

**Candida auris, Strain AKU-2019-43**

**Catalog No. NR-52716**

**Product Description:**

*Candida auris* (*C. auris*), strain AKU-2019-43 was isolated in 2019 from the ear of a human with *otitis externa* in Karachi, Pakistan. Strain AKU-2019-43 was deposited as susceptible to fluconazole, amphotericin and anidulafungin. NR-52716 was produced by inoculation of BEI Resources seed lot 70038718 onto Emmons' Modified Sabouraud Dextrose agar kolles, which were grown for 3 days at 25°C in an aerobic atmosphere. The agar growth was harvested with 20% glycerol to produce this lot. Quality control testing was completed under propagation conditions unless otherwise noted.

**Lot: 70060141**

**Manufacturing Date: 21APR2023**

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](mailto:Contact@BEIResources.org). We try to respond to feedback within 24 hours.

TEST	SPECIFICATIONS	RESULTS
<b>Phenotypic Analysis</b> Cellular morphology  Colony morphology VITEK® 2 (YST card) VITEK® MS (MALDI-TOF)	Report results  Report results <i>C. auris</i> (≥ 89%) <i>C. auris</i>	Globose with some ovoid cells; no pseudohyphae observed (Figure 1) Circular and butyrous (Figure 2) <i>C. auris</i> (98%) <i>C. auris</i> (99.9%)
<b>Antibiotic Susceptibility Profile<sup>1</sup></b> Etest® antibiotic test strips 2 days at 35°C in an aerobic atmosphere on RPMI 1640 medium with MOPS and 2% glucose Amphotericin B Anidulafungin Fluconazole Voriconazole	Susceptible Susceptible Resistant Report results	Susceptible (1 µg/mL) Susceptible (0.75 µg/mL) Resistant (256 µg/mL) <sup>2</sup> 0.5 to 0.75 µg/mL
<b>Genotypic Analysis</b> Sequencing of partial 18S ribosomal RNA (rRNA) gene, internal transcribed spacer (ITS) 1, 5.8S rRNA gene, ITS 2, partial 26S rRNA (~ 360 base pairs) Sequencing of 28S rRNA gene (~ 540 base pairs)	≥ 99% sequence identity to <i>C. auris</i> , strain B8441 (GenBank: PEKT02000002.1) ≥ 99% sequence identity to <i>C. auris</i> , strain B8441 (GenBank: PEKT02000002.1)	100% sequence identity to <i>C. auris</i> , strain B8441 (GenBank: PEKT02000002.1) 100% sequence identity to <i>C. auris</i> , strain B8441 (GenBank: PEKT02000002.1)
<b>Purity</b> Nutrient broth with 0.1% Yeast Extract at 25°C 3 days in an aerobic atmosphere Nutrient broth with 0.1% Yeast Extract at 37°C 3 days in an aerobic atmosphere	No bacterial growth  No bacterial growth	No bacterial growth  No bacterial growth
<b>Viability (post-freeze)</b>	Growth	Growth

<sup>1</sup>Minimum Inhibitory Concentration (MIC). Currently, there are no established *C. auris*-specific MIC interpretation guidelines; therefore, breakpoints are defined based on those established for closely related *Candida* species. For more information, refer to Forsberg, K., et al. "Candida auris: The Recent Emergence of a Multidrug-Resistant Fungal Pathogen." *Med. Mycol.* 57 (2019): 1-12. PubMed: 30085270.

<sup>2</sup>*C. auris*, strain AKU-2019-43 was deposited as susceptible to fluconazole, but showed a MIC of > 256 µg/mL (interpreted as resistant) for lot 70060141 during QC testing.

Figure 1: Cellular Morphology

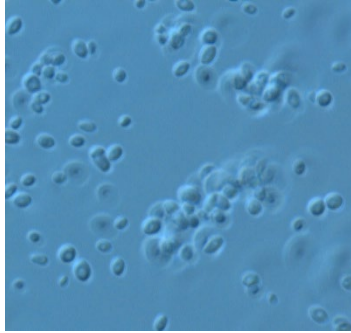
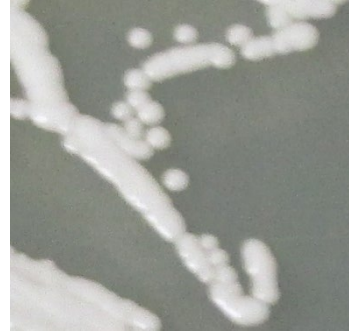


Figure 2: Colony Morphology



/Sonia Bjorum Brower/

Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

07 DEC 2023

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.

