ATCC

Product Sheet

Acetitomaculum ruminis (ATCC® 43876™)

Please read this FIRST

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: *Acetitomaculum ruminis* (ATCC® 43876™)

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: 139B [DSM 5522, UC 12185]
Deposited Name: *Acetitomaculum ruminis* Greening and Leedle

Propagation

Medium
ATCC® Medium 1016: Chopped meat carbohydrate medium (ATCC Medium 593) with rumen fluid
ATCC® Medium 1016: Chopped meat carbohydrate medium (ATCC Medium 593) with rumen fluid
ATCC® Medium 1669: Acetogen medium

Growth Conditions
Temperature: 37.0°C
Atmosphere: Under a gas mixture of 80% H2, 20% CO2

Propagation Procedure
2. If needed exchange the gas in the test tube for 80% H_2 20% CO_2 20 psi.
3. If the medium is pink (see discussion about resazurin) add 0.1 ml Co-enzyme M (5% stock solution, see below) per 10 ml of medium. Let the medium sit at room temperature for a minimum of 30 minutes or up to 24 hours. The resazurin must be colorless before inoculating.
4. When the Balch tube is ready to inoculate, Open the vial according to enclosed instructions. Withdraw 0.5 ml of the prereduced medium with a syringe (1.0 ml syringe tipped with 22-gauge needle) and use this to rehydrate the freeze dried pellet while the under a gentle stream of oxygen-free gas.
5. Transfer the rehydrated culture to the broth. Plate 0.1 ml of the inoculated culture onto a non-selective medium and incubate aerobically at 37ºC. Use 0.1 ml of the inoculated culture to inoculate a nonselective aerobic broth and an additional tube of #1016 broth. Incubate the non-selective aerobic broth tubes at 37ºC. Incubate the anaerobic tube at 37ºC.
6. Growth should be detected in the #1016 broth within 48 to 96 hours. There should be no growth detected on the aerobic plate or in the aerobic broth.
ANAEROBIC CONDITIONS:
a. Resazurin is a commonly used redox indicator that is pink when the redox potential is above 50 mv., and colorless when the redox potential is below 110 mv. i.e. highly reducing. Most strict anaerobes require this low redox potential for optimum growth.
b. To obtain a fully reduced medium, it is necessary that the medium be anoxic and that a reducing agent be added. Common reducing agents are sodium sulfide, cysteine, dithiothreitol, and titanium citrate.
c. Syringes can be made anaerobic by one of two methods. 1. Displace the dead space in the syringe with a sterile

Notes

This culture also grows on ATCC Medium #1365 (E Medium for Anaerobes with 0.1% Cellobiose) or #1669 (Acetogen Medium). Growth was obtained within 48 to 72 hours.

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

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. 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 strain. If an alternative medium

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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 strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.

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

Additional information on this culture is available on the ATCC web site at www.atcc.org.

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