

Integrin alpha 4 Antibody

Rabbit mAb Catalog # AP91025

Product Information

Application WB **Primary Accession** P13612 Reactivity Human Clonality Monoclonal

Other Names CD49d; ITA4; Integrin alpha-4 precursor; Integrin alpha-IV; VLA4; ITGA4;

Isotype Rabbit IgG Host Rabbit 114900 Calculated MW

Additional Information

Dilution WB 1:500~1:2000 **Purification** Affinity-chromatography

A synthesized peptide derived from human Integrin alpha 4 **Immunogen**

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.

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: <u>23125415</u>). 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

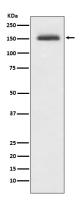
and enhanced ligand binding to site 1 (PubMed: 18635536,

PubMed: <u>25398877</u>). 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: <u>35802072</u>).

Cellular Location Membrane; Single-pass type I membrane protein

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

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.