



Thermoplasma volcanium **Segerer et al.**

51530™

Description

Strain designation: DSM 4299 [GSS1*]

Deposited As: *Thermoplasma volcanium* Segerer et al.

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 569: *Thermoplasma* medium

Temperature: 55-60°C

Handling Procedures

1. Keep cryovial frozen until ready for use, then thaw slowly at room temperature when you are ready to inoculate.
2. Using two sterile 25.0 cm T-flasks, add 10.0 ml of fresh media to each. Place the flasks at 55°C for 30 minutes. Once the vial reaches room temperature remove the flasks from the 55°C incubator. Remove 0.5 ml of #569 broth and add it to the vial. Transfer the entire contents back to the flask. Take 1.0 ml from the first flask and transfer it to the second flask.

3. Incubate the flasks at 55°C. *Thermoplasma volcanium* requires oxygen, so slanting the flasks will provide greater surface area. Shaking is not recommended.

4. Growth appears in the first flask in 4 to 7 days. Subsequent transfers grow more rapidly, and due to drastic loss in viability, transfers should be done 24 to 48 hours after growth. The inoculum size should be 10 to 20%. Glassware should be free of any trace of detergent or soap. Cells do not tolerate refrigeration.

5. For long term storage, freeze in liquid nitrogen. It is recommended that actively growing cells are harvested by centrifugation at 9000 rpm for 30 minutes, the supernatant removed, and the pellet resuspended in a smaller amount of fresh growth medium with an equal volume of 20% glycerol (10% final concentration) added. Small amounts of this suspension are aliquoted into small cryovials and immediately placed in liquid nitrogen storage.

Notes

Under 1000x magnification the cells appear as spheres and pleomorphic filaments.

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: *Thermoplasma volcanium* Segerer et al. (ATCC 51530)

References

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

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