Nitrosospira multiformis (Watson et al.) Head et al.

25196™

Description

Type strain
Strain designation: C 71
Deposited As: *Nitrosolobus multiformis* Watson et al.
Type strain: Yes

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 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 929: Nitrosolobus medium
Temperature: 26°C
Atmosphere: Aerobic
Incubation: With shaking

Handling Procedures

1. Open vial according to enclosed instructions.
2. Rehydrate the entire contents of the vial with 0.5 mL of #929 broth.
3. Transfer this aliquot into a 25 cm^2 T-flask with 5 mL #929.
4. Establish growth in the primary culture before transferring.

5. Additional medium may be inoculated when culture pH needs adjustment every 1 to 2 days and cell numbers reach greater than 1 cell per field at 1000X magnification. A 10% inoculum is suggested. It can take up to 3 weeks for cultures to become turbid.
6. Incubate with shaking at 26°C.
7. For optimal growth, the pH of the medium must be periodically adjusted to 7.5. Medium #929 contains the pH indicator phenol red. As growth occurs, medium pH will drop. Medium color will change from pink to orange and then to yellow. Whenever the medium becomes yellow, adjust pH as follows: aseptically add 0.3 M K_2CO_3 dropwise until color returns to pink. Avoid raising the pH of the culture above 7.5.
8. The medium should turn yellow indicating initial growth within the first week of incubation. Adjust pH and check cell numbers microscopically. Continue incubation, adjusting medium pH as needed.

Notes

This strain was originally deposited as *Nitrosolobus multiformis*.

If strain is received as a broth culture, transfer to fresh medium upon arrival.

It is imperative that the medium be prepared according to directions in clean glassware. Medium may be dispensed into tissue culture flasks rather than glass flasks to avoid trace contaminants sometimes found on glassware.

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: *Nitrosospira multiformis* (Watson et al.) Head et al. (ATCC 25196)

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 2025-02-13

Contact Information

ATCC
10801 University Boulevard
Manassas, VA 20110-2209
USA

Nitrosospira multiformis (Watson et al.) Head et al.

25196

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: tech@atcc.org or contact your local distributor