Datasheet for ABIN968338

anti-ITGA3 antibody (AA 110-325)

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Overview

Quantity:	50 µg
Target:	ITGA3
Binding Specificity:	AA 110-325
Reactivity:	Mouse, Rat, Dog
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Mouse VLA-3alpha aa. 110-325
Clone:	42-CD49c
Isotype:	IgG1
Cross-Reactivity:	Rat (Rattus), Dog (Canine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	ITGA3
Alternative Name:	CD49c (ITGA3 Products)
Background:	Integrins are a family of dimeric proteins that mediate cell-to-cell and extracellular matrix adhesion. They consist of a large alpha chain that is non-covalently associated with a smaller beta chain which defines the integrin subfamilies. VLA-3 (Very Late Antigen-3), a member of the integrin superfamily, exhibits elevated expression on B lymphocytes, but is also found on monocytes, platelets, and hematopoietic progenitor cells. A heterodimer of alpha3 (CD49c) and beta1 (CD29) subunits, VLA is a receptor for laminin, fibronectin, and collagen. The alpha3 chain contains a large extracellular domain with three putative metal-binding sequences, a transmembrane domain, and a short cytoplasmic tail. Differing requirements for divalent cations and the influence of RGD peptides results in multiple ligand-binding mechanisms for VLA-3. Although its expression is restricted in normal tissues, VLA-3 is found on a variety of cultured tumor cells. In addition, levels of VLA-3 have been shown to correlate with the degree of invasiveness of malignant melanoma cells. Thus, VLA-3 mediates intercellular adhesion and cell migration in normal and, possibly, cancerous cell types. Synonyms: Integrin alpha3, VLA-3alpha
Molecular Weight:	135 kDa
Pathways:	CXCR4-mediated Signaling Events, Integrin Complex

Application Details

Comment:	Related Products: ABIN968547, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

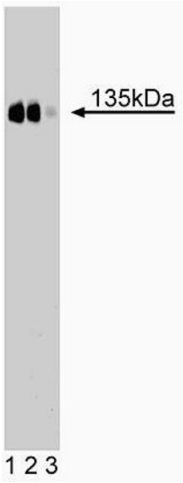
Handling

Storage Comment:	Store undiluted at -20° C.

Publications

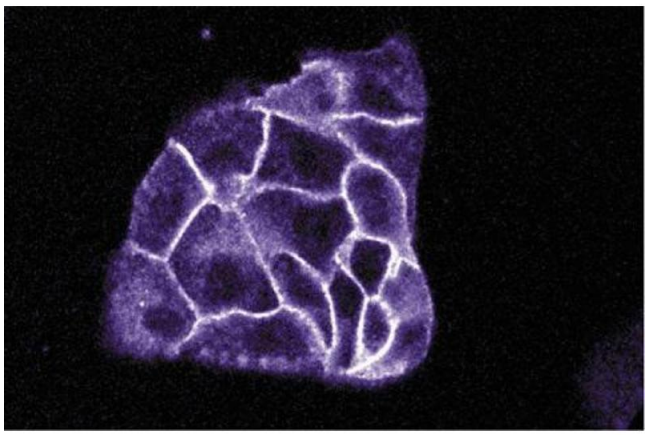
Product cited in:	Takeuchi, Hirano, Tsuji, Osawa, Irimura: "cDNA cloning of mouse VLA-3 alpha subunit." in: **Journal of cellular biochemistry**, Vol. 57, Issue 2, pp. 371-7, (1995) (PubMed). Takada, Murphy, Pil, Chen, Ginsberg, Hemler: "Molecular cloning and expression of the cDNA for alpha 3 subunit of human alpha 3 beta 1 (VLA-3), an integrin receptor for fibronectin, laminin, and collagen." in: **The Journal of cell biology**, Vol. 115, Issue 1, pp. 257-66, (1991) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of CD49c (integrin alpha3) on a rat kidney lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-CD49c antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of MDCK cells (canine kidney, ATCC CCL-34).