



***Corynebacterium diphtheriae* (Kruse) Lehmann and Neumann**

53281™

Description

Produces CRM197.

Strain designation: C7 (beta 197)

Deposited As: *Corynebacterium diphtheriae* (Kruse) Lehmann and Neumann

Type strain: No

Patent depository: This material was deposited with the ATCC Patent Depository to fulfill U.S. or international patent requirements. This material may not have been produced or characterized by ATCC. As an International Depository Authority (IDA) for patent deposits, ATCC is required to complete viability testing only at time of initial deposit of patent material. Patent deposits are made available on behalf of the Depositor when the pertinent U.S. or international patent is issued, but material may not be used to infringe the patent claims.

Patent number:

4,673,574

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: Freeze-dried

Storage conditions: 2°C to 8°C

Intended Use

This product is intended for laboratory research use only. It is not intended for any

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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

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Medium:

ATCC Medium 44: Brain Heart Infusion Agar/Broth

Temperature: 37°C

Atmosphere: Aerobic

Handling Procedures

1. Open vial according to enclosed instructions.
 2. From a single tube of #44 broth (5 to 6 mL), withdraw approximately 0.6 to 1.0 mL with a Pasteur or 1.0 mL pipette and use to rehydrate the entire pellet.
 3. Use 0.5mL of this suspension to inoculate a #44 slant and 0.1mL to inoculate #44 plates.
 4. Incubate tubes and plates at 37°C, under aerobic conditions, for 24 hours.
 5. After 24 hours of incubation, wash cells from the slant and transfer this broth to a new slant and plate. Incubate another 24 hours under aerobic conditions. This second transfer and incubation is necessary for complete removal of the cryoprotectant, which can inhibit growth.
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Notes

Growth on agar yields colonies that are pinpoint to 1 mm in diameter, circular, entire, and somewhat pulvinate. As culture ages, colonies are larger, off-white, dull, and opaque in the center.

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

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Corynebacterium diphtheriae* (Kruse) Lehmann and Neumann (ATCC 53281)

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References

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

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Product Sheet

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Contact Information

***Corynebacterium diphtheriae* (Kruse) Lehmann and Neumann**

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ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: tech@atcc.org or contact your local distributor
