

## PLA2R1/PLA2R Antibody

Catalog No: #62253

Package Size: #62253-1 100ug

## Description

|                    |                                                                                                                                                                                                           |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name       | PLA2R1/PLA2R Antibody                                                                                                                                                                                     |
| Host Species       | Mouse                                                                                                                                                                                                     |
| Clonality          | Monoclonal                                                                                                                                                                                                |
| Clone No.          | MR4532                                                                                                                                                                                                    |
| Isotype            | IgG2a                                                                                                                                                                                                     |
| Purification       | Protein A/G purified from cell culture supernatant.                                                                                                                                                       |
| Applications       | ELISA, WB, IHC, IF                                                                                                                                                                                        |
| Species Reactivity | Human                                                                                                                                                                                                     |
| Target Name        | PLA2R1                                                                                                                                                                                                    |
| Other Names        | PLA2R, 180 kDa secretory phospholipase A2 receptor, Secretory phospholipase A2 receptor, PLA2-R, M-type receptor, C-type lectin domain family 13 member C, Soluble PLA2-R, PLA2R1, Soluble PLA2R, CLEC13C |
| Calculated MW      | 169kD                                                                                                                                                                                                     |
| Formulation        | 0.01M PBS, pH 7.4.                                                                                                                                                                                        |
| Storage            | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.                                                                                                                  |

## Background

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).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.