

TECHNICAL DATA SHEET

redFluor™ 710 Anti-Mouse F4/80 Antigen (BM8.1)

Catalog Number: 80-4801

PRODUCT INFORMATION

Contents: redFluor™ 710 Anti-Mouse F4/80 Antigen (BM8.1)

Isotype: Rat IgG2b, kappa

Concentration: 0.2 mg/mL

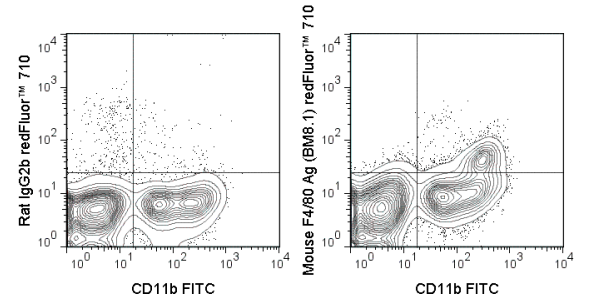
Clone: BM8.1

Reactivity: Mouse

Use By: 12 months from date of receipt

Storage Conditions: 2-8°C protected from light

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃,
0.1% gelatin, pH7.2



C57Bl/6 bone marrow cells were stained with FITC Anti-Mouse CD11b (35-0112) and 0.25 ug redFluor™ 710 Anti-Mouse F4/80 Antigen (80-4801) (right panel) or 0.25 ug redFluor™ 710 Rat IgG2b isotype control (left panel).

DESCRIPTION

The BM8.1 antibody is specific for mouse F4/80 antigen, a 125 kDa transmembrane protein widely expressed by members of the mononuclear phagocyte system and considered to be a key marker for mature macrophage cells. F4/80 is differentially expressed during myeloid cell development, and may be regulated by certain cytokines within the tissue microenvironment. Other cell types shown to express this antigen include Langerhans cells, Kupffer cells and dendritic cell subsets. BM8.1 is widely used together with antibodies to CD115 (c-fms), CD11b and CD11c to identify myeloid / macrophage cells by flow cytometry.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

redFluor™ 710 dye is excited by the red (633-647 nm) laser and has a peak emission of 710 nm. The recommended band pass filter for this dye is 710/50. redFluor™ 710 can be used as an alternative for Alexa Fluor® 700. Confirm that your cytometer is configured to detect this fluorochrome.

REFERENCES

- Ioannou M, Alissafi T, Boon L, Boumpas D, and Verginis P. 2013. *J. Immunol.* 190: 2631-2640. (Flow Cytometry)
- Papadopoulos G, Weinberg EO, Massari P, Gibson FC, Wetzler LM, Morgan EF, and Genco CA. 2013. *J. Immunol.* 190: 1148-1157.
- Chen Q and Snapper CM. 2013. *J. Immunol.* 190: 1048-1055.
- Rankin AL, Mumm JB, Murphy E, Turner S, Yu N, McClanahan TK, Bourne PA, Pierce RH, Kastelein R and Pflanz S. 2010. *J. Immunol.* 184(3): 1526-1535. (Immunohistochemistry - paraffin-embedded tissue)
- Geutskens SB, Otonkoski T, Pulkkinen MA, Drexhage HA and Leenen PJ. 2005. *J. Leukoc. Biol.* 78(4): 845-52 (Immunohistochemistry - frozen tissue)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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