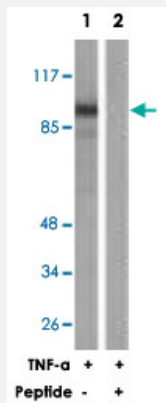


PLA2G4A polyclonal antibody

Catalog # PAB18118

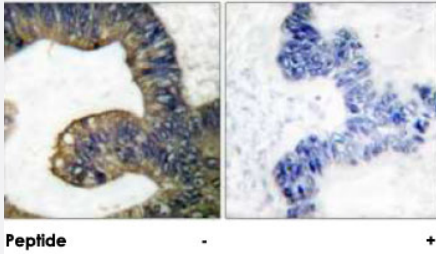
Size 100 ug

Applications



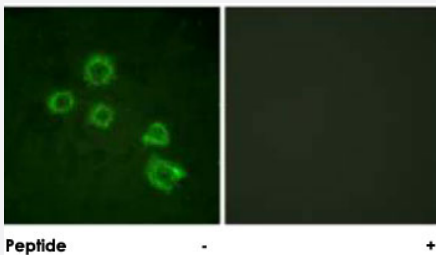
Western Blot (Cell lysate)

Western blot analysis of extracts from HeLa cells, treated with TNF-α (20 ng/mL, 30 mins), using PLA2G4A polyclonal antibody (Cat # PAB18118). Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using PLA2G4A polyclonal antibody (Cat # PAB18118). Peptide "+" means "peptide blocking".



Immunofluorescence

Immunofluorescence analysis of HUVEC cells, using PLA2G4A polyclonal antibody (Cat # PAB18118). Peptide "+" means "peptide blocking".

Specification

Product Description

Rabbit polyclonal antibody raised against synthetic peptide of PLA2G4A.

Immunogen	A synthetic peptide corresponding to human PLA2G4A.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to PLA2G4A.
Form	Liquid
Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) Immunofluorescence (1:500-1:1000) ELISA (1:10000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from HeLa cells, treated with TNF- α (20 ng/mL, 30 mins), using PLA2G4A polyclonal antibody (Cat # PAB18118).

Peptide "+" means "peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using PLA2G4A polyclonal antibody (Cat # PAB18118).

Peptide "+" means "peptide blocking".

- Immunofluorescence

Immunofluorescence analysis of HUVEC cells, using PLA2G4A polyclonal antibody (Cat # PAB18118).

Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PLA2G4A

Entrez GeneID [5321](#)

Protein Accession# [P47712](#)

Gene Name PLA2G4A

Gene Alias MGC126350, PLA2G4, cPLA2-alpha

Gene Description phospholipase A2, group IVA (cytosolic, calcium-dependent)

Omim ID [600522](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene encodes a member of the cytosolic phospholipase A2 group IV family. The enzyme catalyzes the hydrolysis of membrane phospholipids to release arachidonic acid which is subsequently metabolized into eicosanoids. Eicosanoids, including prostaglandins and leukotrienes, are lipid-based cellular hormones that regulate hemodynamics, inflammatory responses, and other intracellular pathways. The hydrolysis reaction also produces lysophospholipids that are converted into platelet-activating factor. The enzyme is activated by increased intracellular Ca(2+) levels and phosphorylation, resulting in its translocation from the cytosol and nucleus to perinuclear membrane vesicles. [provided by RefSeq]

Other Designations OTTHUMP00000033543|calcium-dependent phospholipid-binding protein|cytosolic phospholipase A2, group IVA|lysophospholipase|phosphatidylcholine 2-acylhydrolase

Publication Reference

- [Identification of intracellular phospholipases A2 in the human eye: involvement in phagocytosis of photoreceptor outer segments.](#)

Kolko M, Wang J, Zhan C, Poulsen KA, Prause JU, Nissen MH, Heegaard S, Bazan NG.

Investigative Ophthalmology & Visual Science 2007 Mar; 48(3):1401.

Application: IHC-P, WB, Human, ARPE-19 cells, Human eyes

- [An ovulatory gonadotropin stimulus increases cytosolic phospholipase A2 expression and activity in granulosa cells of primate periovulatory follicles.](#)

Duffy DM, Seachord CL, Dozier BL.

The Journal of clinical endocrinology and metabolism 2005 Oct; 90(10):5858.

- [Activation of BK channels in GH3 cells by a c-PLA2-dependent G-protein signaling pathway.](#)

Denson DD, Li J, Wang X, Eaton DC.

Journal of Neurophysiology 2005 Jun; 93(6):3146.

Pathway

- [alpha-Linolenic acid metabolism](#)
- [Arachidonic acid metabolism](#)
- [Ether lipid metabolism](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Glycerophospholipid metabolism](#)
- [GnRH signaling pathway](#)
- [Linoleic acid metabolism](#)
- [Long-term depression](#)
- [MAPK signaling pathway](#)
- [Metabolic pathways](#)
- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)

Disease

- [Adenomatous Polyposis Coli](#)
- [Alzheimer disease](#)
- [Asthma](#)
- [Bipolar Disorder](#)
- [Cardiovascular Diseases](#)
- [Connective Tissue Diseases](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)

- [Ductus Arteriosus](#)
- [Edema](#)
- [Fetal Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hyperinsulinism](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Metabolic Syndrome X](#)
- [Mood Disorders](#)
- [Musculoskeletal Diseases](#)
- [Neoplasms](#)
- [Osteoarthritis](#)
- [Osteoporosis](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Psychiatric Status Rating Scales](#)
- [Psychotic Disorders](#)
- [Schizophrenia](#)
- [Skin Diseases](#)
- [Tobacco Use Disorder](#)