

**Shiga Toxin Type 2 Subunit B, Recombinant from *Escherichia coli***

**Catalog No. NR-49262**

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

**Product Description:** NR-49262 is a recombinant form of the B subunit of Shiga toxin type 2 (Stx2). The amino acid sequence includes a C-terminal hexa-histidine tag and amino acid residues 20 to 89 of the Stx2 subunit B protein (GenPept: AAD25446). The recombinant protein was expressed in *Escherichia coli* and purified by nickel affinity chromatography.

**Lot: 63709686**

**Manufacturing Date: 22SEP2015**

TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Clear and colorless	Clear and colorless
<b>Purity by SDS-PAGE Densitometry Scan</b>	Protein band of interest represents > 90% of total staining intensity	Dominant band of ~ 9 kDa accounts for >90% of total staining intensity (Figure 1)
<b>SELDI-TOF Mass Spectrometry</b>	Measured mass within 5% of expected mass based on amino acid sequence: 8,640 daltons	Measured mass within 0.03% of expected mass based on amino acid sequence: 8,638 daltons
<b>Concentration by Bicinchoninic Acid Protein Assay<sup>1</sup></b>	Report results	1.14 mg per mL
<b>Functional Activity by Western blot analysis</b> Polyclonal anti-Stx2B <sup>2</sup> Monoclonal anti-histidine tag <sup>3</sup>	Reactive Reactive	Reactive (Figure 2) Reactive (Figure 3)
<b>Cytotoxicity in Vero Cells (Figure 4)</b> NR-49262 Stx2 recombinant active holotoxin <sup>4</sup>	Non-cytotoxic Cytotoxic	Non-cytotoxic Cytotoxic
<b>Endotoxin Content (Limulus Amoebocyte Lysate Assay)</b>	Report results	< 4.38 EU per mg
<b>Filtration</b>	0.2 µm sterile-filtered	0.2 µm sterile-filtered

<sup>1</sup>Using BSA as a standard

<sup>2</sup>BEI Resources NR-9352, Polyclonal Anti-Shiga Toxin 2 Subunit B (IgG, Rabbit) (1:1000 dilution)

<sup>3</sup>R & D Systems® Cat. No. MAB050 (IgG1) (1:1000 dilution)

<sup>4</sup>BEI Resources NR-4478, Shiga Toxin Type 2, Recombinant from *Escherichia coli*

**Date:** 15 DEC 2015

**Signature:**



BEI Resources Authentication

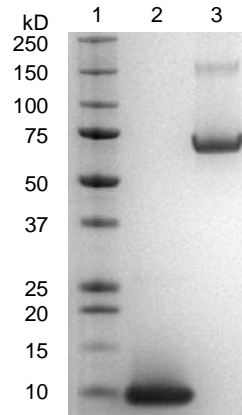
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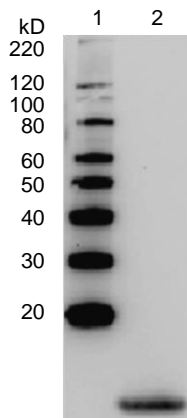


Figure 1: SDS-PAGE



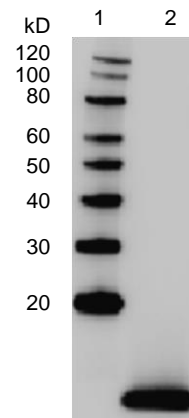
Lane 1: Precision Plus Protein™ Standard  
 Lane 2: NR-49262, 2.0 µg  
 Lane 3: BSA, 2.0 µg

Figure 2: Western Blot with Polyclonal Anti-Stx2B



Lane 1: MagicMark™ XP Protein Standard  
 Lane 2: NR-49262, 2.0 µg

Figure 3: Western Blot with Monoclonal Anti-Histidine Tag



Lane 1: MagicMark™ XP Protein Standard  
 Lane 2: NR-49262, 2.0 µg

Figure 4 – Vero Cell Cytotoxicity Assay

