

For Research Use Only

# GPX4 Monoclonal antibody

Catalog Number: 67763-1-Ig

Featured Product

612 Publications



## Basic Information

Catalog Number:

67763-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG30650

GenBank Accession Number:

BC021567

GeneID (NCBI):

2879

UNIPROT ID:

P36969

Full Name:

glutathione peroxidase 4 (phospholipid hydroperoxidase)

Observed MW:

20-23 kDa

Purification Method:

Protein A purification

CloneNo.:

3F5G5

Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:1000-1:4000

IF-P: 1:200-1:800

IF/ICC: 1:400-1:1600

## Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse, rat, pig, rabbit, chicken, zebrafish, hamster, dog

Cited Species:

human, mouse, rat, pig, chicken, bovine, sheep, goat, duck

**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**: EC109 cells, HEK-293 cells, NCCIT cells, pig brain tissue, rabbit testis tissue, HeLa cells, HepG2 cells, Jurkat cells, HSC-T6 cells, 4T1 cells, ATDC-5 cells, MDCK cells, CHO cells, Chicken brain tissue, Zebrafish tissue, human platelet tissue, rat brain tissue, mouse brain tissue, rabbit brain tissue, rat testis tissue, mouse testis tissue

**IHC**: human liver cancer tissue, mouse testis tissue, rat testis tissue

**IF-P**: mouse testis tissue,

**IF/ICC**: HeLa cells,

## 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 isoforms 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
Wenyuan Li	34588431	Cell Death Discov	WB, IF
Yue Li	36234847	Molecules	WB
Li Li	36153926	Asian J Androl	WB, IHC

## 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

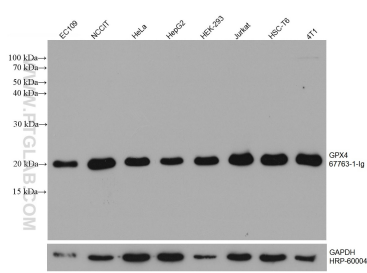
For technical support and original validation data for this product please contact:

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

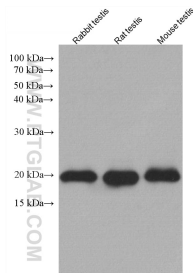
E: proteintech@ptglab.com  
W: ptglab.com

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

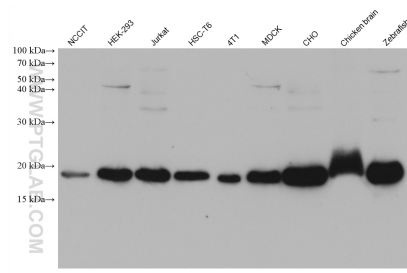
Selected Validation Data



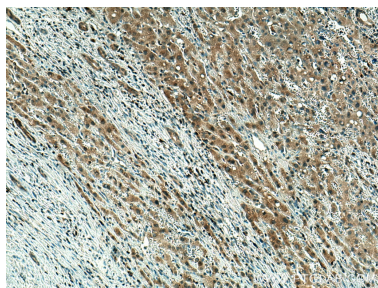
Various lysates were subjected to SDS PAGE followed by western blot with 67763-1-Ig (GPX4 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



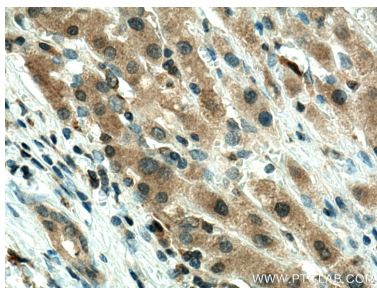
Various lysates were subjected to SDS PAGE followed by western blot with 67763-1-Ig (GPX4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



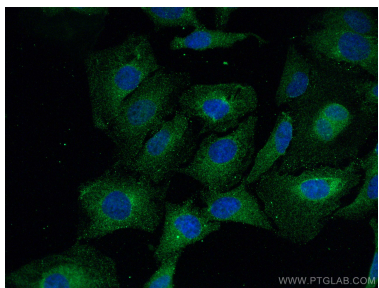
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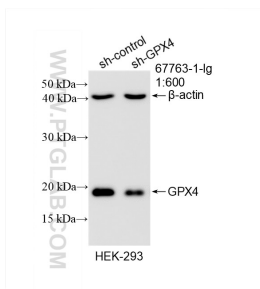
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67763-1-Ig (GPX4 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



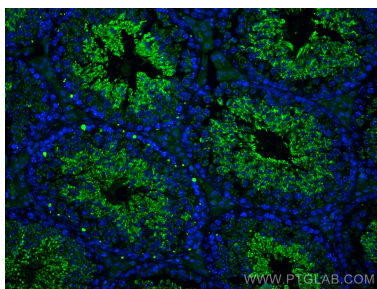
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67763-1-Ig (GPX4 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using GPX4 antibody (67763-1-Ig, Clone: 3F5G5 ) at dilution of 1:800 and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



WB result of GPX4 antibody (67763-1-Ig; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-GPX4 transfected HEK-293 cells.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse testis tissue using GPX4 antibody (67763-1-Ig, Clone: 3F5G5 ) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).