ATCC

Product Sheet

Mesotoga primus (ATCC® BAA-2239™)

Please read this FIRST

Storage Temp.
Frozen: -80°C or colder
Freeze-Dried: 2°C to 8°C
Live Culture: See Propagation Section

Biosafety Level
1

Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Mesotoga primus* (ATCC® BAA-2239™)

American Type Culture Collection
PO Box 1549
Manassas, VA 20108 USA
www.atcc.org

800.638.6597 or 703.365.2700
Fax: 703.365.2750
Email: Tech@atcc.org

Or contact your local distributor

Description

Designation: MesG1.Ag.4.2

Propagation

Medium
ATCC® Medium 2816: Mesotoga primus Medium

Growth Conditions
Temperature: 42°C to 45°C
Atmosphere: Anaerobic, 100% N_2

Propagation Procedure

1. Sterilize the top of the Balch tube by spraying it with 70% ethanol then flaming the top.
2. If needed, exchange the gas in the test tube for 100% N_2.
3. If the medium is pink (see discussion about resazurin), add 0.1 - 0.15 mL drop of reducing agent (3% Cysteine stock solution for each 6-10 mL of medium. Let the medium sit at room temperature for at least 30 minutes, overnight if possible. The resazurin must be colorless before inoculating.
4. Thaw the vial at room temperature under anaerobic conditions. Take an anaerobic 1.0 mL syringe (see Anaerobic Conditions D below) tipped with a 22 gauge needle and withdraw the entire contents of the vial and transfer it to the Balch tube. Secondary pre-reduction tubes of medium can be inoculated with 0.5 mL from the primary. Plate 0.1 mL of the inoculated culture onto a non-selective medium and incubate aerobically at 37°C. Incubate the broth tube at 42-45°C.
5. Growth should be detected in the broth within 48 to 17 hours. Nor growth should be detected on the aerobic plate or broth.

ANAEROBIC CONDITIONS:

A. Balch tubes (available from Bellco Glass, Vineland, NJ) are specifically designed for anaerobic work. Use an aluminum-crimp cap to hold a rubber stopper in place. Needles can be inserted easily through the stopper and the tubes can be pressurized to 2 atm. Alternatively, serum vials or screw cap tubes with butyl rubber stoppers may be used. In the case of the latter, the stopper may be removed and the tube placed under a cannula system that dispense sterile, oxygen-free gas for addition of reducing agents or inoculation.
B. Resazurin is a commonly used redox indicator that is pink when the redox potential is above -50 mv and colorless when the potential is below -110 mv; i.e. highly reducing. More strict anaerobes require this low redox potential for optimum growth.
C. To obtain a fully reduced medium, it is necessary that the medium be anoxic and that a reducing agent be added. Common reducing agent are sodium sulfide, cysteine, dithiothreitol, and titanium citrate.
D. Syringes can be made anaerobic by one of two methods:
    1. Displace the dead space in the syringe with a sterile, oxygen-free gas.
    2. Displace the dead space in the syringe with a reducing agent.

Notes

Once growth has been established, the culture should be transferred every 3 to 6 days.
The culture will remain viable for 1 week if stored at room temperature and maintained under anaerobic conditions.
Cells appear as short rod with swollen ends that occur singly, in pairs, and in small clumps.
When examined under phase microscopy, the sheath can sometimes be detected.
Additional information on this culture is available on the ATCC® web site at www.atcc.org.

References

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

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

ATCC Warranty

Product Sheet

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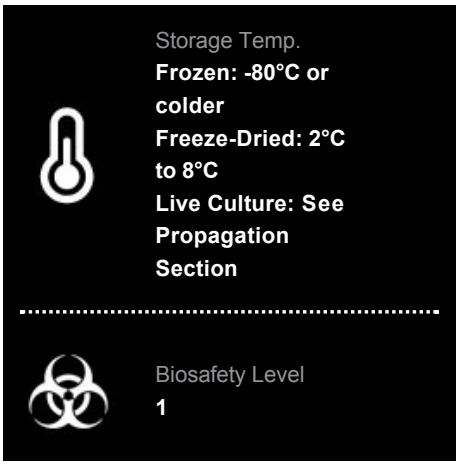

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ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this product. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans.
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.
This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure 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 enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org

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