Mucin 5AC (Gastric Mucin)
Concentrated Monoclonal Antibody
901-231-080818

Catalog Number: CM 231 A
Description: 0.1 ml, concentrated
Dilution: 1:100
Diluent: Da Vinci Green

Intended Use:
For In Vitro Diagnostic Use
Mucin 5AC (Gastric Mucin) [45M1] is a mouse monoclonal antibody that is intended for laboratory use in the qualitative identification of MUC5AC protein 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:
Mucins are high molecular weight glycoproteins with 80% carbohydrate contents and the remaining 20% is constituted by protein core. Gastric mucin M1 antigens are found in columnar mucus cells of surface gastric epithelium and in goblet cells of the fetal and pre-cancerous colon, but not in normal colon. Evidence from the literature suggests that they are associated with peptide core of mucins. Resurgence of gastric mucin reactivity during colon carcinogenesis is suggested to be due to either reexpression of the peptide core of gastric (or fetal colonic) mucins in the adult colon, or due to changes on the glycosylation pattern of mucin which expose the hidden M1 antigens.

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 secondary antibody is added to bind to the primary antibody. An enzyme label is then added to bind to the secondary antibody; this detection of the bound antibody is evidenced by a colorimetric reaction.

Source: Mouse monoclonal
Species Reactivity: Human; others not tested
Clone: 45M1
Isotype: IgG1/kappa
Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig concentration.
Epitope/Antigen: MUC5AC
Cellular Localization: Cytoplasmic
Positive Tissue Control: Stomach
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.

Protocol Recommendations Cont’d:

Proticase Block: Block for 5 minutes with Biocare’s Peroxidazed 1.

Pretreatment:
Perform heat retrieval using Biocare’s Reveal Decloaker. Refer to the Reveal Decloaker product data sheet for specific instructions.

Protein Block (Optional): Incubate for 5-10 minutes at RT with Biocare’s Background Punisher.

Primary Antibody: Incubate for 30 minutes at RT.

Probe: Incubate for 10 minutes at RT with a secondary probe.

Polymer: Incubate for 10-20 minutes at RT with a tertiary polymer.

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) (5)
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. (6)
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: