abcam

Product datasheet

Anti-F4/80 antibody [SP115] ab111101

Recombinant RabMAb

20 Abreviews 120 References 7 Images

Overview

Product name	Anti-F4/80 antibody [SP115]
Description	Rabbit monoclonal [SP115] to F4/80
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P **Unsuitable for:** Flow Cyt
Species reactivity	**Reacts with:** Mouse
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Mouse colon, liver and lung tissue; M1 and M2 macrophages from mice colon tissue.
General notes	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**. **This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.**

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.1% Sodium azide Constituents: 1% BSA, PBS
Purity	Protein A purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP115
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab111101 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	★★★★☆ **(11)**	1/50 - 1/100. Incubate primary antibody overnight at 4C. For antigen retrieval: Boil tissue section in Tris-EDTA (pH 9.0) buffer for 10 min followed by cooling at RT for 20 min. Abcam recommends using a polymer-HRP conjugated secondary for optimal signal.

Application notes Is unsuitable for Flow Cyt.

Target

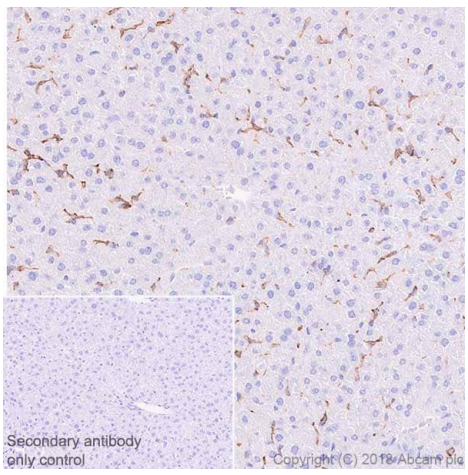
Function Orphan receptor involved in cell adhesion and probably in cell-cell interactions specifically involving cells of the immune system. May play a role in regulatory T-cells (Treg) development.

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.

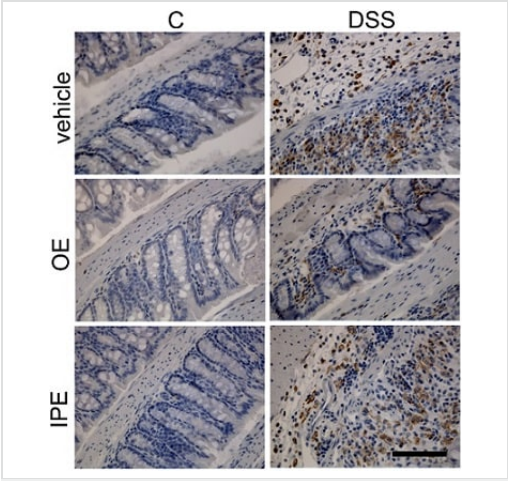
Cellular localization Cell membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] (ab111101)

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.



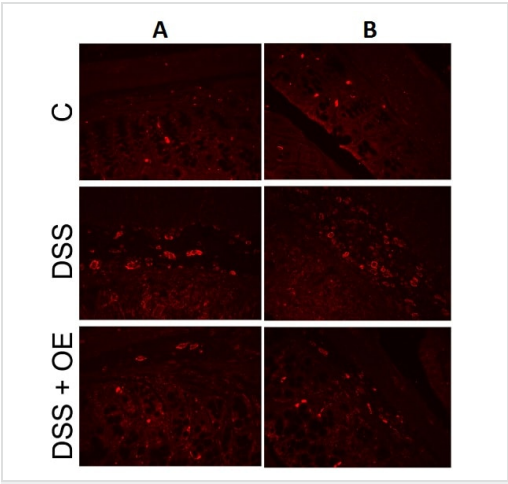
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] (ab111101)

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

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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] (ab111101)

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

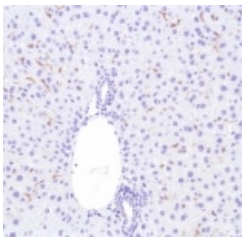
Representative images of (A) M1 macrophages ($F4/80^+$ and $iNOS^+$) and (B) M2 macrophages ($F4/80^+$ and $CD206^+$) using colon tissue from n = 3–5 mice. F4/80 positive cells were visualized using Alexa Fluor 594-conjugated goat anti-rat IgG (red). Nuclei were stained with 4',6-diamidino-2-phenylindole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

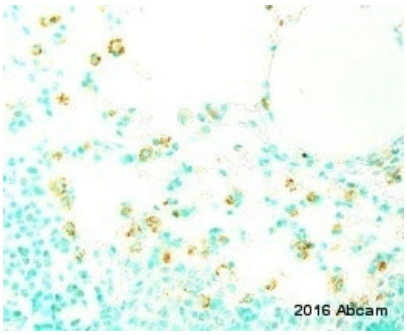
DM LB2 microscope. Fluorescence images (400 × magnification) were captured using NIS-Elements 4.13 (Nikon) software.

For full image see PMID: 26218284.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] (ab111101)

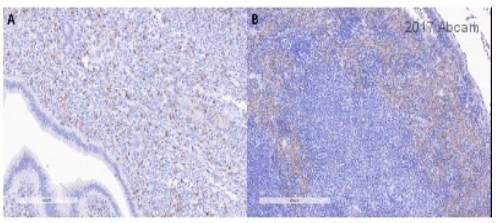
ab111101 at 1/100 dilution staining F4/80 in Formalin-fixed, paraffin-embedded Mouse liver tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] (ab111101)

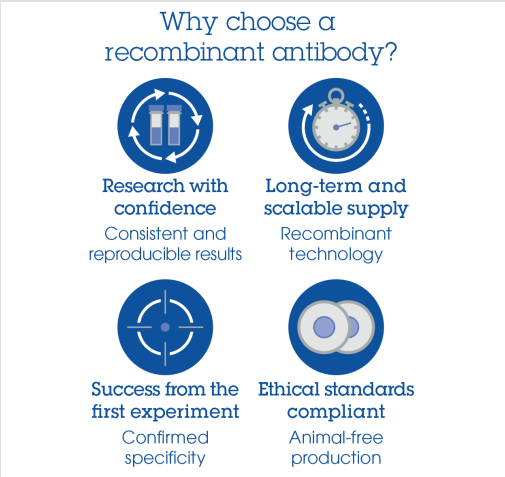
This image is of an Abreciew submitted by Francois Daubeuf.

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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-F4/80 antibody [SP115] (ab111101)

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.



Anti-F4/80 antibody [SP115] (ab111101)

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