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 product 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 product 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 (NaN_3)
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	**UniProt:** P17301 Related reagents **Entrez Gene:** 3673 ITGA2 Related reagents
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	**Mouse anti Human CD49b antibody, clone 31H4** recognizes human CD49b also known as integrin alpha-2, VLA-2 subunit alpha or collogen receptor. CD49b is a 1181 amino acid ¦130 kDa single pass type-1 transmembrane glycoprotein which forms a heterodimer with integrin beta-1. 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 ^{125}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.
References	1. Tanaka, T. *et al.* (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. *et al.* (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. *et al.* (2010) Establishment and characterization of novel human uterine leiomyosarcoma cell lines Int J Oncol. 37: 125-31. 4. Tanaka, T. *et al.* (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. *et al.* (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. *et al.* (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 (1): 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

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., 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 (Fc) (STAR120...)	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

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