

Certificate of Analysis

Name: Clostridium difficile ribotype R087 toxoid A

Product Code: NAT41674-50 / NAT41674-100 / NAT41674-500

Batch #: 47041011

Date of Manufacture: 6th November 2025

Product Description: Native toxin purified from *Clostridioides difficile* (syn. *Clostridium difficile*) ribotype R087, converted to toxoid through processing with formaldehyde.

Strain/Isolate: ribotype R087

Amount: 0.05 mg / 0.10 mg / 0.50 mg

Presentation: Lyophilised. May appear bubbly/glassy due to product stabilisation in sucrose.

Buffer: 50 mM HEPES pH8.0, 150 mM NaCl, 10% (w/v) sucrose.

Reconstitution:

NAT41674-50	100ul sterile pure water	final concentration 500ug/ml
NAT41674-100	200ul sterile pure water	final concentration 500ug/ml
NAT41674-500	1000ul sterile pure water	final concentration 500ug/ml

Verocytotoxicity assay result: No Verotoxicity at 7.81ug/mL (highest concentration tested).

Usage Guidelines

Short Term Storage: 2°C to 8°C lyophilised

Long Term Storage: -80° C after reconstitution

Stability: Lyophilised vial 1 year after date of receipt.

Reconstituted liquid 1 month at 2°C to 8°C, up to 12 months at -80°C.

Freezing: Avoid multiple freeze-thaw cycles and temperature fluctuations of reconstituted product.

Freezing and thawing may cause aggregation and reduce activity.

Mixing: Mix gently to avoid causing aggregation.

Sterility: This product has reduced bioburden through 0.2µm filtration, but is not sterile.

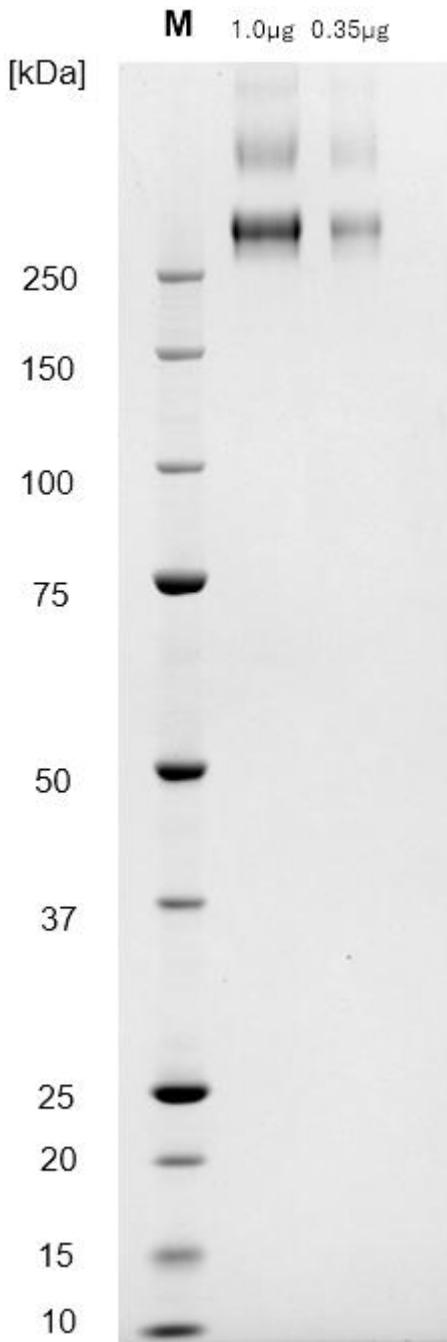
Certificate of Analysis

Name: Clostridium difficile ribotype R087 toxoid A

Product Code: NAT41674-50 / NAT41674-100 / NAT41674-500

Batch #: 47041011

SDS-PAGE: Coomassie-stained reducing SDS-PAGE showing purified Clostridium difficile toxoid A.



Certificate of Analysis

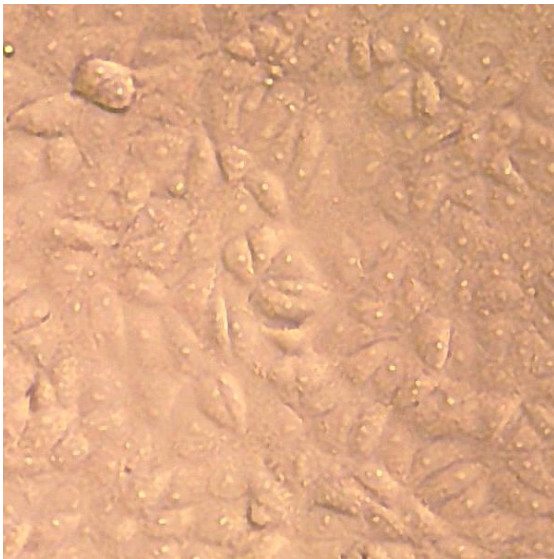
Name: Clostridium difficile ribotype R087 toxoid A

Product Code: NAT41674-50 / NAT41674-100 / NAT41674-500

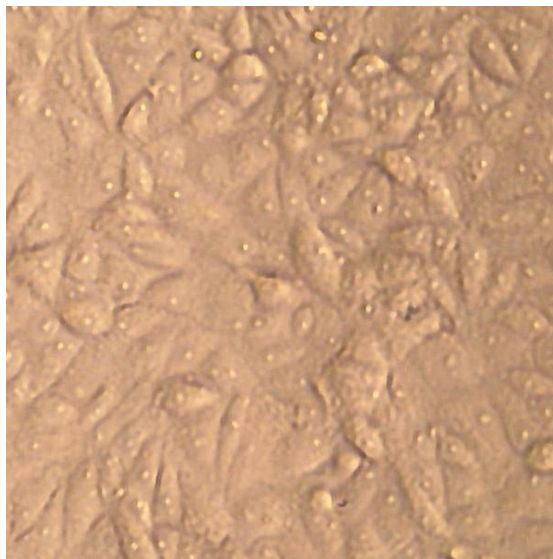
Batch #: 47041011

Verocytotoxicity results

The Toxoid was negative by Verotoxicity up to 7.81µg/ml.



Negative control



Toxoid 7.81µg/ml

30/04/2026

X



QC

Signed by: Toni.Ertl@lgcgroup.com

29/05/2026

X



QA

Signed by: Jo.Berry@LGCGroup.com

Products are for Research Use or for Further Manufacturing Use only. Not for Diagnostic or Therapeutic Use.