

## NAPE-PLD Antibody

Rabbit Polyclonal Antibody Catalog # ALS14699

# Specification

#### NAPE-PLD Antibody - Product Information

Application	WB
Primary Accession	<u>Q6IQ20</u>
Reactivity	Human, Mouse,
	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46kDa KDa

### NAPE-PLD Antibody - Additional Information

### Gene ID 222236

### **Other Names**

N-acyl-phosphatidylethanolamine-hydrolyzi ng phospholipase D, N-acyl phosphatidylethanolamine phospholipase D, NAPE-PLD, NAPE-hydrolyzing phospholipase D, 3.1.4.54, NAPEPLD, C7orf18

#### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

#### Precautions

NAPE-PLD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

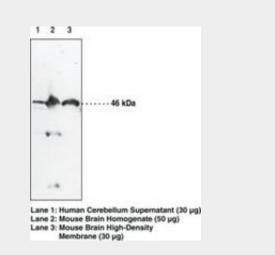
#### NAPE-PLD Antibody - Protein Information

Name NAPEPLD

## Synonyms C7orf18

## Function

D-type phospholipase that hydrolyzes N-acyl- phosphatidylethanolamines (NAPEs) to produce bioactive Nacylethanolamines/fatty acid ethanolamides (NAEs/FAEs) and phosphatidic acid (PubMed:<a href="http://www.uniprot.org/c itations/14634025" target="\_blank">14634025</a>,



Western blot of NAPE-PLD antibody ALS14699.

# **NAPE-PLD Antibody - Background**

Hydrolyzes N-acyl-phosphatidylethanolamines (NAPEs) to produce N-acylethanolamines (NAEs) and phosphatidic acid. Responsible for the generation of anandamide (Narachidonoylethanolamine), the ligand of cannabinoid and vanilloid receptors (By similarity).

## **NAPE-PLD Antibody - References**

Okamoto Y., et al.J. Biol. Chem. 279:5298-5305(2004). Curtiss N.P., et al.Genomics 85:600-607(2005). Bechtel S., et al.BMC Genomics 8:399-399(2007). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Wang J., et al.J. Biol. Chem. 281:12325-12335(2006).



PubMed:<a href="http://www.uniprot.org/ci tations/16527816" target="\_blank">16527816</a>, PubMed:<a href="http://www.uniprot.org/ci tations/27571266" target=" blank">27571266</a>, PubMed:<a href="http://www.uniprot.org/ci tations/25684574" target=" blank">25684574</a>). Cleaves the terminal phosphodiester bond of diacyland alkenylacyl-NAPEs, primarily playing a role in the generation of long-chain saturated and monounsaturated NAEs in the brain (By similarity). May control NAPE homeostasis in dopaminergic neuron membranes and regulate neuron survival, partly through RAC1 activation (By similarity). As a regulator of lipid metabolism in the adipose tissue, mediates the crosstalk between adipocytes, gut microbiota and immune cells to control body temperature and weight. In particular, regulates energy homeostasis by promoting cold-induced brown or beige adipocyte differentiation program to generate heat from fatty acids and glucose. Has limited D-type phospholipase activity toward N-acyl lyso-NAPEs (By similarity).

## **Cellular Location**

Golgi apparatus membrane; Peripheral membrane protein. Early endosome membrane; Peripheral membrane protein. Nucleus envelope. Nucleus, nucleoplasm. Note=Localized in the proximity of the cellular membranes likely through interaction with membrane phospholipids.

#### **Tissue Location**

Widely expressed. Highest expression in brain, kidney and testis (at protein level). Expressed in adipose tissue (at protein level). {ECO:0000250|UniProtKB:Q8BH82}

Volume 100 μl

# NAPE-PLD Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
  Flow Cytomety
  Cell Culture