

Anti-CD11b Picoband Antibody
Catalog # ABO11839**Specification**

Anti-CD11b Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	P11215
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Integrin alpha-M(ITGAM) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD11b Picoband Antibody - Additional Information

Gene ID 3684

Other Names

Integrin alpha-M, CD11 antigen-like family member B, CR-3 alpha chain, Cell surface glycoprotein MAC-1 subunit alpha, Leukocyte adhesion receptor MO1, Neutrophil adherence receptor, CD11b, ITGAM, CD11B, CR3A

Calculated MW

127179 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Membrane; Single-pass type I membrane protein.

Tissue Specificity

Predominantly expressed in monocytes and granulocytes.

Protein Name

Integrin alpha-M

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E.coli-derived human CD11b recombinant protein (Position: F17-T382). Human CD11b shares 79% and 61% amino acid (aa) sequences identity with mouse and rat CD11b, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the integrin alpha chain family.

Anti-CD11b Picoband Antibody - Protein Information

Name ITGAM

Synonyms CD11B, CR3A

Function

Integrin ITGAM/ITGB2 is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles and pathogens (PubMed: [20008295](http://www.uniprot.org/citations/20008295), PubMed: [9558116](http://www.uniprot.org/citations/9558116)). It is identical with CR-3, the receptor for the iC3b fragment of the third complement component. It probably recognizes the R-G-D peptide in C3b. Integrin ITGAM/ITGB2 is also a receptor for fibrinogen, factor X and ICAM1. It recognizes P1 and P2 peptides of fibrinogen gamma chain. Regulates neutrophil migration (PubMed: [28807980](http://www.uniprot.org/citations/28807980)). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed: [21193407](http://www.uniprot.org/citations/21193407)). May regulate phagocytosis-induced apoptosis in extravasated neutrophils (By similarity). May play a role in mast cell development (By similarity). Required with TYROBP/DAP12 in microglia to control production of microglial superoxide ions which promote the neuronal apoptosis that occurs during brain development (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Membrane raft; Single-pass type I membrane protein

Tissue Location

Predominantly expressed in monocytes and granulocytes (PubMed:1346576). Expressed in neutrophils (at protein level) (PubMed:21193407).

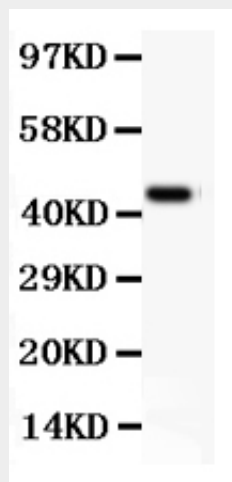
Anti-CD11b Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

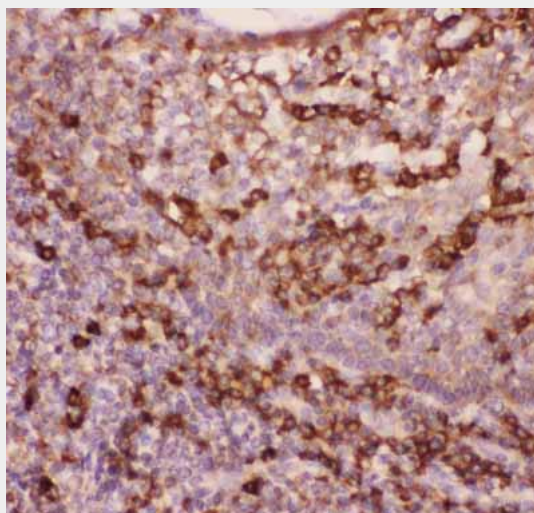
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

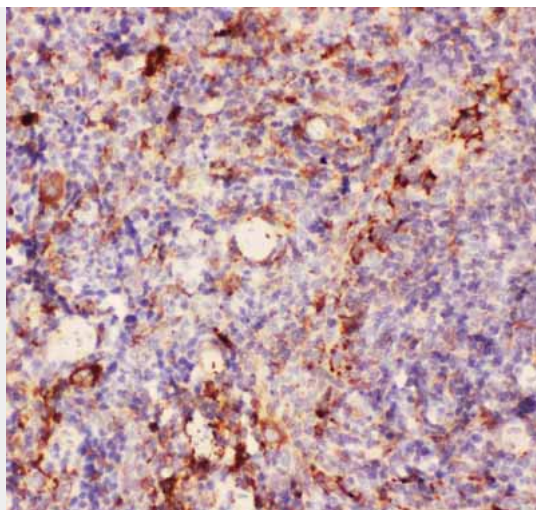
Anti-CD11b Picoband Antibody - Images



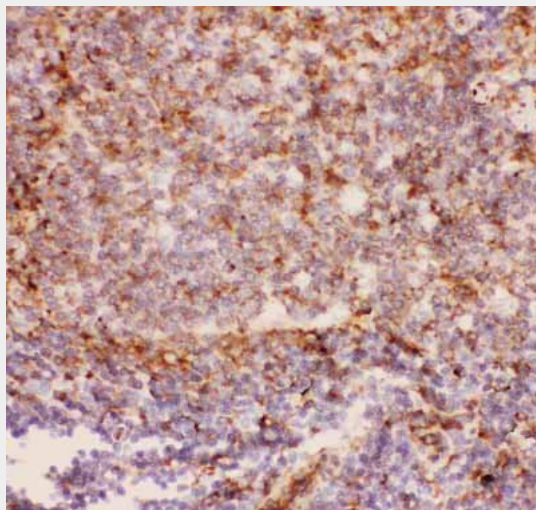
Anti-CD11b Picoband antibody , ABO11839-1.jpg All lanes: Anti CD11B (ABO11839) at 0.5ug/ml WB: Recombinant Human CD11B Protein 0.5ng Predicted bind size: 45KD Observed bind size: 45KD



Anti-CD11b Picoband antibody , ABO11839-2.JPG IHC(P): Human Tonsil Tissue



Anti-CD11b Picoband antibody , ABO11839-3.JPGIHC(P): Mouse Spleen Tissue



Anti-CD11b Picoband antibody , ABO11839-4.JPGIHC(P): Rat Spleen Tissue

Anti-CD11b Picoband Antibody - Background

Integrin alpha M (ITGAM) is one protein subunit that forms the heterodimeric integrin alpha-M beta-2 ($\alpha\text{M}\beta\text{2}$) molecule, also known as macrophage-1 antigen (Mac-1) or complement receptor 3 (CR3). It is mapped to 16p11.2. ITGAM has a role in vascular repair after mechanical arterial injury. It is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles. What's more, ITGAM probably recognizes the R-G-D peptide in C3b, and it is also a receptor for fibrinogen, factor X and ICAM1.