For Research Use Only

PRX5 Monoclonal antibody

Catalog Number:67599-1-lg

Featured Product 3 Publications

BC110983

GeneID (NCBI):

UNIPROT ID:

Full Name:

peroxiredoxin 5

P30044

GenBank Accession Number:



Basic Information

Catalog Number:

67599-1-lg

Size:

150ul, Concentration: 333 ug/ml by 25824 Bradford method using BSA as the

standard;

Source: Mouse Isotype:

lgG1 Immunogen Catalog Number:

AG12262

Calculated MW: 214 aa, 22 kDa Observed MW: 17 kDa

Purification Method:

Protein G purification

CloneNo.: 1B8C5

Recommended Dilutions:

WB 1:2000-1:10400 IHC 1:200-1:1000 IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IF, IP

Species Specificity:

Human, rat

Cited Species: human, 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: HCT 116 cells, LNCaP cells, HepG2 cells, HeLa cells, Jurkat cells, K-562 cells, HEK-293 cells

IHC: human liver cancer tissue,

IF/ICC: HeLa cells,

Background Information

Peroxiredoxin 5 (Prx5) is a member of a family consisting of six antioxidant enzymes. Prx5 is ubiquitously expressed in various tissues including mitochondria and peroxisomes, implying that Prx5 functions as a regulator of the cellular oxidation state. Prx5 plays a critical role in protecting cells from oxidative stress by inhibiting the accumulation of reactive oxygen species and cell death. Prx5 has an intensive ROS scavenging activity because it is located in the cytosol and mitochondria. Prx5 expression was upregulated during adipogenesis and Prx5 overexpression suppressed adipogenesis by regulating cytosolic and mitochondrial ROS generation. (PMID: 29777756, PMID: 31505325, PMID: 22020876)

Notable Publications

Author	Pubmed ID	Journal	Application
Jinshuo Yang	39326715	Brain Res Bull	WB,IF
Rong Wang	39168191	Int J Biol Macromol	WB,IP,IF
Rong Wang	38115765	Adv Sci (Weinh)	WB

Storage

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

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

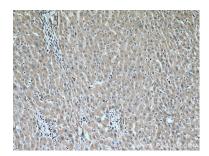
For technical support and original validation data for this product please contact:

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

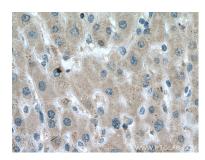
E: proteintech@ptglab.com W: ptglab.com

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

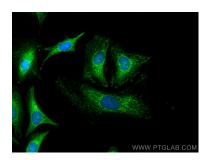
Selected Validation Data



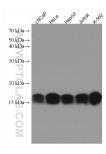
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67599-1-Ig (PRX5 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



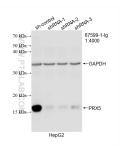
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67599-1-1g (PRX5 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



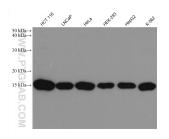
Immunofluorescent analysis of (4% PFA) fixed Hela cells using PRX5 antibody (67599-1-1g, Clone: 1B8C5) at dilution of 1:400 and Coralite® 488-Conjugated Goat Anti-Mouse IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 67599-1-1g (PRX5 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



WB result of PRX5 antibody (67599-1-lg; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRX5 transfected HepG2 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 67599-1-1g (PRX5 antibody) at dilution of 1:5200 incubated at room temperature for 1.5 hours.