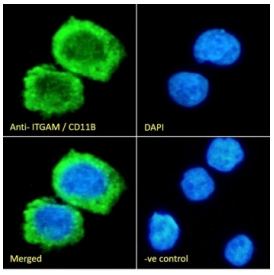
ITGAM Antibody / CD11b Alpha Chain Antibody (R35685)

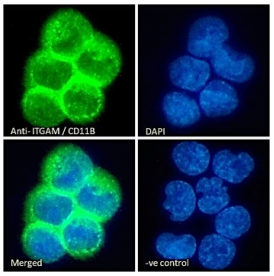
Catalog No.	Formulation	Size
R35685-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

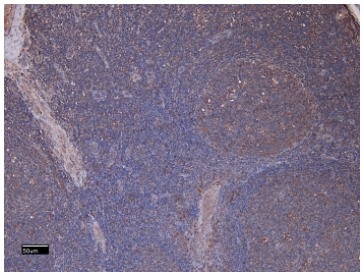
Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	3684
Localization	Cell membrane, cytoplasm
Applications	Immunohistochemistry (FFPE): 8ug/ml Immunofluorescence: 10ug/ml ELISA (peptide) LOD: 1:16000
Limitations	This ITGAM Antibody / CD11b Alpha Chain Antibody is available for research use only.



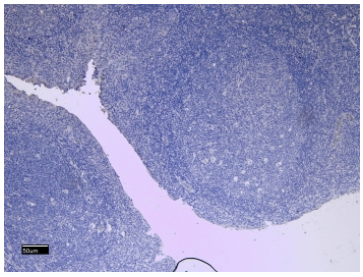
ITGAM Antibody in Human THP-1 Monocytic Cells by IF. Immunofluorescent staining of fixed and permeabilized human THP-1 monocytic cells with ITGAM Antibody at 10 ug/ml (green), with DAPI nuclear counterstain (blue). Green signal is visible around and within the cell profiles, while the nuclei are blue, consistent with detection of the CD11b alpha chain under these staining conditions.



ITGAM Antibody in Human U937 Monocytic Cells by IF. Immunofluorescent staining of fixed and permeabilized human U937 monocytic cells with ITGAM Antibody at 10 ug/ml (green), with DAPI nuclear counterstain (blue). Green signal is evident in the cell profiles surrounding the blue nuclei, providing a second cellular example of staining with this CD11b alpha chain antibody.



ITGAM Antibody in Human Tonsil by IHC. Immunohistochemistry of FFPE human tonsil stained with ITGAM Antibody at 8 ug/ml after heat-induced epitope retrieval by steaming in pH 6 citrate buffer, with HRP detection. Brown staining is visible in scattered cellular areas of the section, consistent with detection of the CD11b alpha chain.



ITGAM Antibody No-Primary Control in Human Tonsil by IHC. Immunohistochemistry of FFPE human tonsil processed without primary antibody after heat-induced epitope retrieval by steaming in pH 6 citrate buffer, with HRP detection. The section lacks the prominent brown cellular staining seen in the antibody-treated image, providing a no-primary control for the CD11b alpha chain staining experiment.

Description

ITGAM Antibody / CD11b Alpha Chain Antibody is directed against CD11b, the integrin alpha M protein encoded by ITGAM. CD11b pairs with CD18, also known as integrin beta 2, to form the receptor called MAC-1 or complement receptor 3 (CR3). CD11b identifies the individual alpha chain, while MAC-1 and CR3 describe the assembled complex. The antibody's immunogen is a short peptide from the extracellular portion of CD11b, making the alpha chain the precise intended target.

The CD11b/CD18 complex helps leukocytes adhere to other cells and interact with their surroundings. These contacts contribute to immune cell migration and recruitment during inflammatory responses. Receptor activation and organization at the cell surface can change the strength of adhesion, even when CD11b remains present. Detecting the alpha chain and measuring the adhesive activity of the complete MAC-1 receptor therefore answer different questions.

CD11b is associated with myeloid populations, including monocytes, macrophages, and granulocytes. It is also commonly studied as a microglial marker. Its expression can help characterize cells within these populations, although biological context and additional markers are needed to interpret cell identity or activation state. The ITGAM gene name is useful when distinguishing CD11b from other CD11 alpha chains that also pair with CD18 to form related beta 2 integrins.

CR3 takes its name from the receptor's ability to recognize complement-coated material, an interaction involved in uptake by phagocytic cells. The CD11b/CD18 complex also participates in adhesion to other ligands. These roles connect surface recognition with cell movement, contact, and clearance of particles. Because CD11b is one component of the receptor, observations made with a CD11b-directed antibody should be described as detection of that subunit unless the experiment separately establishes a property of the complete complex.

NSJ Bioreagents offers this CD11b Alpha Chain Antibody as a polyclonal reagent raised against a defined extracellular peptide. Its ITGAM name makes the intended molecular target clear, while the MAC-1 and CR3 names place that target within its receptor context.

An ITGAM Antibody / CD11b Alpha Chain Antibody can help researchers examine 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 ITGAM Antibody / CD11b Alpha Chain Antibody should be determined by the researcher.

Immunogen

Amino acids RNDGEDSYRTQ were used as the immunogen for this CD11b / ITGAM antibody. The amino acid sequence used as immunogen is from the extracellular portion of the protein.

Storage

Aliquot and store the CD11b / ITGAM antibody at -20oC.

Alternate Names

CD11b alpha chain antibody, integrin alpha M antibody, MAC-1 alpha chain antibody, CR3 alpha chain antibody

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