

**Escherichia coli – Staphylococcal Shuttle Vectors and Hosts**

**Catalog No. NR-50352**

**Product Description:** NR-50352 is a kit containing two vectors and two *Escherichia coli* (*E. coli*) hosts for genetic manipulations. The shuttle vectors, pKK22 and pKK30, are based on the LAC-p01 plasmid. pKK22 is designed to be used with USA300 strains while pKK30 is intended for use in Staphylococcal cells not containing LAC-p01. Both vectors contain a single trimethoprim resistance cassette that is functional in both *E. coli* and *Staphylococcus* species. Additionally, they contain the *E. coli* R6K $\gamma$  origin of replication, which requires *pir+* cells for replication, thus, *E. coli* DH5 $\alpha$ *pir* and the *pir+* dam- dcm- strain, GM2163 $\lambda$ *pir*, are provided as host strains.

**Note:** Both vectors are provided in *E. coli*, strain DH5 $\alpha$ *pir*.

**Lot<sup>1</sup>: 70001911**

**Manufacturing Date: OCT2016**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup>  Motility (wet mount) VITEK <sup>®</sup> MS (MALDI-TOF)	Gram-negative rods Report results  Report results Consistent with <i>E. coli</i>	Gram-negative rods Circular, low convex, entire, smooth and cream or gray Motile <i>E. coli</i> (99.9%)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 790 to ~1410 base pairs) Riboprinter <sup>®</sup> Microbial Characterization System	≥ 99% sequence identity to <i>E. coli</i> DH5 $\alpha$ (GenBank: JRBB01000068) ≥ 85% <i>E. coli</i>	≥ 99.7% sequence identity to <i>E. coli</i> DH5 $\alpha$ (GenBank: JRBB01000068) <sup>3</sup> ≥ 84% <i>E. coli</i> <sup>4</sup>
<b>Confirmation of Trimethoprim Resistance<sup>2,5</sup></b>	Growth	Growth
<b>Purity (post-freeze)<sup>6</sup></b>	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

<sup>1</sup>NR-50352 contains 4 vials comprised of NR-50348 lot 2091, NR-50349 lot 2093, NR-50350 lot 2095 and NR-50351 lot 2097. Individual results can be found on the Certificates of Analyses for each lot under their unique item number in the BEI Resources catalog.

<sup>2</sup>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar with 10 µg/mL trimethoprim (NR-50348 and NR-50349), on Tryptic Soy agar with 5% defibrinated sheep blood (NR-50350) and on Tryptic Soy agar (NR-50351).

<sup>3</sup>Also 99.9% sequence identity to some *Shigella flexneri* strains

<sup>4</sup>All items were greater than 85% except NR-50351. However, the nearest match was *E. coli*, and there is no indication that this item is other than *E. coli*. The highest similarity value obtained for NR-50351 was 84%.

<sup>5</sup>Test performed on NR-50348 and NR-50349 only.

<sup>6</sup>Purity of all components was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO<sub>2</sub> on Tryptic Soy agar with 5% defibrinated sheep blood

**Date:** 12 JAN 2017

**Signature:**



BEI Resources Authentication

ATCC<sup>®</sup>, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC<sup>®</sup>'s knowledge.

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