

## Datasheet: MCA2125B

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

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgM conjugated to Biotin - liquid
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgM concentration 0.1 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>Fusion Partners</b>	Spleen cells from immunised 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>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.</p> <p>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 (<a href="#">BUF041A/B</a>).</p>
<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. Leong, C.C. <i>et al.</i> (1998) Modulation of natural killer cell cytotoxicity in human cytomegalovirus infection: the role of endogenous class I major histocompatibility complex and a viral class I homolog. <a href="#">J Exp Med. 187 (10): 1681-7.</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> <li>7. 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> </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>Shelf Life</b>	<p>18 months from date of despatch.</p>
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation available at:  Material Safety Datasheet Documentation #10041 available at:  <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a></p>
<b>Regulatory</b>	<p>For research purposes only</p>

## Related Products

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

**North & South** Tel: +1 800 265 7376

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