



Product Sheet

Cunninghamella echinulata (ATCC® 90846™)

Please read this **FIRST**

Storage Temp.
Frozen: -80°C or colder
Freeze-Dried: 2°C to 8°C
Live Culture: See Propagation Section

 Biosafety Level
2

Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Cunninghamella echinulata* (ATCC® 90846™)

American Type Culture Collection
PO Box 1549
Manassas, VA 20108 USA
www.atcc.org

800.638.6597 or 703.365.2700
Fax: 703.365.2750
Email: Tech@atcc.org

Or contact your local distributor

Description

Strain Designation: 1965/7.92

Deposited Name: *Cunninghamella bertholletiae* Stadel

Product Description: An ampoule containing viable cells (may include spores and mycelia) suspended in cryoprotectant.

Propagation

The information recommended in this section is to assist users in obtaining living culture(s) for their studies. The recommendation does not imply that the conditions or procedures provided below are optimum. Experienced researchers may initiate the growth of a culture in their own way.

ATCC® Medium 28: Emmons' modification of Sabouraud's agar

ATCC® Medium 200: YM agar or YM broth

Growth Conditions

Temperature: 30°C

Atmosphere: Typical aerobic

Recommended Procedure

For **freeze-dry (lyophilized)** ampoules:

1. Open an ampoule according to enclosed instructions.
2. From a single test tube of **sterile distilled water** (5 to 6 mL), withdraw approximately 0.5 to 1.0 mL with a sterile pipette and apply directly to the pellet. Stir to form a suspension.
3. Aseptically transfer the suspension back into the test tube of sterile distilled water.
4. Let the test tube sit at room temperature (25°C) undisturbed for **at least 2 hours**; longer (e.g., overnight) rehydration might increase viability of some fungi.
5. Mix the suspension well. Use several drops (or make dilutions if desired) to inoculate recommended solid or liquid medium. Include a control that receives no inoculum.
6. Incubate the inoculum at the propagation conditions recommended.
7. Inspect for growth of the inoculum/strain regularly. The sign of viability is noticeable typically after 4-7 days of incubation. However, the time necessary for significant growth will vary from strain to strain.

DNA Sequence

D1D2 region of the 28S ribosomal RNA gene

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AATAAGCGGAGGAAAAGAAAATAACAATGATTCCTCAGTAACGGCGAGTGAACAGGGAAAAGCTC
AAAGTTGGAACCTGGTGGGCCTAGCCTACCCGGATTGTAACATAAAGTTTTGGTTCGTTTAGTCAGCC
AGATAAATAAGTCTCTGGAAAGGGGCGACATAGAGGGTGAATCCCCGCTTTGGTCTGAGCATGAT
TAGGCGTTTTGGCCTGGAACGAAGAGTCAGTTGTTTGGGAATGCAGCCTAAAATGGGAGGTAATC
TCTCCTAAAGCTAAATATTGACGAAAGACCGATAGCGAACAAGTACCGTGAGGAAAAGATGAAAAG
CACTTTGAAAAGAGGGTCAAAAAGTACGTGAAATTGCTGAAAGGGAACCGTATAAAATCAGACTTAC
TGGTAGGTAATCAACCTTCTCCTCGGGGAGGGTGCACCTGCCTGCTATTGTATGCCAGCAATACTTTGGT
TGGGAGGAAAAAGTAGGAGAAATGTAGCCTGGGTTTCGGCTTAGGTGTTATAGTCTCTTGCAAATA
CTCTCGGCTGGAGTAAGGAACGCAGCAAACCGTAAGGCGAAGATTTGGGCGCTTGGAGTTAATAGTT
GGAGAAATTTCTGCTTCGGGTGGTGCCTCAGCTATTGATTTAACTCGCTTAAAGTTCTTTAATTTGCTTA
GGTTGTTGGCTTAATGATTTTATATGA
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Elongation factor 1-alpha gene(EF)

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TCCGTTCTTCGTCCTCCATTTCTGGCTGGCACGGTGATAACATGTTGGAAGAATCCAAGAATCGGAT
TGGTTCAAGGGATGGACCAAGGAAACCAAGACTGGTCTTACAAGGGTAAAGACTCTCTTAGAAGCTAT
TGATGCTATCGAACCTCTACCCGCTCCTCCGACAAGCCTTTACGCTTCTCTTACAAGATGTTTACAAG
ATTGGTGGTATTGGTACCGTCCCTGTAGGTGCTGTTGAAACTGGTGTATCAAAAGCTGGTATGGTTGTTA
CCTTCGCCCCGCTAACGTTACCCTGAAAGTAAAGTCCGTTGAAATGCATCACGAACAATTAGAACAA
GGTGTTCGCGGTGACAACGTTGGTTTCAACGTCAGAAGCTTTCCGTTAAGGATATCCGTCGTGGTAAC
GTCTGTTCCGACTCCAAGAACGACCCTGCTAAGGAATCCGCTTCTTACCAGCTCAAGTTATCGTCTTGA
ACC
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Isolation


Human bronchial secretion, Germany




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References

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

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

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Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org

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