

Product No. F-3772
Monoclonal Anti-Cytokeratin Peptide 7
FITC Conjugate
Purified Mouse Immunoglobulin
Clone LDS-68

Lot 051H4808

FITC Monoclonal Anti-Cytokeratin Peptide 7 is a purified mouse monoclonal antibody conjugated with fluorescein isothiocyanate (FITC) isomer I. Monoclonal anti-Cytokeratin Peptide 7 (mouse IgG1 isotype) is derived from the LDS-68 hybridoma¹ produced by the fusion of mouse myeloma cells and splenocytes of immunized BALB/c mice. Cytoskeletal preparations from the human bladder carcinoma cell line RT4 were used as immunogen. The isotype is determined using 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 conjugate is provided as a solution in 0.01M phosphate buffered saline, pH 7.4, containing 1% BSA with 0.01% thimerosal as a preservative.

Specificity

Monoclonal anti-Cytokeratin Peptide 7 recognizes the 54 kD cytokeratin 7 band in immunoblotting. It reacts specifically with a variety of human simple epithelia (e.g. bile ducts, mammary gland, sweat glands, urinary bladder, endocervix, placenta), simple epithelia of the stomach, colon, pancreatic acini, hepatocytes and myoepithelial cells. No reactivity is found with epidermis. 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 Peptide 8 reacts with cytokeratin from several mammalian species (e.g. guinea pig, hamster and rabbit).

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 trichocytic cells. Cytokeratin Peptide 7 is a member of the type II, neutral-to-basic subfamily. It is a 54 kD polypeptide differentially expressed in various human tissues. Cytokeratin Peptide 7 can be detected by

biochemical or immunohistochemical means in simple, transitional epithelium. Neo-plastic 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. FITC Monoclonal anti- Cytokeratin Peptide 7 is a chain specific antibody which can facilitate typing of normal, metaplastic and neoplastic cells.

Uses

FITC Monoclonal anti-Cytokeratin Peptide 7 may be used for the localization of cytokeratin peptide 7 using direct immunofluorescent staining. It enables double staining in combination with antibodies directed against other markers in cytological, histological and cultured preparations.

Titer: 1:25

The antibody titer was determined by direct immunofluorescent staining of protease digested formalin-fixed, paraffin embedded sections of human 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 0-5°C. 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. Protect from prolonged exposure to light.

References

1. Southgate, G., et al., Lab. Invest., **56**, 211 (1987).

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