Test Definition: CARBI

Carbapenem Resistance Genes, Molecular Detection, PCR, Varies

Reporting Title: Carbapenem Resistance Genes, Varies
Performing Location: Rochester

Ordering Guidance:

This assay should be used for testing of isolates of Enterobacterales, Pseudomonas aeruginosa and Acinetobacter baumannii If testing directly from rectal swabs is desired, order CRPCR / Carbapenem Resistance Genes, Molecular Detection, PCR, Rectal Swab.

Other mechanisms of carbapenem resistance, including other carbapenemase not targeted by this assay, porin mutations, and hyperexpression of drug efflux pumps, may result in carbapenem resistance. These mechanisms are not detected by this assay.

Additional Testing Requirements:

1. Organism identification must be provided. If organism identification is unknown, concomitantly order IDENT / Organism Referred for Identification, Aerobic Bacteria.
2. If susceptibility testing is needed, also order ZMMLS / Antimicrobial Susceptibility, Aerobic Bacteria, Varies.

Shipping Instructions:

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

Necessary Information:

Organism identification and specimen source are required.

Specimen Requirements:

The high sensitivity of amplification by polymerase chain reaction requires the specimen to be processed in an environment in which contamination of the specimen by Klebsiella pneumoniae carbapenemase (KPC), New Delhi metallo-beta-lactamase (NDM), Verona integron-encoded metallo-beta-lactamase (VIM), oxacillin-hydrolyzing beta-lactamase (OXA-48), and imipenemase-type metallo-beta-lactamase (IMP) DNA is not likely.

Supplies: Infectious Container, Large (T146)
Container/Tube: Slant
Specimen Volume: Isolate
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 Type	Temperature	Time	Special Container
Varies	Ambient (preferred)		
	Refrigerated		

Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
CARBI	CRORG	Organism Identified by Client: • ACINETOBACTER BAUMANNII • ACINETOBACTER BAUMANNII COMPLEX • CITROBACTER AMALONATICUS • CITROBACTER FREUNDII • CITROBACTER KOSERI • CITROBACTER SPECIES • KLEBSIELLA AEROGENES • ENTEROBACTER CANCEROGENUS • ENTEROBACTER CLOACAE • ENTEROBACTER CLOACAE COMPLEX • ENTEROBACTER GERGOVIAE • ENTEROBACTER SPECIES • ESCHERICHIA COLI • KLEBSIELLA OXYTOCA • KLEBSIELLA PNEUMONIAE • KLEBSIELLA PNEUMONIAE COMPLEX • KLEBSIELLA SPECIES • MORGANELLA MORGANII • MORGANELLA SPECIES • PROTEUS MIRABILIS • PROTEUS SPECIES • PROTEUS VULGARIS • PSEUDOMONAS AERUGINOSA • SERRATIA MARCESCENS • SERRATIA SPECIES	Answer List	Yes
CARBI	CRSRC	Specimen Source	Plain Text	Yes

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
IMPCB	IMP Resistance Gene	Alphanumeric		85498-4
VIMCB	VIM Resistance Gene	Alphanumeric		85501-5
NDMCB	NDM Resistance Gene	Alphanumeric		73982-1
KPPCB	KPC Resistance Gene	Alphanumeric		49617-4

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Result ID	Reporting Name	Type	Unit	LOINC®
OXACB	OXA-48-like Resistance Gene	Alphanumeric		85503-1
CRORG	Organism Identified by Client	Alphanumeric		43409-2
CRSRC	Specimen Source	Alphanumeric		31208-2

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

87150

Reference Values:

Not Detected