Cytokeratin 19 (CK19)
Concentrated and Prediluted Monoclonal Antibody
Control Number: 901-242-083017

Catalog Number: CM 242 A, C
PM 242 AA
Description: 0.1, 1.0 ml, concentrated
6.0 ml, prediluted
Dilution: 1:100-1:200
Ready-to-use
Diluent: Van Gogh Yellow
N/A

Protocol Recommendations (manual use)

CK19 reacts with the rod domain of human keratin 19, a 40 kDa polypeptide. The antibody reacts with MCF-7 cells and has been shown to label trichoblastoma, thyroid tumors, oral cancer, and epithelial odontogenic tumors. CK19 is not expressed in most hepatocytes, therefore Cytokeratin 19 is useful in the identification of liver metastasis and can be used in a panel with Hepatocyte Specific Antigen (HepPar1).

Principle of Procedure:
Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. A secondary antibody may be applied to bind the primary antibody, followed by an enzyme labeled polymer; or an enzyme labeled polymer may be applied directly to bind the primary antibody. The detection of the bound primary antibody is evidenced by an enzyme-mediated colorometric reaction.

Source: Mouse monoclonal
Species Reactivity: Human; others not tested.
Clone: Ks19.1
Isotype: IgG2a/k
Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig concentration.
Epitope/Antigen: CK19
Cellular Localization: Cytoplasmic
Positive Control: Colon cancer, skin
Known Applications: Immunohistochemistry (formalin-fixed paraffin-embedded tissues)
Supplied As: Buffer with protein carrier and preservative
Storage and Stability:
Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

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Protocol Recommendations (manual use)

Peroxide Block: Block for 5 minutes with Biocare's Peroxidazed 1.
Pretreatment Protocol: Heat Retrieval Method: Retrieve sections under pressure at using Biocare's Decloaking Chamber, followed by a wash in distilled water; alternatively, steam tissue sections for 45-60 minutes. Allow solution to cool for 10 minutes then wash in distilled water.
Alternative Digestion Method (recommended for skin tissues): Digest with Pepsin enzyme for 5 minutes at 37°C -or- for 15 minutes at RT.
Protein Block (Optional): Incubate for 5-10 minutes at RT with Biocare's Background Punisher.
Primary Antibody: Incubate for 30 minutes at RT.

Protocol Recommendations (ONCORE Automated Slide Staining System)

Protocol Editor should be programmed as follows:

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Protocol Suggestions:

Peroxide Block: Block for 5 minutes with Biocare's Peroxidazed 1.
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Quality Control:

Precautions:
1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN₃) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976) (2)
Precautions Cont'd:
2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water. (3)
3. Microbial contamination of reagents may result in an increase in nonspecific staining.
4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
5. Do not use reagent after the expiration date printed on the vial.
6. The SDS is available upon request and is located at http://biocare.net/.

References: