abcam

Product datasheet

Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free ab247539

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free
Description	Rabbit monoclonal [EPR3725] to Lipin 1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, IP, IHC-P, WB, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	ab247539 is the carrier-free version of **ab92316**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3725
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab247539 in the following tested applications.

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

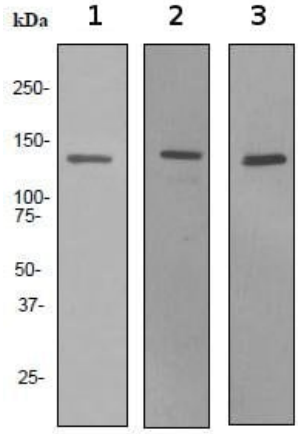
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Heat mediated antigen retrieval and use of an HRP/AP polymerized secondary antibody recommended.
WB		Use at an assay dependent concentration. Predicted molecular weight: 99 kDa.
Flow Cyt (Intra)		Use at an assay dependent concentration.

Target

Function	Plays important roles in controlling the metabolism of fatty acids at differents levels. Acts as a magnesium-dependent phosphatidate phosphatase enzyme which catalyzes the conversion of phosphatidic acid to diacylglycerol during triglyceride, phosphatidylcholine and phosphatidylethanolamine biosynthesis in the reticulum endoplasmic membrane. Acts also as a nuclear transcriptional coactivator for PPARGC1A/PPARA to modulate lipid metabolism gene expression (By similarity). Is involved in adipocyte differentiation. May also be involved in mitochondrial fission by converting phosphatidic acid to diacylglycerol.
Tissue specificity	Abundant in adipose tissue and skeletal muscle. Lower levels in some portions of the digestive

	tract.
Involvement in disease	Defects in LPIN1 are a cause of autosomal recessive acute recurrent myoglobinuria (ARARM) [MIM:268200]; also known as acute recurrent rhabdomyolysis. Recurrent myoglobinuria is characterized by recurrent attacks of rhabdomyolysis (necrosis or disintegration of skeletal muscle) associated with muscle pain and weakness and followed by excretion of myoglobin in the urine. Renal failure may occasionally occur. Onset is usually in early childhood under the age of 5 years.
Sequence similarities	Belongs to the lipin family.
Domain	Contains one Leu-Xaa-Xaa-Ile-Leu (LXXIL), a transcriptional binding motif, which mediates interaction with PPARA. Contains 1 Asp-Xaa-Asp-Xaa-Thr (DXDXT) motif, a catalytic motif essential for phosphatidate phosphatase activity.
Post-translational modifications	Phosphorylated at multiple sites in response to insulin. Phosphorylation is controlled by the mTOR signaling pathway (By similarity). Dephosphorylated in response to epinephrine and oleic acid. Sumoylated.
Cellular localization	Nucleus. Cytoplasm > cytosol. Endoplasmic reticulum membrane.

Images



Western blot - Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free (ab247539)

All lanes : Anti-Lipin 1 antibody [EPR3725] (**ab92316**) at 1/1000 dilution

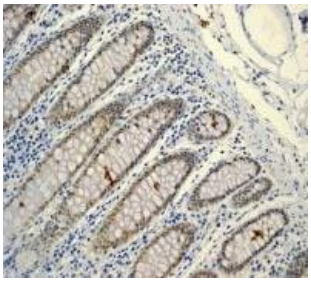
Lane 1 : Jurkat cell lysate
Lane 2 : HepG2 cell lysate
Lane 3 : HuT-78 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

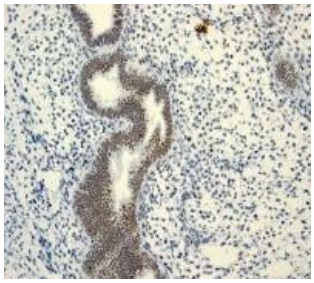
Predicted band size: 99 kDa

This data was developed using **ab92316**, the same antibody clone in a different buffer formulation.



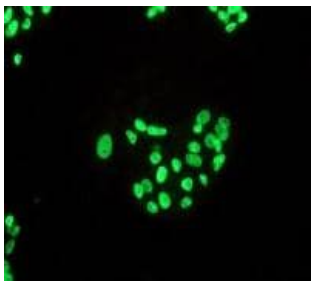
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free (ab247539)

This data was developed using **ab92316**, the same antibody clone in a different buffer formulation.**ab92316** at a 1/50 dilution, staining Lipin 1 in paraffin-embedded Human colon tissue. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



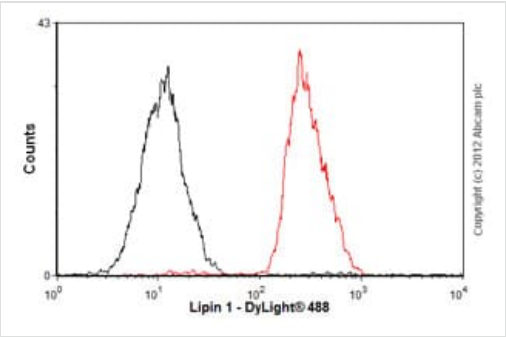
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free (ab247539)

This data was developed using **ab92316**, the same antibody clone in a different buffer formulation.**ab92316** at a 1/50 dilution, staining Lipin 1 in paraffin-embedded Human uterus tissue. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



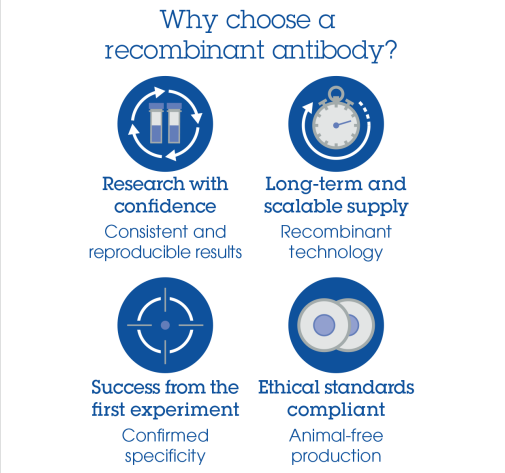
Immunocytochemistry/ Immunofluorescence - Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free (ab247539)

This data was developed using **ab92316**, the same antibody clone in a different buffer formulation.Immunofluorescent staining of HepG2 cells using **ab92316** at 1/100 dilution.



Flow Cytometry (Intracellular) - Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free (ab247539)

This data was developed using **ab92316**, the same antibody clone in a different buffer formulation.Overlay histogram showing HepG2 cells stained with **ab92316** (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 (**ab92316**, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Anti-Lipin 1 antibody [EPR3725] - BSA and Azide free (ab247539)

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