

Technical Data Sheet

Biotin Rat Anti-Mouse CD11b

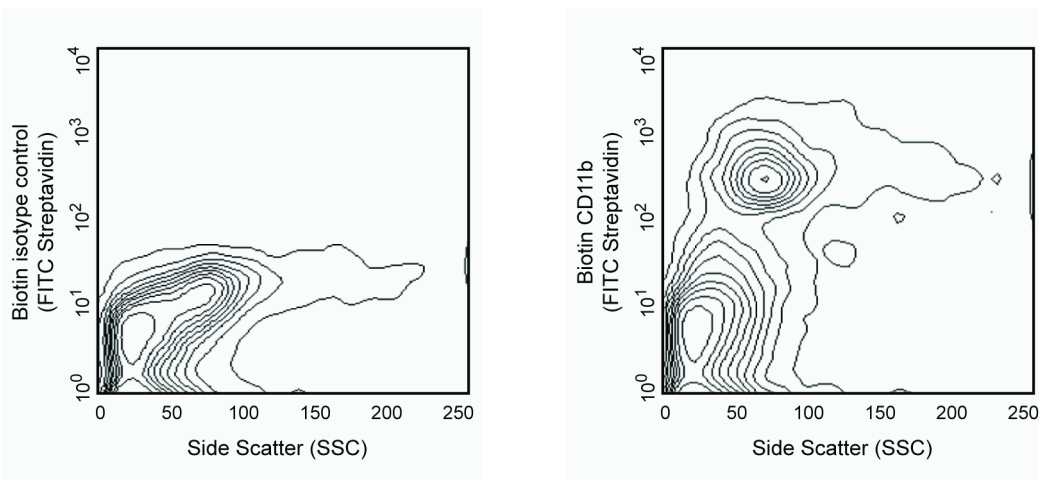
Product Information

Material Number:	553309
Alternate Name:	Integrin α [M] chain, Mac-1 α chain, CR3
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	M1/70
Immunogen:	C57BL/10 splenic T cells and concanavalin A-activated C57BL/10 splenocytes
Isotype:	Rat (DA) IgG2b, κ
Reactivity:	QC Testing: Mouse Reported: Human
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ 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.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Expression of CD11b on bone-marrow myeloid cells. BALB/c bone-marrow leukocytes were stained with biotinylated M1/70 monoclonal antibody (right panel), followed by Streptavidin-FITC (Cat. No. 554060, both panels). 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 FACScan™ flow cytometry system.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

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Application Notes

Application

Flow cytometry	Routinely Tested
Immunofluorescence	Reported

Suggested Companion Products

Catalog Number	Name	Size	Clone
554060	FITC Streptavidin	0.5 mg	(none)
553987	Biotin Rat IgG2b, κ Isotype Control	0.25 mg	A95-1

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to wwwbdbiosciences.com/pharmingen/protocols for technical protocols.
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.

References

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