

Datasheet: MCA699A647

Description:	RAT ANTI HUMAN CD49f:Alexa Fluor® 647
Specificity:	CD49f
Other names:	INTEGRIN ALPHA 6 CHAIN, VLA-6
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	NKI-GoH3
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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	▪			Neat - 1/10

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. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	BALB/c mouse mammary tumor cells
External Database Links	UniProt: P23229 Related reagents Entrez Gene: 3655 ITGA6 Related reagents
RRID	AB_324801
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 cells in 100ul.
References	<ol style="list-style-type: none"> 1. 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. 2. 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. 3. Sonnenberg, A. <i>et al.</i> (1988) Identification and characterization of a novel antigen complex on mouse mammary tumor cells using a monoclonal antibody against platelet glycoprotein Ic. J Biol Chem. 263 (28): 14030-8. 4. Sonnenberg, A. <i>et al.</i> (1988) Laminin receptor on platelets is the integrin VLA-6. Nature. 336 (6198): 487-9. 5. Hemler, M.E. <i>et al.</i> (1988) Multiple very late antigen (VLA) heterodimers on platelets.

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of male mice induces proliferation of CD49⁺ cells. [Sci Rep. 10 \(1\): 19959.](#)
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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.
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Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA699A647 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA6005A647\)](#)

Recommended Useful Reagents

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

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

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