



# *Thiobacillus denitrificans* Kelly and Harrison

23642™

## Description

**Strain designation:** 4G [NCIB 9546]

**Deposited As:** *Thiobacillus denitrificans* Kelly and Harrison

**Type strain:** No

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## Storage Conditions

**Product format:** Freeze-dried

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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 295: S-8 medium for *Thiobacillus*

**Temperature:** 30°C

**Atmosphere:** Anaerobic

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## Handling Procedures

1. Open vial according to enclosed instructions.
- 2. Using a single tube of #295 broth (5 to 6 ml), withdraw approximately 0.5 to 1.0 ml with a Pasteur or 1.0 ml pipette. Rehydrate the entire pellet.**
3. Aseptically transfer this aliquot back into the broth tube. Mix well. Transfer 0.5 ml of the suspension into a second tube of broth.

4. Place tubes with caps loosened in an anaerobe jar or other acceptable method for obtaining anaerobic conditions. Incubate at 30°C.

5. Broth becomes cloudy, indicating growth, after approximately 7 days of incubation. Agar slants and plates may now be inoculated with 0.2 ml each from the 7 day broth culture. Additional volumes of broth can be inoculated using a 5% inoculum (i.e. 5 ml to 100 ml fresh broth).

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## Notes

Better growth may be achieved on initial rehydration in the second tube. The cryoprotectant used in the freeze-drying process may inhibit growth in the primary tube.

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: *Thiobacillus denitrificans* Kelly and Harrison (ATCC 23642)

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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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23642

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