

Datasheet: MCA2125

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

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			
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. 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 IgM - liquid
Buffer Solution	Borate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgM concentration 0.5 mg/ml
Immunogen	RIL-2 propagated NK1.1+ cells from C57BL/6 mice.
External Database Links	UniProt: Q62469 Related reagents Entrez Gene:

Fusion Partners	Spleen cells from immunised Lewis rats were fused with the mouse SP2/0 myeloma cell line.
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 et al. 2005). Rat anti mouse CD49b, clone DX5 stains NK cells from all mouse strains tested including Balb/c mice (Arese et al. 2001). CD49b acts as a receptor for collagen, laminin, fibronectin and E-cadherin (Carafoli et al. 2013).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
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. 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. J Exp Med. 187 (10): 1681-7. 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. 7. Jacobs, N. <i>et al.</i> (2006) Intradermal immune response after infection with Vaccinia virus. J Gen Virol. 87: 1157-61.
Storage	Store at +4°C. DO NOT FREEZE This product should be stored undiluted. 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 #10077 available at: 10077: https://www.bio-rad-antibodies.com/uploads/MSDS/10077.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Goat Anti Rat IgM (STAR116...) [HRP](#)

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