Chlamydia pneumoniae Grayston et al.

VR-1356™

Description

Chlamydia pneumoniae TWAR strain 2023 is propagated in HEp-2 cells (ATCC CCL-23). This bacterial strain was isolated from the nasopharynx of a human patient with pneumonia and can be used in infectious disease and respiratory disease research.

Strain designation: TWAR strain 2023
Deposited As: *Chlamydia pneumoniae* Grayston et al.
Type strain: No

Storage Conditions

Product format: Frozen
Storage conditions: -70°C or colder

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.

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.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Growth Conditions

Host: HEp-2 (ATCC CCL-23)
Effects: CPE; cytoplasmic inclusions
Complete medium: Agent growth medium: DMEM (4.5 mg/mL lucose) + 10% prescreened FBS (Biowhittaker 14-02E) + 2 µg/mL Cycloheximide + 10 mM HEPES
Temperature: 35-37°C
Recommendations for infection: For best results cells should be 24 to 48 hours old and 80%-95% confluent.
Incubation: 2-3 days at 35°C to 37°C in a 5% CO_2 atmosphere in air.

Handling Procedures

Mycoplasma contamination: Detected

Notes

This preparation has tested positive for *Mycoplasma* contamination.

Note that activities with high potential for aerosol production require BSL-3 facilities and practices.

Forms intracellular inclusions that react with specific anti-*C. pneumoniae* monoclonal antibodies and monoclonal antibodies directed against the chlamydia LPS.

Inclusions will not stain with iodine or monoclonal antibodies against the MOMP of *C. trachomatis*. Infection is enhanced by centrifugation and use of cycloheximide (1 to 2 µg/mL) in medium.

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 µg/mL cycloheximide. Incubate at 37°C for 72 hours.

Infection is enhanced by centrifugation and use of cycloheximide (1 to 2 µg/mL) in medium.
Key Abbreviations: °C, Degrees Celsius; CO_2, Carbon dioxide; CPE, Cytopathic effect; EMEM, Eagle's Minimum Essential Medium; FBS, Fetal bovine serum; MRC-5, Human embryonic lung cells

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-1356)

References

References and other information relating to this material are available at www.atcc.org.

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