

## Bacterial Drug Resistance

More commonly, the term Drug Resistance is used in the context of resistance that pathogens have “acquired”. When a microorganism is resistant to more than one drug, it is said to be multidrug-resistant (MDR). Resistance to  $\beta$ -lactam antibiotics which include the penicillins (oxacillin, methicillin, dicloxacillin, nafcillin etc.) and the cephalosporins make difficult to treat infections with standard types of antibiotics. In addition to  $\beta$ -lactam/carbapenem resistance, Enterobacteriaceae often carry genes that confer high levels of resistance to many other antimicrobials, often leaving very limited therapeutic options.

### Drug resistance Kits

|   |   |   |   |     |
|---|---|---|---|-----|
| B1772-96FRT<br>SA, RG, MX, iQ, SC, A, B | <b>Staphylococcus aureus Real-TM</b> <span style="color: red;">NEW</span><br>Real Time Amplification kit  | R |   | 96  |
| B78-100FRT<br>SA, RG, MX, iQ, SC, A, B  | <b>MRSA Quant Real-TM</b><br>Real Time Amplification kit for quantitative detection of Methicillin-Resistant-Staphylococcus aureus  | R | € | 100 |
| C1-100FRT<br>SA, RG, A, B               | <b>MDR MBL (VIM, IMP, NDM) Real-TM</b><br>Real Time Amplification kit for detection of genes VIM, IMP and NDM in Enterobacteriaceae and NFGNB*  | R | € | 100 |
| C2-100FRT<br>SA, RG, A, B               | <b>MDR KPC/OXA Real-TM</b><br>Real Time Amplification kit for detection of genes KPC, OXA-48 and OXA-162 in Enterobacteriaceae and NFGNB  | R | € | 100 |
| T01781-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance cephalosporins-1</b><br>Real Time PCR test for Enterobacteriaceae resistance, genes CTX-M - ready to use 0,2 ml tube format   | R |   | 60  |
| T01782-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance cephalosporins-2</b><br>Real Time PCR test for S.aureus resistance, genes MecA - ready to use 0,2 ml tube format  | R |   | 60  |
| T01784-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance carbapenems-1</b><br>Real Time test for Enterobacteriaceae e Pseudomonas resistance, genes VIM - ready to use 0,2 ml tube format  | R |   | 60  |
| T01785-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance carbapenems-2</b><br>Real Time PCR test for Enterobacteriaceae resistance, genes NDM - ready to use 0,2 ml tube format  | R |   | 60  |
| T01786-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance carbapenems-3</b><br>Real Time PCR test for Enterobacteriaceae resistance, genes OXA-48 - ready to use 0,2 ml tube format   | R |   | 60  |
| T01746-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance carbapenems-4</b><br>Real Time PCR test for Enterobacteriaceae resistance, genes KPC - ready to use 0,2 ml tube format  | R |   | 60  |
| T01787-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance glycopeptides</b><br>Real Time PCR test for Enterococcus faecalis and E. faecium resistance to Vancomycin and Teicoplanin, genes VanA and VanB - ready to use 0,2 ml tube format  | R |   | 60  |
| T01788-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance penicillins</b><br>Real Time PCR test for Enterobacteriaceae and Pseudomonas resistance to penicillins and first-generation cephalosporins, genes TEM - ready to use 0,2 ml tube format   | R |   | 60  |
| T01747-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance macrolides-1</b><br>Real Time PCR test for Streptococcus spp Staphylococcus spp resistance to macrolides, lincosamides, streptogramins, gene ErmB - ready to use 0,2 ml tube format   | R |   | 60  |
| T01748-50-T<br>SA, RG, iQ, MX, A, B     | <b>Resistance macrolides-2</b><br>Real Time PCR test for Streptococcus spp resistance to macrolides; genes Mef - ready to use 0,2 ml tube format  | R |   | 60  |
| C8-96FRT<br>SA, RG, iQ, MX, A, B        | <b>Resistance Screen Plus Real-TM</b> <span style="color: red;">NEW</span><br>Real Time PCR test for detection of St. aureus+Staph. spp+MecA, E. faecalis/E. faecium+VanA+VanB, Acinetobacter baumannii+blaOXA23+blaOXA40, P. aeruginosa+blaVim+blaNDM, Klebsiella pneumoniae+blaKPC+blaOXA48, E.coli+blaOXA10+blaCTX-M, Enterobacter cloacae+blaDHA+blaGES, Streptococcus spp+Mef+ErmB - ready to use <b>0,2 ml strip format</b> | R |   | 12  |

\*NFGNB: Non Fermenting Gram Negative Bacteria