Desulfobacter curvatus Widdel

43919™

Description

Strain designation: DSM 3379
Deposited As: *Desulfobacter curvatus* Widdel
Type strain: Yes

Storage Conditions

Product format: Frozen

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 1648: Modified Desulfobacterium medium
Temperature: 30°C
Atmosphere: Anaerobic

Handling Procedures

1. Open the vial according to enclosed instructions.

2. Perform all steps under anaerobic conditions.

3. Aseptically transfer 0.5 ml of #1648 broth to the vial and rehydrate the pellet. Transfer the suspension back into the broth tube. Inoculate a plate of a non-selective medium such as Trypticase Soy, Nutrient, or blood agar with

0.1 ml of the cell suspension.

4. Seal the tube with a rubber stopper and incubate anaerobically at 30ºC. Incubate the plate(s) aerobically as a purity check.

5. After 2 or 4 days, growth should be evident as indicated by turbidity through out the broth. Once growth has been established the culture should be transferred to fresh broth every 48 hours.

6. This culture is very sensitive to oxygen when initially rehydrated, therefore steps should be taken to avoid exposure to oxygen. When the culture exhibits good growth it will remain viable for up to 1 week if stored at 4ºC under anaerobic condition.

ANAEROBIC CONDITIONS:

· Tubes of media are placed under a gassing cannula system hooked to a source of oxygen free gas.

· All transfers are performed while the test tubes are on the cannula system with a gentle stream of oxygen free gas flowing through the system.

· As the test tubes are removed from the cannula system each is sealed with butyl rubber stopper thus maintaining the anaerobic headspace.

· 100% nitrogen or 80% nitrogen-10% carbon dioxide-10% hydrogen gas mixture is typically employed as the oxygen free gas source.

Notes

When examined microscopically, the cells appear to be teardrop or football-shaped and are non-motile.

Always use freshly prepared anaerobic medium. If there is any question about the anaerobic condition of the medium, the medium can be reduced with the addition of 1.5% cysteine

(2.0 ml per 100 ml of medium).

Other commonly used reducing agents are sodium sulfide, cysteine, dithiothreitol, and titanium citrate. Cysteine is the reducing agent of choice since it does not cause the ferrous ammonium sulfate to precipitate.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Desulfobacter curvatus* Widdel (ATCC 43919)

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