MAYO CLINIC LABORATORIES

Test Definition: MMLYP

Antimicrobial Susceptibility Panel, Yeast, Varies

Overview

Useful For

Determining in vitro quantitative antifungal susceptibility (minimum inhibitory concentration) of non-fastidious yeast

As an aid in the management of certain circumstances, such as:
-Refractory oropharyngeal infections due to *Candida* species in patients who appear to be experiencing therapeutic failure with standard agents at standard doses
-Invasive infections due to *Candida* species when the utility of azole antifungal agents is uncertain (eg, when the infection is due to a non-*Candida albicans* organism)

Additional Tests

Test Id	Reporting Name	Available Separately	Always Performed
SYP	Susceptibility Yeast Panel	No, (Bill Only)	Yes

Testing Algorithm

When this test is ordered, the Susceptibility Yeast Panel will be performed at an additional charge. All yeast submitted will have susceptibility testing performed and billed as appropriate.

Special Instructions

- Infectious Specimen Shipping Guidelines

Highlights

Antifungals included in the assay are amphotericin B, anidulafungin, caspofungin fluconazole, 5-flucytosine, itraconazole, micafungin, posaconazole, and voriconazole.

Method Name

Minimum Inhibitory Concentration (MIC)

NY State Available

Yes

Specimen

Specimen Type

Varies

Shipping Instructions

1. See Infectious Specimen Shipping Guidelines

2. Place specimen in a large infectious container and label as an etiologic agent/infectious substance.

Necessary Information

Specimen source and suspected organism identification are required. If identification of organism is not provided, FUNID / Culture Referred for Identification, Fungus, Varies will be performed at an additional charge.

Specimen Required

Specimen Type: Organism in pure culture
Supplies: Infectious Container, Large (T146)
Container/Tube: Sabouraud's dextrose agar slant
Specimen Volume: Infecting yeast isolate
Collection Instructions: Organism 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.

Specimen Minimum Volume

See Specimen Required

Reject Due To

Agar plate	Reject

Specimen Stability Information

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

Clinical & Interpretive

Clinical Information

Candida species are the fourth leading cause of nosocomial infections and are frequent causes of community-acquired infections.

Antifungal susceptibility testing may aid in the management of patients with invasive infections due to *Candida* species or patients who appear to be experiencing therapeutic failure.

The Clinical Laboratory Standards Institute has approved the use of a broth microdilution method for determining the susceptibility of *Candida* species.

Reference Values

Results reported in mcg/mL

Interpretation
The Clinical and Laboratory Standards Institute method, breakpoints, and interpretive criteria are used.

Cautions
The assay cannot be used for minimum inhibitory concentration determinations for the dimorphic yeast or filamentous fungi.

Clinical Reference
Pappas PG, Kauffman CA, Andes DR, et al: Clinical Practice Guideline for the Management of Candidiasis: 2016 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2016 Feb 15;62(4):e1-e50

Performance

Method Description
Yeast susceptibility is determined by colorimetric microdilution broth method using TREK Sensititre YeastOne Y09 Susceptibility Plate. Each plate is setup with appropriate dilutions of antifungal agents and a colorimetric indicator. After inoculation with a standardized suspension of organism in inoculum medium and incubation at 35 degrees C for 24 to 48 hours; the minimum inhibitory concentrations for the test organism are determined by observing the lowest antifungal concentration showing inhibition of growth as evidenced by no color change of the test medium.(Clinical and Laboratory Standards Institute [CLSI]: Performance Standards for Antifungal Susceptibility Testing of Yeasts. 2nd ed. CLSI supplement M60. CLSI; 2020; CLSI: Reference Method for Broth Dilution Antifungal Susceptibility Testing of Yeasts. 4th ed. CLSI standard M27. CLSI; 2017)

PDF Report
No

Day(s) Performed
Monday through Saturday

Report Available
3 to 7 days

Specimen Retention Time
30 days

Performing Laboratory Location
Rochester

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

87186

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
MMLYP	Susceptibility Panel, Yeast	29577-4

Result ID	Test Result Name	Result LOINC® Value
MMLYP	Susceptibility Panel, Yeast	29577-4