

Certificate of Analysis for NR-50690

Coli Surface Protein 1 (CS1) from Enterotoxigenic Escherichia coli (0.5 mg)

Catalog No. NR-50690

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

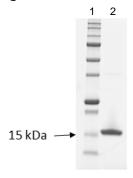
Product Description: NR-50690 is a preparation of coli surface protein 1 (CS1) purified from enterotoxigenic *Escherichia coli (E. coli)* (ETEC). CS1 was purified from *E. coli*, strain 60R75, grown in DME/F-12 (Dulbecco's Modified Eagle's medium and F-12 serum-free medium) broth in a fermenter. The protein was purified from the culture supernatant by ammonium sulfate precipitation.

Lot¹: 05242016-.5 Manufacturing Date: 24MAY2016

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 CS1 (NR-50690)	Reactive	Reactive (Figure 2)
Concentration by Bicinchoninic Acid Protein Assay	Report results	0.5 mg per mL
Endotoxin Content ³	Report results	0.85 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 CS1



Lane 1: MW ladder

Lane 2: Purified CS1 (5 µg)

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²Using rabbit anti-CS1 serum

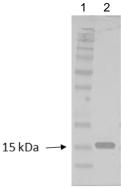
³Endosafe® LAL Assay from Charles River

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 CS1



Lane 1: MW ladder

Lane 2: Purified CS1 (0.5 µg)

14 JUN 2018

Program Manager or designee, ATCC Federal Solutions

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