



Desulfovibrio desulfuricans subsp. *desulfuricans* (Beijerinck) Kluyver and van Niel

27774™

Description

Desulfovibrio desulfuricans subsp. *desulfuricans* strain MB is a whole-genome sequenced bacterium that was isolated from the rumen of sheep. This product produce restriction endonuclease *DdsI* and iron-sulfur protein and is capable of utilizing nitrate as well as sulfate during the anaerobic fermentation of lactate.

Strain designation: MB

Deposited As: *Desulfovibrio desulfuricans* subsp. *desulfuricans* (Beijerinck) Kluyver and van Niel

Type strain: No

Storage Conditions

Product format: Freeze-dried

Storage conditions: 2°C to 8°C

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

Desulfovibrio desulfuricans subsp. *desulfuricans* (Beijerinck) Kluver and van Niel

27774

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.

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 260: Trypticase soy agar/broth with defibrinated sheep blood

ATCC Medium 2755: *Desulfovibrio* Medium

Temperature: 37°C

Atmosphere: 80% N₂, 20% CO₂

Desulfovibrio desulfuricans subsp. *desulfuricans* (Beijerinck) Kluver and van Niel

27774

Handling Procedures

1. Open vial according to enclosed instructions or visit www.atcc.org for instructions.
2. Under anaerobic conditions aseptically rehydrate the entire pellet with approximately 0.5 mL of #1249 broth. Aseptically transfer the entire contents to a 5-6 mL tube of #1249 broth. Additional test tubes can be inoculated by transferring 0.5 mL of the primary broth tube to these secondary broth tubes. Best practice dictates the use of pre-reduced media.
3. Use several drops of the primary broth tube to inoculate a #260 plate and/or #260 agar slant.
4. Incubate in an anaerobic atmosphere at 37°C for 72 to 96 hours. Incubate one agar plate aerobically at 37°C to check for contamination.

ANAEROBIC CONDITIONS:

Anaerobic conditions for transfer may be obtained by the 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 an anaerobic chamber
- Loose screw caps on test tubes in an activated anaerobic gas pack jar
- Use of sterile butyl rubber stoppers on test tubes so that an anaerobic gas headspace is retained

Notes

Always use freshly prepared anaerobic media.

This culture grows well in broth when hungate tubes (18ANA) are used. For larger volumes, use serum bottles (SRM bottles).

Anaerobe Systems Brucella Blood plate (AS-111 or AS-141) can be used to analyze colony morphology and purity

ATCC Medium 2755: *Desulfovibrio* Medium may be substituted for #1249.

Purified genomic DNA of this strain is available as ATCC 27774D-5.

Additional information on this culture is available on the ATCC web site at

Desulfovibrio desulfuricans subsp. *desulfuricans* (Beijerinck) Kluyver and van Niel

27774

www.atcc.org

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Desulfovibrio desulfuricans* subsp. *desulfuricans* (Beijerinck) Kluyver and van Niel (ATCC 27774)

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

Desulfovibrio desulfuricans* subsp. *desulfuricans **(Beijerinck) Kluyver and van Niel**

27774

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

© ATCC 2023. All rights reserved.

ATCC is a registered trademark of the American Type Culture Collection.

Revision

Desulfovibrio desulfuricans* subsp. *desulfuricans
(Beijerinck) Kluyver and van Niel

27774

This information on this document was last updated on 2022-10-22

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
