

Datasheet: MCA2294A647

Description:	RAT ANTI MOUSE CD49d:Alexa Fluor® 647
Specificity:	CD49d
Other names:	INTEGRIN ALPHA 4 CHAIN, VLA-4
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	9C10 (MFR.4.B)
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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	■			Neat - 1/10

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.

Target Species	Mouse		
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		
Immunogen	Mouse LyD9 haematopoietic progenitor cells.		
External Database Links	UniProt: Q00651 Related reagents		

Entrez Gene:

[16401](#) Itga4 [Related reagents](#)

Fusion Partners	Spleen cells from immunised Lewis rats were fused with cells of the mouse P3X63Ag8.653 myeloma cell line.
Specificity	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. 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, T. et al.)
Flow Cytometry	Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).
References	1. Kinashi, T. <i>et al.</i> (1994) Adhesion Molecules in Hematopoietic Cells. Blood Cells. 20:25-44 2. 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	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1212A647\)](#)

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