ATCC

Product Sheet

Mariprofundus ferrooxydans (ATCC® BAA-1021™)

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: *Mariprofundus ferrooxydans* (ATCC® BAA-1021™)

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: JV-1
Deposited Name: *Siderooxidans marinum*

Propagation

Medium
ASW GRADIENT PLATE

Growth Conditions
Temperature: 25°C
Atmosphere: Microaerophilic

Propagation Procedure
1. One frozen vial should be used to start no more than three gradient plates.
2. Autoclave the top and bottom layers for 20 minutes at 121°C. Cool the top layer in an ice bath while allowing the bottom layer to cool slightly.
3. Pipette 8.5 ml of the bottom layer into a standard Petri dish. Allow to set a minimum of 15 minutes, but no longer than 30 minutes.
4. While the bottom layer is setting, adjust the pH of the top layer to between 6.0 and 6.4 by sparging with filter-sterilized CO_2.
5. Inoculate the top layer with the vial of *M. ferrooxydans* and pipette 16 ml over the solidified bottom layer.
6. Place the plates in either GasPak jars with BD BBL CampyPak Plus Microaerophilic system envelopes with palladium catalysts or Mitsubishi AnaeroPack system jars with Pack-MicroAero gas generating envelopes adjusted for the volume of the container.

Notes

Growth should be checked by epifluorescent microscopy five days after inoculation. Syto 13 (Molecular Probes, Eugene, OR) provides good penetration of the Fe-oxides and bright fluorescence. A 0.25 mM stock solution is prepared in sterile d-H_2O that is then diluted 1:5 with the bacterial culture. Cells are bent rods, approximately 0.5 um in diameter, and motile during exponential growth.

Additional volume may be obtained by concentrating cells by centrifugation and using the entire pellet as inoculum for further growth. For example, three plates may be used as inoculum for 12 plates, and the pellet from 12 plates may be used to inoculate 36 plates.

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

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.

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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

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