



Product Sheet

# *Sulfurihydrogenibium subterraneum* (ATCC® BAA-562™)

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: *Sulfurihydrogenibium subterraneum* (ATCC® BAA-562™)

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:** HGMK-1 [DSM 15120, JCM 11477]  
**Deposited Name:** *Sulfurihydrogenibium subterraneum*

## Propagation

### Medium

ATCC® Medium 2346: mjANHOX-NO3 medium supplemented with thiosulfate

### Growth Conditions

**Temperature:** 60.0°C  
**Atmosphere:** Anaerobic

### Propagation Procedure

1. Sterilize the top of the Balch tube by spraying it with 70% ethanol and then flame the top.
2. If needed exchange the gas in the test tube for 100% N<sub>2</sub>, 80% N<sub>2</sub>-20%CO<sub>2</sub>. When thiosulfate is the electron donor the culture can be grown under aerobic conditions (N<sub>2</sub>-CO<sub>2</sub>-O<sub>2</sub>, 65:15:20).
3. When the Balch tube is ready to inoculate, open the vial according to enclosed instructions.
4. For inoculation, use a 1.0 ml syringe tipped with 22 gauge needle. Withdraw 0.5 ml of Medium #2346 and use this to rehydrate the freeze-dried pellet. Transfer the rehydrated cell suspension back to a tube of #2346 broth and incubate at 60°C. Plate 0.1 ml of the inoculated culture onto a non-selective medium and incubate aerobically at 37°C. Inoculate a nonselective anaerobic and aerobic broth and incubate at 60°C
5. Growth should be detected in the #2346 broth within 24 to 48 hours. There should be no growth detected on the aerobic plate. There should be no growth in the nonselective aerobic or anaerobic broth.

## Notes

With hydrogen or thiosulfate as the electron donor this strain was able to utilize molecular oxygen, nitrate, soluble ferric citrate, insoluble ferrihydrite iron (III), arsenate, selenate and selenite.

Growth will be detected within 24 to 48 hours by turbidity that settles at the bottom of the test tube. The turbidity of the culture increases from 24 to 48 hours but the cell density does not.

The cells are Gram negative motile rods with a polar flagella. The cells are typically in short chains. Once growth has been established, the culture should be transferred every 24 to 48 hours when maintained at 60°C. The culture can be maintained at 4°C for up to 1 week..

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).  
Resolution: 1000X

## 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.

## 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 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,



Product Sheet

***Sulfurihydrogenibium***  
***subterraneum*** (ATCC®)  
**BAA-562™**

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](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

© ATCC 2013. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [01/14]

---

**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: *Sulfurihydrogenibium subterraneum* (ATCC® BAA-562™)

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