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Lysophospholipase 1 Antibody

Rabbit mAb
Catalog # AP92172

Product Information

Application	WB, IF, FC, ICC
Primary Accession	O75608
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	APT1; hAPT1; LPL1; LYPLA1; Lysophospholipase 1; LYSOPLA; LysoPLA I;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	24670

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

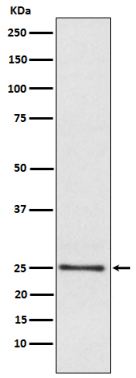
Name	LYPLA1
Synonyms	APT1, LPL1
Function	Acts as an acyl-protein thioesterase (PubMed: 19439193, PubMed:20418879). Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS (PubMed:20418879). Acts as a palmitoyl thioesterase that catalyzes depalmitoylation 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..

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.