



# Clostridium difficile Toxin A (5155): sc-58109

## BACKGROUND

*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 pseudomembranes 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.

## REFERENCES

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## SOURCE

Clostridium difficile Toxin A (5155) is a mouse monoclonal antibody raised against *Clostridium difficile*.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Clostridium difficile Toxin A (5155) is recommended for detection of Toxin A of *Clostridium difficile* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Clostridium difficile Toxin A: 308 kDa.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.