

# **Anti-CD11b Antibody**

Catalog # ABO11247

# **Specification**

# **Anti-CD11b Antibody - Product Information**

Application WB
Primary Accession P11215
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal 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<br/>br>

### **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** 

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:<a href="http://www.uniprot.org/citations/20008295" target="\_blank">20008295</a>, PubMed:<a href="http://www.uniprot.org/citations/9558116" target="\_blank">9558116</a>). 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:<a href="http://www.uniprot.org/citations/28807980" target="\_blank">28807980</a>). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:<a href="http://www.uniprot.org/citations/21193407" target="\_blank">21193407</a>). 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**

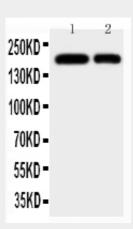
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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).