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

Anti-Peroxiredoxin 5 Antibody

Catalog # ABO11146

Specification

Anti-Peroxiredoxin 5 Antibody - Product Information

Application	**WB, IHC-P**
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 in Human;Mouse;Rat.

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

Anti-Peroxiredoxin 5 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
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

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 Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human Peroxiredoxin 5(166-181aa DDSLVSIFGNRRLKRF), identical to the related mouse and rat sequences.

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 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 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 Antibody - Images

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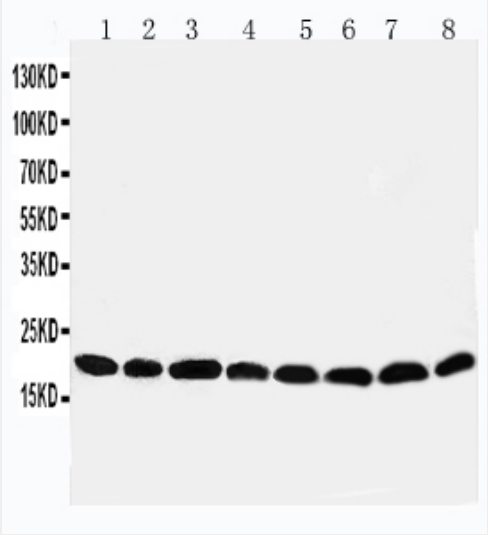
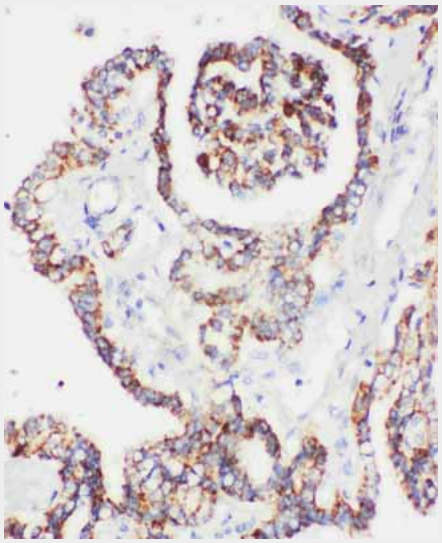
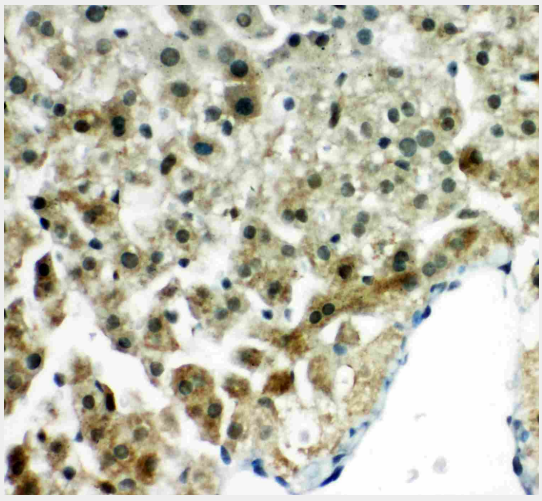


Anti-Peroxiredoxin 5 antibody, ABO11146, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Lung Tissue LysateLane 3: Rat Liver Tissue LysateLane 4: Rat Kidney Tissue LysateLane 5: HELA Cell Lysate Lane 6: 293T Cell LysateLane 7: MCF-7 Cell LysateLane 8: A549 Cell Lysate



Anti-Peroxiredoxin 5 antibody, ABO11146, IHC(P)IHC(P): Human Prostatic Cancer Tissue



Anti-Peroxiredoxin 5 antibody, ABO11146, IHC(P)IHC(P): Rat Liver Tissue

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Anti-Peroxiredoxin 5 Antibody - Background

PRDX5(peroxiredoxin 5) also known asÂ AOEB166, ACR1,B166, MGC117264, MGC142283, MGC142285, PLP, PMP20,Â 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 on 11q13.1. PRDX5Â 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-kbÂ PRDX5Â transcript in tissues and cell lines.Â Functional analysis showed thatÂ PRDX5Â has antioxidant activity equivalent to that of CAT. WhileÂ PRDX5Â was localized to fibroblasts in normal tendon, it was localized to fibroblasts and endothelial cells in degenerative tendon. PRDX5Â mRNA and protein levels increased at 12 hours, and the increase inÂ PRDX5Â expression correlated with reduced peroxide levels. PRDX5Â plays a protective role against oxidative stress in human cartilage.