

Technical Data Sheet

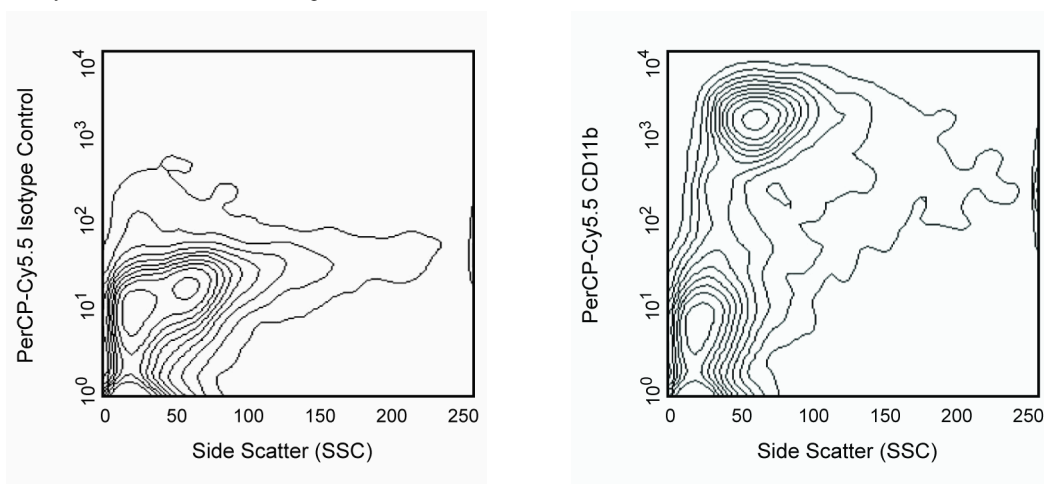
PerCP-Cy™ 5.5 Rat Anti-Mouse CD11b

Product Information

Material Number:	561114
Alternate Name:	CR-3 alpha chain; Itgam; Integrin alpha M; Ly-40; Mac-1 alpha
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	M1/70
Immunogen:	Mouse Splenic Cells
Isotype:	Rat (DA) IgG2b, κ
Reactivity:	QC Testing: Mouse Reported: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The M1/70 antibody reacts with the 170-kDa α[M] chain of Mac-1 (CD11b/CD18, α[M]β[2] integrin), also known as complement receptor 3 (CR3), which mediates adhesion to C3bi and ICAM-1 (CD54). Mac-1 is expressed at varying levels on granulocytes, macrophages, myeloid-derived dendritic cells, natural killer cells, microglia, and B-1 cells. Mac-1 expression is rapidly up-regulated on neutrophils after activation, in the same time period that CD62L (L-selectin) is shed from the cell surface. M1/70 antibody reportedly blocks cell adherence and C3bi binding, but it does not block cell-mediated lysis. Cross-reaction of mAb M1/70 with CD11b on human monocytes, polymorphonuclear leukocytes, and NK cells has been reported.



Expression of CD11b on bone-marrow myeloid cells. BALB/c bone-marrow leukocytes were stained with either PerCP-Cy™ 5.5-conjugated Rat IgG2b, κ isotype control A95-1 (Cat. No. 550764, left panel) or PerCP-Cy™ 5.5-conjugated M1/70 monoclonal antibodies (right panel). Please note that the population of cells having the lowest SSC (erythroid and lymphoid cells) show little expression of CD11b, while cells with moderate-to-high SSC (myeloid cells) are almost uniformly CD11b positive (right panel). Flow cytometry was performed on a BD FACSCalibur™ flow cytometry 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 PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
550764	PerCP-Cy™ 5.5 Rat IgG2b, κ Isotype Control	0.1 mg	A95-1

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.
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4. PerCP-Cy5.5-labelled antibodies can be used with FITC- and R-PE-labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
5. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
6. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
8. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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