

IVD



## Carbaplex<sup>®</sup>

● IVD Real-Time PCR

# Carbaplex

Carbaplex is a multiplex real-time PCR test for the five most prevalent carbapenemase gene families; providing rapid results with high sensitivity and specificity without the need for culture.

## Rapid diagnostics for carbapenemase genes

Multi-drug resistant bacteria present an urgent public health risk. Carbapenemase-producing *Enterobacteriaceae* (CPE) are of particular concern. These organisms are resistant to the carbapenem class of antibiotics, often considered the “last resort” in the treatment of bacterial infections. CPEs are readily transmissible in healthcare settings, restrict treatment options, and are associated with increased morbidity and mortality. There is a pressing need for tools that rapidly stratify patients as colonised by CPEs in order to minimise the risk of transfer and outbreak, and to support appropriate patient management.<sup>1</sup>

<sup>1</sup> European Centre for Disease Prevention and Control. Evidence brief: Update on the spread of carbapenemase-producing *Enterobacteriaceae* in Europe - Summary of the May 2015 expert assessment. Stockholm: ECDC; 2015

**Carbaplex** detects and differentiates the five most prevalent carbapenemase gene families: **KPC, NDM, VIM, IMP and OXA-48-like**. The assay is validated against DNA extracted directly from **rectal swab** with **no need for culture**, or can be used to identify genes from isolates as a confirmatory test.

Targets (differentiated)	Performance characteristics <sup>a</sup>	Thermocyclers (validated)	Time to result
<b>KPC</b> <b>OXA-48-like</b> <b>NDM</b> <b>VIM</b> <b>IMP</b>	Sensitivity = 99.7 % Specificity = 100 %	√ ABI 7500 √ ABI Quantstudio 5 √ Bio-Rad CFX √ Hain FluoroCycler XT √ Mic qPCR Cycler √ Qiagen RotorGene	< 3 h from extraction (1 - 100 samples)

<sup>a</sup> Preliminary data from simulated samples. LOD (plasmid): 30 ipc, LOD (genomic): 10 pg, LOD (simulated rectal swabs): 100 CFU

## Carbaplex:

- has been designed in a **user-friendly** format that is compatible with **existing laboratory equipment** and produces results from extracted nucleic acid in **less than 3 hours**.
- offers the potential to rapidly identify CPE colonisation and improve patient management.

**Order Information: Part-No. 1849975** Carbaplex IVD PCR Kit

Real-time PCR Kit for detection of carbapenemase genes from extracted DNA from rectal swab and culture. The kit provides all necessary reagents for 100 tests.

Carbaplex is a registered trademark of the Bruker group of companies.

Please contact your local representative for availability in your country.  
Not for sale in the USA.



**As of May 2021, Bruker Daltonik GmbH is now Bruker Daltonics GmbH & Co. KG.**

 **Bruker Daltonics GmbH & Co. KG**

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