

DESCRIPTION

Species Reactivity	Human/Equine
Specificity	Detects human CD11b/Integrin αM in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 238446
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD11b/Integrin αM Phe17-Asn1105 Accession # NP_001139280
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 as a 0.2 μm filtered solution in PBS.

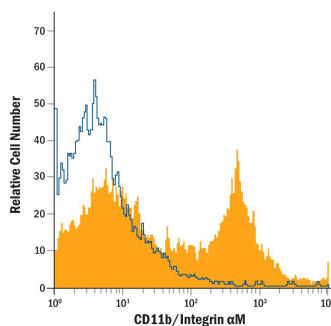
APPLICATIONS

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	See Below
Immunocytochemistry	8-25 μg/mL	See Below
Immunohistochemistry	5-25 μg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

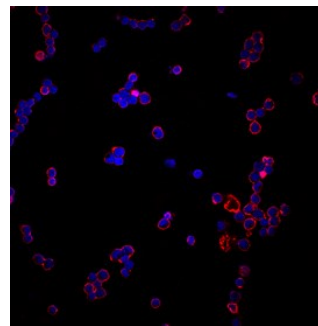
DATA

Flow Cytometry



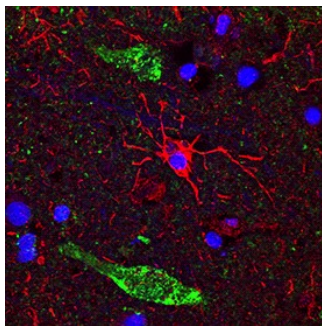
Detection of CD11b/Integrin αM in Equine PBMCs by Flow Cytometry. Equine peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human/Equine CD11b/Integrin αM Monoclonal Antibody (Catalog # MAB16991, filled histogram) or isotype control antibody (Catalog # MAB004, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).

Immunocytochemistry



CD11b/Integrin αM in Human PBMCs. CD11b/Integrin αM was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Mouse Anti-Human/Equine CD11b/Integrin αM Monoclonal Antibody (Catalog # MAB16991) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

Immunohistochemistry



CD11b/Integrin alpha M in Human Brain. CD11b/Integrin alpha M was detected in immersion fixed paraffin-embedded sections of human brain (cerebral cortex) using Mouse Anti-Human/Equine CD11b/Integrin alpha M Monoclonal Antibody (Catalog # MAB16991). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm of microglia. Tissue was co-stained with using a Sheep Anti-Human/Mouse/Rat Neurogranin Antigen Affinity-Purified Polyclonal Antibody (Catalog # AF7947) and an Alexa Fluor® 488-conjugated Donkey Anti-Sheep IgG Secondary Antibody (green). View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

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.

- 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 α M subunit (CD11b), associates with the Integrin β 2 subunit (CD18) to form the non-covalent heterodimeric Integrin CD11b/CD18, also known as Mac-1 and CR-3. Upon activation, CD11b/CD18 is expressed on granulocytes, monocytes, a subset of NK cells and activated lymphocytes. Integrin CD11b/CD18 functions as a receptor for complement fragment iC3b, ICAM-1 (CD54), ICAM-2 (CD102) and fibrinogen to mediate phagocyte adhesion, migration and ingestion of complement-opsonized particles (1-3).

References:

1. Springer, T.A. *et al.* (1978) Eur. J. Immunol. **8**:539.
2. Springer, T.A. *et al.* (1979) Eur. J. Immunol. **9**:301.
3. Springer, T.A. *et al.* (1982) Immunol. Rev. **68**:171.