



Product Sheet

# *Acidithiobacillus ferrooxidans* (ATCC®) 53993™)

Please read this **FIRST**



## Intended Use

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

## Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Acidithiobacillus ferrooxidans* (ATCC® 53993™)

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Manassas, VA 20108 USA  
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Fax: 703.365.2750  
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## Description

**Designation:** BNL-5-31  
**Deposited Name:** *Leptospirillum ferrooxidans* Markosian

## Propagation

**Medium**  
ATCC® Medium 2039: *Acidithiobacillus ferrooxidans* Medium

**Growth Conditions**  
**Temperature:** 30°C  
**Atmosphere:** Aerobic

## Propagation Procedure

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 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 to two weeks, when yellow-orange iron oxide deposits are observed.
5. Transfer the culture approximately every two to four weeks.
6. Transfer more tubes than needed as backup in the event of low viability due to repeated passage. The culture will remain viable for a minimum of one month and for up to three months when stored at room temperature without shaking.

## Notes

No growth on solid media. 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).

## References

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

## Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

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the misidentification or misrepresentation of such materials.

Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at [www.atcc.org](http://www.atcc.org)

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