# abcam

# Product datasheet

# Recombinant Human Niemann Pick C1 protein ab114306

# 1 Image

**Description** 

Product name Recombinant Human Niemann Pick C1 protein

Expression system Wheat germ Accession O15118

Protein length Protein fragment

Animal free No.

**Nature** Recombinant

**Species** Human

Sequence GFANAMYNACRDVEAPSSNDKALGLLCGKDADACNATN

WIEYMFNKDNGQ

APFTITPVFSDFPVHGMEPMNNATKGCDESVDEVTAPCS

CQDCSIVCGPK

Predicted molecular weight 37 kDa including tags

Amino acids 151 to 250

#### **Specifications**

Our Abpromise guarantee covers the use of ab114306 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** Western blot

SDS-PAGE

**ELISA** 

Form Liquid

# **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.3% Glutathione, 0.79% Tris HCI

1

#### **General Info**

**Function** Involved in the intracellular trafficking of 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.

Involvement in disease Defects in NPC1 are the cause of Niemann-Pick disease type C1 (NPDC1) [MIM:257220]. A

> lysosomal storage disorder that affects the viscera and the central nervous system. It is due to defective intracellular processing and transport of low-density lipoprotein derived cholesterol. It

causes accumulation of cholesterol in lysosomes, with delayed induction of cholesterol

homeostatic reactions. Niemann-Pick disease type C1 has a highly variable clinical phenotype. Clinical features include variable hepatosplenomegaly and severe progressive neurological dysfunction such as ataxia, dystonia and dementia. The age of onset can vary from infancy to late adulthood. An allelic variant of Niemann-Pick disease type C1 is found in people with Nova Scotia

ancestry. Patients with the Nova Scotian clinical variant are less severely affected.

Sequence similarities Belongs to the patched family.

Contains 1 SSD (sterol-sensing) domain.

**Domain** A cysteine-rich N-terminal domain and a C-terminal domain containing a di-leucine motif

necessary for lysosomal targeting are critical for mobilization of cholesterol from lysosomes.

12.5% SDS-PAGE image showing ab114306 Stained with

Post-translational modifications

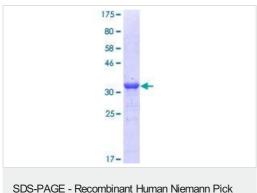
Glycosylated.

**Cellular localization** 

Late endosome membrane. Lysosome membrane.

Coomassie Blue.

#### **Images**



C1 protein (ab114306)

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