

## Datasheet: MCA1870G

**BATCH NUMBER 0412R**

<b>Description:</b>	MOUSE ANTI HUMAN CD326
<b>Specificity:</b>	CD326
<b>Other names:</b>	Ep-CAM
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	VU-1D9
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/200
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) This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	1 mg/ml
<b>Immunogen</b>	HG9 cell line (small cell lung carcinoma)
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P16422</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4072</a>    EPCAM    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	GA733-2, M1S2, M4S1, MIC18, TACSTD1, TROP1
<b>RRID</b>	AB_931706
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse SP2/0 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human CD326 antibody, clone VU-1D9</b> recognizes epithelial cell adhesion molecule (Ep-CAM), a ~34 kDa cell surface antigen otherwise known as CD326, MOC31 or Ber-EP4. CD326 is a type 1 transmembrane glycoprotein, expressed on the basolateral cell membrane of the majority of epithelial tissues, with the exception of adult squamous epithelium, hepatocytes and gastric epithelial cells. Ep-CAM expression has been reported to be a possible marker of early malignancy, with expression being increased in tumor cells.</p> <p>Ep-CAM expression has been reported to be a possible marker of early malignancy, with expression being increased in tumor cells, and <i>de novo</i> expression being seen in dysplastic squamous epithelium</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Large Bowel
<b>Western Blotting</b>	MCA1870G detects a band of approximately 38kDa in HT-29 cell lysates
<b>References</b>	<ol style="list-style-type: none"> <li>1. Koga, Y. <i>et al.</i> (2008) Improved recovery of exfoliated colonocytes from feces using newly developed immunomagnetic beads. <a href="#">Gastroenterol Res Pract. 2008: 605273.</a></li> <li>2. Fillmore, C.M. <i>et al.</i> (2010) Estrogen expands breast cancer stem-like cells through paracrine FGF/Tbx3 signaling. <a href="#">Proc Natl Acad Sci U S A. 107 (50): 21737-42.</a></li> <li>3. Murakata, A. <i>et al.</i> (2011) Gene expression signature of the gross morphology in hepatocellular carcinoma. <a href="#">Ann Surg. 253: 94-100.</a></li> </ol>

4. Keller, P.J. *et al.* (2012) Defining the cellular precursors to human breast cancer. [Proc Natl Acad Sci U S A. 109 \(8\): 2772-7.](#)
5. Jeong, H.T. *et al.* (2012) MRI features of hepatocellular carcinoma expressing progenitor cell markers. [Liver Int. 32: 430-40.](#)
6. Armstrong, A.J. *et al.* (2019) Pharmacodynamic study of radium-223 in men with bone metastatic castration resistant prostate cancer. [PLoS One. 14 \(5\): e0216934.](#)

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**Further Reading** 1. Winter, M.J. *et al.* (2003) The epithelial cell adhesion molecule (Ep-CAM) as a morphoregulatory molecule is a tool in surgical pathology. [Am J Pathol. 163 \(6\): 2139-48.](#)

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**Storage** Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1870G>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)

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