SONY

Product Data Sheet

Alexa Fluor® 647 anti-mouse CD107b (Mac-3)

Catalog # / Size: 1142555 / 25 µg
1142560 / 100 µg

Clone: M3/84

Isotype: Rat IgG1, κ

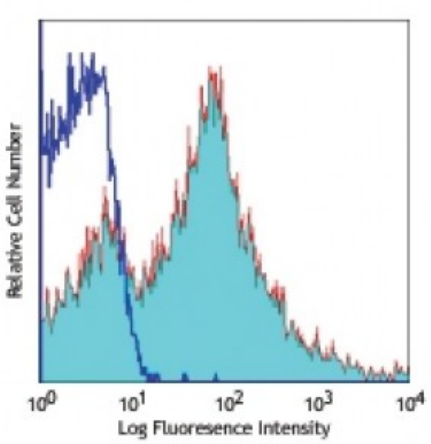
Immunogen: Membrane glycoproteins from C57BL/6 mouse peritoneal exudate cells

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



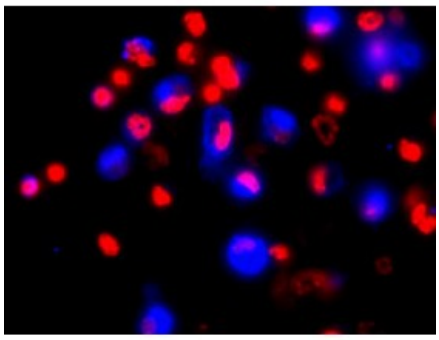
Thioglycollate-elicited BALB/c mouse peritoneal macrophages stained with M3/84 Alexa Fluor® 647

Applications:

Applications: Immunofluorescence

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 10^6 cells in 100 microL volume. For immunofluorescence microscopy, a concentration range of 5-10 µg/ml is recommended. 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 633nm / 635nm.



Thioglycolate-elicited C57BL/6 mouse peritoneal cells were fixed with 2% paraformaldehyde (PFA) for 10 minutes and blocked with 5% FBS for 30 minutes. Then the cells were stained with 10 microg/ml of anti-mouse CD107b (Mac-3) (clone M3/84) Alexa Fluor&r

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation[1-4] and immunohistochemical staining of acetone-fixed frozen sections[5,6] and paraformaldehyde-fixed paraffin-embedded sections[9-11].

Application References:

1. Springer TA. 1981. *J. Biol. Chem.* 256:3833. (IP)
2. Ho MK, *et al.* 1983. *J. Biol. Chem.* 258:636. (IP)
3. Chen JW, *et al.* 1985. *J. Cell Biol.* 101:85. (IP)
4. Ralph P, *et al.* 1983. *J. Immunol.* 130:108. (IP)
5. Flotte TJ, *et al.* 1983. *Am. J. Pathol.* 111:112. (IHC)
6. Kano M, *et al.* 1998. *Transplantation* 65:837. (IHC)
7. Terrazas LI,*et al.*2005. *Int J Parasitol.* 35:1349. PubMed

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8. Hayashida A, *et al.* 2011. *J. Biol Chem.* 286:3288. PubMed
9. Vollmar P, *et al.* 2010. *J. Immunol.* 185:6338. (IHC)
10. Odorisio T, *et al.* 2002. *J. Cell Sci.* 115:2559. (IHC)
11. Nessler S, *et al.* 2007. *Brain* 130:2186. (IHC)
11. Tay SS, *et al.* 2014. *PNAS.* 111:2540. PubMed

Description: Mac-3 is a 110 kD type I membrane glycoprotein, also known as CD107b and LAMP-2. It is expressed on lysosomal membranes and the plasma membrane of macrophages and some myeloid cell lines. In the bone marrow, few cells display Mac-3 antigen on the surface, but a large proportion express Mac-3 in the cytoplasm. CD107b has been identified as a ligand for galaptin, an S-type lectin present in the extracellular matrix. Mac-3/CD107b is upregulated in some tumors and increased expression has been correlated with enhanced metastatic potential.

Antigen References:

1. Springer TA. 1981. *J. Biol. Chem.* 256:3833.
2. Ho MK, *et al.* 1983. *J. Biol. Chem.* 258:636.
3. Ralph P, *et al.* 1983. *J. Immunol.* 130:108.