

# PLA2G12A Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1927a

## Product Information

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<b>Application</b>	WB, FC, E
<b>Primary Accession</b>	<a href="#">Q9BZM1</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	7C7C9
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	21067
<b>Description</b>	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
<b>Immunogen</b>	Purified recombinant fragment of human PLA2G12A (AA: 21-189) expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide.

## Additional Information

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<b>Gene ID</b>	81579
<b>Other Names</b>	Group XIIA secretory phospholipase A2, GXII sPLA2, sPLA2-XII, 3.1.1.4, Phosphatidylcholine 2-acylhydrolase 12A, PLA2G12A, PLA2G12
<b>Dilution</b>	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000
<b>Storage</b>	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.
<b>Precautions</b>	PLA2G12A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	PLA2G12A
<b>Synonyms</b>	PLA2G12

<b>Function</b>	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.
<b>Cellular Location</b>	Secreted. Cytoplasm
<b>Tissue Location</b>	Abundantly expressed in heart, skeletal muscle, kidney, liver and pancreas

## 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. ;

## References

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

## Images

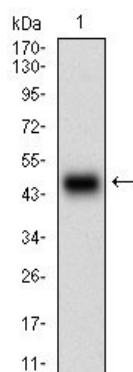


Figure 1: Western blot analysis using PLA2G12A mAb against human PLA2G12A (AA: 21-189) recombinant protein. (Expected MW is 44.5 kDa)

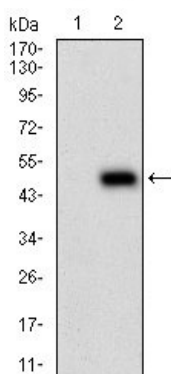
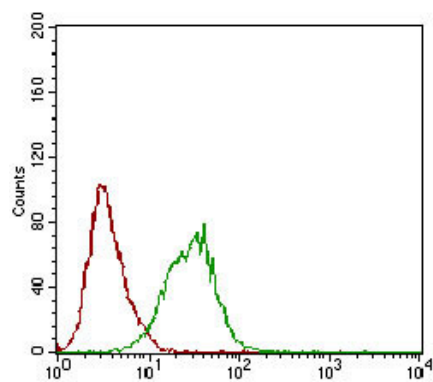


Figure 2: Western blot analysis using PLA2G12A mAb against HEK293 (1) and PLA2G12A (AA: 21-189)-hIgGfc transfected HEK293 (2) cell lysate.

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



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