

# Datasheet for ABIN114228

## anti-ITGA4 antibody





#### Overview

Quantity:	0.25 mg
Target:	ITGA4
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This ITGA4 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro)), Functional Studies (Func)

## **Product Details**

Immunogen:	Peyers Patch HEV binding lymphoma line (TK1)
Clone:	R1-2
Isotype:	lgG2b
Specificity:	This antibody reacts with alpha 4 integrin.
Purification:	Protein G affinity purified immunoglobulin fraction

#### **Target Details**

Target:	ITGA4
Alternative Name:	CD49d / ITGA4 (ITGA4 Products)
Background:	Alpha 4 integrin, which helps to mediate cell-cell and cell-matrix interactions. It combines with

beta 1 and beta 7integrin to form VLA-4 and LPAM-1 (Peyers patch homing receptor) respectively. VLA-4 is expressed on most peripheral lymphocytes, thymocytes and monocytes. LPAM-1 is found on peripheral lymphocytes, but few thymocytes. Fibronectin and VCAM-1 act as ligands for both VLA-4 and LPAM-1. LPAM-1 also binds the mucosal vascular addressin MAdCAM-1. (1)Synonyms: CD49 antigen-like family member D, Integrin alpha-4, Integrin alpha-IV, VLA-4, VLA-4

Gene ID: 16401

NCBI Accession: NP\_034706

UniProt: Q00651

Pathways: Integrin Complex

#### **Application Details**

Application Notes: Flow cytometry (see protocol). Immunoprecipitation. Immunohistochemistry on frozen

sections. Functional assays.

Other applications not tested.

Optimal dilutions are dependent on conditions and should be determined by the user.

Protocol: FLOW CYTOMETRY ANALYSIS: Method: 1. Prepare a cell suspension in media A. For cell

preparations, deplete the red blood cellpopulation with cell separation medium. 2. Wash 2

times. 3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 µl of thissuspension to each tube (each tube will then contain 1x10e6 cells, representing 1 test). 4.

To each tube, add 0. 5-1. 0 µg\* of ABIN114228. 5. Vortex the tubes to ensure thorough mixing

of antibody and cells. 6. Incubate the tubes for 30 minutes at 4°C. 7. Wash 2 times at 4°C. 8.

Add 100 µl of secondary antibody (FITC Goat anti-rat IgG (H+L)) at a 1/500 dilution. 9. Incubate

the tubes at 4°C for 30-60 minutes. (It is recommended that the tubes are protected from light

since most fluorochromes arelight sensitive). 10. Wash 2 times at 4°C in media B. 11.

Resuspend the cell pellet in 50 µl ice cold media B. 12. Transfer to suitable tubes for flow

cytometric analysis containing 15  $\mu l$  of propidiumiodide at 0. 5 mg/ml in PBS. This stains dead

cells by intercalating in DNA. Media: A. Phosphate buffered saline (pH 7. 2) + 5% normal serum

of host species + sodium azide(100  $\mu$ l of 2M sodium azide in 100 mls). B. Phosphate buffered saline (pH 7. 2) + 0. 5% Bovine serum albumin + sodium azide (100 $\mu$ l of 2M sodium azide in 100

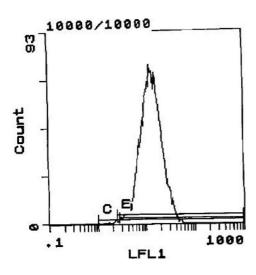
mls).

Restrictions: For Research Use only

## Handling

Concentration:	1 mg/mL
Buffer:	PBS buffer with 0.02 % sodium azide as preservative
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody at 2-8 °C for one month or (in aliquots) at -20 °C for longer.

## **Images**



**Image 1.** Cell Source: TK1 cell line.,.Percentage of cells stained above control: 99.6%