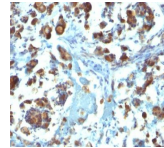


Mucin 3 / MUC 3 Monoclonal Mouse Antibody (M3.1)



Product Description

This antibody recognizes a protein of HMW, identified as mucin 3 glycoprotein (MUC3). Its epitope localizes between aa SITTTT. This MAb shows no cross-reaction with human milk fat globule membranes, MUC1, or MUC2. MUC3 is distributed in colon and rectum, and is also present to a lesser extent in breast, lung and salivary gland tissues. The Mucins are a family of highly glycosylated, secreted proteins with a basic structure consisting of a variable number of tandem repeats (VNTRs) encoded by 60 base pairs (Mucin 1), 69 base pairs (Mucin 2) and 51 base pairs (Mucin 3). The number of repeats is highly polymorphic and varies among different alleles. Mucin 1 proteins are expressed as type I membrane proteins in addition to secreted forms. Mucin 1 is aberrantly expressed in epithelial tumors including breast carcinomas. Mucin 2 coats the epithelia of the intestines and airways and is associated with colonic tumors. Mucin 3 is a major component of various mucus gels and is broadly expressed in normal and tumor cells. 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. **Catalog number key for antibody number 0990, Anti-Mucin 3 (M3.1)**

Product attributes

Antibody number	#0990
Antibody reactivity (target)	Mucin 3
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	M3.1
Isotype	IgG2a, kappa
Molecular weight	1100 kDa
Synonyms	DOM; PCWH; SOX10; SRY (sex determining region Y) box 10; SRY box containing gene 10; SRY related HMG box gene 10; Waardenburg syndrome type 2E (WS2E); WS4; Waardenburg syndrome type 4C (WS4C)
Human gene symbol	MUC3A
Entrez gene ID	4584 & 57876
SwissProt	Q02505 & Q9H195
Unigene	744422 & 744530
Immunogen	A synthetic peptide of 35 amino acids, SIB35 (C-HSTPSFTSSITTTTSHSTPSFTSSITTTT which contains two of the MUC3 tandem repeats, coupled to KLH).
Antibody target cellular localization	Plasma membrane
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL. Immunohistochemistry formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user.
Positive control	LS174T cells or colon carcinoma and normal colon tissue.
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
Cell/tissue expression	Epithelial cells, Intestine
Tumor expression	Breast cancer, Colorectal cancer

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

Dye Features
[CF®405S Features](#)
[CF®488A Features](#)
[CF®568 Features](#)
[CF®594 Features](#)
[CF®640R Features](#)
[CF®647 Features](#)

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