

Rat Anti-Mouse ITGAM Monoclonal Antibody

Rat, Monoclonal (ITGAM)

Cat. No. DMAB2543RM

Lot. No. (See product label)

PRODUCT INFORMATION

Antigen Description: Integrin alpha M (ITGAM) is one protein subunit that forms the heterodimeric integrin alpha-M beta-2 (α M β 2) molecule, also known as macrophage-1 antigen (Mac-1) or complement receptor 3 (CR3). ITGAM is also known as CR3A, and cluster of differentiation molecule 11B (CD11B). The second chain of α M β 2 is the common integrin β 2 subunit known as CD18, and integrin α M β 2 thus belongs to the β 2 subfamily (or leukocyte) integrins.

Immunogen: C57BL/10 mouse spleen cells enriched for T lymphocytes

Isotype: IgG_{2b}

Specificity: Recognizes the Mr 170kD alpha-m subunit of Mac-1, the murine macrophage-granulocyte specific antigen. Mac-1 is a macrophage differentiation antigen associated with type three complement receptor and mediates adhesion to CD54 (ICAM-1). The Mac-1 CD11b antigen is present on macrophages, granulocytes, natural killer cells, blood monocytes. CD11b is expressed on 8% spleen cells, 44% bone marrow cells and <1% of thymocytes.

Clone: N2/71

Host animal: Rat

Source: Tissue culture

Format: Phyco, Liquid

Application: Suitable for use in flow cytometry, immunostaining of acetone-fixed frozen tissue sections and in vitro and in vivo blocking experiments. We recommend using 1 μ g to stain 1×10^6 cells in flow cytometric applications. Each laboratory should determine its own working dilution for individual use. Other applications have not been tested but use in such assays should not necessarily be excluded. Centrifuge before opening to ensure complete recovery of vial contents.

PACKAGING

Concentration: 100 μ g/ml (OD280nm)

Buffer: 0.01M PBS, pH 7.2, containing 2 mM EDTA, 1% BSA

Preservative: 0.1% Sodium azide

Storage: Store at 2-8°C. DO NOT FREEZE!

Warning: This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

ANTIGEN GENE INFORMATION

Gene Name: [Itgam integrin alpha M \[Mus musculus \]](#)

Official Symbol: Itgam

Synonyms: CR3; CR3A; MAC1; Cd11b; Ly-40; Mac-1; Mac-1a; CD11b /CD18; F730045J24Rik; Itgam; integrin alpha-M; Mac-1 alpha; CD11B (p170); CR-3 alpha chain; OTTMUSP0000-0040305; OTTMUSP00000040307; macrophage antigen alpha; complement receptor type 3; leukocyte adhesion receptor MO1; CD11 antigen-like family member B; complement component receptor 3 alpha-a; cell surface glycoprotein MAC-1 alpha subunit; cell surface glycoprotein MAC-1 subunit alpha

GeneID: [16409](#)

mRNA Refseq: [NM_001082960](#)

Protein Refseq: [NP_001076429](#)

UniProt ID: E9Q604

Chromosome Location: 7; 7 F4

Pathway: Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem; Cell adhesion molecules (CAMs), organism-specific biosystem; Focal Adhesion, organism-specific biosystem; Hematopoietic cell lineage, organism-specific biosystem; IL-5 Signaling Pathway, organism-specific biosystem; Integrin cell surface interactions, organism-specific biosystem; Leishmaniasis, organism-specific biosystem; Leukocyte transendothelial migration, organism-specific biosystem; Phagosome, organism-specific biosystem; Regulation of actin cytoskeleton, organism-specific biosystem

Function: glycoprotein binding; heparan sulfate proteoglycan binding; heparin binding; opsonin binding; protein heterodimerization activity; receptor activity

REFERENCES

- Solovjov D, Pluskota E, Plow E (2005). "Distinct roles for the alpha and beta subunits in the functions of integrin alphaMbeta2". J Biol Chem 280 (2): 1336–45.
- Larson R, Springer T (1990). "Structure and function of leukocyte integrins". Immunol Rev 114: 181–217.