Mucin 5AC (MUC5AC) / Gastric Mucin Ab-2 (Clone 1-13M1)

Mouse Monoclonal Antibody

Cat. #MS-551-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200 µg/ml) (Purified Ab with BSA and Azide)
Cat. #MS-551-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
Cat. #MS-551-PCS (5 Slides) (Positive Control for Histology)

Description: Mucins are high molecular weight glycoproteins with 80% carbohydrate content and the remaining 20% is constituted by protein core. Gastric mucin M1 antigens are detected found in columnar mucus cells of surface gastric epithelium and in goblet cells of the fetal and precancerous colon but not in those of normal colon. Evidence from the literature suggests that they are associated with the peptide core of mucins. Resurgence of gastric mucin reactivity during colonic carcinogenesis is suggested to be due to either re-expression of the peptide core of gastric (or fetal colonic) mucins in the adult colon or due to changes in the glycosylation pattern of mucin which expose the hidden M1 antigens.

Comments: Ab-2 recognizes the peptide core of gastric mucin M1 (>1,000kDa) (recently identified as Mucin 5AC).

Mol. Wt. of Antigen: >1,000kDa

Epitope: Its epitope is destroyed by β-mercaptoethanol and proteases but not by periodate treatment.

Species Reactivity: Human, Monkey, Rabbit, Cat, Mouse, Rat, Cow, and Chicken. Does not react with pig and hedgehog. Others-not known.

Clone Designation: 1-13M1

Ig Isotype: IgG1

Immunogen: M1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le(a-) patient.

Applications and Suggested Dilutions:
- Immunohistology (Formalin/paraffin) (Ab-1 is better)
  (Use Ab at 1-2µg/ml for 30 min at RT)
- (No special pretreatment is required for immuno- histochemical staining of formalin-fixed tissues).

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Stomach

Cellular Localization: Cytoplasmic and cell surface

Supplied As: 200µg/ml antibody purified from the ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability: Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

Limitations and Warranty:
Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:
This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only
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Suggested References:
3. Tenti P; Romagnoli S; Silini E; Zappatore R; Giunta P; Stella G; Carnevali L. Cervical adenocarcinomas express markers common to gastric, intestinal, and pancreatobiliary epithelial cells. Pathology, Research and Practice, 1994, 190(4):342-9.
5. Brown RW; Clark GM; Tandon AK; Allred DC. Multiple-marker immunohistochemical phenotypes distinguishing malignant pleural mesothelioma from pulmonary adenocarcinoma [see comments]. Human Pathology, 1993, 24(4):347-54.
9. Tenti P; Aguzzi A; Riva C; Usellini L; Zappatore R; Bara J; Samloff IM; Solcia E. Ovarian mucinous tumors frequently express markers of gastric, intestinal, and pancreatobiliary epithelial cells. Cancer, 1992, 69(8):2131-42.
14. Fiocca R; Villani L; Tenti P; Cornaggia M; Finzi G; Riva C; Capella C; Bara J; Samloff IM; Solcia E. The foveolar cell component of gastric cancer [corrected and republished article originally printed in Hum Pathol 1990 Jan;21(1):83-92]. Human Pathology, 1990, 21(3):260-70.
19. Truong LD; Maccato ML; Awalt H; Cagle PT; Schwartz MR; Kaplan AL. Serous surface carcinoma of the peritoneum: a clinicopathologic...
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