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Anti-CD11b Antibody

Catalog # ABO11247

Product Information

Application	WB
Primary Accession	P11215
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	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.

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
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Membrane; Single-pass type I membrane protein.
Tissue Specificity	Predominantly expressed in monocytes and granulocytes.
Source	Eukaryota
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.

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:20008295, PubMed:9558116). 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:28807980). In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils (PubMed:21193407). Integrin ITGAM/ITGB2 is also a receptor for ICAM1 ligand ensuring adhesion between stimulated neutrophils and stimulated endothelial cells (PubMed:1980124). 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).

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).

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



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