

Datasheet for ABIN968317  
**anti-ITGA2 antibody (AA 42-245)**[2 Images](#)[4 Publications](#)[Go to Product page](#)

## Overview

Quantity:	50 µg
Target:	ITGA2
Binding Specificity:	AA 42-245
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ITGA2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

## Product Details

Immunogen:	Human VLA-2alpha aa.42-245
Clone:	2-CD49b
Isotype:	IgG2a
Characteristics:	<ol style="list-style-type: none"><li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li><li>2. Please refer to us for technical protocols.</li><li>3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li><li>4. 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.</li></ol>
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

## Target Details

Target:	ITGA2
Alternative Name:	CD49b ( <a href="#">ITGA2 Products</a> )
Background:	<p>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 is used to define integrin subfamilies. These molecules exhibit a wide range of expression throughout development and adulthood. VLA-2 (very late antigen), a member of the integrin superfamily, was identified on activated T cells, but has since been reported to be on various cell types. VLA-2 is reported to be a heterodimer of integrin alpha2 (CD49b) and integrin beta1 (CD29) subunits. The alpha2 chain contains a large extracellular domain, a transmembrane domain, and a short cytoplasmic tail. VLA-2 functions as a collagen receptor on platelets and fibroblasts, as well as a collagen and laminin receptor on endothelial and epithelial cells. On activated T cells, VLA-2, like LFA-1, exhibits increased number and affinity of ligand binding. Interactions of these molecules with their extracellular matrix ligands is important for directing effector T cells to their target tissues and to provide co-stimulatory signals. Thus, VLA-2 not only plays an important role in cellular adhesion, but may function in intracellular signal transmission. This antibody is routinely tested by western blot analysis.</p> <p>Synonyms: Integrin alpha2, VLA-2alpha</p>
Molecular Weight:	150 kDa
Pathways:	<a href="#">CXCR4-mediated Signaling Events</a> , <a href="#">Smooth Muscle Cell Migration</a> , <a href="#">Integrin Complex</a>

## Application Details

Comment:	Related Products: ABIN968535, 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.

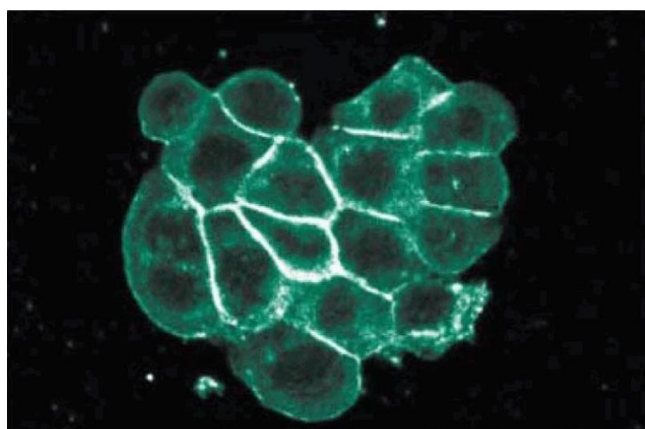
## Handling

Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

## Publications

Product cited in:	<p>Förster, Mäkela, Wärr, Kietz, Becker, Hultenby, Warner, Gustafsson: "Involvement of estrogen receptor beta in terminal differentiation of mammary gland epithelium." in: <b>Proceedings of the National Academy of Sciences of the United States of America</b>, Vol. 99, Issue 24, pp. 15578-83, (2002) (<a href="#">PubMed</a>).</p> <p>Russell, Tofilon: "Radiation-induced activation of nuclear factor-kappaB involves selective degradation of plasma membrane-associated I(kappa)B(alpha)." in: <b>Molecular biology of the cell</b>, Vol. 13, Issue 10, pp. 3431-40, (2002) (<a href="#">PubMed</a>).</p> <p>Emsley, King, Bergelson, Liddington: "Crystal structure of the I domain from integrin alpha2beta1." in: <b>The Journal of biological chemistry</b>, Vol. 272, Issue 45, pp. 28512-7, (1997) (<a href="#">PubMed</a>).</p> <p>Wu, Santoro: "Complex patterns of expression suggest extensive roles for the alpha 2 beta 1 integrin in murine development." in: <b>Developmental dynamics : an official publication of the American Association of Anatomists</b>, Vol. 199, Issue 4, pp. 292-314, (1994) (<a href="#">PubMed</a>).</p>
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## Images



### Immunofluorescence

**Image 1.** Immunofluorescence staining of WiDr cells (Human colorectal adenocarcinoma, ATCC CCL-218).



### Western Blotting

**Image 2.** Western blot analysis of CD49b (Integrin alpha2) on a HeLa cell lysate (Human cervical epitheloid carcinoma, ATCC CCL-2.2). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti-human CD49b antibody.