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ProductInformation

Monoclonal Anti-Cytokeratin Peptide 17
Mouse Ascites Fluid
Clone CK-E3

Product No. **C 9179**

Product Description

Monoclonal anti-Cytokeratin Peptide 17 (mouse IgG2b isotype) is derived from the CK-E3 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a cytoskeletal preparation from rat colon epithelium. The isotype is determined using the Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

Monoclonal Anti-Cytokeratin Peptide 17 specifically recognizes human cytokeratin 17 (46-47 kDa in human),[1] and cytokeratin 19 (40 kDa in rat)[2] in immunoblotting. The antibody labels intermediate filaments in a human cultured epitheloid carcinoma cell line (HeLa)[1] and in rat hepatoma cells,[2] but does not stain rat fibroblasts in primary cultures. It stains a (minor) basal cell population in all variants of "complex" epithelia. Strong staining was noted in myoepithelial cells of all glands studied.[1] The antibody exhibits a wide interspecies cross-reactivity (e.g. human, bovine, goat, porcine, rat). Detailed immunostaining patterns of human tissues with this product have been described.[1,3-10] The epitope detected by the antibody is sensitive to formalin- fixation.

Intermediate-sized filaments are abundant cytoplasmic structural proteins in most vertebrate cells. Cytokeratins, a group comprising at least 29 different proteins, are characteristic of epithelial and trichocytic cells.[8,11] Cytokeratin 17 (46 kDa) is a member of the type I acidic subfamily. Its expression in normal human tissues is restricted to epithelia other than simple and stratified (i.e., the basal cells of a group of complex epithelia); glandular epithelium with myo-epithelial component; transitional and pseudostratified epithelium.[1,8-11] Monoclonal anti-cytokeratins are specific markers of epithelial cell differentiation and have been widely used as tools in tumor identification and classification. Monoclonal anti-Cytokeratin Peptide 17, which recognizes an epitope present in epithelial tissues, may facilitate typing of normal, metaplastic and neoplastic cells. It may aid in the discrimination of carcinomas and non-epithelial tumors such as sarcomas, lymphomas and neural tumors. The antibody producing clone was developed by S.M. Troyanovsky and co-workers at the Russian Cancer Research Center, Moscow.[1-3]

Monoclonal anti-Cytokeratin Peptide 17 may be used for the localization of cytokeratin 17 using various immunochemical assays such as immunoblotting, dot blotting and immunohistochemistry (immunofluorescence and immunoenzymatic staining).

Reagents

The product is provided as ascites fluid with 0.1% sodium azide as preservative.

Precautions and Disclaimer

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

Storage/Stability

For continuous use, store at 2-8 °C. 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

The minimum antibody titer of 1:400 was determined by indirect immunofluorescent staining of acetone-fixed frozen sections of human salivary gland.
In order to obtain best results in different techniques and preparations, it is recommended that each individual user determine their optimal working dilutions by titration assay.

References

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