

Product datasheet

Anti-ICAM1 antibody [EPR22161-284] ab222736

Recombinant RabMAb

[1 References](#) [7 Images](#)

Overview

Product name	Anti-ICAM1 antibody [EPR22161-284]
Description	Rabbit monoclonal [EPR22161-284] to ICAM1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, ICC/IF, IP
Species reactivity	Reacts with: Mouse
Immunogen	Recombinant fragment within Human ICAM1 aa 1-500. The exact sequence is proprietary. Database link: P13597
Positive control	WB: Mouse kidney, spleen and liver tissue lysate; A20 whole cell lysate. IHC-P: Mouse lung and spleen tissue. ICC/IF: A20 cells. Flow: Mouse primary splenocytes. IP: Mouse spleen lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own</p>

labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as 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	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	EPR22161-284
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab222736** 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
WB		1/1000. Detects a band of approximately 110 kDa (predicted molecular weight: 57 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.
Flow Cyt		1/500.
ICC/IF		1/50.
IP		1/30.

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.

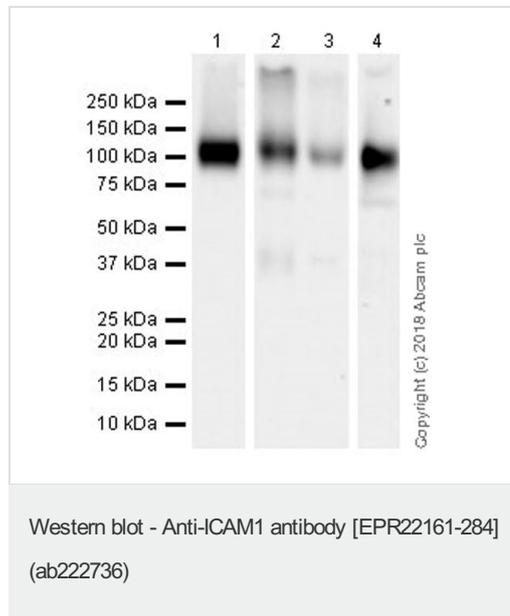
Post-translational modifications

Monoubiquitinated, which is promoted by MARCH9 and leads to endocytosis.

Cellular localization

Membrane.

Images



All lanes : Anti-ICAM1 antibody [EPR22161-284] (ab222736) at 1/1000 dilution

Lane 1 : Mouse kidney tissue lysate

Lane 2 : Mouse spleen tissue lysate

Lane 3 : Mouse liver tissue lysate

Lane 4 : A20 (mouse reticulum sarcoma b lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 57 kDa

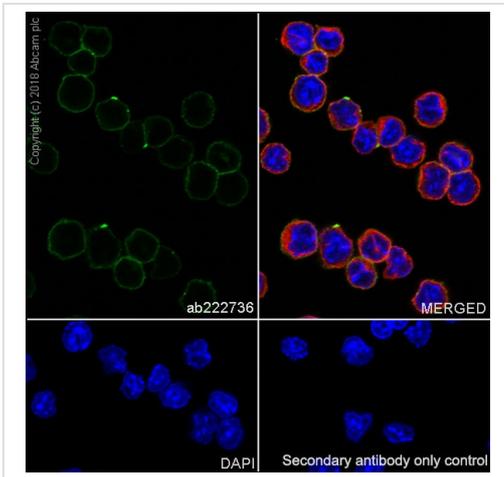
Observed band size: 110 kDa

[why is the actual band size different from the predicted?](#)

Blocking/Diluting buffer and concentration: 5% NFDm/TBST.

Exposure time: 48 seconds.

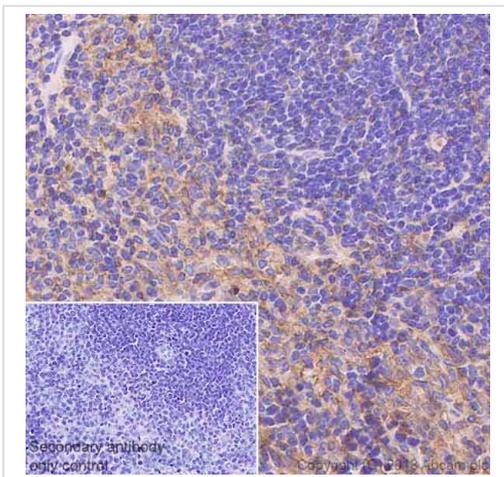
The 110-KDa apparent molecular mass is due to glycosylation (PMID: 1680698).



Immunocytochemistry/ Immunofluorescence - Anti-ICAM1 antibody [EPR22161-284] (ab222736)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A20 (mouse reticulum sarcoma cell line) cells labeling ICAM with ab222736 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in A20 cells with distinct staining of the target protein being transported from Golgi to cell surfaces (PMID: 17486117) is observed. Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (ab195889) was used as a counterstain (Red) at 1/200 dilution. The nuclear counterstain is DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Alexa Fluor[®]488 Goat anti-Rabbit secondary (ab150077) at 1/1000 dilution.



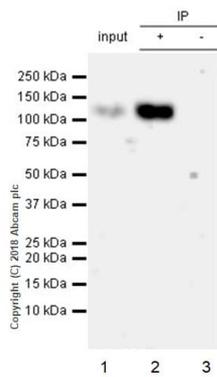
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [EPR22161-284] (ab222736)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling ICAM1 using ab222736 at 1/1000 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Cytoplasmic staining on the marginal zone of mouse spleen (PMID: 12130787; PMID: 17947659) is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) ready to use.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. The section was incubated with ab222736 for 30 mins at room temperature.



Immunoprecipitation - Anti-ICAM1 antibody [EPR22161-284] (ab222736)

ICAM1 was immunoprecipitated from 0.35 mg Mouse spleen lysate with ab222736 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab222736 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1/5000 dilution.

Lane 1: Mouse spleen tissue lysate 10 µg (input).

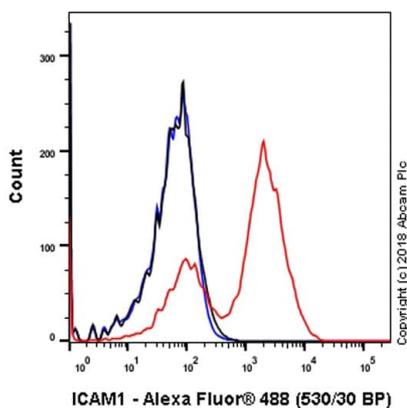
Lane 2: ab222736 IP in mouse spleen tissue lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab222736 in Mouse spleen lysate.

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

Exposure time: 3 minutes.

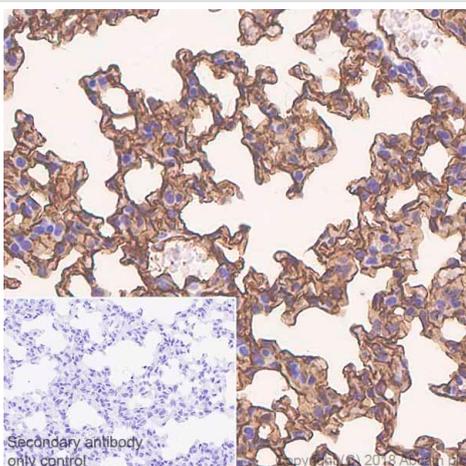
110-kDa molecular mass is due to glycosylation (PMID: 1680698).



Flow Cytometry - Anti-ICAM1 antibody [EPR22161-284] (ab222736)

Flow cytometric analysis of Mouse primary splenocytes labeling ICAM1 with ab222736 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) and an unlabeled control (Cell without incubation with primary antibody and secondary antibody, Blue). Goat anti rabbit IgG (Alexa Fluor[®] 488, ab150077) at 1/200 dilution was used as the secondary antibody. Gated on viable cells.

ICAM1 negative population (left half of red peak) was also observed in mouse splenocytes which is consistent with IHC staining pattern.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [EPR22161-284] (ab222736)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling ICAM1 using ab222736 at 1/1000 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Membranous and cytoplasmic staining on mouse lung (PMID: 14568945; PMID: 9802985) is observed. Counterstained with DAPI.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) ready to use.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. The section was incubated with ab222736 for 30 mins at room temperature.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-ICAM1 antibody [EPR22161-284] (ab222736)

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