BD MAX™ Check-Points CPO

Real-time PCR assay

The need for rapid CPO testing

Carbapenem-non-susceptible Gram-negative organisms are associated with **high mortality rates and have the potential to spread widely**. The most common cause of carbapenem resistance in Gram-negative bacteria is the expression of carbapenemases.

There are **five major carbapenemase genes** that are most often found in human clinical specimens: KPC (*Klebsiella pneumoniae* carbapenemase), VIM (Verona integron–encoded metallo-β-lactamase), NDM (New Delhi metallo-β-lactamase), OXA-48 (Oxacillinase-48 and OXA-48 like variants), or IMP (Imipenemase).

Discover the assay

The **BD MAX™ Check-Points CPO** is an automated assay that includes nucleic acid extraction and real-time polymerase chain reaction (PCR) for direct and qualitative **DNA detection and differentiation of the carbapenemase genes bla$_{KPC}$, bla$_{NDM}$, bla$_{VIM}$ / bla$_{IMP}$ and bla$_{OXA-48}$**, that are associated with carbapenem non-susceptibility in Gram-negative bacteria.

This assay does not distinguish between genes bla$_{VIM}$ and bla$_{IMP}$.

The test also includes a sample processing control.

Sample types

Rectal swab

Workflow and time to results

Results obtained in about **2.5 hours for 24 samples**

Less than **1.5 minutes of hands-on time** in sample preparation

Compatibility to run alongside other BD MAX™ assays on 1 to 24 specimens simultaneously for greater flexibility

Scientific evaluation

Read more about the **BD MAX™ Check-Points CPO assay** from molecular studies and publications.

Girlich et al., Evaluation of the BD MAX Check-Points CPO Assay for the Detection of Carbapenemase Producers Directly from Rectal Swabs, The Journal of Molecular Diagnostics, Vol.22, No 2, February 2020.

Ready-to-use reagents storable at room temperature

REF	Contents	Quantity
278102	**BD MAX™ Check-Points CPO Master Mix (F6)** Dried PCR Master Mix containing Sample Processing Control and carbapenemase gene-specific primers and TaqMan probes	24 tests (2 x 12 tubes)
	BD MAX™Check-Points CPO Reagent Strip Unitised reagent strip containing all the liquid reagents and disposable pipette tips necessary for DNA Extraction	24 strips
	BD MAX™ Check-Points CPO Extraction Tube (A8) Dried pellet containing DNA magnetic affinity beads, protease reagents and Sample Processing Control	24 tests (2 x 12 tubes)
	BD MAX™ Check-Points CPO Sample Buffer Tube	24 tubes
	Septum Cap	25

Rapid, targeted testing on the BD MAX™ System

The innovation of the BD MAX™ System offers you a **fully integrated, automated real-time PCR platform** with the possibility of running multiple assays simultaneously.* Its automated workflow **reduces manual tasks** to achieve rapid, reliable results and facilitates off-hour testing, helping to **offset molecular testing costs**.** [1,2]

Snap

Assemble unitised reagent strips with ready-to-use reagents.

Load

Load Sample Buffer Tubes, Racks and PCR cartridges.

Go

Come back in an average of 2.5 hours for results.***

Discover our full assay portfolio and the BD MAX™ System

advancing-diagnostics.eu advancingdiagnostics@bd.com

BD MAX™ Check-Points CPO [IFU 278102], Franklin Lakes, NJ: Becton, Dickinson and Company; 2021.

1. Mortensen JE, et al. Comparison of time-motion analysis of conventional stool culture and the BD MAX™ Enteric Bacterial Panel (EBP). BMC Clin Pathol. 2015;15:9. **2.** Hirvonen JJ, et al. Comparison of BD Max Cdiff and GenomEra C. difficile molecular assays for detection of toxigenic Clostridium difficile from stools in conventional sample containers and in FecalSwabs. Eur J Clin Microbiol Infect Dis. 2015;34(5):1005-1009.

* BD assays are run & rack compatible – Only MDR-TB and GBS are not run and rack compatible / Vaginal Panel and open systems' assays are only run compatible.
** When compared to culture or immunochromatographic antigen (IA)
*** Time is assay dependent. 4 hours for full results on MDR-TB assay.

The BD MAX™ System and BD MAX™ Check-Points CPO assay are in-vitro diagnostic medical devices bearing a CE-mark.