

Product datasheet for AM33247SU-S

OriGene Technologies, Inc.

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Epcam Mouse Monoclonal Antibody [Clone ID: SPM534]

Product data:

Product Type: Primary Antibodies

Clone Name: SPM534

Applications: FC, IF, IHC, IP, WB

Recommended Dilution: Western blot analysis: 1/100-1/200.

Flow Cytometry: 5-10 µl/106 cells. Immunofluorescence: 1/50-1/100.

Immunoprecipitation: 5-10 μl/500 μg protein lysate.

Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: 1/100-1/200 for

30 minutes at RT.

Monoclonal

Formalin/paraffin tissues REQUIRE digestion of tissue sections with pepsin at 1 mg/ml Tris-

HCl, pH 2.0 for 15 min at RT or 10 min at 37°C. **Positive Control:** Rat Small intestine or Colon.

Reactivity: Rat

Host: Mouse Isotype: IgG1

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Clonality:

Immunogen: Rat small intestine cells.

Specificity: Epitope of SPM534 and SPM535 monoclonal antibodies are different. EGP40 is a 40-43kDa

transmembrane epithelial glycoprotein, also identified as epithelial specific antigen (ESA), or epithelial cellular adhesion molecule (Ep-CAM). It is expressed on baso-lateral cell surface in

most simple epithelia and a vast majority of carcinomas.

Cellular Localization: Cell surface.

Formulation: State: Supernatant

State: Liquid Bioreactor Concentrate Preservative: 0.05% Sodium Azide

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 40-43 kDa



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Gene Name: epithelial cell adhesion molecule

Database Link: Entrez Gene 171577 Rat

<u>O55159</u>

Background: EpCAM, or CD326, is an ~40 kDa transmembrane glycoprotein involved in a number of

cellular processes including adhesion, proliferation, maintenance of stemness, migration and invasion (Spizzo, 2012, Denzel, 2012). It is expressed on most, but not all, normal epithelia

and their corresponding malignancies. Although the role of EpCAM expression in

tumorigenesis remains to be fully elucidated, it may downregulate immunity and help tumors

actively escape from immune surveillance.

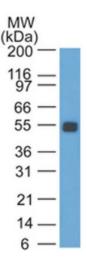
Since the 1980s, EpCAM has been recognized as a pan-carcinoma antigen marker because of its widespread expression on epithelium and their derived tumors (Litnov, 1994; Ruf, 2007). More recently, it has also been identified as a stem cell marker, and it is thought that EpCAM antibody positive tumor cells may have stem-like properties (Flatmark, 2011).

EpCAM antibody is widely used to help distinguish epithelial from non-epithelial neoplasms. EpCAM antibody positive tumors are epithelium derived, whereas EpCAM antibody negative tumors can originate from either non-epithelial or epithelial tissues. EpCAM antibody has also been used for identifying circulating tumor cells (Saif, 2012, de Albuquerque, 2012). It is often used as part of a panel with other tumor or tissue antibody markers when classifying tumors of known, suspected or elusive origin. EpCAM expression may be upregulated in tumors and overexpression can most pronounced on tumor initiating cells (Imrich, 2012). Overexpression may be an indication of early malignancy and correlate with a poor prognosis (Ruf, 2007).

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

M4S1, MIC18

Product images:



Western blot analysis of Rat colon probed with with CD326 / EPCAM / TACSTD1 Antibody (Clone SPM534).