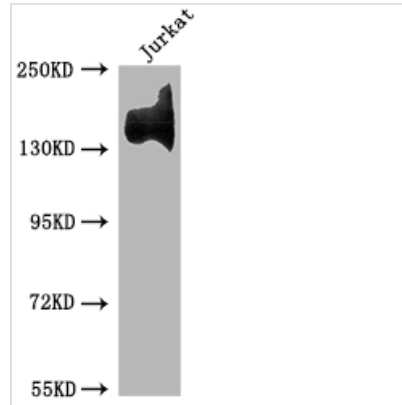




ITGA4 Antibody

Product Code	CSB-RA225859A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P13612
Immunogen	A synthesized peptide derived from human Integrin alpha 4
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:5000
Relevance	<p>Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed:23125415). ITGA4:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:18635536, PubMed:25398877).</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular; Immunology; Signal transduction; Stem cells
Gene Names	ITGA4
Accession NO.	1H4
Image	


Western Blot

Positive WB detected in: Jurkat whole cell lysate

All lanes: ITGA4 antibody at 1:1500

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 115, 26 kDa

Observed band size: 140 kDa

Description

ITGA4, also called CD49d, is integrin $\alpha 4$ that associates with integrin $\beta 1$ (CD29) forming very late antigen 4 (VLA-4), which is expressed in approximately 40% of chronic lymphocytic leukemia (CLL) patients. CD49d enhances CLL leukemic cell proliferation mediated by the microenvironment^{10–13} and defines a subgroup of patients with a progressive course and short survival and is a remarkable prognostic biomarker of CLL. CD49d/CD29 mediates both cell-cell and cell-matrix interactions in CLL-involved tissues eventually sending prosurvival signals and protecting CLL cells from drug-induced damage.

The recombinant ITGA4 antibody was produced by cloning antibody genes into an expression vectors, which were subsequently introduced into mammalian cells to provide animal-free antibody production. This ITGA4 antibody has been validated in ELISA, WB. It has the features of improved affinity, stability, and consistency between different batches.