abcam

Product datasheet

Anti-ICAM1 antibody [1A29] ab171123

61 References 8 Images

Overview

Product name	Anti-ICAM1 antibody [1A29]
Description	Mouse monoclonal [1A29] to ICAM1
Host species	Mouse
Tested applications	**Suitable for:** ICC, WB, IHC-P, Flow Cyt
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Full length protein corresponding to Rat ICAM1. Rat lymph node stroma - Native protein Database link: **Q00238**
Positive control	IHC-P: Mouse kidney, lung and spleen tissues. WB: Mouse kidney, lung and spleen tissue lysate; Rat heart tissue lysate; A549 cell lysate. Flow Cyt: C6, Raji and Ramos cells. ICC: A439 cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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	Constituent: 100% PBS Preservative negative and carrier free.
Purity	Protein A purified
Clonality	Monoclonal
Clone number	1A29
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab171123 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		1/250.
WB		1/250. Predicted molecular weight: 57 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt		1/20. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

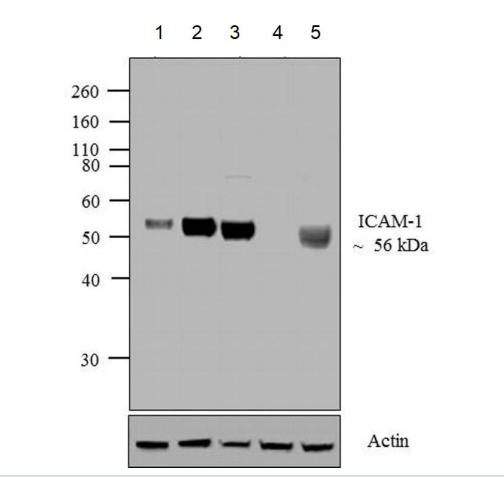
Function ICAM proteins are ligands for the leukocyte adhesion protein LFA-1 (integrin alpha-L/beta-2). During leukocyte trans-endothelial migration, ICAM1 engagement promotes the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG activation. In case of rhinovirus infection acts as a cellular receptor for the virus.

Sequence similarities Belongs to the immunoglobulin superfamily. ICAM family.
Contains 5 Ig-like C2-type (immunoglobulin-like) domains.

Post-translational modifications Monoubiquitinated, which is promoted by MARCH9 and leads to endocytosis.

Cellular localization Membrane.

Images



Western blot - Anti-ICAM1 antibody [1A29] (ab171123)

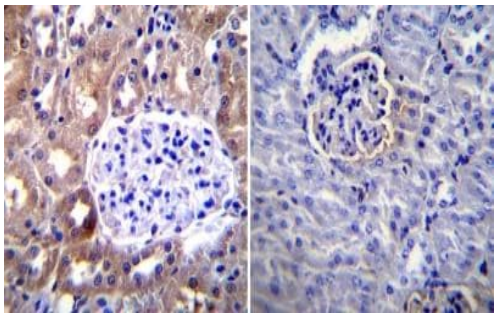
All lanes : Anti-ICAM1 antibody [1A29] (ab171123) at 1/250 dilution

Lane 1 : Mouse spleen lysate
Lane 2 : Mouse lung lysate
Lane 3 : Mouse kidney lysate
Lane 4 : A549 (Human lung carcinoma cell line) whole cell lysate
Lane 5 : Rat heart lysate

Lysates/proteins at 20 µg per lane.

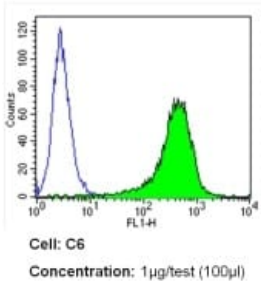
Predicted band size: 57 kDa
Observed band size: 56 kDa

Western blot analysis was performed on whole cell extracts. The blots were probed with ab171123 (1:250 dilution) and detected by chemiluminescence using Goat anti-Mouse IgG (H+L) Secondary Antibody, HRP conjugate. A 56 kDa band corresponding to ICAM-1 was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 12 % Bis-Tris gel , XCell SureLock™ Electrophoresis System and Novex® Sharp Pre-Stained Protein Standard. Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System. The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate.



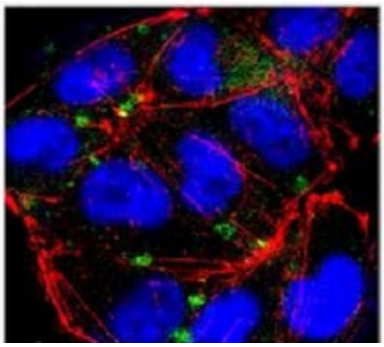
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [1A29] (ab171123)

Immunohistochemical analysis of deparaffinized mouse kidney tissue, labeling ICAM1 with ab171123 at 1/100 dilution (left image) compared with a negative control without primary antibody (right image). Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin.



Flow Cytometry - Anti-ICAM1 antibody [1A29] (ab171123)

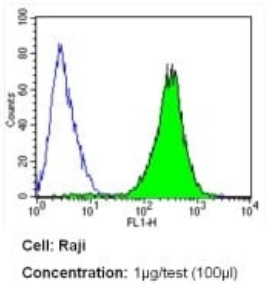
Flow cytometry analysis of ICAM1 in C6 cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of 1-5x10^6 cells/ml, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a ICAM1 monoclonal antibody (ab171123) at a dilution of 1 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated secondary antibody and re-suspended in PBS for FACS analysis.



Immunocytochemistry - Anti-ICAM1 antibody [1A29] (ab171123)

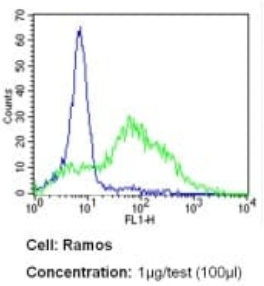
Immunocytochemical analysis of A439 cells staining ICAM1 with ab171123 at 1ug/ml.

Cells were fixed with 4% paraformaldehyde for 15 minutes, permeablilized with 0.25% Trition X-100 for 10 minutes and blocked with 5% BSA for 1 hour at room temparature. Cells were incubated with primary antibody at room temperature for 3 hours. Goat Anti-Mouse IgG (H&L) (Alexa Fluor® 488) was used as a secondary antibody.



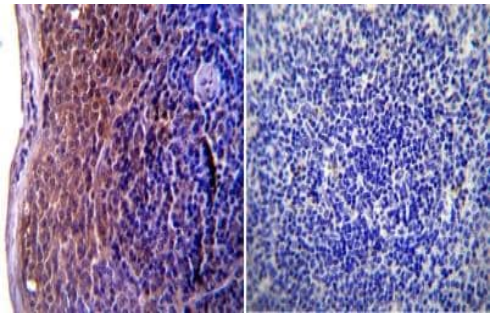
Flow Cytometry - Anti-ICAM1 antibody [1A29] (ab171123)

Flow cytometry analysis of ICAM1 in Raji cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of 1-5x10^6 cells/ml, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a ICAM1 monoclonal antibody (ab171123) at a dilution of 1 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated secondary antibody and re-suspended in PBS for FACS analysis.



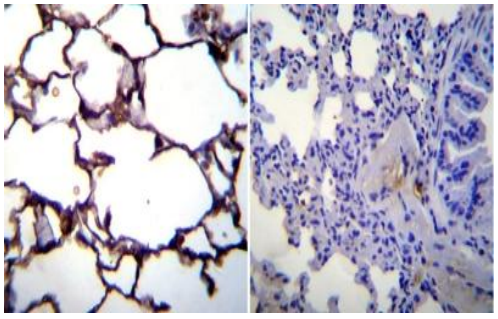
Flow Cytometry - Anti-ICAM1 antibody [1A29] (ab171123)

Flow cytometry analysis of ICAM1 in Ramos cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of 1-5x10^6 cells/ml, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a ICAM1 monoclonal antibody (ab171123) at a dilution of 1 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated secondary antibody and re-suspended in PBS for FACS analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [1A29] (ab171123)

Immunohistochemical analysis of deparaffinized mouse spleen tissue, labeling ICAM1 with ab171123 at 1/100 dilution (left image) compared with a negative control without primary antibody (right image). Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [1A29] (ab171123)

Immunohistochemical analysis of deparaffinized mouse lung tissue, labeling ICAM1 with ab171123 at 1/100 dilution (left image) compared with a negative control without primary antibody (right image). Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors