

Lysophospholipase 1 Rabbit mAb

Catalog # AP78144

Product Information

Application WB, IF, FC, ICC

Primary Accession <u>075608</u>

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human Lysophospholipase 1

Purification Affinity Chromatography

Calculated MW 24670

Additional Information

Gene ID 10434

Other Names LYPLA1

Dilution WB~~1/500-1/1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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: 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).

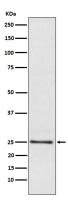
Cellular Location

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..

Images



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