

For Research Use Only

NPC1 Polyclonal antibody

Catalog Number: 13926-1-AP

Featured Product

26 Publications



Basic Information

Catalog Number:

13926-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

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

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

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

FC (Intra) : 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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

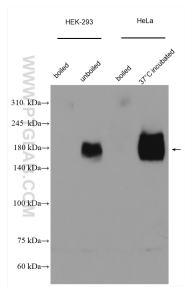
For technical support and original validation data for this product please contact:

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

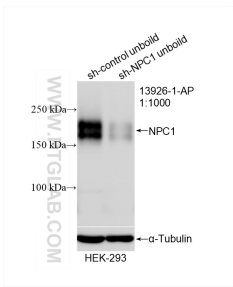
E: proteintech@ptglab.com
W: ptglab.com

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

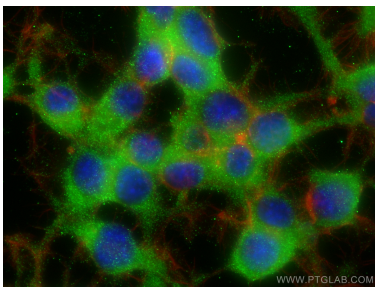
Selected Validation Data



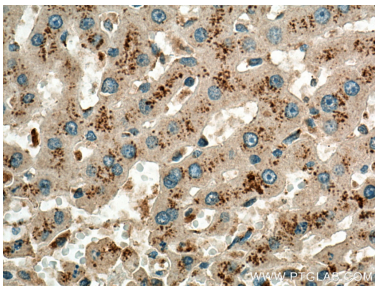
Various lysates were subjected to SDS PAGE followed by western blot with 13926-1-AP (NPC1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



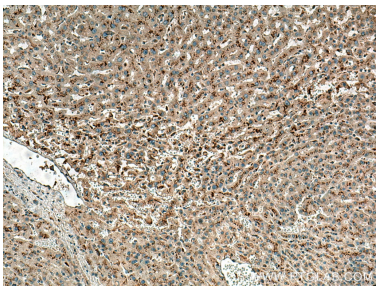
WB result of NPC1 antibody (13926-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NPC1 transfected HEK-293 cells.



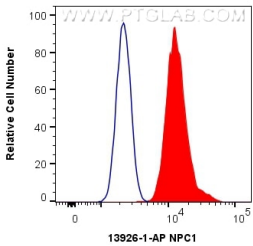
Immunofluorescent analysis of (-20°C Ethanol) fixed Neuro-2a cells using NPC1 antibody (13926-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



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).



1X10⁶ 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).