

# PNPLA1 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP13348a

# **Specification**

# PNPLA1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

**Q8N8W4** 

# PNPLA1 Antibody (N-term) Blocking peptide - Additional Information

**Gene ID 285848** 

#### **Other Names**

Patatin-like phospholipase domain-containing protein 1, 311-, PNPLA1

### Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13348a was selected from the N-term region of PNPLA1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

# **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# PNPLA1 Antibody (N-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/27751867" target="\_blank">27751867</a>, PubMed:<a href="http://www.uniprot.org/citations/28248318" target="\_blank">28248318</a>). Catalyzes the last step of the synthesis of omega-O-acylceramides by transferring linoleic acid from triglycerides to an omega-hydroxyceramide (PubMed:<a href="http://www.uniprot.org/citations/27751867" target="\_blank">27751867</a>, PubMed:<a href="http://www.uniprot.org/citations/28248318" target="\_blank">28248318</a>). 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:<a href="http://www.uniprot.org/citations/22246504" target="\_blank">22246504</a>, PubMed:<a href="http://www.uniprot.org/citations/27751867" target="\_blank">27751867</a>, PubMed:<a href="http://www.uniprot.org/citations/27751867" target="\_blank">27751867</a>, PubMed:<a



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href="http://www.uniprot.org/citations/28248318" target=" blank">28248318</a>). 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 (GlcEOS) (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) Blocking peptide - Protocols

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

### Blocking Peptides

PNPLA1 Antibody (N-term) Blocking peptide - Images

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

Human patatin-like phospholipases, such as PNPLA1, havebeen implicated in regulation of adipocyte differentiation and havebeen induced by metabolic stimuli (Wilson et al., 2006 [PubMed16799181]).

# PNPLA1 Antibody (N-term) Blocking peptide - 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)