

LYPLA1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP19062c**Specification**

LYPLA1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O75608](#)**LYPLA1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 10434**Other Names**

Acyl-protein thioesterase 1, APT-1, hAPT1, 312-, Lysophospholipase 1, Lysophospholipase I, LPL-I, LysoPLA I, LYPLA1, APT1, LPL1

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.

LYPLA1 Antibody (Center) Blocking Peptide - Protein Information**Name** LYPLA1**Synonyms** APT1, LPL1**Function**

Acts as an acyl-protein thioesterase (PubMed:19439193, PubMed:20418879). Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS (PubMed:20418879). Acts as a palmitoyl thioesterase that catalyzes depalmitoylation of proteins, such as ADRB2, KCNMA1 and SQSTM1 (PubMed:22399288, PubMed:27481942, PubMed:37802024). Acts as a negative regulator of autophagy by mediating palmitoylation of SQSTM1, decreasing affinity between SQSTM1 and ATG8 proteins and recruitment of ubiquitinated cargo proteins to autophagosomes (PubMed:37802024). Acts as a lysophospholipase and hydrolyzes lysophosphatidylcholine (lyso-PC) (PubMed:19439193). Also

hydrolyzes lysophosphatidylethanolamine (lyso- PE), lysophosphatidylinositol (lyso-PI) and lysophosphatidylserine (lyso-PS) (By similarity). Has much higher thioesterase activity than lysophospholipase activity (PubMed:19439193). Contributes to the production of lysophosphatidic acid (LPA) during blood coagulation by recognizing and cleaving plasma phospholipids to generate lysophospholipids which in turn act as substrates for ENPP2 to produce LPA (PubMed:21393252).

Cellular Location

Cytoplasm. Cell membrane. Nucleus membrane. Endoplasmic reticulum. Note=Shows predominantly a cytoplasmic localization with a weak expression in the cell membrane, nuclear membrane and endoplasmic reticulum.

Tissue Location

Platelets..

LYPLA1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

LYPLA1 Antibody (Center) Blocking Peptide - Images**LYPLA1 Antibody (Center) Blocking Peptide - Background**

Lysophospholipases are enzymes that act on biological membranes to regulate the multifunctional lysophospholipids. The protein encoded by this gene hydrolyzes lysophosphatidylcholine in both monomeric and micellar forms. The use of alternative polyadenylation sites has been found for this gene. There are alternatively spliced transcript variants described for this gene but the full length nature is not known yet.

LYPLA1 Antibody (Center) Blocking Peptide - References

Satou, M., et al. Endocrinology 151(10):4765-4775(2010) Dekker, F.J., et al. Nat. Chem. Biol. 6(6):449-456(2010) Hirano, T., et al. Biochim. Biophys. Acta 1791(8):797-805(2009) Siegel, G., et al. Nat. Cell Biol. 11(6):705-716(2009) Devedjiev, Y., et al. Structure 8(11):1137-1146(2000)