

For Research Use Only

# NPC1 Polyclonal antibody

Catalog Number: 13926-1-AP

Featured Product

23 Publications



## Basic Information

### Catalog Number:

13926-1-AP

### Concentration:

600 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4946

### GenBank Accession Number:

BC063302

### GeneID (NCBI):

4864

### UNIPROT ID:

O15118

### Full Name:

Niemann-Pick disease, type C1

### Calculated MW:

142 kDa

### Observed MW:

160-200 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, pig, monkey

**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** : unboiled HEK-293 cells, HEK-293 cells, HepG2 cells, unboiled mouse brain tissue, HeLa cells

**IHC** : human liver cancer tissue, human placenta tissue, human brain tissue

**IF/ICC** : Neuro-2a cells, HepG2 cells

## Background Information

Niemann-Pick Type C (NPC) disease is a lysosomal storage disorder characterized by the accumulation of unesterified cholesterol and other lipids in the endolysosomal system. NPC disease results from a defect in either of two distinct cholesterol-binding proteins: a transmembrane protein, NPC1, and a small soluble protein, NPC2. NPC1 or NPC2 deficiency models showed that the functions of these two proteins within lysosomes are linked closely. NPC1 is a typical transmembrane protein and contains a number of modification sites for glycosylation. Defects in NPC1 are the cause of Niemann-Pick disease type C1 which exhibits highly variable clinical phenotype. Moreover, NPC1 may play a role in vesicular trafficking in glia, a process that may be crucial for maintaining the structural and functional integrity of nerve terminals.

## Notable Publications

Author	Pubmed ID	Journal	Application
Junfang Lyu	28923401	Cancer Lett	WB
Guoli Li	34047913	Sci China Life Sci	WB
Jian Xiao	31144242	Sci China Life Sci	

## 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:

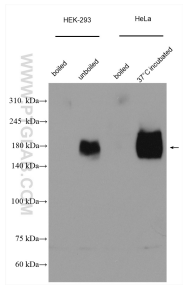
T: 4006900926

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

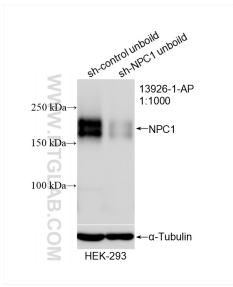
W: [ptgcn.com](http://ptgcn.com)

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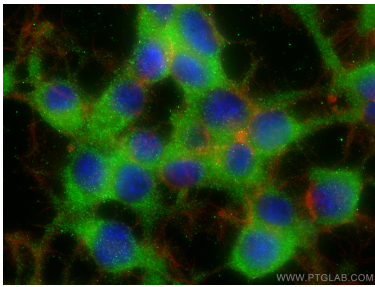
Selected Validation Data



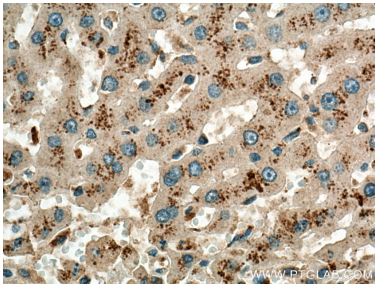
Various lysates were subjected to SDS PAGE followed by western blot with 13926-1-AP (NPC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



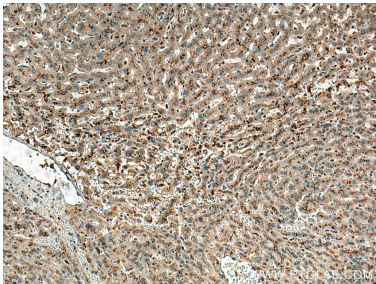
WB result of NPC1 antibody (13926-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NPC1 transfected HEK-293 cells.



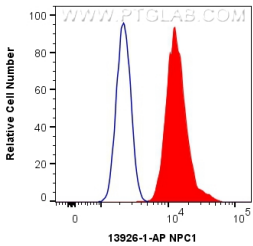
Immunofluorescent analysis of (-20°C Ethanol) fixed Neuro-2a cells using NPC1 antibody (13926-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 13926-1-AP (NPC1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 13926-1-AP (NPC1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human NPC1 (13926-1-AP) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).