

Anti-CD49d Antibody

Catalog # AP95894

Product Information

Application	WB, FC
Primary Accession	P13612
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
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	Recombinant fusion protein of human CD49d expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG2a. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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](#)).

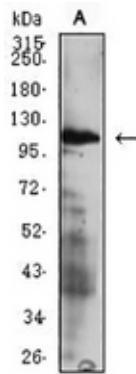
Cellular Location

Membrane; Single-pass type I membrane protein

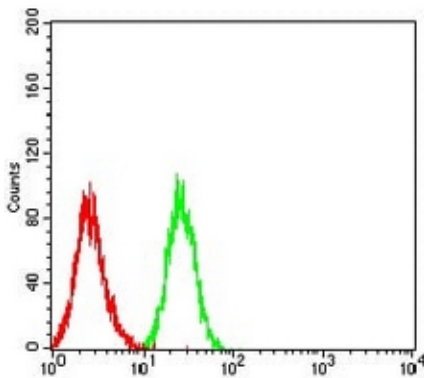
Tissue Location

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

Images



Western blot analysis of CD49d expression in HL60 (A) whole cell lysates. (Predicted band size: 115 kD; Observed band size: 115 kD)



Flow cytometric analysis of HL60 cells using Anti-CD49d Antibody (green) and negative control (red).

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