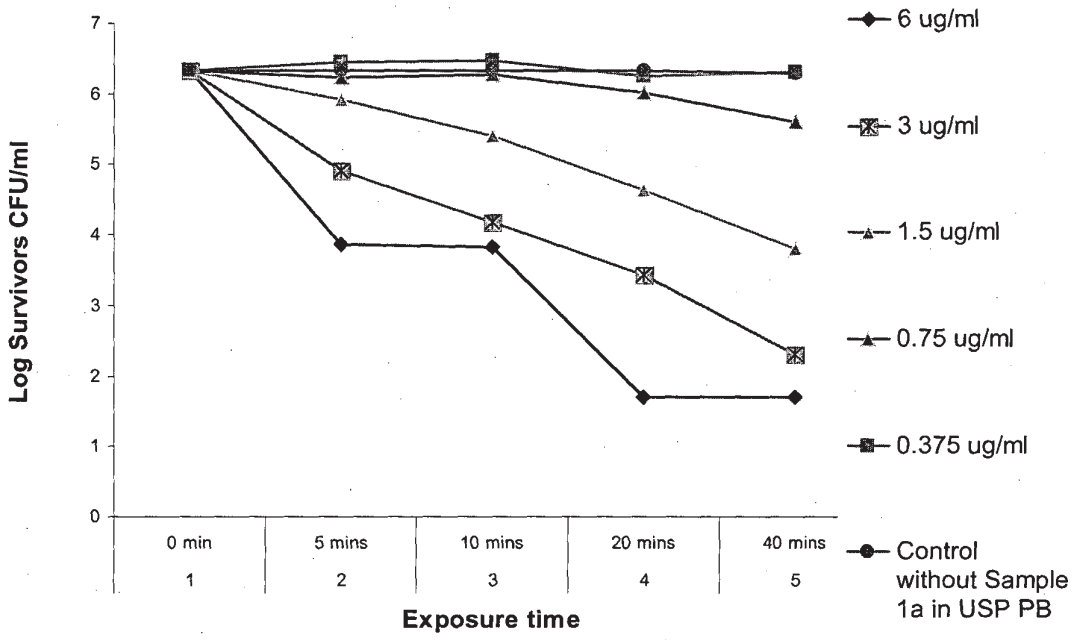

Log Survivors CFU/ml
7
6
5
4
3
2
1
0
0 min
1
5 mins
2
10 mins
3
20 mins
4
40 mins
5
Exposure time
6 ug/ml
3 ug/ml
1.5 ug/ml
0.75 ug/ml
0.375 ug/ml
Control without Sample 1a in USP PB

Figure 1

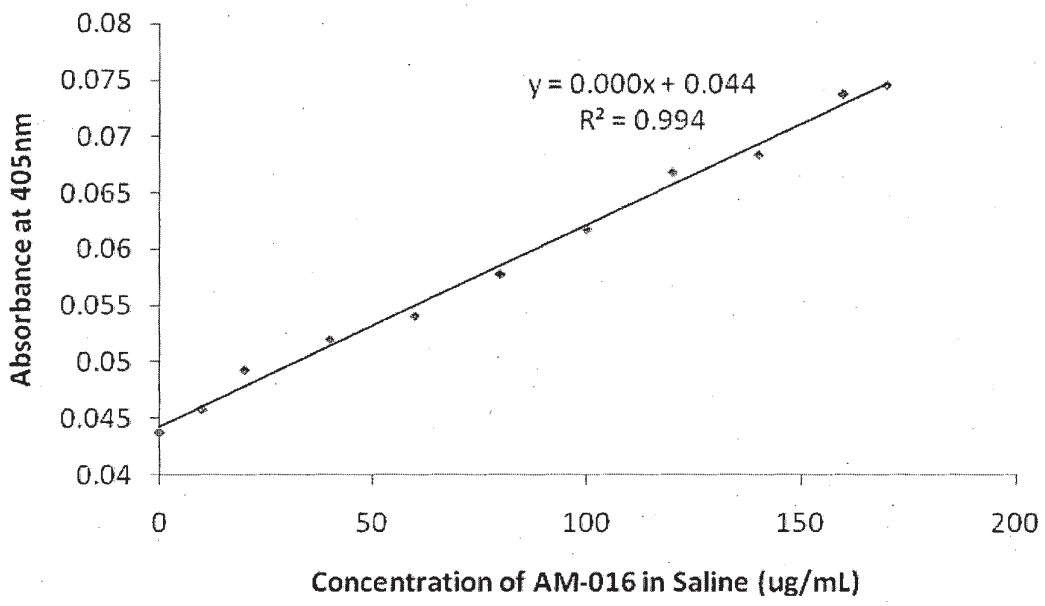

0.08
0.075
0.07
0.065
0.06
0.055
0.05
0.045
0.04
Absorbance at 405nm
y = 0.000x + 0.044
R² = 0.994
0
50
100
150
200
Concentration of AM-016 in Saline (ug/mL)

Figure 2

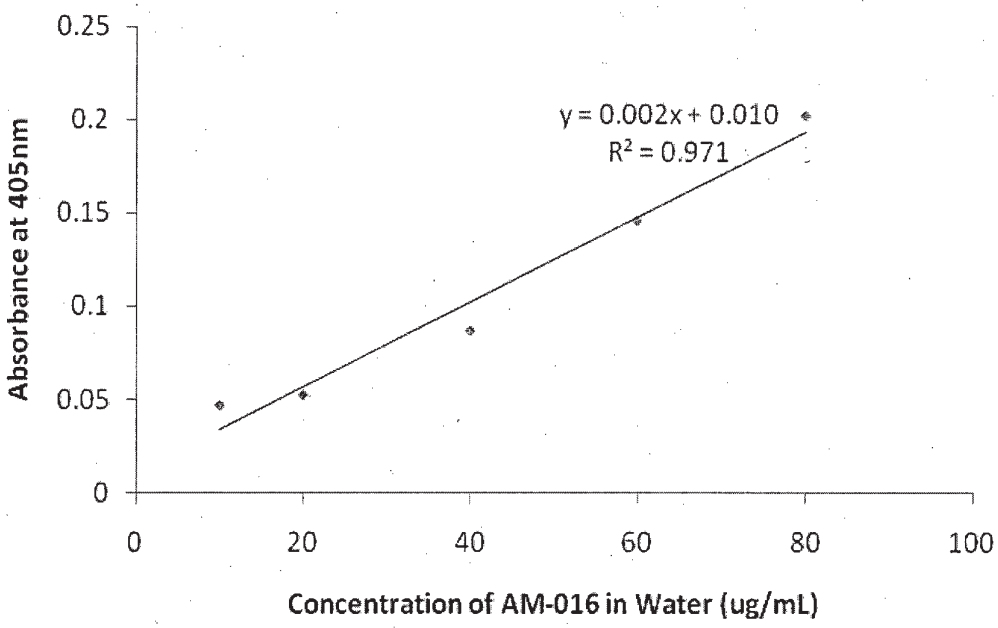

0.25
0.2
0.15
0.1
0.05
0
Absorbance at 405nm
y = 0.002x + 0.010
R² = 0.971
0
20
40
60
80
100
Concentration of AM-016 in Water (ug/mL)

Figure 3

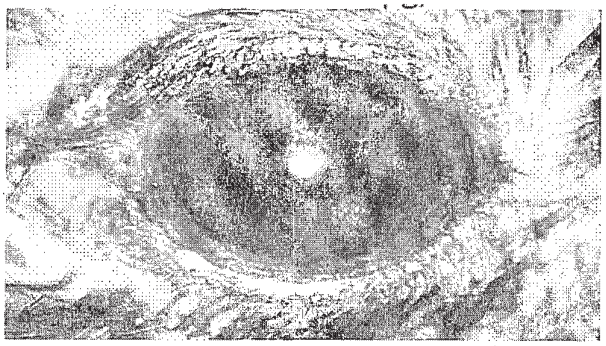


Figure 4a

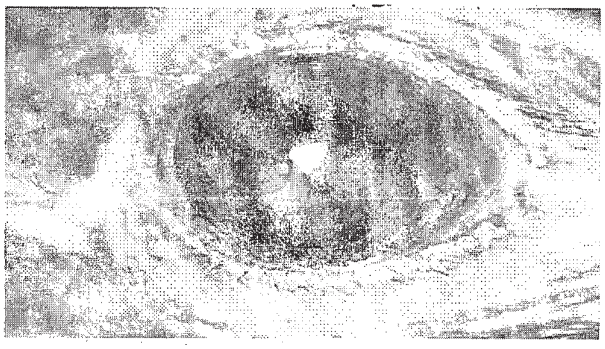


Figure 4b

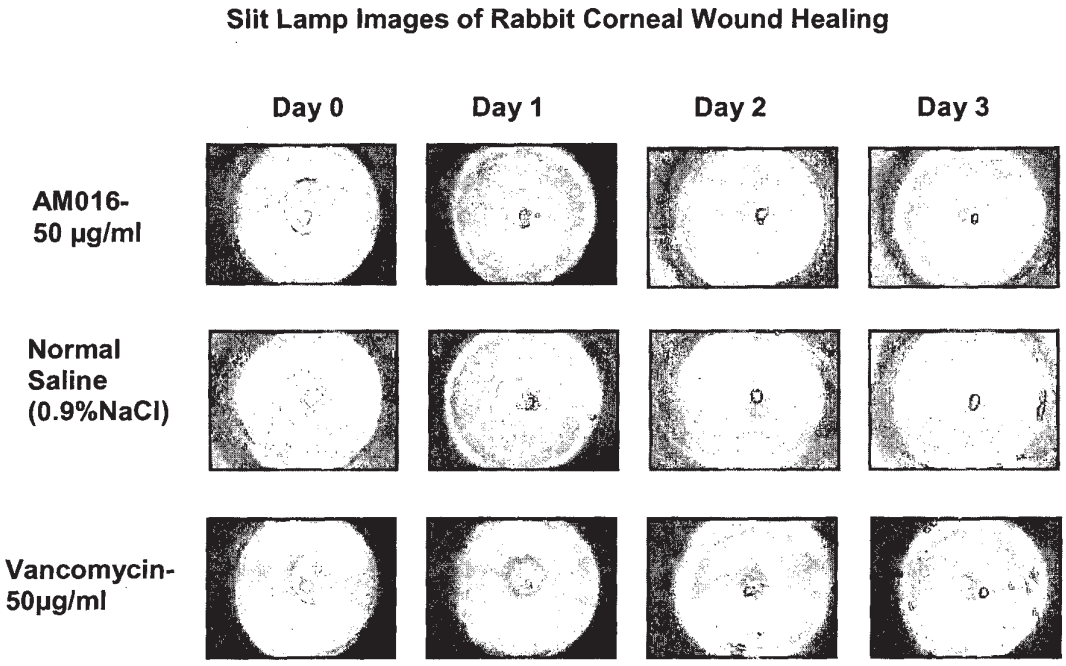

Slit Lamp Images of Rabbit Corneal Wound Healing
Day 0
Day 1
Day 2
Day 3
AM016-
50 µg/ml
Normal
Saline
(0.9%NaCl)
Vancomycin-
50µg/ml

Figure 5

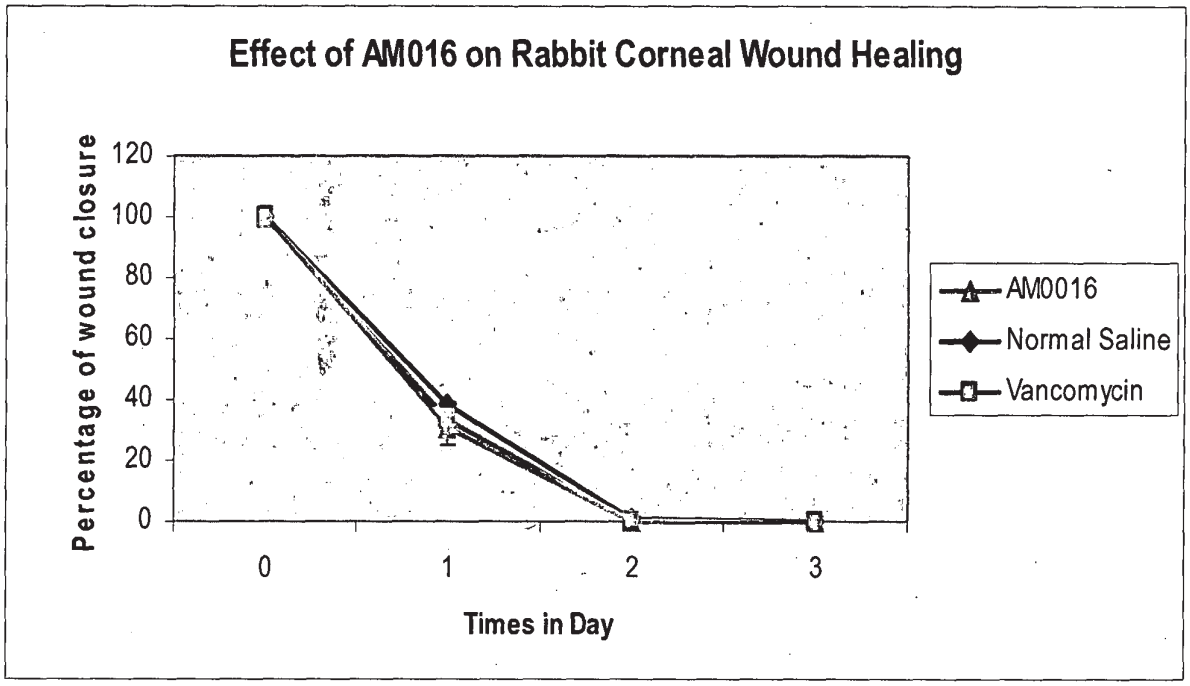

Effect of AM016 on Rabbit Corneal Wound Healing
Percentage of wound closure
120
100
80
60
40
20
0
0
1
2
3
Times in Day
AM0016
Normal Saline
Vancomycin

Figure 6

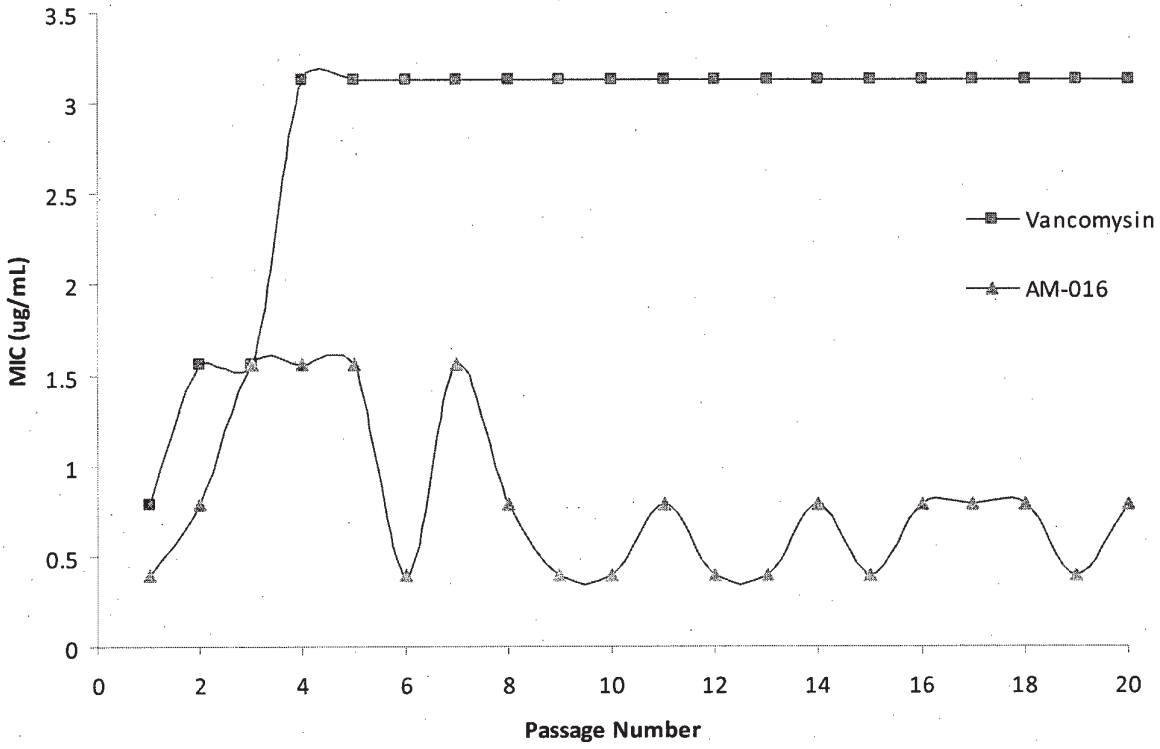

3.5
3
2.5
2
1.5
1
0.5
0
MIC (ug/mL)
0
2
4
6
8
10
12
14
16
18
20
Passage Number
Vancomysin
AM-016

Figure 7

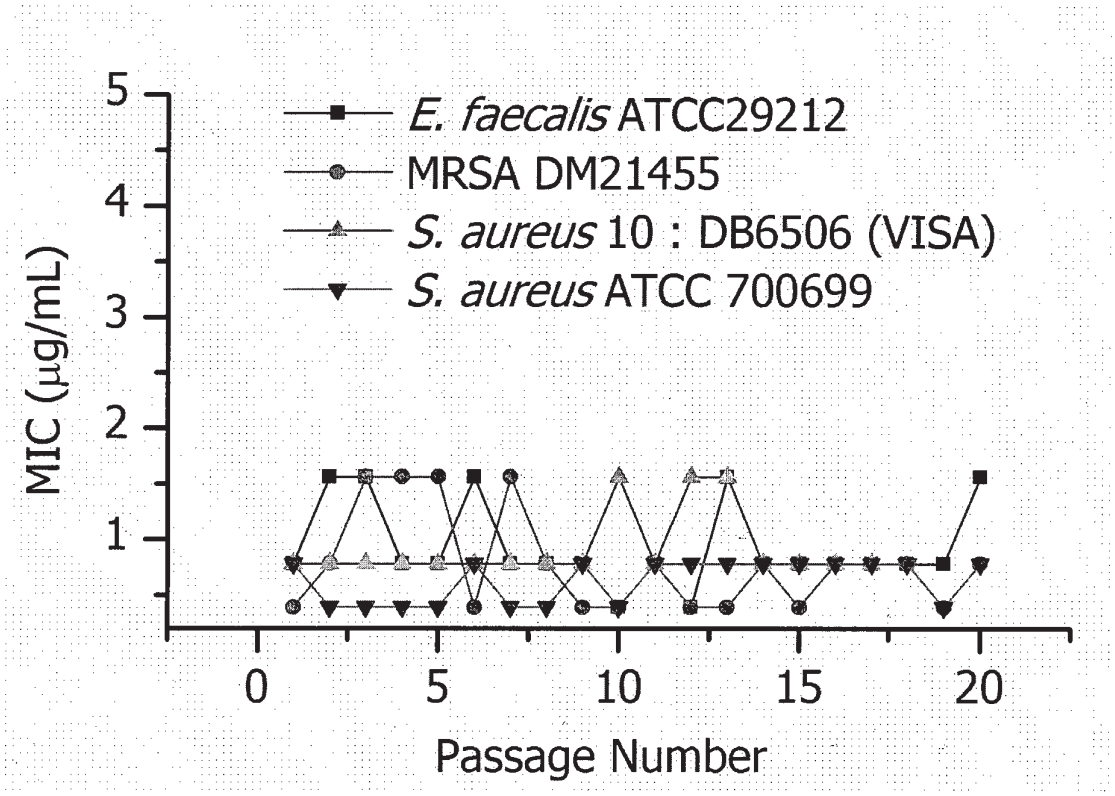

E. faecalis ATCC29212
MRSA DM21455
S. aureus 10 : DB6506 (VISA)
S. aureus ATCC 700699
MIC (µg/mL)
1
2
3
4
5
0
5
10
15
20
Passage Number

Figure 8

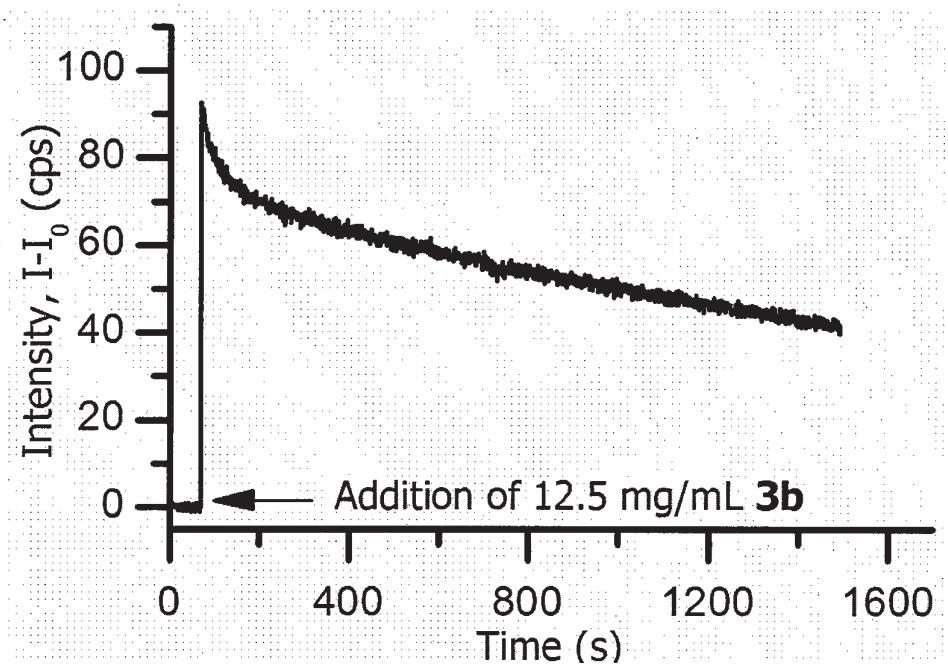

100
80
60
40
20
0
Intensity, I-I0 (cps)
Addition of 12.5 mg/mL 3b
0
400
800
1200
1600
Time (s)

Figure 9

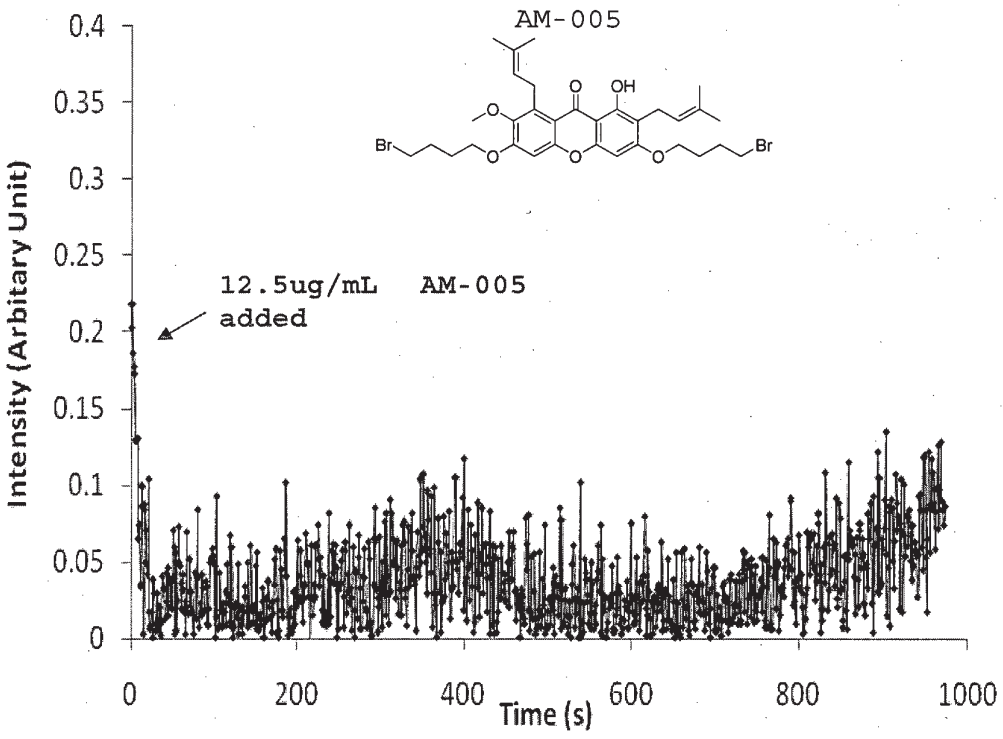

AM-005
Br
O
O
O
OH
O
Br
12.5ug/mL AM-005
added
Intensity (Arbitary Unit)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
200
400
600
800
1000
Time (s)

Figure 10

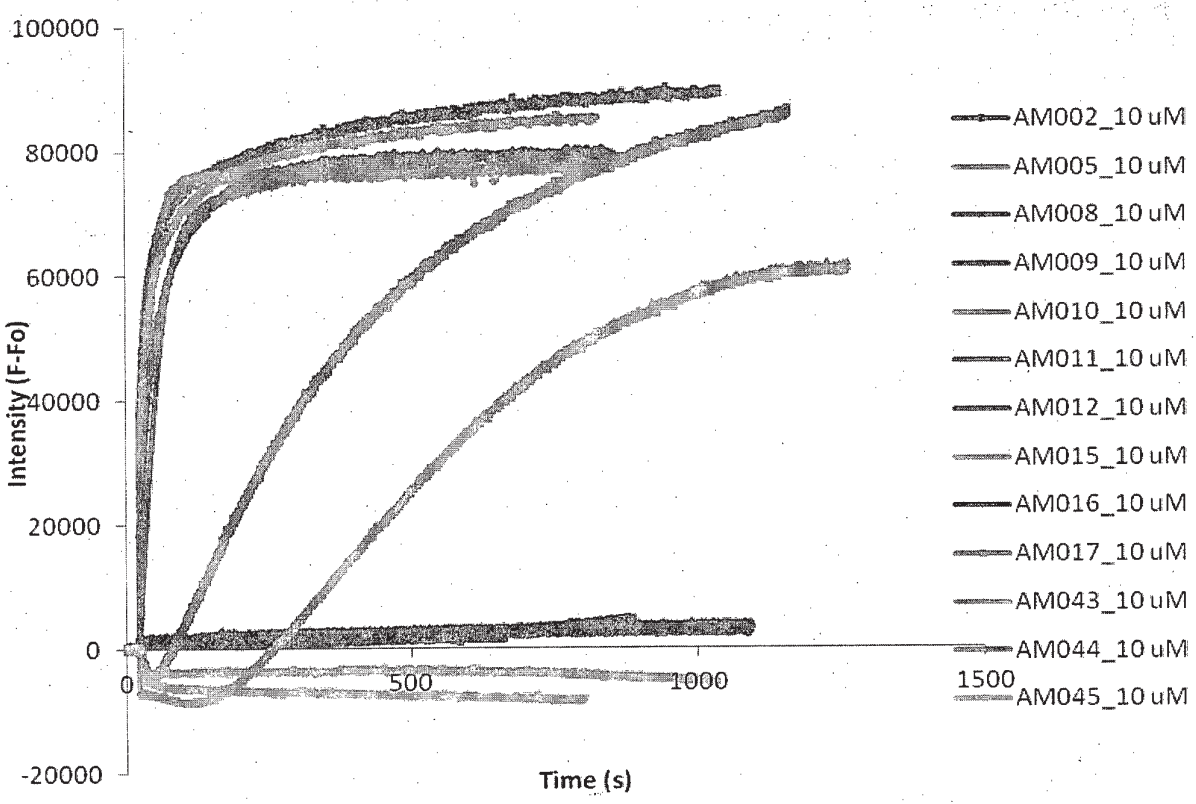

100000
80000
60000
40000
20000
0
-20000
Intensity (F-Fo)
0
500
1000
1500
Time (s)
AM002_10 uM
AM005_10 uM
AM008_10 uM
AM009_10 uM
AM010_10 uM
AM011_10 uM
AM012_10 uM
AM015_10 uM
AM016_10 uM
AM017_10 uM
AM043_10 uM
AM044_10 uM
AM045_10 uM

Figure 11

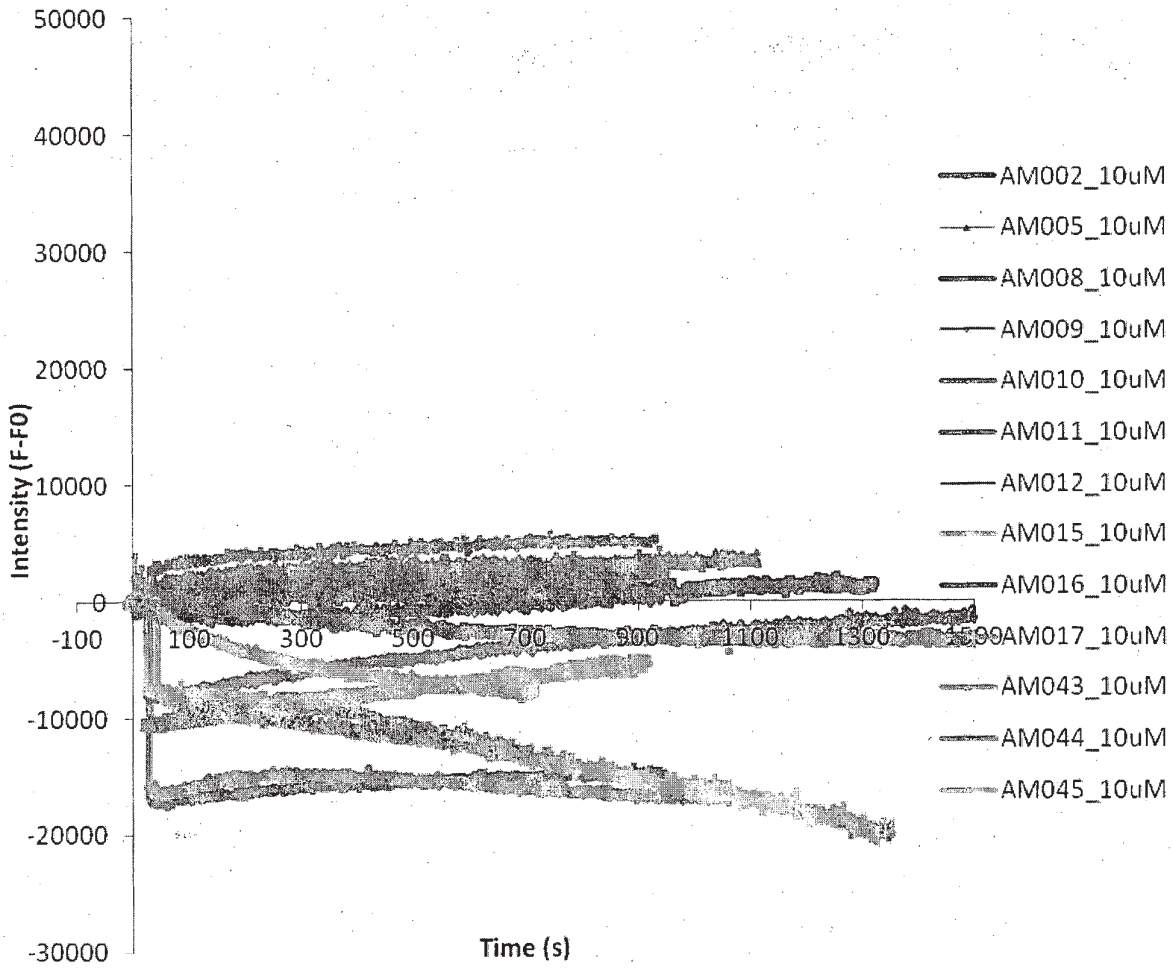

50000
40000
30000
20000
10000
0
-10000
-20000
-30000
Intensity (F-F0)
-100
100
300
500
700
900
1100
1300
1500
Time (s)
AM002_10uM
AM005_10uM
AM008_10uM
AM009_10uM
AM010_10uM
AM011_10uM
AM012_10uM
AM015_10uM
AM016_10uM
AM017_10uM
AM043_10uM
AM044_10uM
AM045_10uM

Figure 12

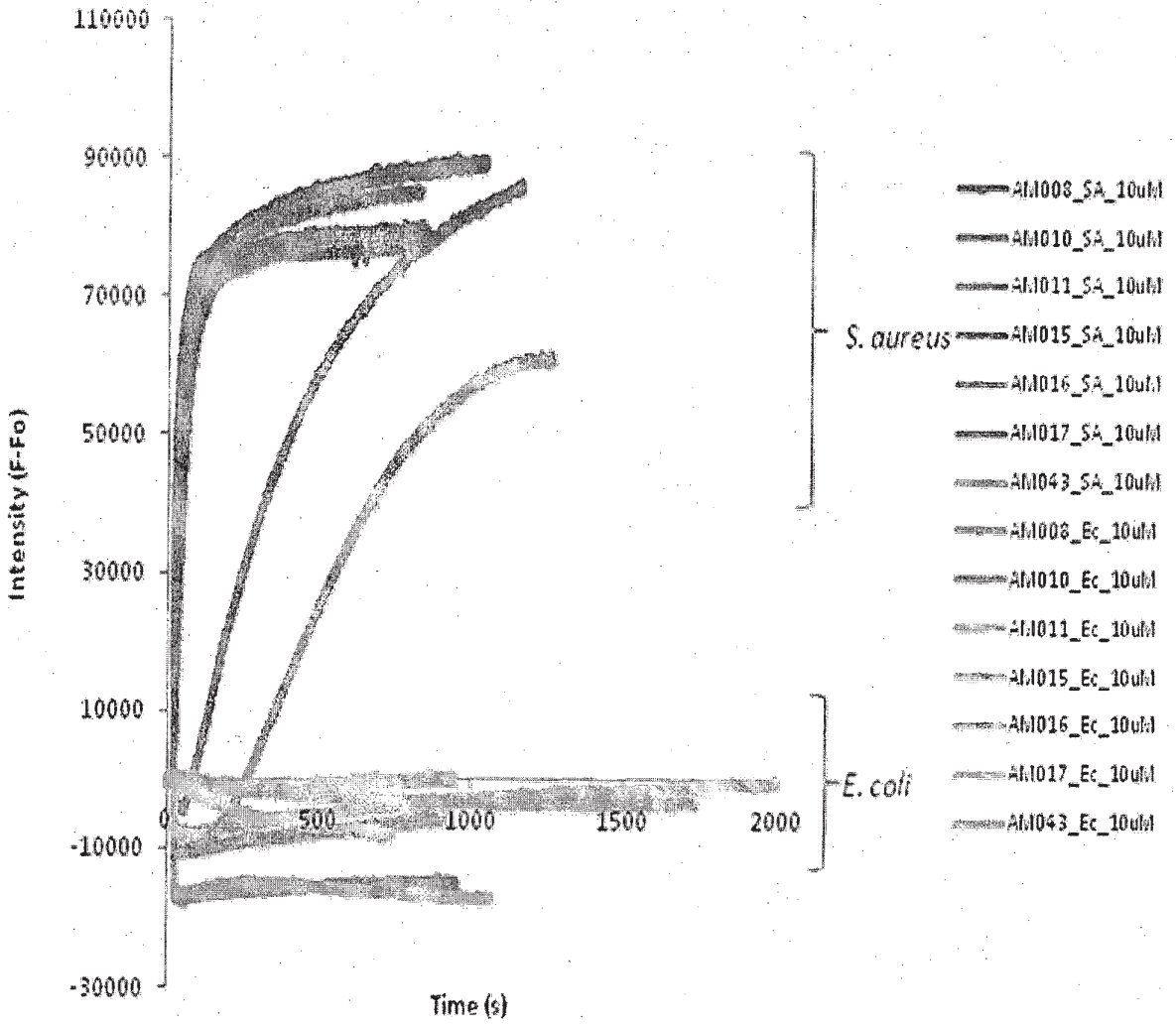

110000
90000
70000
50000
30000
10000
-10000
-30000
Intensity (F-Fo)
0
500
1000
1500
2000
Time (s)
S. aureus
E. coli
AM008_SA_10uM
AM010_SA_10uM
AM011_SA_10uM
AM015_SA_10uM
AM016_SA_10uM
AM017_SA_10uM
AM043_SA_10uM
AM008_Ec_10uM
AM010_Ec_10uM
AM011_Ec_10uM
AM015_Ec_10uM
AM016_Ec_10uM
AM017_Ec_10uM
AM043_Ec_10uM

Figure 13

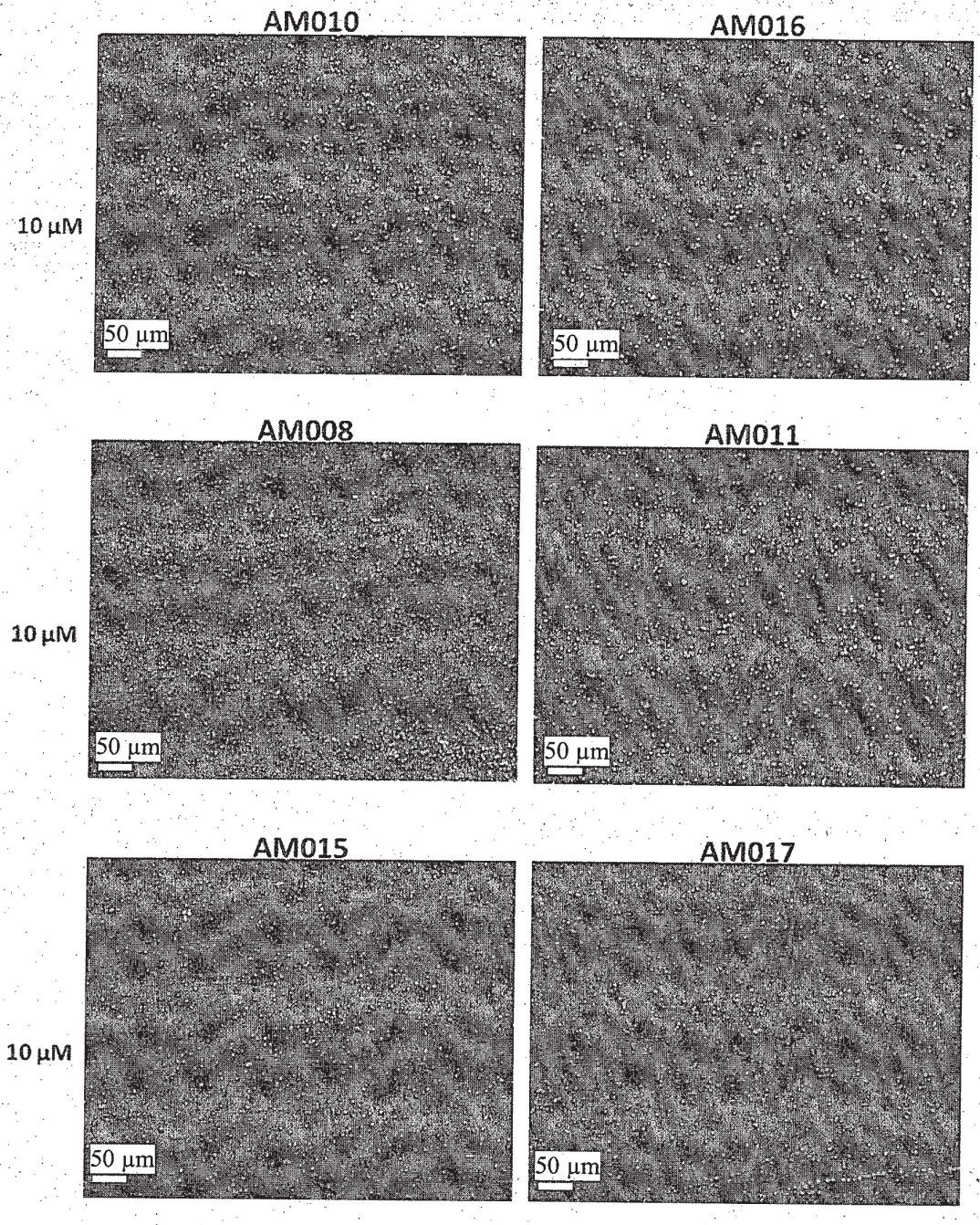

AM010
AM016
10 µM
50 µm
50 µm
AM008
AM011
10 µM
50 µm
50 µm
AM015
AM017
10 µM
50 µm
50 µm

Figure 14

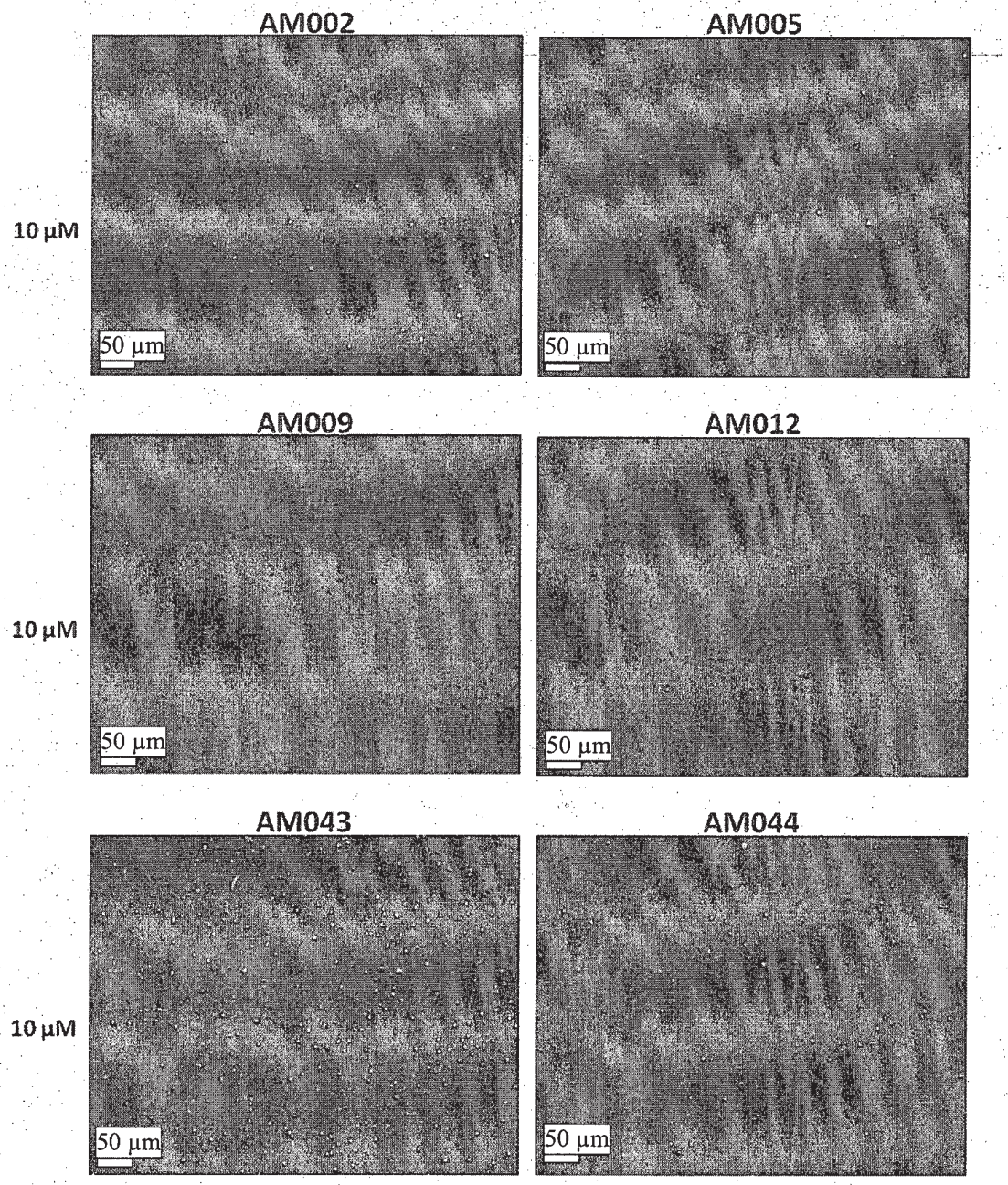

AM002
AM005
10 µM
50 µm
50 µm
AM009
AM012
10 µM
50 µm
50 µm
AM043
AM044
10 µM
50 µm
50 µm

Figure 14

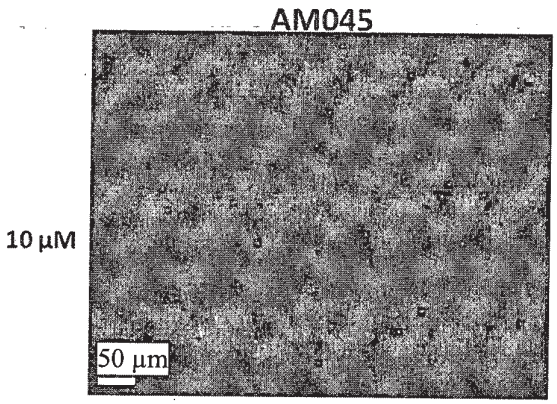


Figure 14

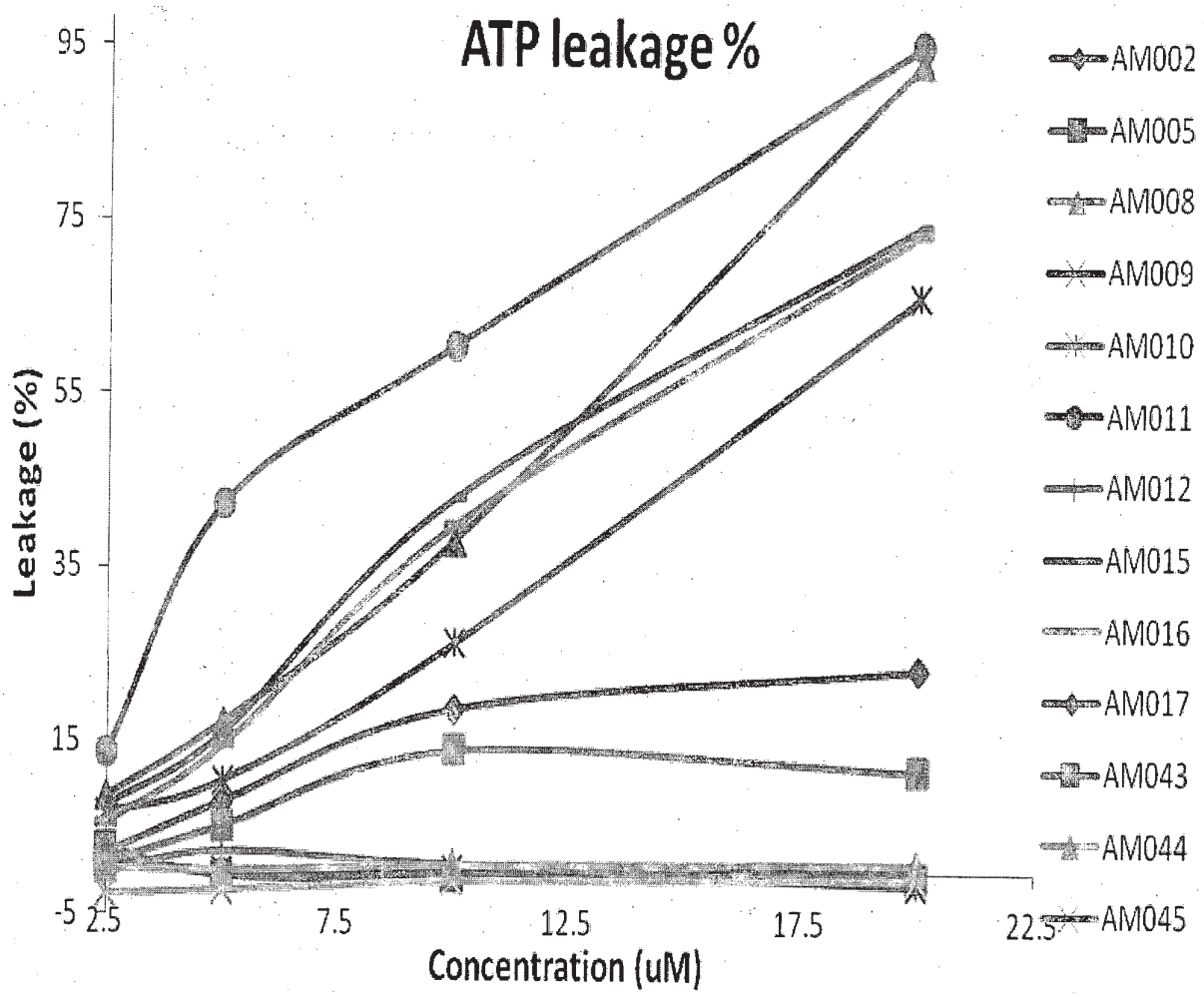

ATP leakage %
Leakage (%)
95
75
55
35
15
-5
2.5
7.5
12.5
17.5
22.5
Concentration (uM)
AM002
AM005
AM008
AM009
AM010
AM011
AM012
AM015
AM016
AM017
AM043
AM044
AM045

Figure 15

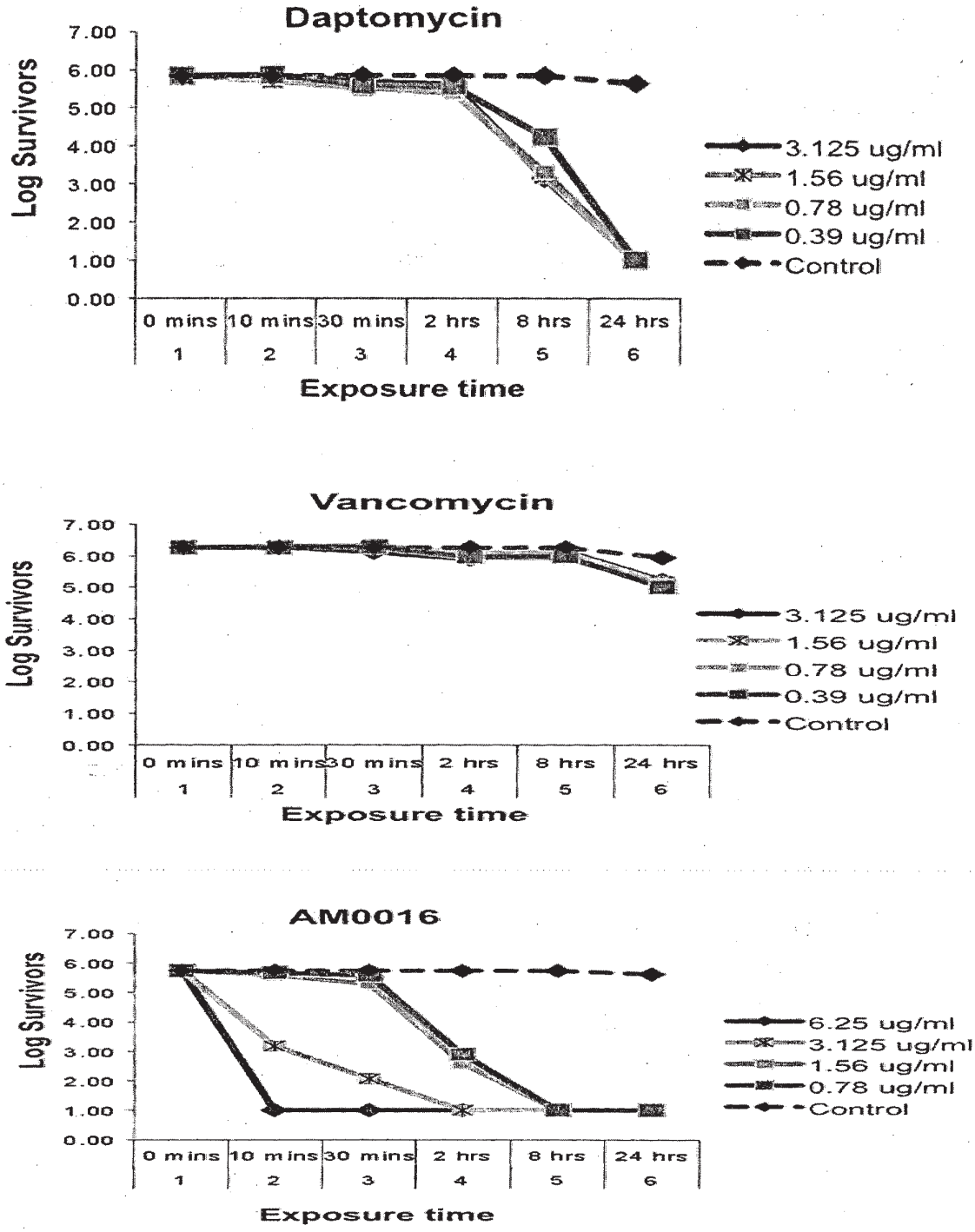
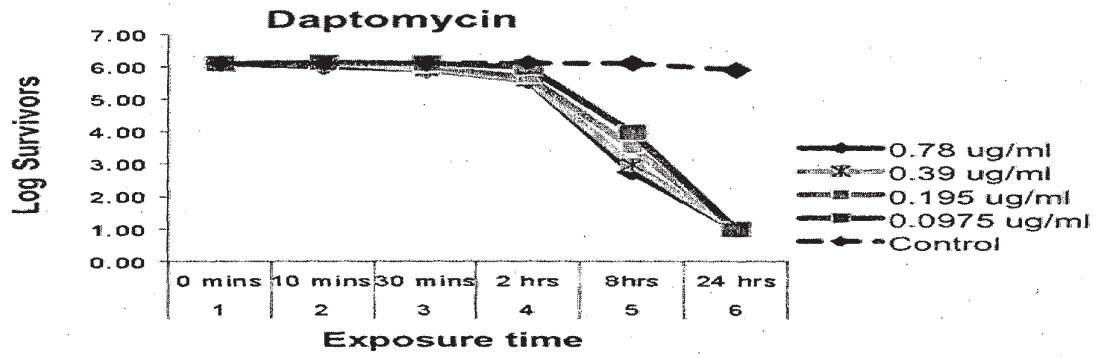
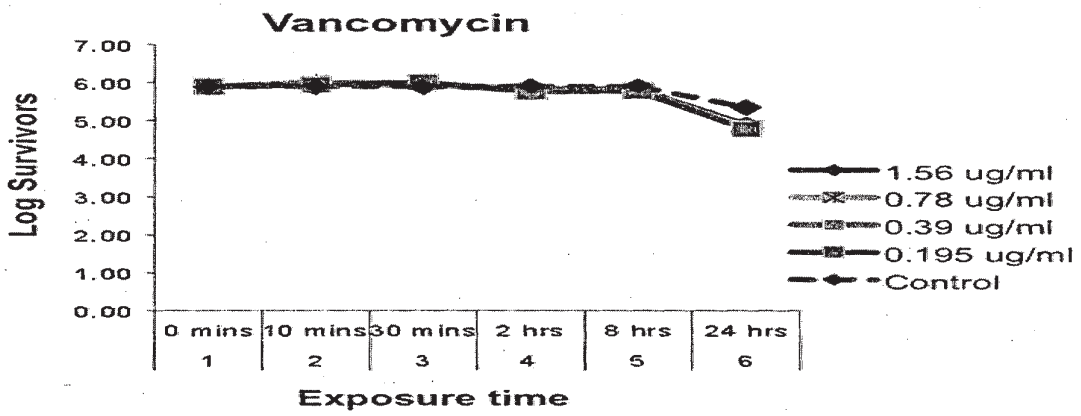

Daptomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
3.125 ug/ml
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
Control
Vancomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
3.125 ug/ml
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
Control
AM0016
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
6.25 ug/ml
3.125 ug/ml
1.56 ug/ml
0.78 ug/ml
Control

Figure 16


Daptomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8hrs
24 hrs
1
2
3
4
5
6
Exposure time
0.78 ug/ml
0.39 ug/ml
0.195 ug/ml
0.0975 ug/ml
Control


Vancomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
0.195 ug/ml
Control

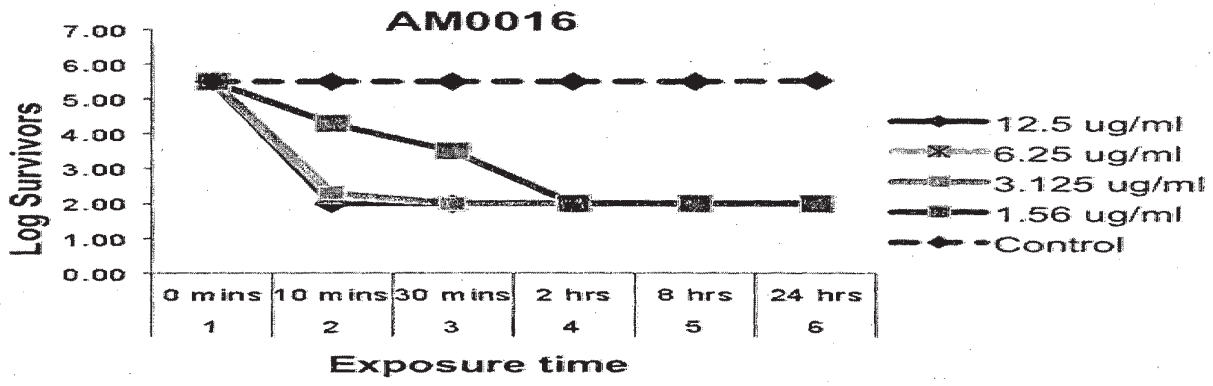
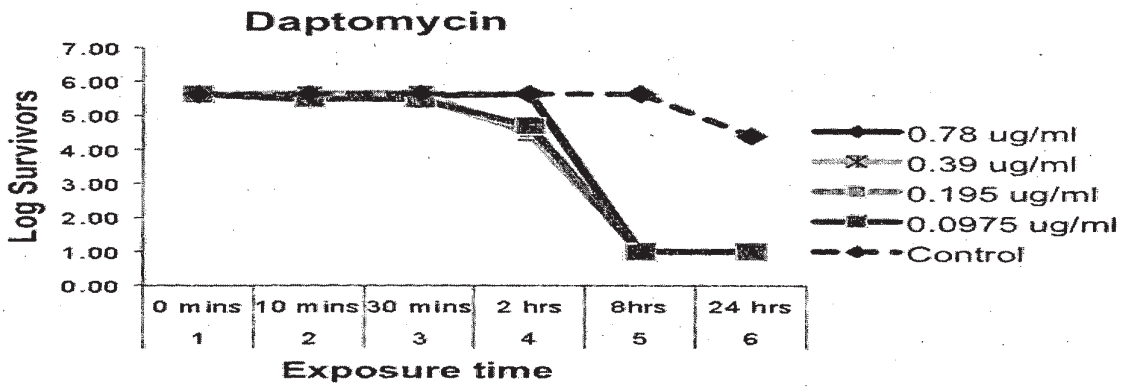
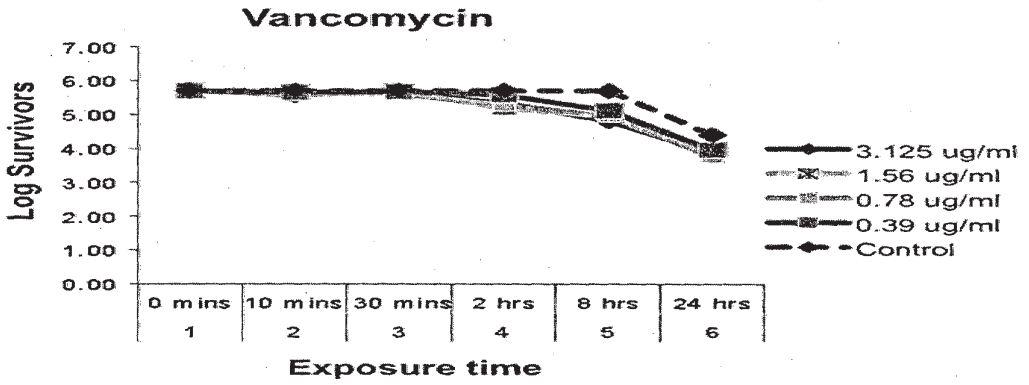

AM0016
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
12.5 ug/ml
6.25 ug/ml
3.125 ug/ml
1.56 ug/ml
Control

Figure 17


Daptomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8hrs
24 hrs
1
2
3
4
5
6
Exposure time
0.78 ug/ml
0.39 ug/ml
0.195 ug/ml
0.0975 ug/ml
Control


Vancomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
3.125 ug/ml
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
Control

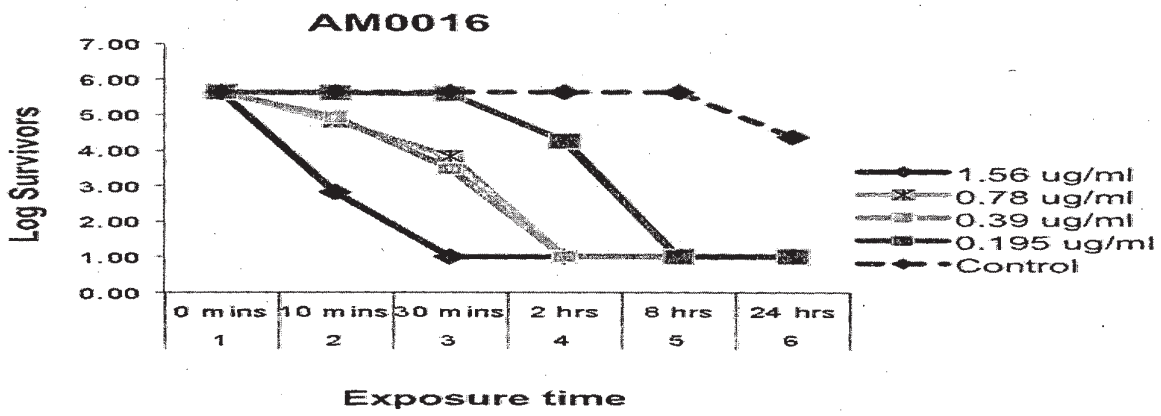

AM0016
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
0.195 ug/ml
Control

Figure 18

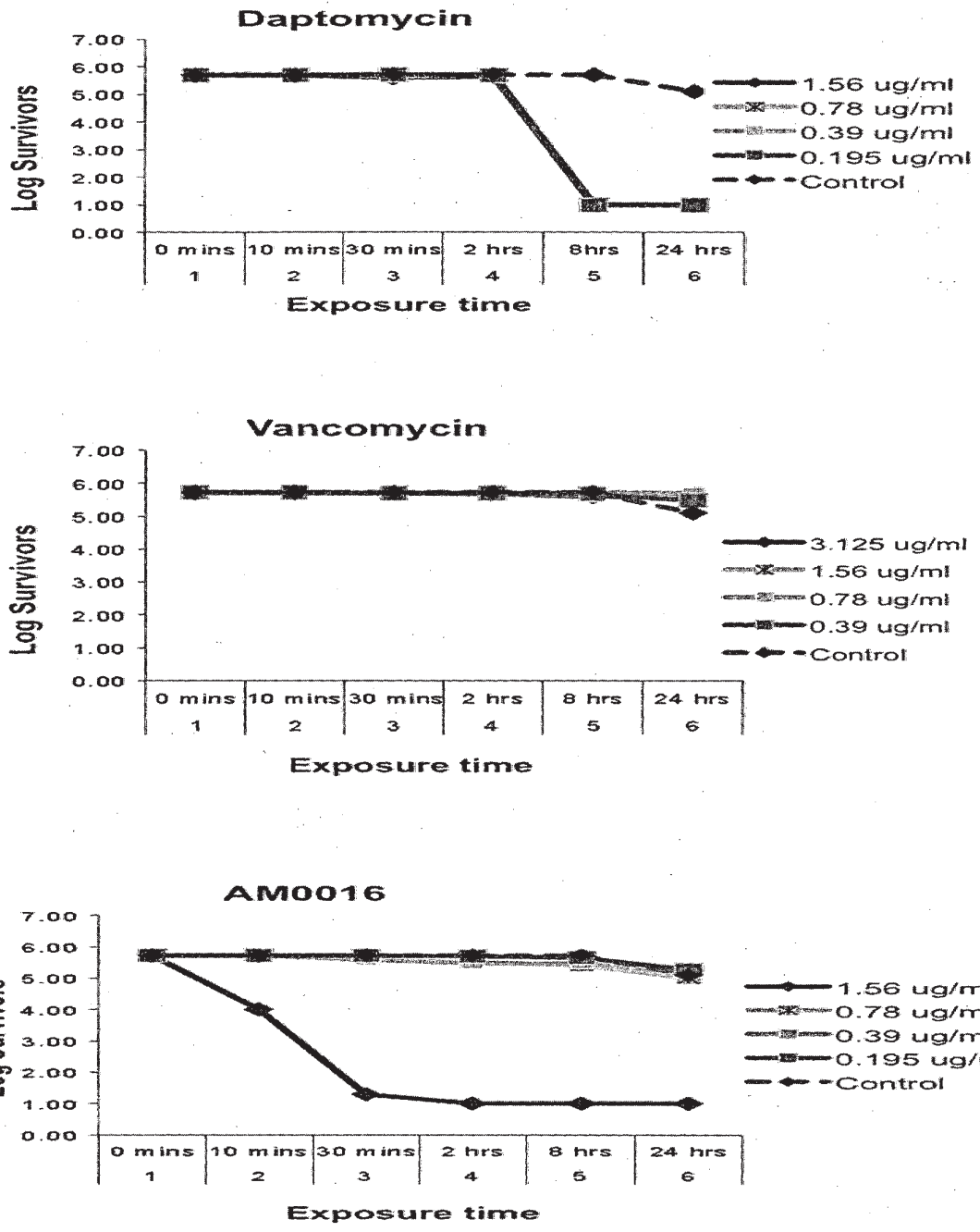
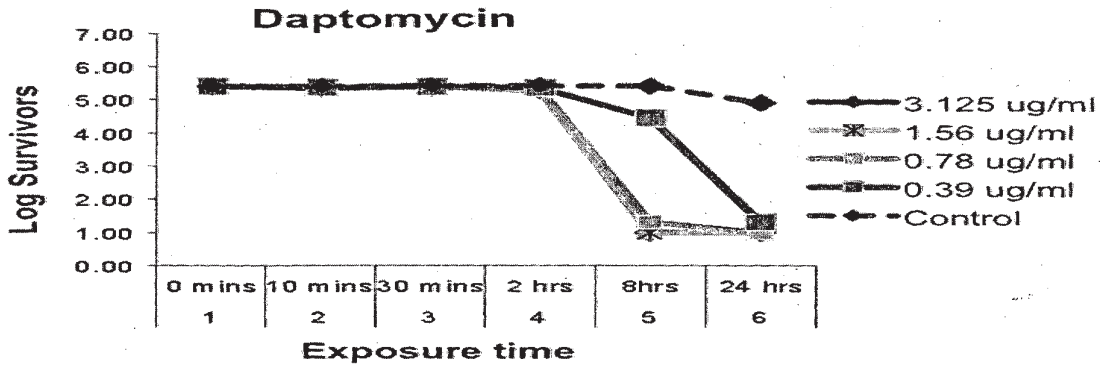
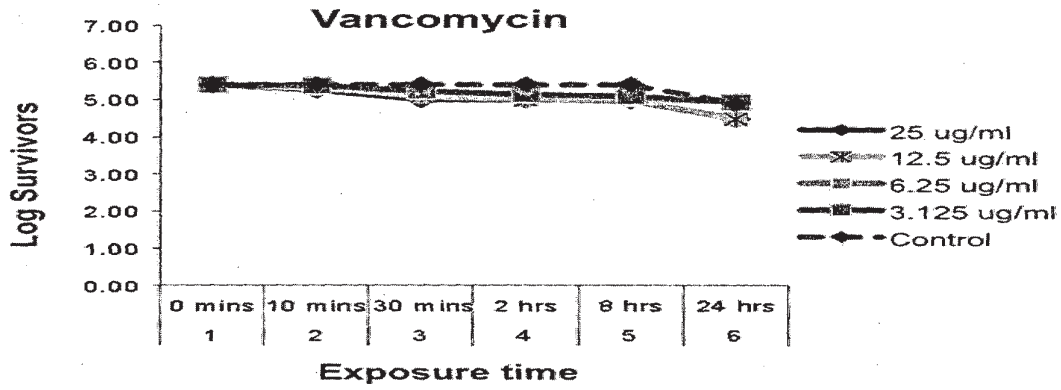

Daptomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8hrs
24 hrs
1
2
3
4
5
6
Exposure time
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
0.195 ug/ml
Control
Vancomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
3.125 ug/ml
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
Control
AM0016
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
0.195 ug/ml
Control

Figure 19


Daptomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8hrs
24 hrs
1
2
3
4
5
6
Exposure time
3.125 ug/ml
1.56 ug/ml
0.78 ug/ml
0.39 ug/ml
Control


Vancomycin
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
25 ug/ml
12.5 ug/ml
6.25 ug/ml
3.125 ug/ml
Control

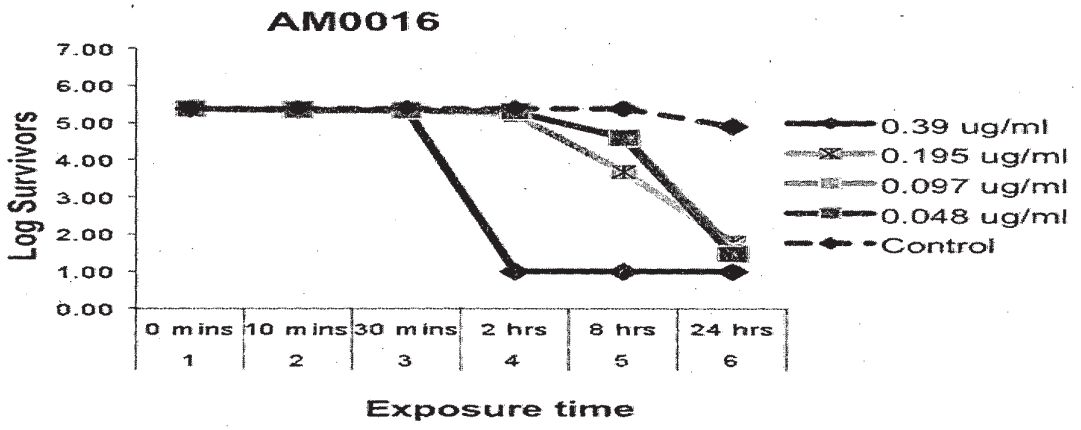

AM0016
Log Survivors
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0 mins
10 mins
30 mins
2 hrs
8 hrs
24 hrs
1
2
3
4
5
6
Exposure time
0.39 ug/ml
0.195 ug/ml
0.097 ug/ml
0.048 ug/ml
Control

Figure 20