MAYO CLINIC LABORATORIES

Test Definition: IDENT

Organism Referred for Identification, Aerobic Bacteria

Overview

Useful For

Identification of pure isolates of aerobic bacteria

Differentiation of members of the *Staphylococcus aureus* complex (*S aureus, Staphylococcus argenteus, Staphylococcus schweitzeri*)

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
COMM	Identification Commercial Kit	No, (Bill Only)	No
RMALD	Ident by MALDI-TOF mass spec	No, (Bill Only)	No
GID	Bacteria Identification	No, (Bill Only)	No
ISAE	Aerobe Ident by Sequencing	No, (Bill Only)	No
REFID	Additional Identification Procedure	No, (Bill Only)	No
SALS	Serologic Agglut Method 1 Ident	No, (Bill Only)	No
EC	Serologic Agglut Method 2 Ident	No, (Bill Only)	No
SHIG	Serologic Agglut Method 3 Ident	No, (Bill Only)	No
STAP	Identification Staphylococcus	No, (Bill Only)	No
STRP	Identification Streptococcus	No, (Bill Only)	No
SIDC	Ident Serologic Agglut Method 4	No, (Bill Only)	No
PCRID	Identification by PCR	No, (Bill Only)	No

Testing Algorithm

When this test is ordered, the reflex tests may be performed at an additional charge. All aerobically growing bacteria submitted will be identified and billed, as appropriate.

Special Instructions

- Infectious Specimen Shipping Guidelines

Method Name

Dependent on organism submitted, 1 or more of the following methods will be used: Conventional Biochemical Testing, Commercial Identification Strips or Panels, Matrix-Assisted Laser Desorption/Ionization Time-of-Flight (MALDI-TOF) Mass Spectrometry, and 16S RNA Gene Sequencing

NY State Available

Yes

Specimen

Specimen Type

Varies

Ordering Guidance

Mayo Clinic Laboratories will not perform identification testing on suspected select agents (eg, *Bacillus anthracis, Brucella species*, *Burkholderia mallei*, *Burkholderia pseudomallei*, *Francisella tularensis*, and *Yersinia pestis*). Consult with your state health department or the Centers for Disease Control and Prevention regarding identification confirmation or exclusion of such isolates. For more information see www.selectagents.gov/sat/list.htm.

If susceptibility testing is needed, also order ZMMLS / Antimicrobial Susceptibility, Aerobic Bacteria, Varies. If susceptibilities are not appropriate and will not be performed, ZMMLS will be canceled at report time.

Additional Testing Requirements

If susceptibility testing is needed; also order ZMMLS / Antimicrobial Susceptibility, Aerobic Bacteria, Varies. If susceptibilities are not appropriate and will not be performed, ZMMLS will be canceled at report time.

Shipping Instructions

1. See Infectious Specimen Shipping Guidelines for shipping information.
2. Place specimen in a large infectious container and label as an etiologic agent/infectious substance, if appropriate.

Necessary Information

1. Specimen source is required.

2. Isolate description is required including: Gram stain reaction, morphology, and tests performed.

Specimen Required

Supplies: Infectious Container, Large (T146)

Specimen Type: Pure culture of organism from source cultured

Container/Tube: Agar slant or other appropriate media

Specimen Volume: Entire specimen

Collection Instructions:

1. Perform isolation of infecting bacteria.
2. Bacterial organism must be submitted 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

Other	Agar plate

Specimen Stability Information

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

Clinical & Interpretive

Clinical Information

Organisms are referred to confirm identification or when the identity is unknown. This may provide helpful information regarding the significance of the organism, its role in the disease process, and its possible origin.

Techniques employed may include conventional biochemical analysis, commercial identification strips or panels, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry or sequencing nucleic acid of the 16S ribosomal RNA gene.

Reference Values

Identification of organism

Interpretation

Genus and species are reported on aerobic bacterial isolates, whenever possible.

Bacillus species will be reported out as "Large spore-forming aerobic gram-positive *Bacillus*, not *Bacillus cereus* or *Bacillus anthracis*," unless species identification is specifically requested on the request form.

Cautions

Isolates suspected of being select agent isolates (eg, *Bacillus anthracis*, *Brucella* species, *Burkholderia mallei*, *Burkholderia pseudomallei*, *Francisella tularensis*, or *Yersinia pestis*) should be submitted to client's state health department or the Centers for Disease Control and Prevention for identification confirmation or exclusion.

Clinical Reference

1. Carroll KC, Pfaller MA, eds. Manual of Clinical Microbiology. 12th ed. ASM Press; 2019
2. Procop GW, Church DL, Hall GD, et al, eds. Koneman's Color Atlas and Textbook of Diagnostic Microbiology. 7th ed. Lippincott Williams and Wilkins; 2017

Performance

Method Description

Pure isolates of aerobic organisms received on slants are inoculated onto culture plates based on Gram stain morphology, the source of the isolate, clinical history, and previous results submitted by the referring client. In general, routine media utilized includes chocolate blood agar, sheep blood agar, and eosin methylene blue agar. After incubation at 35 degrees C in 5% carbon dioxide, the organism is identified using one or a combination of the following techniques: commercial identification strips or panels, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, conventional biochemical tests, carbon source utilization, and nucleic acid sequencing of the 16S ribosomal RNA gene.(JH Jorgensen, MA Pfaller, KC Carrol, et al. Manual of Clinical Microbiology. 11th ed. ASM Press; 2015; Weyant RS, Moss CW, Weaver RE, et al. Identification of Unusual Pathogenic Gram-negative Aerobic and Facultatively Anaerobic Bacteria. Williams and Wilkins; 1996; Krieg NR, ed. Bergey's Manual of Systematic Bacteriology. Vol 1. Williams and Wilkins, 1984; Kolbert CP, Persing DH. Ribosomal DNA sequencing as a tool for identification of bacterial pathogens. Curr Opin Microbiol. 1999;2[3]:299-305)

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

5 to 10 days

Specimen Retention Time

30 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

87077-Organism Referred for Identification, Aerobic Bacteria
87077-Identification Commercial Kit (if appropriate)
87077-Ident by MALDI-TOF mass spec (if appropriate)
87077-Bacteria Identification (if appropriate)
87153-Aerobe Ident by Sequencing (if appropriate)
87077-Additional Identification Procedure (if appropriate)
87147 x 3-Serologic Agglut Method 1 Ident (if appropriate)
87147-Serologic Agglut Method 2 Ident (if appropriate)
87147 x 4-Serologic Agglut Method 3 Ident (if appropriate)
87147 x 2-6 - Serologic Agglut Method 4 Ident (if appropriate)
87077-Identification Staphylococcus (if appropriate)
87077-Identification Streptococcus (if appropriate)
87798-Identification by PCR (if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
IDENT	Organism Refer for ID, Aerobic Bact	32367-5

Result ID	Test Result Name	Result LOINC® Value
IDENT	Organism Refer for ID, Aerobic Bact	In Process