| Basic Information | Catalog Number: 10694-1-AP | GenBank Accession Number: BC007566 | Purification Method: <br> Antigen affinity purification |
| :---: | :---: | :---: | :---: |
|  | Size: | Geneld (NCBI): | Recommended Dilutions: |
|  | $650 \mu \mathrm{~g} / \mathrm{ml}$ | 10226 | WB 1:2000-1:10000 |
|  | Source: | UNIPROT ID: | IP 0.5-4.0 ug for $1.0-3.0 \mathrm{mg}$ of total |
|  | Rabbit |  | protein lysate |
|  | Isotype: | $060664$ | IHC 1:50-1:500 |
|  | $\operatorname{lgG}$ | Full Name: mannose-6-phosphate receptor | IF 1:20-1:200 |
|  | Immunogen Catalog Number: | binding protein 1 |  |
|  | AG1028 | Calculated MW: |  |
|  |  | 47 kDa |  |
|  |  | Observed MW: |  |
|  |  | 47 kDa |  |
| Applications | Tested Applications: <br> FC, IF/ICC, IHC, IP, WB, ELISA |  | Positive Controls: |
|  |  |  | WB : HEK-293 cells, Jurkat cells, 3T3-L1 cells, HeLa |
|  | Cited Applications: |  | cells |
|  | IF, IHC, WB |  | IP : HeLa cells, |
|  | Species Specificity: |  | IHC : mouse liver tissue, mouse ovary tissue |
|  | human, mouse | IHC: mou |  |
|  | Cited Species: <br> IF : MEF cells, oleic acid treated HeLa cells human, rat, mouse |  |  |
|  |  |  |  |  |  |
|  | Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

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 cationindependent 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 |
| :--- | :--- | :--- | :--- |
| Xinyu Bao | 36107452 | J Mol Cell Biol | WB |
| Fangjun Yu | 34493722 | Nat Commun | WB |
| Takahiro Seki | 30184469 | Neurobiol Dis | WB |

$\overline{\text { Storage }}$
Storage:
Store at $-20^{\circ} \mathrm{C}$. Stable for one year after shipment.
Storage Buffer:
PBS with $0.02 \%$ sodium azide and $50 \%$ glycerol pH 7.3.
Aliquoting is unnecessary for $-20^{\circ} \mathrm{C}$ storage
For technical support and original validation data for this product please contact:

| $\mathrm{T}: 4006900926$ | E: Proteintech-CN@ptglab.com | W: ptgcn.com |
| :--- | :--- | :--- |

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Group brand and is not available to purchase from any other manufacturer.


IF result of anti-TIP47 (10694-1-AP,1:500) with MEF cell by Dr.Hector Alex Saka.


Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 10694-1AP (TIP47 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with TrisEDTA buffer ( pH 9.0 ).

Various lysates were subjected to SDS PAGE
followed by western blot with 10694-1-AP (TIP47 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.


Immunofluorescent analysis of ( $-20^{\circ} \mathrm{C}$ Ethanol) fixed oleic acid treated HeLa cells using TIP47 antibody (10694-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Affini Pure Goat AntiRabbit $\operatorname{lgG}(\mathrm{H}+\mathrm{L})$. F -actin was stained with $\mathrm{CL} 594-$ phalloidin.

IP result of anti-TIP47 (IP:10694-1-AP, 3ug; Detection:10694-1-AP 1:1000) with HeLa cells lysate 1000ug.


Immunofluorescent analysis of ( $-20^{\circ} \mathrm{C}$ Ethanol) fixed oleic acid treated HeLa cells using TIP47 antibody (10694-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat AntiRabbit IgG(H+L), CL594-Phalloidin (red).


3T3-L1 cells were subjected to SDS PAGE followed by western blot with 10694-1-AP (TIP47 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.


1X10^6 HeLa cells were stained with 0.2 ug TIP47 antibody (10694-1-AP, red) and control antibody (blue). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit lgG( $\mathrm{H}+\mathrm{L}$ ) with dilution 1:1500. Cells were fixed with 4\% PFA and permeabilized with $0.1 \%$ Triton X -100.

