Datasheet: NB-47-02831-100UG

Description:	MOUSE ANTI HUMAN CD49f
Specificity:	CD49f
Other names:	INTEGRIN ALPHA 6 CHAIN, VLA-6
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	450-30A
Isotype:	IgG1
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

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/50
Immunohistology - Frozen (1)	▪			1/50 - 1/100
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. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)**The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

Target Species	Human
Product Form	Purified IgG - 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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	alpha 6 beta 4 integrin purified from A431 cells.
RRID	AB_324600
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	**Mouse anti Human CD49f antibody, clone 450-30A** recognizes the human VLA-6 cell surface antigen, also known as the alpha 6 integrin and as CD49f. CD49f is expressed by platelets, weakly by monocytes and by a subset of lymphocytes. CD49f is also widely expressed on epithelial tissues.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
Histology Positive Control Tissue	Tonsil
References	1. Kennel, S.J. *et al.* (1990) Second generation monoclonal antibodies to the human integrin alpha 6 beta 4. Hybridoma. 9 (3): 243-55. 2. Maurice, S. *et al.* (2007) Isolation of progenitor cells from cord blood using adhesion matrices. Cytotechnology. 54: 121-33. 3. Cavers, M. *et al.* (2002) Differential expression of beta1 and beta2 integrins and L-selectin on CD4+ and CD8+ T lymphocytes in human blood: comparative analysis between isolated cells, whole blood samples and cryopreserved preparations. Clin Exp Immunol. 127: 60-5. 4. López, J. *et al.* (2012) Cancer-initiating cells derived from established cervical cell lines exhibit stem-cell markers and increased radioresistance. BMC Cancer. 12: 48. 5. Keller, P.J. *et al.* (2012) Defining the cellular precursors to human breast cancer. Proc Natl Acad Sci U S A. 109: 2772-7. 6. Kaczmarek, M. *et al.* (2011) Evaluation of the phenotype pattern of macrophages isolated from malignant and non-malignant pleural effusions. Tumour Biol. 32: 1123-32. 7. Aldridge, V. *et al.* (2012) Human mesenchymal stem cells are recruited to injured liver

in a β1-integrin and CD44 dependent manner. Hepatology. 56 (3): 1063-73.
8. Steinberg, F. *et al.* (2012) SNX17 protects integrins from degradation by sorting between lysosomal and recycling pathways. J Cell Biol. 197 (2): 219-30.
9. Liu, L. *et al.* (2003) Priming of eosinophil migration across lung epithelial cell monolayers and upregulation of CD11b/CD18 are elicited by extracellular Ca^{2+}. Am J Respir Cell Mol Biol. 28: 713-21.
10. Goyer, B. *et al.* (2017) Extracellular matrix and integrin expression profiles in Fuchs endothelial corneal dystrophy cells and tissue model. Tissue Eng Part A. Jul 20 [Epub ahead of print].

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. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Regulatory	For research purposes only