Desulfosporosinus orientis (Campbell and Postgate) Stackebrandt et al.

23598™

Description

Strain designation: NCIB 8445 [Singapore II, Ulu]
Deposited As: *Desulfovibrio orientis* Adams and Postgate
Type strain: No

Storage Conditions

Product format: Freeze-dried

Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

Desulfosporosinus orientis (Campbell and Postgate) Stackebrandt et al.

23598

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Growth Conditions

Medium:
ATCC Medium 1249: Modified Baar's medium for sulfate reducers
ATCC Medium 1249: Modified Baar's medium for sulfate reducers
ATCC Medium 207: Modified Starkey's medium C
Temperature: 30°C
Atmosphere: Anaerobic

Handling Procedures

1. Open vial according to enclosed instructions.

2. Perform all steps under anaerobic conditions. (*see below*)

3. Aseptically transfer 0.5 ml of ATCC Medium #1249 to the vial and rehydrate the

freeze-dried pellet. Transfer the suspension back into the tube of broth. Inoculate a plate of non-selective medium with 0.1 of the culture.

4. Seal the test tube with a rubber stopper and incubate anaerobically at 30ºC. Incubate the plate(s) aerobically as a purity check.

5. Within 24 to 48 hours, growth should be evident by moderate to good turbidity in the broth, with sediment in the bottom of the tube. No growth should occur on the blood agar plate incubated aerobically. Once growth is achieved, transfer the culture to fresh #1249 broth. This culture does not grow well on agar.

ANAEROBIC CONDITIONS:

· Tubes of media are placed under a gassing cannula system hooked to a source of oxygen free gas.

· All transfers are performed while the test tubes are on the cannula system with a gentle stream of oxygen-free gas flowing through the system.

· As the test tubes are removed from the cannula system, each is sealed with butyl rubber stopper, thus maintaining the anaerobic headspace.

Notes

Always use freshly prepared anaerobic media.

The best results have been obtained using the 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.

Either 100% N_2 or 80% N_2-10% CO_2-10% H_2 can be used as the anaerobic gas for culturing this organism.

Once growth has been obtained this culture is fairly easy to maintain by transferring every other day. A culture that has good growth and is fresh can be maintained at 4ºC for up to a week. The cells can be stored at 70 to 80ºC by growing a large volume in #1249 broth, harvesting the cells and then mixing the cell pellet in

an equal volume of fresh #1249 and 20% glycerol (10% final concentration). Distribute the cells into vials (approximately 0.5 to 1.0 ml per vial) and freeze rapidly. Both the #1249 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.

Cells appear as rods in singles and pairs with pointed ends. The cells are motile and produce spores.

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

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Desulfosporosinus orientis* (Campbell and Postgate) Stackebrandt et al. (ATCC 23598)

References

References and other information relating to this material are available at www.atcc.org.

Warranty

The product is provided 'AS IS' and the viability of ATCC® products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product. While other unspecified media and reagents may also produce satisfactory results, a

change in the ATCC and/or depositor-recommended protocols may affect the recovery, growth, and/or function of the product. If an alternative medium formulation or reagent is used, the ATCC warranty for viability is no longer valid. Except as expressly set forth herein, no other warranties of any kind are provided, express or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose, manufacture according to cGMP standards, typicality, safety, accuracy, and/or noninfringement.

Disclaimers

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use. Any proposed commercial use is prohibited without a license from ATCC.

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 or complete and the customer bears the sole responsibility of confirming the accuracy and completeness of any such information.

This product is sent on the condition that the customer is responsible for and assumes all risk and responsibility in connection with the receipt, handling, storage, disposal, and use of the ATCC product including without limitation taking all appropriate safety and handling precautions to minimize health or environmental risk. As a condition of receiving the material, the customer agrees that any activity undertaken with the ATCC product and any progeny or modifications will be conducted in compliance with all applicable laws, regulations, and guidelines. This product is provided 'AS IS' with no representations or warranties whatsoever except as expressly set forth herein and in no event shall ATCC, its parents, subsidiaries, directors, officers, agents, employees, assigns, successors, and affiliates be liable for indirect, special, incidental, or consequential damages of any kind in connection with or arising out of the customer's use of the product. While reasonable effort is made to ensure 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 material transfer agreement (MTA) for further details regarding the use of this product. The MTA is available at www.atcc.org.

Copyright and Trademark Information

Revision

This information on this document was last updated on 2025-02-03

Contact Information

ATCC
10801 University Boulevard
Manassas, VA 20110-2209
USA
US telephone: 800-638-6597
Worldwide telephone: +1-703-365-2700
Email: tech@atcc.org or contact your local distributor