MAYO CLINIC LABORATORIES

Test Definition: SSF1

Nocardia Stain, Varies

Overview

Useful For

Detecting *Nocardia* species and other partially-acid fast aerobic actinomycetes in clinical specimens

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
TISSR	Tissue Processing	No, (Bill Only)	No

Testing Algorithm

When this test is ordered, tissue processing may be performed at an additional charge.

Method Name

Modified Acid-Fast Stain

NY State Available

Yes

Specimen

Specimen Type

Varies

Necessary Information

Specimen source is required.

Specimen Required

Container/Tube: Sterile container

Specimen Volume: 0.2 mL

Collection Instructions: Collect a raw specimen.

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

Blood Bone marrow	Reject

Fixed tissue Viral transport media (including but not limited to M4, M5, BD viral transport media, thioglycolate broth) Environmental specimen Wood shaft or charcoal swab Prepared slides, glass slides, microscope slides	

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Refrigerated (preferred)	7 days	
	Ambient	7 days	

Clinical & Interpretive

Clinical Information

Nocardia species and other aerobic actinomycetes can cause significant disease in immunocompromised patients. Clinical presentations can include, but are not limited to, pneumonia, skin abscess, bacteremia, brain abscess, eye infection, and joint infection.

The modified acid-fast stain can detect *Nocardia* species and other partially-acid fast aerobic actinomycetes directly from clinical specimens.

Reference Values

Reported as positive or negative

Interpretation

Patients whose specimens are reported as partially acid-fast positive should be considered potentially infected with *Nocardia* species or other aerobic actinomycetes, pending definitive diagnosis by molecular methods or culture.

Cautions

Artifacts may exhibit nonspecific staining and be confused with organisms. Not all aerobic actinomycetes stain as partially acid-fast. A negative stain does not rule out the possibility of infection and culture should be performed. *Nocardia* species and other aerobic actinomycetes grow well on mycobacterial culture medium so CTB / Mycobacteria and *Nocardia* Culture, Varies should be ordered. Sometimes, *Nocardia* species can also be recovered in fungal cultures (FGEN / Fungal Culture, Routine).

Clinical Reference

Brown-Elliott BA, Brown JM, Conville PS, Wallace RJ. Clinical and laboratory features of the Nocardia spp. based on current molecular taxonomy. Clin Microbiol Rev. 2006;19(2):259-282

Performance

Method Description

Modified acid-fast stain. This method uses carbolfuchsin stain (Kinyoun method) with a milder decolorization step for detection of *Nocardia* species.(Atlas R, Snyder J. Reagents, stains and media: Bacteriology. In: Carrol KC, Pfaller MA, Landry ML, et al, eds. Manual of Clinical Microbiology, 12th ed. ASM Press; 2019:331-361)

PDF Report

No

Day(s) Performed

Monday through Sunday

Report Available

1 to 2 days

Specimen Retention Time

Raw specimens: 2 to14 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

87206

87176-Tissue processing (if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
SSF1	Nocardia Stain	21003-9

Result ID	Test Result Name	Result LOINC® Value
SSF1	Nocardia Stain	In Process