

Secretory phospholipase A2 Type V Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57602**Specification****Secretory phospholipase A2 Type V Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC
Primary Accession	P39877
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15674

Secretory phospholipase A2 Type V Polyclonal Antibody - Additional Information**Gene ID** 5322**Other Names**

Phospholipase A2 group V, 3.1.1.4, PLA2-10, Phosphatidylcholine 2-acylhydrolase 5, PLA2G5

Format

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

Storage

Store at -20 °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 °C.

Secretory phospholipase A2 Type V Polyclonal Antibody - Protein Information**Name** PLA2G5**Function**

Secretory calcium-dependent phospholipase A2 that primarily targets extracellular phospholipids (PubMed:8300559). Hydrolyzes the ester bond of the fatty acyl group attached at sn-2 position of phospholipids (phospholipase A2 activity), preferentially releasing fatty acyl groups with a low degree of unsaturation such as oleoyl (C18:1) and linoleoyl (C18:2) groups (PubMed:8300559, PubMed:14998370, PubMed:23533611). Hydrolyzes low-density lipoprotein (LDL) phospholipids releasing unsaturated fatty acids that drive macrophage polarization toward an M2 phenotype (By similarity). May act in an autocrine and paracrine manner. Contributes to lipid remodeling of cellular membranes at different subcellular locations and generation of lipid mediators involved in pathogen clearance. Cleaves sn-2 fatty acyl chains of cardiolipin, a major component of the inner membrane of mitochondria and bacterial membranes (PubMed:23533611). Promotes phagocytosis of bacteria in macrophages through production of lysophosphatidylethanolamines (PubMed:23533611).

[25725101](http://www.uniprot.org/citations/25725101)). Displays bactericidal activity against Gram-positive bacteria by directly hydrolyzing phospholipids of the bacterial membrane (PubMed: [11694541](http://www.uniprot.org/citations/11694541)). Promotes phagocytosis and killing of ingested fungi likely through controlling phagosome-lysosome fusion and phagosome maturation (By similarity). Plays a role in biosynthesis of cysteinyl leukotrienes (CysLTs) in myeloid cells (PubMed: [12124392](http://www.uniprot.org/citations/12124392), PubMed: [12796497](http://www.uniprot.org/citations/12796497)). In eosinophils, triggers perinuclear arachidonate release and LTC4 synthesis in a PLA2G4A-independent way (PubMed: [12796497](http://www.uniprot.org/citations/12796497)). In neutrophils, amplifies CysLTs biosynthesis initiated by PLA2G4A (PubMed: [12124392](http://www.uniprot.org/citations/12124392)). Promotes immune complex clearance in macrophages via stimulating synthesis of CysLTs, which act through CYSLTR1 to trigger phagocytosis (By similarity). May regulate antigen processing in antigen-presenting cells (By similarity). In pulmonary macrophages regulates IL33 production required for activation of group 2 innate lymphoid cells (By similarity). May play a role in the biosynthesis of N-acyl ethanolamines that regulate energy metabolism. Hydrolyzes N-acyl phosphatidylethanolamines to N-acyl lysophosphatidylethanolamines, which are further cleaved by a lysophospholipase D to release N-acyl ethanolamines (PubMed: [14998370](http://www.uniprot.org/citations/14998370)).

Cellular Location

Secreted. Cell membrane {ECO:0000250|UniProtKB:P97391}. Cytoplasmic vesicle, phagosome {ECO:0000250|UniProtKB:P97391}. Recycling endosome {ECO:0000250|UniProtKB:P97391}. Golgi apparatus, cis-Golgi network {ECO:0000250|UniProtKB:P97391}. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:P97391}

Tissue Location

Heart, placenta and less abundantly, in lung. Detected in the outer and inner plexiform layers of the retina (at protein level) (PubMed:22137173). Expressed in monocytes and macrophages (PubMed:25725101).

Secretory phospholipase A2 Type V Polyclonal 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](#)

Secretory phospholipase A2 Type V Polyclonal Antibody - Images