

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

Specification

NPC1L1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O9UHC9
Other Accession	NP_037521.2
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

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

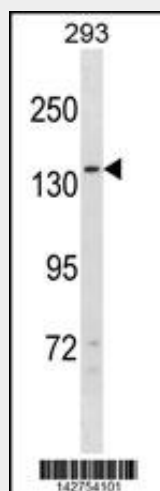
Widely expressed. Expressed in liver. Also expressed in small intestine, pancreas, kidney, lung, pancreas, spleen, heart, gall bladder, brain, testis, stomach and muscle

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)