

## **PLA2R Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54940

### **Specification**

# **PLA2R Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, ICC

Primary Accession

Reactivity

Host

Clonality

Calculated MW

Description

O13018

Bovine

Rabbit

Polyclonal

153 KDa

Physical State
Liquid
Immunogen
KLH conjugated synthetic peptide derived

from human PLA2R

Epitope Specificity 1021-1100/1463 Isotype IgG

Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

SUBCELLULAR LOCATION Proclin300 and 50% Glycerol.
Secreted and Cell membrane.

SIMILARITY Contains 8 C-type lectin domains. Contains

1 fibronectin type-II domain. Contains 1

ricin B-type lectin domain.

Post-translational modifications The secretory phospholipase A2 receptor

form may be produced by the action of metalloproteinases. It contains all extracellular domains and only lacks transmembrane and cytosolic regions. It is however unclear whether this form is produced by proteolytic cleavage as suggested by some experiments, or by alternative splicing, as in the case of isoform 2 that shares all characteristics of secretory phospholipase A2 receptor form.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

### **Background Descriptions**

affinity purified by Protein A

This gene represents a phospholipase A2 receptor. The encoded protein likely exists as both a transmembrane form and a soluble form. The transmembrane receptor may play a role in clearance of phospholipase A2, thereby inhibiting its action. Polymorphisms at this locus have been associated with susceptibility to idiopathic membranous nephropathy. Alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Sep 2010]

### PLA2R Polyclonal Antibody - Additional Information



#### **Gene ID 22925**

#### **Other Names**

Secretory phospholipase A2 receptor, PLA2-R, PLA2R, 180 kDa secretory phospholipase A2 receptor, C-type lectin domain family 13 member C, M-type receptor, Soluble secretory phospholipase A2 receptor, Soluble PLA2-R, Soluble PLA2-R, PLA2R1, CLEC13C

## **Target/Specificity**

Present in lung macrophage (at protein level). Highly expressed in kidney. Also expressed in pancreas, amnion, choriodecidua and placenta. Isoform 2 is expressed at much lower level.

### **Dilution**

- <span class ="dilution WB">WB~~1:1000</span><br \><span class</pre>
- ="dilution IHC-P">IHC-P~~N/A</span><br \><span class
- ="dilution IHC-F">IHC-F~~N/A</span><br \><span class
- ="dilution\_IF">IF $\sim$ 1:50 $\sim$ 200</span><br\><span class ="dilution\_ICC">ICC $\sim$ N/A</span>

#### Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### Storage

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

### **PLA2R Polyclonal Antibody - Protein Information**

### Name PLA2R1

### Synonyms CLEC13C

#### **Function**

Receptor for secretory phospholipase A2 (sPLA2). Acts as a receptor for phospholipase sPLA2-IB/PLA2G1B but not sPLA2-IIA/PLA2G2A. Also able to bind to snake PA2-like toxins. Although its precise function remains unclear, binding of sPLA2 to its receptor participates in both positive and negative regulation of sPLA2 functions as well as clearance of sPLA2. Binding of sPLA2-IB/PLA2G1B induces various effects depending on the cell type, such as activation of the mitogen-activated protein kinase (MAPK) cascade to induce cell proliferation, the production of lipid mediators, selective release of arachidonic acid in bone marrow-derived mast cells. In neutrophils, binding of sPLA2- IB/PLA2G1B can activate p38 MAPK to stimulate elastase release and cell adhesion. May be involved in responses in pro-inflammatory cytokine productions during endotoxic shock. Also has endocytic properties and rapidly internalizes sPLA2 ligands, which is particularly important for the clearance of extracellular sPLA2s to protect their potent enzymatic activities. The soluble secretory phospholipase A2 receptor form is circulating and acts as a negative regulator of sPLA2 functions by blocking the biological functions of sPLA2-IB/PLA2G1B (PubMed:<a href="http://www.uniprot.org/citations/15611272" target=" blank">15611272</a>, PubMed:<a href="http://www.uniprot.org/citations/7721806" target=" blank">7721806</a>). In podocytes, binding of sPLA2-IB/PLA2G1B can regulate podocyte survival and glomerular homeostasis (PubMed:<a href="http://www.uniprot.org/citations/25335547" target=" blank">25335547</a>).

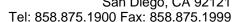
### **Cellular Location**

Cell membrane; Single-pass type I membrane protein [Isoform 2]: Secreted.

#### **Tissue Location**

Expressed in podocytes (at protein level) (PubMed:25335547). Present in lung macrophage (at







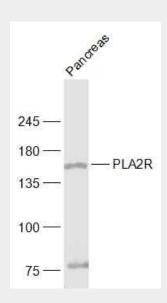
protein level) Highly expressed in kidney. Also expressed in pancreas, amnion, choriodecidua and placenta. Isoform 2 is expressed at much lower level

# **PLA2R Polyclonal 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

# **PLA2R Polyclonal Antibody - Images**



# Sample:

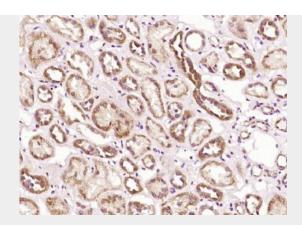
Pancreas (Mouse) Lysate at 40 ug

Primary: Anti-PLA2R (bs-12699R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 153 kD Observed band size: 153 kD





Paraformaldehyde-fixed, paraffin embedded (Human kidney tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PLA2R) Polyclonal Antibody, Unconjugated (bs-12699R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.