

# Datasheet: MCA1870PE

## **BATCH NUMBER 150090**

Description:	MOUSE ANTI HUMAN CD326:RPE		
Specificity:	CD326		
Other names:	Ep-CAM		
Format:	RPE		
Product Type:	Monoclonal Antibody		
Clone:	VU-1D9		
Isotype:	lgG1		
Quantity:	100 TESTS		

# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

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

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					
Product Form	Purified IgG conjug	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized				
Reconstitution	Reconstitute with 1	.0 ml distilled water				
	Care should be take	en during reconstitution	as the protein may a	appear as a film at the		
		Bio-Rad recommend that		• •		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	)		
	RPE 488nm laser	496	578			
	RPE 561nm laser	546	578	_		
Preparation	Purified IgG prepare	ed by affinity chromatog	raphy on Protein A			
Buffer Solution	Phosphate buffered	d saline				

Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)1% Bovine Serum Albumin

5% Sucrose

Immunogen

HG9 cell line (small cell lung carcinoma)

## External Database Links

**UniProt:** 

P16422 Related reagents

#### **Entrez Gene:**

4072 EPCAM Related reagents

### **Synonyms**

GA733-2, M1S2, M4S1, MIC18, TACSTD1, TROP1

### **Fusion Partners**

Spleen cells from immunised mice were fused with cells of the mouse SP2/0 myeloma cell line

### **Specificity**

Mouse anti Human CD326 antibody, clone VU-1D9 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.

Ep-CAM expression has been reported to be a possible marker of early malignancy, with expression being increased in tumor cells, and *de novo* expression being seen in dysplastic squamous epithelium

### Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10<sup>6</sup> cells in 100ul

### References

- 1. Koga, Y. *et al.* (2008) Improved recovery of exfoliated colonocytes from feces using newly developed immunomagnetic beads. Gastroenterol Res Pract. 2008: 605273.
- 2. Fillmore, C.M. *et al.* (2010) Estrogen expands breast cancer stem-like cells through paracrine FGF/Tbx3 signaling. <u>Proc Natl Acad Sci U S A. 107 (50): 21737-42.</u>
- 3. Murakata, A. *et al.* (2011) Gene expression signature of the gross morphology in hepatocellular carcinoma. Ann Surg. 253: 94-100.
- 4. Keller, P.J. *et al.* (2012) Defining the cellular precursors to human breast cancer. <u>Proc Natl Acad Sci U S A. 109 (8): 2772-7.</u>
- 5. Jeong, H.T. *et al.* (2012) MRI features of hepatocellular carcinoma expressing progenitor cell markers. <u>Liver Int. 32: 430-40.</u>
- 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.

### **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. <u>Am J Pathol. 163 (6): 2139-48.</u>

Storage
Prior to reconstitution store at +4°C.
After reconstitution store at +4°C.
DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.
Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1870PE">https://www.bio-rad-antibodies.com/SDS/MCA1870PE</a> 20487
Regulatory	For research purposes only

## Related Products

# **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

## **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375377:210104'

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