

# Monoclonal Antibody to Macrophage F4/80 antigen - FITC

Alternate names: Cell surface glycoprotein EMR1, EMR1 hormone receptor, Emr1, Gpf480

Catalog No.: BM4008FX
Quantity: 0.5 mg
Concentration: 0.5 mg/ml

Background: F4/80 antigen is a 160 kD cell surface glycoprotein that is a member of the EGF-TM7 family

of proteins which shares 68% overall amino acid identity with human EGF

module-containing mucin-like hormone receptor 1 (EMR1).

Expression of F4/80 is heterogeneous and is reported to vary during macrophage maturation and activation. The F4/80 antigen is expressed on a wide range of mature tissue macrophages including Kupffer cells, Langerhans, microglia, macrophages located in the gut lamina propria, peritoneal cavity, lung, thymus, bone marrow stroma and macrophages in the red pulp of the spleen. F4/80 expression has also been reported on a subpopulation of dendritic cells but is absent from macrophages located in T cell areas of the spleen and lymph node.

The ligands and biological functions of the F4/80 antigen have not yet been determined but recent studies suggest a role for F4/80 in the generation of efferent CD8+ve regulatory

T cells.

Uniprot ID: Q61549

NCBI: NP 034260.1

GenelD: <u>13733</u>

Host / Isotype: Rat / IgG2b Clone: Cl:A3-1

Immunogen: Thioglycollate stimulated peritoneal macrophages from C57/BL mice

Format: State: Liquid IgG fraction

**Purification:** Protein G affinity chromatography

Buffer System: PBS, pH 7.4, with 0.09% sodium azide as preservative and 1% BSA as

stabiliser

Label: FITC - Fluorescein Isothiocyanate Isomer 1

Applications: Flow cytometry: use 10  $\mu$ l of 1/10 - 1/50 diluted antibody to label 10e6 cells in 100  $\mu$ l.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

**Specificity:** BM4008FX recognises the murine F4/80 antigen

Add. Information: Clone CI:A3-1 has been reported to modulate cytokine levels released in response to

Listeria monocytogenes.

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

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We recommend the use of antibody BM4008A for this purpose.

#### Storage:

Store the antibody undiluted at 2-8°C for up to one month or at -20°C for longer. Avoid repeated freezing and thawing.

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

General References: 1. Austyn, J.M. and Gordon, S. (1981). F4/80, a monoclonal antibody directed specifically against the mouse macrophage. Eur. J. Immunol. 11: 805-815.

> 2. Hume, D.A. et al. (1984). The mononuclear phagocyte system of the mouse defined by immunohistochemical localization of antigen F4/80: Macrophages associated with epithelia. The Anatomical Record 210: 503-512.

3. Lee, S.H. et al. (1985). Quantitative analysis of total macrophage content in adult mouse tissues. Immunochemical studies with monoclonal antibody F4/80. J. Exp. Med. 161: 475-489.

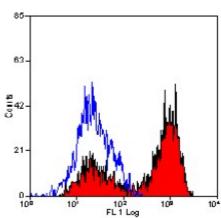
4. Gordon, S. et al. (1992). Antigen markers of macrophage differentitation in murine tissues. Curr. Top. Microbiol. Immunol. 181: 1-37.

5. Warschkau, H. and Kiderlen, A.F. (1999). A monoclonal antibody directed against the murine macrophage surface molecule F4/80 modulates natural immune response to Listeria monocytogenes. J. Immunol.163:3409 - 3416.

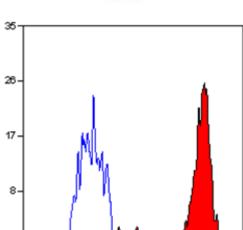
6. His-Hsien, L. et al. (2005). The macrophage F4/80 receptor is required for the induction of antigen-specific efferent regulatory T cells in peripheral tolerance.

J. Exp. Med. 201:1615 - 1625.

### **Pictures:**



Staining of mouse peritoneal macrophages with RAT ANTI MOUSE F4/80 ANTIGEN - FITC (BM4008F)



10<sup>2</sup>

FITC / FITC

101

Staining of mouse peritoneal macrophages with Rat anti Mouse F4/80 antigen:FITC (BM4008F)