



# *Desulfovulcanus ferrireducens* Kashyap et al.

TSD-233™

## Description

*Desulfovulcanus ferrireducens* strain Ax17 is a bacterial type strain that was isolated in 2017 from hydrothermal vent fluid.

**Strain designation:** Ax17

**Deposited As:** *Desulfothermobacter ferriducens*

**Type strain:** Yes

**Type strain description:** This culture provided to the ATCC type strain depository is neither produced nor characterized by ATCC. No technical information is available on this material. Refer to depositor for technical information on this strain.

**Technical information:** ATCC Technical Services does not have technical information on type strain deposits that are not fully characterized. Additional information can be found in the depositor's publication.

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -80°C or colder

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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

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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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### Handling Procedures

#### Depositor-recommended growth conditions:

Grow on Geothermobacter modified medium (below are the concentrations per /L), at 55°F, in 2 atm of 80% H<sub>2</sub> and 20% CO<sub>2</sub> gas, in the dark, for 4-5 days.

NaCl: 19.0 g, MgCl<sub>2</sub>·6H<sub>2</sub>O: 9.0 g, MgSO<sub>4</sub>·7H<sub>2</sub>O: 0.15 g, CaCl<sub>2</sub>·2H<sub>2</sub>O: 0.3 g, KCl: 0.5 g, KH<sub>2</sub>PO<sub>4</sub>: 0.14 g, (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>: 0.1 g, NaBr: 0.05 g, SrCl<sub>2</sub>·6H<sub>2</sub>O: 0.02 g, Trace element solution:

10 ml, NaHCO<sub>3</sub>: 1.0 g, Vitamin solution: 10 ml, L-cysteine-HCl.H<sub>2</sub>O: 0.5 mM for ferrihydrite, 0.025% for sulfate, Resazurin (sulfate only): 50 ul of 0.5% solution, Electron acceptor: a. For iron e- acceptor, add 100 ml/L of 1 M ferrihydrite solution and 1.3 mM FeCl<sub>2</sub> (from 50× degassed stock solution). b. For sulfate e- acceptor, add 1.0 g/liter of Na<sub>2</sub>SO<sub>4</sub>.

Media should have pH of 6.80.

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Desulfovulcanus ferrireducens* Kashyap et al. (ATCC TSD-233)

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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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designation, no further testing is performed and these strains are made available on behalf of the depositor per the requirements of the International Journal of Systematic and Evolutionary Microbiology (IJSEM), published by the Society for General Microbiology (SGM), and the International Committee on Systematics of Prokaryotes (ICSP).

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