

Technical Data Sheet

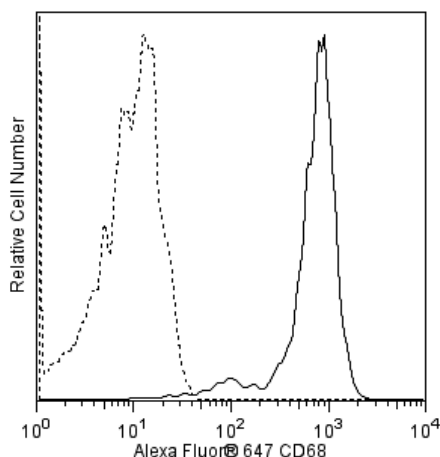
Alexa Fluor® 647 Mouse Anti-Human CD68

Product Information

Material Number:	562111
Alternate Name:	GP110; Macrosialin; SCARD1; Scavenger receptor class D, member 1
Size:	50 tests
Vol. per Test:	5 µl
Clone:	Y1/82A
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Workshop:	VI MR23
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The Y1/82A monoclonal antibody specifically binds to a 110 kDa-type I-transmembrane glycoprotein expressed in cytoplasmic granules of monocytes, macrophages, dendritic cells, granulocytes, myeloid progenitor cells and, reportedly, a subset of CD34-positive hemopoietic bone marrow progenitor cells. CD68 belongs to the sialomucin family and its function has not been fully elucidated. This antibody could be useful in studies of myeloid cell development.



Flow cytometric analysis of CD68 expression on human peripheral blood monocytes. Human peripheral blood mononuclear cells were fixed and permeabilized with BD Cytotfix/CytoPerm™ Fixation/Permeabilization Solution (Cat. No. 554722). After washing with BD Perm/Wash™ Buffer (Cat. No. 554723), the cells were stained with either Alexa Fluor® 647 Mouse Anti-Human CD68 antibody (Cat. No. 562111; solid line histogram) or with an Alexa Fluor® 647 Mouse IgG2b, κ Isotype Control (Cat. No. 557903; dashed line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of intact monocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

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 to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed.

Application Notes

Application

Intracellular staining (flow cytometry)	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
557903	Alexa Fluor® 647 Mouse IgG2b, κ Isotype Control	100 tests	27-35
554722	Fixation and Permeabilization Solution	125 ml	(none)
554723	Perm/Wash Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100-µl experimental sample (a test).
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

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5. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
8. 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.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

References

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- Davey FR, Erber WN, Gatter KC, Mason DY. The use of monoclonal antibody Y1/82A in the identification of acute myeloblastic and monocytic leukemias. *Am J Clin Pathol*. 1988; 89(1):76-80. (Clone-specific: Immunohistochemistry)
- Kishimoto T, von dem Borne AEG, Goyert SM, et al., ed. *Leucocyte Typing VI: White Cell Differentiation Antigens*. London: Garland Publishing; 1997. (Clone-specific: Immunohistochemistry)