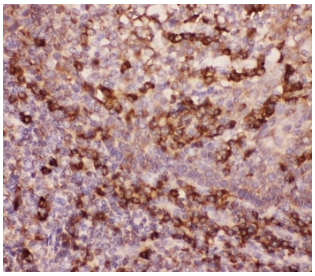
MAC-1 Antibody / CD11b Polyclonal Antibody (R31561)

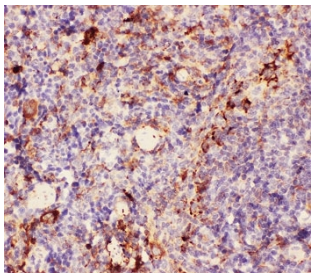
Catalog No.	Formulation	Size
R31561	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

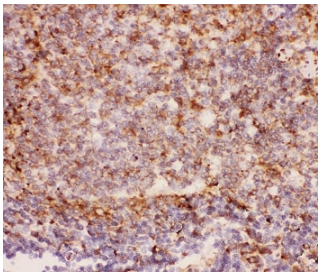
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
Gene ID	3684
Localization	Cytoplasmic, membranous
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml Flow cytometry: 1-3ug/10^6 cells
Limitations	This MAC-1 Antibody / CD11b Polyclonal Antibody is available for research use only.



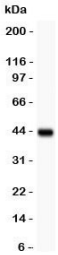
MAC-1 Antibody in Human Tonsil by IHC. Immunohistochemistry of FFPE human tonsil stained with MAC-1 Antibody shows red staining in scattered cells and cellular regions of the section. The antibody was raised against CD11b, the alpha chain of MAC-1.



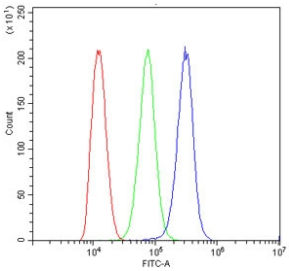
MAC-1 Antibody in Mouse Spleen by IHC. Immunohistochemistry of FFPE mouse spleen stained with MAC-1 Antibody shows red staining distributed through cellular areas of the tissue. The image illustrates detection with this CD11b polyclonal antibody in the mouse spleen section.



MAC-1 Antibody in Rat Spleen by IHC. Immunohistochemistry of FFPE rat spleen stained with MAC-1 Antibody shows red cellular staining within the section. This image provides a separate tissue example for the antibody directed against the CD11b alpha chain.



MAC-1 Antibody with Recombinant Human CD11b by WB. Western blot testing of 0.5 ng recombinant human partial protein with MAC-1 Antibody shows a distinct band in the sample lane. The result demonstrates recognition of the recombinant CD11b fragment used in this assay; it does not establish the migration position of full-length MAC-1 in a tissue lysate.



MAC-1 Antibody in Human THP-1 Monocytic Cells by FACS. Flow cytometric analysis of human THP-1 monocytic cells stained with MAC-1 Antibody at 1 ug per 10^6 cells after blocking with goat serum. The antibody-stained population (blue) shifts to the right of the isotype control (green) and cells-alone distribution (red), consistent with detection by this CD11b polyclonal antibody.

Description

MAC-1 Antibody / CD11b Polyclonal Antibody is directed against CD11b, the alpha integrin subunit encoded by ITGAM. CD11b pairs with CD18, also called integrin beta 2, to form the receptor known as macrophage-1 antigen (MAC-1) or complement receptor 3 (CR3). The immunogen for this antibody is a partial human CD11b protein. CD11b therefore identifies its intended protein target, while MAC-1 and CR3 describe the assembled receptor to which that protein contributes.

MAC-1 participates in leukocyte adhesion, migration, and interactions with other cells. It can bind ligands associated with cell surfaces and the surrounding environment, helping immune cells establish and maintain contact during inflammatory responses. The receptor's adhesive behavior also changes with its activation state and organization at the cell surface. Detecting CD11b and measuring MAC-1-mediated adhesion are consequently related but distinct approaches to studying this receptor system.

CD11b is associated with myeloid populations such as monocytes, macrophages, and granulocytes. It is also commonly examined in studies of microglia. Researchers use its expression to help characterize these cells, although additional markers and biological context are needed when defining a population or interpreting its state. The CD11b name refers to a particular alpha chain within the beta 2 integrin family; other CD11 proteins can also pair with CD18 but form receptors

with different properties.

The CR3 name reflects the CD11b/CD18 complex's role in recognizing complement-opsonized material. This interaction can contribute to the uptake of coated particles by phagocytic cells. MAC-1 also has roles in cell attachment and movement, linking recognition of extracellular ligands to broader immune cell behavior. These functions make it useful to distinguish expression of the CD11b subunit from the activity of the complete complex.

This CD11b Polyclonal Antibody provides a reagent directed against a partial protein immunogen. Its datasheet also reports cross-reactivity with CD11c by ELISA, a consideration when interpreting experiments involving related integrins. NSJ Bioreagents offers the antibody for research on the CD11b alpha chain and its relationship to MAC-1 biology.

A MAC-1 Antibody / CD11b Polyclonal Antibody can help researchers investigate myeloid cell markers, adhesion, and complement-associated responses.

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

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the MAC-1 Antibody / CD11b Polyclonal Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

1. This antibody has shown cross-reactivity with CD11c by ELISA.

Immunogen

Human partial recombinant protein (AA 17-382) was used as the immunogen for this MAC-1 antibody.

Storage

After reconstitution, the MAC-1 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

CD11b antibody, ITGAM antibody, integrin alpha M antibody, CR3 alpha chain antibody

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