For Research Use Only

GPX4 Monoclonal antibody

Catalog Number:67763-1-lg Featured Product 539 Publications

GenBank Accession Number:



Basic Information

Catalog Number: 67763-1-lg Concentration: 1000 ug/ml

UNIPROT ID: Source: Mouse P36969 Full Name: Isotype: lgG2b glutathione peroxidase 4

Immunogen Catalog Number:

(phospholipid hydroperoxidase)

AG30650 Observed MW:

20-23 kDa

BC021567

2879

GeneID (NCBI):

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, goat, sheep,

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

Storage

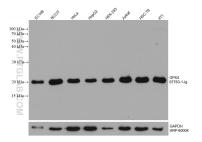
Storage:

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

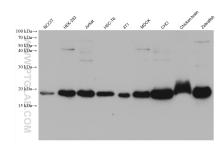
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

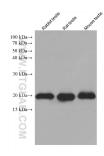
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67763-1-lg (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



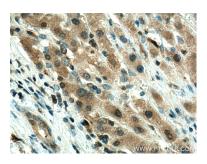
Various lysates were subjected to SDS PAGE followed by western blot with 67763-1-lg (GPX4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



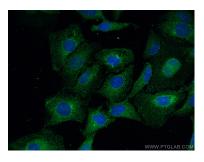
Various lysates were subjected to SDS PAGE followed by western blot with 67763-1-1g (GPX4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



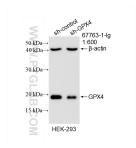
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67763-1-lg (GPX4 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



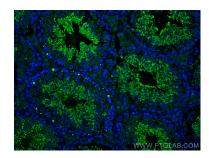
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67763-1-lg (GPX4 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using GPX4 antibody (67763-1-lg, 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-lg; 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).