

**Escherichia coli, Strain VS81**

**Catalog No. NR-50496**

**Product Description:** *Escherichia coli* (*E. coli*), strain VS81 is an S-ribosylhomocysteine lyase gene (*luxS*) 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.

**Lot<sup>1</sup>: 2232**

**Manufacturing Date: 11NOV2016**

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology Colony morphology <sup>2</sup>  Motility <sup>3</sup> VITEK <sup>®</sup> MS (MALDI-TOF)	Gram-negative rods Report results  Motile Consistent with <i>E. coli</i>	Gram-negative rods Circular, convex, entire, smooth and cream (Figure 1) Motile <i>E. coli</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>4</sup></b> HardyDisk <sup>™</sup> AST <sup>5</sup> Chloramphenicol (30 µg) Kanamycin (30 µg) Nalidixic Acid (30 µg) Tetracycline (30 µg)	Susceptible (≥ 18 mm) Susceptible (≥ 18 mm) Resistant (≤ 13 mm) Resistant (≤ 11 mm)	Susceptible (23 mm) Susceptible (19 mm) Resistant (6 mm) Resistant (10.5 mm)
<b>Genotypic Analysis</b> Sequencing of 16S ribosomal RNA gene (~ 1470 base pairs)  Riboprinter <sup>®</sup> 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> (≥ 0.91)
<b>PCR Amplification of Genetic Targets from Extracted DNA</b> 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  ~ 2590 base pair amplicon  ~ 1300 base pair amplicon  ~ 710 base pair amplicon  ~ 1560 base pair amplicon  ~ 840 base pair amplicon
<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-50496 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.

<sup>2</sup>1 day at 37°C in an aerobic atmosphere on Tryptic Soy agar

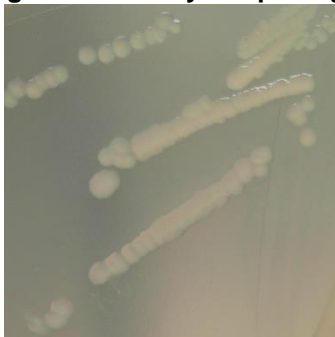
<sup>3</sup>Motility test performed in Remel<sup>™</sup> Motility Test Medium with TTC Indicator for 1 day at 37°C in an aerobic atmosphere

<sup>4</sup>Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S26 (2016)

<sup>5</sup>1 day at 37°C in an aerobic atmosphere on Mueller Hinton agar

<sup>6</sup>Purity of this lot 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.

Figure 1: Colony Morphology



Date: 28 AUG 2017

Signature:



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