


# MUC5AC (Mucin 5AC / Gastric Mucin); Clone 45M1 (Concentrate)


**Availability/Contents:**

<u>Item #</u>	<u>Volume</u>
RA0221-C.5	0.5 ml

**Description:**


Species:	Mouse
Immunogen:	M1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le(a-b) patient.
Clone:	45M1
Isotype:	IgG1, kappa
Entrez Gene ID:	4586 (Human); 17833 (Mouse); 682837 (Rat)
Hu Chromosome Loc.:	11p15.5
Synonyms:	Apomucin Major Airway Glycoprotein; Mucin 5 subtype AC tracheobronchial; Mucin 5 Subtypes A and C; Mucin 5AC oligomeric mucus/gel forming; Tracheobronchial Mucin (TBM).
Mol. Weight of Antigen:	>1,000kDa
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	This antibody recognizes the peptide core of gastric mucin M1 (>1,000kDa) (recently identified as Mucin 5AC). Its epitope is destroyed by beta-mercaptoethanol and proteases, but not by periodate treatment. This antibody to gastric mucin M1 reacts with the gastric epithelium of normal human gastrointestinal tract as well as with the precancerous and cancerous colon, but it does not react with normal adult colon. It also reacts with fetal colonic mucosa. Resurgence of gastric mucin reactivity during colonic carcinogenesis is due to re-expression of the peptide core of gastric (or fetal colonic) mucins.
Background:	Mucin 5AC glycoprotein (MUC5AC) is a 641kDa glycoprotein belonging to the superfamily of mucins. Mucins are high molecular weight glycoproteins produced by epithelial cells and can be divided into two families: secretory mucins and membrane bound mucins. MUC5AC is a mucus-forming secreted mucin that is found in normal gastric and tracheobronchial mucosa, but is absent from normal colon. MUC5AC expression is present in primary ovarian mucinous cancer, but is usually absent in colorectal adenocarcinoma, thus showing an expression pattern opposite to MUC2. Together with a panel of antibodies, anti-MUC5AC may be useful for differential identification of primary mucinous ovarian tumors from colon adenocarcinoma metastatic to the ovary. MUC5AC antibodies may also be useful for identification of intestinal metaplasia as well as in the identification of pancreatic carcinoma and pre-cancerous changes vs. normal pancreas.
Species Reactivity:	Human, Monkey, Rabbit, Cat, Mouse, Rat, Pig, Hedgehog and Chicken. Does not react with Cow. Others not known.
Positive Control:	Stomach
Cellular Localization:	Cytoplasmic
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1µg/million cells Immunofluorescence: 1-2 µg/ml Western Blotting: 0.5-1µg/ml Immunoprecipitation: 1-2 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

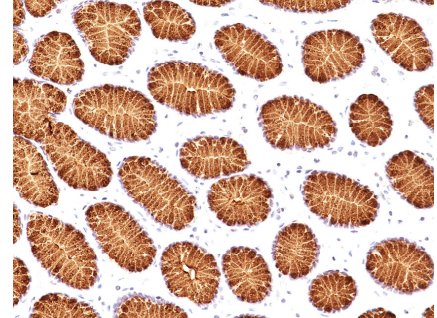


ScyTek Laboratories, Inc.  
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Logan, UT 84321  
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 EmergoEurope (31)(0) 70 345-8570  
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**Uses/Limitations:** Not to be taken internally.  
 For Research Use Only.  
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
 Do not use if reagent becomes cloudy.  
 Do not use past expiration date.  
 Non-Sterile.



**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

Formalin-fixed, paraffin-embedded human stomach stained with MUC5AC; Clone 45M1.

**Procedure:**

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:**


Contains Sodium Azide as a preservative (0.09% w/v).  
 Do not pipette by mouth.  
 Avoid contact of reagents and specimens with skin and mucous membranes.  
 Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Bara J *et. al.* International Journal of Cancer, 1991, 47(2):304-10.
2. Bara J *et. al.* Journal of Immunological Methods, 1992, 149(1):105-13.

**Warranty:**


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Storage: 2° C  8° C



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