

Datasheet: MCA2294GA

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| Description: | RAT ANTI MOUSE CD49d |
| Specificity: | CD49d |
| Other names: | INTEGRIN ALPHA 4 CHAIN, VLA-4 |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | 9C10 (MFR4.B) |
| Isotype: | IgG2a |
| Quantity: | 0.1 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 | ▪ | | | 1/10 - 1/50 |
| Immunohistology - Frozen | ▪ | | | |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | | | ▪ | |
| Immunoprecipitation | | | ▪ | |
| Western Blotting | | | ▪ | |
| Functional Assays (1) | | | ▪ | |

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 the appropriate negative/positive controls.

(1) **Removal of sodium azide is recommended prior to use in functional assays - Bio-Rad recommend the use of [EQU003](#) for this purpose.**

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| Target Species | Mouse |
| 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 |

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| Immunogen | Mouse LyD9 haematopoietic progenitor cells. |
| External Database Links | <p>UniProt: Q00651 Related reagents</p> <p>Entrez Gene: 16401 Itga4 Related reagents</p> |
| RRID | AB_566800 |
| Fusion Partners | Spleen cells from immunised Lewis rats were fused with cells of the mouse P3X63Ag8.653 myeloma cell line. |
| Specificity | <p>Rat anti Mouse CD49d monoclonal antibody, clone 9C10 recognizes murine alpha 4 integrin (CD49d) also known as VLA-4 subunit alpha, CD49d is a ~150 kDa single pass type I transmembrane glycoprotein that can associate with either beta 1 integrin (CD29) or beta 7 integrin to form heterodimers CD49d/CD29 (VLA-4) and alpha4/beta7 (LPAM-1) respectively. CD49d is expressed on most lymphocytes, granulocytes, monocytes and thymocytes. The primary ligands for CD49d are CD106 (VCAM-1), fibronectin and MAdCAM-1.</p> <p>Clone 9C10 (MFR4.B) is reported to significantly inhibit binding of CD49d to CD106 but only when used in combination with clone R1-2 (Kinashi and Springer 1994).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul |
| References | 1. Bellingan, G.J. <i>et al.</i> (2002) Adhesion molecule-dependent mechanisms regulate the rate of macrophage clearance during the resolution of peritoneal inflammation. J Exp Med. 196 (11): 1515-21. |
| Storage | <p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p> |
| 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

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|---------------------------------|---|
| Rabbit Anti Rat IgG (STAR17...) | FITC |
| Goat Anti Rat IgG (STAR69...) | FITC |
| Goat Anti Rat IgG (STAR131...) | Alk. Phos. , Biotin |
| Goat Anti Rat IgG (STAR73...) | RPE |

Rabbit Anti Rat IgG (STAR21...) [HRP](#)
Goat Anti Rat IgG (STAR72...) [HRP](#)
Rabbit Anti Rat IgG (STAR16...) [DyLight®800](#)
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) [DyLight®800](#)

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

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|----------------------------------|---|------------------|---|---------------|---|
| 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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'M366573:200529'

Printed on 11 Aug 2020

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