

For Research Use Only

# PRDX4 Polyclonal antibody

Catalog Number: 10703-1-AP

Featured Product

24 Publications



## Basic Information

### Catalog Number:

10703-1-AP

### Size:

150ul, Concentration: 300 ug/ml by Nanodrop;

### 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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human

### Cited Species:

human, mouse, rat, 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/ICC : 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

\*\*\* 20ul sizes contain 0.1% BSA

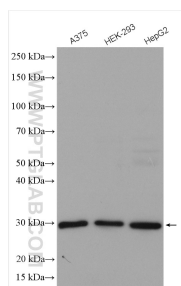
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

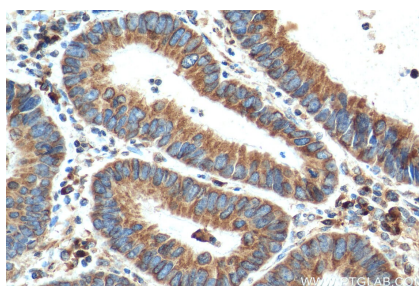
E: proteintech@ptglab.com  
W: ptglab.com

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

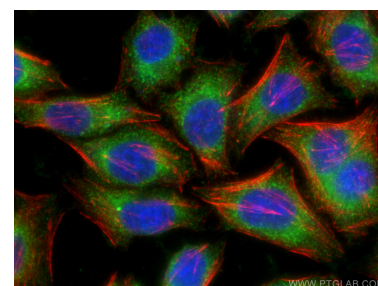
## Selected Validation Data



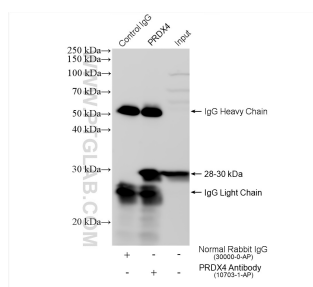
Various lysates were subjected to SDS PAGE followed by western blot with 10703-1-AP (PRDX4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



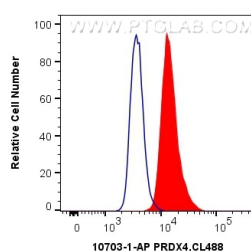
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10703-1-AP (PRDX4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



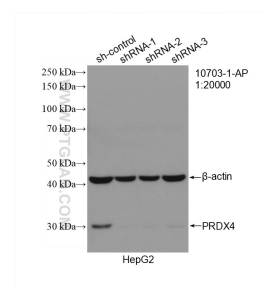
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PRDX4 antibody (10703-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug 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 ug 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.