

## **Certificate of Analysis for NR-856**

## Epsilon Protoxin, from Clostridium perfringens

## Catalog No. NR-856

(Derived from ATCC®  $3626^{\text{TM}}$ ) This reagent is the property of the U.S. government.

**Product Description:** Epsilon protoxin was purified from culture supernatants of C. perfringens ATCC®  $3626^{\text{TM}}$ . The protein is suitable for western blots or can be treated with trypsin to generate the active toxin for cytotoxicity assays.

Lot: 5053478 Manufacturing Date: DEC2006

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless with no particulate matter	Clear and colorless with no particulate matter
SDS-PAGE (SYPRO Orange densitometer scan)	Dominant band ~ 32 kDa > 95% pure	Dominant band ~ 32 kDa > 98% pure (see Figure 1)
SELDI-TOF Mass Spectrometry	Molecular weight within 5% of theoretical value (33.1 kDa)	Molecular weight within 2% of theoretical value (32.3 kDa)
SELDI-TOF Mass Spectrometry of Protease Digest Trypsin Glutamic C endopeptidase	large fragment representing     activated toxin     > 50% of total residues accounted     for in peptides of expected mass	large fragment representing activated toxin     59% of total residues accounted for in peptides of expected mass
Concentration by Bicinchoninic Acid Protein Assay	Report results	0.5 mg/mL
Functional Activity Western Blot (see Figure 2) <sup>1</sup> Carbonic anhydrase NR-856	Non-reactive Reactive	Non-reactive Reactive
Cytotoxicity in MDCK cells NR-856 NR-4670 (activated toxin)	Report results Report results	CD <sub>50</sub> > 2 μM CD <sub>50</sub> = 0.1 μM
Sterility	0.22 µm filter sterilized	0.22 µm filter sterilized
Endotoxin Content	1 to 10000 EU/mg	< 5 EU/mg
Absorbance Ratio (OD <sub>280</sub> /OD <sub>260</sub> )	Report results	1.8

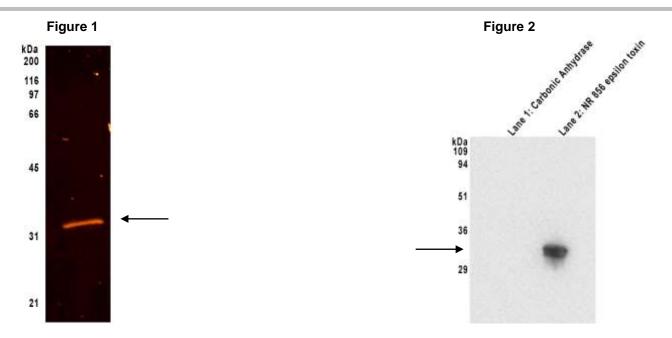
<sup>&</sup>lt;sup>1</sup>Completed with rabbit polyclonal immunoglobulin G to epsilon toxin peptides (NR-865).

Fax: 703-365-2898

800-359-7370



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**Date:** 17 NOV 2008 **Signature:** Signature on File

Title: Technical Manager, BEI Authentication or designee

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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