

## PNPLA1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13348A

### Specification

# **PNPLA1 Antibody (N-term) - Product Information**

Application WB,E **Primary Accession Q8N8W4** Other Accession NP 001139188.1, NP 001139189.2, NP 775947.2 Reactivity Human Host Rabbit Polyclonal Clonality Isotype Rabbit IgG Calculated MW 57875 Antigen Region 1-30

## **PNPLA1** Antibody (N-term) - Additional Information

Gene ID 285848

**Other Names** Patatin-like phospholipase domain-containing protein 1, 311-, PNPLA1

Target/Specificity

This PNPLA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PNPLA1.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PNPLA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **PNPLA1 Antibody (N-term) - Protein Information**

Name PNPLA1 (HGNC:21246)



**Function** Omega-hydroxyceramide transacylase involved in the synthesis of omega-O-acylceramides (esterified omega-hydroxyacyl-sphingosine; EOS), which are extremely hydrophobic lipids involved in skin barrier formation (PubMed:<u>27751867</u>, PubMed:<u>28248318</u>). Catalyzes the last step of the synthesis of omega-O-acylceramides by transferring linoleic acid from triglycerides to an omega-hydroxyceramide (PubMed:<u>27751867</u>, PubMed:<u>28248318</u>). Omega-O-acylceramides, are required for the biogenesis of lipid lamellae in the stratum corneum and the formation of the cornified lipid envelope which are essential for the epidermis barrier function (PubMed:<u>22246504</u>, PubMed:<u>27751867</u>, PubMed:<u>28248318</u>). These lipids also play a role in keratinocyte differentiation (By similarity). May also act on omega-hydroxylated ultra-long chain fatty acids (omega-OH ULCFA) and acylglucosylceramides (GICEOS) (By similarity).

Cellular Location Cytoplasm.

**Tissue Location** 

Expressed in the digestive system. Expressed in the epidermis of skin keratinocytes. Strongly expressed in the granular layer. Expressed in the upper epidermis and eccrine sweat glands of the dermis and in the region of keratin filament bundles, which is more pronounced in upper epidermal layers and in the lower cornified layers

## **PNPLA1** Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **PNPLA1** Antibody (N-term) - Images



PNPLA1 Antibody (N-term) (Cat. #AP13348a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the PNPLA1 antibody detected the PNPLA1 protein (arrow).

### PNPLA1 Antibody (N-term) - Background



Human patatin-like phospholipases, such as PNPLA1, have been implicated in regulation of adipocyte differentiation and have been induced by metabolic stimuli (Wilson et al., 2006 [PubMed 16799181]).

## PNPLA1 Antibody (N-term) - References

Kienesberger, P.C., et al. J. Lipid Res. 50 SUPPL, S63-S68 (2009) : Johansson, L.E., et al. PLoS ONE 4 (4), E5327 (2009) : De Chaudhuri, S., et al. Environ. Health Perspect. 116(4):501-505(2008) Wilson, P.A., et al. J. Lipid Res. 47(9):1940-1949(2006)