



Nitrospira 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 cm² 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 K₂CO₃ 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.
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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.

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