Coli Surface Protein 17 (CS17) from Enterotoxigenic Escherichia coli (2 mg)

Catalog No. NR-50691
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Contributor:
National Institutes of Allergy and Infectious Diseases (NIAID),
National Institutes of Health (NIH)

Manufacturer:
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Product Description:
NR-50691 is a preparation of coli surface protein 17 (CS17)
purified from enterotoxigenic Escherichia coli (E. coli)
(ETEC). CS17 is a virulence factor responsible for adhesion
of bacterial cells to intestinal epithelial cells.

NR-50691 was obtained from E. coli, strain WS6788A, grown
in colonization factor antigen (CFA) broth containing 0.15%
bile salts in a fermenter. The protein was purified from the
culture supernatant by ammonium sulfate precipitation.
NR-50691 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 adhesins, colonization factors [including
CFAs, coli surface (CS), and putative colonization factors
(PCF6s)] and host receptors. ETEC then causes secretory
diarrhea by expressing heat-labile enterotoxin and heat-
stable enterotoxin.

Material Provided:
Each vial of NR-50691 contains approximately 2 mg of CS17
in PBS, pH 7.4. The concentration, expressed as mg per mL,
is shown on the Certificate of Analysis.

Packaging/Storage:
NR-50691 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 17 (CS17) from Enterotoxigenic
Escherichia coli (2 mg), NR-50691.”

Biosafety Level: 1
Appropriate safety procedures should always be used with this
material. Laboratory safety is discussed in the following
publication: U.S. Department of Health and Human Services,
Public Health Service, Centers for Disease Control and
Prevention, and National Institutes of Health. Biosafety in
Microbiological and Biomedical Laboratories. 5th ed.

Disclaimers:
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Provisional Patent Application No. 60/453,956).

References:
2. Beachey, E. H. “Bacterial Adherence: Adhesin-Receptor
Interactions Mediating the Attachment of Bacteria to
PubMed: 7014727
3. Evans, D. G., D. J. Evans, Jr., and W. Tjoa.
“Hemagglutination of Human Group A Erythrocytes by
Enterotoxigenic Escherichia coli Isolated from Adults

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Page 1 of 2

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