LYVE1 Monoclonal Antibody (ALY7), Alexa Fluor 488, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Alexa Fluor 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	ALY7
Conjugate	Alexa Fluor® 488
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1633415

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	17 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	2 Publications
Immunocytochemistry (ICC/IF)	Assay-Dependent	5 Publications
Flow Cytometry (Flow)	Assay-Dependent	8 Publications

Product Specific Information

Description: The monoclonal antibody ALY7 recognizes mouse LYVE-1, a transmembrane glycoprotein with similarity to CD44. The extracellular domain contains a conserved hyaluronan binding domain also found in CD44. Expression is found on lymphatic and liver endothelial cells and some populations of macrophages. The lymphatic system is responsible for transporting proteins and cells (especially dendritic cells) to tissues throughout the body, thereby acting as immune surveyors. LYVE-1 is one characteristic protein, along with podoplanin, PROX-1, Tie-2 and VEGFR-3, that is expressed on lymphatic endothelial cells (LECS). The ligand for LYVE-1 is hyaluronan, a large mucopolysaccharide. Although LYVE-1 can bind hyaluronan in vitro, the site for ligand binding in vivo is masked by sialyated O-linked glycan chains. It is postulated that binding to ligand requires modification /unmasking to expose the binding site. The development and remodeling of the endothelium after injury is an area of extensive study. When transplanted, hematopoietic stem cells (HSCs) can give rise to LECs that integrate into the endothelium in normal and metastatic tissue.

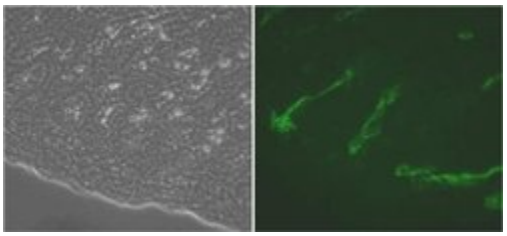
Applications Reported: This ALY7 antibody has been reported for use in flow cytometric analysis and immunohistologic staining of frozen tissue sections.

Applications Tested: This ALY7 antibody has been tested by immunofluorescence microscopy on mouse intestine. This can be used at less than or equal to 2 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488 nm; Emission: 519 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For LYVE1 Monoclonal Antibody (ALY7), Alexa Fluor 488, eBioscience™



LYVE1 Antibody (53-0443-82) in IHC (F)
Immunohistochemistry of cryosections of mouse intestine at 1 µg/mL of Anti-Mouse Lyve-1 Alexa Fluor® 488 (right). Phase image of same field (left).

View more figures on thermofisher.com

32 References

Immunohistochemistry (17)

Scientific reports

Integrins mediate placental extracellular vesicle trafficking to lung and liver in vivo.

"Published figure using LYVE1 monoclonal antibody (Product # 53-0443-82) in Immunohistochemistry"

Authors: Nguyen SL,Ahn SH,Greenberg JW,Collaer BW,Agnew DW,Arora R,Petroff MG

Species
Not Applicable

Dilution
Not Cited

Year
2021

Medical hypotheses

Anatomic evidence shows that lymphatic drainage exists in the pituitary to loop the cerebral lymphatic circulation.

"53-0443 was used in Immunohistochemistry to investigate the drainage differences between the perinasal and intracerebral lymphatic systems."

Authors: Elham E,Wumaier R,Wang C,Luo X,Chen T,Zhong N

Species
Mouse

Dilution
1:250

Year
2020

View more IHC references on thermofisher.com

Immunohistochemistry (Frozen) (2)

PloS one

The Lymphatic Endothelial mCLCA1 Antibody Induces Proliferation and Growth of Lymph Node Lymphatic Sinuses.

"53-0443 was used in Immunofluorescence to investigate the induction of proliferation and growth of lymph node lymphatic sinuses."

Authors: Jordan-Williams KL,Ramanujam N,Farr AG,Ruddell A

Species
Mouse

Dilution
Not Cited

Year
2017

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eLife

Lymph node stromal cells constrain immunity via MHC class II self-antigen presentation.

"53-0443 was used in Immunofluorescence on frozen tissues to investigate the role of MHC-II in lymph node stromal cells, showing that stromal cells constrain immunity through MHC-II expression."

Authors: Baptista AP,Roozendaal R,Reijmers RM,Koning JJ,Unger WW,Greuter M,Keuning ED,Molenaar R,Goverse G, Sneeboer MM,den Haan JM,Boes M,Mebius RE

Species
Mouse

Dilution
Not Cited

Year
2014

More applications with references on thermofisher.com

ICC/IF (5) **Flow (8)**