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PLA2G12A Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1930a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q9BZM1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3H2C11
Isotype	IgG1
Calculated MW	21067
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.

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	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
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.

Protein Information

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

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. ; ; ;

References

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

Images

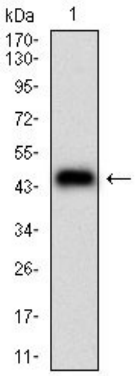


Figure 1: Western blot analysis using PLA2G12A mAb against human PLA2G12A (AA: 21-189) recombinant protein. (Expected MW is 44.5 kDa)

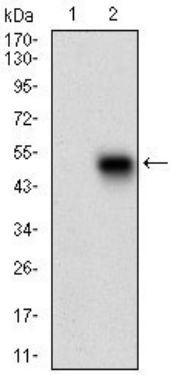


Figure 2: Western blot analysis using PLA2G12A mAb against HEK293 (1) and PLA2G12A (AA: 21-189)-hIgGFc transfected HEK293 (2) cell lysate.

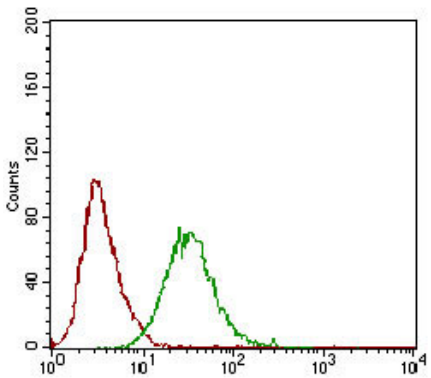


Figure 3: Flow cytometric analysis of Hela cells using PLA2G12A mouse mAb (green) and negative control (red).

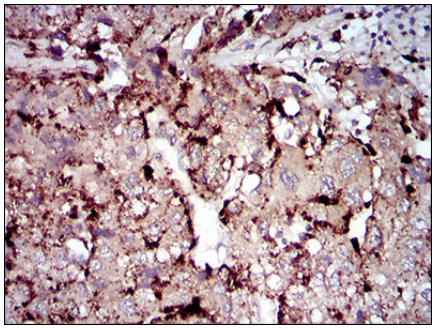


Figure 4: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using PLA2G12A mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.