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Product Data Sheet

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Log Fluoresence Intensity Thioglycolate-elicited Balb/c mouse

peritoneal macrophages stained with BM8 Alexa Fluor® 647

Live intravital mouse spleen imaging.

PE CD169 (red) (clone 3D6.112), Alexa Fluor® 647 F4/80 (blue) (clone BM8), and autofluorescence (green)

were imaged for 30 minutes after iv

concentrations, time post injection,

and exposure conditions were used

for the negative control. Cells were imaged with a Leica SP5 confocal on anesthetized mice. Image courtesy of Grzegorz Chodaczek and Zbigniew

injection of 10 µg per antibody. Isotype controls at the same

Mikulski at LIAI.

Relative Cell Numbe

100

Alexa Fluor® 647 anti-mouse F4/80

Catalog # / Size: 123121 / 25 µg

123122 / 100 µg

Clone: BM8

Isotype: Rat IgG2a, κ

Immunogen: Murine macrophages

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with

Alexa Fluor® 647 under optimal conditions. The solution is free of

unconjugated Alexa Fluor® 647.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Applications: FC - Quality tested IHC - Validated

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

- * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at
- Alexa Fluor® 647 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 647 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Additional reported applications (for the relevant formats) include:

immunohistochemical staining of acetone-fixed frozen sections^{1,2} and

Western blotting.

Application References: 1. Schaller E, et al. 2002. Mol. Cell. Biol. 22:8035. (IHC)

- 2. Stevceva L, et al. 2001. BMC Clin Pathol. 1:3. (IHC)
- 3. Kobayashi M, *et al.* 2008. *J. Leukocyte Biol.* 83:1354. PubMed 4. Poeckel D, *et al.* 2009. *J. Biol Chem.* 284:21077. PubMed

Description: F4/80 is a 160 kD glycoprotein. It is characterized as a member of the epidermal growth factor (EGF)-transmembrane 7 (TM7) family. F4/80, also known as EMR1 or Ly71, has been widely used as a murine macrophage marker, which is expressed on majority of tissue macrophages including peritoneal macrophages, macrophages in lung, gut, thymus and red pulp of spleen (but not on the macrophages located in T cell areas of the spleen, lymph node and Peyer's patch), Kuffer cells, Langerhans cells, bone marrow stromal cells. F4/80 has also been shown on a subset of dendritic cells. The biological ligand of F4/80 has not been identified, but it has been reported that F4/80 is required for induction of CD8 T cells-mediated peripheral tolerance.

Antigen References:

- 1. Austy JM and Gordon S. 1981. *Eur. J. Immunol.* 11:805. 2. Hume DA, *et al.* 1983. *J. Exp. Med.* 158:1522.
- 3. Ruedl C, et al. 1996. Eur. J. Immunol. 26:1801
- 4. McKnight AJ, et al. 1996. J. Biol. Chem. 271:486.
- 5. Lin HH, et al. 2005. J. Exp. Med. 201:1615.

Related Products: Product

Cell Staining Buffer

Clone

Application FC, ICC, ICFC



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Alexa Fluor® 647 Rat IgG2a, κ Isotype Ctrl TruStain fcXTM (anti-mouse CD16/32)

RTK2758 93 FC, ICFC FC



