

### **Anti-Peroxiredoxin 6 Picoband Antibody**

**Catalog # ABO12041** 

# **Specification**

# **Anti-Peroxiredoxin 6 Picoband Antibody - Product Information**

Application WB, IHC-P
Primary Accession P30041
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Peroxiredoxin-6(PRDX6) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-Peroxiredoxin 6 Picoband Antibody - Additional Information

### **Gene ID 9588**

#### **Other Names**

Peroxiredoxin-6, 1.11.1.15, 1-Cys peroxiredoxin, 1-Cys PRX, 24 kDa protein, Acidic calcium-independent phospholipase A2, aiPLA2, 3.1.1.-, Antioxidant protein 2, Liver 2D page spot 40, Non-selenium glutathione peroxidase, NSGPx, 1.11.1.9, Red blood cells page spot 12, PRDX6, AOP2, KIAA0106

## Calculated MW 25035 MW KDa

### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Human, Mouse<br/>br>

### **Subcellular Localization**

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

### **Protein Name**

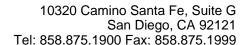
Peroxiredoxin-6

#### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

### **Immunogen**

E.coli-derived human Peroxiredoxin 6 recombinant protein (Position: E15-P224). Human Peroxiredoxin 6 shares 90% and 91% amino acid (aa) sequence identity with mouse and rat Peroxiredoxin 6, respectively.





Purification Immunogen affinity purified.

**Cross Reactivity** 

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities** 

Belongs to the AhpC/TSA family. Rehydrin subfamily.

## Anti-Peroxiredoxin 6 Picoband 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(2)O(2) 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 phospholipds 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-Peroxiredoxin 6 Picoband Antibody - Protocols**

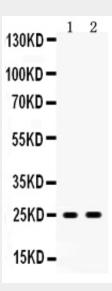
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

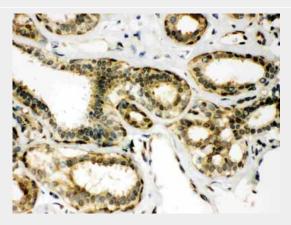


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-Peroxiredoxin 6 Picoband Antibody - Images



Anti- Peroxiredoxin 6 Picoband antibody, ABO12041, Western blottingAll lanes: Anti Peroxiredoxin 6 (ABO12041) at 0.5ug/mlLane 1: Mouse Liver Tissue Lysate at 50ugLane 2: 293T Whole Cell Lysate at 40ugPredicted bind size: 25KDObserved bind size: 25KD



Anti- Peroxiredoxin 6 Picoband antibody, ABO12041, IHC(P)IHC(P): Human Mammary Cancer Tissue

# Anti-Peroxiredoxin 6 Picoband Antibody - Background

PRDX6 is also known as PRX, p29 or AOP2. The protein encoded by this gene 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(2)O(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.