Chlamydia pneumoniae Grayston et al.

VR-2282™

Description

Chlamydia pneumoniae strain TW-183 is propagated in HEp-2 cells (ATCC CCL-23). This strain was isolated in 1965 from the conjunctiva of a child in Taiwan. It has applications in respiratory and infectious disease research.

Strain designation: TW-183

Deposited As: *Chlamydia pneumoniae* Grayston et al.

Type strain: Yes

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Patent number:

5,008,186

Technical information: ATCC Product Experience does not have technical information on patent deposits that are not produced or characterized by ATCC. Additional information can be found in the corresponding patent available from the patent holder or with the U.S. and/or international patent office.

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:
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_2
Recommendations for infection: For best results cells should be 24 to 48 hours old and 90% - 100% confluent
Incubation: 3 days at 35°C, a 5% CO_2 in air atmosphere is recommended

Handling Procedures

Mycoplasma contamination: Detected

Notes

Note that activities with high potential for aerosol production require BSL 3 facilities and practices. This preparation has tested positive for Mycoplasma contamination. For a time, prior to the acceptance of the *C. pneumoniae* strains as a separate species, the strains were referred to as TWAR, after the isolates TW-183 and AR-39. AR-39 is available as ATCC® 53592™. The inclusions are iodine stain negative (contain no glycogen). Suggested protocol for propagation: Add glassbeads 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 35°C for 3 days. Infection of TC is enhanced by subconfluent monolayer of cells. This preparation has been tested and found to be positive for Mycoplasma contamination.
Key Abbreviations: °C, Degrees Celsius; AR-39, TWAR Chlamydia strain; CO_2, Carbon dioxide; DMEM, Dulbecco's Modified Eagle's Medium; FBS, Fetal bovine serum; g, Acceleration of gravity; HEp-2, Human laryngeal tumor cells; HEPES, N-(2-Hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid); µg, Microgram; uM, micromolar; mg, Milligram; mL, Milliliter; mM, millimolar; rpm, Revolutions per minute; TW-183,

TWAR Chlamydia strain; TWAR, Taiwan Acute Respiratory

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-2282)

References

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

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