abcam

Product datasheet

Anti-VCAM1 antibody ab115135

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Overview

Product name Anti-VCAM1 antibody

Description Rabbit polyclonal to VCAM1

Host species Rabbit

Tested applications
Suitable for: WB, ICC/IF
Species reactivity
Reacts with: Mouse, Rat

Predicted to work with: Horse, Macaque monkey ^

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Mouse Spleen, Rat Spleen, Mouse Thymus, Rat Thymus, and Mouse Lung tissue lysates;

LADMAC and LPS treated bEnd.3 cell lysates; ICC/IF: NIH-3T3 cells.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, 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 or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

Clonality Polyclonal

1

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab115135 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		Use a concentration of 1 µg/ml. Detects a band of approximately 100 kDa (predicted molecular weight: 81 kDa). Stimulation may be required to allow detection of the target protein due to low levels of endogenous expression in some samples. Please see images below for recommended treatment conditions and positive controls.
ICC/IF		Use a concentration of 5 µg/ml.

Target		
Function	Important in cell-cell recognition. Appears to function in leukocyte-endothelial cell adhesion. Interacts with the beta-1 integrin VLA4 on leukocytes, and mediates both adhesion and signal transduction. The VCAM1/VLA4 interaction may play a pathophysiologic role both in immune responses and in leukocyte emigration to sites of inflammation.	
Tissue specificity	Expressed on inflammed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflammed tissue.	
Sequence similarities	Contains 7 lg-like C2-type (immunoglobulin-like) domains.	
Domain	Either the first or the fourth Ig-like C2-type domain is required for VLA4-dependent cell adhesion.	
Post-translational modifications	Sialoglycoprotein.	
Cellular localization	Membrane.	

Images



Western blot - Anti-VCAM1 antibody (ab115135)

All lanes: Anti-VCAM1 antibody (ab115135) at 1/1000 dilution

Lane 1: LADMAC (Mouse bone marrow monocyte macrophage) whole cell lysate

Lane 2: bEnd.3 (Mouse brain endothelioma) whole cell lysate

Lane 3 : bEnd.3 (Mouse brain endothelioma) treated with 10 μ g/ml

LPS for 24 h, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

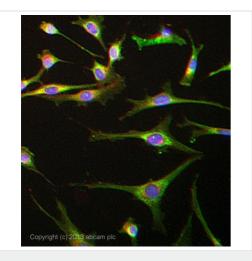
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 81 kDa **Observed band size:** 100 kDa

Exposure time: 3 minutes

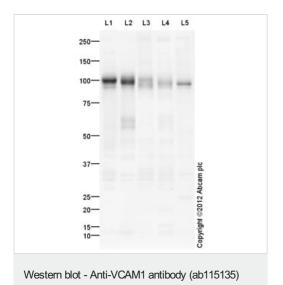
Rabbit monoclonal [EPR16891] to GAPDH (<u>ab181602</u>) used as loading control.

Blocking/Diluting buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-VCAM1 antibody (ab115135)

ICC/IF image of ab115135 stained NIH-3T3 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab115135 at 5μ g/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43μ M.



All lanes: Anti-VCAM1 antibody (ab115135) at 1 µg/ml

Lane 1: Spleen (Mouse) Tissue Lysate

Lane 2: Spleen (Rat) Tissue Lysate

Lane 3: Thymus (Mouse) Tissue Lysate

Lane 4: Thymus (Rat) Tissue Lysate

Lane 5: Mouse lung normal tissue lysate - total protein (ab29297)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 81 kDa

Observed band size: 100 kDa

Additional bands at: 62 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 4 minutes

VCAM1 contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.

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

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