

Datasheet: MCA2296GA

Description:	RAT ANTI MOUSE CD49e
Specificity:	CD49e
Other names:	INTEGRIN ALPHA 5 CHAIN, VLA-5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MFR5 (5H10)
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 - 1/25
Immunohistology - Frozen	■			
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
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	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
Immunogen	Mouse MC/9 cell line

**External Database
Links**

UniProt:

[P11688](#) [Related reagents](#)

Entrez Gene:

[16402](#) Itga5 [Related reagents](#)

Fusion Partners Spleen cells from immunised Lewis rats were fused with cells of the Murine P3X63Ag8.653

Specificity **Rat anti Mouse CD49e antibody, clone MFR5 (5H10)** recognizes murine integrin alpha 5 (CD49e), which associates with the beta 1 integrin (CD29) to form the fibronectin receptor CD49e/CD29 (VLA-5).

VLA-5 plays an important role in cell adhesion and migration and is expressed by mast cells, thymocytes, T-cells and monocytes. Rat anti Mouse CD49e antibody, clone MFR5 (5H10) has been reported to block CD49e mediated function ([Kinashi and Springer 1994](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Kinashi, T. & Springer, T.A. (1994) Adhesion molecules in hematopoietic cells. [Blood Cells. 20 \(1\): 25-44.](#)
2. VanDerLoo, J.C. *et al.* (1998) VLA-5 is expressed by mouse and human long-term repopulating hematopoietic cells and mediates adhesion to extracellular matrix protein fibronectin. [J Clin Invest. 102 \(5\): 1051-61.](#)
3. Cukierman, E. *et al.* (2001) Taking cell-matrix adhesions to the third dimension. [Science. 294 \(5547\): 1708-12.](#)
4. Kinashi, T. & Springer, T.A. (1994) Steel factor and c-kit regulate cell-matrix adhesion. [Blood. 83 \(4\): 1033-8.](#)

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

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.

Shelf Life 18 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

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC

Goat Anti Rat IgG (STAR72...)

[HRP](#)

Recommended Negative Controls

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

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