



Product Sheet

Sulfurospirillum

arsenophilum (ATCC®)

700056™)

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: *Sulfurospirillum arsenophilum* (ATCC® 700056™)

Description

Designation: MIT-13 [DSM 10659]

Deposited Name: *Geospirillum arsenophilus*

Propagation

Growth Conditions

Temperature: 30.0°C

Atmosphere: Under a gas mixture of 80% N₂, 20% CO₂

Propagation Procedure

1. Thaw and open vial according to enclosed instructions.
2. Under anaerobic conditions, withdraw 0.5 ml of #2022 broth from a single test tube (5 to 6 ml) and rehydrate the entire vial contents.
3. Aseptically transfer this aliquot back into the broth tube and inoculate a blood agar plate to be incubated anaerobically. An aerobic blood plate may also be streaked to check for purity.
4. Incubate tubes and one plate under an anaerobic atmosphere at 30°C. Incubate second blood plate aerobically at 37°C.
5. Within 48 to 72 hours, growth is evident by moderate to good turbidity in the broth with sediment in the bottom of the tube. No growth occurs on the blood agar plate incubated aerobically. Once growth is achieved, transfer the culture to fresh tubes of #2022 broth. This culture does not grow on agar.

ANAEROBIC CONDITIONS:

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

· 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 an activated anaerobic gas pack jar, or

· Use of sterile butyl rubber stoppers on test tubes so that an anaerobic gas headspace is retained.

Notes

Always use freshly prepared anaerobic media.

The best results have been obtained using the gassing cannula system. For reviving the cultures initially, an anaerobic jar is not recommended. Once the culture has been established, an anaerobic jar can be used if the inoculum is 20% or greater.

Either 100% N₂ or 80% N₂-10% CO₂-10% H₂ can be used as the anaerobic gas for culturing this organism.

Once growth has been obtained, this culture is fairly easy to maintain if transferred every other day. A culture that has good growth and is fresh can be maintained at 4°C for up to a week. The cells can be stored at 70 to 80°C by growing a large volume in ATCC Medium #2022, harvesting the cells and then mixing the cell pellet in an equal volume of fresh #2022 and 20% glycerol (10% final concentration). Dispense the cells into vials (approximately 0.5 to 1.0 ml per vial) and freeze rapidly. Both the #2022 broth and glycerol need to be pre-reduced. This may be accomplished by adding 0.1 ml (for each 5 to 6 ml medium) of a 1.5% sodium sulfide solution.

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

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



Product Sheet

Sulfurospirillum
***arsenophilum* (ATCC®**
700056™)

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: *Sulfurospirillum arsenophilum* (ATCC® 700056™)

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 longer valid.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from 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

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

© ATCC 2018. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [08/17]

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