

ITGAM monoclonal antibody, clone MEM-174 (FITC)

Catalog # MAB4549

Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against native ITGAM.
Immunogen	Native purified ITGAM from human granulocytes.
Host	Mouse
Theoretical MW (kDa)	165-170
Reactivity	Human
Specificity	This antibody recognizes CD11b antigen (Mac-1 alpha), a 165-170 KDa type I transmembrane prote in 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 10 ⁶ 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.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Flow Cytometry

Gene Info — ITGAM

Entrez GeneID	3684
Gene Name	ITGAM
Gene Alias	CD11B, CR3A, MAC-1, MAC1A, MGC117044, MO1A, SLEB6
Gene Description	integrin, alpha M (complement component 3 receptor 3 subunit)
Omim ID	120980
Gene Ontology	Hyperlink
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]
Other Designations	antigen CD11b (p170) complement component receptor 3, alpha integrin alpha M macrophage antigen alpha polypeptide neutrophil adherence receptor alpha-M subunit

Publication Reference

- [Effects of beta-glucans on the immune system.](#)

Akramiene D, Kondrotas A, Didziapetriene J, Kevelaitis E.

Medicina (Kaunas, Lithuania) 2007 Aug; 43(8):597.

Application: Filow Cyt, Mouse, NK cells, Phagocytic cells

- [CD11b of Ovis canadensis and Ovis aries: molecular cloning and characterization.](#)

Lawrence PK, Srikumaran S.

Veterinary Immunology and Immunopathology 2007 Oct; 119(3-4):287.

- [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; 95(3):911.

Pathway

- [Cell adhesion molecules \(CAMs\)](#)
- [Hematopoietic cell lineage](#)
- [Leukocyte transendothelial migration](#)
- [Regulation of actin cytoskeleton](#)

Disease

- [Autoimmune Diseases](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Disease Susceptibility](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Helicobacter Infections](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Macular Degeneration](#)
- [Nephritis](#)
- [Stomach Ulcer](#)