## Mucin 3 Monoclonal Mouse Antibody (MUC3/1154)



## **Product Description**

This antibody recognizes a protein of HMW, identified as mucin 3 glycoprotein (MUC3). This MAb shows no cross-reaction with human milk fat globule membranes, MUC1, or MUC2. 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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1154, Anti-Mucin 3 (MUC3/1154)

## Product attributes

Regulatory status

formulation

Antibody/conjugate

Antibody research areas

Cell/tissue expression

**Tumor expression** 

Call us: 800-304-5357

Product attributes				
Antibody number	#1154			
Antibody reactivity (target)	Mucin 3			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	MUC3/1154			
Isotype	IgG2a, kappa			
Molecular weight	1100 kDa			
Synonyms	Intestinal mucin-3A; intestinal mucin-like; MUC3; MUC3B; mucin 3, intestinal; mucin 3A, cell surface associated; mucin 3A, intestinal; mucin 3B, cell surface associated			
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-HSTPSFTSSITTETTSHSTPSFTSSIT which contains two of the MUC3 tandem repeats, coupled to KLH.			
Antibody target cellular	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, Does not react with rat; others not known, Immunohistology 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 Gastric Carcinoma.			
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

For research use only (RUO)

without azide

Cancer, Mucins

Epithelial cells, Intestine

Breast cancer, Colorectal cancer

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

Email: btinfo@biotium.com

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,	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, of LI-COR Bioscience.