



Product Sheet

# *Cryptococcus neoformans* (ATCC® MYA-4564™)

## 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: *Cryptococcus neoformans* (ATCC® MYA-4564™)

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

800.638.6597 or 703.365.2700  
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## Description

**Strain Designation:** WM148 [CBS 10085]

**Antigenic Properties:** Serotype A

**Genotype:** VNI, AFLP1

**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 325: Malt extract agar (Blakeslee's formula)

ATCC® Medium 336: Potato dextrose agar (PDA)

## Growth Conditions

**Temperature:** 20°C to 25°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 10 µL (or any amount desired up to all) 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.

## Notes

Reference strain of VN I, AFLP1 molecular type of *C. neoformans* strains.

## DNA Sequence

ITS of MYA-4564:

```
TTTCCGTAGGTGAACCTGCCGAAGGATCAGTAGAGAATATTGGACTTCGGTCCATTTATCTACCCATCT  
ACACCTGTGAACCTGTTTATGTGCTTCGGCACGTTTTACACAACTTCTAAATGTAATGAATGTAATCTTA  
TTATAACAATAATAAACTTTCAACAACGGATCTCTTGGCTTCCACATCGATGAAGAACGCAGCGAAA  
TGCGATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCAACTTGCGCCCTTTG  
GTATTCCGAAGGGCATGCCTGTTTGAGAGTCATGAAAATCTCAATCCCTCGGGTTTTATTACCTGTTGGA  
CTTGGATTTGGGTGTTTCCCGCAGCTGCAAAGGACGTCGGCTCGCCTTAAATGTGTTAGTGGGAAGGT  
GATTACCTGTCAGCCCGCGTAATAAGTTTCGCTGGCCTATGGGTAGTCTTCGGCTTGCTGATAACA  
ACCATCTCTTTTTGTTGACCTCAAATCAGGTAGGGCTACCCGCTGAACCTAAGCATATCAAT
```

D1D2 region of the 28S ribosomal RNA gene:

```
ATATCAATAAGCGGAGGAAAAGAACTAACAAGGATCCCTTAGTAACGGCGAGTGAACCGGGAAG  
AGCTCAAATTTGAAATCTGGCGTCTCCGGGCGTCCGAGTTGTAATCTACAGAAACGTTTTCCGTGCTG  
GACCGTGTCTAAGTCCCTTGAATAGGGTATCAAAGAGGGTGACAATCCCGTACTTGACACGATCACC  
AGTGCTCTGTGATACGTTTTCTACGAGTCGCGTACTTGGGAGTGTAGCGCAAAATGGGTGGTAAACTC  
CATCTAAAGCTAAATTTGGTGAAGACCGATAGCGAACAAGTACCGTGAGGGAAAGATGAAAAGC  
ACTTTGGAAAGAGAGTTAAACAGTACGTGAAATTTGTAAGGGGAAACGATTGAAGTCAGTCGTGTC  
TATTGGGTTACGCCAGTTCTGCTGTTATCCCTTTAGACGGGTCAACATCAGTTCTGATCGGTGATA  
AGGGCTGGGGAATGTAGCACTTTCGGAGTGTGTTATAGCCTCTGTCGCATACACTGGTTGGGACTG  
AGGAATGCAGCTCGCCTTTATGGCCGGGTTCCGCCACGTTTCGAGCTTAGGATGTTGACAAAATGGCTT
```



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TAAACGA



Isolation

Human, Australia.



References

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