

**Abrin Toxin, B Subunit with N-Terminal Histidine Tag, Recombinant from *Escherichia coli***

**Catalog No. NR-51637**

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

**Product Description:**

A recombinant form of the abrin subunit linker and abrin-a toxin subunit B (GenPept: [AAB25434](#)) was produced by transformation of purified plasmid in *Escherichia coli* and purified under denaturing conditions using immobilized metal affinity chromatography (cOMplete™ His-Tag Resin). The purified protein was refolded in 20 mM Tris, pH 8.0, 500mM NaCl, 10% glycerol, 0.5% CHAPS and 1 mM DTT using direct dilution. NR-51637 contains an N-terminal hexa-histidine tag and TEV protease cleavage site, as well as the abrin subunit linker and abrin-a B subunit (268 residues).

**Lot: 70029282**

**Manufacturing Date: 12DEC2019**

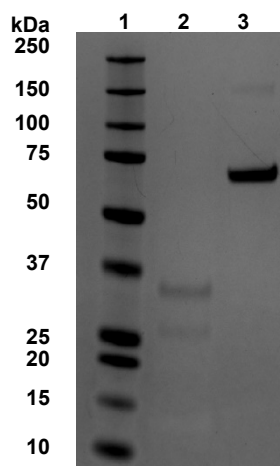
TEST	SPECIFICATIONS	RESULTS
<b>Appearance</b>	Clear and colorless	Clear
<b>SDS-PAGE Analysis (Densitometer Scan)</b>	Protein band of interest represents > 95% of total staining intensity above background	Dominant band at ~ 33kDa represents ~ 73% of total staining intensity (Figure 1) <sup>1</sup>
<b>Concentration by Bradford Assay</b> Bovine Serum Albumin (standard)	Report results	36 µg per mL
<b>Final Product</b> Amount per vial Volume per vial	Report results Report results	36 µg 1 mL
<b>Functional Activity by Western Blot Analysis</b> Monoclonal anti-ricin toxin B chain <sup>2</sup> Monoclonal anti-histidine tag <sup>3</sup>	Reactive Reactive	Reactive (Figure 2) Reactive (Figure 3)
<b>Endotoxin Content (Limulus Amebocyte Lysate Assay)</b>	Report results	< 14.6 EU per mg
<b>Sterility</b>	0.22 µm filter sterilized	0.22 µm filter sterilized

<sup>1</sup>Significant protein loss occurred during refolding.

<sup>2</sup>Using a 1:1000 dilution of mouse monoclonal anti-ricin toxin B (BEI Resources NR-842) as primary antibody and a 1:1000 dilution of HRP-conjugated goat anti-mouse IgG (R&D Systems HAF007) as secondary antibody.

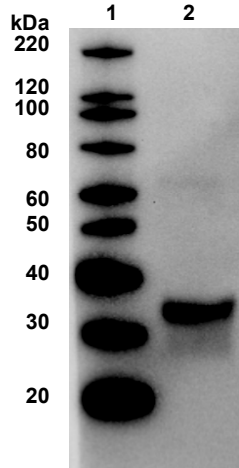
<sup>3</sup>Using a 1:1000 dilution of mouse monoclonal anti-histidine tag (R&D Systems MAB050) as primary antibody and a 1:1000 dilution of HRP-conjugated goat anti-mouse IgG (R&D Systems HAF007) as secondary antibody.

**Figure 1: SDS-PAGE Analysis**



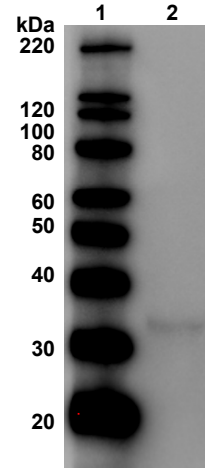
Lane 1: Precision Plus Protein™ Standard  
 Lane 2: NR-51637 (0.8 µg)  
 Lane 3: BSA (1 µg)

Figure 2: Anti-Ricin Western Blot Analysis



Lane 1: MagicMark™ XP Protein Standard  
Lane 2: NR-51637 (0.4 µg)

Figure 3: Anti-Histidine Tag Western Blot Analysis



Lane 1: MagicMark™ XP Protein Standard  
Lane 2: NR-51637 (0.4 µg)

/Heather Couch/  
Heather Couch

Program Manager or designee, ATCC Federal Solutions

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