MAYO CLINIC LABORATORIES

NEW TEST

Notification Date: January 19, 2026
Effective Date: January 19, 2026

Bacterial Culture, Aerobic, with Antimicrobial Susceptibilities, Urine

Test ID: URNS

Useful for:

- Diagnosing urinary tract infections
- May be helpful in discriminating contamination, colonization, and infection
- Determining the in vitro antimicrobial susceptibility of potentially pathogenic aerobic bacteria, if appropriate
- This test is **not intended for** medicolegal use.

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
REFID	Additional Identification Procedure	No (Bill Only)	No
STAP	Identification Staphylococcus	No (Bill Only)	No
STRP	Identification Streptococcus	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
SIDC	Ident Serologic Agglut Method 4	No (Bill Only)	No
ISAE	Aerobe Ident by Sequencing	No (Bill Only)	No
PCRID	Identification by PCR	No (Bill Only)	No
BLA	Beta Lactamase	No (Bill Only)	No
MIC	Susceptibility, MIC	No (Bill Only)	No
SUS	Susceptibility	No (Bill Only)	No
MECAB	mecA PCR Test, Bill Only	No (Bill Only)	No

Methods:

Conventional Quantitative Culture Technique/Identification of Pathogens with Minimal Inhibitory Concentration (MIC) (Agar Dilution or Broth Microdilution or Gradient Diffusion) or Disk Diffusion, (if appropriate)

Reference Values:

No growth, Organism present less than 10,000 cfu/mL or urogenital microbiota.

Identification of probable pathogens with colony count ranges.

Susceptibility results are reported as minimal inhibitory concentration (MIC) in mcg/mL. Breakpoints (also known as clinical breakpoints) are used to categorize an organism as susceptible, susceptible-dose dependent, intermediate, resistant, or nonsusceptible according to breakpoint setting organizations, either the Clinical and Laboratory Standards Institute (CLSI) or the European Committee on Antimicrobial Susceptibility Testing (EUCAST), as applicable.

In some instances, an interpretive category cannot be provided based on available data; therefore, the following comment will be included in the report: There are no established interpretive guidelines for agents reported without interpretations.

For information regarding CLSI and EUCAST susceptibility interpretations, see Susceptibility Interpretative Category Definitions

Specimen Requirements:

Supplies: Boric Acid Urine Preservative Tube, 4 mL (T996)
Collection Container/Tube: Clean, plastic urine collection container
Submission Container/Tube: Commercially available transport system intended for the collection and transport of urine samples for culture and sensitivity testing of bacteria (4 mL of lyophilized maintenance formula; BD Vacutainer C and S Preservative and BD Vacutainer C and S Boric Acid Sodium Borate/Formate)
Specimen Volume: 4 mL
Collection Instructions:
1. Collect a random urine specimen.
2. Transfer 4 mL into the boric acid transport tube.
3. Send ambient in transport tube. **Do not aliquot from transport tube.**

Additional Information: Aliquots from transport tube and frozen specimens are **not acceptable.**
Specimen Stability Information: Ambient 72 hours

Note: Boric Acid Urine Preservative Tube, 4 mL (T996) is strictly for urine culture testing and is not an acceptable submission container for any other Microbiology Culture or PCR testing at Mayo.

Specimen Stability Information:

Specimen Type	Temperature	Time
Urine	Ambient	72 hours

Cautions:

- Although urine is normally sterile, contamination by organisms normally present in the urethra or on periurethral surfaces can allow a proliferation of these organisms yielding misleading urine culture results.
- Urine held at ambient temperature for more than 30 minutes supports the growth of both disease-causing organisms and contaminants, leading to potentially inaccurate colony counts.
- Urine obtained from catheter bags at the bedside and Foley catheter tips are unacceptable for culture.

- When antimicrobial susceptibilities are performed, in vitro susceptibility does not guarantee clinical response. Therefore, the decision to treat with a particular agent should not be based solely on the antimicrobial susceptibility testing result.

CPT Code:

87086-Bacterial Culture, Aerobic, Urine
87077-Identification commercial kit (if appropriate)
87077-Ident by MALDI-TOF mass spec (if appropriate)
87077-Bacteria Identification (if appropriate)
87077-Additional Identification procedure (if appropriate)
87077-Identification Staphylococcus (if appropriate)
87077-Identification Streptococcus (if appropriate)
87147 x 1-3-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)
87153-Aerobe ident by sequencing (if appropriate)
87150-Identification by PCR (if appropriate)
87185-Beta lactamase (if appropriate)
87186-Antimicrobial Susceptibility, Aerobic Bacteria, MIC-per organism for routine battery (if appropriate)
87181-Susceptibility per drug and per organism for drugs not in routine battery (if appropriate)
87150-mec A PCR (if appropriate)
87150 x 5 Carbapenem resistance genes (if appropriate)

Days Performed: Monday through Sunday **Report Available:** 2 to 5 days

Questions

Contact Brandon DeBoom, Laboratory Resource Coordinator at 800-533-1710.