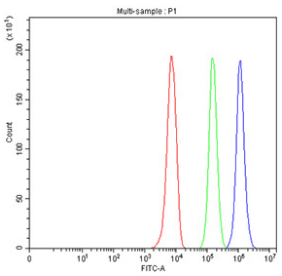
CD11b Antibody / MAC-1 / ITGAM (RQ4351)

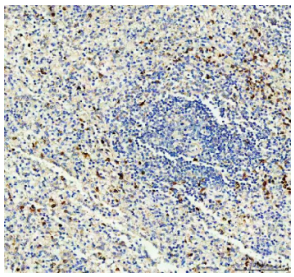
Catalog No.	Formulation	Size
RQ4351	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

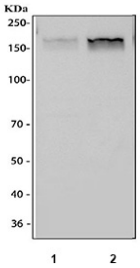
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P11215
Localization	Cytoplasmic, membranous
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Immunohistochemisty (FFPE) : 2-5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This CD11b antibody is available for research use only.



Flow cytometry testing of fixed human U937 cells with CD11b antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=CD11b antibody.



IHC staining of FFPE human spleen tissue with CD11b antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) mouse spleen and 2) mouse RAW264.7 cell lysate with CD11b antibody at 0.5ug/ml. Expected molecular weight: 127~170 kDa depending on glycosylation level.

Description

CD11b, also known as integrin alpha M, is a transmembrane protein that forms a heterodimer with CD18 to create the Mac-1 complex, also referred to as complement receptor 3. CD11b is primarily expressed on myeloid lineage cells such as monocytes, macrophages, neutrophils, dendritic cells, and natural killer cells. It plays a critical role in cell adhesion, migration, phagocytosis, and the immune response by facilitating interactions with intercellular adhesion molecules and complement components.

CD11b undergoes alternative splicing and post-translational modifications, giving rise to multiple isoforms that may differ in function and cellular localization. These isoforms allow fine-tuned regulation of integrin signaling and influence how immune cells respond to inflammatory cues or tissue injury.

The CD11b antibody is a valuable tool for identifying and characterizing myeloid populations in both normal and disease states, including cancer, autoimmune disorders, and infectious diseases. Researchers use CD11b antibody products in immunohistochemistry, flow cytometry, and western blot to evaluate immune cell infiltration, surface marker expression, and signaling activity. A well-validated CD11b antibody enables reproducible results across various assay platforms, ensuring high specificity and minimal background.

NSJ Bioreagents offers a selection of CD11b antibody reagents optimized for multiple applications and species, supporting both basic research and clinical investigation.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the CD11b antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A recombinant human protein corresponding to amino acids N129-E336 was used as the immunogen for the CD11b antibody.

Storage

After reconstitution, the CD11b 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

Granulocyte marker