

Technical Data Sheet

Purified NA/LE Rat Anti-Mouse CD11b

Product Information

Material Number:	553307
Alternate Name:	CR-3 alpha chain; Itgam; Integrin alpha M; Ly-40; Mac-1 alpha
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	M1/70
Immunogen:	Mouse Splenic Cells
Isotype:	Rat (DA) IgG2b, κ
Reactivity:	QC Testing: Mouse Reported: Human
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2 μ m sterile filtered. Endotoxin level is ≤ 0.01 EU/ μ g (≤ 0.001 ng/ μ g) of protein as determined by the LAL assay.

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.

Preparation and Storage

Store undiluted at 4°C.

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

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Reported
Immunoprecipitation	Reported
Blocking	Reported
Immunohistochemistry-paraffin	Not Recommended
Western blot	Not Recommended

Suggested Companion Products

Catalog Number	Name	Size	Clone
553985	Purified NA/LE Rat IgG2b, κ Isotype Control	0.5 mg	A95-1
553308	Purified Rat Anti-Mouse CD11b	0.5 mg	M1/70

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Kishimoto TK, Jutila MA, Berg EL, Butcher EC. Neutrophil Mac-1 and MEL-14 adhesion proteins inversely regulated by chemotactic factors. *Science.* 1989; 245(4923):1238-1241. (Biology)

Lagasse E, Weissman IL. Flow cytometric identification of murine neutrophils and monocytes. *J Immunol Methods.* 1996; 197(1-2):139-150. (Methodology: Flow cytometry)

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Sanchez-Madrid F, Simon P, Thompson S, Springer TA. Mapping of antigenic and functional epitopes on the alpha- and beta-subunits of two related mouse glycoproteins involved in cell interactions, LFA-1 and Mac-1. *J Exp Med.* 1983; 158(2):586-602. (Biology: Blocking, Immunoprecipitation, Western blot)

Springer T, Galfre G, Secher DS, Milstein C. Monoclonal xenogeneic antibodies to murine cell surface antigens: identification of novel leukocyte differentiation antigens. *Eur J Immunol.* 1978; 8(8):539-551. (Immunogen: Immunoprecipitation)

Springer T, Galfre G, Secher DS, Milstein C. Mac-1: a macrophage differentiation antigen identified by monoclonal antibody. *Eur J Immunol.* 1979; 9(4):301-306. (Clone-specific: Immunoprecipitation)

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