

## Product datasheet for **TA336646**

### Niemann Pick C1 (NPC1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	Electron Microscopy, ICC/IF, IHC, IP, WB
Recommended Dilution:	Immunohistochemistry: 5-10 ug/ml, Immunohistochemistry-Paraffin: 5-10 ug/ml, Knockdown Validated, Knockout Validated, Electron Microscopy, Immunocytochemistry/ Immunofluorescence: 1:250, Western Blot: 1:1000-1:3000, Immunoprecipitation: 1:10-1:500
Reactivity:	Human, Mouse, Rat, Porcine, Hamster, Primate
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to the C-terminal region of human Niemann-Pick C. [UniProt# O15118]
Formulation:	PBS, 0.1% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	NPC intracellular cholesterol transporter 1
Database Link:	<a href="#">NP_000262</a> <a href="#">Entrez Gene 18145 Mouse</a> <a href="#">Entrez Gene 266732 Rat</a> <a href="#">Entrez Gene 4864 Human</a> <a href="#">O15118</a>

**Background:** Niemann-Pick type C1 (NPC1) is a member of a family of genes encoding membrane-bound proteins containing putative sterol sensing domains. NPC1 protein regulates cholesterol transport from late endosomes-lysosomes to other intracellular compartments. NPC1 overexpression increases the rate of trafficking of low density lipoprotein cholesterol to the endoplasmic reticulum and the rate of delivery of endosomal cholesterol to the plasma membrane. NPC disease is an inherited neurovisceral lipid storage disorder of unesterified cholesterol accumulation in lysosomes. It is characterized by progressive neural and liver degeneration, resulting from inactivating mutations in NPC1, in most cases.



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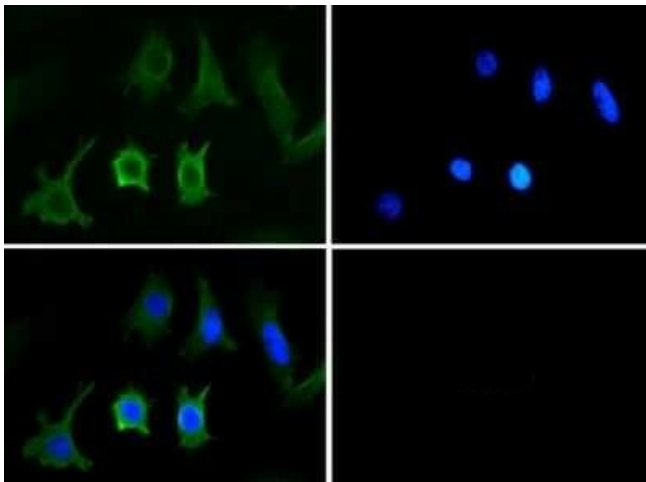
**Synonyms:** NPC

**Note:** This Niemann-Pick C1 antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry paraffin embedded sections, Immunoprecipitation and Western blot. In Western blot the antibody detects heterogeneously glycosylated NPC1 protein with prominent bands at 170 and 220 kDa. It has also been tested for immuno-EM (on human protein only). Use in Electron Microscopy reported in scientific literature (PMID: 21051527)

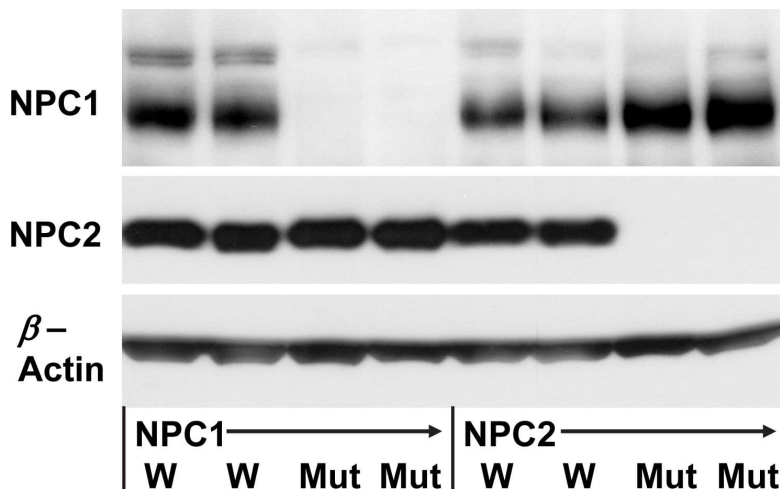
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Lysosome

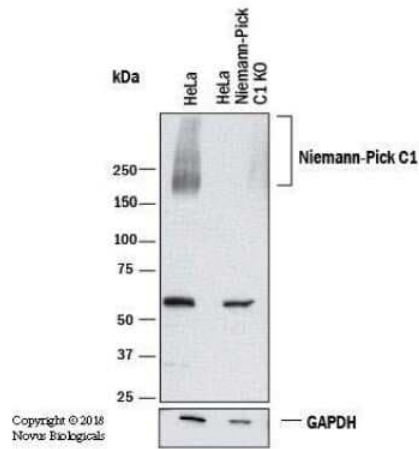
**Product images:**



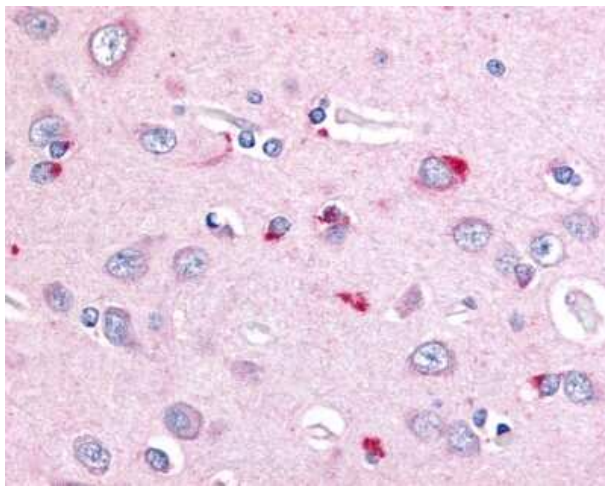
Immunocytochemistry/Immunofluorescence: Niemann-Pick C1 Antibody - BSA Free TA336646 - NPC1 antibody was tested in HeLa cells with DyLight 488 (green). Nuclei were counterstained with DAPI (blue).



NPC proteins in mouse lungs. Western blot of wild type (W) littermates, NPC1 (Mut) or NPC2 (Mut) mutant mouse lungs using anti-NPC1 or -NPC2 antibody.  $\beta$ -actin used as a loading control. 30  $\mu$ g protein/lane.



Knockout Validated: Niemann-Pick C1 Antibody - BSA Free TA336646 - Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and NPC1 knockout (KO) HeLa cell line. PVDF membrane was probed with 1:1000 of Rabbit Anti-Human NPC1 Polyclonal Antibody (Catalog # TA336646) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog #HAF008). Specific band was detected for NPC1 at approximately 240-260 kDa (as indicated) in the parental HeLa cell line, but is not detectable in the knockout HeLa cell line. This experiment was conducted under reducing conditions.



Immunohistochemistry-Paraffin: Niemann-Pick C1 Antibody - BSA Free TA336646 - Staining of human brain, cortex, neurons and astrocytes.