Datasheet for 600-401-DE4

NPC1 Antibody

Overview

Description:	Anti-NPC1 (RABBIT) Antibody - 600-401-DE4
Item No.:	600-401-DE4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Mutations in the Niemann-Pick disease type C1 (NPC1) gene result in a fatal progressive neurodegenerative disorder characterized by an abnormal sequestration of lipids including cholesterol and glycosphingolipids. The NPC1 protein is a large protein that resides in the limiting membrane of endosomes and lysosomes and mediates intracellular cholesterol trafficking via binding of cholesterol to its N-terminal domain. NPC1 transports low-density lipoproteins to late endosomal/lysosomal compartments where they are hydrolyzed and released as free cholesterol. NPC1, in addition to FTO, MC4R, and PTER has recently been shown to be a new risk loci for early-onset and morbid adult obesity in European populations. This anti-NPC1 antibody will not cross-react to NPC2, another gene whose defects also result in Niemann-Pick type C disease.
Synonyms:	NPC1 Antibody, NPC, Niemann-Pick C1 protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NPC1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-NPC1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the C-terminus of human NPC1.
Purity/Specificity:	Anti-NPC1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with NPC1 from other sources has not been determined.
Relevant Links:	• UniProtKB - O15118 • GeneID - 4864 • NCBI - NP_000262

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-NPC1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 142 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1 µg/mL

Formulation

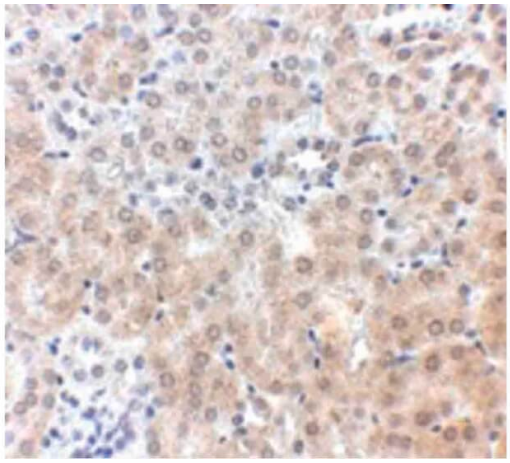
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

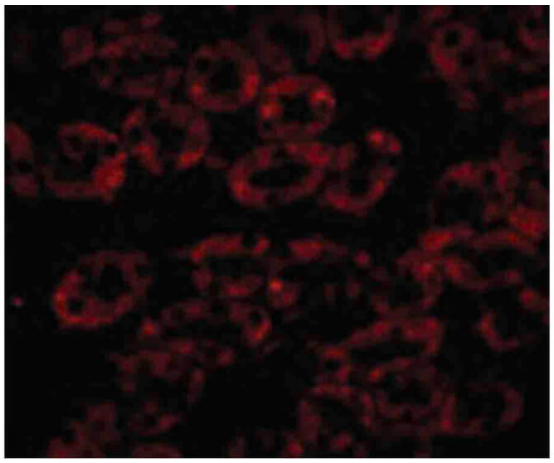
Shipping Condition:	Wet Ice

Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

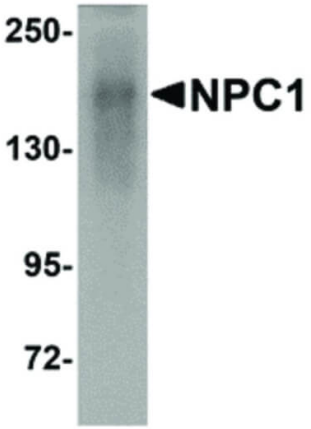
Images



Immunohistochemistry
Immunohistochemistry of NPC1 antibody. Tissue: mouse kidney tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: NPC1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: NPC1 is a lysosomal membrane protein. Staining: NPC1 as precipitated pink signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of NPC1 antibody. Tissue: mouse kidney cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: NPC1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: NPC1 is a lysosomal membrane protein. Staining: NPC1 as red fluorescent signal.



Western Blot
Western Blot of NPC1 antibody. Lane 1: Human kidney tissue lysate with NPC1 antibody at 1 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 142 kDa, 190 kDa for NPC1. Other band(s): NPC1 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.