

#### **PLA2G12A Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1927a

#### **Specification**

### **PLA2G12A Antibody - Product Information**

Application WB, FC, E
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**

WB~~1/500 - 1/2000 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.

### **PLA2G12A Antibody - 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

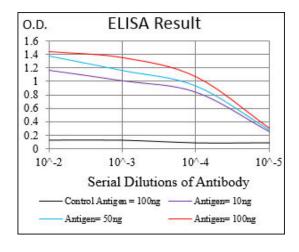
### **Tissue Location**

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

### **PLA2G12A Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture





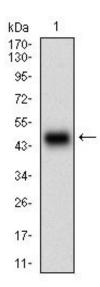


Figure 1: Western blot analysis using PLA2G12A mAb against human PLA2G12A (AA: 21-189) recombinant protein. (Expected MW is 44.5 kDa)

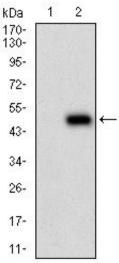


Figure 2: Western blot analysis using PLA2G12A mAb against HEK293 (1) and PLA2G12A (AA: 21-189)-hlgGFc transfected HEK293 (2) cell lysate.

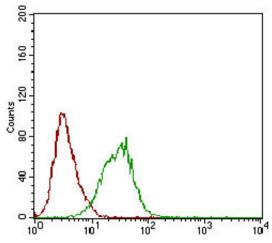
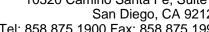


Figure 3: Flow cytometric analysis of Hela cells using PLA2G12A mouse mAb (green) and negative control (red).





# 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.