



Product Sheet

# *Dictyostelium unicornutum* (ATCC® MYA-4861™)

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: *Dictyostelium unicornutum* (ATCC® MYA-4861™)

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:** OH599

**Genotype:** Not available

**Product Description:** An ampoule containing viable cells (may include spores, cysts and plasmodia) 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 579: LY Agar for Filobasidium

ATCC® Medium 2432: wMY (weak Malt Yeast Extract)

ATCC® Medium 2219: Corn meal agar, half-strength

## Growth Conditions

**Temperature:** 20°C to 25°C

**Atmospheric:** 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. One day prior to inoculation streak center of agar medium with a large X of live food source and incubate at 25°C to 30°C. Several replicates are recommended for optimum results.
2. 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.
3. Immediately after thawing, wipe down ampoule with 70% ethanol and aseptically transfer a few drops of inoculum onto the medium containing food source directly at center of X.
4. Incubate the culture at the propagation conditions recommended.
5. Inspect for growth of the inoculum/strain regularly. Viability is typically noticeable after 7 - 10 days of incubation. However, the time necessary for significant growth will vary from strain to strain.

**Colony and Cell Morphology:** On LY agar after 10 days at 20°C, Sorocarps solitary to loosely clustered and erect.

## Notes

Type strain of the species.

Grown in two-member culture with *Escherichia coli* ATCC® 23437 as food source.

Exposure to low light may also benefit growth.

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:

```
GAAACTGCAGACGGCTCATTACAACAGTGATAAACTAATAGAGTTTCGGGTCTAACCTTTATGGATAT  
CCGCAGTAAATCGGGGCTAATACATACAAACGAGGGGTACTGTTACAGAAGCTTCGCGATTATTAG  
TCTAACCAATACCCGCAAGGGTCTAGTGGTGAACCGAATAATATTGCAGATCGAAACCTAGTTTCGA  
CGATTCTATTGTGCTACTGCCCTATCAACTTTCGATGGTACGGTATTGGCCTACCATGGTTGTAACGGGT  
AACGGGGAATTAGGGTTCGATTCGGAGAGGGCGCCTGAGAAATGGCGACCATTCTACGGAAGGCA  
GCAGGCGCGCAAATTACTCAATCCCAATACGGGGAAGTAGTGACAATAAATATCAATGCCTATTTCGTT  
TTTCGAAAGGTAATTGAAATGGGTACAAATTAACCCCTTAACCAATACAAATTGGAGGGCAAGTCTGG  
TGCCAGCAGCCCGGTAATCCAGCTCCAATAGCATATACTAAAGTTGTTGCGGTTAAAAAGCTCGTA  
GTTGAAACTAAATTTGATTGGGCTCAAGCTTGATAGCCACTTTGGTGGTTATCAAGTTCAGTGCATTTT  
TTTGAAGCGCCCTTAAAGCCTTACCTCGTAGTTGGTTTTCTGGGTTTTTCACTGTGAGAAAAATTGTG  
GTGTTCAAAGCGGGGCTTCGCTGATCTTTTGCAGCATGGGATGATAAAACATGACATTCGAATGCAAT  
TGTTGCATCTGAGTGAATGATTAATAGGGATGGATGGGGGTGTTTCATATTGGTGGGCGAGAGGTGA
```



Product Sheet

## *Dictyostelium unicornutum* (ATCC® MYA-4861™)

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: *Dictyostelium unicornutum* (ATCC® MYA-4861™)

AATTCGTTGACCCTATCAAGATGAACTTCTGCGAAAGCATTATCAAACTTCCCCATTAATCAAGAA  
CGAAAGTTTGGGGATCAAGACGATCAGATACCGTCGTAGTCCAACTATAAACTATGTGACCCAGG  
GATCGGGTAGCATTTCAAAAATCTATTTGGCACCTTGTGAGAAATCATGAGTGTTTAGATTCTGGGG  
GGAGTATGGTCGCAAGTCTGAAACTTAAAGGAATTGACGGAAGGGCACACAATGGAGTGGAGCCTG  
CGGCTTAATTTGACTCAACTCGGGAAAACTTACCAAGCTAAGATATAGTAAGGATTGACAGACTAAAA  
GATTTTTCATGATTCTATAAAGTGGTGGTGCATGGTCTTCTAGTTGGTGGAGCAATCTGTCTGGTCAAT  
TCCGATAACGGACGAGATCTCGACCTGCTAACTAGTAGTACGTATTTGGTGCATATGGGTGAAGCTCT  
TTTGGAGTAAGTTGTGCGTCGCAAGGTGTACAGCACTTCTGGGGTTTGTAACTGGTCAGATACGTAC  
GATTAATAAACTTCTTAGAGGGACTACCTGTGGCAACAGGGGGAAGTTCGAGGCAATAACAGGTC  
TGTGATGCCCTTAGATACCTTGGGCCGCACGCGCTACAATGTAAAGGCAAAAAGCTTTCCTGGTC  
CGGAAGGACTGGGTAATCATCTGAATTTTTACGTAAGTGGGATTGATCTTTGTAATTATTGATCATCAA  
CGAGGAATTCCTTGAAGCGCAAATCATTACTTTGTGCTGAATAGTCCCTGCCCTTTGTACACCCGCC  
CGTCTCCTACCGATCGAATGATACGGTAAAGCCAACAGATATGGCTCTGTAGCAATACGAGAGTTG  
TAGAAGT



### Isolation

Soils collected from the semi-green rain forest of Tikal, Guatemala.



### 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.

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

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).  
© ATCC 2013. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [08/02]

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