abcam

Product datasheet

Anti-LYVE1 antibody [EPR21771] ab218535

Recombinant RabMAb

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Overview

Product name	Anti-LYVE1 antibody [EPR21771]
Description	Rabbit monoclonal [EPR21771] to LYVE1
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB, IHC-P, IHC-Fr, Flow Cyt
Species reactivity	**Reacts with:** Mouse
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse lymph node and lung lysates; bEnd.3 whole cell lysate. IHC-P: Mouse liver, lung and colon tissues. IHC-Fr: Mouse liver and stomach tissues. Flow Cyt: bEnd.3 cells. IP: Mouse lung lysate.
General notes	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**.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21771

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab218535 in the following tested applications.

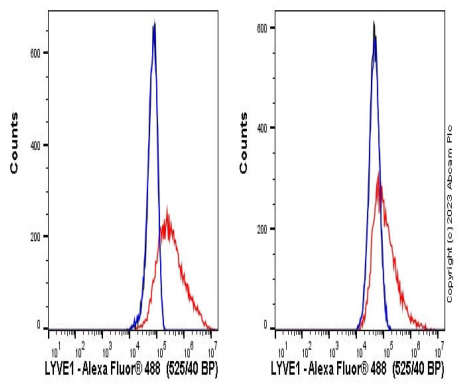
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/30.
WB		1/1000. Detects a band of approximately 34-70 kDa (predicted molecular weight: 35 kDa).
IHC-P	★☆☆☆☆ (1)	1/5000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt		1/60.

Target

Function	Ligand-specific transporter trafficking between intracellular organelles (TGN) and the plasma membrane. Plays a role in autocrine regulation of cell growth mediated by growth regulators containing cell surface retention sequence binding (CRS). May act as a hyaluronan (HA) transporter, either mediating its uptake for catabolism within lymphatic endothelial cells themselves, or its transport into the lumen of afferent lymphatic vessels for subsequent re-uptake and degradation in lymph nodes.
Tissue specificity	Mainly expressed in endothelial cells lining lymphatic vessels.
Sequence similarities	Contains 1 Link domain.
Post-translational modifications	O-glycosylated.
Cellular localization	Membrane. Localized to the plasma membrane and in vesicles near extranuclear membranes which may represent trans-Golgi network (TGN) and endosomes/prelysosomeal compartments. Undergoes ligand-dependent internalization and recycling at the cell surface.

Images



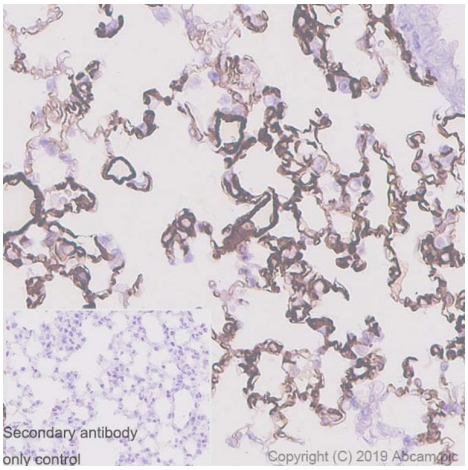
Flow Cytometry - Anti-LYVE1 antibody [EPR21771] (ab218535)

Flow cytometry overlay histogram showing left, bEND.3 treated with 100ng/mL TNF-alpha for 24h and right, negative untreated bEND.3 stained with ab218535 (red line). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interactionfollowed by the antibody (ab218535) (1x 10^6 in 100µl at 10.0 µg/ml (1/209)) for 30min on ice.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min on ice

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

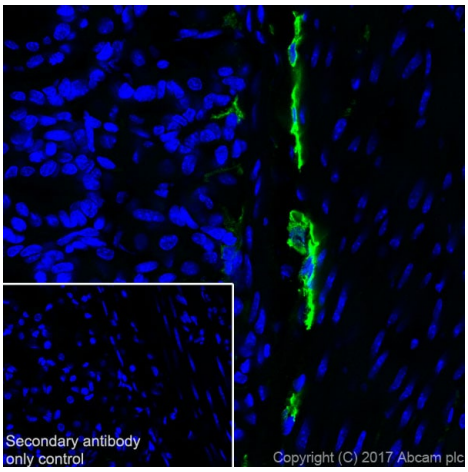
Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LYVE1 antibody [EPR21771] (ab218535)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling LYVE1 with ab218535 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on the lymphatic endothelial cells of mouse lung is observed. Counter stained with hematoxylin. Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

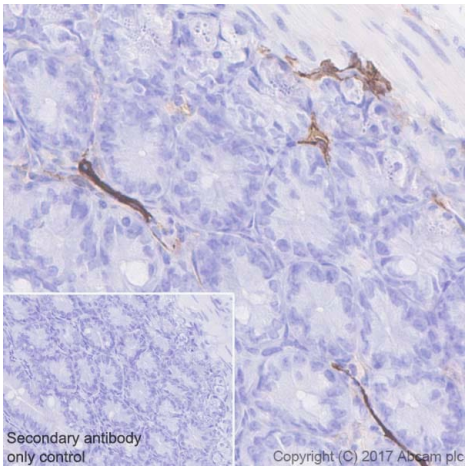


Immunohistochemistry (Frozen sections) - Anti-LYVE1 antibody [EPR21771] (ab218535)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse stomach tissue labeling LYVE1 with ab218535 at 1/5000 dilution (green), followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Positive staining of the endothelium of lymph vessels in the submucosae on mouse stomach tissue section (PMID: 15705793).

The nuclear counter stain is DAPI (blue).

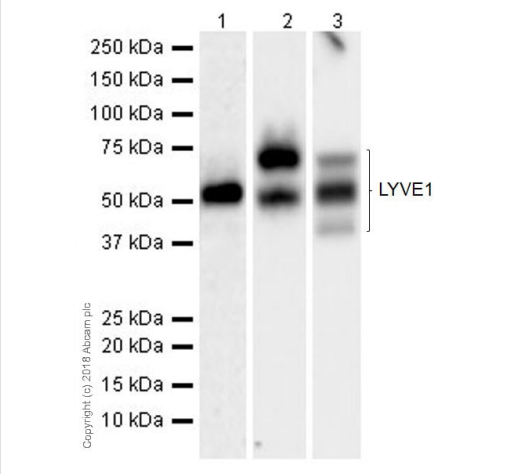
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LYVE1 antibody [EPR21771] (ab218535)

Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling LYVE1 with ab218535 at 1/5000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on the lymphatic endothelium of mouse colon (PMID: 14722766). Counter stained with Hematoxylin. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Western blot - Anti-LYVE1 antibody [EPR21771] (ab218535)

All lanes : Anti-LYVE1 antibody [EPR21771] (ab218535) at 1/1000 dilution

Lane 1 : Mouse lymph node lysate
Lane 2 : bEnd.3 (mouse brain endothelioma cell line) whole cell lysate
Lane 3 : Mouse lung lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

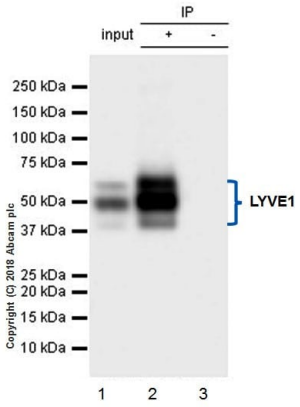
Developed using the ECL technique.

Predicted band size: 35 kDa
Observed band size: 34-70 kDa

Exposure time : Lane 1: 3 minutes; Lane 2: 32 seconds; Lane 3: 5 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

Several bands are observed including soluble, glycosylated and non-glycosylated forms which are consistent with the literature (PMID: 26966180).



Immunoprecipitation - Anti-LYVE1 antibody [EPR21771] (ab218535)

LYVE1 was immunoprecipitated from 0.35 mg mouse lung lysate with ab218535 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab218535 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

Lane 1: Mouse lung lysate 10 µg (Input).

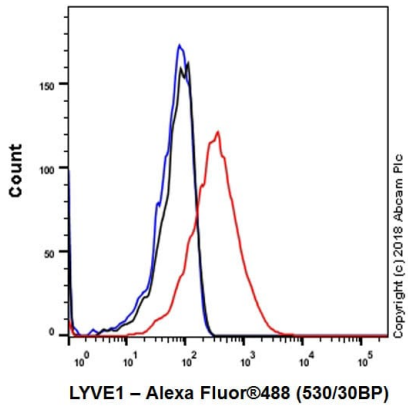
Lane 2: ab218535 IP in mouse lung lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab218535 in mouse lung lysate.

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

Exposure time: 8 seconds.

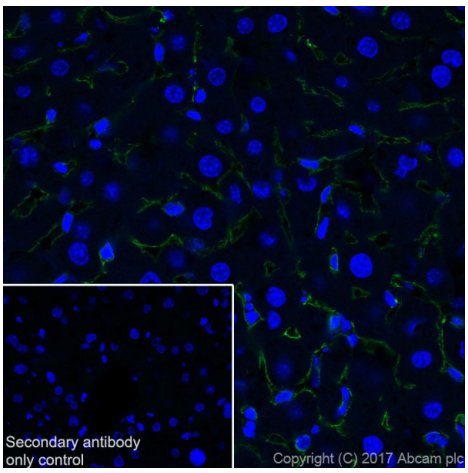
Several bands are observed including soluble, glycosylated and non-glycosylated forms which are consistent with the literature (PMID: 26966180).



Flow Cytometry - Anti-LYVE1 antibody [EPR21771] (ab218535)

Flow cytometric analysis of bEnd.3 (mouse brain endothelioma cell line) cells labeling LYVE1 with ab218535 at 1/60 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.

Gated on total viable cells.

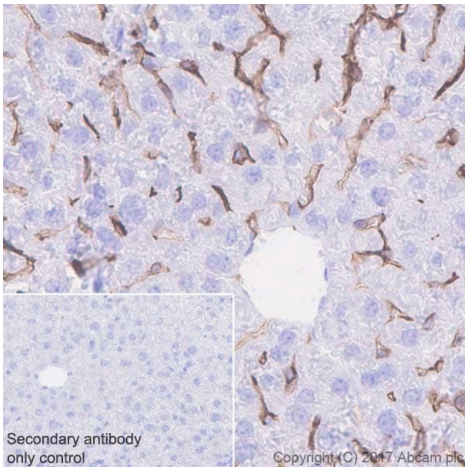


Immunohistochemistry (Frozen sections) - Anti-LYVE1 antibody [EPR21771] (ab218535)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse liver tissue labeling LYVE1 with ab218535 at 1/500 dilution (green), followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Positive staining of the endothelium of sinusoid blood vessels on mouse liver tissue section (PMID: 11719431).

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LYVE1 antibody [EPR21771] (ab218535)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling LYVE1 with ab218535 at 1/5000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on the endothelial surface of mouse hepatic sinusoids (PMID: 16353487; PMID: 11719431). Counter stained with Hematoxylin. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Anti-LYVE1 antibody [EPR21771] (ab218535)

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