



# ***Acidithiobacillus ferrooxidans* (Temple and Colmer) Kelly and Wood**

**23270™**

## **Description**

Type strain. Formerly *Thiobacillus ferrooxidans*. Organism used in genome sequencing project.

**Strain designation:** NCIB 8455 [DSM 14882]

**Deposited As:** *Ferrobacillus ferrooxidans* Leathen and Braley

**Type strain:** Yes

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## **Storage Conditions**

**Product format:** Test tube

**Storage conditions:** See handling procedure

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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**

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or national agencies.

Product Sheet

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 2039: *Acidithiobacillus ferrooxidans* Medium

**Temperature:** 26°C

**Atmosphere:** Aerobic

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## **Handling Procedures**

1. Incubate test tube cultures under above conditions upon receipt. It is helpful to incubate test tubes in a slanted position to increase gas exchange in broth. Transfer culture to fresh media within one week of arrival.
2. Gently vortex the test-tube to dislodge the iron that has oxidized onto the

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- glass. Aseptically withdraw approximately 1.0 mL of the broth culture and transfer into 5 mL of fresh broth.
3. Incubate the broth either on a shaker or in a static and slanted position.
  4. Growth is evident within one week, when yellow-orange iron oxide deposits are observed.
  5. Transfer the culture approximately every two weeks.
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### **Notes**

The cells are motile and rod-shaped.

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: *Acidithiobacillus ferrooxidans* (Temple and Colmer) Kelly and Wood (ATCC 23270)

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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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