# abcam

## Product datasheet

# Anti-ICAM1 antibody [EPR24639-3] ab282575





重组 RabMAb

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概述

产品名称 Anti-ICAM1抗体[EPR24639-3]

描述 兔单克隆抗体[EPR24639-3] to ICAM1

宿主 Rabbit

特异性 Rat species is recommended based on Flow Cyt result. We do not guarantee other applications

经测试应用 适用于: Flow Cyt, IP, IHC-P, ICC/IF, WB

不适用于: IHC-Fr

种属反应性 与反应: Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Wild-type HeLa whole cell lysate. Ramos and Raji whole cell lysate. Human kidney tissue

lysate. IHC-P: Human kidney tissue. Human breast cancer tissue. ICC/IF: Raji cells. Wild-type

HeLa cells. Flow Cyt: Rat splenocytes. C6 and Raji cells. IP: Raji whole cell lysate.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

**克隆** 单克隆

**克隆编号** EPR24639-3

**同种型** IgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab282575于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		1/500.
IP		1/30.
IHC-P		1/600. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/500.
WB	*** <u>*</u>	1/1000. Predicted molecular weight: 57 kDa.

应用说明 Is unsuitable for IHC-Fr.

靶标

功能 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.

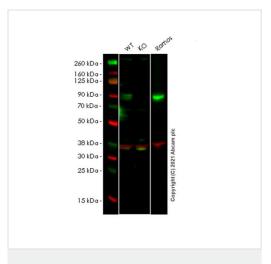
序列相似性 Belongs to the immunoglobulin superfamily. ICAM family.

Contains 5 lg-like C2-type (immunoglobulin-like) domains.

翻译后修饰 Monoubiquitinated, which is promoted by MARCH9 and leads to endocytosis.

细胞定位 Membrane.

图片



Western blot - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

**All lanes :** Anti-ICAM1 antibody [EPR24639-3] (ab282575) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2: ICAM1 knockout HeLa whole cell lysate

Lane 3 : Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

All lanes: Goat Anti-Rabbit IgG H&L (IRDye® 800CW)
(ab216773) and Goat Anti-Mouse IgG H&L (IRDye® 680RD)
(ab216776) at 1/10000 dilution

**Predicted band size:** 57 kDa **Observed band size:** 90 kDa

Blocking and diluting buffer and concentration: Intercept® (TBS) Blocking Buffer diluted with an equal volume of 0.1% TBS

**Lanes 1-3:** Merged signal (red and green). Green - ab282575 observed at 90kDa. Red - loading control **ab8245** observed at 36 kDa.

ab282575 Anti-ICAM1 antibody [EPR24639-3] was shown to react with ICAM1 in wild-type Hela cells in Western blot. Loss of signal was observed when knockout cell line <a href="mailto:ab261742"><u>ab261742</u></a> (knockout cell lysate <a href="mailto:ab256947"><u>ab256947</u></a>) was used. Wild-type and ICAM1 knockout samples were subjected to SDS-PAGE.

ab282575 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated at 4°C overnight at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773)

3

and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.

1 2

250 kDa = 150 kDa = 100 kDa = 75 kDa = 20 k

Western blot - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

**All lanes :** Anti-ICAM1 antibody [EPR24639-3] (ab282575) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2: ICAM1 knockout Hela whole cell lysate

Lysates/proteins at 20 µg per lane.

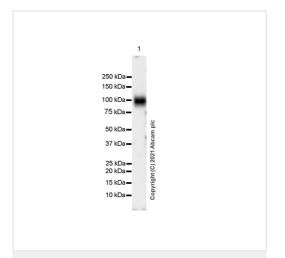
### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 57 kDa **Observed band size:** 90 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST ab282575 Anti-ICAM1 antibody [EPR24639-3] was shown to react with ICAM1 in wild-type Hela cells in Western blot. Loss of signal was observed when knockout cell line <a href="mailto:ab261742"><u>ab261742</u></a> (knockout cell lysate <a href="mailto:ab256947"><u>ab256947</u></a>) was used. Wild-type and ICAM1 knockout samples were subjected to SDS-PAGE.

Exposure time: 15 seconds.



Western blot - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

Anti-ICAM1 antibody [EPR24639-3] (ab282575) at 1/1000 dilution + human kidney tissue lysate at 20 µg

#### Secondary

VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

**Predicted band size:** 57 kDa **Observed band size:** 90 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

1 2
250 kDa—
150 kDa—
100 kDa—
75 kDa—
37 kDa—
37 kDa—
25 kDa—
25 kDa—
25 kDa—
15 kDa—
11 kDa—
11 kDa—

Western blot - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

Exposure time: 26 seconds

**All lanes :** Anti-ICAM1 antibody [EPR24639-3] (ab282575) at 1/1000 dilution

**Lane 1 :** Ramos (human Burkitt's lymphoma B lymphocyte) whole cell lysate

**Lane 2 :** Raji (human Burkitts lymphoma B lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

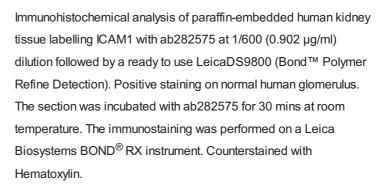
### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 57 kDa
Observed band size: 90 kDa

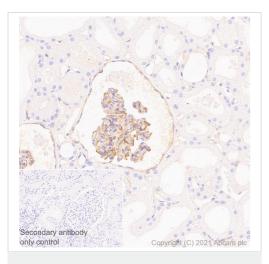
Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: 15 seconds

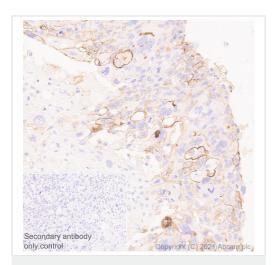


Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICAM1 antibody
[EPR24639-3] (ab282575)

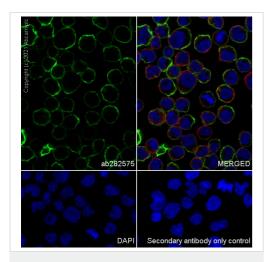


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICAM1 antibody
[EPR24639-3] (ab282575)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labelling ICAM1 with ab282575 at 1/600 (0.902 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human breast cancer (PMID: 30082828). The section was incubated with ab282575 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

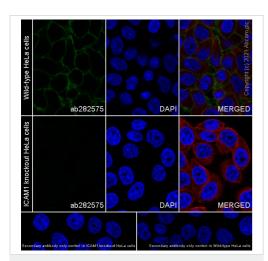


Immunocytochemistry/ Immunofluorescence - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Raji cells labelling ICAM1 with ab282575 at 1/500 (1.082  $\mu$ g/ml) dilution, followed by **ab150077** Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in Raji cells.

<u>ab195889</u> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) at 1/1000 dilution.

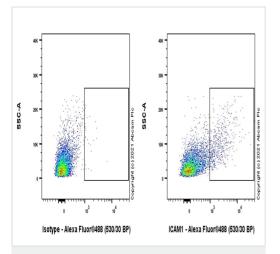


Immunocytochemistry/ Immunofluorescence - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized ICAM1 KO HeLa cells labelling ICAM1 with ab282575 at 1/500 (1.082  $\mu$ g/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) preadsorbed antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in wild-type HeLa cells, and no staining in ICAM1 knockout HeLa cells is observed.

<u>ab195889</u> Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

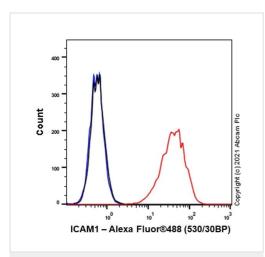
Secondary antibody only control: Secondary antibody is <a href="mailto:ab150081">ab150081</a> Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) preadsorbed at 1/1000 dilution.



Flow Cytometry - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

Flow cytometric analysis of rat splenocytes cells labelling ICAM1 with ab282575 at 1/500 dilution (0.1  $\mu$ g)/ Right compared with a Rabbit monoclonal IgG (<u>ab172730</u>) / Left isotype control. A goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) at 1/2000 dilution was used as the secondary antibody.

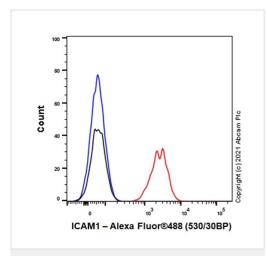
Gated on viable cells.



Flow Cytometry - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

Flow cytometric analysis of C6 (Rat glial tumor glial cell) cells labelling ICAM1 with ab282575 at 1/500 dilution (0.1  $\mu$ g)/(red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

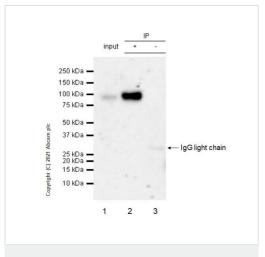
Gated on viable cells.



Flow Cytometry - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

Flow cytometric analysis of Raji (Human Burkitt's lymphoma B lymphocyte) cells labelling ICAM1 with ab282575 at 1/500 dilution (0.1  $\mu$ g)/(Red) compared with a Rabbit monoclonal lgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.



Immunoprecipitation - Anti-ICAM1 antibody [EPR24639-3] (ab282575)

ICAM1 was immunoprecipitated from 0.35 mg Raji (human burkitt's lymphoma b lymphocyte) whole cell lysate 10  $\mu$ g with ab282575 at 1/30 dilution (2  $\mu$ g in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using ab282575 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

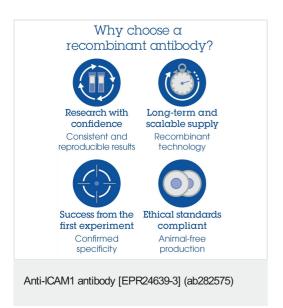
Lane 1: Raji whole cell lysate 10 µg

Lane 2: ab282575 IP in Raji whole cell lysate

**Lane 3**: Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab282575 in Raji whole cell lysate

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

Exposure time: 3 minutes.



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