**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 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: EPCAM (human) mapping to 2p21; Epcam (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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ep-CAM (AUA1) is available conjugated to agarose (sc-53277 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53277 HRP), 200 µg/ml, for WB, HCP) and ELISA; to either phycoerythrin (sc-53277 PE), fluorescein (sc-53277 FITC), Alexa Fluor® 488 (sc-53277 AF488), Alexa Fluor® 546 (sc-53277 AF546), Alexa Fluor® 594 (sc-53277 AF594) or Alexa Fluor® 647 (sc-53277 AF647), 200 µg/ml, for WB (RGB), IF, HCP) and FCM; and to either Alexa Fluor® 680 (sc-53277 AF680) or Alexa Fluor® 790 (sc-53277 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**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-364258 or Ca Ski whole cell lysate: sc-364360.

**DATA**

![Western blot analysis of Ep-CAM expression in Ca Ski (A), Caco-2 (B), LS1034 (C) and SHP-77 (D) whole cell lysates and human prostate tumor tissue extract (E).](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.

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