

Datasheet: MCA699B

Description:	RAT ANTI HUMAN CD49f:Biotin
Specificity:	CD49f
Other names:	INTEGRIN ALPHA 6 CHAIN, VLA-6
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	NKI-GoH3
Isotype:	lgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				Neat - 1/5

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 negitive/positive controls.

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Target Species	Human

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

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Product Form	Purified IgG conjugated to Biotin - liquid

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 Protoin	

Approx. Protein Concentrations	IgG concentration 0.1 mg/ml

Immunogen	BALB/c mouse mammary tumor cells

External Database UniProt:

Links

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 (Sonnenberg et al. 1998).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ platelets in 100ul.

References

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- 2. Soligo, D. *et al.* (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. *et al.* Oxford University Press p1029-1032.
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- 4. Sonnenberg, A. *et al.* (1987) A complex of platelet glycoproteins Ic and IIa identified by a rat monoclonal antibody. J Biol Chem. 262 (21): 10376-83.
- 5. Hemler, M.E. *et al.* (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):</u> 7660-5.
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Chem. 263 (28): 14030-8.

- 12. Le Bellego, F. et al. (2005) Cytoskeleton reorganization mediates alpha6beta1 integrinassociated actions of laminin on proliferation and survival, but not on steroidogenesis of ovine granulosa cells. Reprod Biol Endocrinol. 3: 19.
- 13. Anderson, C. et al. (2009) Sonic hedgehog-dependent synthesis of laminin alpha1 controls basement membrane assembly in the myotome. <u>Development. 136: 3495-504.</u>
- 14. Collins, C.A. et al. (2011) Reprogramming adult dermis to a neonatal state through epidermal activation of β-catenin Development.138: 5189-99.
- 15. Moreira, M. L. et al. (2016) Vaccination against canine leishmaniosis increases the phagocytic activity, nitric oxide production and expression of cell activation/migration molecules in neutrophils and monocytes. Veterinary Parasitology. 15 Feb [Epub ahead of print]
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- 17. Schäfer, G. et al. (2013) The role of inflammation in HPV infection of the Oesophagus. BMC Cancer. 13: 185.
- 18. Peuhu. E, et al. (2017) Integrin beta 1 inhibition alleviates the chronic hyperproliferative dermatitis phenotype of SHARPIN-deficient mice PLOS ONE. 12 (10): e0186628.
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Further	Reading
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Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. 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 #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Biotin (MCA6005B)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

America

North & South Tel: +1 800 265 7376 Fax: +1 919 878 3751 Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

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Printed on 11 Jan 2019

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