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Goat Anti-ITGAM / CD11B Antibody

Peptide-affinity purified goat antibody
Catalog # AF1574a

Specification

Goat Anti-ITGAM / CD11B Antibody - Product Information

Application	**IHC, WB**
Primary Accession	P11215
Other Accession	NP_000623, 3684, 16409 (mouse), 25021 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**127179**

Goat Anti-ITGAM / CD11B Antibody - 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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-ITGAM / CD11B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ITGAM / CD11B Antibody - 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:9558116, PubMed:20008295). 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

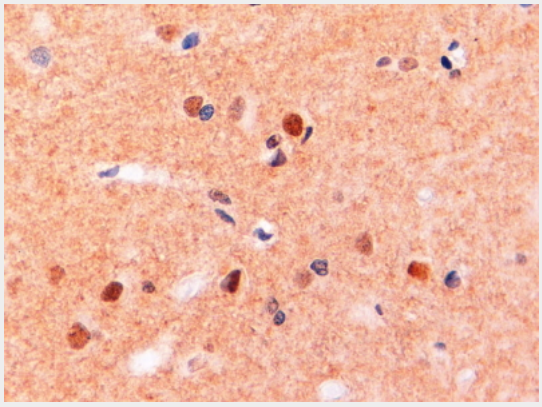
Tissue Location
Predominantly expressed in monocytes and granulocytes (PubMed:1346576). Expressed in neutrophils (at protein level) (PubMed:21193407).

Goat Anti-ITGAM / CD11B Antibody - Protocols

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

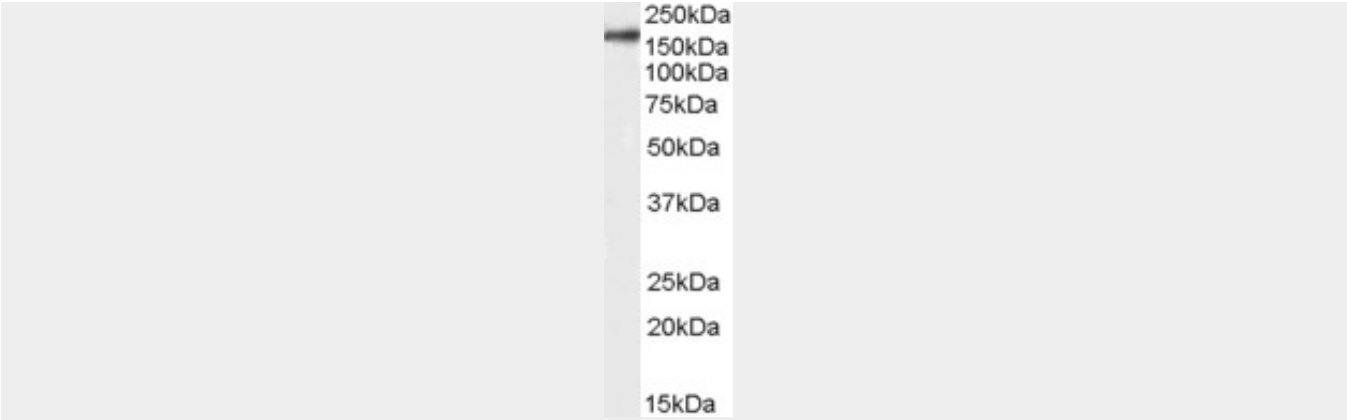
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-ITGAM / CD11B Antibody - Images



AF1574a (2 µg/ml) staining of paraffin embedded Human Brain. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.

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AF1574a (0.3 µg/ml) staining of Human Brain (Cerebellum) lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ITGAM / CD11B Antibody - Background

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.

Goat Anti-ITGAM / CD11B Antibody - References

ITGAM Arg77His Is Associated with Disease Susceptibility, Arthritis, and Renal Symptoms in Systemic Lupus Erythematosus Patients from a Sample of the Polish Population. Warcho? T, et al. DNA Cell Biol, 2010 Jul 28. PMID 20666624.
Association of ITGAM polymorphism with systemic lupus erythematosus: a meta-analysis. Fan Y, et al. J Eur Acad Dermatol Venereol, 2010 Jul 13. PMID 20629846.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Urokinase receptor (uPAR) regulates complement receptor 3 (CR3)-mediated neutrophil phagocytosis. Pliyev BK, et al. Biochem Biophys Res Commun, 2010 Jun 25. PMID 20580686.
Short-term IL-1beta blockade reduces monocyte CD11b integrin expression in an IL-8 dependent fashion in patients with type 1 diabetes. Sanda S, et al. Clin Immunol, 2010 Aug. PMID 20483667.