

For Research Use Only

# PNPT1 Polyclonal antibody

Catalog Number: 14487-1-AP

Featured Product

10 Publications



## Basic Information

### Catalog Number:

14487-1-AP

### Concentration:

650 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5888

### GenBank Accession Number:

BC053660

### GeneID (NCBI):

87178

### UNIPROT ID:

Q8TCS8

### Full Name:

polyribonucleotide  
nucleotidyltransferase 1

### Calculated MW:

86 kDa

### Observed MW:

86 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

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

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

**WB**: HEK-293 cells, human brain tissue, HeLa cells,  
Jurkat cells

**IP**: mouse brain tissue,

**IHC**: human gliomas tissue, human skin tissue, human  
spleen tissue, human lung tissue

**IF/ICC**: HeLa cells,

**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

PNPT1 (polynucleotide phosphorylase1; also known as PNPASE) localizes in the mitochondrial intermembrane and regulates RNA import into mitochondria (20691904). PNPT1 is also involved in mRNA degradation. As a type I IFN-inducible gene, PNPT1 plays an essential role in mediating IFN-mediated inflammatory processes (17804700). Recently mutation in PNPT1 has been reported to cause hereditary hearing loss (23084290). This antibody detected the endogenous PNPT1 around 80 kDa in mouse brain.

## Notable Publications

Author	Pubmed ID	Journal	Application
Mrinmoyee Majumder	31940341	PLoS Genet	WB
Tina Pangršič	25691754	Proc Natl Acad Sci U S A	IF
Hongchao Liu	33634111	Front Cell Dev Biol	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:

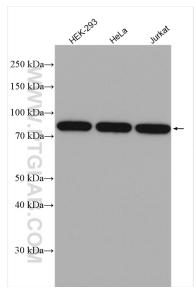
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

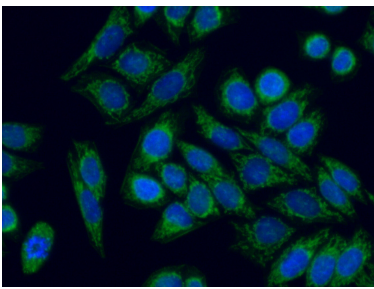
W: [ptgcn.com](http://ptgcn.com)

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

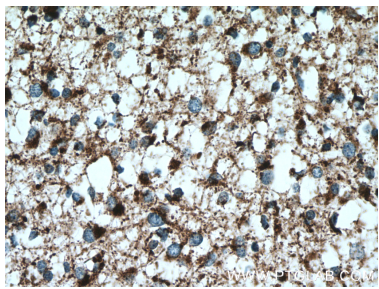
Selected Validation Data



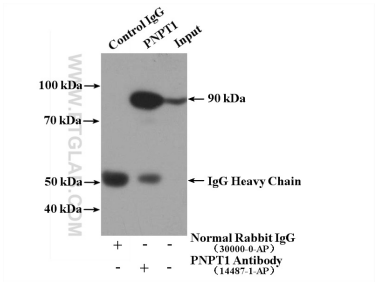
Various lysates were subjected to SDS PAGE followed by western blot with 14487-1-AP (PNPT1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 14487-1-AP (PNPT1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 14487-1-AP (PNPT1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PNPT1 (IP:14487-1-AP, 4ug; Detection:14487-1-AP 1:1000) with mouse brain tissue lysate 4000ug.