

For Research Use Only

# PRDX4 Monoclonal antibody

Catalog Number: 60286-1-Ig

Featured Product

3 Publications



## Basic Information

Catalog Number:

60286-1-Ig

Size:

150ul, Concentration: 1100 ug/ml by Nanodrop and 727 ug/ml by Bradford method using BSA as the standard;

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG13401

GenBank Accession Number:

BC007107

GeneID (NCBI):

10549

UNIPROT ID:

Q13162

Full Name:

peroxiredoxin 4

Calculated MW:

31 kDa

Observed MW:

30 kDa

Purification Method:

Protein A purification

CloneNo.:

5B6F1

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:20-1:200

IF/ICC 1:400-1:1600

## Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

**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** : LNCaP cells, NIH/3T3 cells, HeLa cells, HepG2 cells, K-562 cells, PC-12 cells, HEK-293 cells, Jurkat cells, HSC-T6 cells

**IHC** : human colon tissue, human pancreas cancer tissue, human prostate 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).

## Notable Publications

| Author           | Pubmed ID | Journal                    | Application |
|------------------|-----------|----------------------------|-------------|
| Wangjuan Dai     | 36334439  | Biochem Biophys Res Commun | IF          |
| Alexander Vdovin | 36357400  | Nat Commun                 | WB          |
| Youyi Liu        | 38254641  | Biomolecules               | WB          |

## 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

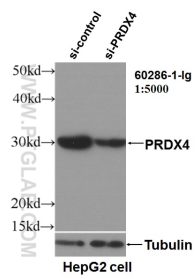
For technical support and original validation data for this product please contact:

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

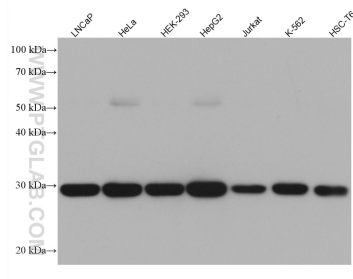
E: proteintech@ptglab.com  
W: ptglab.com

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

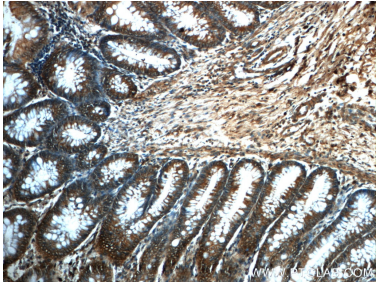
Selected Validation Data



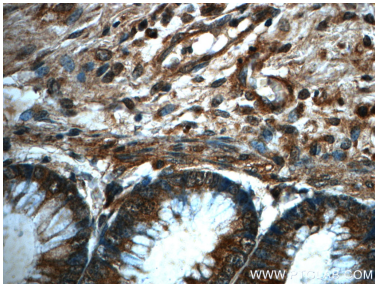
WB result of PRDX4 antibody (60286-1-Ig, 1:5000) with si-Control and si-PRDX4 transfected HepG2 cells.



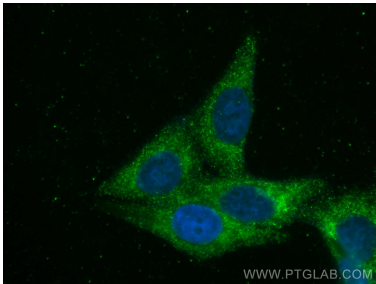
Various lysates were subjected to SDS PAGE followed by western blot with 60286-1-Ig (PRDX4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon slide using 60286-1-Ig (PRDX4 Antibody) at dilution of 1:50(under 10x lens).



Immunohistochemical analysis of paraffin-embedded human colon slide using 60286-1-Ig (PRDX4 Antibody) at dilution of 1:50(under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PRDX4 antibody (60286-1-Ig, Clone: 5B6F1) at dilution of 1:800 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L).