

For Research Use Only

# PRX5 Monoclonal antibody

Catalog Number: 67599-1-Ig

Featured Product

4 Publications



## Basic Information

Catalog Number:

67599-1-Ig

Size:

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

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG12262

GenBank Accession Number:

BC110983

GeneID (NCBI):

25824

UNIPROT ID:

P30044

Full Name:

peroxiredoxin 5

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, IHC, IF, IP

Species Specificity:

human, rat

Cited Species:

human, mouse, 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
Rong Wang	39900986	Br J Cancer	IHC
Jinshuo Yang	39326715	Brain Res Bull	WB,IF
Rong Wang	39168191	Int J Biol Macromol	WB,IP,IF

## 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

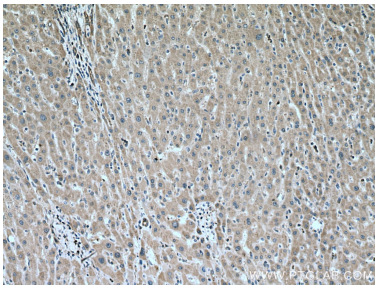
For technical support and original validation data for this product please contact:

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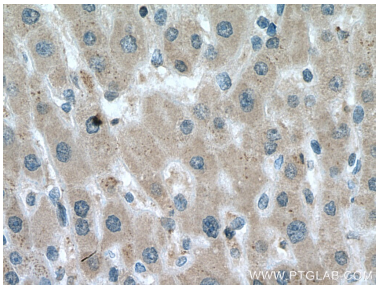
E: proteintech@ptglab.com  
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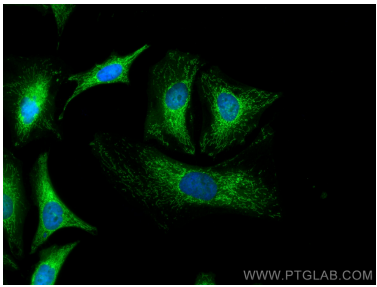
Selected Validation Data



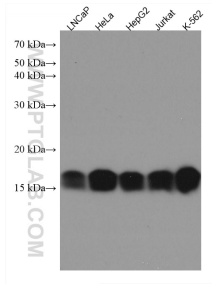
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67599-1-Ig (PRX5 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



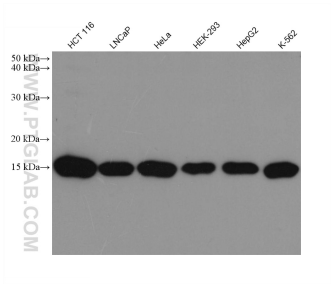
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67599-1-Ig (PRX5 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



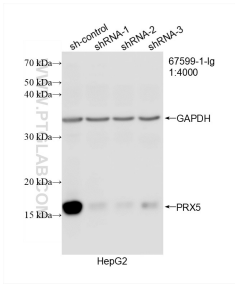
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PRX5 antibody (67599-1-Ig, Clone: 1B8C5 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



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



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



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