For Research Use Only

# TIP47 Monoclonal antibody

Catalog Number:66523-1-Ig 1 Publications

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## Basic Information

Catalog Number:
66523-1-Ig

Size:
150ul , Concentration: 1600 μg/ml by Nanodrop and 1000 μg/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG1028

GenBank Accession Number:
BC007566

GeneID (NCBI):
10226

Full Name:
mannose-6-phosphate receptor binding protein 1

Calculated MW:
47 kDa

Observed MW:
47 kDa

Purification Method:
Protein G purification

CloneNo.:
4C11B1

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:150-1:600
IF 1:200-1:800

## Applications

Tested Applications:
IF, IHC, WB, ELISA

Cited Applications:
WB

Species Specificity:
Human, mouse

Cited Species:
mouse

***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 : HepG2 cells, U2OS cells, A549 cells, A431 cells, LNCaP cells, K-562 cells

IHC : mouse liver tissue,

IF : oleic acid treated HeLa cells,

## Background Information

Mannose 6-phosphate receptors (M6PRs) transport newly synthesized lysosomal hydrolases from the Golgi to prelysosomes and then return to the Golgi for another round of transport. M6PRBP1 (mannose-6-phosphate receptor binding protein 1), also known as TIP47, PLIN3 or PP17, interacts with the cytoplasmic domains of both cation-independent and cation-dependent M6PRs, and is required for endosome-to-Golgi transport. In addition to M6PR recycling, M6PRBP1 plays a role in lipid droplet biogenesis, and is also implicated in rhodopsin photobleaching and viral infection. M6PRBP1 has been found to be expressed in a variety of human tissues (including colon, liver and lung parenchyme, mammary gland, and skin) and is overexpressed in certain cancer cell lines. It binds to lipid droplets and also occurs in cytosol and on endosomal membranes.

## Notable Publications

| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Zhang-Peng Chen | 36941428 | Nat Neurosci | WB |

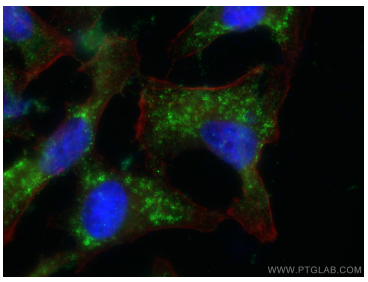
## Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

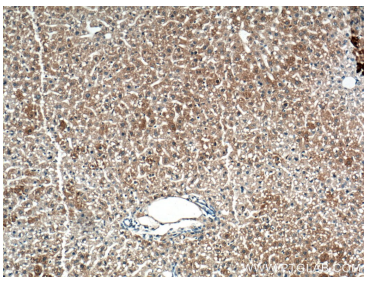
*** 20ul sizes contain 0.1% BSA

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

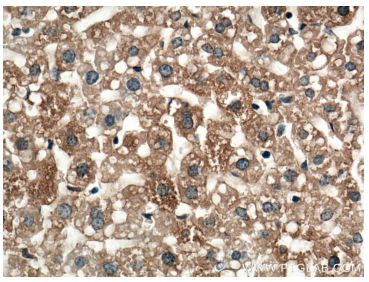
## Selected Validation Data



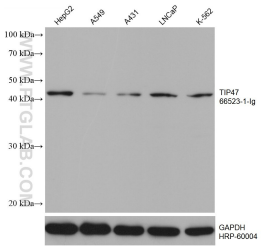
Immunofluorescent analysis of (-20°C Ethanol) fixed oleic acid treated HeLa cells using TIP47 antibody (66523-1-Ig, Clone: 4C11B1 ) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). The F-actin was stained with CL594-Phalloidin (red).



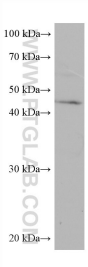
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 66523-1-Ig (TIP47 antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 66523-1-Ig (TIP47 antibody) at dilution of 1:300 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).




Various lysates were subjected to SDS PAGE followed by western blot with 66523-1-Ig (TIP47 antibody) at dilution of 1:10000 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.




U2OS cells were subjected to SDS PAGE followed by western blot with 66523-1-Ig (TIP47 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of (-20°C Ethanol) fixed oleic acid treated HeLa cells using TIP47 antibody (66523-1-Ig, Clone: 4C11B1 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).