

NEW!

hyplex[®] CarbOxa ID

Multiplex - PCR for the detection of OXA - carbapenemases producing bacteria



hyplex[®] CarbOxa ID

- **Definite identification of OXA – carbapenemases producing bacteria by detection of OXA - 23, OXA - 40 and OXA - 58 families**
- Can be performed on samples from a pure culture, enrichment bouillon or swabs
- Simple test performance; automation possible
- Individual test assembly
- **Blood cultures can be tested directly !**
- **CE**

Acinetobacter baumannii is an opportunistic pathogen of increasing relevance in hospital infections during the last 15 years. The organism causes a wide range of infections, including pneumonia, sepsis, wound infection, urinary tract infection and post-neurosurgical meningitis, especially among critically-ill patients in intensive care units (ICUs). Extensive use of antimicrobial agents within hospitals has contributed to the emergence of multidrug-resistant *A. baumannii* strains that exhibit resistance to a wide range of antibiotics, including new-generation broad-spectrum β -lactams, aminoglycosides and fluoroquinolones.

Carbapenems have potent activity against acinetobacters and, until recently, were often used to treat infections caused by multiresistant *A. baumannii* isolates. However, acinetobacters may develop resistance to carbapenems by various mechanisms, including decreased permeability, overexpression of efflux pumps and production of carbapenemases.

In recent years, carbapenem resistance has been attributed increasingly to the production of carbapenemases, which may be class D carbapenem-hydrolysing oxacillinases or, less frequently, class B metallo- β -lactamases (MBLs).

The class D carbapenemases split into four groups, represented by **OXA - 23, OXA - 40, OXA - 58** and the intrinsic OXA - 51 like enzymes, while MBLs of the IMP, VIM and SIM types have also been recognised among *A. baumannii* isolates with reduced susceptibility to carbapenems.

Outbreaks of carbapenem-resistant *A. baumannii* strains have been documented in diverse geographical areas, including America, Europe and the Far East.

With the **hyplex® CarbOxa ID OXA** – carbapenemases producing bacteria can be reliable identified within **2 to 4 hours** due to the detection of **OXA - 23, OXA - 40** and **OXA - 58** families in samples taken from **blood cultures**, pure cultures, swabs or enrichment bouillon.

Product	Description	Tests/kit	Cat.No.
hyplex® CarbOxa ID PCR-module	Reagents for multiplex-PCR	1 kit 96 tests	3880
hyplex® CarbOxa ID hybridisation module <i>A. baumannii</i>	Specific oligonucleotide probe for reverse hybridisation	1 kit 96 tests	3881
hyplex® CarbOxa ID hybridisation module OXA - 23 family	Specific oligonucleotide probe for reverse hybridisation	1 kit 96 tests	3882
hyplex® CarbOxa ID hybridisation module OXA - 40 family	Specific oligonucleotide probe for reverse hybridisation	1 kit 96 tests	3883
hyplex® CarbOxa ID hybridisation module OXA - 58 family	Specific oligonucleotide probe for reverse hybridisation	1 kit 96 tests	3884
Lysis buffer	Buffer for DNA preparation	60 ml	3950
hyplex® Prep module	To isolate genomic DNA from clinical material	50 preparations	3951
Filtration vials	For DNA preparation	20 pcs.	3957

For further information see www.hyplex.info