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Niemann Pick C1 Antibody
Rabbit mAb
Catalog # AP91596

Specification

Niemann Pick C1 Antibody - Product Information

Application	**WB, IHC, FC, ICC**
Primary Accession	O15118
Reactivity	**Rat**
Clonality	**Monoclonal**
Other Names	
Niemann Pick C1 protein precursor; NPC; NPC1;	
Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**142167 Da**

Niemann Pick C1 Antibody - Additional Information

Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human Niemann Pick C1**
Description	**Involved in the intracellular trafficking of cholesterol. 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.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Niemann Pick C1 Antibody - Protein Information

Name NPC1 (HGNC:7897)

Function
Intracellular cholesterol transporter which acts in concert with NPC2 and plays an important role in the egress of cholesterol from the endosomal/lysosomal compartment (PubMed:10821832, PubMed:12554680, PubMed:18772377, PubMed:27238017, PubMed:9211849, PubMed:9927649). Unesterified cholesterol that has been released from LDLs in the lumen of the late endosomes/lysosomes is transferred by NPC2 to the cholesterol-binding pocket in the N-terminal domain of NPC1 (PubMed:18772377,

PubMed:19563754, PubMed:27238017, PubMed:27378690, PubMed:28784760, PubMed:9211849, PubMed:9927649). Cholesterol binds to NPC1 with the hydroxyl group buried in the binding pocket (PubMed:19563754). Binds oxysterol with higher affinity than cholesterol. 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 (Probable). Inhibits cholesterol-mediated mTORC1 activation throught its interaction with SLC38A9 (PubMed:28336668).

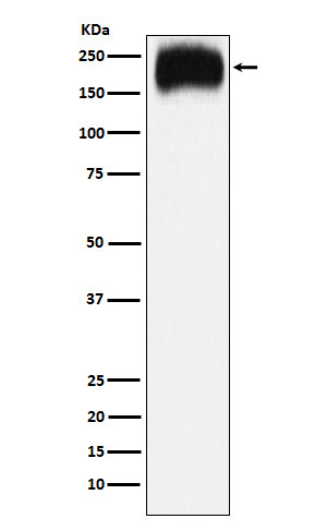
Cellular Location
Late endosome membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein

Niemann Pick C1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Niemann Pick C1 Antibody - Images



Western blot analysis of Niemann Pick C1 expression in HepG2 cell lysate.