

Datasheet for ABIN1112177 anti-ITGA4 antibody (FITC)





Overview

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

Product Details

Clone:	ALC1-1
Isotype:	lgG1
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

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 μ l/10^6 cells.

Comment:

Fluorescein isothiocyanate (Molecular Probes). Reactivity and.

Sample Preparation:

1. Transfer 100 μ l of anticoagulated (EDTA) blood to a 12 x 75 mm polystyrene test tube (10^6 cells). 2. Add 20 μ l of CD49d FITC and mix gently with a vortex mixer. The 20 μ l is a guideline only, the optimal volume should be determined by the individual laboratory. 3. The recommended negative control is a non-reactive FITC-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 μ l 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 μ l 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. Normal Blood Sample from a Human Donor

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 (NaN3), 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

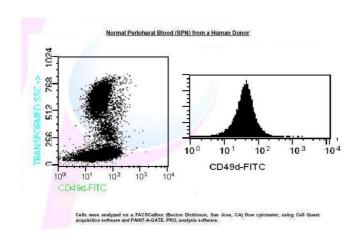


Image 1.