

# Lysophospholipase 1 Antibody

Rabbit mAb Catalog # AP92172

### **Product Information**

**Application** WB, IF, FC, ICC **Primary Accession** 075608

**Reactivity** Rat, Human, Mouse

**Clonality** Monoclonal

Other Names APT1; hAPT1; LPL1; LYPLA1; Lysophospholipase 1; LYSOPLA; LysoPLA I;

IsotypeRabbit IgGHostRabbitCalculated MW24670

## **Additional Information**

**Dilution** WB 1:500~1:2000 ICC/IF 1:50~1:200 FC 1:50

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human Lysophospholipase 1

**Description**Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as

trimeric G alpha proteins or HRAS. Has depalmitoylating activity and also low

lysophospholipase activity.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **Protein Information**

Name LYPLA1

Synonyms APT1, LPL1

**Function** Acts as an acyl-protein thioesterase (PubMed: <u>19439193</u>, PubMed:<u>20418879</u>).

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:<u>37802024</u>). 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:<u>37802024</u>). Acts as a lysophospholipase and hydrolyzes lysophosphatidylcholine (lyso-PC) (PubMed:<u>19439193</u>). Also hydrolyzes lysophosphatidylethanolamine (lyso-PE), lysophosphatidylinositol (lyso-PI) and lysophosphatidylserine (lyso-PS) (By similarity). Has much higher thioesterase activity than lysophospholipase activity (PubMed:<u>19439193</u>). 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).

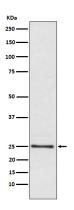
**Cellular Location** 

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..

# **Images**



Western blot analysis of Lysophospholipase 1 expression in Human fetal liver lysate.

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