

DATASHEET
LYPLA1 Rabbit Polyclonal Antibody
CAT. NO. APA08762
KEY FEATURES

Target	LYPLA1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Rabbit	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Acts as an acyl-protein thioesterase . Hydrolyzes fatty acids from S-acylated cysteine residues in proteins such as trimeric G alpha proteins or HRAS . Acts as a palmitoyl thioesterase that catalyzes depalmitoylation of proteins, such as ADRB2, KCNMA1 and SQSTM1 . 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 . Acts as a lysophospholipase and hydrolyzes lysophosphatidylcholine (lyso-PC) . Also hydrolyzes lysophosphatidylethanolamine (lyso-PE), lysophosphatidylinositol (lyso-PI) and lysophosphatidylserine (lyso-PS) . Has much higher thioesterase activity than lysophospholipase activity .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:100 - 1:500

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to LYPLA1
Specificity	Recognizes endogenous levels of LYPLA1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human LYPLA1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 24 kD; Observed: 25 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	APT1; LPL1; Acyl-protein thioesterase 1; APT-1; hAPT1; Lysophospholipase 1; Lysophospholipase I; LPL-I; LysoPLA I
Gene Symbol	LYPLA1
Entrez Gene	10434(Human); 18777(Mouse); 25514(Rat)
SwissProt	O75608(Human); P97823(Mouse); P70470(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

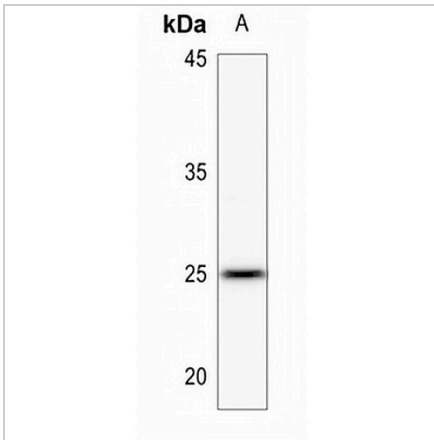
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

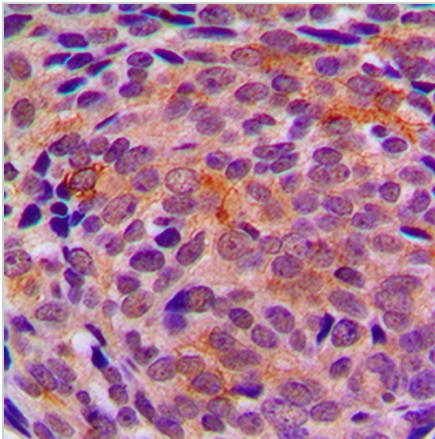
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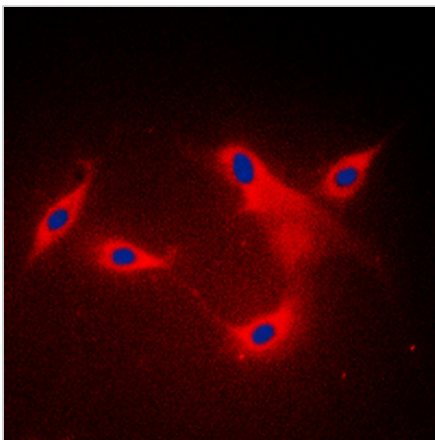
DATA



Western blot analysis of LYPLA1 expression in rat lung (A) whole cell lysates. (Predicted band size: 24 kD; Observed band size: 25 kD)



Immunohistochemical analysis of LYPLA1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of LYPLA1 staining in MDAMB453 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.