

Product datasheet

Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free ab216445

Recombinant RabMAb

1 References 13 Images

Overview

Product name	Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EPR1344] to CD11b - Low endotoxin, Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB:TF-1 and TPA-treated TF-1 cell lysates. IHC-P: Rat cerebrum, bone marrow tissue; human tonsil and spleen tissue; mouse colon and lung tissue.
General notes	<p>ab216445 is the carrier-free version of ab133357.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Our [Low endotoxin, azide-free formats](#) have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1344
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab216445 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 127 kDa.

Target

Function	Integrin alpha-M/beta-2 is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles. It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin alpha-M/beta-2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain.
Tissue specificity	Predominantly expressed in monocytes and granulocytes.
Involvement in disease	Genetic variations in ITGAM has been associated with susceptibility to systemic lupus erythematosus type 6 (SLEB6) [MIM:609939]. Systemic lupus erythematosus (SLE) is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system.
Sequence similarities	Belongs to the integrin alpha chain family.

Contains 7 FG-GAP repeats.

Contains 1 VWFA domain.

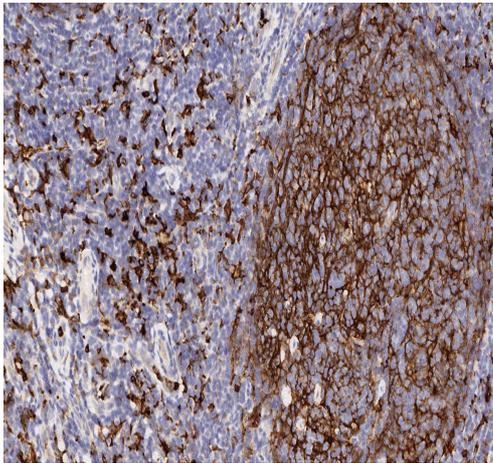
Domain

The integrin I-domain (insert) is a VWFA domain. Integrins with I-domains do not undergo protease cleavage.

Cellular localization

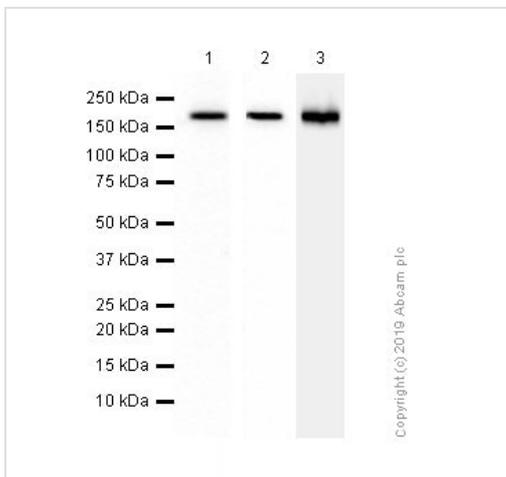
Membrane.

Images



Immunohistochemical analysis of human tonsil tissue labeling CD11b with ab216445 at 1/8000 dilution. No blocking step performed. Anti-Rabbit HRP polymer was used as the secondary detection system. Heat-mediated antigen retrieval was performed using citrate based pH 6.0 buffer.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)



Western blot - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)

All lanes : Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445) at 1/1000 dilution

Lane 1 : TF-1 cell lysate

Lane 2 : rat spleen tissue lysate

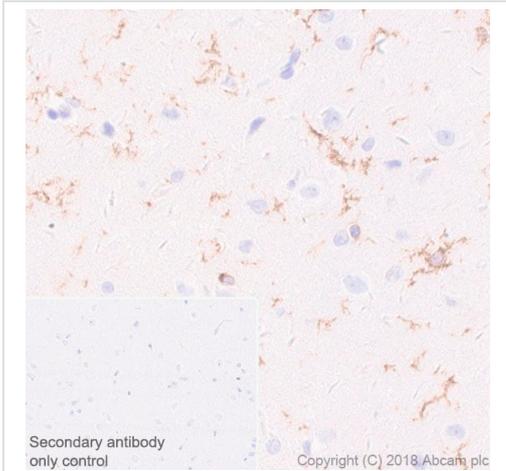
Lane 3 : RAW 264.7 cell lysate

Lysates/proteins at 15 µg per lane.

Secondary

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

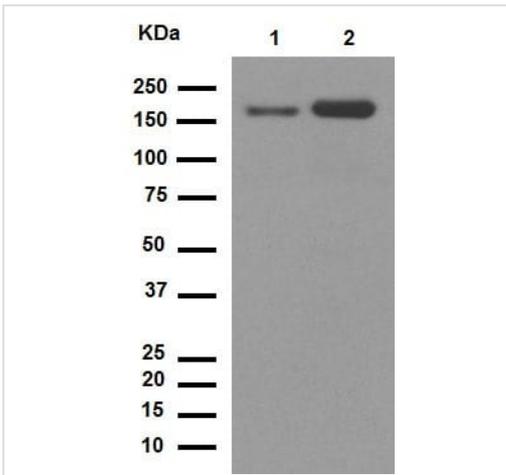
Predicted band size: 127 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)

Ab133357 staining CD11b in paraffin embedded Rat cerebrum tissue sections by Immunohistochemistry. Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at 1/4000 dilution (0.29 µg/ml). A ready to use Goat Anti-rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on gliocytes of rat cerebrum [PMID: 20483006].

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab133357](#)).



Western blot - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)

All lanes : Anti-CD11b antibody [EPR1344] ([ab133357](#)) at 1/1000 dilution

Lane 1 : TF-1 cell lysate

Lane 2 : TPA treated THP-1 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

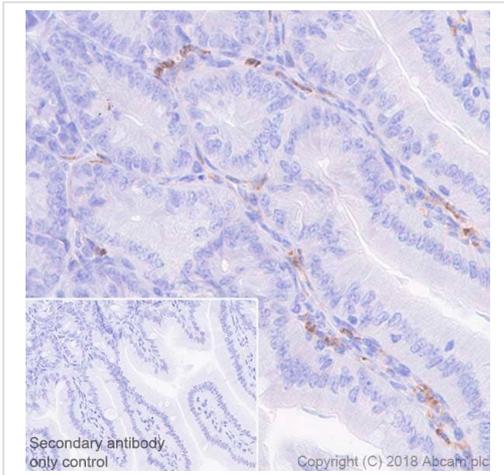
All lanes : HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 127 kDa

This WB data was generated using the same anti-CD11b antibody clone, EPR1344, in a different buffer formulation (cat# [ab133357](#)).

Blocking buffer: 5% NFDm/TBST

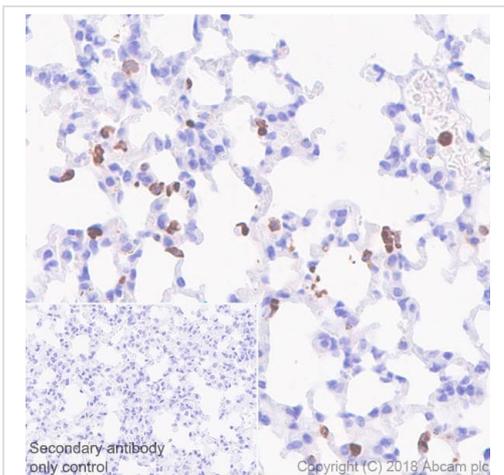
Dilution buffer: 5% NFDm/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)

Ab133357 staining CD11b in paraffin embedded Mouse colon tissue sections by Immunohistochemistry. Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at 1/4000 dilution (0.031 µg/ml). A ready to use Goat Anti-rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on stromal cells of mouse colon.

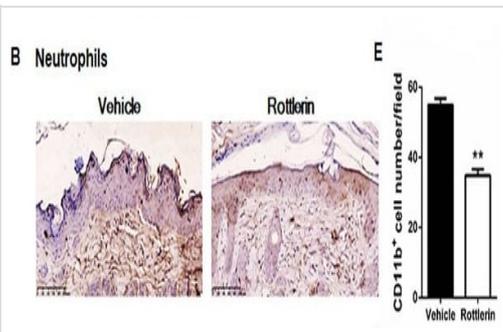
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab133357](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)

Ab133357 staining CD11b in paraffin embedded Mouse lung tissue sections by Immunohistochemistry. Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at 1/4000 dilution (0.031 µg/ml). A ready to use Goat Anti-rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on stromal cells of mouse lung.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab133357](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody

[EPR1344] - Low endotoxin, Azide free (ab216445)

Min Met al. PLoS One. 2017 Dec 22;12(12):e0190051. doi: 10.1371/journal.pone.0190051. eCollection 2017.

Rottlerin decreases the number of effector cells that mainly infiltrate the skin in IMQ-treated mice

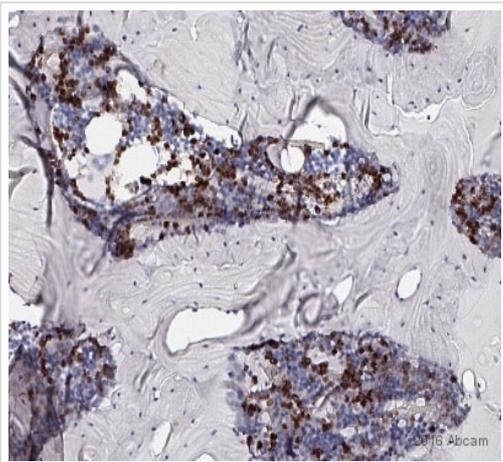
Immunohistochemical detection of immune cell-related markers was performed on paraffin-embedded sections obtained from the back skin of IMQ-induced mice treated with vehicle or rottlerin.

Representatives IHC images of CD11b (B) on the skin of the vehicle or rottlerin-treated mice. Scale bar = 100µm.

Quantification analysis of IHC staining for CD11b(E) on the skin of the vehicle and rottlerin treated mice. Two independent researchers counted the number of positive staining cells were per high-power field (HPF). The data are representative of three experiments (n = 5 mice per group). ** *P*

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133357).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



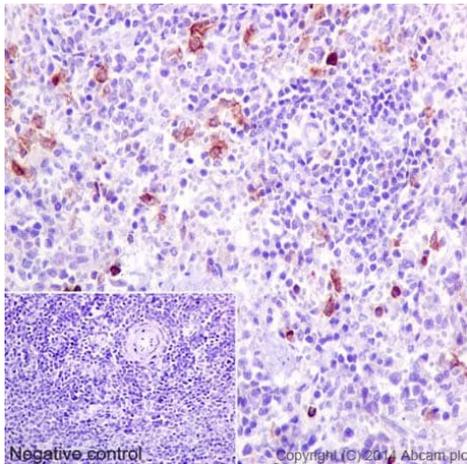
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody

[EPR1344] - Low endotoxin, Azide free (ab216445)

Formaldehyde-fixed, paraffin-embedded rat bone marrow tissue stained for CD11b using ab133357 at 1/5000 in immunohistochemical analysis.

Heat mediated antigen retrieval with EDTA buffer pH 9 was performed before commencing with staining protocol. 1% casein was used as blocking agent.

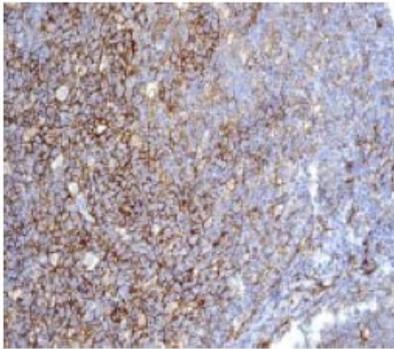
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133357).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody
[EPR1344] - Low endotoxin, Azide free (ab216445)

Immunohistochemical staining of paraffin embedded human spleen with purified [ab133357](#) at a working dilution of 1 in 4000. The secondary antibody used is a HRP goat anti-rabbit ([ab97051](#)). The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab133357](#)).

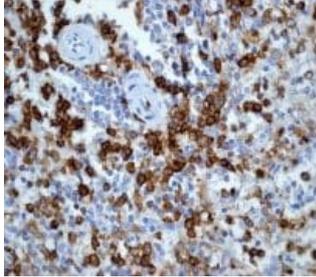


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody
[EPR1344] - Low endotoxin, Azide free (ab216445)

Immunohistochemical analysis of CD11b in paraffin embedded human tonsil tissue, using unpurified [ab133357](#) at a dilution of 1/100.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab133357](#)).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

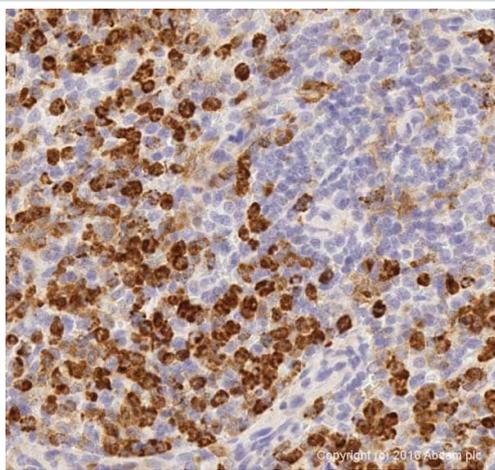


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)

Immunohistochemical analysis of CD11b in paraffin embedded human spleen tissue, using unpurified [ab133357](#) at a dilution of 1/100.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab133357](#)).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD11b antibody [EPR1344] - Low endotoxin, Azide free (ab216445)

This IHC data was generated using the same anti-CD11b antibody clone, EPR1344, in a different buffer formulation (cat# [ab133357](#)).

IHC image of CD11b staining in a formalin fixed, paraffin embedded human normal spleen tissue section*, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with [ab133357](#) at 1/4000 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CD11b antibody [EPR1344] - Low endotoxin,
Azide free (ab216445)

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