ATCC

Product Sheet

Cunninghamella elegans (ATCC® 36112™)

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
1

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 elegans* (ATCC® 36112™)

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: PA-1
Deposited Name: *Cunninghamella elegans* Lendner
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 200: YM agar or YM broth
ATCC® Medium 323: Malt agar medium
ATCC® Medium 336: Potato dextrose agar (PDA)

Growth Conditions
Temperature: 24°C to 26°C
Atmosphere: Typical aerobic

Recommended Procedure
Frozen ampoules packed in dry ice should either be thawed immediately or stored in liquid nitrogen. If liquid nitrogen storage facilities are not available, frozen ampoules may be stored at or below -70°C for approximately one week. **Do not under any circumstance store frozen ampoules at refrigerator freezer temperatures (generally -20°C).** Storage of frozen material at this temperature will result in the death of the culture.

1. To thaw a frozen ampoule, place in a **25°C to 30°C** water bath, until just thawed (**approximately 5 minutes**). Immerse the ampoule just sufficient to cover the frozen material. Do not agitate the ampoule.
2. Immediately after thawing, wipe down ampoule with 70% ethanol and aseptically transfer at least 50 µL (or 2-3 agar cubes) of the content onto a plate or broth with medium recommended.
3. Incubate the inoculum/strain at the temperature and conditions recommended.
4. Inspect for growth of the inoculum/strain regularly. The sign of viability is noticeable typically after 5-7 days of incubation. However, the time necessary for significant growth will vary from strain to strain.

Colony and Cell Morphology: After 10 days colonies spreading rapidly, at first white, later with dark spots of conidia, becoming gray, conidiophores erect, with verticillate or solitary branches; vesicles subglobose to pyriform, verrucose or smooth, conidia globose. 7-11 µm, or ovoid to ellipsoidal, 6-10 x 9-13 µm, smooth, verruculose, or shortly echinulate, hyaline, or with granular contents, brownish in mass.

Notes

No special notes.
Additional, updated information on this product may be available on the ATCC® web site at www.atcc.org.

DNA Sequence

18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence
GGTTTCCGTAGGTGAACCTGCGGAAGGATCATTACTTATTCGGTCATTGGTTTTTTATTCAAAAACCTTTG
GCTTTAAATCATCCACAGTGTGGGAAATGTCTTCTAACGCTTGTGCCTGGTTCAGTCTAGTGCTGCCACT
TGAGTTTACTCTTGGGTCAAGGGACCTTTGGGTAGTTTGTTCATTCGTGAGCAACCTCTTGTAACGGGGA
TAAGATTAATTTTATTATACTAAATTTTACTGAACTGATAGACCATAAATCTATGGTTGTTTTTTATTATA
AACAAAAAAACAACTTTCAGCAATGGATCTCTCGGCTTTCGTATCGATGAAGAACGCAGCAAATCGCG
ATATGTAATGTGATCTGCCTATAGTGAATCATCAAATCTTTGAACGCATCTTGCACCTTATGGTATTCCA
TAAGGTACGTCTGTTTCAGTACCACTAGTAAATCTCCCCTCCACCTTGGTGGTTTAAAAGGAAGAGATA
AATTATTACTGGTTCTGGTGATTCTTGATTTATTAAGAATTACTCTCGACCTAAATATAAGGCTCGACTTT
TTTATTAGATCTCGCATCTGGTAAAACCTAGTCGGCTTTAATAGGATTTATTTCTTATTAGGTTTATAGCC
ATCATTTTACTTTTAAATCTTGGCCTGAAATCAGATGGGACTACCCGCTGAACTTAAGCATATCAATAA

D1D2 region of the 28S ribosomal RNA gene
ATATCAATAAGCGGAGGAAAAGAAAATAACAATGATTCCCCTAGTAACGGCGAGTGAAGAGGGAAA
AGCTCAAAGTTGGAACCTGGTGGGCATAGCTCACCCGGATTGTAAACTAAAGTTTTTGAGTCGTTTAGT

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CAGCCAGGTAAATAAGTCCTCTGGAAAGGGGCGACATAGAGGGTGAAATCCCCGTCTTTGGCCTGAG
TTTTGGTTAGGCGTTTGGCTTGGAAACGAAGAGTCAGGTTGTTTGGGAATGCAGCCTAAAATGGGAGG
TAAATCTCTCCTAAAGCTAAATATTGACGAAAGACCGATAGCGAACAAGTACCGTGAGGGAAAGATG
AAAAGCACTTTGAAAAGAGGGTCAAAAAGTACGTGAAATTGCTGAAAGGGAACCGTATGAAATCAG
ACCTACTGGTAGGTAATCAATCTTTCCCTTGGGAAGGATGCACTTGCCTGCTATGTATGCCAGCGACAT
TTTGGTTGGGAGGAAAAAAATAGAAGGAATGTAGCCTAGGCTTCGGTTTAGGTGTTATAGACTTTTAT
AAAATACTCTCGGCTGGAATGAGGAACGCAGCAAACCGTAAGGCGAAGATTCTAGTCGCTTGGGGGG
AATAATTAGAGAATTTCTGCTTCGGGTGGTGCTTTGATTATTACTTTCAACTCGGTTGGAGTTCTTTAATT
TGCTTAGGTTGTTGGCTTAATGATTTATATGAC

Isolation

Estuarine mud

References

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

Biosafety Level: 1

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

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Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans.
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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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