

**PLA2G7 (aa53-64) Antibody (internal region)**  
Peptide-affinity purified goat antibody  
Catalog # AF3940a

### Specification

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#### PLA2G7 (aa53-64) Antibody (internal region) - Product Information

Application	E
Primary Accession	<a href="#">O13093</a>
Other Accession	<a href="#">NP_005075.3</a> , <a href="#">7941</a>
Predicted	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	50077

#### PLA2G7 (aa53-64) Antibody (internal region) - Additional Information

Gene ID 7941

#### Other Names

Platelet-activating factor acetylhydrolase, PAF acetylhydrolase, 3.1.1.47, 1-alkyl-2-acetyl-glycerophosphocholine esterase, 2-acetyl-1-alkyl-glycerophosphocholine esterase, Group-VIIA phospholipase A2, gVIIA-PLA2, LDL-associated phospholipase A2, LDL-PLA(2), PAF 2-acylhydrolase, PLA2G7, PAFAH

#### Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 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

PLA2G7 (aa53-64) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PLA2G7 (aa53-64) Antibody (internal region) - Protein Information

Name PLA2G7

Synonyms PAFAH

#### Function

Lipoprotein-associated calcium-independent phospholipase A2 involved in phospholipid catabolism during inflammatory and oxidative stress response (PubMed:<a href="http://www.uniprot.org/citations/10066756" target="\_blank">10066756</a>, PubMed:<a

href="http://www.uniprot.org/citations/16371369" target="\_blank">16371369</a>, PubMed:<a href="http://www.uniprot.org/citations/17090529" target="\_blank">17090529</a>, PubMed:<a href="http://www.uniprot.org/citations/2040620" target="\_blank">2040620</a>, PubMed:<a href="http://www.uniprot.org/citations/7700381" target="\_blank">7700381</a>, PubMed:<a href="http://www.uniprot.org/citations/8624782" target="\_blank">8624782</a>). At the lipid-aqueous interface, hydrolyzes the ester bond of fatty acyl group attached at sn-2 position of phospholipids (phospholipase A2 activity) (PubMed:<a href="http://www.uniprot.org/citations/10504265" target="\_blank">10504265</a>, PubMed:<a href="http://www.uniprot.org/citations/2040620" target="\_blank">2040620</a>). Specifically targets phospholipids with a short-chain fatty acyl group at sn-2 position (PubMed:<a href="http://www.uniprot.org/citations/2040620" target="\_blank">2040620</a>). Can hydrolyze phospholipids with long fatty acyl chains, only if they carry oxidized functional groups (PubMed:<a href="http://www.uniprot.org/citations/2040620" target="\_blank">2040620</a>, PubMed:<a href="http://www.uniprot.org/citations/8624782" target="\_blank">8624782</a>). Hydrolyzes and inactivates platelet-activating factor (PAF, 1-O-alkyl- 2-acetyl-sn-glycero-3-phosphocholine), a potent pro-inflammatory signaling lipid that acts through PTAFR on various innate immune cells (PubMed:<a href="http://www.uniprot.org/citations/10066756" target="\_blank">10066756</a>, PubMed:<a href="http://www.uniprot.org/citations/10504265" target="\_blank">10504265</a>, PubMed:<a href="http://www.uniprot.org/citations/11590221" target="\_blank">11590221</a>, PubMed:<a href="http://www.uniprot.org/citations/16371369" target="\_blank">16371369</a>, PubMed:<a href="http://www.uniprot.org/citations/18434304" target="\_blank">18434304</a>, PubMed:<a href="http://www.uniprot.org/citations/7592717" target="\_blank">7592717</a>, PubMed:<a href="http://www.uniprot.org/citations/7700381" target="\_blank">7700381</a>, PubMed:<a href="http://www.uniprot.org/citations/8624782" target="\_blank">8624782</a>, PubMed:<a href="http://www.uniprot.org/citations/8675689" target="\_blank">8675689</a>). Hydrolyzes oxidatively truncated phospholipids carrying an aldehyde group at omega position, preventing their accumulation in low-density lipoprotein (LDL) particles and uncontrolled pro-inflammatory effects (PubMed:<a href="http://www.uniprot.org/citations/2040620" target="\_blank">2040620</a>, PubMed:<a href="http://www.uniprot.org/citations/7700381" target="\_blank">7700381</a>). As part of high-density lipoprotein (HDL) particles, can hydrolyze phospholipids having long-chain fatty acyl hydroperoxides at sn-2 position and protect against potential accumulation of these oxylipins in the vascular wall (PubMed:<a href="http://www.uniprot.org/citations/17090529" target="\_blank">17090529</a>). Catalyzes the release from membrane phospholipids of F2-isoprostanes, lipid biomarkers of cellular oxidative damage (PubMed:<a href="http://www.uniprot.org/citations/16371369" target="\_blank">16371369</a>).

#### Cellular Location

Secreted, extracellular space Note=Associates with both LDL and HDL particles in plasma (PubMed:10066756, PubMed:11590221, PubMed:12821559, PubMed:18434304) Mainly associates with pro-inflammatory electronegative LDL particles (PubMed:12821559).

#### Tissue Location

Plasma (PubMed:11590221, PubMed:12821559). Secreted by macrophages (at protein level) (PubMed:11590221)

### PLA2G7 (aa53-64) Antibody (internal region) - 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](#)

**PLA2G7 (aa53-64) Antibody (internal region) - Images****PLA2G7 (aa53-64) Antibody (internal region) - Background**

Reported variants represent identical protein: NP\_005075.3, NP\_001161829.1

**PLA2G7 (aa53-64) Antibody (internal region) - References**

Lipoprotein-associated phospholipase A2 activity in patients with preserved left ventricular ejection fraction. Moldoveanu E, Serban M, Marta DS, Serban I, Huica R. Biomarkers. 2011 Nov;16(7):587-9. PMID: 21942556