



# ***Clostridium formicaceticum*** **Andreesen et al.**

**27076™**

Product Sheet

## **Description**

Type strain.

**Strain designation:** A1 [SMG 92]

**Deposited As:** *Clostridium formicaceticum* Andreesen et al.

**Type strain:** Yes

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## **Storage Conditions**

**Product format:** Freeze-dried

**Storage conditions:** 2°C to 8°C

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## **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.

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## **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.

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## Growth Conditions

**Medium:**

ATCC Medium 591: *Clostridium* medium

**Temperature:** 37°C

**Atmosphere:** Anaerobic

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## Handling Procedures

1. This culture must be propagated under strictly anaerobic, conditions (*see below*).
2. Open the vial according to enclosed instructions.
3. Under anaerobic conditions, withdraw 0.5 mL of #591 broth from a single test tube and rehydrate the entire vial contents.

4. Aseptically transfer this aliquot back into the broth tube. A slant and a pre-reduced blood plate may be inoculated with 0.1 mL each of the cell suspension. Also inoculate a non-selective plate and tube of broth to test for the presence of aerobic contaminants.
5. Incubate tubes and plate under anaerobic conditions at 37°C. Incubate aerobic plate(s) and broth tube(s) at 37°C.
6. In 1 to 3 days, growth should be evident by light turbidity in the broth and by turbidity in the liquid at the base of the slant culture. On #591 plates, colonies are entire, glistening, circular, smooth, and opaque. Cells are long, regular rods. Many cells exhibit motility. No growth should occur on the aerobic plate.

#### 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.

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## Notes

A basic pH is very important for good growth of this species. It is difficult to achieve good anaerobic growth on agar plates unless inoculation and incubation are performed in an anaerobic chamber.

Always use freshly prepared pre-reduced media or pre-reduced media that has been previously prepared but stored under anaerobic conditions. Resazurin in the media is a color indicator for anaerobic conditions. Observance of pink color in medium before use or during incubation shows anaerobic conditions have not been met and

oxidation has occurred. Medium should be discarded.

Additional information on this culture is available on the ATCC® web site at [www.atcc.org](http://www.atcc.org).

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Clostridium formicaceticum* Andreesen et al. (ATCC 27076)

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## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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## Revision

This information on this document was last updated on 2025-02-23

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