BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-Peroxiredoxin 5/PRDX5 Antibody Picoband™

Catalog Number: PB9384

About PRDX5

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.

Overview

Product Name	Anti-Peroxiredoxin 5/PRDX5 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Peroxiredoxin 5/PRDX5 Antibody Picoband™ catalog # PB9384. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P30044

Technical Details

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.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.

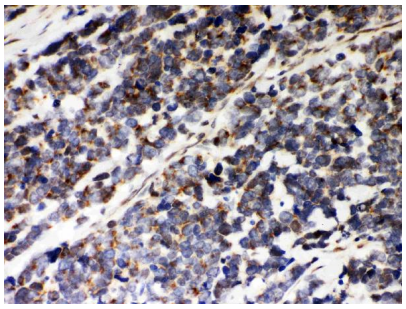
BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat Immunocytochemistry/Immunofluorescence, 2ug/ml, Human Flow Cytometry, 1-3ug/1x10^6 cells, Human

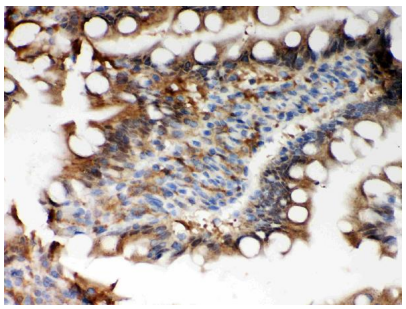
BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

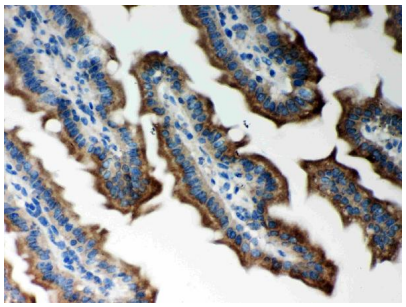
Anti-Peroxiredoxin 5/PRDX5 Antibody Picoband™ (PB9384) Images



Anti-Peroxiredoxin 5 Picoband antibody, PB9384, IHC(P)
IHC(P): Human Lung Cancer Tissue



Anti-Peroxiredoxin 5 Picoband antibody, PB9384, IHC(P)
IHC(P): Rat Intestine Tissue



Anti-Peroxiredoxin 5 Picoband antibody, PB9384, IHC(P)
IHC(P): Mouse Intestine Tissue

Anti-Peroxiredoxin 5 Picoband antibody, PB9384, Western blotting
All lanes: Anti Peroxiredoxin 5 (PB9384) 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

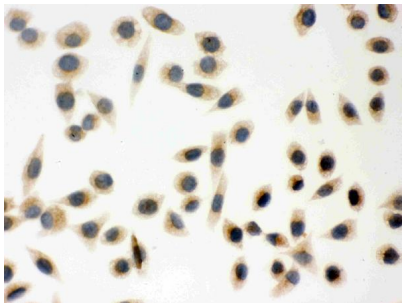


Figure 5. IHC analysis of Peroxiredoxin 5 using anti-Peroxiredoxin 5 antibody (PB9384).
Peroxiredoxin 5 was detected in immunocytochemical section of SMMC Cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 1ug/ml rabbit anti-Peroxiredoxin 5 Antibody (PB9384) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

antibody and incubated for 30 minutes at 37°C. The section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

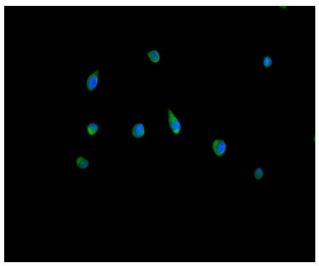


Figure 6. IF analysis of Peroxiredoxin 5 using anti-Peroxiredoxin 5 antibody (PB9384).
Peroxiredoxin 5 was detected in immunocytochemical section of HELA cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-Peroxiredoxin 5 Antibody (PB9384) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

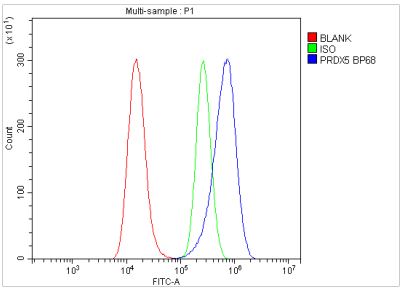


Figure 7. Flow Cytometry analysis of A549 cells using anti-Peroxiredoxin 5 antibody (PB9384).
Overlay histogram showing A549 cells stained with PB9384 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Peroxiredoxin 5 Antibody (PB9384,1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a $20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.