ATCC

Product Sheet

# *Geobacter lovleyi* (ATCC® BAA-1151™)

**Please read this FIRST**

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

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 lovleyi* (ATCC® BAA-1151™)

American Type Culture Collection
PO Box 1549
Manassas, VA 20108 USA
www.atcc.org

800.638.6597 or 703.365.2700
Fax: 703.365.2750
Email: Tech@atcc.org

*Or contact your local distributor*

## Description

**Designation:** SZ
**Deposited Name:** *Geobacter lovleyi*
**Product Description:** Type strain. Genome sequenced strain.

## Propagation

**Medium**
ATCC® Medium 2635: *Desulfuromonas michiganenesis* Medium

**Growth Conditions**
**Temperature:** 26°C
**Atmosphere:** Anaerobic gas mixture, 80% $N_2$, 20% $CO_2$

**Propagation Procedure**

1. Sterilize the top of the Balch tube by spraying with 70% ethanol and then flaming
2. If needed, exchange the gas in the test tube for 80% $N_2$-20% $CO_2$. Supplement the media with 200 µL per 100 mL PCE and 100 µL per 10 mL of fumarate.
3. When the Balch tube is ready to inoculate, open the vial according to enclosed instructions.
4. For inoculation, use an anaerobic 1.0 mL syringe tipped with 22-gauge needle. Withdraw 0.5 mL of #2635 broth and use this to rehydrate the entire freeze-dried pellet. Immediately place the rehydrated vial under a gentle stream of sterile oxygen-free gas.
5. Using the same syringe, transfer the rehydrated cell suspension to a tube of # 2635 broth. Plate 0.1 mL of the inoculated culture onto a non-selective medium and incubate aerobically at 26°C. Use 0.1 mL of the inoculated culture to inoculate a nonselective aerobic broth and an additional tube of #2635 broth. Incubate the broth tubes at 26°C.
6. Growth should be detected in the #2635 broth within 2 weeks. There should be no growth detected on the aerobic plate or in the aerobic broth.

## Notes

After two weeks of incubation, growth can be viewed as motile rods in a wet mount. The broth will not become turbid. An oil slick may form at the surface of the broth due to the addition of PCE.

This organism is capable of degrading a common groundwater contaminant by completely dechlorinating tetrachloroethene (PCE). Growth on PCE yields very low cell numbers, but when supplemented with 10 mM fumarate, cell yields are much higher. Growth on media lacking PCE may decrease the cells' ability to dechlorinate PCE.

Additional information on this culture is available on the ATCC® web site at www.atcc.org.

## References

References and other information relating to this product are available online at 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.

## ATCC Warranty

ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this product. If an alternative medium formulation is used, the ATCC warranty for viability is no

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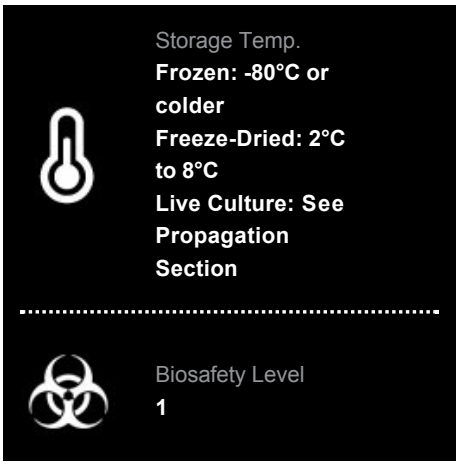


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longer valid.

**Disclaimers**

This product is intended for laboratory research purposes only. It is not intended for use in humans.
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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

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