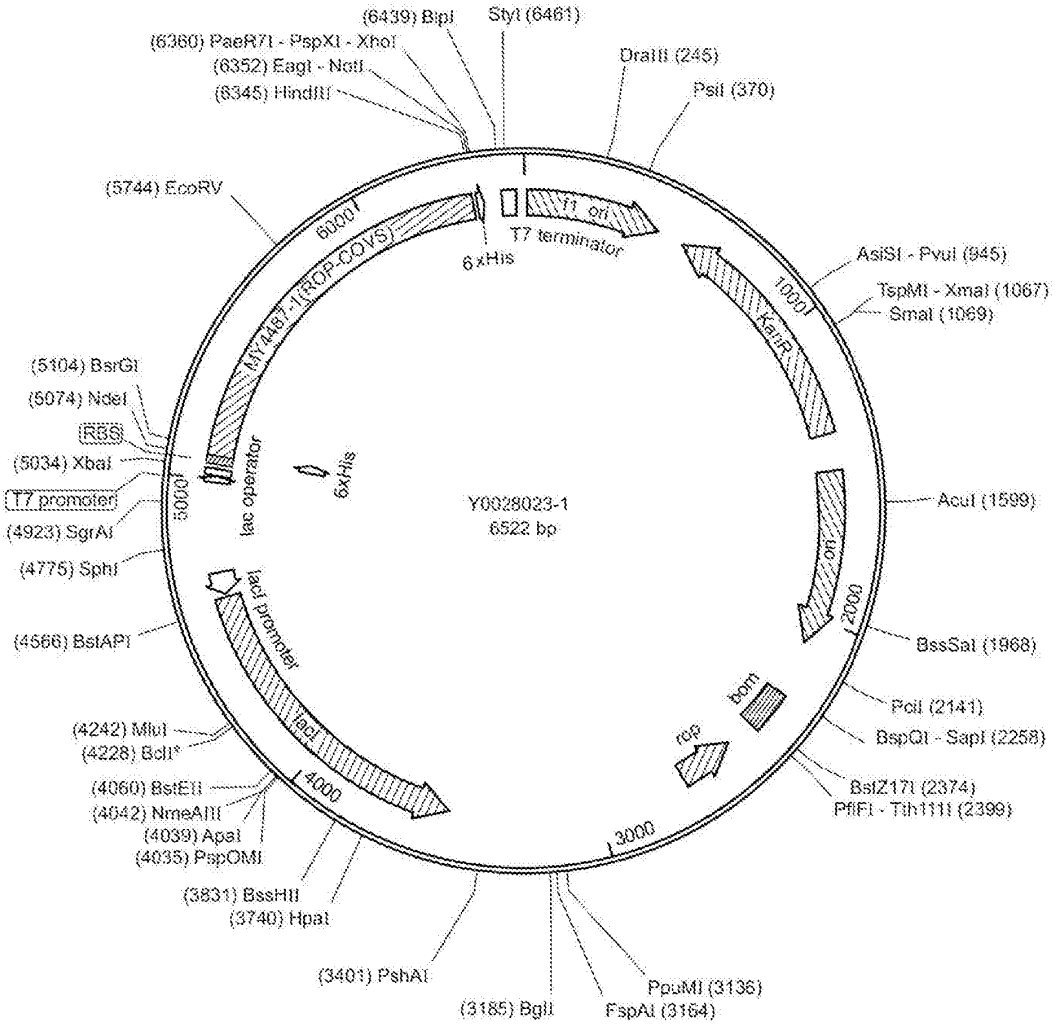

(6439) BlpI
StyI (6461)
(6360) PaeR7I - PspXI - XhoI
(6352) EagI - NotI
(6345) HindIII
DraIII (245)
PsiI (370)
(5744) EcoRV
6000
T7 ori
T7 terminator
6xHis
AsiSI - PvuI (945)
TspMI - XmaI (1067)
SmaI (1069)
1000
KanR
(5104) BsrGI
(5074) NdeI
RBS
(5034) XbaI
T7 promoter
(4923) SgrAI
(4775) SphI
(4566) BstAPI
5000
lac operator
6xHis
Y0028023-1
6522 bp
AcuI (1599)
ori
2000
BssSaI (1968)
PciI (2141)
BspQI - SapI (2258)
BslZ17I (2374)
PflFI - Tth111I (2399)
bom
rop
3000
lacI promoter
lacI
4000
(4242) MluI
(4228) BclI*
(4060) BstEII
(4042) NmeAIII
(4039) ApaI
(4035) PspOMI
(3831) BssHII
(3740) HpaI
(3401) PshAI
(3185) BglI
PpuMI (3136)
FspAI (3164)

FIG. 1

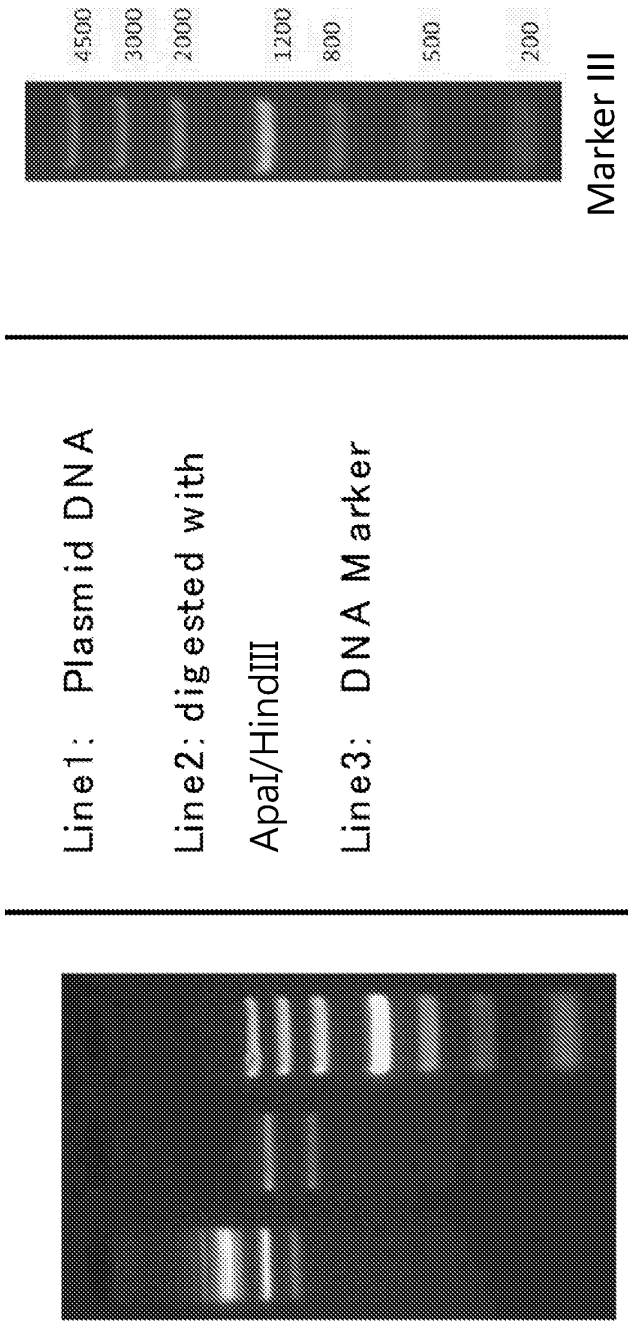

4500
3000
2000
1200
800
500
200
Marker III
Line1: Plasmid DNA
Line2: digested with ApaI/HindIII
Line3: DNA Marker

Figure 2

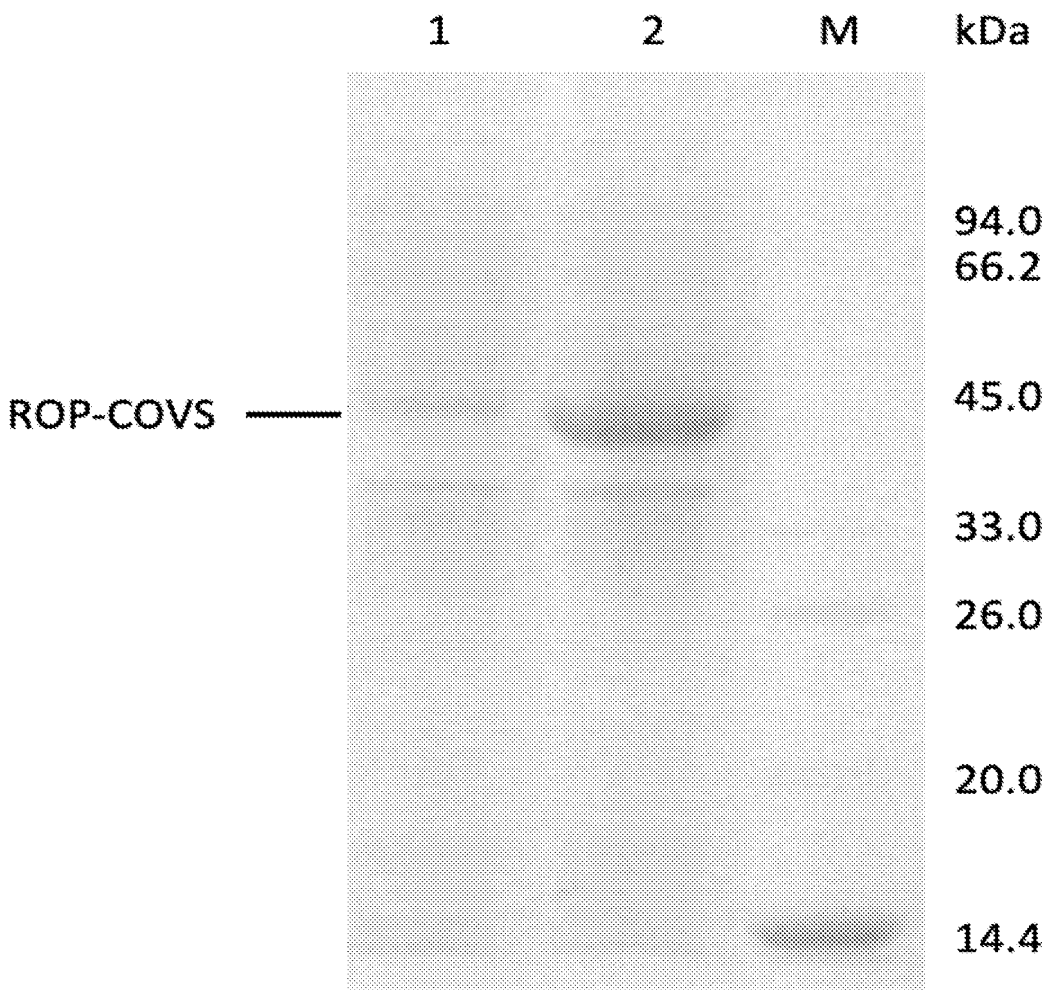


Figure 3A

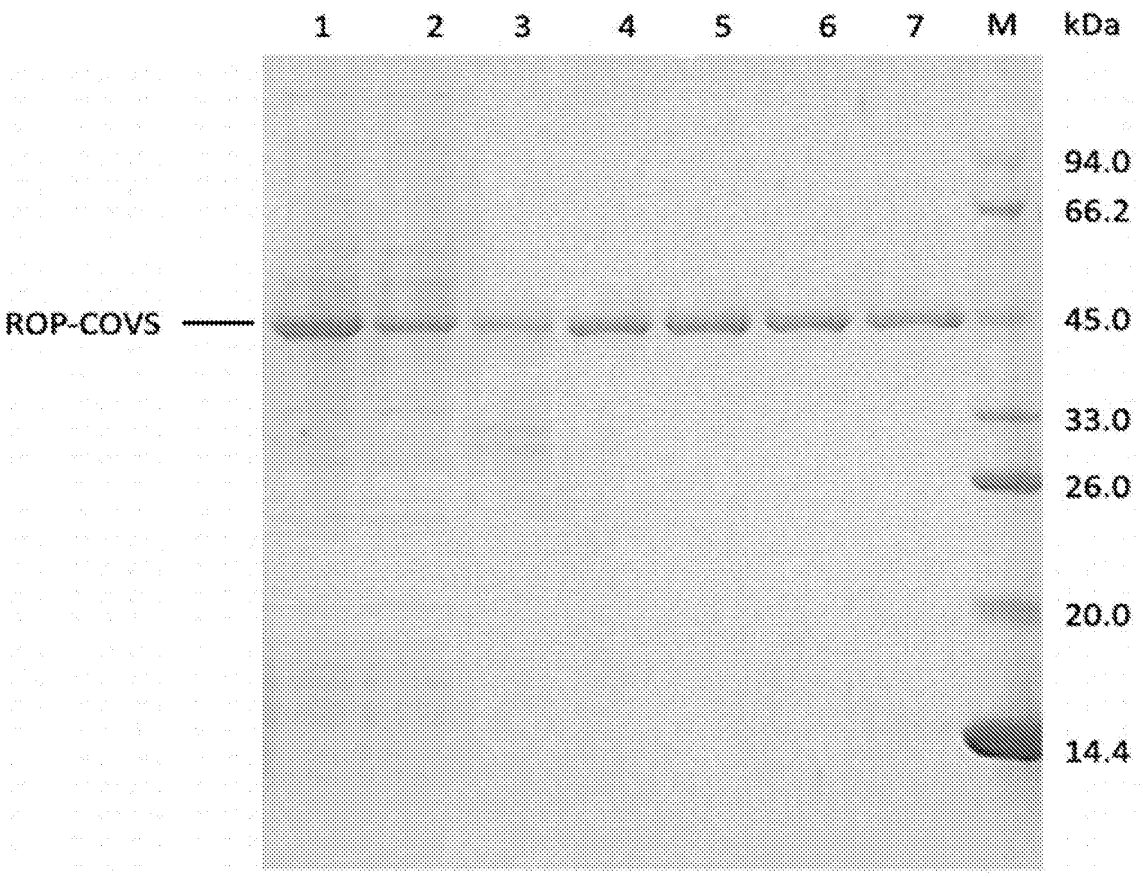


Figure 3B

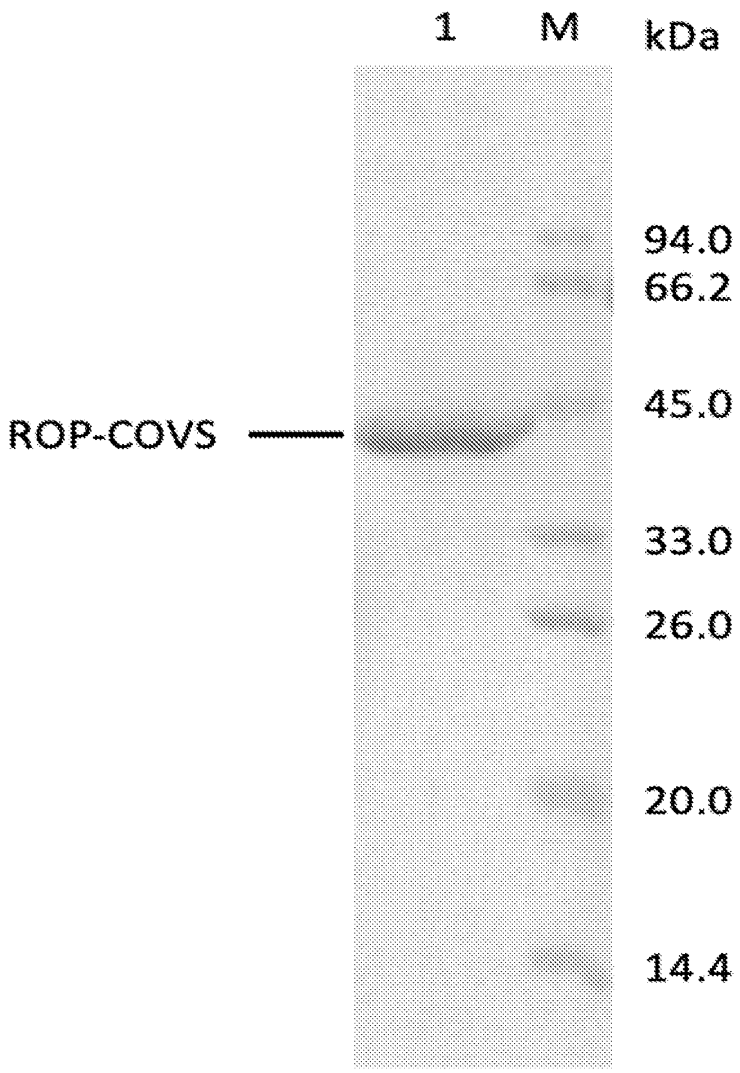


Figure 3C

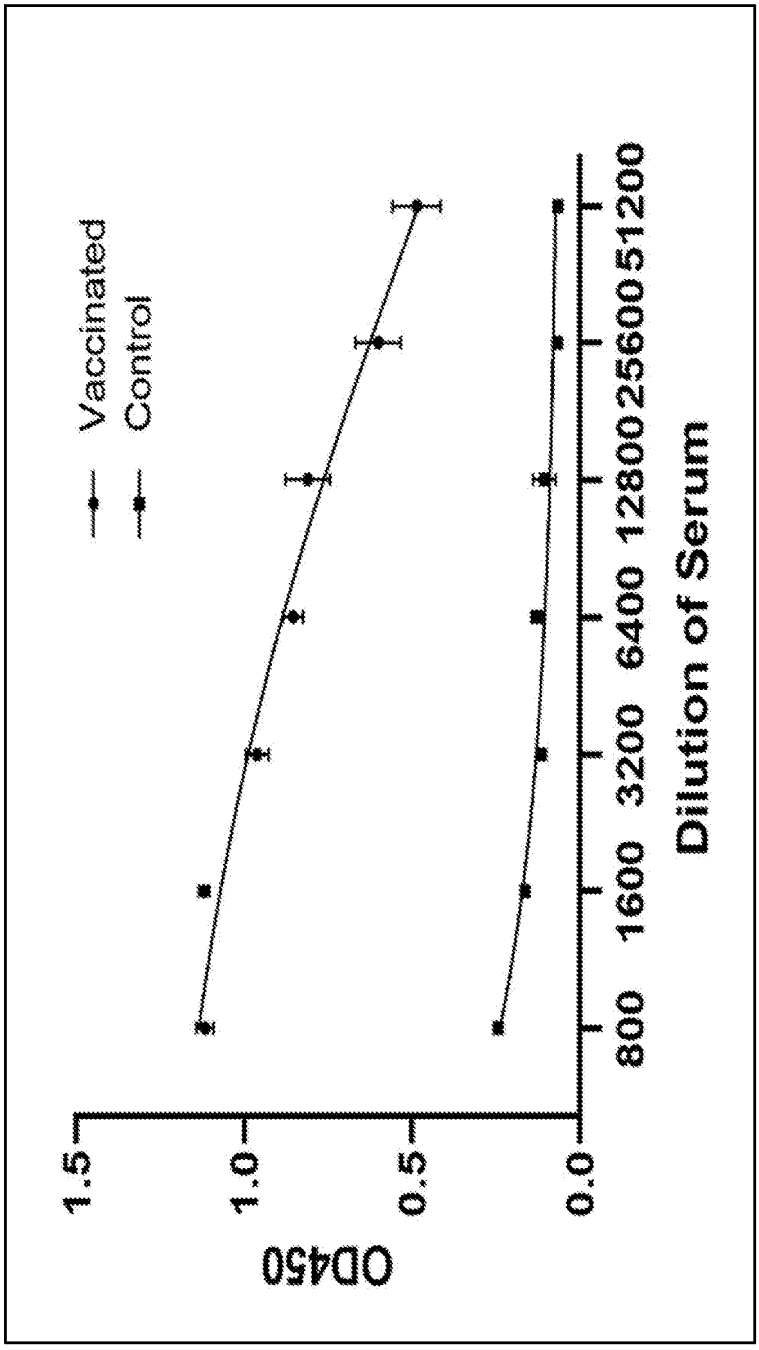

Vaccinated
Control
OD450
1.5
1.0
0.5
0.0
800
1600
3200
6400
12800
25600
51200
Dilution of Serum

Figure 4

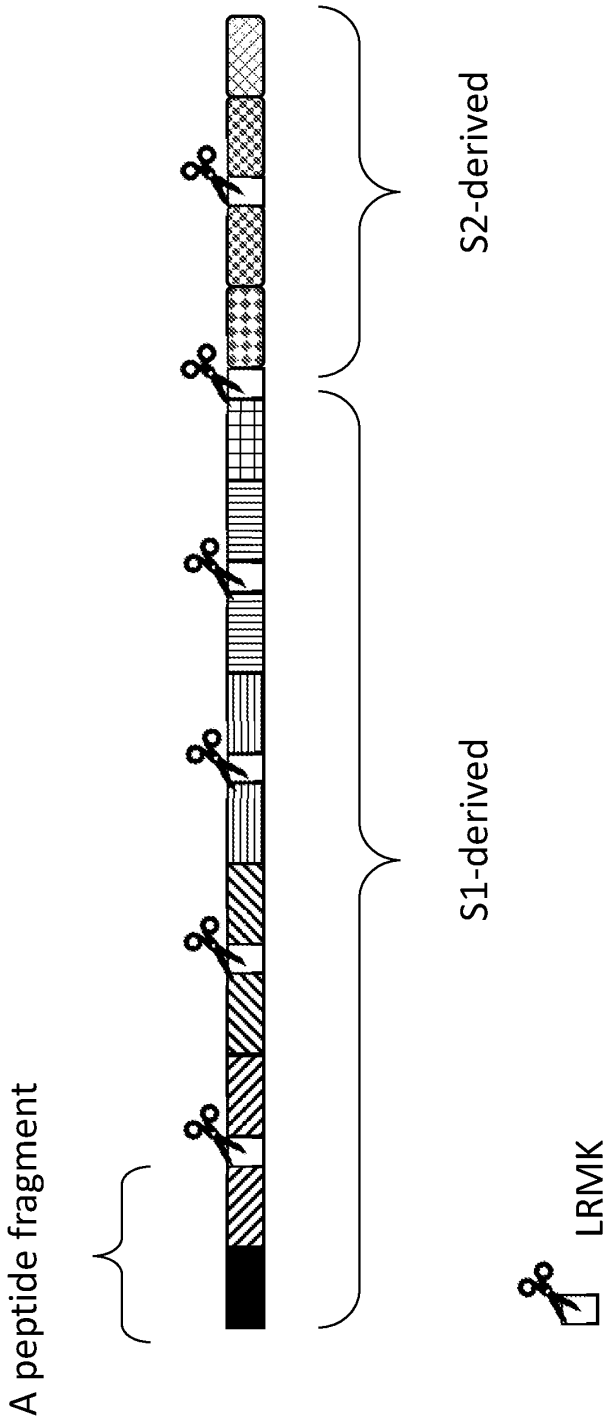
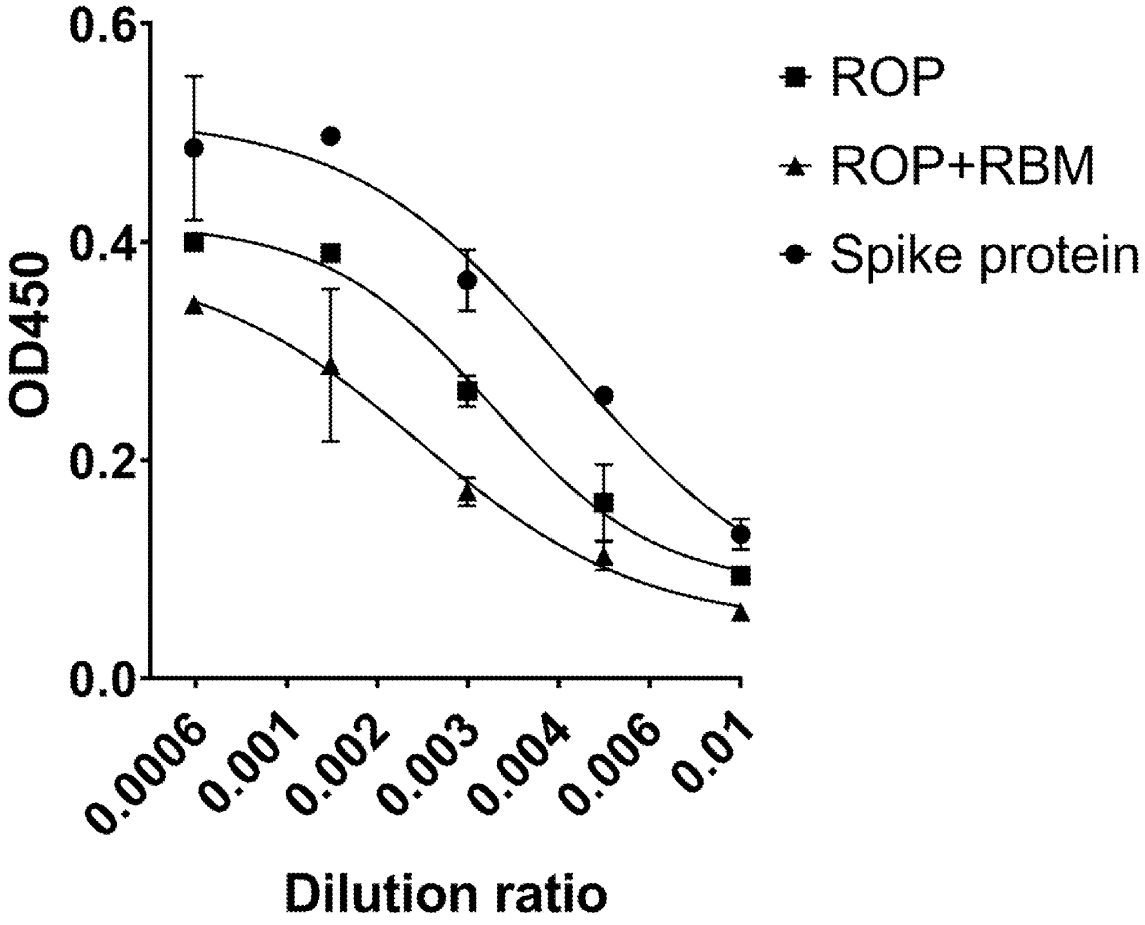


Figure 5



N= 5 mice/group

Figure 6

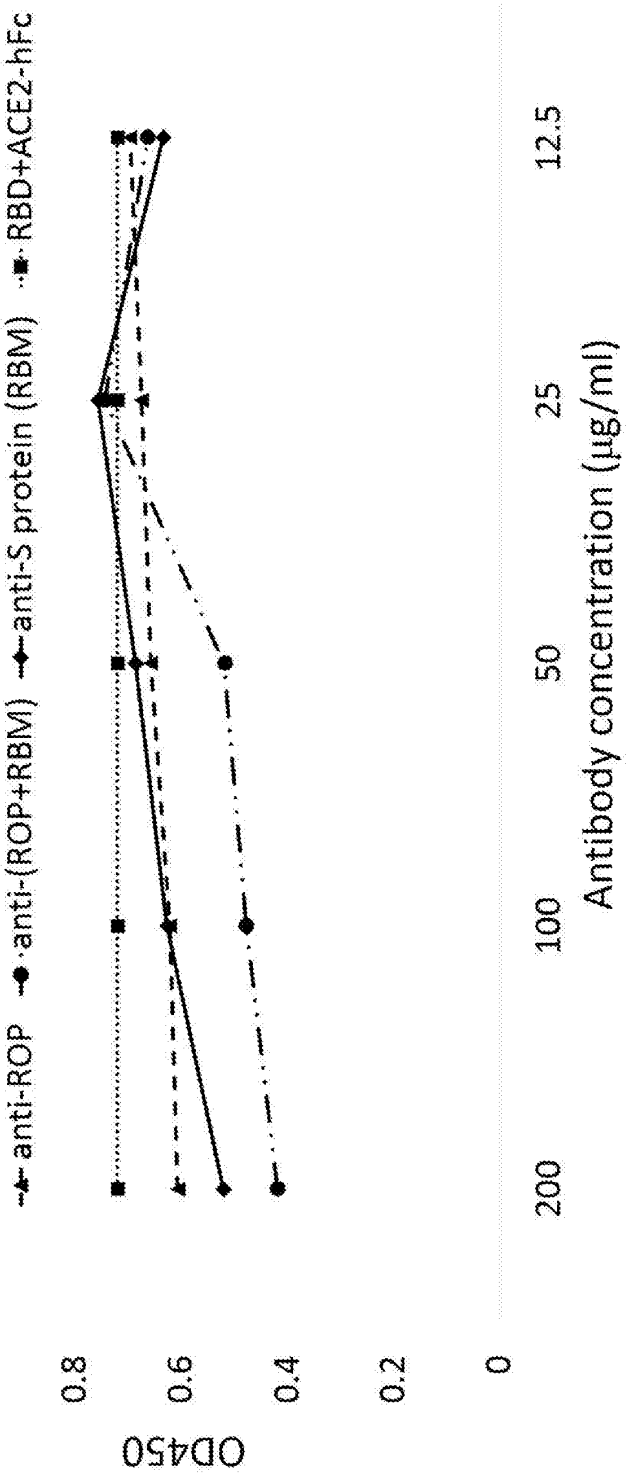

anti-ROP
anti-(ROP+RBM)
anti-S protein (RBM)
RBD+ACE2-hFc
OD450
0
0.2
0.4
0.6
0.8
Antibody concentration (µg/ml)
12.5
25
50
100
200

FIG. 7