

Escherichia coli K-12, Strain DC10B

Catalog No. NR-49804

Product Description:

Escherichia coli (*E. coli*) K-12, strain DC10B is a DNA cytosine methyltransferase (*dcm*) deletion mutant that was produced from *E. coli* K-12 derivative strain DH10B via recombination-mediated genetic engineering (recombineering). Strain DC10B is a universal host for constructing plasmids for introduction into staphylococci and was deposited as Δdcm and resistant to streptomycin. NR-49804 was produced by inoculation of the BEI Resources seed lot into Tryptic Soy broth with 25 $\mu\text{g}/\text{mL}$ streptomycin and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar with 25 $\mu\text{g}/\text{mL}$ streptomycin kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot.

Lot: 70031169

Manufacturing Date: 12DEC2019

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 25 $\mu\text{g}/\text{mL}$ streptomycin Motility (wet mount) VITEK® MS (MALDI-TOF)	Gram-negative rods Report results Report results <i>E. coli</i> ($\geq 90\%$)	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Motile <i>E. coli</i> (99.9%)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)	$\geq 99\%$ sequence identity to <i>E. coli</i> type strain (GenBank: JMST01000030.1)	99.5% sequence identity to <i>E. coli</i> type strain (GenBank: JMST01000030.1) ¹
Confirmation of Streptomycin Resistance 1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 25 $\mu\text{g}/\text{mL}$ streptomycin	Growth	Growth
Purity (post-freeze) 7 days at 37°C in an aerobic atmosphere with and without 5% CO ₂ 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 25 $\mu\text{g}/\text{mL}$ streptomycin	Growth	Growth

¹Also consistent with *Shigella* and other *Escherichia* species

Figure 1: Colony Morphology



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