

ITGAL Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13692c

Specification

ITGAL Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P20701
Other Accession	NP_002200.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	128770
Antigen Region	722-751

ITGAL Antibody (Center) - 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

Target/Specificity

This ITGAL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 722-751 amino acids from the Central region of human ITGAL.

Dilution

WB~~1:1000

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

ITGAL Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ITGAL Antibody (Center) - Protein Information

Name ITGAL ([HGNC:6148](#))

Function Integrin ITGAL/ITGB2 is a receptor for ICAM1, ICAM2, ICAM3 and ICAM4 (PubMed:[10846180](#), PubMed:[12526797](#), PubMed:[1676048](#), PubMed:[3086451](#)). Integrin ITGAL/ITGB2 is a receptor for F11R (PubMed:[11812992](#), PubMed:[15528364](#)). Integrin ITGAL/ITGB2 is a receptor for the secreted form of ubiquitin-like protein ISG15; the interaction is mediated by ITGAL (PubMed:[29100055](#)). 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:[15356110](#)). Involved in leukocyte adhesion and transmigration of leukocytes including T-cells and neutrophils (PubMed:[11812992](#)). Acts as a platform at the immunological synapse to translate TCR engagement and density of the ITGAL ligand ICAM1 into graded adhesion (PubMed:[38195629](#)). 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:[23775590](#)). Integrins ITGAL:ITGB2 functions as a receptor of the neuron-specific adhesion molecule ICAM5 ensuring neuron cell-leukocyte adhesion (PubMed:[10741396](#)). Integrin ITGAL/ITGB2 that functions as a signaling receptor of ICAM2, ensuring leukocyte cell-cell adhesion on resting cells (PubMed:[1676048](#)).

Cellular Location

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

Tissue Location

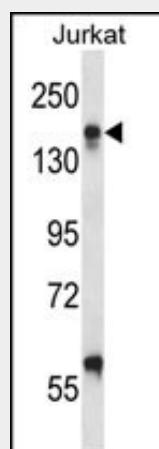
Leukocytes.

ITGAL Antibody (Center) - 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](#)

ITGAL Antibody (Center) - Images



ITGAL Antibody (Center) (Cat. #AP13692c) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the ITGAL antibody detected the ITGAL protein (arrow).

ITGAL Antibody (Center) - 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.

ITGAL Antibody (Center) - References

- Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
- Kuwano, Y., et al. Blood 116(4):617-624(2010)
- Ghannam, S., et al. J. Immunol. 185(1):302-312(2010)
- Quist, S.R., et al. Acta Derm. Venereol. 90(4):429-430(2010)
- Lipkin, S.M., et al. Cancer Prev Res (Phila) 3(5):597-603(2010)