

Datasheet: MCA2162XZ

Description:	MOUSE ANTI HUMAN CD326:Preservative Free
Specificity:	CD326
Other names:	Ep-CAM
Format:	Preservative Free
Product Type:	Monoclonal Antibody
Clone:	MOC-31
Isotype:	IgG1
Quantity:	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	▪			10ug/ml
Immunohistology - Frozen	▪			10ug/ml
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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)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
Product Form	Purified IgG - liquid
Preparation	Antibody purified from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None Present

Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
External Database Links	<p>UniProt: P16422 Related reagents</p> <p>Entrez Gene: 4072 EPCAM Related reagents</p>
Synonyms	GA733-2, M1S2, M4S1, MIC18, TACSTD1, TROP1
RRID	AB_324459
Specificity	<p>Mouse anti Human CD326 antibody, clone MOC31 recognizes human CD326, also known as Epithelial cell adhesion molecule, Ep-CAM, Adenocarcinoma-associated antigen, Cell surface glycoprotein Trop-1, Epithelial glycoprotein 314, KS 1/4 antigen, Major gastrointestinal tumor-associated protein GA733-2 and Tumor-associated calcium signal transducer 1. Human CD326 is a 314 amino acid ~40 kDa type 1 single pass transmembrane glycoprotein containing a single thyroglobulin domain,</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, and <i>de novo</i> expression being seen in dysplastic squamous epithelium (Spizzo et al. 2002).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
Histology Positive Control Tissue	Human lung carcinoma
References	<ol style="list-style-type: none"> Souhami, R.L. <i>et al.</i> (1987) Antigens of small-cell lung cancer. First International Workshop. Lancet. 2 (8554): 325-6. Ralhan R <i>et al.</i> (2010) Nuclear and cytoplasmic accumulation of Ep-ICD is frequently detected in human epithelial cancers. PLoS One. 5 (11): e14130. Dankers, P.Y. <i>et al.</i> (2010) The use of fibrous, supramolecular membranes and human tubular cells for renal epithelial tissue engineering: towards a suitable membrane for a bioartificial kidney. Macromol Biosci. 10: 1345-54. Ralhan, R. <i>et al.</i> (2010) EpCAM nuclear localization identifies aggressive thyroid cancer and is a marker for poor prognosis. BMC Cancer. 10: 331. Kawashima, R. <i>et al.</i> (2011) EpCAM- and EGFR-targeted selective gene therapy for biliary cancers using Z33-fiber-modified adenovirus. Int J Cancer. 129: 1244-53. He HC <i>et al.</i> (2012) An Ep-ICD based index is a marker of aggressiveness and poor prognosis in thyroid carcinoma. PLoS One. 7 (9): e42893. Kunavisarut T <i>et al.</i> (2012) Immunohistochemical analysis based Ep-ICD subcellular

localization index (ESLI) is a novel marker for metastatic papillary thyroid microcarcinoma.

[BMC Cancer. 12: 523.](#)

8. Srivastava G *et al.* (2014) Nuclear Ep-ICD accumulation predicts aggressive clinical course in early stage breast cancer patients. [BMC Cancer. 14: 726.](#)

9. Assi, J. *et al.* (2015) Nuclear Ep-ICD expression is a predictor of poor prognosis in "low risk" prostate adenocarcinomas. [PLoS One. 10 \(2\): e0107586.](#)

10. Somasundaram, R.T. *et al.* (2016) Subcellular differential expression of Ep-ICD in oral dysplasia and cancer is associated with disease progression and prognosis. [BMC Cancer. 16: 486.](#)

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.](#)

Storage Store at -20°C only.
This product should be stored undiluted.
Storage in frost-free freezers is not recommended. 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 #10162 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2162XZ>
10162

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
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](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)

Recommended Negative Controls

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

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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

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