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ProductInformation

Monclonal Anti-Uvomorulin/E-Cadherin
Clone DECMA-1
Rat Ascites Fluid

Product No. **U 3254**

Product Description

Monoclonal Anti-Uvomorulin/E-Cadherin (rat IgG1 isotype) is derived from the DECMA-1 hybridoma,[1] produced by the fusion of rat myeloma cells and splenocytes from an immunized Lou rat. The mouse embryonal carcinoma cell line PCC4 Aza RI was used as the immunogen. The isotype is determined using Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product No. ISO-2).

Monoclonal Anti-Uvomorulin/E-Cadherin was selected against the mouse cell adhesion molecule uvomorulin/E-Cadherin. It blocks both the aggregation of mouse embryonal carcinoma cells and the compaction of pre-implantation embryos. The antibody disrupts confluent monolayers of Madin-Darby canine kidney (MDCK) epithelial cells. In indirect immunofluorescent staining of MDCK cells grown in culture, the antibody shows strong staining on the membrane of adjacent cells, after treatment with 0.5% Triton-X 100.

Monoclonal Anti-Uvomorulin/E-Cadherin may be used for immunofluorescent labeling of uvomorulin/E-C adherin on confluent cell layers grown in culture. The antibody can also be used in immunoblotting and immunoprecipitation techniques with mouse or dog tissue. It can be used for studies of embryonal development, cell-cell interation of cells grown in culture, and localization of uvomorulin/E-Cadherin (L-CAM).

Cell-cell interactions during embryonic development and in tissue organization involve specific cell-adhesion molecules (CAMs) that are functionally defined by antibodies that interfere with cell-cell adhesion. CAMs are expressed on early embryonic cells and persist in derivatives of all three germ layers. The best characterized CAMs are N-CAM (neural CAM) and L-CAM (liver CAM). The protein uvomorulin, initially identified in embryonal carcinoma, is identical to E-Cadherin, L-CAM, Cell CAM 80/120, and ARC-1, each of which have been characterized in different systems. Uvomorulin/E-Cadherin has been characterized as a 120 kDa cell surface glycoprotein from which an 84 kDa fragment can be released by trypsin digestion in the presence of Ca^{2+}.

Reagent

Monoclonal Anti-Uvomorulin/E-Cadherin is provided as ascites fluid with 15 mM sodium azide.

Precautions

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

A minimum working dilution of 1:1,600 was determined by indirect immunofluorescent staining of MDCK cells grown in culture.
In order to obtain the best results, it is recommended that each individual user determine their working dilution by titration assay.

Reference

1. Vestweber, D., and Kemler, R., EMBO J., **4**,3393 (1985).

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