

# LYPLA1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP19062c

### **Specification**

LYPLA1 Antibody (Center) Blocking Peptide -Product Information

Primary Accession 075608

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 a acyl-protein thioesterase (PubMed:<a href="http://www.uniprot.org/c itations/19439193" target="\_blank">19439193</a>, PubMed:<a href="http://www.uniprot.org/ci tations/20418879"

## LYPLA1 Antibody (Center) Blocking Peptide - Background

Lysophospholipases are enzymes that act on biologicalmembranes to regulate the multifunctional lysophospholipids. Theprotein encoded by this gene hydrolyzes lysophosphatidylcholine inboth monomeric and micellar forms. The use of alternatepolyadenylation sites has been found for this gene. There arealternatively spliced transcript variants described for this genebut 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)



target="\_blank">20418879</a>). Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS (PubMed:<a href="http://www.uniprot.org/c itations/20418879" target="\_blank">20418879</a>). Has depalmitoylating activity toward KCNMA1 (PubMed:<a href="http://www.uniprot.org/c itations/22399288" target="\_blank">22399288</a>). Could also depalmitoylate ADRB2 (PubMed:<a href

f="http://www.uniprot.org/citations/274819 42" target="\_blank">27481942</a>). Acts as a lysophospholipase and hydrolyzes lysophosphatidylcholine (lyso-PC) (PubMed:<a href="http://www.uniprot.org/c

itations/19439193" target="\_blank">19439193</a>). Also hydrolyzes lysophosphatidylethanolamine (lyso-PE), lysophosphatidylinositol (lyso-PI) and lysophosphatidylserine (lyso-PS) (By

similarity). Has much higher thioesterase activity than lysophospholipase activity (PubMed:<a href="http://www.uniprot.org/c itations/19439193"

target="\_blank">19439193</a>). 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:<a href="http://www.uniprot.org/c itations/21393252" target=" blank">21393252</a>).

# **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