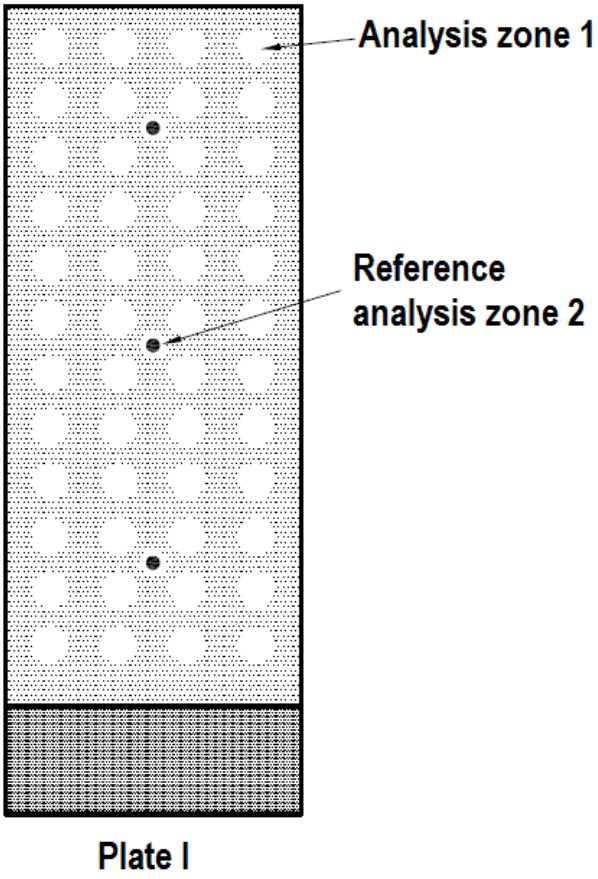


FIG.1

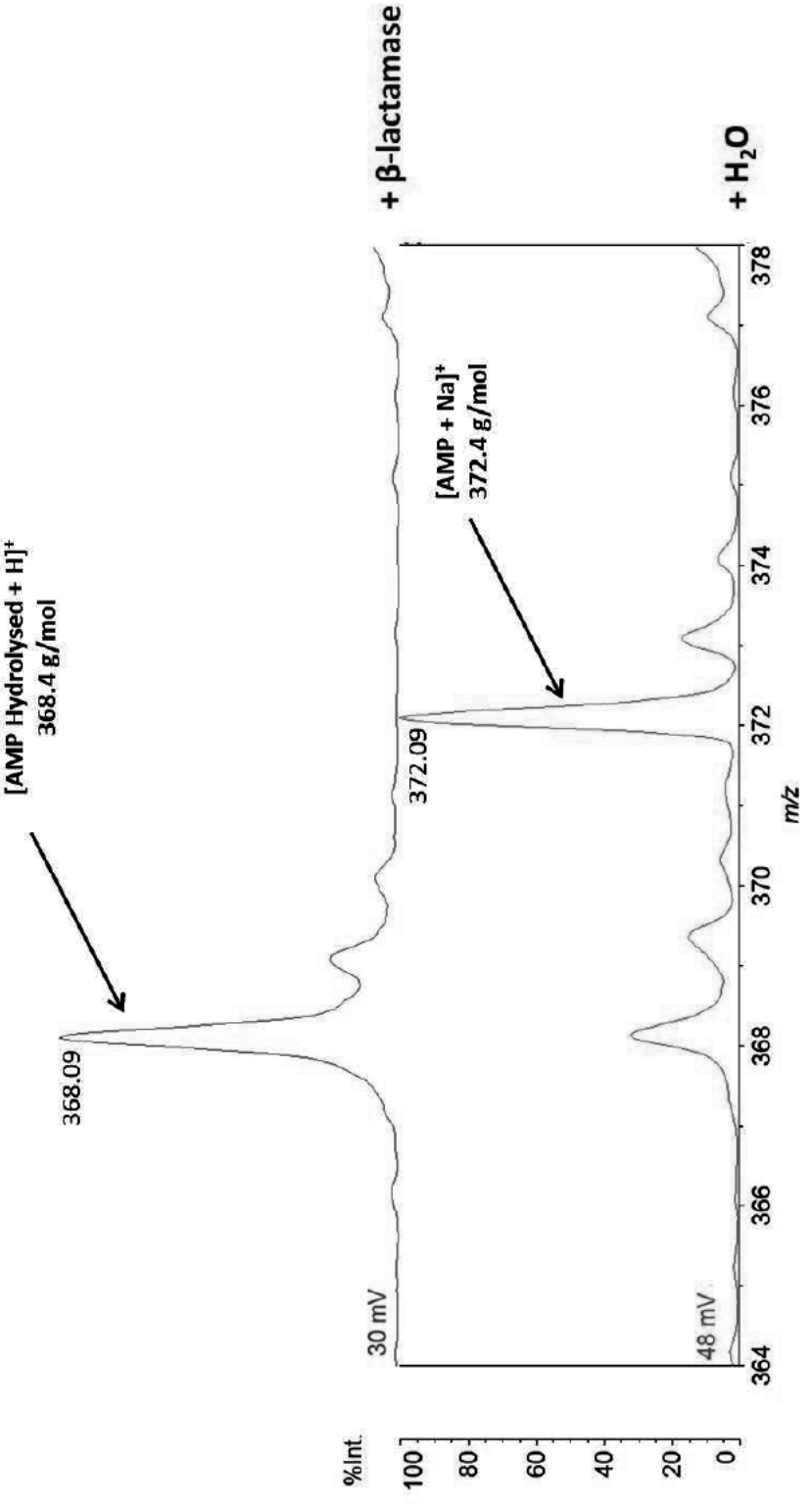

+ β-lactamase
+ H_2O
[AMP Hydrolysed + H]$^+$
368.4 g/mol
[AMP + Na]$^+$
372.4 g/mol
368.09
372.09
30 mV
48 mV
%Int.
100
80
60
40
20
0
364
366
368
370
372
374
376
378
m/z

FIG.2

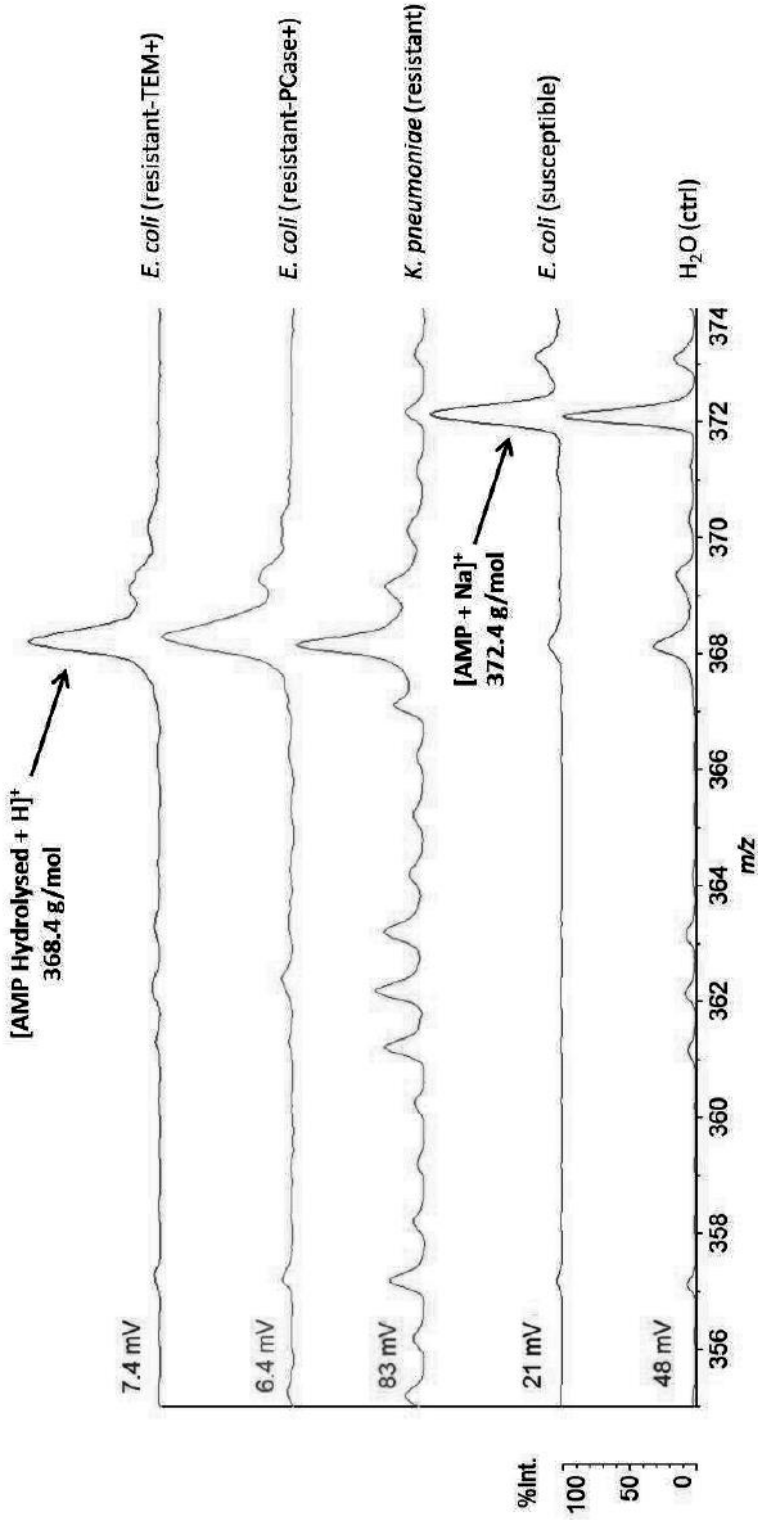

E. coli (resistant-TEM+)
E. coli (resistant-PCase+)
K. pneumoniae (resistant)
E. coli (susceptible)
H2O (ctrl)
[AMP Hydrolysed + H]+
368.4 g/mol
[AMP + Na]+
372.4 g/mol
7.4 mV
6.4 mV
83 mV
21 mV
48 mV
%Int.
100
50
0
356
358
360
362
364
366
368
370
372
374
m/z

FIG.3

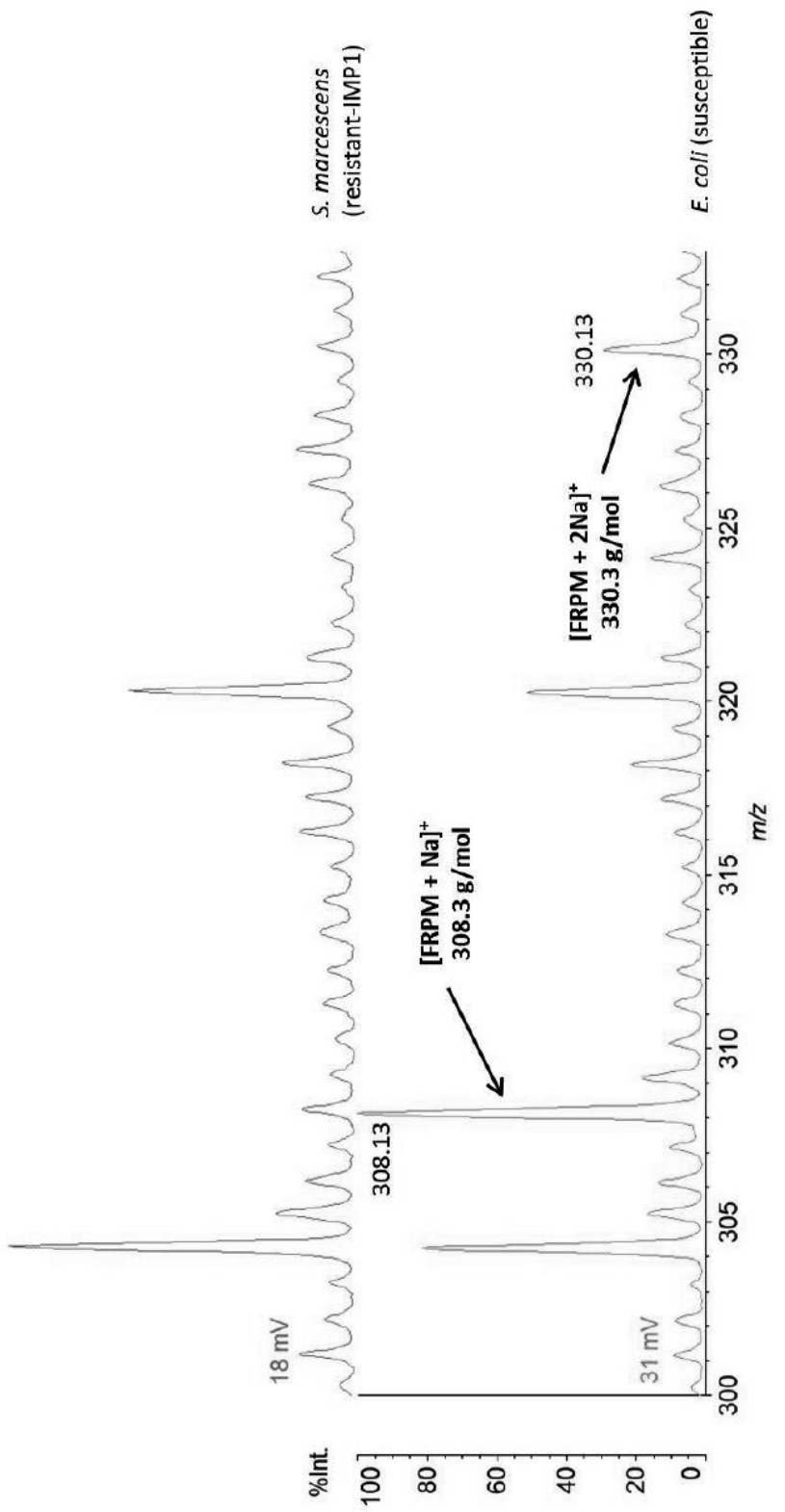

S. marcescens
(resistant-IMP1)
E. coli (susceptible)
18 mV
31 mV
308.13
330.13
[FRPM + Na]+
308.3 g/mol
[FRPM + 2Na]+
330.3 g/mol
%Int.
100
80
60
40
20
0
300
305
310
315
320
325
330
m/z

FIG.4

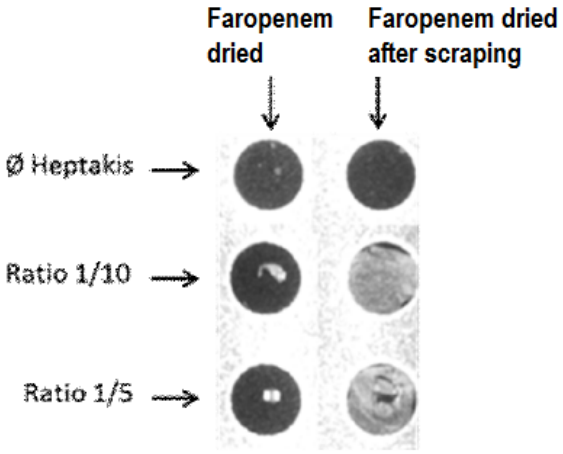

Faropenem dried
Faropenem dried after scraping
Ø Heptakis
Ratio 1/10
Ratio 1/5

FIG.5

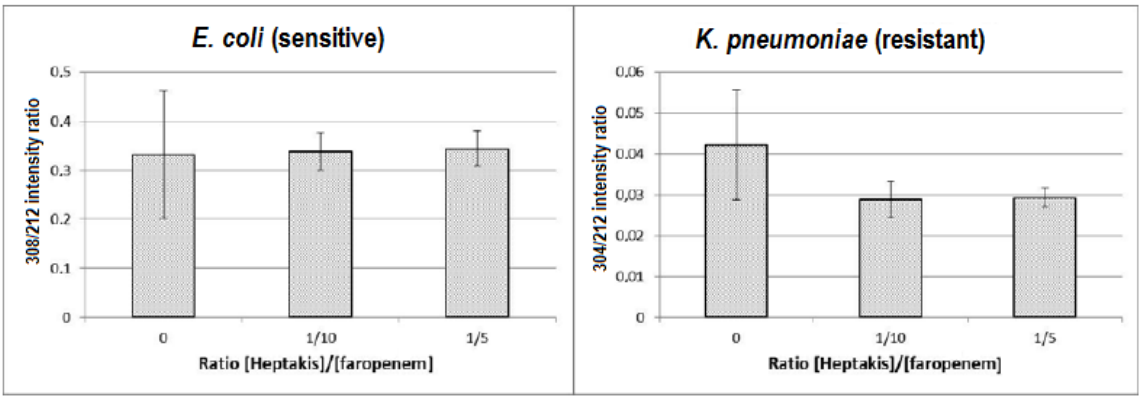

E. coli (sensitive)
308/212 intensity ratio
0,5
0,4
0,3
0,2
0,1
0
0
1/10
1/5
Ratio [Heptakis]/[faropenem]
K. pneumoniae (resistant)
304/212 intensity ratio
0,06
0,05
0,04
0,03
0,02
0,01
0
0
1/10
1/5
Ratio [Heptakis]/[faropenem]

FIG.6

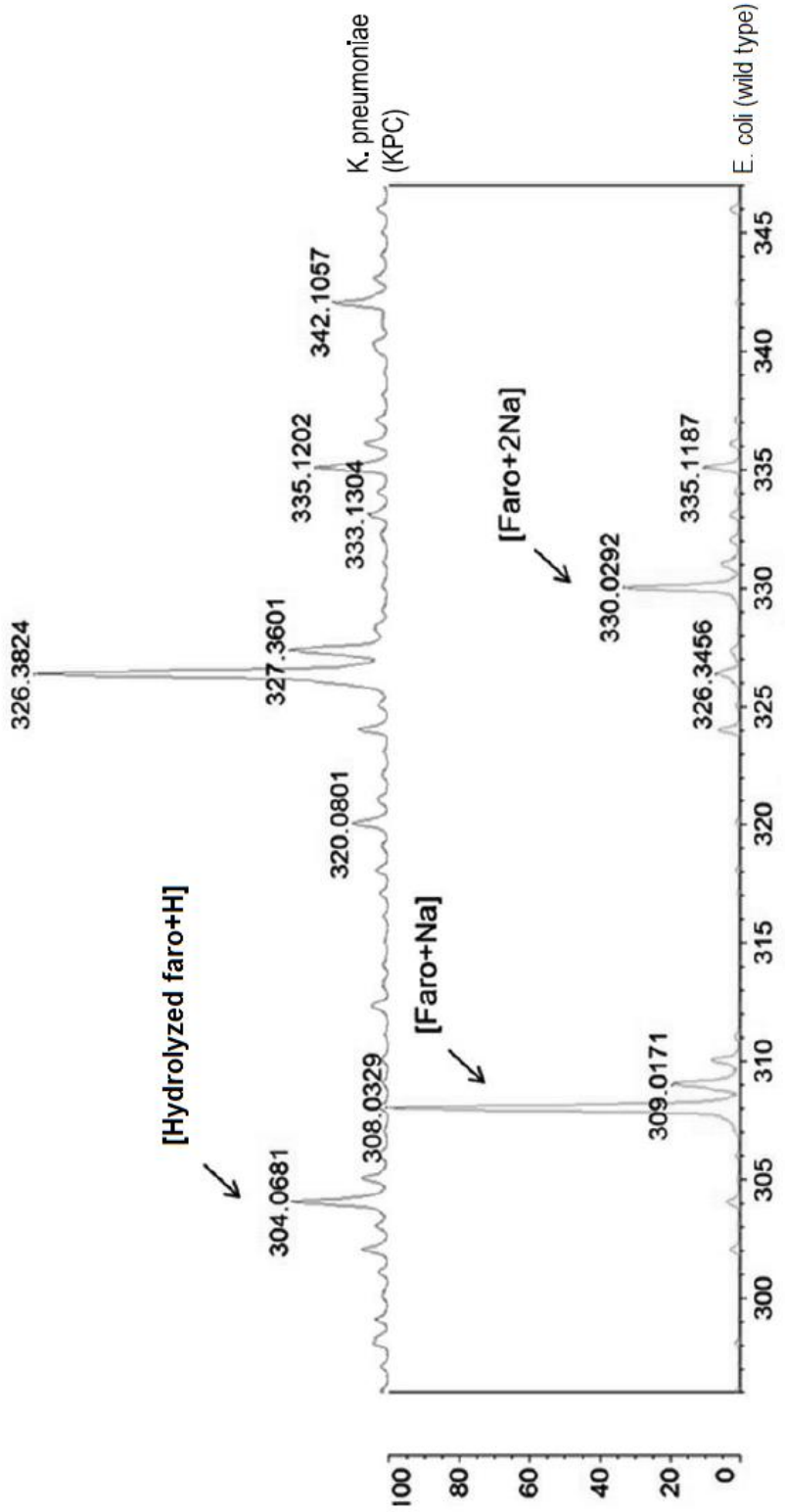

K. pneumoniae (KPC)
E. coli (wild type)
326.3824
327.3601
342.1057
335.1202
333.1304
[Faro+2Na]
330.0292
335.1187
326.3456
320.0801
[Hydrolyzed faro+H]
304.0681
308.0329
[Faro+Na]
309.0171
m/z
100
80
60
40
20
0
300
305
310
315
320
325
330
335
340
345

FIG.7

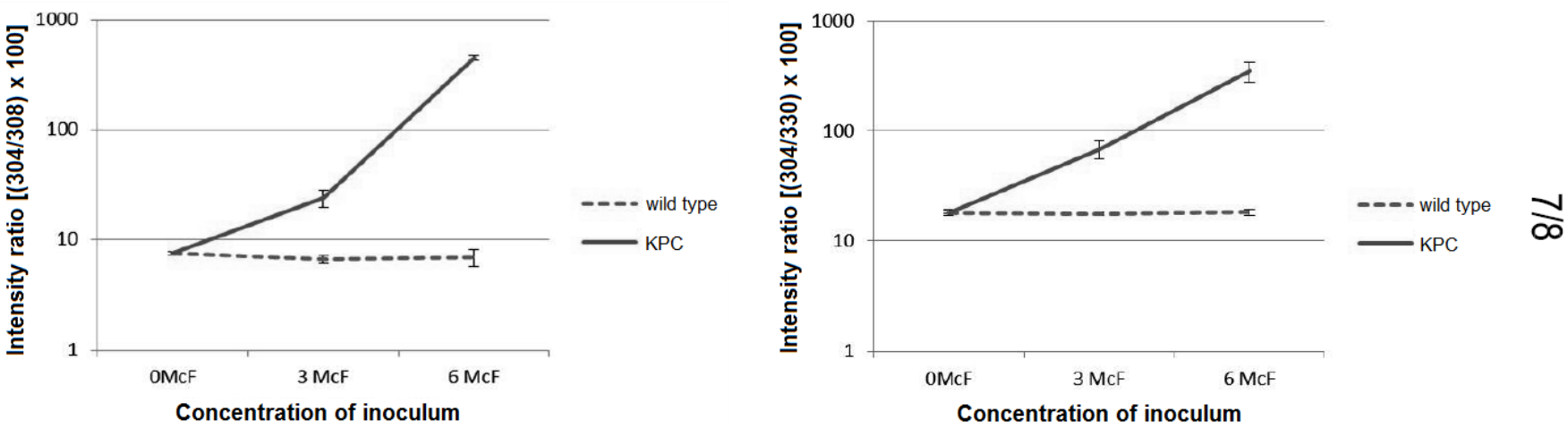

Intensity ratio [(304/308) x 100]
1000
100
10
1
0McF
3 McF
6 McF
Concentration of inoculum
wild type
KPC
Intensity ratio [(304/330) x 100]
1000
100
10
1
0McF
3 McF
6 McF
Concentration of inoculum
wild type
KPC

FIG.8

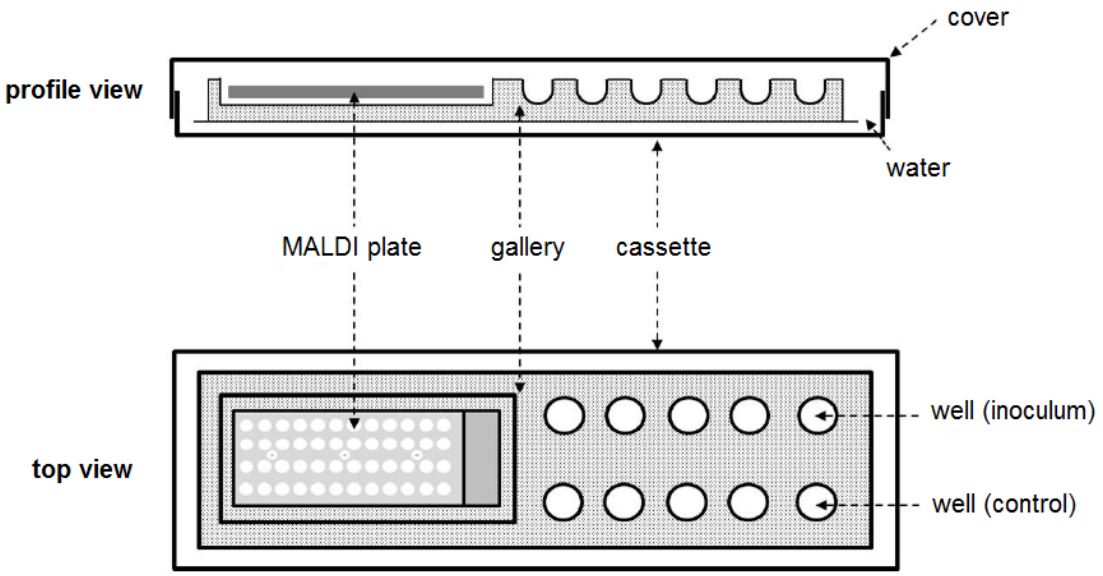

profile view
cover
water
MALDI plate
gallery
cassette
top view
well (inoculum)
well (control)

FIG.9