



Nitrospira multiformis **(Watson et al.) Head et al.**

25198™

Description

Strain designation: C 22

Deposited As: *Nitrosolobus multiformis* Watson et al.

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.

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 438: Nitrosolobus medium

Temperature: 30°C

Handling Procedures

1. Open vial according to enclosed instructions.
2. Using a single tube of #438 broth (5 to 6 ml), withdraw approximately 0.5 to 1.0 ml with a Pasteur or 1.0 ml pipette. Rehydrate the entire pellet.
3. Aseptically transfer this aliquot back into the broth tube. Mix well.
4. Aseptically transfer 2 ml of vial contents to 25 ml of #438 broth contained in an

Erlenmeyer flask or a tissue culture flask.

5. Incubate flask in the dark at 30°C. When using a tissue culture flask, flask should be laid down for incubation to promote air exchange.

6. As the cells multiply, the indicator in the medium will change from pink to yellow. The pH of the medium should be maintained at 7.8 to 8.2 (pink) during growth by neutralizing with a drop or two of sterile 0.1M potassium carbonate.

7. Abundant growth should be evident in static culture in 10 to 14 days. The rate of growth can be accelerated by incubation on a reciprocal shaker (4 to 6 days).

Notes

Transfer the culture every four to six weeks, storing the fully grown culture at 4 °C. A 10% inoculum (10 ml per 100 ml fresh medium) is recommended. Cells may be preserved by freezing with a suitable cryoprotectant.

To reduce constant monitoring of the medium during growth, 0.05M HEPES buffer can be added to the media formula. This will help to maintain the pH necessary for growth.

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 25198)

References

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

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