

## PRDX4 Polyclonal antibody

Catalog Number: 10703-1-AP

Featured Product

19 Publications

## Basic Information

## Catalog Number:

10703-1-AP

## Size:

300 µg/ml

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG1177

## GenBank Accession Number:

BC007107

## GeneID (NCBI):

10549

## UNIPROT ID:

Q13162

## Full Name:

peroxiredoxin 4

## Calculated MW:

31 kDa

## Observed MW:

30 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

## Applications

## Tested Applications:

FC, IF/ICC, IHC, IP, WB, ELISA

## Cited Applications:

WB, IP, IF, IHC

## Species Specificity:

human

## Cited Species:

human, rat, mouse, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Positive Controls:

WB : A375 cells, HepG2 cells, HEK-293 cells

IP : HepG2 cells,

IHC : human colon cancer tissue, human pancreas cancer tissue, human liver cancer tissue

IF : HepG2 cells,

## Background Information

PRDX4 (Peroxiredoxin-4) is also named as AOE37-2, Prx-IV and belongs to the AhpC/TSA family. PRDX4 is associated with acrosome formation during rat spermatogenesis and has a protective role in the male reproductive tract, because the phenotype of mice lacking this isoform includes testicular atrophy and increased sperm DNA damage (PMID:20864641). It is initially synthesized as a membrane-binding 31-kDa protein and processed into a 27-kDa secretory form and is discarded with the residual bodies (PMID:19208552). PRDX4 is a pentamer of dimers (PMID:23025503). This antibody is specific to PRDX4.

## Notable Publications

| Author       | Pubmed ID | Journal               | Application  |
|--------------|-----------|-----------------------|--------------|
| Ling Fu      | 31411056  | Antioxid Redox Signal | WB           |
| Chenhao Xu   | 33161253  | Bioorg Chem           | WB           |
| Daria Sicari | 31647176  | FEBS J                | WB,IHC,IF,IP |

## Storage

## Storage:

Store at -20°C. Stable for one year after shipment.

## Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

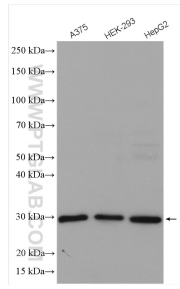
For technical support and original validation data for this product please contact:

T: 4006900926

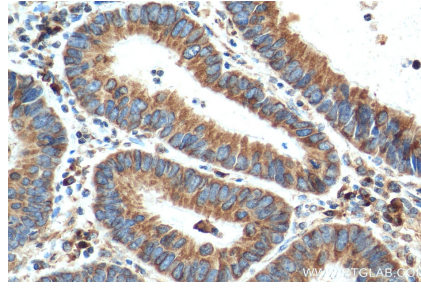
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

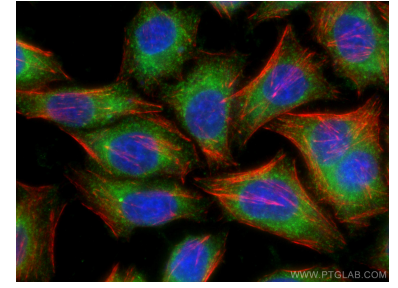
## Selected Validation Data



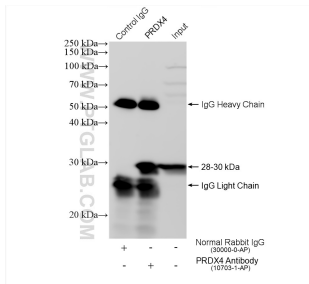
Various lysates were subjected to SDS PAGE followed by western blot with 10703-1-AP (PRDX4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



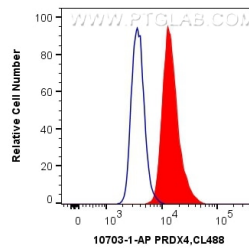
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10703-1-AP (PRDX4 antibody) at dilution of 1:200 (under 40x Lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



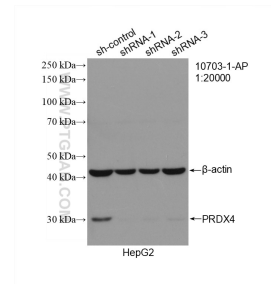
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PRDX4 antibody (10703-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-PRDX4 (IP:10703-1-AP, 4 $\mu$ g; Detection:10703-1-AP 1:4000) with HepG2 cells lysate 2040  $\mu$ g.



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4  $\mu$ g Anti-Human PRDX4 (10703-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4  $\mu$ g Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



WB result of PRDX4 antibody (10703-1-AP; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRDX4 transfected HepG2 cells.