

Fraction 1 Capsular Antigen (F1) from *Yersinia pestis*, Recombinant from *Escherichia coli*

Catalog No. NR-44223

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

Product Description: NR-44223 is a recombinant form of the *Yersinia pestis* (*Y. pestis*) fraction 1 capsular antigen (F1). A precursor recombinant protein lacking the native signal sequence but including an N-terminal hexa-histidine tag, a thrombin cleavage site, and amino acid residues 22 to 170 of F1 from *Y. pestis* was expressed in *Escherichia coli* and purified by nickel affinity chromatography. Treatment with immobilized bovine thrombin resulted in a protein with four non-F1 residues at the amino terminus. The thrombin-cleaved protein was further purified by anion exchange chromatography and another round of nickel affinity chromatography to remove the cleaved hexa-histidine tag.

Lot: 64122077

Manufacturing Date: 21APR2016

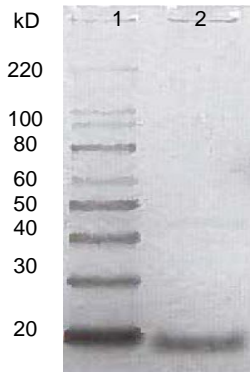
TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
Purity by SDS-PAGE densitometer scan	~ 18 kDa band represents > 90% of total staining intensity above background	~ 18 kDa band represents 95% of total staining intensity above background (Figure 1)
Identification by Western Blot Analysis Monoclonal anti- <i>Y. pestis</i> F1 ¹	Reactive	Reactive (Figure 2)
Concentration by Bicinchoninic Acid Protein Assay	Report results	0.536 mg per mL
Final Product Quantity per vial Volume per vial	Report results Report results	214 µg 400 µL
Endotoxin Content²	Report results	≤ 8.92 EU/mg
Sterility	0.22 µm filter-sterilized	0.22 µm filter-sterilized

¹Test completed utilizing YPF19 (Santa Cruz Biotechnology SC-52303).

²Test completed utilizing Endosafe®-PTS™ Endotoxin Test (Charles River PTS2005F).

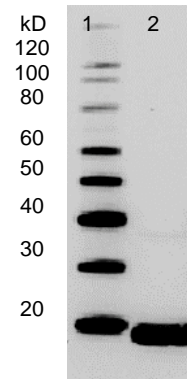
Certificate of Analysis for NR-44223

Figure 1: SDS-PAGE



Lane 1: Invitrogen™ MagicMark™ XP Protein Standard
Lane 2: NR-44223, 1 µg

Figure 2: Western Blot



Lane 1: Invitrogen™ MagicMark™ XP Protein Standard
Lane 2: NR-44223, 1 µg

Date: 01 JUL 2016

Signature:

BEI Resources Authentication

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