

**NPC1 Antibody (internal region)**  
Peptide-affinity purified goat antibody  
Catalog # AF3231a

### Specification

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#### NPC1 Antibody (internal region) - Product Information

Application	WB
Primary Accession	<a href="#">O15118</a>
Other Accession	<a href="#">NP_000262.2</a> , <a href="#">4864</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	142167

#### NPC1 Antibody (internal region) - Additional Information

**Gene ID** 4864

#### Other Names

Niemann-Pick C1 protein, NPC1

#### Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

NPC1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

#### NPC1 Antibody (internal region) - 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](http://www.uniprot.org/citations/10821832), PubMed:[12554680](http://www.uniprot.org/citations/12554680), PubMed:[18772377](http://www.uniprot.org/citations/18772377), PubMed:[27238017](http://www.uniprot.org/citations/27238017), PubMed:[9211849](http://www.uniprot.org/citations/9211849), PubMed:[9927649](http://www.uniprot.org/citations/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:<a href="http://www.uniprot.org/citations/18772377" target="\_blank">18772377</a>, PubMed:<a href="http://www.uniprot.org/citations/19563754" target="\_blank">19563754</a>, PubMed:<a href="http://www.uniprot.org/citations/27238017" target="\_blank">27238017</a>, PubMed:<a href="http://www.uniprot.org/citations/27378690" target="\_blank">27378690</a>, PubMed:<a href="http://www.uniprot.org/citations/28784760" target="\_blank">28784760</a>, PubMed:<a href="http://www.uniprot.org/citations/9211849" target="\_blank">9211849</a>, PubMed:<a href="http://www.uniprot.org/citations/9927649" target="\_blank">9927649</a>). Cholesterol binds to NPC1 with the hydroxyl group buried in the binding pocket (PubMed:<a href="http://www.uniprot.org/citations/19563754" target="\_blank">19563754</a>). 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 through its interaction with SLC38A9 (PubMed:<a href="http://www.uniprot.org/citations/28336668" target="\_blank">28336668</a>).

### Cellular Location

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

### NPC1 Antibody (internal region) - 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](#)

### NPC1 Antibody (internal region) - Images



AF3231a (0.5 µg/ml) staining of HEK293 lysate (35 µg protein in RIPA buffer). Primary incubation

was 1 hour. Detected by chemiluminescence.

### **NPC1 Antibody (internal region) - References**

Deficiency of niemann-pick type C-1 protein impairs release of human immunodeficiency virus type 1 and results in Gag accumulation in late endosomal/lysosomal compartments. Tang Y, Leao IC, Coleman EM, Broughton RS, Hildreth JE, Journal of virology 2009 Aug 83 (16): 7982-95. PMID: 19474101