

Escherichia coli, Strain B354

Catalog No. NR-15802

Product Description:

Escherichia coli (*E. coli*), strain B354 was isolated in November 2001 from a spectacled monarch (*Monarcha trivirgatus*) in Mount Lewis, Queensland, Australia. The deposited material was inoculated into Brain Heart Infusion broth and grown for 1 day at 37°C in an aerobic atmosphere, and the resulting subculture was vialled and frozen. NR-15802 was produced by inoculation of the frozen subculture into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 5% defibrinated sheep blood kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot.

Lot: 62590271

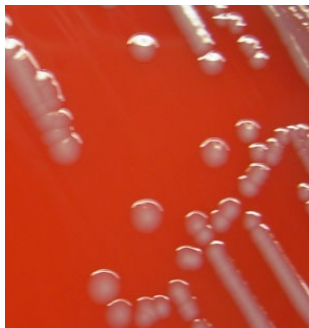
Manufacturing Date: 07MAY2014

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood Motility (wet mount) VITEK® 2 Compact (GN Card) VITEK® MS (MALDI-TOF) Genotypic Analysis Digital DNA-DNA hybridization (dDDH) ¹ Riboprinter® Microbial Characterization System Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	Gram-negative rods Report results Report results <i>E. coli</i> (≥ 89%) <i>E. coli</i> ≥ 70% for species identification Consistent with <i>E. coli</i> ≥ 99% sequence identity to <i>E. coli</i> , strain B354 (GenBank: ACXG01000060.1)	Gram-negative rods Circular, low convex, entire, smooth and gray (Figure 1) Motile <i>E. coli</i> (99%) <i>E. coli</i> (99.9%) <i>Shigella boydii</i> (78.3%) ² <i>Shigella sonnei</i> (78.2%) <i>Shigella flexneri</i> (77.9%) <i>Shigella dysenteriae</i> (77.3%) <i>E. coli</i> (76.1%) Consistent with <i>E. coli</i> 99.6% sequence identity to <i>E. coli</i> , strain B354 (GenBank: ACXG01000060.1) ³
Purity (post-freeze) 7 days at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood	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 Tryptic Soy agar with 5% defibrinated sheep blood	Growth	Growth

¹The whole genome of *E. coli*, strain B354 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.

²Reclassification 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.].

³Also consistent with *Shigella* species and other *Escherichia* species

Figure 1: Colony Morphology

/Sonia Bjorum Brower/
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