Certificate of Analysis for NR-3052

Genomic DNA from *Escherichia coli*, Strain NCDC U14-41

Catalog No. NR-3052

Product Description: Genomic DNA was isolated from a preparation of enteroaggregative *Escherichia coli* (EAggEC) strain NCDC U14-41, serotype O3:K2a,2b(L):H2. The bacterial preparation was produced by propagation of BEI Resources NR-102.

Lot[1]: 58666833 **Manufacturing Date: 13JUL2009**

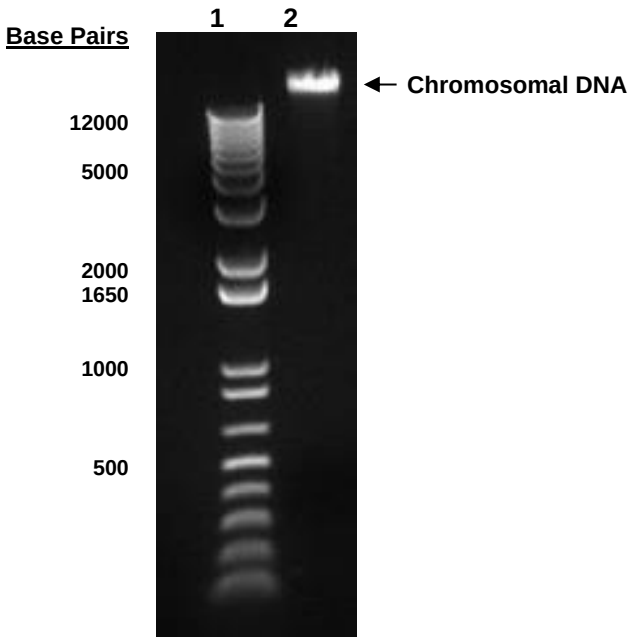
TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis		
Sequencing of 16S rRNA gene (~ 1370 bp)	Consistent with *Escherichia coli*	Consistent with *Escherichia coli*[2]
PCR amplification of plasmid markers		
CVD432 (pAA)	Report results	Positive
aggR (pAA)	Report results	Positive
elt (pJY11)	Report results	Negative
esth (pCS1)	Report results	Negative
estp (pCS1)	Report results	Negative
EAF (pEAF)	Negative	Negative
bfpA (pEAF)	Negative	Negative
invE (pINV)	Negative	Negative
PCR amplification of chromosomal markers		
eaeA	Negative	Negative
stx1	Negative	Negative
stx2	Negative	Negative
astA	Report results	Negative
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	4 to 6 µg in 25 to 100 µL per vial	6.7 µg in 27 µL per vial (247 µg/mL)[3]
Functional Activity by PCR Amplification		
16S ribosomal RNA gene	~ 1500 bp amplicon	~ 1500 bp amplicon
Virulence markers[4]		
CVD432 (pAA)	~ 690 bp amplicon	~ 690 bp amplicon
aggR (pAA)	~ 434 bp amplicon	~ 434 bp amplicon
OD_{260}/OD_{280} Ratio	1.7 to 1.9	1.9
Bacterial Inactivation		
10% of total yield plated on Tryptic Soy Agar[5,6]	No viable bacteria detected	No viable bacteria detected

[1]The bacterial preparation used for extraction of genomic DNA was produced by inoculation of BEI Resources NR-102 (Lot 3670409) into Tryptic Soy Broth. After incubation for 24 hours at 37°C, genomic DNA was extracted using proprietary technology.
[2]Also consistent with *Shigella* species.
[3]The µg of DNA in the vials is greater than required by current specifications
[4]Kimata, K., et al. "Rapid Categorization of Pathogenic *Escherichia coli* by Multiplex PCR." Microbiol. Immunol. 49 (2005): 485-492. PubMed: 15965295.
[5]7 days at 37°C in an aerobic atmosphere
[6]An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-negative bacteria.

Biodefense and Emerging Infections Research Resources Repository
P.O. Box 4137
Manassas, VA 20108-4137 USA
www.beiresources.org
800-359-7370
Fax: 703-365-2898
E-mail: contact@beiresources.org

Certificate of Analysis for NR-3052

Figure 1



Lane 1: Invitrogen™ 1Kb Plus DNA Ladder
Lane 2: 200 ng of NR-3052

Date: 16 OCT 2009 **Signature:** Signature on File

Title: Technical Manager, BEI Authentication or designee

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

Support Provided by NIAID

ATCC® is a trademark of the American Type Culture Collection.
You are authorized to use this product for research use only. It is not intended for human use.

Biodefense and Emerging Infections Research Resources Repository
P.O. Box 4137
Manassas, VA 20108-4137 USA
www.beiresources.org
800-359-7370
Fax: 703-365-2898
E-mail: contact@beiresources.org