

Datasheet: MCA699P647

Description:	RAT ANTI HUMAN CD49f:RPE-Alexa Fluor® 647
Specificity:	CD49f
Other names:	INTEGRIN ALPHA 6 CHAIN, VLA-6
Format:	RPE-ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	NKI-GoH3
Isotype:	lgG2a
Quantity:	100 TESTS

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 commun							
	the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols .							
	recommendations, pre		No	Not Determined	Suggested Dilution			
	Flow Cytometry	•			Neat - 1/2			
	this does not necessarily							
	exclude its use in such procedures. Suggested working dilutions are given as a guide o							
	recommended that th	e user titrates the p	oduct for	use in their own syste	em using appropriate			
	negative/positive cont	negative/positive controls.						
Target Species	Human	Human						
Species Cross	Reacts with: Mouse, I	Reacts with: Mouse, Dog, Pig, Cynomolgus monkey, Sheep						
Reactivity	N.B. Antibody reactivity and working conditions may vary between species.							
Product Form	Purified IgG conjugate	Purified IgG conjugated to RPE-Alexa Fluor 647 - lyophilized						
Reconstitution	Reconstitute with 1.0	Reconstitute with 1.0 ml distilled water.						
	Care should be taken	during reconstitution	n as the	protein may appear as	a film at the bottom of the			
	vial. Bio-Rad recomm	vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.						
Max Ex/Em	Fluorophore	Excitation Max (nm) Emiss	ion Max (nm)				
	RPE-Alexa Fluor®647 488nm laser	496		667				
	RPE-Alexa Fluor®647	546		667				
	561nm laser							
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant							
Buffer Solution	Phosphate buffered saline							
Preservative	0.09% Sodium Azide	(NaN ₃)						
Stabilisers	1% Bovine Serum Albumin							

	5% Sucrose
Immunogen	BALB/c mouse mammary tumor cells
External Database Links	UniProt: P23229 Related reagents Entrez Gene: 3655 ITGA6 Related reagents
Fusion Partners	Spleen cells from immunized Sprague-Dawley rats were fused with cells of the SP2/0 mouse myeloma cell line
Specificity	 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. 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 syncytotrophoblasts.VLA-6 is an important mediator of cell binding to laminin.
	Rat anti Human CD49f antibody, clone NKI-GoH3 blocks the binding of cells to the E8 fragment of laminin (<u>Sonnenberg <i>et al.</i> 1998</u>).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	 Jensen, K.B. <i>et al.</i> (2010) Assaying proliferation and differentiation capacity of stem cells using disaggregated adult mouse epidermis. <u>Nat Protoc. 5 (5): 898-911.</u> Soligo, D. <i>et al.</i> (1989) Immunohistochemical reacitivy 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. <u>J Histochem Cytochem. 34 (8): 1037-46.</u> Sonnenberg, A. <i>et al.</i> (1987) A complex of platelet glycoproteins Ic and IIa identified by a rat monoclonal antibody. <u>J Biol Chem. 262 (21): 10376-83.</u> 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. <u>J Biol Chem. 263 (16): T660-5.</u> Galkowska, H. <i>et al.</i> (1996) Reactivity of antibodies directed against human antigens with surface markers on canine leukocytes. <u>Vet Immunol Immunopathol. 53 (3-4): 329-34.</u> 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. <u>J Cell Biol. 110 (6): 2145-55.</u> 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

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	associated actions of laminin on proliferation and survival, but not on steroidogenesis of ovine
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	activity, nitric oxide production and expression of cell activation/migration molecules in neutrophils
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	by preventing adipocyte differentiation of the reticular dermis. <u>J Invest Dermatol. pii:</u>
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	Cancer. 13: 185.
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Further Reading	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <u>Vet Res.</u> <u>39: 54.</u>
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Further Reading Storage	<u>39: 54.</u> Prior to reconstitution store at +4°C.
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Related Products

Recommended Useful Reagents

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America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
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