Nitrosococcus oceani (Watson) Watson

19707™

Description

Type strain. Genome sequenced strain.
Strain designation: C-107
Deposited As: *Nitrosococcus oceanus* (Watson) Watson
Type strain: Yes

Storage Conditions

Product format: Frozen
Storage conditions: -80°C or colder

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 928: Nitrosococcus medium
ATCC Medium 260: Trypticase soy agar/broth with defibrinated sheep blood
Temperature: 26°C
Atmosphere: Aerobic

Handling Procedures

1. Thaw frozen vial at room temperature and aseptically transfer vial contents to 10.0 mL of ATCC Medium #928 contained in an Erlenmeyer or tissue culture flask. Remove 1.0 mL and transfer to a second flask containing 10.0 mL.
2. Transfer 0.1 mL to ATCC Medium #260 from primary flask and streak.
3. Incubate flask and plate at 26°C for 7-14 days. Wrap the flask with a foil served

as dark. When using a tissue culture flask, it should be laid down for incubation to promote air exchange.

4. Growth is very slow but is evident by the change of color due to pH changes and microscopically with round cells found in pairs. After growth has been established the culture can be transferred (see notes). No growth observes on Medium #260.

Notes

Transfer culture every four to six weeks, storing the fully-grown culture at 4°C. A 10% inoculum (10.0 mL per 100.0 mL fresh medium) is recommended. Cells may be preserved by freezing with a suitable cryoprotectant.

When starting ATCC® 19707™ in a flask of broth, ATCC typically observes pink medium changing to yellow within two weeks and growth that settles on the bottom of the flask. ATCC uses a T-25 with 10 mL of medium (laid flat) and incubate at 26°C. It is very important that the media needs to be fresh. The media should have a pink coloration and is sensitive to light. The media should be kept away from the light and refrigerated (this helps with keeping the media a little longer).

Within two weeks of starting the culture the media should have changed coloration to a pale yellow but the culture will not be dense enough to transfer. The culture should be fed K_2CO_3, until the color changes back to pink. You need to do this by a drop by drop basis so that you don't add too much.

The culture should be examined microscopically once the K_2CO_3 is beginning to be utilized. This culture does not get very dense and there will be only a few cells per field. The cells will appear as cocci in pairs and singles, motile by tuft of flagella.

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: *Nitrosococcus oceani* (Watson) Watson (ATCC 19707)

References

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

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