

Overview

Useful For

Identification of pure isolates of filamentous fungi and yeast

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
D2F	D2 Fungal Sequencing Identification	No, (Bill Only)	No
FUNA	Fungal Ident Panel A	No, (Bill Only)	No
FUNB	Fungal Ident Panel B	No, (Bill Only)	No
ITSF	ITS Fungal Sequencing	No, (Bill Only)	No
RMALF	Id MALDI-TOF Mass Spec Fungi	No, (Bill Only)	No
RMALY	Id MALDI-TOF Mass Spec Yeast	No, (Bill Only)	No

Testing Algorithm

When this test is ordered, the reflex tests may be performed and charged. All fungal organisms submitted will be identified and billed as appropriate.

Special Instructions

- [Infectious Specimen Shipping Guidelines](#)

Method Name

Macroscopic/Microscopic/D2 and Internal Transcribed Spacer (ITS) rDNA Gene Sequencing/Matrix-Assisted Laser Desorption/Ionization-Time of Flight Mass Spectrometry (MALDI-TOF MS)
Dimorphic Pathogen Identification Confirmation: D2 and ITS rDNA Gene Sequencing/MALDI-TOF MS

NY State Available

Yes

Specimen

Specimen Type

Varies

Shipping Instructions

1. See [Infectious Specimen Shipping Guidelines](#) for shipping information.

2. Place specimen in a large infectious container (T146) and label as an etiologic agent/infectious substance, if appropriate.

Necessary Information

- Specimen source (anatomic body site) is required.**
- Isolate description is required: Gram stain reaction, morphology, tests performed.**

Specimen Required

Specimen Type: Yeast or filamentous fungus in pure culture

Supplies: Infectious Container, Large (T146)

Container/Tube:

Preferred: Sabouraud dextrose agar slant

Acceptable: Inhibitory mold agar slant

Specimen Volume: Isolated mold or yeast

Collection Instructions: Yeast or filamentous fungus must be in pure culture, actively growing. **Do not submit mixed cultures.**

Forms

If not ordering electronically, complete, print, and send a [Microbiology Test Request](#) (T244) with the specimen.

Reject Due To

Agar plate	Reject
------------	--------

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Ambient (preferred)		
	Refrigerated		

Clinical & Interpretive**Clinical Information**

Fida M, Wengenack NL, Theel ES. Mycology: General approaches for direct and indirect detection and identification of fungi. In: Carroll KC, Pfaller MA, Pritt BS, et al. Manual of Clinical Microbiology. 13th ed. ASM Press; 2023

Reference Values

Not applicable

Interpretation

Genus and species are reported on fungal isolates whenever possible.

Cautions

If the organism is received in mixed culture or contaminated, the report may be delayed or identification may not be possible.

Clinical Reference

Ashbee HR: General approaches for direct detection and identification of fungi. In: Carroll KC, Pfaller MA, Landry ML, et al, eds. Manual of Clinical Microbiology. 12th ed. Vol 1. ASM Press; 2019:2035-2055

Performance**Method Description**

Identification of fungi is based on colonial and microscopic morphology, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry and/or D2 and internal transcribed spacer (ITS) rDNA gene sequencing, as applicable.(Dhiman N, Hall L, Wohlfel SL, Buckwalter SP, Wengenack NL. Performance and cost analysis of matrix-assisted laser desorption ionization time of flight mass spectrometry for routine identification of yeast. *J Clin Microbiol.* 2011;49[4]:1614-1616; Hall L, Wohlfel SL, Roberts GD. Experience with the MicroSeq D2 large-subunit ribosomal DNA sequencing kit for identification of filamentous fungi encountered in the clinical laboratory. *J Clin Microbiol.* 2004;42[2]:622-626; Theel ES, Schmidt BH, Hall L, et al. Formic acid-based direct, on-plate testing of yeast and *Corynebacterium* species by Bruker Biotype matrix-assisted laser desorption ionization-time of flight mass spectrometry. *J Clin Microbiol.* 2012;50[9]:3093-3095; Theel ES, Hall L, Mandrekar J, Wengenack NL. Dermatophyte identification using matrix-assisted laser desorption ionization-time of flight mass spectrometry. *J Clin Microbiol.* 2011;49[12]:4067-4071; General approaches for direct and indirect detection and identification of fungi. In: Carroll KC, Pfaller MA, Pritt BS, et al. Manual of Clinical Microbiology. 13th ed. ASM Press; 2023)

PDF Report

No

Day(s) Performed

Monday through Saturday

Report Available

2 to 35 days

Specimen Retention Time

30 days after identification

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Main Campus

Fees & Codes**Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

Test Classification

This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

CPT Code Information

87107-Culture, fungi, definitive identification
87106-Culture, fungi, definitive identification, each organism; yeast (if appropriate)
87106-Id MALDI-TOF Mass Spec Yeast (if appropriate)
87107-Id MALDI-TOF Mass Spec Fungi (if appropriate)
87107-Culture, fungi, definitive identification, each organism; mold (if appropriate)
87107-Fungal identification Panel A (if appropriate)
87107-Fungal identification Panel B (if appropriate)
87153-D2 fungal sequencing Identification (if appropriate)
87153-ITS Fungal Sequencing (if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
FUNID	Culture Referred for ID, Fungus	42804-5

Result ID	Test Result Name	Result LOINC® Value
FUNID	Culture Referred for ID, Fungus	In Process