

Datasheet: MCA2027

**BATCH NUMBER 158555**

<b>Description:</b>	MOUSE ANTI HUMAN CD49b
<b>Specificity:</b>	CD49b
<b>Other names:</b>	INTEGRIN ALPHA 2 CHAIN, VLA-2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	31H4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/25 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			10ug/ml
Immunoprecipitation	▪			25ug/ml - 50ug/ml
Western Blotting			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Does not react with:Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Purified human b1 integrin preparation from HT1080 fibrosarcoma cell extract.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P17301</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3673</a>    ITGA2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD49B
<b>RRID</b>	AB_321445
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the X63/Ag8.653 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD49b antibody, clone 31H4</b> recognizes human CD49b also known as integrin alpha-2, VLA-2 subunit alpha or collagen receptor. CD49b is a 1181 amino acid 130 kDa single pass type-1 transmembrane glycoprotein which forms a heterodimer with integrin beta-1.</p> <p>Mouse anti Human CD49b antibody, clone 31H4 has been identified as being capable of immunoprecipitating the integrin a2 subunit from human cell-lines surface labelled with <sup>125</sup>I. It has been confirmed specific to a2 by relative expression of antigen on various cell lines by flow cytometry, and recognition of affinity purified a2b1 in dot blots.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Tanaka, T. <i>et al.</i> (2009) Remodeling of the human endometrial epithelium is regulated by laminin and type IV collagen. <a href="#">Int J Mol Med. 23: 173-80.</a></li> <li>2. Tanaka, T. <i>et al.</i> (2005) Reduced radiosensitivity and increased CD40 expression in cyclophosphamide-resistant subclones established from human cervical squamous cell carcinoma cells. <a href="#">Oncol Rep. 14: 941-8.</a></li> <li>3. Tanaka, T. <i>et al.</i> (2010) Establishment and characterization of novel human uterine leiomyosarcoma cell lines <a href="#">Int J Oncol. 37: 125-31.</a></li> <li>4. Tanaka, T. <i>et al.</i> (2012) Differential sensitivity to paclitaxel-induced apoptosis and growth suppression in paclitaxel-resistant cell lines established from HEC-1 human endometrial adenocarcinoma cells. <a href="#">Int J Oncol. 41: 1837-44.</a></li> <li>5. Tanaka, T. <i>et al.</i> (2008) Autocrine/paracrine regulation of human endometrial stromal remodeling by laminin and type IV collagen. <a href="#">Int J Mol Med. 22: 581-7.</a></li> <li>6. Tanaka, T. <i>et al.</i> (2006) Optimal combination chemotherapy and chemoradiotherapy with etoposide for advanced cervical squamous cancer cells in vitro. <a href="#">Oncol Rep. 15: 939-47.</a></li> </ol>

7. Tanaka, T. *et al.* (2012) Impaired death-associated protein kinase-mediated survival signals in 5-fluorouracil-resistant human endometrial adenocarcinoma cells. [Oncol Rep. 28: 330-6.](#)
8. Tanaka, T. *et al.* (2008) Experimental characterization of recurrent ovarian immature teratoma cells after optimal surgery. [Oncol Rep. 20: 13-23.](#)

**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

**Guarantee** 12 months from date of despatch

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2027>  
10040

**Regulatory** For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

Goat Anti Mouse IgG (STAR76...) [RPE](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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