

# **Product datasheet for DM2014A**

### OriGene Technologies, Inc.

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## **EPCAM Mouse Monoclonal Antibody [Clone ID: MOC-31]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: MOC-31
Applications: FC, IHC

**Recommended Dilution:** Flow Cytometry: Use 10 μl of 10 μg/ml diluted antibody to label 16 cells in 100 μl.

Immunohistochemistry on Frozen Sections: 10 µg/ml.

**Immunohistochemistry on Paraffin Sections**: Antigen retrieval is required using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended

for this purpose.

**Recommended Positive Control:** Lung carcinoma tissue.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Specificity:** This antibody recognises the 40kDa cell surface antigen known as CD326.

Formulation: PBS, pH 7.4, Azide Free

State: Azide Free

State: Liquid purified IgG fraction

Stabilizer: None Preservative: None

**Concentration:** lot specific

**Conjugation:** Unconjugated

Storage: Upon receipt, store undiluted (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: epithelial cell adhesion molecule

Database Link: Entrez Gene 4072 Human

P16422



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#### Background:

Lung cancer is a heterogeneous disease, which can be subdivided into five major tyoes based on histopathological criteria like squamous cell carcinomas, adenocarcinoma, large cell carcinoma, adenosquamous carcinoma and small cell lung cancer (SCLC). A number of important prognostic characteristics have been identified to include the extend of disease and especially for SCLC, tumor sensitivity to chemotherapy. Epithelial Cell Adhesion Molecule (EpCAM) is a 40 kDa cell surface antigen.

This antigen has been identified independently by a number of groups, and it has been known by a variety of names including Epithelial Cell Adhesion Molecule (Ep-CAM), Epithelial Specific Antigen, MOC31 and Ber-EP4. Several monoclonal antibodies have been raised against CD326, many of which have been described as tumour specific molecules on carcinomas.

CD326 is a Type 1 transmembrane glycoprotein. It 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. CD326 expression has been reported to be a possible marker of early malignancy, with expression being increased in tumour cells, and *de novo* expression being seen in dysplastic squamous epithelium.

Synonyms:

Ep-CAM, Epithelial cell adhesion molecule, GA733-2, EGP314, KSA, TROP1, Trop-1, M1S2, M4S1, MIC18