ATCC

Product Sheet

Thermoanaerobacter pseudethanolicus (ATCC® 33223™)

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: *Thermoanaerobacter pseudethanolicus* (ATCC® 33223™)

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: 39E
Deposited Name: *Clostridium thermohydrosulfuricum* Klaushofer and Parkkinen

Propagation

Medium
ATCC® Medium 1118: Methanobacteria medium (ATCC medium 1045) with 0.2% yeast extract and 0.5% glucose

Growth Conditions
Temperature: 65.0°C
Atmosphere: Anaerobic

Propagation Procedure
1. Sterilize the top of the Balch tube by spraying it with 70% ethanol and then flame the top.
2. If needed exchange the gas in the test tube for 80% N_2 -20% CO_2.
4. When the Balch tube is ready to inoculate, open the vial. With a sterile anaerobic syringe tipped with a 22-gauge needle withdraw 0.5 ml of reduced #1118 medium and add it to the freeze dried pellet. Immediately place the vial under a gentle stream of oxygen free gas.
5. Using the same anaerobic syringe draw the rehydrated culture up and inoculate the same tube of #1118 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 non-selective aerobic broth and an additional tube of #1118 broth. Incubate the non-selective aerobic broth tubes at 37ºC. Incubate the #1118 broth culture at 65ºC.
6. Growth should be detected in the #1118 broth within 48 to 72 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

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Notes

Gram negative curved rods of varying length which form chains and spores.
Additional information on this culture is available on the ATCC® web site at www.atcc.org.
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References

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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

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Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans.

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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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