abcam

Product datasheet

Anti-Lipoprotein lipase antibody [LPL.A4] ab21356

9 Abreviews 56 References 2 Images

Overview

Product name	Anti-Lipoprotein lipase antibody [LPL.A4]
Description	Mouse monoclonal [LPL.A4] to Lipoprotein lipase
Host species	Mouse
Tested applications	**Suitable for:** Flow Cyt, WB
Species reactivity	**Reacts with:** Cow, Human
Immunogen	Full length protein corresponding to Human Lipoprotein lipase.
Positive control	Purified human and bovine recombinant Lipoprotein lipase.
General notes	This product was changed from ascites to tissue culture supernatant on 25th May 2018. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team. 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. 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

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein A purified
Purification notes	Protein A affinity chromatography
Clonality	Monoclonal
Clone number	LPL.A4

Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab21356 in the following tested applications.

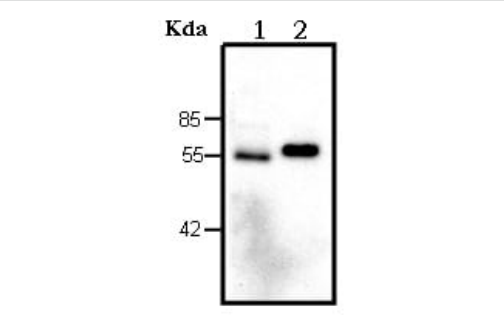
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 1µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
WB	★★★☆☆ **(4)**	1/1000. Predicted molecular weight: 53 kDa.

Target

Function	The primary function of this lipase is the hydrolysis of triglycerides of circulating chylomicrons and very low density lipoproteins (VLDL). Binding to heparin sulfate proteogylcans at the cell surface is vital to the function. The apolipoprotein, APOC2, acts as a coactivator of LPL activity in the presence of lipids on the luminal surface of vascular endothelium.
Involvement in disease	Defects in LPL are the cause of lipoprotein lipase deficiency (LPL deficiency) [MIM:238600]; also known as familial chylomicronemia or hyperlipoproteinemia type I. LPL deficiency chylomicronemia is a recessive disorder usually manifesting in childhood. On a normal diet, patients often present with abdominal pain, hepatosplenomegaly, lipemia retinalis, eruptive xanthomata, and massive hypertriglyceridemia, sometimes complicated with acute pancreatitis.
Sequence similarities	Belongs to the AB hydrolase superfamily. Lipase family. Contains 1 PLAT domain.
Post-translational modifications	Tyrosine nitration after lipopolysaccharide (LPS) challenge down-regulates the lipase activity.
Cellular localization	Cell membrane. Secreted. Locates to the plasma membrane of microvilli of hepatocytes with triacyl-glycerol-rich lipoproteins (TRL). Some of the bound LPL is then internalized and located inside non-coated endocytic vesicles.

Images



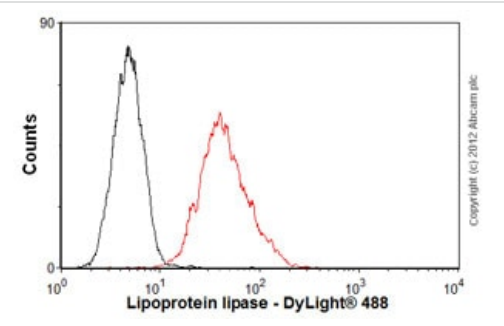
Western blot - Anti-Lipoprotein lipase antibody [LPL.A4] (ab21356)

All lanes : Anti-Lipoprotein lipase antibody [LPL.A4] (ab21356) at 1/1000 dilution

Lane 1 : Human Lipoprotein lipase.
Lane 2 : Bovine Lipoprotein lipase

Lysates/proteins at 10 µg per lane.

Predicted band size: 53 kDa
Observed band size: 55,60 kDa



Flow Cytometry - Anti-Lipoprotein lipase antibody [LPL.A4] (ab21356)

Overlay histogram showing HeLa cells stained with ab21356 (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 (ab21356, 1µg/1x10^6 cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

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