



Product Sheet

# *Cylindrocarpon* sp. (ATCC® MYA-283™)

## Please read this FIRST



## 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: *Cylindrocarpon* sp. (ATCC® MYA-283™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

## Description

**Strain Designation:** m2c1 [ILLS 54720]

**Deposited Name:** *Fusarium oxysporum* Schlechtendahl, anamorph

**Product Description:** An ampoule containing viable cells (e.g. yeast cells, spores, or agar cubes with 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 336: Potato dextrose agar (PDA)

ATCC® Medium 335: Potato carrot agar

## 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 **25–30 °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 1-2 days of incubation. However, the time necessary for significant growth will vary from strain to strain.

**Colony and Cell Morphology:** After 6 days on Potato dextrose medium at 25°C, colony is flat, white to buff, reverse orange-brown. Macroconidia hyaline, fusiform, slightly curved 3-5 septate.

## Notes

Potential biological control agent against Verticillium wilt disease (Eric Grunden, personal communication); the DNA sequences of ITS, D1D2 and RPB1 regions of MYA-283 (ILLS 54720) differ from the type strain of *Cylindrocarpon olidum* ATCC 16548 (CBS 215.67) by mismatches of 4, 3 and 9 nucleotide positions, respectively.

Additional, updated information on this product may be available on the ATCC web site at [www.atcc.org](http://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  
GGATCATTACCGAGTTTACAACCTCCCAAACCCCTGTGAACATACGTGTTGCTTCGGCGGACCACCCC  
AACCCCTCGGGGCGAGGGGCGCCAGAGGACCCAAAACCCAACTGTTTTTTCGGTAACGAAACCTAT  
TCTGAGTGGAATTATTAATAAACTCAAACCTTTCAACAACGGATCTCTTGGCTCGGCATCGATGAAGA  
ACGCAGCGAAATGCGATAAGTAATGTGAATTGAGAATTCAGTGAACCATCGAATCTTTGAACGCAC  
ATTGCGCCCGCCAGTACTCTGGCGGGCATGCCTGTTGAGCGTCATTTCAACCCCTCGAGCCCCGGGCT  
CGGTGTTGGGGATCGGCACAAGGCGGAGGCTCCCCGGGAGCCCCCGCCCGCTCCCCAAATG  
CAGTGGCGGTACGTGCGGGCCCCCTGCGTAGTAGCAACACCTCGACCCGAGCCGCTGTCGCCCA  
CGCCGTAACCCCGACTTTTACAAGGTTGACCTCGAATCAGGTAGGACTACCCGCTGAACCTAAG

D1/D2 region of 28S ribosomal RNA gene; GenBank number: KC585414

CATATCAATAAGCGGAGGAAAAGAAACCAACAGGGATTGCCCGAGTAACGGCGAGTGAAGCGGCAA  
CAGCTCAAATTTGAAATCTGGCCCTCGGGTCCGAGTTGTAATTTGTAGAGGATGCTTTTGGCAAGGTGC  
CTTCCGAGTTCCCTGGAACGGGACGCCATAGAGGGTGAAGCCCGCTGTTGCGGACACCGCGCCTCT  
GTAAAGCTCCTTCGACGAGTCGAGTAGTTTGGGAATGCTGCTCTAAATGGGAGGTATATGTCTTCTAAA



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GCTAAATACCGGCCAGAGACCGATAGCGCACAAAGTAGAGTGATCGAAAGATGAAAAGCACTTTGAA  
AAGAGAGTTAAAAAGCACGTGAAATTGTTGAAAGGGAAGCGATTATGACCAGACTTGGGCCTGTTTG  
ATCAGCTTGGGTTCTCCCGGGTGCACTCTCAGGCTCAGGCCAGCATCAGTTCTCGCGGGGGACAA  
AGGTCGCGGAATGTAGCTCCCCTCGGGGAGTGTATAGCTCGCTTCGCAATACCCTGCCTCGGACTGA  
GGTTCGCGCATCTGCAAGGATGCTGGCGTAATGGTCATCATCGAC



### Isolation

Microsclerotia of *Verticillium daliae*, Rutan Woods, Ogden, IL, USA



### References

References and other information relating to this product are available online at [www.atcc.org](http://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.

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### Disclaimers

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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](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).  
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