



Product Sheet

# *Desulfotomaculum acetoxidans* (ATCC®) 49208™

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: *Desulfotomaculum acetoxidans* (ATCC® 49208™)

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:** DSM 771 [5575]

**Deposited Name:** *Desulfotomaculum acetoxidans* Widdel and Pfennig

**Product Description:** Type strain

## Propagation

### Medium

ATCC® Medium 1964: *Desulfotomaculum acetoxidans* medium

### Growth Conditions

**Temperature:** 37°C in shaking condition

**Atmosphere:** Anaerobic gas mixture, 80% N<sub>2</sub> - 10% CO<sub>2</sub> - 10% H<sub>2</sub>

### Propagation Procedure

1. Keep cryovial frozen until ready for use.
2. Perform all steps under anaerobic conditions (*see below*).
3. Thaw the vial and aseptically transfer the suspension into a tube of #1964 broth. Inoculate a plate of non-selective medium with 0.1 mL of the culture.
4. Seal the test tube with a rubber stopper and incubate anaerobically at 37°C in shaking condition. Incubate the plate(s) aerobically as a purity check.
5. Within 7 to 14 days, growth is evident by moderate to good turbidity in the broth, with sediment in the bottom of the tube. Cells are motile medium rods in singles, and pairs. No growth should occur on the blood agar plate incubated aerobically. Once growth is achieved, transfer the culture to fresh #1964 broth. This culture does not grow well on agar.

### ANAEROBIC CONDITIONS:

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

- Use of an anaerobic gas chamber, or
- Placement of test tubes under a gassing cannula system connected 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, or
- Use of sterile butyl rubber stoppers on test tubes so that an anaerobic gas headspace is retained.

## Notes

Prior to inoculation, reduce the medium with the addition of 0.1 mL of a 1.5 % Na<sub>2</sub>S·9H<sub>2</sub>O (stock solution) for each 10 mL of medium to be inoculated; let the medium sit for minimum of 30 minute before inoculating.

Once growth has been detected, it has been noted that adding 0.1 mL of a 1.5 % Na<sub>2</sub>S·9H<sub>2</sub>O stock solution for each 10 mL of medium may enhance growth.

Always use freshly prepared anaerobic media.

For best results, use an anaerobe chamber. If one is not available, use a gassing cannula system. Using an anaerobic jar after rehydration of the freeze-dried pellet is not recommended. Once the culture has been established, using an anaerobic jar will work if the inoculum is 20% or greater.

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°C to -80°C by growing a large volume in #1964 broth, harvesting the cells, and then mixing the cell pellet in an equal volume of fresh #1964 and 20% glycerol (10% final glycerol concentration). Distribute the cells into vials (approximately 0.5 to 1.0 mL per vial), and freeze rapidly. Both the #1964 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](http://www.atcc.org).

## References

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



Product Sheet

***Desulfotomaculum***  
***acetoxidans*** (ATCC®)  
**49208™**

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: *Desulfotomaculum acetoxidans* (ATCC® 49208™)

**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, 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. [03/27]

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