

Candida auris, Strain AKU-2019-111

Catalog No. NR-52715

Product Description:

Candida auris (*C. auris*), strain AKU-2019-111 was isolated in 2019 from the bloodstream of a human with nosocomial fungemia in Karachi, Pakistan. Strain AKU-2019-111 was deposited as resistant to fluconazole and susceptible to amphotericin and anidulafungin. NR-52715 lot 70038127 was produced by inoculation of the deposited material onto Emmons' Modified Sabouraud Dextrose agar, which was grown for 3 days at 25°C in an aerobic atmosphere. The agar growth was harvested with 20% glycerol to produce this lot.

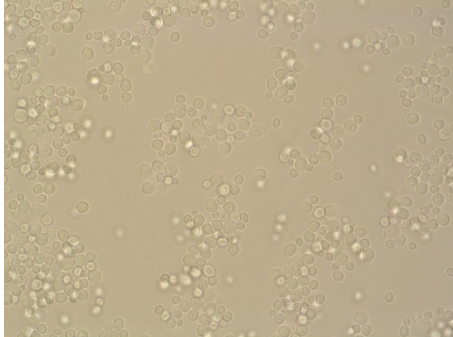
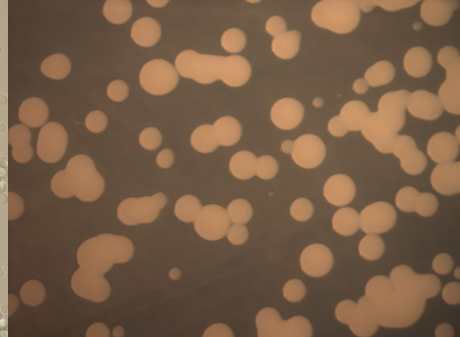
Lot: 70038127

Manufacturing Date: 17AUG2020

| TEST | SPECIFICATIONS | RESULTS |
|--|--|--|
| Phenotypic Analysis Cellular morphology 3 days at 25°C in an aerobic atmosphere on Emmons' Modified Sabouraud Dextrose agar Colony morphology Biochemical tests VITEK® 2 (YST card) | Report results Report results <i>C. auris</i> (≥ 89%) | Globose-to-subglobose; budding observed; no pseudohyphae observed (Figure 1a) Butyrous and off-white (Figure 1b) <i>C. auris</i> (99%) |
| Antibiotic Susceptibility Profile¹ Etest® antibiotic test strips 2 days at 35°C in an aerobic atmosphere on RPMI 1640 with MOPS and 2% glucose Amphotericin B Anidulafungin Fluconazole Voriconazole | Report results Susceptible Resistant Report results | Susceptible (0.5 to 0.75 µg/mL) Susceptible (0.016 µg/mL) Susceptible (3 to 4 µg/mL) ² 0.016 µg/mL |
| Genotypic Analysis 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 (~ 530 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) |
| Purity 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 |
| Viability (post-freeze) 3 days at 25°C in an aerobic atmosphere on Emmons' Modified Sabouraud Dextrose agar | Growth | Growth |

¹Minimum 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.

²*C. auris*, strain AKU-2019-111 was deposited as resistant to fluconazole but showed a MIC of ≤ 4 µg/mL (interpreted as susceptible) for fluconazole during QC testing. Testing was performed in duplicate.

Figure 1a: Cellular Morphology**Figure 1b: Colony Morphology**

/Heather Couch/

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31 OCT 2020

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