



# *Ensifer fredii* (Scholla and Elkan) Young

35423™

## Description

**Strain designation:** USDA 205 [CCUG 27877, DSM 5851, HAMBI 2075, ICMP 11139, IFO 14780, LMG 6217, NRRL B-14241, NRRL B-14594, PRC 205]

**Deposited As:** *Rhizobium fredii* Scholla and Elkan

**Type strain:** Yes

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## Storage Conditions

**Product format:** Freeze-dried

**Storage conditions:** 2°C to 8°C

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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 1

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 submerged 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 submerged 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 111: Rhizobium X medium

**Temperature:** 30°C

**Atmosphere:** Aerobic

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## Handling Procedures

1. Open vial according to enclosed instructions or visit [www.atcc.org](http://www.atcc.org) for instructions.
2. Rehydrate the entire pellet with approximately 0.5 mL of #111 broth. Aseptically transfer the entire contents to a 5-6 mL tube of #111 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 #111 plate and/or #111 agar slant.
  4. Incubate at 30°C for 3-4 days.
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## **Notes**

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: *Ensifer fredii* (Scholla and Elkan) Young (ATCC 35423)

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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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