Desulfurella acetivorans Bonch-Osmolovskaya et al.

51451™

Description

Strain designation: DSM 5264 [A63]
Deposited As: *Desulfurella acetivorans* Bonch-Osmolovskaya et al.
Type strain: Yes

Storage Conditions

Product format: Freeze-dried

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 1920: Desulfurella medium (DSM 480)
Temperature: 55°C
Atmosphere: Anaerobic

Handling Procedures

1. Open vial according to enclosed instructions.

2. Under anaerobic conditions, withdraw 0.5 ml of the recommended broth from a single test tube (5 to 6 ml) and rehydrate the vial contents.

3. Aseptically transfer this aliquot back into the broth. Additional tubes may be inoculated with 0.5 ml each from the suspension. 0.1 ml may also be inoculated onto

a slant. Streak several blood plates to check for colonial morphology and purity.

4. Incubate tubes under an anaerobic atmosphere at 55ºC. Incubate one agar plate anaerobically for colony formation, and one aerobically for aerobic contamination check.

5. Within 7 to 10 days, growth should be evident by turbidity in the broth. No growth should occur on agar plate incubated aerobically.

ANAEROBIC CONDITIONS:

Anaerobic conditions for transfer may be obtained by either of the following:

·Use of an anaerobic gas chamber, or

· Placement of test tubes under a gassing cannula system hooked to anaerobic gas.

Anaerobic conditions for incubation may be obtained by any of the following:

·Loose screw caps on test tubes in anaerobic chamber,

·Loose screw caps on test tubes in an activated anaerobic

gas pack jar, or

·Use of sterile butyl rubber stoppers on test tubes so that

an anaerobic gas headspace is retained.

Notes

Cells are Gram negative short rods, often in pairs and motile.

Reduces elemental sulfur with acetate as the sole source of energy and carbon. Does not ferment organic substrates, does not use electron acceptors other than sulfur. Growth products are H_2S and CO_2.

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: *Desulfurella acetivorans* Bonch-Osmolovskaya et al. (ATCC 51451)

References

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

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Contact Information

ATCC
10801 University Boulevard
Manassas, VA 20110-2209
USA
US telephone: 800-638-6597
Worldwide telephone: +1-703-365-2700
Email: tech@atcc.org or contact your local distributor