

**Shiga Toxin Type 1 Subunit B, Recombinant from *Escherichia coli***

**Catalog No. NR-860**

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

**Product Description:** NR-860 is a recombinant form of the B subunit of Shiga toxin type 1 (Stx1). The amino acid sequence includes a C-terminal hexa-histidine tag and amino acid residues 21 to 89 of the Stx1 subunit B protein. The recombinant protein was expressed in *Escherichia coli* and purified by nickel affinity chromatography.

**Lot<sup>1</sup>: 63732547**

**Manufacturing Date: 26OCT2015**

TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Clear and colorless	Clear and colorless
<b>SDS-PAGE (SYPRO Orange densitometer scan) (Figure 1)</b>	Dominant band ~ 8.5 kDa > 95% pure	Dominant band ~ 8.5 kDa > 98% pure
<b>SELDI-TOF Mass Spectrometry</b>	Measured mass within 5% of expected mass (8513 Da)	Measured mass (8512 Da) within 0.1% of expected mass
<b>SELDI-TOF Mass Spectrometry of Protease Digest</b> Glutamic C endopeptidase	> 50% of total residues accounted for in peptides of expected mass	86% of total residues accounted for in peptides of expected mass
<b>Concentration by Bicinchoninic Acid Protein Assay</b>	Report results	1.0 mg/mL
<b>Functional Activity Western Blot (Figure 2)<sup>2</sup></b> Carbonic anhydrase Stx1 subunit B (NR-860) with mouse monoclonal antibody to Stx1 subunit B	Non-reactive Reactive	Non-reactive Reactive
<b>Cytotoxicity in Vero Cells</b> Stx1 subunit B (NR-860)	Non-cytotoxic	Non-cytotoxic <sup>3</sup>
<b>Sterility</b>	0.22 µm filter-sterilized	0.22 µm filter-sterilized
<b>Endotoxin Content</b>	1 to 10000 EU/mg	< 125 EU/mg
<b>Absorbance Ratio (OD<sub>280</sub>/OD<sub>260</sub>)</b>	Report results	1.5

<sup>1</sup>This item was manufactured and subjected to quality control testing by Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

<sup>2</sup>Completed with primary antibody BEI Resources NR-844, similar to 13C4

<sup>3</sup>Not cytotoxic at 1:100 dilution (0.01 mg/mL) of NR-860

**Date:** 20 MAY 2016

**Signature:**



BEI Resources Authentication

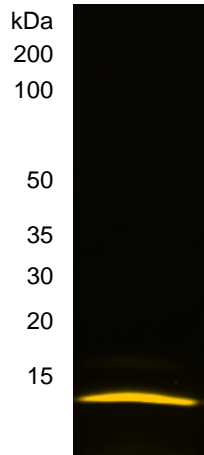
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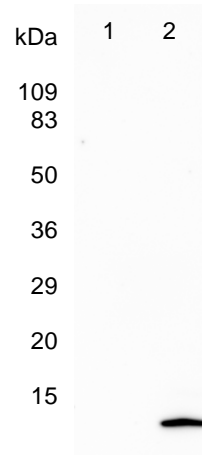
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**Figure 1: SDS-PAGE**



**Figure 2: Western Blot**



Lane 1: Carbonic Anhydrase Negative Control  
Lane 2: NR-860