

For Research Use Only

# PLA2G4A Monoclonal antibody

Catalog Number: 68133-1-Ig **1 Publications**



## Basic Information

<b>Catalog Number:</b> 68133-1-Ig	<b>GenBank Accession Number:</b> BC114340	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5321	<b>CloneNo.:</b> 2D10H8
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P47712	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> phospholipase A2, group IVA (cytosolic, calcium-dependent)	
<b>Immunogen Catalog Number:</b> AG32674	<b>Calculated MW:</b> 749 aa, 85 kDa	
	<b>Observed MW:</b> 85-100 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> <b>WB :</b> HEK-293 cells, A549 cells, HeLa cells, MJ cells, NIH/3T3 cells, K-562 cells, HSC-T6 cells <b>IHC :</b> human lung cancer tissue, <b>IF/ICC :</b> HeLa cells,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> Human, mouse	
<b>Cited Species:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

PLA2G4A, also named cPLA2 (cytosolic phospholipase A2), is a highly conserved and widely expressed enzyme that can promote lipid mediator production. It is present in the cytosol of resting cells and upon activation by a variety of agonists, undergoes Ca<sup>++</sup>-directed translocation to perinuclear membranes. PLA2G4A plays a major role in membrane lipid remodeling and biosynthesis of lipid mediators of the inflammatory response. It has been reported that the activity and expression levels of PLA2G4A are upregulated in several neurodegenerative diseases. It is a 749 amino acid, 85 kDa protein that migrates at 100-112 kDa in polyacrylamide gels (PMID: 17459165).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shengzhou Shan	39636236	FASEB J	WB

## Storage

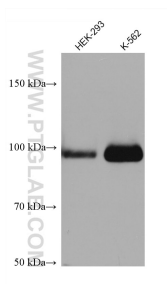
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

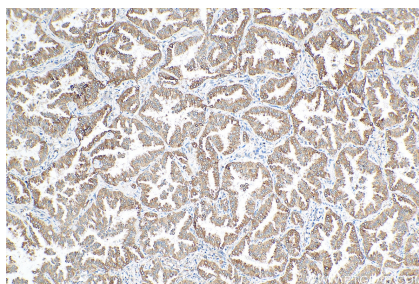
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

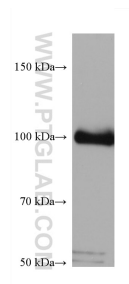
## Selected Validation Data



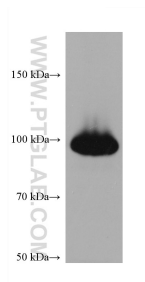
Various lysates were subjected to SDS PAGE followed by western blot with 68133-1-Ig (PLA2G4A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



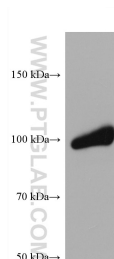
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 68133-1-Ig (PLA2G4A antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



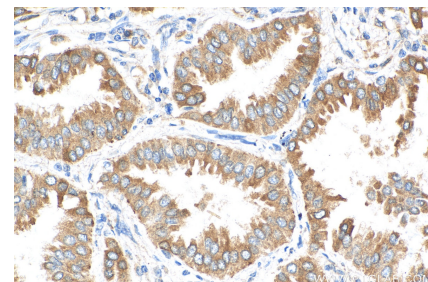
A549 cells were subjected to SDS PAGE followed by western blot with 68133-1-Ig (PLA2G4A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



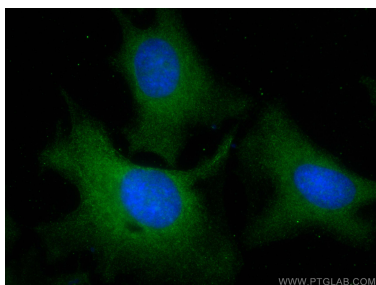
HeLa cells were subjected to SDS PAGE followed by western blot with 68133-1-Ig (PLA2G4A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 68133-1-Ig (PLA2G4A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 68133-1-Ig (PLA2G4A antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using PLA2G4A antibody (68133-1-Ig, Clone: 2D10H8 ) at dilution of 1:100 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).