



Product Sheet

# *Geobacter metallireducens* (ATCC® 53774™)

Please read this **FIRST**



Storage Temp.  
**Frozen: -80°C or colder**  
**Freeze-Dried: 2°C to 8°C**  
**Live Culture: See Propagation Section**

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Biosafety Level  
**1**

## 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: *Geobacter metallireducens* (ATCC® 53774™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

## Description

**Designation:** GS-15 [DSM 7210]

**Deposited Name:** *Geobacter metallireducens* Lovley et al.

**Product Description:** Type strain. Genome sequenced strain.

## Propagation

### Medium

ATCC® Medium 1768: *Geobacter metallireducens* medium

### Growth Conditions

**Temperature:** 30°C

**Atmosphere:** Anaerobic gas mixture, 80% N<sub>2</sub>-20% CO<sub>2</sub>

### Propagation Procedure

1. Keep vial frozen until ready to use; then thaw under anaerobic conditions.
2. Under anaerobic conditions, quickly transfer the thawed aliquot into a single tube of 5 to 6 mL anaerobic ATCC® #1768 broth.
3. Additional #1768 broth tubes can also be inoculated with 0.5 mL from the original broth.
4. Incubate at 30°C for 3 to 5 days under a gas mixture of 80% N<sub>2</sub> and 20% CO<sub>2</sub>.
5. Growth is evident by slight turbidity in the broth. The medium starts out light orange and then turns darker brown. When this occurs, it should be transferred. As the culture ages, it will eventually lose all the pigmentation. Once the pigment is lost, it is less likely that the cells will survive transfer.

### ANAEROBIC CONDITIONS:

Anaerobic conditions for transfer may be obtained by either of the following:

- Use of an anaerobic gas chamber.
- Placement of test tubes under a gassing cannula system hooked to anaerobic gas.

Anaerobic conditions for incubation may be obtained by any of the following:

- Loose screw caps on test tubes in anaerobic chamber.
- Loose screw caps on test tubes in an activated anaerobic gas pack jar.
- Use of sterile butyl rubber stoppers on test tubes so that an anaerobic gas headspace is retained.

## Notes

This organism grows well in broth but not on agar. Media must contain Ferric citrate to support growth. Cells are Gram-negative small rods. Some cells are motile.

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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## Disclaimers



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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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