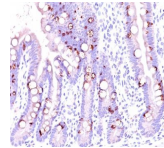


# Mucin 2 / MUC2 Monoclonal Mouse Antibody (CCP58)



## Product Description

Recognizes a single glycoprotein of 520 kDa, identified as mucin 2 (MUC2). This MAb shows no cross-reaction with human milk fat globule membranes, MUC1, or MUC3. Its epitope has been defined as GTQTP (GlyThrGlnThrPro). Mucins are high molecular weight glycoproteins, which constitute the major component of the mucus layer that protects the gastric epithelium. MUC2 is specifically expressed in goblet cells of the small intestine & colon; in about 65% of colonic carcinomas and about 40% of gastric carcinomas. MUC2 is rarely expressed outside of the GI tract with the exceptions of mucinous carcinoma of breast and clear cell-type carcinomas of the ovary.

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](mailto: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.

- Int J Cancer (1997)73: 795-801. (ELISA)
- Gastroenterol (2002) 123(3):817-826. (WB)
- Gastroenterol (2002) 123(4): 1052-1060. (IHC, FFPE)
- SEPTEMBER 01, 2002Chem Senses (2019) 44(7): 511-521. (IF, frozen tissue sections)

## Product attributes

Antibody number	#0032
Antibody reactivity (target)	MUC2, Mucin 2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CCP58
Isotype	IgG1, kappa
Molecular weight	520 kDa
Synonyms	Mucin-2, Intestinal mucin-2, Mucin like protein, (MLP), SMUC
Human gene symbol	MUC2
Entrez gene ID	4583
SwissProt	Q02817
Unigene	315
Immunogen	A synthetic peptide of 29 amino acids, KYPTTTPISITTTMVTPTPTGTQTPPTT from MUC2 protein, coupled to KLH.
Antibody target cellular	Secreted (extracellular)
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Expected antibody applications	ELISA (published for clone), IF (published for clone), WB (published for clone)
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, 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 small intestine.
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	Goblet cells, Intestine
Tumor expression	Colorectal cancer, Gastrointestinal cancer

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