

PRDX4 Polyclonal antibody

Catalog Number: 10703-1-AP

Featured Product

26 Publications

Basic Information

Catalog Number:

10703-1-AP

Concentration:

300 ug/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 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF, IP, CoIP

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,

FC (Intra) : 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, pH7.3

Aliquoting is unnecessary for -20°C storage

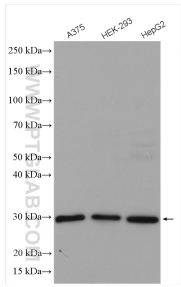
For technical support and original validation data for this product please contact:

T: 4006900926

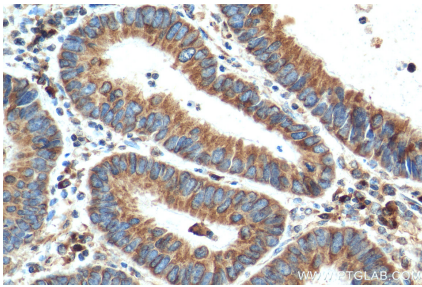
E: Proteintech-CN@ptglab.comW: ptgcn.com

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

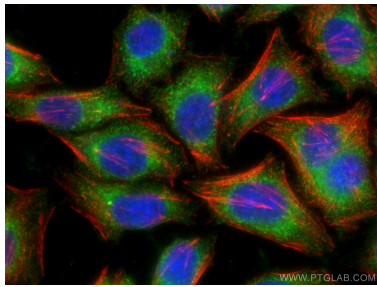
Selected Validation Data



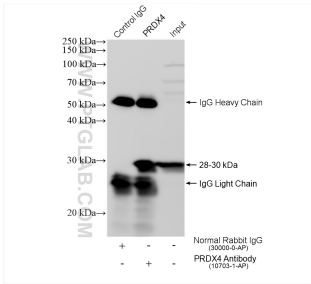
Various lysates were subjected to SDS PAGE followed by western blot with 10703-1-AP (PRDX4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



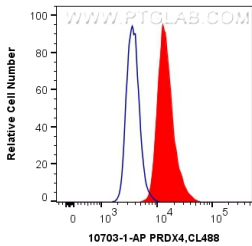
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10703-1-AP (PRDX4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



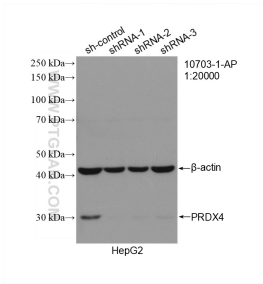
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PRDX4 antibody (10703-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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



1X10⁶ 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.