

## Datasheet: MCA2125

**BATCH NUMBER 165840**

<b>Description:</b>	RAT ANTI MOUSE CD49b
<b>Specificity:</b>	CD49b
<b>Other names:</b>	INTEGRIN ALPHA 2 CHAIN, VLA-2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DX5
<b>Isotype:</b>	IgM
<b>Quantity:</b>	0.25 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen		▪		
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgM - liquid
<b>Preparation</b>	Antibody purified from tissue culture supernatant
<b>Buffer Solution</b>	Borate buffered saline
<b>Preservative Stabilisers</b>	< 0.1% sodium azide (NaN <sub>3</sub> )

<b>Approx. Protein Concentrations</b>	IgM concentration 0.5 mg/ml
<b>Immunogen</b>	RIL-2 propagated NK1.1+ cells from C57BL/6 mice.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q62469</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16398</a>    Itga2    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_324336
<b>Fusion Partners</b>	Spleen cells from immunized Lewis rats were fused with the mouse SP2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD49b monoclonal antibody, clone DX5</b> 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 (<a href="#">Pellicci et al. 2005</a>).</p> <p>Rat anti mouse CD49b, clone DX5 stains NK cells from all mouse strains tested including Balb/c mice (<a href="#">Arese et al. 2001</a>). CD49b acts as a receptor for collagen, laminin, fibronectin and E-cadherin (<a href="#">Carafoli et al. 2013</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>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). <a href="#">J Immunol. 167 (3): 1141-4.</a></li> <li>2. Jacobs, N. <i>et al.</i> (2006) Intradermal immune response after infection with Vaccinia virus. <a href="#">J Gen Virol. 87: 1157-61.</a></li> <li>3. Yin, Y. <i>et al.</i> (2013) Phosphatidylserine-targeting antibody induces M1 macrophage polarization and promotes myeloid-derived suppressor cell differentiation. <a href="#">Cancer Immunol Res. 1 (4): 256-68.</a></li> <li>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. <a href="#">Cancer Lett. 272: 285-95.</a></li> <li>5. Thomson, R.C. <i>et al.</i> (2008) Expansion and activation of NK cell populations in a gammaherpesvirus infection. <a href="#">Scand J Immunol. 67: 489-95.</a></li> <li>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. <a href="#">PLoS One. 7: e43182.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C.</p> <p>DO NOT FREEZE</p> <p>This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.</p>

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10077 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2125">https://www.bio-rad-antibodies.com/SDS/MCA2125</a> 10077
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgM (302001...) [Biotin](#), [RPE](#)  
Goat Anti Rat IgM (STAR116...) [HRP](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](https://bio-rad-antibodies.com/datasheets)  
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