

Certificate of Analysis for NR-50705

Coli Surface Protein 2 (CS2) from Enterotoxigenic Escherichia coli (1 mg)

Catalog No. NR-50705

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

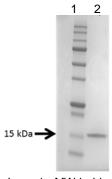
Product Description: NR-50705 is a preparation of coli surface protein 2 (CS2) purified from enterotoxigenic *Escherichia coli* (*E. coli*) (ETEC). CS2 was purified from *E. coli*, strain C91f, grown in DME/F-12 (Dulbecco's Modified Eagle's medium and F-12 serum-free medium) broth in a fermenter. The protein was purified from the culture supernatant by ammonium sulfate precipitation.

Lot¹: 09222015-1 Manufacturing Date: 22SEP2015

| 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 CS2 (NR-50705) | Reactive | Reactive (Figure 2) |
| Concentration by Bicinchoninic Acid Protein Assay | Report results | 1 mg per mL |
| Endotoxin Content ³ | Report results | 1.0 EU per μg protein |
| Sterility | 0.22 µm filter sterilized | 0.22 µm filter sterilized |
| Post-Purification Viability ⁴ | No growth | No growth |

¹Production and quality control was completed by the Department of Subunit Enteric Vaccines and Immunology (SEVI), Bacterial Diseases Branch, Walter Reed Army Institute of Research, Silver Spring, Maryland, USA.

Figure 1: SDS-PAGE of CS2



Lane 1: MW ladder

Lane 2: Purified CS2 (0.5 µg)

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²Using rabbit anti-CŚ2 serum

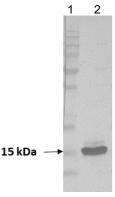
³Endosafe® LAL Assay from Charles River

⁴Presence 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.



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Figure 2: Western Blot of CS2



Lane 1: MW ladder

Lane 2: Purified CS2 (0.5 µg)

25 MAY 2018

Program Manager or designee, ATCC Federal Solutions

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