

Datasheet: MCA1456F

Description:	MOUSE ANTI HUMAN CD104:FITC
Specificity:	CD104
Other names:	INTEGRIN BETA 4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	450-9D
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, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10
Immunofluorescence	▪			

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.

Target Species	Human		
Species Cross Reactivity	Reacts with: Ferret, Mink Based on sequence similarity, is expected to react with: Mustelid N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
Immunogen	Purified alpha6 beta4 integrin from A431 cells.		

External Database Links	UniProt: P16144 Related reagents Entrez Gene: 3691 ITGB4 Related reagents
RRID	AB_322543
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse Sp2/0 myeloma cell line.
Specificity	<p>Mouse anti Human CD104 antibody, clone 450-9D recognizes the human beta4 integrin, also known as CD104. CD104 is a ~205 kDa glycoprotein which associates with the alpha6 integrin to form the alpha6/beta4 complex. CD104 is expressed on epithelial cells, Schwann cells and various tumor cell lines.</p> <p>Mouse anti Human CD104 antibody, clone 450-9D recognizes an extracellular epitope on the CD104 molecule.</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. Kennel, S.J. <i>et al.</i> (1990) Second generation monoclonal antibodies to the human integrin alpha 6 beta 4. Hybridoma. 9 (3): 243-55. 2. Barbaro, V. <i>et al.</i> (2009) Reconstruction of a human hemicornea through natural scaffolds compatible with the growth of corneal epithelial stem cells and stromal keratocytes. Mol Vis. 15: 2084-93. 3. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. Vet Immunol Immunopathol. 132:109-15. 4. Smith, K. <i>et al.</i> (2011) Mono- and tri-cationic porphyrin-monoclonal antibody conjugates: photodynamic activity and mechanism of action. Immunology. 132: 256-65. 5. Alam, H. <i>et al.</i> (2011) Loss of keratins 8 and 18 leads to alterations in α6β4-integrin-mediated signalling and decreased neoplastic progression in an oral-tumour-derived cell line. J Cell Sci. 124: 2096-106. 6. Lai-cheong, J.E. <i>et al.</i> (2009) Loss-of-function FERMT1 mutations in kindler syndrome implicate a role for fermitin family homolog-1 in integrin activation. Am J Pathol. 175 (4): 1431-41. 7. Groves, R.W. <i>et al.</i> (2010) A homozygous nonsense mutation within the dystonin gene coding for the coiled-coil domain of the epithelial isoform of BPAG1 underlies a new subtype of autosomal recessive epidermolysis bullosa simplex. J Invest Dermatol. 130 (6): 1551-7. 8. Aasted, B. & Viuff, B. (2007) Reactivity of monoclonal antibodies to human CD antigens with cells from mink. Vet Immunol Immunopathol. 119 (1-2): 27-37.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>

Guarantee 12 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

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

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

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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