

50821[™]

Description

Strain designation: MIRANDA CL78 **Deposited As:** *Trypanosoma cruzi* Chagas

Type strain: No

Storage Conditions

Product format: Frozen

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.

BSL₂

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

Medium:

ATCC Medium 1029: LIT medium

Instructions for complete medium: ATCC Medium 1029

Temperature: 25°C **Culture system:** Axenic

Handling Procedures

Culture maintenance:

- 1. Agitate a culture at or near peak density by inverting several times.
- 2. Aseptically transfer a 0.1 ml aliquot to a T-25 tissue culture flask containing 10 ml of fresh complete medium.

- 3. Screw cap on tightly and incubate at 20-25°C.
- 4. Subculture every 14-21d.

Cryopreservation:

- 1. Harvest cells from several cultures in very late logarithmic to early stationary phase of growth. Vigorously agitate to suspend the cells.
- 2. Aseptically transfer the cell suspension to 15 ml plastic centrifuge tubes.
- 3. Centrifuge at ~800 x g for 5 min.
- 4. While cells are centrifuging, prepare a 10% solution of DMSO in complete ATCC Medium 1029. Cool on ice.
- 5. Remove the supernatant and pool the cell pellets to the final volume desired with fresh growth medium.
- 6. Combine the cell suspension with an equal volume of 10% DMSO cryoprotectant solution (prepared in step 4) to yield a final concentration of 5% DMSO.
- 7. Dispense in 0.5 ml aliquots to 1.0-2.0 ml Nunc vials (special plastic vials for cryopreservation).
- 8. Place the vials in a controlled rate freezing unit. From room temperature cool at -1°C/min to -40°C. At -40°C, plunge ampules into liquid nitrogen. Alternatively, place the vials in a Nalgene 1°C freezing apparatus. Place the apparatus at -80°C for 1.5 to 2 hours and then plunge ampules into liquid nitrogen. (The cooling rate in this apparatus is approximately -1°C/min.).
- 9. Store ampules in a liquid nitrogen refrigerator until needed.
- 10. To establish a culture from the frozen state, place a frozen ampule in a 35°C water bath just enough to cover the frozen material. Allow the ampule to thaw completely (2-3 min).
- 11. Immediately after thawing, aseptically remove the contents and transfer to a T-25 tissue culture flask containing 10 ml of fresh complete ATCC medium 1029.
- 12. Screw the cap on tightly and incubate at 20-25°C. Observe the culture daily and transfer when numerous trophozoites are observed.

Notes

Additional information on this culture is available on the ATCC web site at www.atcc.org.

While every effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.

ATCC recommends that individuals contemplating commercial use of any culture first contact the originating investigator to negotiate an agreement. Third party distribution of this culture is discouraged, since this practice has resulted in the unintentional spreading of contaminated cultures.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Trypanosoma cruzi* Chagas (ATCC 50821)

References

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

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