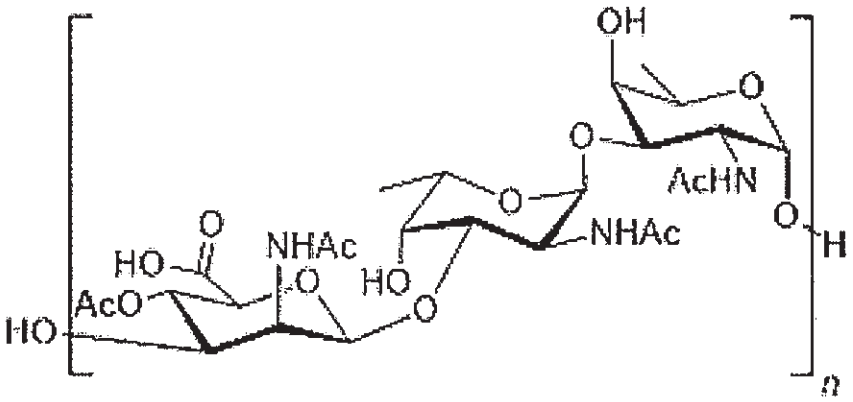
FIGURE 1



[-3)-β-D-ManNAcA(4-O-Ac)-(1-3)-α-L-FucNAc-(1-3)-α-D-FucNAc-(1-]$_n$

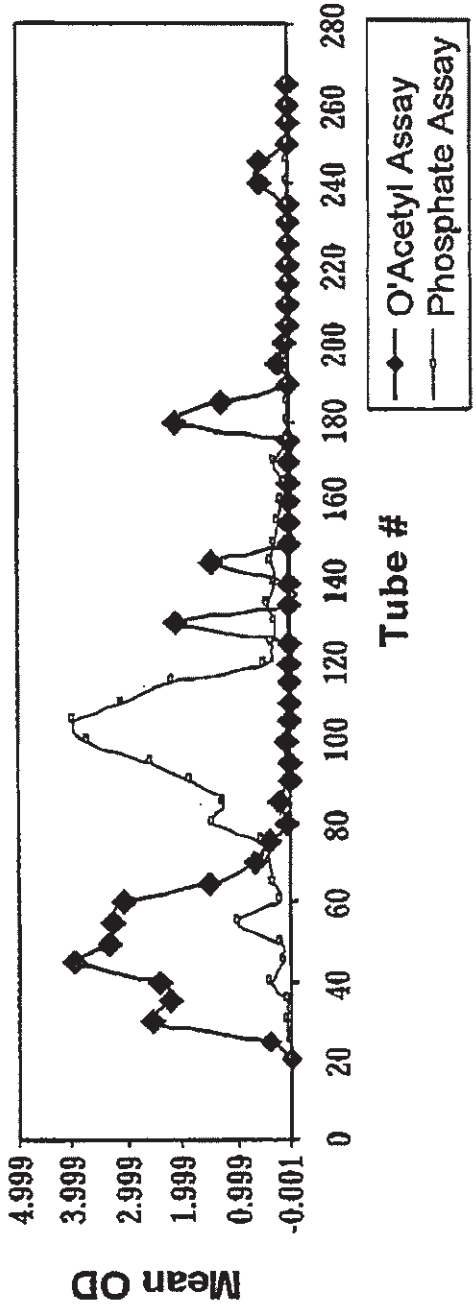

Mean OD
4.999
3.999
2.999
1.999
0.999
-0.001
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
Tube #
O'Acetyl Assay
Phosphate Assay

FIG. 2A

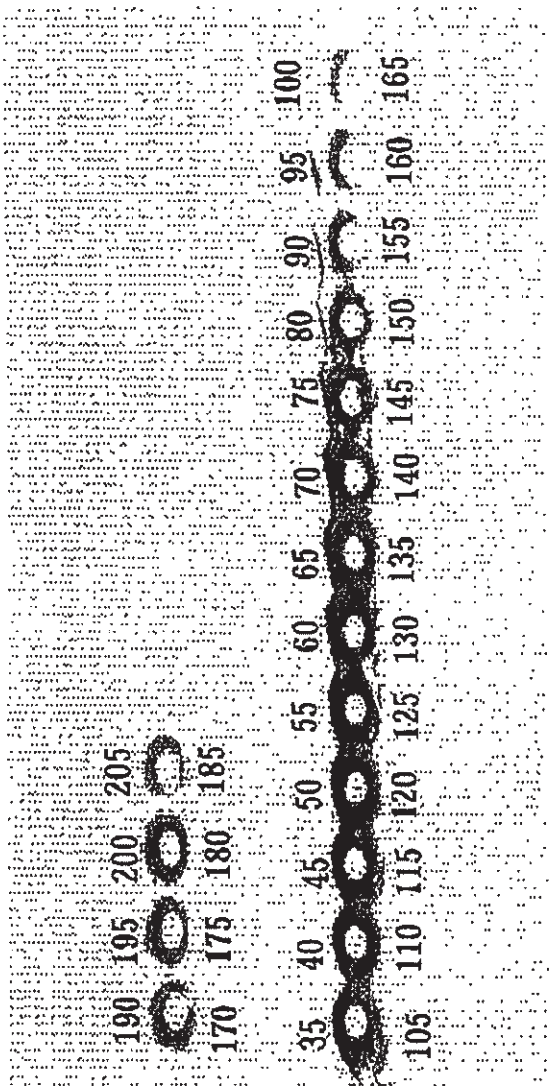

190
195
200
205
170
175
180
185
35
40
45
50
55
60
65
70
75
80
90
95
100
105
110
115
120
125
130
135
140
145
150
155
160
165

FIG. 2B

FIG. 3A

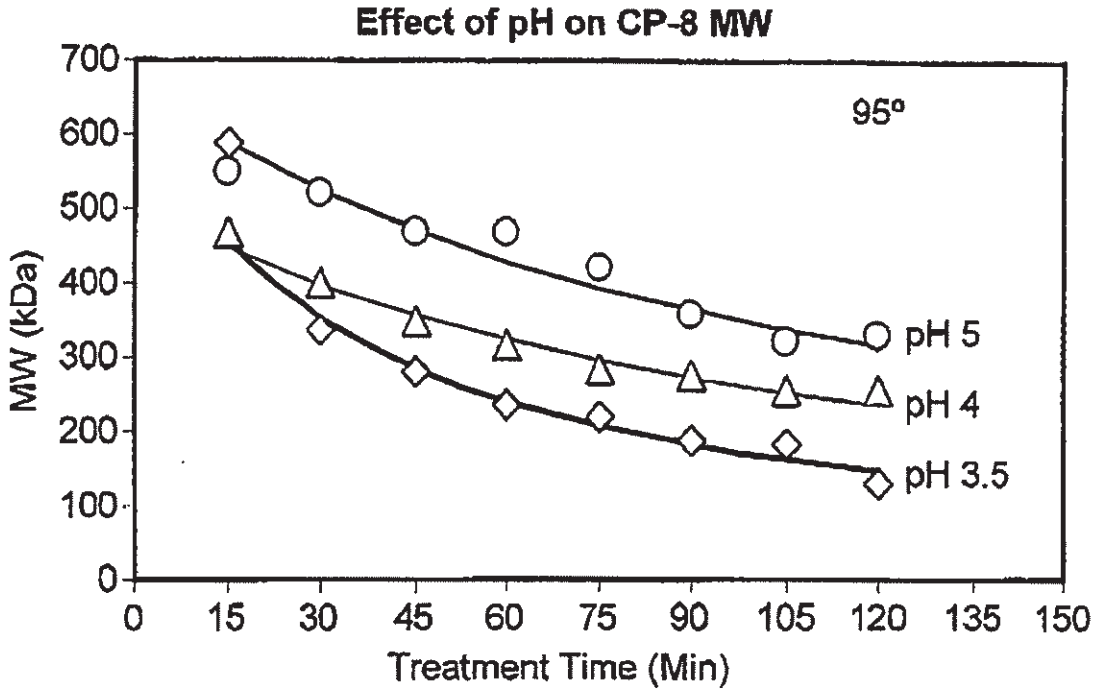

Effect of pH on CP-8 MW
95°
pH 5
pH 4
pH 3.5
MW (kDa)
700
600
500
400
300
200
100
0
0 15 30 45 60 75 90 105 120 135 150
Treatment Time (Min)

FIG. 3B

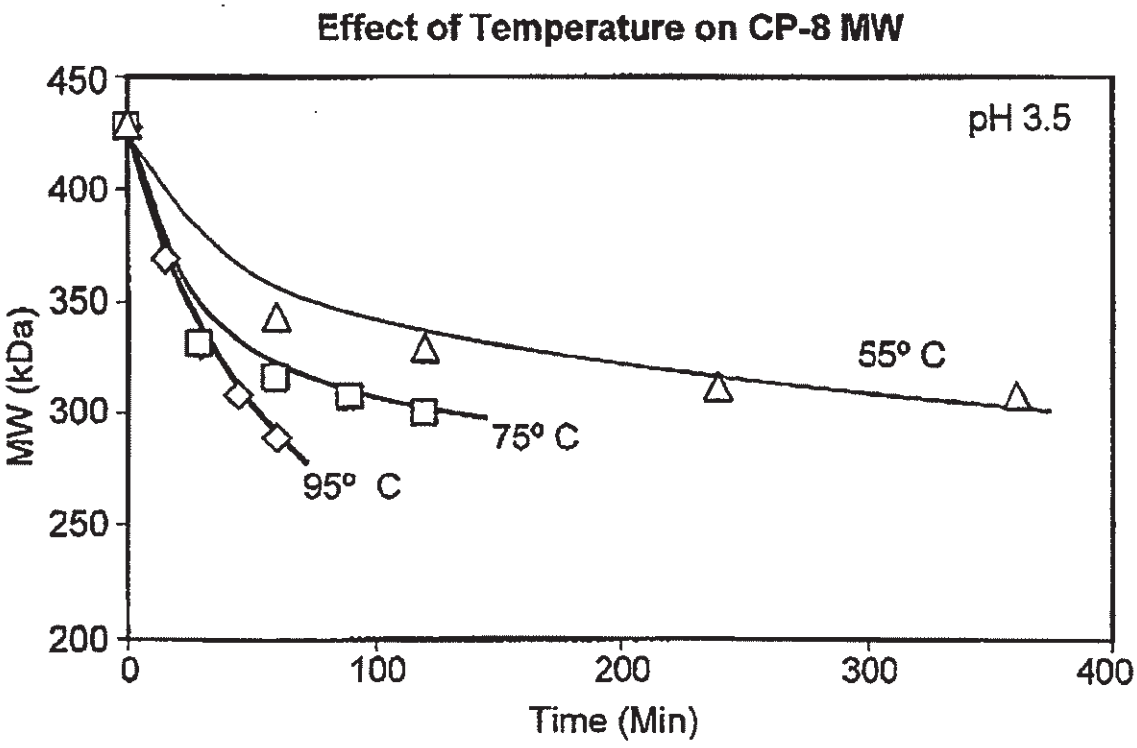

Effect of Temperature on CP-8 MW
pH 3.5
55° C
75° C
95° C
MW (kDa)
450
400
350
300
250
200
0 100 200 300 400
Time (Min)

FIG. 4

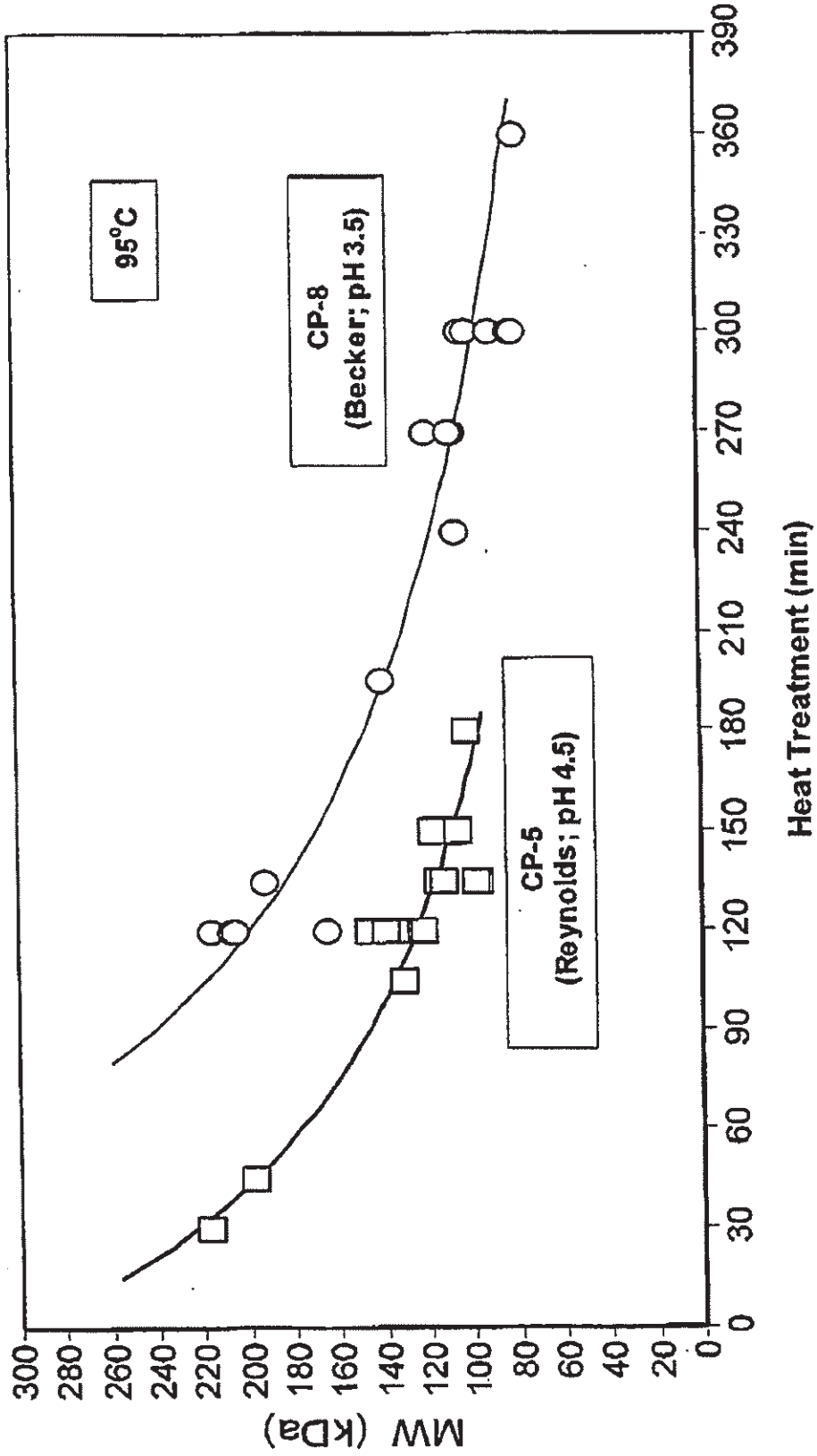

95°C
CP-8
(Becker; pH 3.5)
CP-5
(Reynolds; pH 4.5)
MW (kDa)
Heat Treatment (min)
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
0
30
60
90
120
150
180
210
240
270
300
330
360
390

FIG. 5

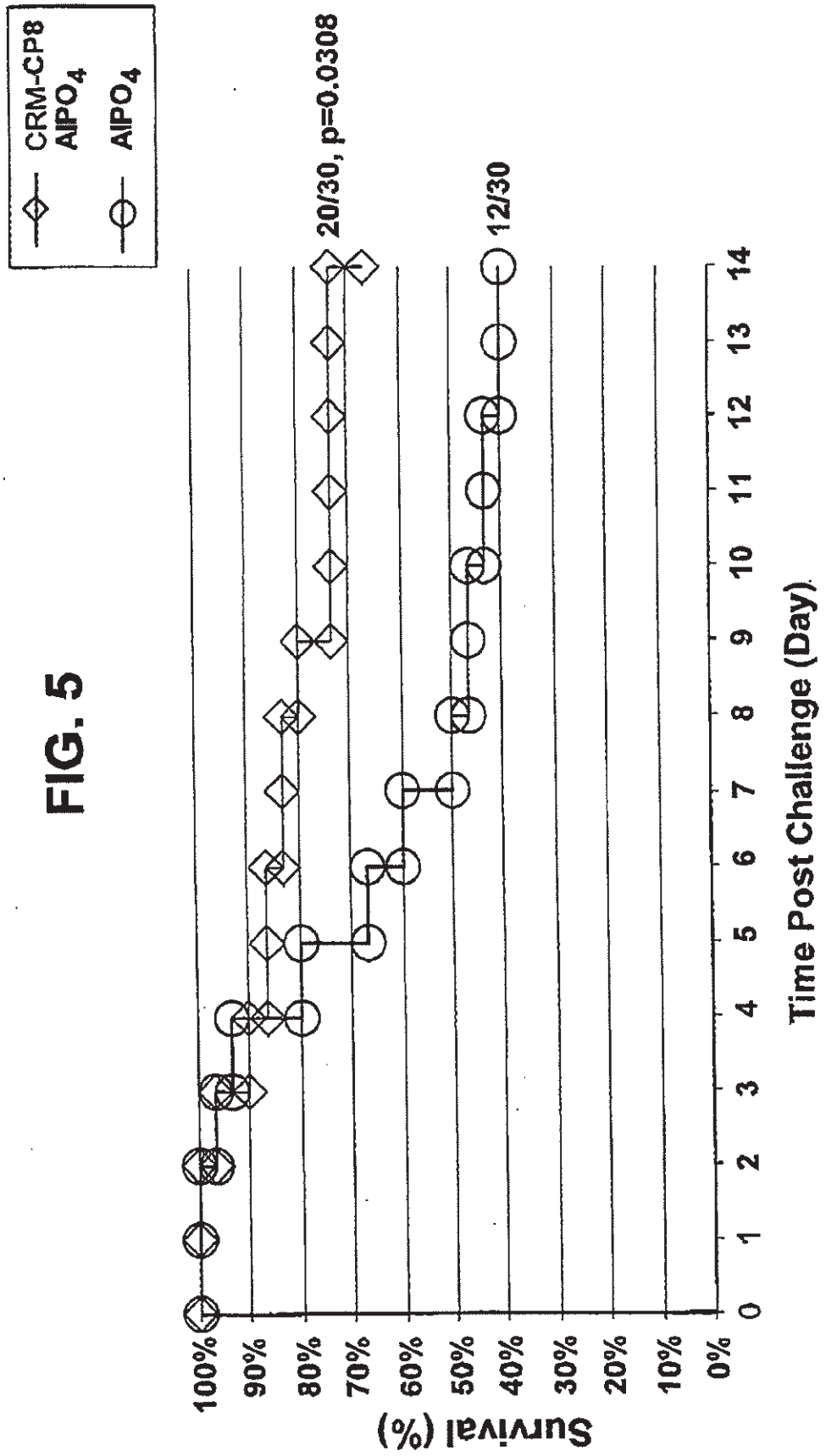

CRM-CP8 AlPO4
AlPO4
20/30, p=0.0308
12/30
Survival (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Time Post Challenge (Day)

FIG. 6

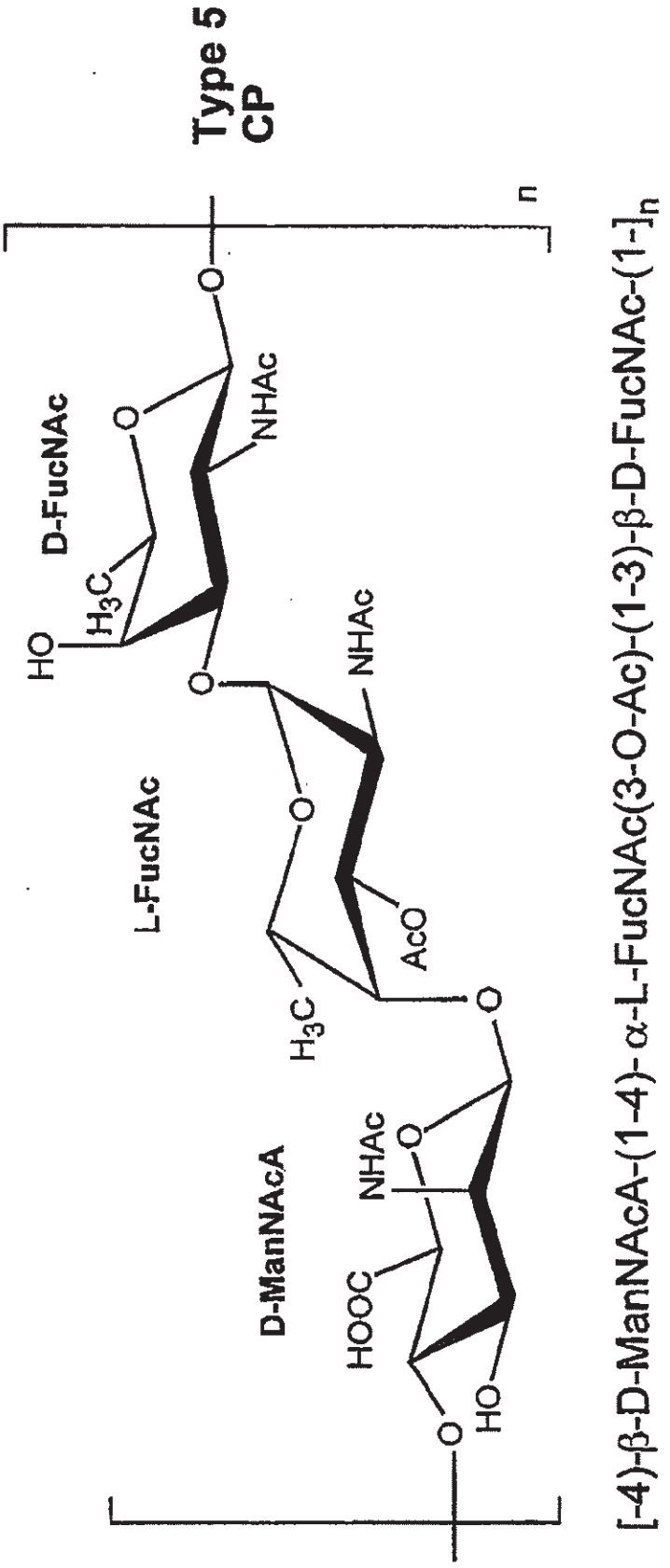

Type 5 CP
D-FucNAc
L-FucNAc
D-ManNAcA
NHAc
AcO
HOOC
HO
H_3C
n
[-4)-β-D-ManNAcA-(1-4)- α-L-FucNAc(3-O-Ac)-(1-3)-β-D-FucNAc-(1-]$_n$

FIG. 7A

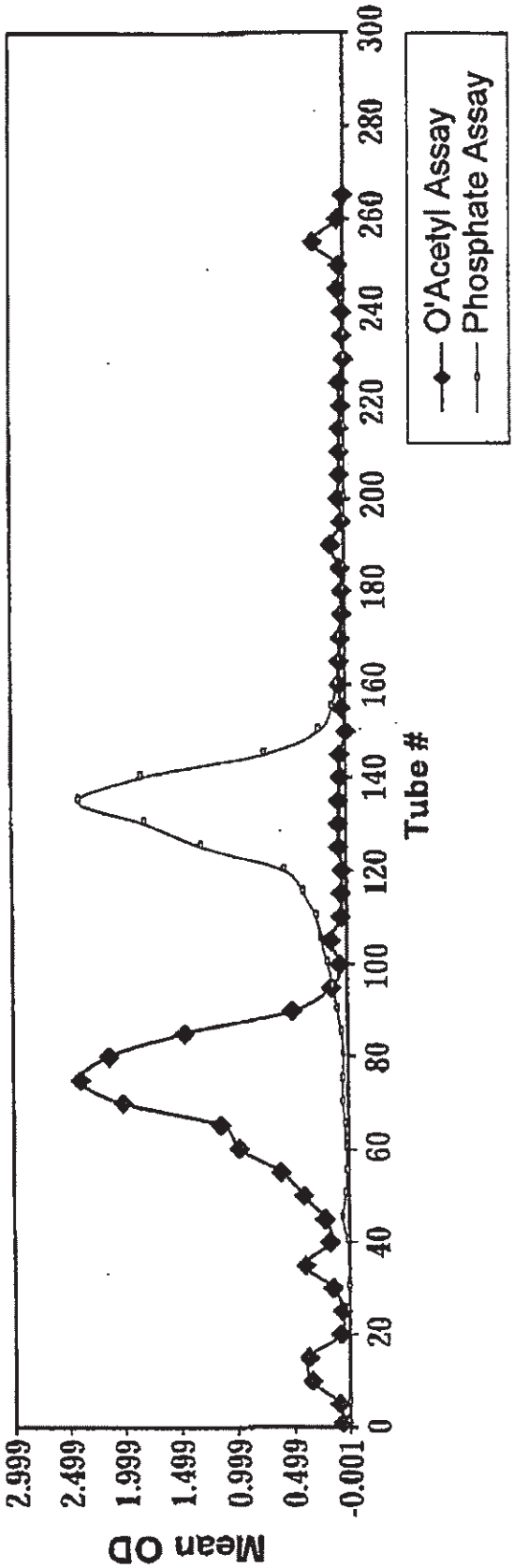

Mean OD
2.999
2.499
1.999
1.499
0.999
0.499
-0.001
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
Tube #
O'Acetyl Assay
Phosphate Assay

FIG. 7B

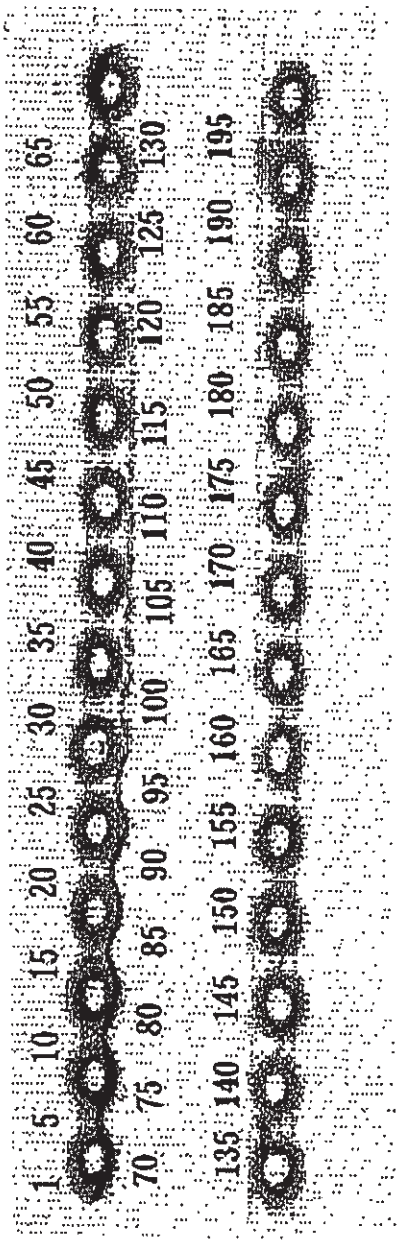

1 5 10 15 20 25 30 35 40 45 50 55 60 65
70 75 80 85 90 95 100 105 110 115 120 125 130
135 140 145 150 155 160 165 170 175 180 185 190 195

FIG. 8A

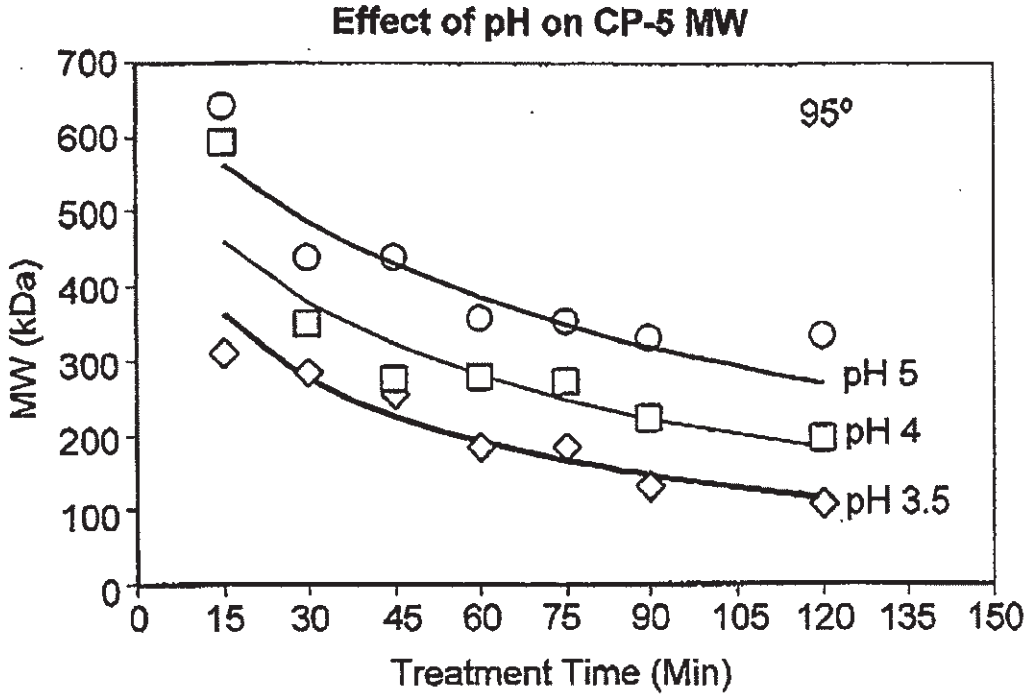

Effect of pH on CP-5 MW
MW (kDa)
700
600
500
400
300
200
100
0
0
15
30
45
60
75
90
105
120
135
150
Treatment Time (Min)
95°
pH 5
pH 4
pH 3.5

FIG. 8B

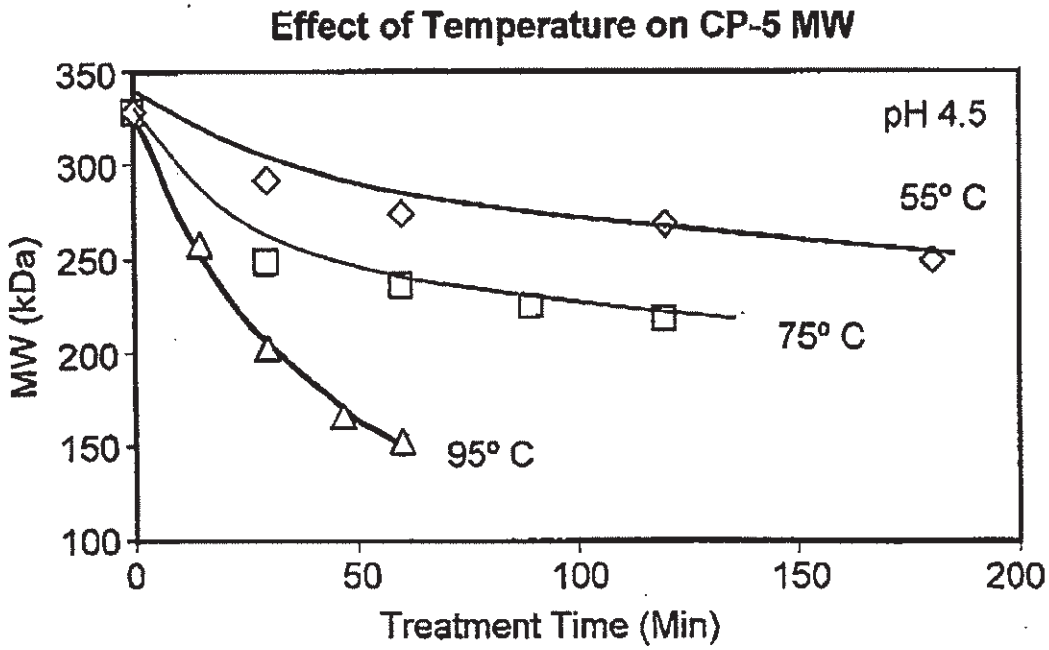

Effect of Temperature on CP-5 MW
MW (kDa)
350
300
250
200
150
100
0
50
100
150
200
Treatment Time (Min)
pH 4.5
55° C
75° C
95° C

FIG. 9

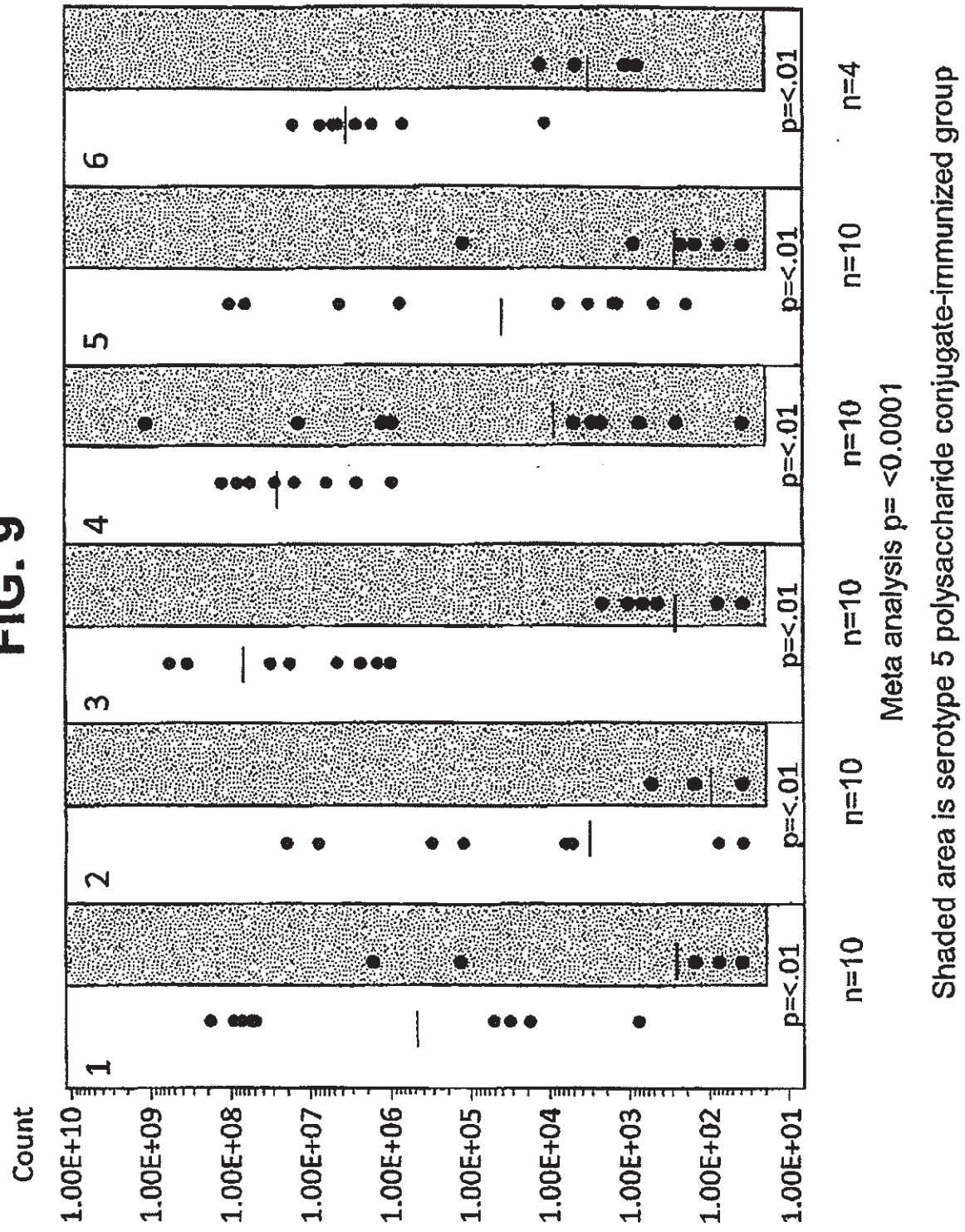

Count
1.00E+10
1.00E+09
1.00E+08
1.00E+07
1.00E+06
1.00E+05
1.00E+04
1.00E+03
1.00E+02
1.00E+01
1
2
3
4
5
6
p=<.01
p=<.01
p=<.01
p=<.01
p=<.01
p=<.01
n=10
n=10
n=10
n=10
n=10
n=4
Meta analysis p= <0.0001
Shaded area is serotype 5 polysaccharide conjugate-immunized group

FIGURE 10

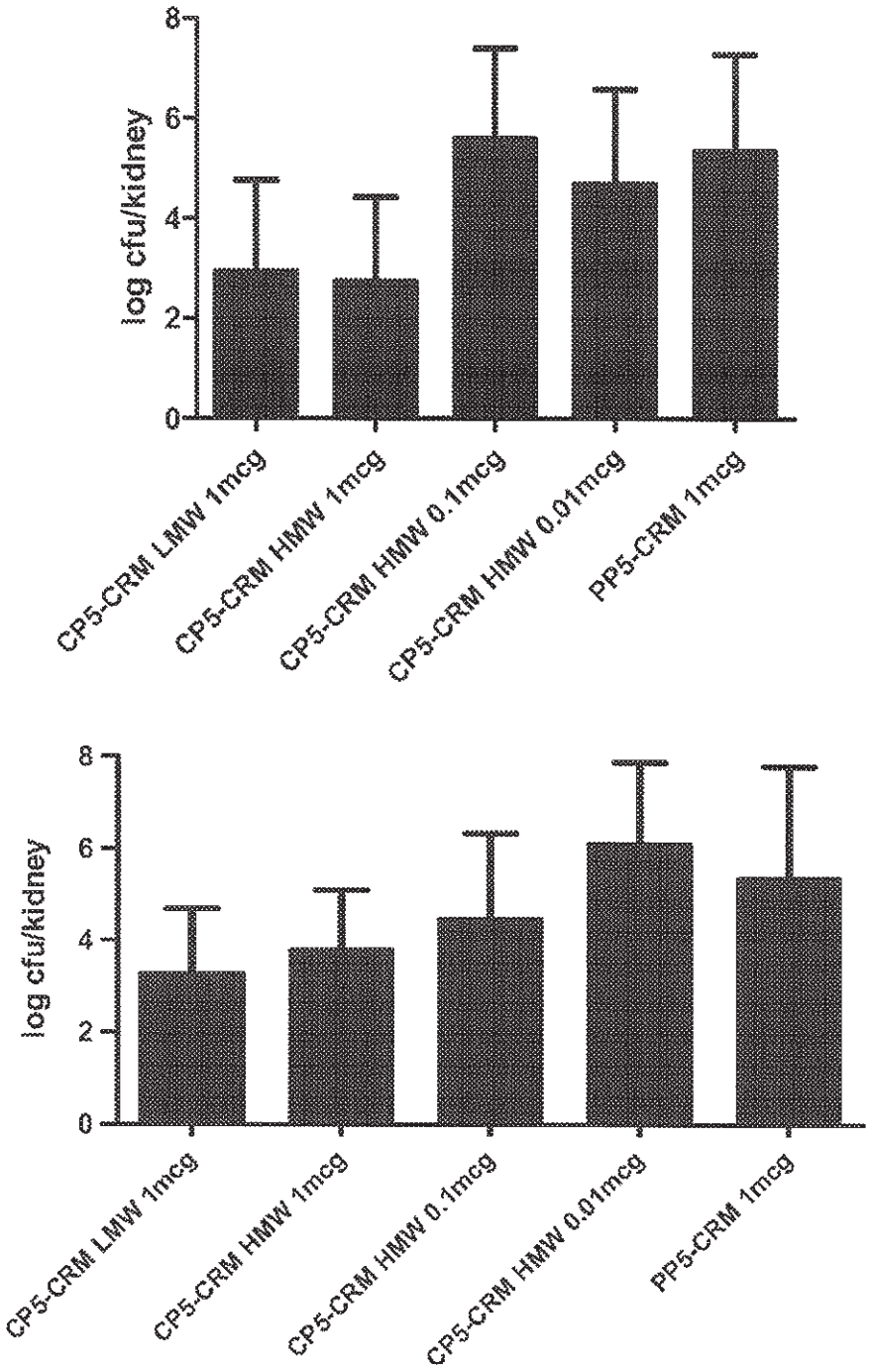
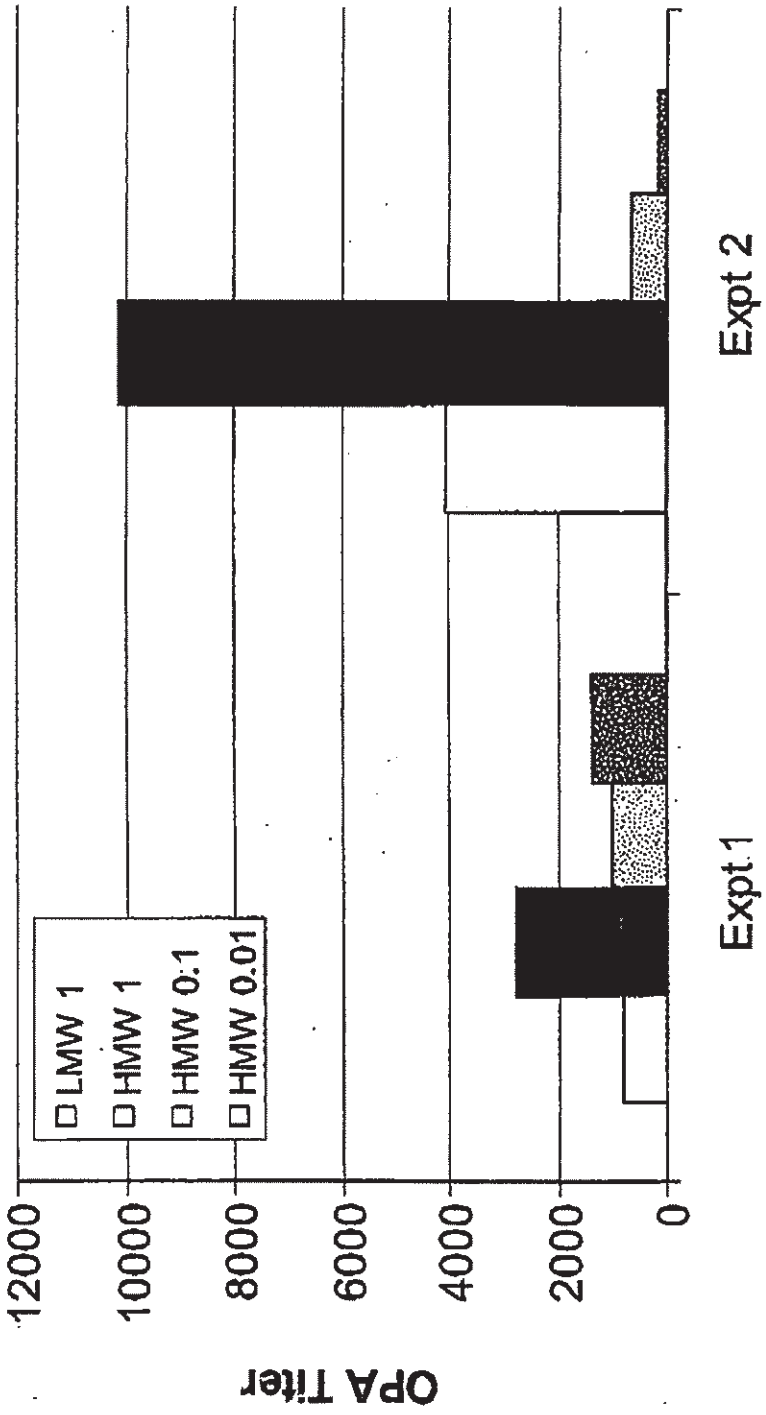

log cfu/kidney
0
2
4
6
8
CP5-CRM LMW 1mcg
CP5-CRM HMW 1mcg
CP5-CRM HMW 0.1mcg
CP5-CRM HMW 0.01mcg
PP5-CRM 1mcg
log cfu/kidney
0
2
4
6
8
CP5-CRM LMW 1mcg
CP5-CRM HMW 1mcg
CP5-CRM HMW 0.1mcg
CP5-CRM HMW 0.01mcg
PP5-CRM 1mcg

FIG. 11


OPA Titer
12000
10000
8000
6000
4000
2000
0
LMW 1
HMW 1
HMW 0.1
HMW 0.01
Expt 1
Expt 2