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

Catalog No. NR-50705
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Contributor:
National Institutes of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH)

Manufacturer:
Robert Kaminski, Department Chief, Department of Subunit Enteric Vaccines and Immunology (SEVI), Bacterial Diseases Branch, Walter Reed Army Institute of Research, Silver Spring, Maryland, USA

Product Description:
NR-50705 is a preparation of coli surface protein 2 (CS2) purified from enterotoxigenic Escherichia coli (E. coli) (ETEC). CS2 is a virulence factor responsible for adhesion of bacterial cells to intestinal epithelial cells.

NR-50705 was obtained 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. NR-50705 has an approximate molecular weight of 15 kilodaltons.

The ETEC infectious process is initiated by the organism adhering to the host intestinal epithelial cells via interactions between bacterial adhesions, colonization factors [including colonization factor antigens (CFAs), coli surface (CS), and putative colonization factors (PCFs)] and host receptors. ETEC then causes secretory diarrhea by expressing heat-labile enterotoxin and heat-stable enterotoxin.

Material Provided:
Each vial of NR-50705 contains approximately 1 mg of CS2 in PBS, pH 7.4. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:
NR-50705 was packaged aseptically in cryovials. The product is provided frozen on dry ice and should be stored at -80°C ± 10°C immediately upon arrival. Freeze-thaw cycles should be avoided.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Coli Surface Protein 2 (CS2) from Enterotoxigenic Escherichia coli (1 mg), NR-50705.”

Biosafety Level: 1

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References:
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