

ABSTRACT**CHARACTERIZING MICROORGANISMS BY MALDI-TOF**

- 5 The present invention concerns a method of preparing a characterization zone of an analysis plate in order to carry out at least one characterization of a population of at least one microorganism in the presence of at least one antimicrobial agent by mass spectrometry using the matrix-assisted laser desorption-ionization mass spectrometry technique known as MALDI;
- 10 · comprising the following steps in succession:
- a step consisting in providing an analysis plate for a characterization by means of the MALDI technique, the plate including at least one analysis zone carrying an antimicrobial agent;
 - a step of depositing the population of at least one microorganism onto said
 - 15 analysis zone in contact with the antimicrobial agent;
 - an incubation step, consisting in preserving the analysis plate under conditions and for a sufficient time to allow the antimicrobial agent and the microorganism that is present to interact; and
 - a step of depositing a matrix that is suitable for the MALDI technique onto
 - 20 the analysis zone;
 - associated characterization and functionalization methods, analysis plates and uses.

25 Figure 9