

Datasheet: MCA699PE

Description:	RAT ANTI HUMAN CD49f:RPE
Specificity:	CD49f
Other names:	INTEGRIN ALPHA 6 CHAIN, VLA-6
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	NKI-GoH3
Isotype:	IgG2a
Quantity:	100 TESTS

Product Details

RRID AB_566833

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	■			Neat

Where this antibody 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 antibody for use in their own systems using appropriate negative/positive controls.

Target Species Human

Species Cross Reactivity Reacts with: Mouse, Dog, Pig, Cynomolgus monkey, Sheep
N.B. Antibody reactivity and working conditions may vary between species.

Product Form Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution Reconstitute with 1.0 ml distilled water.

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578

Preparation Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin
 5% Sucrose

Immunogen	BALB/c mouse mammary tumor cells
External Database Links	<p>UniProt: P23229 Related reagents</p> <p>Entrez Gene: 3655 ITGA6 Related reagents</p>
Fusion Partners	Spleen cells from immunized Sprague-Dawley rats were fused with cells of the SP2/0 mouse myeloma cell line
Specificity	<p>Rat anti Human CD49f antibody, clone NKI-GoH3 recognizes CD49f, also known as the VLA-6 alpha chain. CD49f is a 1107 amino acid ~120 kDa cell surface glycoprotein that forms distinct complexes with CD29 (VLA beta-chain), resulting in the VLA-6 (alpha-6 beta-1) complex, expressed on human platelets, or with the beta-4 integrin resulting in the alpha-6 beta-4 complex expressed on various human epithelial cells.</p> <p>Rat anti Human CD49f antibody, clone NKI-GoH3 reacts with platelets, megakaryocytes, T lymphocytes and common acute lymphoblastic leukemia cells (alpha-6 beta-1). In immunohistology the monoclonal antibody reacts with epithelial cells of a variety of tissues, peripheral nerves, microvascular endothelial cells, placenta cyto- and syncytiotrophoblasts. VLA-6 is an important mediator of cell binding to laminin.</p> <p>Rat anti Human CD49f antibody, clone NKI-GoH3 blocks the binding of cells to the E8 fragment of laminin (Sonnenberg et al. 1998).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ platelets in 100ul.
References	<ol style="list-style-type: none"> Jensen, K.B. <i>et al.</i> (2010) Assaying proliferation and differentiation capacity of stem cells using disaggregated adult mouse epidermis. Nat Protoc. 5 (5): 898-911. Soligo, D. <i>et al.</i> (1989) Immunohistochemical reactivity on bone marrow and tissues of anti-VLA antibodies in the platelet panel, in Leucocyte Typing IV: White Cell Differentiation Antigens. Edited by Knapp, W. <i>et al.</i> Oxford University Press p1029-1032. Sonnenberg, A. <i>et al.</i> (1986) Development of mouse mammary gland: identification of stages in differentiation of luminal and myoepithelial cells using monoclonal antibodies and polyvalent antiserum against keratin. J Histochem Cytochem. 34 (8): 1037-46. Sonnenberg, A. <i>et al.</i> (1987) A complex of platelet glycoproteins Ic and IIa identified by a rat monoclonal antibody. J Biol Chem. 262 (21): 10376-83. Hemler, M.E. <i>et al.</i> (1988) Multiple very late antigen (VLA) heterodimers on platelets. Evidence for distinct VLA-2, VLA-5 (fibronectin receptor), and VLA-6 structures. J Biol Chem. 263 (16): 7660-5. Galkowska, H. <i>et al.</i> (1996) Reactivity of antibodies directed against human antigens with surface markers on canine leukocytes. Vet Immunol Immunopathol. 53 (3-4): 329-34. Sonnenberg, A. <i>et al.</i> (1988) Laminin receptor on platelets is the integrin VLA-6. Nature. 336 (6198): 487-9. Sonnenberg, A. <i>et al.</i> (1990) Integrin recognition of different cell-binding fragments of laminin (P1, E3, E8) and evidence that alpha 6 beta 1 but not alpha 6 beta 4 functions as a major receptor for fragment E8. J Cell Biol. 110 (6): 2145-55. Yoshino, N. <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (<i>Macaca fascicularis</i>) by using anti-human cross-reactive antibodies. Exp Anim. 49 (2): 97-110. Sonnenberg, A. <i>et al.</i> (1990) The alpha 6 beta 1 (VLA-6) and alpha 6 beta 4 protein

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Further Reading	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54.
Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA6005PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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