10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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**
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 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:10893423, PubMed:9497358). Can reduce H(2)O(2) 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 phospholipds 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}

Anti-Peroxiredoxin 6 Picoband Antibody - Protocols

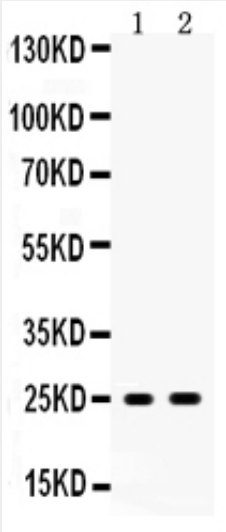
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

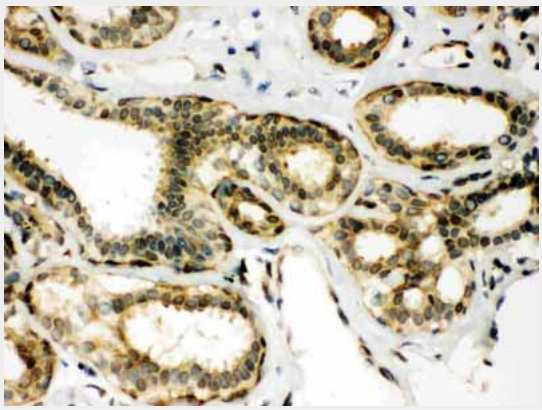
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- 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.