

Antimicrobial Susceptibility Testing of Biofilm-growing Bacteria

Introduction

Creative Diagnostics has extensive experience in antimicrobial susceptibility testing. We've designed antimicrobial susceptibility testing in biofilm-growing bacteria, including minimal biofilm inhibitory concentration (MBIC), minimal biofilm-eradication concentration (MBEC), biofilm bactericidal concentration (BBC), and biofilm-prevention concentration (BPC).

Service Projects

➤ Minimal Biofilm Inhibitory Concentration (MBIC)

The MBIC is the lowest concentration of an antimicrobial agent at which there is no time-dependent increase in the mean number of viable biofilm cells when an early exposure time is compared with a later exposure time.

➤ Minimal Biofilm-Eradication Concentration (MBEC)

The minimal biofilm-eradication concentration (MBEC) is defined as the lowest concentration of antibiotic required to eradicate the biofilm or, in other words, the lowest concentration of antimicrobial agent that prevents visible growth in the recovery medium used to collect biofilm cells (0 CFU/peg on plate counts).

➤ Biofilm Bactericidal Concentration (BBC)

The biofilm bactericidal concentration (BBC), defined as the lowest concentration that killed 99.9% of the cells recovered from a biofilm culture compared to the growth control, has also been used to evaluate the efficacy of antibiotics on biofilm-growing bacteria.

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➤ Biofilm-Prevention Concentration (BPC)

The biofilm-prevention concentration (BPC) determination involves a modification of the MBIC assay, which consists of incubating peg lids with the planktonic inoculum at the time of exposure to different concentrations of antibiotics.

Our Advantages

- Available for various strains.
- Competitive price with the best quality.
- Faster project cycle, results are available as soon as possible.
- Fully customizable experimental design to expand beyond standard procedures.