SUPPORTING INFECTIOUS DISEASE RESEARCH

Escherichia coli, Strain 4.0522

Catalog No. NR-17627

Product Description: *Escherichia coli* (*E. coli*), strain 4.0522 was isolated from a cow; it is referred to as a non-O157, Shiga toxin-producing *E. coli* (STEC) strain.

Lot¹: 61086682

Manufacturing Date: 29JUN2012

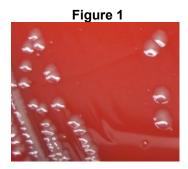
TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis		
Cellular morphology	Gram-negative rods	Gram-negative rods
Colony morphologies ^{2,3}	Report results	Colony type 1: Circular, convex, entire, smooth and gray (Figure 1) Colony type 2: Irregular, flat, smooth and gray (Figure 2)
Analytical profile index (API [®] 20 E)	Consistent with E. coli	Consistent with <i>E. coli</i>
Genotypic Analysis		
Sequencing of 16S ribosomal RNA gene (1465 base pairs)	≥ 99% sequence identity to <i>E. coli</i> , strain 4.0522 (GenBank: AEZU02000105)	99.5% sequence identity to <i>E. coli</i> , strain 4.0522 (GenBank: AEZU02000105) ⁴
Riboprinter [®] Microbial Characterization System	≥ 85% <i>E. coli</i>	<i>E. coli</i> (97%)
PCR Assay of Extracted DNA		
16S ribosomal RNA gene	~ 1500 base pair amplicon	~ 1500 base pair amplicon
PCR amplification of chromosomal borne virulence		
markers		
stx1	Positive	Positive
stx2	Positive	Positive
Viability (post-freeze) ²	Growth	Growth

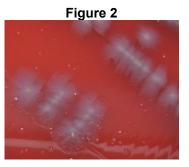
¹E. coli, strain 4.0522 was deposited by C. DebRoy, Director, E. coli Reference Center, Department of Veterinary and Biomedical Sciences, College of Agricultural Sciences, The Pennsylvania State University, University Park, Pennsylvania, USA. NR-17627 was produced by inoculation of the deposited material into Tryptic Soy broth and grown 24 hours at 37°C and aerobic atmosphere. Broth inoculum was added to kolles which were grown 24 hours at 37°C and aerobic atmosphere to produce this lot.

²24 hours at 37°C and aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood

³Two colony types were observed. Plating of the individual colony types showed that they did not revert to a mixed colony type. The 16S ribosomal RNA gene of each colony type was sequenced and found to be consistent with *E. coli*.

⁴Also consistent with Shigella species





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Certificate of Analysis for NR-17627

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Date: 22 APR 2014

Signature:

BEI Resources Authentication

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.

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