

Anti-PLD1 Picoband Antibody

Catalog # ABO12071

Specification

Anti-PLD1 Picoband Antibody - Product Information

ApplicationWBPrimary Accession013393HostRabbitReactivityHuman, MouseClonalityPolyclonalFormatLyophilizedDescriptionPlaceton. Tested with WB inHuman; Mouse.Human; Mouse.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PLD1 Picoband Antibody - Additional Information

Gene ID 5337

Other Names Phospholipase D1, PLD 1, hPLD1, 3.1.4.4, Choline phosphatase 1, Phosphatidylcholine-hydrolyzing phospholipase D1, PLD1

Calculated MW 124184 MW KDa

Application Details Western blot, 0.1-0.5 µg/ml, Human, Mouse

Subcellular Localization

Cytoplasm, perinuclear region . Endoplasmic reticulum membrane ; Lipid-anchor ; Cytoplasmic side . Golgi apparatus membrane ; Lipid-anchor ; Cytoplasmic side . Late endosome membrane ; Lipid- anchor ; Cytoplasmic side .

Tissue Specificity Expressed abundantly in the pancreas and heart and at high levels in brain, placenta, spleen, uterus and small intestine.

Protein Name Phospholipase D1

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human PLD1 recombinant protein (Position: M1-H330). Human PLD1 shares 91.8%



and 90.9% amino acid (aa) sequence identity with mouse and rat PLD1, respectively.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the phospholipase D family.

Anti-PLD1 Picoband Antibody - Protein Information

Name PLD1 (HGNC:9067)

Function

Function as phospholipase selective for phosphatidylcholine (PubMed:8530346, PubMed:9582313, PubMed:25936805). Implicated as a critical step in numerous cellular pathways, including signal transduction, membrane trafficking, and the regulation of mitosis. May be involved in the regulation of perinuclear intravesicular membrane traffic (By similarity).

Cellular Location

Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q9Z280}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9Z280}. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9Z280}. Late endosome membrane {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9Z280}; Lipid-anchor {ECO:0000250|UniProtKB:Q9Z280}; Cytoplasmic

Tissue Location

Expressed abundantly in the pancreas and heart and at high levels in brain, placenta, spleen, uterus and small intestine

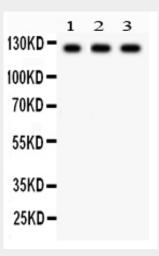
Anti-PLD1 Picoband Antibody - Protocols

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

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



• <u>Cell Culture</u> Anti-PLD1 Picoband Antibody - Images



Anti-PLD1 Picoband antibody, ABO12071, Western blottingAll lanes: Anti PLD1 (ABO12071) at 0.5ug/mlLane 1: Mouse Cardiac Muscle Tissue Lysate at 50ugLane 2: 22RV1 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 124KDObserved bind size: 124KD

Anti-PLD1 Picoband Antibody - Background

By somatic cell hybrid analysis, PLD1 is mapped to 3q26.31. This gene encodes a phosphatidylcholine-specific phospholipase which catalyzes the hydrolysis of phosphatidylcholine in order to yield phosphatidic acid and choline. The enzyme may play a role in signal transduction and subcellular trafficking. Alternative splicing results in multiple transcript variants with both catalytic and regulatory properties. And PLD1 disrupted association of gamma-secretase protein components, independent of PLD1catalytic activity. What's more, PLD1 regulates intracellular trafficking of beta-amyloid, distinct from its effect on gamma-secretase activity.