

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	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
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	<p>UniProt: Q62469 Related reagents</p> <p>Entrez Gene: 16398 Itga2 Related reagents</p> <hr/> <p>RRID AB_323718</p> <hr/> <p>Fusion Partners Spleen cells from immunized Lewis rats were fused with the mouse SP2/0 myeloma cell line.</p> <hr/> <p>Specificity 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> <hr/> <p>Flow Cytometry Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl. 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> <hr/> <p>References 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.</p> <p>2. Jacobs, N. <i>et al.</i> (2006) Intradermal immune response after infection with Vaccinia virus. J Gen Virol. 87: 1157-61.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <hr/> <p>Storage Store at +4°C only. DO NOT FREEZE This product should be stored undiluted. 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.</p>
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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/MCA2125F>
10040

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
'M415514:230105'

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