





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

```
AATAAGCGGAGGAAAAGAAAATAACAATGATCCCTCAGTAACGGCGAGTGAACAGGGAAAAGCTC
AAAGTTGGAACCTGGTGGGCCTAGCCTACCCGGATTGTAACATAAAGTTTTGGTTCGTTTAGTCAGCC
AGATAAATAAGTCTCTGGAAGGGGCGACATAGAGGGTGAATCCCCGCTTTGGTCTGAGCATGAT
TAGGCGTTTTGGCCTGGAACGAAGAGTCAGTTGTTTGGGAATGCAGCCTAAAATGGGAGGTAATC
TCTCCTAAAGCTAAATATTGACGAAAGACCGATAGCGAACAAGTACCGTGAGGAAAAGATGAAAAG
CACTTTGAAAAGAGGGTCAAAAAGTACGTGAAATTGCTGAAAGGGAACCGTATAAAATCAGACTTAC
TGGTAGGTAATCAACCTTCTCTCGGGGAGGGTGCACCTGCCTGCTATTGTATGCCAGCAATACTTTGGT
TGGGAGGAAAAAGTAGGAGAAATGTAGCCTGGGTTTCGGCTTAGGTGTTATAGTCTCTTGCAAATA
CTCTCGGCTGGAGTAAGGAACGCAGCAAACCGTAAGGCGAAGATTTTGGGCGCTTGGAGTTAATAGTT
GGAGAAATTTCTGCTTCGGGTGGTCTCAGCTATTGATTTAACTCGCTTAAAGTTCTTTAATTTGCTTA
GGTTGTTGGCTTAATGATTTTATATGA
```

Elongation factor 1-alpha gene(EF)

```
TCCGTTCCITTCGTCCTCCATTTCTGGCTGGCAGGTTGATAACATGTTGGAAGATCCAAGAATCGGAT
TGGTTCAAGGGATGGACCAAGGAAACCAAGACTGGTTCTTACAAGGGTAAAGACTCTCTTAGAAGCTAT
TGATGCTATCGAACCTCTACCCGCTCTCCGACAAGCCTTTACGCTTCTCTTACAAGATGTTTACAAG
ATTGGTGGTATTGGTACCGTCCCTGTAGGTGCTGTTGAAACTGGTGTATCAAGCTGGTATGGTTGTTA
CCTTCGCCCCGCTAACGTTACCCTGAAAGTAAAGTCCGTTGAAATGCATCACGAACAATTAGAACAA
GGTGTTCGCGGTGACAACGTTGGTTTCAACGTCAGAAGCTTTCCGTTAAGGATATCCGTCGTGGTAAC
GTCTGTTCCGACTCCAAGAACGACCCTGCTAAGGAATCCGCTTCTTACCAGCTCAAGTTATCGTCTTGA
ACC
```

Isolation


Human bronchial secretion, Germany




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™)

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.

ATCC Warranty

ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this product. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

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.
© ATCC 2016. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [04/27]

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