

Carbapenemase-producing Enterobacteriaceae

- ▶▶ The recent increase in the global detection of carbapenem-resistant Enterobacteriaceae (CRE) represents one of the most pressing threats to public health. This is mainly due to their implication in numerous outbreaks and Health Care Associated Infection (HAI), which imply longer lengths of stay, increased healthcare costs, and higher mortality than carbapenem-susceptible infections.
- ▶▶ **The most important source for CRE dissemination is intestinal carriers (infected or colonized people) and their prompt identification is crucial to reduce cross-transmission of CRE through direct person-to-person contact in community and healthcare settings.**
- ▶▶ They primarily affect patients in acute and long-term healthcare settings, who are being treated for another condition, patients who have compromised immune systems or have invasive devices like tubes going into their body. Once these bacteria have spread outside the gut, they could cause serious infections, such as pneumonia, bacteremia, urinary tract infections, wound infections, surgical site infections and meningitis.

The phenotypic methods for identification of CPE, like modified Hodge test, have been considered 'reference' methods, but they may be complex, occasionally inconclusive and time-consuming owing to the wide range of carbapenem minimum inhibitory concentration.

- ▶▶ **Molecular methods for rapid detection of carbapenemase-producing Enterobacteriaceae (CPE) represent an advantageous tool for faster identification of CRE and allow precise differentiation of the carbapenemase type.**



"Ready & Easy-to-use" kits.
Lyophilised product



Transport and storage at **room temperature**.
Shelf-life: 24 months



Validated according to **ISO 13485**
and **CE marked**



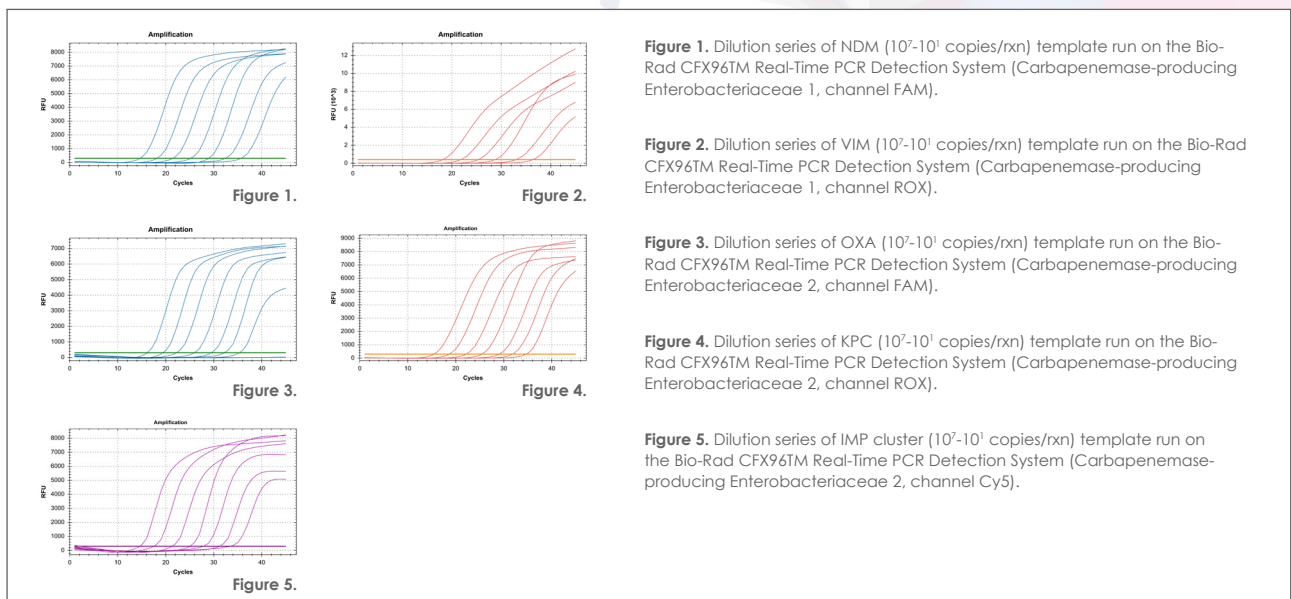
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VIASURE Carbapenemase-producing Enterobacteriaceae Real Time PCR Detection Kit is designed for the simultaneous qualitative detection and differentiation of the main carbapenemase-encoding genes (NDM, VIM, OXA, KPC and/or IMP) from bacterial isolates of clinical samples and directly from rectal swabs from individuals suspected of infection by carbapenem-resistant pathogens by their healthcare professional (HCP).

This test is intended for use as an aid in the diagnosis of infection caused by carbapenem-resistant Enterobacteriaceae in combination with clinical and epidemiological risk factors. DNA is extracted from bacterial isolates and rectal swabs samples, amplified using real time PCR, and detected using fluorescent reporter dye probes specific for carbapenemase-encoding genes.

► Analytical sensitivity

VIASURE Carbapenemase-producing Enterobacteriaceae Real Time PCR Detection Kit has a detection limit of 10 DNA copies per reaction for carbapenemase-encoding genes NDM, KPC and IMP, 50 DNA copies per reaction for OXA and 100 DNA copies per reaction for VIM (Figures 1, 2, 3, 4 and 5).



► References -VIASURE Carbapenemase-producing Enterobacteriaceae Real Time PCR Detection Kit-

6 x 8-well strips, low profile _____ VS-CPE106L

6 x 8-well strips, high profile _____ VS-CPE106H

12 x 8-well strips, low profile _____ VS-CPE112L

12 x 8-well strips, high profile _____ VS-CPE112H

9 x 4-well strips, Rotor-Gene® _____ VS-CPE136

TUBE FORMAT WITH INTERNAL CONTROL: 4 tubes x 24 reactions _____ VS-CPE148T

CerTest
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For more information and use procedure,
read the instructions for use included in this product.



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