[26830860](#)). Shows a clear preference for LPC as the lysophospholipid and for palmitoyl CoA as the fatty acyl substrate (PubMed:[26830860](#)).

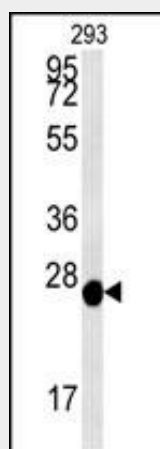
**Cellular Location**

Cytoplasm. Lysosome {ECO:0000250|UniProtKB:O35244}. Note=Also found in lung secretory organelles (lamellar bodies). {ECO:0000250|UniProtKB:O35244}

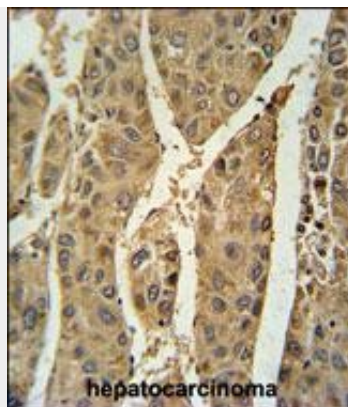
**PRDX6 Antibody (Center) - Protocols**

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

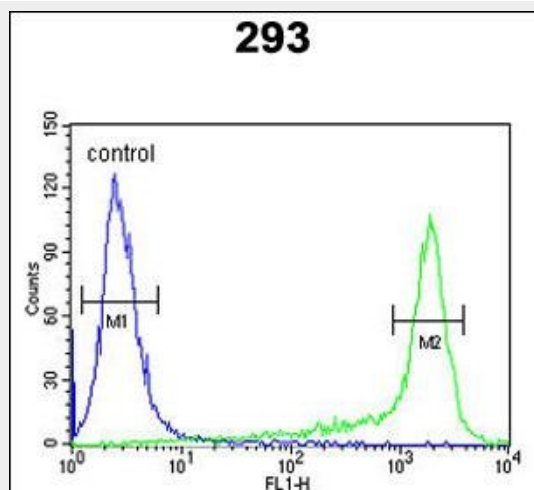
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PRDX6 Antibody (Center) - Images**

PRDX6 Antibody (Center) (Cat.#AP2927c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the PRDX6 antibody detected the PRDX6 protein (arrow).



PRDX6 Antibody (Center) (Cat. #AP2927c) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PRDX6 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



PRDX6 Antibody (Center) (Cat. #AP2927c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### PRDX6 Antibody (Center) - Background

PRDX6 is a member of the thiol-specific antioxidant protein family. This protein is a bifunctional enzyme with two distinct active sites. It is involved in redox regulation of the cell; it can reduce  $H_2O_2$  and short chain organic, fatty acid, and phospholipid hydroperoxides. It may play a role in the regulation of phospholipid turnover as well as in protection against oxidative injury.

### PRDX6 Antibody (Center) - References

Davila, S., et al. Genes Immun. (2010) In press :  
Kubo, E., et al. Am. J. Physiol., Cell Physiol. 298 (2), C342-C354 (2010) :  
Sorokina, E.M., et al. Am. J. Physiol. Lung Cell Mol. Physiol. 297 (5), L871-L880 (2009)