Figure 1

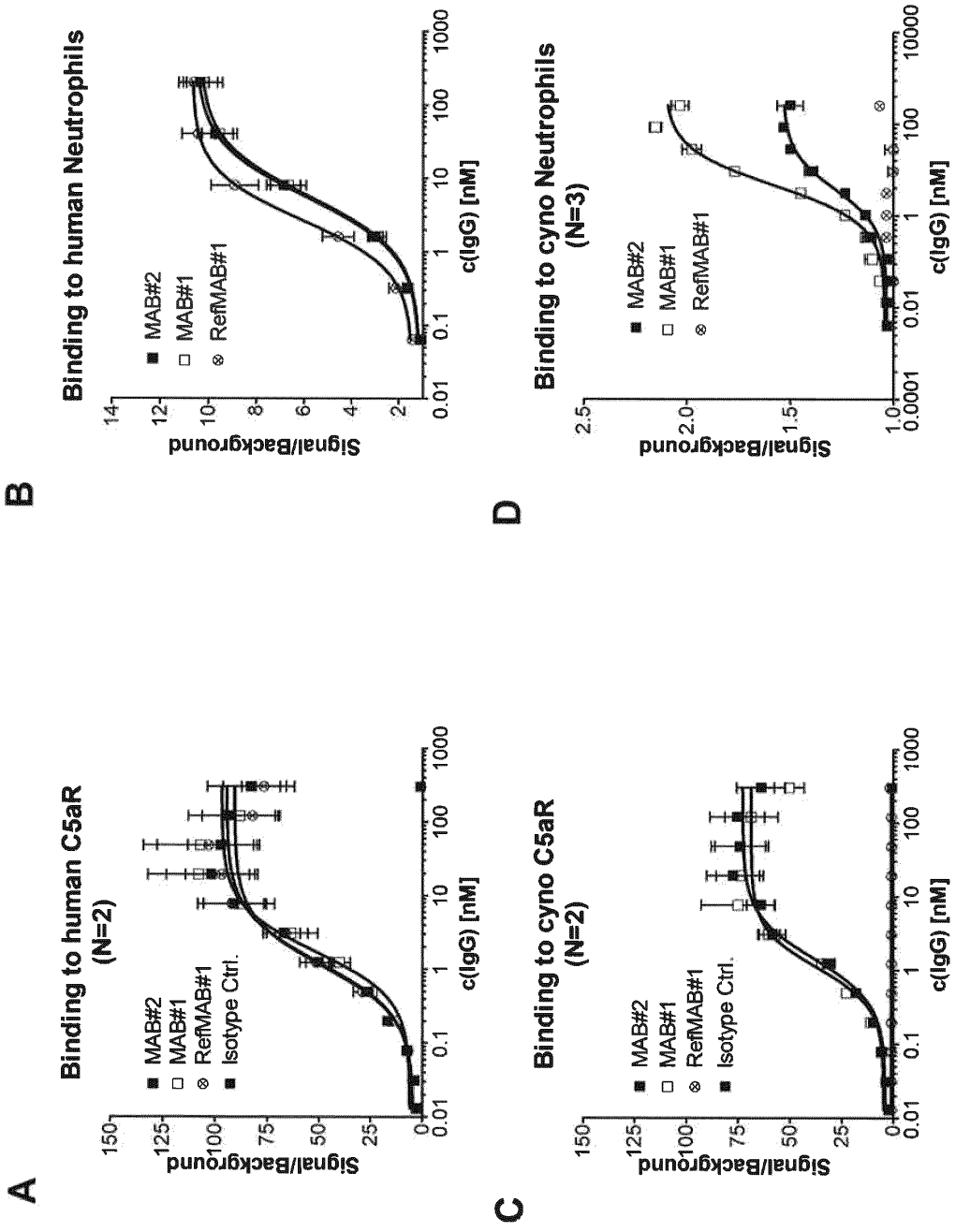

A
Binding to human C5aR
(N=2)
MAB#2
MAB#1
RefMAB#1
Isotype Ctrl.
Signal/Background
c(IgG) [nM]
B
Binding to human Neutrophils
MAB#2
MAB#1
RefMAB#1
Signal/Background
c(IgG) [nM]
C
Binding to cyno C5aR
(N=2)
MAB#2
MAB#1
RefMAB#1
Isotype Ctrl.
Signal/Background
c(IgG) [nM]
D
Binding to cyno Neutrophils
(N=3)
MAB#2
MAB#1
RefMAB#1
Signal/Background
c(IgG) [nM]

Figure 2

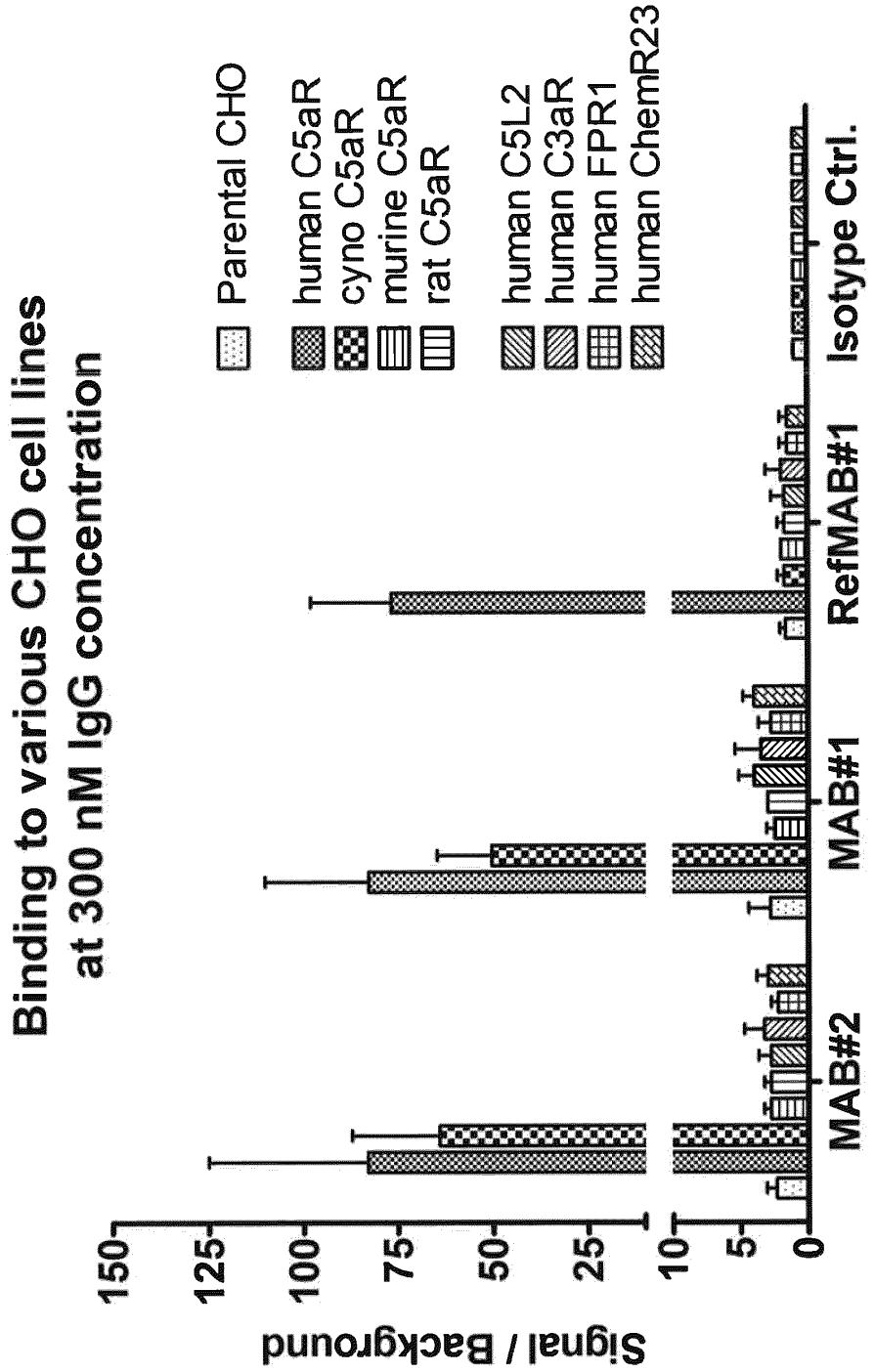

Binding to various CHO cell lines
at 300 nM IgG concentration
Parental CHO
human C5aR
cyno C5aR
murine C5aR
rat C5aR
human C5L2
human C3aR
human FPR1
human ChemR23
Signal / Background
150
125
100
75
50
25
10
5
0
MAB#2
MAB#1
RefMAB#1
Isotype Ctrl.

Figure 3

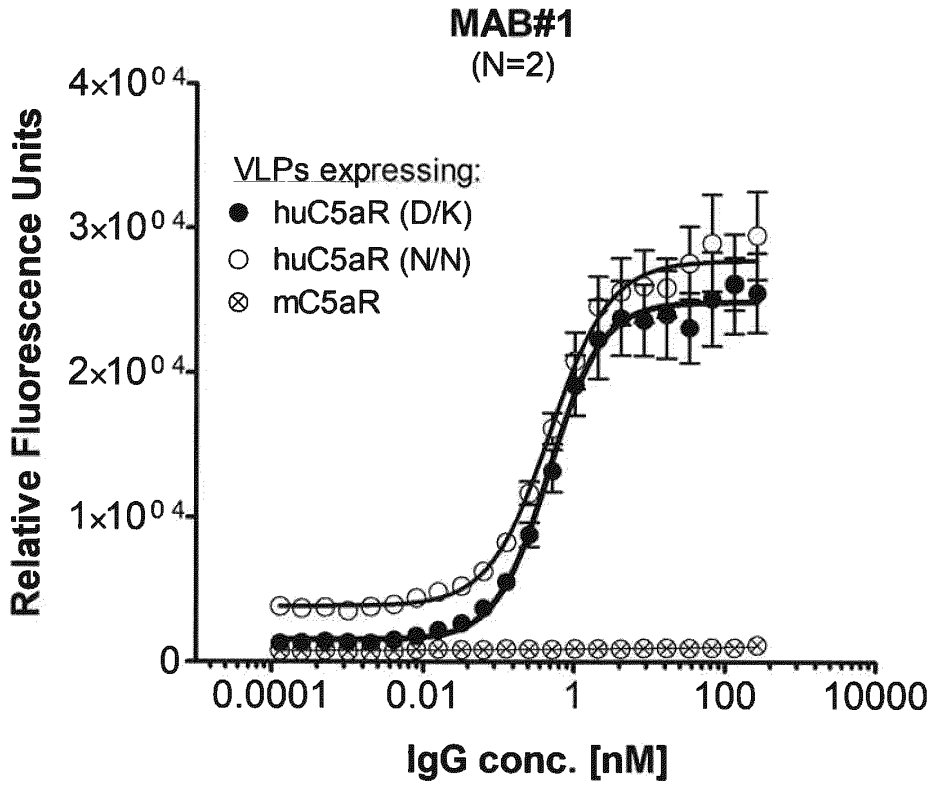

MAB#1
(N=2)
Relative Fluorescence Units
4×10^04
3×10^04
2×10^04
1×10^04
0
VLPs expressing:
huC5aR (D/K)
huC5aR (N/N)
mC5aR
0.0001
0.01
1
100
10000
IgG conc. [nM]

Figure 4

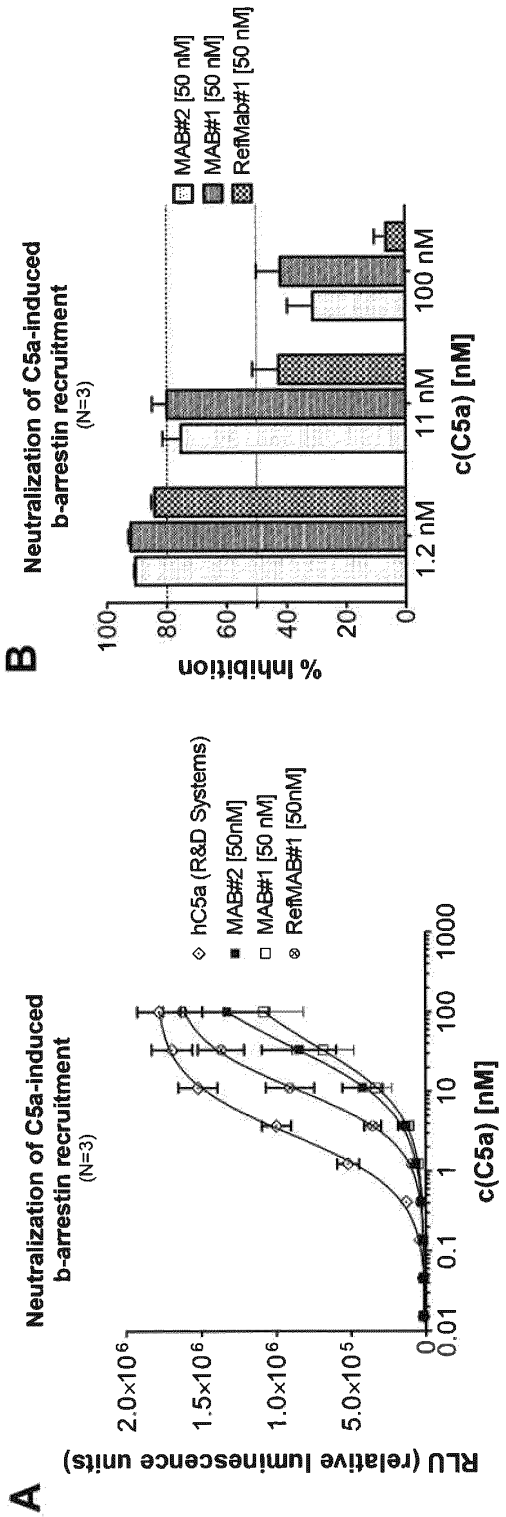

A
Neutralization of C5a-induced
b-arrestin recruitment
(N=3)
RLU (relative luminescence units)
2.0×10^6
1.5×10^6
1.0×10^6
5.0×10^5
0
0.01
0.1
1
10
100
1000
c(C5a) [nM]
hC5a (R&D Systems)
MAB#2 [50nM]
MAB#1 [50 nM]
RefMAB#1 [50nM]
B
Neutralization of C5a-induced
b-arrestin recruitment
(N=3)
% Inhibition
100
80
60
40
20
0
1.2 nM
11 nM
100 nM
c(C5a) [nM]
MAB#2 [50 nM]
MAB#1 [50 nM]
RefMab#1 [50 nM]

Figure 5

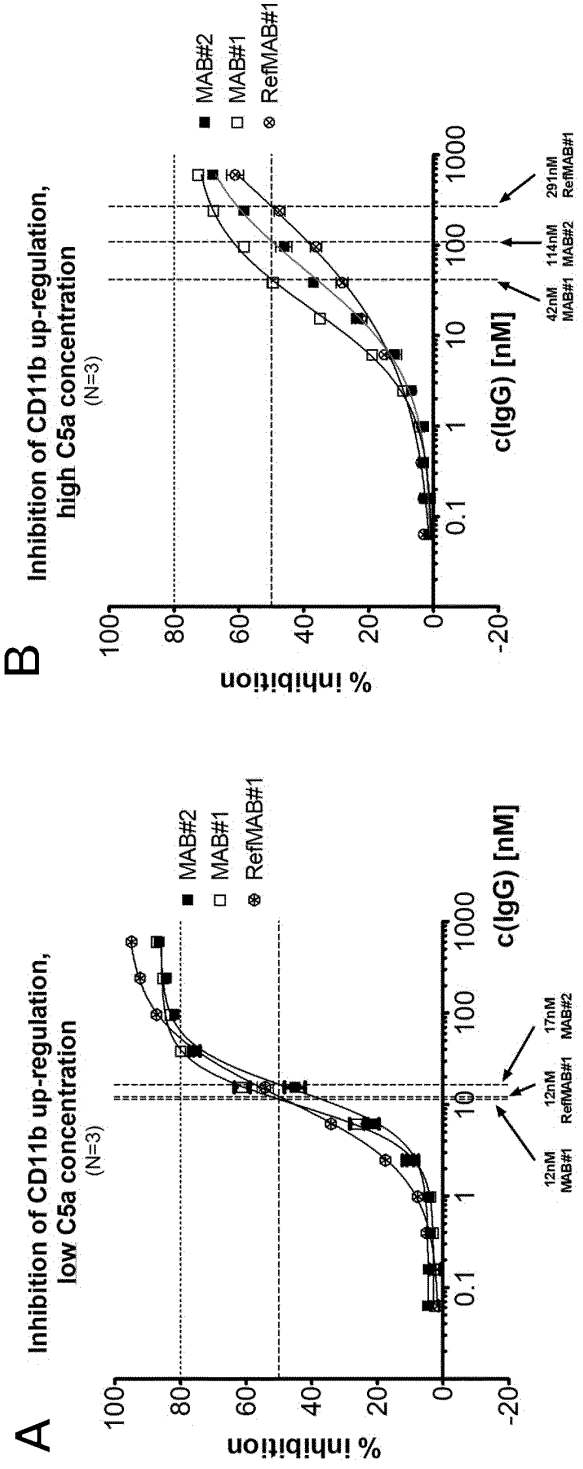

B
Inhibition of CD11b up-regulation,
high C5a concentration
(N=3)
MAB#2
MAB#1
RefMAB#1
% inhibition
c(IgG) [nM]
291nM RefMAB#1
114nM MAB#2
42nM MAB#1
A
Inhibition of CD11b up-regulation,
low C5a concentration
(N=3)
MAB#2
MAB#1
RefMAB#1
% inhibition
c(IgG) [nM]
17nM MAB#2
12nM RefMAB#1
12nM MAB#1

Figure 6

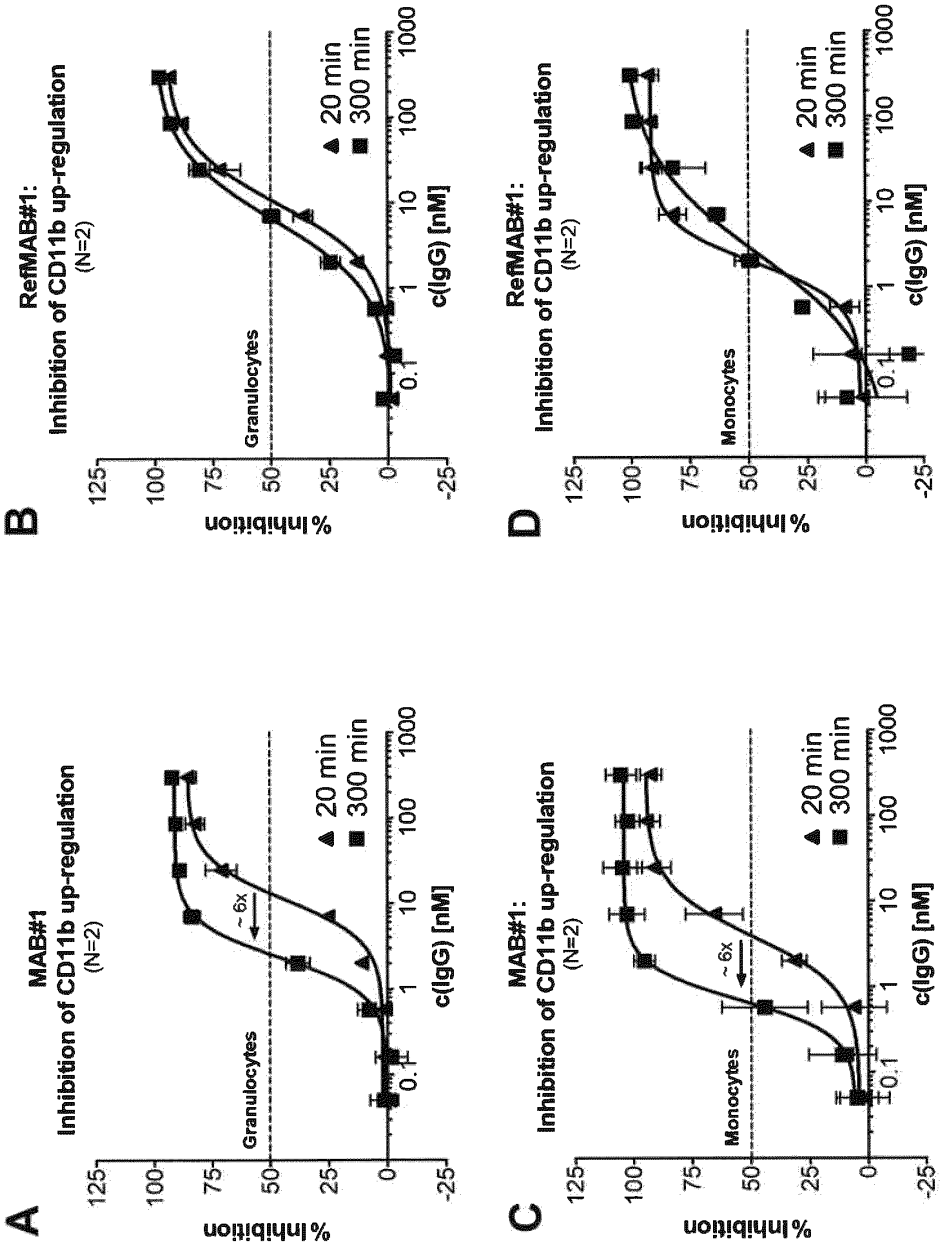

A
MAB#1
Inhibition of CD11b up-regulation
(N=2)
Granulocytes
~ 6x
20 min
300 min
% Inhibition
c(IgG) [nM]
B
RefMAB#1:
Inhibition of CD11b up-regulation
(N=2)
Granulocytes
20 min
300 min
% Inhibition
c(IgG) [nM]
C
MAB#1:
Inhibition of CD11b up-regulation
(N=2)
Monocytes
~ 6x
20 min
300 min
% Inhibition
c(IgG) [nM]
D
RefMAB#1:
Inhibition of CD11b up-regulation
(N=2)
Monocytes
20 min
300 min
% Inhibition
c(IgG) [nM]

Figure 7

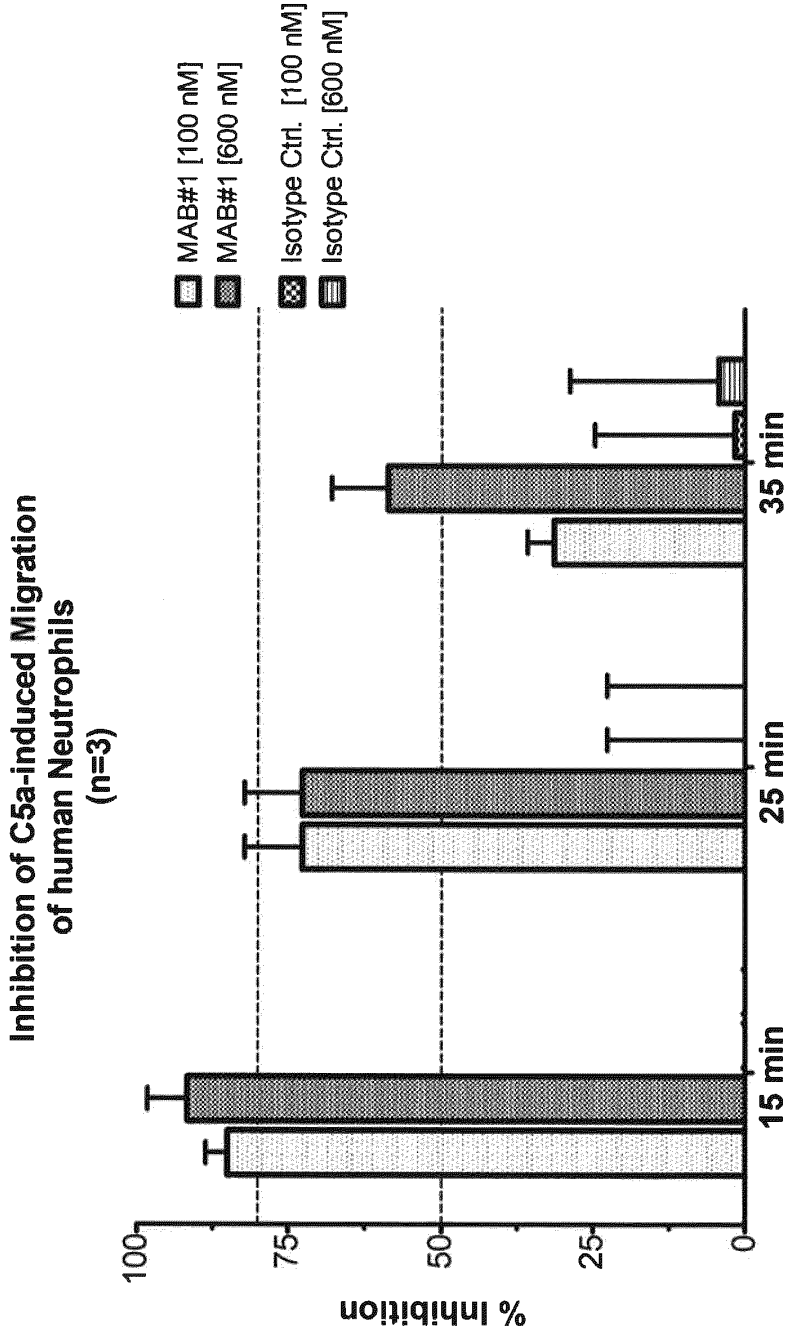
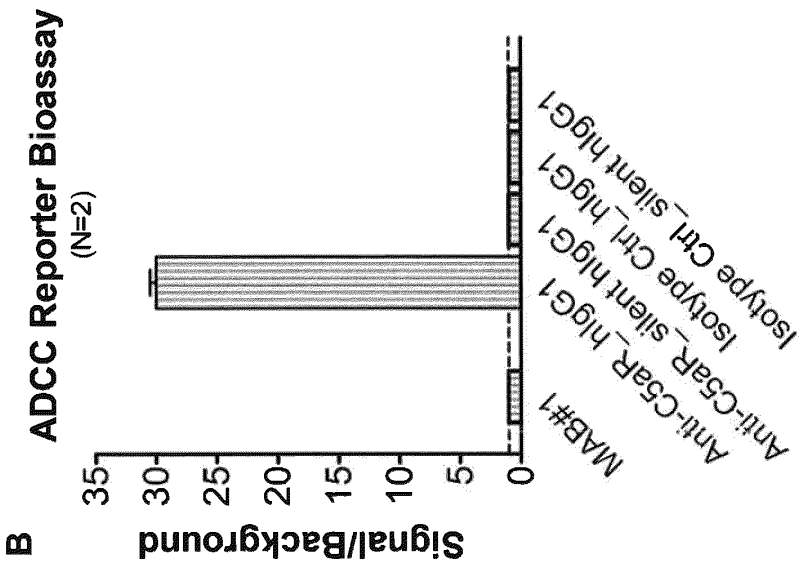

Inhibition of C5a-induced Migration
of human Neutrophils
(n=3)
MAB#1 [100 nM]
MAB#1 [600 nM]
Isotype Ctrl. [100 nM]
Isotype Ctrl. [600 nM]
% Inhibition
100
75
50
25
0
15 min
25 min
35 min

Figure 8


B
ADCC Reporter Bioassay
(N=2)
Signal/Background
35
30
25
20
15
10
5
0
MAB#1
Anti-C5aR_hIgG1
Anti-C5aR_silent hIgG1
Isotype Ctrl_hIgG1
Isotype Ctrl_silent hIgG1

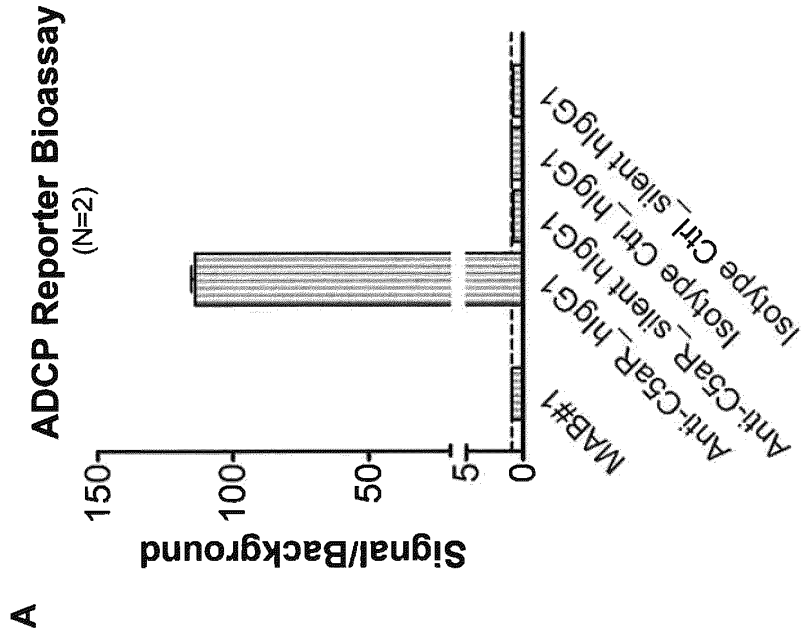

A
ADCP Reporter Bioassay
(N=2)
Signal/Background
150
100
50
5
0
MAB#1
Anti-C5aR_hIgG1
Anti-C5aR_silent hIgG1
Isotype Ctrl_hIgG1
Isotype Ctrl_silent hIgG1

Figure 9

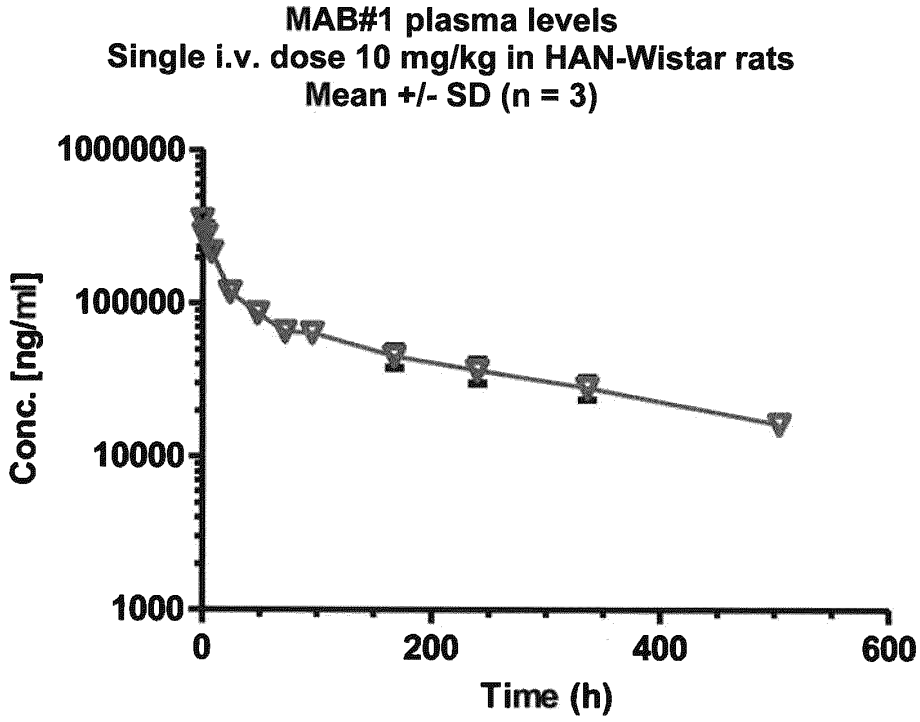
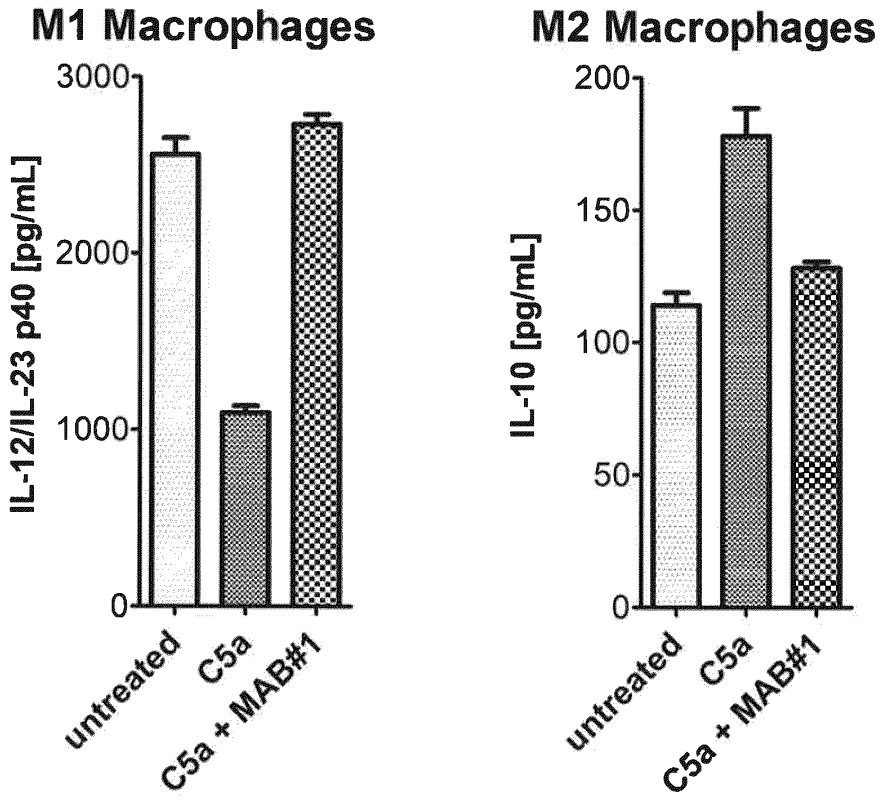

MAB#1 plasma levels
Single i.v. dose 10 mg/kg in HAN-Wistar rats
Mean +/- SD (n = 3)
1000000
100000
10000
1000
Conc. [ng/ml]
0
200
400
600
Time (h)

Figure 10

Antigen	MAB#2		MAB#1	
	100 nM	10 nM	100 nM	10 nM
Blank	2	1	2	1
huC5aR_NT_bio	49	46	84	82
Protein A	1	1	1	1
Serum albumin (h)	2	1	2	2
Fibrinogen (b)	2	1	2	1
Hemoglobin (h)	2	1	2	1
Transferrin (b)	9	4	19	8
Antitrypsin	2	2	2	1
Cell surface rec. 1_Lys (h)	2	1	2	1
Cell surface rec. 2_Fc (h)	2	1	2	1
Cell surface rec. 3_Fc (h)	2	2	2	2
GFP	2	1	2	1
Baculovirus particles	3	1	3	1
Fc (h)	3	1	2	1
HKB11 vesicle	3	1	3	1
Dextransulfate sodium salt	2	1	2	1
Pepsinogen	5	1	4	1
Amyloglycosidase	2	1	3	1
Trypsin inhibitor	7	3	5	2
Cytochrome C	2	1	2	1
Myoglobin	2	1	2	1
Lectin	2	1	2	1
Ovalbumin	4	1	2	1
Trypsinogen	2	1	2	1
Milk powder	2	1	2	1
RNase B	2	1	2	1
RNase A	6	2	4	2
Lysozyme	2	1	2	1
anti-human Fab (Dianova)	1	1	1	1
anti-human Fc	1	1	1	1
Blank	2	1	2	1
Blank	2	1	2	1

Figure 11


M1 Macrophages
IL-12/IL-23 p40 [pg/mL]
3000
2000
1000
0
untreated
C5a
C5a + MAB#1
M2 Macrophages
IL-10 [pg/mL]
200
150
100
50
0
untreated
C5a
C5a + MAB#1