

Rabbit Niemann Pick C2 Polyclonal Antibody | anti-NPC2 antibody

Anti-Niemann Pick C2 Picoband Antibody

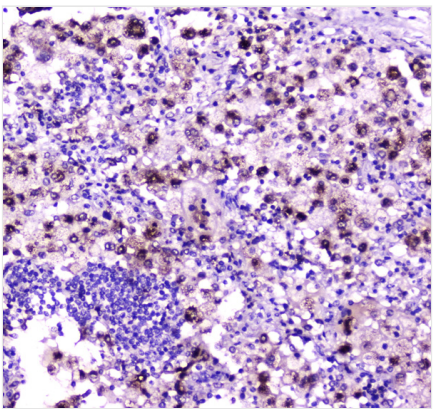
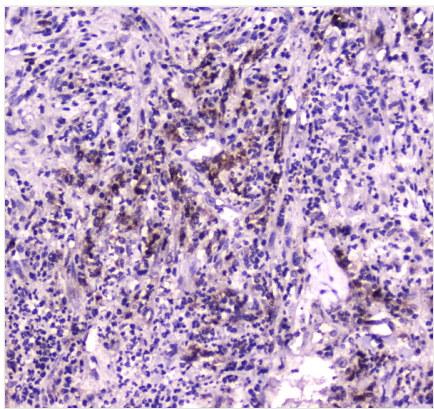
CATALOG # AAA124656	HOST Rabbit	REACTIVITY Human No cross reactivity with other proteins.	APPLICATIONS Western Blot, Immunohistochemistry
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PRODUCT SYNONYMS

Niemann Pick C2; Polyclonal Antibody; Anti-Niemann Pick C2 Picoband Antibody; Epididymal secretory protein E1; Human epididymis-specific protein 1; He1; Niemann-Pick disease type C2 protein; NPC2; HE1; anti-NPC2 antibody

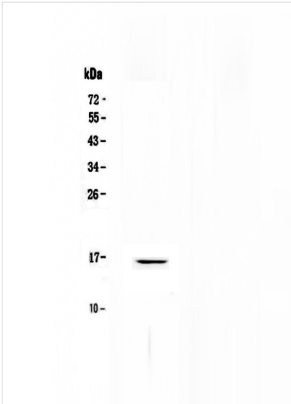
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	125
Applicable Applications for anti-NPC2 antibody	WB (Western Blot), IHC (Immunohistochemistry)
Immunogen	A synthetic peptide corresponding to a sequence of human Niemann Pick C2 (KSEYPSIKLVVEWQLQDDKNQSLFCWEIPVQIVS).
Subcellular Localization	Secreted.
Tissue Specificity	Epididymis.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemisry)
Figure 3. IHC analysis of Niemann Pick C2 using anti-Niemann Pick C2 antibody (AAA124656).Niemann Pick C2 was detected in paraffin-embedded section of human intestinal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Niemann Pick C2 Antibody (AAA124656) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

IHC (Immunohiostchemistry)
Figure 2. IHC analysis of Niemann Pick C2 using anti-Niemann Pick C2 antibody (AAA124656).Niemann Pick C2 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Niemann Pick C2 Antibody (AAA124656) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of Niemann Pick C2 using anti-Niemann Pick C2 antibody (AAA124656).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human SK-OV-3 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Niemann Pick C2 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Niemann Pick C2 at approximately 16KD. The expected band size for Niemann Pick C2 is at 16KD.

ADDITIONAL INFORMATION

Related Product Information for anti-NPC2 antibody	Description: NPC2 is a protein associated with Niemann-Pick disease, type C. This gene is mapped to chromosome 14q24.3. It encodes a protein containing a lipid recognition domain. The encoded protein may function in regulating the transport of cholesterol through the late endosomal/lysosomal system. Mutations in this gene have been associated with Niemann-Pick disease, type C2 and frontal lobe atrophy. Protein Function: Intracellular cholesterol transporter which acts in concert with NPC1 and plays an important role in the egress of cholesterol from the endosomal/lysosomal compartment. Both NPC1 and NPC2 function as the cellular 'tag team duo' (TTD) to catalyze the mobilization of cholesterol within the multivesicular environment of the late endosome (LE) to effect egress through the limiting bilayer of the LE. NPC2 binds unesterified cholesterol that has been released from LDLs in the lumen of the late endosomes/lysosomes and transfers it to the cholesterol-binding pocket of the N-terminal domain of NPC1. Cholesterol binds to NPC1 with the hydroxyl group buried in the binding pocket and is exported from the limiting membrane of late endosomes/ lysosomes to the ER and plasma membrane by an unknown mechanism. The secreted form of NPC2 regulates biliary cholesterol secretion via stimulation of ABCG5/ABCG8-mediated cholesterol transport.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	5453678
NCBI GeneID	10577
NCBI Accession #	NP_006423.1
NCBI GenBank Nucleotide #	NM_006432.3
UniProt Accession #	P61916; Q15668; Q29413; B4DQV7
Molecular Weight	13,416 Da
NCBI Official Full Name	epididymal secretory protein E1
NCBI Official Synonym Full Names	NPC intracellular cholesterol transporter 2
NCBI Official Symbol	NPC2
NCBI Official Synonym Symbols	HE1; EDDM1
NCBI Protein Information	epididymal secretory protein E1
UniProt Protein Name	Epididymal secretory protein E1
UniProt Gene Name	NPC2
UniProt Synonym Gene Names	HE1; He1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/polyclonal/niemann-pick-c2-antibody-western-blot-immunohistochemistry-elisa/124656>