Certificate of Analysis for NR-49116

Coli Surface Protein 6 (CS6) from Enterotoxigenic *Escherichia coli*

Catalog No. NR-49116

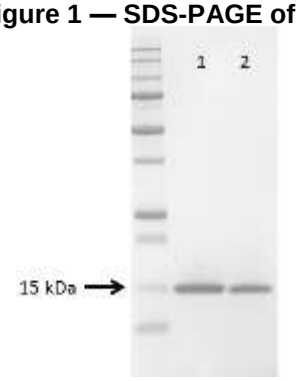
Product Description: NR-49116 is a preparation of coli surface protein 6 (CS6) purified from enterotoxigenic *Escherichia coli* (*E. coli*) (ETEC). CS6 was purified from *E. coli*, strain M346, grown in yeast extract broth in a fermentor under cGMP conditions in February 2002. The protein was purified from the culture supernatant by tangential flow filtration and stored as a bulk preparation, at approximately -80°C, until it was vialed.

Lot[1]: 03242014-3 **Manufacturing Date: 22FEB2002**

TEST	SPECIFICATIONS	RESULTS
Appearance	Report results	Clear
SDS-PAGE (GelCode® Blue Stain Reagent)	15 kDa band represents > 95% of total staining intensity above background	15 kDa band represents > 95% of total staining intensity above background (Figure 1)
Confirmation of Identity by Western Blot[2] CS6 (NR-49116)	Reactive	Reactive (Figure 2)
Concentration by Bicinchoninic Acid Protein Assay	Report results	2.0 mg/mL
Endotoxin Content[3]	Report results	0.3 EU/µg protein
Sterility	0.22 µm filter sterilized	0.22 µm filter sterilized
Post-Purification Viability[4]	No growth	No growth

[1]Production and quality control completed by Department of Subunit Enteric Vaccines and Immunology (SEVI), Bacterial Diseases Branch, Walter Reed Army Institute of Research, Silver Spring, Maryland, USA. The bulk material was thawed and vialed 24MAR2014. Quality control testing was completed at the time of vialing.
[2]Using rabbit anti-CS6 serum
[3]Endosafe® LAL Assay from Charles River
[4]Presence of bacteria was tested by plating 100 µL of purified protein onto a Tryptic Soy agar plate which was incubated in an aerobic atmosphere at 37°C for 24 hours, in triplicate.

Figure 1 — SDS-PAGE of CS6



Lane 1: Purified CS6 (5 µg)
Lane 2: Purified CS6 (2.5 µg)

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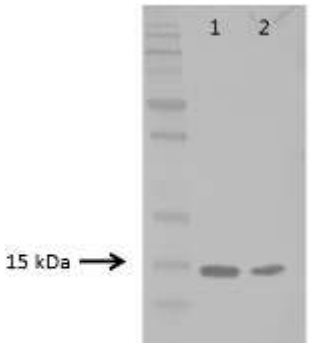
Figure 2 — Western Blot of CS6



Lane 1: Purified CS6 (0.5 µg)
Lane 2: Purified CS6 (0.25 µg)

Date: 16 JAN 2015 **Signature:**

Title: Technical Manager, BEI Authentication or designee

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