Figuren

Fig. 1 A

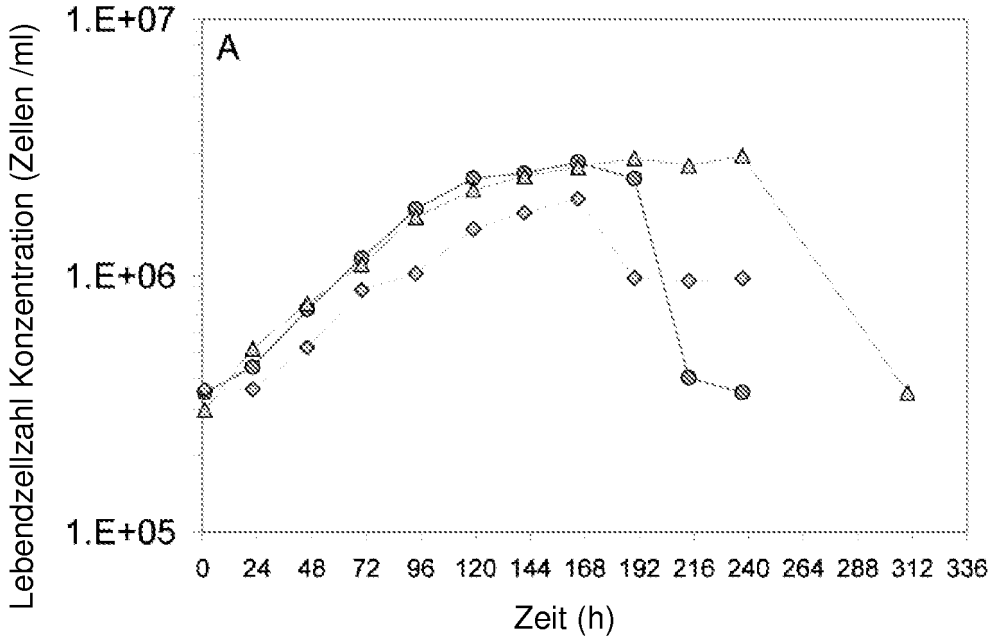


Fig. 1 B

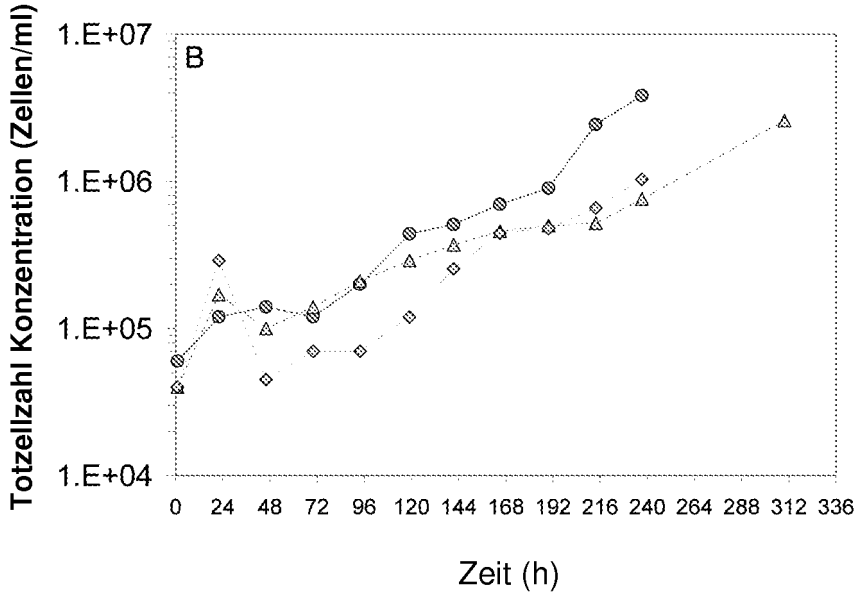


Fig. 1 C

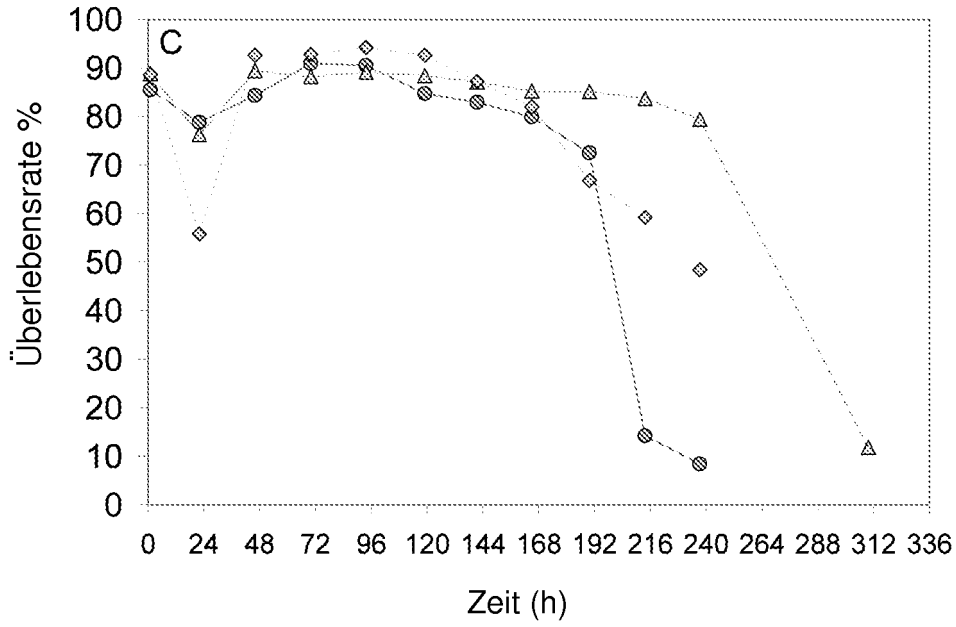

C
Überlebensrate %
100
90
80
70
60
50
40
30
20
10
0
0 24 48 72 96 120 144 168 192 216 240 264 288 312 336
Zeit (h)

Fig. 1D

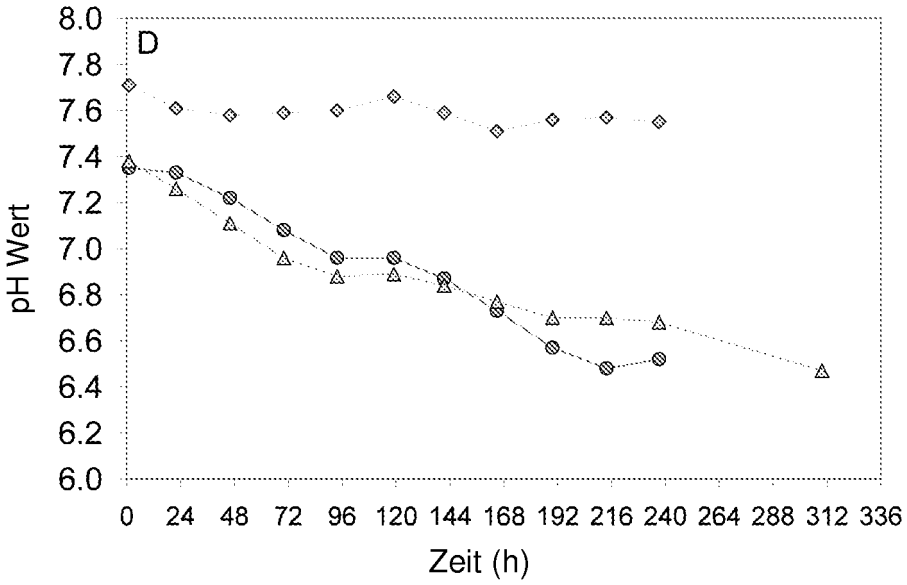

D
pH Wert
8.0
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
6.2
6.0
0 24 48 72 96 120 144 168 192 216 240 264 288 312 336
Zeit (h)

Fig. 1 E

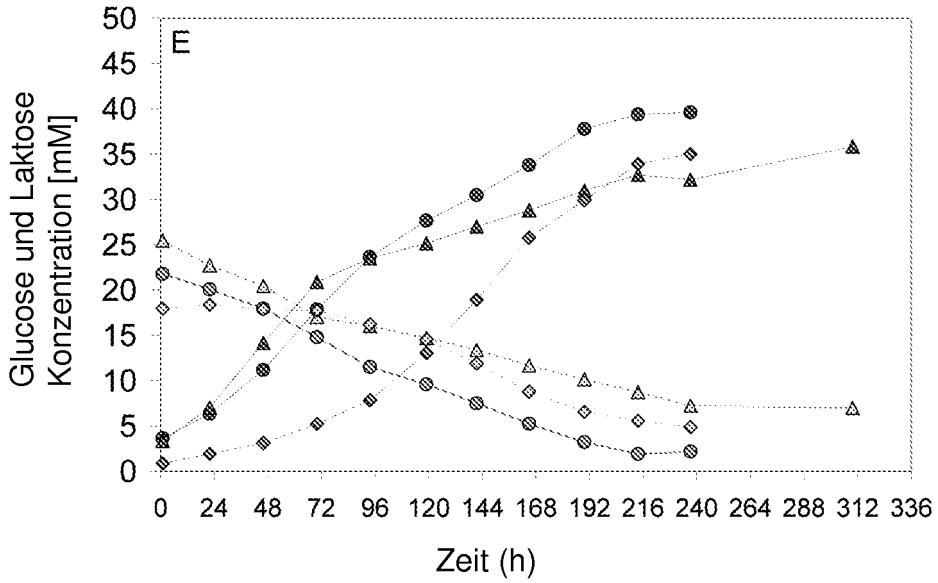

E
Glucose und Laktose Konzentration [mM]
0
5
10
15
20
25
30
35
40
45
50
0 24 48 72 96 120 144 168 192 216 240 264 288 312 336
Zeit (h)

Fig. 1 F

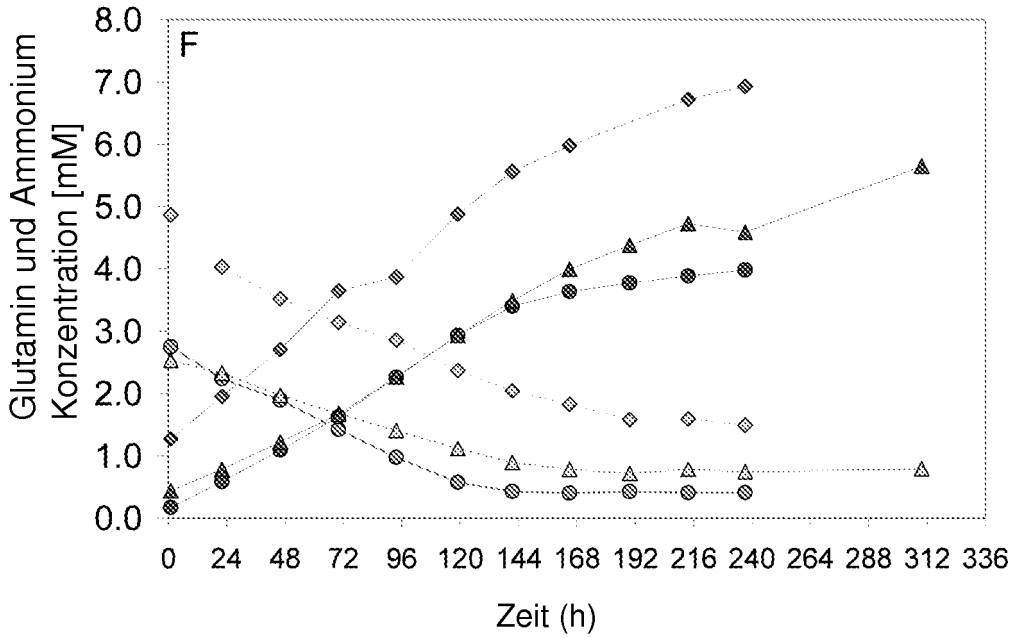

F
Glutamin und Ammonium Konzentration [mM]
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
0 24 48 72 96 120 144 168 192 216 240 264 288 312 336
Zeit (h)

Fig. 1 G

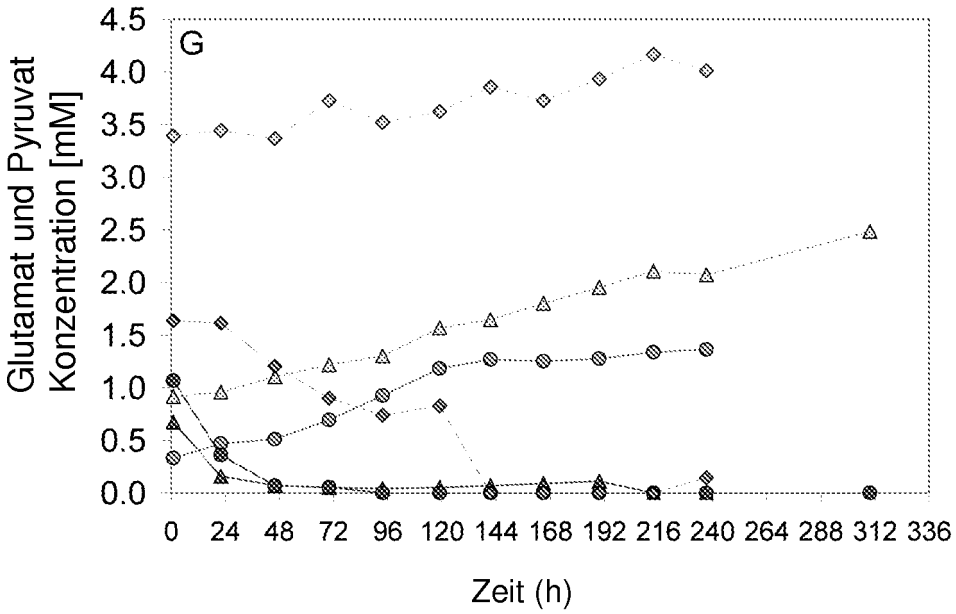

G
Glutamat und Pyruvat Konzentration [mM]
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0 24 48 72 96 120 144 168 192 216 240 264 288 312 336
Zeit (h)

Fig. 2

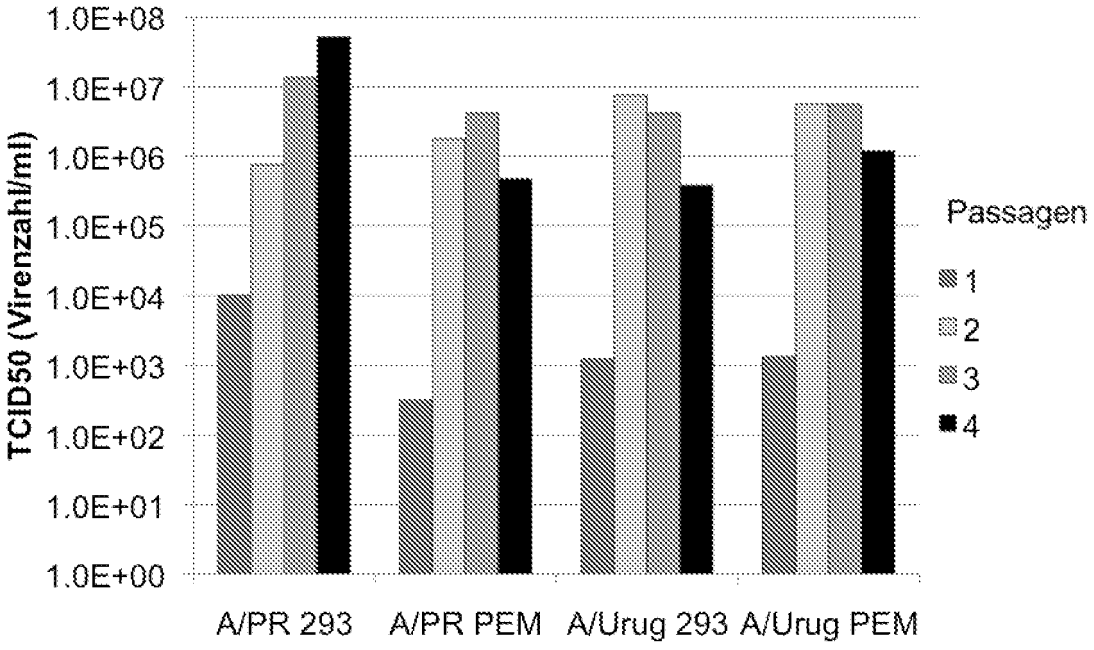

TCID50 (Virenzahl/ml)
1.0E+08
1.0E+07
1.0E+06
1.0E+05
1.0E+04
1.0E+03
1.0E+02
1.0E+01
1.0E+00
A/PR 293
A/PR PEM
A/Urug 293
A/Urug PEM
Passagen
1
2
3
4

Fig. 3 A

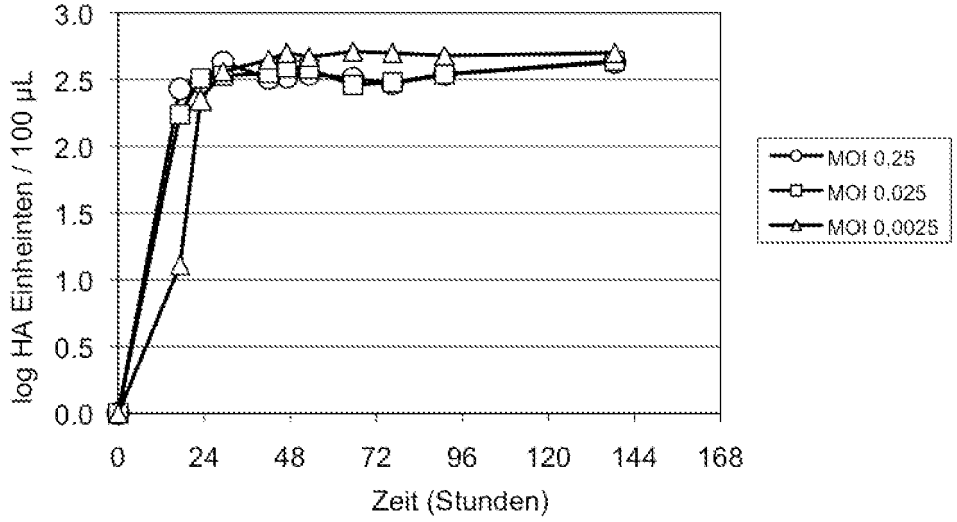

log HA Einheiten / 100 µL
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
24
48
72
96
120
144
168
Zeit (Stunden)
MOI 0,25
MOI 0,025
MOI 0,0025

Fig. 3 B

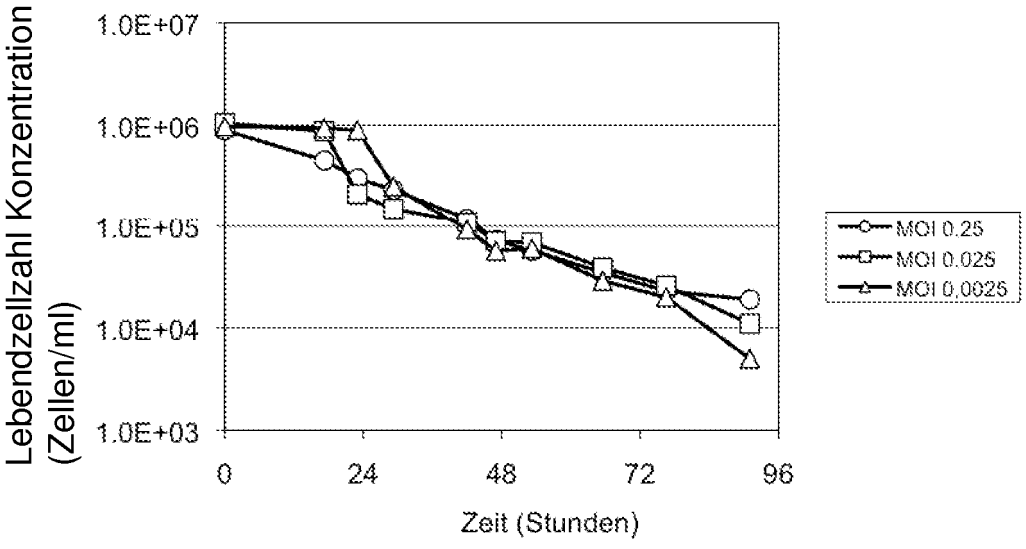

Lebendzellzahl Konzentration (Zellen/ml)
1.0E+07
1.0E+06
1.0E+05
1.0E+04
1.0E+03
0
24
48
72
96
Zeit (Stunden)
MOI 0,25
MOI 0,025
MOI 0,0025

Fig. 3 C

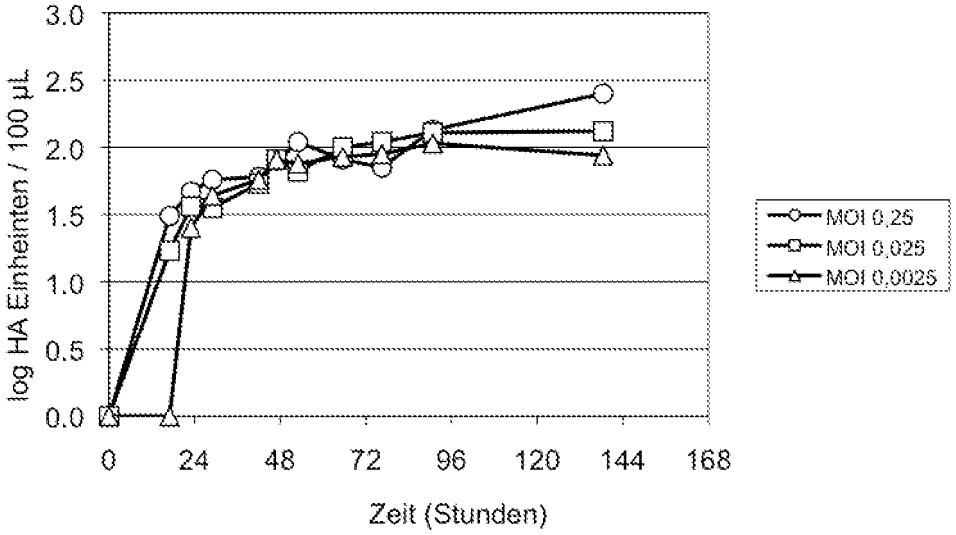

3.0
2.5
2.0
1.5
1.0
0.5
0.0
log HA Einheiten / 100 µL
0
24
48
72
96
120
144
168
Zeit (Stunden)
MOI 0,25
MOI 0,025
MOI 0,0025

Fig. 3 D

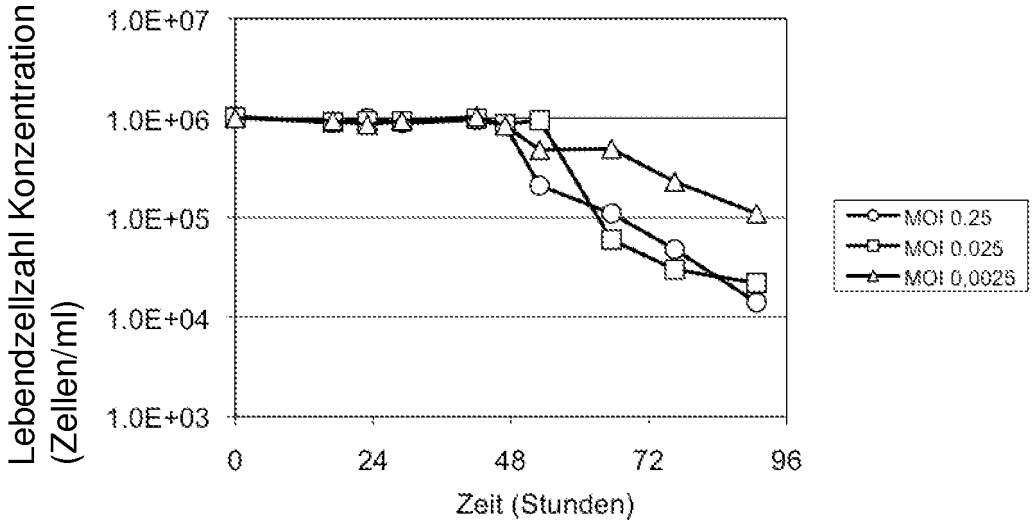

1.0E+07
1.0E+06
1.0E+05
1.0E+04
1.0E+03
Lebendzellzahl Konzentration (Zellen/ml)
0
24
48
72
96
Zeit (Stunden)
MOI 0.25
MOI 0.025
MOI 0.0025

Fig. 3 E

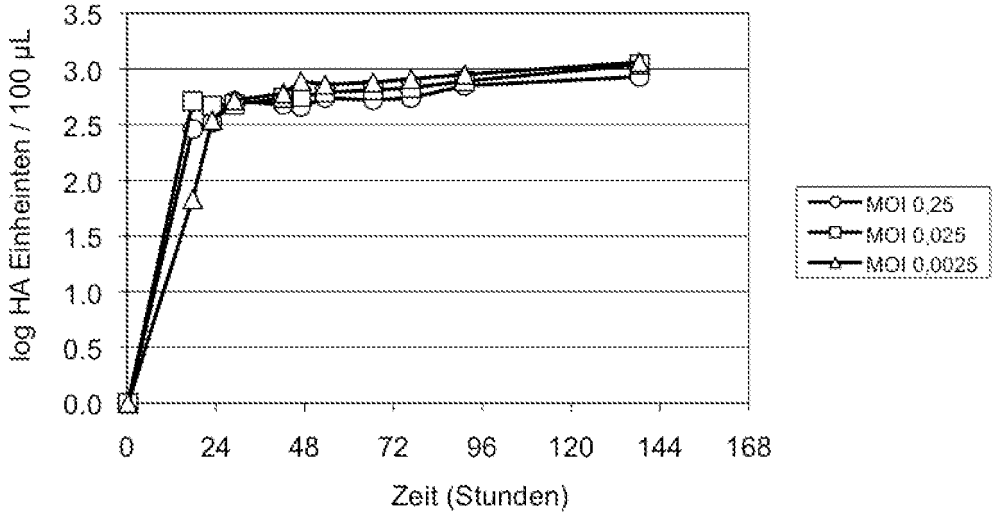

log HA Einheiten / 100 µL
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
24
48
72
96
120
144
168
Zeit (Stunden)
MOI 0,25
MOI 0,025
MOI 0,0025

Fig. 3 F

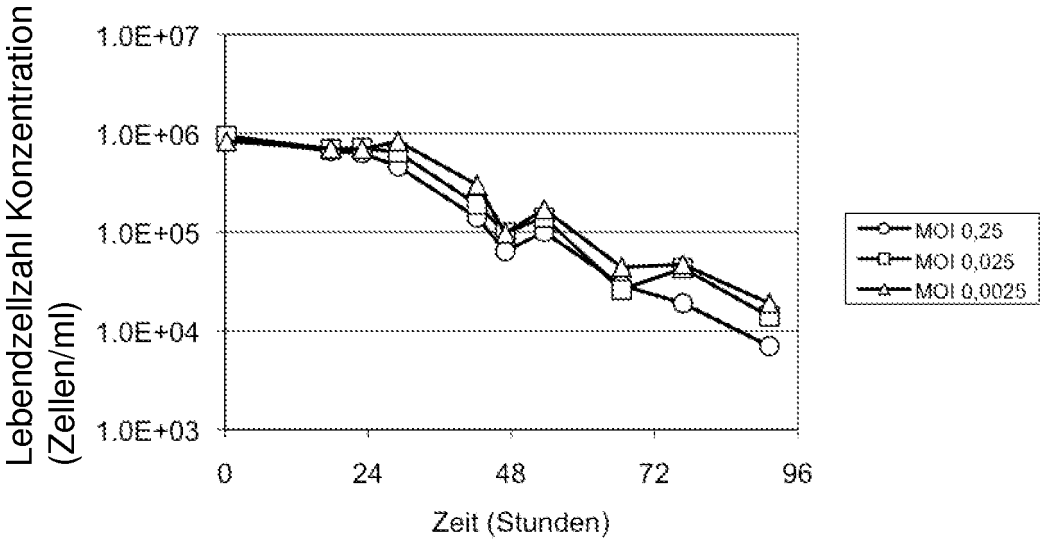

Lebendzellzahl Konzentration (Zellen/ml)
1.0E+07
1.0E+06
1.0E+05
1.0E+04
1.0E+03
0
24
48
72
96
Zeit (Stunden)
MOI 0,25
MOI 0,025
MOI 0,0025

Fig. 4 A

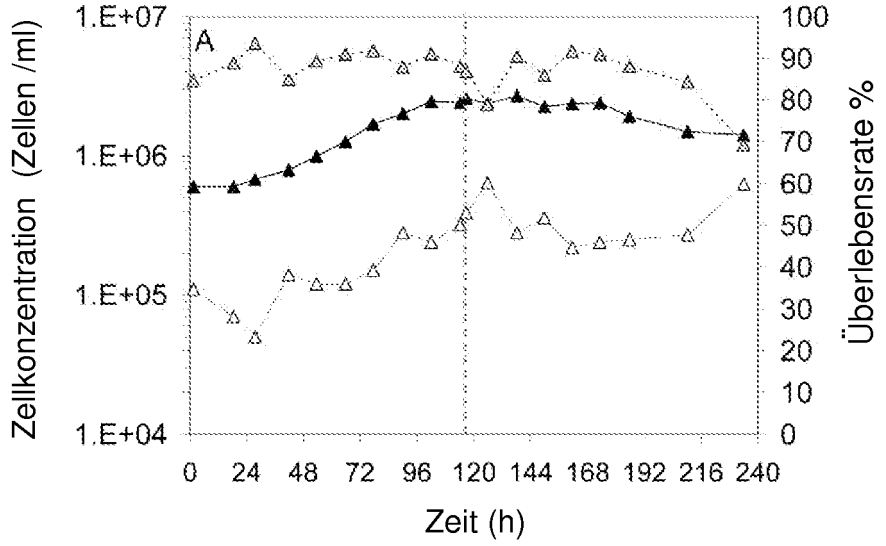

A
Zellkonzentration (Zellen /ml)
1.E+07
1.E+06
1.E+05
1.E+04
Überlebensrate %
100
90
80
70
60
50
40
30
20
10
0
0 24 48 72 96 120 144 168 192 216 240
Zeit (h)

Fig. 4 B

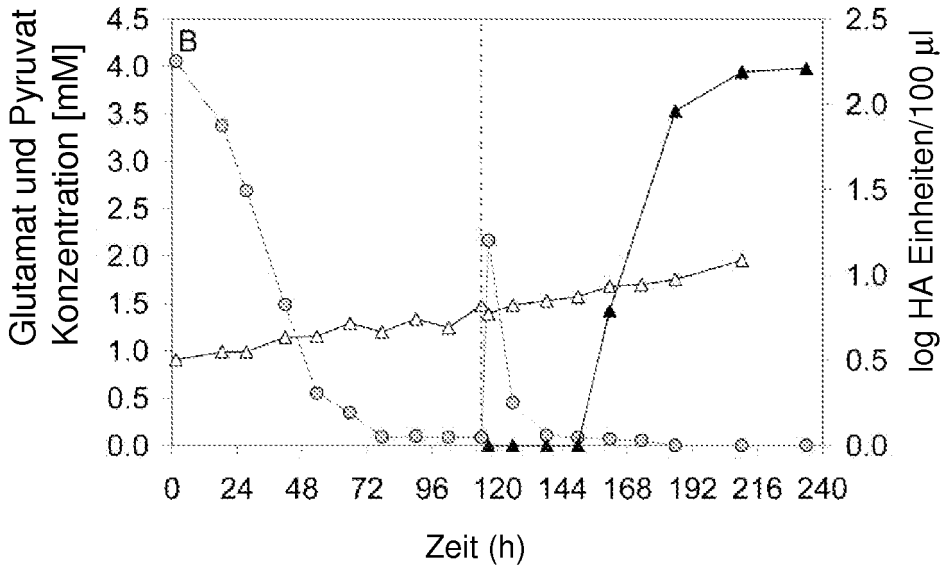

B
Glutamat und Pyruvat Konzentration [mM]
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
log HA Einheiten/100 µl
2.5
2.0
1.5
1.0
0.5
0.0
0 24 48 72 96 120 144 168 192 216 240
Zeit (h)

Fig. 4 C

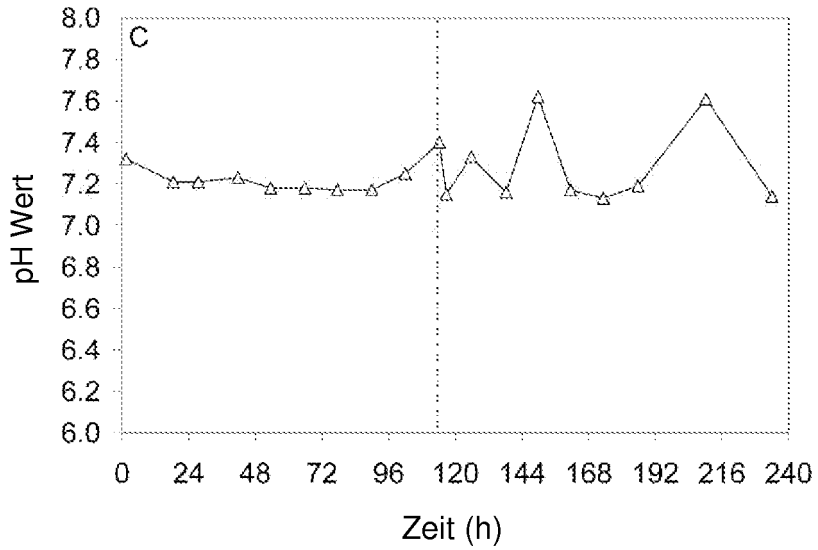

C
pH Wert
8.0
7.8
7.6
7.4
7.2
7.0
6.8
6.6
6.4
6.2
6.0
0 24 48 72 96 120 144 168 192 216 240
Zeit (h)

Fig. 4 D

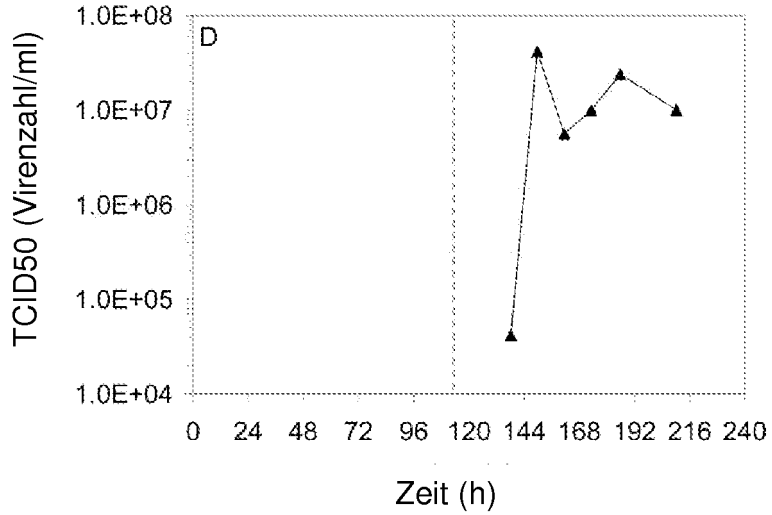

D
TCID50 (Virenzahl/ml)
1.0E+08
1.0E+07
1.0E+06
1.0E+05
1.0E+04
0 24 48 72 96 120 144 168 192 216 240
Zeit (h)

Fig. 5 A

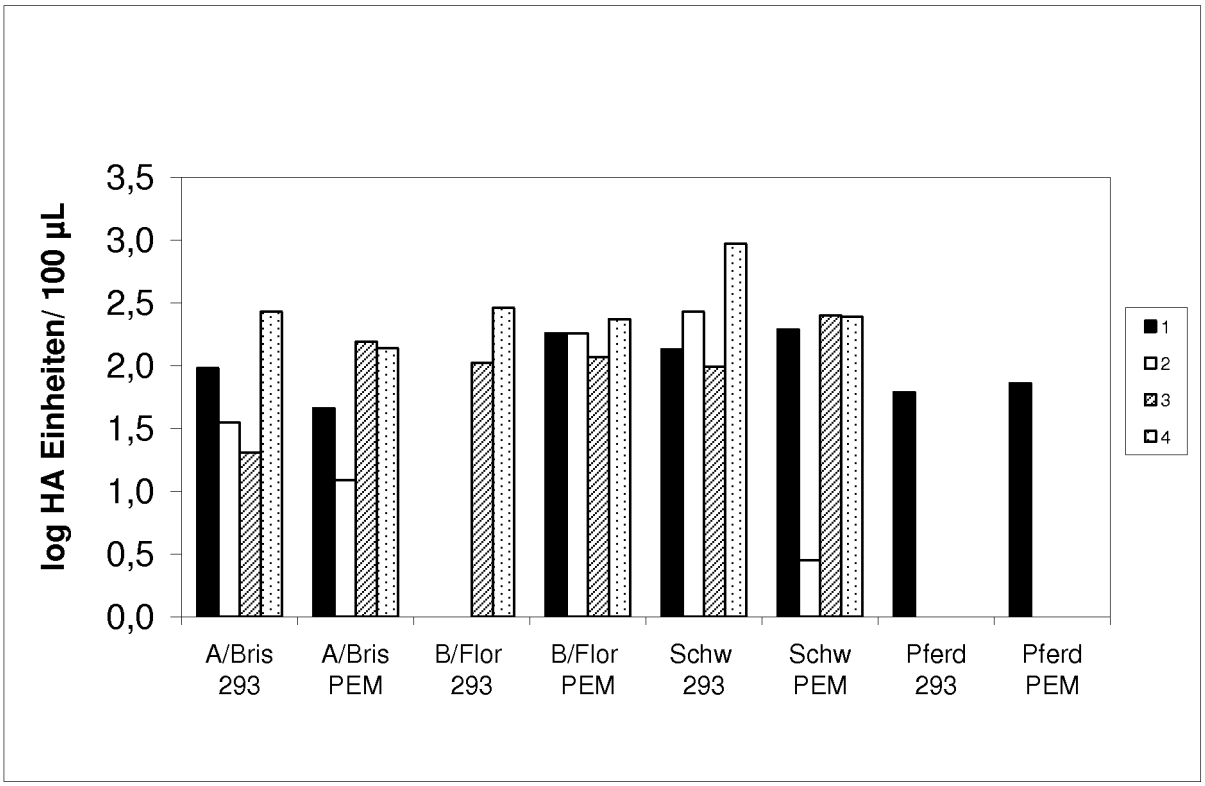

log HA Einheiten/ 100 µL
3,5
3,0
2,5
2,0
1,5
1,0
0,5
0,0
A/Bris 293
A/Bris PEM
B/Flor 293
B/Flor PEM
Schw 293
Schw PEM
Pferd 293
Pferd PEM
1
2
3
4

Fig. 5 B

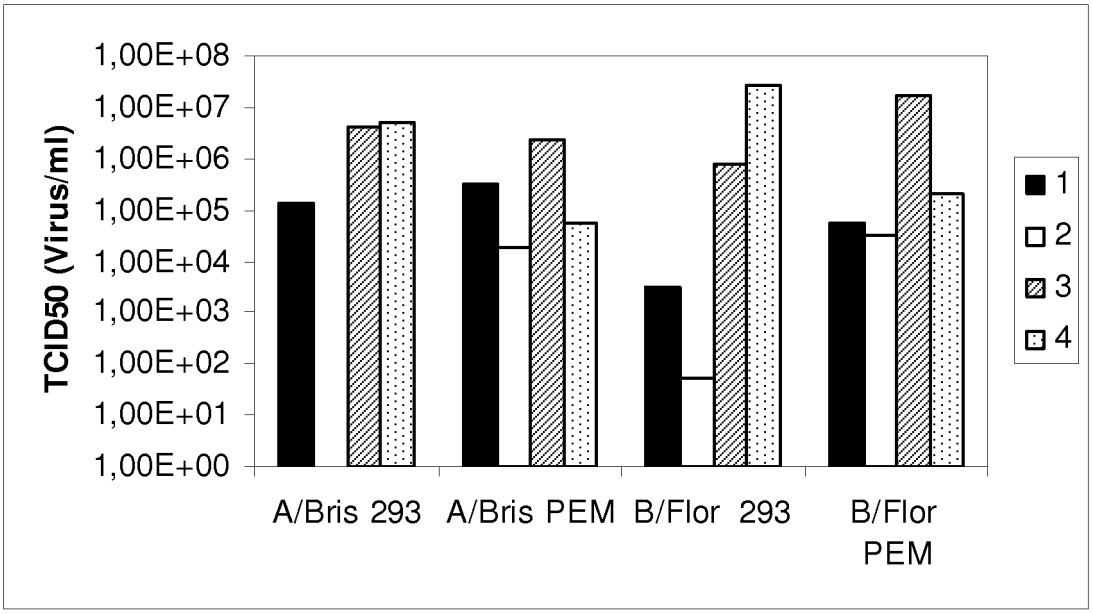

TCID50 (Virus/ml)
1,00E+08
1,00E+07
1,00E+06
1,00E+05
1,00E+04
1,00E+03
1,00E+02
1,00E+01
1,00E+00
A/Bris 293
A/Bris PEM
B/Flor 293
B/Flor PEM
1
2
3
4

Fig. 6A

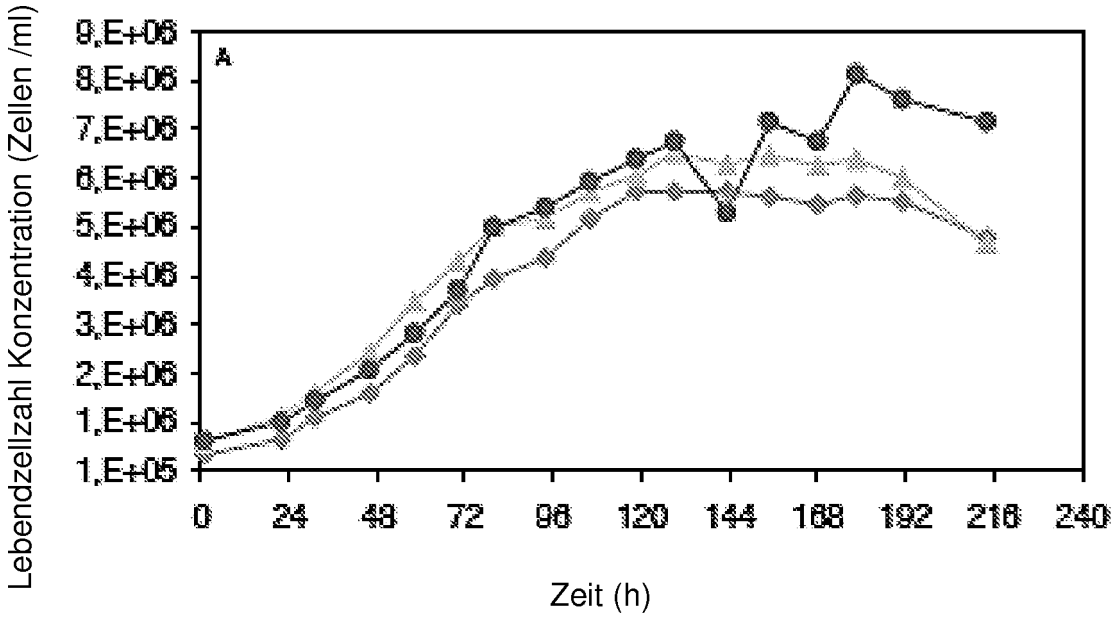

A
Lebendzellzahl Konzentration (Zellen /ml)
9,E+06
8,E+06
7,E+06
6,E+06
5,E+06
4,E+06
3,E+06
2,E+06
1,E+06
1,E+05
0
24
48
72
96
120
144
168
192
216
240
Zeit (h)

Fig. 6B

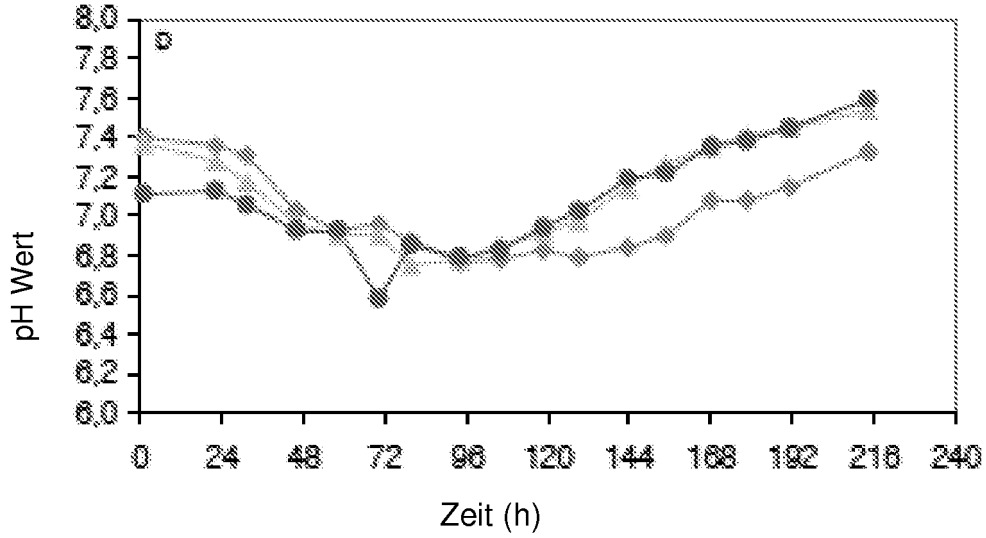

B
pH Wert
8,0
7,8
7,6
7,4
7,2
7,0
6,8
6,6
6,4
6,2
6,0
0
24
48
72
96
120
144
168
192
216
240
Zeit (h)

Fig. 7A

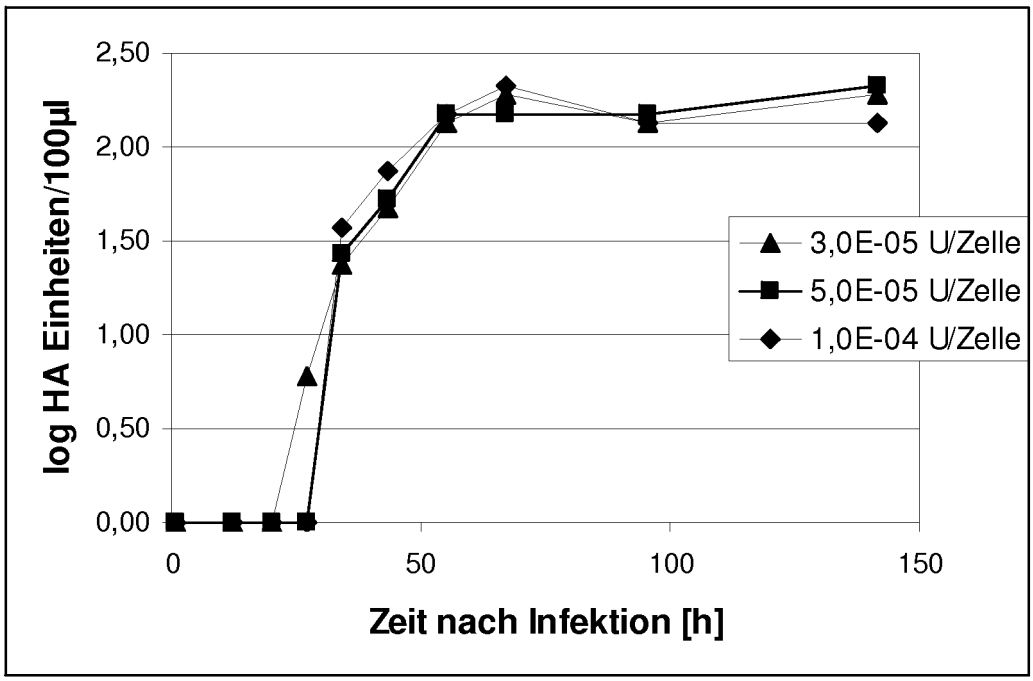

log HA Einheiten/100µl
2,50
2,00
1,50
1,00
0,50
0,00
0
50
100
150
Zeit nach Infektion [h]
3,0E-05 U/Zelle
5,0E-05 U/Zelle
1,0E-04 U/Zelle

Fig. 7 B

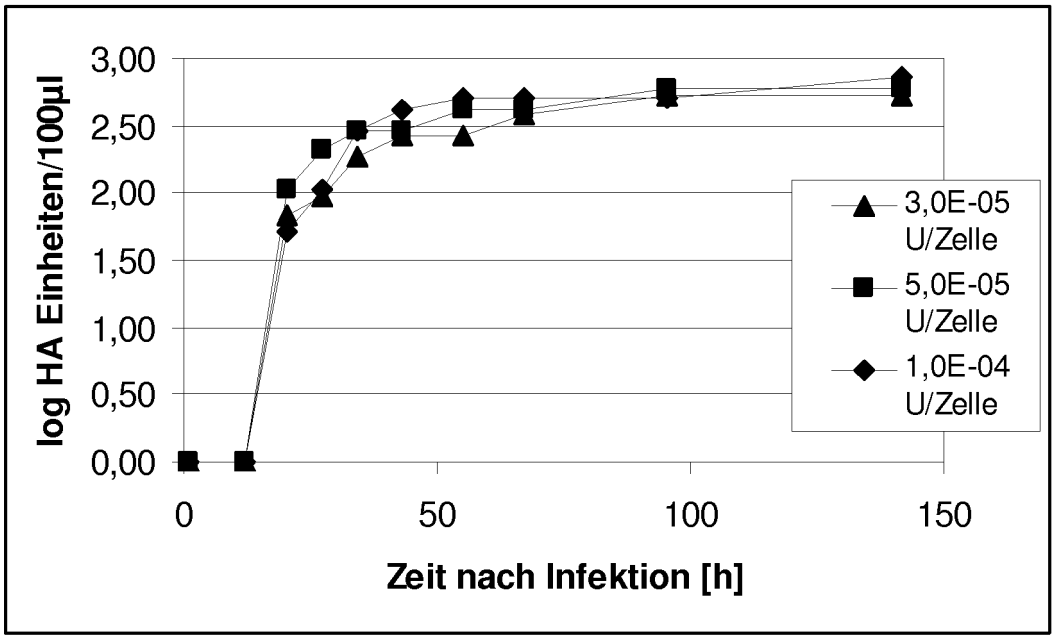

log HA Einheiten/100µl
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
50
100
150
Zeit nach Infektion [h]
3,0E-05 U/Zelle
5,0E-05 U/Zelle
1,0E-04 U/Zelle

Fig. 7 C

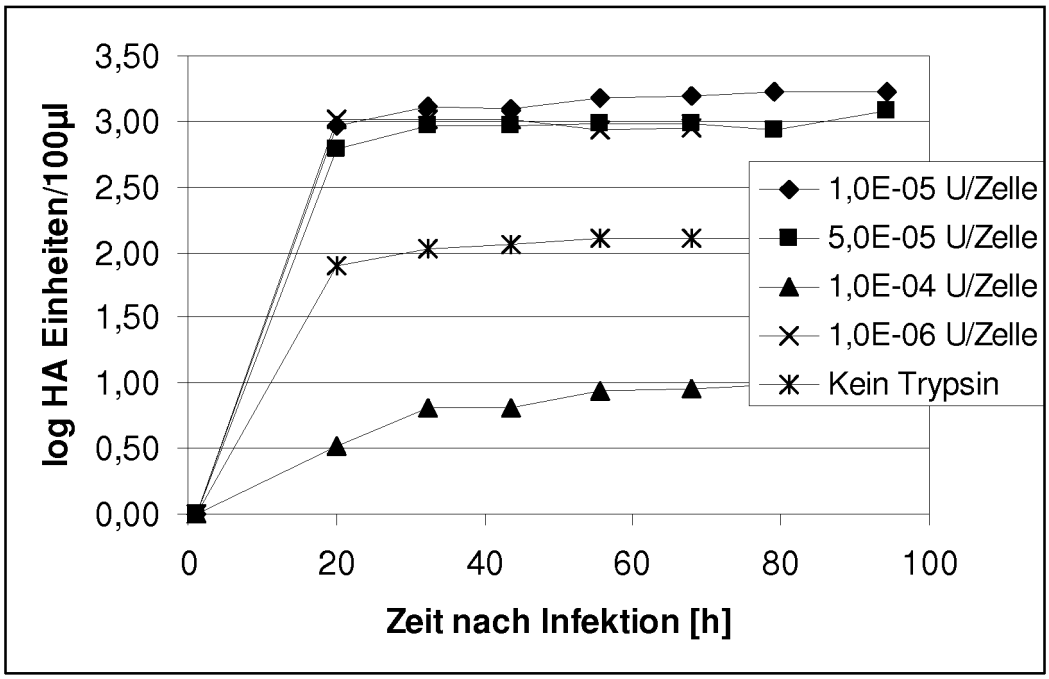

log HA Einheiten/100µl
3,50
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
20
40
60
80
100
Zeit nach Infektion [h]
1,0E-05 U/Zelle
5,0E-05 U/Zelle
1,0E-04 U/Zelle
1,0E-06 U/Zelle
Kein Trypsin

Fig. 8 A

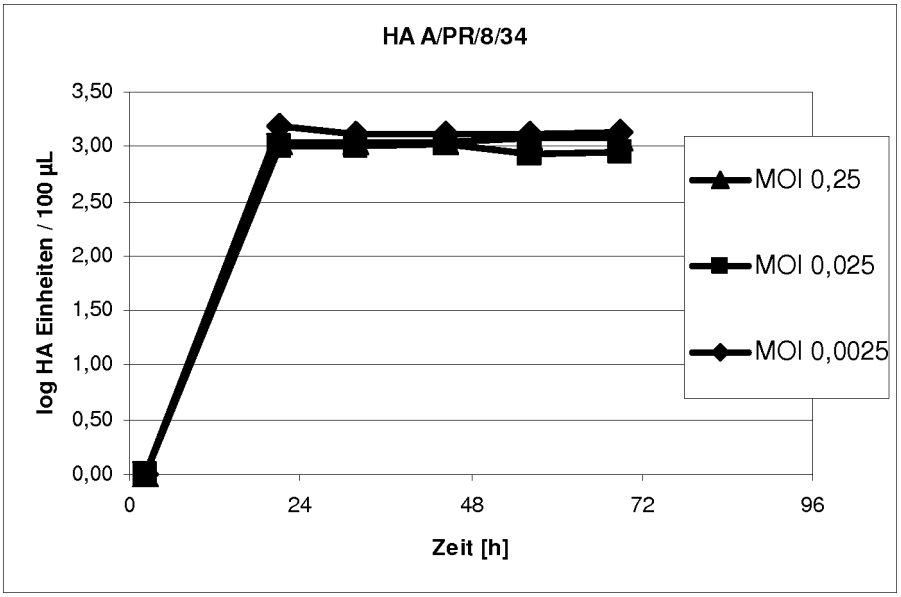

HA A/PR/8/34
log HA Einheiten / 100 µL
3,50
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
24
48
72
96
Zeit [h]
MOI 0,25
MOI 0,025
MOI 0,0025

Fig. 8 B

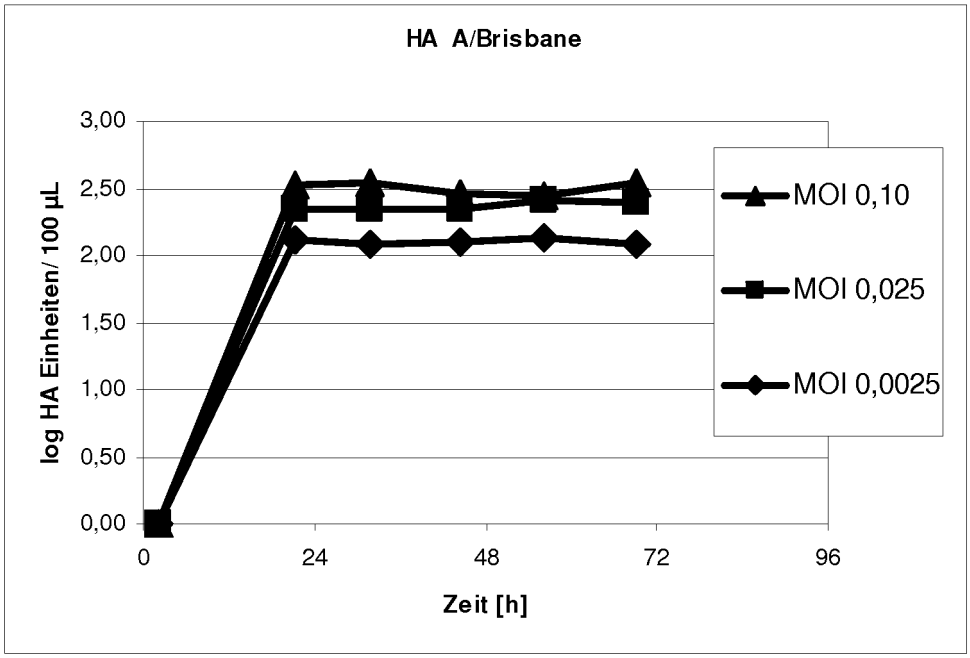

HA A/Brisbane
log HA Einheiten/ 100 µL
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
24
48
72
96
Zeit [h]
MOI 0,10
MOI 0,025
MOI 0,0025

Fig. 8 C

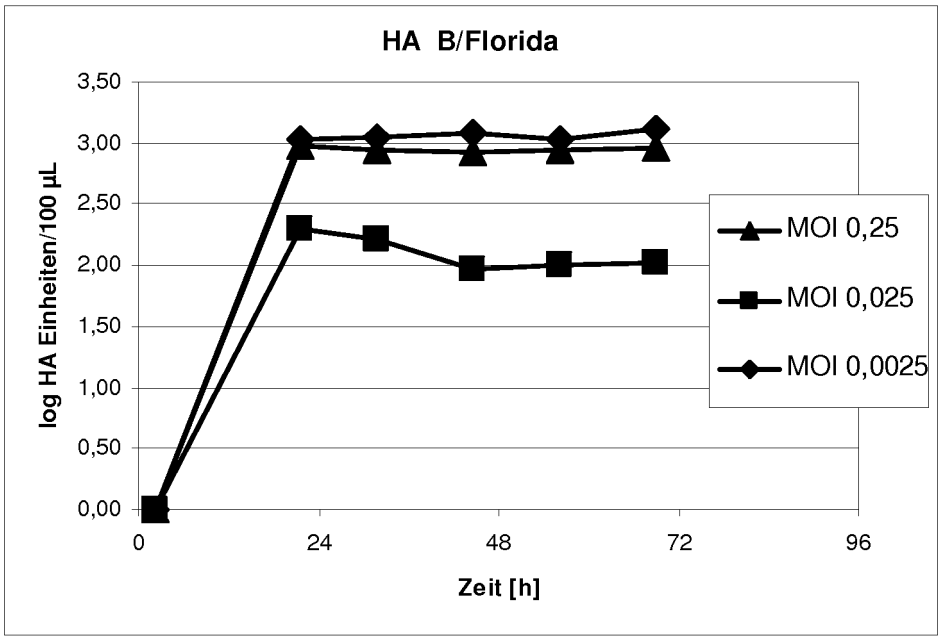

HA B/Florida
log HA Einheiten/100 µL
3,50
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
24
48
72
96
Zeit [h]
MOI 0,25
MOI 0,025
MOI 0,0025

Fig. 8 D

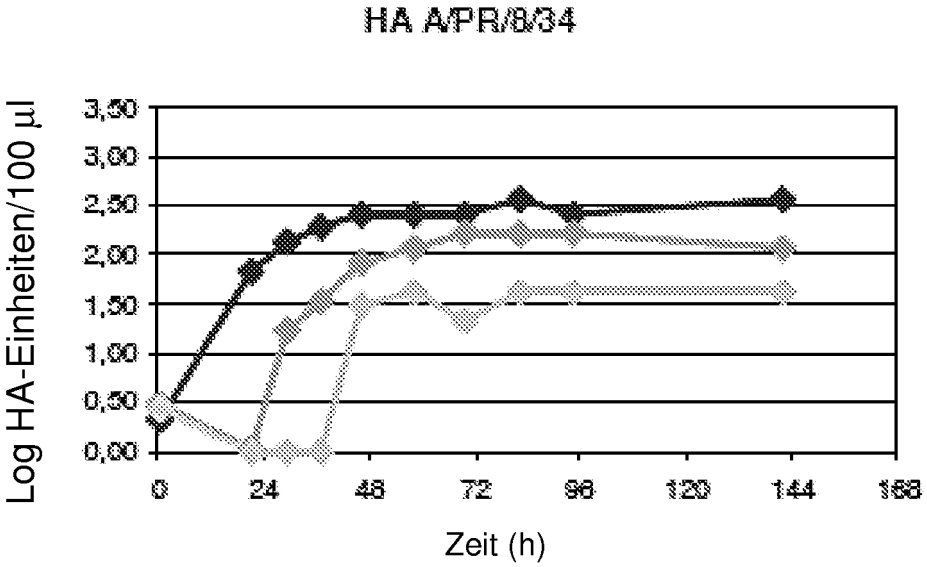

HA A/PR/8/34
Log HA-Einheiten/100 µl
3,50
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
24
48
72
96
120
144
168
Zeit (h)

Fig. 8 E

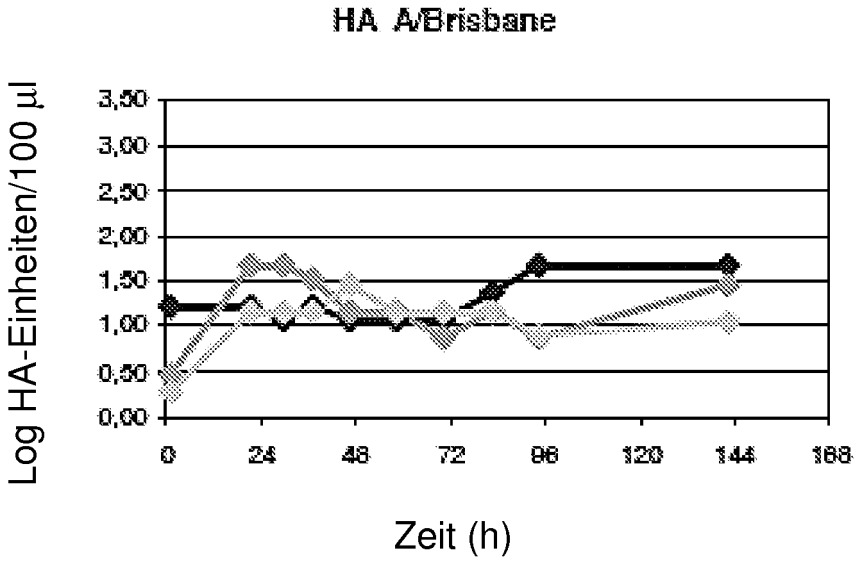

HA A/Brisbane
Log HA-Einheiten/100 µl
3,50
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
24
48
72
96
120
144
168
Zeit (h)

Fig. 8 F

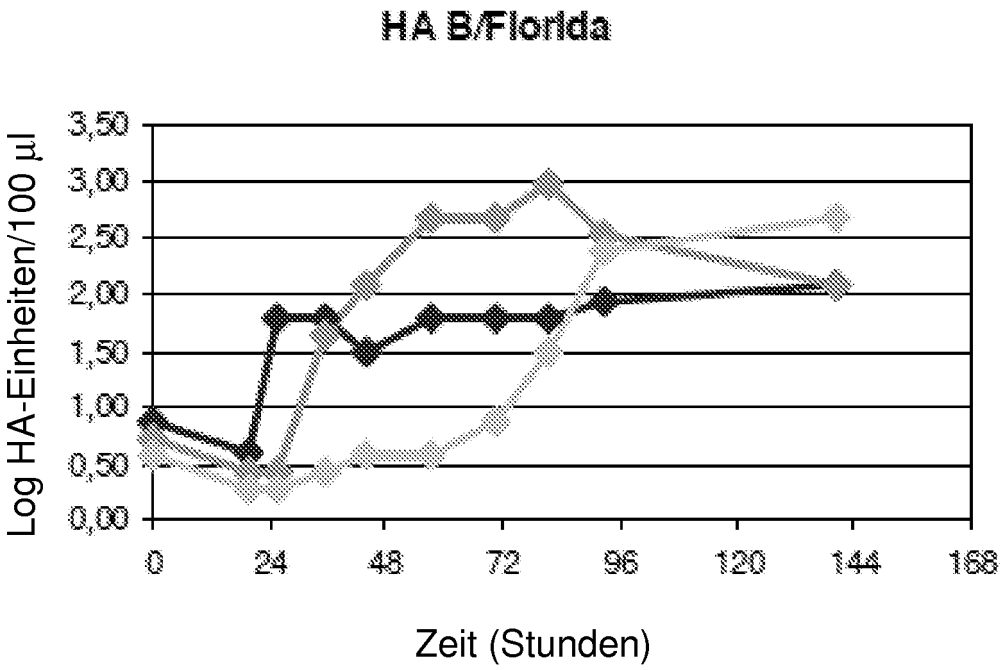

HA B/Florida
Log HA-Einheiten/100 µl
3,50
3,00
2,50
2,00
1,50
1,00
0,50
0,00
0
24
48
72
96
120
144
168
Zeit (Stunden)

Fig. 9 A

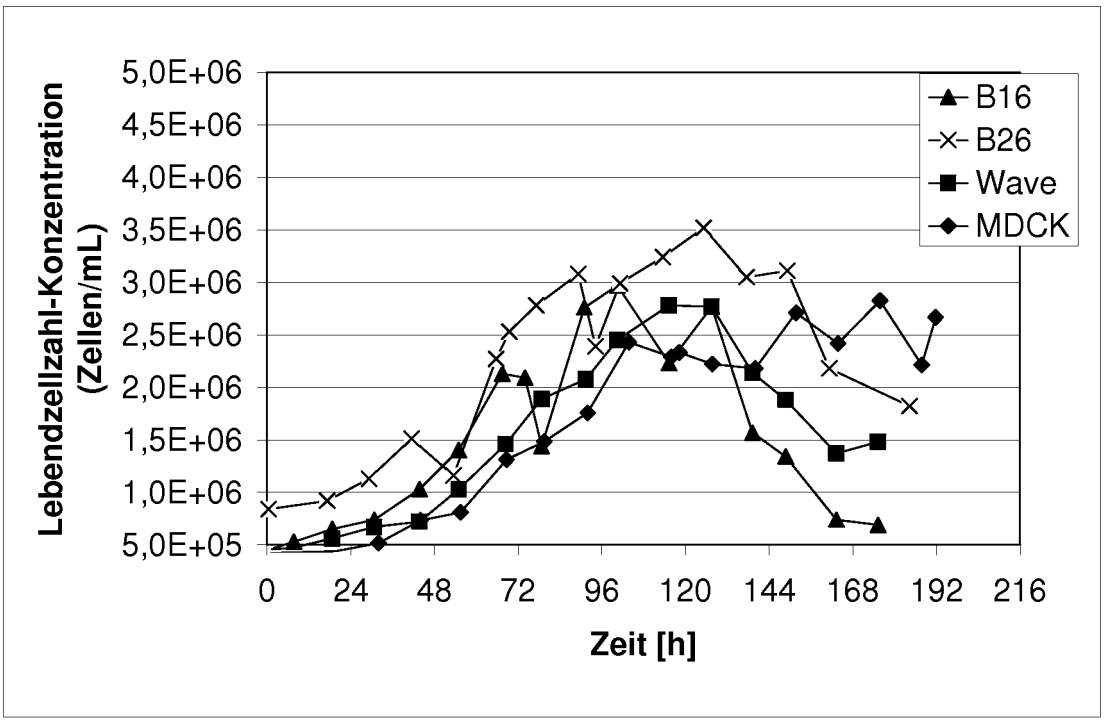

Lebendzellzahl-Konzentration (Zellen/mL)
5,0E+06
4,5E+06
4,0E+06
3,5E+06
3,0E+06
2,5E+06
2,0E+06
1,5E+06
1,0E+06
5,0E+05
0
24
48
72
96
120
144
168
192
216
Zeit [h]
B16
B26
Wave
MDCK

Fig. 9 B

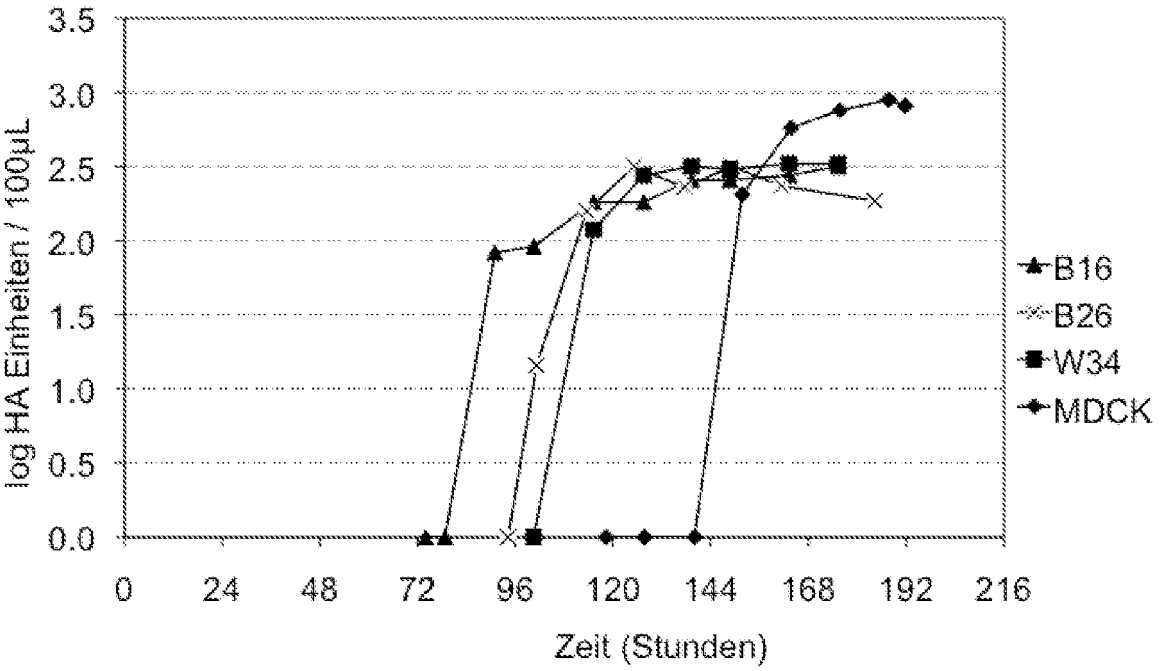


Fig. 10 A

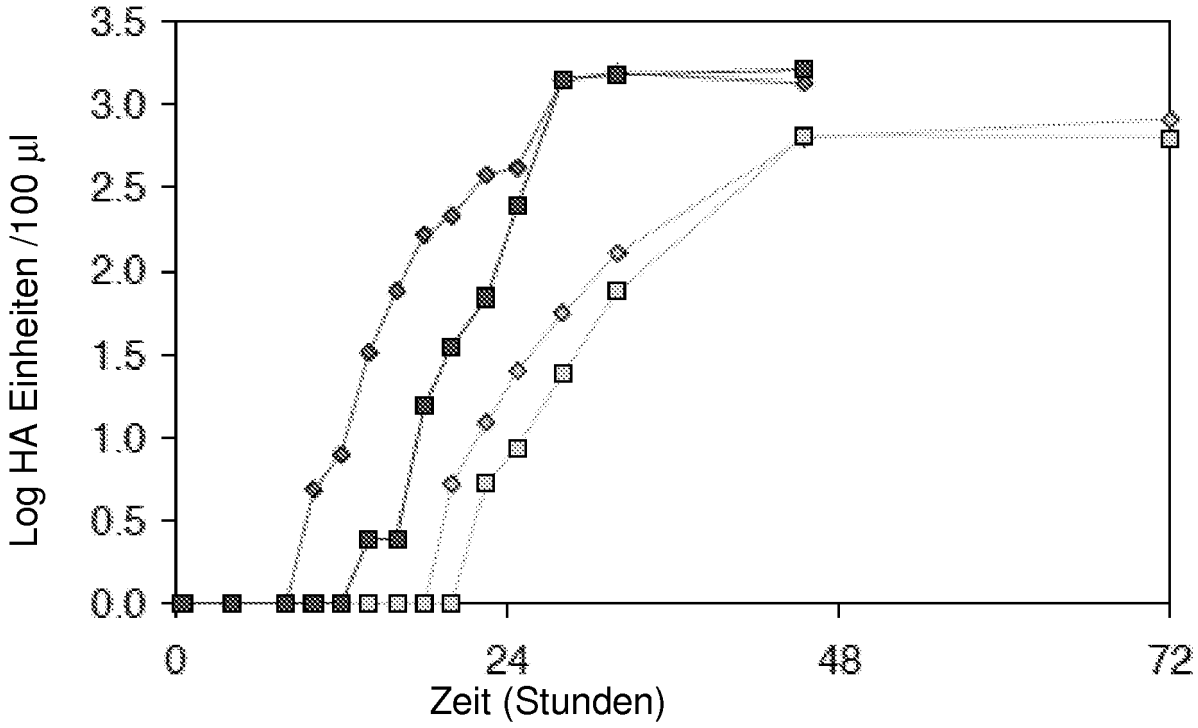


Fig. 10 B

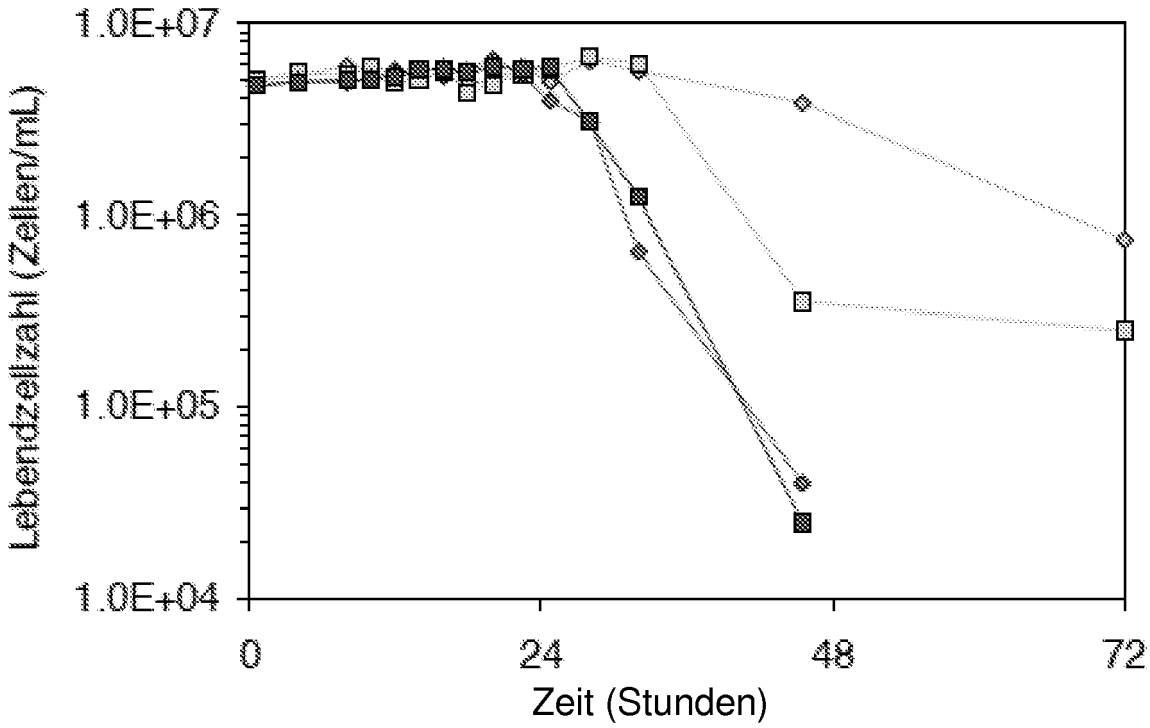


Fig. 10 C

