

Anti-Peroxiredoxin 6 Picoband Antibody
Catalog # ABO12041**Specification****Anti-Peroxiredoxin 6 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	P30041
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	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 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse

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 Na₃N.

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 reconstitution, 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: [10893423](http://www.uniprot.org/citations/10893423), PubMed: [9497358](http://www.uniprot.org/citations/9497358)). Can reduce H₂O₂ and short chain organic, fatty acid, and phospholipid hydroperoxides (PubMed: [10893423](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10893423), PubMed: [26830860](http://www.uniprot.org/citations/26830860)). These activities are dependent on binding to phospholipids at acidic pH and to oxidized phospholipids at cytosolic pH (PubMed: [10893423](http://www.uniprot.org/citations/10893423)). Plays a role in cell protection against oxidative stress by detoxifying peroxides and in phospholipid homeostasis (PubMed: [10893423](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/26830860)). Shows a clear preference for LPC as the lysophospholipid and for palmitoyl CoA as the fatty acyl substrate (PubMed: [26830860](http://www.uniprot.org/citations/26830860)).

Cellular Location

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

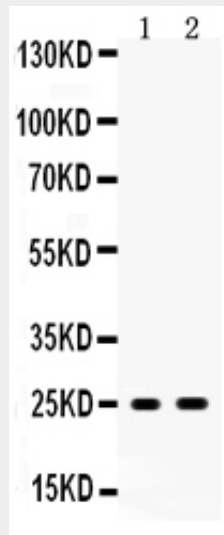
Anti-Peroxiredoxin 6 Picoband Antibody - Protocols

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

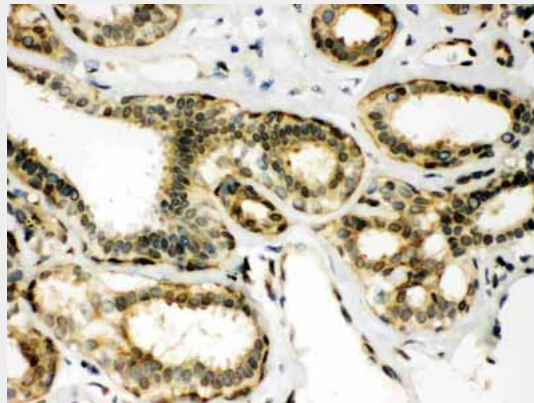
- [Western Blot](#)
- [Blocking Peptides](#)

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

Anti-Peroxiredoxin 6 Picoband Antibody - Images



Anti- Peroxiredoxin 6 Picoband antibody, ABO12041, Western blotting All lanes: Anti Peroxiredoxin 6 (ABO12041) at 0.5ug/ml Lane 1: Mouse Liver Tissue Lysate at 50ug Lane 2: 293T Whole Cell Lysate at 40ug Predicted bind size: 25KD Observed 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 H₂O₂ 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.