Mucin 5AC / MUC 5AC Monoclonal Mouse Antibody (2-12M1)

Product Description

This MAb recognizes the peptide core of gastric mucin M1 (recently identified as Mucin 5AC). Its epitope is located in the N-terminal cysteine rich part of the peptide core of MUC5AC, which is heavily glycosylated. Its epitope is destroyed by beta-mercaptoethanol but not by periodate treatment. MAb 2-11M1 reacts with the protein backbone exclusively; it only reacts with fully deglycosylated MUC5AC. Therefore, the material under test should also be fully deglycosylated. This can be achieved with standard periodate oxidation method. The success of the deglycosylation can be checked with routine PAS (Periodic Acid Shiff) staining. After deglycosylation, the preparation should no longer be stainable with PAS reagent. Only then 2-11M1 will react should MUC5AC be present. This mucin is present in primary ovarian mucinous cancer but 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. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the

CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Int J Cancer (1998) 75: 767-773. (RIA)
2. Arch Ophthamol (2007) 125 (10): 1337-1344 (IF, FFPE)
3. FEBS J (2008) 275: 481-489. (WB, epitope mapping)
4.

Product attributes

Antibody number	#0438
Antibody reactivity (target)	Gastric Mucin, MUC5AC
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	2-12M1
Isotype	IgG1, kappa
Molecular weight	>1,000 kDa
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)
Human gene symbol	MUC5AC
Entrez gene ID	4586
SwissProt	P98088
Unigene	534332
Immunogen	M1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le(a-b) patient
Antibody target cellular localization	Secreted (extracellular)
Species reactivity	Cat, Cow, Human, Monkey, Mouse
Expected antibody applications	RIA (published for clone), IHC (FFPE) (published for clone), WB (published for clone)
Antibody application notes	Flow cytometry: 0.5-1 ug/million cells; Immunofluorescence: 1-2 ug/mL; Optimal dilution for a specific application should be determined., Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody
Positive control	MCF-7 cells. Human colon or stomach (IHC).
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Cell/tissue expression	Epithelial cells
Antibody research areas	Cancer, Mucins

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	