

# LYPLA1 Polyclonal Antibody

Catalog # AP70792

## Product Information

Application	WB, IHC-P, IF
Primary Accession	<a href="#">O75608</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24670

## Additional Information

Gene ID	10434
Other Names	LYPLA1; APT1; LPL1; Acyl-protein thioesterase 1; APT-1; hAPT1; Lysophospholipase 1; Lysophospholipase I; LPL-I; LysoPLA I
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications. IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

Name	LYPLA1
Synonyms	APT1, LPL1
Function	Acts as an acyl-protein thioesterase (PubMed: <a href="#">19439193</a> , PubMed: <a href="#">20418879</a> ). Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS (PubMed: <a href="#">20418879</a> ). Acts as a palmitoyl thioesterase that catalyzes depalmitoylation of proteins, such as ADRB2, KCNMA1 and SQSTM1 (PubMed: <a href="#">22399288</a> , PubMed: <a href="#">27481942</a> , PubMed: <a href="#">37802024</a> ). 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: <a href="#">37802024</a> ). Acts as a lysophospholipase and hydrolyzes lysophosphatidylcholine (lyso-PC) (PubMed: <a href="#">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:[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..

## Background

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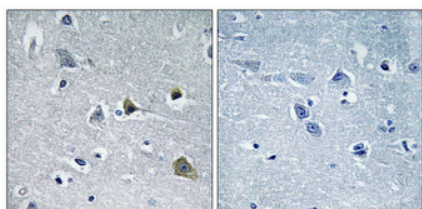
Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS. Has depalmitoylating activity toward KCNMA1. Has low lysophospholipase activity.

## Images

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Western Blot analysis of various cells using LYPLA1  
Polyclonal Antibody diluted at 1 : 2000



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

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