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

Anti-Peroxiredoxin 5 Antibody

Catalog # ABO11146

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Isoform Mitochondrial: Mitochondrion.
Tissue Specificity	Widely expressed. .
Source	Eukaryota
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.

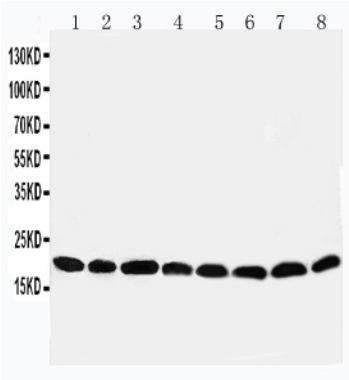
Protein Information

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..

Background

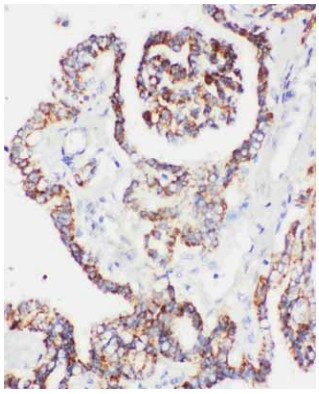
PRDX5(peroxiredoxin 5) also known as AOEB166, ACR1,B166, MGC117264, MGC142283, MGC142285, PLP, PMP20, PRDX6, PRXV, SBBI10, is a member of the peroxiredoxin family and may play an antioxidant protective role in various tissues under nonpathologic conditions and during inflammatory processes. The PRDX5 gene is mapped on 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.

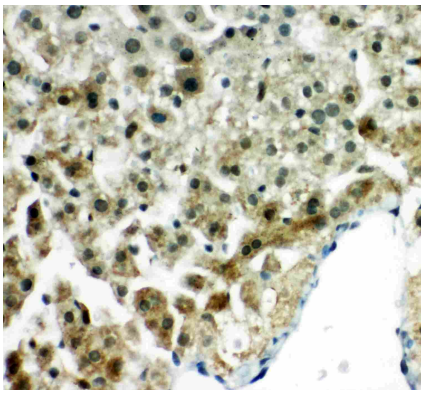
Images



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