

**Anti-CD11b / MAC-1 (Microglial Marker) Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # AH13327**

**Specification**

**Anti-CD11b / MAC-1 (Microglial Marker) Antibody - Product Information**

Application	IF, FC
Primary Accession	<a href="#">P11215</a>
Other Accession	<a href="#">172631</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	127179

**Anti-CD11b / MAC-1 (Microglial Marker) Antibody - Additional Information**

**Gene ID** 3684

**Other Names**

CD11 antigen-like family member B; CD11b/CD18; CD49d; Cell surface glycoprotein MAC-1 subunit alpha; Complement Component Receptor 3 Alpha; CR3 Alpha Chain (CR3A); Integrin alpha-M; Integrin beta 2 alpha subunit; ITGAM; Leukocyte adhesion receptor MO1; Ly-40; Mac-1a; MAC1; Mac1, alpha subunit; MAC1A; Macrophage antigen alpha polypeptide; MO1A; Neutrophil adherence receptor alpha M subunit

**Application Note**

<span class = "dilution\_IF">IF~~~1:50~200</span><br /><span class = "dilution\_FC">FC~~~1:10~50</span>

**Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

Anti-CD11b / MAC-1 (Microglial Marker) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-CD11b / MAC-1 (Microglial Marker) 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:<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 and factor X. 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>). Integrin ITGAM/ITGB2 is also a receptor for ICAM1 ligand ensuring adhesion between stimulated neutrophils and stimulated endothelial cells (PubMed:<a href="http://www.uniprot.org/citations/1980124" target="\_blank">1980124</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 / MAC-1 (Microglial Marker) 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 / MAC-1 (Microglial Marker) Antibody - Images**

### **Anti-CD11b / MAC-1 (Microglial Marker) Antibody - Background**

CD11b is a cell adhesion molecule that acts as a receptor for cell surface ligands such as intracellular adhesion molecules (ICAMs) or soluble ligands. Integrins are heterodimeric proteins that contain an a chain and b chain. Integrin  $\alpha$ M combines with the Integrin  $\beta$ 2 to form a leukocyte-specific integrin referred to as macrophage receptor 1 (Mac-1), or inactivated-C3b (iC3b) receptor 3 (CR3). Integrin  $\alpha$ M/ $\beta$ 2 is important in the adherence of neutrophils and monocytes to stimulated endothelium, and also in the phagocytosis of complement coated particles. The protein CD11b has been implicated in the various adhesion-related interactions of cells such as monocytes, macrophages, natural killer (NK) cells, and granulocytes. It is part of a heterodimer that consists of CD11b and CD18. It also modulates the uptake of complement-coated particles within the cell. It is commonly used as a microglial marker in tissues derived from the nervous system.