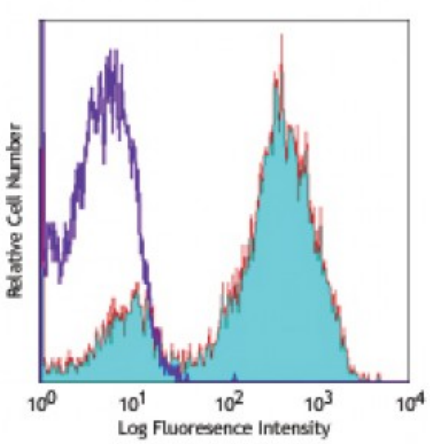
SONY

Product Data Sheet

Alexa Fluor® 647 anti-mouse F4/80

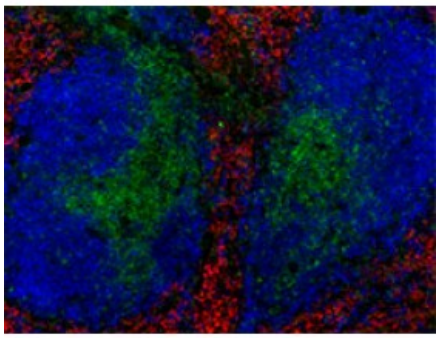
Catalog # / Size:	1215605 / 25 µg 1215610 / 100 µg
Clone:	BM8
Isotype:	Rat IgG2a, κ
Immunogen:	Murine macrophages
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5



Thioglycolate-elicited Balb/c mouse peritoneal macrophages stained with BM8 Alexa Fluor® 647.

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. For immunofluorescence microscopy, a concentration range of 5-10 µg/ml is recommended. For immunohistochemical staining on frozen tissue sections, the suggested use of this reagent is 2.5 - 10 microg/ml. 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 633 nm / 635 nm.
Application Notes:	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections[1,2] and formalin-fixed paraffin-embedded sections[6,7], and Western blotting.



C57BL/6 mouse frozen spleen section was fixed with 4% paraformaldehyde (PFA) for ten minutes at room temperature and blocked with 5% FBS plus 5% rat/mouse serum for 30 minutes at room temperature. Then the section was stained with 5 microg/ml of anti-mo

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. Leukoc. Biol.* 83:1354. PubMed
4. Poeckel D, *et al.* 2009. *J. Biol Chem.* 284:21077. PubMed
5. Glass AM, *et al.* 2013. *J. Immunol.* 190:4830. PubMed
6. Koehm S, et al. 2007. J. Allergy Clin. Immunol. 120:570. (IHC)
7. Rankin AL, et al. 2010. J. Immunol. 184:1526. (IHC)

8. Sasi SP, *et al.* 2014. *J Biol Chem.* 289:14178. PubMed
9. Thakus VS, *et al.* 2014. *Toxicol Lett.* 230:322. PubMed
10. Jaworska J, *et al.* 2015. *J Immunol.* 194:325. PubMed
11. Wang J, *et al.* 2015. *Cancer Res.* 75:306. PubMed
12. Yang X, *et al.* 2015. *PNAS.* 112:2900. PubMed
13. Belliere J, *et al.* 2015. *J Am Soc Nephrol.* 26:1363. PubMed
14. Inoue M, *et al.* 2015. *J Immunol.* 194:5595. 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 the 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, and 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