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CD11b Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10668a

Product Information

Application	FC, WB, IHC-P, E
Primary Accession	P11215
Other Accession	NP_000623
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17991
Calculated MW	127179
Antigen Region	253-282

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
Target/Specificity	This CD11b antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 253-282 amino acids from the N-terminal region of human CD11b.
Dilution	FC~~1:10~50 WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD11b Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ITGAM
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, factor X and ICAM1. 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). 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).

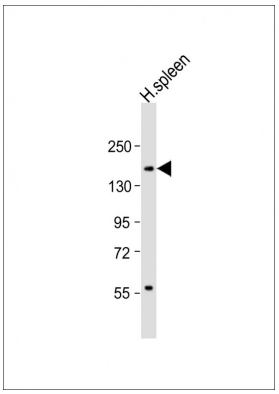
Background

CD11b is 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.

References

Gjelstrup, L.C., et al. J. Immunol. 185(7):4154-4168(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Warchol, T., et al. DNA Cell Biol. (2010) In press :
Fan, Y., et al. J Eur Acad Dermatol Venereol (2010) In press :
Pliyev, B.K., et al. Biochem. Biophys. Res. Commun. 397(2):277-282(2010)

Images



Anti-CD11b Antibody (N-term) at 1:500 dilution + human spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 127 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Repetitive myocardial ischemia promotes coronary growth in the adult mammalian heart.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.