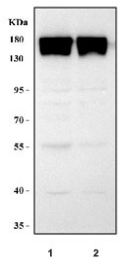
Integrin Alpha M Antibody / Mouse CD11b Antibody (RQ7906)

Catalog No.	Formulation	Size
RQ7906	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P05555
Applications	Western blot: 0.5-1ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This Integrin Alpha M Antibody / Mouse CD11b Antibody is available for research use only.



Integrin Alpha M Antibody in Mouse ANA-1 and RAW264.7 Macrophage Cells by WB. Western blot of mouse ANA-1 (lane 1) and RAW264.7 (lane 2) cell lysates probed with Integrin Alpha M Antibody. Both lanes show a prominent high-molecular-weight band at approximately 130-150 kDa, within the stated 127-170 kDa range for CD11b; differences in glycosylation can affect its apparent migration. Weaker lower-molecular-weight bands are also visible and should not be assumed to represent full-length CD11b. ANA-1 and RAW264.7 are mouse macrophage cell lines, making the image relevant to studies of myeloid cells. The high-molecular-weight signal supports detection of mouse CD11b by this polyclonal antibody.

Description

Integrin Alpha M Antibody / Mouse CD11b Antibody recognizes the alpha M integrin subunit encoded by ITGAM. CD11b pairs with integrin beta 2, also called CD18, to form the receptor known as MAC-1 or complement receptor 3 (CR3). Integrin alpha M and CD11b name the individual alpha subunit, while MAC-1 and CR3 name the assembled receptor. Keeping these terms distinct helps identify the protein being studied and the larger complex in which it functions.

The CD11b/CD18 complex contributes to leukocyte adhesion and movement. It engages ligands on other cells and in the

surrounding environment, helping immune cells establish contact during surveillance and inflammatory responses. Its adhesive behavior can vary with receptor activation and organization at the cell surface. Detecting CD11b therefore provides information about an important receptor component, but expression alone does not measure the strength of a cell's adhesion.

CD11b is associated with myeloid cells, including monocytes, macrophages, and granulocytes. It is also commonly examined in microglial research. The marker can help characterize these populations, although cell identity and functional state require interpretation alongside other markers and biological context. ITGAM identifies CD11b specifically within the CD11 family of integrin alpha chains. Other members can also pair with CD18, but the resulting receptors differ in their ligand interactions and roles.

The CR3 name reflects a role for the CD11b/CD18 complex in recognizing complement-coated material. This interaction contributes to uptake by phagocytic cells, connecting surface recognition with clearance of particles. MAC-1 also participates in cell attachment and migration. Its involvement in several processes makes it useful to distinguish studies of CD11b abundance from experiments designed to measure the activity of the complete receptor.

NSJ Bioreagents offers this Mouse CD11b Antibody as a polyclonal reagent raised against a recombinant portion of mouse integrin alpha M. The alpha-chain focus provides a precise way to describe the intended target while retaining the familiar MAC-1 and CR3 names for its receptor complex.

An Integrin Alpha M Antibody / Mouse CD11b Antibody can help researchers investigate this integrin subunit in studies of myeloid cell markers, adhesion, and complement-associated biology.

See our CD11b Antibody ITGAM/3338 page for a monoclonal antibody targeting the ITGAM alpha chain.

Application Notes

Optimal dilution of the Integrin Alpha M Antibody / Mouse CD11b Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant mouse protein (amino acids F17-L253) was used as the immunogen for the Integrin alpha M antibody.

Storage

After reconstitution, the Integrin alpha M antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

mouse CD11b antibody, ITGAM antibody, MAC-1 alpha chain antibody, CR3 alpha chain antibody

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