

Ep-CAM (CD326) clone VU-1D9

Instructions for Use

Specification:

Ep-CAM (epithelial specific antigen) is an ~40 kDa transmembrane glycoprotein involved in several cellular processes including adhesion, proliferation, maintenance of stemness, migration and invasion (Spizzo, 2012, Denzel, 2012). Ep-CAM is expressed on most, but not all, normal epithelia and their corresponding malignancies. Although the role of Ep-CAM expression in tumorigenesis remains to be fully elucidated, Ep-CAM may downregulate immunity and help tumors actively escape from immune surveillance.

Since the 1980s Ep-CAM 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, Ep-CAM has also been identified as a stem cell marker, and it is thought that Ep-CAM antibody positive tumor cells may have stem-like properties (Flatmark, 2011) Ep-CAM antibody is widely used to help distinguish epithelial from non-epithelial neoplasms. Ep-CAM antibody positive tumors are epithelium derived, whereas Ep-CAM antibody negative tumors can originate from either non-epithelial or epithelial tissues. Ep-CAM antibody has also been used for identifying circulating tumor cells (Saif, 2012, de Albuquerque, 2012). Ep-CAM antibody is often used as part of a panel with other tumor or tissue antibody markers when classifying tumors of known, suspected or elusive origin. Ep-CAM 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).

The VU1D9 Ep-CAM antibody clone has been widely cited in the literature, and researchers are encouraged to review the published literature for additional information.

Availability:

Catalog No.	Contents	Volume
ILM6727-C01	Ep-CAM	0,1 ml concentrate
ILM6727-C05	Ep-CAM	0,5 ml concentrate
ILM6727-C1	Ep-CAM	1,0 ml concentrate

Intended use: For Research Use Only

Reactivity: Human

Clone: VU-1D9

Species of origin: Mouse

Isotype: IgG1

Control Tissue: Columnar epithelium, adenocarcinoma

Staining: Membranous

Immunogen: Small cell lung carcinoma cells

Presentation: Ep-CAM antibody in PBS with 15 mM sodium azide

Application and suggested dilutions:

Pre-treatment: Heat induced epitope retrieval in 10 mM citrate buffer, pH6.0, for 20 minutes is required for IHC staining on formalin-fixed, paraffin embedded tissue sections.

- Immunohistochemical staining of formalin-fixed, paraffin embedded tissue section (dilution up to 1:400)
- Western blotting

The optimal dilution for a specific application should be determined by the investigator.

Note: Dilution of the antibody in 10% normal goat serum followed by a goat anti-mouse secondary antibody-based detection is recommended.

Storage & Stability: Store at 2-8 °C. Do not use after expiration date printed on the vial. For long-term storage, aliquot and store at -20°C.

References:

- 1) Litvinov SV, MP Velders, HAM Bakker, GJ Fleuren, SO Warnaar. JBC 125:437-446 (1994).
- 2) Imrich S, M Hachmeister, O Gires. Cell Adhes Migr 6:30-38 (2012).
- 3) Spizzo G, D Fong, M Wurm, C Ensinger, P Obrist, C Hofer, G Mazzoleni, G Gastl, P Went. J Clin Pathol 64:415-420 (2011).
- 4) Denzel S, B Mack, C Eggert, P Massoner, N Stocklein, D Kemming, U Harreus, O Gires. Int J Exp Path 93:341-353 (2012)