

CD11b Rabbit pAb

Catalog # AP96529

Product Information

Application	WB
Primary Accession	P05555
Other Accession	P05555
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	127481
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse CD11b
Epitope Specificity	77-180/1152
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Genetic variations in ITGAM has been associated with susceptibility to systemic lupus erythematosus type 6 (SLEB6). Systemic lupus erythematosus (SLE) is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system.
SUBUNIT	Heterodimer of an alpha and a beta subunit. Alpha-M associates with beta-2. Interacts with JAM3.
DISEASE	Genetic variations in ITGAM has been associated with susceptibility to systemic lupus erythematosus type 6 (SLEB6) [MIM:609939]. Systemic lupus erythematosus (SLE) is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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, Mar 2009]

Additional Information

Other Names	CD11B; CR3A; MAC-1; MAC1A; MO1A; SLEB6; ITAM_HUMAN; ITGAM; CD11 antigen-like family member B; CR-3 alpha chain; Cell surface glycoprotein
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MAC-1 subunit alpha; Leukocyte adhesion receptor MO1; Neutrophil adherence receptor; ITAM_MOUSE; integrin subunit alpha M; integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide); integrin, alpha M (complement component 3 receptor 3 subunit); human neutrophil antigen 4; complement component 3 receptor 3 subunit; macrophage-1 antigen alpha subunit

Dilution

WB=1:500-2000

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

Itgam {ECO:0000312 | MGI:MGI:96607}

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 (By similarity). 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. In association with beta subunit ITGB2/CD18, required for CD177-PRTN3-mediated activation of TNF primed neutrophils. Integrin ITGAM/ITGB2 is also a receptor for ICAM1 ligand ensuring adhesion between stimulated neutrophils and stimulated endothelial cells (By similarity). 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 (PubMed:[18685038](#)).

Cellular Location

Cell membrane; Single-pass type I membrane protein {ECO:0000250 | UniProtKB:P11215}. Membrane raft {ECO:0000250 | UniProtKB:P11215}; Single-pass type I membrane protein {ECO:0000250 | UniProtKB:P11215}

Tissue Location

Predominantly expressed in monocytes and granulocytes (PubMed:3887182, PubMed:8986723). Expressed in a subset of peritoneal mast cells (PubMed:9862668). Expressed in microglia (at protein level) (PubMed:18685038).

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