

**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  $\Delta dcm$  and resistant to streptomycin. NR-49804 was produced by the inoculation of BEI Resources seed lot 63849793 into Tryptic Soy broth containing 25  $\mu\text{g}/\text{mL}$  streptomycin and incubated for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar containing 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. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70076774**

**Manufacturing Date: 02JUL2025**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology  Motility (wet mount) VITEK® MS (MALDI-TOF)	Gram-negative rods Report results  Report results <i>Escherichia coli</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1)  Motile <i>Escherichia coli</i> (99.9%)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1400 base pairs)	≥ 99% sequence identity to <i>E. coli</i> type strain (GenBank: JMST01000030.1)	99.8% sequence identity to <i>E. coli</i> type strain (GenBank: JMST01000030.1)
<b>Confirmation of Streptomycin Resistance</b>	Growth	Growth
<b>Purity</b> 7 days at 37°C in an aerobic atmosphere with and without 5% CO <sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood	Consistent with expected colony morphology	Consistent with expected colony morphology
<b>Viability</b>	Growth	Growth

**Figure 1: Colony Morphology**



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Technical Manager or designee, ATCC Federal Solutions

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