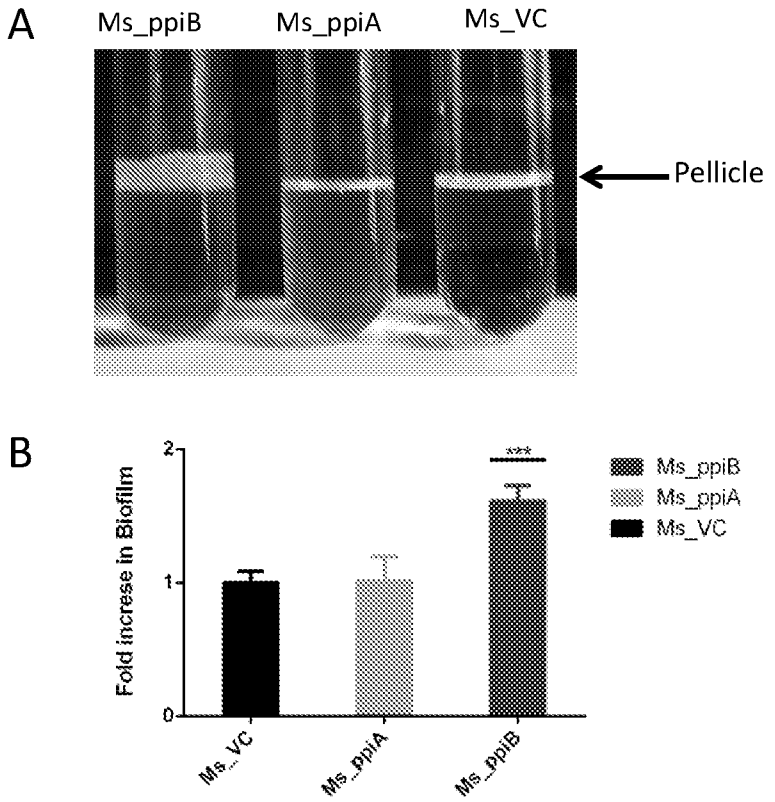


Figure 1

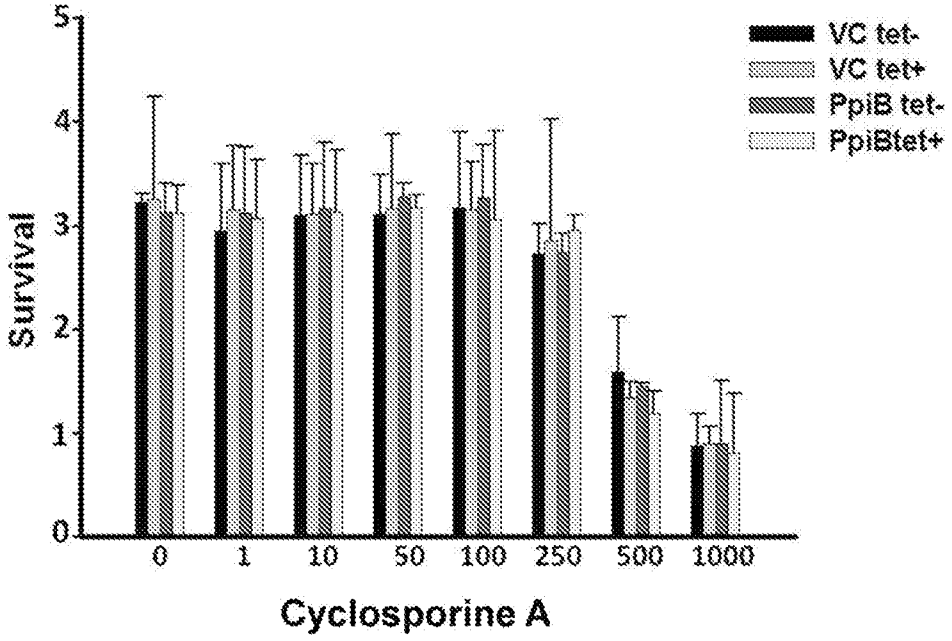


Figure 2

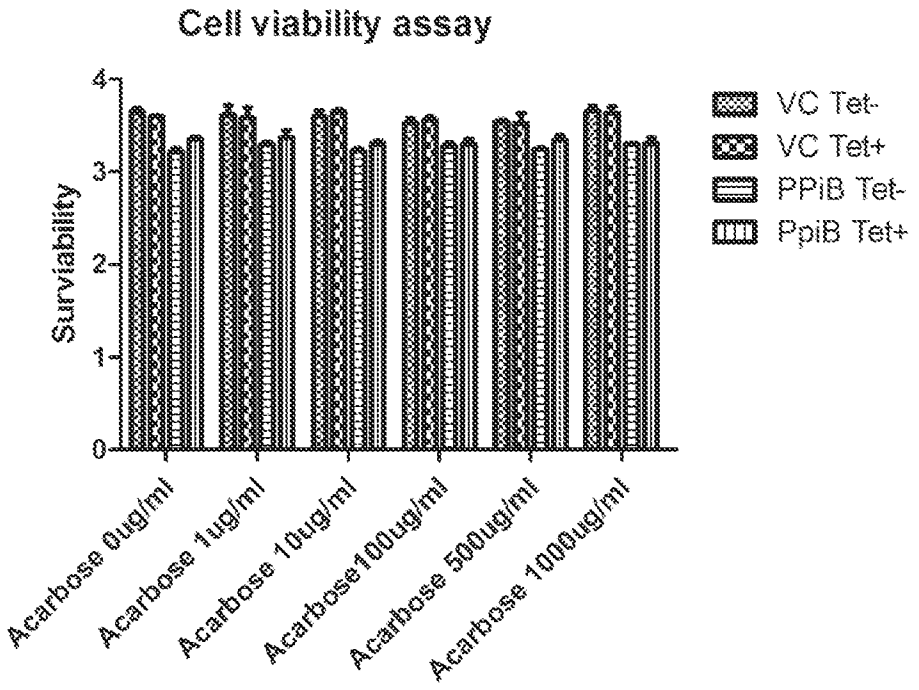


Figure 3

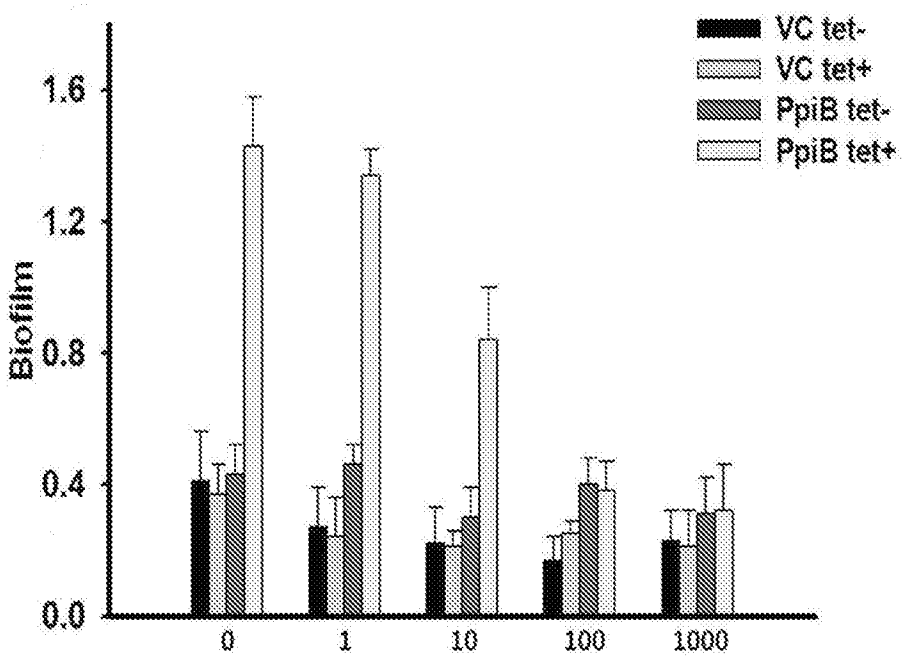


Figure 4

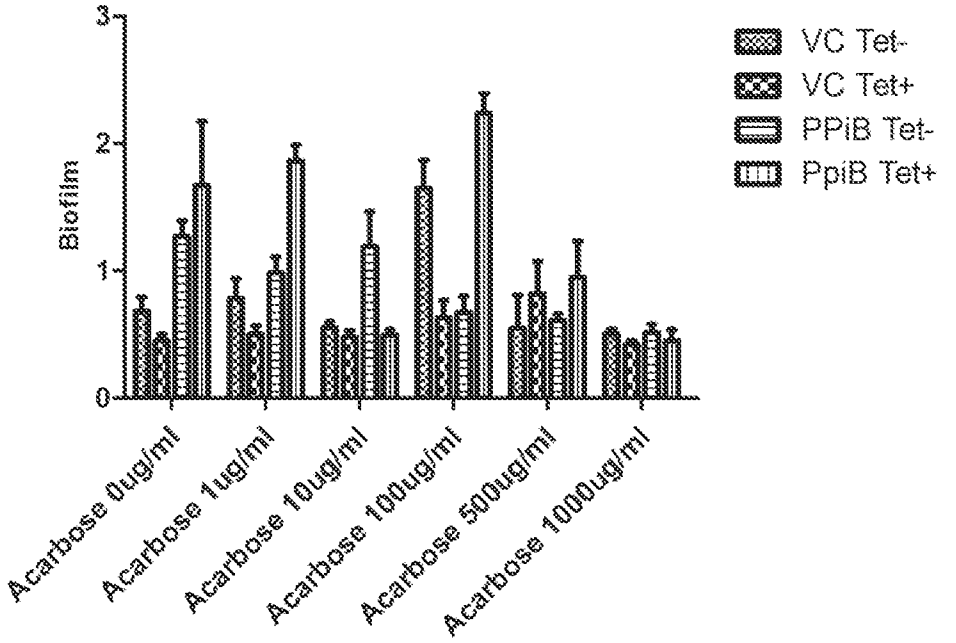


Figure 5

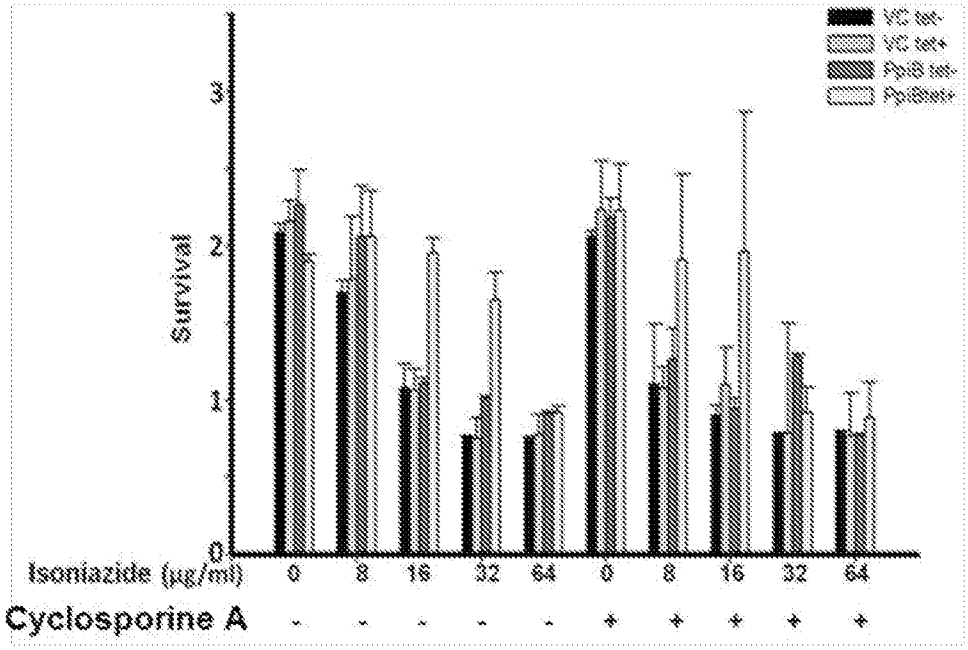


Figure 6

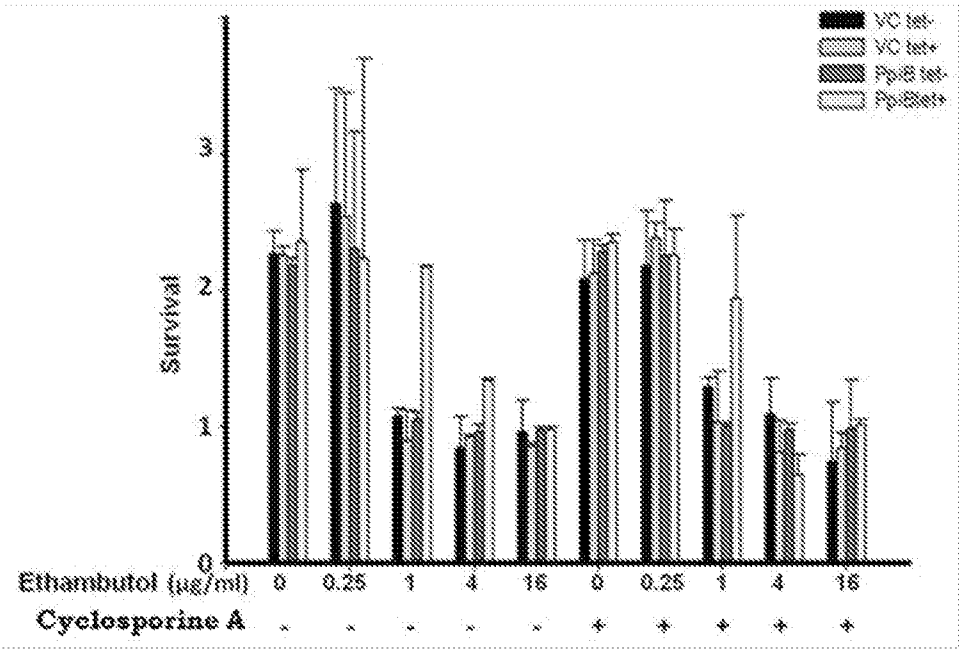


Figure 7

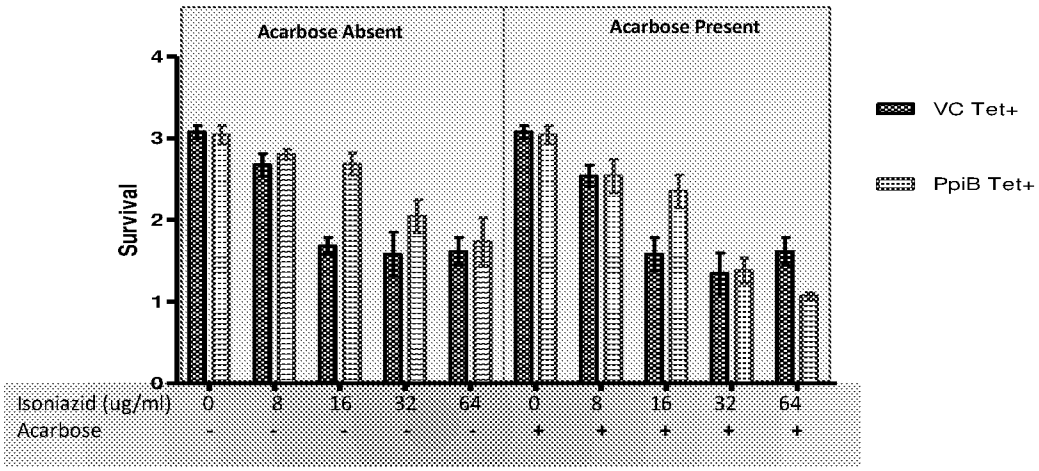


Figure 8

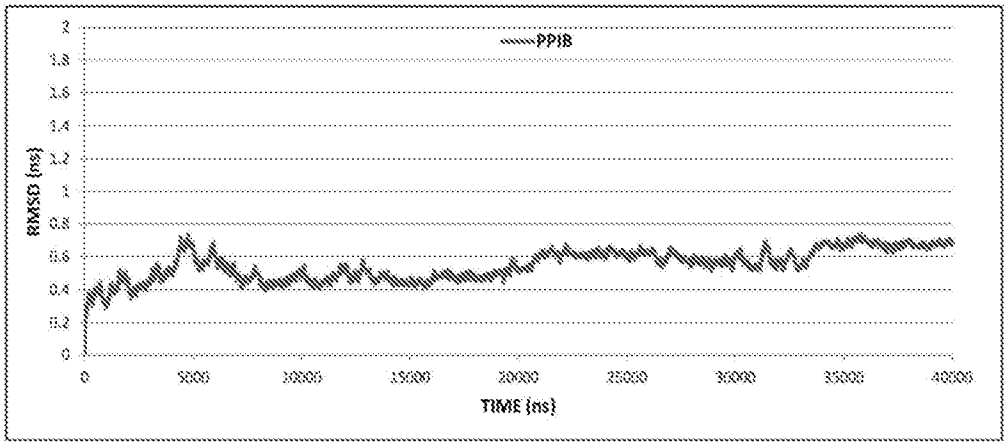


Figure 9

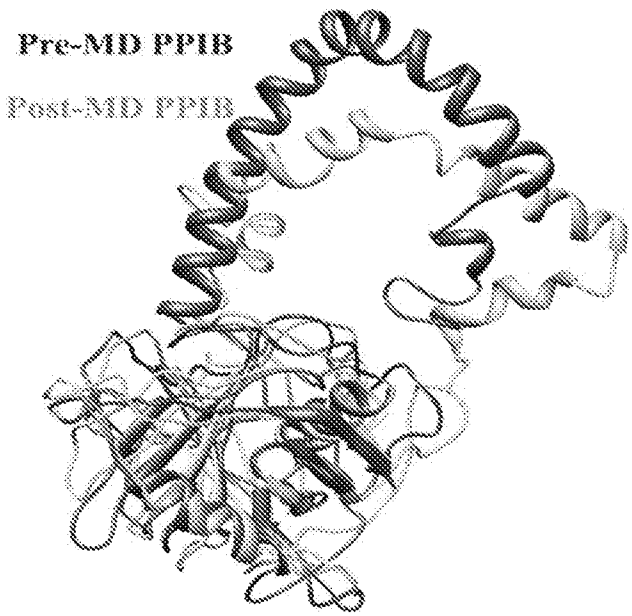


Figure 10

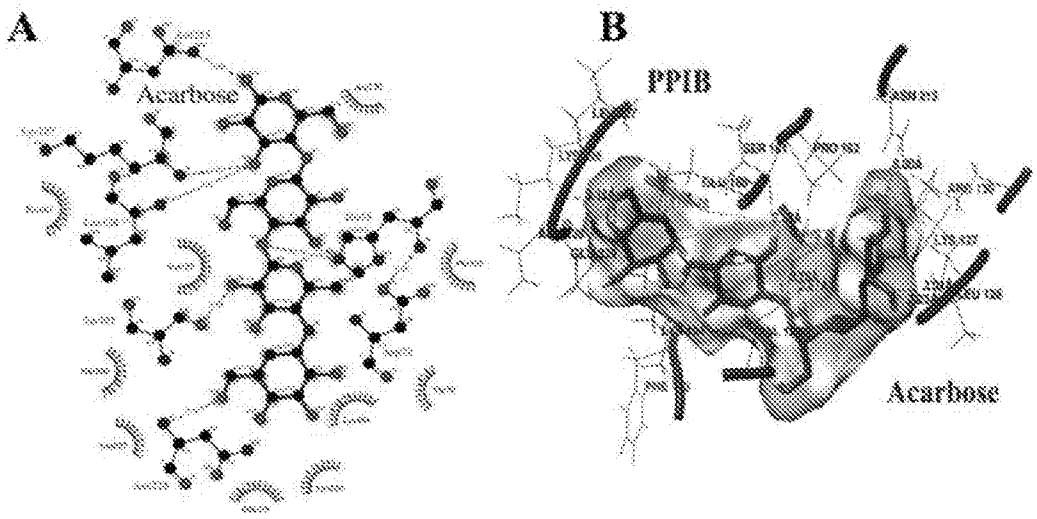


Figure 11

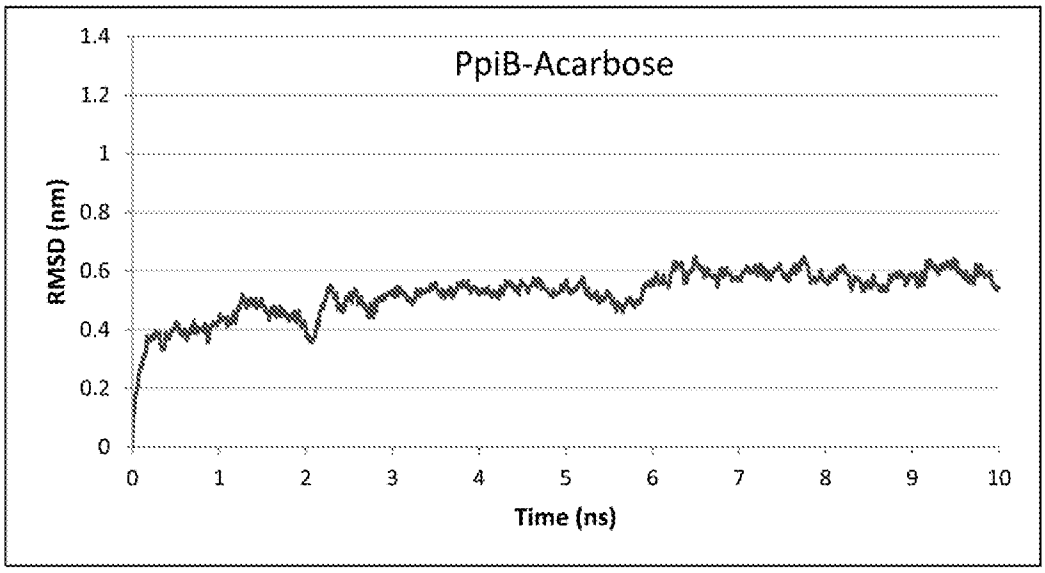


Figure 12

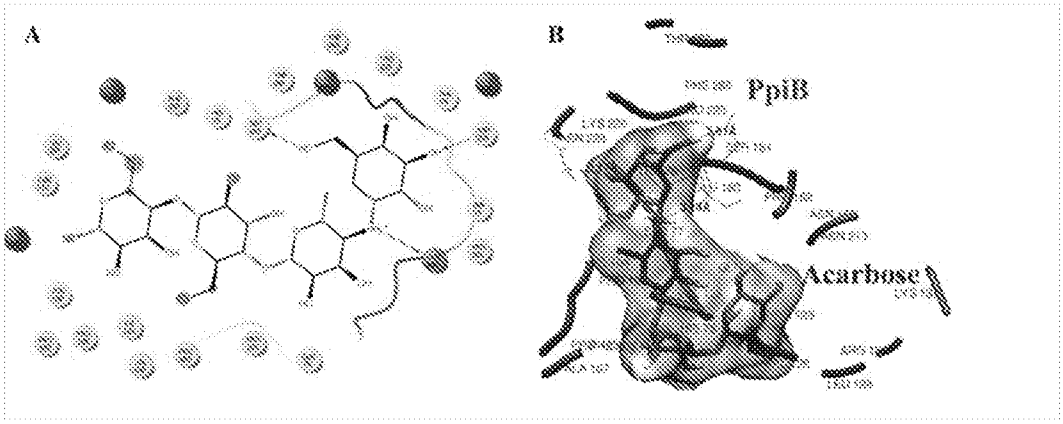


Figure 13

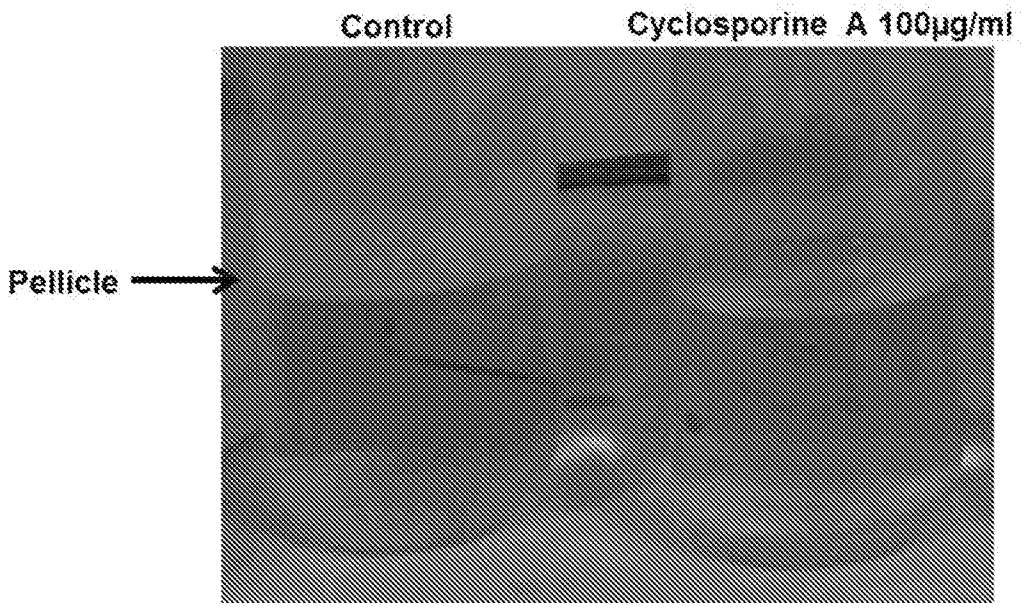


Figure 14

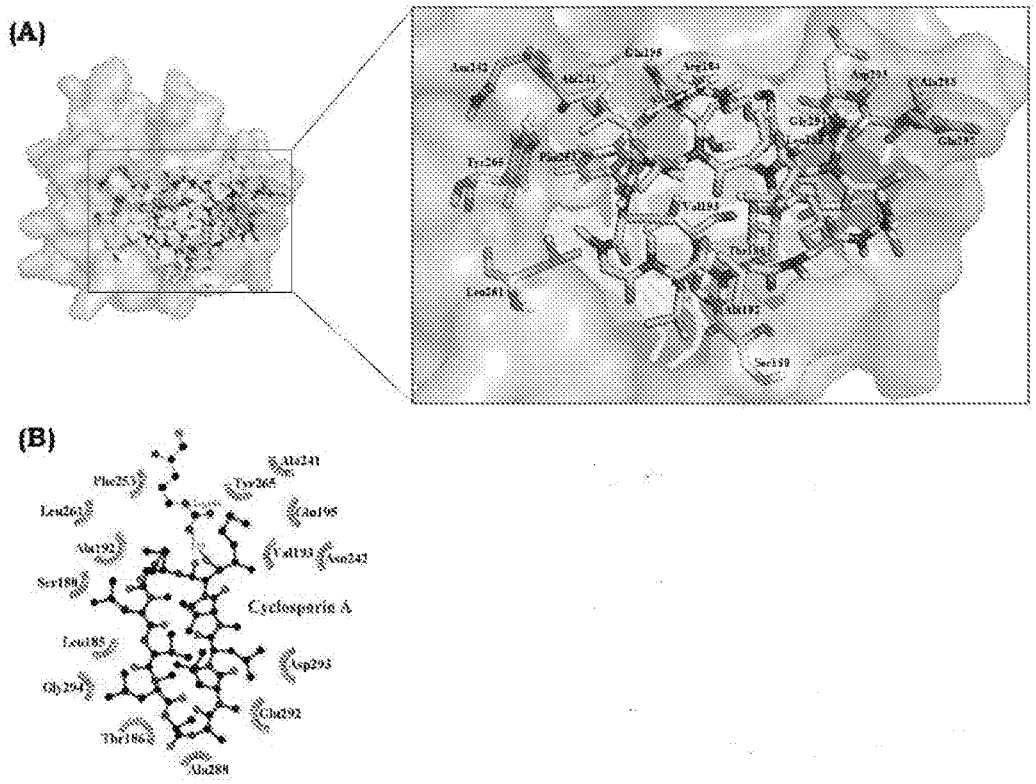


Figure 15

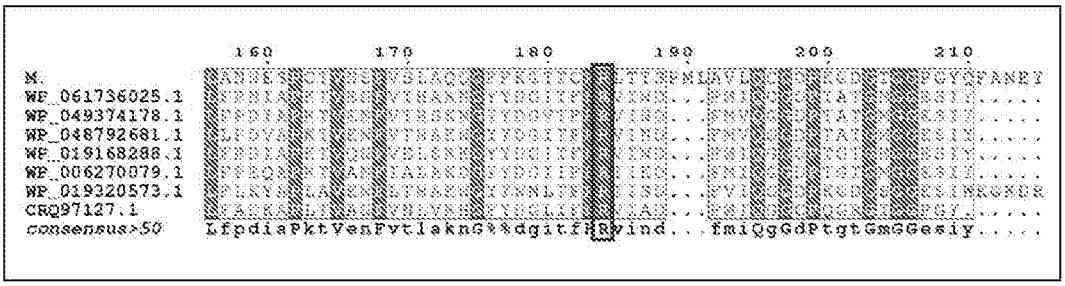


Figure 16

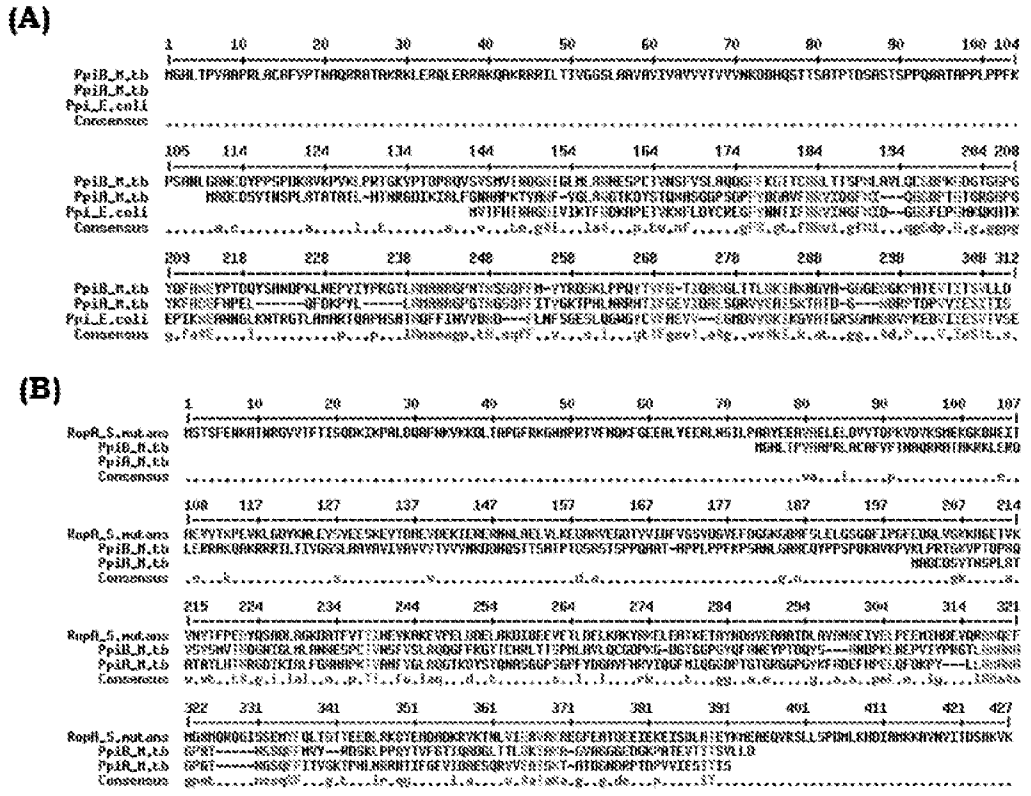


Figure 17

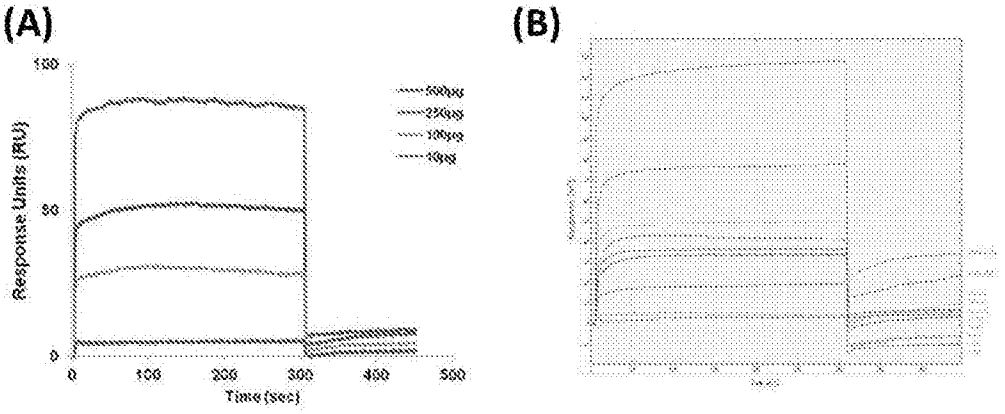


Figure 18

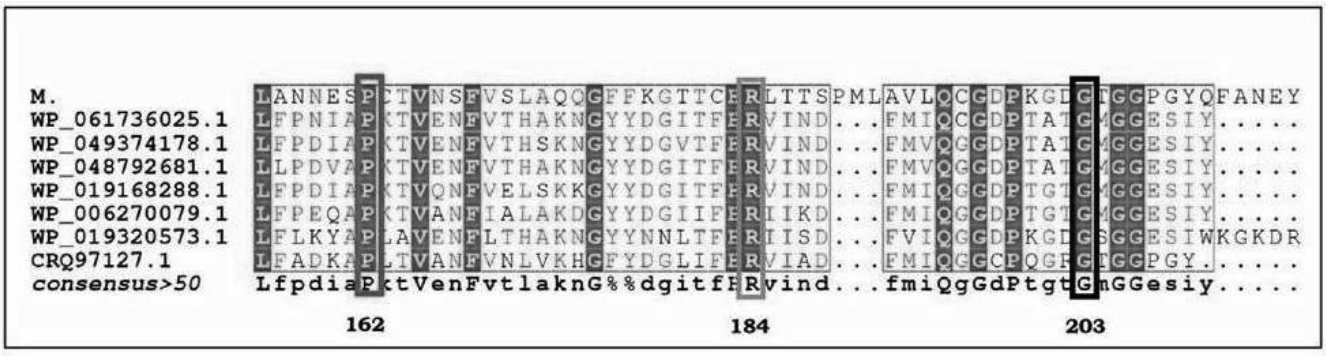

M.
WP_061736025.1
WP_049374178.1
WP_048792681.1
WP_019168288.1
WP_006270079.1
WP_019320573.1
CRQ97127.1
consensus>50
162
184
203

Figure 16A

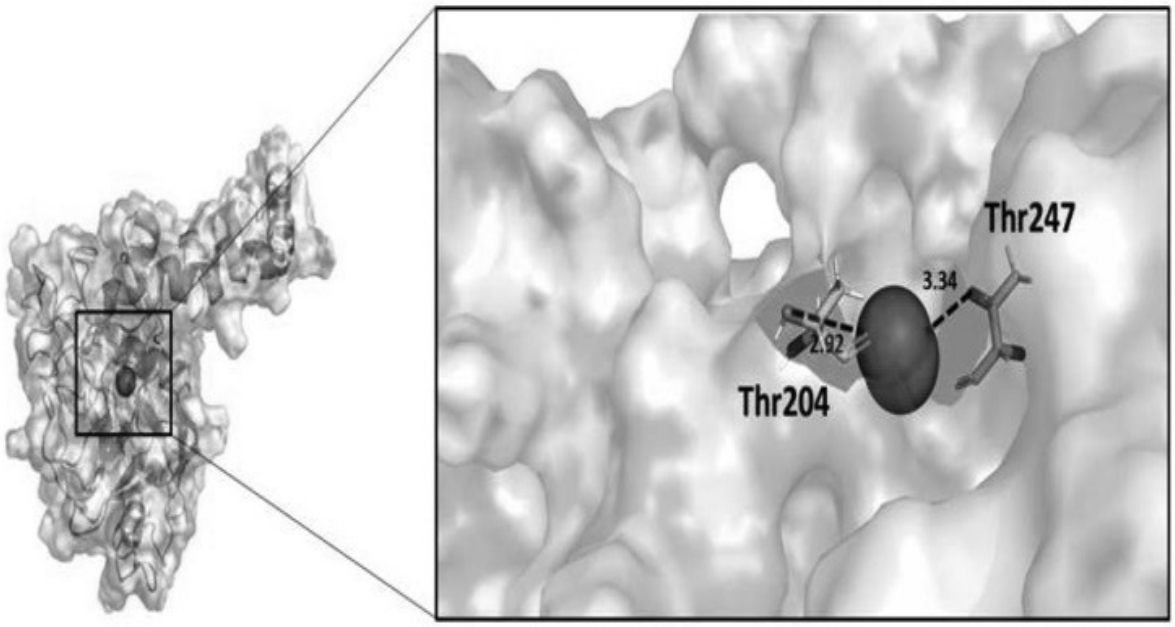


Figure 19

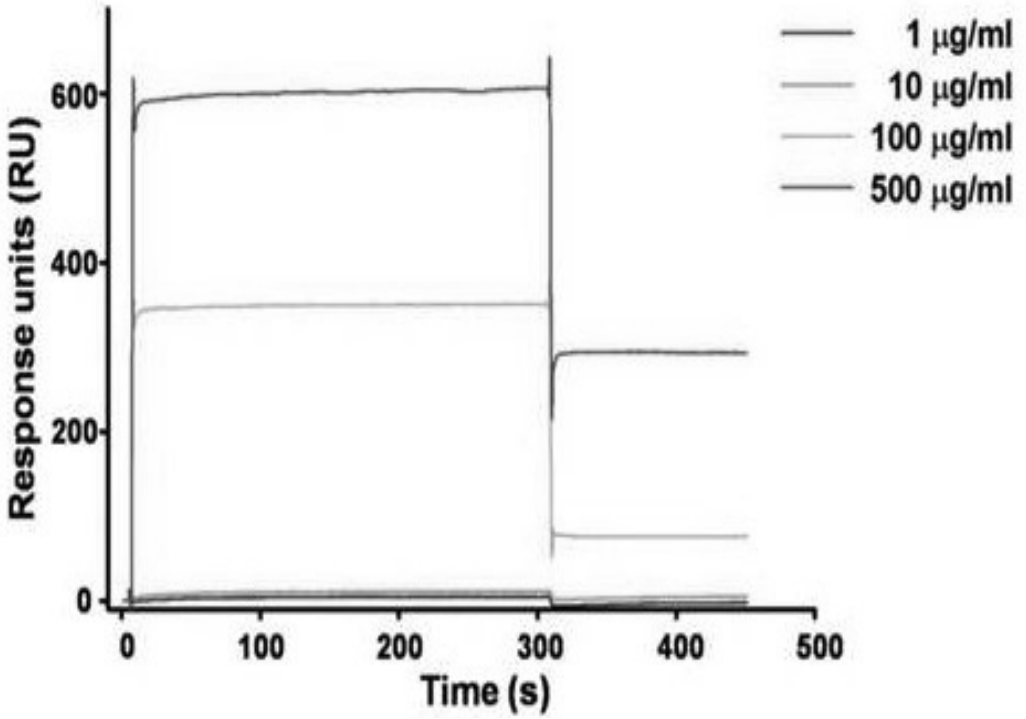

1 μg/ml
10 μg/ml
100 μg/ml
500 μg/ml
Response units (RU)
600
400
200
0
0
100
200
300
400
500
Time (s)

Figure 20

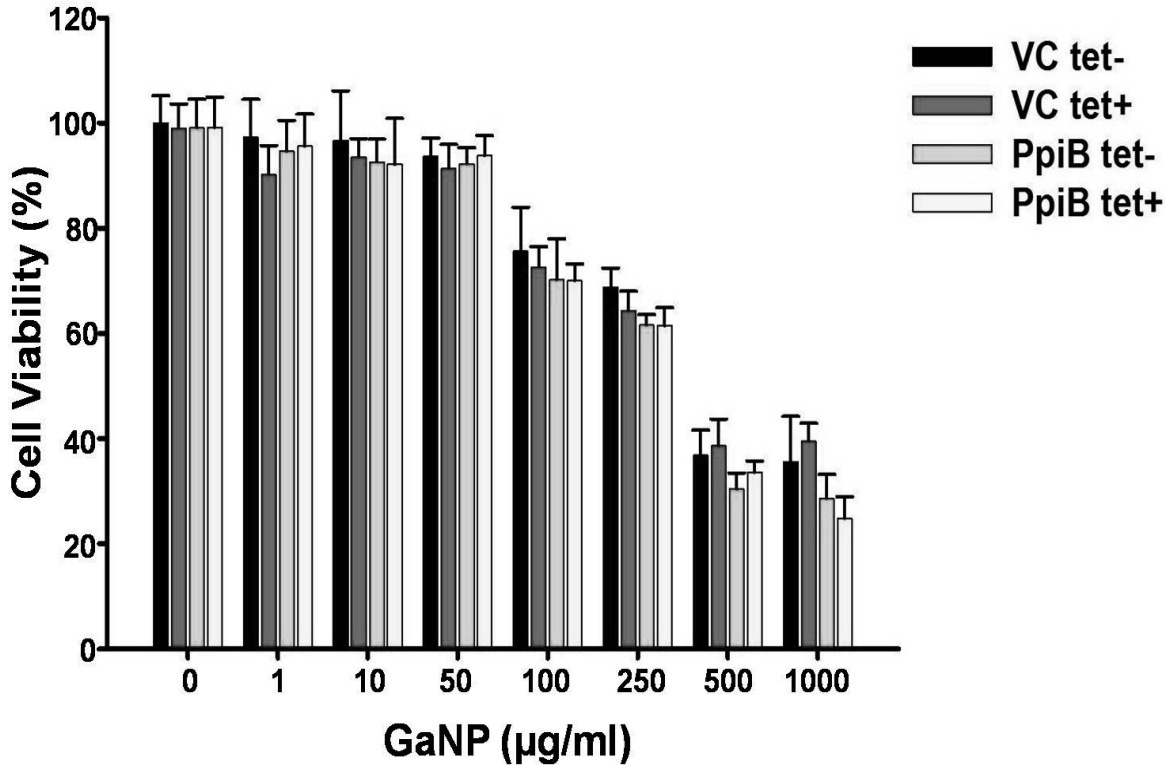

120
100
80
60
40
20
0
Cell Viability (%)
0
1
10
50
100
250
500
1000
GaNP (µg/ml)
VC tet-
VC tet+
PpiB tet-
PpiB tet+

Figure 21

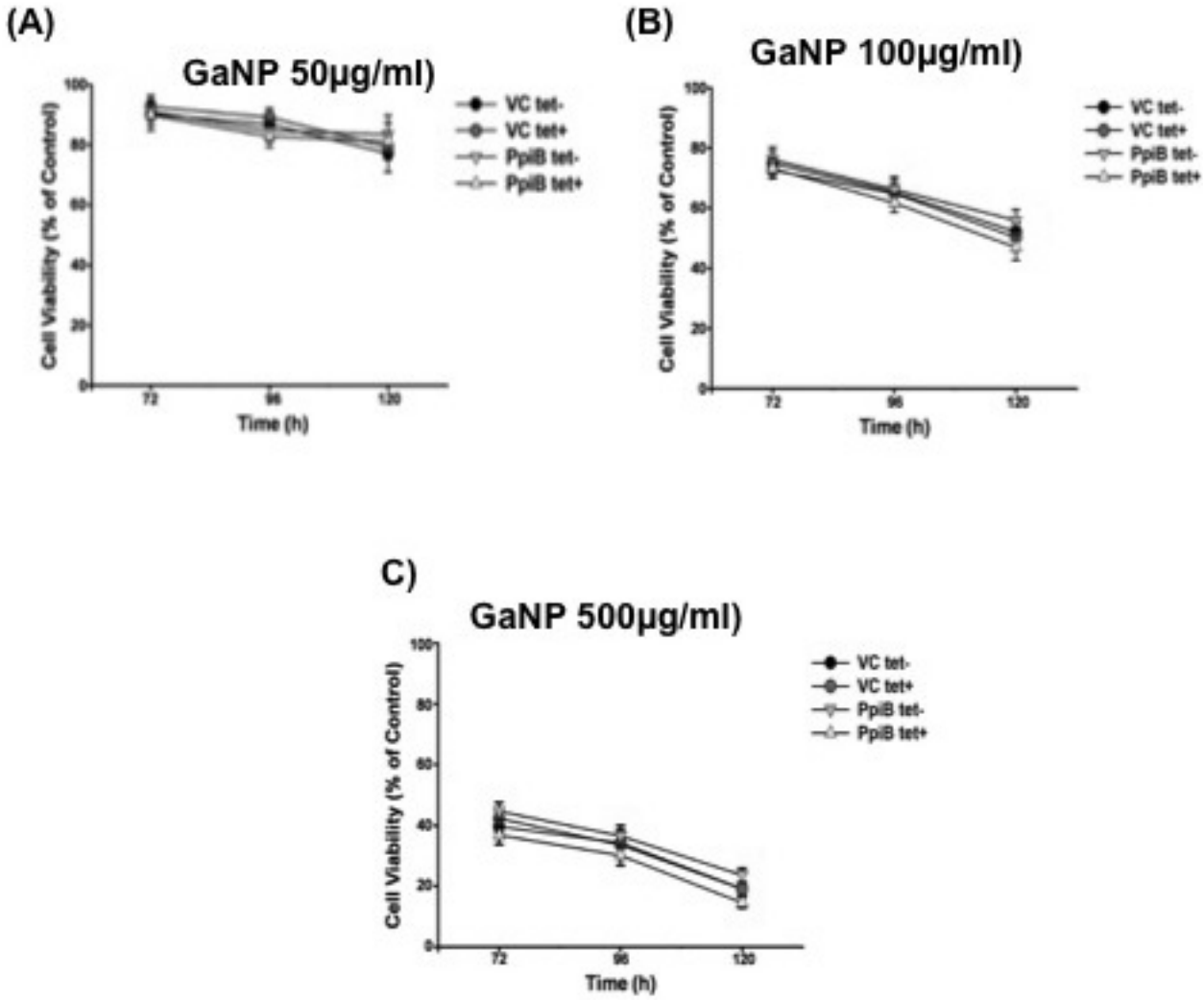

(A)
GaNP 50μg/ml)
Cell Viability (% of Control)
Time (h)
VC tet-
VC tet+
PpiB tet-
PpiB tet+
(B)
GaNP 100μg/ml)
Cell Viability (% of Control)
Time (h)
VC tet-
VC tet+
PpiB tet-
PpiB tet+
C)
GaNP 500μg/ml)
Cell Viability (% of Control)
Time (h)
VC tet-
VC tet+
PpiB tet-
PpiB tet+

Figure 22

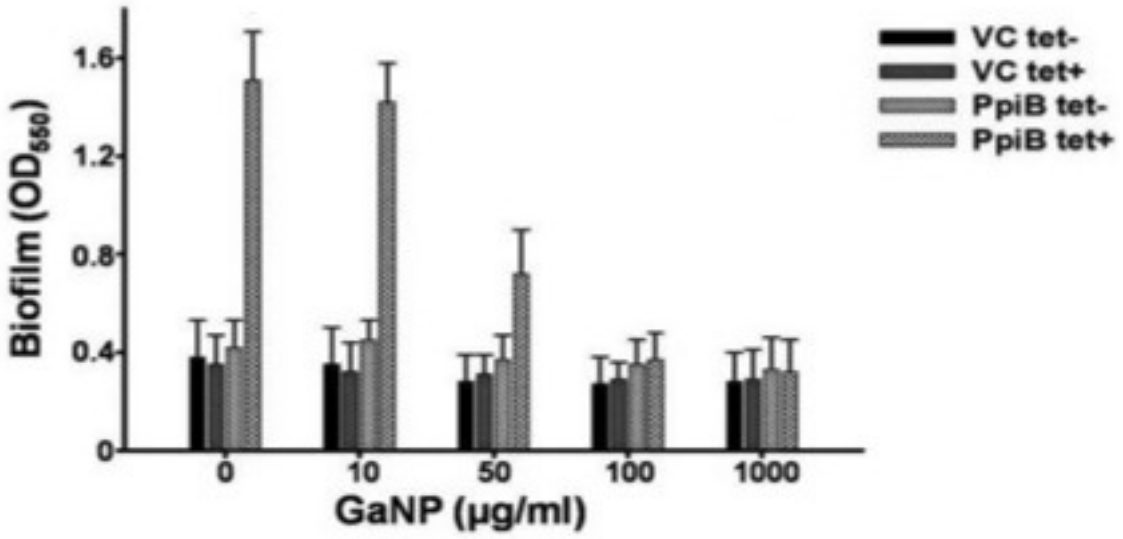

VC tet-
VC tet+
PpiB tet-
PpiB tet+
Biofilm (OD550)
1.6
1.2
0.8
0.4
0
0
10
50
100
1000
GaNP (µg/ml)

Figure 23

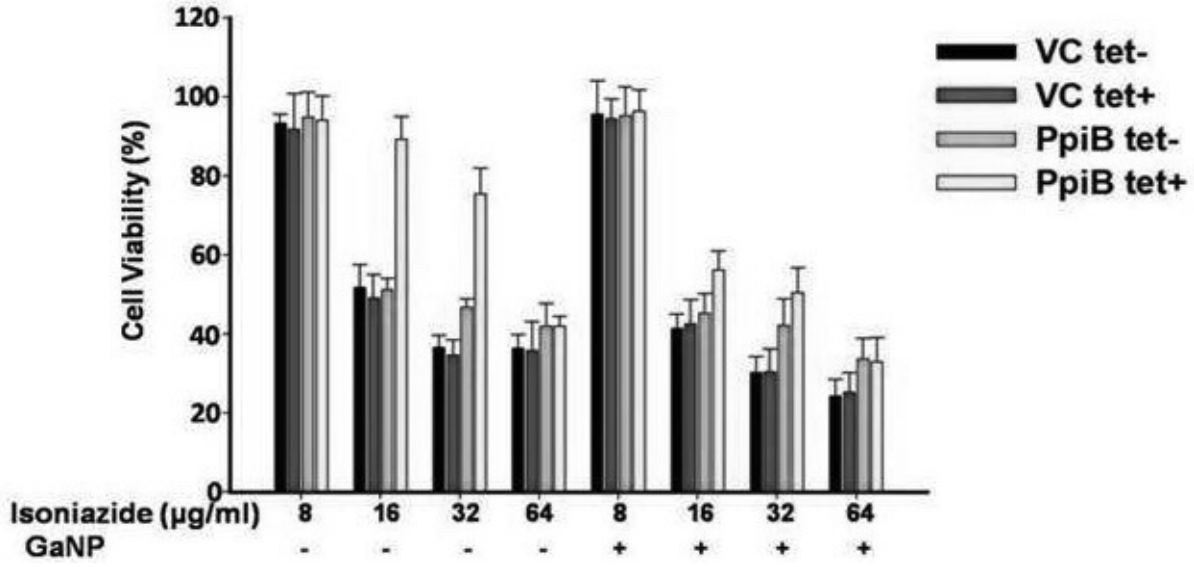

120
100
80
60
40
20
0
Cell Viability (%)
VC tet-
VC tet+
PpiB tet-
PpiB tet+
Isoniazide (µg/ml)
8
16
32
64
8
16
32
64
GaNP
-
-
-
-
+
+
+
+

Figure 24

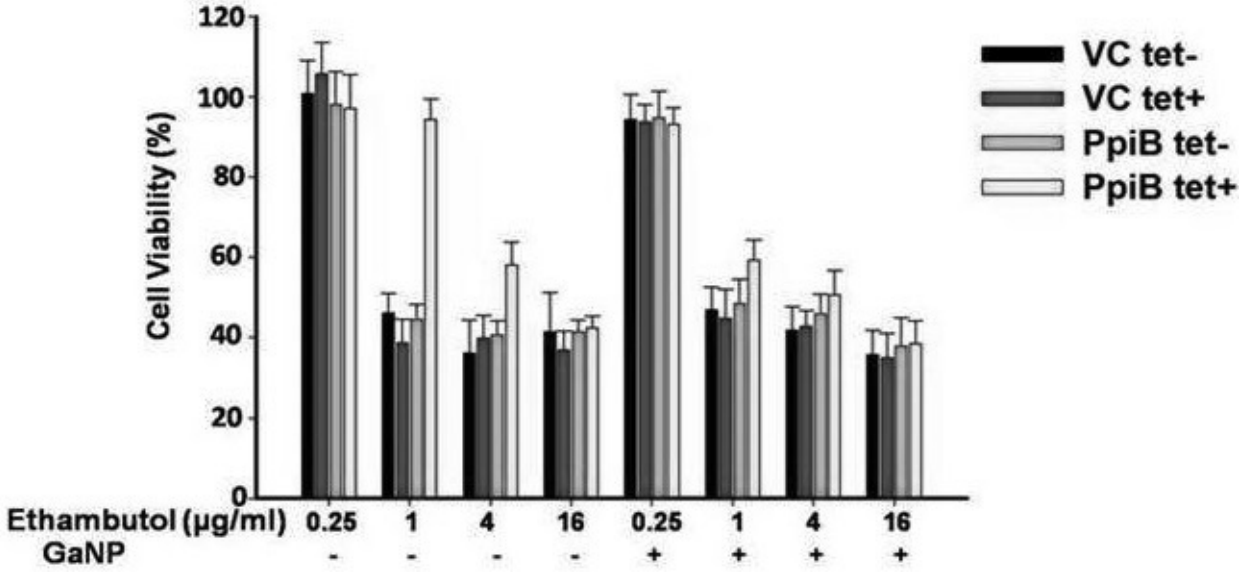

120
100
80
60
40
20
0
Cell Viability (%)
VC tet-
VC tet+
PpiB tet-
PpiB tet+
Ethambutol (μg/ml) 0.25 1 4 16 0.25 1 4 16
GaNP - - - - + + + +

Figure 25

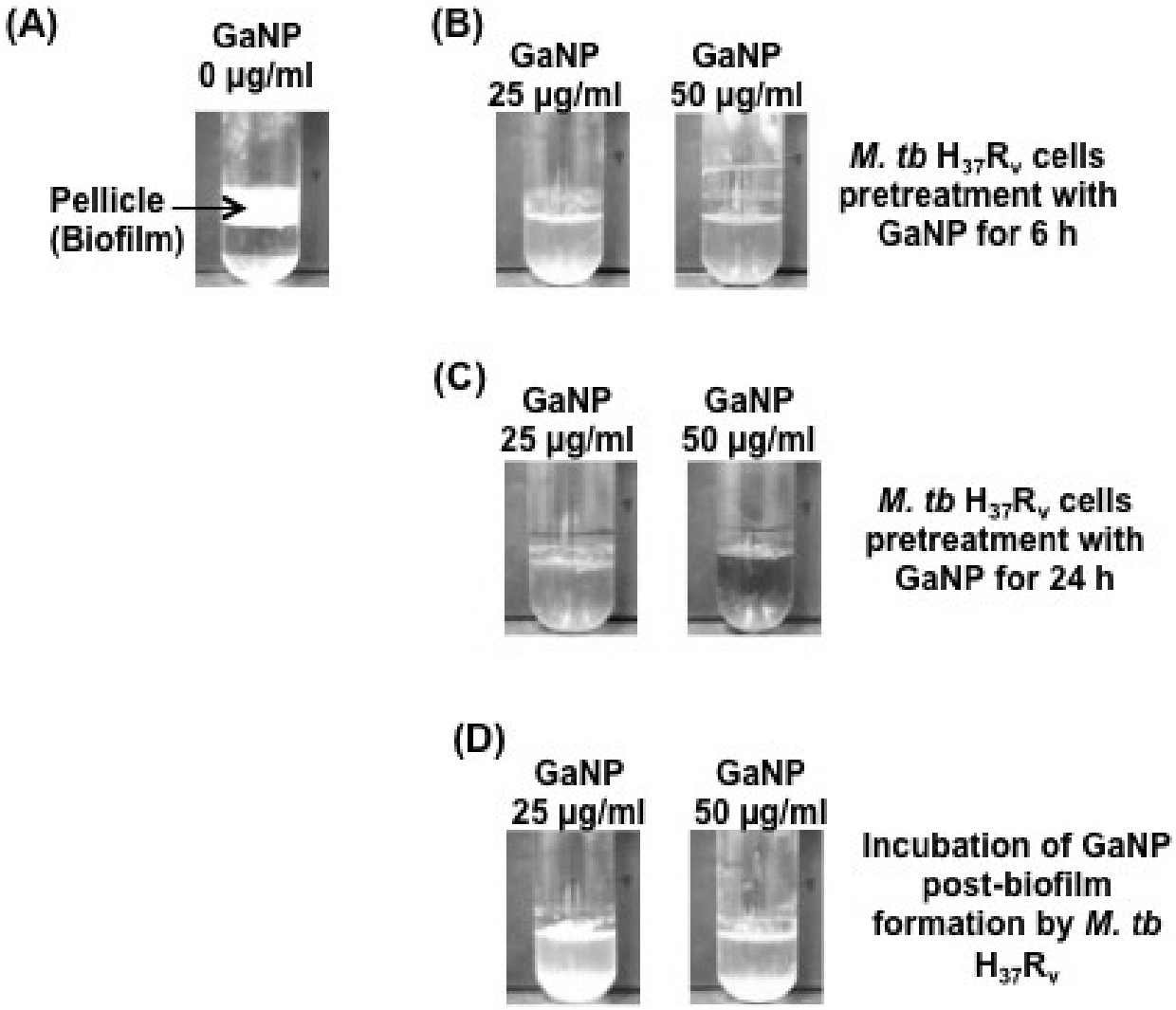

(A)
GaNP
0 µg/ml
Pellicle
(Biofilm)
(B)
GaNP
25 µg/ml
GaNP
50 µg/ml
M. tb H37Rv cells pretreatment with GaNP for 6 h
(C)
GaNP
25 µg/ml
GaNP
50 µg/ml
M. tb H37Rv cells pretreatment with GaNP for 24 h
(D)
GaNP
25 µg/ml
GaNP
50 µg/ml
Incubation of GaNP post-biofilm formation by M. tb H37Rv

Figure 26

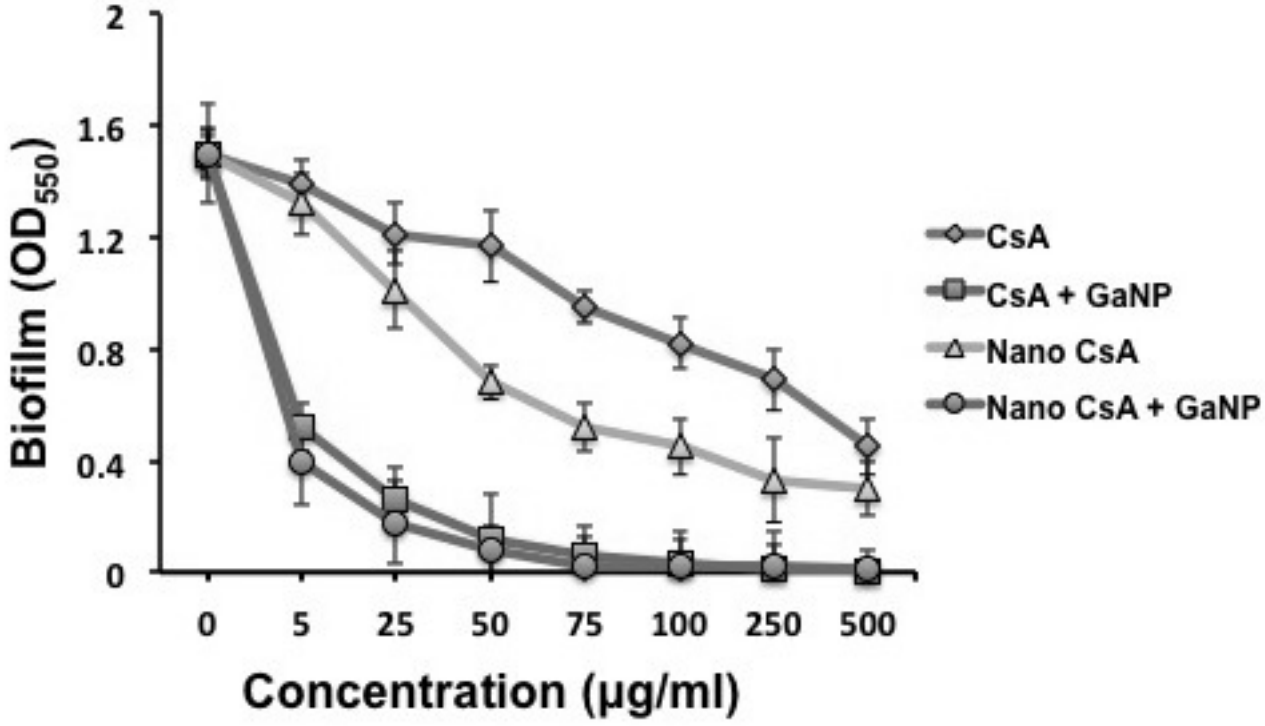

Biofilm (OD_{550})
2
1.6
1.2
0.8
0.4
0
0
5
25
50
75
100
250
500
Concentration (µg/ml)
CsA
CsA + GaNP
Nano CsA
Nano CsA + GaNP

Figure 27

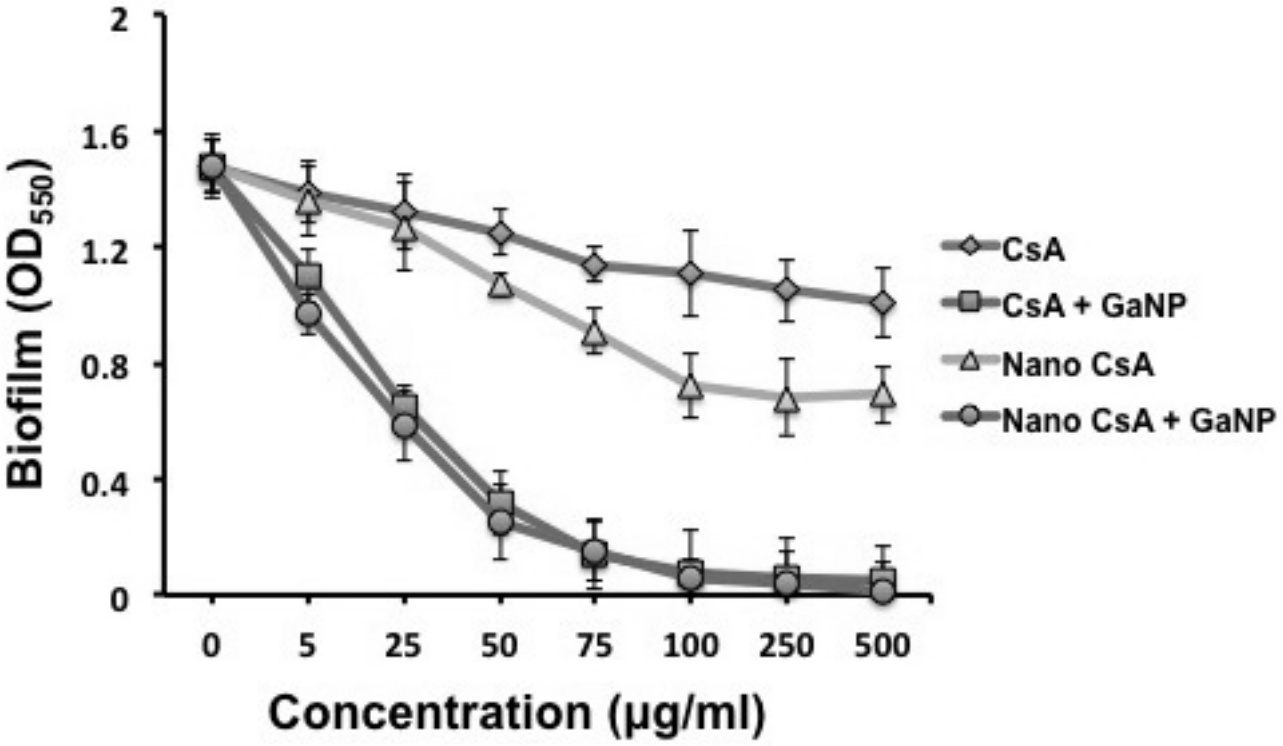

Biofilm (OD_{550})
2
1.6
1.2
0.8
0.4
0
0
5
25
50
75
100
250
500
Concentration (µg/ml)
CsA
CsA + GaNP
Nano CsA
Nano CsA + GaNP

Figure 28

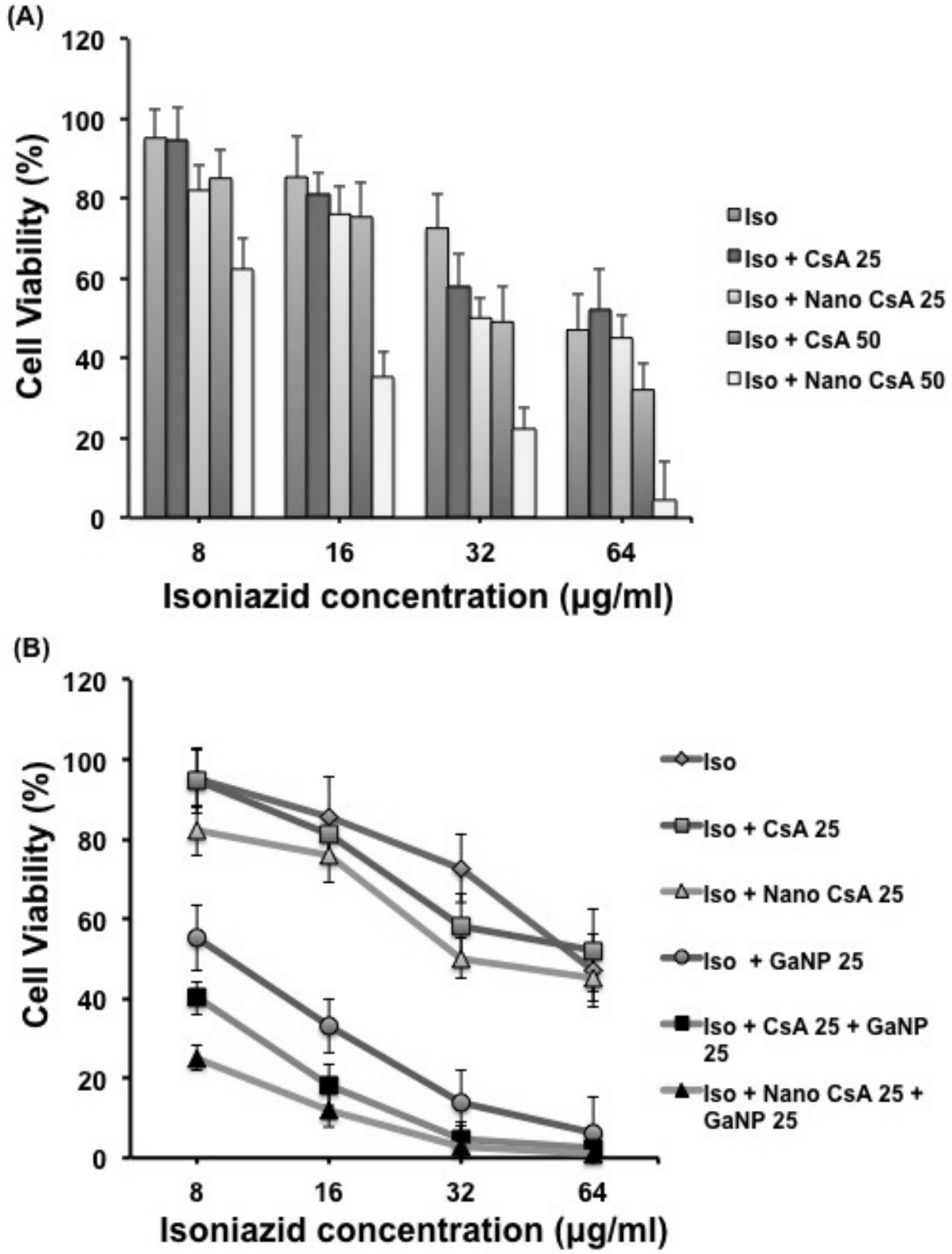

(A)
Cell Viability (%)
120
100
80
60
40
20
0
8
16
32
64
Isoniazid concentration (µg/ml)
Iso
Iso + CsA 25
Iso + Nano CsA 25
Iso + CsA 50
Iso + Nano CsA 50
(B)
Cell Viability (%)
120
100
80
60
40
20
0
8
16
32
64
Isoniazid concentration (µg/ml)
Iso
Iso + CsA 25
Iso + Nano CsA 25
Iso + GaNP 25
Iso + CsA 25 + GaNP 25
Iso + Nano CsA 25 + GaNP 25

Figure 29

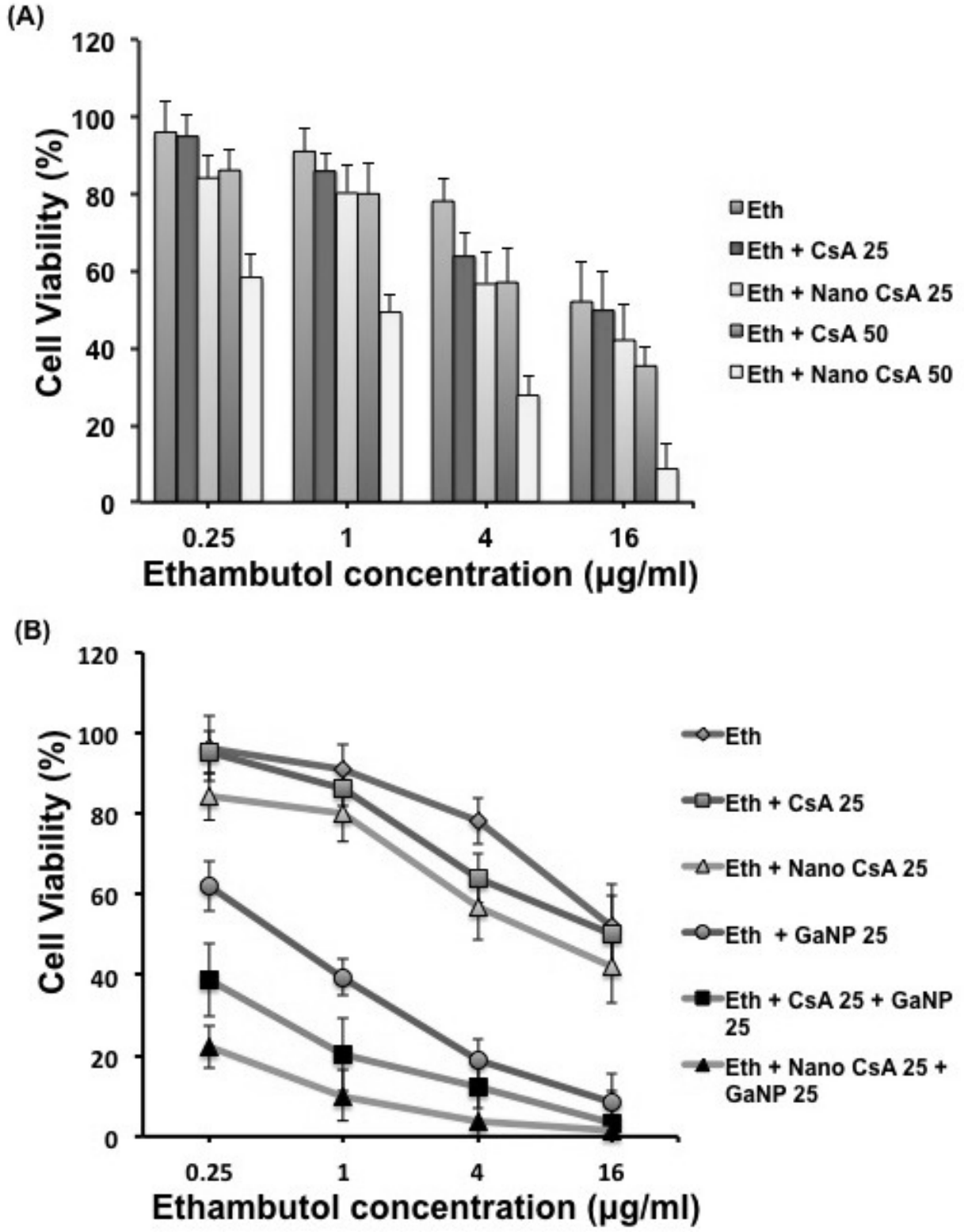

(A)
Cell Viability (%)
120
100
80
60
40
20
0
0.25
1
4
16
Ethambutol concentration (µg/ml)
Eth
Eth + CsA 25
Eth + Nano CsA 25
Eth + CsA 50
Eth + Nano CsA 50
(B)
Cell Viability (%)
120
100
80
60
40
20
0
0.25
1
4
16
Ethambutol concentration (µg/ml)
Eth
Eth + CsA 25
Eth + Nano CsA 25
Eth + GaNP 25
Eth + CsA 25 + GaNP 25
Eth + Nano CsA 25 + GaNP 25

Figure 30

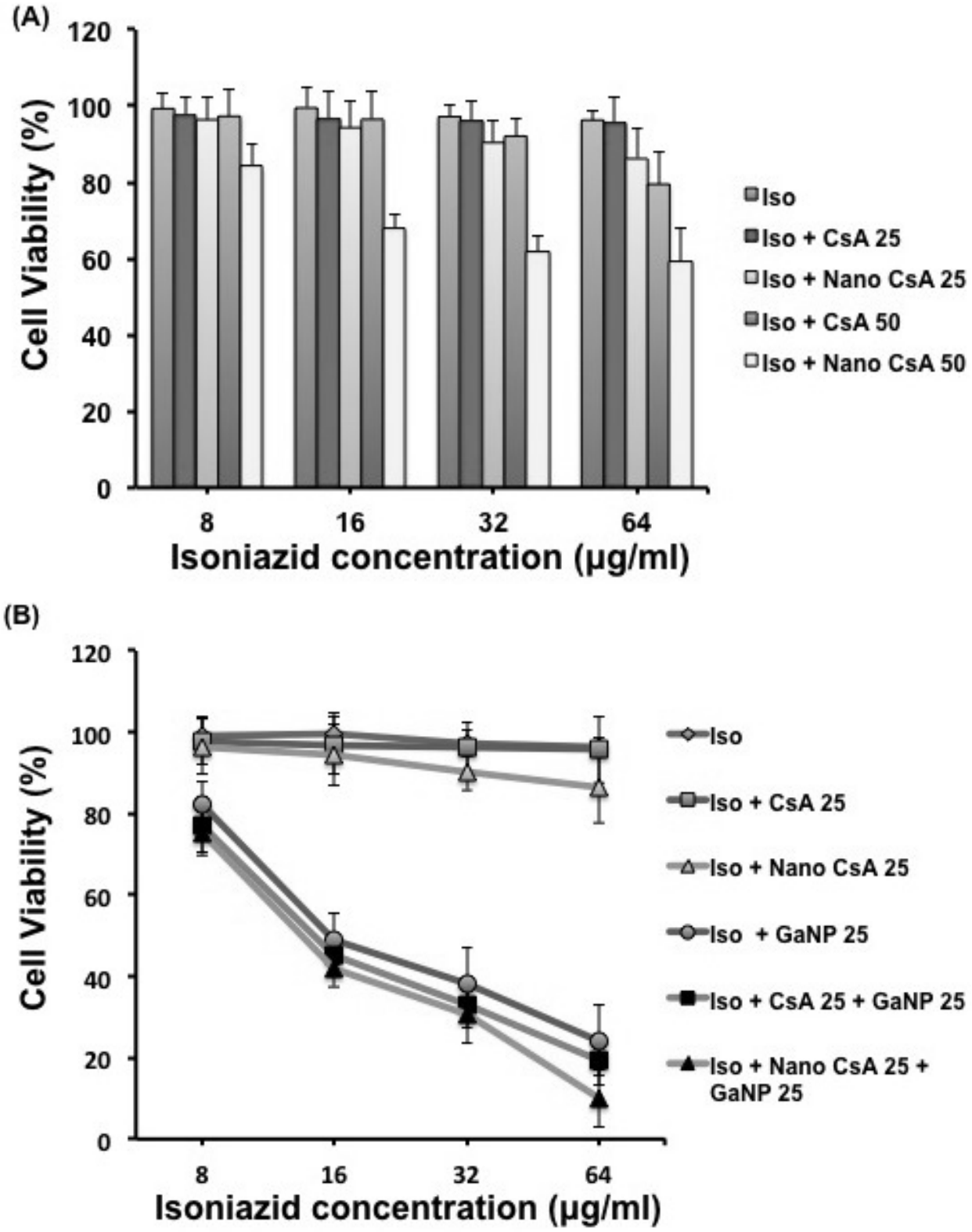

(A)
Cell Viability (%)
120
100
80
60
40
20
0
8
16
32
64
Isoniazid concentration (µg/ml)
Iso
Iso + CsA 25
Iso + Nano CsA 25
Iso + CsA 50
Iso + Nano CsA 50
(B)
Cell Viability (%)
120
100
80
60
40
20
0
8
16
32
64
Isoniazid concentration (µg/ml)
Iso
Iso + CsA 25
Iso + Nano CsA 25
Iso + GaNP 25
Iso + CsA 25 + GaNP 25
Iso + Nano CsA 25 + GaNP 25

Figure 31

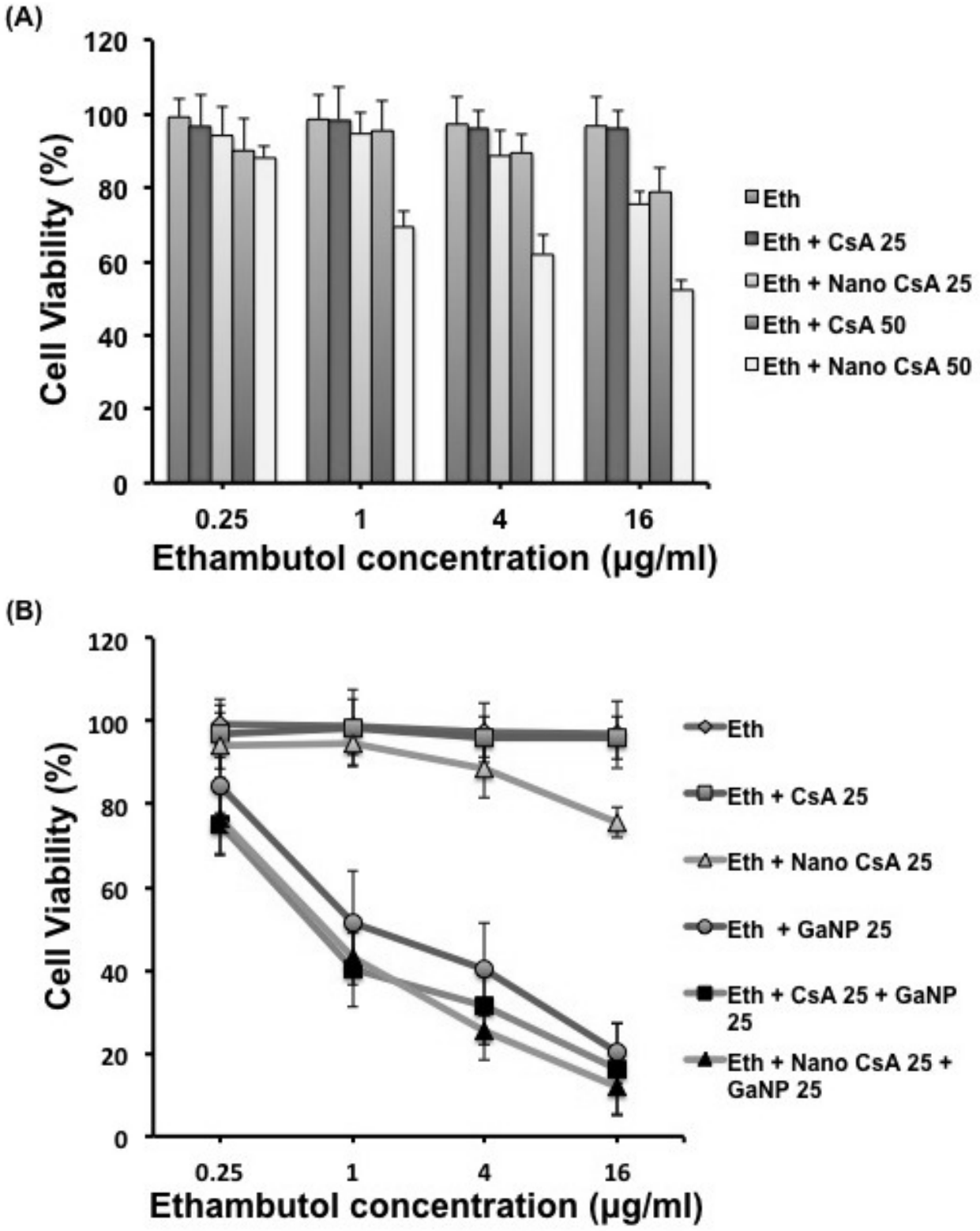

(A)
120
100
80
60
40
20
0
Cell Viability (%)
0.25
1
4
16
Ethambutol concentration (µg/ml)
Eth
Eth + CsA 25
Eth + Nano CsA 25
Eth + CsA 50
Eth + Nano CsA 50
(B)
120
100
80
60
40
20
0
Cell Viability (%)
0.25
1
4
16
Ethambutol concentration (µg/ml)
Eth
Eth + CsA 25
Eth + Nano CsA 25
Eth + GaNP 25
Eth + CsA 25 + GaNP 25
Eth + Nano CsA 25 + GaNP 25

Figure 32