

LP-PLA2 / PLA2G7 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16556**Specification**

LP-PLA2 / PLA2G7 Antibody - Product Information

Application	IHC
Primary Accession	O13093
Other Accession	7941
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	50077

LP-PLA2 / PLA2G7 Antibody - Additional Information**Gene ID** 7941**Other Names**

PLA2G7, GVIIA-PLA2, PAF acetylhydrolase, PAFAD, PAF 2-acylhydrolase, PAFAH, LDL-PLA(2), LP-PLA2, Group-VIIA phospholipase A2, LDL-PLA2

Target/Specificity

This Polyclonal antibody is directed against human PAF Acetylhydrolase protein. The product was purified from serum by protein A chromatography. Expect reactivity with human PAF Acetylhydrolase. Cross-reactivity with PAF Acetylhydrolase from other so ...

Reconstitution & Storage

PBS, pH 7.4, 0.02% sodium azide. Store at -20°C for up to one year.

Precautions

LP-PLA2 / PLA2G7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LP-PLA2 / PLA2G7 Antibody - 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:<a

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

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)

Volume

50 µl

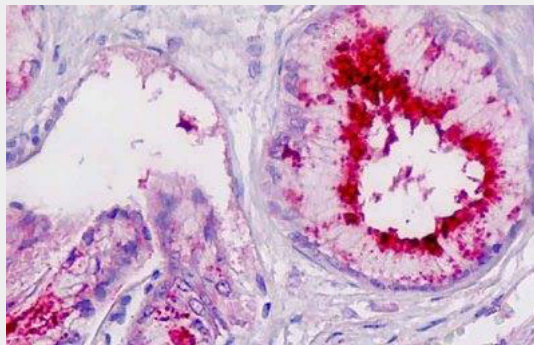
LP-PLA2 / PLA2G7 Antibody - Protocols

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](#)

LP-PLA2 / PLA2G7 Antibody - Images



Anti-LP-PLA2 / PLA2G7 antibody IHC staining of human pancreatic duct.

LP-PLA2 / PLA2G7 Antibody - Background

Modulates the action of platelet-activating factor (PAF) by hydrolyzing the sn-2 ester bond to yield the biologically inactive lyso-PAF. Has a specificity for substrates with a short residue at the sn-2 position. It is inactive against long-chain phospholipids.

LP-PLA2 / PLA2G7 Antibody - References

Tjoelker L.W.,et al.Nature 374:549-553(1995).
Tew D.G.,et al.Arterioscler. Thromb. Vasc. Biol. 16:591-599(1996).
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Tjoelker L.W.,et al.J. Biol. Chem. 270:25481-25487(1995).