10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-Peroxiredoxin 5 Picoband Antibody

Catalog # ABO12075

Specification

Anti-Peroxiredoxin 5 Picoband Antibody - Product Information

Application	**WB, IHC-P, ICC**
Primary Accession	P30044
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, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 Na2HPO4, 0.05mg NaN3.

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 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 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 Cytomety
- Cell Culture

Anti-Peroxiredoxin 5 Picoband Antibody - Images

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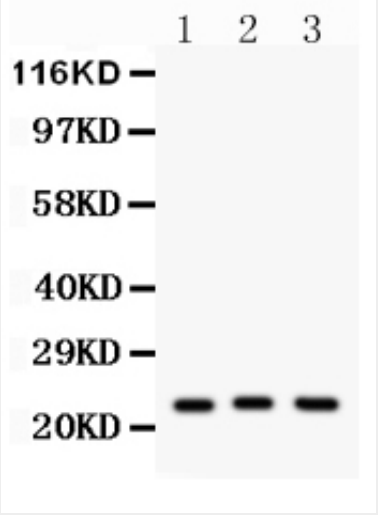
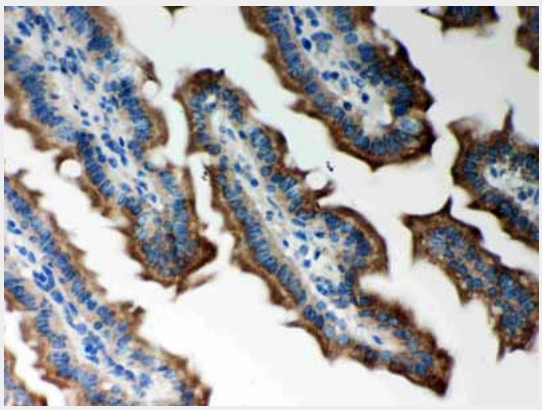
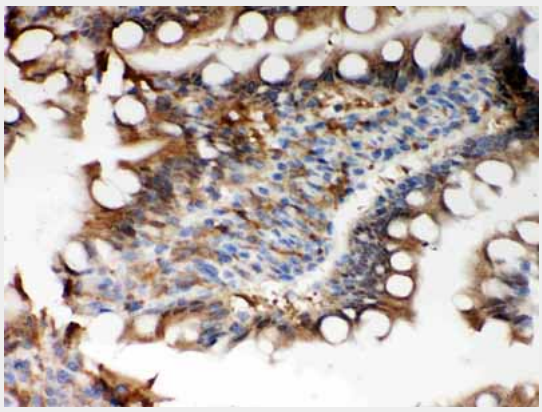


Anti- Peroxiredoxin 5 Picoband antibody, ABO12075, Western blottingAll lanes: Anti Peroxiredoxin 5 (ABO12075) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: Rat Brain Tissue Lysate at 50ugLane 3: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 22KDObserved bind size: 22KD



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

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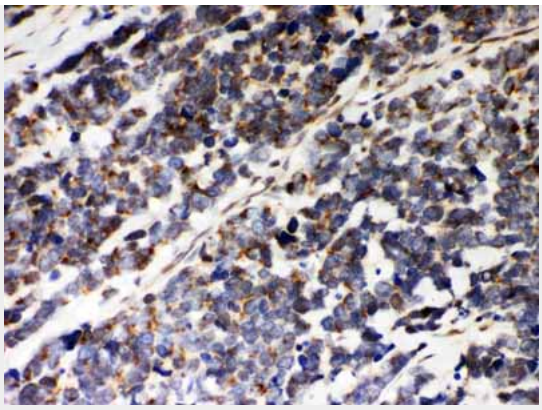
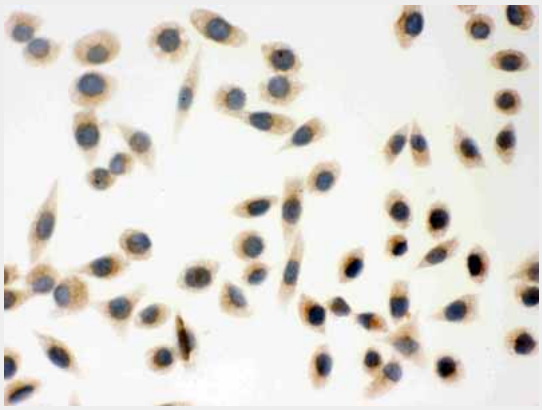


Anti- Peroxiredoxin 5 Picoband antibody, ABO12075, IHC(P)IHC(P): Human Lung Cancer Tissue



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 to11q13.1. 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.