Certificate of Analysis for NR-44235

Staphylococcal Enterotoxin B Toxoid, Chemically Inactivated from *Staphylococcus aureus* subsp. *aureus*

Catalog No. NR-44235

This reagent is the tangible property of the U.S. Government.

Product Description: Staphylococcal enterotoxin B (SEB) was extracted from a preparation of *Staphylococcus aureus* (*S. aureus*) subsp. *aureus*, strain FDA 243 (ATCC® 14458™), purified by ion exchange chromatography, and chemically inactivated with formaldehyde.

Lot: 61992695 **Manufacturing Date: 09JUL2013**

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
SDS-PAGE (Densitometer Scan)	Protein band of interest represents > 95% of total staining intensity above background	Toxoid band represents > 95% of total staining intensity above background (Figure 1)
SELDI-TOF Mass Spectrometry	Measured mass within 5% of expected mass: 28368 daltons	Measured mass (30037 daltons) within 5.8% of expected mass[1]
SELDI-TOF Mass Spectrometry of Lys-C Proteolysis Products	> 50% of total residues accounted for in peptides of expected mass	54% of total residues accounted for in peptides of expected mass
Concentration by Bicinchoninic Acid Protein Assay	0.5 mg per mL (± 5%)	0.5 mg per mL
Functional Activity Western blot[2] (Figure 2) Staphylococcal enterotoxin B toxoid Carbonic anhydrase	 Reactive Not reactive	 Reactive Not reactive
Cytotoxicity Human interferon-γ ELISPOT assay[3,4] Staphylococcal enterotoxin B (0.357 mM) Staphylococcal enterotoxin B toxoid (35.7 mM) Negative control (cells with no antigen)	 Positive T-cell response Negative T-cell response Negative T-cell response	 > 500 spots per sample < 5 spots per sample < 5 spots per sample
Sterility	0.22 µm filter-sterilized	0.22 µm filter-sterilized

[1]Increased mass is due to formalin treatment.
[2]Using anti-Staphylococcal Enterotoxin B immunoglobulin produced in rabbit
[3]Using Human Interferon-γ ELISPOT Kit (Pierce™ ELHIFNG)
[4]This assay analyzes interferon-γ production at a single cell level. A spot forms at the site where secreted cytokine is bound; one spot is equal to one molecule-secreting cell.

BEI Resources
www.beiresources.org
E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898

Certificate of Analysis for NR-44235

Figure 1

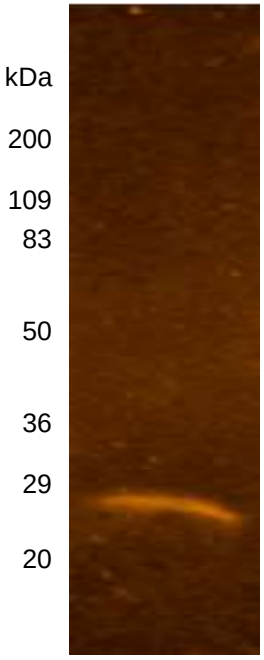
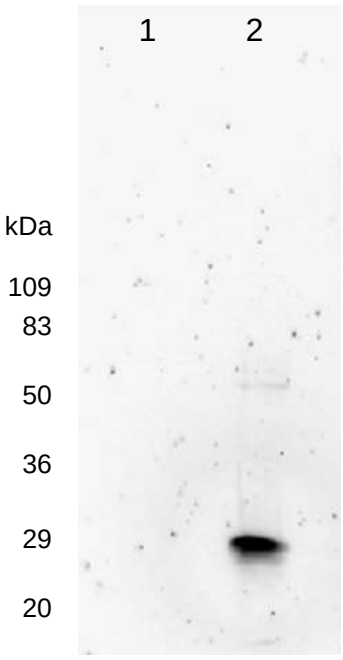


Figure 2



Lane 1: Carbonic anhydrase
Lane 2: NR-44235

Date: 17 DEC 2014

Signature:

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 by the contractor 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.

ATCC® is a trademark of the American Type Culture Collection.
You are authorized to use this product for research use only. It is not intended for human use.

Support Provided by NIAID

BEI Resources
www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898

NR-44235_61992695_17DEC2014