abcam

ab328031

Anti-Lipoprotein lipase antibody [EPR31098-680]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR31098-680
Purification technique	Affinity purification Protein A
Specificity	This antibody does not cross-react with overexpressed mouse endothelial lipase (LIPG) or mouse hepatic triacylglycerol lipase (LIPC). This antibody detects transfected levels of human lipoprotein lipase only.
Concentration	0.525 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Transfected cell lysate - Human
Dilution info	1/1000

Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Predicted

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell line - Mouse, Transfected cell line - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Transfected cell line - Mouse
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Predicted

Species	Human
Dilution info	-

Notes	-

Not recommended

Species	Transfected cell lysate - Human, Transfected cell line - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Transfected cell line - Human
Dilution info	1/500
Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Predicted

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Human, Transfected cell line - Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Mouse

Dilution info	1/5000
Notes	-

Species	Transfected cell line - Human
Dilution info	1/5000
Notes	-

Species	Mouse
Dilution info	1/5000
Notes	-

Predicted

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

Target data

See full target information Lpl

Function Key enzyme in triglyceride metabolism. Catalyzes the hydrolysis of triglycerides from circulating chylomicrons and very low density lipoproteins (VLDL), and thereby plays an important role in lipid clearance from the blood stream, lipid utilization and storage (PubMed:8675619). Although it has both phospholipase and triglyceride lipase activities it is primarily a triglyceride lipase with low but detectable phospholipase activity (By similarity). Mediates margination of triglyceride-rich lipoprotein particles in capillaries (PubMed:24726386). Recruited to its site of action on vascular endothelium by binding to GPIHBP1 and cell surface heparan sulfate proteoglycans (PubMed:20620994, PubMed:24726386, PubMed:27811232).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

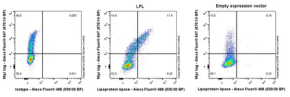
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

12 product images

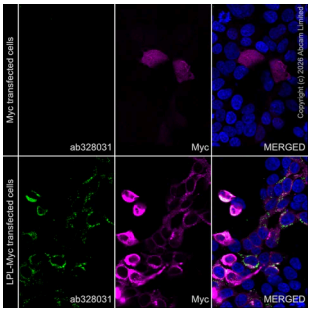


Flow Cytometry (Intracellular) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Flow Cytometry (Intracellular) staining using rabbit Anti-Lipoprotein lipase antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized 293T (human embryonic kidney epithelial cell) cells transfected with a human LPL expression vector containing a myc-His-tag® (middle)
293T cells transfected with an empty expression vector containing a myc-His-tag® (Right) labelling with ab328031 at 1/5000 dilution (0.01ug) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



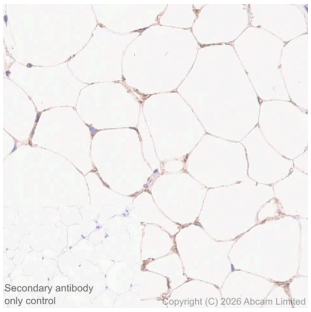
Immunocytochemistry/ Immunofluorescence - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Lipoprotein lipase antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 293T (human embryonic kidney epithelial cell) transfected with an empty expression vector containing a myc-His-tag® and 293T cells transfected with a human LPL protein expression vector containing a myc-His-tag® labelling with ab328031 at 1/500 (1.044 µg/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green).

Confocal image showing positive staining in 293T cells transfected with a human LPL protein expression vectors containing a myc-His-tag® (shown in green). The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab223894 Anti-Myc tag mouse monoclonal antibody (Alexa Fluor® 594) was used to counterstain Myc at 1/100 dilution (Magenta). The Nuclear counterstain was DAPI (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse white adipose using rabbit Anti-Lipoprotein lipase antibody

Immunohistochemical analysis of paraffin-embedded Mouse white adipose tissue labeling with ab328031 at 1/2000 (0.261 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Cytoplasmic staining in mouse white adipose (PMID: 24899625).

The primary antibody was incubated for 30 mins at room temperature.

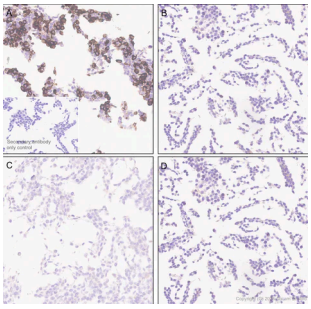
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Lipoprotein lipase antibody

Immunohistochemical analysis of paraffin-embedded
(A) HEK-293T cells transfected with a mouse LPL expression vector containing a myc-His tag cell pellet
(B) HEK-293T cells transfected with a mouse LIPG expression vector containing a myc-His tag cell pellet
(C) HEK-293T cells transfected with a mouse LIPC expression vector containing a myc-His tag cell pellet
(D) HEK-293T cells transfected with an empty vector containing a myc-His tag cell pellet
labeling with ab328031 at 1/2000 (0.261 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Cytoplasmic staining HEK-293T cells transfected with a mouse LPL expression vector containing a myc-His tag cell pellet (A); No staining in HEK-293T cells transfected with a mouse LIPG expression vector containing a myc-His tag cell pellet (B); No staining in HEK-293T cells transfected with a mouse LIPC expression vector containing a myc-His tag cell pellet (C); No staining in HEK-293T cells transfected with an empty plasmid vector containing a myc-His tag cell pellet (D).

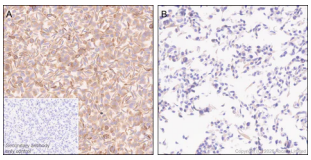
The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of (A) L-929 (mouse connective tissue fibroblast) cell pellet using rabbit Anti-Lipoprotein lipase antibody

Immunohistochemical analysis of paraffin-embedded (A) L-929 (mouse connective tissue fibroblast) cell pellet and (B) Neuro-2a (mouse neuroblastoma neuroblast) cell pellet tissue labeling Lipoprotein lipase with ab328031 at 1/2000 (0.261 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Cytoplasmic staining in L-929 cell pellet (A); Nearly no staining in Neuro-2a cell pellet (B).

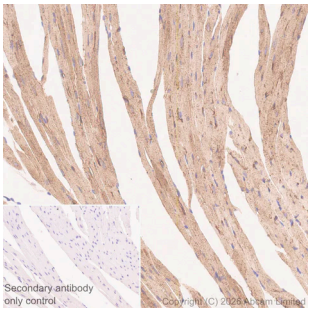
The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse cardiac muscle using rabbit Anti-Lipoprotein lipase antibody

Immunohistochemical analysis of paraffin-embedded Mouse cardiac muscle tissue labeling with ab328031 at 1/2000 (0.261 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Cytoplasmic staining in mouse cardiac muscle (PMID: 30598475).

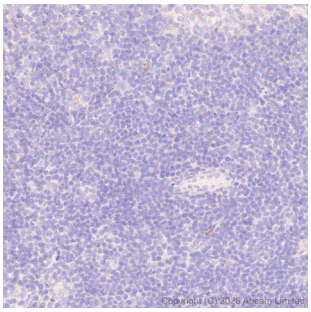
The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Lipoprotein lipase antibody

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling with ab328031 at 1/2000 (0.261 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Low expression: Almost no staining in mouse spleen (PMID: 30598475).

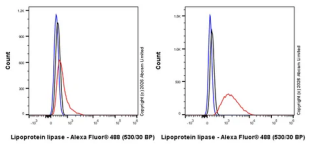
The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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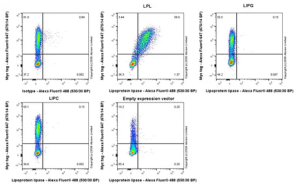
Flow Cytometry (Intracellular) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Flow Cytometry (Intracellular) staining of L-929 (mouse connective tissue fibroblast, Right) using rabbit Anti-Lipoprotein lipase antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized L-929 (mouse connective tissue fibroblast, Right) and Neuro-2a (mouse neuroblastoma neuroblast, Left) labelling with ab328031 at 1/5000 dilution (0.01ug) / Red compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Low expression: Neuro-2a.

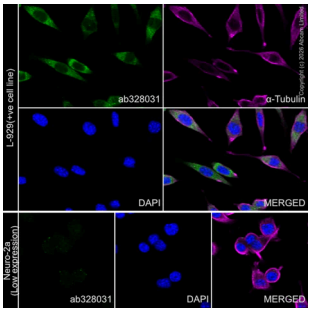


Flow Cytometry (Intracellular) - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Flow Cytometry (Intracellular) staining using rabbit Anti-Lipoprotein lipase antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized
293T (human embryonic kidney epithelial cell) cells transfected with a mouse LPL expression vector containing a myc-His-tag® (Upper middle)
293T cells transfected with a mouse LIPG expression vector containing a myc-His-tag® (Upper right)
293T cells transfected a mouse LIPC expression vector containing a myc-His-tag® (Lower left)
293T cells transfected with an empty expression vector containing a myc-His-tag® (Lower middle)
labelling with ab328031 at 1/5000 dilution (0.01ug) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



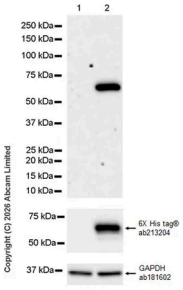
Immunocytochemistry/ Immunofluorescence - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Immunocytochemistry/ Immunofluorescence staining of L-929 (mouse connective tissue fibroblast) using rabbit Anti-Lipoprotein lipase antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized L-929 (mouse connective tissue fibroblast) and Neuro-2a (mouse neuroblastoma neuroblast) cells labelling with ab328031 at 1/500 (1.044 µg/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green).

Confocal image showing cytoplasmic staining in L-929 cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue).
Low expression: Neuro-2a.
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab7291 Anti-alpha Tubulin mouse monoclonal antibody was used to counterstain tubulin at 1/1000 dilution (Magenta). The Nuclear counterstain was DAPI (Blue).



Western blot - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Western blot staining using rabbit Anti-Lipoprotein lipase antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

In Western blot, Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) (1:5000) (53KDa); Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).

All lanes:
Western blot - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031) at 1/1000 dilution

Lane 1:
293T (human embryonic kidney epithelial cell) cells transfected with an empty vector containing a myc-His-tag® whole cell lysate at 20 µg

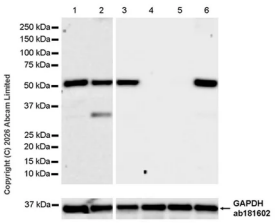
Lane 2:
293T cells transfected with a human Lipoprotein lipase expression vector containing a myc-His-tag® whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 53 kDa, 36 kDa

Exposure time: 180s



Western blot - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031)

Lipoprotein lipase Western blot staining using rabbit Anti-Lipoprotein lipase antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: Neuro-2a.

The identity of the bands lower than 37 kDa are unknown.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).

Exposure time: Lanes 1-2: 180 seconds; Lanes 3-6: 26 seconds.

All lanes:
Western blot - Anti-Lipoprotein lipase antibody [EPR31098-680] (ab328031) at 1/1000 dilution

Lane 1:
Mouse heart tissue lysate at 20 µg

Lane 2:
Mouse white fat tissue lysate at 20 µg

Lane 3:
L-929 (mouse connective tissue fibroblast) whole cell lysate at 20 µg

Lane 4:
Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate at 20 µg

Lane 5:
Undifferentiated 3T3-L1 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Lane 6:
3T3-L1 differentiated for 6 days whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 53 kDa, 36 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.