

**Biotin anti-mouse CD107b (Mac-3)**

**Catalog # / Size:** 1142540 / 500 µg

**Clone:** M3/84

**Isotype:** Rat IgG1, κ

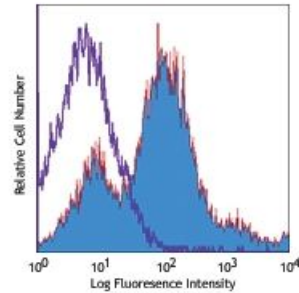
**Immunogen:** Membrane glycoproteins from C57BL/6 mouse peritoneal exudate cells

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

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

**Concentration:** 0.5



Thioglycollate-elicited BALB/c mouse peritoneal macrophages stained with biotinylated M3/84, followed by Sav-PE

**Applications:**

**Applications:** Flow Cytometry, Immunohistochemistry

**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  $\leq 0.25$  microg per  $10^6$  cells in 100 microl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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

**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](#)
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)

**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 galactin, 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.