

Mucin 5AC / MUC 5AC Monoclonal Mouse Antibody (45M1)



Product Description

This MAb recognizes the peptide core of gastric mucin M1 (recently identified as Mucin 5AC). Its epitope is located in the C-terminal cysteine rich part of the peptide core of MUC5AC. The epitope is destroyed by beta-mercaptoethanol but not by periodate treatment. 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.

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.

Catalog number key for antibody number 0031, Anti-Mucin 5AC (45M1)

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Product attributes

Antibody number	#0031		
Antibody reactivity (target)	Mucin 5AC		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	45M1		
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)		
Verified antibody applications	IHC (FFPE) (verified)		
Species reactivity	Cat, Chicken, Hedgehog, Human, Monkey, Mouse, Pig, Rabbit, Rat		
Expected antibody applications	ELISA (published for clone), Flow, surface (published for clone), WB (published for clone)		
Antibody application notes	Flow cytometry: 0.5-1 ug/million cells in 0.1 mL, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Immunofhistology formalin-fixed 1-2 ug/mL, Does not react with cow, others not known, Staining of formalin-fixed tissues requires bolling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user		
Positive control	Stomach		
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		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
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		
Antibody research areas	Cancer, Mucins		
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.		
Cell/tissue expression	Epithelial cells		
Tumor expression	Ovarian cancer		

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
BNC74	CF®740	742/767	633-685	775/50	CF®740 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	

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References

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

- Biochem J (2002) 364, 191-200. (IHC, FFPE; ELISA)
 FEBS Journal 275 (2008): 481-489. (WB; epitope mapping)
 Cancer Immunol Immunother (2013) 62: 1011-1019. (Flow, surface)

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