Ep-CAM (B302): sc-59783

**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 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 is necessary for the adhesion properties of the molecule.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

Ep-CAM (B302) is a mouse monoclonal antibody raised against MCF-7 human breast cancer cells of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Ep-CAM (B302) is recommended for detection of Ep-CAM of mouse, rat and human origin by Western Blotting (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 immunohistochomistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500); may cross-react with most epithelial cells and carcinomas.


Molecular Weight of Ep-CAM: 40 kDa.

Positive Controls: Ep-CAM (h3): 293T Lysate: sc-113013, MCF7 whole cell lysate: sc-2206 or HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

![Ep-CAM (B302): sc-59783. Western blot analysis of Ep-CAM expression in non-transfected: sc-117752 (A) and human Ep-CAM transfected: sc-113013 (B) 293T whole cell lysates.](Image)


**SELECT PRODUCT CITATIONS**


**STORAGE**

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

**RESEARCH USE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

**CONJUGATES**

See Ep-CAM (C-10): sc-25308 for Ep-CAM antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.