

Goat Anti-CD11A / integrin alpha L Antibody Peptide-affinity purified goat antibody

Catalog # AF1212a

# Specification

# Goat Anti-CD11A / integrin alpha L Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC <u>P20701</u> <u>NP\_001107852</u>, <u>3683</u> Human Dog Goat Polyclonal 100ug/200ul IgG 128770

# Goat Anti-CD11A / integrin alpha L Antibody - Additional Information

Gene ID 3683

**Other Names** 

Integrin alpha-L, CD11 antigen-like family member A, Leukocyte adhesion glycoprotein LFA-1 alpha chain, LFA-1A, Leukocyte function-associated molecule 1 alpha chain, CD11a, ITGAL, CD11A

#### 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-CD11A / integrin alpha L Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-CD11A / integrin alpha L Antibody - Protein Information

Name ITGAL (HGNC:6148)

Synonyms CD11A

Function

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Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4. Integrin ITGAL/ITGB2 is a receptor for F11R (PubMed:<a href="http://www.uniprot.org/citations/11812992" target="_blank">11812992</a>, PubMed:<a href="http://www.uniprot.org/citations/15528364"
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target="\_blank">15528364</a>). Integrin ITGAL/ITGB2 is a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (PubMed:<a href="http://www.uniprot.org/citations/29100055" target="\_blank">29100055</a>). Involved in a variety of immune phenomena including leukocyte-endothelial cell interaction, cytotoxic T-cell mediated killing, and antibody dependent killing by granulocytes and monocytes. Contributes to natural killer cell cytotoxicity (PubMed:<a href="http://www.uniprot.org/citations/15356110" target="\_blank">15356110</a>). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:<a href="blank">11812992</a>). Acts as a platform at the immunological synapse to translate TCR engagement and density of the ITGAL ligand ICAM1 into graded adhesion (PubMed:<a href="http://www.uniprot.org/citations/38195629" target="\_blank">38195629</a>). Required for generation of common lymphoid progenitor cells in bone marrow, indicating a role in lymphopoiesis (By similarity). Integrin ITGAL/ITGB2 in association with ICAM3, contributes to apoptotic neutrophil phagocytosis by macrophages (PubMed:<a href="http://www.uniprot.org/citations/23775590" target="\_blank">23775590</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Note=Upon antigen recognition by the TCR, is recruited to lipid rafts (PubMed:15684041).

Tissue Location Leukocytes.

# Goat Anti-CD11A / integrin alpha L Antibody - Protocols

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

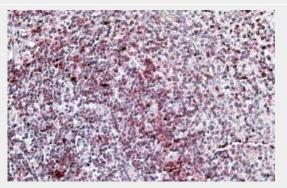
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Goat Anti-CD11A / integrin alpha L Antibody - Images





AF1212a (0.5  $\mu$ g/ml) staining of Human Spleen lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1212a (3.8  $\mu$ g/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

# Goat Anti-CD11A / integrin alpha L Antibody - Background

ITGAL encodes the integrin alpha L 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 the integrin lymphocyte function-associated antigen-1 (LFA-1), which is expressed on all leukocytes. LFA-1 plays a central role in leukocyte intercellular adhesion through interactions with its ligands, ICAMs 1-3 (intercellular adhesion molecules 1 through 3), and also functions in lymphocyte costimulatory signaling. Two transcript variants encoding different isoforms have been found for this gene.

### Goat Anti-CD11A / integrin alpha L Antibody - References

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.

Mesenchymal stem cells inhibit human Th17 cell differentiation and function and induce a T regulatory cell phenotype. Ghannam S, et al. J Immunol, 2010 Jul 1. PMID 20511548.

Rolling on E- or P-selectin induces the extended but not high-affinity conformation of LFA-1 in neutrophils. Kuwano Y, et al. Blood, 2010 Jul 29. PMID 20445017.

Genetic variation in 3-hydroxy-3-methylglutaryl CoA reductase modifies the chemopreventive activity of statins for colorectal cancer. Lipkin SM, et al. Cancer Prev Res (Phila), 2010 May. PMID 20403997.

A transmembrane polar interaction is involved in the functional regulation of integrin alpha L beta 2. Vararattanavech A, et al. J Mol Biol, 2010 May 14. PMID 20338181.