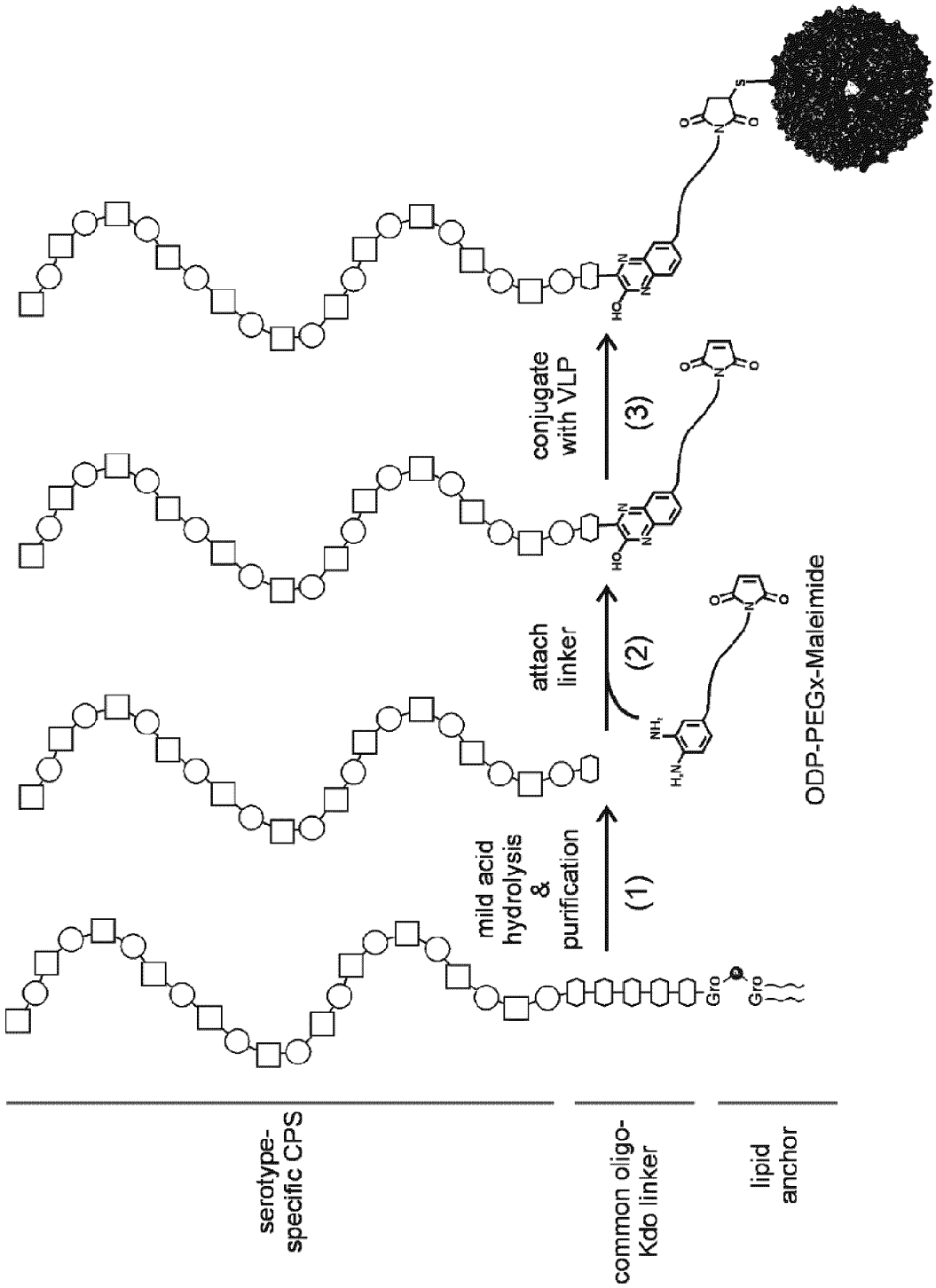
serotype-specific CPS
common oligo-Kdo linker
lipid anchor
mild acid hydrolysis & purification
(1)
attach linker
(2)
ODP-PEGx-Maleimide
conjugate with VLP
(3)

Figure 1

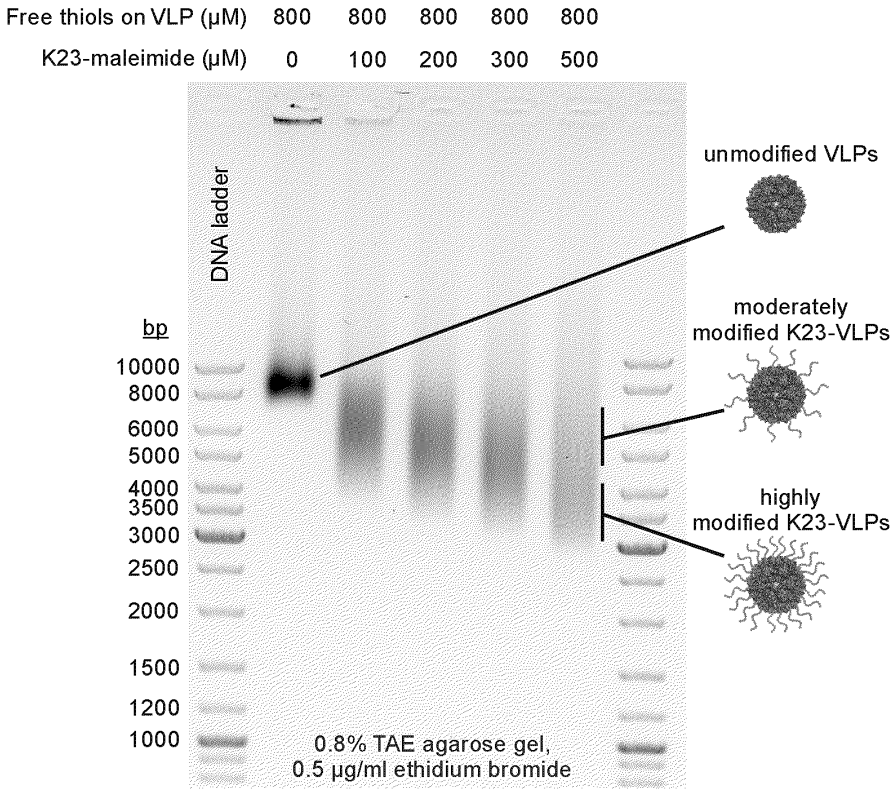

Figure 2

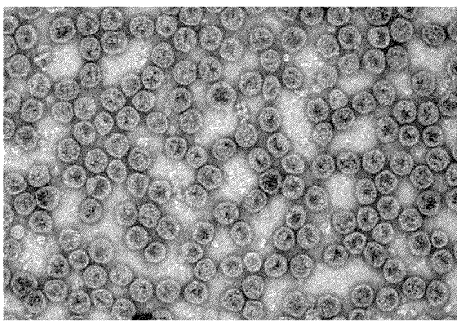

Figure 3A

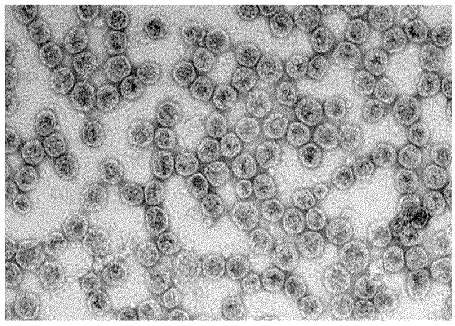

Figure 3B

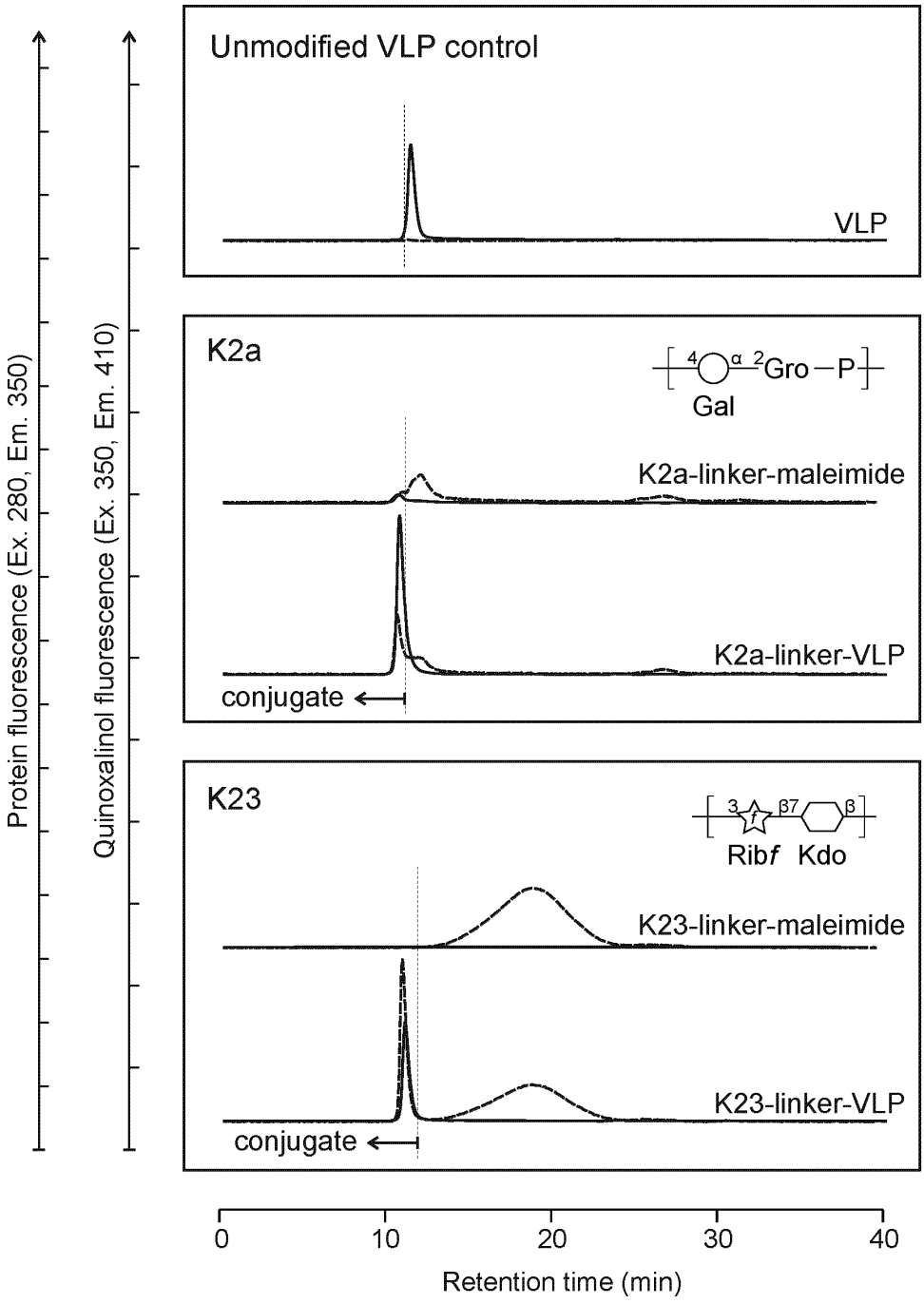
Unmodified VLP control
VLP
K2a
4 α 2 Gro – P
Gal
K2a-linker-maleimide
K2a-linker-VLP
conjugate
K23
3 f β7 β
Rib*f* Kdo
K23-linker-maleimide
K23-linker-VLP
conjugate
Protein fluorescence (Ex. 280, Em. 350)
Quinoxalinol fluorescence (Ex. 350, Em. 410)
0
10
20
30
40
Retention time (min)

Figure 4

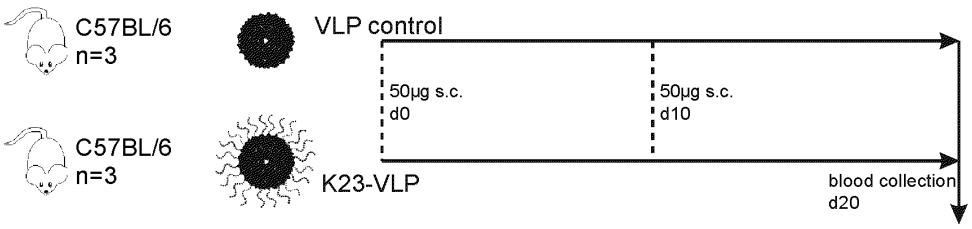

Figure 5

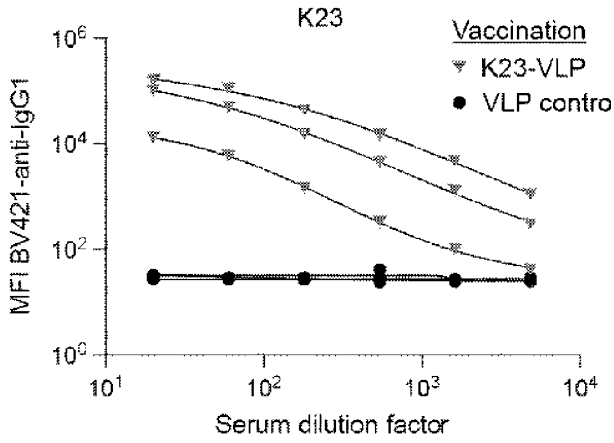

Figure 6A

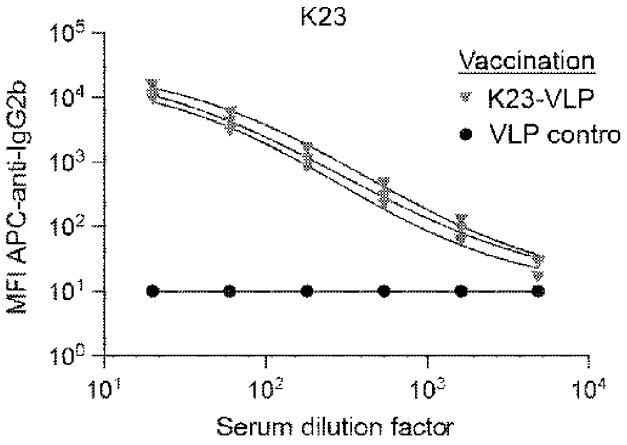

Figure 6B

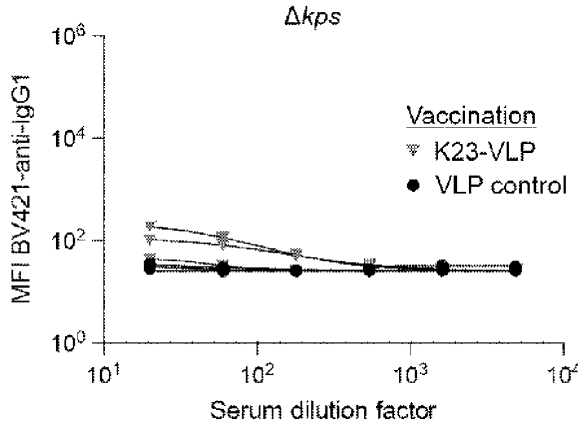

Figure 7A

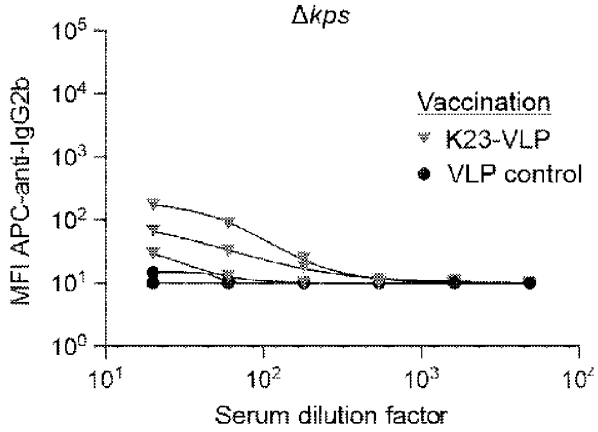

Figure 7B

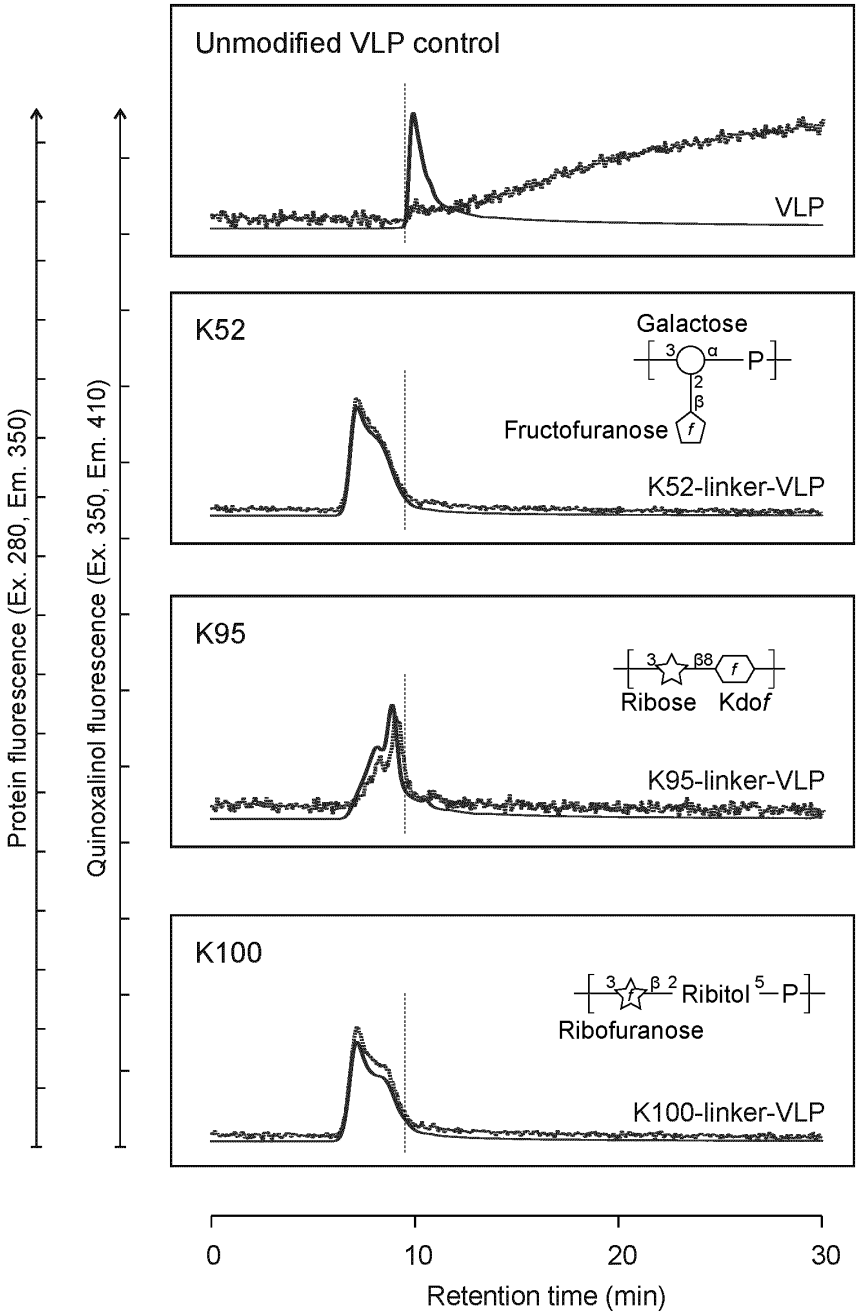
Unmodified VLP control
VLP
K52
Galactose
3
α
P
2
β
Fructofuranose
f
K52-linker-VLP
K95
3
β8
f
Ribose
Kdof
K95-linker-VLP
K100
3
β 2
Ribitol
5
P
Ribofuranose
K100-linker-VLP
Protein fluorescence (Ex. 280, Em. 350)
Quinoxalinol fluorescence (Ex. 350, Em. 410)
0
10
20
30
Retention time (min)

Figure 8

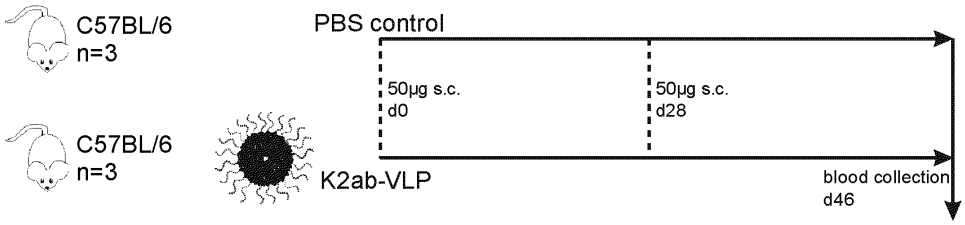

Figure 9

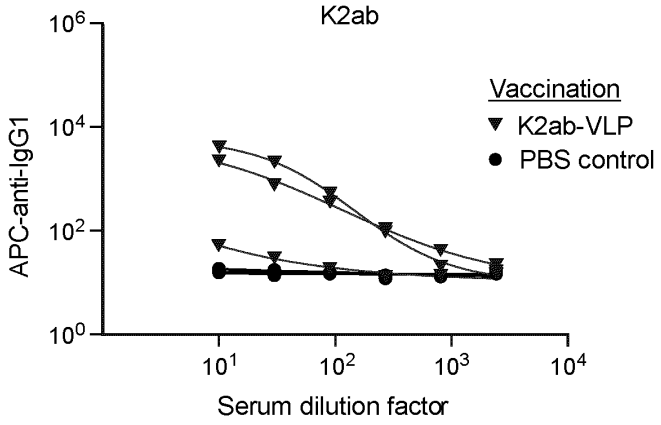

Figure 10A

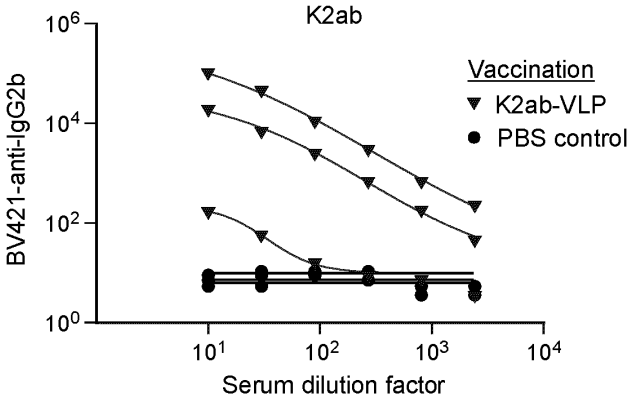

Figure 10B

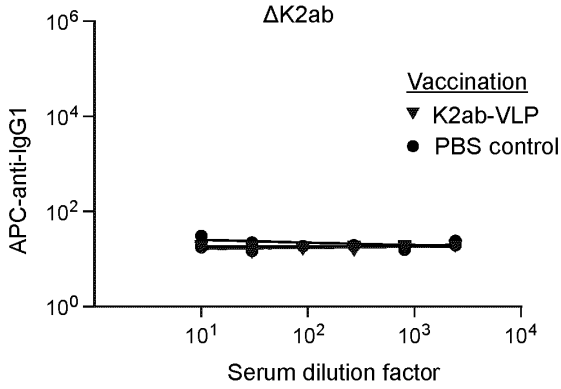

Figure 11A

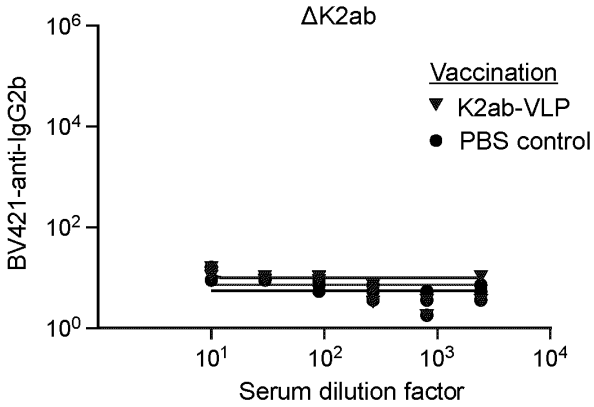

Figure 11B

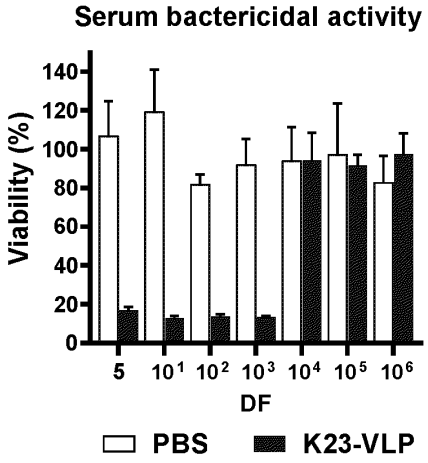

Figure 12