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 # AO1930a

Specification

PLA2G12A Antibody - Product Information

Application	**E, WB, FC, IHC**
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
IHC~~1/200 - 1/1000

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.

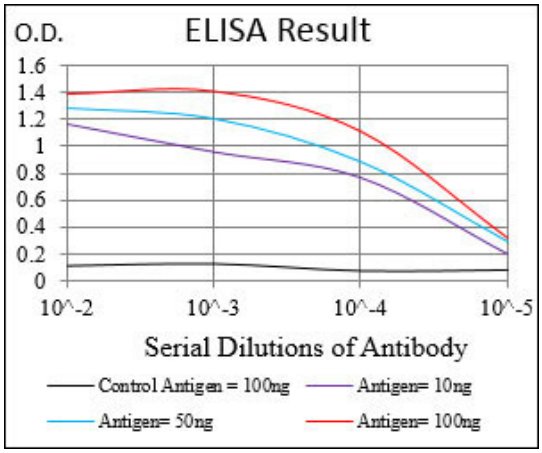
Cellular Location
Secreted. Cytoplasm

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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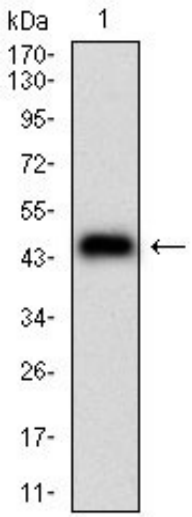


Figure 1: Western blot analysis using PLA2G12A mAb against human PLA2G12A (AA: 21-189) recombinant protein. (Expected MW is 44.5 kDa)

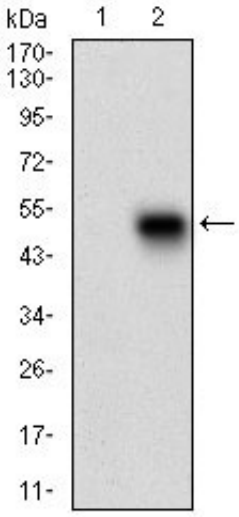


Figure 2: Western blot analysis using PLA2G12A mAb against HEK293 (1) and PLA2G12A (AA: 21-189)-hIgGFc transfected HEK293 (2) cell lysate.

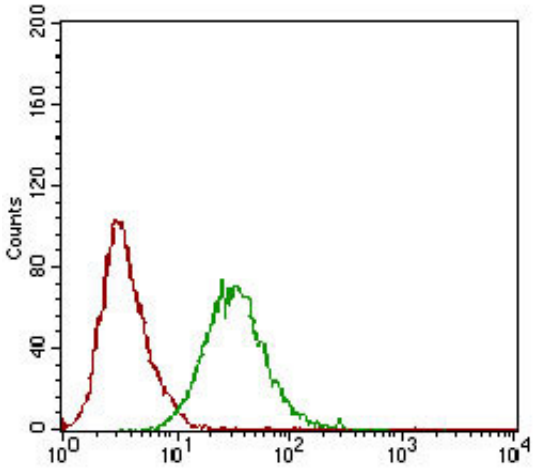


Figure 3: Flow cytometric analysis of Hela cells using PLA2G12A mouse mAb (green) and negative control (red).

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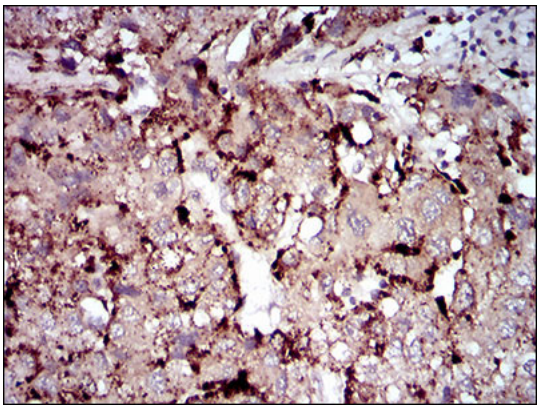


Figure 4: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using PLA2G12A mouse mAb with DAB staining.

PLA2G12A Antibody - Background

The protein encoded by this gene is an isozyme of very long-chain acyl-CoA synthetase (VLCS). It is capable of activating very long-chain fatty-acids containing 24- and 26-carbons. It is expressed in liver and associated with endoplasmic reticulum but not with peroxisomes. Its primary role is in fatty acid elongation or complex lipid synthesis rather than in degradation. This gene has a mouse ortholog. ; ; ;

PLA2G12A Antibody - References

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