Figure 1

A

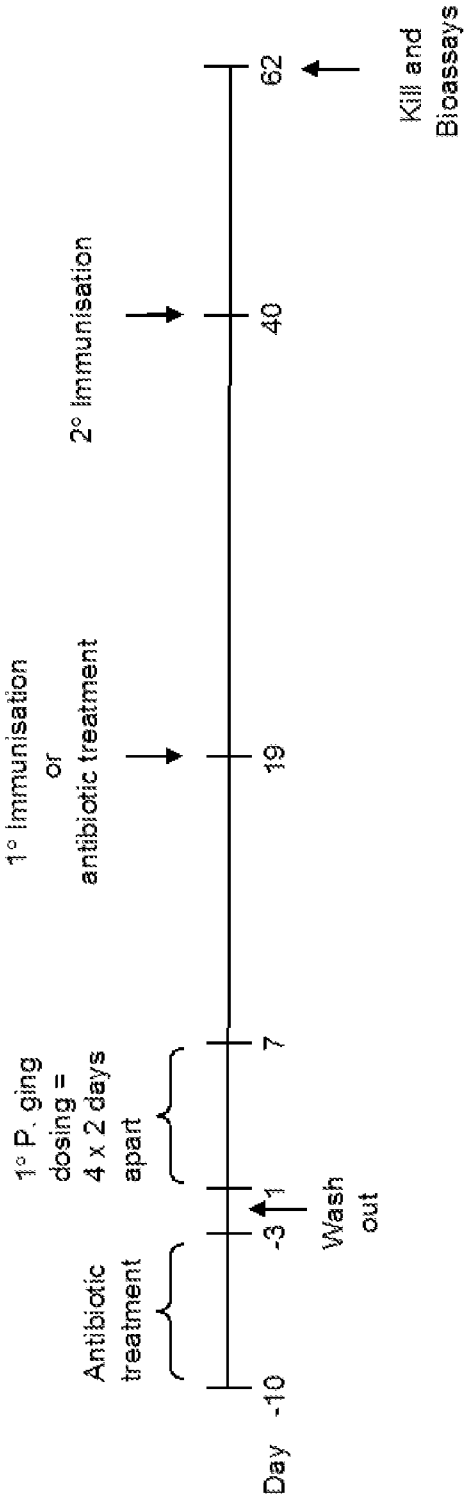

Day
-10
-3
1
7
19
40
62
Antibiotic treatment
1° P. ging dosing = 4 x 2 days apart
Wash out
1° Immunisation or antibiotic treatment
2° Immunisation
Kill and Bioassays

Figure 1 continued

B

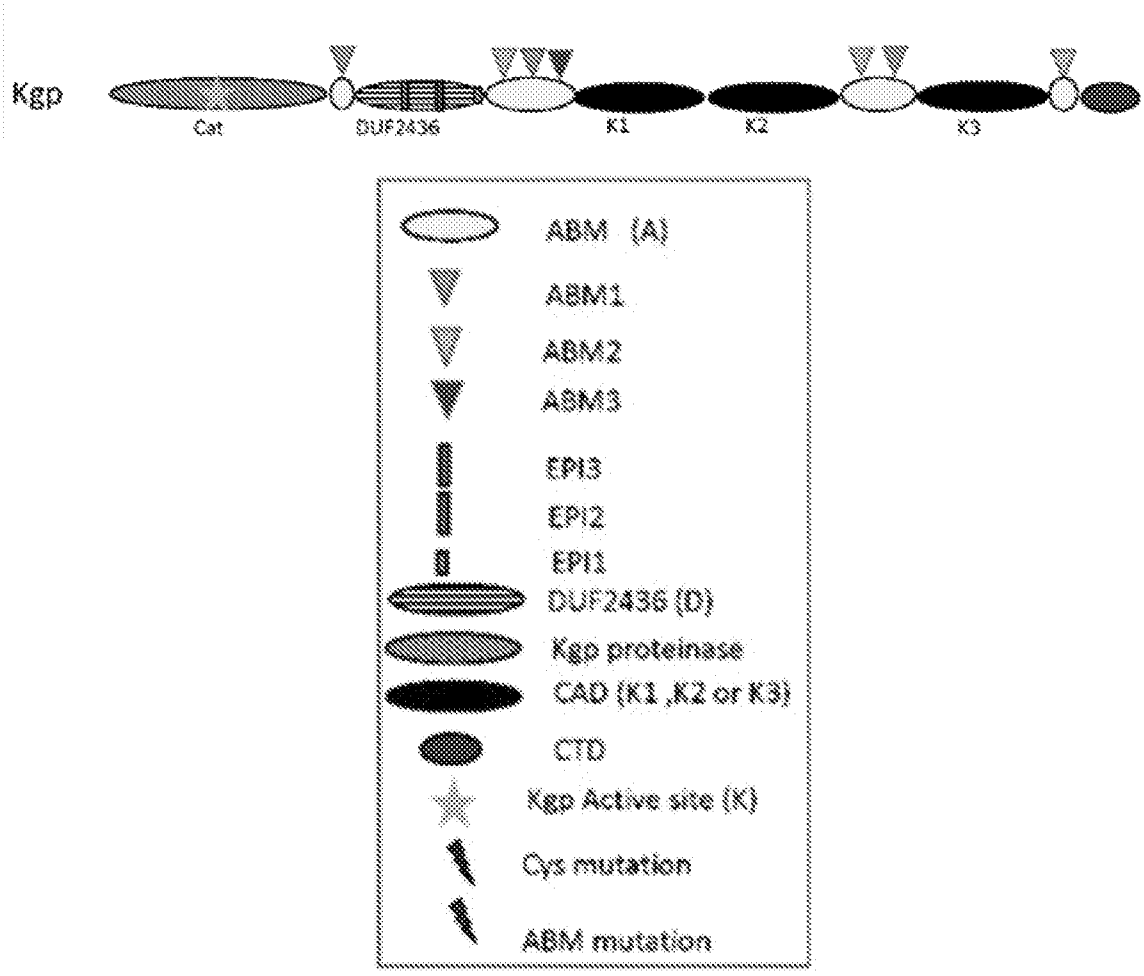


Figure 2

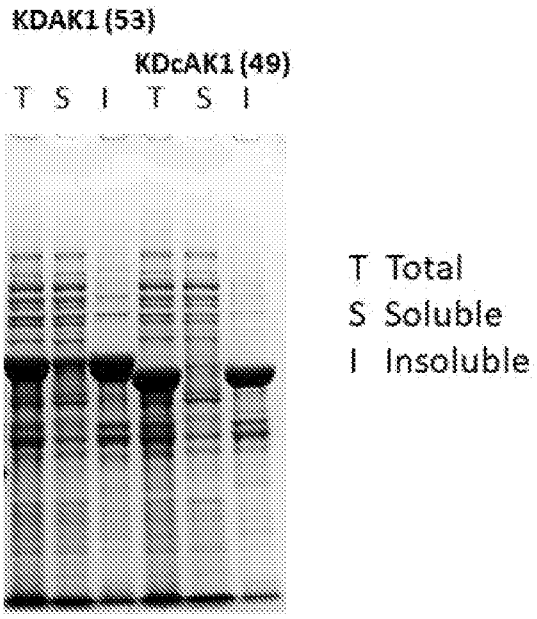
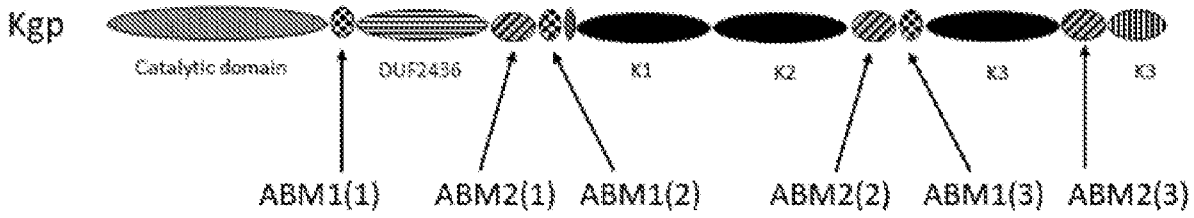
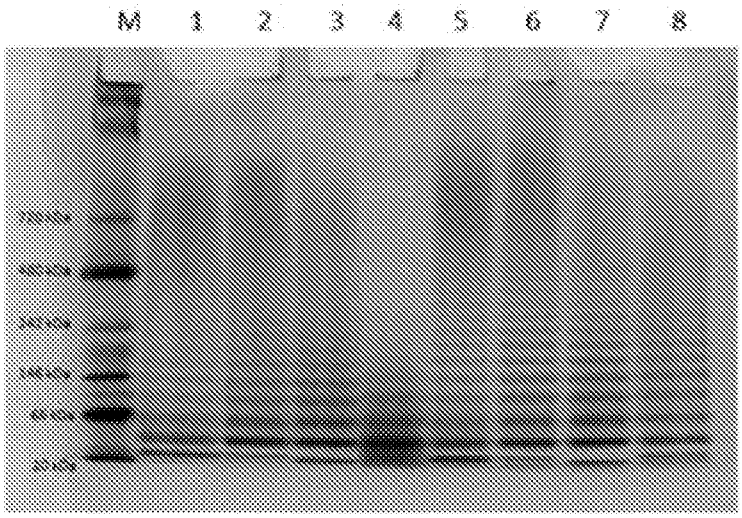


Figure 3

A



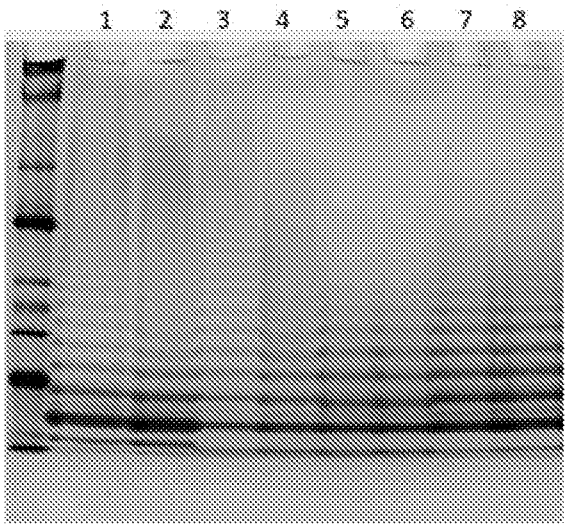
B



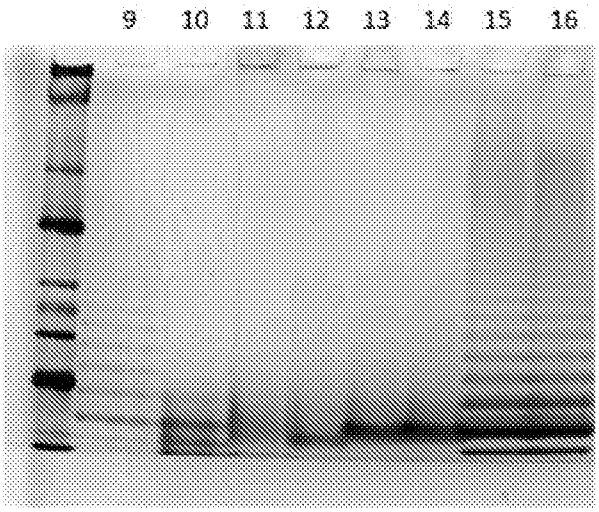
M Native Marker
1 rABM21 (+ DTT)
2 rABM21-AVQN (+ DTT)
3 rABM21-AVQA (+ DTT)
4 rABM21-AVQP (+ DTT)
5 rABM21 (- DTT)
6 rABM21-AVQN (- DTT)
7 rABM21-AVQA (- DTT)
8 rABM21-AVQP (- DTT)

Figure 3 continued

C

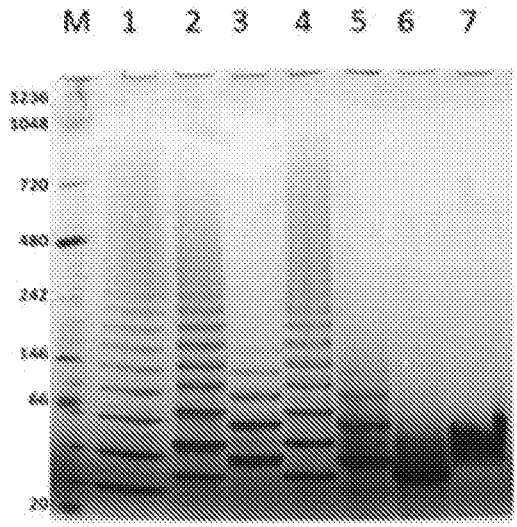


1: rABM12 (– DTT)
2: rABM12 (+ DTT)
3: rABM21-AVQA (– DTT)
4: rABM21-AVQA (+ DTT)
5: rABM21-AVQA-Cys>Ser (– DTT)
6: rABM21-AVQA-Cys>Ser (+ DTT)
7: rABM21-AVQA-2X Cys>Ser (– DTT)
8: rABM21-AVQA-2X Cys>Ser (+ DTT)



9: rABM21-AVQP (– DTT)
10: rABM21-AVQP (+ DTT)
11: rABM21-AVQP-Cys>Ser (– DTT)
12: rABM21-AVQP-Cys>Ser (+ DTT)
13: rABM21-AVQP-2X Cys>Ser (– DTT)
14: rABM21-AVQP-2X Cys>Ser (+ DTT)
15: rABM21-2X Cys>Ser (– DTT)
16: rABM21-2X Cys>Ser (+ DTT)

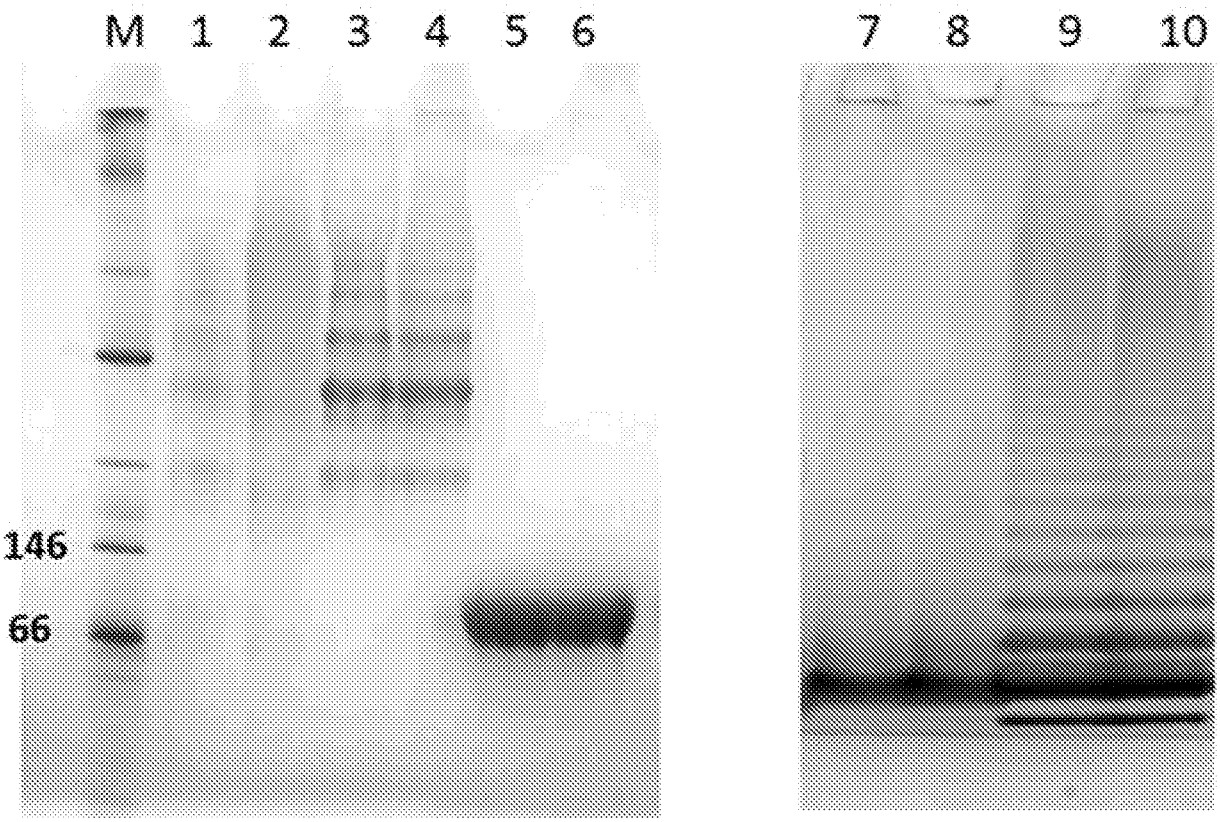
D



1. rABM21
2. rABM21-PNPFA
3. rABM21-SSEYQ
4. rABM21-PSPY
5. rABM21-Y>A
6. rABM21-Y>A/W>A
7. rABM21-AVQP-2X Cys>Ser

Figure 3 continued

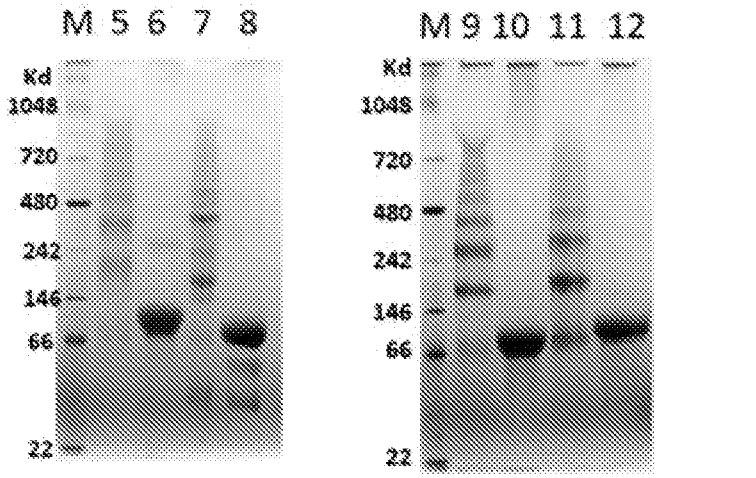
E



1- KDcAK1n + DTT
2- KDcAK1n - DTT
3- KDcAK1n 4XCys>Ser + DTT
4- KDcAK1n 4XCys>Ser - DTT
5- KDcAK1n 4XCys>Ser/PVQN>AVQP + DTT
6- KDcAK1n 4XCys>Ser/PVQN>AVQP - DTT
7- ABM21 2XCys>Ser/PVQN>AVQP - DTT
8- ABM21- 2XCys>Ser/PVQN>AVQP + DTT
9- ABM21 2X Cys>Ser - DTT
10-ABM21 2XCys>Ser + DTT

Figure 3 Continued

F



5: rKDcAK1n
6: rKDcAK1n-3S-AVQP
7: rKDcAK1nK
8: rKDcAK1nK-3S-AVQP

9: rKDAK1n
10: rKDAK1n-3S-AVQP
11: rKDAK1nK
12: rKDAK1nK-3S-AVQP

Figure 4

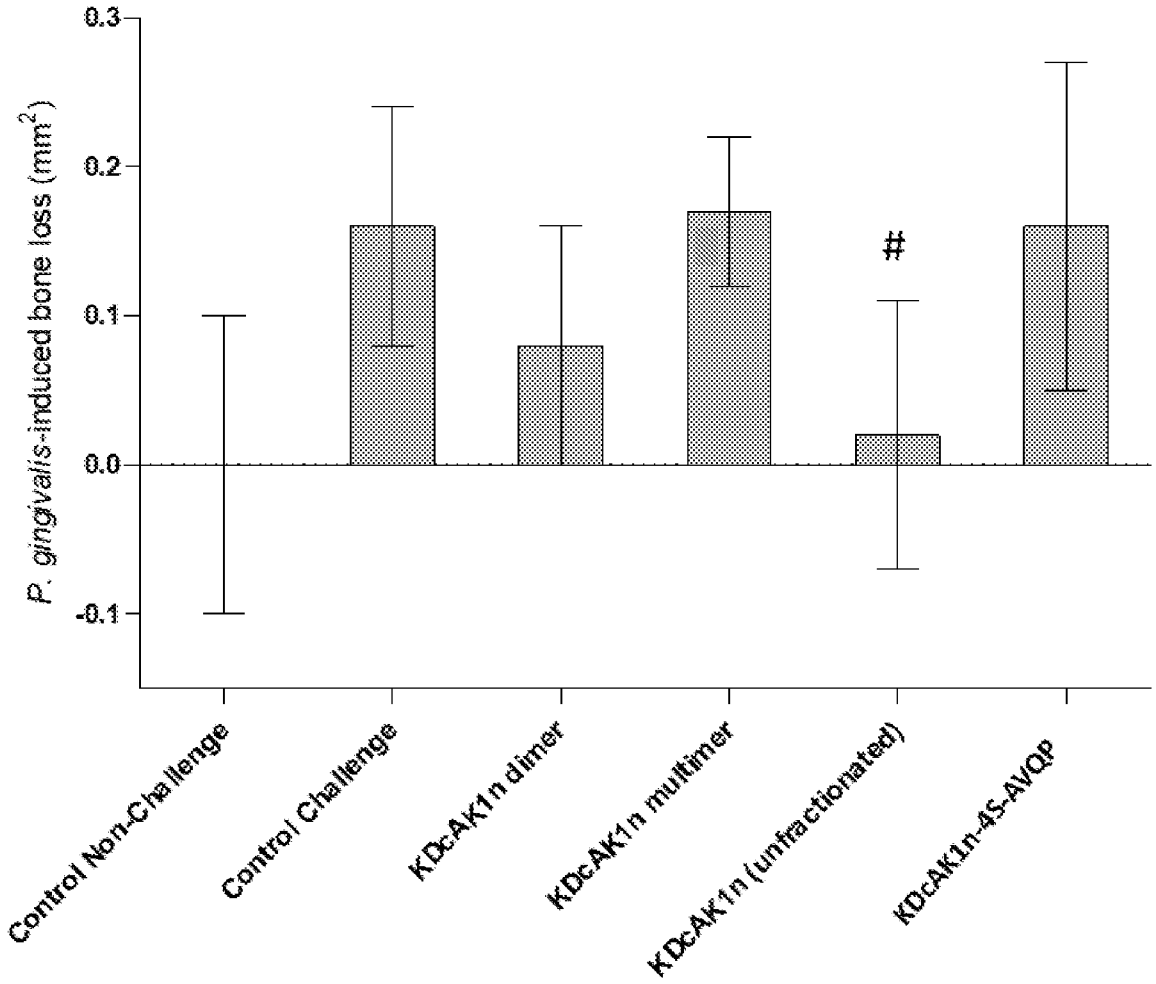

0.3
0.2
0.1
0.0
-0.1
P. gingivalis-induced bone loss (mm2)
#
Control Non-Challenge
Control Challenge
KDcAK1n dimer
KDcAK1n multimer
KDcAK1n (unfractionated)
KDcAK1n-4S-AVQP

Figure 5

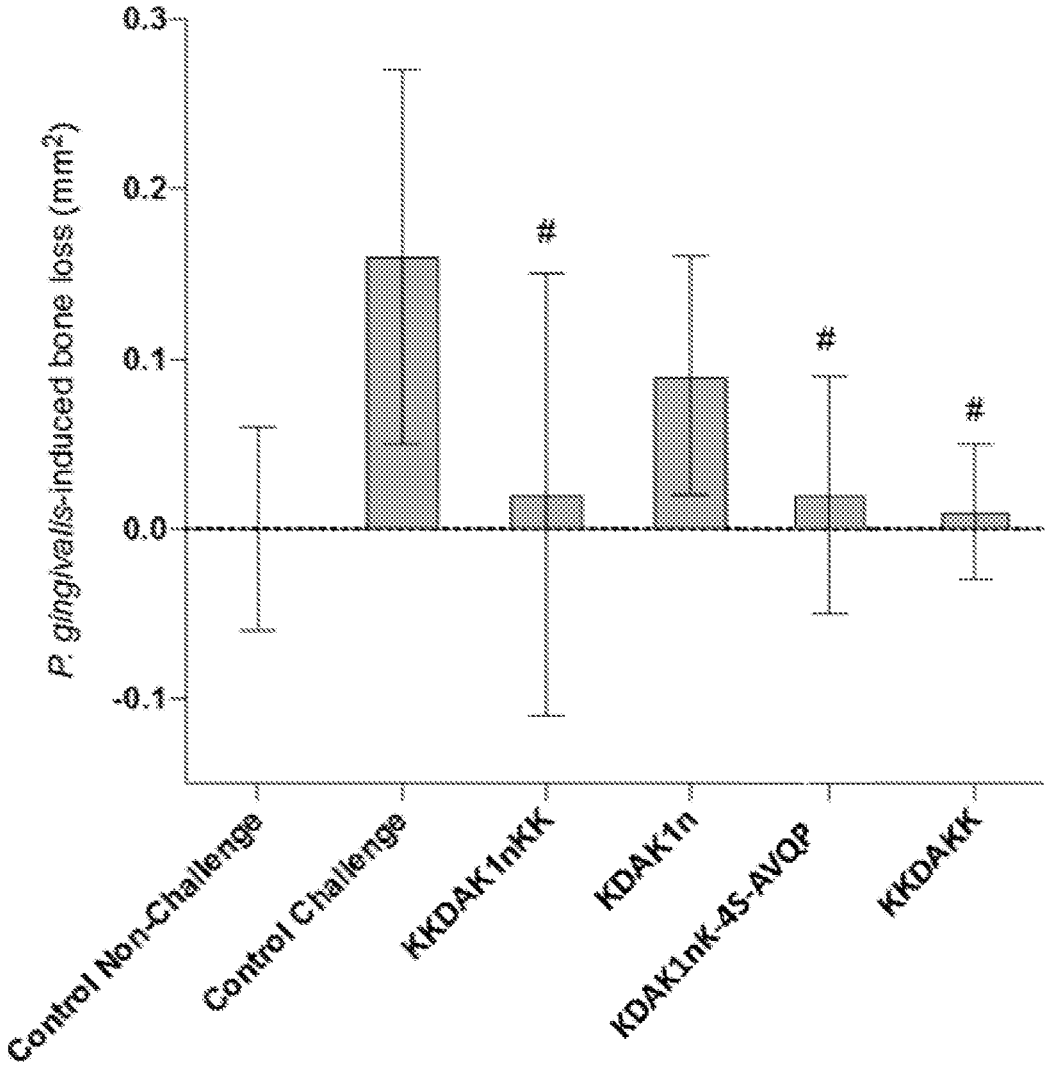

0.3
0.2
0.1
0.0
-0.1
P. gingivalis-induced bone loss (mm²)
#
#
#
Control Non-Challenge
Control Challenge
KKDAK1nKK
KDAK1n
KDAK1nK-4S-AVQP
KKDAKK

Figure 6

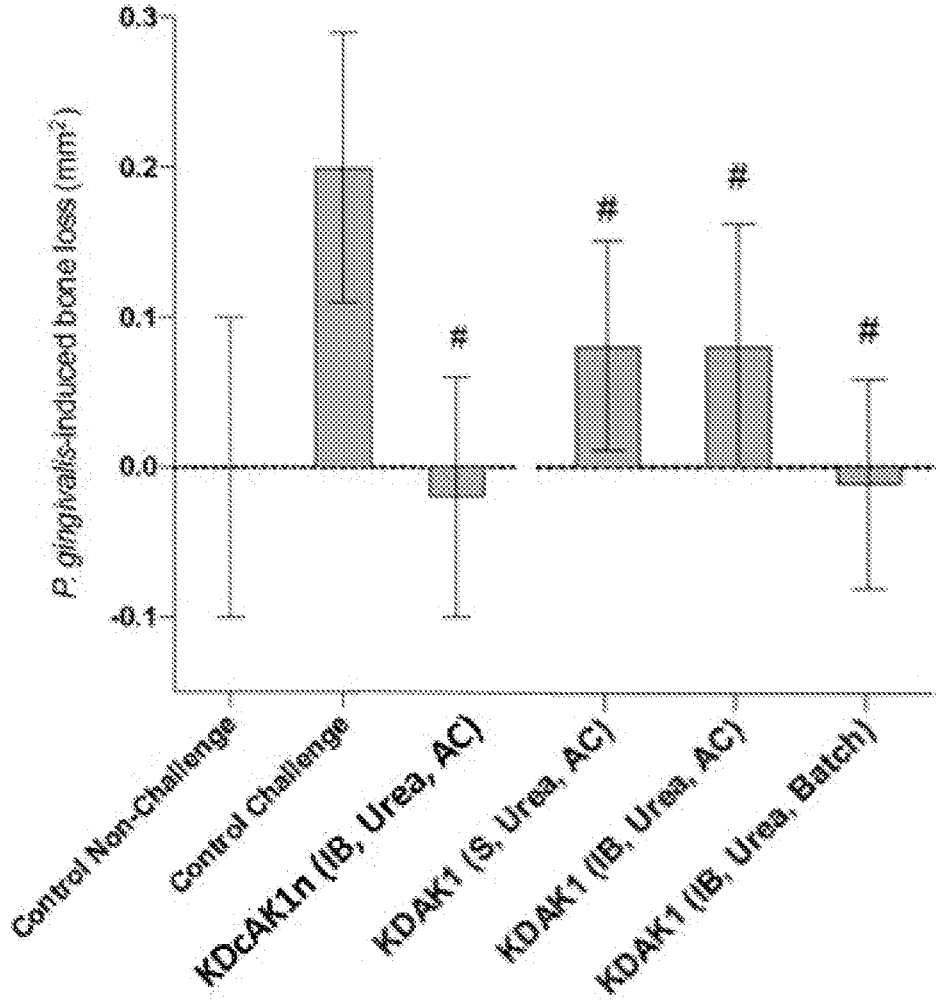
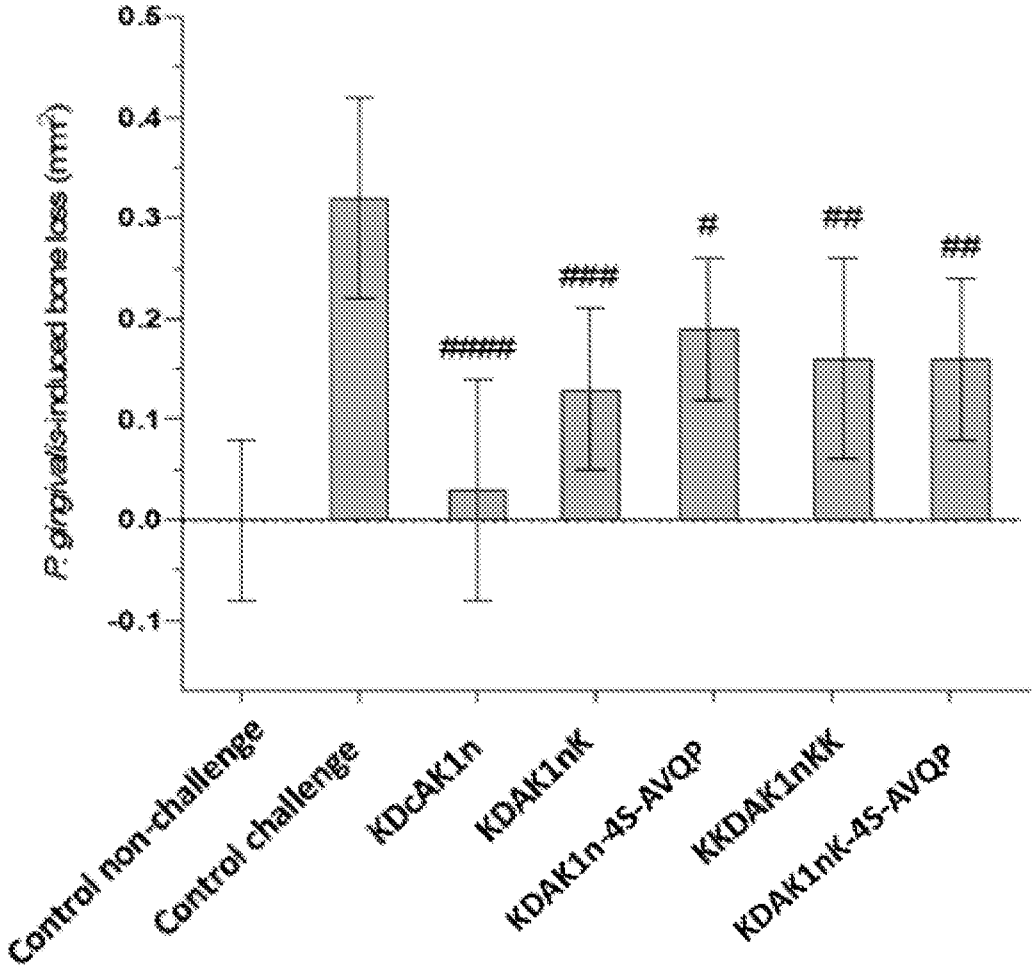

P. gingivalis-induced bone loss (mm²)
0.3
0.2
0.1
0.0
-0.1
#
#
#
Control Non-Challenge
Control Challenge
KDcAK1n (IB, Urea, AC)
KDAK1 (S, Urea, AC)
KDAK1 (IB, Urea, AC)
KDAK1 (IB, Urea, Batch)

Figure 7


P. gingivalis-induced bone loss (mm²)
0.5
0.4
0.3
0.2
0.1
0.0
-0.1
#####
###
#
##
##
Control non-challenge
Control challenge
KDcAK1n
KDAK1nK
KDAK1n-4S-AVQP
KKDAK1nKK
KDAK1nK-4S-AVQP