

## Datasheet: MCA850G

**BATCH NUMBER 164429**

<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>	HEA-125
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat
Immunohistology - Frozen	▪			1 / 20
Immunohistology - Paraffin (1)	▪			1 / 20
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
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 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 from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide 0.5% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	0.1 mg/ml
<b>Immunogen</b>	HT29 carcinoma cell line.
<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_322943
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of a mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti human CD236 antibody, clone HEA-125</b> recognizes CD326 also known as Adenocarcinoma-associated antigen, Epithelial glycoprotein 314 or Epithelial Cell Adhesion Molecule (Ep-CAM). CD326 is a 314 amino acid ~34 kDa single pass type I transmembrane glycoprotein nearing a single thyroglobulin type-1 domain (<a href="#">UniProt: P16422</a>).</p> <p>CD326 is expressed on the basolateral membrane of cells by the majority of epithelial tissues, with the exception of adult squamous epithelium and some specific epithelial cell types including hepatocytes and gastric epithelial cells.</p> <p>CD326 expression has been reported to be a possible marker of early malignancy, with expression being increased in tumour cells (<a href="#">Balzar et al. 1999</a>), and <i>de novo</i> expression being seen in dysplastic squamous epithelium (<a href="#">Winter et al. 2003</a>). CD326 has been identified independently by a number of groups, and it has been known by a variety of names including Epithelial Specific Antigen, MOC31 (<a href="#">Proca et al. 2000</a>) and Ber-EP4 (<a href="#">Patriarca et al. 2012</a>).</p>
<b>Flow Cytometry</b>	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul cell suspension.
<b>Histology Positive Control Tissue</b>	Human colon & appendix
<b>References</b>	<ol style="list-style-type: none"> <li>Chowdhury, F. <i>et al.</i> (2010) Interactions between endothelial cells and epithelial cells in a combined cell model of airway mucosa: effects on tight junction permeability. <a href="#">Exp Lung Res. 36 (1): 1-11.</a></li> <li>Winter, M.J. <i>et al.</i> (2003) The epithelial cell adhesion molecule (Ep-CAM) as a</li> </ol>

- morphoregulatory molecule is a tool in surgical pathology. [Am J Pathol. 163 \(6\): 2139-48.](#)
3. Momburg, F. *et al.* (1987) Immunohistochemical study of the expression of a Mr 34,000 human epithelium-specific surface glycoprotein in normal and malignant tissues. [Cancer Res. 47 \(11\): 2883-91.](#)
  4. Simon, B. *et al.* (1990) Epithelial glycoprotein is a member of a family of epithelial cell surface antigens homologous to nidogen, a matrix adhesion protein. [Proc Natl Acad Sci U S A. 87 \(7\): 2755-9.](#)
  5. Kemmner, W. *et al.* (1992) Separation of tumor cells from a suspension of dissociated human colorectal carcinoma tissue by means of monoclonal antibody-coated magnetic beads. [J Immunol Methods. 147 \(2\): 197-200.](#)
  6. Inada, M. *et al.* (2008) Stage-specific regulation of adhesion molecule expression segregates epithelial stem/progenitor cells in fetal and adult human livers. [Hepato Int. 2 \(1\): 50-62.](#)

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**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.

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**Guarantee** Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA850G>  
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**Regulatory** For research purposes only

## Related Products

### Recommended Secondary Antibodies

- |   |   |
|---|---|
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>  |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |

### Recommended Negative Controls

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

**North & South** Tel: +1 800 265 7376

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**Europe** Tel: +49 (0) 89 8090 95 21

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

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