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PLA2G4C Antibody (internal region)

Peptide-affinity purified goat antibody

Catalog # AF3237a

Specification

PLA2G4C Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	Q9UP65
Other Accession	NP_003697.2, NP_001152794.1, NP_001152795.1, 8605
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**60939**

PLA2G4C Antibody (internal region) - Additional Information

Gene ID 8605

Other Names
Cytosolic phospholipase A2 gamma, cPLA2-gamma, 3.1.1.4, Phospholipase A2 group IVC, PLA2G4C

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PLA2G4C Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

PLA2G4C Antibody (internal region) - Protein Information

Name PLA2G4C

Function
Calcium-independent phospholipase, lysophospholipase and O- acyltransferase involved in phospholipid remodeling with implications in endoplasmic reticulum membrane homeostasis and lipid droplet biogenesis (PubMed:19501189, PubMed:9705332, PubMed:10085124, PubMed:10358058, PubMed:<a href="http://www.uniprot.org/citations/28336330"

target="_blank">28336330). Preferentially hydrolyzes the ester bond of the fatty acyl group attached at the sn-2 position of phospholipids with choline and ethanolamine head groups, producing lysophospholipids that are used in deacylation-reacylation cycles (PubMed:19501189, PubMed:9705332, PubMed:10085124, PubMed:10358058, PubMed:28336330). Transfers the sn-1 fatty acyl from one lysophospholipid molecule to the sn-2 position of another lysophospholipid to form diacyl, alkylacyl and alkenylacyl glycerophospholipids. Cleaves ester bonds but not alkyl or alkenyl ether bonds at sn-1 position of lysophospholipids (PubMed:19501189, PubMed:15944408). Catalyzes sn-2 fatty acyl transfer from phospholipids to the sn-2 position of 1-O-alkyl or 1-O-alkenyl lysophospholipids with lower efficiency (PubMed:19501189, PubMed:15944408). In response to dietary fatty acids, may play a role in the formation of nascent lipid droplets from the endoplasmic reticulum likely by regulating the phospholipid composition of these organelles (PubMed:28336330).

Cellular Location
Cell membrane; Lipid-anchor. Endoplasmic reticulum membrane; Lipid-anchor. Mitochondrion membrane; Lipid- anchor. Lipid droplet. Note=Translocates from endoplasmic reticulum to lipid droplets in response to oleate

Tissue Location
Highly expressed in heart and skeletal muscle.

PLA2G4C Antibody (internal region) - 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

PLA2G4C Antibody (internal region) - Images

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AF3237a (0.03 µg/ml) staining of Human Pancreas lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



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PLA2G4C Antibody (internal region) - Background

This antibody is expected to recognize all reported isoforms (NP_003697.2; NP_001152794.1; NP_001152795.1).

PLA2G4C Antibody (internal region) - References

Subcellular localization and lysophospholipase/transacylation activities of human group IVC phospholipase A2 (cPLA2gamma). Yamashita A, Tanaka K, Kamata R, Kumazawa T, Suzuki N, Koga H, Waku K, Sugiura T, Biochimica et biophysica acta 2009 Oct 1791 (10): 1011-22. PMID: 19501189