



# *Chlamydia pneumoniae* Grayston et al.

VR-1435™

## Description

**Strain designation:** J-21

**Deposited As:** *Chlamydia pneumoniae* Grayston et al.

**Type strain:** No

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -70°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 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 submerged 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 submerged 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

**Host:** HEp-2 (ATCC CCL-23)

**Effects:** CPE; cytoplasmic inclusions

**Complete medium:**

DMEM (ATCC® 30-2002™) + 10% prescreened FBS + 10 mM HEPES + 2 µg/mL

Cycloheximide (Sigma C-4859 Ready-Made)

**Temperature:** 35°C

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

**Recommendations for infection:** For best results cells should be 24 to 48 hours old and 90-100% confluent.

**Incubation:** 3 days, a 5% CO<sub>2</sub> in air atmosphere is recommended

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## Handling Procedures

**Mycoplasma contamination:** Not detected

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## Notes

FBS used to culture *Chlamydia* must be prescreened to verify that the serum does not contain antibodies to *Chlamydia* or other factors that would interfere with growth.

Note that activities with high potential for aerosol production require BSL 3 facilities and practices. Rapid loss in titer when stored above -70°C. Suggested protocol for propagation: Add glass beads and vortex preparation to disrupt cells. Infect monolayer with disrupted material. Centrifuge at 3000 x rpm (750 x g) for 1 hour. Feed with fresh growth medium containing FBS prescreened for Chlamydia antibodies and 1-2 mg/mL Cycloheximide. Incubate at 35°C for 3 days, a 5% CO<sub>2</sub> in air atmosphere is recommended. This preparation has tested positive for Mycoplasma contamination.

**Key Abbreviations:** °C, Degrees Celsius; BSL, Biosafety level; CO<sub>2</sub>, Carbon dioxide; DMEM, Dulbecco's Modified Eagle's Medium; FA, Fluorescent antibody assay; FBS, Fetal bovine serum; g, Acceleration of gravity; HEPES, N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid)

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Chlamydia pneumoniae* Grayston et al. (ATCC VR-1435)

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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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