

Escherichia coli, Strain Bird108

Catalog No. NR-15796

Product Description:

Escherichia coli (*E. coli*), strain Bird108 (also referred to as B108) was isolated in October 2001 from a little friarbird (*Philemon citreogularis*) in Wongarbron, New South Wales, 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-15796 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: 62590264

Manufacturing Date: 07MAY2014

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphologies ¹ 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 5% defibrinated sheep blood Motility (wet mount) VITEK® MS (MALDI-TOF) Analytical profile index (API® 20 E)	Gram-negative rods Report results Report results <i>E. coli</i> Consistent with <i>E. coli</i>	Gram-negative rods Colony type 1: Circular, convex, entire, smooth and gray (Figure 1) Colony type 2: Irregular, low convex, undulate, smooth and gray (Figure 1) Motile <i>E. coli</i> (99.9%) Consistent with <i>E. coli</i>
Genotypic Analysis Digital DNA-DNA hybridization (dDDH) ² Riboprinter® Microbial Characterization System	≥ 70% for species identification Consistent with <i>E. coli</i>	<i>E. coli</i> (89.5%) ³ <i>Shigella sonnei</i> (74.9%) <i>Shigella dysenteriae</i> (74.0%) <i>Shigella flexneri</i> (73.0%) <i>Shigella boydii</i> (72.5%) Consistent with <i>E. coli</i>
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

¹Two colony types were observed. Plating of the individual colony types showed that they reverted to a mixed colony type. The 16S ribosomal RNA gene of each colony type was sequenced and found to be consistent with *E. coli*.

²The whole genome of *E. coli*, strain Bird108 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



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