

Product Information

MONOCLONAL ANTI-CYTOKERATIN PEPTIDE 8 CLONE M20 Mouse Ascites Fluid

Product No. **C5301**

Monoclonal Anti-Cytokeratin 8 (mouse IgG1 isotype) is derived from the M20 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a cytokeratin preparation purified from the human breast carcinoma cell line MCF7.¹ The isotype is determined using the Sigma ImmunoType Kit (Sigma Stock No. ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Sigma Stock No. ISO-2). The product is provided as ascites fluid with 0.1% sodium azide (see MSDS)* as a preservative.

Specificity

Monoclonal Anti-Cytokeratin 8¹ recognizes the 52.5 kD band in immunoblotting (the weak 45 kD band appears to be a degradation product). It reacts specifically with a wide variety of human simple and complex epithelia (e.g., liver, intestine, pancreas, urinary bladder, salivary gland, thyroid, prostate, mesothel, and placenta). It does not react with stratified squamous epithelia. With a few possible exceptions (e.g., certain smooth muscle cells), it does not react with non-epithelial tissues. This antibody is reactive with methanol- or acetone-fixed frozen sections, and with certain protease-digested, formalin-fixed, paraffin-embedded human tissues. Anti-Cytokeratin 8 cross reacts with cytokeratin from many mammalian species (e.g., rabbit, cow, dog, and cat).

Description

Intermediate filaments are abundant cytoplasmic structural proteins in most vertebrate cells. Cytokeratins, a group comprised of at least 29 different proteins, are characteristic of epithelial and tri-chocytic cells. Cytokeratin 8 is a member of the type II, neutral-to-basic subfamily. It is a 52.5 kD polypeptide differentially expressed² in various human tissues. Cytokeratin 8 can be detected by biochemical or immunohistochemical means³ in simple, glandular, pseudo-stratified and transitional epithelium.

Neoplastic cells usually retain the intermediate filament pattern of their cell of origin.

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 8 is a chain specific antibody which can facilitate typing of normal, metaplastic and neoplastic cells.

Uses

Monoclonal Anti-Cytokeratin 8 may be used for the localization of cytokeratin 8 using various immunochemical assays including immunoblotting, dot blotting and immunohistochemistry (immunofluorescence or immuno-enzymatic staining).

Titer: At least 1:200

The antibody titer was determined by indirect immunofluorescent staining of frozen sections of human or animal tissues.

In order to obtain best results in different techniques and preparations, it is recommended that each individual user determine their optimum working dilutions by titration assay.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage freeze, 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.

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 hazardous and safe handling practices.

References

1. Van Muijen, G., et al., Lab. Invest. **57**, 359 (1987).
2. Van Muijen, G., et al., Exp. Cell es. **171**, 331 (1987).
3. Oosterwijk, E., et al., J. Histochem. Cytochem., **38**, 385 (1990).

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