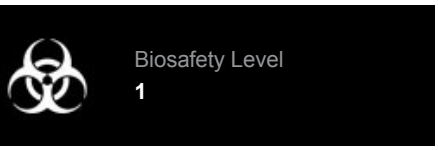
ATCC

Product Sheet

Chrysiogenes arsenatis (ATCC® 700172™)

Please read this FIRST



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: *Chrysiogenes arsenatis* (ATCC® 700172™)

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: BAL-1
Deposited Name: *Chrysiogenes arsenatis* Macy et al.

Propagation

Medium
ATCC® Medium 2139: Chrysiogenes arsenatis medium

Growth Conditions
Temperature: 28.0°C
Atmosphere: Anaerobic

Propagation Procedure
1. Sterilize the top of the Balch tube by spraying it with 70% ethanol and then flaming the top.
2. If needed exchange the gas in the test tube for 100% N_2
3. Open the freeze-dried vial according to the enclosed instructions. Take a gassed 1.0 ml syringe tipped with 22 gauge needle and withdraw 0.5 ml of medium from the Balch tube and rehydrate the freeze dried pellet. Immediately place the rehydrated vial under a stream of sterile gas, 100% N_2 to maintain anaerobicity.
4. Using the same syringe, withdraw the cell suspension from the vial and transfer it to the Balch tube. Plate 0.1 ml of the inoculated culture onto a non-selective medium and incubate aerobically at 28ºC.
5. Growth should be detected in the broth within 4-6 days. No growth should be detected on the aerobic plate or broth.

ANAEROBIC CONDITIONS:

A. Balch tubes (available from Bellco Glass, Vineland, NJ; are specially designed for anaerobic work and use an aluminum crimp cap to hold a rubber stopper in place. Needles can easily be inserted through the stopper, and the tubes can be pressurized to 2 atm. Alternatively, serum vials may be used, or screw cap tubes with butyl rubber stoppers, in the latter case the stopper may be removed and the tube placed under a cannula system that dispenses sterile, oxygen free gas for addition of reducing agents or inoculation.

B. Syringes can be made anaerobic by one of two methods.

1. Displace the dead space in the syringe with a sterile

2. Displace the dead space in the syringe with a reducing

Notes

Chrysiogenes arsenatis grows by reducing arsenate [As (V)] to arsenite [As(III)], using acetate as the electron donor and carbon source.

Cells are Gram-negative, small vibroids, which are highly active exhibiting a spiral type motility

All culture work was done using the Hungate technique and no extra reducing agent was added to the media.

Growth from freeze-dried vials takes 4-6 days but subsequent transfers take 2 days.

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

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1

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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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