

Escherichia coli, Strain AGT01

Catalog No. NR-50499

Product Description: *Escherichia coli* (*E. coli*), strain AGT01 is a flagellin (*fliC*) insertion mutant of the wild type strain E2348/69. Strain E2348/69 was isolated in 1969 during an outbreak of diarrhea in an infant nursery in Taunton, England.

Lot¹: 2236

Manufacturing Date: 30NOV2016

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology ² Motility ³ VITEK [®] MS (MALDI-TOF)	Gram-negative rods Report results Non-motile <i>E. coli</i>	Gram-negative rods Circular, low convex, entire, smooth and cream (Figure 1) Motile ⁴ <i>E. coli</i> (99.9%)
Antibiotic Susceptibility Profile⁵ HardyDisk [™] AST Disks ⁶ Chloramphenicol (30 µg) Kanamycin (30 µg) Nalidixic Acid (30 µg) Tetracycline (30 µg)	Resistant (≤ 12 mm) Susceptible (≥ 18 mm) Resistant (≤ 13 mm) Susceptible (≥ 15 mm)	Resistant (6 mm) Susceptible (25 mm) Resistant (6 mm) Susceptible (24 mm)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1480 base pairs) Riboprinter [®] Microbial Characterization System	≥ 99% sequence identity to <i>E. coli</i> strain E2348/69 (GenBank: NC_011601.1) <i>E. coli</i> (≥ 0.85)	99.6% sequence identity to <i>E. coli</i> strain E2348/69 (GenBank: NC_011601.1) <i>E. coli</i> (0.93)
PCR Amplification of Genetic Targets from Extracted DNA Translocated intimin receptor (<i>tir</i>) Wild type <i>tir</i> Δ <i>tir</i> S-ribosylhomocysteinase (<i>luxS</i>) Wild type <i>luxS</i> Δ <i>luxS</i> Transcriptional regulator (<i>gadX</i>) Wild type <i>gadX</i> Δ <i>gadX</i> Type III secretion system ATPase (<i>escN</i>) Wild type <i>escN</i> Δ <i>escN</i> Flagellin (<i>fliC</i>) Wild type <i>fliC</i> Δ <i>fliC</i> Plasmid pMAR2 (<i>bfpD</i>)	~ 1620 base pair amplicon ~ 2260 base pair amplicon ~ 1310 base pair amplicon ~ 2590 base pair amplicon ~ 1300 base pair amplicon ~ 2200 base pair amplicon ~ 710 base pair amplicon ~ 1560 base pair amplicon ~ 1560 base pair amplicon ~ 2200 base pair amplicon ~ 840 base pair amplicon	~ 1620 base pair amplicon ~ 1310 base pair amplicon ~ 1300 base pair amplicon ~ 710 base pair amplicon ~ 2200 base pair amplicon ³ ~ 840 base pair amplicon
Purity (post-freeze)⁷	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology
Viability (post-freeze)²	Growth	Growth

¹NR-50499 was produced by inoculation of the deposited material into Tryptic Soy broth and grown for 1 day at 37°C in an aerobic atmosphere. Broth inoculum was added to Tryptic Soy agar kolles, which were grown for 1 day at 37°C in an aerobic atmosphere to produce this lot.

²1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

³Motility test performed in Remel[™] Motility Test Medium with TTC Indicator for 1 day at 37°C in an aerobic atmosphere.

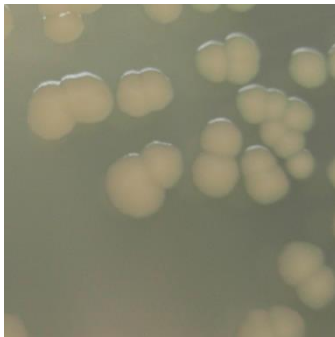
⁴*E. coli*, strain AGT01 was deposited as non-motile due to an insertion of a chloramphenicol-resistance gene (*cat*) cassette into *fliC*. Functional inactivation of *fliC* was confirmed by the depositor using LB motility plates. BEI Resources confirmed the presence of the insertion by PCR, but could not recapitulate the non-motile phenotype using motility test medium with TTC indicator. The different medias used may be responsible for the differences in observed motility. For more information, please refer to Giron, J. A., et al. "The Flagella of Enteropathogenic *Escherichia coli* Mediate Adherence to Epithelial Cells." *Mol. Microbiol.* 44 (2002): 361-379. PubMed: 11972776.

⁵Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S26 (2016)

⁶1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar

⁷Purity of this lot was assessed for 7 days at 37°C in an aerobic atmosphere with 5% CO₂ on Tryptic Soy agar with 5% defibrinated sheep blood.

Figure 1: Colony Morphology



Date: 28 AUG 2017

Signature:

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