

For Research Use Only

PRDX4 Polyclonal antibody

Catalog Number: 10703-1-AP

Featured Product

12 Publications



Basic Information

Catalog Number:

10703-1-AP

Size:

150ul, Concentration: 300 µg/ml by Nanodrop and 233 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1177

GenBank Accession Number:

BC007107

GeneID (NCBI):

10549

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 IP and 1:500-1:1000 for WB

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

FC, IF, IHC, IP, WB, ELISA

Cited Applications:

IF, IHC, IP, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

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, Jurkat cells, HEK-293 cells, HepG2 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 |
|----------------|-----------|-------------|-----------------|
| Chenhao Xu | 33161253 | Bioorg Chem | WB |
| Daria Sicari | 31647176 | FEBS J | WB, IHC, IF, IP |
| Takujiro Homma | 33087733 | Sci Rep | WB, IF, IHC |

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

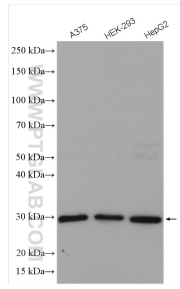
For technical support and original validation data for this product please contact:

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

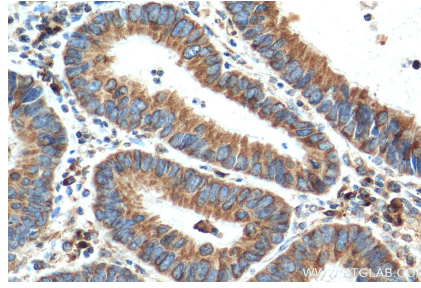
E: proteintech@ptglab.com
W: ptglab.com

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

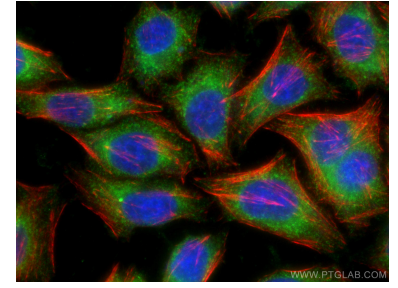
Selected Validation Data



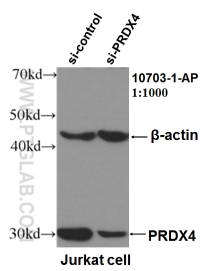
Various lysates were subjected to SDS PAGE followed by western blot with 10703-1-AP (PRDX4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



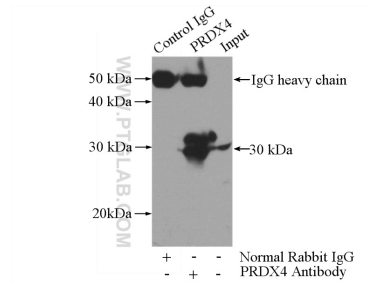
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10703-1-AP (PRDX4 antibody) at dilution of 1:200 (under 40x Lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



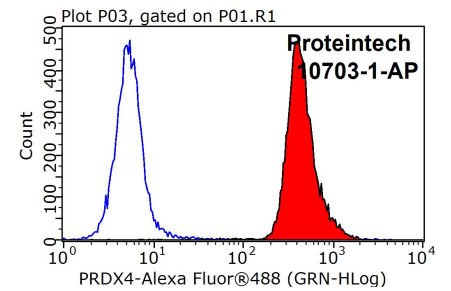
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PRDX4 antibody (10703-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



WB result of PRDX4 antibody (10703-1-AP, 1:1000) with si-Control and si-PRDX4 transfected Jurkat cells.



IP Result of anti-PRDX4 (IP:10703-1-AP, 3ug; Detection:10703-1-AP 1:500) with HepG2 cells lysate 4000ug.



1X10⁶ HepG2 cells were stained with 0.2ug PRDX4 antibody (10703-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.