Fig. 1

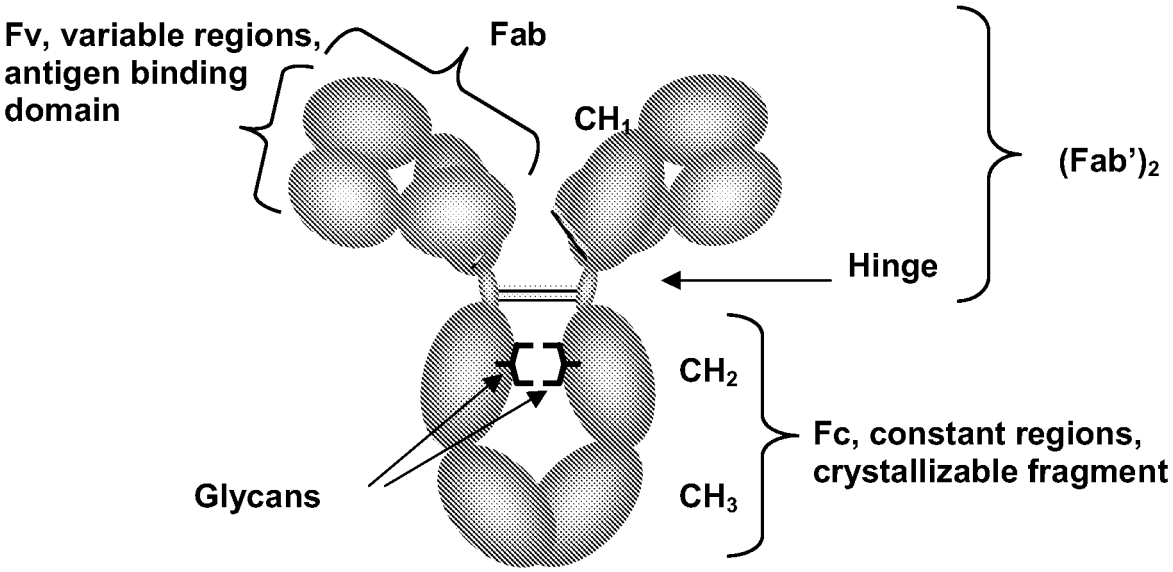

Fv, variable regions, antigen binding domain
Fab
CH1
(Fab')2
Hinge
CH2
Fc, constant regions, crystallizable fragment
Glycans
CH3

Fig. 2

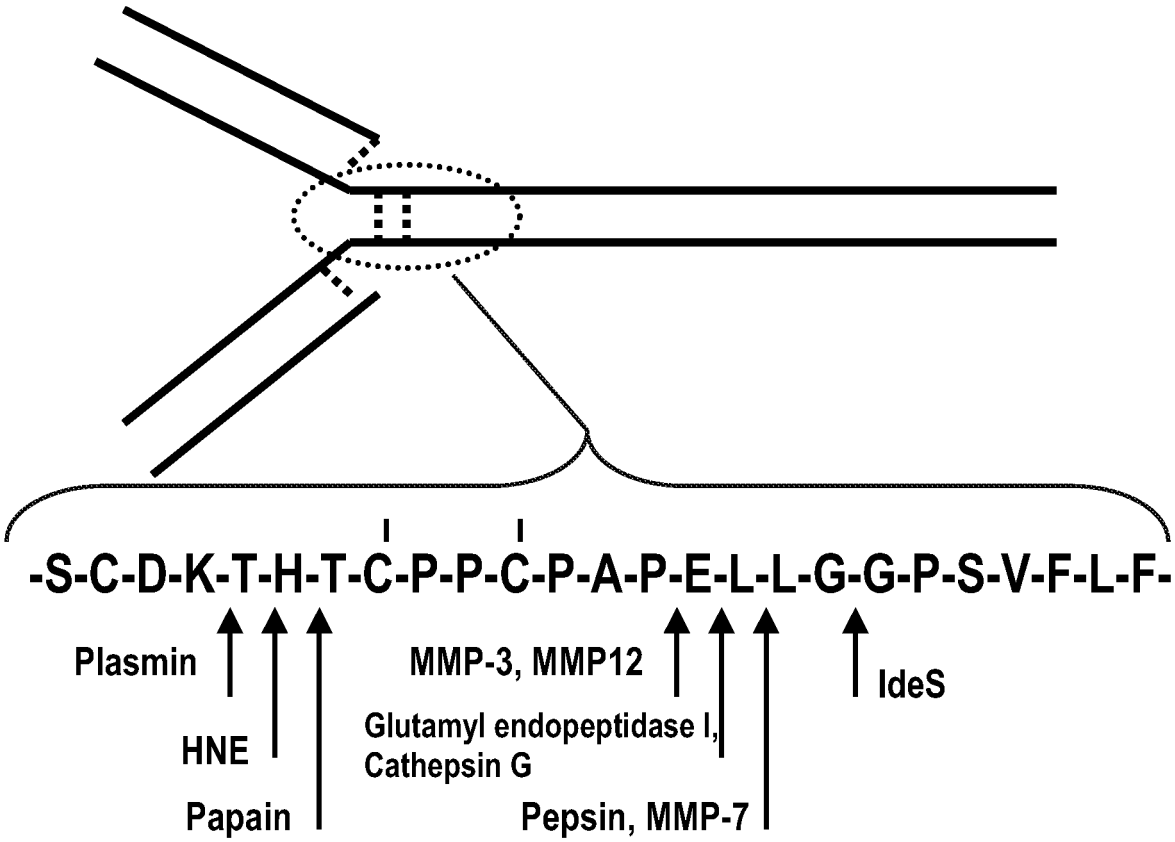

-S-C-D-K-T-H-T-C-P-P-C-P-A-P-E-L-L-G-G-P-S-V-F-L-F-
Plasmin
HNE
Papain
MMP-3, MMP12
Glutamyl endopeptidase I,
Cathepsin G
Pepsin, MMP-7
IdeS

Fig. 3

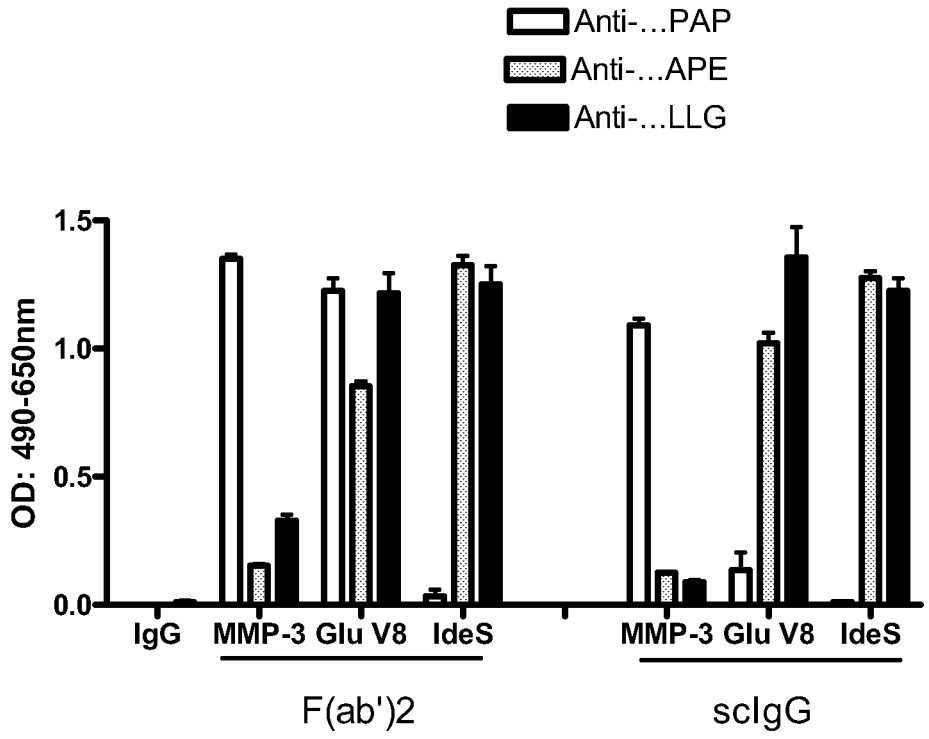

Anti-...PAP
Anti-...APE
Anti-...LLG
OD: 490-650nm
1.5
1.0
0.5
0.0
IgG
MMP-3
Glu V8
IdeS
MMP-3
Glu V8
IdeS
F(ab')2
scIgG

Fig. 4

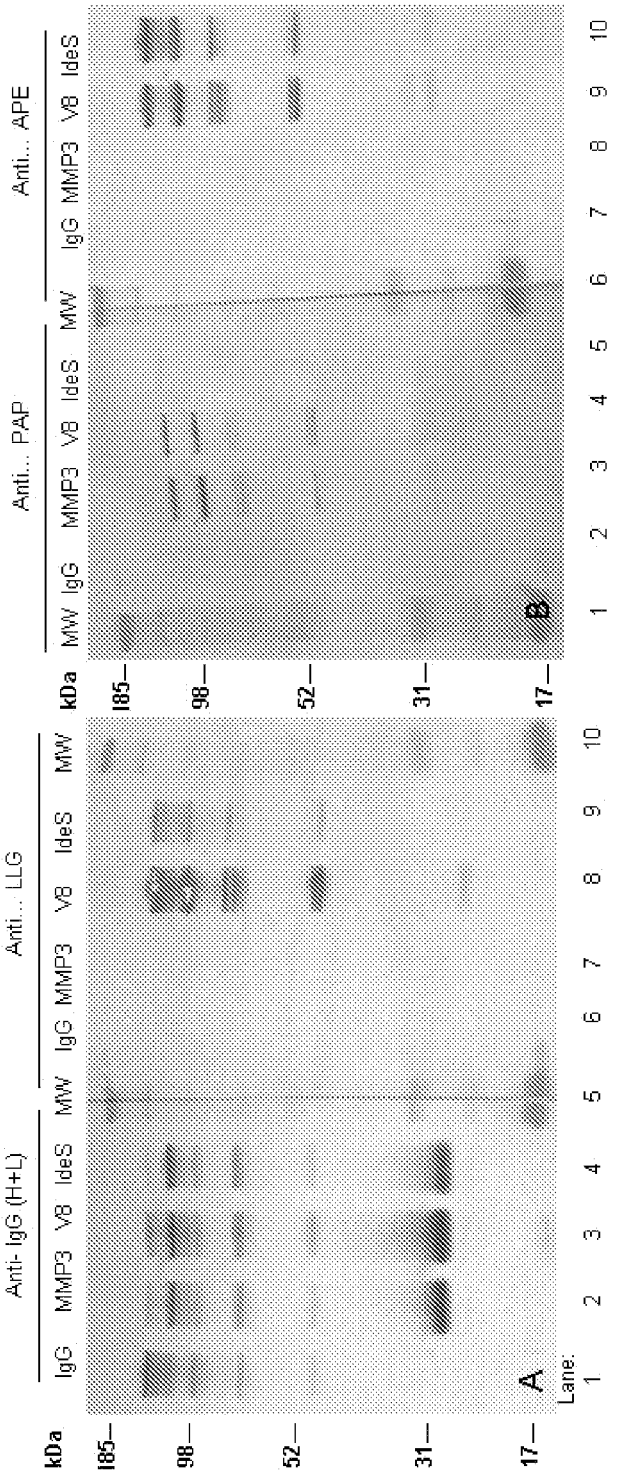

kDa
185
98
52
31
17
A
Lane:
1 2 3 4 5 6 7 8 9 10
IgG MMP3 V8 IdeS MW IgG MMP3 V8 IdeS MW
Anti- IgG (H+L)
Anti... LLG
B
1 2 3 4 5 6 7 8 9 10
MW IgG MMP3 V8 IdeS MW IgG MMP3 V8 IdeS
Anti... PAP
Anti... APE

Fig. 5

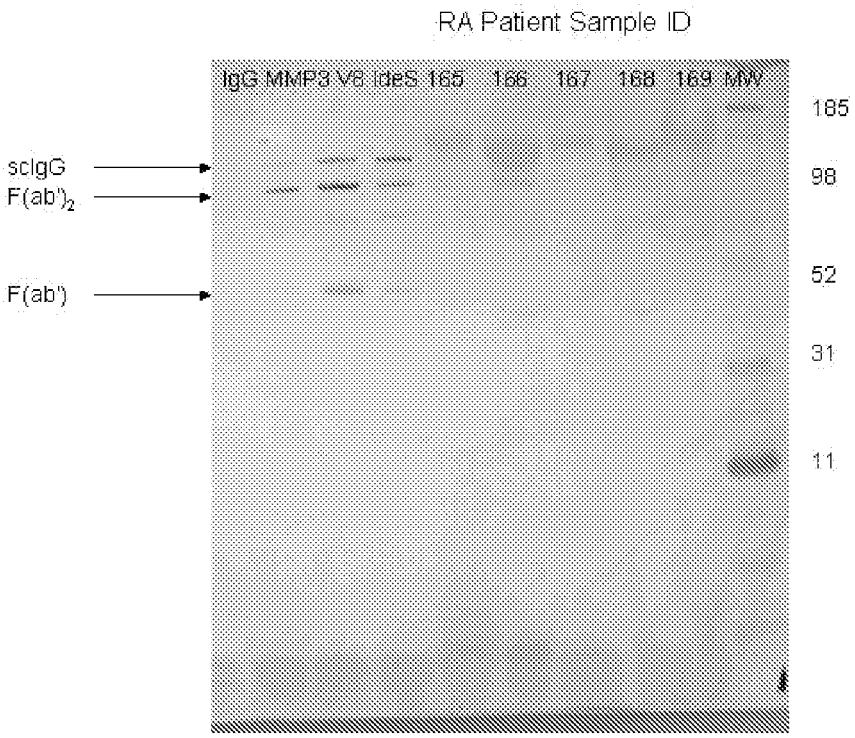

RA Patient Sample ID
IgG MMP3 V8 IdeS 165 166 167 168 169 MW
185
98
52
31
11
scIgG
F(ab')2
F(ab')

Fig. 6

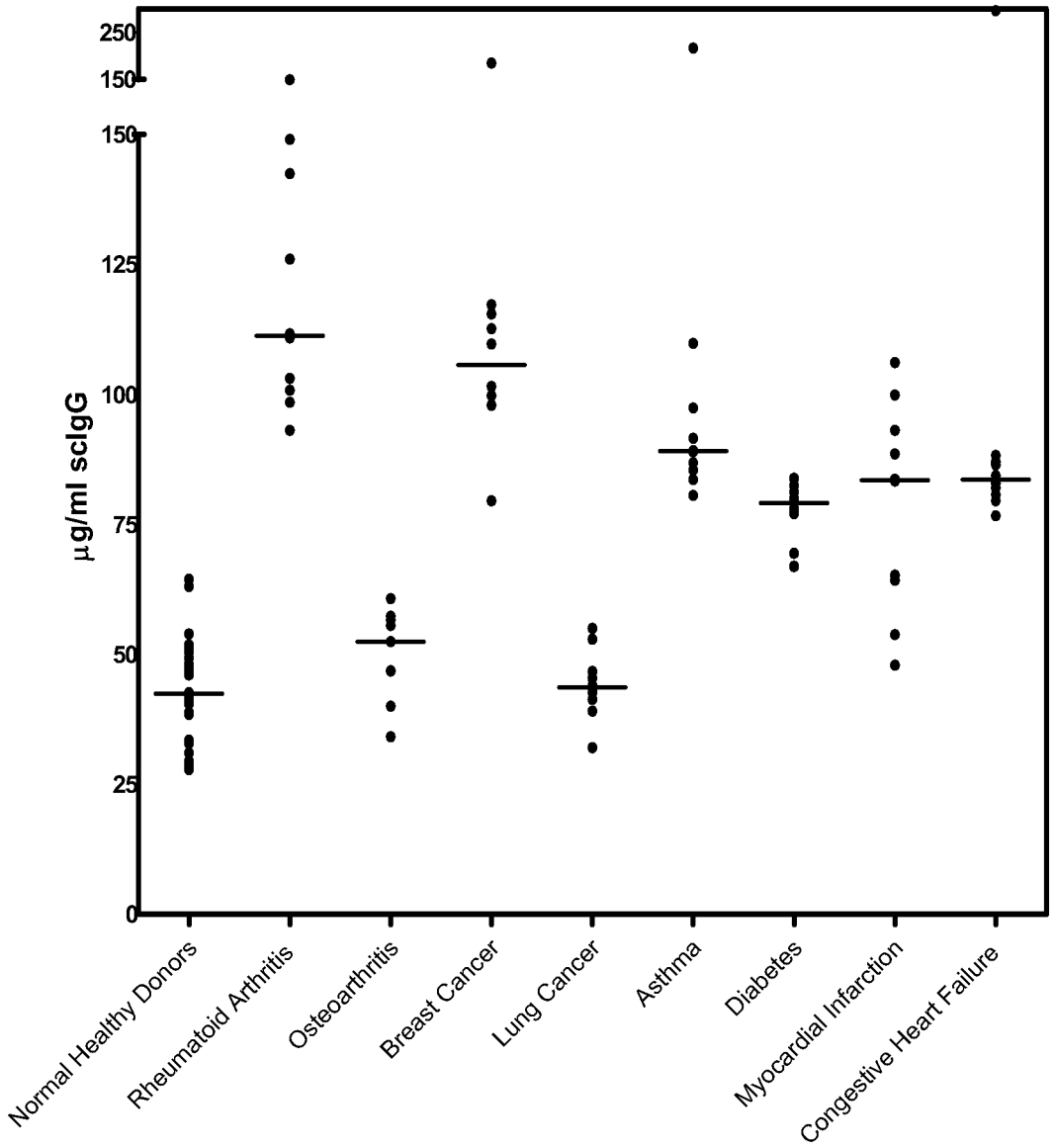

250
150
150
125
100
75
50
25
0
µg/ml sclgG
Normal Healthy Donors
Rheumatoid Arthritis
Osteoarthritis
Breast Cancer
Lung Cancer
Asthma
Diabetes
Myocardial Infarction
Congestive Heart Failure

Fig. 7

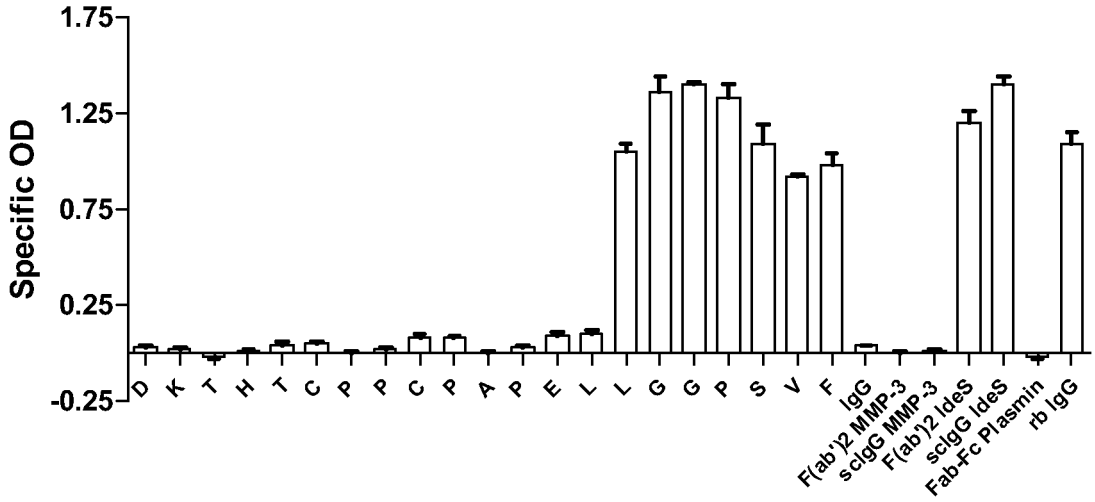

Specific OD
1.75
1.25
0.75
0.25
-0.25
D K T H T C P P C P A P E L L G G P S V F
IgG
F(ab')2 MMP-3
sclgG MMP-3
F(ab')2 IdeS
sclgG IdeS
Fab-Fc Plasmin
rb IgG

Fig. 8

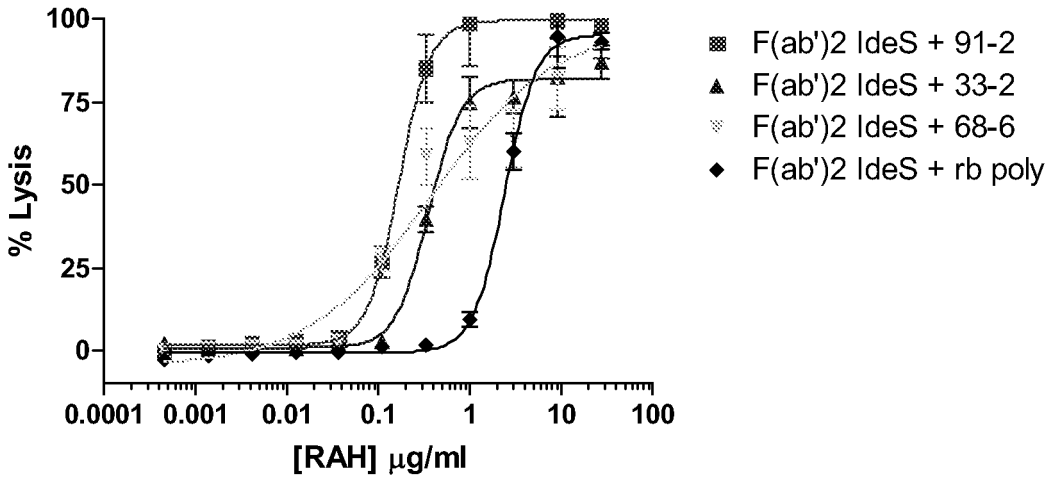

100
75
50
25
0
% Lysis
0.0001
0.001
0.01
0.1
1
10
100
[RAH] μg/ml
F(ab')2 IdeS + 91-2
F(ab')2 IdeS + 33-2
F(ab')2 IdeS + 68-6
F(ab')2 IdeS + rb poly

Fig. 9

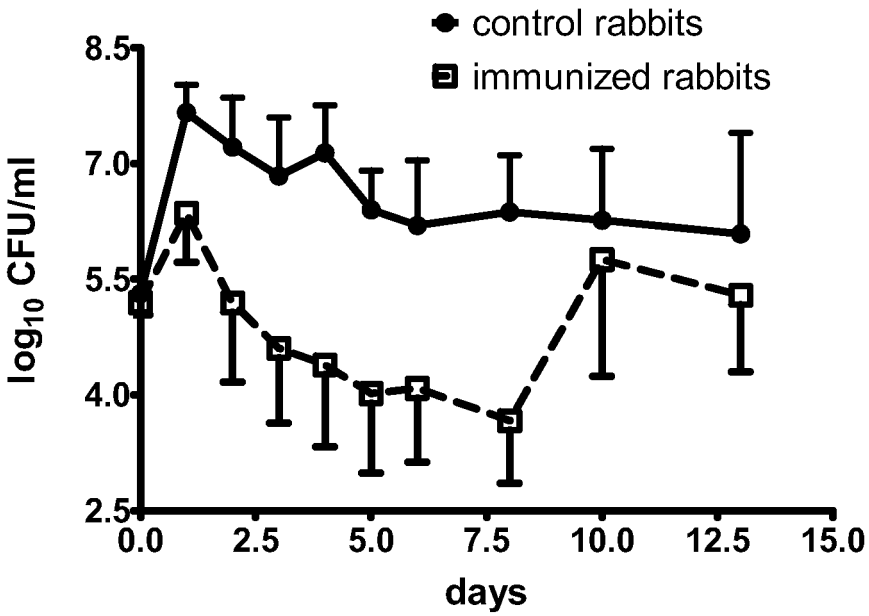

control rabbits
immunized rabbits
8.5
7.0
5.5
4.0
2.5
log10 CFU/ml
0.0
2.5
5.0
7.5
10.0
12.5
15.0
days

Fig. 10

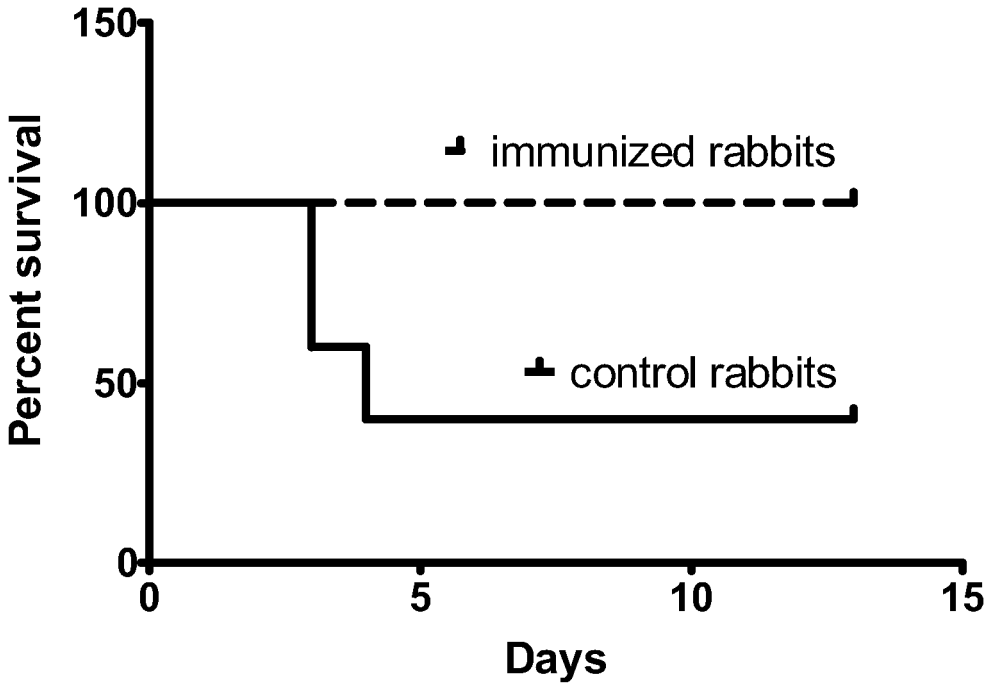

150
100
50
0
Percent survival
immunized rabbits
control rabbits
0
5
10
15
Days

Fig. 11

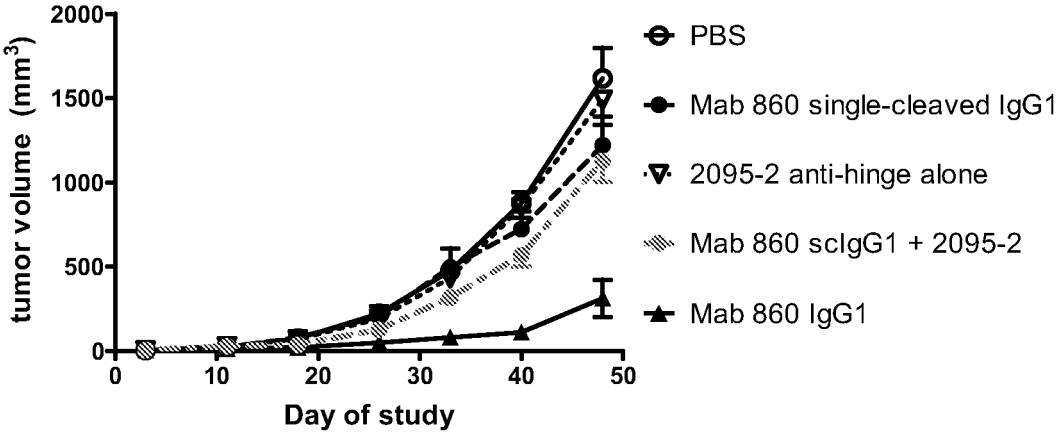
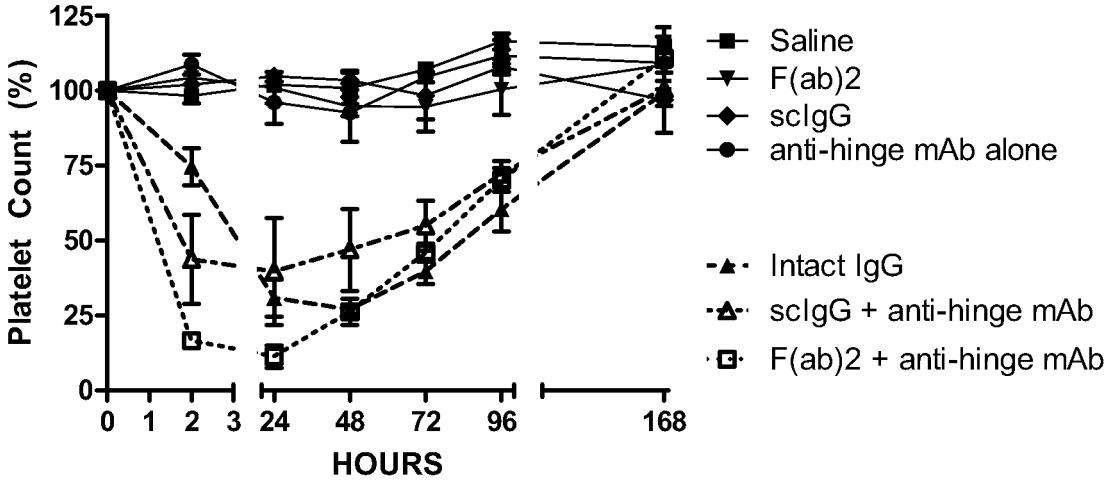

2000
1500
1000
500
0
tumor volume (mm3)
0
10
20
30
40
50
Day of study
PBS
Mab 860 single-cleaved IgG1
2095-2 anti-hinge alone
Mab 860 scIgG1 + 2095-2
Mab 860 IgG1

Fig. 12


125
100
75
50
25
0
Platelet Count (%)
0 1 2 3 24 48 72 96 168
HOURS
Saline
F(ab)2
scIgG
anti-hinge mAb alone
Intact IgG
scIgG + anti-hinge mAb
F(ab)2 + anti-hinge mAb