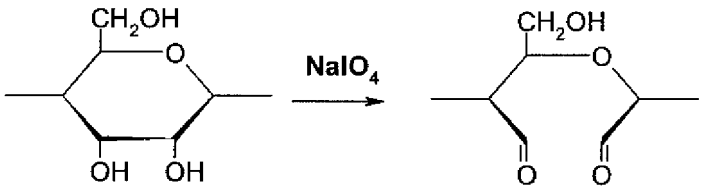
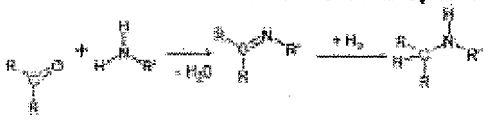
Figure 1.

A

1. Oxidation: activation at vicinal OH

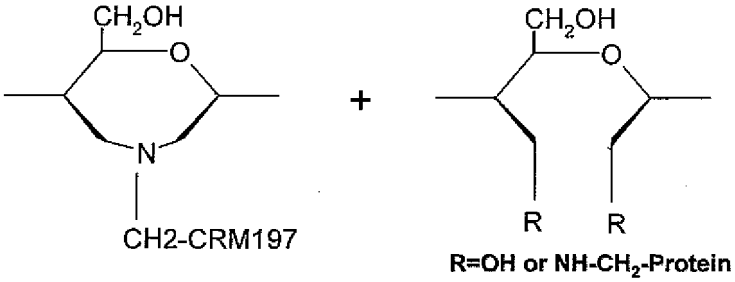


2. Reductive amination: breaks open the hexasaccharide ring



+ H2N-CRM —NaBH3CN→ PS-CH2-NH-CRM

3. After conjugation, a new epitope can be produced



B)

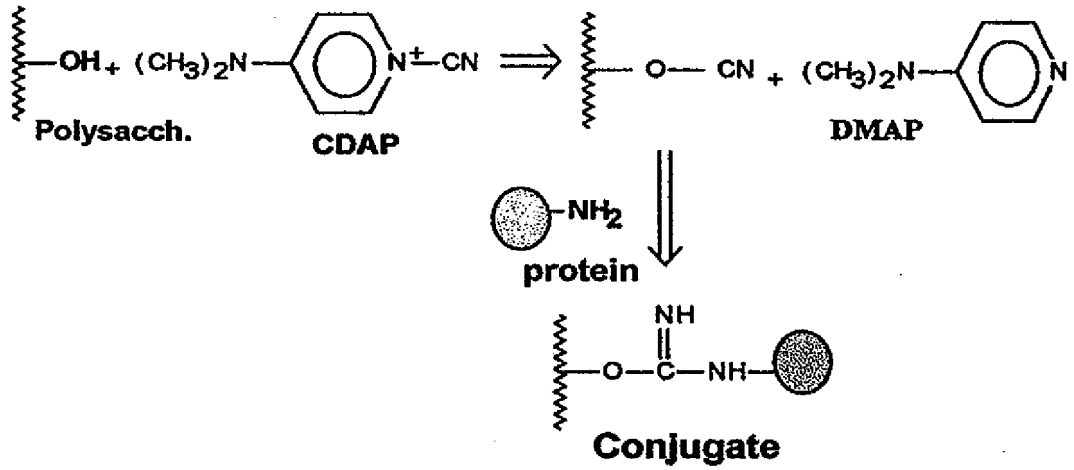


Figure 2

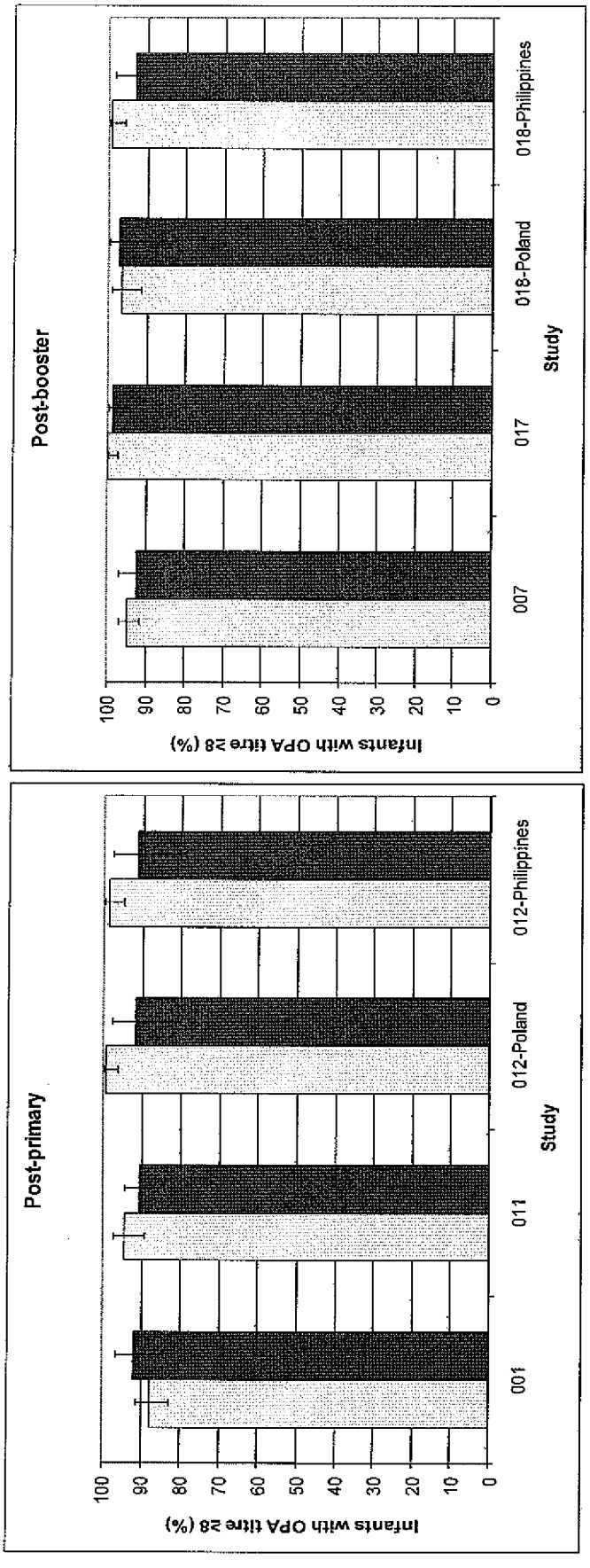

Post-primary
Infants with OPA titre ≥8 (%)
100
90
80
70
60
50
40
30
20
10
0
001
011
012-Poland
012-Philippines
Study
Post-booster
007
017
018-Poland
018-Philippines
PHiD-CV
7vCRM

Figure 3.

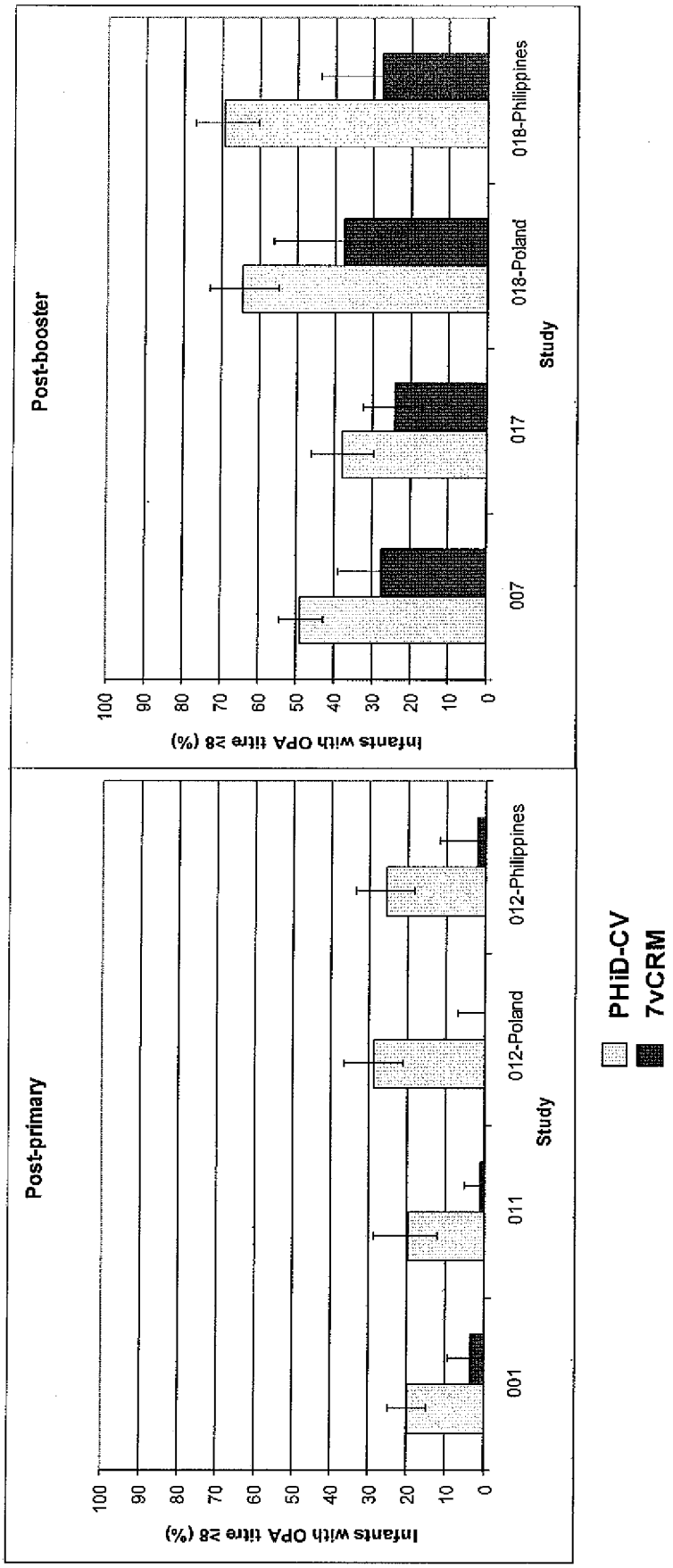

Post-primary
Infants with OPA titre ≥8 (%)
100
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70
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30
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10
0
001
011
012-Poland
012-Philippines
Study
Post-booster
007
017
018-Poland
018-Philippines
PHiD-CV
7vCRM

Figure 4

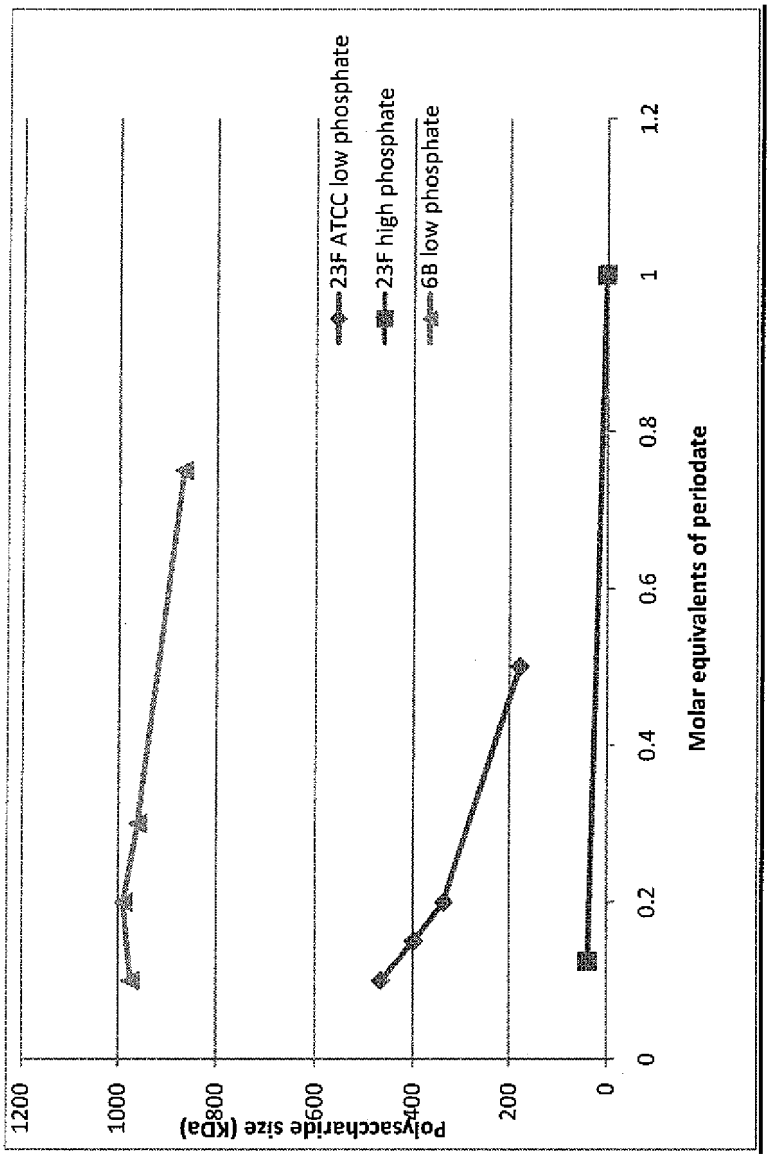

1200
1000
800
600
400
200
0
Polysaccharide size (kDa)
0
0.2
0.4
0.6
0.8
1
1.2
Molar equivalents of periodate
23F ATCC low phosphate
23F high phosphate
6B low phosphate

Figure 5

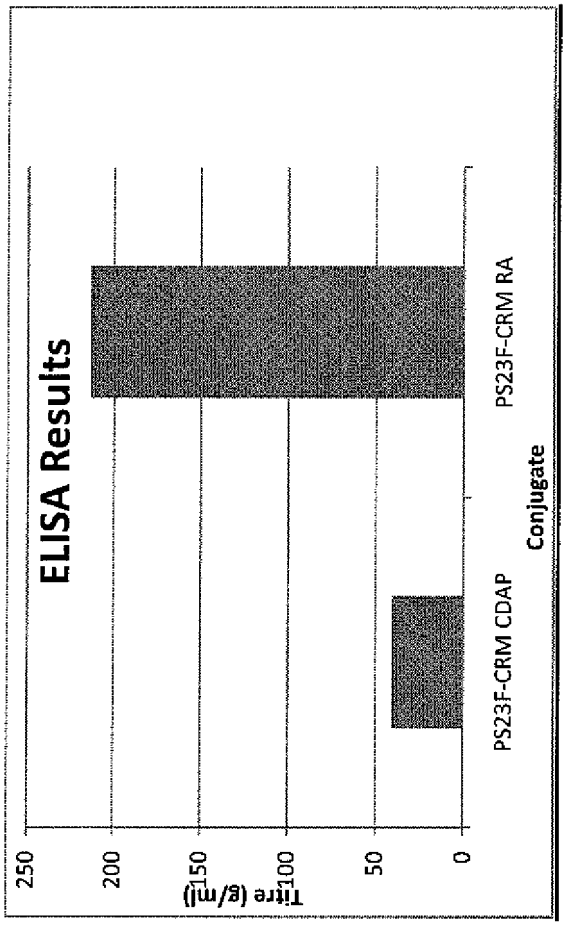

ELISA Results
Titre (g/ml)
250
200
150
100
50
0
PS23F-CRM CDAP
PS23F-CRM RA
Conjugate

Figure 6

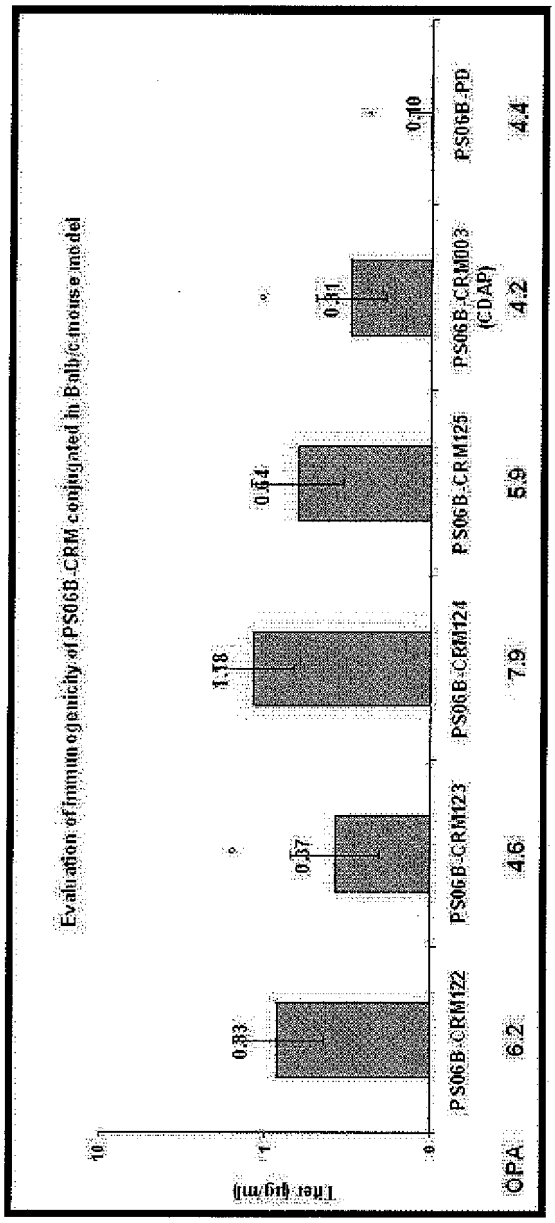
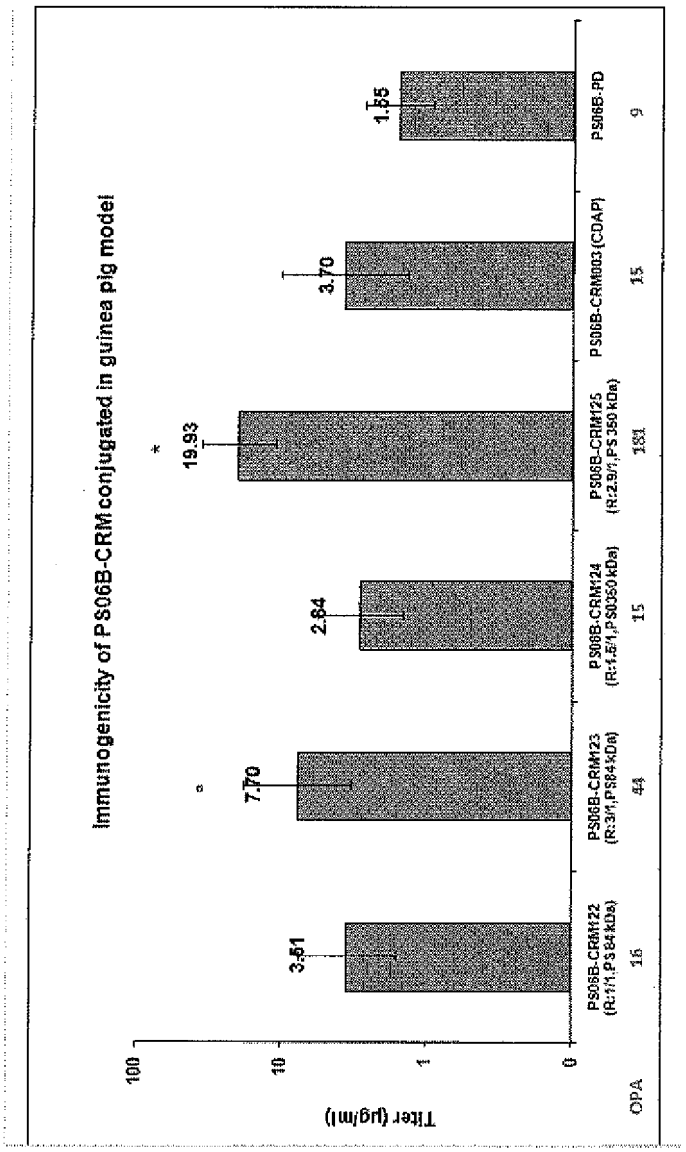

Evaluation of immunogenicity of PS06B-CRM conjugated in Balb/c mouse model
Titer µg/ml
10
1
0
0,33
0,57
1,18
0,64
0,11
0,10
PS06B-CRM122
PS06B-CRM123
PS06B-CRM124
PS06B-CRM125
PS06B-CRM003 (CDAP)
PS06B-PD
OPA
6.2
4.6
7.9
5.9
4.2
4.4

Figure 7


Immunogenicity of PS06B-CRM conjugated in guinea pig model
Titer (µg/ml)
100
10
1
0
OPA
3.51
7.70
2.84
19.93
3.70
1.55
a
*
PS06B-CRM122 (R:1/1,PS 64 kDa)
PS06B-CRM123 (R:3/1,PS64kDa)
PS06B-CRM124 (R:1.5/1,PS350 kDa)
PS06B-CRM125 (R:2.5/1,PS 350 kDa)
PS06B-CRM603(CDAP)
PS06B-PD
16
44
15
183
15
9