

**Anti-Peroxiredoxin 5 Picoband Antibody**  
**Catalog # ABO12075****Specification****Anti-Peroxiredoxin 5 Picoband Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P, ICC         |
| Primary Accession | <a href="#">P30044</a> |
| Host              | Rabbit                 |
| Reactivity        | Human, Mouse, Rat      |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for Peroxiredoxin-5, mitochondrial (PRDX5) detection. Tested with WB, IHC-P, ICC in Human; Mouse; Rat.

**Reconstitution**

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

**Anti-Peroxiredoxin 5 Picoband Antibody - Additional Information**

**Gene ID** 25824

**Other Names**

Peroxiredoxin-5, mitochondrial, 1.11.1.15, Alu corepressor 1, Antioxidant enzyme B166, AOEB166, Liver tissue 2D-page spot 71B, PLP, Peroxiredoxin V, Prx-V, Peroxisomal antioxidant enzyme, TPx type VI, Thioredoxin peroxidase PMP20, Thioredoxin reductase, PRDX5, ACR1

**Calculated MW**

22086 MW KDa

**Application Details**

Immunocytochemistry, 0.5-1 µg/ml, Human, -<br>Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Isoform Mitochondrial: Mitochondrion.

**Tissue Specificity**

Widely expressed. .

**Protein Name**

Peroxiredoxin-5, mitochondrial

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E.coli-derived human Peroxiredoxin 5 recombinant protein (Position: E66-D198). Human

Peroxiredoxin 5 shares 91% amino acid (aa) sequence identity with both mouse and rat Peroxiredoxin 5.

**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 peroxiredoxin 2 family.

**Anti-Peroxiredoxin 5 Picoband Antibody - Protein Information**

**Name** PRDX5 ([HGNC:9355](#))

**Synonyms** ACR1

**Function**

Thiol-specific peroxidase that catalyzes the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. Plays a role in cell protection against oxidative stress by detoxifying peroxides and as sensor of hydrogen peroxide-mediated signaling events.

**Cellular Location**

[Isoform Mitochondrial]: Mitochondrion

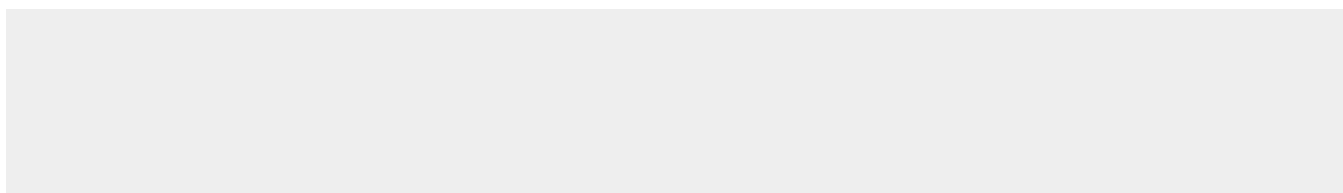
**Tissue Location**

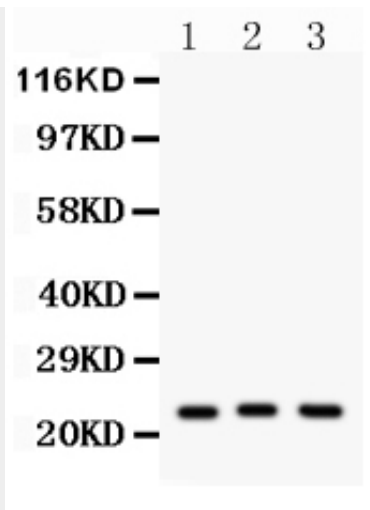
Widely expressed..

**Anti-Peroxiredoxin 5 Picoband Antibody - Protocols**

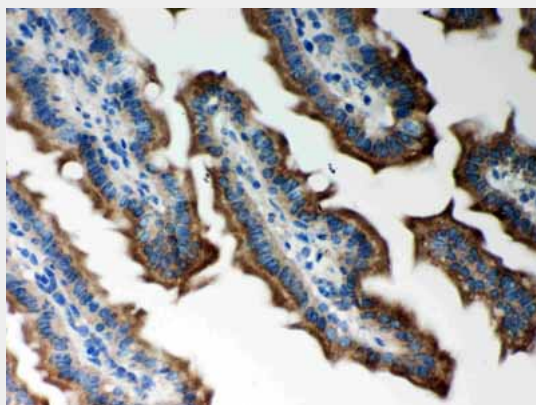
Provided below are standard protocols that you may find useful for product applications.

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

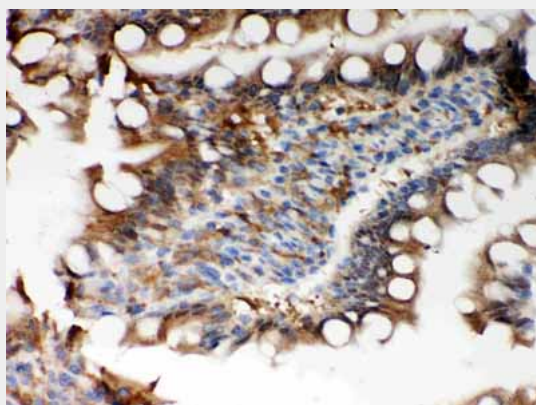
**Anti-Peroxiredoxin 5 Picoband Antibody - Images**



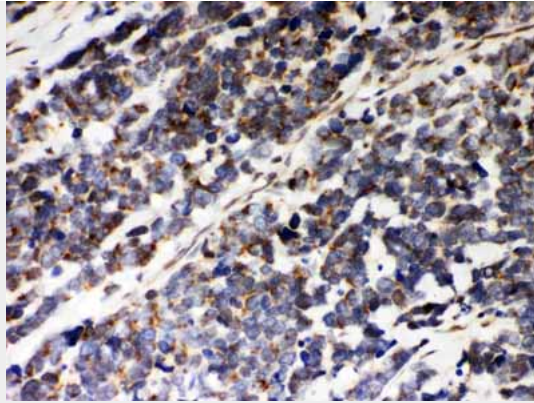
Anti- Peroxiredoxin 5 Picoband antibody, ABO12075, Western blotting All lanes: Anti Peroxiredoxin 5 (ABO12075) at 0.5ug/ml  
Lane 1: A549 Whole Cell Lysate at 40ug  
Lane 2: Rat Brain Tissue Lysate at 50ug  
Lane 3: Mouse Brain Tissue Lysate at 50ug  
Predicted bind size: 22KD  
Observed bind size: 22KD



Anti- Peroxiredoxin 5 Picoband antibody, ABO12075, IHC(P)  
IHC(P): Mouse Intestine Tissue



Anti- Peroxiredoxin 5 Picoband antibody, ABO12075, IHC(P)  
IHC(P): Rat Intestine Tissue



Anti- Peroxiredoxin 5 Picoband antibody, ABO12075, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti- Peroxiredoxin 5 Picoband antibody, ABO12075, ICCICC: SMMC Cell

#### **Anti-Peroxiredoxin 5 Picoband Antibody - Background**

PRDX5 (peroxiredoxin 5) also known as AOEB166, ACR1,B166, MGC117264, MGC142283, MGC142285, PLP, PMP20, PRDX6, PRXV, SBBI10, is a member of the peroxiredoxin family and may play an antioxidant protective role in various tissues under nonpathologic conditions and during inflammatory processes. The PRDX5 gene is mapped to 11q13.1. PRDX5 displays mitochondrial presequence features and has 3 cysteines implicated in antioxidant activity and a C-terminal SQL peroxisomal targeting sequence. Northern blot analysis revealed ubiquitous expression of a 1.0-kb PRDX5 transcript in tissues and cell lines. Functional analysis showed that PRDX5 has antioxidant activity equivalent to that of CAT. While PRDX5 was localized to fibroblasts in normal tendon, it was localized to fibroblasts and endothelial cells in degenerative tendon. PRDX5 mRNA and protein levels increased at 12 hours, and the increase in PRDX5 expression correlated with reduced peroxide levels. PRDX5 plays a protective role against oxidative stress in human cartilage.