

Certificate of Analysis for NR-15771

Fraction 1 Capsular Antigen (F1) from *Yersinia pestis* with N-terminal Histidine Tag, Expressed in *Escherichia coli*

Catalog No. NR-15771

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

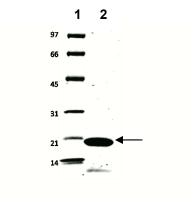
Product Description: NR-15771 is a recombinant form of the *Yersinia pestis (Y. pestis)* fraction 1 capsular antigen (F1). The recombinant protein was expressed in *Escherichia coli* and purified by nickel affinity chromatography.

Lot: 58989373 Manufacturing Date: 15JAN2010

| TEST | SPECIFICATIONS | RESULTS |
|--|---|--|
| Appearance | Clear and colorless, no particulate matter | Clear and colorless, no particulate matter |
| Purity by SDS-PAGE densitometer scan | 18 kDa band represents > 90% of total staining intensity above background | 18 kDa band represents 93% of total staining intensity above background (Figure 1) |
| Identification by Mass Spectrometry of Protease Digested Protein | > 50% of total residues accounted for in peptides of expected mass | 79% of total residues accounted for in peptides of expected mass |
| Endotoxin Content (Limulus Amoebocyte Lysate Assay) | Report results | 169 EU/mg |
| Concentration by Bicinchoninic Acid Protein Assay | Report results | 1.04 mg/mL |
| Functional Activity ¹ Western Blot | | |
| NR-15771 | Reactive | Reactive (Figure 2) |
| Bovine serum albumin (BSA) | Nonreactive | Nonreactive |
| ELISA | Report results | Reactive |

¹Using mouse monoclonal antibody (IgG1) to Yersinia pestis F1 (YPF19): (Santa Cruz Biotechnology sc-52303)

Figure 1 — SDS-PAGE



Lane 1 – Bio-Rad SDS-PAGE Protein Standards, Low Range Lane 2 – NR-15771

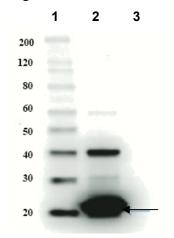
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Figure 2 - Western Blot



Lane 1 — Invitrogen™
MagicMark™ Western
Protein Standard
Lane 2 — NR-15771 (20 µg)
Lane 3 — BSA (20 µg)

Date: 04 JAN 2011

Signature:

Title:

Technical Manager BEI Authentication or designe

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