SUPPORTING INFECTIOUS DISEASE RESEARCH

## Escherichia coli, Strain E2348/69

## Catalog No. NR-50518

Product Description: Escherichia coli (E. coli), strain E2348/69, serotype O127:H6, was isolated in 1969 during an outbreak of diarrhea in an infant nursery in Taunton, England. E. coli, strain E2348/69 is known to contain the pMAR2 plasmid carrying the enteropathogenic E. coli (EPEC) adherence factor (EAF).

Lot ${ }^{1}$ : 2226
Manufacturing Date: 08DEC2016

| TEST | SPECIFICATIONS | RESULTS |
| :---: | :---: | :---: |
| Phenotypic Analysis <br> Cellular morphology <br> Colony morphology ${ }^{2}$ <br> Motility ${ }^{3}$ <br> VITEK ${ }^{\circledR}$ MS (MALDI-TOF) | Gram-negative rods Report results <br> Motile <br> Consistent with E. coli | Gram-negative rods <br> Circular, convex, entire, smooth and cream (Figure 1) <br> Motile <br> E. coli (99.9\%) |
| Antibiotic Susceptibility Profile by Kirby-Bauer Disc Diffusion ${ }^{4}$ <br> Chloramphenicol ( $30 \mu \mathrm{~g}$ ) <br> Kanamycin ( $30 \mu \mathrm{~g}$ ) <br> Nalidixic Acid $(30 \mu \mathrm{~g})$ <br> Tetracyline $(30 \mu \mathrm{~g})$ | Susceptible ( $\geq 18 \mathrm{~mm}$ ) <br> Susceptible ( $\geq 18 \mathrm{~mm}$ ) <br> Resistant ( $\leq 13 \mathrm{~mm}$ ) <br> Susceptible ( $\geq 15 \mathrm{~mm}$ ) | Susceptible (26 mm) <br> Susceptible ( 28 mm ) <br> Resistant ( 6 mm ) <br> Susceptible ( 25 mm ) |
| Genotypic Analysis <br> Sequencing of 16S ribosomal RNA gene <br> ( $\sim 840$ base pairs) <br> Riboprinter ${ }^{\circledR}$ Microbial Characterization System | ```\geq99% sequence identity to E.coli, strain E2348/69 (GenBank: NC_011601.1) E. coli (\geq0.85)``` | $99.5 \%$ sequence identity to $E$. coli, strain E2348/69 (GenBank: NC_011601.1) <br> E. coli (0.94) |
| PCR Amplification of Genetic Targets from Extracted DNA <br> Translocated intimin receptor (tir) Wild type tir $\Delta t i r$ <br> S-ribosylhomocysteinase (luxS) Wild type luxS $\Delta l u x S$ <br> Transcriptional regulator (gadX) Wild type gadX $\Delta$ gadX <br> Type III secretion system ATPase (escN) Wild type escN $\Delta \operatorname{escN}$ <br> Flagellin (fliC) Wild type fliC $\Delta f l i C$ <br> Plasmid pMAR2 (bfpD) | ~ 1620 base pair amplicon <br> ~ 2260 base pair amplicon <br> ~ 1310 base pair amplicon <br> ~ 2590 base pair amplicon <br> ~ 1300 base pair amplicon <br> ~ 2200 base pair amplicon <br> ~ 710 base pair amplicon <br> ~ 1560 base pair amplicon <br> ~ 1560 base pair amplicon <br> ~ 2200 base pair amplicon <br> ~ 840 base pair amplicon | ~ 1620 base pair amplicon <br> ~ 1310 base pair amplicon <br> ~ 1300 base pair amplicon <br> ~ 710 base pair amplicon <br> ~ 1560 base pair amplicon <br> ~ 840 base pair amplicon |
| Purity (post-freeze) ${ }^{\mathbf{5}}$ | Growth consistent with expected colony morphology | Growth consistent with expected colony morphology |
| Viability (post-freeze) ${ }^{\mathbf{2}}$ | Growth | Growth |

${ }^{1}$ NR-50518 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at $37^{\circ} \mathrm{C}$ in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at $37^{\circ} \mathrm{C}$ in an aerobic atmosphere to produce this lot.
${ }^{2} 1$ day at $37^{\circ} \mathrm{C}$ in an aerobic atmosphere on Tryptic Soy agar
${ }^{3}$ Motility test performed in Remel ${ }^{\text {TM }}$ Motility Test Medium w/TTC indicator for 1 day at $37^{\circ} \mathrm{C}$ in an ambient atmosphere.
${ }^{4}$ Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S26 (2016)
${ }^{5}$ Purity of this lot was assessed for 7 days at $37^{\circ} \mathrm{C}$ in an aerobic atmosphere on Tryptic Soy agar with $5 \%$ defibrinated sheep blood.

## BEI Resources

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Figure 1: Colony Morphology


Date: 03 AUG 2017
Signature:


## BEI Resources Authentication

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