

Datasheet: MCA2025

BATCH NUMBER 149490

Description:	MOUSE ANTI HUMAN CD49b
Specificity:	CD49b
Other names:	INTEGRIN ALPHA 2 CHAIN, VLA-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	16B4
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	▪			30ug/ml
Immunohistology - Frozen	▪			30ug/ml - 40ug/ml
Immunohistology - Paraffin (1)	▪			
ELISA	▪			10ug/ml
Immunoprecipitation	▪			25ug/ml - 50ug/ml
Western Blotting	▪			
Immunofluorescence	▪			
Functional Assays (2)	▪			

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.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.

Tris/EDTA pH9.0 is recommended for this purpose.

(2) This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays. Dialysis cassettes [EQU003](#) are suitable for this purpose.

Target Species	Human
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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 beta 1 preparation from HT1080 fibrosarcoma cell extract
External Database Links	UniProt: P17301 Related reagents Entrez Gene: 3673 ITGA2 Related reagents
Synonyms	CD49B
RRID	AB_321444
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63/Ag8.653 mouse myeloma cell line
Specificity	Mouse anti Human CD49b antibody, clone 16B4 recognizes human CD49b, also known as integrin $\alpha 2$, collagen receptor, Platelet membrane glycoprotein Ia or VLA-2 subunit alpha. CD49b is a 1181 amino acid ~160 kDa single pass type-1 transmembrane glycoprotein possessing multiple FG-GAP repeats and a single VWFA domain. Mouse anti human CD49b antibody, clone 16B4 is identified as capable of immunoprecipitating a non-reducible alpha subunit from I^{125} surface labeled human cell line extract. It is confirmed as specific to the alpha 2 subunit by relative expression of antigen on various cell lines by FACS, and its recognition of affinity purified alpha 2 beta 1 in dot blots.
References	1. Fitter, S. <i>et al.</i> (1999) Transmembrane 4 superfamily protein CD151 (PETA-3) associates with beta 1 and alpha IIb beta 3 integrins in haemopoietic cell lines and modulates cell-cell adhesion. Biochem J. 338 (Pt 1): 61-70. 2. Sincock, P.M. <i>et al.</i> (1999) PETA-3/CD151, a member of the transmembrane 4 superfamily, is localised to the plasma membrane and endocytic system of endothelial cells, associates with multiple integrins and modulates cell function. J Cell Sci. 112 (Pt 6):

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16. Pietiäinen, V. *et al.* (2004) Echovirus 1 endocytosis into caveosomes requires lipid rafts, dynamin II, and signaling events. [Mol Biol Cell. 15: 4911-25.](#)
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18. Poulter, N.S. *et al.* (2017) Clustering of glycoprotein VI (GPVI) dimers upon adhesion to collagen as a mechanism to regulate GPVI signaling in platelets. [J Thromb Haemost. 15 \(3\): 549-564.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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/MCA2025 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 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)
'M366064:200529'

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