#### For Research Use Only

# NPC1 Polyclonal antibody

Catalog Number: 13926-1-AP

**Featured Product** 

**18 Publications** 

BC063302



**Basic Information** 

Catalog Number: GenBank Accession Number: 13926-1-AP

GeneID (NCBI):

150ul, Concentration: 600 µg/ml by 4864 Nanodrop;

Source: Niemann-Pick disease, type C1

Rabbit Calculated MW: Isotype: 142 kDa IgG Observed MW: Immunogen Catalog Number: 160-200 kDa

AG4946

**Tested Applications:** 

FC, IF, IHC, WB, ELISA

**Cited Applications:** 

IHC, WB

Species Specificity:

human, mouse Cited Species:

human, mouse, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000 IHC 1:50-1:500 IF 1:50-1:500

**Applications** 

Positive Controls:

WB: unboiled HEK-293 cells, unboiled mouse brain

tissue, HepG2 cells, HeLa cells

IHC: human liver cancer tissue, human placenta

tissue, human brain tissue

IF: HepG2 cells,

### **Background Information**

Niemann-Pick Type C (NPC) disease is a lysosomal storage disorder characterized by 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.

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

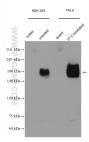
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

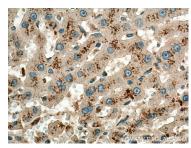
E: proteintech@ptglab.com W: ptglab.com

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

## Selected Validation Data



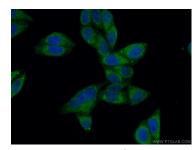
Various lysates were subjected to SDS PAGE followed by western blot with 13926-1-AP (NPC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



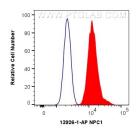
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 13926-1-AP (NPC1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded 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).



Immunofluorescent analysis of (10% Formaldehyde) fixed HepG2 cells using 13926-1-AP (NPC1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human NPC1 (13926-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(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).