abcam

Product datasheet

Anti-ICAM1 antibody [EP1442Y] ab53013

リコンビナント RabMAb

56 References 画像数 6

製品の概要

製品名	Anti-ICAM1 antibody [EP1442Y]
製品の詳細	Rabbit monoclonal [EP1442Y] to ICAM1
由来種	Rabbit
アプリケーション	**適用あり:** WB, IHC-P
種交差性	**交差種:** Human
免疫原	Synthetic peptide within Human ICAM1 aa 1-100 (N terminal). The exact sequence is proprietary. (Peptide available as **ab218845**)
ポジティブ・コントロール	WB: Huvec, Ramos and Raji whole cell lysate; IHC: Human kidney and tonsil tissue.
特記事項	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.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP1442Y

アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab53013の使用に適用されます

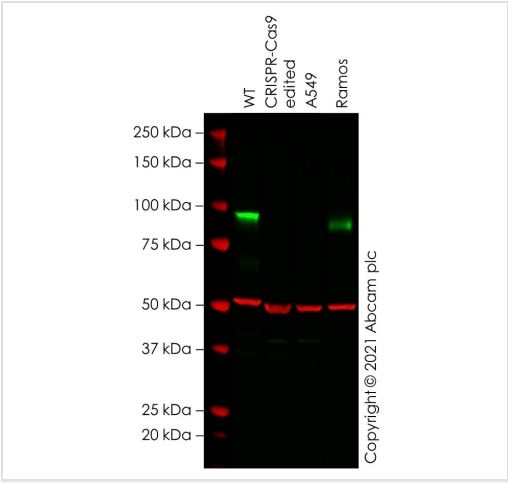
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

ターゲット情報

機能	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.
配列類似性	Belongs to the immunoglobulin superfamily. ICAM family. Contains 5 Ig-like C2-type (immunoglobulin-like) domains.
翻訳後修飾	Monoubiquitinated, which is promoted by MARCH9 and leads to endocytosis.
細胞内局在	Membrane.

画像



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

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

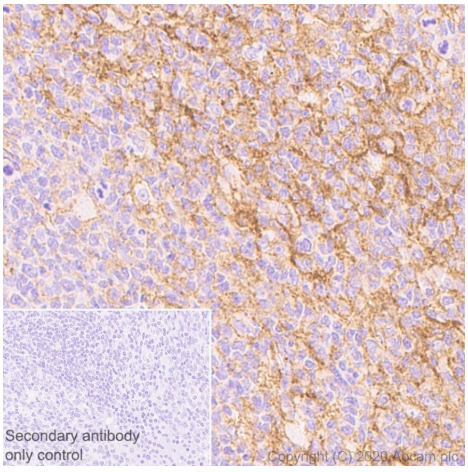
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : ICAM1 CRISPR-Cas9 edited HeLa cell lysate
Lane 3 : A549 cell lysate
Lane 4 : Ramos cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

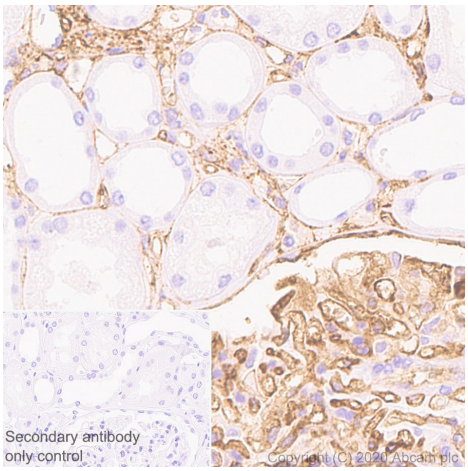
Predicted band size: 58 kDa
Observed band size: 90 kDa

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 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 (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, 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® 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 IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



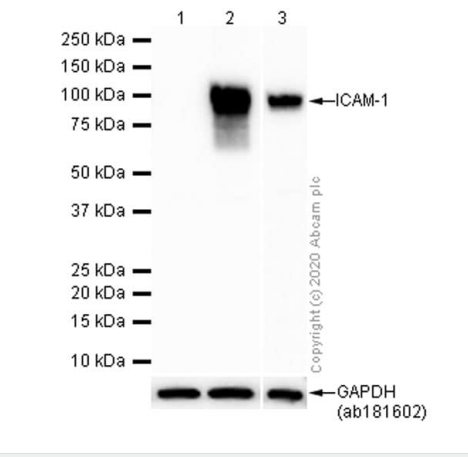
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ICAM1 antibody [EP1442Y] (ab53013)

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 paraffin-embedded 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)

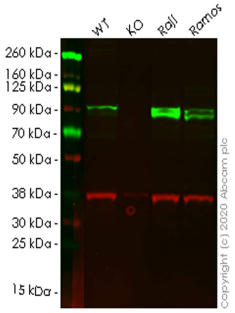
Lane 1 : Untreated HUVEC (Human umbilical vein endothelial cell) whole cell lysate
Lane 2 : HUVEC (Human umbilical vein endothelial cell) treated with 50ng/ml TNF-a for 24 hours whole cell lysate
Lane 3 : Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG 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

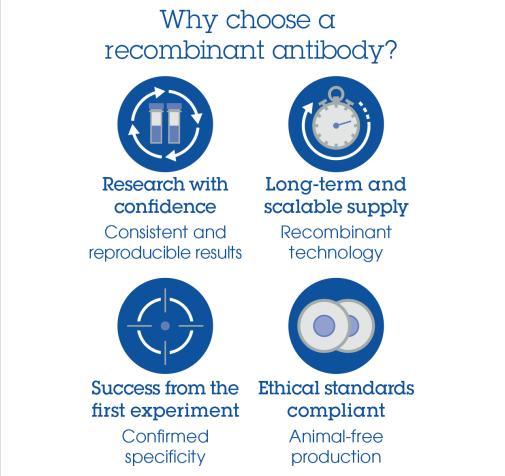
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG 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.



Anti-ICAM1 antibody [EP1442Y] (ab53013)

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