

Product datasheet

Anti-Lysosomal acid lipase antibody ab73445

1 References 3 Images

Overview

<b>Product name</b>	Anti-Lysosomal acid lipase antibody
<b>Description</b>	Rabbit polyclonal to Lysosomal acid lipase
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide conjugated to KLH derived from within residues 350 to the C-terminus of Human Lysosomal acid lipase. Read Abcam's proprietary immunogen policy (Peptide available as <a href="#">ab87127</a> .)
<b>Positive control</b>	This antibody gave a positive signal in the following whole cell lysates: HepG2; HT 1080.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab73445** 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
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 55 kDa (predicted molecular weight: 45 kDa).
ICC/IF		Use a concentration of 1 µg/ml.

Application	Abreviews	Notes
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IHC-P Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

## Target

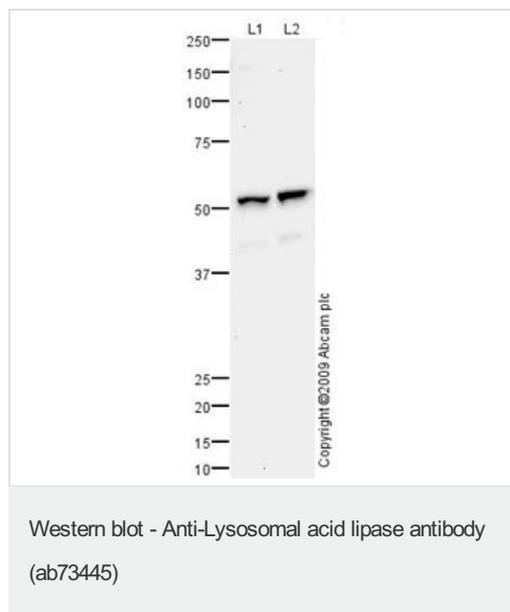
**Function** Crucial for the intracellular hydrolysis of cholesteryl esters and triglycerides that have been internalized via receptor-mediated endocytosis of lipoprotein particles. Important in mediating the effect of LDL (low density lipoprotein) uptake on suppression of hydroxymethylglutaryl-CoA reductase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



**All lanes** : Anti-Lysosomal acid lipase antibody (ab73445) at 1 µg/ml

**Lane 1** : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 2** : HT 1080 (Human fibrosarcoma) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

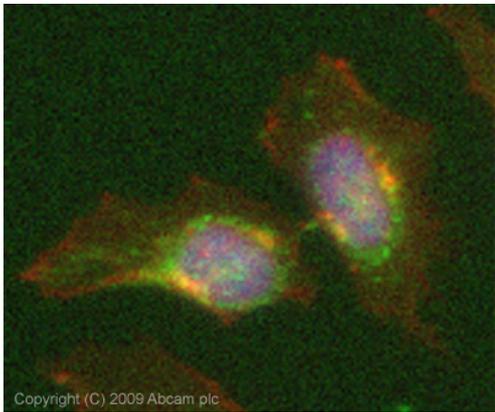
Performed under reducing conditions.

**Predicted band size:** 45 kDa

**Observed band size:** 45,55 kDa

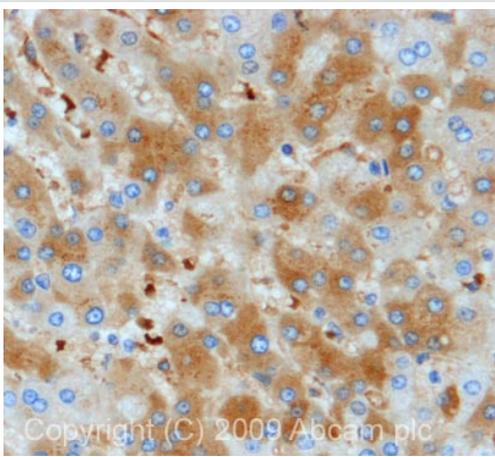
why is the actual band size different from the predicted?

Lysosomal acid lipase contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunocytochemistry/ Immunofluorescence - Anti-Lysosomal acid lipase antibody (ab73445)

ICC/IF image of ab73445 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab73445, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lysosomal acid lipase antibody (ab73445)

IHC image of Lysosomal acid lipase staining in normal human liver formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab73445, 5µg/ml, for 15 mins 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.

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