

Escherichia coli, Strain GM2163λpir

Catalog No. NR-50351

Product Description:

Escherichia coli (*E. coli*), strain GM2163λpir contains the *pir* gene, which allows genetic manipulations of vectors prior to transfer into *Staphylococcus* species. This strain is also a *Dam* and *Dcm* methylase mutant for the transfer of plasmids into *Staphylococcus* isolates that do not accept *E. coli* DNA easily. Strain GM2163λpir has genotype F-*ara-14 leuB6 fhuA31 lacY1 tsx78 glnV44 galk2 galT22 mcrA dcm-6 hisG4 rfbD1 rpsL136 dam13::Tn9 xylA5 mtl-1 thi-1 mcrB1 hsdR2 λpir*. The deposited material was inoculated into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to a Tryptic Soy agar plate, which was grown for 1 day at 37°C in an aerobic atmosphere. One colony was selected from the agar growth and used to inoculate a Tryptic Soy agar plate, which was grown for 1 day at 37°C in an aerobic atmosphere. A loopful of colonies from this Tryptic Soy agar plate was suspended in Tryptic Soy broth with 10% glycerol, vialled and frozen. NR-50351 was produced by inoculation of the frozen subculture into Tryptic Soy broth containing 10 µg/mL trimethoprim and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar containing 10 µg/mL trimethoprim 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.

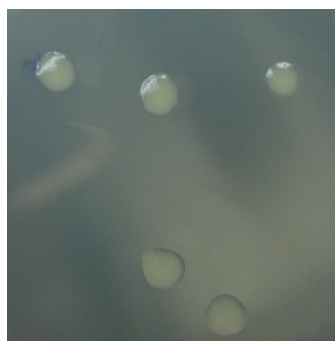
Lot: 70057129

Manufacturing Date: 11JAN2023

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount) VITEK® MS (MALDI-TOF)	Gram-negative rods Report results Report results <i>E. coli</i>	Gram-negative rods Circular, low convex, entire, smooth and cream (Figure 1) Motile <i>E. coli</i> (99.9%)
Confirmation of Trimethoprim Resistance	Growth	Growth
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs)	≥ 99% sequence identity to <i>E. coli</i> type strain (GenBank: JMST01000030.1)	100% sequence identity to <i>E. coli</i> type strain (GenBank: JMST01000030.1) ¹
Purity (post-freeze) 7 days at 37°C in an aerobic atmosphere with 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)	Growth	Growth

¹Also 99.9% sequence identity to some *Shigella flexneri* strains

Figure 1: Colony Morphology



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