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NAPE-PLD Antibody
Rabbit Polyclonal Antibody
Catalog # ALS14699

Specification

NAPE-PLD Antibody - Product Information

Application	**WB**
Primary Accession	Q6IQ20
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-hydrolyzing 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 N- acylethanolamines/fatty acid ethanolamides (NAEs/FAEs) and phosphatidic acid (PubMed:14634025, PubMed:16527816, PubMed:27571266, PubMed:25684574). Cleaves the terminal phosphodiester bond of diacyl- and 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}

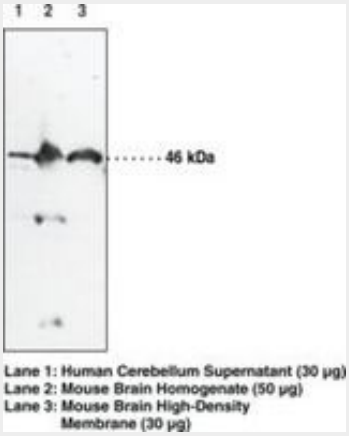
Volume
100 µl

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

NAPE-PLD Antibody - Images



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 (N-arachidonoylethanolamine), 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).