For Research Use Only

GPX4 Polyclonal antibody

Catalog Number: 30388-1-AP

Featured Product

80 Publications



Basic Information

Catalog Number: GenBank Accession Number:

30388-1-AP BC021567
Size: GenelD (NCBI):

150ul, Concentration: 550 ug/ml by 2879
Nanodrop:

Nanodrop; UNIPROT ID:
Source: P36969
Rabbit Full Name:

 Isotype:
 glutathione peroxidase 4

 IgG
 (phospholipid hydroperoxidase)

Immunogen Catalog Number: Observed MW: AG30650 18-23 kDa

Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IF-P 1:50-1:500

Applications

Tested Applications:

WB, IF-P, FC (Intra), IP, ELISA

Cited Applications: WB, IHC, IF, IP Species Specificity: human, mouse, rat Cited Species:

human, mouse, rat, pig

Positive Controls:

WB: HCT 116 cells, HL-60 cells, HEK-293 cells, Jurkat cells, mouse brain tissue, rat brain tissue

IP: rat testis tissue,
IF-P: rat testis tissue.

Background Information

GPX4 (Phospholipid hydroperoxide glutathione peroxidase, mitochondrial) protects cells against membrane lipid peroxidation and cell death. Required for normal sperm development and male fertility. It has two isforms about 20KDa and 22KDa, respectively. GPX4 is a monomer, but it has a tendency to form higher mass oligomers (PMID:17630701). It presents primarily in testis.

Notable Publications

Author	Pubmed ID	Journal	Application
Xin Zhou	39897031	Int J Biol Sci	WB,IP
Xiuxia Wang	39820341	Cell Death Discov	WB
Shasha Huang	39818137	Ecotoxicol Environ Saf	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

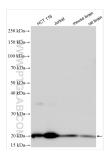
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

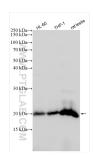
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

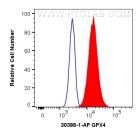
Selected Validation Data



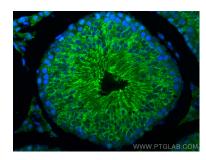
Various lysates were subjected to SDS PAGE followed by western blot with 30388-1-AP (GPX4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



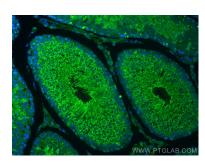
Various lysates were subjected to SDS PAGE followed by western blot with 30388-1-AP (GPX4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



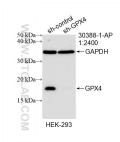
1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human GPX4 (30388-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



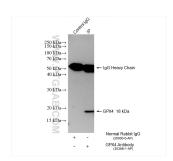
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat testis tissue using GPX4 antibody (30388-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat testis tissue using GPX4 antibody (30388-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of GPX4 antibody (30388-1-AP; 1:2400; incubated at room temperature for 1.5 hours) with sh-Control and sh-GPX4 transfected HEK-293 cells.



IP result of anti-GPX4 (IP:30388-1-AP, 4ug; Detection:30388-1-AP 1:3000) with rat testis tissue lysate 1880 ug.