

Antibody Datasheet

Product Name:	Mouse anti <i>Clostridium difficile</i> Toxin B
Clone number:	TB7
Isotype:	Mouse IgG ₁
Product code:	MAB12144-100
Batch Number:	
Amount:	0.1mg
Concentration:	1 mg/ml
Buffer:	Phosphate Buffered Saline pH7.4
Preservative:	0.09% Sodium Azide (NaN ₃)
Purification:	The antibody was purified by affinity chromatography on protein A
Specificity:	<p>This antibody is specific for <i>Clostridium difficile</i> Toxin B. The antibody also recognises Toxoid B. The antibody does not cross react with <i>Clostridium difficile</i> Toxin A.</p> <p>The antibody may be used in a pair with MAB12145. In LFD assays this antibody has been used as membrane bound capture reagent in combination with gold labelled MAB12145.</p>
Applications:	ELISA, LFD

Antigen background: *Clostridium difficile* (*C.difficile*) is a gram positive spore-forming anaerobic bacterium, which was first described in the mid-1930s and was later linked to cases of pseudomembranous colitis. *C.difficile* infection can cause a spectrum of diseases known collectively as *C.difficile* infections (CDI) that range from mild diarrhoea to pseudomembranous colitis and toxic megacolon, severe disease which may lead to



death. Further studies have shown that *C.difficile* is predominantly associated with cases of infectious diarrhoea in patients that have been treated with antibiotics or have disrupted commensal gastrointestinal flora, and is recognised as a leading cause of severe gastrointestinal disease in hospitalised patients ([Voth, DE](#)).

The severity of the disease in each case is determined by the virulence of the *C.difficile* strain, the condition of the patient's normal gut flora and the individual's immune response to intestinal damage.

C.difficile spores are found in soil, human and animal faeces, and some processed meats and can be transmitted from one individual to another through contact with contaminated surfaces. Toxins A and B have been identified as major *C. difficile* virulence factors, which are encoded by the *tcdA* and *tcdB* genes respectively. Both toxin A and toxin B have proinflammatory and cytotoxic activity, which causes disruption to the intestinal epithelium leading to extensive damage and cell death in the large intestine ([Carter, GP](#)).

References:

Voth, DE et al. (2005). Clostridium difficile Toxins: Mechanism of Action and Role in Disease. Clin Microbiol Rev.18(2): 247–263.

Carter, GP et al (2010). The role of toxin A and toxin B in Clostridium difficile-associated disease. Past and present perspectives. Gut Microbes.1(1): 58–64.

Storage:

Store at +4⁰C for up to three months, or at -20⁰C for longer periods
The antibody is shipped at ambient temperature.
Avoid repeated freeze/thaw cycles.

