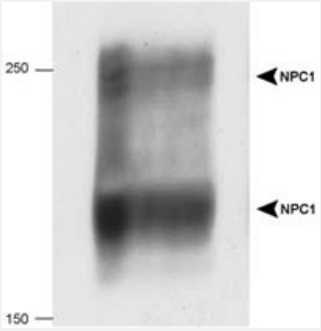
NPC1 polyclonal antibody

Catalog # PAB12093 Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of NPC1 in 20 ug of human fibroblast cell lysate with NPC1 polyclonal antibody (Cat # PAB12093).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of NPC1.
Immunogen	A synthetic peptide corresponding to amino acids 1230-1278 at C-terminus of human NPC1.
Host	Rabbit
Reactivity	Hamster, Human, Mouse
Specificity	This antibody is specific to NPC1 protein.
Form	Liquid
Recommend Usage	Immunofluorescence (1:250) Western Blot (1:1000-1:3000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C for short term. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

  Western blot analysis of NPC1 in 20 ug of human fibroblast cell lysate with NPC1 polyclonal antibody (Cat # PAB12093).

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Immunoelectron Microscopy

Gene Info — NPC1

Entrez GeneID	4864
Gene Name	NPC1
Gene Alias	NPC
Gene Description	Niemann-Pick disease, type C1
Omim ID	257220 607623
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a large protein that resides in the limiting membrane of endosomes and lysos omes and mediates intracellular cholesterol trafficking via binding of cholesterol to its N-terminal d omain. It is predicted to have a cytoplasmic C-terminus, 13 transmembrane domains, and 3 large loops in the lumen of the endosome - the last loop being at the N-terminus. This protein transports low-density lipoproteins to late endosomal/lysosomal compartments where they are hydrolized an d released as free cholesterol. Defects in this gene cause Niemann-Pick type C disease, a rare a utosomal recessive neurodegenerative disorder characterized by over accumulation of cholestero l and glycosphingolipids in late endosomal/lysosomal compartments
Other Designations	-

Publication Reference

- Primary Cilium Alterations and Expression Changes of Patched1 Proteins in Niemann-pick Type C Disease.

  Formichi P, Battisti C, De Santi MM, Guazzo R, Tripodi SA, Radi E, Rossi B, Tarquini E, Federico A.

  Amino Acids 2018 Jan; 233(1):663.

  Application: WB-Ce, Human, Human skin fibroblasts

- Transport of maternal cholesterol to the fetus is affected by maternal plasma cholesterol concentrations in the golden Syrian hamster.

  Burke KT, Colvin PL, Myatt L, Graf GA, Schroeder F, Woollett LA.

  Journal of Lipid Research 2009 Jan; 50(6):1146.

- Cholesterol overload promotes morphogenesis of a Niemann-Pick C (NPC)-like compartment independent of inhibition of NPC1 or HE1/NPC2 function.

  Frolov A, Srivastava K, Daphna-Iken D, Traub LM, Schaffer JE, Ory DS.

  The Journal of Biological Chemistry 2001 Dec; 276(49):46414.

  Application: ICC, IEM, IF, Mouse, CHO, M87 cells

- Niemann-pick type C1 (NPC1) overexpression alters cellular cholesterol homeostasis.

  Millard EE, Srivastava K, Traub LM, Schaffer JE, Ory DS.

  The Journal of Biological Chemistry 2000 Dec; 275(49):38445.

  Application: IF, WB-Tr, Mouse, CHO cells

Pathway

- Lysosome

Disease

- Alzheimer disease
- Birth Weight
- Cardiovascular Diseases
- Coronary Artery Disease
- Coronary Disease
- Diabetes Complications
- Diabetes Mellitus

- Edema
- Genetic Predisposition to Disease
- Lymphoma
- Metabolic Syndrome X
- Neoplasms
- Niemann-Pick Disease
- Obesity
- Osteoporosis
- Overweight