

PLA2G7 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9819c**Specification**

PLA2G7 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q13093](#)**PLA2G7 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 7941**Other Names**

Platelet-activating factor acetylhydrolase, PAF acetylhydrolase, 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

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PLA2G7 Antibody (Center) Blocking Peptide - Protein Information**Name** PLA2G7**Synonyms** PAFAH**Function**

Lipoprotein-associated calcium-independent phospholipase A2 involved in phospholipid catabolism during inflammatory and oxidative stress response (PubMed:7700381, PubMed:8624782, PubMed:2040620, PubMed:16371369, PubMed:17090529, PubMed:10066756). At the lipid-aqueous interface, hydrolyzes the ester bond of fatty acyl group attached at sn-2 position of phospholipids (phospholipase A2 activity) (PubMed:2040620, PubMed:10504265). Specifically targets phospholipids with a short-chain fatty acyl group at sn-2 position (PubMed:<a

[2040620](http://www.uniprot.org/citations/2040620)). Can hydrolyze phospholipids with long fatty acyl chains, only if they carry oxidized functional groups (PubMed:[2040620](http://www.uniprot.org/citations/2040620), PubMed:[8624782](http://www.uniprot.org/citations/8624782)). 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:[10504265](http://www.uniprot.org/citations/10504265), PubMed:[10066756](http://www.uniprot.org/citations/10066756), PubMed:[7592717](http://www.uniprot.org/citations/7592717), PubMed:[11590221](http://www.uniprot.org/citations/11590221), PubMed:[7700381](http://www.uniprot.org/citations/7700381), PubMed:[18434304](http://www.uniprot.org/citations/18434304), PubMed:[16371369](http://www.uniprot.org/citations/16371369), PubMed:[8675689](http://www.uniprot.org/citations/8675689), PubMed:[8624782](http://www.uniprot.org/citations/8624782)). 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:[2040620](http://www.uniprot.org/citations/2040620), PubMed:[7700381](http://www.uniprot.org/citations/7700381)). 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:[17090529](http://www.uniprot.org/citations/17090529)). Catalyzes the release from membrane phospholipids of F2-isoprostanes, lipid biomarkers of cellular oxidative damage (PubMed:[16371369](http://www.uniprot.org/citations/16371369)).

Cellular Location

Secreted, extracellular space Note=Associates with both LDL and HDL particles in plasma (PubMed:11590221, PubMed:12821559, PubMed:18434304, PubMed:10066756) 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 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

PLA2G7 Antibody (Center) Blocking Peptide - Images

PLA2G7 Antibody (Center) Blocking Peptide - Background

The protein encoded by this gene is a secreted enzyme that catalyzes the degradation of platelet-activating factor to biologically inactive products. Defects in this gene are a cause of platelet-activating factor acetylhydrolase deficiency.

PLA2G7 Antibody (Center) Blocking Peptide - References

Fan, P., et al. Hum. Reprod. 25(5):1288-1294(2010)Paik, J.K., et al. Clin. Chim. Acta 411 (7-8), 486-493 (2010) Meng, X., et al. Psychiatry Res 175 (1-2), 186-187 (2010) McGeachie, M., et al. Circulation 120(24):2448-2454(2009)Cojocar, I.M., et al. Rom J Intern Med 47(1):61-65(2009)