

Anti-CD11b Antibody
Catalog # ABO11247**Specification****Anti-CD11b Antibody - Product Information**

Application	WB
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 in Human;Mouse;Rat.

Reconstitution

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

Anti-CD11b 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

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human CD11b(177-192aa MEQLKKSKTLFSLMQY), different from the related mouse sequence by one amino acid, and from the related rat sequence by three amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r° Constitution, 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 Antibody - Protein Information

Name ITGAM ([HGNC:6149](#))

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, PubMed: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 and factor X. It recognizes P1 and P2 peptides of fibrinogen gamma chain. Regulates neutrophil migration (PubMed:28807980). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407). Integrin ITGAM/ITGB2 is also a receptor for ICAM1 ligand ensuring adhesion between stimulated neutrophils and stimulated endothelial cells (PubMed:1980124). 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 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 Antibody - Images



Anti-CD11b antibody, ABO11247, All Western blottingAll lanes: Anti-ITGAM(ABO11247) at 0.5ug/mlLane 1: JURKAT Whole Cell Lysate at 40ugLane 2: RAJI Whole Cell Lysate at 40ugPredicted bind size: 127KDObserved bind size: 170KD

Anti-CD11b Antibody - Background

ITGAM(Integrin Alpha-M), also called CD11B or Mo1 ALPHA SUBUNIT(MO1A), is one protein subunit that forms the heterodimeric integrin alpha-M beta-2(alphaMbeta2) molecule. A major surface antigen family on human leukocytes includes complement receptor type 3(CR3A; also called ITGAM, Mac1, or Mo1), lymphocyte function-associated(LFA) antigen type 1(ITGAL), and p150, 95(ITGAX). By in situ hybridization, Corbi et al.(1988) demonstrated that the genes encoding the alpha subunits of LFA1(ITGAL), Mac1, and p150, 95(ITGAX), all of which are involved in leukocyte adhesion, constitute a cluster on 16p13.1-p11. Callen et al.(1991) narrowed the assignment to 16p11.2. Inflammation plays an essential role in the initiation and progression of atherosclerosis. Simon et al.(2000) presented evidence that it also has a role in vascular repair after mechanical arterial injury(i.e., percutaneous transluminal coronary angioplasty, or PTCA).