ARUP LABORATORIES | *A nonprofit enterprise of the University of Utah and its Department of Pathology*

Effective Date: December 1, 2025

TEST CHANGE

Antimicrobial Susceptibility - Carbapenemase Gene Detection by PCR

2014277, CARBAR PCR

Specimen Requirements:	
Patient Preparation:	
Collect:	Actively growing Enterobacteriaceae, Pseudomonas aeruginosa, or Acinetobacter baumannii in pure culture.
Specimen Preparation:	Transport sealed container with pure culture on agar slant/bacterial transport media. Place each specimen in an individually sealed bag.
Transport Temperature:	Room temperature.
Unacceptable Conditions:	Mixed cultures or nonviable organisms.
Remarks:	Isolate identification (for cultures) and specimen source required.
Stability:	Ambient: 1 week; Refrigerated: 1 week; Frozen: Unacceptable
Methodology:	Qualitative Polymerase Chain Reaction (PCR)
Note:	An additional processing fee will be billed for all isolates 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. The *bla*IMP family is highly diverse and many variants that diverge from the IMP-1 sequence may not be detected. This assay will generate a negative IMP result when testing samples containing IMP-2, IMP-7, IMP-8, IMP-13, or IMP-14 gene sequences, and may detect IMP-4 at reduced sensitivity. This assay may also generate a false-negative result for uncommon OXA-48-like variants.
CPT Codes:	87150
New York DOH Approval Status:	This test is New York DOH approved.

Interpretive Data:

This assay detects five carbapenemase gene families (*bla*KPC, *bla*NDM, *bla*OXA-48, *bla*VIM, *bla*IMP) encoding enzymes that may confer resistance to carbapenem and other beta-lactam antibiotics. This assay is intended for use as an aid to infection control in the detection of carbapenem-resistant bacteria and is not intended to guide or monitor treatment of infection. A negative result does not exclude the presence of other resistance mechanisms or assay-specific nucleic acid in concentrations below the level of detection.

Reference Interval:

~~Not Detected~~

Deleted Cells

HOTLINE NOTE: There is a component change associated with this test. One or more components have been added or removed. Refer to the Hotline Test Mix for interface build information.