

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD11b/Integrin αM. Cross-reaction with human CD11b/Integrin αM has been reported (1, 2).
Source	Monoclonal Rat IgG _{2B} Clone # M1/70
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Con A-activated C57BL/10 splenocytes
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

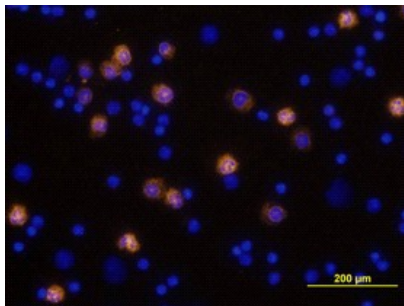
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25 μg/10 ⁶ cells	Mouse splenocytes
Immunocytochemistry	8-25 μg/mL	See Below
CyTOF-reported	Lee, H. <i>et al.</i> (2015) <i>Mucosal Immunol.</i> 8 : 1083. Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Immunohistochemistry	Hata, H., <i>et al.</i> (2004) <i>J. Clin. Invest.</i> 114 :582. Iwasaki, A. and Kelsall, B.L. (2002) <i>J. Immunol.</i> 166 :4884. Zhang, Y., <i>et al.</i> (2002) <i>J. Immunol.</i> 168 :3088.	
Immunoprecipitation	Springer, T.A. <i>et al.</i> (1979) <i>Eur. J. Immunol.</i> 9 :301.	

DATA

Immunocytochemistry



CD11b/Integrin αM in Mouse Splenocytes.
CD11b/Integrin αM was detected in immersion fixed mouse splenocytes using Rat Anti-Mouse CD11b/Integrin αM Monoclonal Antibody (Catalog # MAB1124) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The Integrin family proteins are heterodimeric transmembrane receptors composed of an α and a β subunit. The Integrin αM subunit, also known as MAC-1α subunit or CD11b, combines with the Integrin β2 subunit (CD18) to form the non-covalent heterodimer Integrin αM/β2, also known as MAC-1 and complement receptor type 3 (CR3). Integrin αM/β2 is expressed on granulocytes, macrophages, dendritic cells and natural killer cells. Upon activation, αM/β2 can bind several ligands (including ICAM-1, fibrinogen, and the C3 complement fragment, C3bi) to mediate phagocyte adhesion, migration and ingestion of complement-opsonized particles.

References:

1. Beller, D.J. *et al.* (1982) *J. Exp. Med.* **156**:1000.
2. Ault, K.A. and T.A. Springer (1981) *J. Immunol.* **126**:359.