

Carbapenemase Resistant *Pseudomonas aeruginosa* Testing

Revised: 10/4/2023

Test description	Carbapenem Resistant <i>Pseudomonas aeruginosa</i> (CRPA) isolate submission will include, screening for presence of KPC, OXA-48 like, VIM, IMP and NDM, identification confirmation, antimicrobial susceptibility testing, carbapenemase phenotypic screening and PCR.
Test use	Characterization of CRPA to aid in infection prevention measures.
Test Department	Bacteriology Phone: (860)920-6596, FAX (860)920-6721
Methodology	Organism screening of carbapenemase enzymes by NG-Test CARBA 5, identification by MALDI-TOF or commercial kit (i.e. API 20E), antimicrobial susceptibility testing by broth microdilution and/or disk diffusion method, phenotypic testing by modified Carbapenem Inactivation Method (mCIM), and Real-Time PCR.
Availability	Monday-Friday. Fast Track: Saturday-Sunday (Epidemiology Approval Required)
Specimen Requirements	<i>Pseudomonas aeruginosa</i> isolates with carbapenem resistance (MICs of ≥ 8 $\mu\text{g/ml}$ against Imipenem, Meropenem) identified in clinical isolates from sterile sites, sputum, or urine.
Collection Kit/Container	Not applicable
Collection instructions	Clinical CRPA isolate(s) should be submitted on non-inhibitory/non-selective agar slant(s), 18-24 hour growth
Specimen Handling & Transport	Transport to laboratory as soon as possible. Store and transport at room temperature (15°-25°C) or with ice pack.
Unacceptable Conditions	Unlabeled specimens. Specimens that have leaked or containers that have broken in transit. Specimens submitted on expired media. No clinical samples (i.e. blood, urine, etc.), ONLY ISOLATES are acceptable.
Requisition Form	Clinical Test Requisition OL-9B Select: Carbapenem Resistant Organism: CRPA, Fast Track (if approved)
Required Information	Name and address of submitter. Two patient identifiers (ie. name, DOB Acc. #, MRN), town of residence (city, state, zip), specimen source/type of collection, date of collection and test requested. Please ensure information on the requisition matches the specimen.
Limitations	Not applicable
Additional Comments	Carbapenem Resistant <i>Pseudomonas aeruginosa</i> (CRPA) are reportable on the OL-15C form and are required to be submitted to the State Laboratory for confirmation. Complete AST work-up may be requested (despite the absence of carbanemase markers), by indicating on the OL-9B form in Comments section.