Cytokeratin 5/6 (CK 5/6)
Concentrated and Prediluted Monoclonal Antibody
901-105-040819

Intended Use:
For In Vitro Diagnostic Use

Cytokeratin 5/6 [CK5/6.007] is a mouse monoclonal antibody that is intended for laboratory use in the qualitative identification of cytokeratin 5 and 6 proteins by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient’s clinical history and other diagnostic tests by a qualified pathologist.

Summary and Explanation:
Studies have shown Cytokeratin 5/6 reacts with human epidermis and non-keratinizing epithelium as determined by immunoblotting. Studies have also shown it reacts with cytokeratin No. 6, and weakly reacts with cytokeratin No. 4. It does not react with cytokeratins 1, 7, 8, 10, 13, 14, 18 and 19. CK5/6 has been shown to be a reliable marker for mesothelia and squamous cell carcinoma of the lung. It does not react with pulmonary adenocarcinoma.

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. After labeling the antigen with a primary antibody, a one-, two- or three-step detection procedure can be employed. The one-step procedure will feature an enzyme-labeled polymer that binds to the primary antibody. A two-step procedure will feature a secondary antibody added to bind to the primary antibody. An enzyme-labeled polymer is then added to bind to the secondary antibody. The three-step detection procedure will feature a secondary antibody added to bind to the primary antibody followed by a linker antibody step for maximum binding. An enzyme-labeled polymer is then added to bind to the linker antibody. These detections of the bound antibodies are evidenced by a colorimetric reaction.

Source: Mouse monoclonal

Species Reactivity: Human; others not tested

Clone: CK5/6.007
Isotype: IgG1

Protein Concentration: Call for lot specific Ig concentration.

Epitope/Antigen: CK5/6

Cellular Localization: Cytoplasmic

Positive Tissue Control: Prostate or 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. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Protocol Recommendations (VALENT Automated Slide Staining Platform):

VLTM 105 G20 is intended for use with the VALENT. Refer to the User Manual for specific instructions for use. Protocol parameters in the Protocol Manager should be programmed as follows:

Deparaффinisation: Deparaффinize for 8 minutes with Val DePar.

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Chromogen: Chromogen: Incubate for 5 minutes with Val DAB.

Counterstain: Counterstain with hematoxylin.

Linker: Incubate for 10 minutes with Val Universal Linker.

Polymer: Incubate for 10-20 minutes with Val Universal Polymer.

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Deparaффinisation: Deparaffinize for 8 minutes with Val DePar.

Chromogen: Incubate for 5 minutes with Val DAB.

Counterstain: Counterstain with Val Hematoxylin.

Precautions:
This antibody, for intelliPATH FLX and manual use, has been standardized with MACH 4 detection system. Use TBS for washing steps.

Limitations:
The optimum antibody dilution and protocols for a specific application may vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Biocare products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.

Quality Control:
Precautions Cont'd:
injected. 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)

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 into 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.

Troubleshooting:
Follow the antibody specific protocol recommendations according to data sheet provided. If atypical results occur, contact Biocare's Technical Support at 1-800-542-2002.

References: