

## Product datasheet

# Anti-ICAM1 antibody [EPR4776] ab109361

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [14 References](#) [9 Images](#)

### Overview

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<b>Product name</b>	Anti-ICAM1 antibody [EPR4776]
<b>Description</b>	Rabbit monoclonal [EPR4776] to ICAM1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment within Human ICAM1 aa 300-500 (C terminal). The exact sequence is proprietary. Database link: <a href="#">P05362</a>
<b>Positive control</b>	IHC-P: Human lung carcinoma and tonsil tissue sections; Flow Cyt (intra): Ramos cells; ICC/IF: Raji cells; IP: Raji whole cell lysate; WB: HUVEC treated with 10ng/ml for 18 hours and Ramos whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p><b>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</b></p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

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**Form** Liquid

<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4776
<b>Isotype</b>	IgG

## Applications

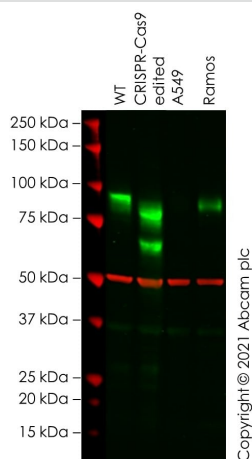
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab109361 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/70. For unpurified use at 1/100 - 1/500. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/100. <b>For unpurified use at 1/500.</b>
WB		1/1000 - 1/10000. Detects a band of approximately 89 kDa (predicted molecular weight: 58 kDa).
IP		1/10 - 1/100.
IHC-P	★★★★★ (1)	1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .

## Target

<b>Function</b>	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.
<b>Sequence similarities</b>	Belongs to the immunoglobulin superfamily. ICAM family. Contains 5 Ig-like C2-type (immunoglobulin-like) domains.
<b>Post-translational modifications</b>	Monoubiquitinated, which is promoted by MARCH9 and leads to endocytosis.
<b>Cellular localization</b>	Membrane.

## Images



Western blot - Anti-ICAM1 antibody [EPR4776] (ab109361)

**All lanes** : Anti-ICAM1 antibody [EPR4776] (ab109361) at 1/1000 dilution

**Lane 1** : Wild-type HeLa cell lysate

**Lane 2** : ICAM1 CRISPR-Cas9 edited HeLa cell lysate

**Lane 3** : A549 cell lysate

**Lane 4** : Ramos cell lysate

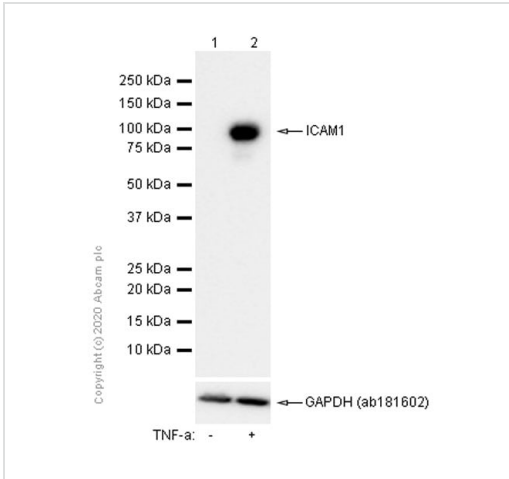
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 58 kDa

**Observed band size:** 90 kDa

False colour image of Western blot: Anti-ICAM1 antibody [EPR4776] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab109361 was shown to bind specifically to ICAM1. A band was observed at 90 kDa in wild-type HeLa cell lysates with no signal observed at this size in *Icam1* CRISPR-Cas9 edited cell line [ab261742](#) (CRISPR-Cas9 edited cell lysate [ab256947](#)). The band observed in the CRISPR-Cas9 edited lysate lane below 90 kDa is likely to represent a truncated form of ICAM1. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and *Icam1* CRISPR-Cas9 edited HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-ICAM1 antibody [EPR4776]  
(ab109361)

**Lane 1 :** Anti-ICAM1 antibody [EPR4776] (ab109361) at 1/1000 dilution (Purified)

**Lane 2 :** Anti-ICAM1 antibody [EPR4776] (ab109361) at 1/1000 dilution ((Purified))

**Lane 1 :** HUVEC (Human umbilical vein endothelial cell) whole cell lysate

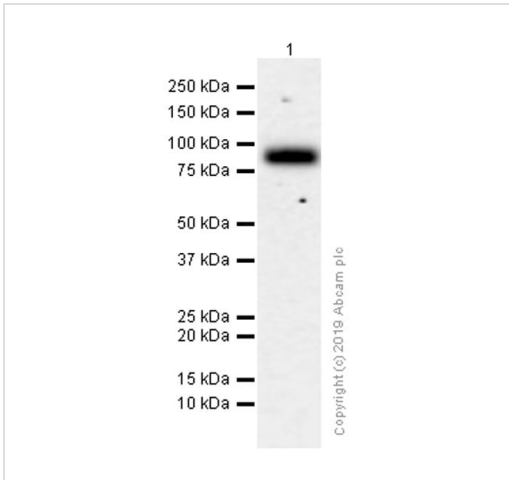
**Lane 2 :** HUVEC (Human umbilical vein endothelial cell) treated with 10ng/ml for 18 hours whole cell lysate

Lysates/proteins at 15 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 58 kDa



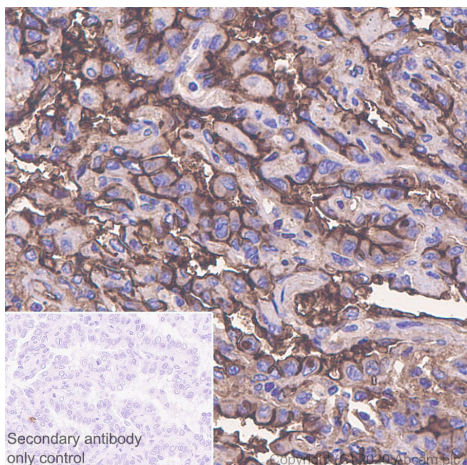
Western blot - Anti-ICAM1 antibody [EPR4776]  
(ab109361)

Anti-ICAM1 antibody [EPR4776] (ab109361) at 1/1000 dilution (Purified) + Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysate at 15 µg

**Secondary**

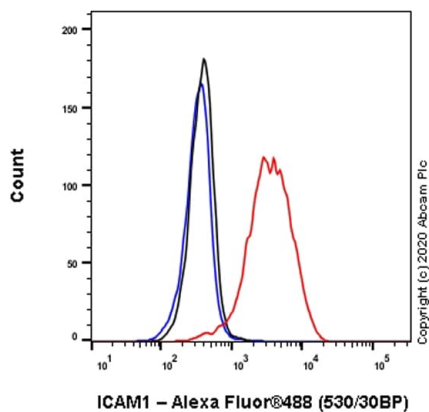
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 58 kDa



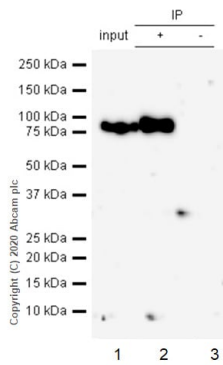
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [EPR4776] (ab109361)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue sections labeling ICAM1 with Purified ab109361 at 1/100 dilution (6.79  $\mu\text{g}/\text{mL}$ ). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-ICAM1 antibody [EPR4776] (ab109361)

Intracellular Flow Cytometry analysis of Ramos (Human Burkitt's lymphoma B lymphocyte) cells labeling ICAM1 with Purified ab109361 at 1/70 dilution (10  $\mu\text{g}/\text{mL}$ ) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-ICAM1 antibody  
[EPR4776] (ab109361)

Purified ab109361 at 1/30 dilution (2µg) immunoprecipitating ICAM1 in Raji whole cell lysate.

Lane 1 (input): Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate 10µg

Lane 2 (+): ab109361 + Raji whole cell lysate.

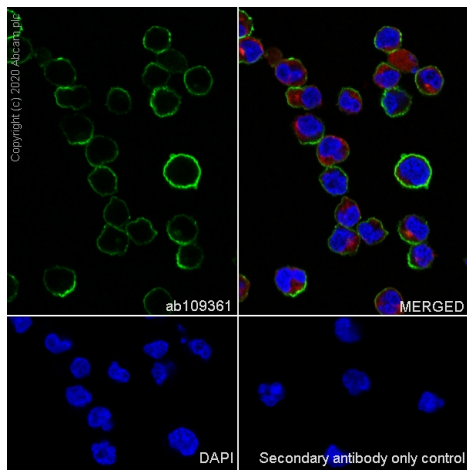
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab109361 in Raji whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

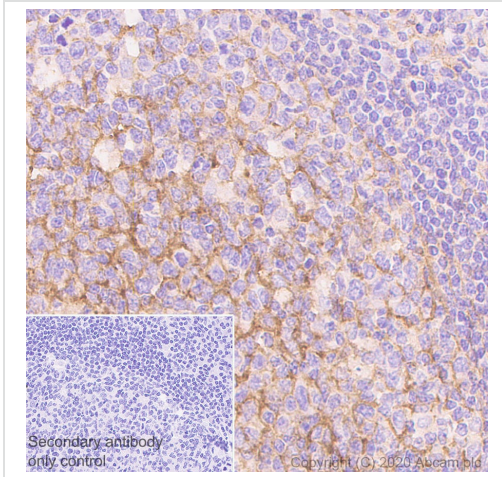
Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 89 kDa



Immunocytochemistry/ Immunofluorescence - Anti-ICAM1 antibody [EPR4776] (ab109361)





Immunocytochemistry analysis of Raji (Human Burkitt's lymphoma B lymphocyte) cells labeling ICAM1 with Purified ab109361 at 1/100 dilution (6.79 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 dilution (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 dilution (2 µg/mL). DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling ICAM1 with Purified ab109361 at 1/100 dilution (6.79 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [EPR4776] (ab109361)

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-ICAM1 antibody [EPR4776] (ab109361)

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