

**NPC1L1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20268a****Specification**

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**NPC1L1 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9UHC9</a>
Other Accession	<a href="#">NP_037521.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	148728
Antigen Region	294-323

**NPC1L1 Antibody (N-term) - Additional Information****Gene ID** 29881**Other Names**

Niemann-Pick C1-like protein 1, NPC1L1

**Target/Specificity**

This NPC1L1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 294-323 amino acids from the N-terminal region of human NPC1L1.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

NPC1L1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**NPC1L1 Antibody (N-term) - Protein Information****Name** NPC1L1 ([HGNC:7898](#))**Function** Plays a major role in cholesterol homeostasis (PubMed:[22095670](#)). Critical for the

uptake of cholesterol across the plasma membrane of the intestinal enterocyte (PubMed:[22095670](#)). Involved in plant sterol absorption, it transports sitosterol, although at lower rates than cholesterol (By similarity). Is the direct molecular target of ezetimibe, a drug that inhibits cholesterol absorption and is approved for the treatment of hypercholesterolemia (PubMed:[15928087](#)). May have a function in the transport of multiple lipids and their homeostasis, thereby influencing lipid metabolism regulation (PubMed:[15671032](#)). May be involved in caveolin trafficking from the plasma membrane (By similarity). In addition, acts as a negative regulator of NPC2 and down-regulates its expression and secretion by inhibiting its maturation and accelerating its degradation (PubMed:[22095670](#)).

#### Cellular Location

Apical cell membrane; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q6T3U3}; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Note=Subfractionation of brush border membranes from proximal enterocytes suggests considerable association with the apical membrane fraction. Exists as a predominantly cell surface membrane expressed protein (By similarity). According to PubMed:15671032, localizes in a subcellular vesicular compartment rich in RAB5.

#### Tissue Location

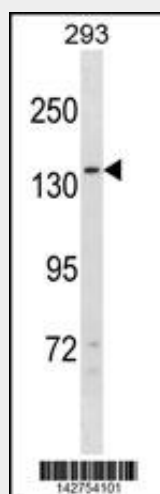
Widely expressed. Expressed in liver. Also expressed in small intestine, pancreas, kidney, lung, pancreas, spleen, heart, gall bladder, brain, testis, stomach and muscle

#### NPC1L1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### NPC1L1 Antibody (N-term) - Images



NPC1L1 Antibody (N-term) (Cat. #AP20268a) western blot analysis in 293 cell line lysates

(35ug/lane). This demonstrates the NPC1L1 antibody detected the NPC1L1 protein (arrow).

#### **NPC1L1 Antibody (N-term) - Background**

The protein encoded by this gene is a multi-pass membrane protein. It contains a conserved N-terminal Niemann-Pick C1 (NPC1) domain and a putative sterol-sensing domain (SSD) which includes a YQRL motif functioning as a plasma membrane to trans-Golgi network transport signal in other proteins. This protein takes up free cholesterol into cells through vesicular endocytosis and plays a critical role in the absorption of intestinal cholesterol. It also has the ability to transport alpha-tocopherol (vitamin E). The drug ezetimibe targets this protein and inhibits the absorption of intestinal cholesterol and alpha-tocopherol. In addition, this protein may play a critical role in regulating lipid metabolism. Polymorphic variations in this gene are associated with plasma total cholesterol and low-density lipoprotein cholesterol (LDL-C) levels and coronary heart disease (CHD) risk. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

#### **NPC1L1 Antibody (N-term) - References**

Hu, M., et al. Pharmacogenet. Genomics 20(10):634-637(2010)  
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Teslovich, T.M., et al. Nature 466(7307):707-713(2010)  
Pramfalk, C., et al. J. Lipid Res. 51(6):1354-1362(2010)  
Maeda, T., et al. J. Atheroscler. Thromb. 17(4):356-360(2010)