MAYO CLINIC LABORATORIES

Test Definition: FDERM

Fungal Culture, Dermal

Overview

Useful For

Recovery and identification of dermatophyte fungi from hair, skin, and nail infected specimens

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
FUNA	Fungal Ident Panel A	No, (Bill Only)	No
FUNB	Fungal Ident Panel B	No, (Bill Only)	No
LCCI	Ident Rapid PCR Coccidioides	No, (Bill Only)	No
LCHB	Id, Histoplasma/Blastomyces PCR	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
D2F	D2 Fungal Sequencing Identification	No, (Bill Only)	No

Testing Algorithm

When this test is ordered, the reflex test may be performed at an additional charge.

Method Name

Plated to Mycobiotic Agar

NY State Available

Yes

Specimen

Specimen Type

Varies

Shipping Instructions

Specimen must arrive within 7 days of collection.

Transport in petri dishes may result in loss of specimen. Securely tape petri dishes closed for transport.

Necessary Information

Specimen source is required.

Specimen Required

Note:

-Aseptic techniques should be used when collecting specimens to minimize contamination.

-For optimal recovery of organisms, sufficient clinical material should be collected.

Specimen Type: Hair

Container/Tube: Dry sterile container or specimen collection envelope

Specimen Volume: 10 to 12

Collection Instructions: Using forceps collect affected hairs with base of the shaft intact.

Specimen Type: Nails

Container/Tube: Dry sterile container or specimen collection envelope

Specimen Volume: Entire collection

Collection Instructions:

1. Wipe the nail with 70% alcohol using gauze (not cotton).
2. Clip away a generous portion of the affected area.
3. Collect material or debris from under the nail.

Specimen Type: Skin

Container/Tube: Dry sterile container or specimen collection envelope

Specimen Volume: Entire specimen

Collection Instructions:

1. Cleanse the affected area with 70% alcohol.
2. Gently scrape the surface of the skin at the active margin of the lesion, being careful to not draw blood.

Forms

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

Reject Due To

Charcoal, wooden shaft, or dry swab Agar plate Blades from scalpel or razor	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Ambient	7 days	

Clinical & Interpretive

Clinical Information

Fungal infections of keratinized tissues (hair, skin, nails) can be caused by dermatophytic fungi belonging to the genera *Epidermophyton*, *Microsporum*, and *Trichophyton*. Opportunistic superficial infections resembling dermatophytoses may be caused by yeasts or by unrelated filamentous fungi that are normally saprobes or plant pathogens. Dermatophytes are usually unable to penetrate deeper tissues. Infection may range from mild to severe.

Reference Values

Negative
If positive, fungus or yeast will be identified.

Interpretation

Positive cultures are reported with organism identification.

Negative reports are issued after 30 days incubation.

Cautions

No significant cautionary statements

Clinical Reference

Borman AM, Summerbell RC: *Trichophyton*, *Microsporum*, *Epidermophyton* and agents of superficial mycoses. In: Carroll KC, Pfaller MA, Landry ML, et al. Manual of Clinical Microbiology. 12th ed. ASM Press; 2019:2208-2233

Performance

Method Description

Specimens are plated on mycobiotic agar, which contains chloramphenicol and cyclohexamide to inhibit bacterial and saprobic fungal contamination. Cultures are incubated at 30 degrees C for 30 days. Identification of dermatophyte species is based on colony and microscopic morphology and polymerase chain-reaction (PCR), DNA sequencing or matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, when applicable.(Hall L, Wohlfiel S, 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 Feb;42[2]:622-626; 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 Dec;49[12]:4067-4071)

PDF Report

No

Day(s) Performed

Monday through Sunday

Report Available

30 to 35 days

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

87101-Fungal culture, dermal
87106-Id MALDI-TOF Mass Spec Yeast (if appropriate)
87107-Id MALDI-TOF Mass Spec Fungi (if appropriate)
87107-Fungal identification panel A (if appropriate)
87107-Fungal identification panel B (if appropriate)
87150-Identification rapid PCR Coccidioides (if appropriate)
87150 x 2-Identification Histoplasma/Blastomyces, PCR (if appropriate)
87153-D2 fungal sequencing identification (if appropriate)
87150-Id, Candida auris Rapid PCR (if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
FDERM	Fungal Culture, Dermal	580-1

Result ID	Test Result Name	Result LOINC® Value
FDERM	Fungal Culture, Dermal	In Process