



# ***Citrobacter freundii*** **(Braak) Werkman and Gillen**

**BAA-3038™**

## **Description**

This strain is part of the Global Priority Superbugs collection. It is an extensively characterized antimicrobial-resistant clinical isolate with validated genotypic and phenotypic activity against a variety of drug classes. This strain is provided with geographic source information; an NGS-assembled whole genome sequence, including annotated antibiotic resistance and rRNA genes; and an expanded level of susceptibility data with MIC test results, making it an essential tool for all stages of the discovery and development process for novel antimicrobials and therapeutics, molecular-based detection assays, and updated sterility protocols.

**This product has been removed from the ATCC catalog and will be deposited with the Biodefense and Emerging Infectious Resources (BEIR) collection.**

**Strain designation:** 1049882

**Deposited As:** *Citrobacter freundii*

**Type strain:** No

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## **Storage Conditions**

**Product format:** Frozen

**Storage conditions:** -80°C or colder

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## **Intended Use**

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

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## **BSL 2**

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

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## **Certificate of Analysis**

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## **Growth Conditions**

### **Medium:**

ATCC Medium 18: Trypticase Soy Agar/Broth

**Temperature:** 37°C

**Atmosphere:** Aerobic

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## Handling Procedures

1. Open thawed vial according to enclosed instructions or visit [www.atcc.org](http://www.atcc.org) for instructions.
  2. Aseptically transfer the entire contents to a 5-6 mL tube of #18 broth. Additional test tubes can be inoculated by transferring 0.5 mL of the primary broth tube to these secondary tubes.
  3. Use several drops of the primary broth tube to inoculate a #18 plate and/or #18 agar slant.
  4. Incubate at 37°C for 18-24 hours.
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## Notes

Predicted antimicrobial resistance gene sequence data are provided for informational purposes only and are based on open reading frames (ORFs) identified and annotated from contigs produced during NextGen Sequencing (NGS). ATCC does not warrant that the entire predicted antimicrobial resistance gene is present within the sequence prepared for lot-specific reports. Likewise, the information provided merely indicates that some portion of the sequence (whole or in part) is present based on analytical base pair alignment with known gene sequences. Additional information on this culture is available on the ATCC® web site at [www.atcc.org](http://www.atcc.org).

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Citrobacter freundii* (Braak) Werkman and Gillen (ATCC BAA-3038)

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## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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