

## PLA2G4A Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PLA2G4A.

Catalog # AT3330a

### Specification

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#### PLA2G4A Antibody (monoclonal) (M01) - Product Information

Application	WB, E
Primary Accession	<a href="#">P47712</a>
Other Accession	<a href="#">NM_024420</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	85239

#### PLA2G4A Antibody (monoclonal) (M01) - Additional Information

Gene ID 5321

##### Other Names

Cytosolic phospholipase A2, cPLA2, Phospholipase A2 group IVA, Phospholipase A2, Phosphatidylcholine 2-acylhydrolase, Lysophospholipase, PLA2G4A, CPLA2, PLA2G4

##### Target/Specificity

PLA2G4A (NP\_077734, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

##### Dilution

WB~~1:500~1000

##### Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

##### Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

##### Precautions

PLA2G4A Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

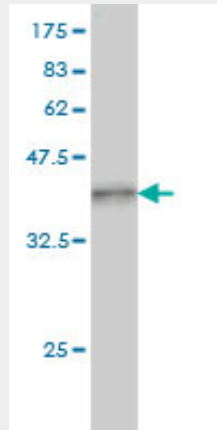
#### PLA2G4A Antibody (monoclonal) (M01) - Protocols

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

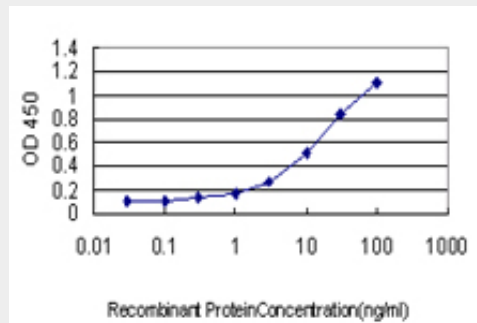
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### PLA2G4A Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .



Detection limit for recombinant GST tagged PLA2G4A is approximately 0.3ng/ml as a capture antibody.

### PLA2G4A Antibody (monoclonal) (M01) - Background

This gene encodes a member of the cytosolic phospholipase A2 group IV family. The enzyme catalyzes the hydrolysis of membrane phospholipids to release arachidonic acid which is subsequently metabolized into eicosanoids. Eicosanoids, including prostaglandins and leukotrienes, are lipid-based cellular hormones that regulate hemodynamics, inflammatory responses, and other intracellular pathways. The hydrolysis reaction also produces lysophospholipids that are converted into platelet-activating factor. The enzyme is activated by increased intracellular  $Ca^{2+}$  levels and phosphorylation, resulting in its translocation from the cytosol and nucleus to perinuclear membrane vesicles.

### PLA2G4A Antibody (monoclonal) (M01) - References

Association Study of Interferon-gamma, Cytosolic Phospholipase A2, and Cyclooxygenase-2 Gene Polymorphisms in Alzheimer Disease. Fehrer A, et al. Am J Geriatr Psychiatry, 2010 Jun 30. PMID 20808133. Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REDuction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Study of association between genetic

polymorphisms of phospholipase A2 enzymes and Alzheimer's disease. Cordeiro Q, et al. *Arq Neuropsiquiatr*, 2010 Apr. PMID 20464283. Cytosolic phospholipase A2 group IVA is overexpressed in patients with persistent asthma and regulated by the promoter microsatellites. Sokolowska M, et al. *J Allergy Clin Immunol*, 2010 Jun. PMID 20392485. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. *Mol Med*, 2010 Jul-Aug. PMID 20379614.