

Product datasheet

Anti-Lysosomal acid lipase/LAL antibody [9G7F12] ab36597

★★★★★ [1 Abreviews](#) [3 References](#) [3 Images](#)

Overview

Product name	Anti-Lysosomal acid lipase/LAL antibody [9G7F12]
Description	Mouse monoclonal [9G7F12] to Lysosomal acid lipase/LAL
Host species	Mouse
Tested applications	Suitable for: Flow Cyt, WB, IHC-P
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Recombinant fragment corresponding to Lysosomal acid lipase/LAL.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein G purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	9G7F12
Isotype	IgG2a

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab36597 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 0.5µg for 10 ⁶ cells. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/500 - 1/2000. Detects a band of approximately 45 kDa (predicted molecular weight: 46 kDa).
IHC-P		Use a concentration of 2 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

Function

Crucial for the intracellular hydrolysis of cholesteryl esters and triglycerides that have been internalized via receptor-mediated endocytosis of lipoprotein particles. Important in mediating the effect of LDL (low density lipoprotein) uptake on suppression of hydroxymethylglutaryl-CoA reductase and activation of endogenous cellular cholesteryl ester formation.

Involvement in disease

Defects in LIPA are the cause of Wolman disease (WOD) [MIM:278000]. WOD is a severe manifestation of LIPA deficiency, leading to the accumulation of cholesteryl esters and triglycerides in most tissues of the body. WOD occurs in infancy and is nearly always fatal before the age of 1 year.

Defects in LIPA are the cause of cholesteryl ester storage disease (CESD) [MIM:278000]. CESD is a mild manifestation of LIPA deficiency, leading to the accumulation of cholesteryl esters and triglycerides in most tissues of the body. It is characterized by late-onset.

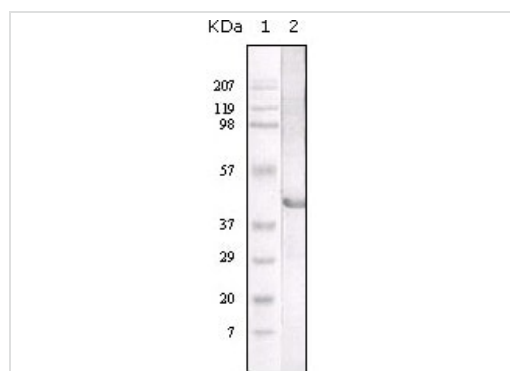
Sequence similarities

Belongs to the AB hydrolase superfamily. Lipase family.

Cellular localization

Lysosome.

Images



Western blot - Anti-Lysosomal acid lipase/LAL antibody [9G7F12] (ab36597)

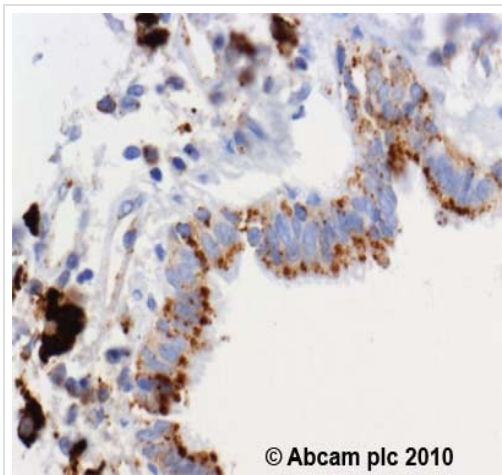
All lanes : Anti-Lysosomal acid lipase/LAL antibody [9G7F12] (ab36597)

Lane 1 : Molecular weight marker

Lane 2 : Truncated LAL recombinant protein

Predicted band size: 46 kDa

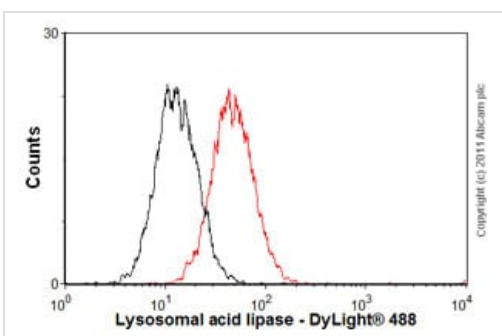
Observed band size: ~45 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lysosomal acid lipase/LAL antibody [9G7F12] (ab36597)

ab36597 (2 µg/ml) staining Lysosomal acid lipase/LAL in human lung using an automated system (DAKO Autostainer Plus). Using this protocol there is lysosomal staining in the bronchiolar epithelium and resident macrophages .

Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer citrate pH 6.0 in a DAKO PT link. Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.



Flow Cytometry - Anti-Lysosomal acid lipase/LAL antibody [9G7F12] (ab36597)

Overlay histogram showing HepG2 cells stained with ab36597 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab36597, 0.5µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (**ab91361**, 1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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