



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

**Specifications**

**Microorganism Name:** Trichoderma virens

**Catalog Number:** 01080

**Lot Number:** 1080-07

**Reference Number:** ATCC® 9645™\*

**Purity:** Pure

**Passage from Reference:** 2

**Expiration Date:** 2019/8/31

**Release Information:**

**Quality Control Technologist:** Tracy A Blenker

**Release Date:** 2017/11/27

**Performance**

**Macroscopic Features:**

Large, white to dark green, with white aerial mycelium

**Microscopic Features:**

Hyphae haline, conidophores arranged in a branching, pyramidal pattern. May have long branches with shorter branches near the tips, which branch at right angles. Chlamydospores are often present in old cultures.

**Medium:**

PDA

**Method:**

Lactophenol Blue (1)

**ID System:** Charles River

See attached ID System results document.

Amanda Kuperus

Quality Control Manager

AUTHORIZED SIGNATURE

Disclaimer: The last digit(s) of the lot number appearing on the product label and packing slip are merely a packaging event number. The lot number displayed on this certificate is the actual base lot number.

Note for Vitek®: Although the Vitek® panel uses many conventional tests, the unique environment of the card, combined with the short incubation period, may produce results that differ from published results obtained by other methods.

⚠ Refer to the enclosed product insert for instructions, intended use and hazard/safety information.

Individual products are traceable to a recognized culture collection.



(\*) The ATCC Licensed Derivative Emblem, the ATCC Licensed Derivative word mark and the ATCC catalog marks are trademarks of ATCC. Microbiologics, Inc. is licensed to use these trademarks and to sell products derived from ATCC® cultures.

(1) These tests are accredited to ISO/IEC 17025:2005.



---

|                     |                                                              |                    |                 |
|---------------------|--------------------------------------------------------------|--------------------|-----------------|
| Customer:           | MicroBiologics, Inc.                                         | Account:           | 602190 ( MLI2 ) |
| Address:            | 200 Cooper Avenue North, St. Cloud, MN, 56303, United States |                    |                 |
| Accugenix C#:       | C2851493-20171124037                                         | ID Request Form #: | 293971          |
| Customer Sample ID: | 1080-07                                                      | Due Date:          | 2017-11-24      |

---

**Accugenix Database Search Result - FunITS**

Identification: **Trichoderma virens**

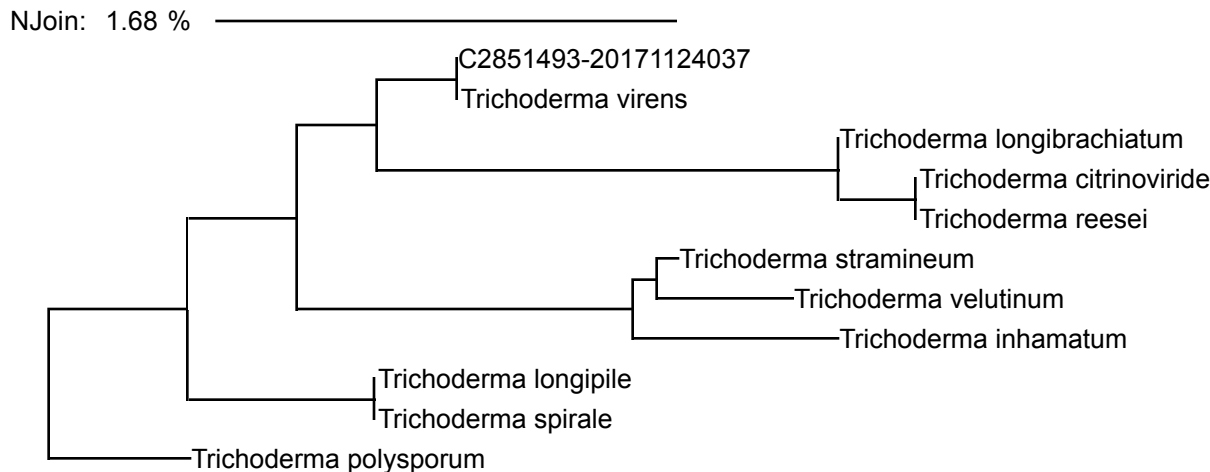
Confidence Level: **Species**

**Sequence Alignment**

Alignment: 355 C2851493-20171124037

0.00 % 355 Trichoderma virens  
1.69 % 354 Trichoderma longipile  
1.69 % 354 Trichoderma spirale  
1.97 % 356 Trichoderma stramineum  
1.97 % 355 Trichoderma longibrachiatum  
1.98 % 353 Trichoderma polysporum  
2.26 % 354 Trichoderma citrinoviride  
2.26 % 354 Trichoderma reesei  
2.54 % 358 Trichoderma inhamatum  
2.54 % 358 Trichoderma velutinum

**Neighbor Joining Tree**




---

Not intended for in vitro diagnostic use

---