

Datasheet for ABIN1112175
anti-ITGA4 antibody (APC)



[Go to Product page](#)

1 Image

Overview

Quantity:	100 tests
Target:	ITGA4
Reactivity:	Human
Host:	Please inquire
Clonality:	Monoclonal
Conjugate:	This ITGA4 antibody is conjugated to APC
Application:	Flow Cytometry (FACS), Immunofluorescence (IF)

Product Details

Clone:	ALC1-1
Isotype:	IgG1
Characteristics:	The CD49d antigen is primarily expressed on T and B lymphocytes and weakly expressed on monocytes.

Target Details

Target:	ITGA4
Alternative Name:	CD49d (ITGA4 Products)
Background:	CD49d (Anti-VLA-alpha-4) recognizes the 150 kDa alpha-chain of very-late antigen (VLA)-4, a member of the integrin family of cell adhesion molecules. VLA-4, like other integrins, is a noncovalently associated heterodimeric glycoprotein composed of alpha and beta subunits and is involved in cell-cell and cell-extracellular matrix interactions. The beta-chain of the VLA-4

Target Details

complex is the CD29 antigen, a 130 kDa glycoprotein. The CD29 antigen, also known as the beta-1 subunit, is common to the VLA family of integrins. When acting as a matrix receptor, the CD49d antigen binds to CS-1, an alternatively spliced domain of fibronectin. When functioning as a cell receptor, the CD49d antigen binds to the vascular cell-adhesion molecule-1 (VCAM-1). The interaction between the CD49d antigen and VCAM-1 is known to play an important role in stabilizing the adhesion of lymphocytes to endothelial cells and in mediating B- lymphocyte precursor/bone marrow stromal cell adhesion. The CD49d antigen, when associated with the beta integrin, forms a lymphocyte homing receptor for Peyer's patch, binding to the mucosal vascular addressin MAdCAM-1. The CD49d antigen is also involved in CD3- dependent CD4+ T- lymphocyte activation via its interaction with fibronectin.

Pathways: [Integrin Complex](#)

Application Details

Application Notes: It is recommended for use in flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 20 µl/10⁶ cells.

Comment: Allophycocyanin (Febico, Far East Bio-Tech Co.) Reactivity and.

Sample Preparation: 1. Transfer 100 µl of anticoagulated (EDTA) blood to a 12 x 75 mm polystyrene test tube (10⁶ cells). 2. Add 20 µl of CD49d APC and mix gently with a vortex mixer. The 20 µl is a guideline only, the optimal volume should be determined by the individual laboratory. 3. The recommended negative control is a non-reactive APC-conjugated antibody of the same isotype. 4. Incubate in the dark at room temperature at 4°C for 30 minutes or at room temperature (20-25 °C) for 15 minutes. 5. Add 1,5 ml of Lysing Solution to each sample and mix gently with a vortex mixer. Incubate for 10 minutes at room temperature in the dark. 6. Centrifuge at 1000 x g for 5 minutes. Gently aspirate the supernatant and discard it leaving approximately 50 µl of fluid. 7. Add 2 ml 0.01 mol/l PBS (It better that it containing 2% bovine serum albumin) and resuspend the cells by using a vortex mixer. 8. Centrifuge at 1000 x g for 5 minutes. Gently aspirate the supernatant and discard it leaving approximately 50 µl of fluid. 9. Resuspend pellet in an appropriate fluid for flow cytometry, e.g. 0.3 ml PBS. The PBS should contain 1% paraformaldehyde (fixative) if samples are not analysed the same day. 10. Analyse on a flow cytometer or store at 2-8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The conjugate is provided in liquid form in buffer containing 1% bovine serum albumin (BSA) and 0,09% Sodium azide, pH 7.2.
Preservative:	Sodium azide
Precaution of Use:	1. The device is not intended for clinical use including diagnosis, prognosis, and monitoring of a disease state, and it must not be used in conjunction with patient records or treatment. 2. This product contains Sodium azide (NaN ₃), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, Sodium azide may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing. 3. As with any product derived from biological sources, proper handling procedures should be used.
Storage:	4 °C

Images

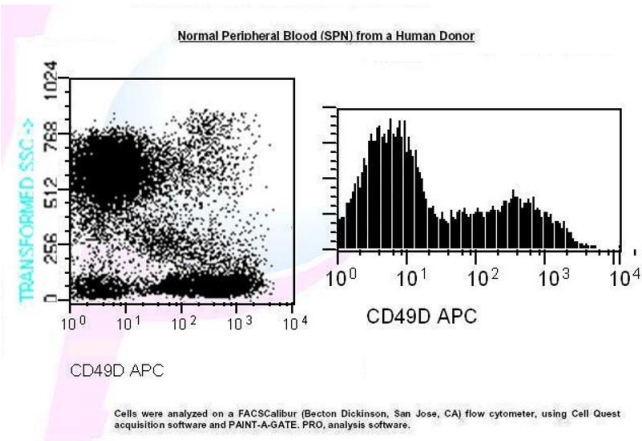


Image 1.