



# *Legionella pneumophila* subsp. *fraseri* Brenner et al.

33156™

## Description

Type strain. Fluorescent antibody serogroup 4.

**Strain designation:** Los Angeles-1

**Deposited As:** *Legionella pneumophila* subsp. *fraseri* Brenner 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 2

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 1099: CYE (Charcoal Yeast Extract) Buffered Medium

**Temperature:** 37°C

**Atmosphere:** 95% Air, 5% CO<sub>2</sub>

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## Handling Procedures

1. Open vial according to enclosed instructions or visit [www.atcc.org](http://www.atcc.org) for instructions.
2. Rehydrate the entire pellet with approximately 0.5 mL of #1099 broth. Aseptically transfer the entire contents to a 5-6 mL tube of #1099 broth. Additional test tubes can be inoculated by transferring 0.5 mL of the primary

- broth tube to these secondary broth tubes.
3. Use several drops of the primary broth tube to inoculate a #1099 plate and/or #1099 agar slant.
  4. Incubate at 37°C for 24-72 hours in an atmosphere of 5% CO<sub>2</sub>.
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## Notes

Strain shows growth by turbidity in the supernatant portion of the broth.

*Legionella* species are nutritionally fastidious and are inhibited by media of poor caliber, so strict attention should be paid to the quality of the ingredients. The pH of the medium should be checked when cool, and is most critical. Unbuffered medium should not be used. Exposure of medium to light, particularly when hot, may also result in the accumulation of peroxides which can be inhibitory to the bacteria.

Before rehydration, vials may be stored at +2 to +8°C for extended periods with minimal loss of viability. Subculturing to maintain culture is discouraged because of the possibility of mutation, selection of variants, or contamination. To minimize changes, it is recommended that cells be harvested and stored at -70°C or below.

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: *Legionella pneumophila* subsp. *fraseri* Brenner et al. (ATCC 33156)

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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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