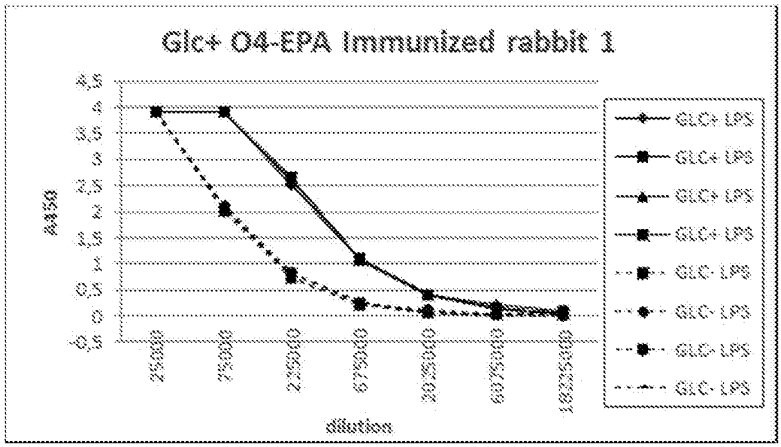

Glc+ O4-EPA Immunized rabbit 1
A450
dilution
GLC+ LPS
GLC+ LPS
GLC+ LPS
GLC+ LPS
GLC- LPS
GLC- LPS
GLC- LPS
GLC- LPS

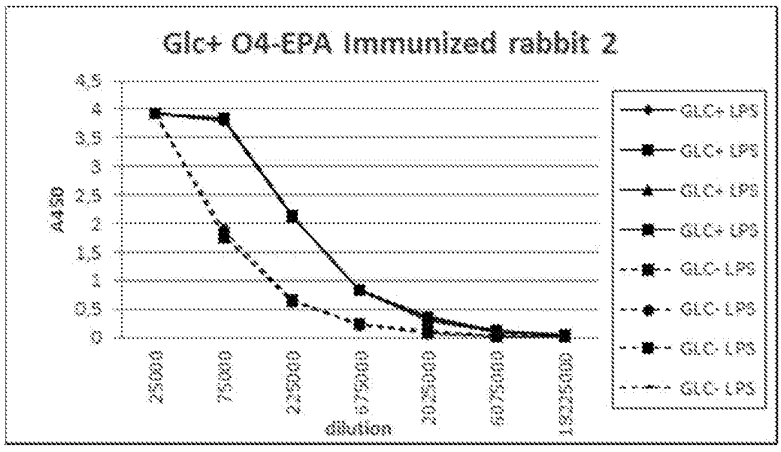

Glc+ O4-EPA Immunized rabbit 2
A450
dilution
GLC+ LPS
GLC+ LPS
GLC+ LPS
GLC+ LPS
GLC- LPS
GLC- LPS
GLC- LPS
GLC- LPS

Fig. 1

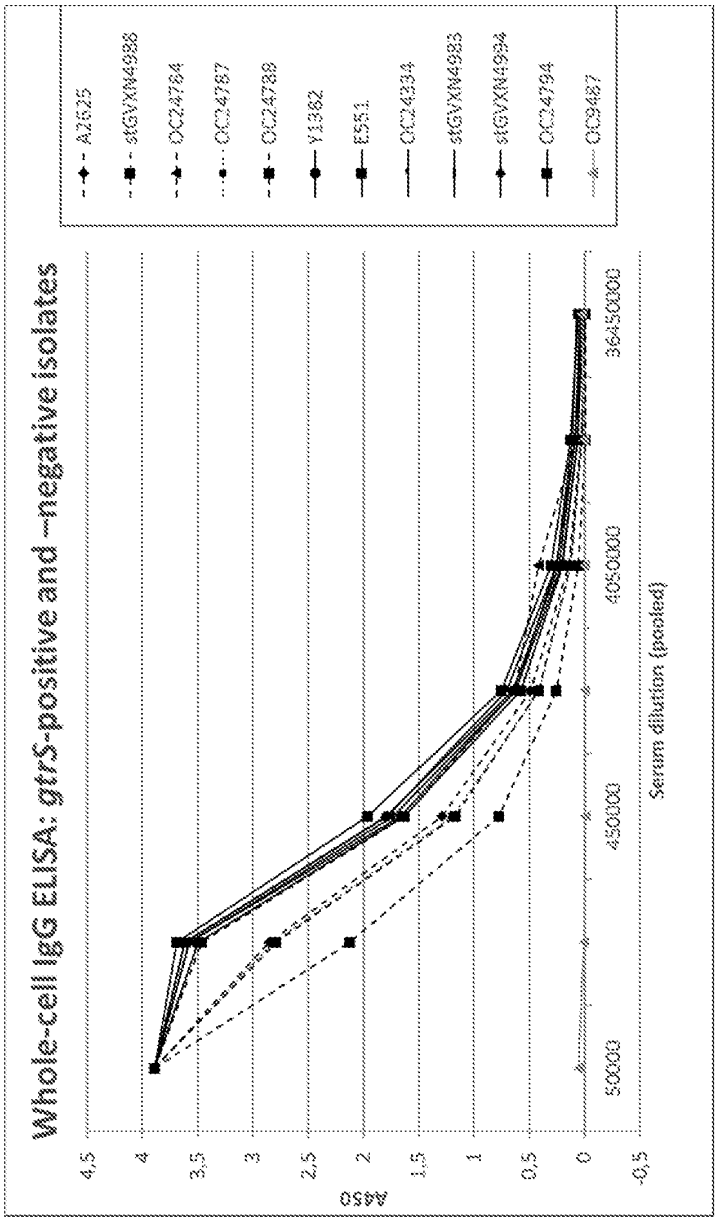
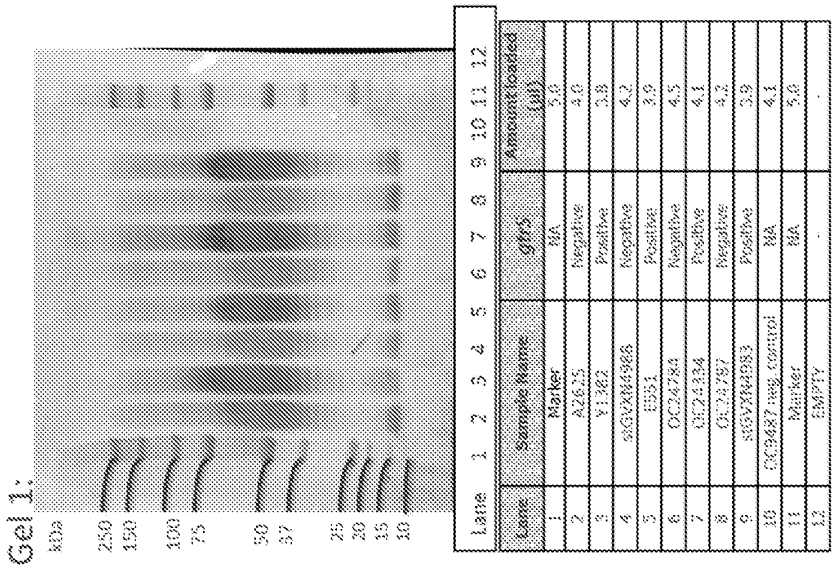
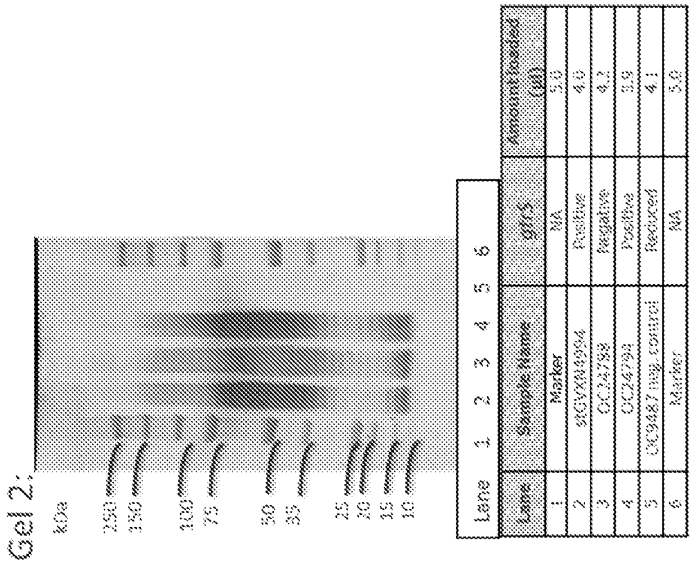

Whole-cell IgG ELISA: gtrS-positive and –negative isolates
A450
4,5
4
3,5
3
2,5
2
1,5
1
0,5
0
-0,5
50000
450000
4050000
36450000
Serum dilution (pooled)
A2625
stGVXN4983
OC24784
OC24787
OC24788
Y1382
E551
OC24834
stGVXN4983
stGVXN4934
OC24794
OC9487

Fig. 2

Fig. 3



Lane	Sample Name	gt/5	Amount loaded (µl)
1	Marker	NA	5.0
2	A2625	Negative	4.0
3	Y1362	Positive	3.8
4	sGVM4968	Negative	4.2
5	E551	Positive	3.9
6	OC24784	Negative	4.5
7	OC24334	Positive	4.1
8	OC24797	Negative	4.2
9	sGVM4983	Positive	3.9
10	OC9487 neg control	NA	4.1
11	Marker	NA	5.0
12	EMPTY	-	-



Lane	Sample Name	gt/5	Amount loaded (µl)
1	Marker	NA	5.0
2	sGVM4994	Positive	4.0
3	OC24788	Negative	4.2
4	OC24793	Positive	3.9
5	OC9487 neg control	Reduced	4.1
6	Marker	NA	5.0

Fig. 4A

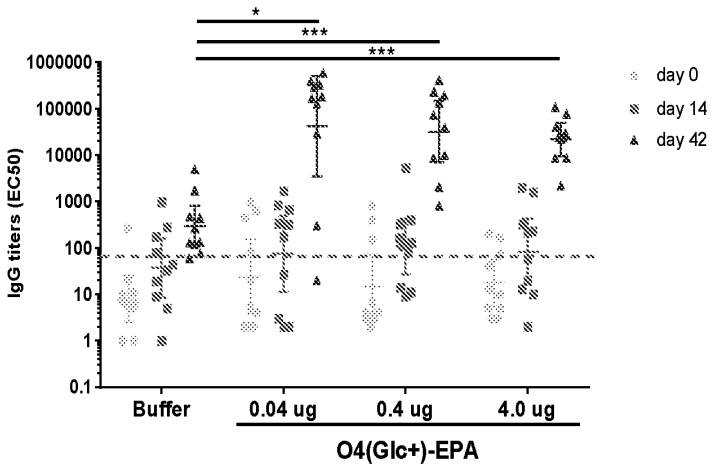

*
***
***
1000000
100000
10000
1000
100
10
1
0.1
IgG titers (EC50)
day 0
day 14
day 42
Buffer
0.04 ug
0.4 ug
4.0 ug
O4(Glc+)-EPA

Fig. 4B

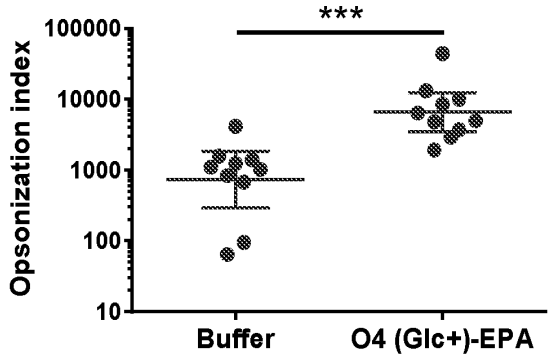

***
100000
10000
1000
100
10
Opsonization index
Buffer
O4 (Glc+)-EPA

Fig. 5

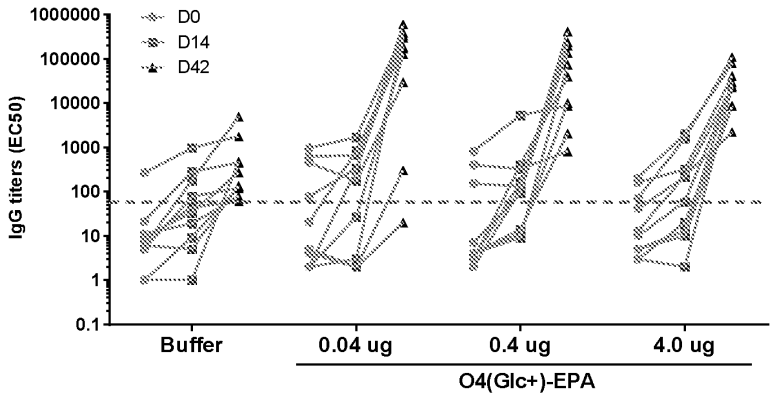
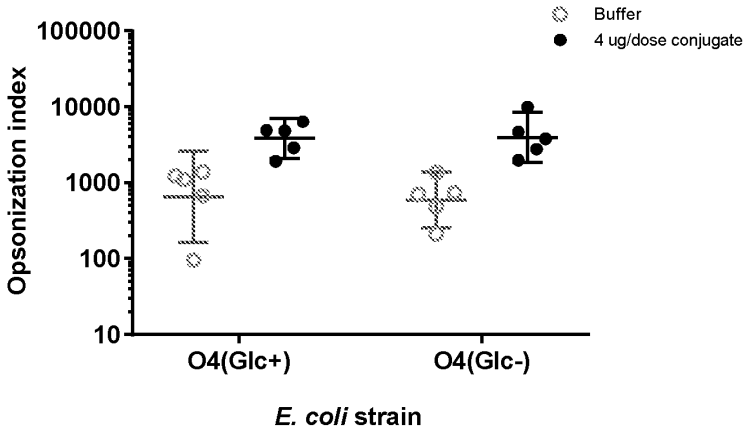

D0
D14
D42
IgG titers (EC50)
1000000
100000
10000
1000
100
10
1
0.1
Buffer
0.04 ug
0.4 ug
4.0 ug
O4(Glc+)-EPA

Fig. 6


Buffer
4 ug/dose conjugate
Opsonization index
100000
10000
1000
100
10
O4(Glc+)
O4(Glc-)
E. coli strain

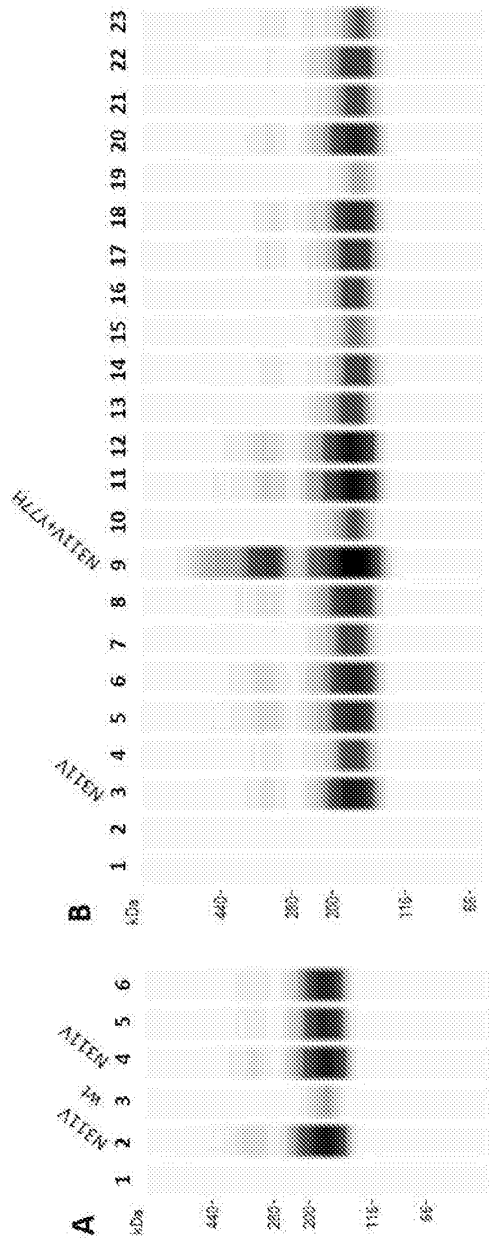

A
kDa
460-
260-
200-
110-
60-
1
2
3
4
5
6
ATEN
ATEN
1A
B
kDa
460-
260-
200-
110-
60-
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
ATEN
HELA+ATEN

Fig. 7

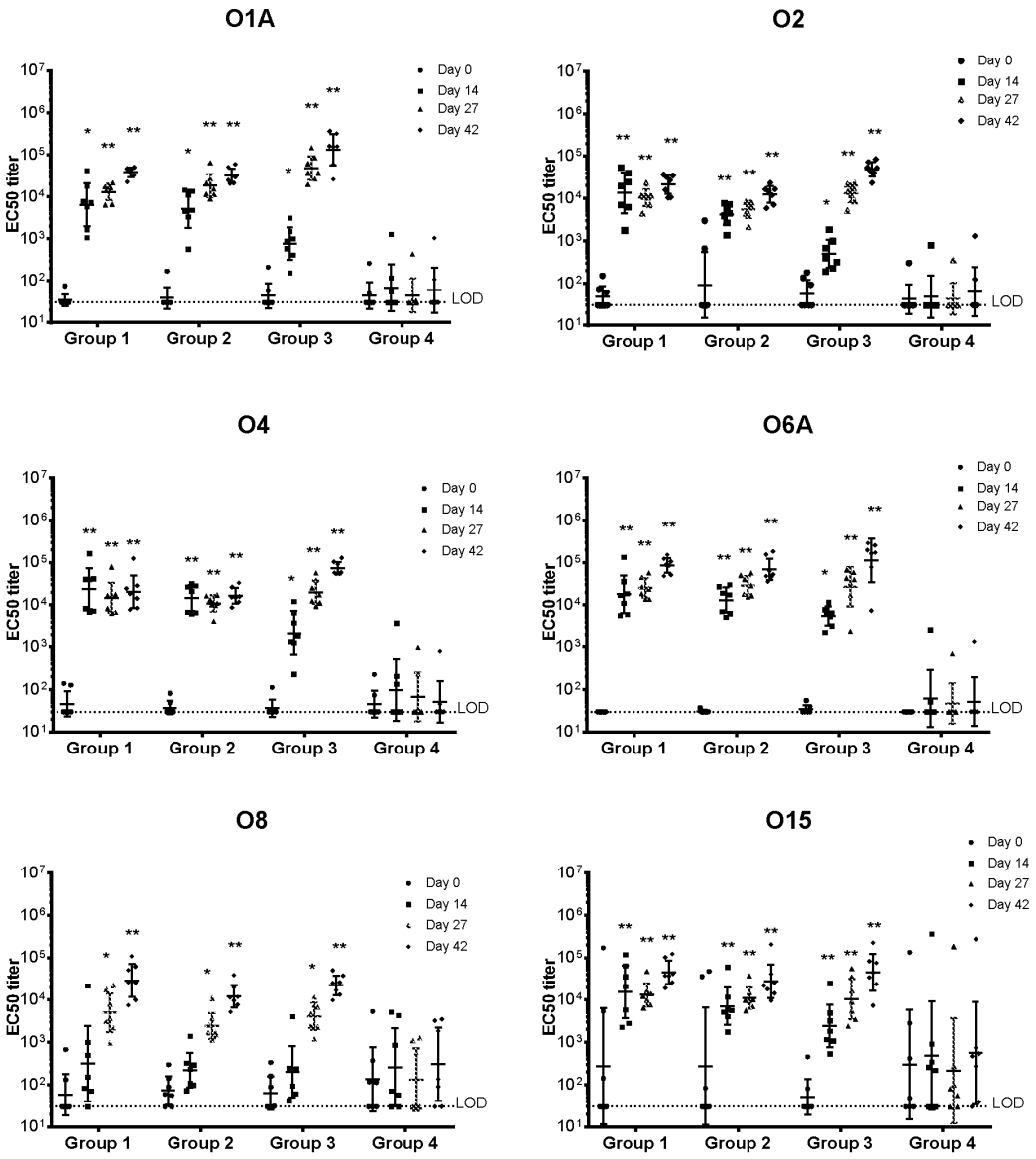

O1A
O2
O4
O6A
O8
O15
EC50 titer
Day 0
Day 14
Day 27
Day 42
LOD
Group 1
Group 2
Group 3
Group 4

Fig. 8

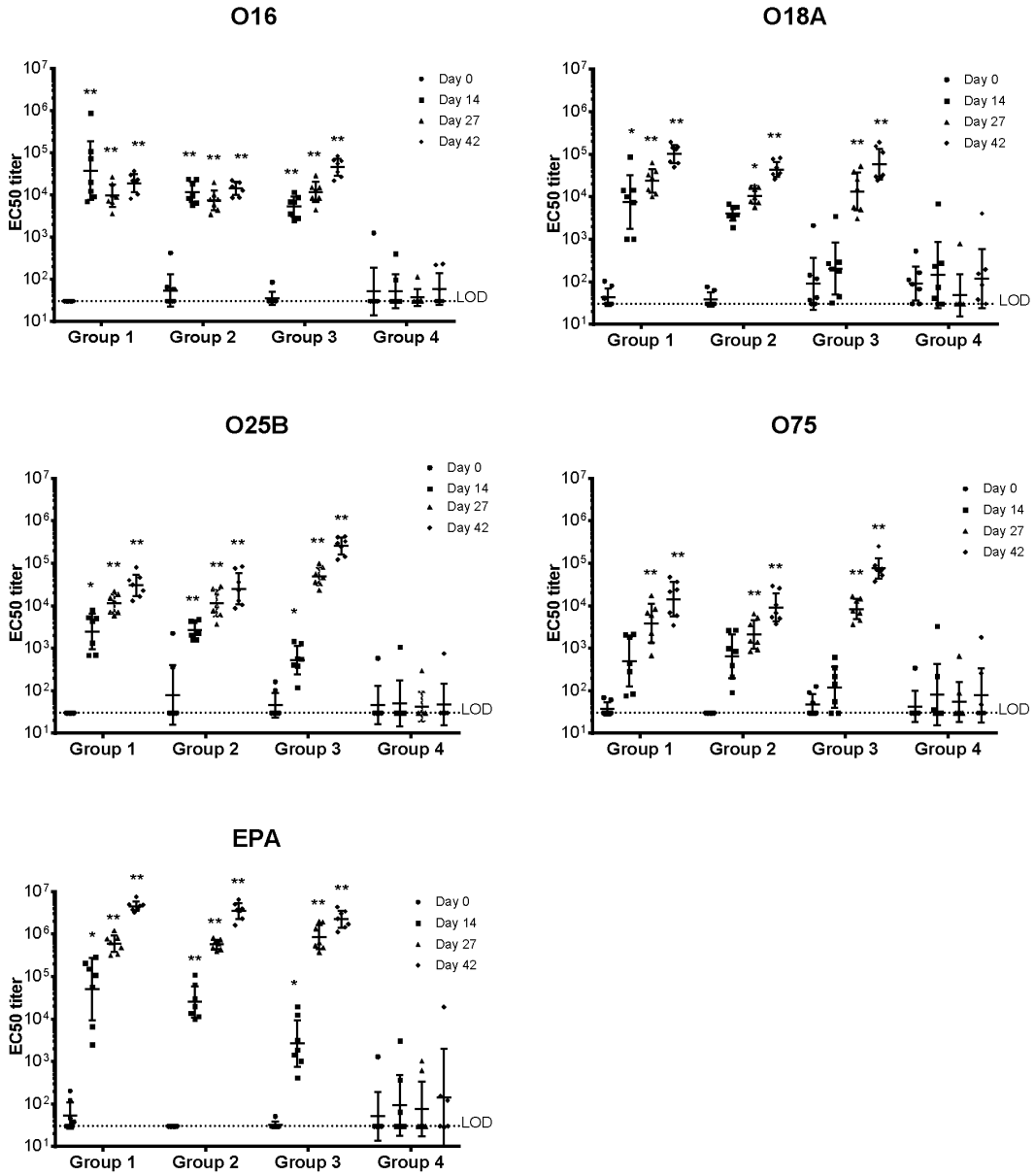


Fig. 8 - continued

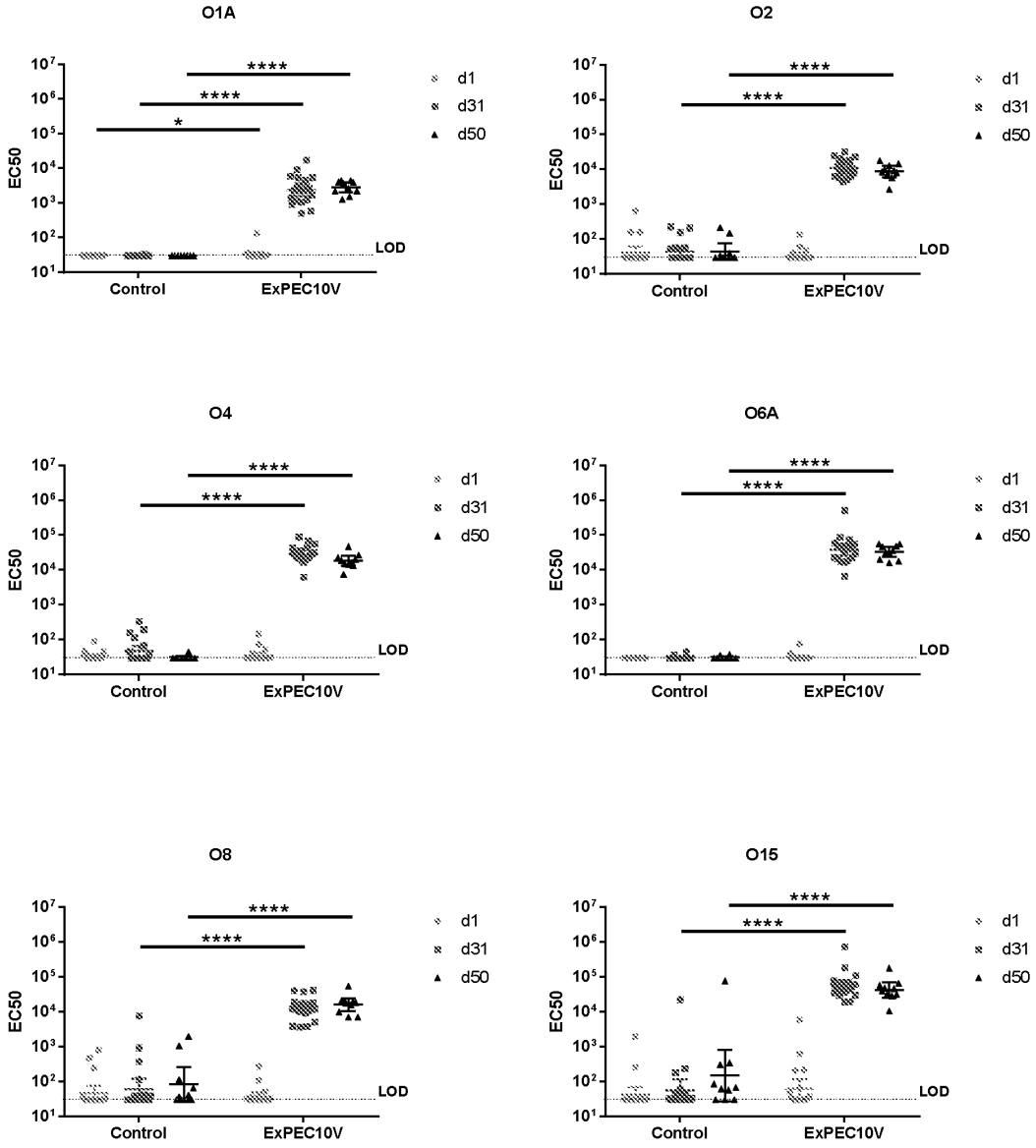


Fig. 9

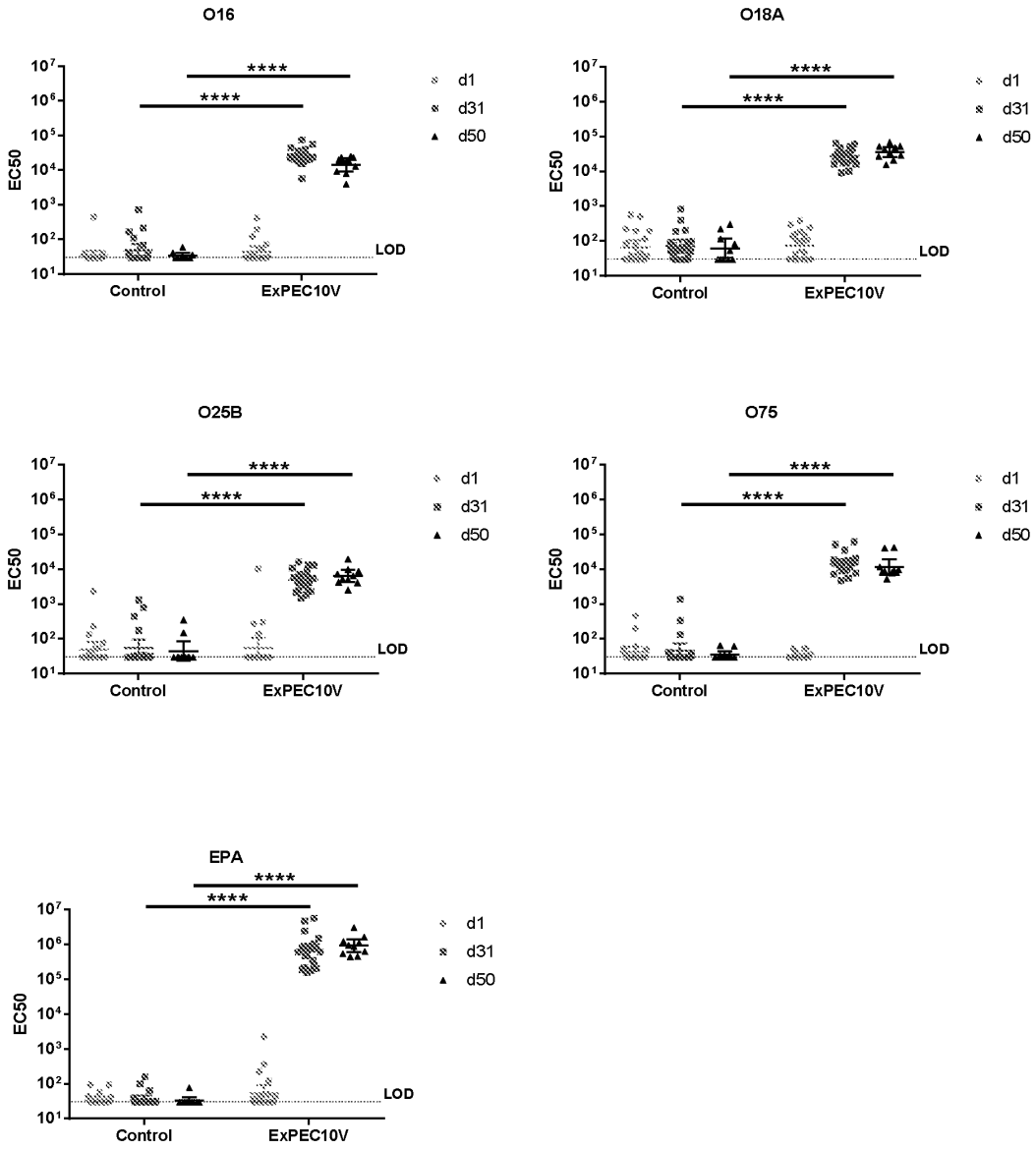
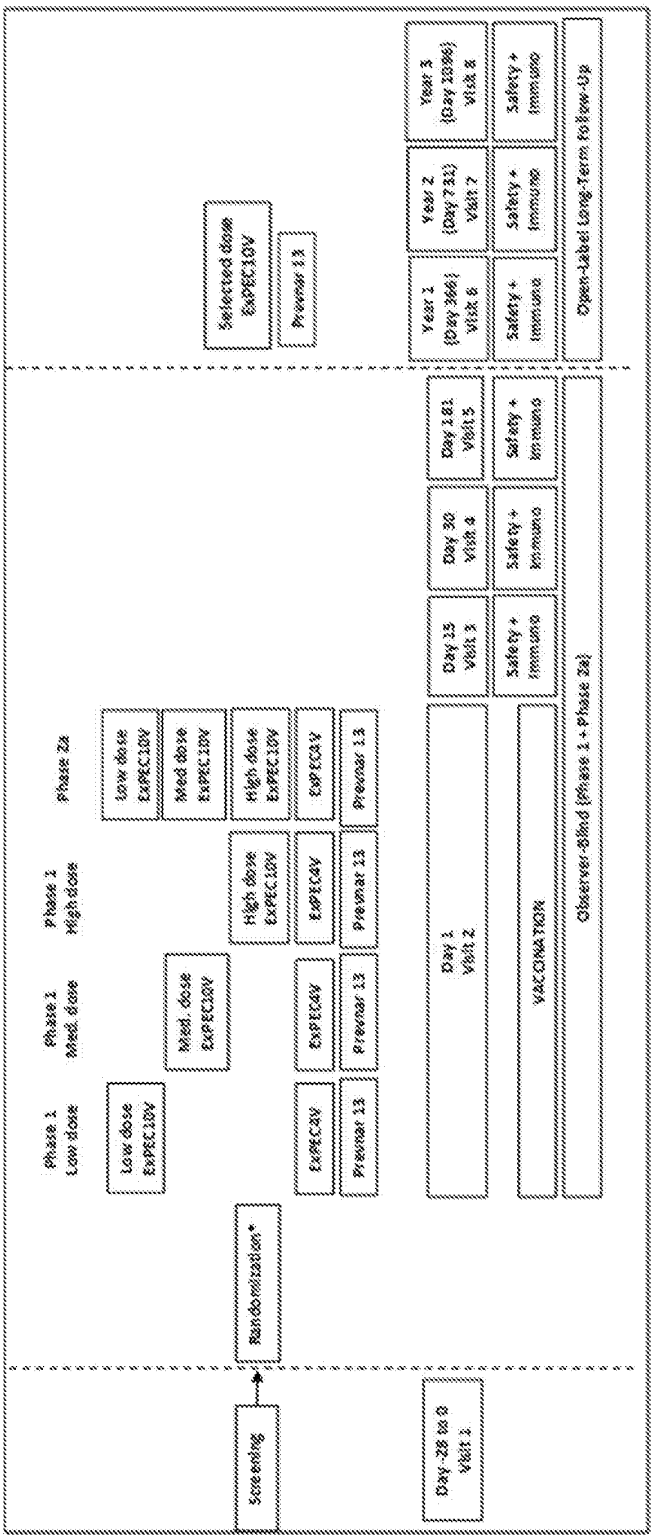


Fig. 9 - continued

Fig. 10A


Screening
Day -28 to 0
Visit 1
Randomization*
Phase 1
Low dose
Phase 1
Med. dose
Phase 1
High dose
Phase 2a
Low dose
ExPEC10V
Med dose
ExPEC10V
High dose
ExPEC10V
ExPEC4V
Prevnar 13
Day 1
Visit 2
Day 15
Visit 3
Day 30
Visit 4
Day 181
Visit 5
VACCINATION
Observer-Blind (Phase 1 + Phase 2a)
Safety +
Immuno
Open-Label Long-Term Follow-Up
Year 1
(Day 366)
Visit 6
Year 2
(Day 731)
Visit 7
Year 3
(Day 1096)
Visit 8
Selected dose
ExPEC10V
Prevnar 13

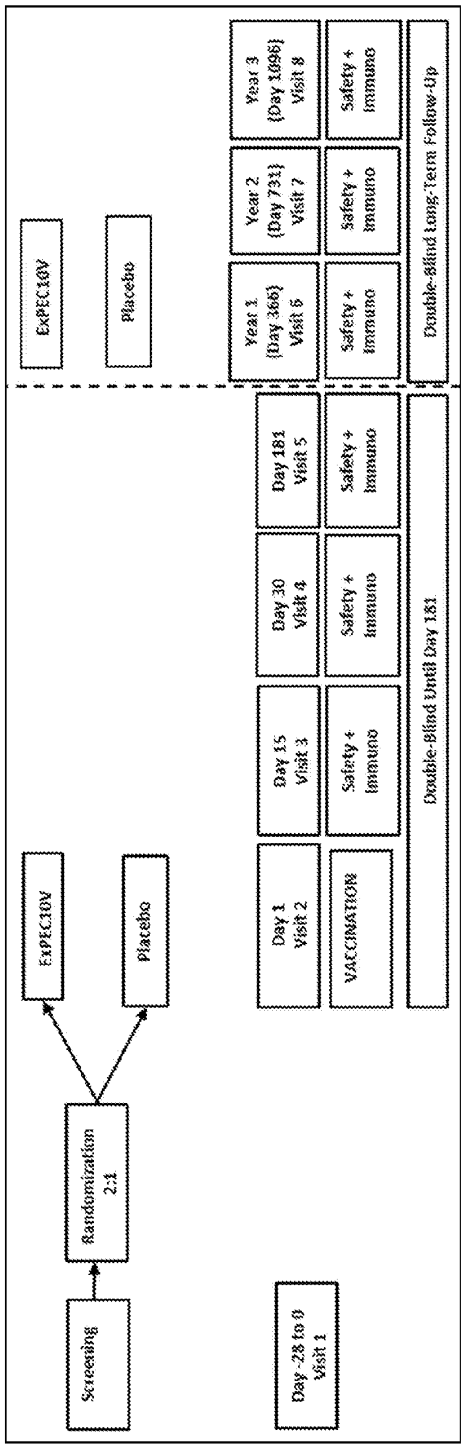

Screening
Day -28 to 0
Visit 1
Randomization
2:1
EXPEC10V
Placebo
Day 1
Visit 2
Day 15
Visit 3
Day 30
Visit 4
Day 181
Visit 5
Year 1
(Day 366)
Visit 6
Year 2
(Day 731)
Visit 7
Year 3
(Day 1096)
Visit 8
VACCINATION
Safety +
Immuno
Double-Blind Until Day 181
Double-Blind Long-Term Follow-Up

Fig. 10B