

Datasheet

ITGAM monoclonal antibody, clone MEM-174 (FITC)

Catalog Number: MAB4549

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against native ITGAM.

Clone Name: MEM-174

Immunogen: Native purified ITGAM from human granulocytes.

Host: Mouse

Theoretical MW (kDa): 165-170

Reactivity: Human

Applications: Flow Cyt

(See our web site product page for detailed applications information)

Protocols: See our web site at

<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Specificity: This antibody recognizes CD11b antigen (Mac-1 alpha), a 165-170 kDa type I transmembrane protein mainly expressed on monocytes, granulocytes and NK-cells. The CD11b mediates neutrophil and monocyte interactions with stimulated endothelium.

Form: Liquid

Conjugation: FITC

Isotype: IgG2a

Recommend Usage: Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10⁶ cells in a suspension)

The optimal working dilution should be determined by the end user.

Storage Buffer: In PBS (0.2% BSA, 0.09% sodium azide)

Storage Instruction: Store in the dark at 4 °C. Do not freeze.

Avoid prolonged exposure to light.

Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 3684

Gene Symbol: ITGAM

Gene Alias: CD11B, CR3A, MAC-1, MAC1A, MGC117044, MO1A, SLEB6

Gene Summary: This gene encodes the integrin alpha M chain. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This I-domain containing alpha integrin combines with the beta 2 chain (ITGB2) to form a leukocyte-specific integrin referred to as macrophage receptor 1 ('Mac-1'), or inactivated-C3b (iC3b) receptor 3 ('CR3'). The alpha M beta 2 integrin is important in the adherence of neutrophils and monocytes to stimulated endothelium, and also in the phagocytosis of complement coated particles. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

References:

1. CD11b of *Ovis canadensis* and *Ovis aries*: molecular cloning and characterization. Lawrence PK, Srikumaran S. *Vet Immunol Immunopathol.* 2007 Oct 15;119(3-4):287-98. Epub 2007 Jun 3.
2. Effects of beta-glucans on the immune system. Akramiene D, Kondrotas A, Didziapetriene J, Kevelaitis E. *Medicina (Kaunas).* 2007;43(8):597-606.
3. Sequential binding of CD11a/CD18 and CD11b/CD18 defines neutrophil capture and stable adhesion to intercellular adhesion molecule-1. Hentzen ER, Neelamegham S, Kansas GS, Benanti JA, McIntire LV, Smith CW, Simon SI. *Blood.* 2000 Feb 1;95(3):911-20.