

Goat Anti-PLA2R1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF2208a**Specification**

Goat Anti-PLA2R1 Antibody - Product Information

Application	WB, E
Primary Accession	Q13018
Other Accession	NP_001007268 , 22925
Reactivity	Human
Predicted	Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5mg/ml
Isotype	IgG
Calculated MW	168600

Goat Anti-PLA2R1 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 PLA2R, PLA2R1, CLEC13C

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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

Goat Anti-PLA2R1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PLA2R1 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:15611272, PubMed:7721806). In podocytes, binding of sPLA2-IB/PLA2G1B can regulate podocyte survival and glomerular homeostasis (PubMed:25335547).

Cellular Location

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

Tissue Location

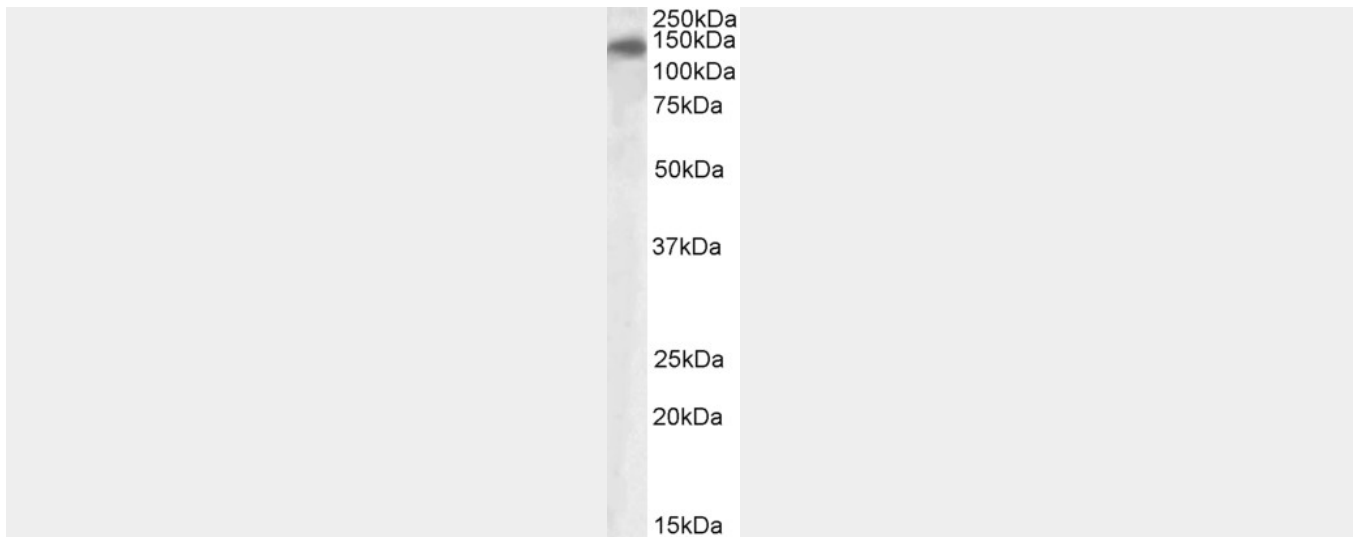
Expressed in podocytes (at protein level) (PubMed:25335547). Present in lung macrophage (at protein level) Highly expressed in kidney. Also expressed in pancreas, amnion, choriondecidua and placenta. Isoform 2 is expressed at much lower level

Goat Anti-PLA2R1 Antibody - 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](#)

Goat Anti-PLA2R1 Antibody - Images



AF2208a (1 μ g/ml) staining of Human Ileum lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-PLA2R1 Antibody - Background

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.

Goat Anti-PLA2R1 Antibody - References

Single Nucleotide Polymorphisms in the Phospholipase A(2) Receptor Gene Are Associated with Genetic Susceptibility to Idiopathic Membranous Nephropathy. Kim S, et al. Nephron Clin Pract, 2010 Aug 31. PMID 20805699. The variant rs1867277 in FOXE1 gene confers thyroid cancer susceptibility through the recruitment of USF1/USF2 transcription factors. Landa I, et al. PLoS Genet, 2009 Sep. PMID 19730683. M-type phospholipase A2 receptor as target antigen in idiopathic membranous nephropathy. Beck LH Jr, et al. N Engl J Med, 2009 Jul 2. PMID 19571279. The M-type receptor PLA2R regulates senescence through the p53 pathway. Augert A, et al. EMBO Rep, 2009 Mar. PMID 19197340. Sequence comparison of human and mouse genes reveals a homologous block structure in the promoter regions. Suzuki Y, et al. Genome Res, 2004 Sep. PMID 15342556.