ALPHA DIAGNOSTIC INTERNATIONAL

PRODUCT SPECIFICATION SHEET

Clostridium Difficile Toxin A

Cat # CDTA11-S | Rabbit Anti-Clostridium Difficile Toxin A antiserum | **SIZE**: 100 ul

Clostridium difficile has been recognized as a toxin-producing anaerobic bacterium responsible for antibiotic-associated colitis, and it is now the most common infectious cause of nosocomial diarrhea. *C difficile*–associated diarrhea (CDAD) and pseudomembranous colitis are believed to result from the actions of 2 bacterial exotoxins, toxin A and toxin B, that are produced by pathogenic strains of the bacterium. Both toxins have cytotoxic and proinflammatory properties. Toxin A causes intestinal injury and secretion in both animals and humans. Toxin B has little effect on the intact intestine in animal models but appears to be a potent toxin for human colon.

Clostridium difficile toxin A (TcdA) is similar to *Clostridium difficile* Toxin B. The toxins are the main virulence factors produced by the gram positive, anaerobic, *Clostridium difficile* bacteria. TcdA is one of the largest bacterial toxins known with a molecular mass of 308 kDa and is usually described as a potent enterotoxin. Risk factors for *C. difficile* infection include antibiotic treatment, which can disrupt normal intestinal microbiota and lead to colonization of *C. difficile* bacteria. The gene contains an open reading frame (ORF) of 8,133 nucleotides, coding for 2,710 amino acids. TcdA and TcdB share 63% homology in their amino acid sequences. Environmental stresses such as antibiotics and catabolite repression can influence toxin expression

Source of Antigen and Antibodies

Antigen	*Clostridium Difficile* Toxoid A purified from *C. difficle* strain VPI 10463 and converted to inactive toxoid form
Ab Host/type	Rabbit, Polyclonal unpurified antiserum (# **CDTA11-S**)
2-ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antiserum

Antiserum (unpurified)
100 ul Solution Lyophilized powder
Supplied in Buffer: 0.1% azide
Reconstitute powder in 100 ul PBS

Storage

Short-term: unopened, undiluted liquid vials at -20°C and powder at 4oC or -20oC..

Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20ºC or below.

General References: Bartlett JG (2002) N Engl J Med., 346, 334–339.

This product is for in vitro research use only.

Related material available from ADI

Catalog#	Description
CDTA11-BTN	Biotinylated Rabbit anti-Clostridium Difficile Toxin A antibody, affinitiy purified
CDTA12-M-1	Mouse Monoclonal anti-Clostridium difficile toxin A IgG (Clone #1)
CDTA12-M-2	Mouse Monoclonal anti-Clostridium difficile toxin A IgG (Clone #2)
CDTA12-M-3	Mouse Monoclonal anti-Clostridium difficile toxin A IgG (Clone #3)
CDTA15-R-25	Native Clostridium Difficile Toxoid A (VPI 10463, >95% Pure)
CDTB12-M-1	Mouse Monoclonal anti-Clostridium difficile toxin B IgG (Clone #1)
CDTB12-M-2	Mouse Monoclonal anti-Clostridium difficile toxin B IgG (Clone #2)
CDTA-010-96	Clostridium difficile Toxin/Toxoid A antigen ELISA kit, 96 tests, Quantitative
CDTA-015	Human anti-Clostridium difficile Toxin A IgG ELISA kit, 96 tests, Quantitative
CDTA-020	Human anti-Clostridium difficile Toxin A IgM ELISA kit, 96 tests, Quantitative

C. difficile toxin A antibody ELISA Kits for various species and antibody isotypes also available

CDTA11-S 180613AC

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