

Integrin alpha 4 Antibody Rabbit mAb Catalog # AP91025

Specification

Integrin alpha 4 Antibody - Product Information

ApplicationWBPrimary AccessionP13612ClonalityMonoclonalOther NamesCD49d; ITA4; Integrin alpha-4 precursor; Integrin alpha-IV; VLA4; ITGA4;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	114900 Da

Integrin alpha 4 Antibody - Additional Information

Dilution Purification Immunogen	WB~~1:1000 Affinity-chromatography A synthesized peptide derived from human Integrin alpha 4
Description	ITGA4 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Integrin alpha 4 Antibody - Protein Information

Name ITGA4

Synonyms CD49D

Function

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). Integrin ITGA4:ITGB1 represses PRKCA-mediated L-type voltage-gated channel Ca(2+) influx and ROCK-mediated calcium sensitivity in vascular smooth muscle cells via its interaction with SVEP1, thereby inhibiting vasocontraction (PubMed:35802072).

Cellular Location

Membrane; Single-pass type I membrane protein

Tissue Location

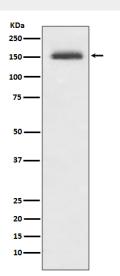
Expressed in vascular smooth muscle cells (at protein level).

Integrin alpha 4 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>

Integrin alpha 4 Antibody - Images



Western blot analysis of Integrin alpha 4 expression in Jurkat cell lysate.