abcam

Product datasheet

Anti-F4/80 antibody [SP115] - BSA and Azide free ab240946

Recombinant RabMAb

4 References 7 Images

Overview

Product name	Anti-F4/80 antibody [SP115] - BSA and Azide free
Description	Rabbit monoclonal [SP115] to F4/80 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P **Unsuitable for:** Flow Cyt
Species reactivity	**Reacts with:** Mouse
Immunogen	Synthetic peptide within Mouse F4/80 aa 50-150 (N terminal). The exact sequence is proprietary. Database link: Q61549
Positive control	IHC-P: Mouse colon, liver and lung tissue; M1 and M2 macrophages from mice colon tissue
General notes	FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com. Ab240946 is the carrier-free version of ab111101. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. 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. ab240946 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* 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. Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP115
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab240946** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

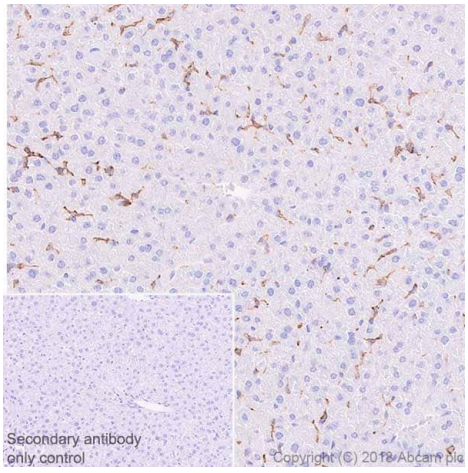
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. For antigen retrieval: Boil tissue section in EDTA buffer for 10 min followed by cooling at RT for 20 min.

Application notes Is unsuitable for Flow Cyt.

Target

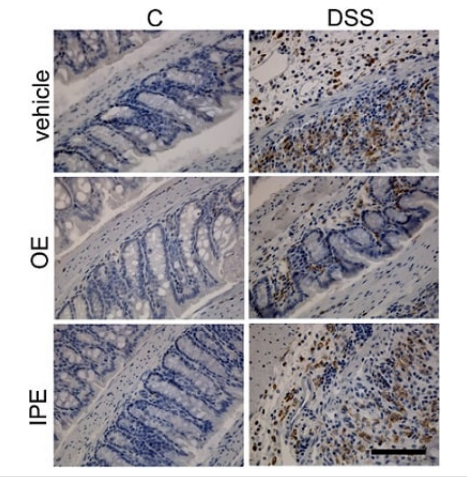
Function	Orphan receptor involved in cell adhesion and probably in cell-cell interactions specifically involving cells of the immune system. May play a role in regulatory T-cells (Treg) development.
Tissue specificity	Expression is restricted to eosinophils.
Sequence similarities	Belongs to the G-protein coupled receptor 2 family. Adhesion G-protein coupled receptor (ADGR) subfamily. Contains 6 EGF-like domains. Contains 1 GPS domain.
Cellular localization	Cell membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] - BSA and Azide free (ab240946)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse liver tissue sections labeling F4/80 with ab111101 at 1/250 dilution (0.48 µg/ml). Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on macrophages in the mouse liver. This image was generated using ab111101, the same clone, but with a different buffer formulation.



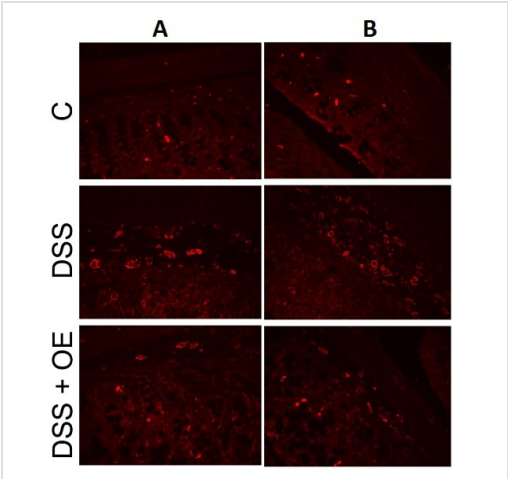
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] - BSA and Azide free (ab240946)

Representative immunostaining of F4/80-positive macrophages in the distal colon from healthy and colitic mice treated with and without enoxaparin.

For immunohistochemical staining, antigen retrieval was performed by incubating the sections for 10 minutes at 97°C in 1 mM EDTA buffer, pH 8 or 10 mM citrate buffer, pH 6. Activity of endogenous peroxidase was blocked by incubating sections with 3% v/v hydrogen for 20 minutes. Sections were then washed with 0.05 M Tris-buffered saline containing 0.5% v/v Tween 20 (TBST), pH 7.6. Subsequently, sections were incubated with serum-free protein block for 10 minutes. Colon sections were then incubated with primary antibody ab111101 at 1/100 dilution overnight at 4°C or room temperature for 1 hour. Sections were then washed 3 x 5 minutes and allowed to react with secondary antibody: anti-rabbit immunoglobulin C conjugated to horseradish peroxidase (HRP) (ab7090) at 1/300 dilution at room temperature for 1 hour.

Scale bar = 100 µm for 400 x magnification. Control, C; untreated colitis, DSS; oral enoxaparin, OE; intraperitoneal injection of enoxaparin, IPE.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab111101).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] - BSA and Azide free (ab240946)

Lean, Q.Y. et al PLoS One. 2015 Jul 28;10(7):e0134259. doi: 10.1371/journal.pone.0134259. eCollection 2015

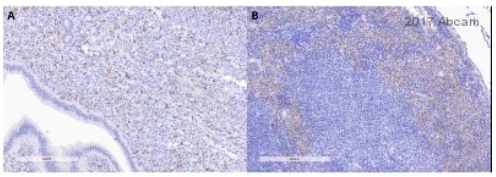
Representative images of (A) M1 macrophages ($F4/80^+$ and $iNOS^+$) and (B) M2 macrophages ($F4/80^+$ and $CD206^+$) using colon tissue from n = 3–5 mice. F4/80 positive cells were visualized using Alexa Fluor 594-conjugated goat anti-rat IgG (red). Nuclei were stained with 4',6-diamidino-2-phenylindole (DAPI, blue).

Scale bar = 50 µm for 400 × magnification. Control, C; untreated colitis, DSS; colitis with oral enoxaparin, DSS+OE.

For immunofluorescence staining, sections were dewaxed and rehydrated before antigen retrieval using 10 mM citrate buffer, pH 6 for 15 minutes at 97°C. Sections were incubated with serum-free protein block and permeabilized with 0.4% v/v Triton-X at room temperature for 30 minutes. Sections were incubated with primary antibodies anti-F4/80 (ab16911) at 1/25 dilution overnight at 4°C or at room temperature for 1 hour. Sections were washed with TBST 3 × 10 minutes and incubated with species-specific secondary antibodies: anti-rat IgG H&L AlexaFluor 594 (ab150160, Abcam, 1:1000) and anti-rabbit IgG H&L AlexaFluor 488 (A11070, Thermo Fisher Scientific, Melbourne, Australia, 1:1000) at room temperature for 2 hours. Sections were rinsed with TBST 3 × 10 minutes, followed by a quick wash with distilled water before mounting using Glycerol Mounting Medium (Abcam) that contained 4',6-diamidino-2-phenylindole (DAPI) and 1,4-diazobicyclo-2,2,2-octane (DABCO). Labelled tissues were visualized using a Leica DM LB2 microscope. Fluorescence images (400 × magnification) were captured using NIS-Elements 4.13 (Nikon) software.

For full image see PMID: 26218284.

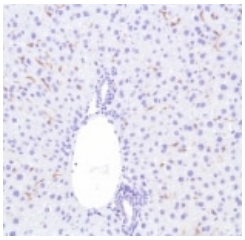
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab111101).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] - BSA and Azide free (ab240946)

Immunohistochemical analysis staining for macrophages in (A) mouse uterus and (B) mouse spleen using ab111101 at a dilution of 1:200. HRP Anti-Rabbit IgG (Peroxidase) Polymer D antibody was used as a secondary.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab111101).

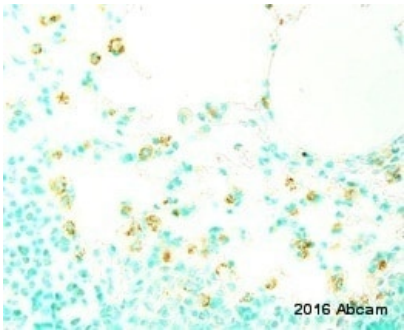


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] - BSA and Azide free (ab240946)

This image is of an Abreciew submitted by Francois Daubeuf.

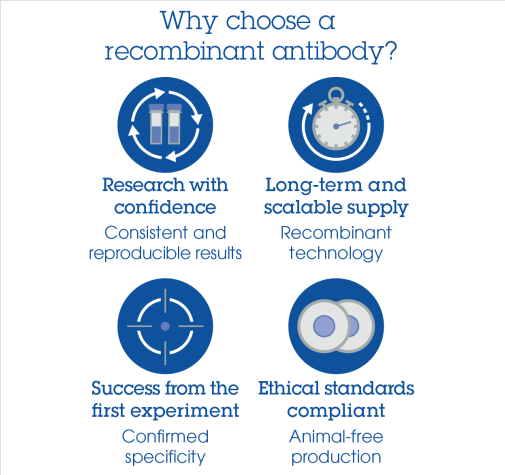
ab111101 at 1/100 dilution staining F4/80 in Formalin-fixed, paraffin-embedded Mouse liver tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab111101).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] - BSA and Azide free (ab240946)

Immunohistochemistry analysis of Formalin fixed paraffin-embedded mouse lung tissue sections labeling F4/80 with ab111101 at 1/200 for 16 hours at 4°C. Biotin conjugated Goat anti-rabbit polyclonal antibody at 1/500 was used as the secondary. Antigen retrieval was heat mediated using citrate buffer pH 6.0. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab111101).



Anti-F4/80 antibody [SP115] - BSA and Azide free (ab240946)

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