

Technical Data Sheet

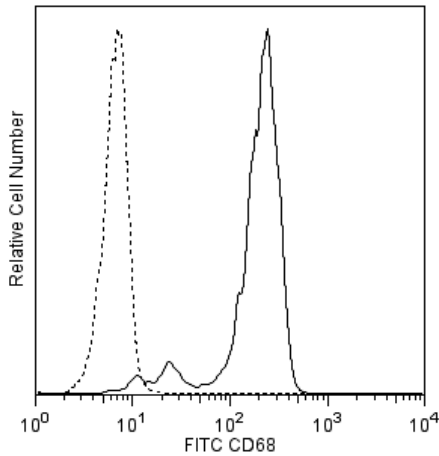
FITC Mouse Anti-Human CD68

Product Information

Material Number:	562117
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 Cytofix/Cytoperm™ Fixation/Permeabilization Solution (Cat. No. 554722). After washing with BD Perm/Wash™ Buffer (Cat. No. 554723), the cells were stained with either FITC Mouse Anti-Human CD68 antibody (Cat. No. 562117; solid line histogram) or with a FITC Mouse IgG2b, κ Isotype Control (Cat. No. 555057; 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 with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Intracellular staining (flow cytometry)	Routinely Tested
---	------------------

Suggested Companion Products

Catalog Number	Name	Size	Clone
555057	FITC Mouse IgG2b, κ Isotype Control	0.1 mg	27-35
554722	Fixation and Permeabilization Solution	125 ml	(none)
554723	Perm/Wash Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

BD Biosciences

[bdbiosciences.com](http://bdbiosciences.com)  
United States 877.232.8995 Canada 888.268.5430 Europe 32.53.720.550 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 0800.771.7157  
For country-specific contact information, visit [bdbiosciences.com/how\\_to\\_order/](http://bdbiosciences.com/how_to_order/)  
Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.  
For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.  
BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2011 BD



## Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to [www.bdbiosciences.com/pharmlingen/protocols](http://www.bdbiosciences.com/pharmlingen/protocols) for technical protocols.
4. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References

Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997. (Biology)

Davey FR, Cordell JL, Erber WN, Pulford KA, Gatter KC, Mason DY. Monoclonal antibody (Y1/82A) with specificity towards peripheral blood monocytes and tissue macrophages. *J Clin Pathol*. 1988; 41(7):753-758. (Clone-specific: Immunohistochemistry)

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)