



# *Ensifer fredii* (Scholla and Elkan) Young

51809™

## Description

**Strain designation:** HH103

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

**Type strain:** No

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## Storage Conditions

**Product format:** Freeze-dried

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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 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 111: Rhizobium X medium

**Temperature:** 26°C

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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 51809)

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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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# ***Ensifer fredii* (Scholla and Elkan) Young**

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Product Sheet

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