

# Clostridium difficile Toxin A Monoclonal Mouse Antibody (253/422)

## Product Description

This MAb reacts with C. difficile Toxin A, but not with Cholera subunit a, Cholera toxin, Pseudomonas aeruginosa exotoxin A, H-LT, P-LT. Clostridium difficile is a major nosocomial pathogen that causes antibiotic-associated colitis. Clostridium difficile mediates inflammatory diarrhea by releasing two large protein enterotoxins (Toxin A and Toxin B) that are able to disrupt intestinal epithelial cells via their transferase activity and ability to monoglucosylate members of the Rho family. Clostridium difficile Toxin A is a toxin that is composed of 39 repeats that are responsible for binding to intestinal epithelial cell surface carbohydrates. Clostridium difficile Toxin A causes significant apoptosis of colonocytes which contributes to the formation of ulcers and pseudo-membranes in a pathway that involves p38-dependent activation of p53 and induction of p21, leading to cytochrome c release and caspase-3 activation through Bak activation. 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.

### Product attributes

Antibody number	#0202
Antibody reactivity (target)	Clostridium difficile Toxin A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	253/422
Isotype	IgG1, kappa
Molecular weight	308 kDa (Toxin A)
Synonyms	Clostridium difficile; C. difficile; tcdA; toxA
Human gene symbol	Not Applicable
Entrez gene ID	Not Applicable
SwissProt	P16154
Unigene	Not Applicable
Immunogen	C. difficile Toxin A
Antibody target cellular localization	Secreted (extracellular)
Species reactivity	Clostridium difficile
Antibody application notes	For coating for ELISA, order Ab without BSA. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry
Positive control	Clostridium difficile extract or infected cells. 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
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

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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