Technical Data Sheet

FITC Rat Anti-Mouse CD107b

Product Information

Material Number:	**553323**
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	M3/84
Immunogen:	Mouse C57Bl/6 peritoneal exudate cells
Isotype:	Rat (LEW x BN) IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The M3/84 monoclonal antibody specifically binds to CD107b which is also known as Mac-3, Lysosome-associated membrane protein 2 (LAMP-2/Lamp2/Lamp II), and Lysosomal membrane glycoprotein type B (LGP-B). CD107b is a single-pass type I transmembrane glycoprotein that constitutes a major integral membrane protein of lysosomes and may play a role in lysosomal function. CD107b is also expressed on the surface of mouse mononuclear phagocytes. Surface expression of the 92-110-kDa glycoprotein antigen increases during differentiation of monocytes to activated macrophages and may play a role in adhesion. The M3/84 mAb can detect CD107b antigen on tissue macrophages, thioglycollate-elicited peritoneal macrophages, and some myeloid cell lines, but not on lymphocytes or monocytes. In the bone marrow, very few cells display CD107b antigen on the surface, but a large proportion express cytoplasmic CD107b. The M3/84 antibody has also been reported to stain dendritic cells and endothelium in sections of thymus (both medulla and cortex), lymph nodes, spleen (white pulp), and gut-associated lymphoid tissue.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
553924	FITC Rat IgG1, κ Isotype Control	0.25 mg	R3-34
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Walker EB, Akporiaye ET, Warner NL, Stewart CC. Characterization of subsets of bone marrow-derived macrophages by flow cytometry analysis. *J Leukoc Biol.* 1985; 37(2):121-136. (Biology)

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