

Anti-CD11a Picoband Antibody
Catalog # ABO10306**Specification****Anti-CD11a Picoband Antibody - Product Information**

Application	WB, IHC-F, FC, ICC
Primary Accession	P20701
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Integrin alpha-L (ITGAL) detection. Tested with WB, IHC-F, ICC, FCM in Human.

Reconstitution

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

Anti-CD11a Picoband Antibody - Additional Information

Gene ID 3683

Other Names

Integrin alpha-L, CD11 antigen-like family member A, Leukocyte adhesion glycoprotein LFA-1 alpha chain, LFA-1A, Leukocyte function-associated molecule 1 alpha chain, CD11a, ITGAL, CD11A

Application Details

Immunohistochemistry (Frozen Section), 0.5-1 µg/ml
Immunocytochemistry, 0.5-1 µg/ml
Western blot, 0.1-0.5 µg/ml
Flow Cytometry, 1-3^{1/4} µg/1x10⁶ cells

Contents

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

Immunogen

E.coli-derived human CD11a recombinant protein (Position: F161-L349). Human CD11a shares 73.7% amino acid (aa) sequence identity with mouse CD11a.

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.

Anti-CD11a Picoband Antibody - Protein Information

Name ITGAL ([HGNC:6148](#))

Synonyms CD11A

Function

Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrin ITGAL/ITGB2 is a receptor for F11R (PubMed:11812992, PubMed:15528364). Integrin ITGAL/ITGB2 is a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (PubMed:29100055). Involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes. Contributes to natural killer cell cytotoxicity (PubMed:15356110). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:11812992). Acts as a platform at the immunological synapse to translate TCR engagement and density of the ITGAL ligand ICAM1 into graded adhesion (PubMed:38195629). Required for generation of common lymphoid progenitor cells in bone marrow, indicating a role in lymphopoiesis (By similarity). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed:23775590).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Note=Upon antigen recognition by the TCR, is recruited to lipid rafts (PubMed:15684041).

Tissue Location

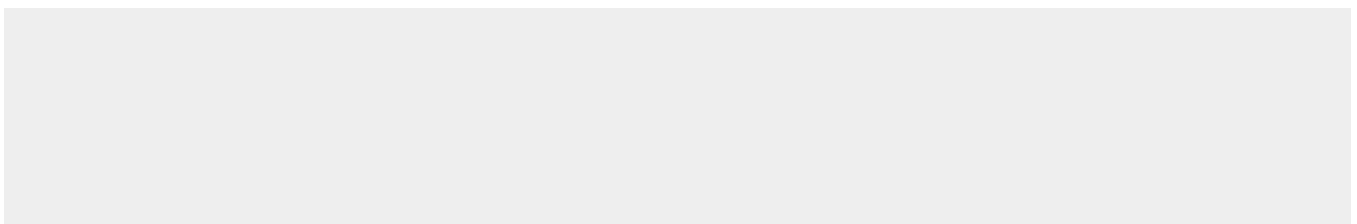
Leukocytes.

Anti-CD11a 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-CD11a Picoband Antibody - Images



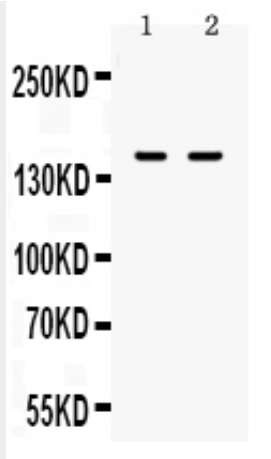


Figure 1. Western blot analysis of CD11a using anti-CD11a antibody (ABO10306). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. lane 1: JURKAT cell lysates, lane 2: CEM whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD11a antigen affinity purified polyclonal antibody (Catalog # ABO10306) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD11a at approximately 150KD. The expected band size for CD11a is at 129KD.

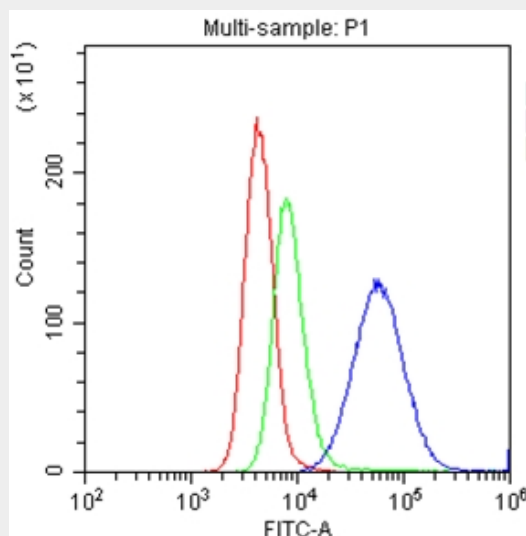


Figure 2. Flow Cytometry analysis of U937 cells using anti-CD11a antibody (ABO10306). Overlay histogram showing U937 cells stained with ABO10306 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD11a Antibody (ABO10306, 1 μ g/1x10⁶ cells) for 30 min at 20 $^{\circ}$ C. DyLight⁴⁸⁸ conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 $^{\circ}$ C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.