

## TEST CHANGE

### Antimicrobial Susceptibility - MIC, Individual

0060201, MA MIC

#### Specimen Requirements:

##### Patient Preparation:

Collect: Actively growing isolate in pure culture.

Specimen Preparation: Transport sealed container with pure culture on agar slant or in bacterial transport media. Place each specimen in individually sealed bag.

Transport Temperature: Room temperature. If culture is suspected of being a microorganism identified on the IATA list as an infectious substance affecting humans, submit specimen according to Infectious Substance, Category A, shipping guidelines.

Unacceptable Conditions: Mixed cultures or ~~nonviable~~~~non-viable~~ organisms.

Remarks: Isolate identification and specimen source required. Individual antibiotics must be specified.

Stability: Ambient: 1 week; Refrigerated: Unacceptable; Frozen: Unacceptable

Methodology: Gradient Diffusion/Broth Microdilution

Performed: Sun-Sat

Reported: 2-~~7~~4 days

Note: The MIC is defined as the lowest concentration of an antibiotic which will inhibit the in vitro growth of an infectious organism. Results are reported in micrograms per mL. The interpretation of in vitro data is based on achievable serum concentrations, which may vary depending on dose, route of administration, degree of protein binding, site of infection, age and weight of the patient, state of health of the patient, and other factors. Reporting of MICs can provide the physician with precise information regarding the infectious organism's degree of susceptibility. When this information is coupled with the physician's knowledge of the site and severity of the infection, as well as the pharmacology of antibiotics, a rational choice of the most appropriate antibiotic can be made to suit the individual patient. With the quantitative MIC: (1) susceptibility can be determined for dosages and routes of administration

other than those usually prescribed and (2) susceptibility can more accurately be related to the achievable antibiotic concentration in urine, bile, CSF, and other body fluids which may vary widely from the achievable concentration in serum. This test will bill per antibiotic tested. Susceptibility panels are available for certain organisms. Refer to Antimicrobial Susceptibility by organism type. For organisms where panels are not available, specific agent(s) to be tested must be indicated. For staphylococcal species, oxacillin resistance testing is performed in order to interpret the results for  $\beta$ -lactam agents. An additional processing fee will be billed for all organisms not submitted in pure culture, as indicated in the specimen requirements. If species identification is not provided, identification will be performed at ARUP. Additional charges apply.

CPT Codes:	CPT codes vary based on method.
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New York DOH Approval Status:	This test is New York DOH approved.
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Interpretive Data:
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Susceptibility testing is performed by broth microdilution using custom-made MIC panels and is interpreted according to CLSI guidelines.
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Reference Interval:
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Susceptible, intermediate, or resistant.
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