

Datasheet: MCA465GA

Description:	MOUSE ANTI HUMAN VINCULIN
Specificity:	VINCULIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	V284
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 (1)	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (2)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/500 - 1/2000
Immunofluorescence	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

(1) Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.

(2) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species

Human

Species Cross Reactivity

Reacts with: Rat, Rabbit, Chicken, Mouse

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified vinculin from human platelets
External Database Links	<p>UniProt: P18206 Related reagents</p> <p>Entrez Gene: 7414 VCL Related reagents</p>
Fusion Partners	Spleen cells of immunised mice were fused with cells from the SP2/0 mouse myeloma line
Specificity	<p>Mouse anti Human vinculin antibody, clone V284 recognizes human vinculin, also known as metavinculin. Vinculin is a highly conserved, cytoskeletal protein associated with cell-cell and cell-matrix adhesion. Vinculin is an actin filament (F-actin)-binding protein involved in anchoring F-actin to the membrane.</p> <p>Mouse anti Human vinculin antibody, clone V284 detects vinculin as a ~130 kDa band in homogenates of platelets and other cells. It reacts with leucocytes, muscle cells, epithelial cells and fibroblasts.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
Histology Positive Control Tissue	Human appendix
References	<ol style="list-style-type: none"> Porter, R.M. <i>et al.</i> (1993) Monoclonal antibodies to cytoskeletal proteins: an immunohistochemical investigation of human colon cancer. J Pathol. 170 (4): 435-40. Kubler, M.D. & Watt, F.M. (1993) Changes in the distribution of actin-associated proteins during epidermal wound healing. J Invest Dermatol. 100 (6): 785-9. DeFife, K.M. <i>et al.</i> (1999) Cytoskeletal and adhesive structural polarizations accompany IL-13-induced human macrophage fusion. J Histochem Cytochem. 47: 65-74. Jester, J.V. <i>et al.</i> (1999) Transforming growth factor(beta)-mediated corneal myofibroblast differentiation requires actin and fibronectin assembly. Invest Ophthalmol Vis Sci. 40: 1959-67.

5. Dlugosz, J.A. *et al.* (2000) Stretch-induced mesangial cell ERK1/ERK2 activation is enhanced in high glucose by decreased dephosphorylation. [Am J Physiol Renal Physiol. 279: F688-97.](#)
6. Brown, H. *et al.* (2001) Blood-brain barrier function in cerebral malaria in Malawian children. [Am J Trop Med Hyg. 64 \(3-4\): 207-13.](#)
7. Frangogiannis, N.G. *et al.* (2002) Active interstitial remodeling: an important process in the hibernating human myocardium. [J Am Coll Cardiol. 39: 1468-74.](#)
8. Frye, M. *et al.* (2003) Evidence that Myc activation depletes the epidermal stem cell compartment by modulating adhesive interactions with the local microenvironment. [Development. 130: 2793-808.](#)
9. Jester, J.V. *et al.* (2003) Myofibroblast differentiation of normal human keratocytes and hTERT, extended-life human corneal fibroblasts. [Invest Ophthalmol Vis Sci. 44: 1850-8.](#)
10. Hua, H. *et al.* (2003) Endothelin-1 activates mesangial cell ERK1/2 via EGF-receptor transactivation and caveolin-1 interaction. [Am J Physiol Renal Physiol. 284: F303-12.](#)
11. Monsees, T.K. *et al.* (2005) Effects of different titanium alloys and nanosize surface patterning on adhesion, differentiation, and orientation of osteoblast-like cells. [Cells Tissues Organs. 180: 81-95.](#)
12. Rebhun, R.B. *et al.* (2006) Targeting receptor tyrosine kinase on lymphatic endothelial cells for the therapy of colon cancer lymph node metastasis. [Neoplasia. 8: 747-57.](#)
13. Sluka, P. *et al.* (2006) FSH regulates the formation of adherens junctions and ectoplasmic specialisations between rat Sertoli cells in vitro and in vivo. [J Endocrinol. 189: 381-95.](#)
14. Zheng, P.P. *et al.* (2007) Hela I-CaD undergoes a DNA replication-associated switch in localization from the cytoplasm to the nuclei of endothelial cells/endothelial progenitor cells in human tumor vasculature. [Cancer Biol Ther. 6: 886-90.](#)
15. Gray, M.J. *et al.* (2008) Therapeutic targeting of Id2 reduces growth of human colorectal carcinoma in the murine liver. [Oncogene. 27: 7192-200.](#)
16. Andrews, K.D. *et al.* (2008) Vascular prostheses: performance related to cell-shear responses. [J Surg Res. 149: 39-46.](#)
17. Zheng, P.P. *et al.* (2007) Hela I-CaD is implicated in the migration of endothelial cells/endothelial progenitor cells in human neoplasms. [Cell Adh Migr. 1: 84-91.](#)
18. Rio, M. *et al.* (2016) Microfluidic measurement of cell motility in response to applied non-homogeneous DC electric fields [Journal of Sensors and Sensor Systems. 5 \(2\): 237-43.](#)
19. Ananthaseshan, S. *et al.* (2017) Locally Transplanted CD34+ Bone Marrow-Derived Cells Contribute to Vascular Healing After Vascular Injury. [Transplant Proc. 49 \(6\): 1467-76.](#)

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

Health And Safety

Material Safety Datasheet documentation #10040 available at:

Information 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 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
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M384168:210513'

Printed on 20 Sep 2021

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)