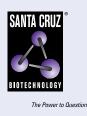
## SANTA CRUZ BIOTECHNOLOGY, INC.

# Ep-CAM (0.N.277): sc-59782



### BACKGROUND

The epithelial cell adhesion molecule Ep-CAM, which is also designated tumor-associated calcium signal transducer 1 and MK-1, is a monomeric membrane glycoprotein that is expressed in most normal human epithelium and in most carcinomas. The human Ep-CAM gene encodes a 314 amino acid protein that is expressed as two forms, a major form and a minor form, which are reduced upon treatment with the amino-glycosylation inhibitor tunicamycin. Ep-CAM is overexpressed in a variety of carcinomas and is, therefore, a potential target for the visualization and therapy of human solid tumors. Ep-CAM contains an extracellular domain containing two epidermal growth factor-like repeats, followed by a cysteine poor region, which are necessary for the adhesion properties of the molecule.

## REFERENCES

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- Bjork, P., et al. 1993. Isolation, partial characterization, and molecular cloning of a human colon adenocarcinoma cell-surface glycoprotein recognized by the C215 mouse monoclonal antibody. J. Biol. Chem. 268: 24232-24241.
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#### **CHROMOSOMAL LOCATION**

Genetic locus: EPCAM (human) mapping to 2p21, Epcam (mouse) mapping to 17 E4.

## SOURCE

 $\ensuremath{\mathsf{Ep}}\xspace{-}\mathsf{CAM}$  (0.N.277) is a mouse monoclonal antibody raised against LoVo cell line of human origin.

## PRODUCT

Each vial contains 200  $\mu g~lg G_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **APPLICATIONS**

Ep-CAM (0.N.277) is recommended for detection of Ep-CAM of mouse, rat and human origin by Western Blotting (non-reducing) (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffinembedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Ep-CAM siRNA (h): sc-43032, Ep-CAM siRNA (m): sc-43033, Ep-CAM shRNA Plasmid (h): sc-43032-SH, Ep-CAM shRNA Plasmid (m): sc-43033-SH, Ep-CAM shRNA (h) Lentiviral Particles: sc-43032-V and Ep-CAM shRNA (m) Lentiviral Particles: sc-43033-V.

Molecular Weight of Ep-CAM: 40 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, A-431 whole cell lysate: sc-2201 or Hep G2 cell lysate: sc-2227.

#### **SELECT PRODUCT CITATIONS**

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- Dissanayake, K., et al. 2020. Individually cultured bovine embryos produce extracellular vesicles that have the potential to be used as non-invasive embryo quality markers. Theriogenology 149: 104-116.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.