



# *Pseudomonas putida* (Trevisan) Migula

23483<sup>TM</sup>

## Description

*Pseudomonas putida* strain MnB 1 is a whole-genome sequenced bacterium that was isolated from the manganese oxide crusts from a pipe. This strain oxidizes manganese.

**Strain designation:** MnB 1

**Deposited As:** *Pseudomonas putida* (Trevisan) Migula

**Type strain:** No

**Antigenic properties:** Biotype B

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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 3: Nutrient agar or nutrient broth

**Temperature:** 26°C

**Atmosphere:** Aerobic

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## Handling Procedures

1. Open the freeze-dried vial according to enclosed instructions.
2. From a single tube of #3 broth (5 to 6 mL), withdraw approximately 0.5 to 1.0

- mL with a Pasteur or 1.0 mL pipette and use to rehydrate the pellet.
3. Aseptically transfer the rehydrated pellet back into the broth tube. Mix well.
  4. Use several drops of the suspension to inoculate a second tube of broth, a slant and/or a plate.
  5. Incubate all tubes and plate at 26°C for 24 hours.
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## Notes

To demonstrate manganese oxidation, transfer culture to ATCC Medium #279. Incubate at 26°C for 96 hours. The formation of a black precipitate indicates the presence of manganese dioxide.

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: *Pseudomonas putida* (Trevisan) Migula (ATCC 23483)

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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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