

Niemann Pick C1 Like 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP59085

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9UHC9
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	148728
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Niemann Pick C1 Like 1
Epitope Specificity	51-150/1359
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Apical cell membrane. Cell membrane. Cytoplasmic vesicle membrane. 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.
SIMILARITY	Belongs to the patched family. Contains 1 SSD (sterol-sensing) domain.
Post-translational modifications	Highly glycosylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Oct 2009]

Additional Information

Gene ID	29881
Other Names	NPC1-like intracellular cholesterol transporter 1 {ECO:0000312 HGNC:HGNC:7898}, Niemann-Pick C1-like protein 1, NPC1L1 (HGNC:7898)
Target/Specificity	Widely expressed. Expressed in liver. Also expressed in small intestine, pancreas, kidney, lung, pancreas, spleen, heart, gall bladder, brain, testis, stomach and muscle.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.