

51181[™]

Description

Strain designation: BrY

Deposited As: Shewanella algae Simidu et al. emend. Nozue

Type strain: No

Storage Conditions

Product format: Freeze-dried Storage conditions: 2°C to 8°C

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.

BSL₁

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 2: Marine agar 2216 or marine broth 2216

Temperature: 30°C **Atmosphere:** Aerobic

Handling Procedures

- 1. Open vial according to enclosed instructions or visit www.atcc.org for instructions.
- 2. Rehydrate the entire pellet with approximately 0.5 mL of #2 broth. Aseptically transfer the entire contents to a 5-6 mL tube of #2 broth. Additional test tubes can be inoculated by transferring 0.5 mL of the primary broth tube to these secondary tubes.



- 3. Use several drops of the primary broth tube to inoculate a #2 plate and/or #2 agar slant.
- 4. Incubate at 30°C for 24 hours.

Notes

To demonstrate anaerobic growth by dissimilatory iron (III) reduction, use ATCC Medium #1931 broth.

1931 Broth: Ferric citrate Medium

Ferric citrate, 13.7 g

NaHCO₃, 2.5 g

KCl, 0.1 g

NH₄Cl, 1.5 g

NaH₂PO₄, 0.6 g

Wolfe's Vitamin Solution (see below), 10.0 mL

Wolfe's Mineral Solution (see below), 10.0 mL

Sodium lactate, 30.0 mM

Distilled water, 1.0 L

Boil ferric citrate in distilled water to dissolve; cool to room temperature. Adjust to pH 6.6 with $10\underline{N}$ NaOH. Add remaining components. Equilibrate medium under 80% N₂, 20% CO₂. Dispense medium anaerobically under same gas phase. Autoclave anaerobically at 121°C for 15 minutes. Final pH 7.0.

Wolfe's Vitamin Solution:

Biotin, 2.0 mg

Folic acid, 2.0 mg



Pyridoxine HCl, 10.0 mg

Thiamine HCl, 5.0 mg

Riboflavin, 5.0 mg

Nicotinic acid, 5.0 mg

Calcium D-(+)-pantothenate, 5.0 mg

Vitamin B₁₂, 0.1 mg

p-Aminobenzoic acid, 5.0 mg

Thioctic acid, 5.0 mg

Distilled water, 1.0 L

Wolfe's Mineral Solution:

Nitrilotriacetic acid, 1.5 g

 $MgSO_4.7H_2O, 3.0 g$

MnSO₄·H₂O, 0.5 g

NaCl, 1.0 g

 $FeSO_4\cdot7H_2O,\,0.1\;g$

CoCl₂·6H₂O, 0.1 g

CaCl₂, 0.1 g

ZnSO₄·7H₂O, 0.1 g

CuSO₄·5H₂O, 0.01 g

 $AIK(SO_4)_2 \cdot 12H_2O$, 0.01 g

 H_3BO_3 , 0.01 g



Na₂MoO₄·2H₂O, 0.01 g

Distilled water, 1.0 L

Add nitrilotriacetic acid to approximately 500 mL of water and adjust to pH 6.5 with KOH to dissolve the compound. Bring volume to 1.0 L with remaining water and add remaining compounds one at a time.

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: *Shewanella algae* Simidu et al. emend. Nozue (ATCC 51181)

References

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

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Revision

This information on this document was last updated on 2024-10-24

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