Endomucin Monoclonal Antibody (eBioV.7C7 (V.7C7)), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	eBioV.7C7 (V.7C7)
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_891527

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	-
Immunohistochemistry (IHC)	-	25 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	2 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	2 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	1 µg/test	3 Publications
Immunoprecipitation (IP)	Assay-Dependent	-

Product Specific Information

Description: The eBioV.7C7 monoclonal antibody reacts with mouse endomucin, which was identified in a search for cell-surface expressed endothelial cell markers. Endomucin is a 75 kDa type I integral membrane protein, with similarities to the sialomucin family of proteins including extensive O-linked glycosylation. Endomucin is expressed on endothelial cells, however, an exception is the high endothelial venules (HEV) of secondary lymphoid organs. In addition, it has been demonstrated that endomucin is expressed on CD34-c-Kit+Sca-1+Lin- hematopoietic progenitors, and that these cells are capable of multi-lineage long-term reconstitution of the hematopoietic compartment.

Applications Reported: This eBioV.7C7 (V.7C7) antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunoblotting (WB), and immunohistology staining of paraffin embedded tissue sections.

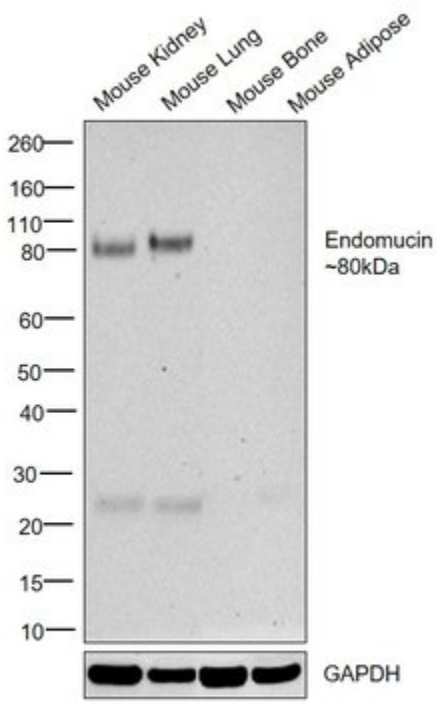
Applications Tested: This eBioV.7C7 (V.7C7) antibody has been tested by flow cytometric analysis of bEnd.3 cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

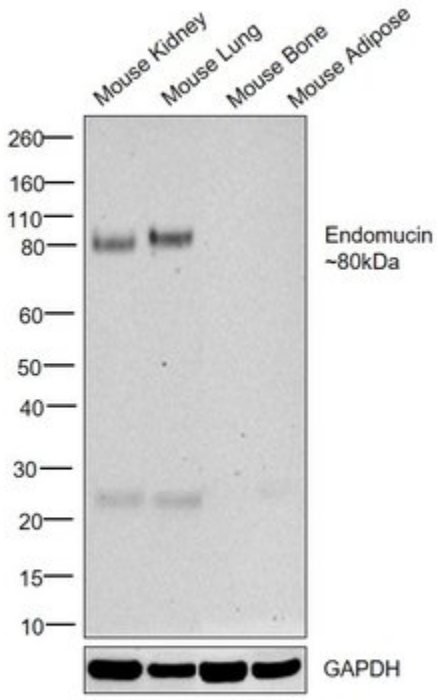
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data

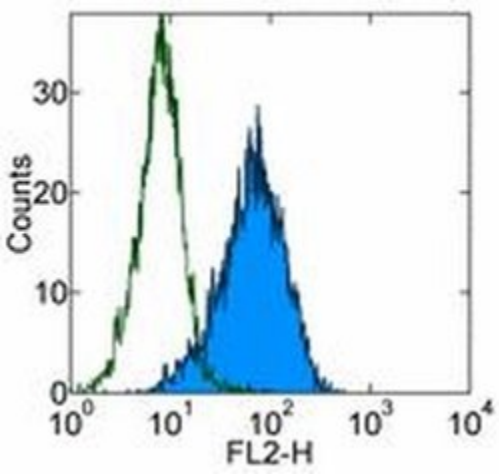


Endomucin Antibody (14-5851-82)
Antibody specificity was demonstrated by detection of differential basal expression of the target across tissue lysates tested owing to their inherent genetic constitution. Relative expression of Endomucin was observed in highly vascularized tissue such as Mouse Kidney and Mouse Lung as compared to less vascularized tissues such as Mouse Bone and Mouse Adipose using Anti-Endomucin Monoclonal Antibody (Product # 14-5851-85) in Western Blot. Relative expression validation info.

Product Images For Endomucin Monoclonal Antibody (eBioV.7C7 (V.7C7)), eBioscience™



Endomucin Antibody (14-5851-82) in WB
Western blot was performed using Anti-Endomucin Monoclonal Antibody (Product # 14-5851-85) and an 80kDa band corresponding to Endomucin was observed across tissue lysates tested except Mouse Bone and Mouse Adipose. Tissue extracts (30 µg lysate) of Mouse Kidney (Lane 1), Mouse Lung (Lane 2), Mouse Bone (Lane 3) and Mouse Adipose (Lane 4) were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with F(ab)2-Rabbit anti-Rat IgG (H+L) Secondary Antibody, HRP (Product # PA1-29927, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



Endomucin Antibody (14-5851-82) in Flow
Staining of bEnd.3 cell line with 0.5 µg of Rat IgG2a K Isotype Control Purified (Product # 14-4321-82) (open histogram) or 0.5 µg of Anti-Mouse Endomucin Purified (filled histogram) followed by F (ab')2 Anti-Rat IgG PE (Product # 12-4822). Total viable cells were used for analysis.

View more figures on thermofisher.com

38 References

Immunohistochemistry (25)

Nature communications

Indispensable role of Galectin-3 in promoting quiescence of hematopoietic stem cells.

"Published figure using Endomucin monoclonal antibody (Product # 14-5851-82) in Immunohistochemistry"

Authors: Jia W,Kong L,Kidoya H,Naito H,Muramatsu F,Hayashi Y,Hsieh HY,Yamakawa D,Hsu DK,Liu FT,Takakura N

Species
Not Applicable

Dilution
Not Cited

Year
2021

Development (Cambridge, England)

YAP and TAZ maintain PROX1 expression in the developing lymphatic and lymphovenous valves in response to VEGF-C signaling.

"14-5851 was used in Immunohistochemistry to report that VEGF-C signaling is necessary for valve morphogenesis."

Authors: Cha B,Ho YC,Geng X,Mahamud MR,Chen L,Kim Y,Choi D,Kim TH,Randolph GJ,Cao X,Chen H,Srinivasan RS

Species
Mouse
Not Applicable

Dilution
1:3000
Not Cited

Year
2020

View more IHC references on thermofisher.com

Immunohistochemistry (Paraffin) (2)

JCI insight

Switching harmful visceral fat to beneficial energy combustion improves metabolic dysfunctions.

"14-5851 was used in Immunohistochemistry on paraffin embedded tissues to present a new concept to turn the harmful visceral fat into a beneficial energy consumption depot, which is beneficial for improvement of metabolic dysfunctions in obese mice."

Authors: Yang X,Sui W,Zhang M,Dong M,Lim S,Seki T,Guo Z,Fischer C,Lu H,Zhang C,Yang J,Zhang M,Wang Y,Cao C, Gao Y,Zhao X,Sun M,Sun Y,Zhuang R,Samani NJ,Zhang Y,Cao Y

Species
Mouse

Dilution
Not Cited

Year
2017

Oncotarget

Co-option of pre-existing vascular beds in adipose tissue controls tumor growth rates and angiogenesis.

"Published figure using Endomucin monoclonal antibody (Product # 14-5851-82) in Immunofluorescence"

Authors: Lim S,Hosaka K,Nakamura M,Cao Y

Species
Human
Mouse

Dilution
Not Cited
1:100

Year
2016

More applications with references on thermofisher.com

IHC (PFA) (2) IHC (F) (2) ICC/IF (4) Flow (3)