10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PLA2G12A Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1927a

Specification

PLA2G12A Antibody - Product Information

Application	**E, WB, FC**
Primary Accession	Q9BZM1
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**21kDa KDa**

Description
Secreted phospholipase A2 (sPLA2) enzymes liberate arachidonic acid from phospholipids for production of eicosanoids and exert a variety of physiologic and pathologic effects. Group XII sPLA2s, such as PLA2G12A, have relatively low specific activity and are structurally and functionally distinct from other sPLA2s

Immunogen
Purified recombinant fragment of human PLA2G12A (AA: 21-189) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide.

PLA2G12A Antibody - Additional Information

Gene ID 81579

Other Names
Group XIIA secretory phospholipase A2, GXII sPLA2, sPLA2-XII, 3.1.1.4, Phosphatidylcholine 2-acylhydrolase 12A, PLA2G12A, PLA2G12

Dilution
E~~1/10000
WB~~1/500 - 1/2000
FC~~1/200 - 1/400

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
PLA2G12A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PLA2G12A Antibody - Protein Information

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Name PLA2G12A

Synonyms PLA2G12

Function
PA2 catalyzes the calcium-dependent hydrolysis of the 2-acyl groups in 3-sn-phosphoglycerides. Does not exhibit detectable activity toward sn-2-arachidonoyl- or linoleoyl-phosphatidylcholine or -phosphatidylethanolamine.

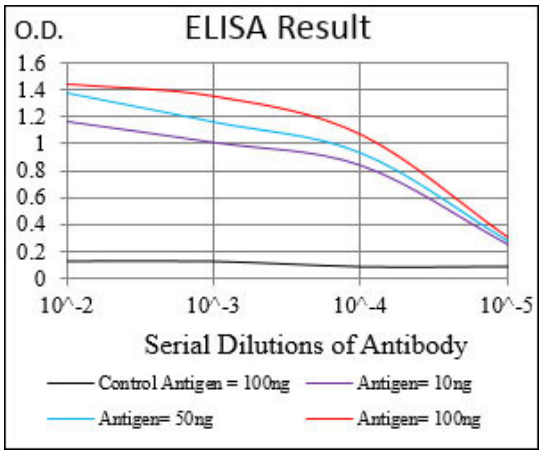
Cellular Location
Secreted. Cytoplasm

Tissue Location
Abundantly expressed in heart, skeletal muscle, kidney, liver and pancreas

PLA2G12A 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



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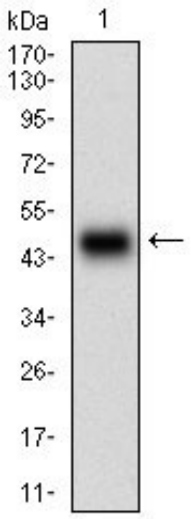


Figure 1: Western blot analysis using PLA2G12A mAb against human PLA2G12A (AA: 21-189) recombinant protein. (Expected MW is 44.5 kDa)

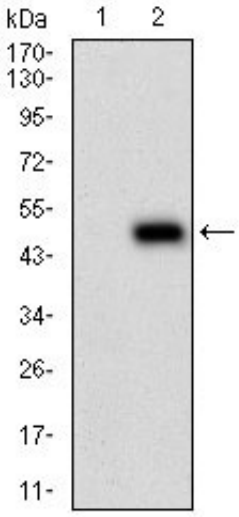


Figure 2: Western blot analysis using PLA2G12A mAb against HEK293 (1) and PLA2G12A (AA: 21-189)-hIgGFc transfected HEK293 (2) cell lysate.

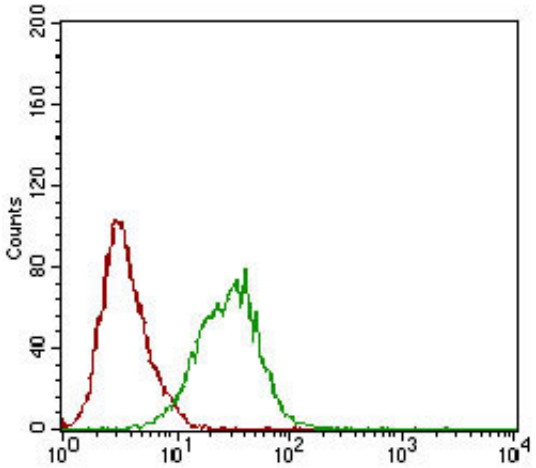


Figure 3: Flow cytometric analysis of Hela cells using PLA2G12A mouse mAb (green) and negative control (red).

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PLA2G12A Antibody - Background

The protein encoded by this gene is found in the nucleus and is a cofactor of DNA polymerase delta. The encoded protein acts as a homotrimer and helps increase the processivity of leading strand synthesis during DNA replication. In response to DNA damage, this protein is ubiquitinated and is involved in the RAD6-dependent DNA repair pathway. Two transcript variants encoding the same protein have been found for this gene. Pseudogenes of this gene have been described on chromosome 4 and on the X chromosome. ; ;

PLA2G12A Antibody - References

1. J Biol Chem. 2003 Mar 21;278(12):10657-67. 2. Biochemistry. 2003 Oct 7;42(39):11494-503.