

## TRUPCR® *Clostridium difficile* Detection Kit

### NEED

*Clostridium difficile* is one of the most common causes of healthcare-associated diarrhea (HCAD). It is by far the most common infectious cause of HCAD, accounts for 25% cases. Highly virulent (hypervirulent) *Clostridium difficile* strains have caused outbreaks of severe disease worldwide. HCAD can cause substantial morbidity, including organ dysfunction, nondiarrheal nosocomial infections, increased length of stay, reduced quality of life, and even death. *C. difficile* infection is the major identifiable cause of antibiotic-associated diarrhea and is responsible for 15–25 percent of all cases, with a marked increase in the incidence of CDI since the last few years.

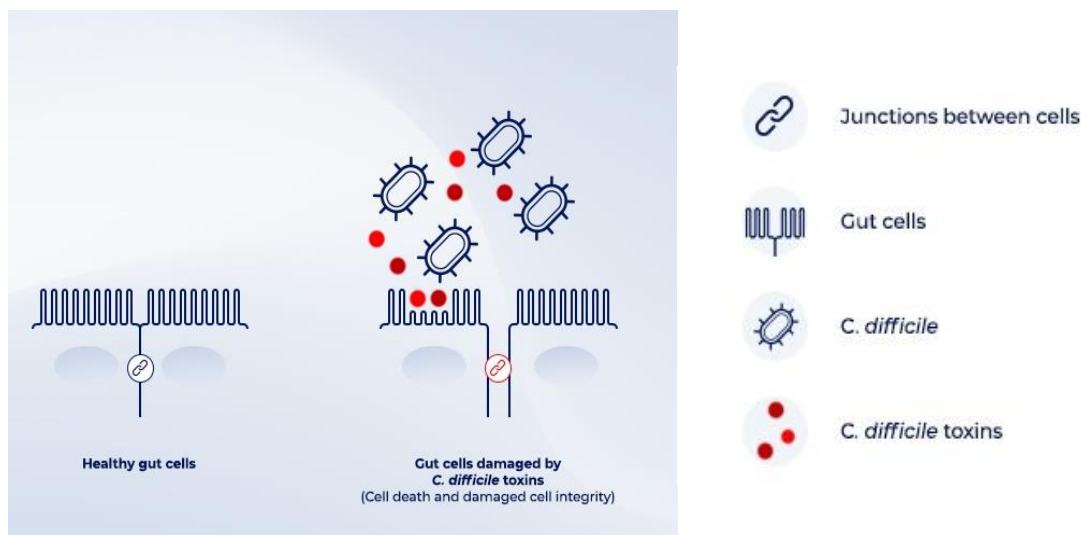
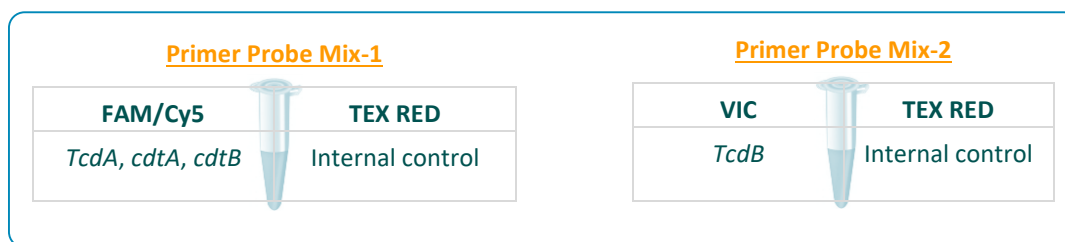


Image Source: <https://www.saccharomycesboulardii.com/therapeutic-area/clostridium-difficile-infection/>

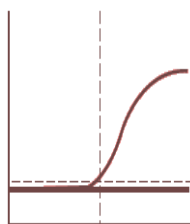
### SOLUTION BY TRUPCR®

TRUPCR® *Clostridium difficile* Detection Kit is a Real-Time amplification test for the qualitative detection of *Clostridium difficile* including hyper virulent species from human clinical samples. The assay detects multiple toxins of *Clostridium difficile* including toxin A (*TcdA*), toxin B (*TcdB*) and binary toxins gene (*cdtA* and *cdtB*). The presence of the genes encoding toxin B and binary toxin have been associated with hypervirulent *C. difficile* strain. It includes two tube assay based on oligonucleotide hydrolysis principle which allows higher specificity and sensitivity. Thus TRUPCR® *Clostridium difficile* Detection Kit provides rapid detection of *Clostridium difficile* and hyper virulent *Clostridium difficile* at once.

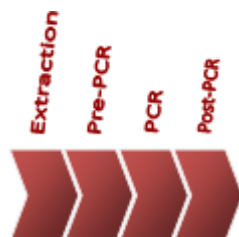
### TARGET PATHOGENS



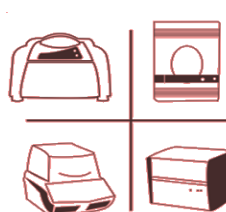
## KEY FEATURES



Endogenous Internal Control incorporated within the kit to ensure reliable results



Complete workflow solution available from Extraction of sample to Post-PCR analysis



Platform agnostic as compatible with various platforms



Rapid and reliable results within 90-100 minutes after PCR Start

## TECHNICAL SPECIFICATIONS

- Sample Type – Stool Specimen
- Clinical Validation – Validated on more than 300 clinical samples
- Target Regions – *TcdA*, *TcdB* and Binary Toxin genes (*cdtA* and *cdtB*)
- Reaction Volume – 25 µl in each tube
- LOD Data: 1000 CFU/ml
- Compatible Instruments – Applied Biosystems™ 7500 series, Applied Biosystems™ QuantStudio® 5, Rotor-Gene Q, Bio-Rad CFX96

## CLINICAL DATA

		Reference Method		
		Positive	Negative	Total
TRUPCR Method	Positive	62	1	63
	Negative	1	54	55
Total		63	55	118

Parameters	Estimate
Sensitivity	98.41%
Specificity	98.18%
Positive Predictive Value	98.41%
Negative Predictive Value	98.18%



## ORDERING INFORMATION

Cat. No.	Description	Size
3B375	TRUPCR® <i>Clostridium difficile</i> Detection Kit	48 Reactions
3B376	TRUPCR® <i>Clostridium difficile</i> Detection Kit	96 Reactions