

For Research Use Only

# GNPNAT1 Polyclonal antibody

Catalog Number: 16282-1-AP

Featured Product

8 Publications



## Basic Information

**Catalog Number:**

16282-1-AP

**Size:**

400 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG9375

**GenBank Accession Number:**

BC012179

**GeneID (NCBI):**

64841

**UNIPROT ID:**

Q96EK6

**Full Name:**

glucosamine-phosphate N-acetyltransferase 1

**Calculated MW:**

184 aa, 21 kDa

**Observed MW:**

21-23 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:20-1:200

## Applications

**Tested Applications:**

WB, IP, IHC, ELISA

**Cited Applications:**

WB, IHC, IF

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, 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: MCF-7 cells, mouse large intestine tissue, MDA-MB-231 cells, mouse colon tissue

IP: mouse large intestine tissue,

IHC: human liver tissue,

## Background Information

Glucosamine-6 phosphate-N-acetyl Transferase (GNPNAT1) is a key enzyme in the hexosamine biosynthetic pathway. It converts D-glucosamine 6-phosphate to N-acetyl-D-glucosamine 6-phosphate, the acetylation step allowing carbon and nitrogen enter into the hexosamine biosynthetic pathway. Recently inhibition of GNPNAT1 has been reported to promote proliferation and aggressiveness of castration-resistant prostate cancer. (27194471) GNPNAT1 is a small dimeric protein localized in the Golgi and endosome membranes.

## Notable Publications

Author	Pubmed ID	Journal	Application
Akash K Kaushik	27194471	Nat Commun	WB,IHC
Wenting Liu	33842535	Front Mol Biosci	IHC
Rajina Shakya	39464080	bioRxiv	WB,IF

## 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

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

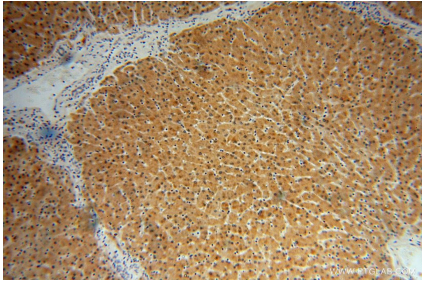
T: 4006900926

E: Proteintech-CN@ptglab.com

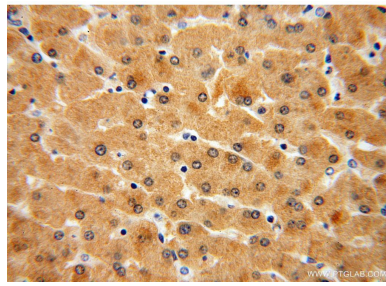
W: ptgcn.com

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

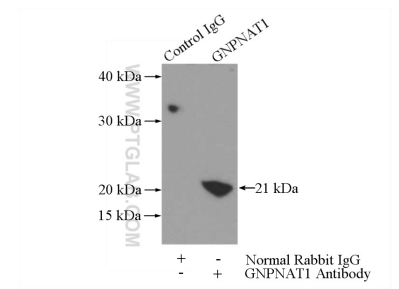
## Selected Validation Data



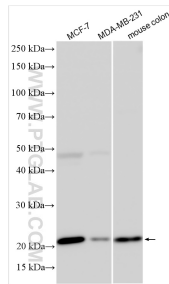
Immunohistochemical analysis of paraffin-embedded human liver using 16282-1-AP (GNPNAT1 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver using 16282-1-AP (GNPNAT1 antibody) at dilution of 1:100 (under 40x lens).



IP result of anti-GNPAT1 (IP:16282-1-AP, 3ug; Detection:16282-1-AP 1:300) with mouse large intestine tissue lysate 3200ug.



Various lysates were subjected to SDS PAGE followed by western blot with 16282-1-AP (GNPNAT1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.