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Anti-CD49d-Biotin-labled

Catalog # AP100713

Product Information

Application	FC, IF/IC
Primary Accession	Q00651
Reactivity	Mouse
Clonality	Monoclonal
Calculated MW	115696

Additional Information

Gene ID	16401
Other Names	CD49D; Integrin alpha-4; CD49 antigen-like family member D; Integrin alpha-IV; VLA-4 subunit alpha; CD49d
Target/Specificity	Recognizes mouse CD49d
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Rat IgG2b kappa. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	Itga4
Function	Integrins alpha-4/beta-1 (VLA-4 or LPAM-2) and alpha-4/beta-7 (LPAM-1) 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. 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. 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 the media layer of the arterial wall (at protein level) (PubMed:35802072). Weakly expression in the thymus, spleen and mesenteric lymph nodes (PubMed:1840602)

Background

Biotin-labled rat monoclonal antibody to CD49d

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