ANTI-HUMAN EPITHELIAL CELL ADHESION MOLECULE

Mouse Monoclonal Antibody Against Human Epithelial Cell Adhesion Molecule (EpCAM)
Clone VU-1D9

Catalog # 01420 **100 µg/tube**

SPECIFICITY:

Epithelial cell adhesion molecule (EpCAM), also known as epithelial-specific antigen[1] and EGP-40[2], is a homophilic CA^{2+}-independent cell adhesion molecule expressed on the basolateral surfaces of most epithelial cells[3,4]. Cells of nervous, muscular and stromal tissue do not express EpCAM. EpCAM expression is also absent on mesothelial cells and mesotheliomas, and thus is a suitable marker for discriminating between mesothelioma and carcinoma cells[5]. In the mammary gland, all cells within the mammary epithelium except for the myoepithelial cells express EpCAM[6,7].

The VU-1D9 clone was generated immunizing a BALB/c mouse with NCl-H69 small cell lung carcinoma cells. Splenocytes were fused with SP2/0 myeloma cells.

CLONE: VU-1D9

ISOTYPE: IgG_1 (mouse)

FORMAT:

100 µg of antibody in phosphate buffered saline (PBS).

STABILITY/STORAGE:

Store at 4°C. Do not freeze. Product is stable for at least 2 years.

APPLICATIONS AND DIRECTIONS FOR USE:

The antibody is suitable for flow cytometry (10^6 cells in 100 µL and 1-3 µg/mL antibody) and immunohistochemistry. The antibody works with paraffin sections at 1-3 µg/mL, however a heat-induced antigen retrieval protocol is required for optimal staining of formalin fixed paraffin embedded tissues. Appropriate conditions should be established with each application.

THIS REAGENT IS FOR LABORATORY USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.

STEMCELL TECHNOLOGIES INC
777 West Broadway, Suite 808
Vancouver, British Columbia
CANADA V5Z 4J7

Tel: (604) 877-0713 Toll-free Tel: 1-800-667-0322
Fax: (604) 877-0704 Toll-free Fax: 1-800-567-2899
Website: www.stemcell.com E-mail: info@stemcell.com

Revised May 2003

REFERENCES

1. Litvinov SV, Velders MP, Bakker HAM, Gleuren GJ, Warnaar SO (1994) Ep-CAM: a human epithelial antigen is a homophilic cell-cell adhesion molecule. Journal of Cell Biology 125: 437-446.
2. Simon B, Podolsky DK, Moldenhauer G, Isselbacher KJ, Gattoni-Celli S and Brand SJ (1990) Epithelial glycoprotein is a member of a family of epithelial cell surface antigens homologous to nidogen, a matrix adhesion protein. Proceedings of the National Academy of Sciences, USA 87: 2755-2759.
3. Latza U, Niedobitek G, Schwarting R, Nekarda H and Stein H (1990) Ber-EP4: new monoclonal antibody which distinguishes epithelial from mesothelia. Journal of Clinical Pathology 43: 213-219.
4. Momburg F, Moldenhauer G, Hammerling GJ and Moller P (1987) Immunohistochemical study of the expression of a M_r 34, 000 human epithelium-specific surface glycoproteinin normal and malignant tissues. Cancer Research 47: 2883-2891.
5. Ordonez NG (1998) Role of immunohistochemistry in distinguishing epithelial peritoneal mesotheliomas from peritoneal and ovarian serous carcinomas. American Journal of Surgical Pathology 22: 1203-1214.
6. Gudjonsson T, Villadsen R, Nielsen HL, Ronnov-Jessen L, Bissell MJ and Petersen OW (2002) Isolation, immortalization, and characterization of a human breast epithelial cell line with stem cell properties. Genes and Development 16: 693-706.
7. Stingl J, Zandieh I, Eaves CJ and Emerman JT (2001) Characterization of bipotent mammary epithelial progenitor cells in normal adult human tissue. Breast Cancer Research and Treatment 67:93-109.