

For Research Use Only

# peroxiredoxin 2 Polyclonal antibody

Catalog Number: 10545-2-AP

Featured Product

45 Publications



## Basic Information

### Catalog Number:

10545-2-AP

### Size:

150ul, Concentration: 400 µg/ml by Nanodrop and 200 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0835

### GenBank Accession Number:

BC003022

### GeneID (NCBI):

7001

### Full Name:

peroxiredoxin 2

### Calculated MW:

22 kDa

### Observed MW:

22 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:8000

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

IHC 1:600-1:3000

IF 1:50-1:500

## Applications

### Tested Applications:

IF, IHC, IP, WB, ELISA

### Cited Applications:

CoIP, IF, IHC, IP, RIP, WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human, rat, 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: HepG2 cells, C2C12 cells, PC-12 cells

IP: HepG2 cells,

IHC: human liver tissue, human hepatocirrhosis tissue

IF: HepG2 cells, HeLa cells

## Background Information

PRDX2, also named as TSA, PRP, NKEFB and TDPX1, belongs to the ahpC/TSA family. It is known to act as an antioxidant enzyme whose main function is H<sub>2</sub>O<sub>2</sub> reduction in cells. PRDX2 is involved in redox regulation of the cell. It reduces peroxides with reducing equivalents provided through the thioredoxin system. It may play an important role in eliminating peroxides generated during metabolism. PRDX2 might participate in the signaling cascades of growth factors and tumor necrosis factor-α by regulating the intracellular concentrations of H<sub>2</sub>O<sub>2</sub>. PRDX2 actions may be related to the expression of NFκB and IκB. (PMID:21248284)

## Notable Publications

Author	Pubmed ID	Journal	Application
Tingyi Zhao	32892658	Free Radic Res	WB
Ling Fu	31411056	Antioxid Redox Signal	WB
Zhiwei Liao	34476937	ACS Nano	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

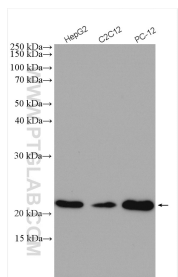
For technical support and original validation data for this product please contact:

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

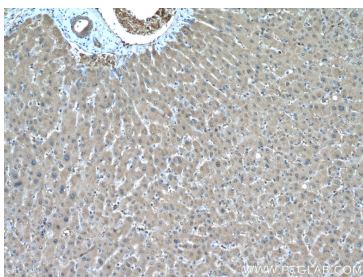
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

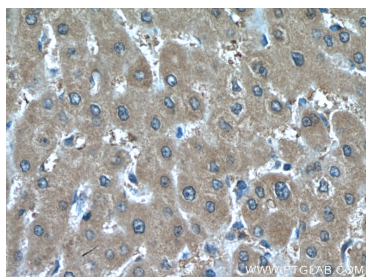
Selected Validation Data



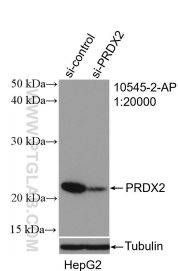
Various lysates were subjected to SDS PAGE followed by western blot with 10545-2-AP (peroxiredoxin 2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



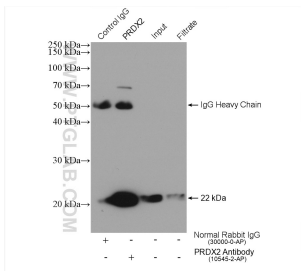
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 10545-2-AP (peroxiredoxin 2 antibody) at dilution of 1:600 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



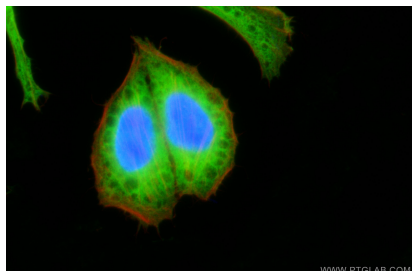
Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 10545-2-AP (peroxiredoxin 2 antibody) at dilution of 1:600 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of peroxiredoxin 2 antibody (10545-2-AP; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-peroxiredoxin 2 transfected HepG2 cells.



IP result of anti-peroxiredoxin 2 (IP:10545-2-AP, 4ug; Detection:10545-2-AP 1:4000) with HepG2 cells lysate 960 ug.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using peroxiredoxin 2 antibody (10545-2-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).