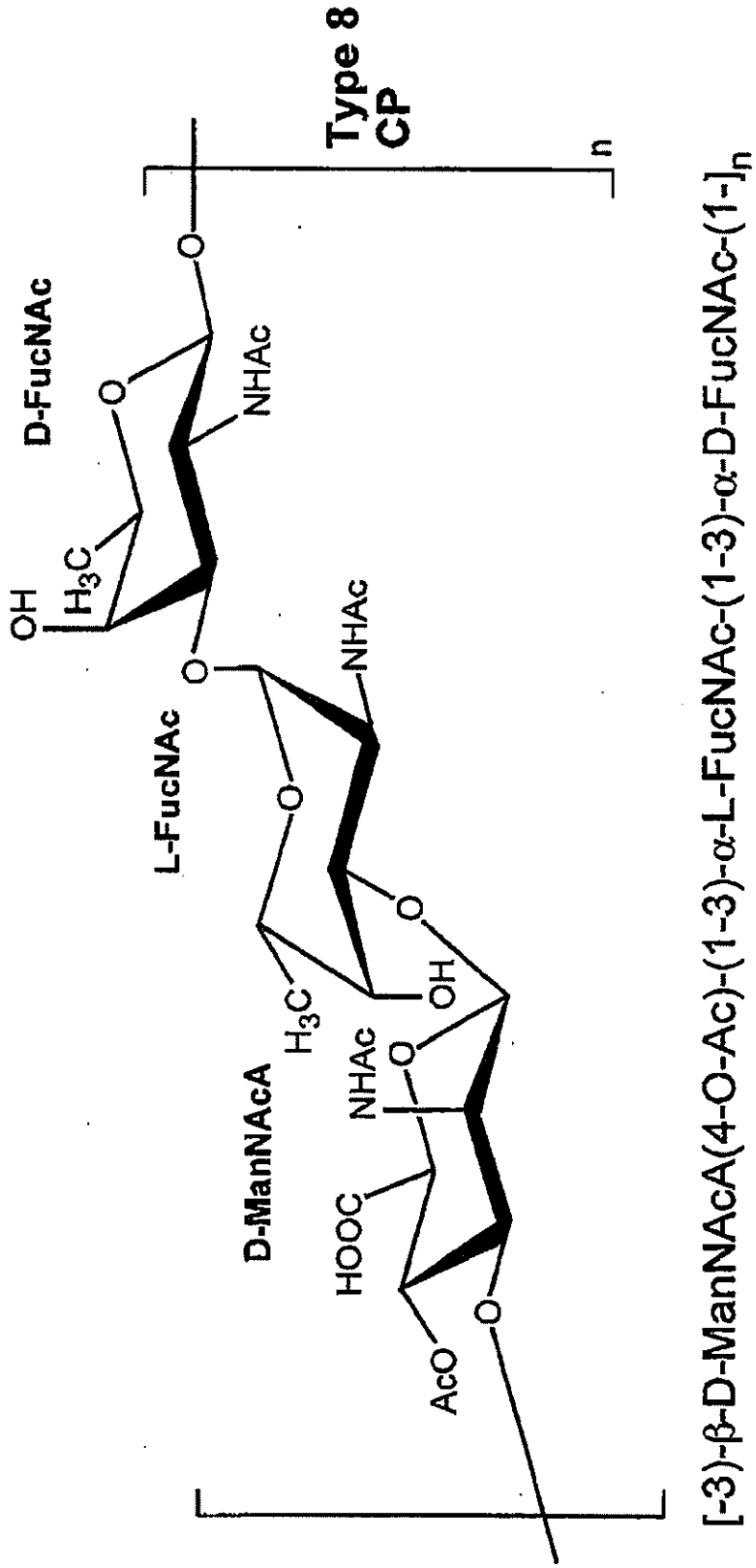
FIG. 1


Type 8
CP
n
D-FucNAc
NHAc
OH
H3C
L-FucNAc
NHAc
D-ManNAcA
H3C
NHAc
HOOC
AcO
OH
[-3)-β-D-ManNAcA(4-O-Ac)-(1-3)-α-L-FucNAc-(1-3)-α-D-FucNAc-(1-]n

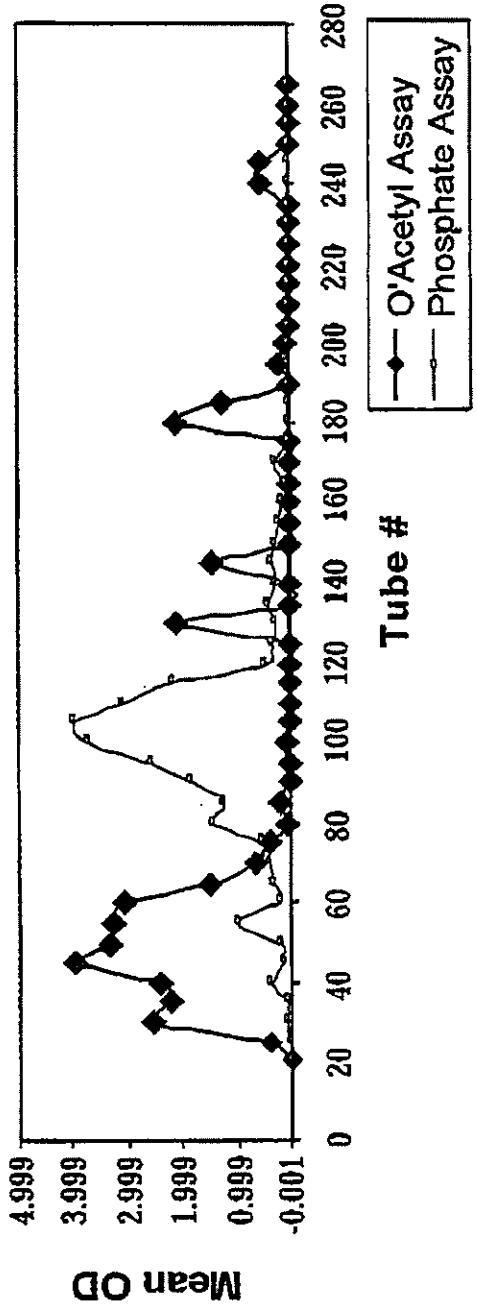

Mean OD
4.999
3.999
2.999
1.999
0.999
-0.001
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
Tube #
O'Acetyl Assay
Phosphate Assay

FIG. 2A

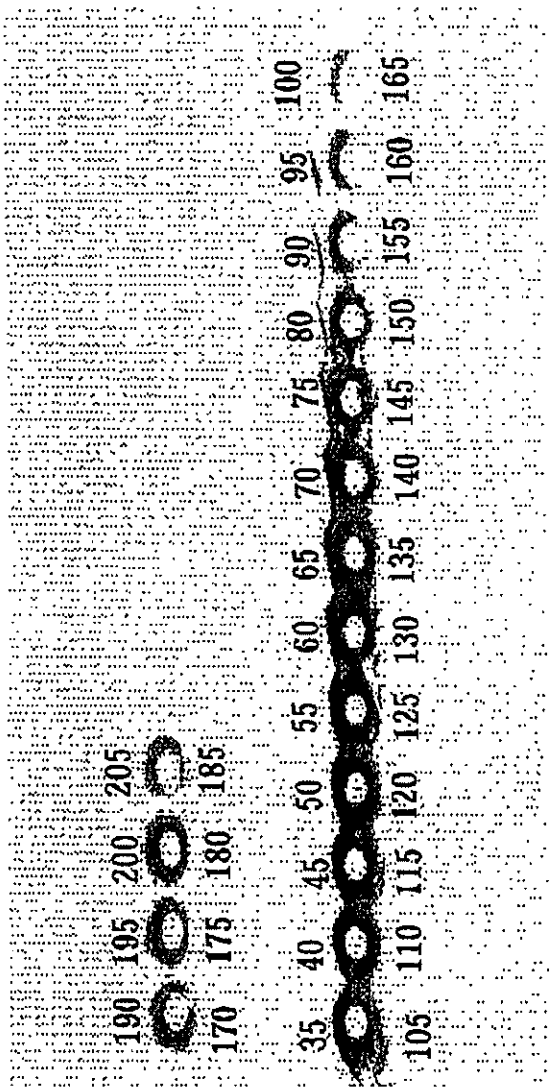


FIG. 2B

FIG. 3A

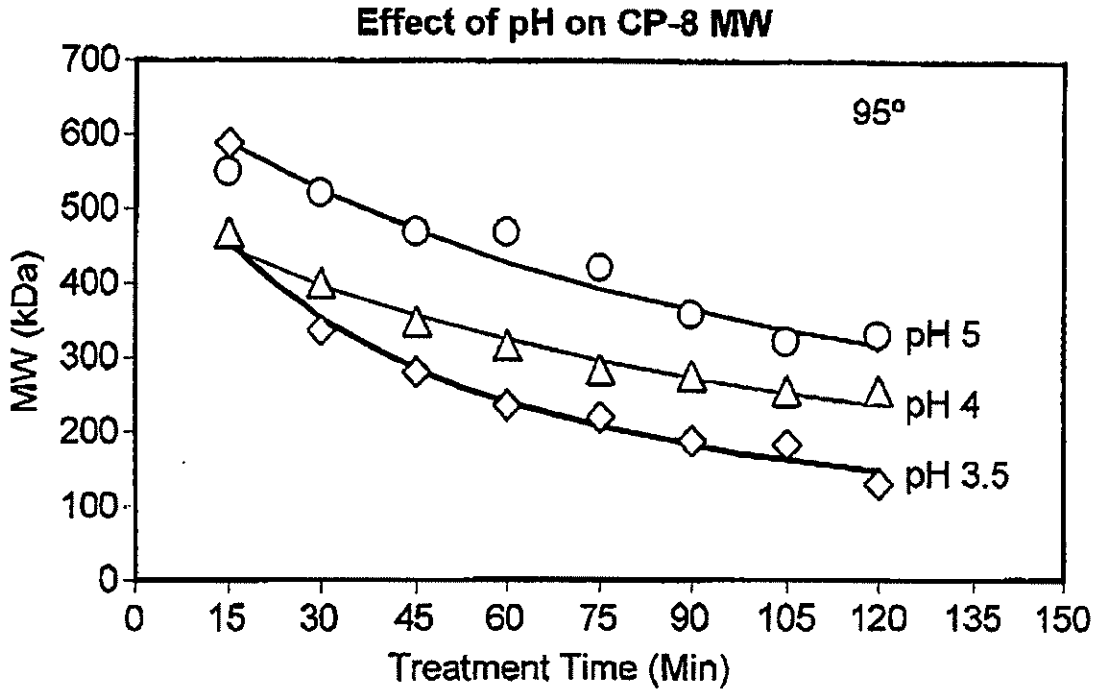

Effect of pH on CP-8 MW
95°
pH 5
pH 4
pH 3.5
MW (kDa)
700
600
500
400
300
200
100
0
0
15
30
45
60
75
90
105
120
135
150
Treatment Time (Min)

FIG. 3B

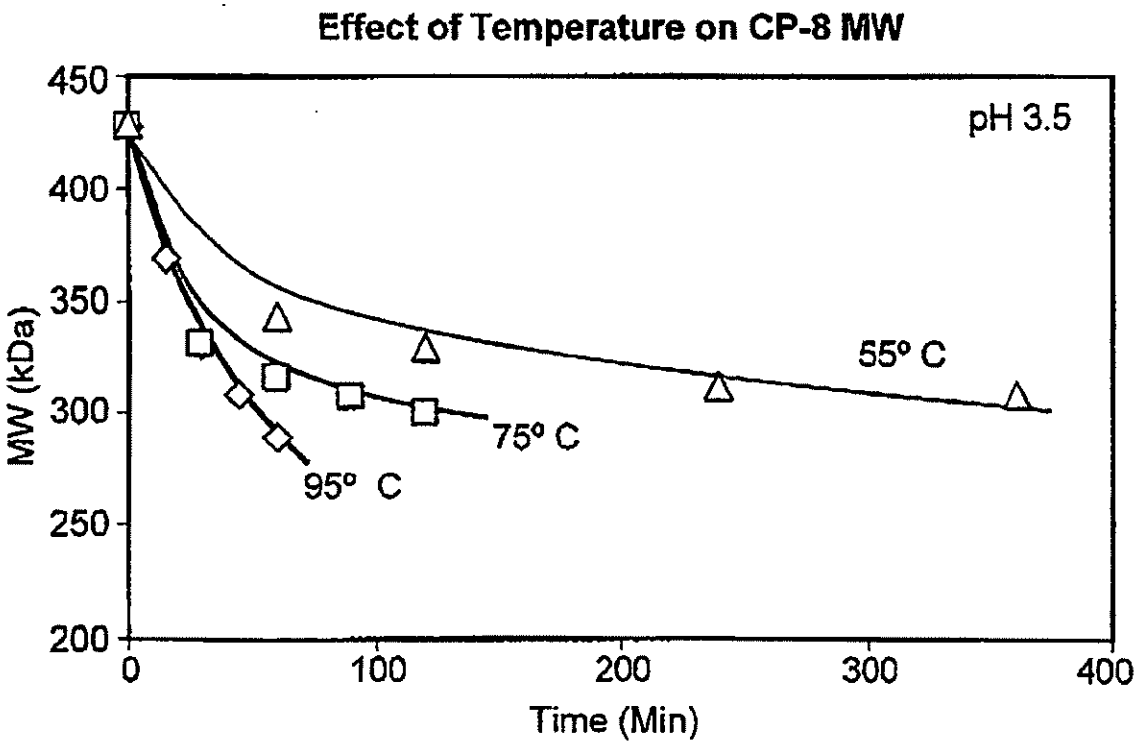

Effect of Temperature on CP-8 MW
pH 3.5
55° C
75° C
95° C
MW (kDa)
450
400
350
300
250
200
0
100
200
300
400
Time (Min)

FIG. 4

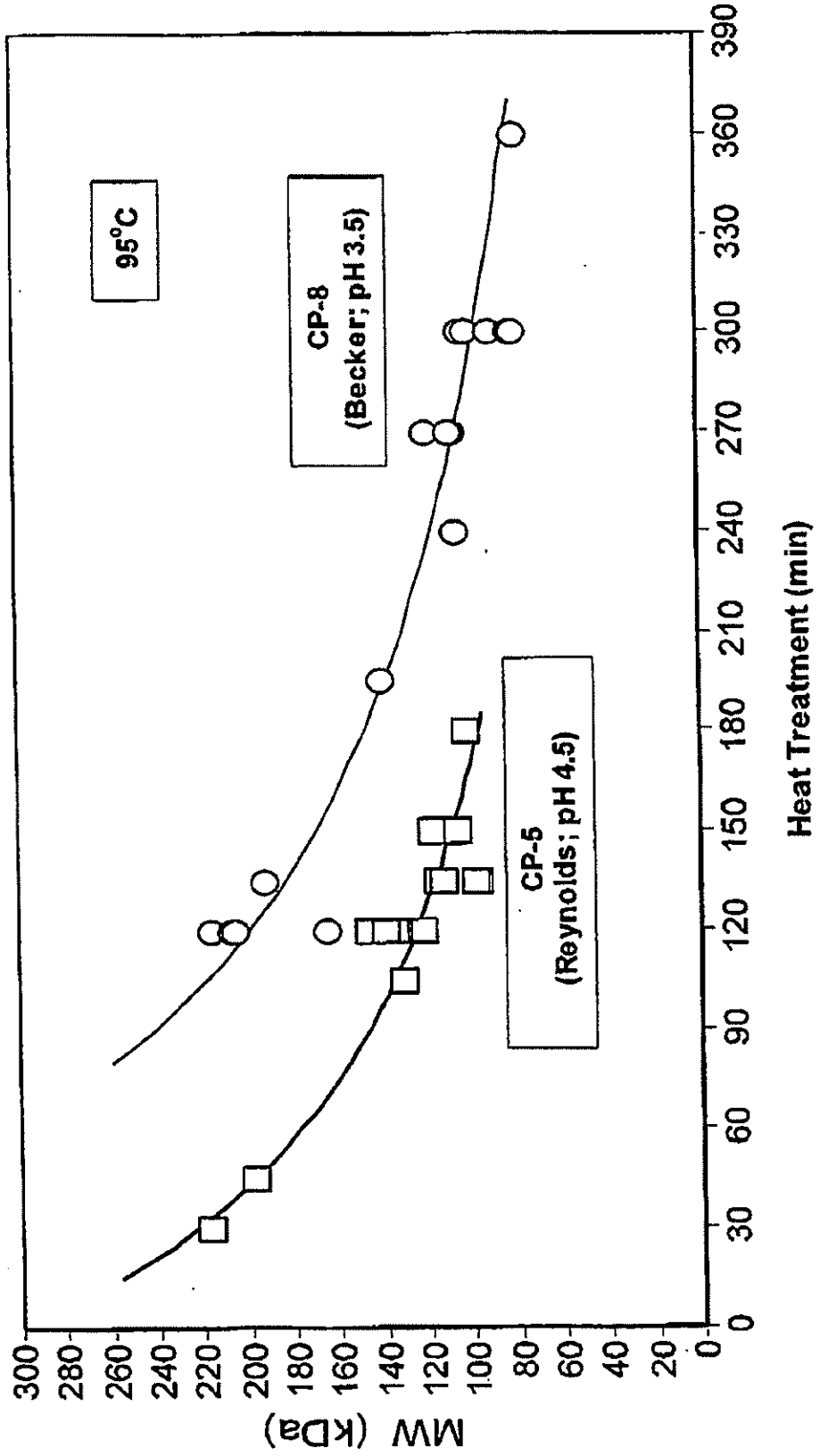

95°C
CP-8
(Becker; pH 3.5)
CP-5
(Reynolds; pH 4.5)
MW (kDa)
Heat Treatment (min)
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
0
30
60
90
120
150
180
210
240
270
300
330
360
390

FIG. 5

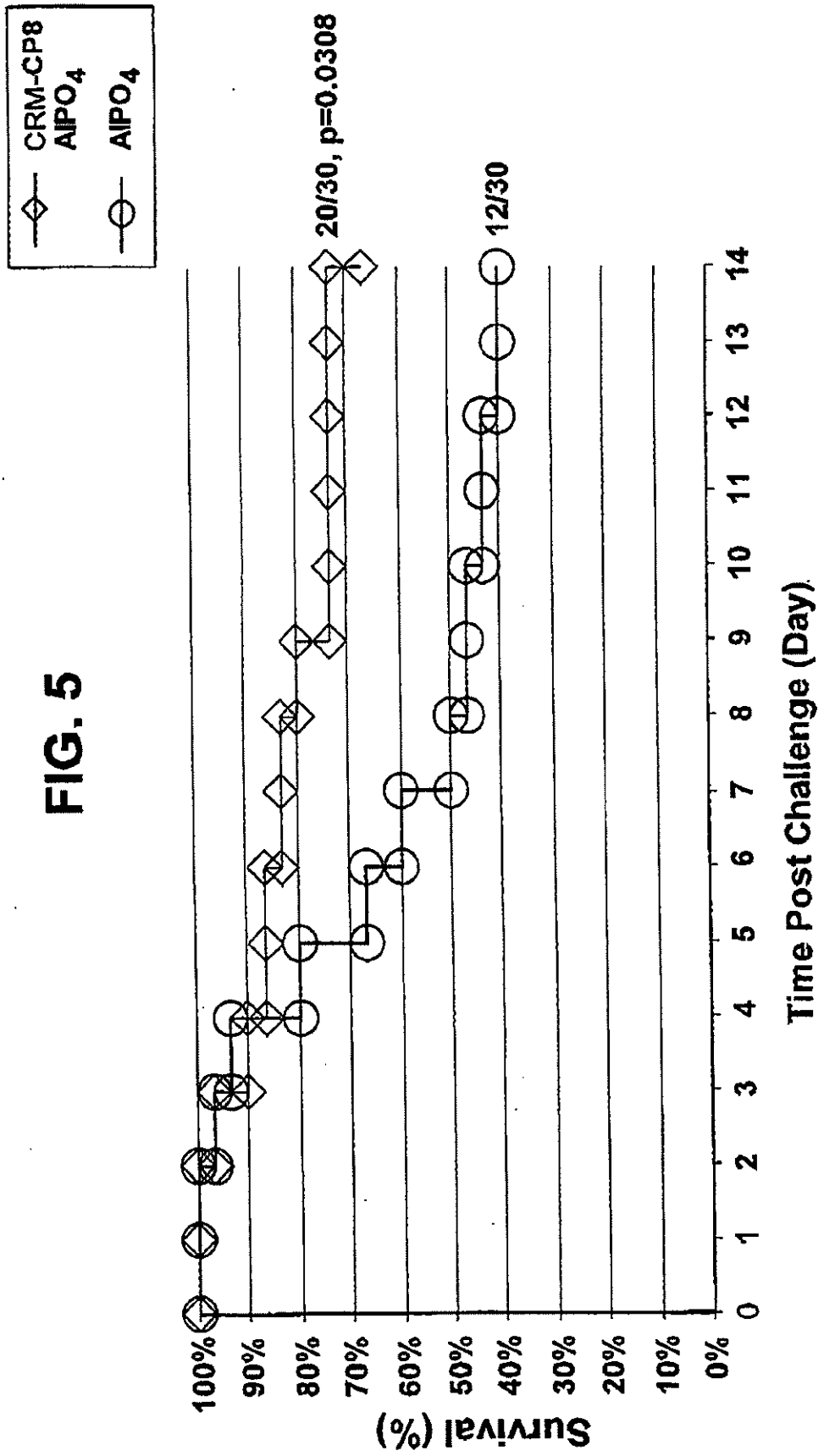

CRM-CP8 AlPO4
AlPO4
20/30, p=0.0308
12/30
Survival (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
Time Post Challenge (Day)

FIG. 6

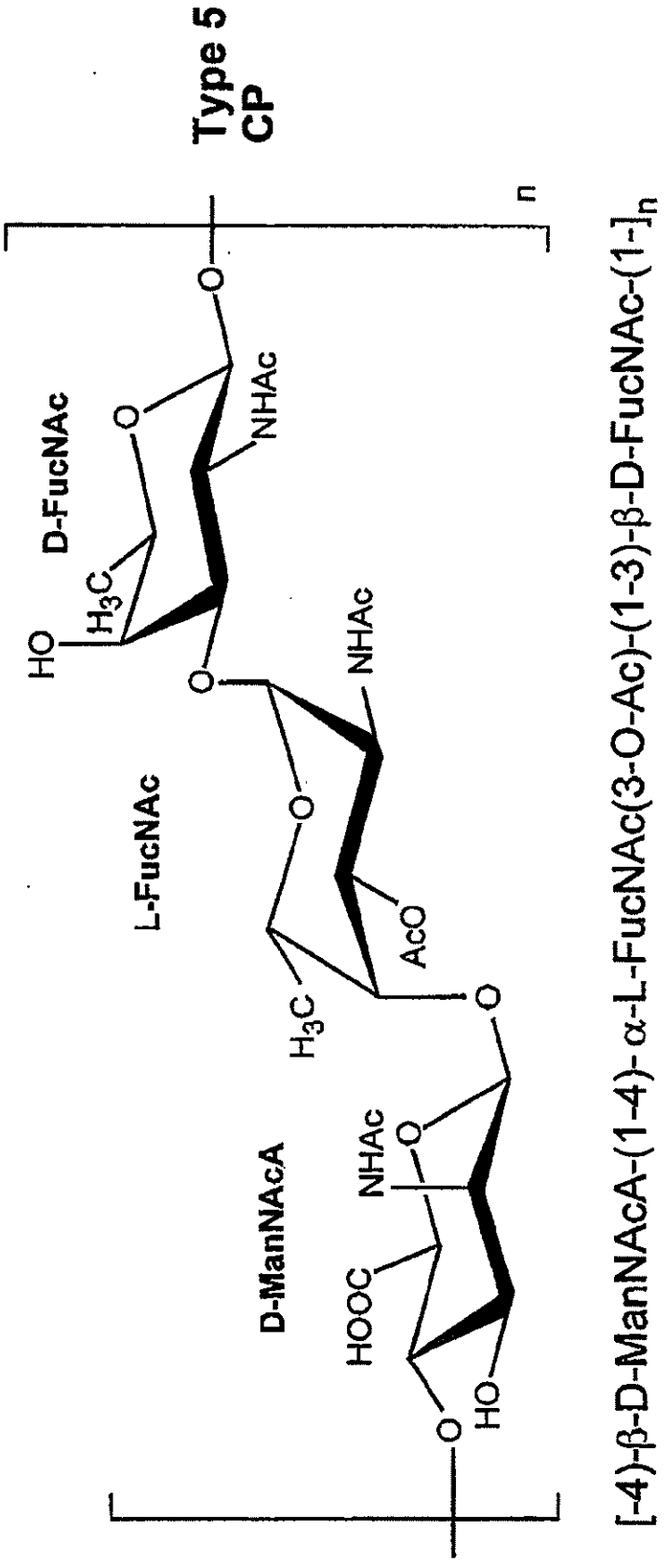
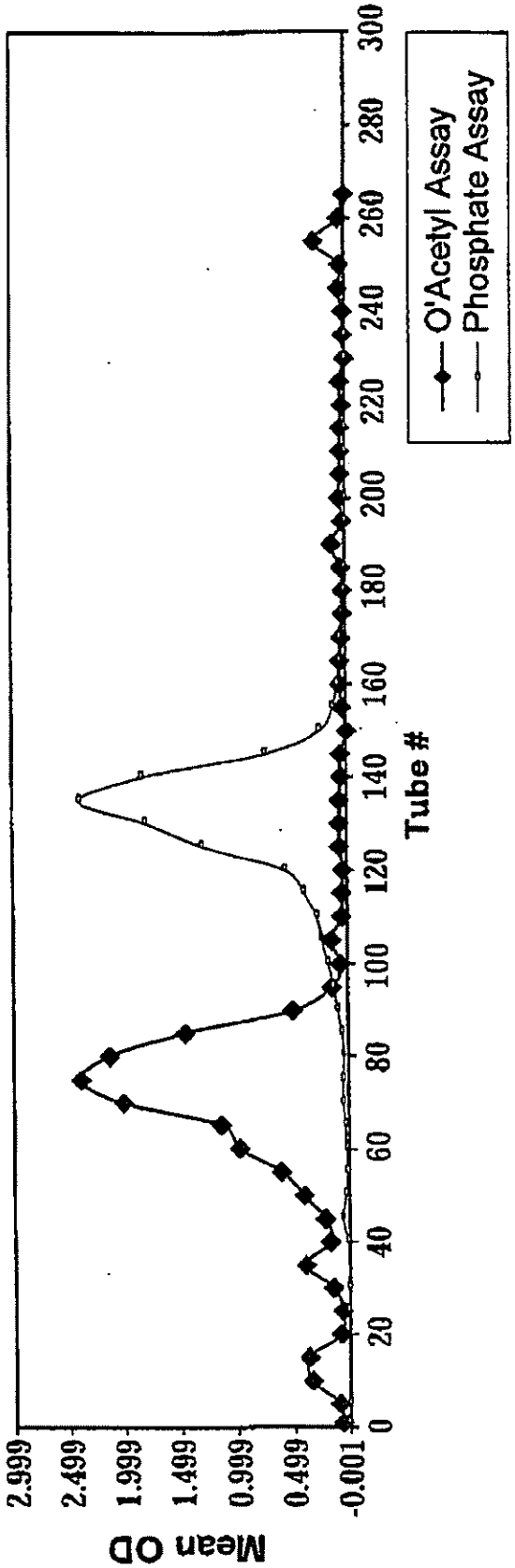

Type 5 CP
D-FucNAc
L-FucNAc
D-ManNAcA
NHAc
AcO
HO
HOOC
H_3C
n
[-4)-β-D-ManNAcA-(1-4)- α-L-FucNAc(3-O-Ac)-(1-3)-β-D-FucNAc-(1-]$_n$

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

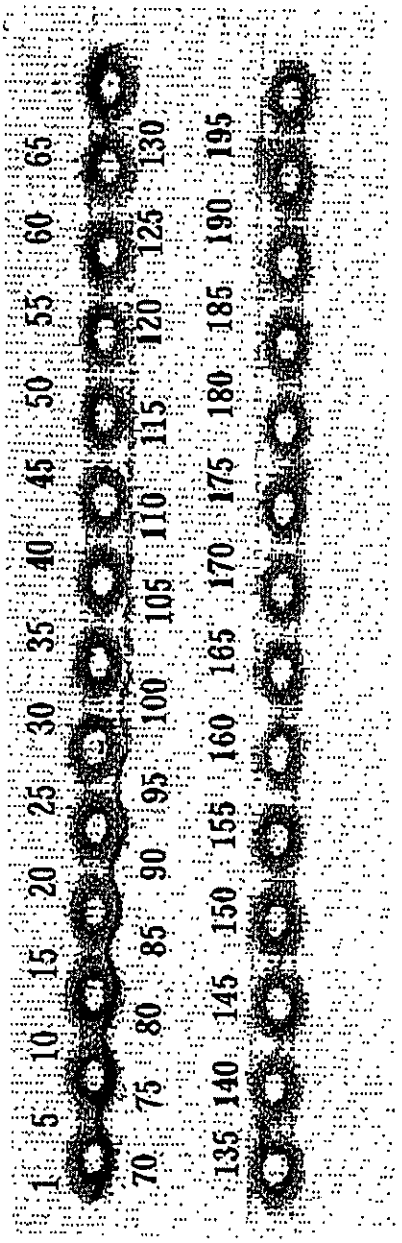

1 5 10 15 20 25 30 35 40 45 50 55 60 65
70 75 80 85 90 95 100 105 110 115 120 125 130
135 140 145 150 155 160 165 170 175 180 185 190 195

FIG. 7B

FIG. 8A

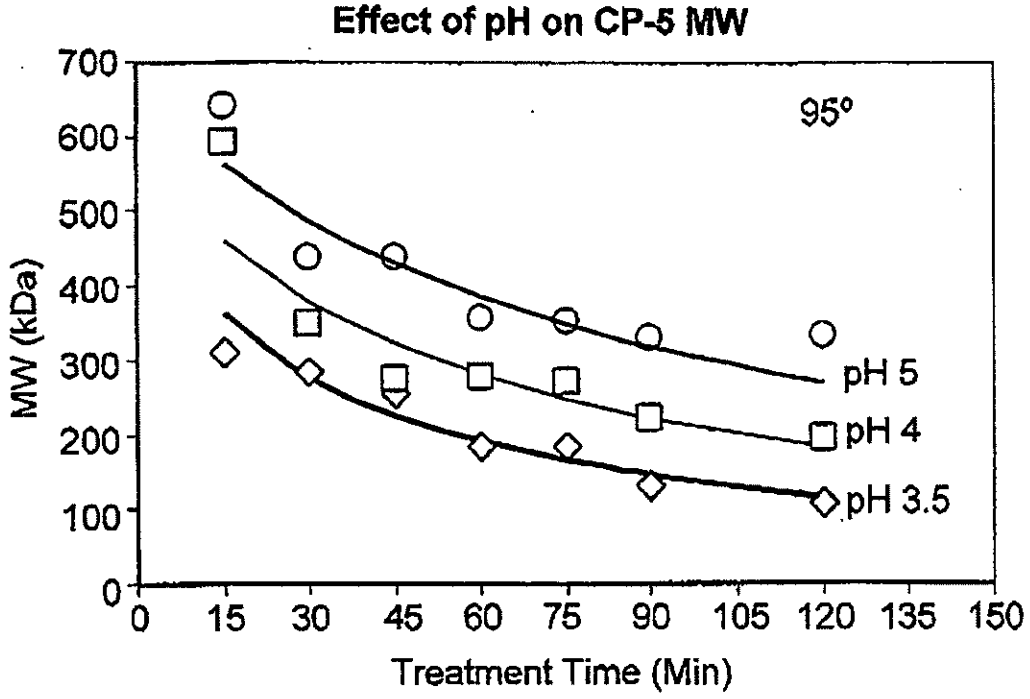

Effect of pH on CP-5 MW
MW (kDa)
700
600
500
400
300
200
100
0
0
15
30
45
60
75
90
105
120
135
150
Treatment Time (Min)
95°
pH 5
pH 4
pH 3.5

FIG. 8B

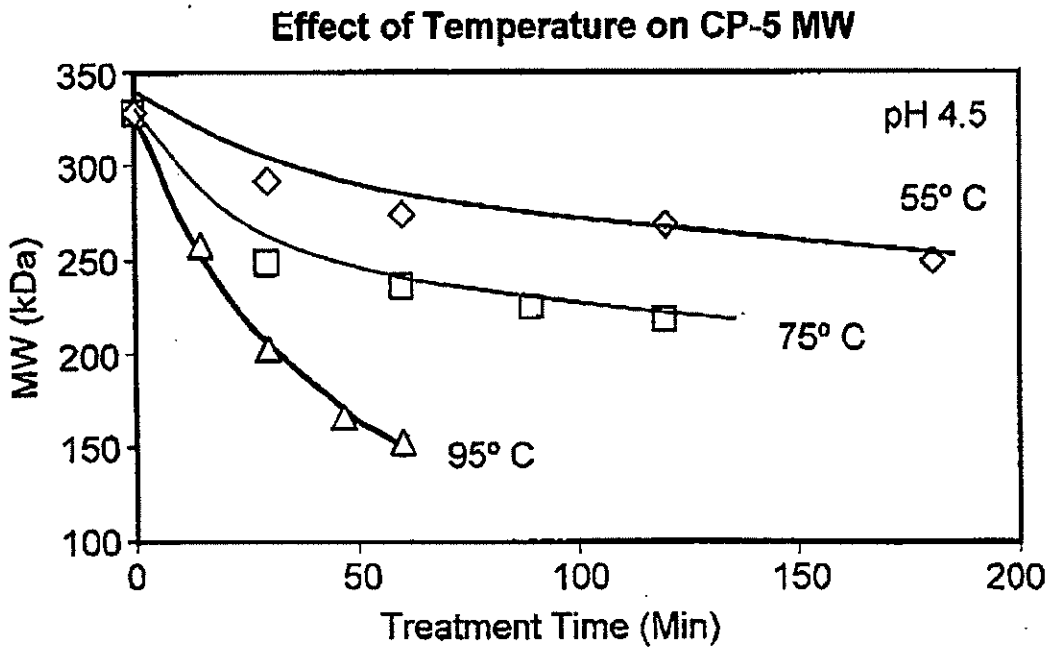

Effect of Temperature on CP-5 MW
MW (kDa)
350
300
250
200
150
100
0
50
100
150
200
Treatment Time (Min)
pH 4.5
55° C
75° C
95° C

FIG. 9

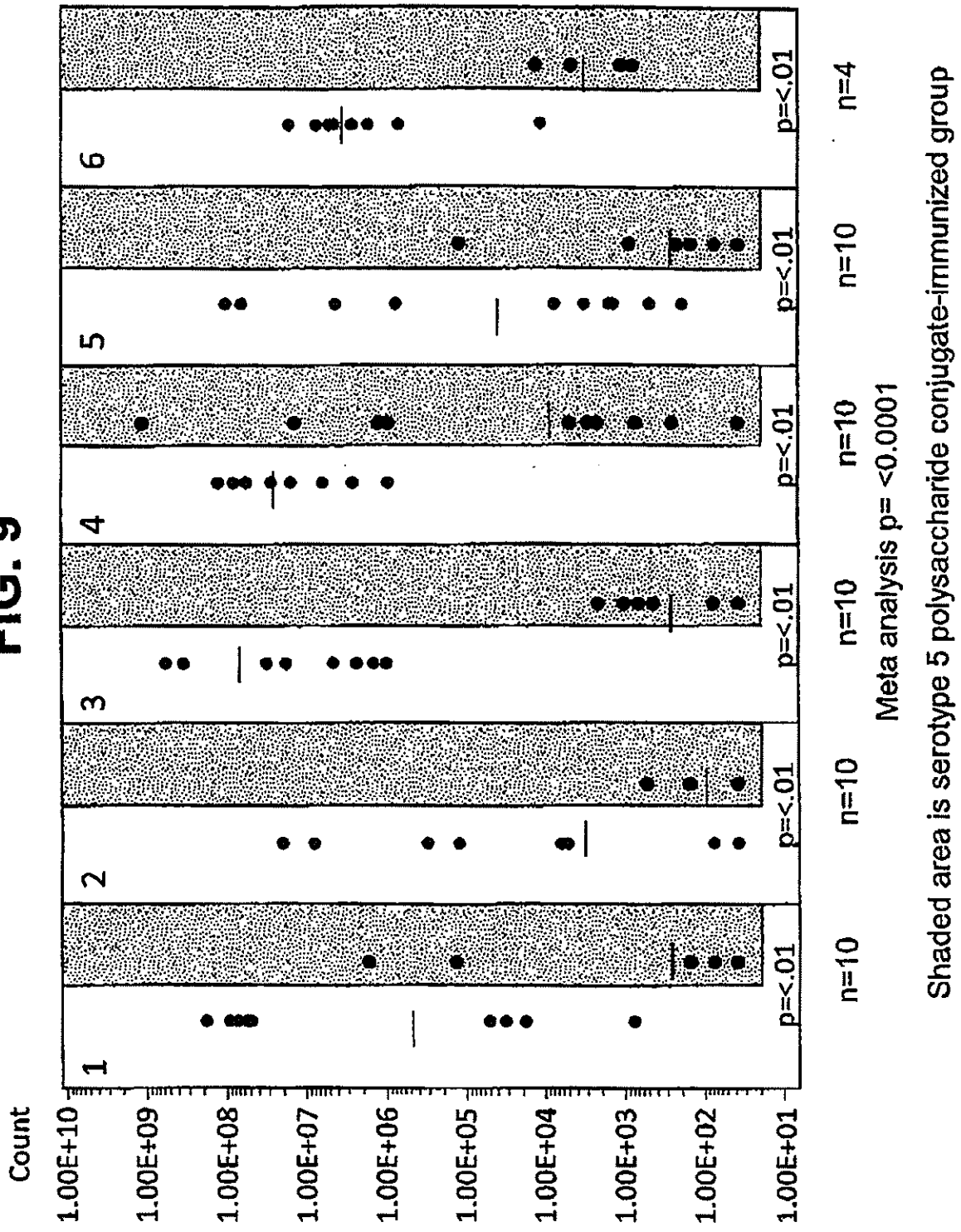

Count
1.00E+10
1.00E+09
1.00E+08
1.00E+07
1.00E+06
1.00E+05
1.00E+04
1.00E+03
1.00E+02
1.00E+01
1
2
3
4
5
6
p=<.01
p=<.01
p=<.01
p=<.01
p=<.01
p=<.01
n=10
n=10
n=10
n=10
n=10
n=4
Meta analysis p= <0.0001
Shaded area is serotype 5 polysaccharide conjugate-immunized group

FIGURE 10

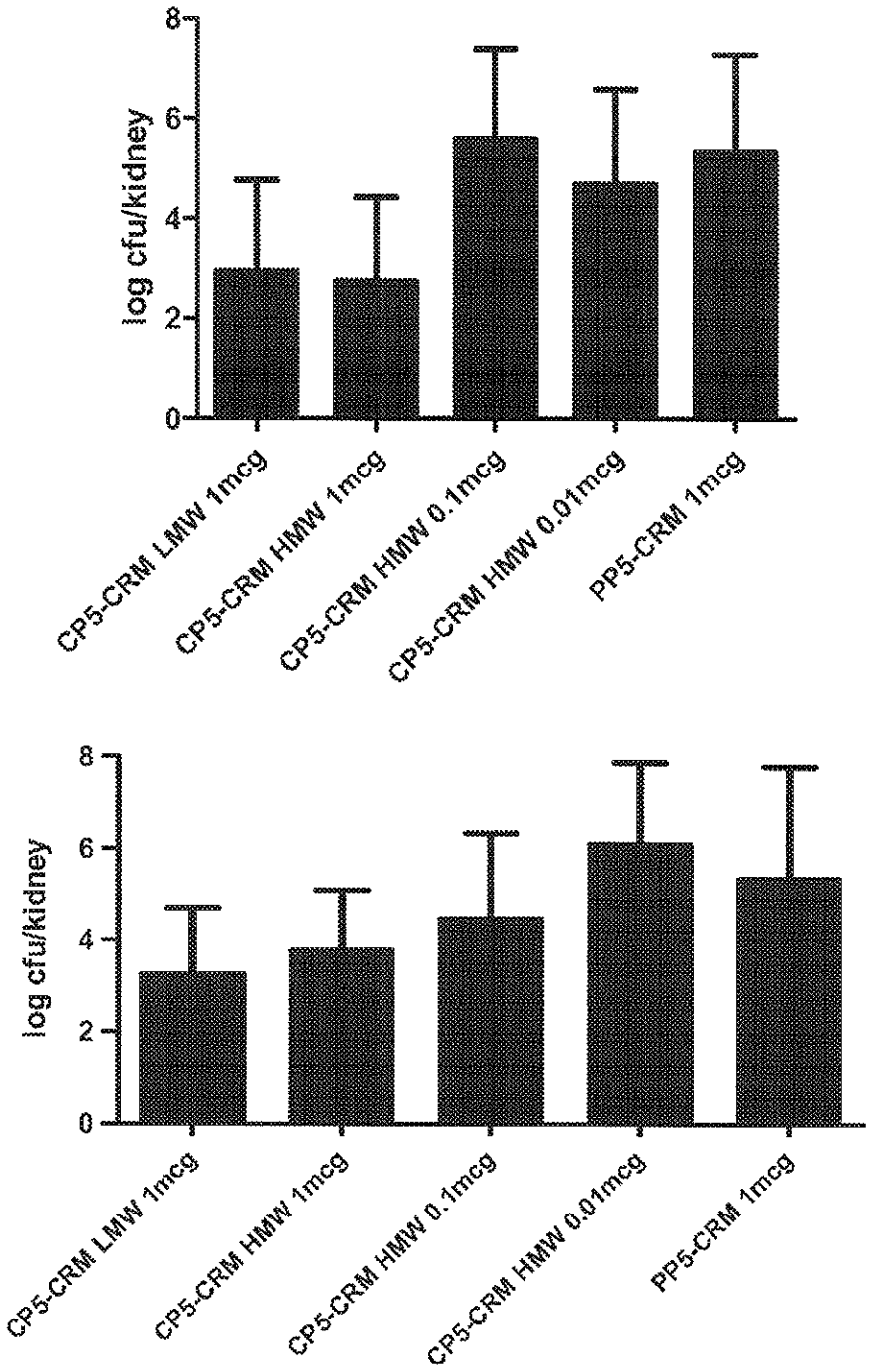
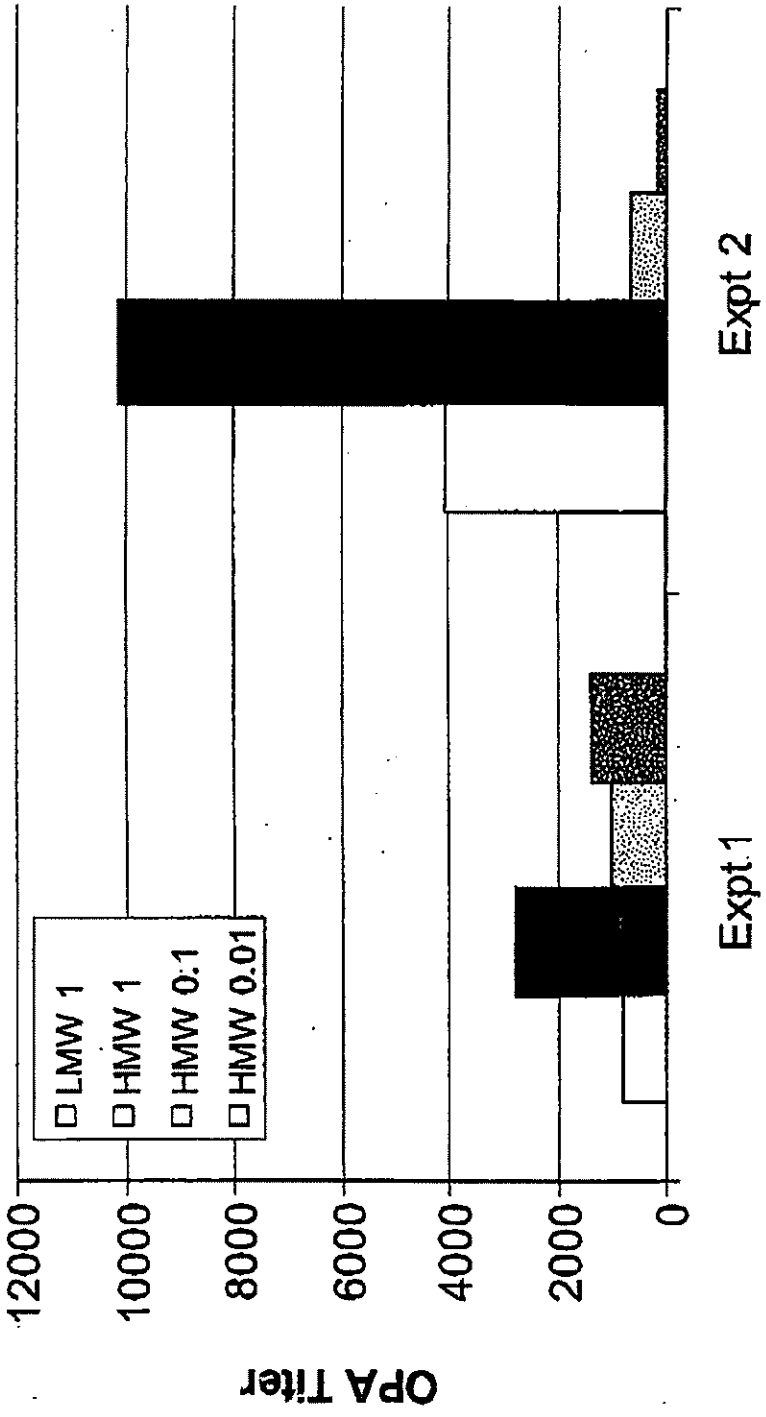

log cfu/kidney
0
2
4
6
8
CP5-CRM LMW 1mcg
CP5-CRM HMW 1mcg
CP5-CRM HMW 0.1mcg
CP5-CRM HMW 0.01mcg
PP5-CRM 1mcg
log cfu/kidney
0
2
4
6
8
CP5-CRM LMW 1mcg
CP5-CRM HMW 1mcg
CP5-CRM HMW 0.1mcg
CP5-CRM HMW 0.01mcg
PP5-CRM 1mcg

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