abcam

Product datasheet

Anti-ICAM1 antibody [EP1442Y] ab53013



重组 RabMAb

56 References 6 图像

概述

产品名称 Anti-ICAM1抗体[EP1442Y]

描述 兔单克隆抗体[EP1442Y] to ICAM1

宿主 Rabbit

适用于: WB, IHC-P 经测试应用 种属反应性 与反应: Human

免疫原 Synthetic peptide within Human ICAM1 aa 1-100 (N terminal). The exact sequence is proprietary.

(Peptide available as ab218845)

阳性对照 WB: Huvec, Ramos and Raji whole cell lysate; IHC: Human kidney and tonsil tissue.

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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 **FP1442Y**

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab53013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
WB		1/1000. Detects a band of approximately 89 kDa (predicted molecular weight: 58 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

靶标

功能

ICAM proteins are ligands for the leukocyte adhesion protein LFA-1 (integrin alpha-L/beta-2).

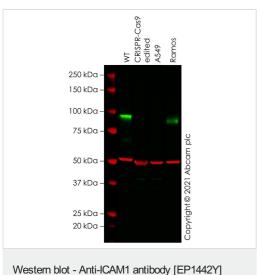
During leukocyte trans-endothelial migration, ICAM1 engagement promotes the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG activation. In case of rhinovirus infection acts as a cellular receptor for the virus.

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 [EP1442Y] (ab53013)

All lanes: Anti-ICAM1 antibody [EP1442Y] (ab53013) at 1/1000

dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: ICAM1 CRISPR-Cas9 edited HeLa cell lysate

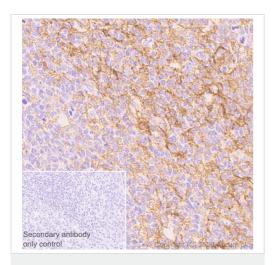
Lane 3 : A549 cell lysate
Lane 4 : Ramos cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

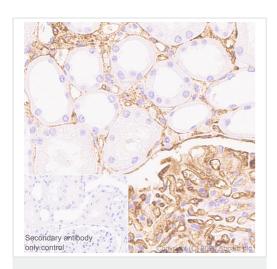
Predicted band size: 58 kDa **Observed band size:** 90 kDa

False colour image of Western blot: Anti-ICAM1 antibody [EP1442Y] 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, ab53013 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 lcam1 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 (not observed by this antibody) 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, wildtype and lcam1 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® 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® 800CW) preabsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed (ab216776) at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ICAM1 antibody
[EP1442Y] (ab53013)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human tonsil tissue sections labeling ICAM1 with purified ab53013 at 1/500 dilution (0.22 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. 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 paraffinembedded sections) - Anti-ICAM1 antibody
[EP1442Y] (ab53013)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human kidney tissue sections labeling ICAM1 with purified ab53013 at 1/500 dilution (0.22 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. 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.



Western blot - Anti-ICAM1 antibody [EP1442Y] (ab53013)

Lanes 1 & 3: Anti-ICAM1 antibody [EP1442Y] (ab53013) at 1/1000 dilution

Lane 2: Anti-ICAM1 antibody [EP1442Y] (ab53013) at 1/1000 dilution (Purified)

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

Lane 2: HUVEC (Human umbilical vein endothelial cell) treated with 50ng/ml TNF-a for 24 hours whole cell lysate

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

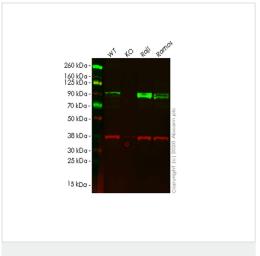
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 58 kDa

The molecular mass observed is consistent with what has been described in the literatures (PMID: 29777158, 30082828, 31244919).



Western blot - Anti-ICAM1 antibody [EP1442Y] (ab53013)

All lanes : Anti-ICAM1 antibody [EP1442Y] (ab53013) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: ICAM1 knockout HeLa cell lysate

Lane 3: Raji cell lysate

Lane 4: Ramos cell lysate

Lysates/proteins at 20 µg per lane.

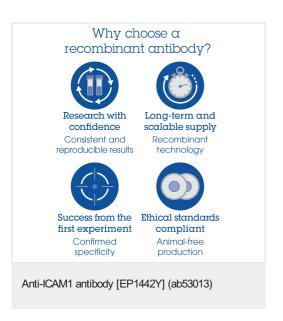
Secondary

All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 58 kDa Observed band size: 90 kDa

Lanes 1-4: Merged signal (red and green). Green - ab53013 observed at 90 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab53013 Anti-ICAM1 antibody [EP1442Y] was shown to specifically react with ICAM1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab261742 (knockout cell lysate ab256947) was used. Wild-type and ICAM1 knockout samples were subjected to SDS-PAGE. ab53013 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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.cn/abpromise or contact our technical team.

Terms and conditions

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