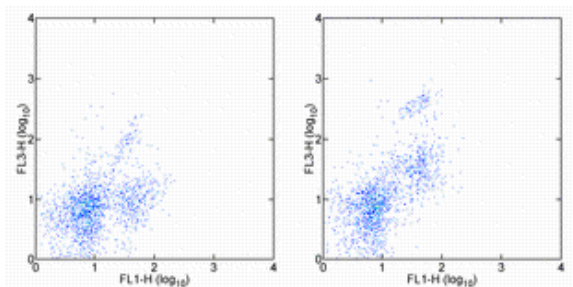


Anti-Mouse F4/80 Antigen PE-Cyanine7

Catalog Number: 25-4801

Also Known As: Pan Macrophage Marker

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of BALB/c splenocytes with Anti-Mouse CD11b FITC (cat. 11-0112) and 0.25 ug of Rat IgG2a K Isotype Control PE-Cyanine7 (cat. 25-4321) (left) or 0.25 ug of Anti-Mouse F4/80 Antigen PE-Cyanine7 (right). Total cells were used for analysis.

Product Information

Contents: Anti-Mouse F4/80 Antigen PE-Cyanine7

REF **Catalog Number:** 25-4801

Clone: BM8

Concentration: 0.2 mg/mL

Host/Isotype: Rat IgG2a, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.



Batch Code: Refer to Vial



Use By: Refer to Vial



Contains sodium azide

Description

The BM8 monoclonal antibody reacts with mouse F4/80 antigen, an approximately 125 kDa transmembrane protein. The F4/80 antigen is expressed by a majority of mature macrophages and is the best marker for this population of cells. However, other cell types such as Langerhans cells and liver Kupffer cells have been reported to express this antigen. Expression of F4/80 commences during early myeloid development and is upregulated on all BM cells stimulated *in vitro* with M-CSF. It has been shown that some cytokines downregulate the expression of F4/80 resulting in lack of F4/80 antigen on a subpopulation of macrophages, especially in the lymphoid microenvironment *in vivo*.

Applications Reported

This BM8 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This BM8 antibody has been tested by flow cytometric analysis of mouse spleen and bone marrow cell suspensions. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

References

Geutskens SB, Otonkoski T, Pulkkinen MA, Drexhage HA, Leenen PJ. Macrophages in the murine pancreas and their involvement in fetal endocrine development *in vitro*. J Leukoc Biol. 2005 Oct;78(4):845-52. (IHC frozen, PubMed)

Torzewski M, Shaw PX, Han KR, Shortal B, Lackner KJ, Witztum JL, Palinski W, Tsimikas S. Reduced *in vivo* aortic uptake of radiolabeled oxidation-specific antibodies reflects changes in plaque composition consistent with plaque stabilization. Arterioscler Thromb Vasc Biol. 2004 Dec;24(12):2307-12. (IHC paraffin, PubMed)

Schaller E, Macfarlane AJ, Rupec RA, Gordon S, McKnight AJ, Pfeffer K. Inactivation of the F4/80 glycoprotein in the mouse germ line. Mol Cell Biol. 2002. 22(22):8035-43.

Mackler AM, Green LM, McMillan PJ, Yellon SM. Distribution and activation of uterine mononuclear phagocytes in peripartum endometrium and myometrium of the mouse. *Biol Reprod.* 2000 May;62(5):1193-200. (IHC paraffin, PubMed)

Murayama T, Yokode M, Kataoka H, Imabayashi T, Yoshida H, Sano H, Nishikawa S, Nishikawa S, Kita T. Intraperitoneal administration of anti-c-fms monoclonal antibody prevents initial events of atherogenesis but does not reduce the size of advanced lesions in apolipoprotein E-deficient mice. *Circulation.* 1999 Apr 6;99(13):1740-6. (IHC frozen, PubMed)

Leenen PJ, de Bruijn MF, Voerman JS, Campbell PA, van Ewijk W. Markers of mouse macrophage development detected by monoclonal antibodies. *J Immunol Methods.* 1994. 174(1-2):5-19.

Zwadlo G, Brocker EB, von Bassewitz DB, Feige U, Sorg C. A monoclonal antibody to a differentiation antigen present on mature human macrophages and absent from monocytes. *J Immunol.* 1985. 134(3):1487-92

Related Products

11-0112 Anti-Mouse CD11b FITC (M1/70)

25-4321 Rat IgG2a K Isotype Control PE-Cyanine7 (eBR2a)

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