

Datasheet: MCA2027

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

	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.

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

Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified human b1 integrin preparation from HT1080 fibrosarcoma cell extract.
External Database Links	<p>UniProt: P17301 Related reagents</p> <p>Entrez Gene: 3673 ITGA2 Related reagents</p>
Synonyms	CD49B
RRID	AB_321445
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63/Ag8.653 mouse myeloma cell line.
Specificity	<p>Mouse anti Human CD49b antibody, clone 31H4 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 ¹²⁵I. 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>
References	<ol style="list-style-type: none"> 1. Tanaka, T. <i>et al.</i> (2009) Remodeling of the human endometrial epithelium is regulated by laminin and type IV collagen. Int J Mol Med. 23: 173-80. 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. Oncol Rep. 14: 941-8. 3. Tanaka, T. <i>et al.</i> (2010) Establishment and characterization of novel human uterine leiomyosarcoma cell lines Int J Oncol. 37: 125-31. 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. Int J Oncol. 41: 1837-44. 5. Tanaka, T. <i>et al.</i> (2008) Autocrine/paracrine regulation of human endometrial stromal remodeling by laminin and type IV collagen. Int J Mol Med. 22: 581-7. 6. Tanaka, T. <i>et al.</i> (2006) Optimal combination chemotherapy and chemoradiotherapy with etoposide for advanced cervical squamous cancer cells in vitro. Oncol Rep. 15: 939-47.

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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

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

Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)

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

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

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

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

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

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

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

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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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Printed on 17 Sep 2021