

**Anti-PRDX6/Peroxiredoxin 6 Rabbit Monoclonal Antibody**  
**Catalog # ABO13774****Specification****Anti-PRDX6/Peroxiredoxin 6 Rabbit Monoclonal Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IF, ICC, IP        |
| Primary Accession | <a href="#">P30041</a> |
| Host              | Rabbit                 |
| Isotype           | Rabbit IgG             |
| Reactivity        | Rat, Human, Mouse      |
| Clonality         | Monoclonal             |
| Format            | Liquid                 |

**Description**

Anti-PRDX6/Peroxiredoxin 6 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP applications.  
This antibody reacts with Human, Mouse, Rat.

**Anti-PRDX6/Peroxiredoxin 6 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 9588

**Other Names**

Peroxiredoxin-6, 1.11.1.27, 1-Cys peroxiredoxin, 1-Cys PRX, 24 kDa protein, Acidic calcium-independent phospholipase A2, aiPLA2, 3.1.1.4, Antioxidant protein 2, Glutathione-dependent peroxiredoxin, Liver 2D page spot 40, Lysophosphatidylcholine acyltransferase 5, LPC acyltransferase 5, LPCAT-5, Lyso-PC acyltransferase 5, 2.3.1.23, Non-selenium glutathione peroxidase, NSGPx, Red blood cells page spot 12, PRDX6, AOP2, KIAA0106

**Calculated MW**

25035 MW KDa

**Application Details**

WB 1:500-1:1000<br>ICC/IF 1:50-1:200<br>IP 1:20

**Subcellular Localization**

Cytoplasm. Lysosome. Cytoplasmic vesicle. Also found in lung secretory organelles..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human PRDX6

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

**up to one month. Avoid repeated  
freeze-thaw cycles.**

## **Anti-PRDX6/Peroxiredoxin 6 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/10893423" target="\_blank">10893423</a>, PubMed:<a href="http://www.uniprot.org/citations/9497358" target="\_blank">9497358</a>). Can reduce H<sub>2</sub>O<sub>2</sub> and short chain organic, fatty acid, and phospholipid hydroperoxides (PubMed:<a href="http://www.uniprot.org/citations/10893423" target="\_blank">10893423</a>). 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:<a href="http://www.uniprot.org/citations/10893423" target="\_blank">10893423</a>, PubMed:<a href="http://www.uniprot.org/citations/26830860" target="\_blank">26830860</a>). These activities are dependent on binding to phospholipids at acidic pH and to oxidized phospholipids at cytosolic pH (PubMed:<a href="http://www.uniprot.org/citations/10893423" target="\_blank">10893423</a>). Plays a role in cell protection against oxidative stress by detoxifying peroxides and in phospholipid homeostasis (PubMed:<a href="http://www.uniprot.org/citations/10893423" target="\_blank">10893423</a>). 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:<a href="http://www.uniprot.org/citations/26830860" target="\_blank">26830860</a>). Shows a clear preference for LPC as the lysophospholipid and for palmitoyl CoA as the fatty acyl substrate (PubMed:<a href="http://www.uniprot.org/citations/26830860" target="\_blank">26830860</a>).

### **Cellular Location**

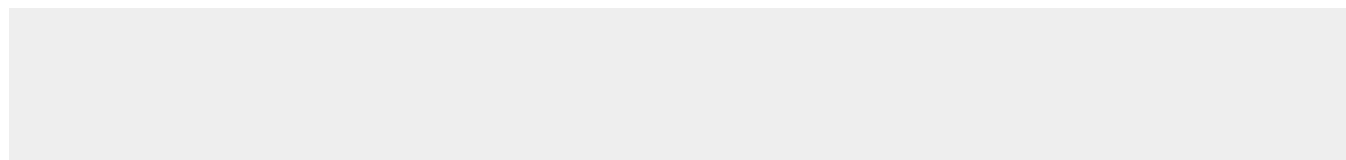
Cytoplasm. Lysosome {ECO:0000250|UniProtKB:O35244}. Note=Also found in lung secretory organelles (lamellar bodies). {ECO:0000250|UniProtKB:O35244}

## **Anti-PRDX6/Peroxiredoxin 6 Rabbit Monoclonal Antibody - 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](#)

## **Anti-PRDX6/Peroxiredoxin 6 Rabbit Monoclonal Antibody - Images**



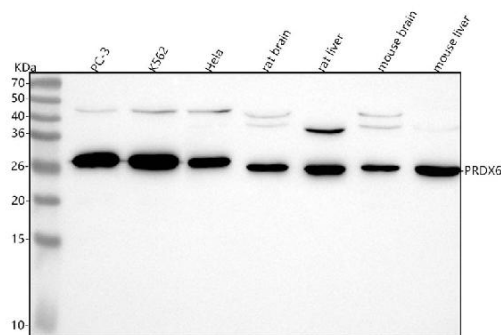


Figure 1. Western blot analysis of PRDX6 using anti-PRDX6 antibody (M01847).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human PC-3 whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human Hela whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: rat liver tissue lysates,

Lane 6: mouse brain tissue lysates,

Lane 7: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PRDX6 antigen affinity purified monoclonal antibody (Catalog # M01847) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PRDX6 at approximately 25 kDa. The expected band size for PRDX6 is at 25 kDa.