

Anti-CD49d Antibody

Rabbit polyclonal antibody to CD49d

Catalog # AP61461

Product Information

Application	WB
Primary Accession	P13612
Other Accession	Q00651
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	114900

Additional Information

Gene ID	3676
Other Names	CD49D; Integrin alpha-4; CD49 antigen-like family member D; Integrin alpha-IV; VLA-4 subunit alpha; CD49d
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD49d. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ITGA4
Synonyms	CD49D
Function	<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</p>

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](#)).

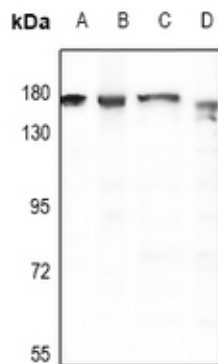
Cellular Location Membrane; Single-pass type I membrane protein

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

Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD49d. The exact sequence is proprietary.

Images



Western blot analysis of CD49d expression in PMVEC (A), SP20 (B), SHSY5Y (C), A549 (D) whole cell lysates.

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