**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 2 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 tumours. 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**


**CHROMOSOMAL LOCATION**

Genetic locus: TACSTD1 (human) mapping to 2p21; Tacstd1 (mouse) mapping to 17 E4.

**SOURCE**

Ep-CAM (AUA1) is a mouse monoclonal antibody raised against LoVo cell line of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

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

**APPLICATIONS**

Ep-CAM (AUA1) 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 paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of Ep-CAM: 40 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, SHP-77 whole cell lysate: sc-364528 or Ca Ski whole cell lysate: sc-364380.

**DATA**

**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.

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