

CD11b Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10668a

Specification

CD11b Antibody (N-term) - Product Information

Application	WB, FC, IHC-P,E
Primary Accession	P11215
Other Accession	NP_000623
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	253-282

CD11b Antibody (N-term) - 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

WB~~1:2000
FC~~1:10~50
IHC-P~~1:25
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.

CD11b Antibody (N-term) - 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

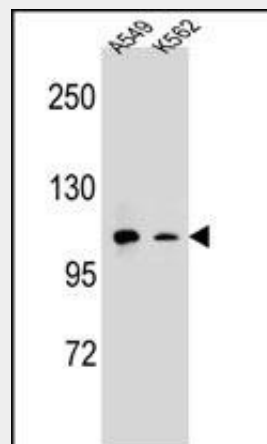
Predominantly expressed in monocytes and granulocytes (PubMed:1346576). Expressed in neutrophils (at protein level) (PubMed:21193407).

CD11b Antibody (N-term) - Protocols

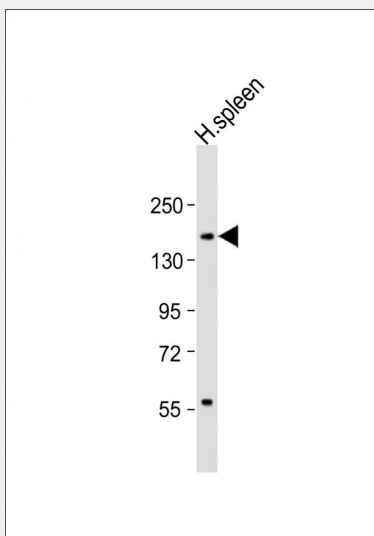
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

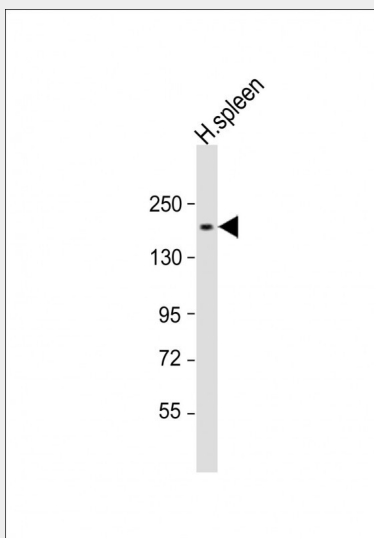
CD11b Antibody (N-term) - Images



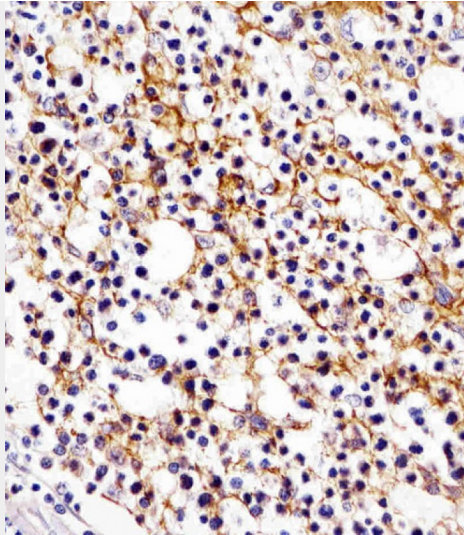
CD11b Antibody (N-term) (Cat. #AP10668a) western blot analysis in A549,K562 cell line lysates (35ug/lane). This demonstrates the CD11b antibody detected the CD11b protein (arrow).



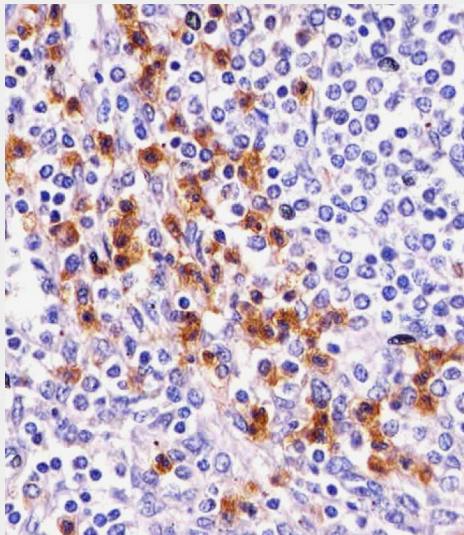
Anti-CD11b Antibody (N-term) at 1:500 dilution + human spleen lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 127 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



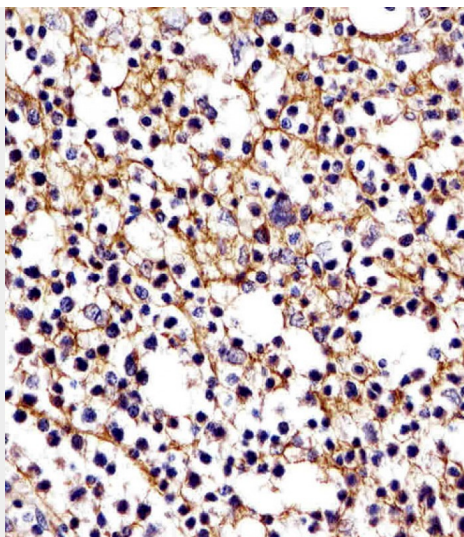
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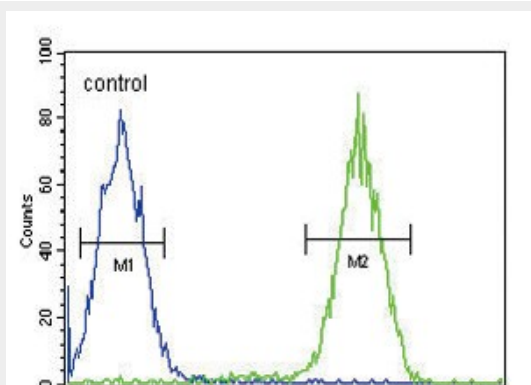
AP10668a staining D11b in human tonsil tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AP10668a staining D11b in human spleen tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



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CD11b Antibody (N-term) (Cat. #AP10668a) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CD11b Antibody (N-term) - 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.

CD11b Antibody (N-term) - 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)

CD11b Antibody (N-term) - Citations

- [Repetitive myocardial ischemia promotes coronary growth in the adult mammalian heart.](#)