## abcam

### Product datasheet

# Anti-F4/80 antibody [CI:A3-1] - Macrophage Marker ab6640

\*\*\*\* 69 Abreviews 961 References 5 Images

Overview

Product name Anti-F4/80 antibody [Cl:A3-1] - Macrophage Marker

**Description** Rat monoclonal [Cl:A3-1] to F4/80 - Macrophage Marker

Host species Rat

Specificity Anti-F4/80 antibody (ab6640) recognises the mouse F4/80 antigen, a 160kD glycoprotein

expressed by murine macrophages.

Tested applications Suitable for: Flow Cyt, ICC/IF

Species reactivity Reacts with: Mouse

Immunogen Tissue, cells or virus corresponding to F4/80. Thioglycollate stimulated peritoneal macrophages

from C57/BL mice

Positive control ICC/IF: Raw 264.7 cells, mouse bone marrow cells. Flow Cyt: J774 cells and peritoneal

macrophages.

General notes Please note we cannot guarantee IHC-P, however should you use this application for

this product then please use a specific protocol which can be found in the protocols

section of our datasheet here.

The 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** Preservative: 0.09% Sodium azide

Constituent: PBS

1

**Purity** Protein G purified

**Purification notes** Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.

**Clonality** Monoclonal

Clone numberCl:A3-1MyelomaNS1IsotypeIgG2b

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab6640 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
Flow Cyt		1/10 - 1/50.  ab18536 - Rat monoclonal lgG2b, is suitable for use as an isotype control with this antibody.
ICC/IF	<b>★★★★★ (11)</b>	Use a concentration of 5 - 10 µg/ml.  We recommend <u>ab150165 Goat Anti-Rat lgG H&amp;L (Alexa Fluor® 488)</u> secondary antibody.

ı	aı	g	е	t

**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.

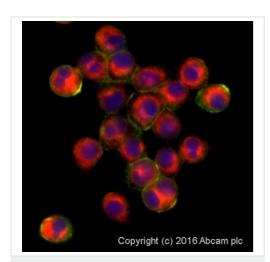
Sequence similarities Belongs to the G-protein coupled receptor 2 family. Adhesion G-protein coupled receptor (ADGR)

subfamily.

Contains 6 EGF-like domains. Contains 1 GPS domain.

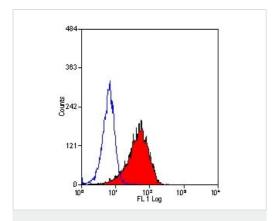
**Cellular localization** Cell membrane.

#### **Images**



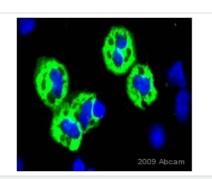
Immunocytochemistry/ Immunofluorescence - Anti-F4/80 antibody [Cl:A3-1] - Macrophage Marker (ab6640)

ab6640 stained Raw 264.7 cells. The cells were 100% methanol fixed for 5 minutes at room temperatureand then incubated in 1%BSA / 10% normal Goat serum / 0.3M glycine in 0.1% PBS-Tween for 1hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab6640 at 5 $\mu$ g/ml) overnight at +4°C. The secondary antibody (pseudo-colored green) was **ab150165 Goat Anti-Rat IgG H&L (Alexa Fluor® 488)** preadsorbed used at a 1/1000 dilution for 1 hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 $\mu$ M for 1hour at room temperature.



Flow Cytometry - Anti-F4/80 antibody [Cl:A3-1] - Macrophage Marker (ab6640)

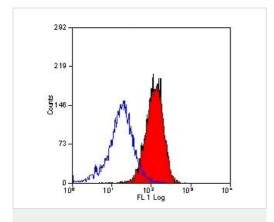
Flow cytometry analysis of J774 cells labelling F4/80 (red) with ab6640 at a dilution of 1/10 followed by streptavidin FITC secondary at 1/100 dilution. The blue line shows J774 cells stained with Rat anti mouse isotype control.



Immunocytochemistry/ Immunofluorescence - Anti-F4/80 antibody [Cl:A3-1] - Macrophage Marker (ab6640)

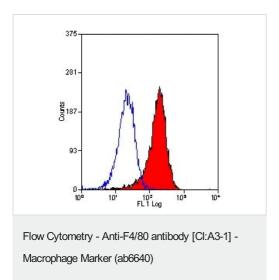
This image is courtesy of an anonymous Abreview

ab6640 staining F4/80 in mouse bone marrow cells by immunocytochemistry/ immunofluorescence. Cells were formaldehyde fixed and permeabilized in 0.2% Triton X-100 prior to blocking in 2% BSA for 30 minutes at 20°C. The primary antibody was diluted 1/200 and incubated with the sample for 9 hour at 4°C. Alexa fluor® 488 goat polyclonal to rat lg, diluted 1/200, was used as the secondary antibody.



Flow Cytometry - Anti-F4/80 antibody [Cl:A3-1] - Macrophage Marker (ab6640)

Flow cytometry analysis of peritoneal macrophages labelling F4/80 (red) with ab6640 at a dilution of 1/10. The blue line shows J774 cells stained with Rat anti mouse isotype control.



Flow cytometry analysis of J774 cells labelling F4/80 (red) with ab6640 at a dilution of 1/50 followed by goat anti rat lgG FITC secondary antibody at 1/100 dilution. The blue line shows J774 cells stained with Rat anti mouse isotype control.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors