

Escherichia coli, Strain CHS 68

Catalog No. NR-48570

This reagent is the tangible property of the U.S. Government.

Product Description:

Escherichia coli (*E. coli*), strain CHS 68 was isolated in 2013 from the urine of a non-ICU adult human patient in North Carolina, USA. *E. coli*, strain CHS 68 was deposited as a carbapenem-resistant strain and is part of a Carbapenem Resistant *Enterobacteriaceae* (CRE) Sequencing Project at the Broad Institute. Strain CHS 68 was also deposited as resistant to amikacin, ampicillin, ampicillin/sulbactam, cefazolin, cefepime, ceftazidime, ceftriaxone, cefoxitin, ciprofloxacin, ertapenem, gentamicin, imipenem, levofloxacin, meropenem, nitrofurantoin, and trimethoprim/sulfamethoxazole, and sensitive to tigecycline. NR-48570 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. Quality control testing was completed under propagation conditions unless otherwise noted.

Lot: 63885490

Manufacturing Date: 25NOV2015

BEI Resources is committed to ensuring digital accessibility for people with disabilities. This Certificate of Analysis contains complex tables and may not be fully accessible. Please let us know if you encounter accessibility barriers and a fully accessible document will be provided: E-mail: Contact@BEIResources.org. We try to respond to feedback within 24 hours.

TEST	SPECIFICATIONS	RESULTS
Phenotypic Analysis Cellular morphology Colony morphology Motility (wet mount) VITEK® 2 (GN card)	Gram-negative rods Report results Report results <i>E. coli</i>	Gram-negative rods Circular, low convex, entire, smooth, opaque and cream (Figure 1) Motile <i>E. coli</i> (99.9%)
Antibiotic Susceptibility Profile¹ VITEK® (AST-GN69 Card) ESBL Amoxicillin/clavulanic acid Ampicillin Ampicillin/sulbactam Cefazolin Cefepime Ceftazidime Ceftriaxone Ciprofloxacin Ertapenem Gentamicin Imipenem Levofloxacin Nitrofurantoin Piperacillin/tazobactam Tobramycin Trimethoprim/sulfamethoxazole	Report results Report results Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Resistant Report results Report results Resistant	Positive Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 32 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 64 µg/mL) Resistant (≥ 4 µg/mL) Sensitive (≤ 0.5 µg/mL) ² Resistant (≥ 16 µg/mL) Sensitive (≤ 0.25 µg/mL) ³ Resistant (≥ 8 µg/mL) Sensitive (≤ 16 µg/mL) ⁴ Intermediate (64 µg/mL) Resistant (≥ 16 µg/mL) Resistant (≥ 320 µg/mL)
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1450 base pairs)	≥ 99% sequence identity to <i>E. coli</i> , strain CHS 68 (GenBank: JMV01000024.1)	99.7% sequence identity to <i>E. coli</i> , strain CHS 68 (GenBank: JMV01000024.1) ⁵
Purity (post-freeze) 7 days at 37°C in an aerobic atmosphere on Tryptic Soy agar	Growth consistent with expected colony morphology	Growth consistent with expected colony morphology

Certificate of Analysis for NR-48570

TEST	SPECIFICATIONS	RESULTS
Viability (post-freeze)	Growth	Growth

¹Minimum Inhibitory Concentration (MIC); MIC Interpretation Guideline: CLSI M100-S30 (2020).

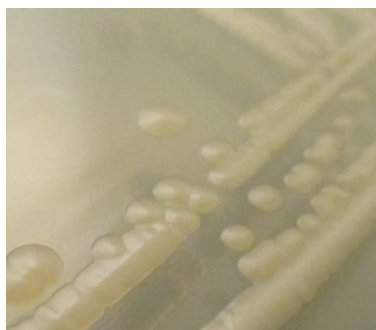
²*E. coli*, strain CHS 68 was deposited as resistant to ertapenem, but showed an MIC of ≤ 0.5 $\mu\text{g/mL}$ (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

³*E. coli*, strain CHS 68 was deposited as resistant to imipenem, but showed an MIC of ≤ 0.25 $\mu\text{g/mL}$ (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

⁴*E. coli*, strain CHS 68 was deposited as resistant to nitrofurantoin, but showed an MIC of ≤ 16 $\mu\text{g/mL}$ (interpreted as sensitive) for this antibiotic during QC testing. Testing was performed in duplicate.

⁵Also consistent with *Shigella* and other *Escherichia* species

Figure 1: Colony Morphology



/Sonia Bjorum Brower/

Sonia Bjorum Brower

13 MAY 2026

Technical Manager or designee, ATCC Federal Solutions

ATCC®, 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®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

