**Bacillus anthracis** Exosporium Basal Layer Protein BxpB (Locus_Tag: BA_1237) with N-terminal Histidine Tag, Recombinant from *Escherichia coli*

**Catalog No. NR-12132**
This reagent is the tangible property of the U.S. Government.

**For research use only. Not for human use.**

**Contributor and Manufacturer:**
Alison D. O’Brien, Ph.D., Chairperson, and James F. Sinclair, Ph.D., Laboratory Supervisor, Department of Microbiology and Immunology, Uniformed Services University of the Health Sciences, Bethesda, Maryland, USA

**Product Description:**
NR-12132 is a recombinant form of the *Bacillus anthracis* (B. anthracis) protein BxpB (locus_tag: BA_1237) which is known to be expressed in the exosporium and localized to the exosporium basal surface.\(^1\)\(^-\)\(^3\) The amino acid sequence includes 1) an N-terminal hexa-histidine tag 2) a thrombin cleavage site and 3) amino acid residues 1 to 167 of hypothetical protein BxpB from the Ames strain of *B. anthracis* (GenPept: AAP25195).\(^4\) The recombinant protein was expressed in *Escherichia coli* and purified by nickel affinity chromatography. NR-12132 has a theoretical molecular weight of approximately 19 kilodaltons. The predicted amino acid sequence of NR-12132 is shown below in Table 1.

**Material Provided:**
Each vial contains approximately 10 μg of NR-12132 in PBS. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

**Packaging/Storage:**
NR-12132 was packaged aseptically in cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

**Functional Activity:**
NR-12132 reacts with rabbit polyclonal antibody to *B. anthracis* exosporium basal layer protein BxpB (BEI Resources NR-12133) as shown by Western blot analysis.

**Citation:**
Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Bacillus anthracis* Exosporium Basal Layer Protein BxpB (Locus_Tag: BA_1237) with N-terminal Histidine Tag, Recombinant from *Escherichia coli*, NR-12132.”

**Biosafety Level:**
1

**Disclaimers:**
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**References:**


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Table 1 - Predicted Protein Sequence

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<th>MGSSHHHHHH</th>
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<td>SLGTPANIIIP</td>
<td>GSGTAVRSNV</td>
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<td>DLIRIVPVEL</td>
<td>IGTVDIRAAA</td>
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Non-hypothetical protein BxpB residues are underlined.