

Datasheet: MCA2125F

Description:	RAT ANTI MOUSE CD49b:FITC
Specificity:	CD49b
Other names:	INTEGRIN ALPHA 2 CHAIN, VLA-2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	DX5
Isotype:	IgM
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	■			

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	Mouse		
Product Form	Purified IgM conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgM from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	< 0.1% sodium azide (NaN ₃)		
Approx. Protein Concentrations	IgM concentration 0.1 mg/ml		
Immunogen	RIL-2 propagated NK1.1+ cells from C57BL/6 mice.		

External Database Links	UniProt: Q62469 Related reagents
	Entrez Gene: 16398 Itga2 Related reagents
RRID	AB_323718
Fusion Partners	Spleen cells from immunized Lewis rats were fused with the mouse SP2/0 myeloma cell line.
Specificity	<p>Rat anti Mouse CD49b monoclonal antibody, clone DX5 recognizes mouse CD49b, also known as Very Late Antigen-2 (VLA-2) or alpha-2 integrin. CD49b is a ~160kDa single pass type I membrane protein expressed by NK cells and a small subset of T-cells (Pellicci <i>et al.</i> 2005).</p> <p>Rat anti mouse CD49b, clone DX5 stains NK cells from all mouse strains tested including Balb/c mice (Arese <i>et al.</i> 2001). CD49b acts as a receptor for collagen, laminin, fibronectin and E-cadherin (Carafoli <i>et al.</i> 2013).</p>
Flow Cytometry	<p>Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.</p> <p>The Fc region of monoclonal antibodies may bind to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).</p>
References	<ol style="list-style-type: none"> 1. Arase, H. <i>et al.</i> (2001) Cutting edge: the mouse NK cell-associated antigen recognized by DX5 monoclonal antibody is CD49b (alpha 2 integrin, very late antigen-2). J Immunol. 167 (3): 1141-4. 2. Jacobs, N. <i>et al.</i> (2006) Intradermal immune response after infection with Vaccinia virus. J Gen Virol. 87: 1157-61. 3. Yin, Y. <i>et al.</i> (2013) Phosphatidylserine-targeting antibody induces M1 macrophage polarization and promotes myeloid-derived suppressor cell differentiation. Cancer Immunol Res. 1 (4): 256-68. 4. Lin, C.Y. <i>et al.</i> (2008) Combined immunogene therapy of IL-6 and IL-15 enhances anti-tumor activity through augmented NK cytotoxicity. Cancer Lett. 272: 285-95. 5. Thomson, R.C. <i>et al.</i> (2008) Expansion and activation of NK cell populations in a gammaherpesvirus infection. Scand J Immunol. 67: 489-95. 6. Pais, R. <i>et al.</i> (2012) An intracameral injection of antigen induces in situ chemokines and cytokines required for the generation of circulating immunoregulatory monocytes. PLoS One. 7: e43182.
Storage	<p>This product is shipped at ambient temperature.</p> <p>Store at +4°C only.</p> <p>DO NOT FREEZE</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>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: https://www.bio-rad-antibodies.com/SDS/MCA2125F10040
Regulatory	For research purposes only

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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
'M440409:250523'

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