

Escherichia coli, Strain E1002

Catalog No. NR-15810

Product Description:

Escherichia coli (*E. coli*), strain E1002 was isolated in December 2003 from a water sample collected at Lake Ginnderra, Australian Capital Territory, Australia. The deposited material was inoculated into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere, and the resulting subculture was vialled and frozen. NR-15810 was produced by inoculation of the frozen subculture into Nutrient broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Nutrient agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot.

Lot: 62521218

Manufacturing Date: 12JUN2014

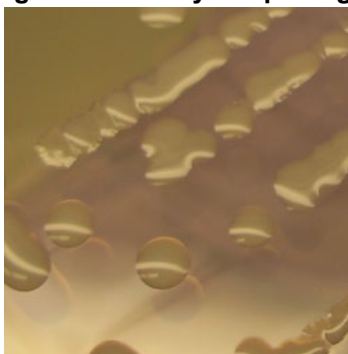
TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology 1 day at 37°C in an aerobic atmosphere on Nutrient agar Motility (wet mount) VITEK® 2 Compact (GN Card)	Gram-negative rods Report results Report results <i>E. coli</i> (≥ 89%)	Gram-negative rods Circular, convex, entire, opaque, smooth and cream (Figure 1) Non-motile ¹ <i>E. coli</i> (96%)
Genotypic Analysis Digital DNA-DNA hybridization (dDDH) ² Riboprinter® Microbial Characterization System	≥ 70% for species identification Consistent with <i>E. coli</i>	<i>Shigella boydii</i> (86.5%) ³ <i>Shigella sonnei</i> (86.4%) <i>Shigella flexneri</i> (85.3%) <i>Shigella dysenteriae</i> (82.4%) <i>E. coli</i> (74.4%) Consistent with <i>E. coli</i>
Purity (post-freeze) 8 days at 37°C in an aerobic atmosphere on Nutrient agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze) 1 day at 37°C in an aerobic atmosphere on Nutrient agar	Growth	Growth

¹Motility was not observed on wet mount.

²The whole genome of *E. coli*, strain E1002 was sequenced. Relatedness between bacterial strains has traditionally been determined using DDH. For additional information, refer to Auch, A. F., et al. "Digital DNA-DNA Hybridization for Microbial Species Delineation by Means of Genome-to-Genome Sequence Comparison." *Stand Genomic Sci.* 2 (2010): 117-134. PubMed: 21304684.

³Reclassification of *Shigella sonnei*, *Shigella boydii*, *Shigella flexneri* and *Shigella dysenteriae* as subspecies of *E. coli* (*E. coli* subsp. *shigella* subsp. nov.) has been proposed [Dif, G., et al. "In-Depth Genome-Based Analysis of *Shigella* spp. and *Escherichia* spp.: Resolving Ambiguities and Unveiling Phylogenetic Relationships." *Curr. Microbiol.* 82 (2025): 170. PubMed: 40045049.].

Figure 1: Colony Morphology



/Sonia Bjorum Brower/

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