**BACKGROUND**

The epidermal growth factor (EGF)-TM7 family constitutes a group of class B G protein-coupled receptors, which includes CD97, EMR1(EGF-like molecule containing mucin-like hormone receptor 1, designated F4/80 in mouse), EMR2, EMR3, FIRE and ETL. These family members are characterized by an extended extracellular region with several N-terminal EGF domains, and are predominantly expressed on cells of the immune system. The EGF-TM7 protein family are encoded by a gene cluster on human chromosome 19p13.3. The F4/80 molecule is solely expressed on the surface of macrophages and serves as a marker for mature macrophage tissues, including Kupffer cells in liver, splenic red pulp macrophages, brain microglia, gut lamina propria and Langerhans cells in the skin. F4/80/EMR1 undergoes extensive N-linked glycosylation as well as some O-linked glycosylation. The function of F4/80/EMR1 is unclear, but it is speculated to be involved in macrophage adhesion events, cell migration, or as a G protein-coupled signaling component of macrophages.

**CHROMOSOMAL LOCATION**

Genetic locus: ADGRE1 (human) mapping to 19p13.3; Adgre1 (mouse) mapping to 17 D.

**SOURCE**

F4/80 (BM8) is a rat monoclonal antibody raised against cultured bone marrow-derived macrophages of mouse origin.

**PRODUCT**

Each vial contains 100 µg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

F4/80 (BM8) is available conjugated fluorescein (sc-52664 FITC, 100 tests in 2 ml), for WB (RGB), IF, IHC(P) and FCM.

**APPLICATIONS**

F4/80 (BM8) is recommended for detection of EMR1 of human origin, F4/80 of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).


Molecular Weight of F4/80: 160 kDa.

Positive Controls: WEHI-3 cell lysate: sc-3815 or M1 whole cell lysate: sc-364782.

**STORAGE**

Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**SELECT PRODUCT CITATIONS**


See F4/80 (C-7): sc-37009 for F4/80 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.