

Certificate of Analysis for NR-3832

Yersinia pestis LcrV Protein, Recombinant from Escherichia coli

Catalog No. NR-3832

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

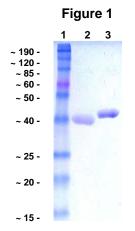
Product Description: Recombinant LcrV protein (*Y. pestis*, strain KIM5) was expressed in *Escherichia coli* BL21 cells. The N-terminal deca-histidine tagged protein was purified via nickel-NTA and gel filtration chromatography. Cleavage with Factor Xa resulted in a protein with one extra histidine at the amino acid terminus. The protein preparation was treated with Triton X-114 to reduce endotoxin contamination.

Lot¹: 57606524 Manufacturing Date: 16FEB2007

TEST	SPECIFICATIONS	RESULTS
Appearance	Clear and colorless	Clear and colorless
SDS-PAGE (Coomassie Blue densitometer scan)	Dominant band ~ 37 kDa > 95% pure	Dominant band ~ 37 kDa > 95% pure (see Figure 1)
Mass Spectrometry (MALDI)	Measured mass within 5% of expected mass based on amino acid sequence (~ 37395 daltons)	Measured mass within 0.2% of expected mass based on amino acid sequence (37453 daltons)
Concentration (Bicinchoninic Acid Protein Assay, BSA standard)	Report results	1 mg/mL
Endotoxin Content ²	Report results	2.4 EU/mL

¹NR-3832 was extracted from a preparation of *E. coli* BL21 cells and purified by nickel affinity and gel filtration chromatography. The N-terminal histidine tag was removed from the protein by digestion with Factor Xa (Novagen Catalog No. 69037-3).

²QCL-1000® Chromogenic LAL Endpoint Assay (Cambrex Catalog No. 50-647U).



SDS-PAGE gel of LcrV purified recombinant protein

Lane 1: BenchMark[™] Pre-Stained Protein Ladder (Invitrogen Catalog No. 10748-010; ! 10 to ~ 190 kDa)

Lane 2: NR-3832

Lane 3: NR-3832 prior to Factor Xa treatment

Date: 07 AUG 2007 **Signature:** Signature on File

Title: Technical Manager, BEI Authentication or designee

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