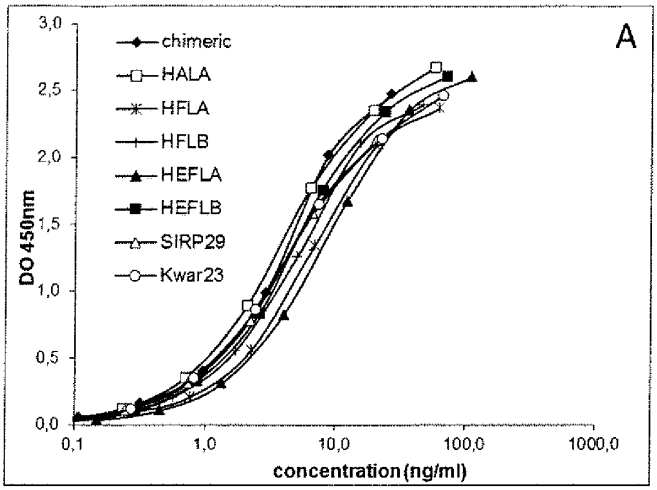
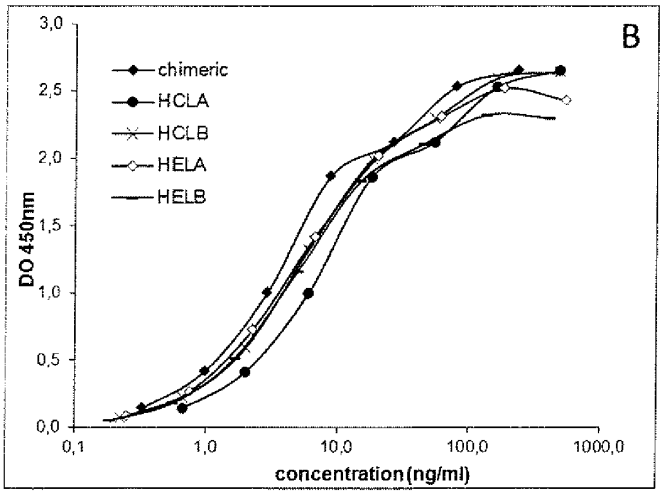
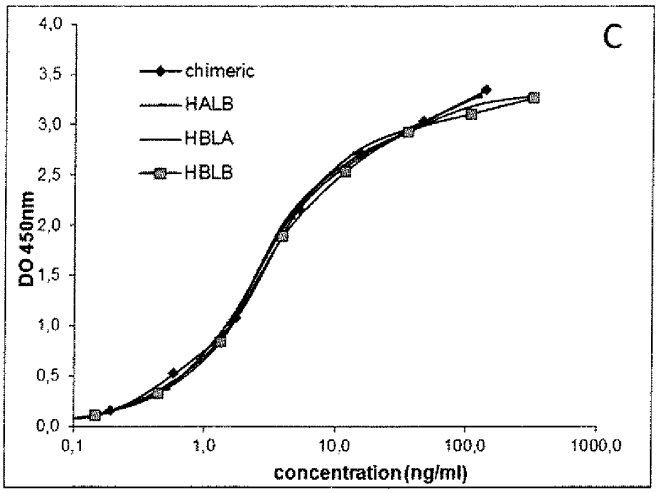


	EC50 (ng/ml)
chimeric	2,9
HALA	3,9
HFLA	5,1
HFLB	4,0
HEFLA	7,1
HEFLB	4,4
SIRP29	3,7
Kwar23	3,3



	EC50 (ng/ml)
chimeric	4,06
HCLA	5,60
HCLB	5,59
HELA	4,61
HELB	4,13



	EC50 (ng/ml)
chimeric	2,74
HALB	2,53
HBLA	2,68
HBLB	2,95

FIGURE 1 (start)

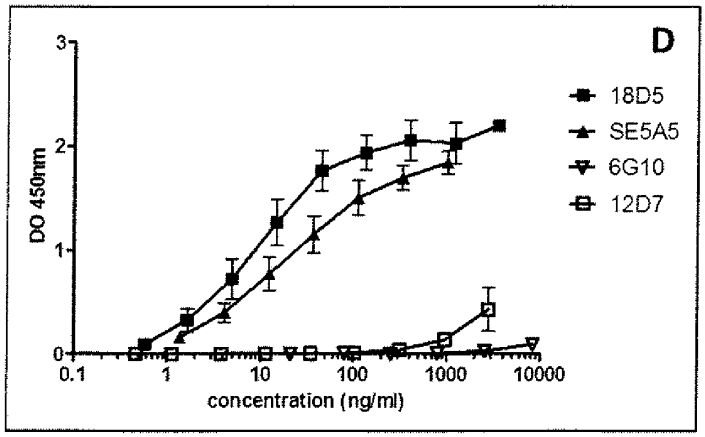
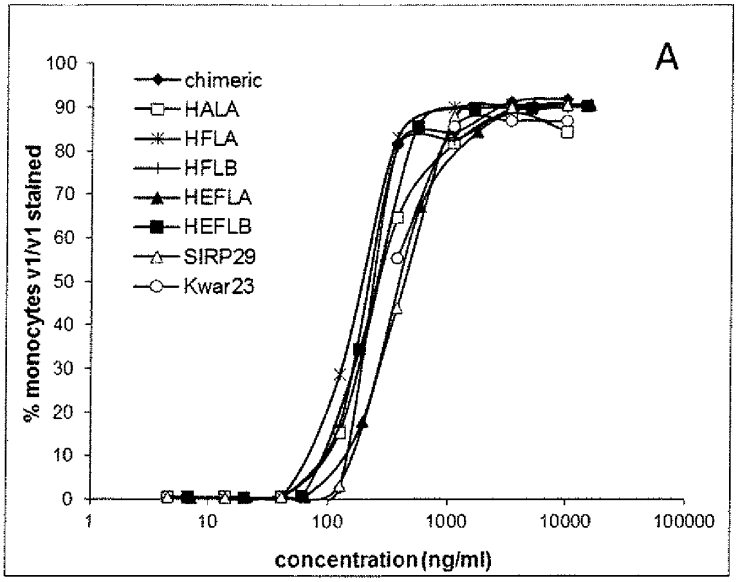


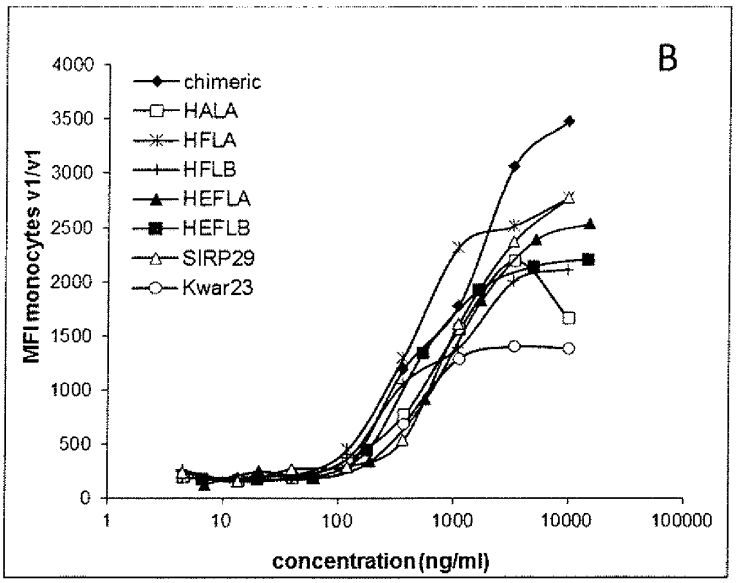
FIGURE 1 (end)

	Association (ka) (1/Ms)	Dissociation (kd) (1/s)	Affinity (KD) (M)
mouse 18D5	6,23e4	1,20e-5	**1,93e-10**
chimeric	1,49e5	5,14e-5	**3,44e-10**
HFLA	8,57e5	1,86e-4	**2,17e-10**
HFLB	7,91e5	2,49e-4	**3,15e-10**
HEFLA	5,59e5	1,48e-4	**2,64e-10**
HEFLB	6,54e5	1,89e-4	**2,89e-10**
SIRP29	4,15e4	1,01e-5	**2,43e-10**
Kwar23	2,44e5	8,95e-5	**3,67e-10**
SE7C2	5,98e3	0,01	**1,67e-6**
SE5A5	2,45e4	9,49e-4	**3,87e-8**

FIGURE 2

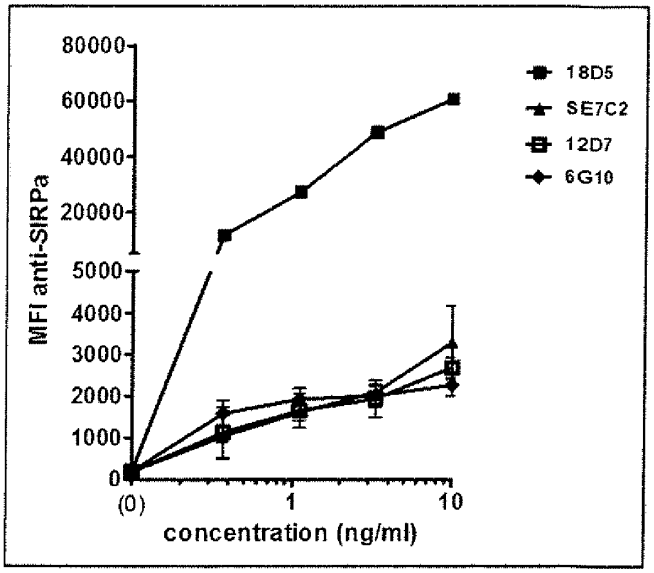


% stained	EC50 (ng/ml)
chimeric	225
HALA	242
HFLA	174
HFLB	201
HEFLA	356
HEFLB	208
SIRP29	376
Kwar23	260



MFI	EC50 (ng/ml)
chimeric	780
HALA	590
HFLA	328
HFLB	467
HEFLA	858
HEFLB	449
SIRP29	960
Kwar23	378

FIGURE 3 (start)



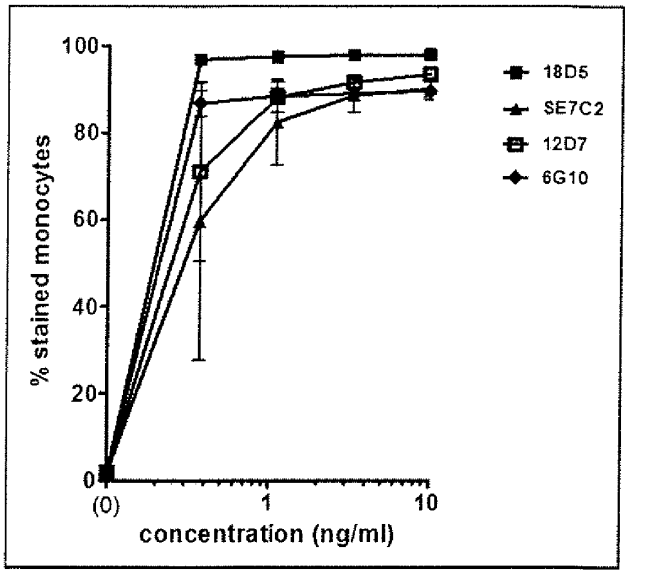


FIGURE 3 (middle)

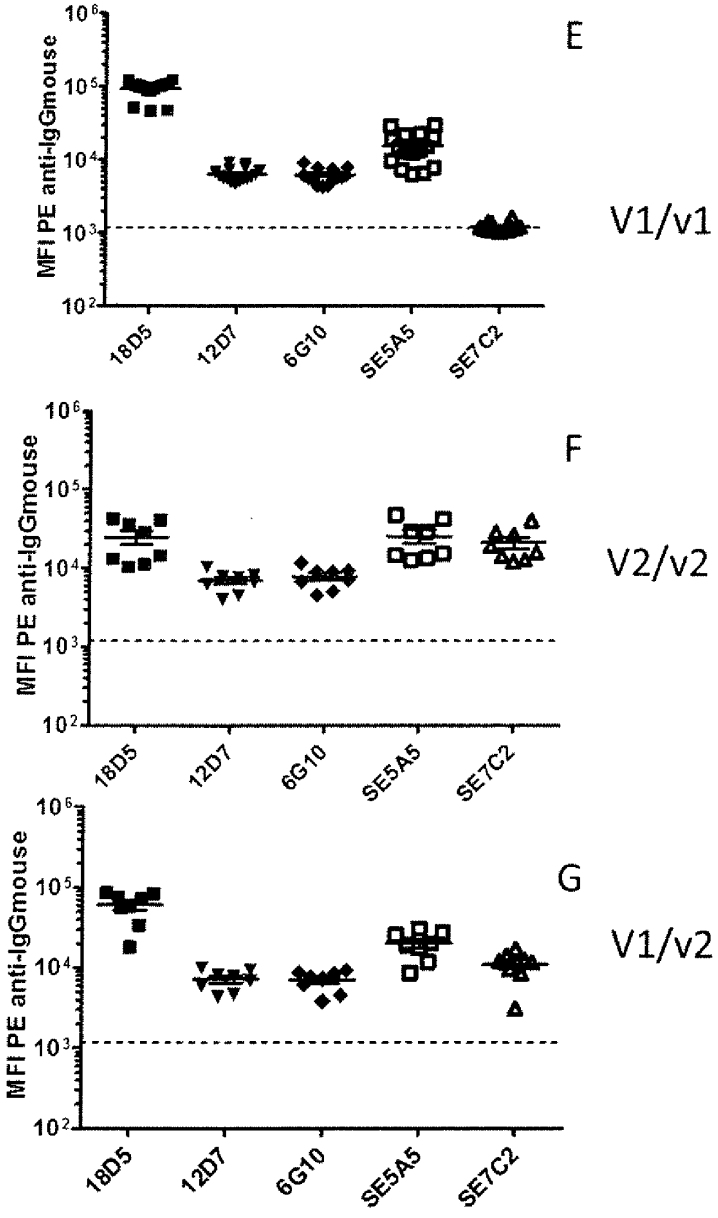
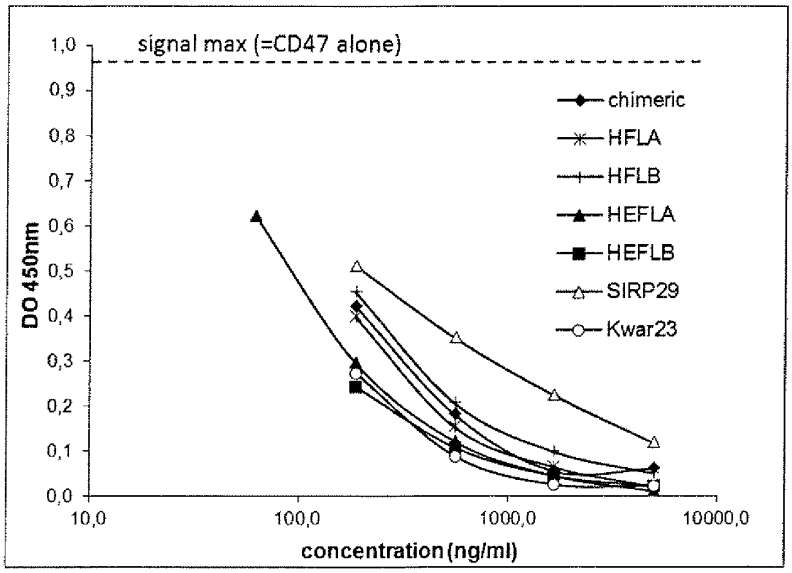

E
V1/v1
F
V2/v2
G
V1/v2
MFI PE anti-IgGmouse
10^6
10^5
10^4
10^3
10^2
18D5
12D7
6G10
SE5A5
SE7C2

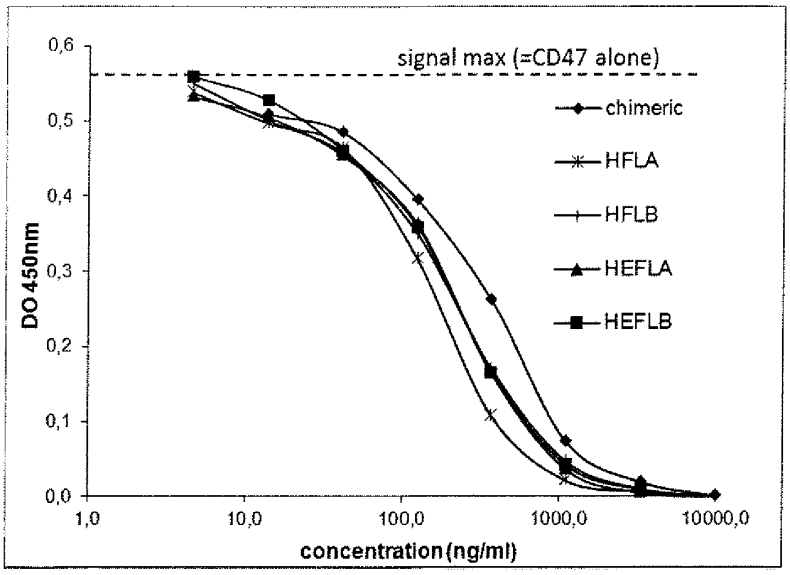
FIGURE 3 (End)

A

First experiment



Second experiment



	IC50 (ng/ml)
chimeric	303,8
HFLA	146,2
HFLB	182,7
HEFLA	190,6
HEFLB	186,3

FIGURE 4 (start)

B

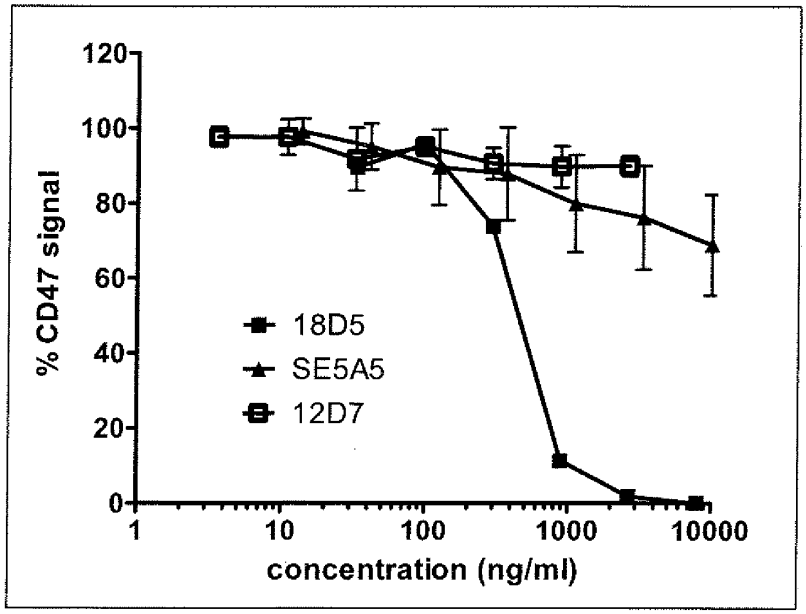
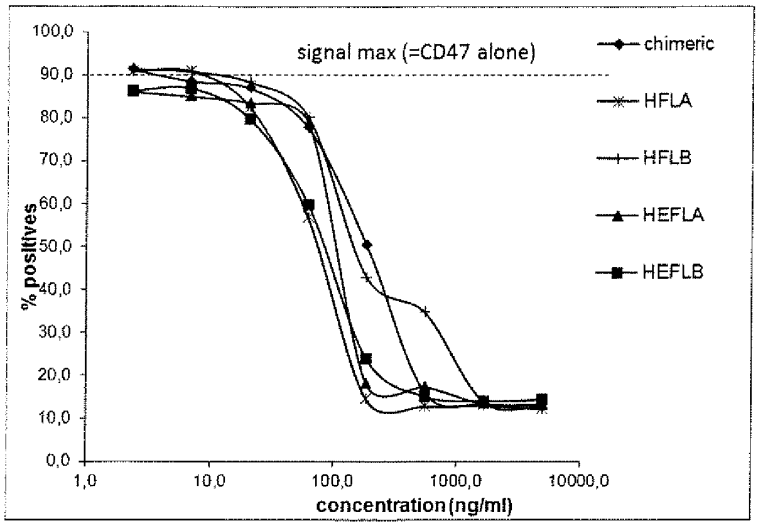


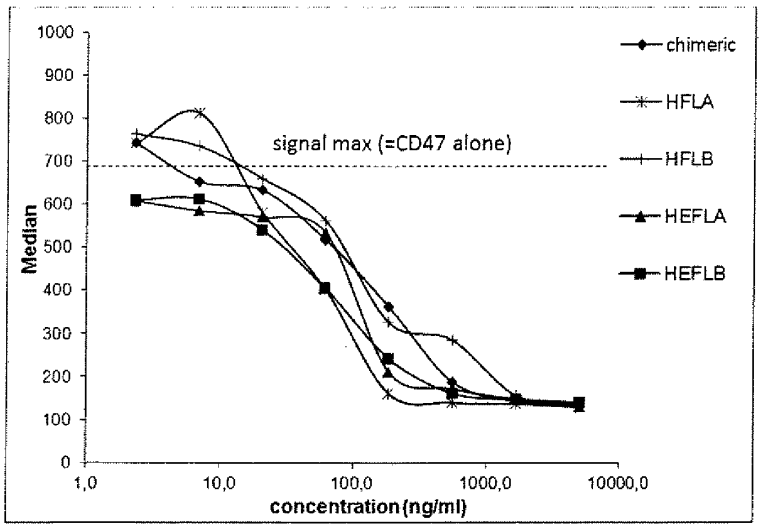
FIGURE 4 (end)

A



	IC50 (ng/ml)
chimeric	171,83
HFLA	64,09
HFLB	149,73
HEFLA	104,56
HEFLB	73,49

B



	IC50 (ng/ml)
chimeric	199,9
HFLA	75,1
HFLB	169,9
HEFLA	117,6
HEFLB	90,1

FIGURE 5 (start)

C

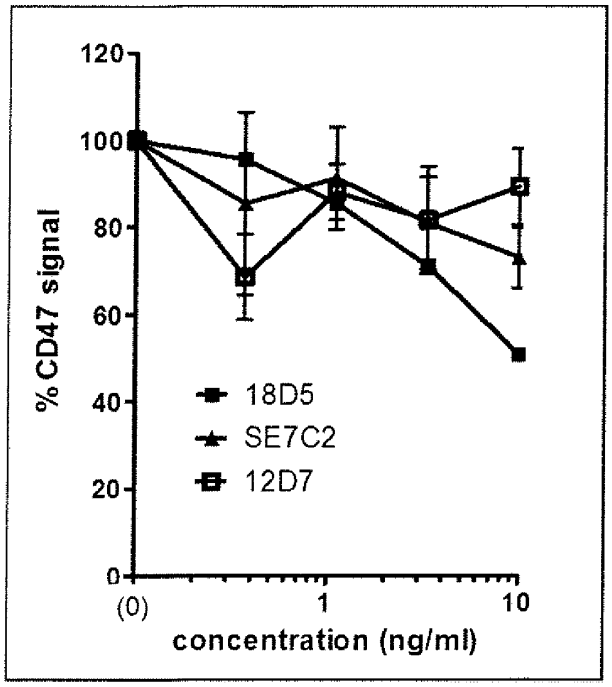


FIGURE 5 (end)

A	Association (ka) (1/Ms)	Dissociation (kd) (1/s)	Affinity (KD) (M)
mouse 18D5	1,58e4	1,76e-3	1,11e-7
mouse 18D5 with SP-D	3,797e5	1,088e-2	2,865e-8

B	Association (ka) (1/Ms)	Dissociation (kd) (1/s)	Affinity (KD) (M)
SP-D	2,465e3	1,078e-2	4,372e-6
SPD with mouse 18D5	3,272e3	2,405e-3	7,35e-7

FIGURE 6

A

	Association (ka) (1/Ms)	Dissociation (kd) (1/s)	Affinity (KD) (M)
Chimeric	8,837e4	1,385e-3	1,568e-8
HALA	1,328e5	8,504e-4	6,403e-9
HFLA	7,447e4	1,919e-3	2,576e-8
HFLB	6,694e4	1,738e-3	2,596e-8
HEFLA	9,827e4	1,221e-3	1,243e-8
HEFLB	1,939e4	1,711e-3	8,69e-8
SIRP29	1,078e5	8,114e-4	7,531e-9
kwar23	2,863e5	7,935e-4	2,772e-9

B

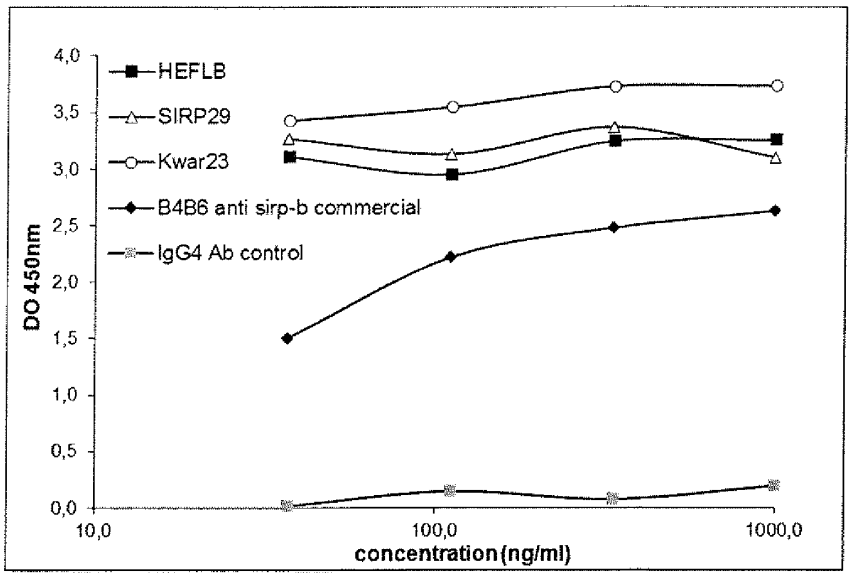


FIGURE 7

A

	Association (ka) (1/Ms)	Dissociation (kd) (1/s)	Affinity (KD) (M)
Chimeric	4,93e4	3,194e-3	6,479e-8
HALA	1,539e5	7,093e-3	4,609e-8
HFLA	2,477e5	1,18e-2	4,764e-8
HFLB	1,191e5	1,234e-2	1,036e-7
HEFLA	2,173e5	1,14e-2	5,244e-8
HEFLB	1,92e5	1,193e-2	6,215e-8
SIRP29	1,36e5	7,2e-4	5,296e-9
kwar23	3,57e5	7,648e-4	2,142e-9

B

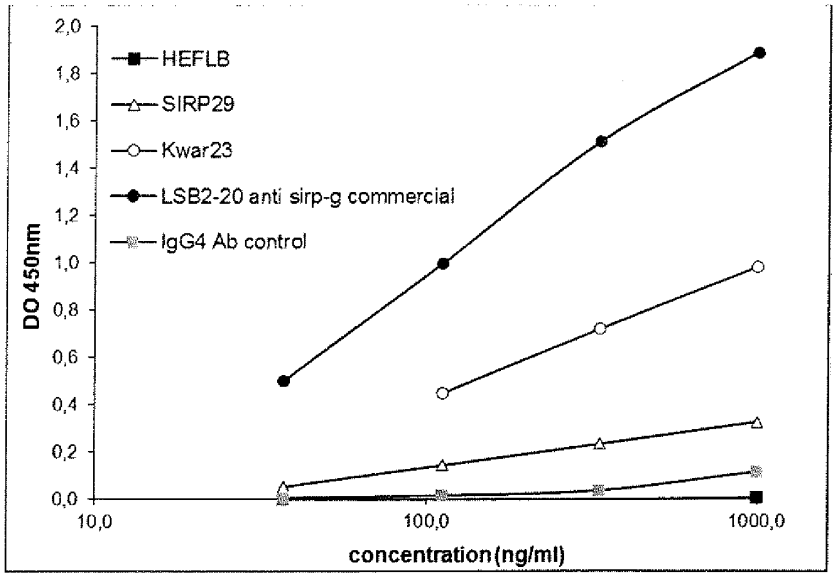


FIGURE 8

	Association (ka) (1/Ms)	Dissociation (kd) (1/s)	Affinity (KD) (M)
CD47 alone	2,193e4	1,309e-2	5,969e-7
HEFLB +CD47	5,372e4	5,334e-2	9,928e-7
SIRP29 +CD47	2,118e4	5,525e-2	2,572e-6
Kwar23 +CD47	4,369e2	1,259e-1	2,88e-4

FIGURE 9

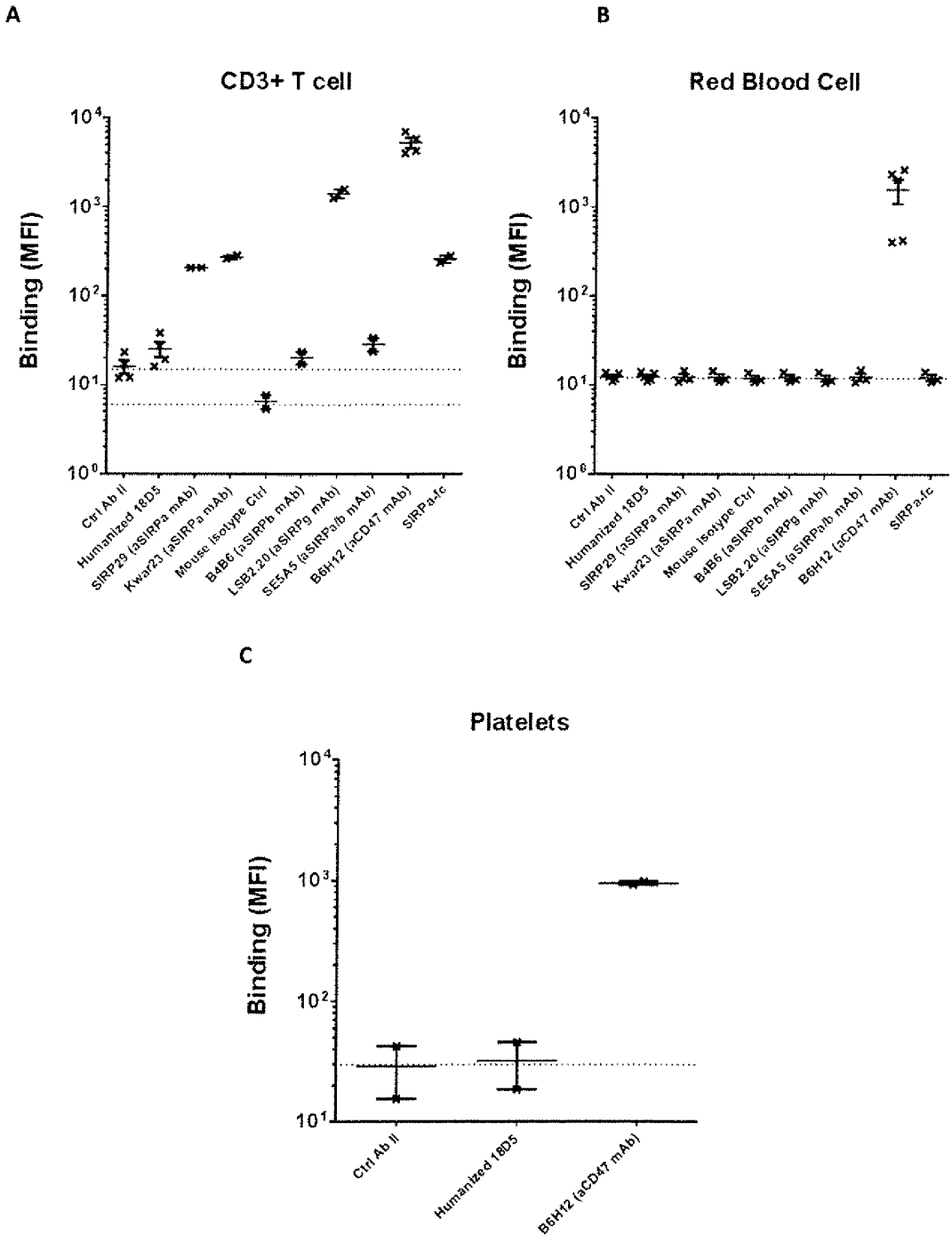
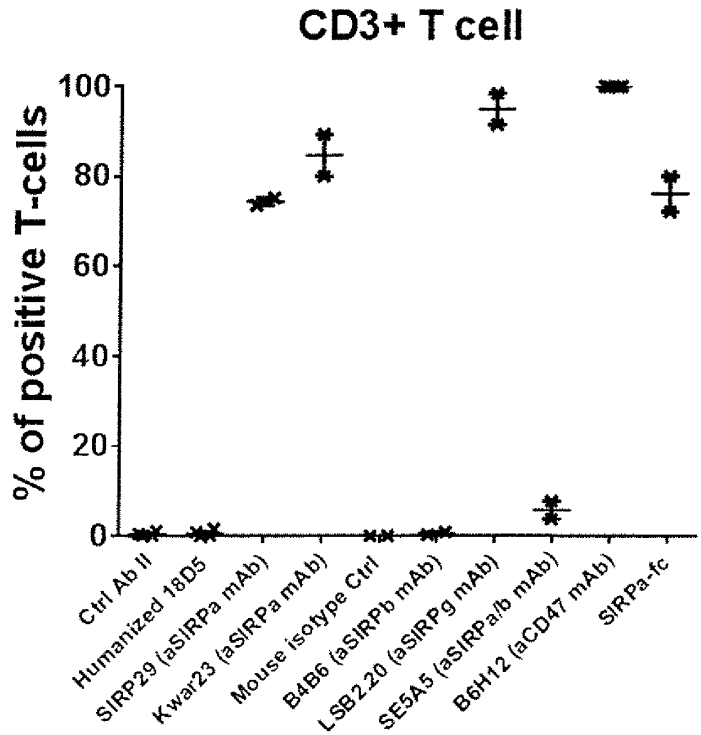

A
CD3+ T cell
Binding (MFI)
10^0
10^1
10^2
10^3
10^4
Ctrl Ab II
Humanized 18D5
SIRP29 (aSIRPa mAb)
Kwar23 (aSIRPa mAb)
Mouse isotype Ctrl
B4B6 (aSIRPb mAb)
LSB2.20 (aSIRPg mAb)
SE5A5 (aSIRPa/b mAb)
B6H12 (aCD47 mAb)
SIRPa-fc
B
Red Blood Cell
Binding (MFI)
10^0
10^1
10^2
10^3
10^4
Ctrl Ab II
Humanized 18D5
SIRP29 (aSIRPa mAb)
Kwar23 (aSIRPa mAb)
Mouse isotype Ctrl
B4B6 (aSIRPb mAb)
LSB2.20 (aSIRPg mAb)
SE5A5 (aSIRPa/b mAb)
B6H12 (aCD47 mAb)
SIRPa-fc
C
Platelets
Binding (MFI)
10^1
10^2
10^3
10^4
Ctrl Ab II
Humanized 18D5
B6H12 (aCD47 mAb)

FIGURE 10



	Ctrl Ab II	Humanized 18D5	SIRP29 (aSIRPa mAb)	Kwar23 (aSIRPa mAb)	Mouse isotype Ctrl	B4B6 (aSIRPb mAb)	LSB2.20 (aSIRPg mAb)	SE5A5 (aSIRPa/b mAb)	B6H12 (aCD47 mAb)	SIRPa-fc
Exp 1 HV1	0,45	1,54	73,5	80	0	0,87	91,4	3,72	100	72,2
Exp 1 HV2	1,12	0,84	75,2	89,3	0,016	0,25	98,4	7,69	100	80,1
Exp 2 HV1	0,057	0,016							99,9	
Exp 2 HV2	0,076	0,058							99,9	

FIGURE 11

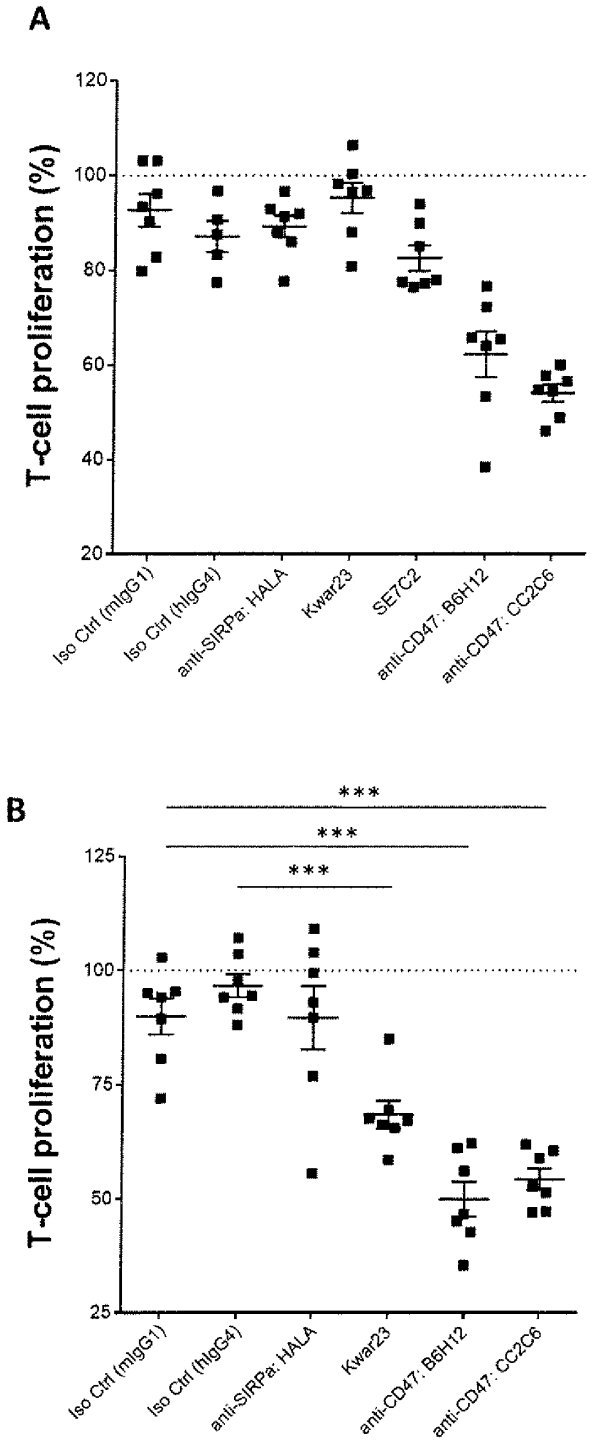


FIGURE 12 (start)

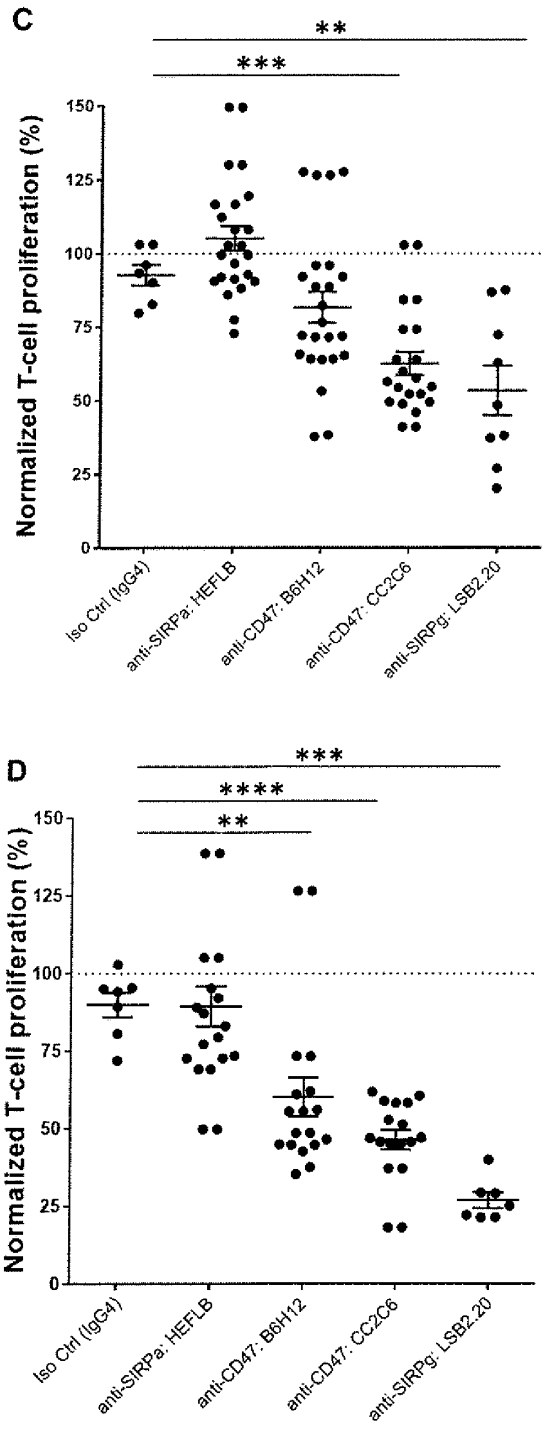


FIGURE 12 (middle)

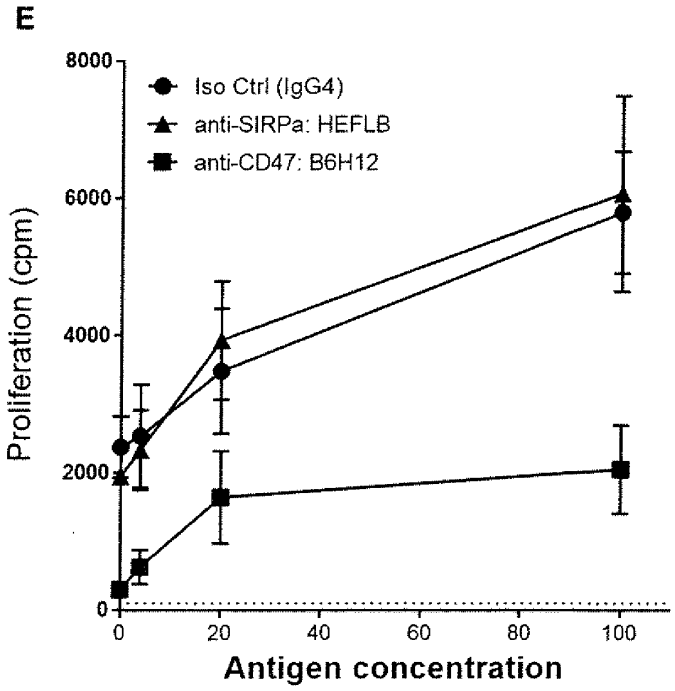


FIGURE 12 (end)

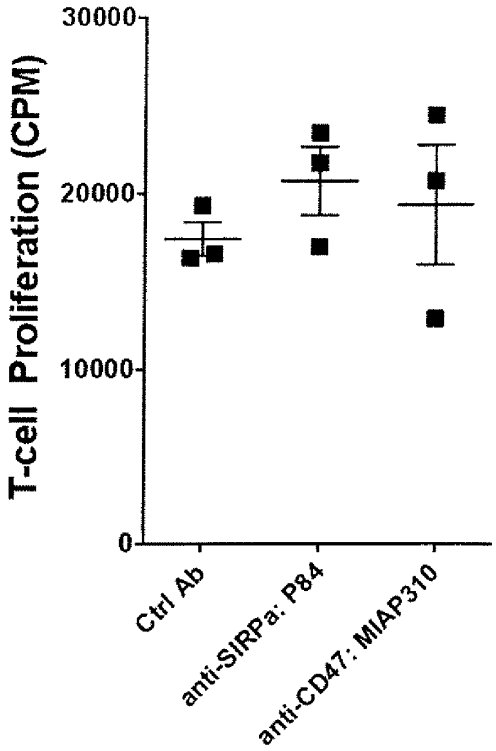
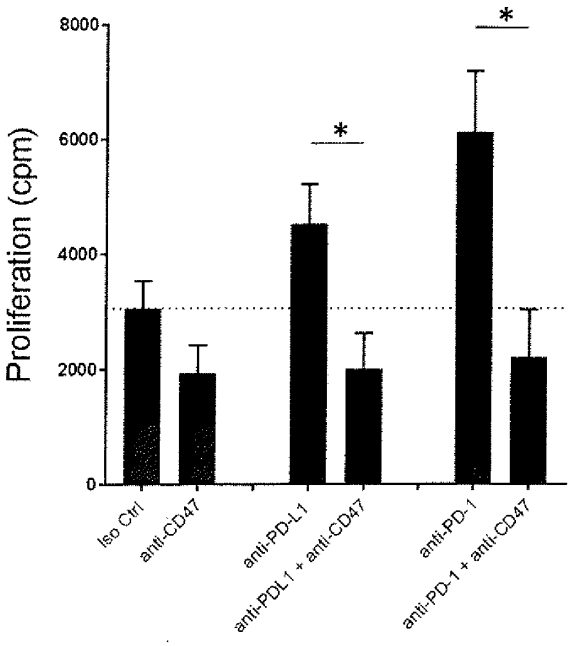


FIGURE 13


Proliferation (cpm)
8000
6000
4000
2000
0
*
*
Iso Ctrl
anti-CD47
anti-PD-L1
anti-PDL1 + anti-CD47
anti-PD-1
anti-PD-1 + anti-CD47

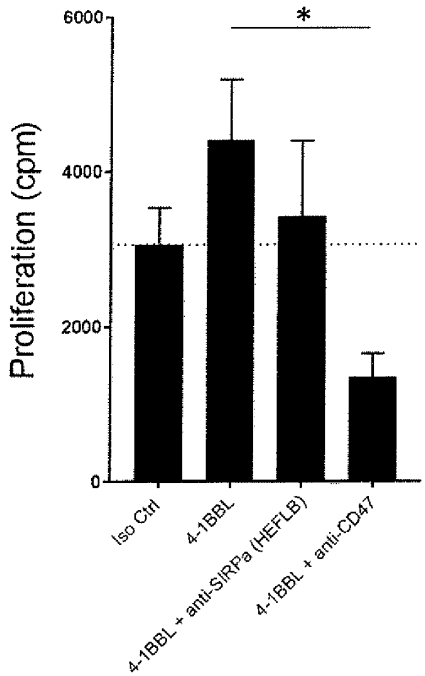

Proliferation (cpm)
6000
4000
2000
0
*
Iso Ctrl
4-1BBL
4-1BBL + anti-SIRPa (HEFLB)
4-1BBL + anti-CD47

FIGURE 14

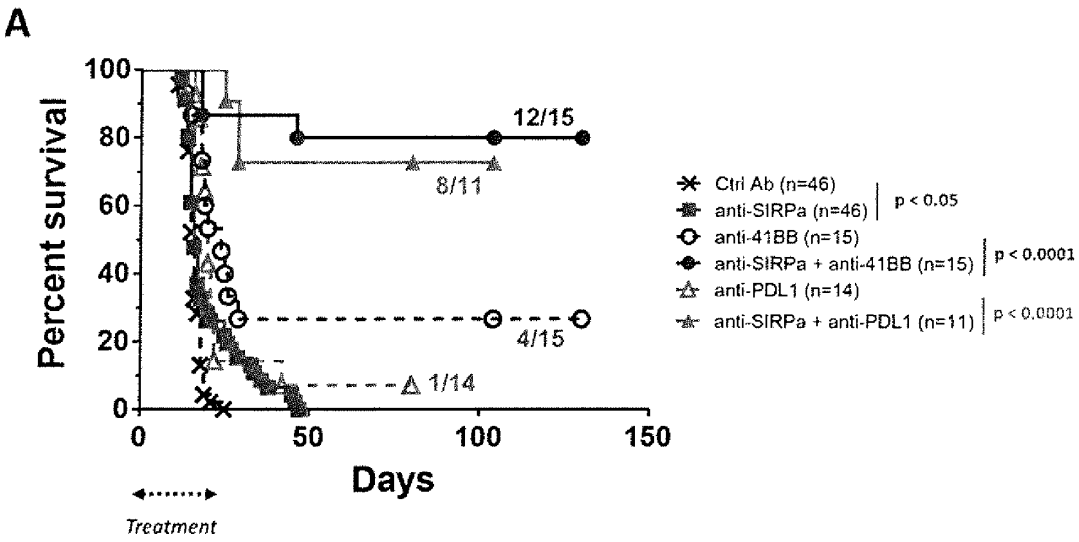
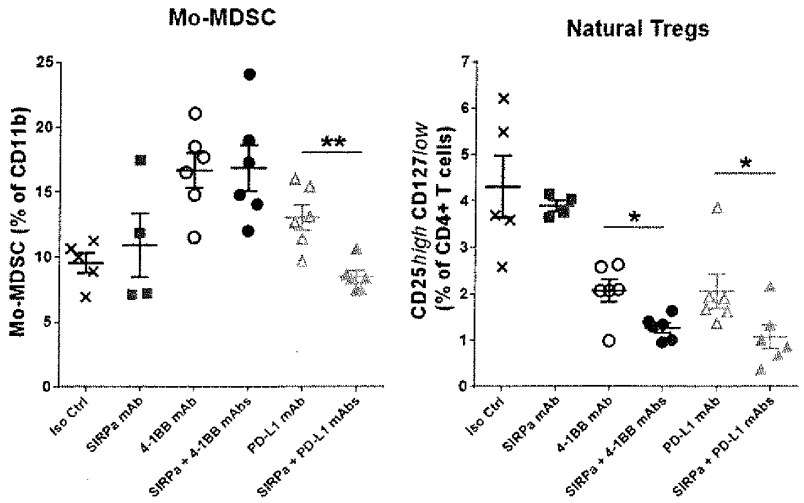


FIGURE 15 (start)

B Reduced regulatory cells



Increased effector T cells

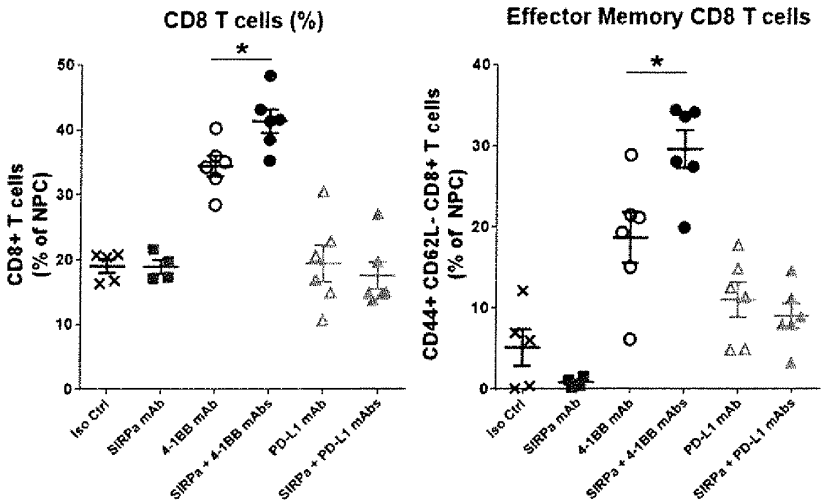


FIGURE 15 (middle)

C

Tumor HCC

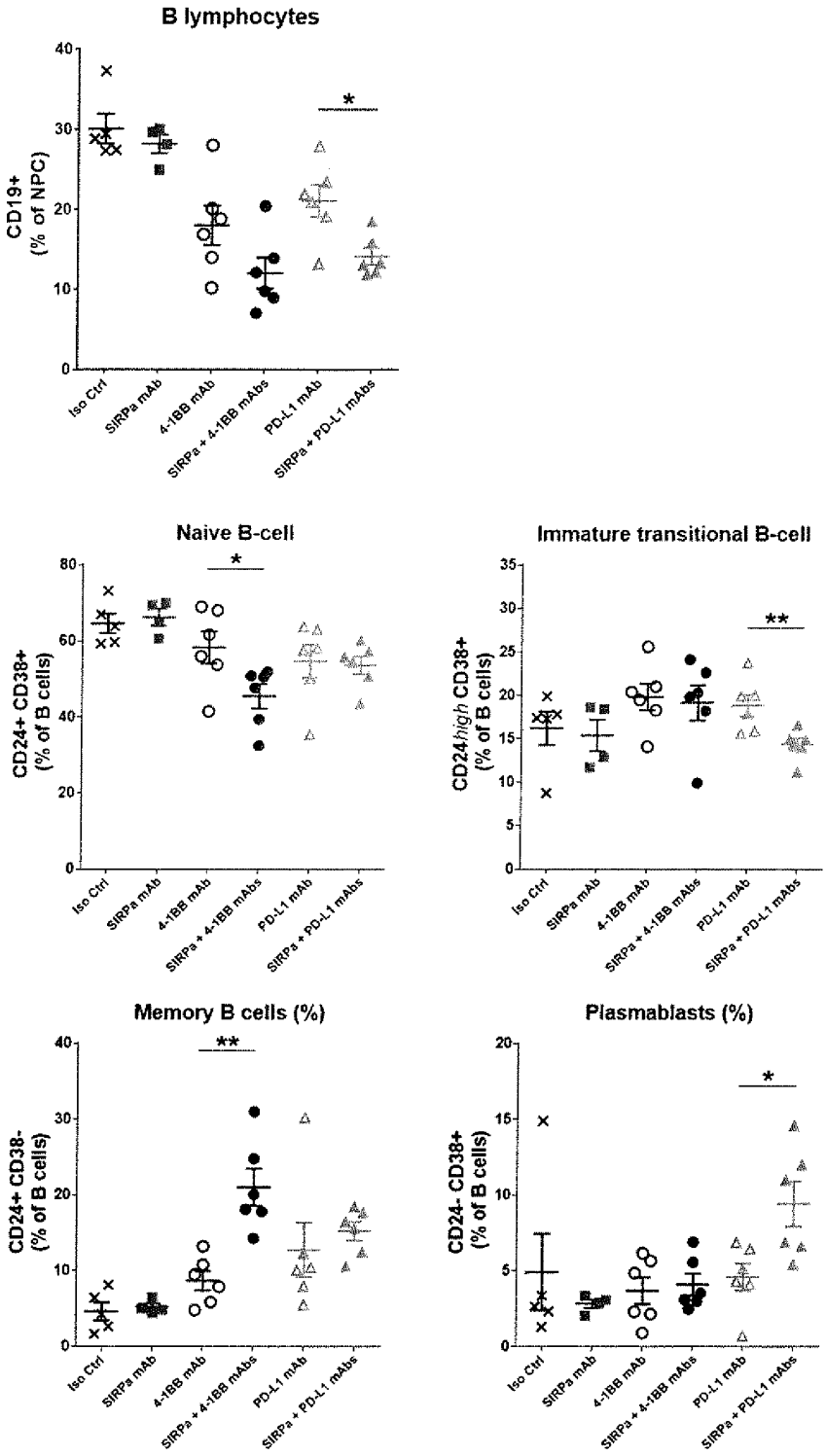


FIGURE 15 (middle)

Periphery (spleen)

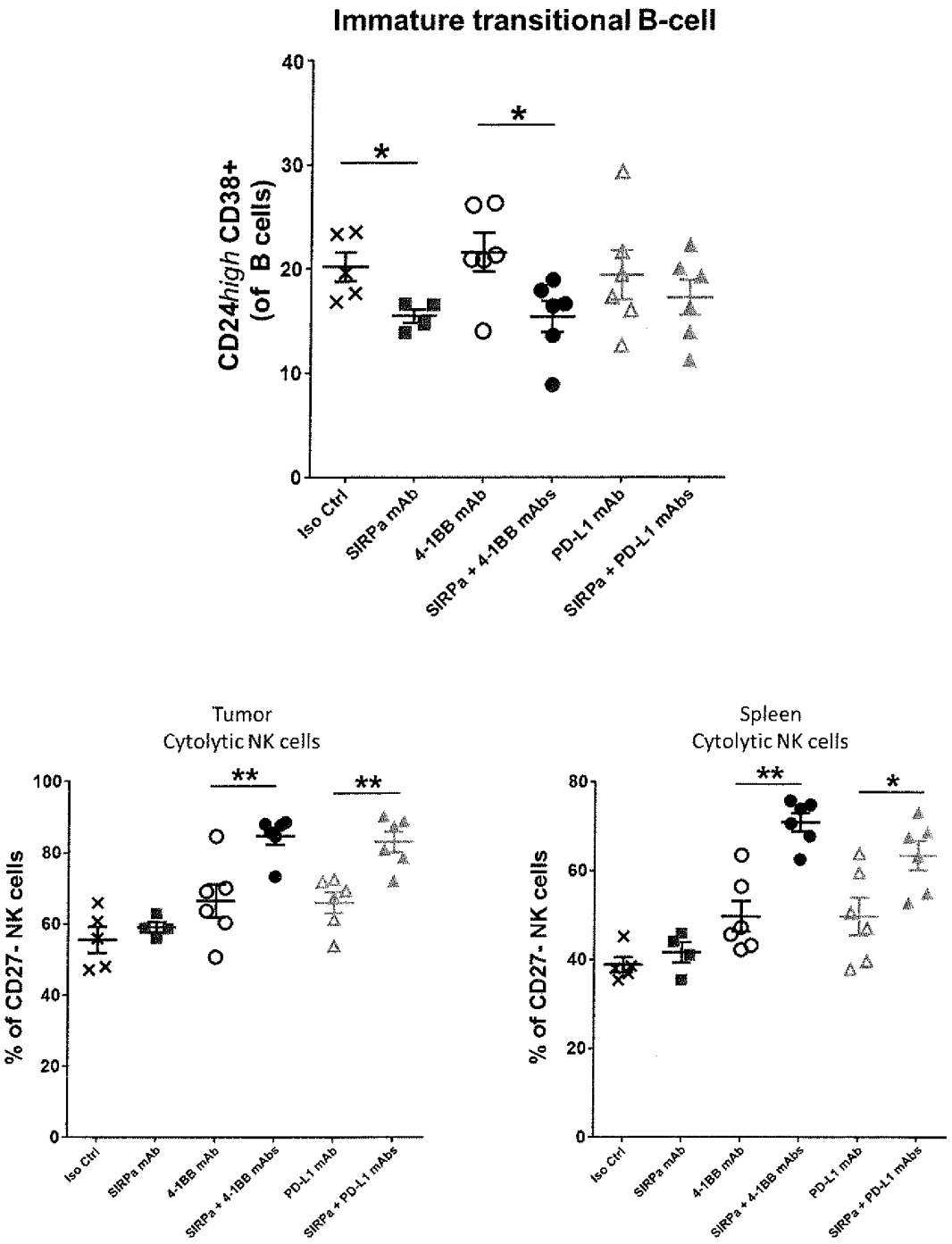


FIGURE 15 (middle)

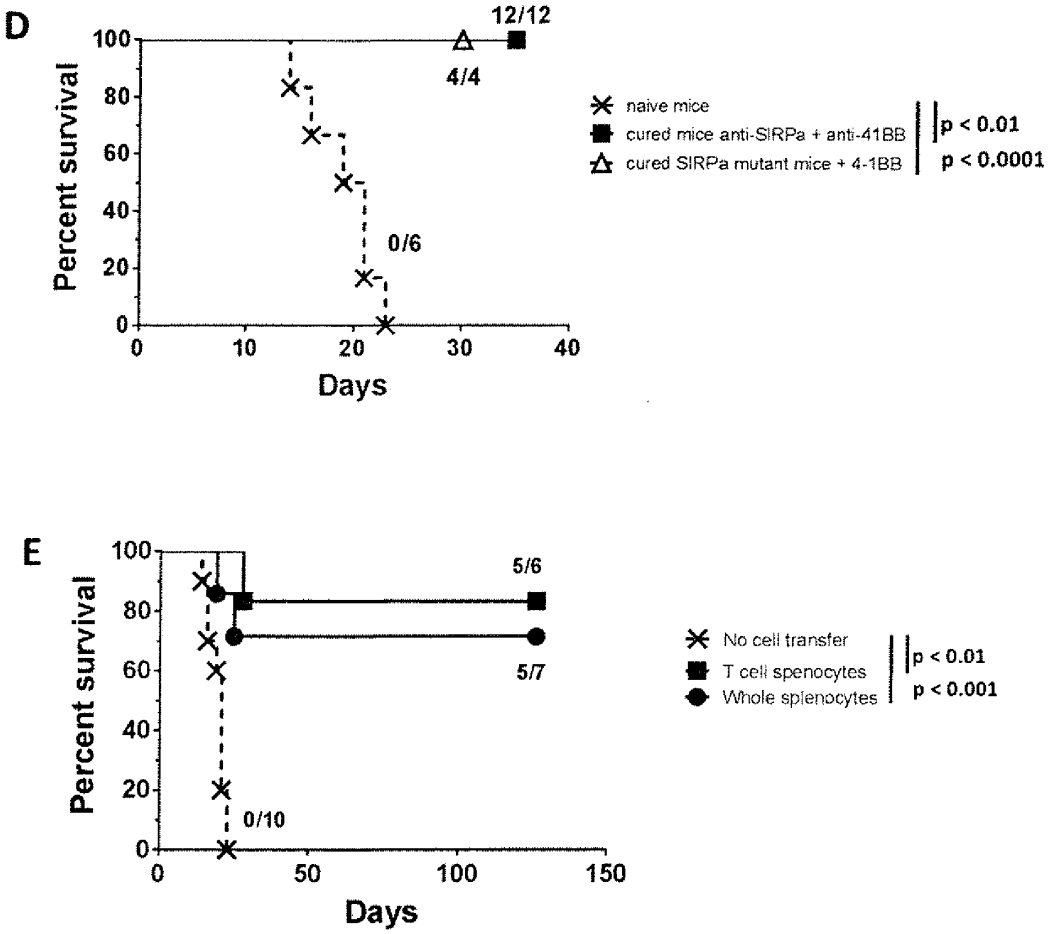


FIGURE 15 (end)

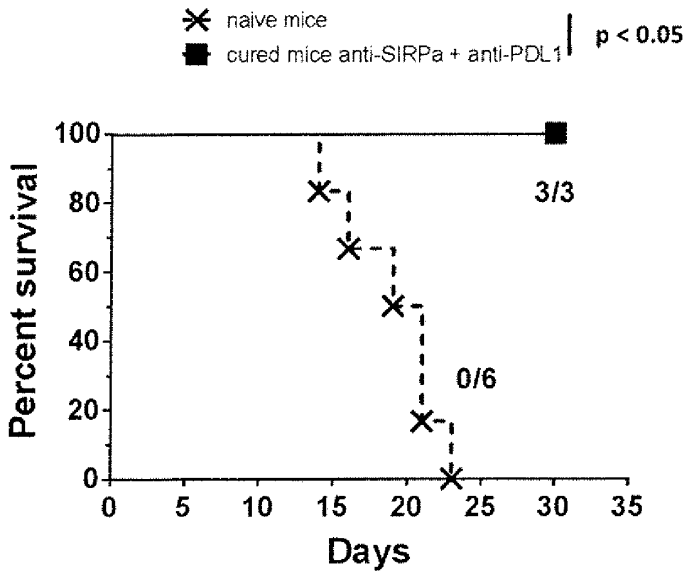


FIGURE 16

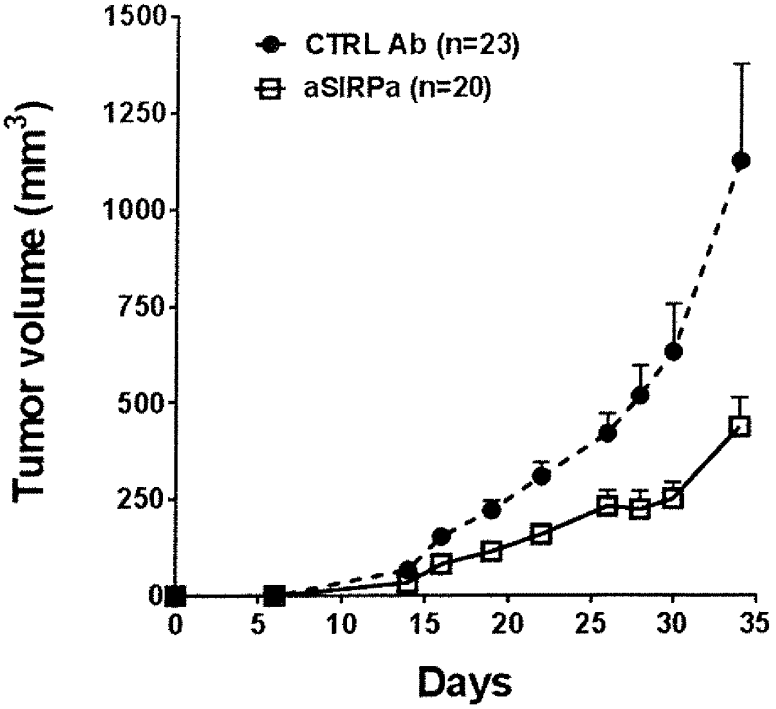


FIGURE 17

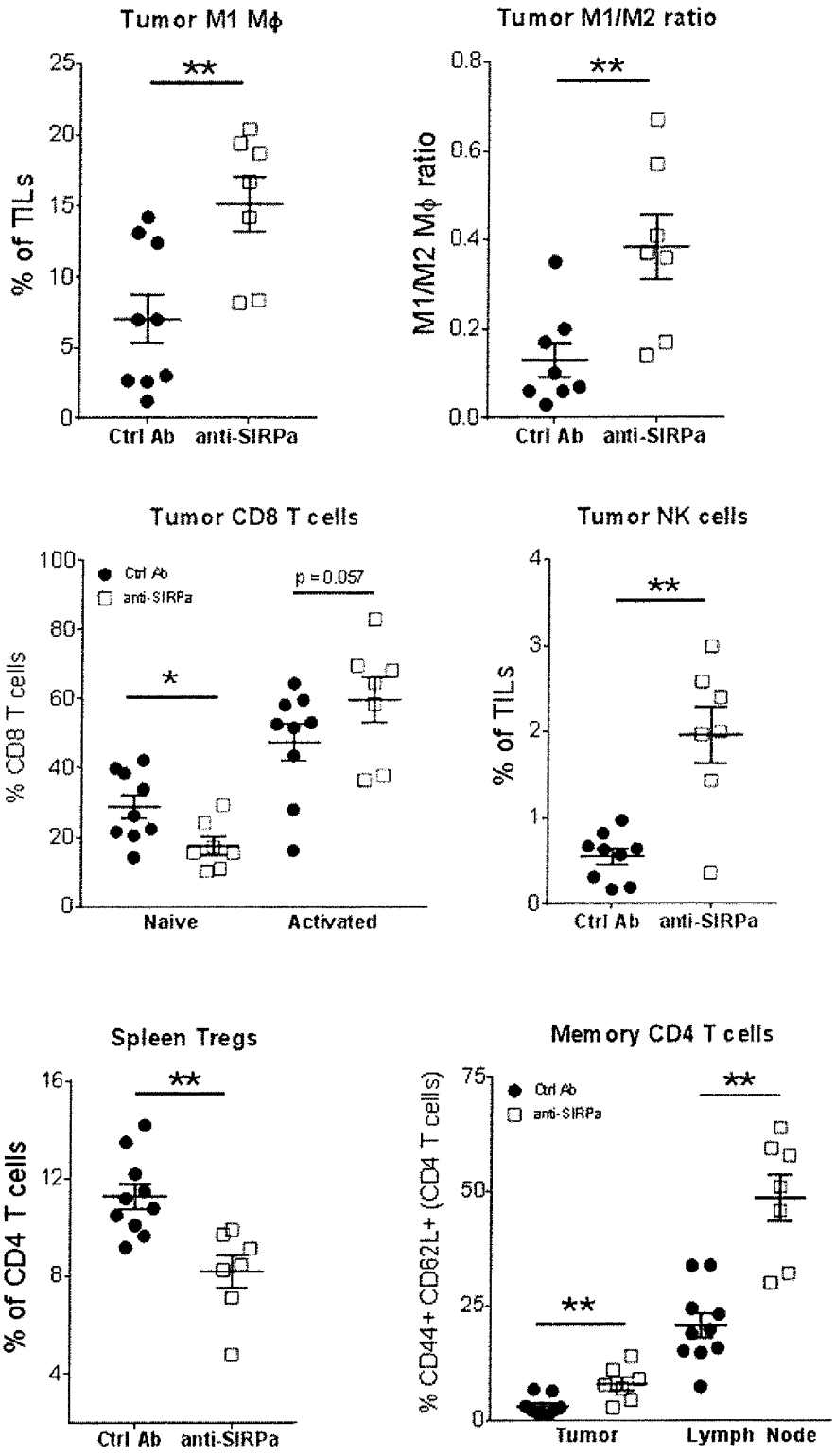

Tumor M1 Mϕ
% of TILs
25
20
15
10
5
0
**
Ctrl Ab
anti-SIRPa
Tumor M1/M2 ratio
M1/M2 Mϕ ratio
0.8
0.6
0.4
0.2
0.0
**
Ctrl Ab
anti-SIRPa
Tumor CD8 T cells
% CD8 T cells
100
80
60
40
20
0
Ctrl Ab
anti-SIRPa
p = 0.057
*
Naive
Activated
Tumor NK cells
% of TILs
4
3
2
1
0
**
Ctrl Ab
anti-SIRPa
Spleen Tregs
% of CD4 T cells
16
12
8
4
**
Ctrl Ab
anti-SIRPa
Memory CD4 T cells
% CD44+ CD62L+ (CD4 T cells)
75
50
25
0
Ctrl Ab
anti-SIRPa
**
**
Tumor
Lymph Node

FIGURE 18

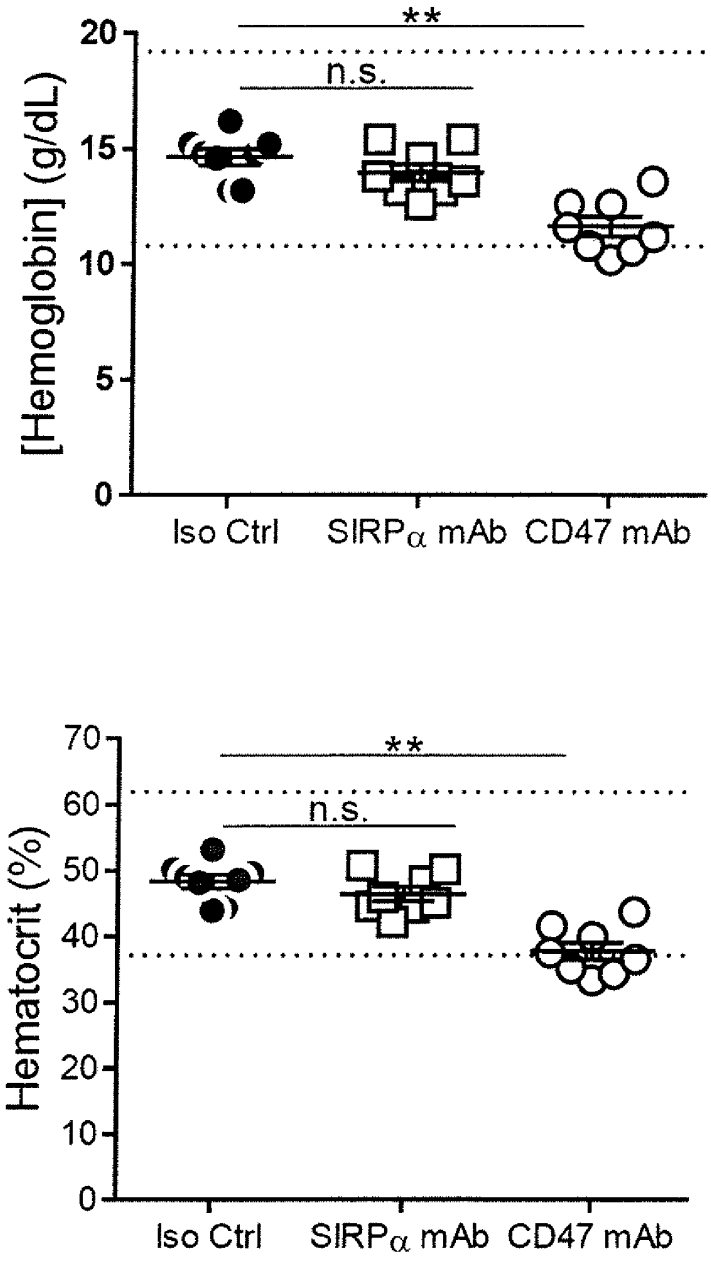

**
n.s.
20
15
10
5
0
[Hemoglobin] (g/dL)
Iso Ctrl
SIRPα mAb
CD47 mAb
**
n.s.
70
60
50
40
30
20
10
0
Hematocrit (%)
Iso Ctrl
SIRPα mAb
CD47 mAb

FIGURE 19

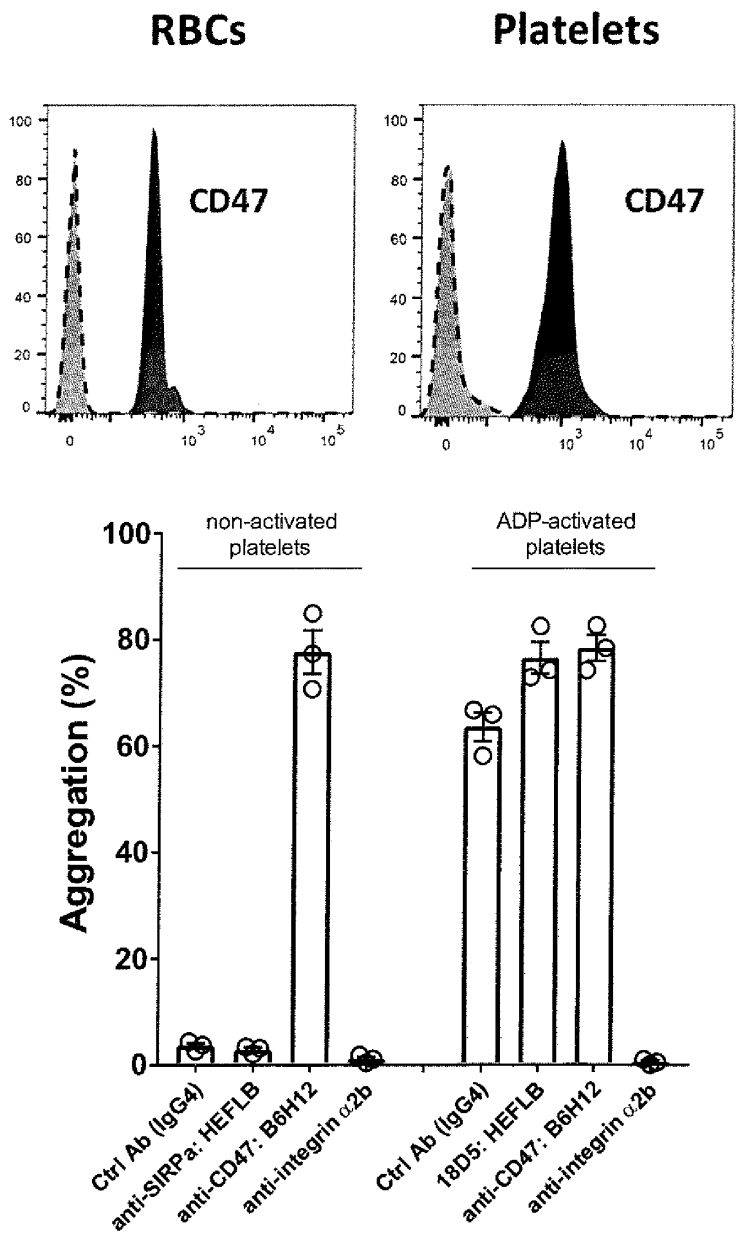

RBCs
Platelets
CD47
CD47
non-activated platelets
ADP-activated platelets
Aggregation (%)
Ctrl Ab (IgG4)
anti-SIRPa: HEFLB
anti-CD47: B6H12
anti-integrin α2b
Ctrl Ab (IgG4)
18D5: HEFLB
anti-CD47: B6H12
anti-integrin α2b

FIGURE 20

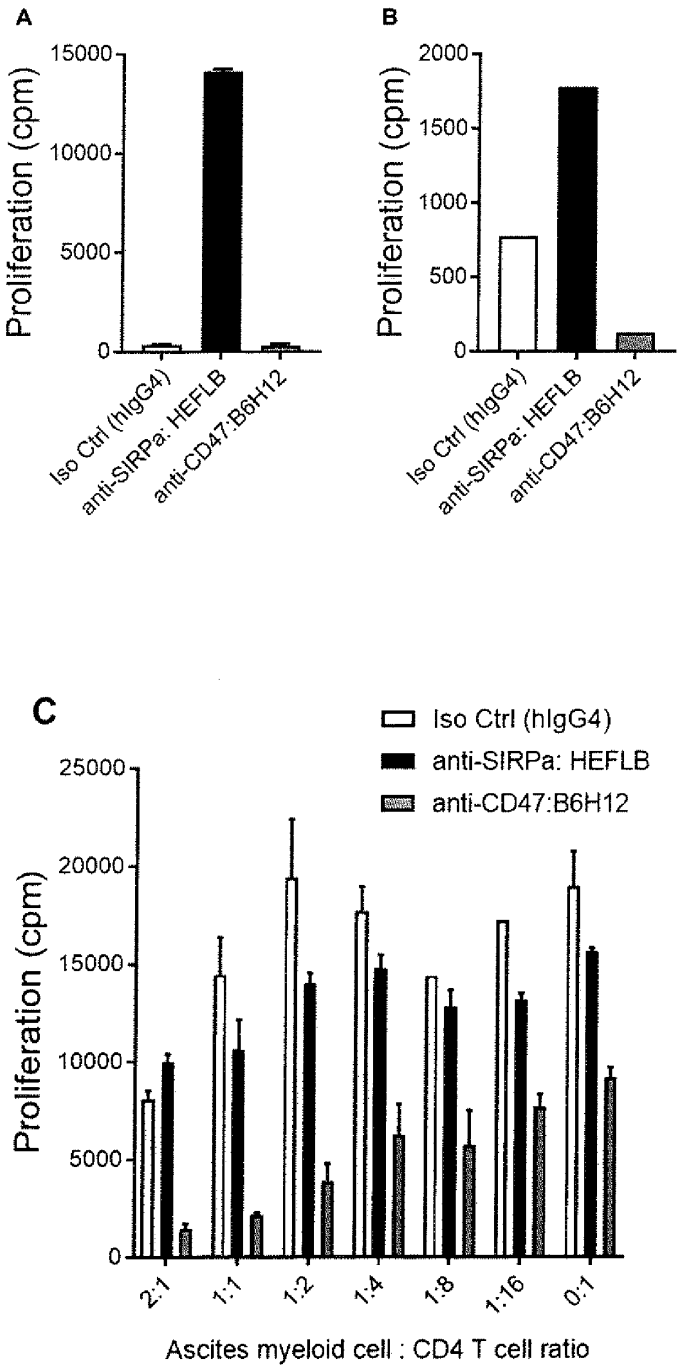

A
Proliferation (cpm)
15000
10000
5000
0
Iso Ctrl (hIgG4)
anti-SIRPa: HEFLB
anti-CD47:B6H12
B
Proliferation (cpm)
2000
1500
1000
500
0
Iso Ctrl (hIgG4)
anti-SIRPa: HEFLB
anti-CD47:B6H12
C
Iso Ctrl (hIgG4)
anti-SIRPa: HEFLB
anti-CD47:B6H12
Proliferation (cpm)
25000
20000
15000
10000
5000
0
2:1
1:1
1:2
1:4
1:8
1:16
0:1
Ascites myeloid cell : CD4 T cell ratio

FIGURE 21