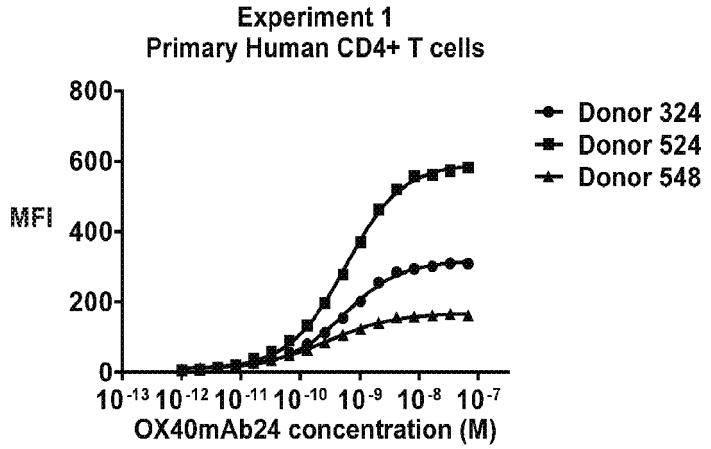
FIGURE 1

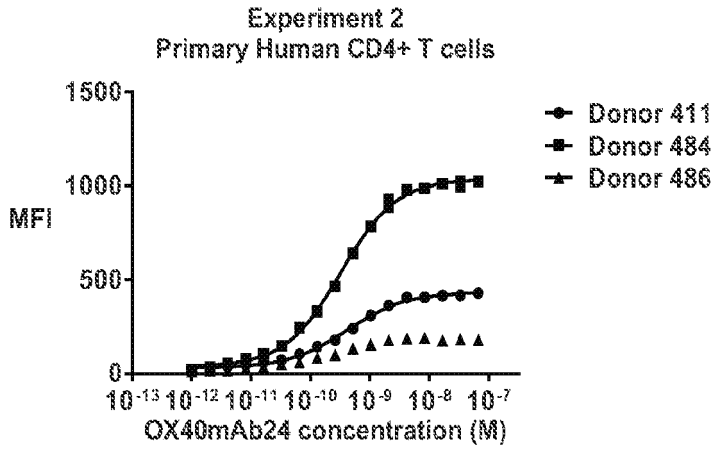
9B12VH mutant variants pairing with humanized VL										
		VH mutation position							Removing Sequence liabilities	
Clone ID	VH mutant (nick name)	27D	39K	47Y	48M	71R	78Y	91F	NG (CDR2H)	RYDYDG (CDR3H)
OX40mAb1	9B12 chimera	D	K	Y	M	R	Y	F		
OX40mAb2	9B12 mouse VH	D	K	Y	M	R	Y	F		
OX40mAb5	hu	G	Q	W	I	P	F	Y	NG	RYDYDG
OX40mAb8	huKR	G	K	W	I	R	F	Y		
OX40mAb10	m1	D	Q	W	I	P	F	Y		
OX40mAb11	m2	G	K	Y	M	P	F	Y		
OX40mAb12	m3	G	Q	W	I	R	Y	F		
OX40mAb13	KR-DYMYF	D	K	Y	M	R	Y	F		
OX40mAb14	KR-DYIYF	D	K	Y	I	R	Y	F		
OX40mAb15	KR-DYIFF	D	K	Y	I	R	F	F		
OX40mAb16	KR-DYIYY	D	K	Y	I	R	Y	Y		
OX40mAb17	KR-DYIFY	D	K	Y	I	R	F	Y		
OX40mAb18	KYYF	G	K	Y	I	R	Y	F		
OX40mAb19	KYRYF	G	K	Y	I	R	Y	F		
OX40mAb20	KYRY	G	K	Y	I	R	Y	Y	NG	RYDYDG
OX40mAb21	KYY	G	K	Y	I	R	Y	Y		
OX40mAb22	55A,96K-A	G	K	Y	I	R	Y	Y	NA	KYDYDG
OX40mAb23	55A	G	K	Y	I	R	Y	Y	NA	RYDYDG
OX40mAb24	96K	G	K	Y	I	R	Y	Y	NG	KYDYDG
OX40mAb25	54S	G	K	Y	I	R	Y	Y	SG	RYDYDG
OX40mAb25a	54S,96K	G	K	Y	I	R	Y	Y	SG	KYDYDG
OX40mAb26	mouseVH-55A	D	K	Y	M	R	Y	F	NA	RYDYDG
OX40mAb27	55A,96K	G	K	Y	I	R	Y	Y	NA	KYDYDG
OX40mAb28	hulgG4P	G	K	Y	I	R	Y	Y	NG	KYDYDG
OX40mAb29	hulgG1TM	G	K	Y	I	R	Y	Y	NG	KYDYDG
OX40mAb30	mIgG1	G	K	Y	I	R	Y	Y	NG	KYDYDG
OX40mAb31	hulgG4P	G	K	Y	I	R	Y	Y	NA	KYDYDG
OX40mAb32	hulgG1TM	G	K	Y	I	R	Y	Y	NA	KYDYDG
OX40mAb37	mIgG1	G	K	Y	I	R	Y	Y	NA	KYDYDG

FIGURE 2A-D

A

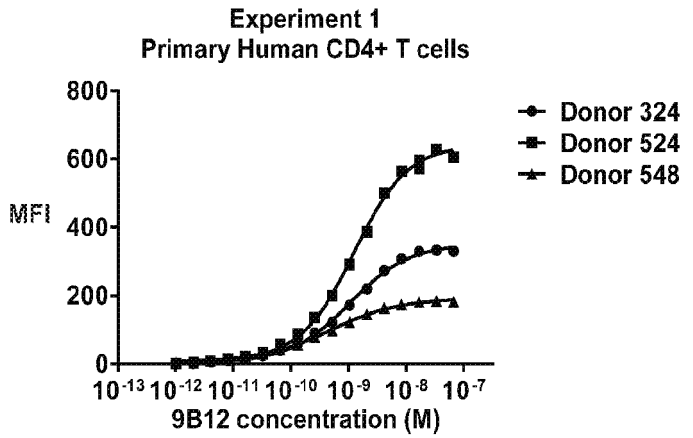


B



(FIGURE 2A-D, con't.)

C



D

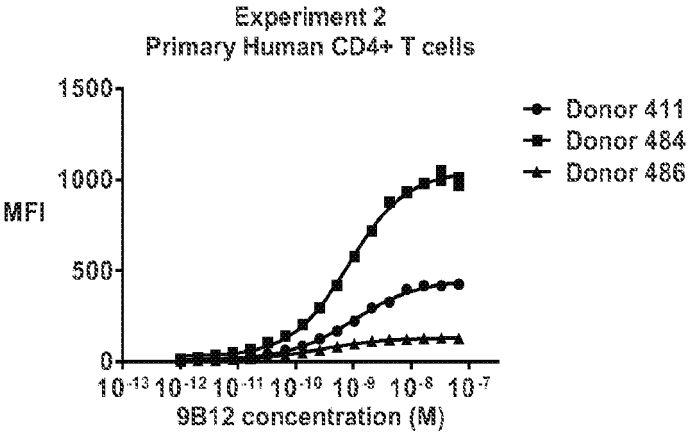
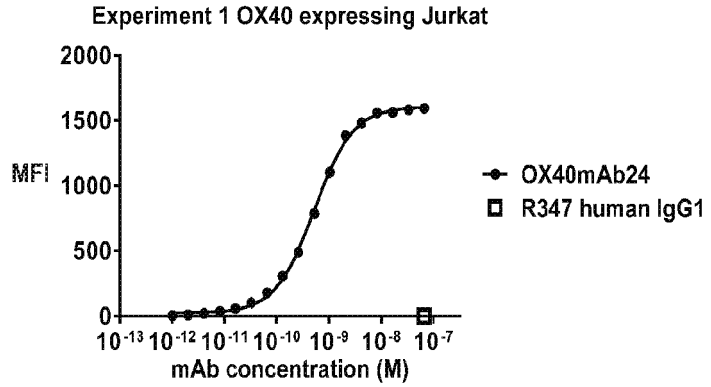
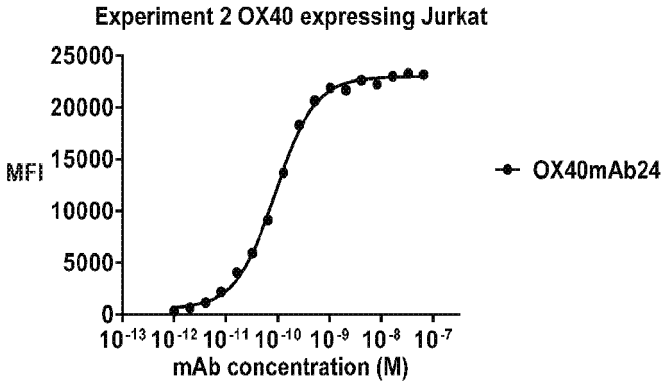


FIGURE 3A-F

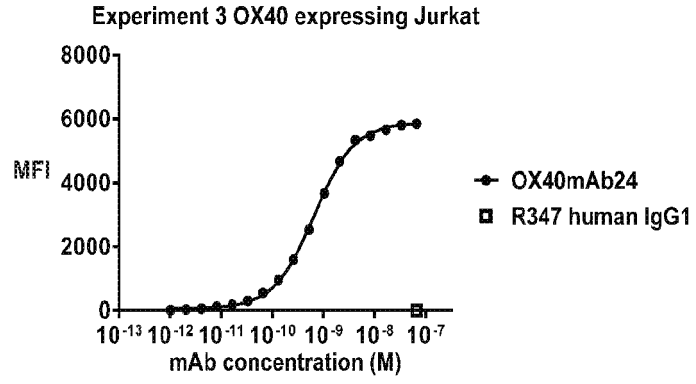
A



B

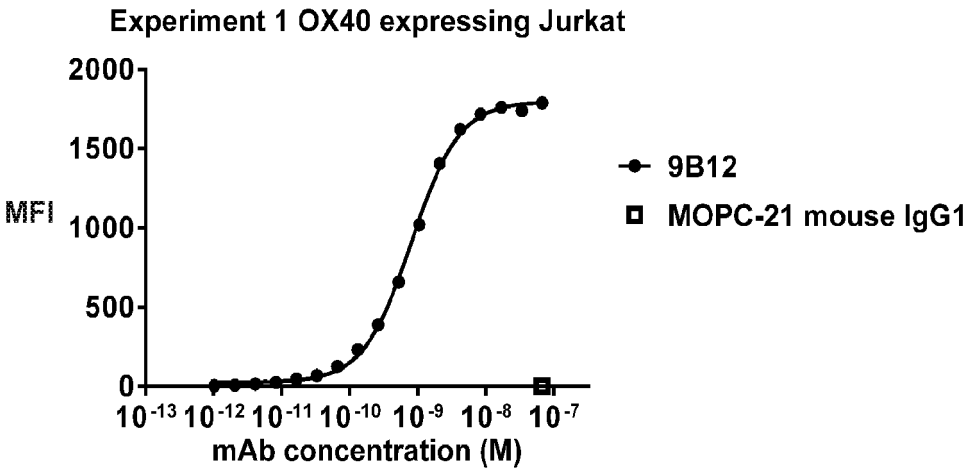


C

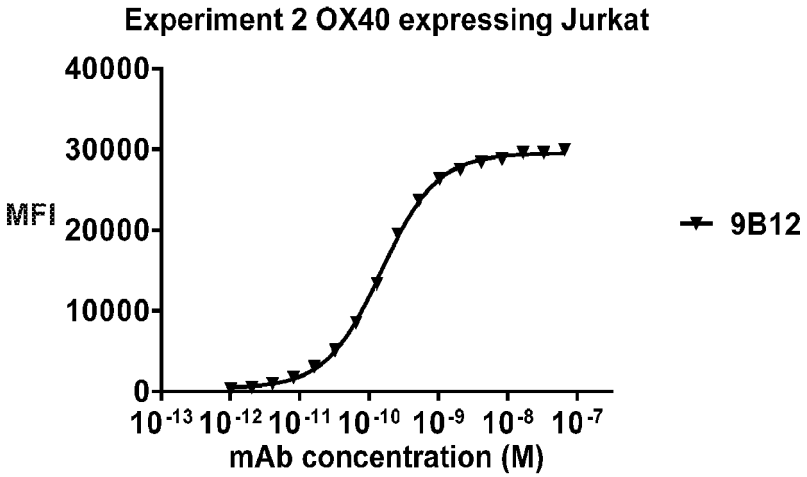


(FIGURE 3A-F, con't)

D



E



F

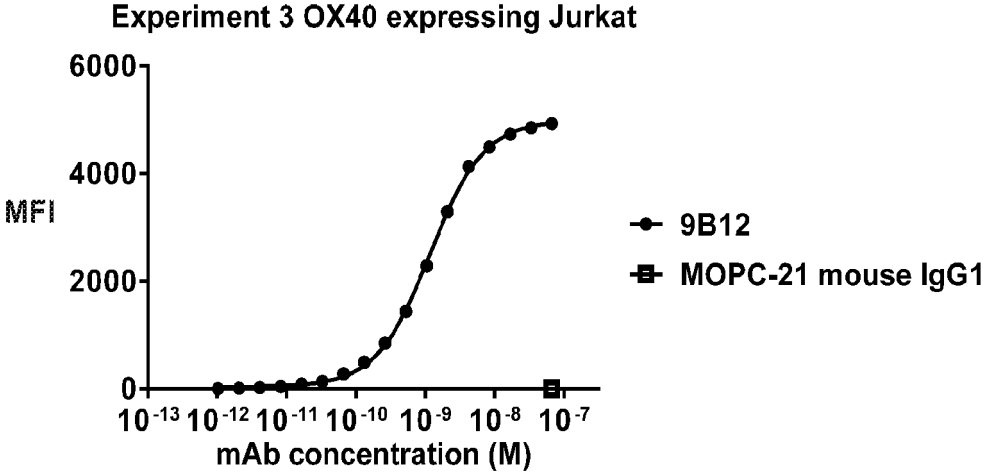
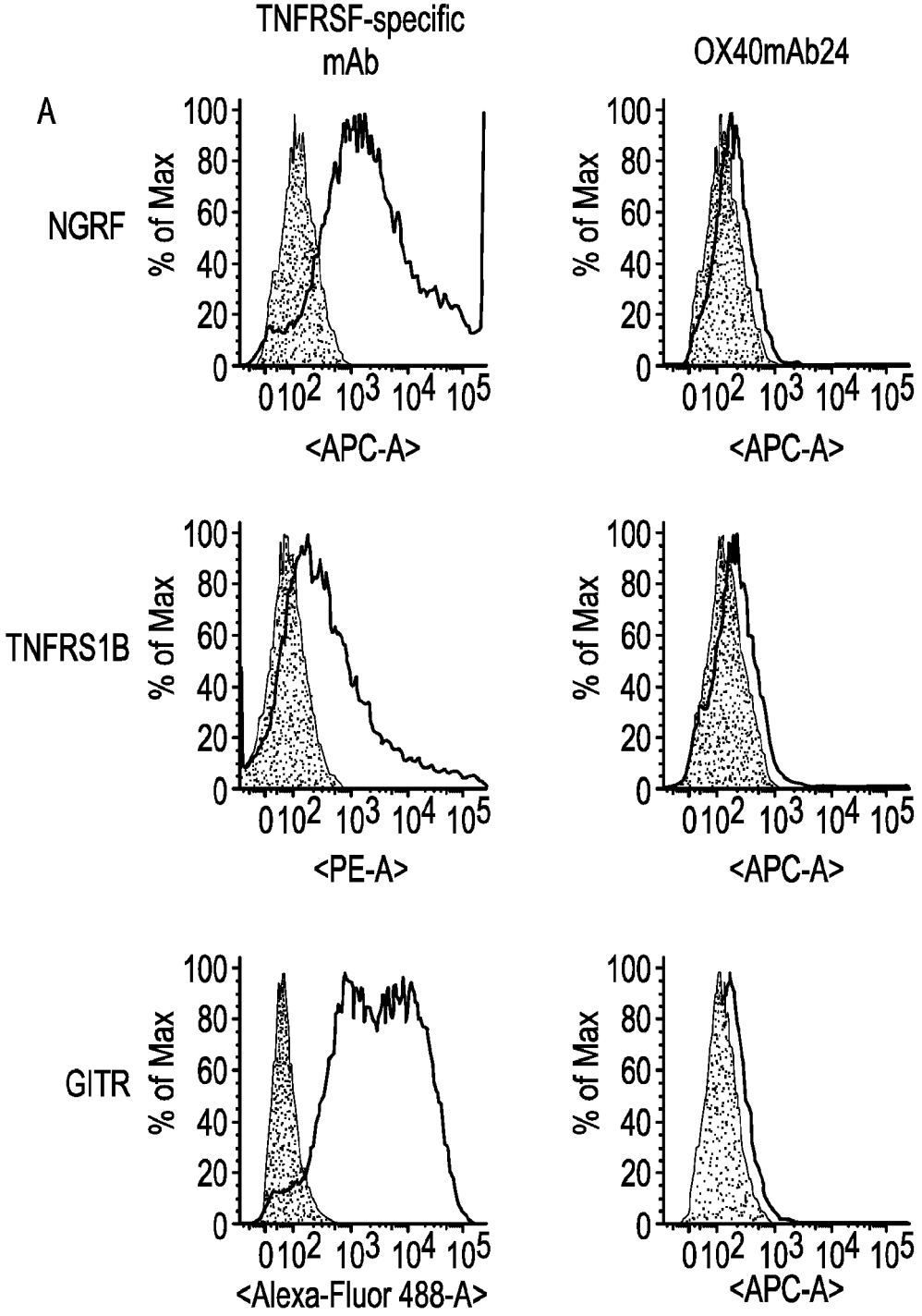


FIGURE 4A-B


TNFRSF-specific mAb
OX40mAb24
A
NGRF
TNFRS1B
GITR
% of Max
100
80
60
40
20
0
0 10^2 10^3 10^4 10^5
<APC-A>
<PE-A>
<Alexa-Fluor 488-A>

(FIGURE 4A-B, con't)

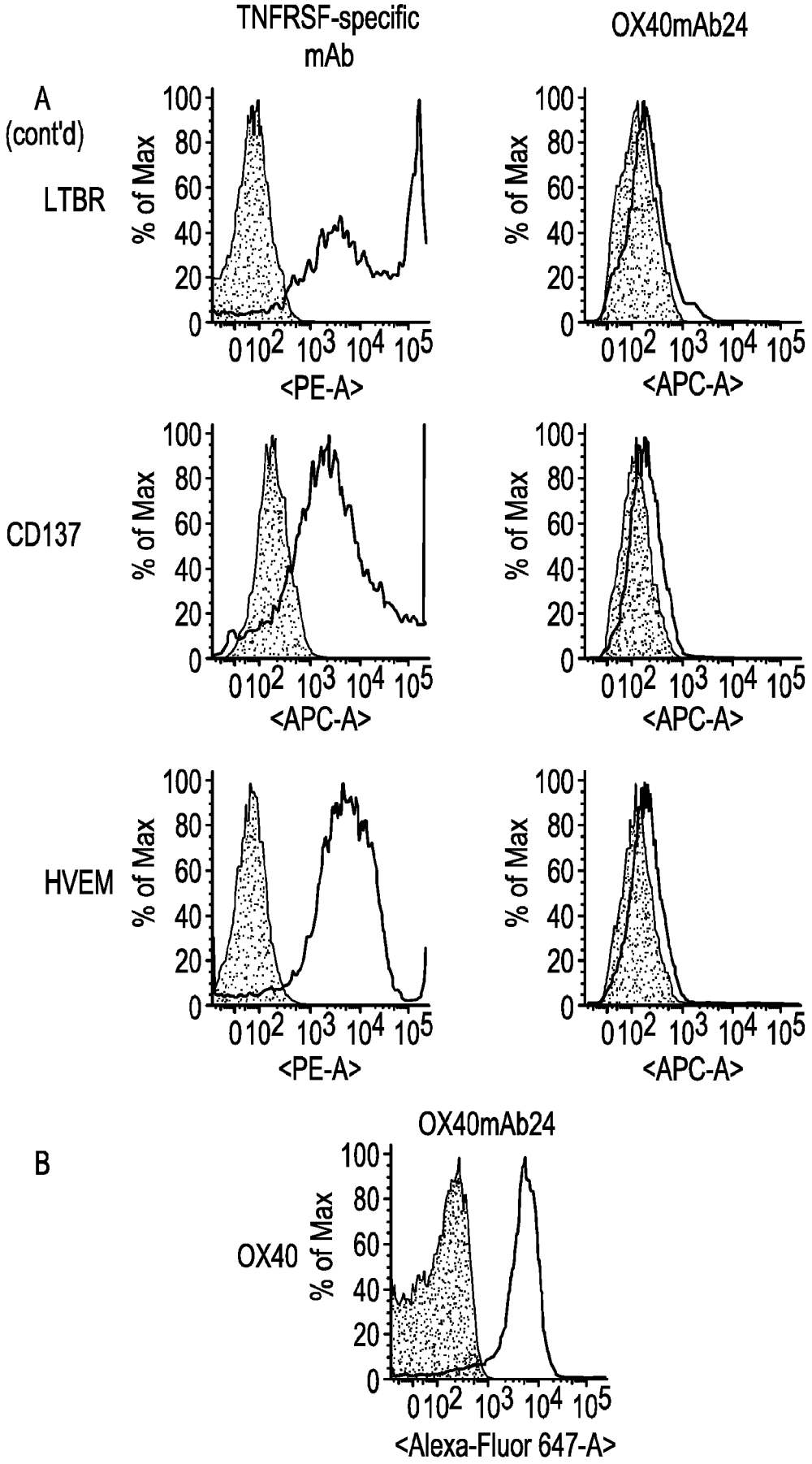
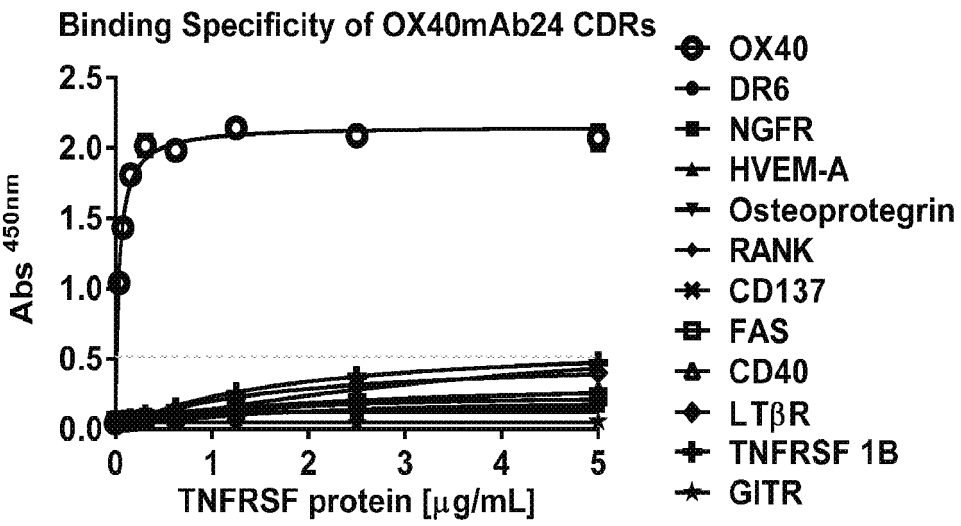


FIGURE 5A-B

A



B

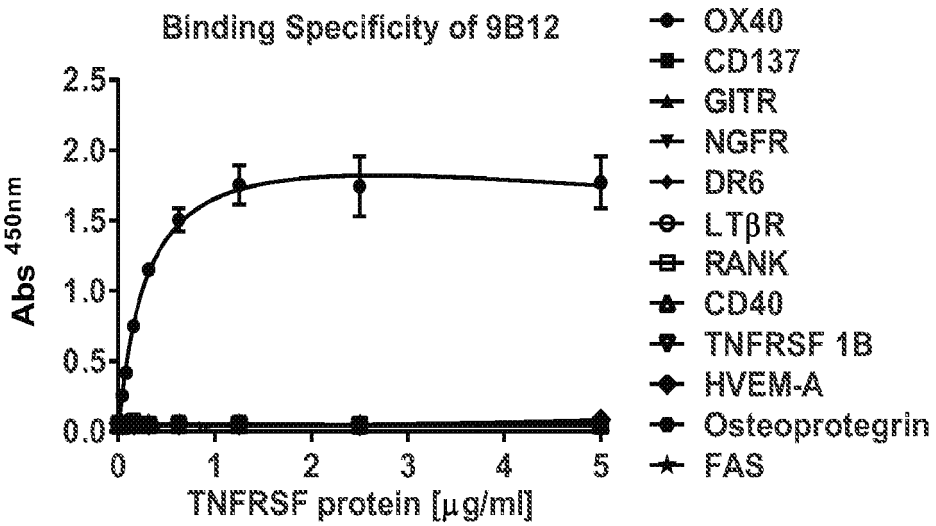
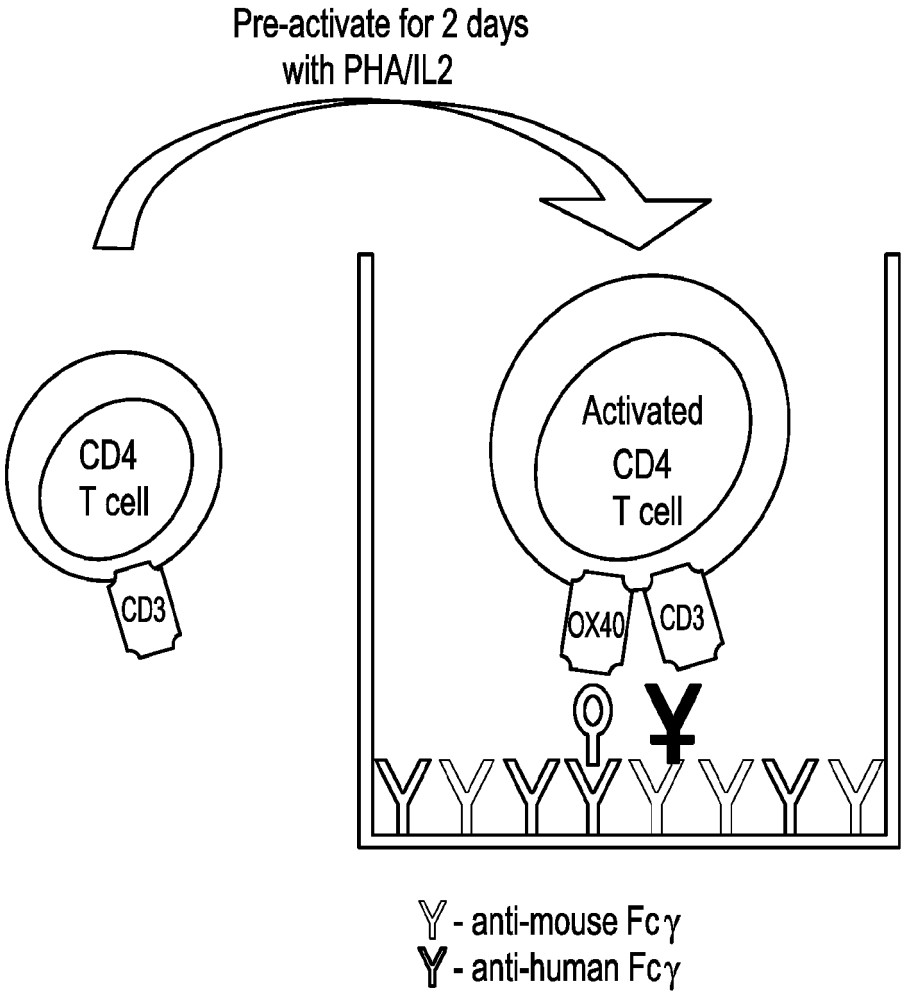


FIGURE 6



Incubate 72hrs:

- measure cytokines released
- measure % divided cells

FIGURE 7A-C

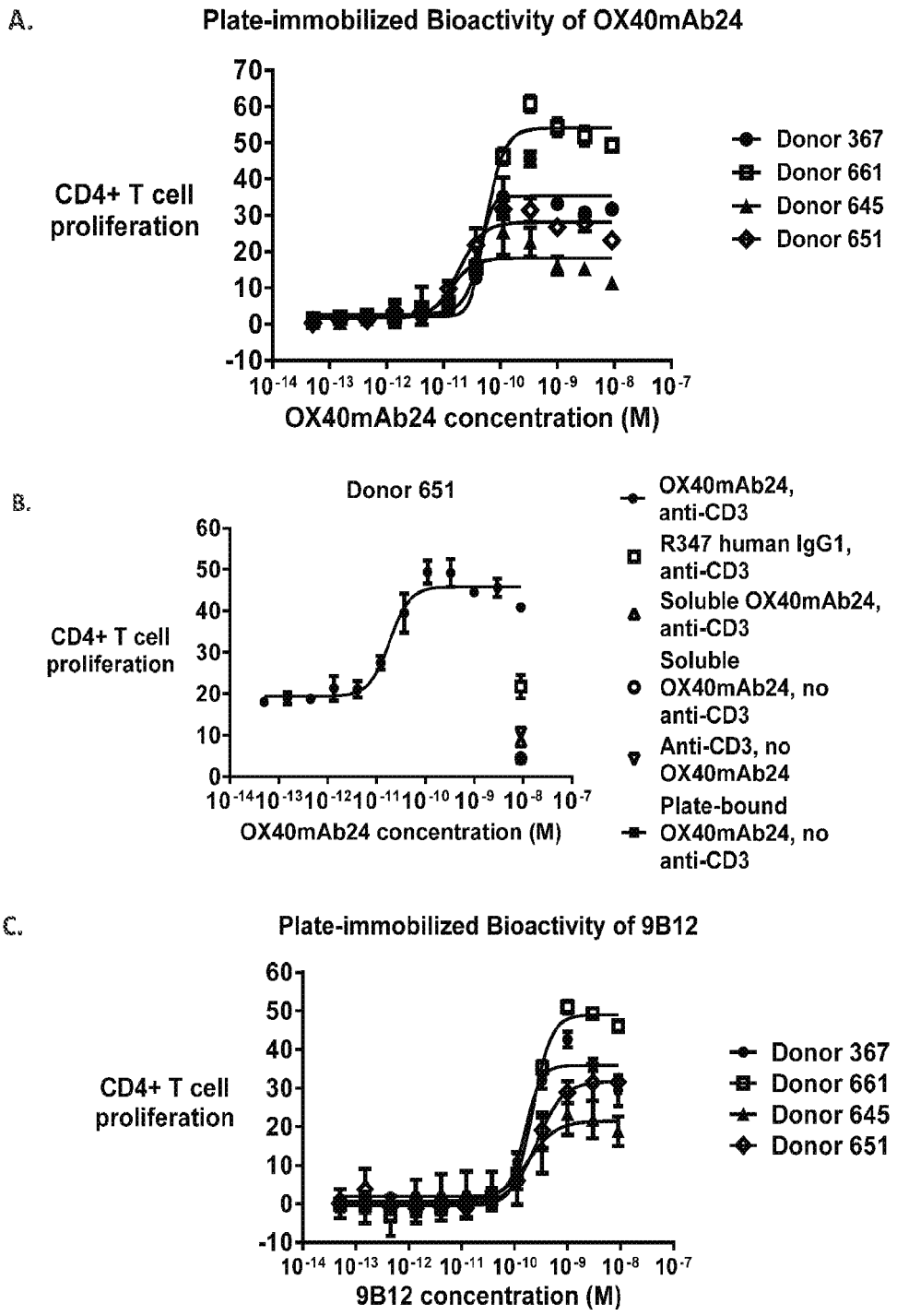
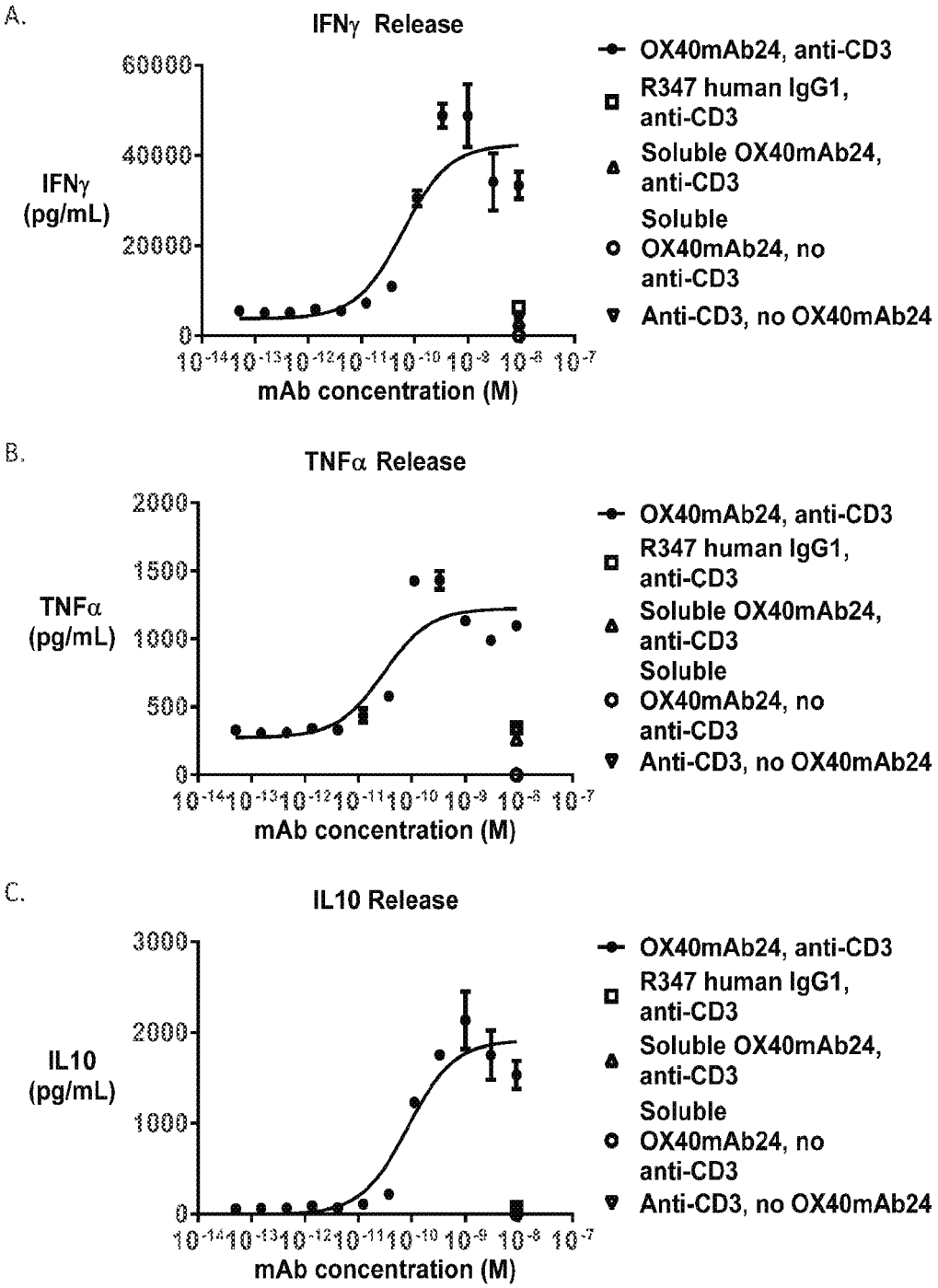
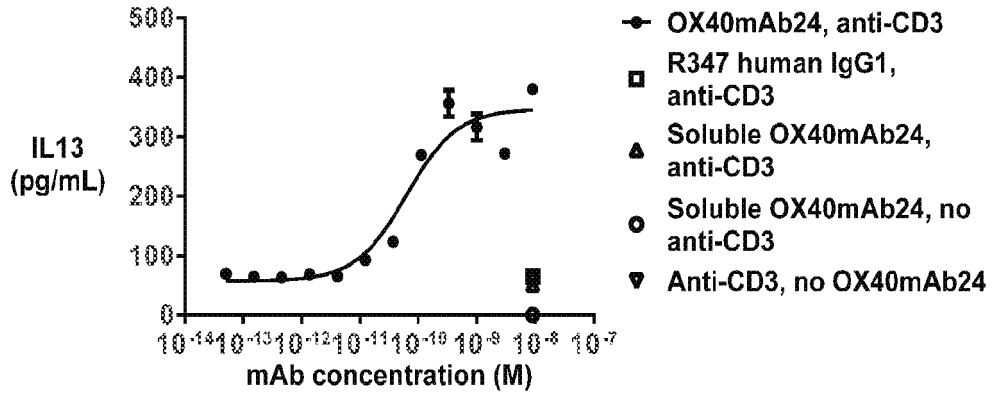

A.
Plate-immobilized Bioactivity of OX40mAb24
CD4+ T cell proliferation
70
60
50
40
30
20
10
0
-10
10-14 10-13 10-12 10-11 10-10 10-9 10-8 10-7
OX40mAb24 concentration (M)
Donor 367
Donor 661
Donor 645
Donor 651
B.
Donor 651
CD4+ T cell proliferation
60
50
40
30
20
10
0
10-14 10-13 10-12 10-11 10-10 10-9 10-8 10-7
OX40mAb24 concentration (M)
OX40mAb24, anti-CD3
R347 human IgG1, anti-CD3
Soluble OX40mAb24, anti-CD3
Soluble OX40mAb24, no anti-CD3
Anti-CD3, no OX40mAb24
Plate-bound OX40mAb24, no anti-CD3
C.
Plate-immobilized Bioactivity of 9B12
CD4+ T cell proliferation
60
50
40
30
20
10
0
-10
10-14 10-13 10-12 10-11 10-10 10-9 10-8 10-7
9B12 concentration (M)
Donor 367
Donor 661
Donor 645
Donor 651

FIGURE 8A-E


A.
IFNγ Release
IFNγ (pg/mL)
60000
40000
20000
0
10-14 10-13 10-12 10-11 10-10 10-9 10-8 10-7
mAb concentration (M)
OX40mAb24, anti-CD3
R347 human IgG1, anti-CD3
Soluble OX40mAb24, anti-CD3
Soluble OX40mAb24, no anti-CD3
Anti-CD3, no OX40mAb24
B.
TNFα Release
TNFα (pg/mL)
2000
1500
1000
500
0
10-14 10-13 10-12 10-11 10-10 10-9 10-8 10-7
mAb concentration (M)
OX40mAb24, anti-CD3
R347 human IgG1, anti-CD3
Soluble OX40mAb24, anti-CD3
Soluble OX40mAb24, no anti-CD3
Anti-CD3, no OX40mAb24
C.
IL10 Release
IL10 (pg/mL)
3000
2000
1000
0
10-14 10-13 10-12 10-11 10-10 10-9 10-8 10-7
mAb concentration (M)
OX40mAb24, anti-CD3
R347 human IgG1, anti-CD3
Soluble OX40mAb24, anti-CD3
Soluble OX40mAb24, no anti-CD3
Anti-CD3, no OX40mAb24

(FIGURE 8A-E, con't)

D.



E.

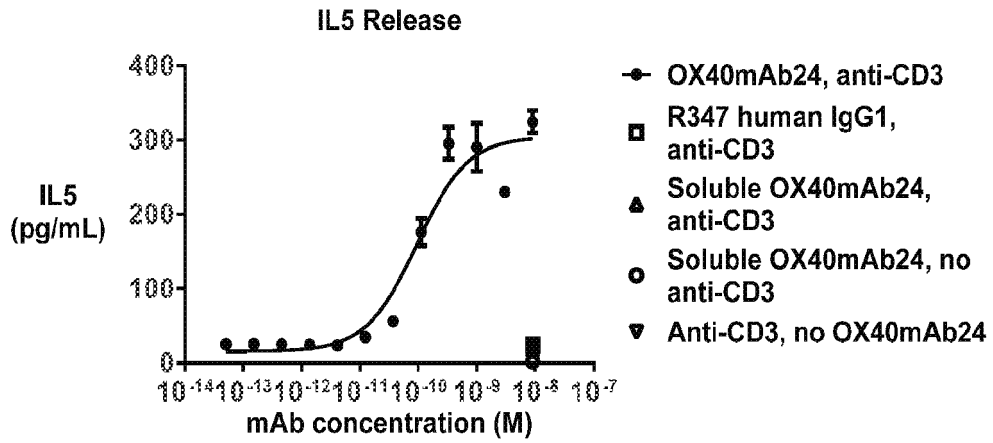
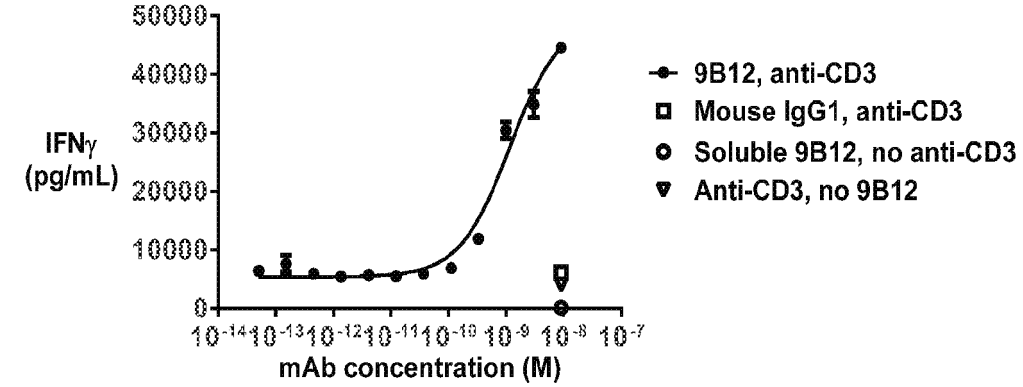
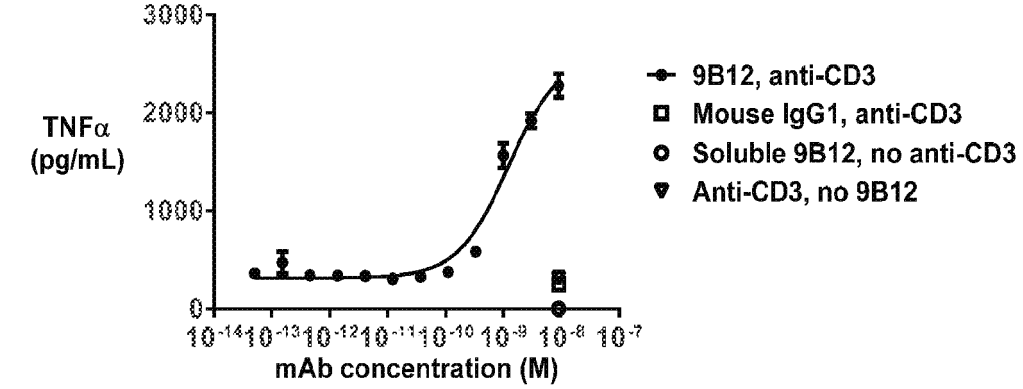


FIGURE 9A-E

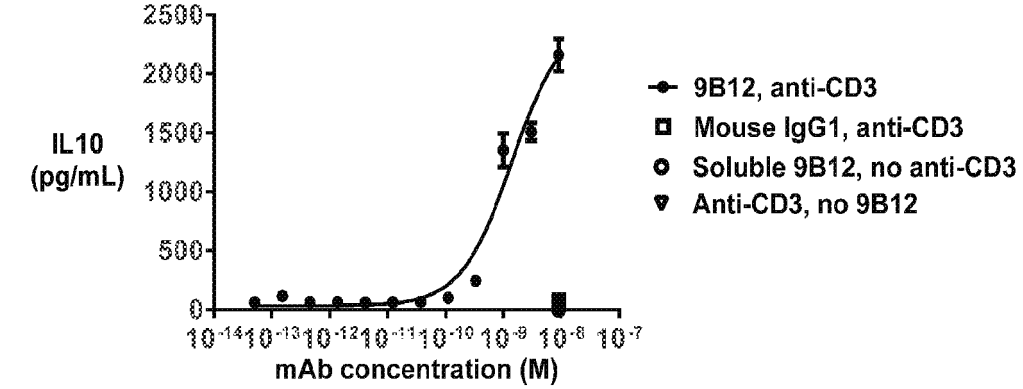
A.



B.

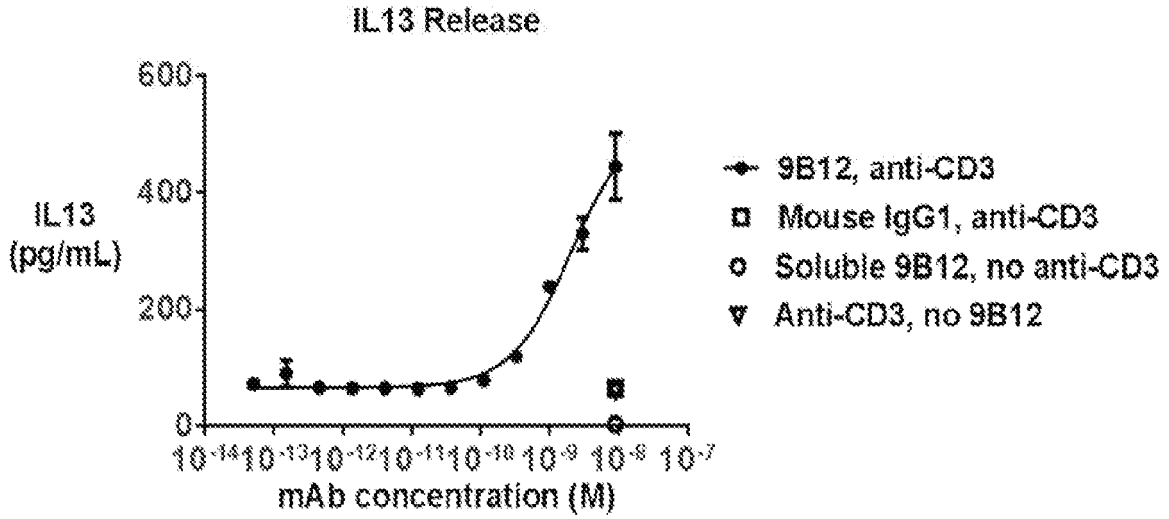


C.



(FIGURE 9A-E, con't)

D.



E.

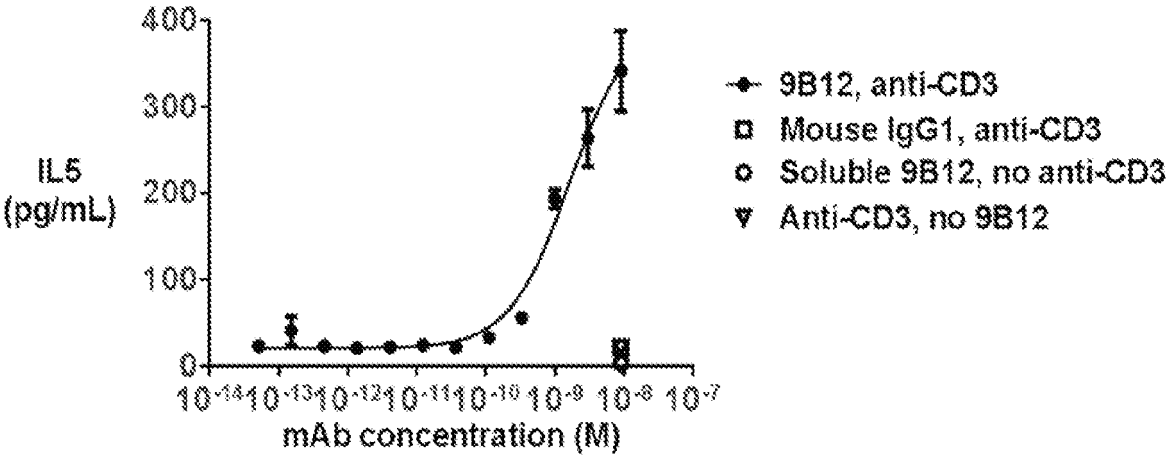


FIGURE 10

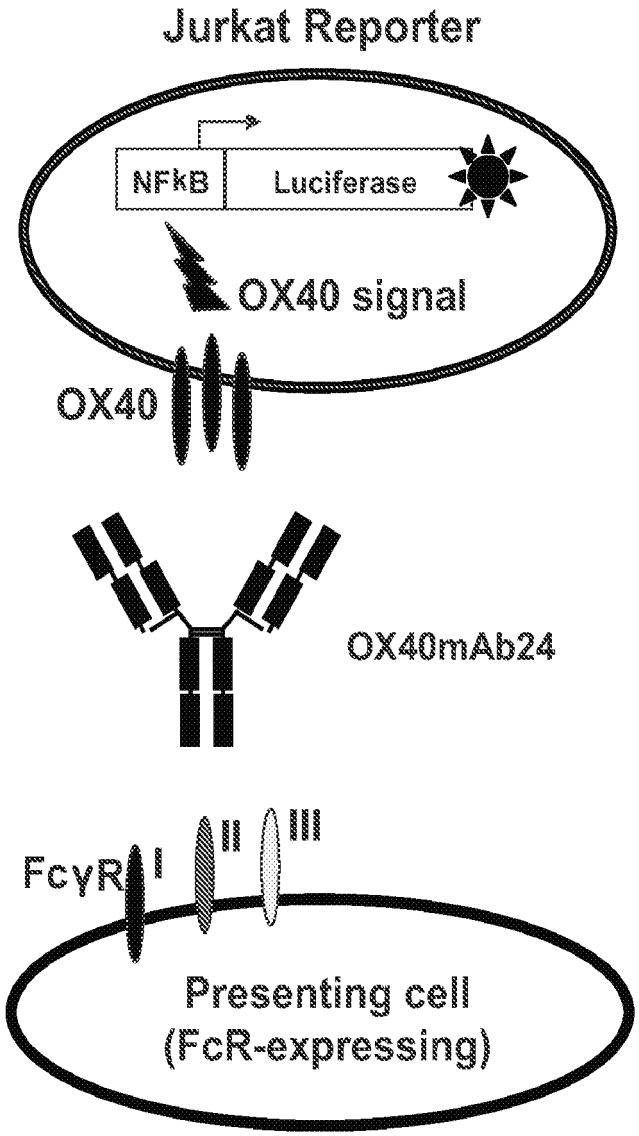

Jurkat Reporter
NFkB
Luciferase
OX40 signal
OX40
OX40mAb24
FcγR
I
II
III
Presenting cell
(FcR-expressing)

FIGURE 11A-D

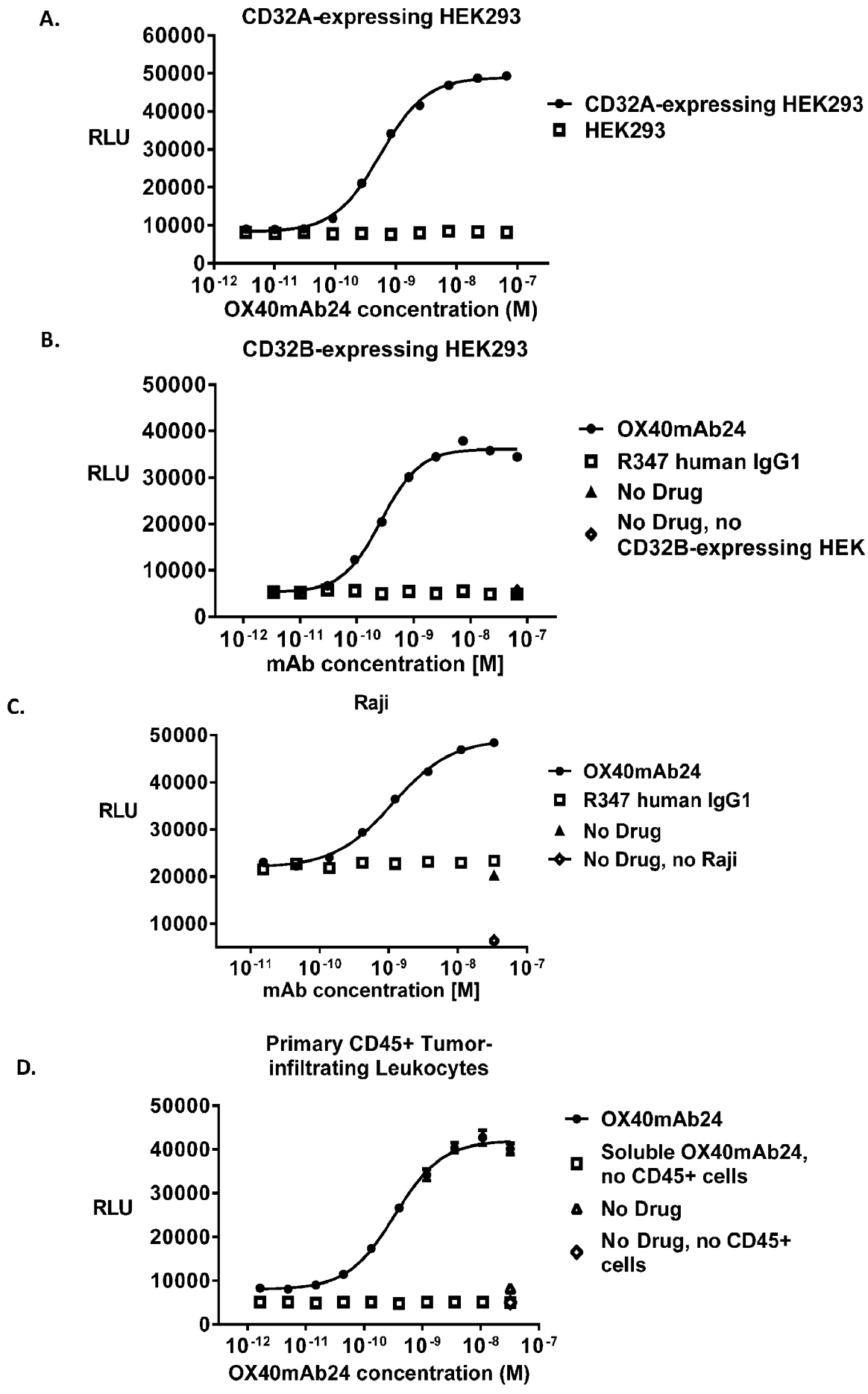
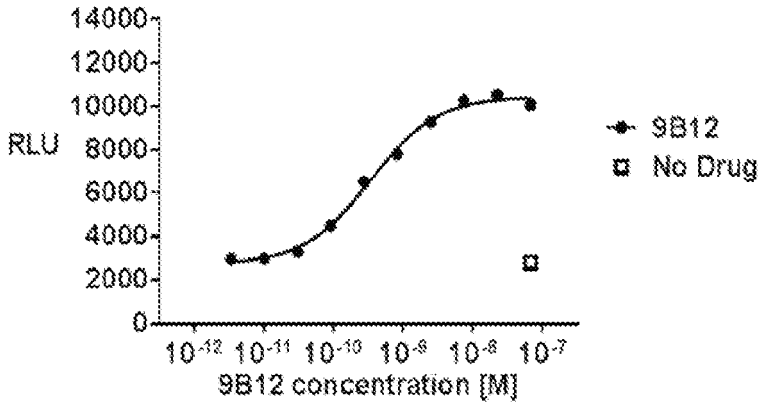

A.
CD32A-expressing HEK293
RLU
60000
50000
40000
30000
20000
10000
0
10-12 10-11 10-10 10-9 10-8 10-7
OX40mAb24 concentration (M)
CD32A-expressing HEK293
HEK293
B.
CD32B-expressing HEK293
RLU
50000
40000
30000
20000
10000
0
10-12 10-11 10-10 10-9 10-8 10-7
mAb concentration [M]
OX40mAb24
R347 human IgG1
No Drug
No Drug, no CD32B-expressing HEK
C.
Raji
RLU
50000
40000
30000
20000
10000
10-11 10-10 10-9 10-8 10-7
mAb concentration [M]
OX40mAb24
R347 human IgG1
No Drug
No Drug, no Raji
D.
Primary CD45+ Tumor-infiltrating Leukocytes
RLU
50000
40000
30000
20000
10000
0
10-12 10-11 10-10 10-9 10-8 10-7
OX40mAb24 concentration (M)
OX40mAb24
Soluble OX40mAb24, no CD45+ cells
No Drug
No Drug, no CD45+ cells

FIGURE 12A-B

A.



B.

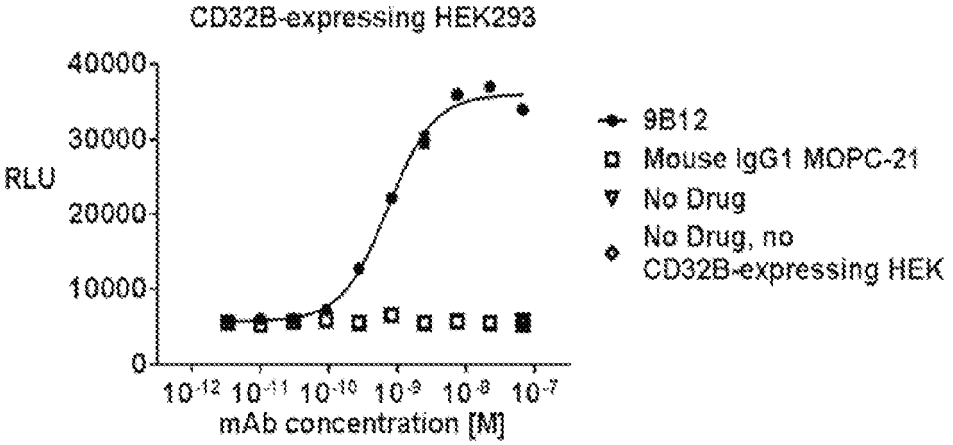


FIGURE 12C-D

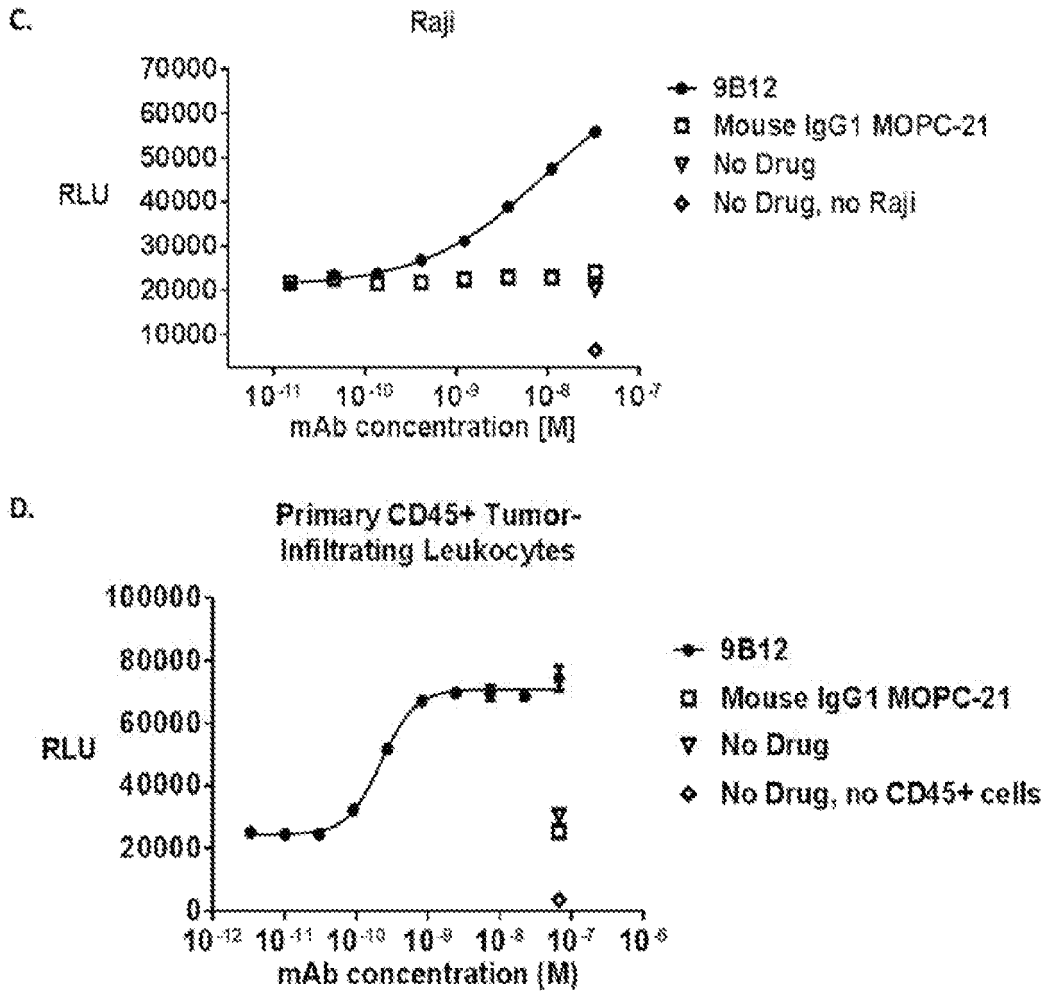
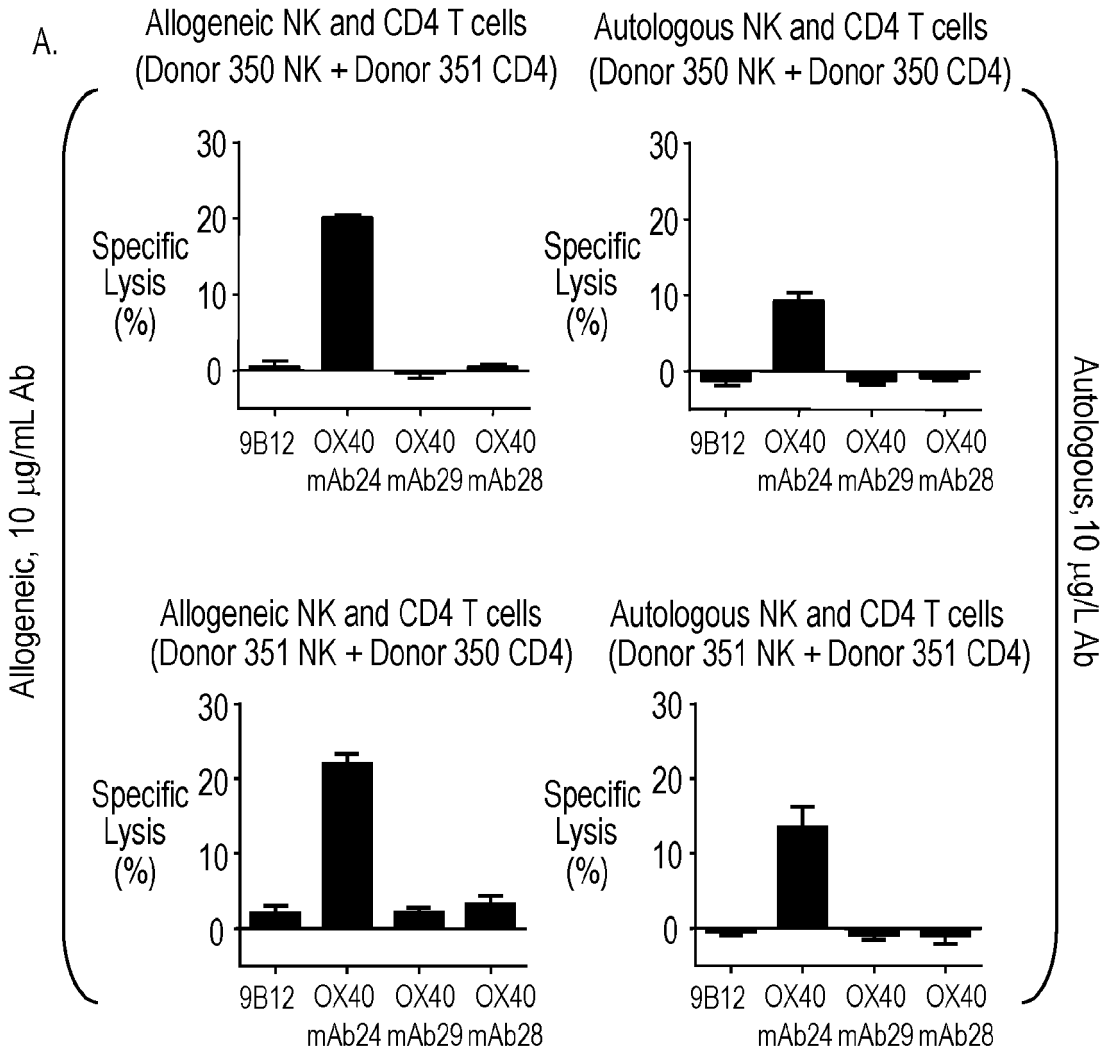

C.
Raji
RLU
70000
60000
50000
40000
30000
20000
10000
10^{-11} 10^{-10} 10^{-9} 10^{-8} 10^{-7}
mAb concentration [M]
9B12
Mouse IgG1 MOPC-21
No Drug
No Drug, no Raji
D.
Primary CD45+ Tumor-Infiltrating Leukocytes
RLU
100000
80000
60000
40000
20000
0
10^{-12} 10^{-11} 10^{-10} 10^{-9} 10^{-8} 10^{-7} 10^{-6}
mAb concentration (M)
9B12
Mouse IgG1 MOPC-21
No Drug
No Drug, no CD45+ cells

FIGURE 13A-B


A.
Allogeneic NK and CD4 T cells
(Donor 350 NK + Donor 351 CD4)
Autologous NK and CD4 T cells
(Donor 350 NK + Donor 350 CD4)
Allogeneic NK and CD4 T cells
(Donor 351 NK + Donor 350 CD4)
Autologous NK and CD4 T cells
(Donor 351 NK + Donor 351 CD4)
Specific Lysis (%)
30
20
10
0
9B12
OX40 mAb24
OX40 mAb29
OX40 mAb28
Allogeneic, 10 µg/mL Ab
Autologous, 10 µg/L Ab

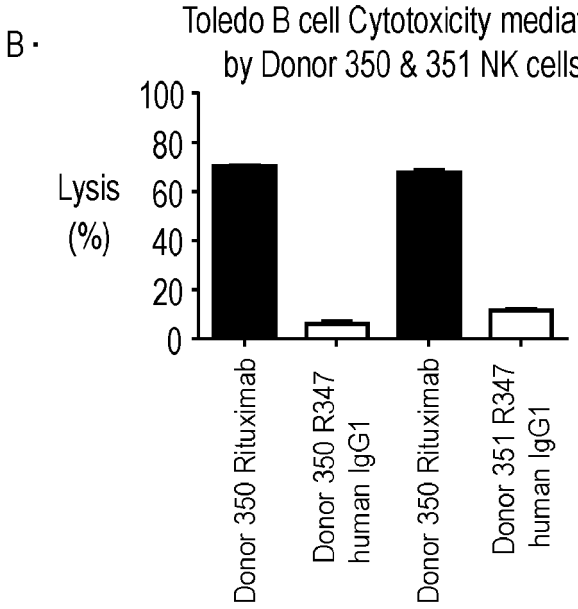
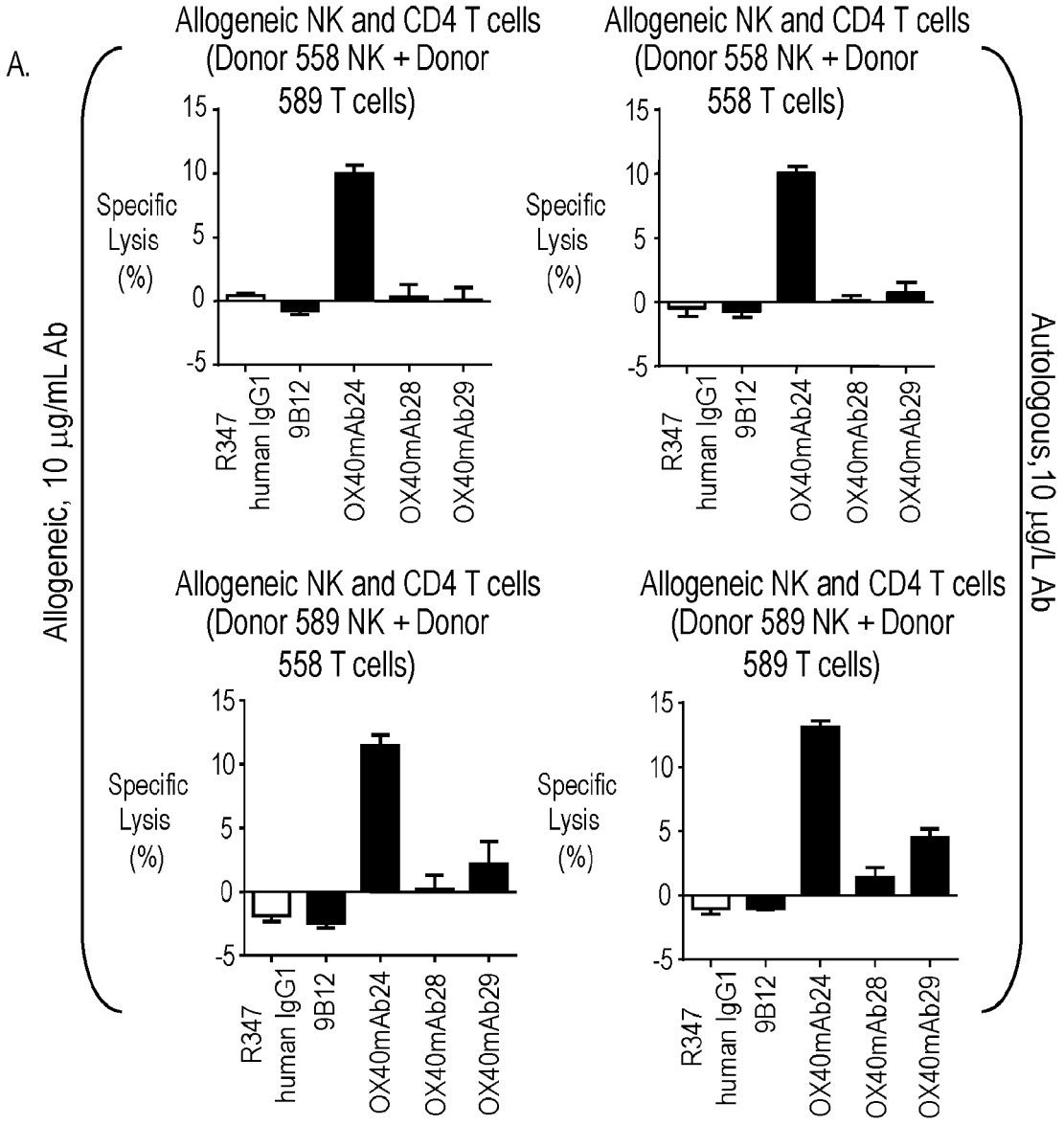

B.
Toledo B cell Cytotoxicity mediated
by Donor 350 & 351 NK cells
Lysis (%)
100
80
60
40
20
0
Donor 350 Rituximab
Donor 350 R347 human IgG1
Donor 350 Rituximab
Donor 351 R347 human IgG1

FIGURE 14A-B


A.
Allogeneic, 10 µg/mL Ab
Autologous, 10 µg/L Ab
Allogeneic NK and CD4 T cells (Donor 558 NK + Donor 589 T cells)
Allogeneic NK and CD4 T cells (Donor 558 NK + Donor 558 T cells)
Allogeneic NK and CD4 T cells (Donor 589 NK + Donor 558 T cells)
Allogeneic NK and CD4 T cells (Donor 589 NK + Donor 589 T cells)
Specific Lysis (%)
15
10
5
0
-5
R347 human IgG1
9B12
OX40mAb24
OX40mAb28
OX40mAb29

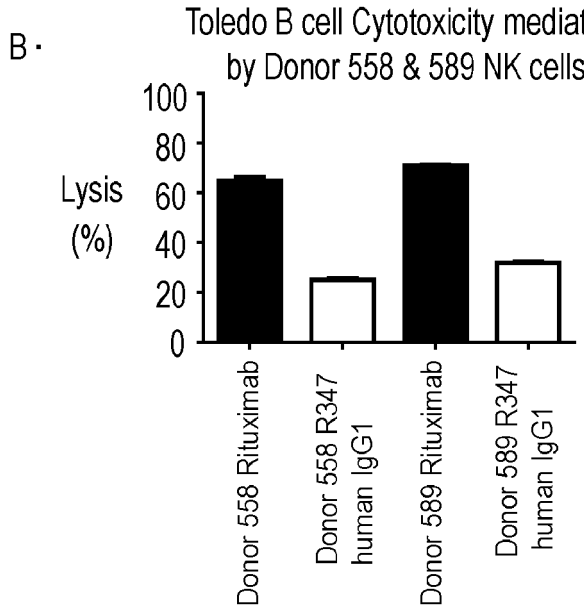

B.
Toledo B cell Cytotoxicity mediated by Donor 558 & 589 NK cells
Lysis (%)
100
80
60
40
20
0
Donor 558 Rituximab
Donor 558 R347 human IgG1
Donor 589 Rituximab
Donor 589 R347 human IgG1

FIGURE 15A-D

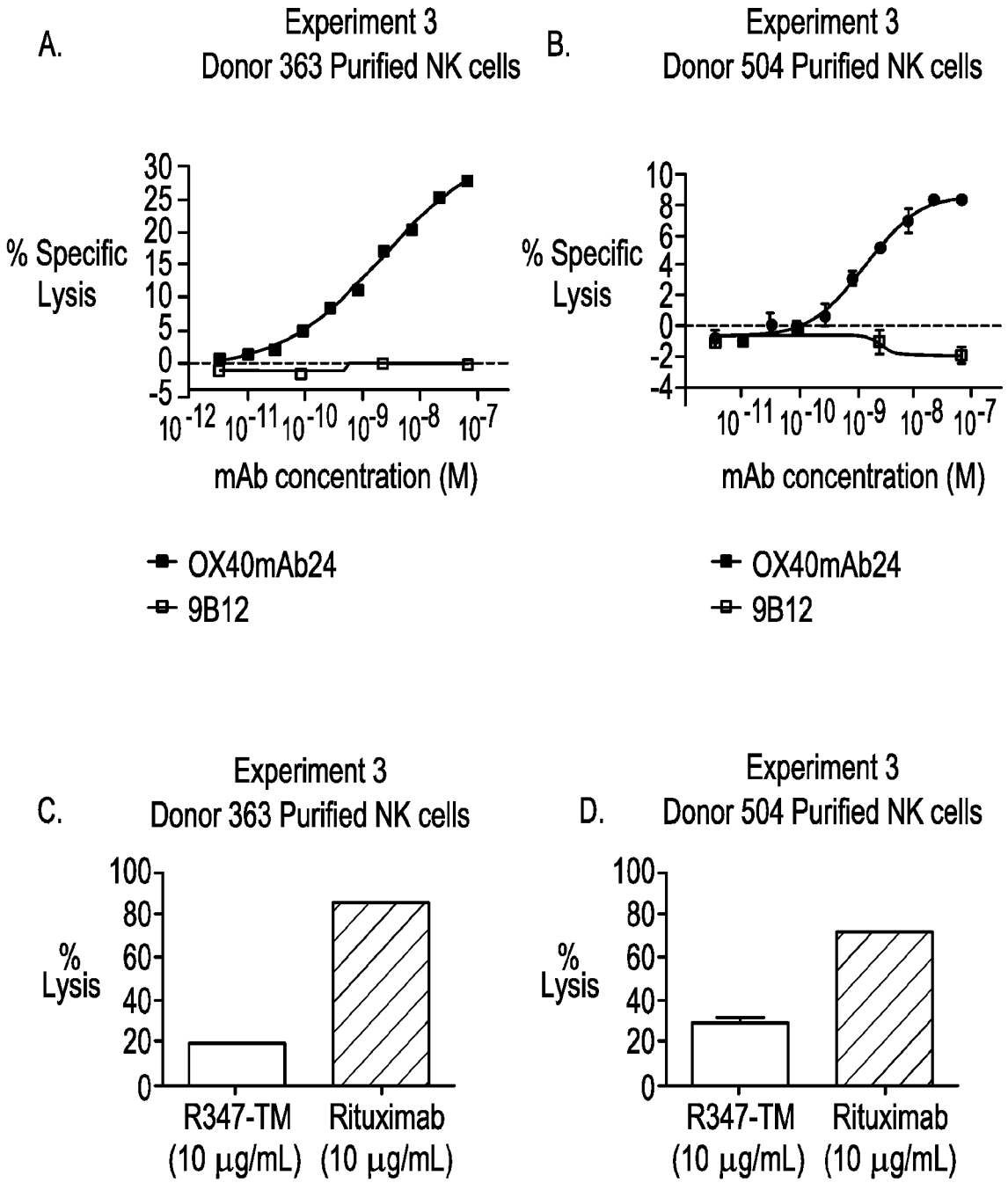

A.
Experiment 3
Donor 363 Purified NK cells
% Specific Lysis
30
25
20
15
10
5
0
-5
10-12 10-11 10-10 10-9 10-8 10-7
mAb concentration (M)
OX40mAb24
9B12
B.
Experiment 3
Donor 504 Purified NK cells
% Specific Lysis
10
8
6
4
2
0
-2
-4
10-11 10-10 10-9 10-8 10-7
mAb concentration (M)
OX40mAb24
9B12
C.
Experiment 3
Donor 363 Purified NK cells
% Lysis
100
80
60
40
20
0
R347-TM (10 µg/mL)
Rituximab (10 µg/mL)
D.
Experiment 3
Donor 504 Purified NK cells
% Lysis
100
80
60
40
20
0
R347-TM (10 µg/mL)
Rituximab (10 µg/mL)

FIGURE 16A-D

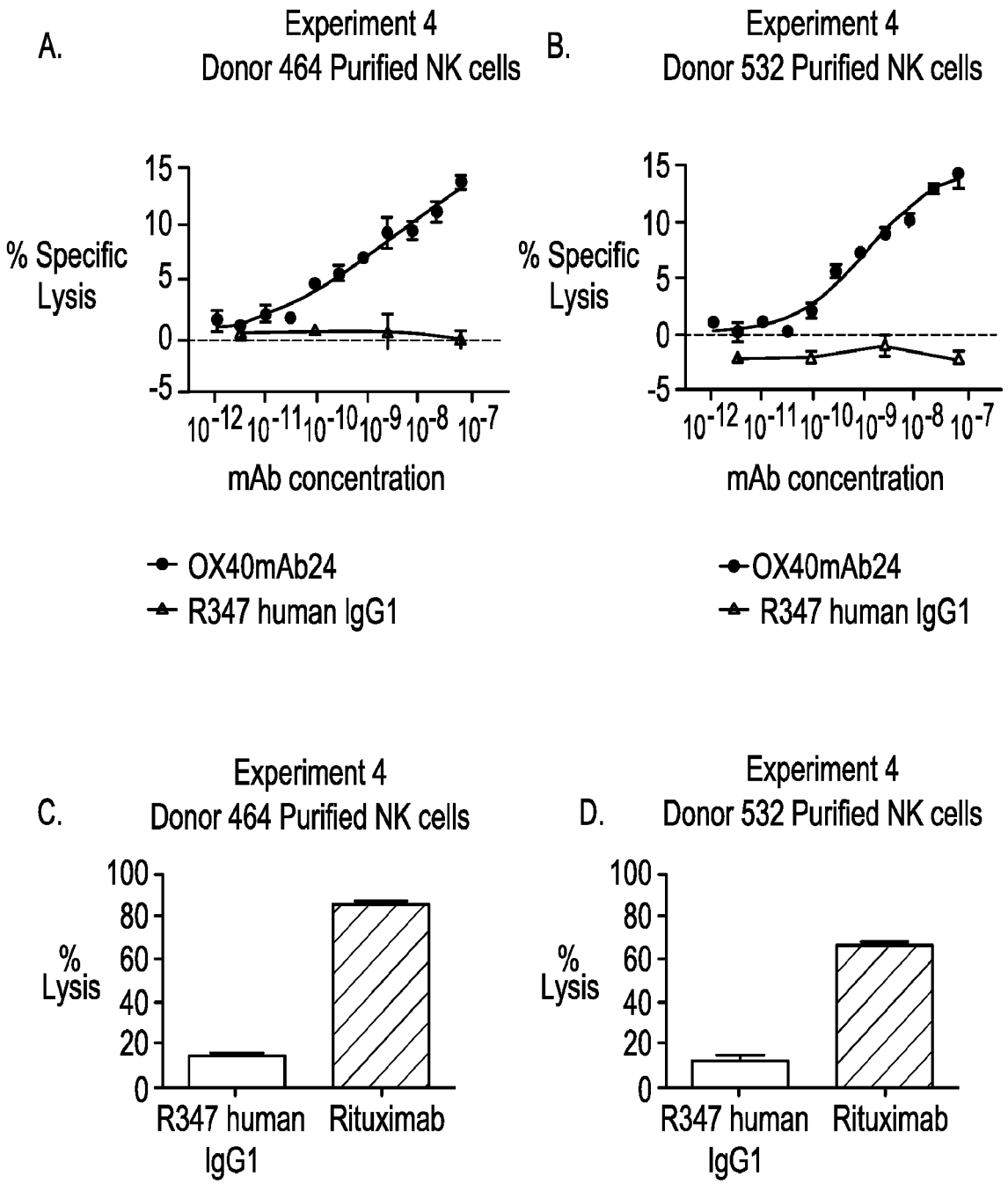
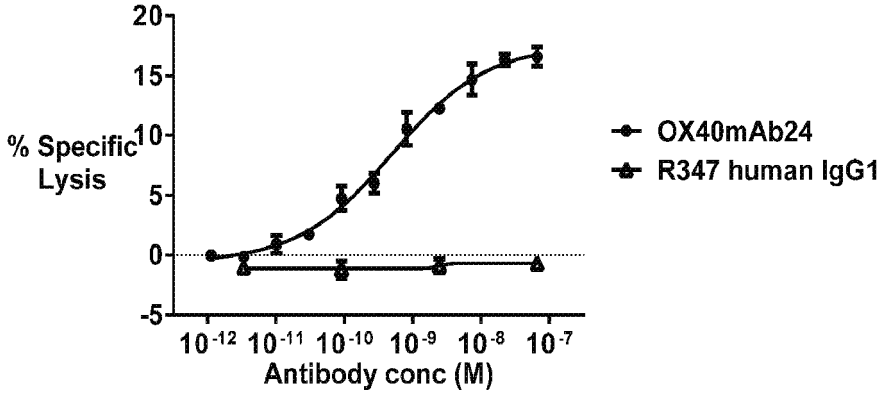

A.
Experiment 4
Donor 464 Purified NK cells
% Specific Lysis
15
10
5
0
-5
10-12 10-11 10-10 10-9 10-8 10-7
mAb concentration
OX40mAb24
R347 human IgG1
B.
Experiment 4
Donor 532 Purified NK cells
% Specific Lysis
15
10
5
0
-5
10-12 10-11 10-10 10-9 10-8 10-7
mAb concentration
OX40mAb24
R347 human IgG1
C.
Experiment 4
Donor 464 Purified NK cells
% Lysis
100
80
60
40
20
0
R347 human IgG1
Rituximab
D.
Experiment 4
Donor 532 Purified NK cells
% Lysis
100
80
60
40
20
0
R347 human IgG1
Rituximab

FIGURE 17A-B

A



B

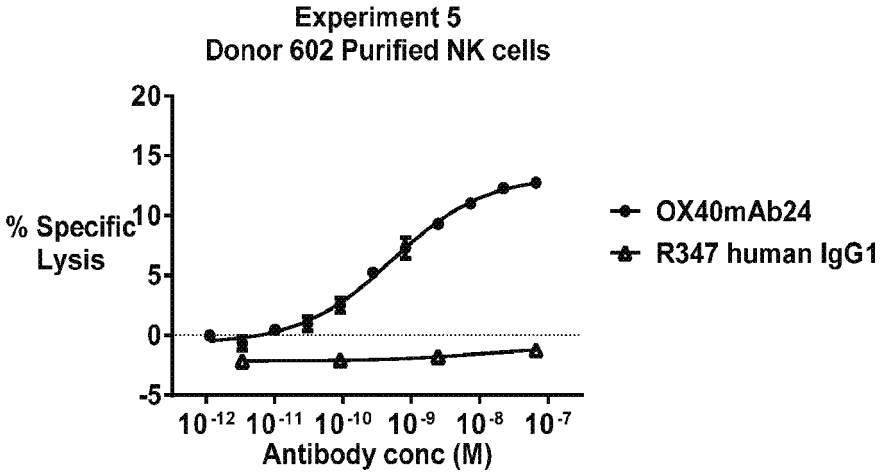


FIGURE 18A-B

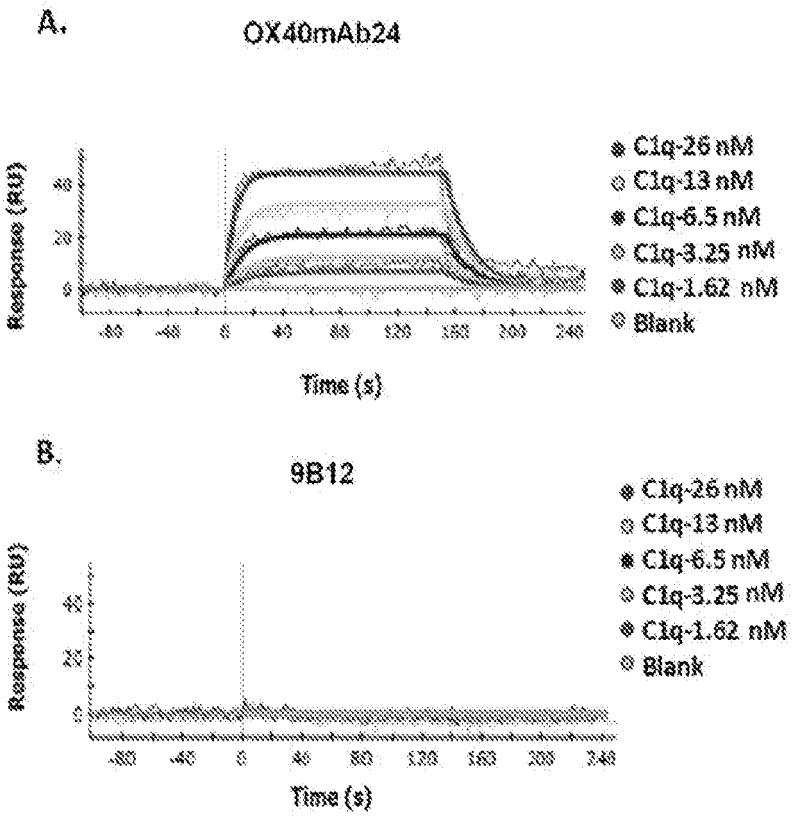
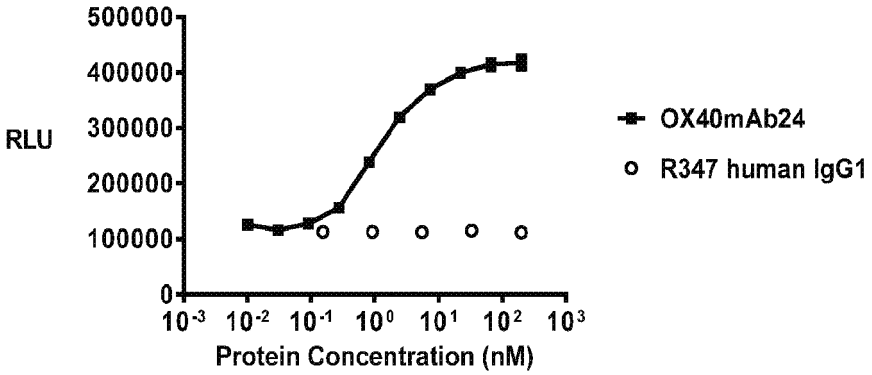

A.
OX40mAb24
Response (RU)
Time (s)
C1q-26 nM
C1q-13 nM
C1q-6.5 nM
C1q-3.25 nM
C1q-1.62 nM
Blank
B.
9B12
Response (RU)
Time (s)
C1q-26 nM
C1q-13 nM
C1q-6.5 nM
C1q-3.25 nM
C1q-1.62 nM
Blank

FIGURE 19A-B

A



B

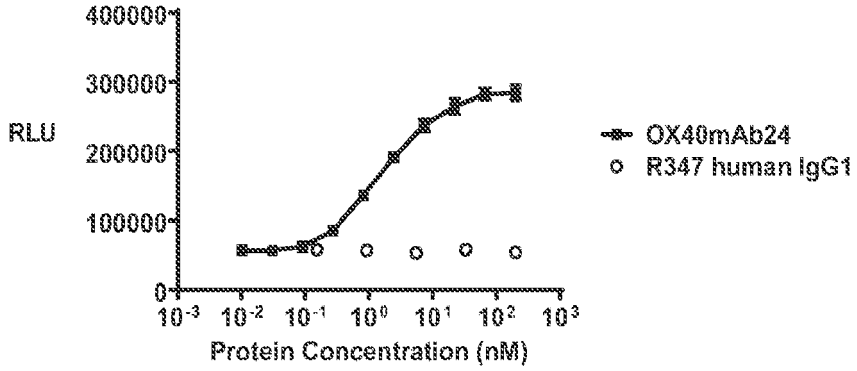
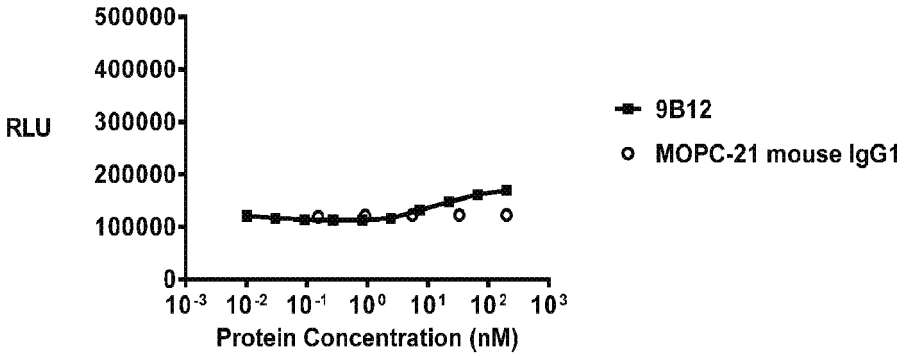


FIGURE 20A-B

A



B

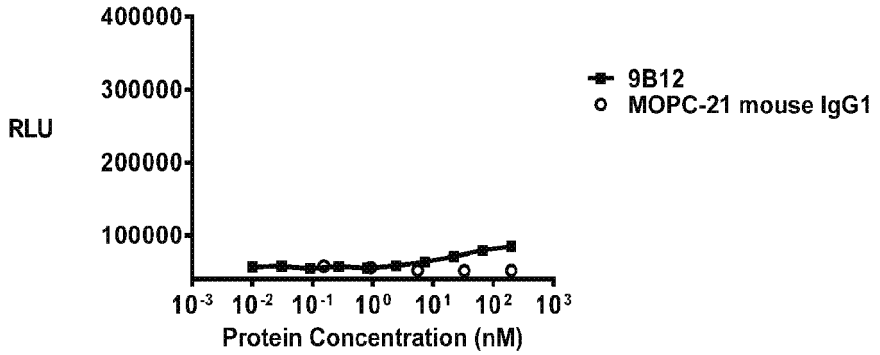
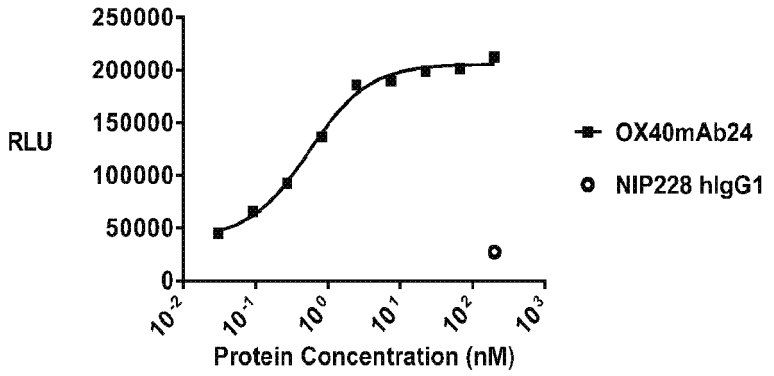


FIGURE 21A-B

A



B

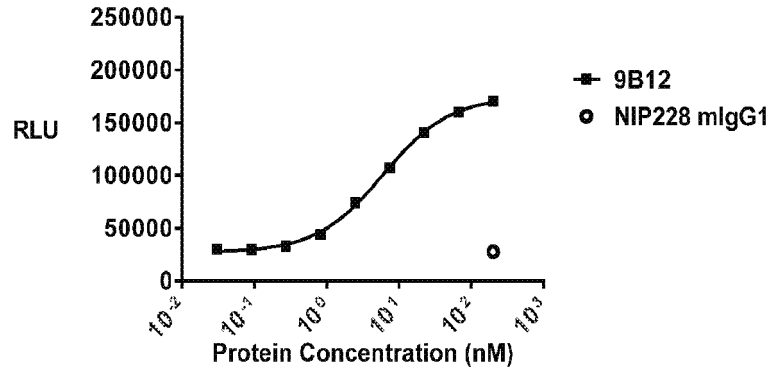
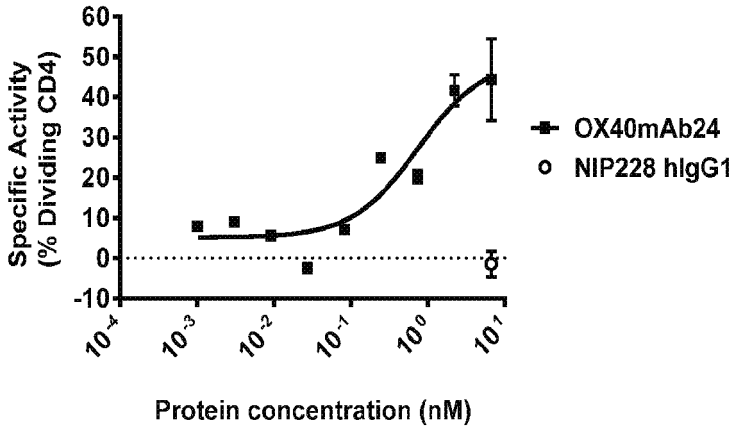
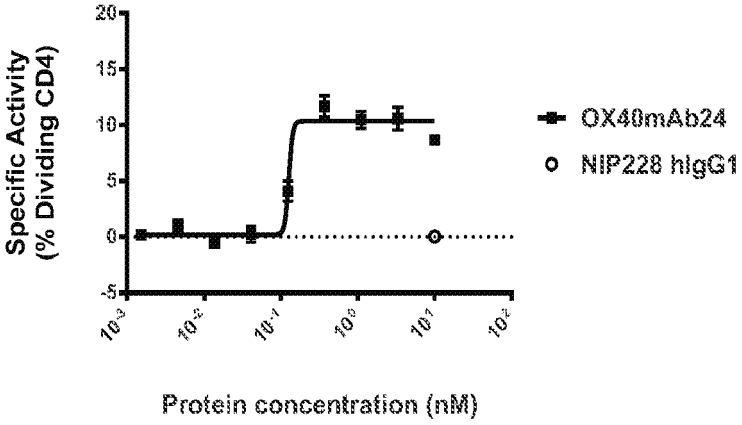


FIGURE 22A-D

A

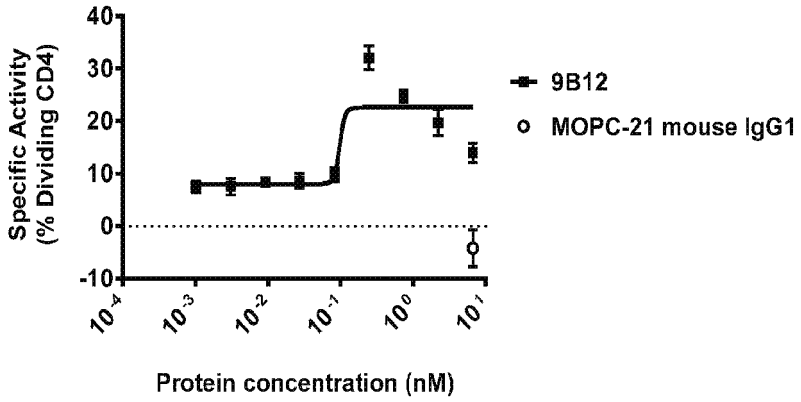


B



(FIGURE 22A-D, con't)

C



D

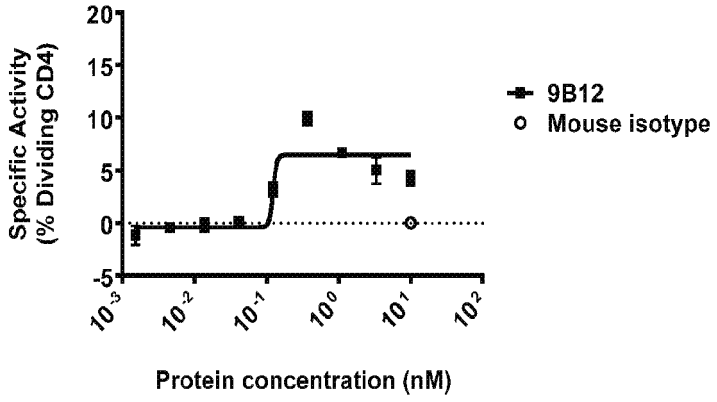
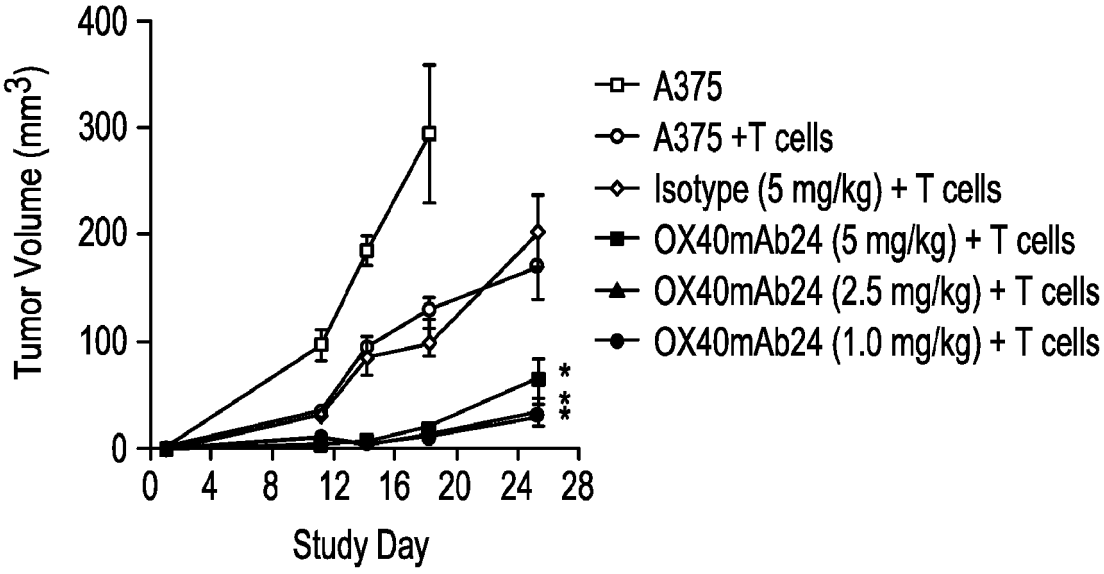


FIGURE 23A-B

A



B

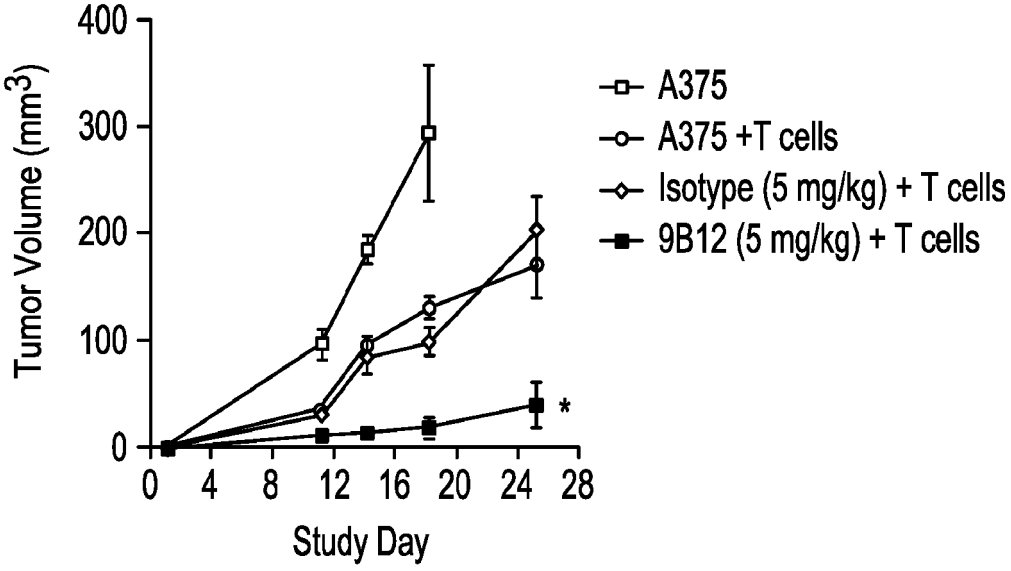


FIGURE 24A-B

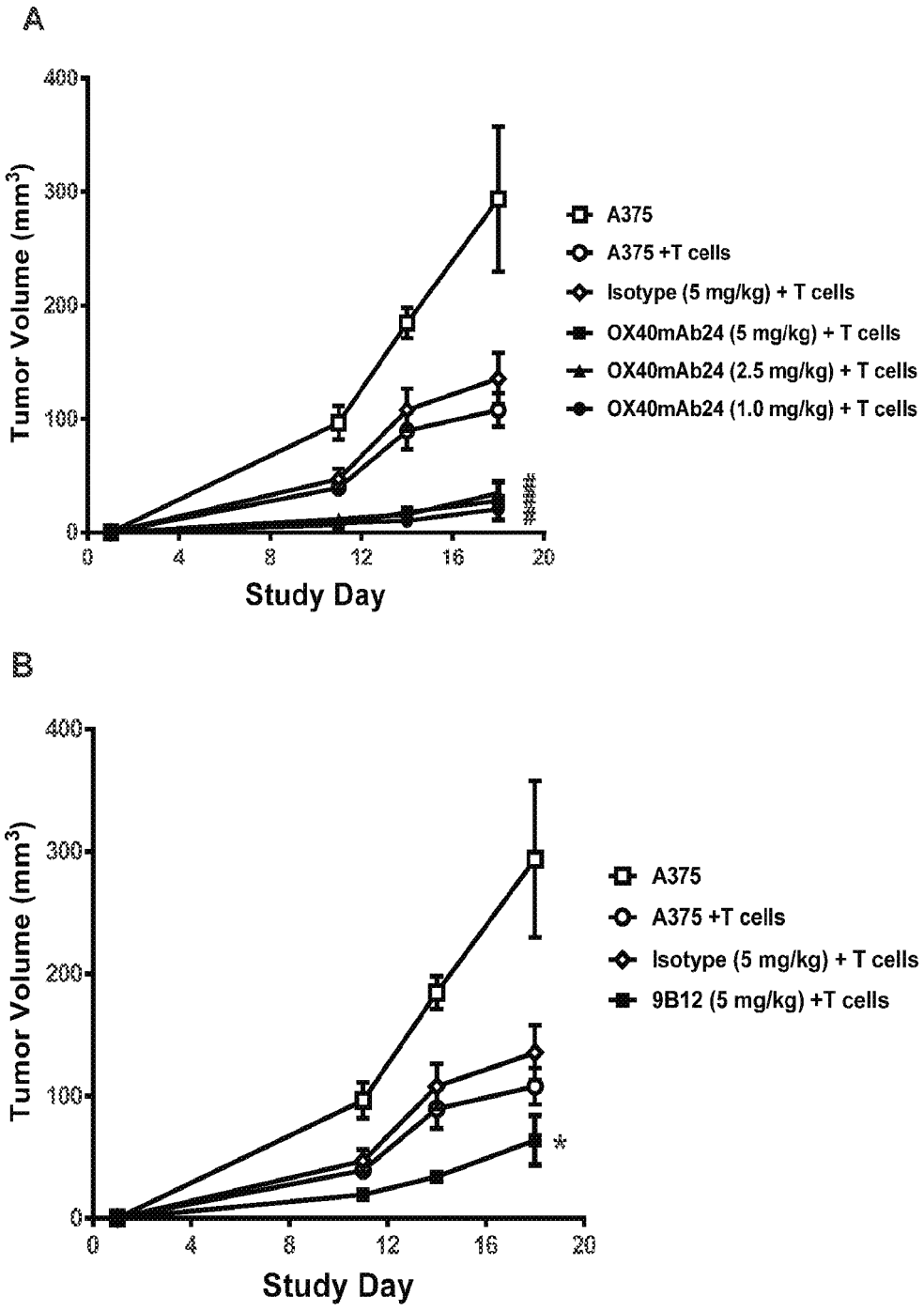

A
Tumor Volume (mm3)
400
300
200
100
0
0
4
8
12
16
20
Study Day
A375
A375 +T cells
Isotype (5 mg/kg) + T cells
OX40mAb24 (5 mg/kg) + T cells
OX40mAb24 (2.5 mg/kg) + T cells
OX40mAb24 (1.0 mg/kg) + T cells
B
Tumor Volume (mm3)
400
300
200
100
0
0
4
8
12
16
20
Study Day
*
A375
A375 +T cells
Isotype (5 mg/kg) + T cells
9B12 (5 mg/kg) +T cells

FIGURE 25

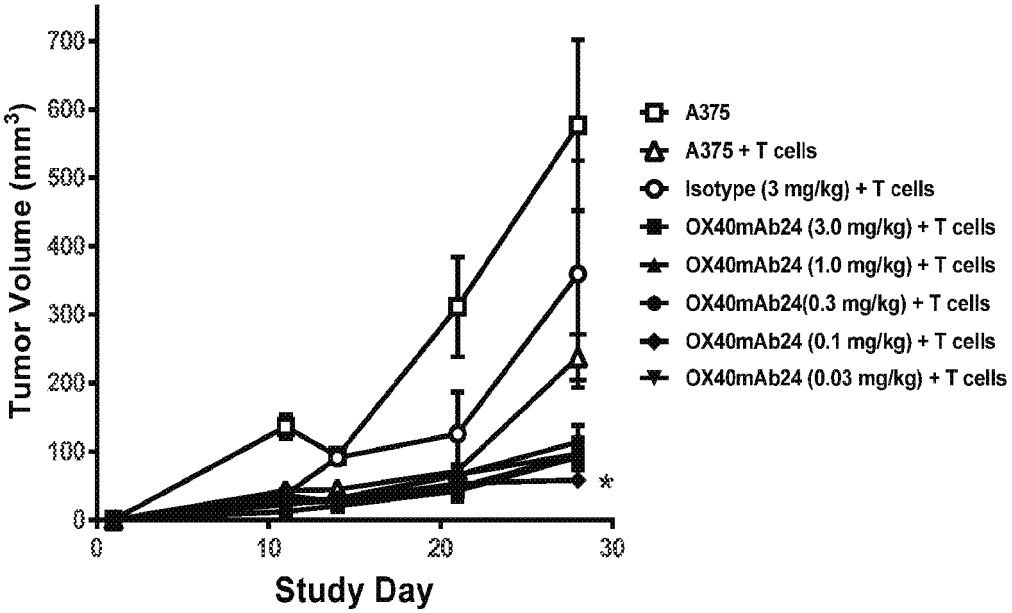

Tumor Volume (mm3)
700
600
500
400
300
200
100
0
0
10
20
30
Study Day
*
A375
A375 + T cells
Isotype (3 mg/kg) + T cells
OX40mAb24 (3.0 mg/kg) + T cells
OX40mAb24 (1.0 mg/kg) + T cells
OX40mAb24(0.3 mg/kg) + T cells
OX40mAb24 (0.1 mg/kg) + T cells
OX40mAb24 (0.03 mg/kg) + T cells

FIGURE 26A-B

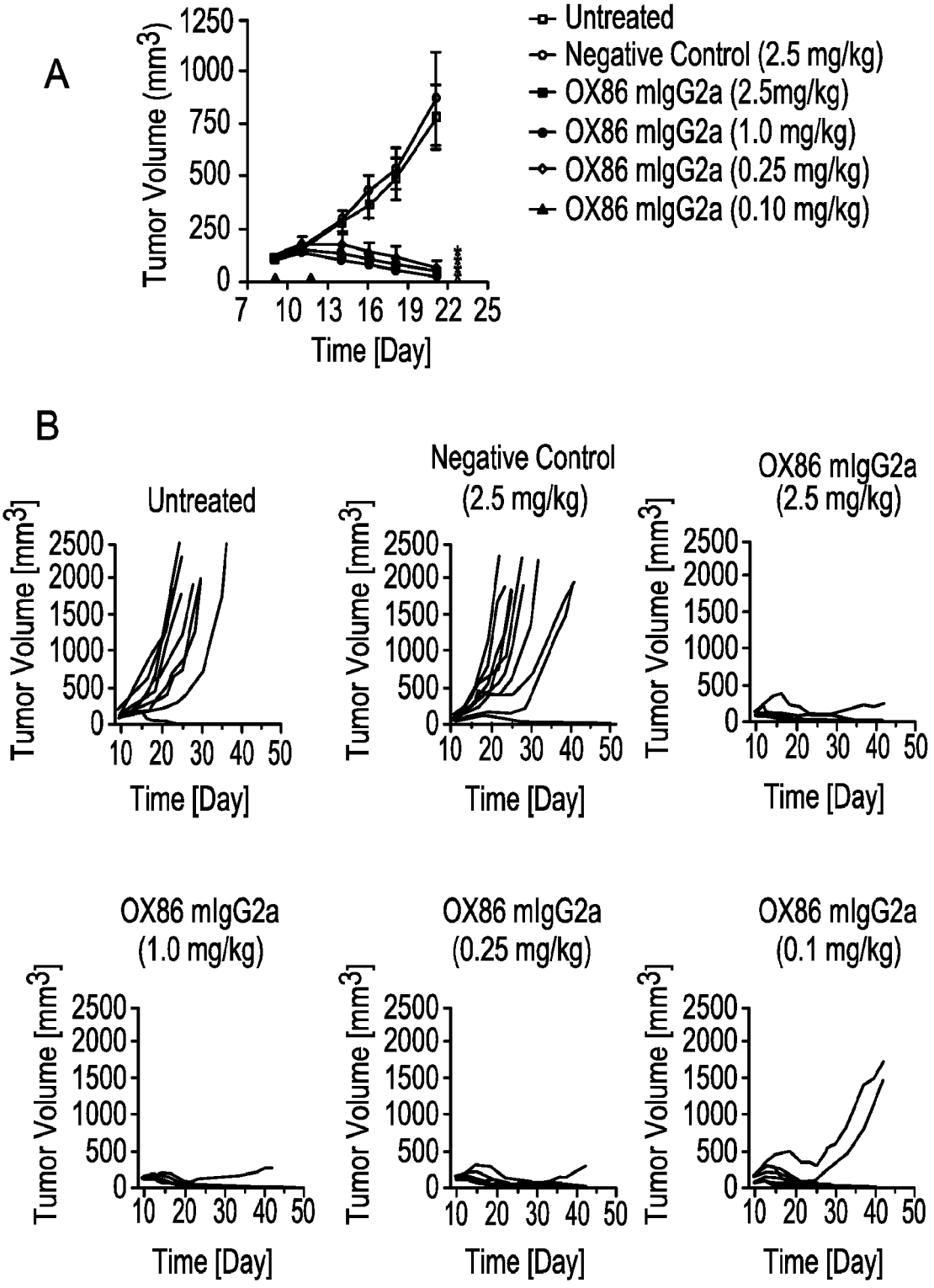

A
Tumor Volume (mm3)
1250
1000
750
500
250
0
7 10 13 16 19 22 25
Time [Day]
Untreated
Negative Control (2.5 mg/kg)
OX86 mIgG2a (2.5mg/kg)
OX86 mIgG2a (1.0 mg/kg)
OX86 mIgG2a (0.25 mg/kg)
OX86 mIgG2a (0.10 mg/kg)
B
Untreated
Negative Control (2.5 mg/kg)
OX86 mIgG2a (2.5 mg/kg)
OX86 mIgG2a (1.0 mg/kg)
OX86 mIgG2a (0.25 mg/kg)
OX86 mIgG2a (0.1 mg/kg)
Tumor Volume [mm3]
2500
2000
1500
1000
500
0
10 20 30 40 50
Time [Day]

FIGURE 27A-B

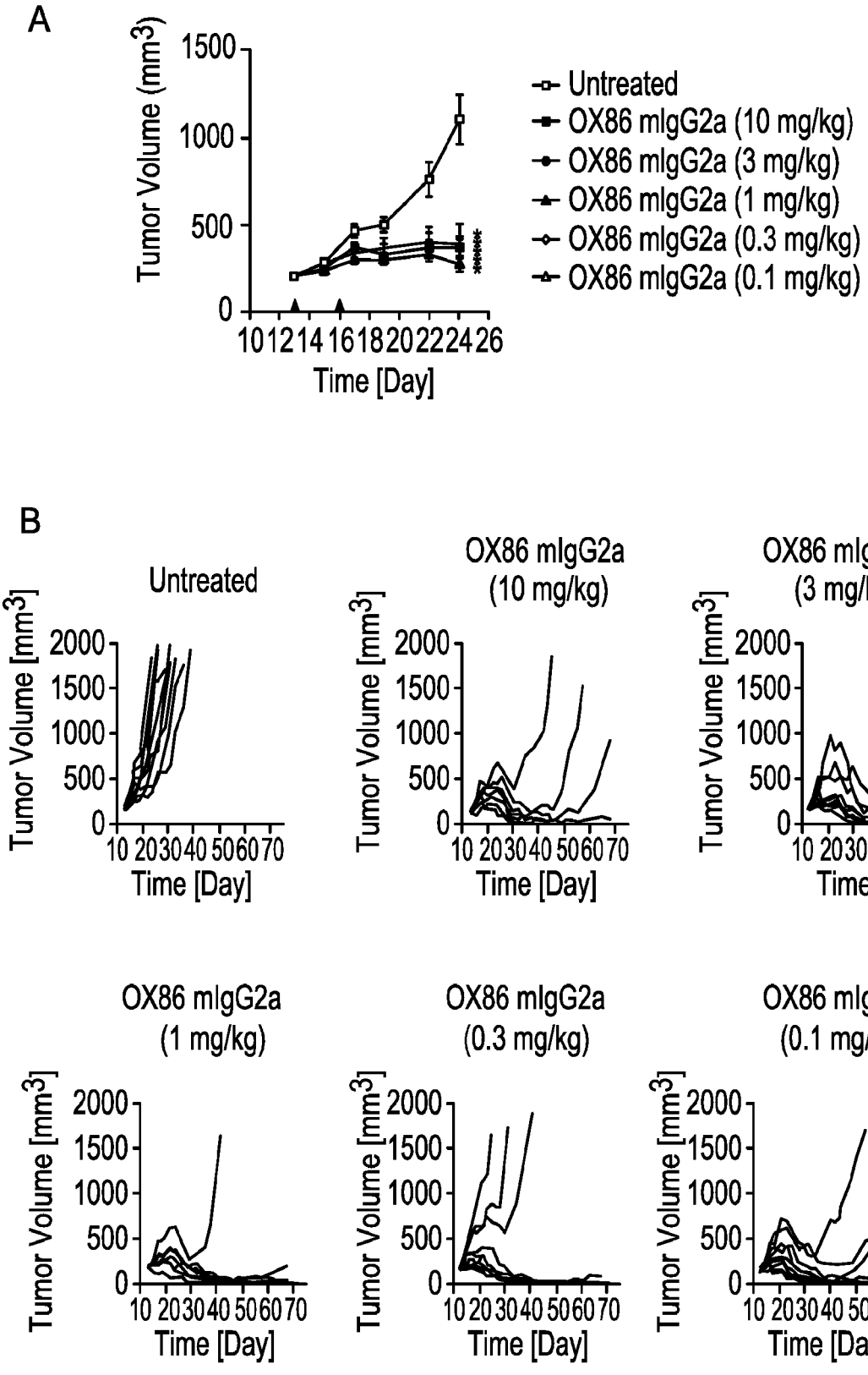

A
Tumor Volume (mm3)
1500
1000
500
0
10 12 14 16 18 20 22 24 26
Time [Day]
Untreated
OX86 mIgG2a (10 mg/kg)
OX86 mIgG2a (3 mg/kg)
OX86 mIgG2a (1 mg/kg)
OX86 mIgG2a (0.3 mg/kg)
OX86 mIgG2a (0.1 mg/kg)
B
Untreated
OX86 mIgG2a (10 mg/kg)
OX86 mIgG2a (3 mg/kg)
OX86 mIgG2a (1 mg/kg)
OX86 mIgG2a (0.3 mg/kg)
OX86 mIgG2a (0.1 mg/kg)
Tumor Volume [mm3]
2000
1500
1000
500
0
10 20 30 40 50 60 70
Time [Day]

FIGURE 28A-B

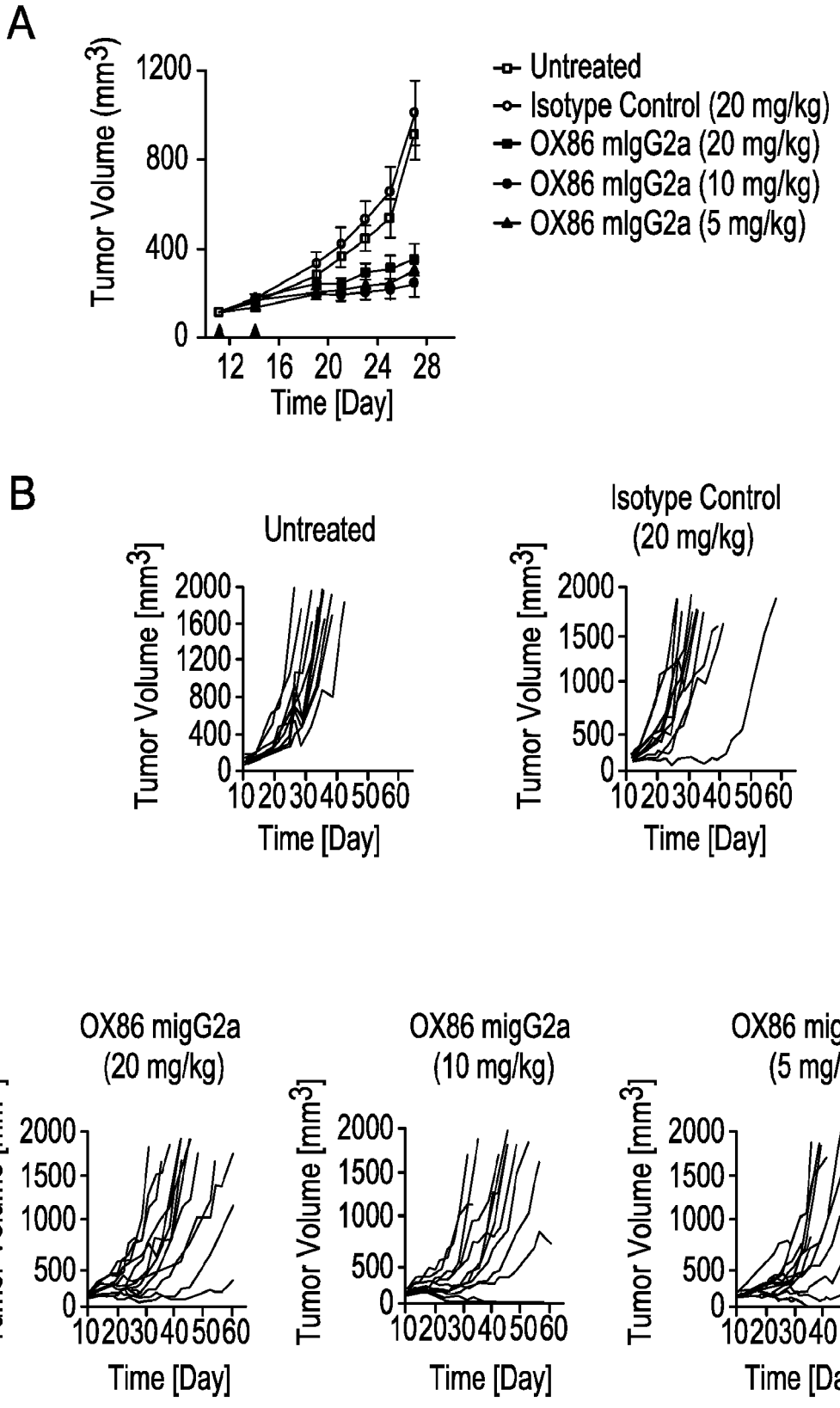

A
Tumor Volume (mm3)
1200
800
400
0
12 16 20 24 28
Time [Day]
Untreated
Isotype Control (20 mg/kg)
OX86 mIgG2a (20 mg/kg)
OX86 mIgG2a (10 mg/kg)
OX86 mIgG2a (5 mg/kg)
B
Untreated
Isotype Control (20 mg/kg)
OX86 migG2a (20 mg/kg)
OX86 migG2a (10 mg/kg)
OX86 migG2a (5 mg/kg)
Tumor Volume [mm3]
2000
1600
1200
800
400
0
1500
1000
500
10 20 30 40 50 60
Time [Day]

FIGURE 29A-B

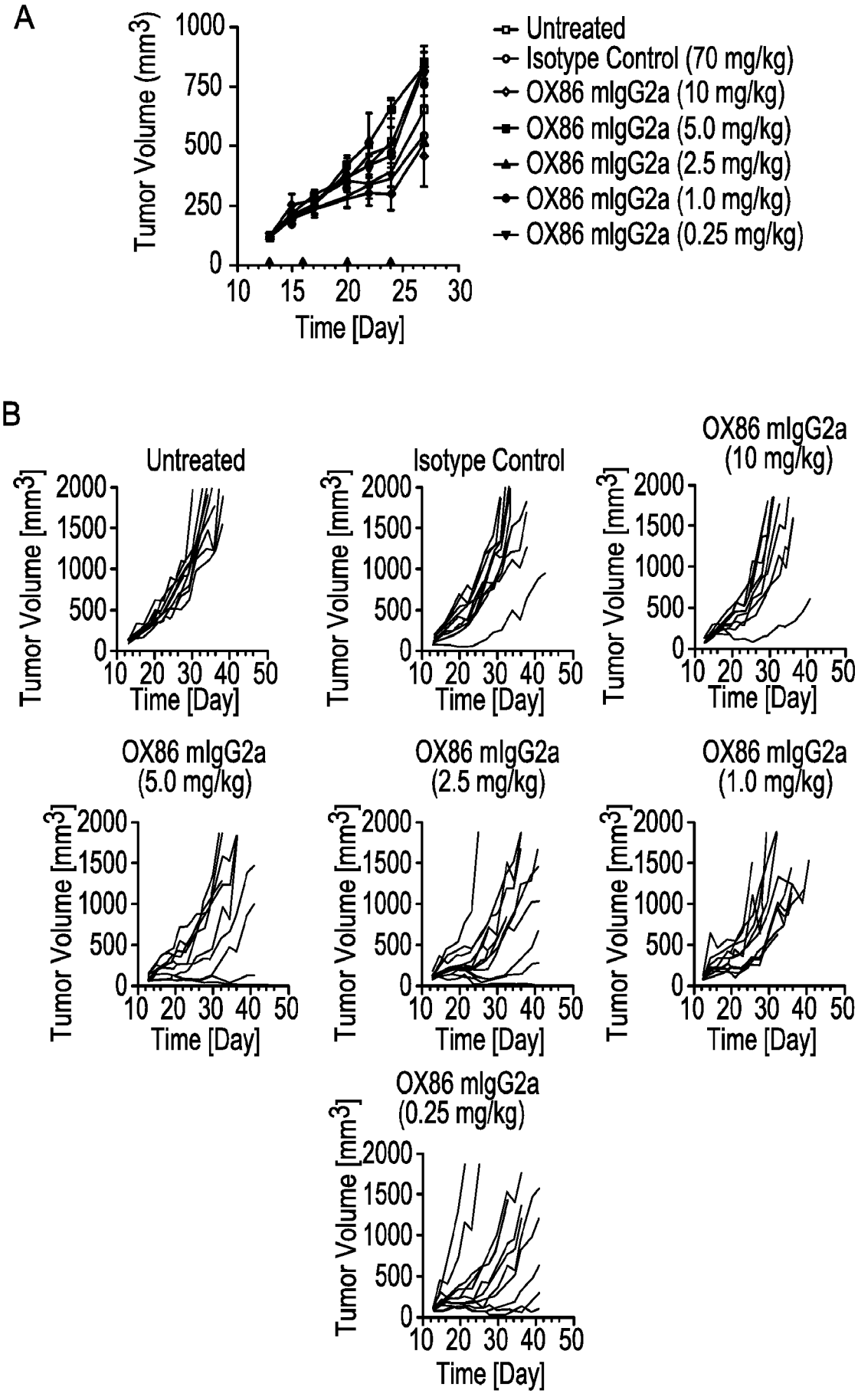

A
Tumor Volume (mm3)
1000
750
500
250
0
10 15 20 25 30
Time [Day]
Untreated
Isotype Control (70 mg/kg)
OX86 mIgG2a (10 mg/kg)
OX86 mIgG2a (5.0 mg/kg)
OX86 mIgG2a (2.5 mg/kg)
OX86 mIgG2a (1.0 mg/kg)
OX86 mIgG2a (0.25 mg/kg)
B
Untreated
Isotype Control
OX86 mIgG2a (10 mg/kg)
OX86 mIgG2a (5.0 mg/kg)
OX86 mIgG2a (2.5 mg/kg)
OX86 mIgG2a (1.0 mg/kg)
OX86 mIgG2a (0.25 mg/kg)
Tumor Volume [mm3]
2000
1500
1000
500
0
10 20 30 40 50
Time [Day]

FIGURE 30

```
                                                CRD1
Human_OX40  MCVGARRLGRGPCAALLLGLGLSTVTG-LHCVGDTYPSNDRCCHECRPGNGMVSRCSRS 59
Mouse_OX40  MYVWVQQP-----TALLLLALTLGVTARRLNCVKHTYPSGHKCCRECQPGHGMVSRCDHT 55
            * * .::      :******.* *...:  *:** .****..:**:**:*******.::
                                                  111  116
                                          CRD2
Human_OX40  QNTVCRPCGPGFYNDVVSSKPCKPCTWCNLRSGSERKQLCTATQDTVCRCRAGTQP-LDS 118
Mouse_OX40  RDTLCHPCETGFYNEAVNYDTCKQCTQCNHRSGSELKQNCTPTQDTVCRCRPGTQPRQDS 115
            ::*:*:** .****:.*. ..** ** ** ****** ** **.**********.****  **
               121 126      137
                CRD3
                                                CRD4
Human_OX40  -YKPGVDCAPCPPGHFSPGDNQACKPWTNCTLAGKHTLQPASNSSDAICEDRDPPATQPQ 177
Mouse_OX40  GYKLGVDCVPCPPGHFSPGNNQACKPWTNCTLSGKQTRHPASDSLDAVCEDRSLLATLLW 175
             ** *****.**********:**********:**:* :****:* **:****.  **
```

FIGURE 31

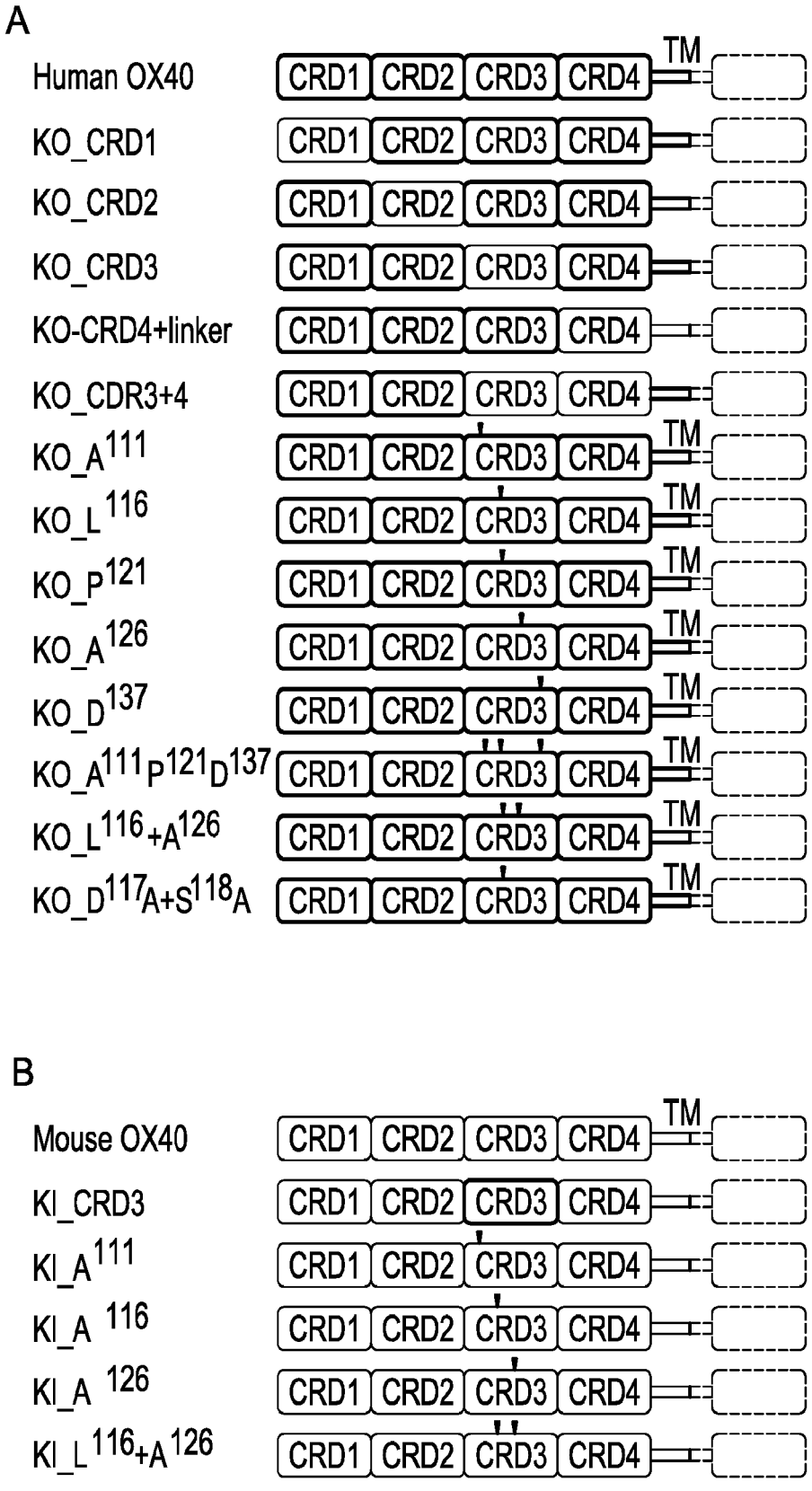
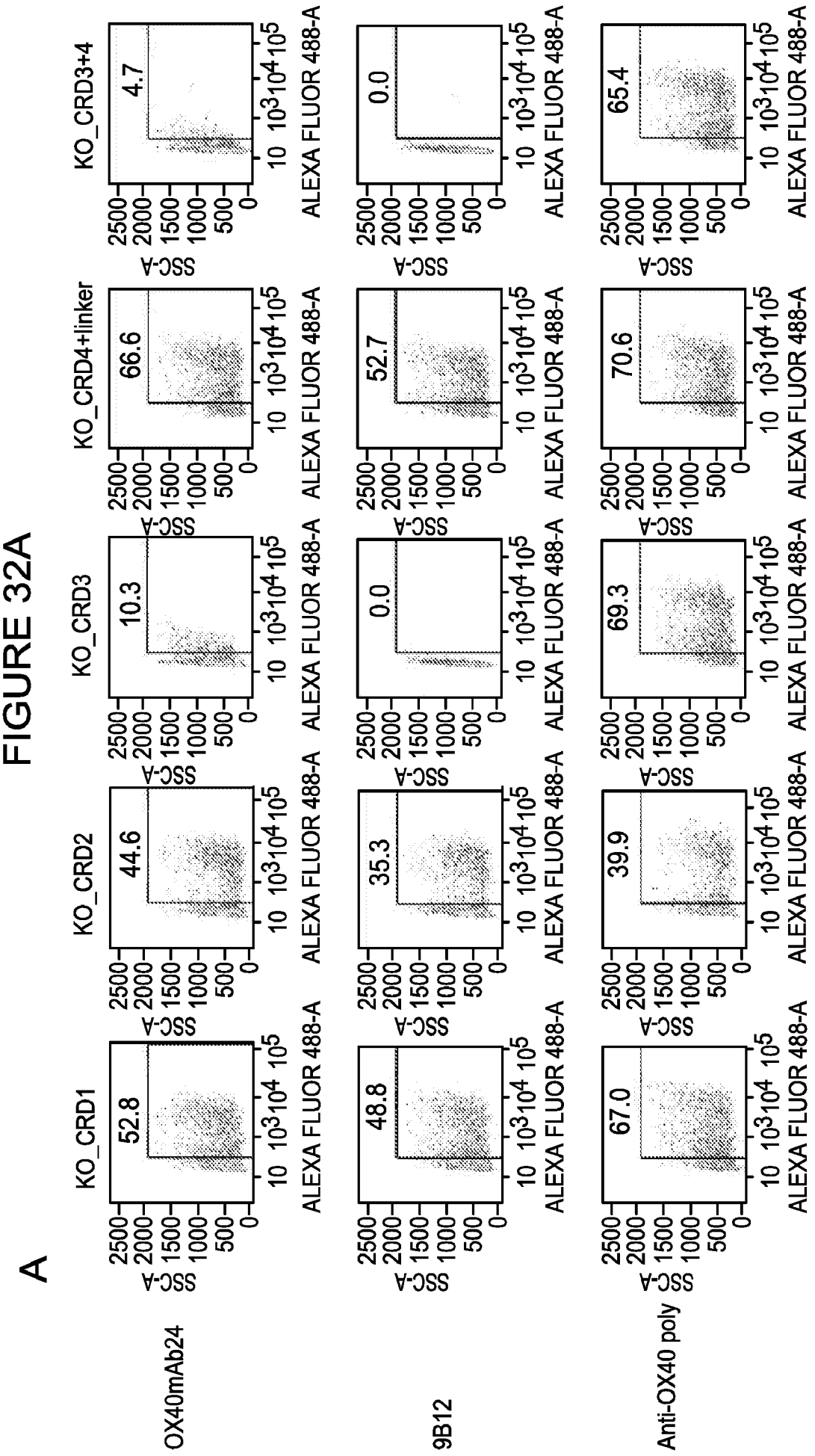

A
Human OX40
KO_CRD1
KO_CRD2
KO_CRD3
KO-CRD4+linker
KO_CDR3+4
KO_A111
KO_L116
KO_P121
KO_A126
KO_D137
KO_A111P121D137
KO_L116+A126
KO_D117A+S118A
CRD1 CRD2 CRD3 CRD4
TM
B
Mouse OX40
KI_CRD3
KI_A111
KI_A 116
KI_A 126
KI_L116+A126

FIGURE 32A


A
KO_CRD1
KO_CRD2
KO_CRD3
KO_CRD4+linker
KO_CRD3+4
OX40mAb24
9B12
Anti-OX40 poly
52.8
44.6
10.3
66.6
4.7
48.8
35.3
0.0
52.7
0.0
67.0
39.9
69.3
70.6
65.4
SSC-A
ALEXA FLUOR 488-A

(FIGURE 32A con't)

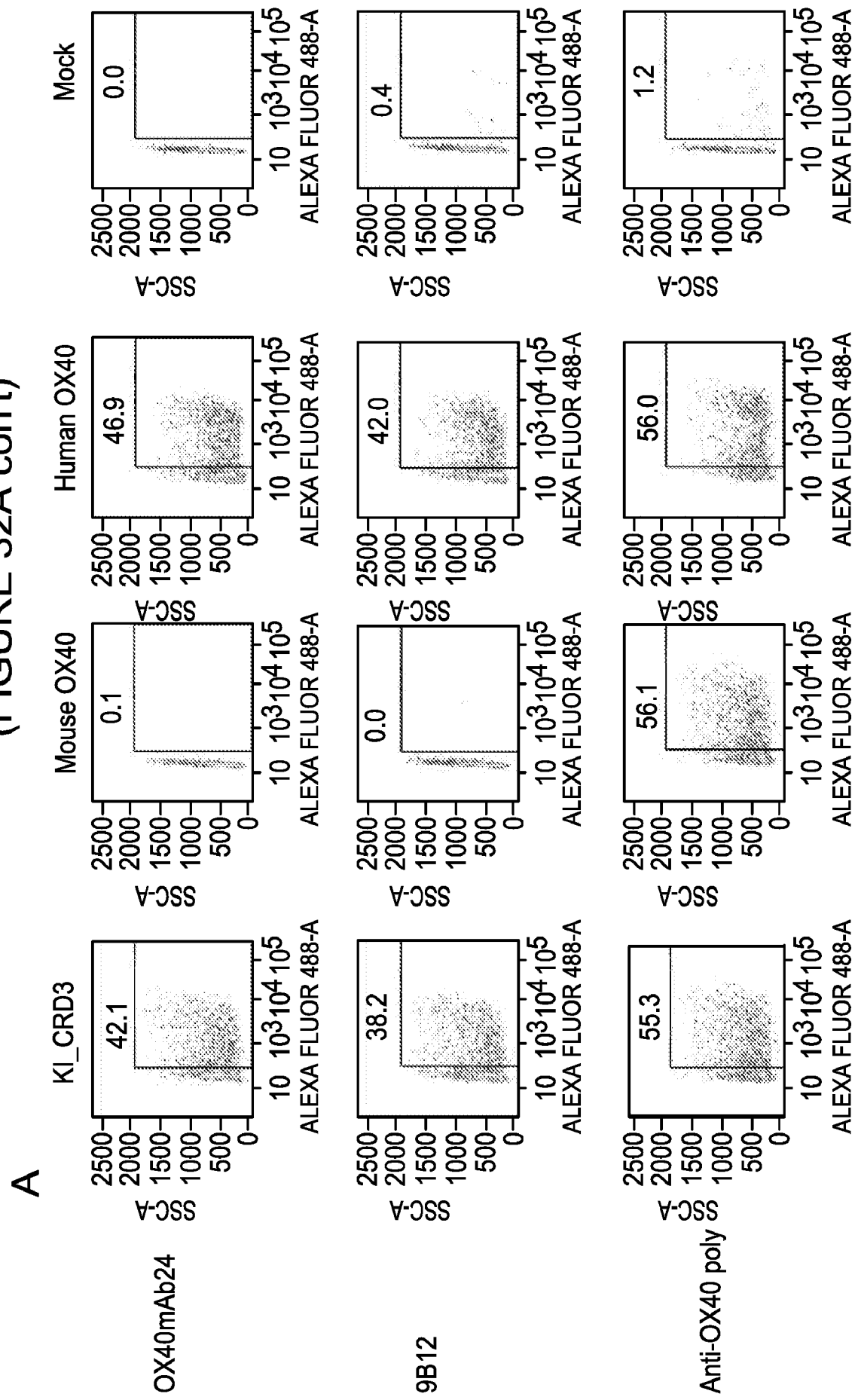
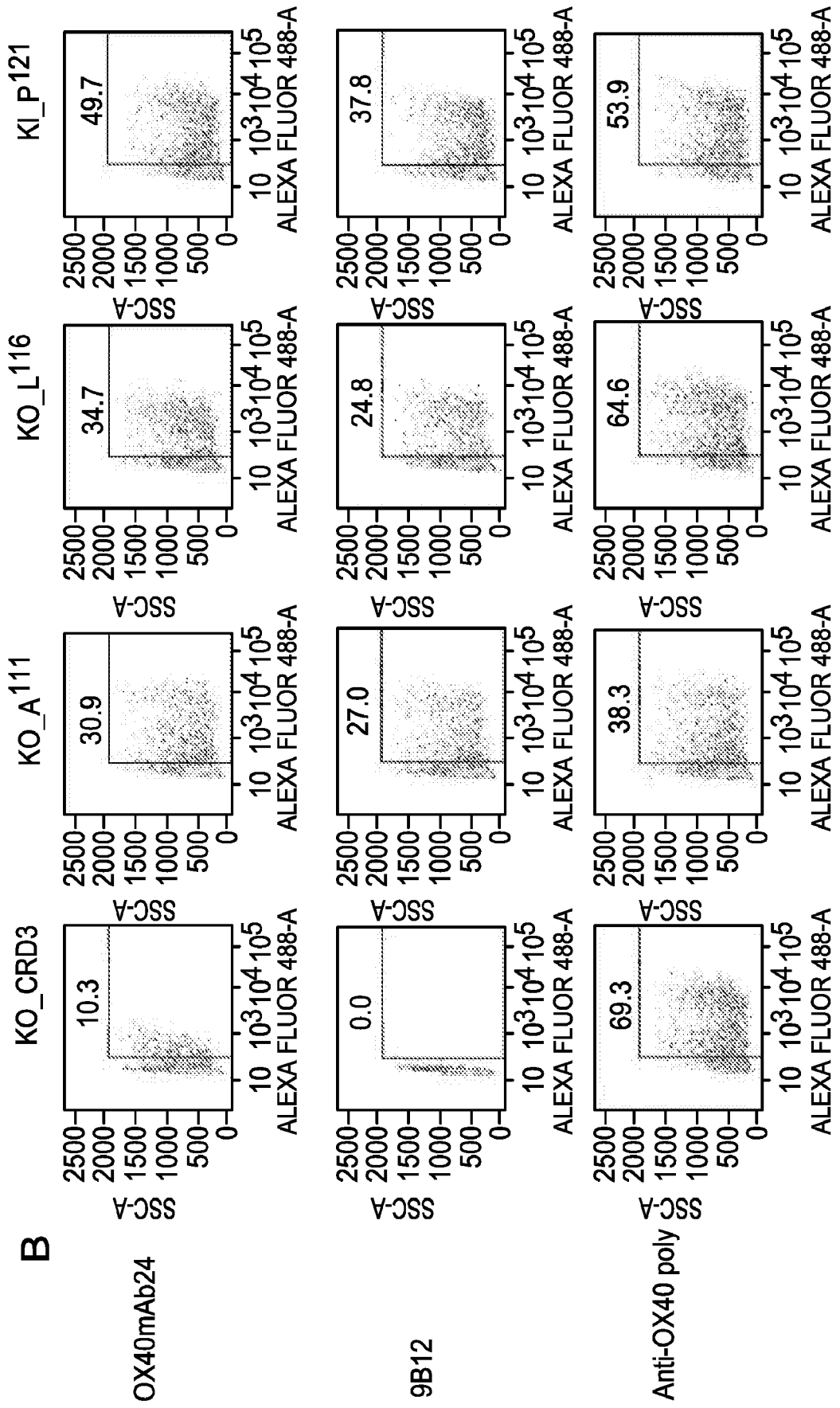
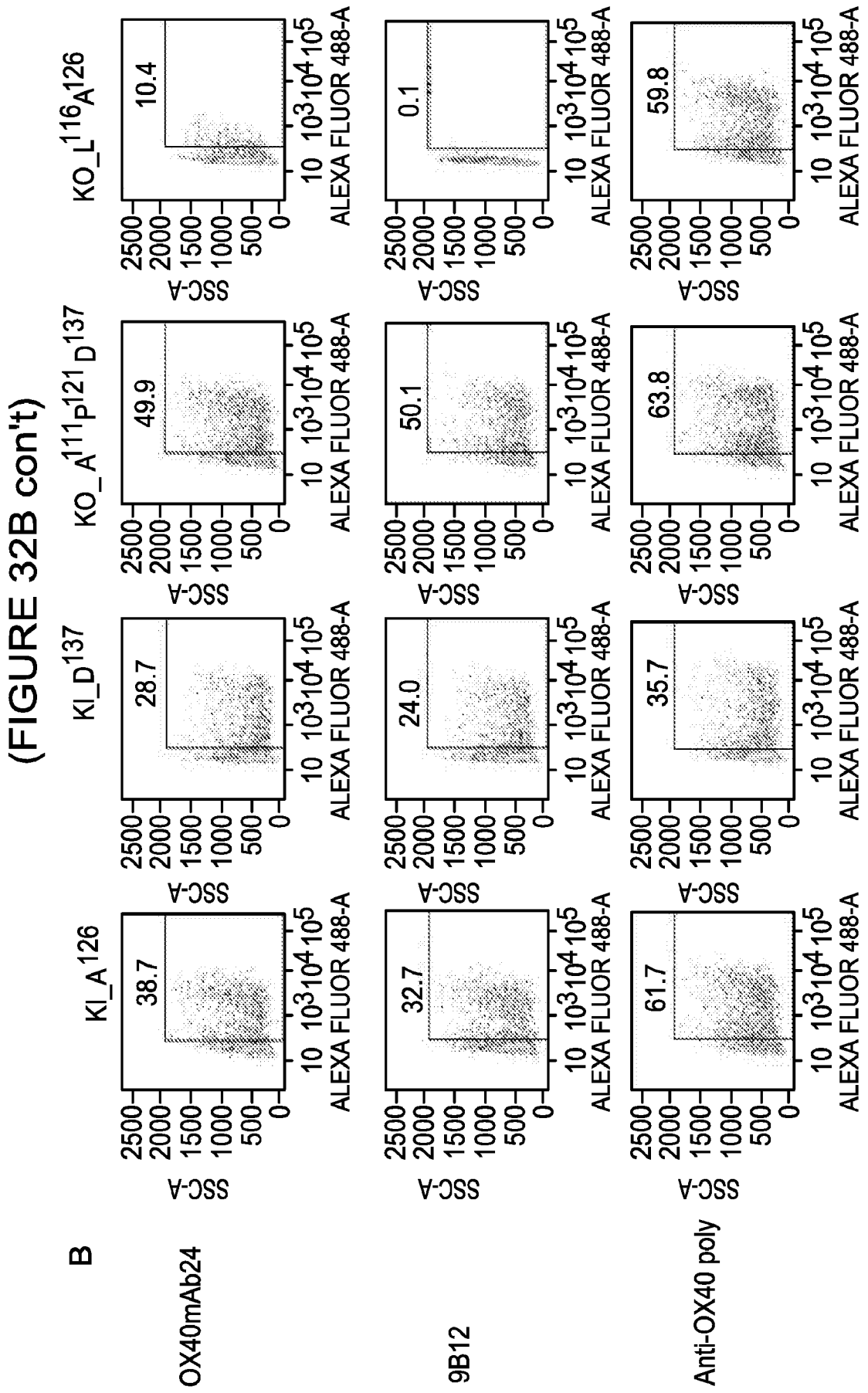


FIGURE 32B


B
KO_CRD3
KO_A111
KO_L116
KI_P121
OX40mAb24
9B12
Anti-OX40 poly
10.3
30.9
34.7
49.7
0.0
27.0
24.8
37.8
69.3
38.3
64.6
53.9
SSC-A
ALEXA FLUOR 488-A
0
500
1000
1500
2000
2500
10
10^3
10^4
10^5

(FIGURE 32B con't)



(FIGURE 32B con't)

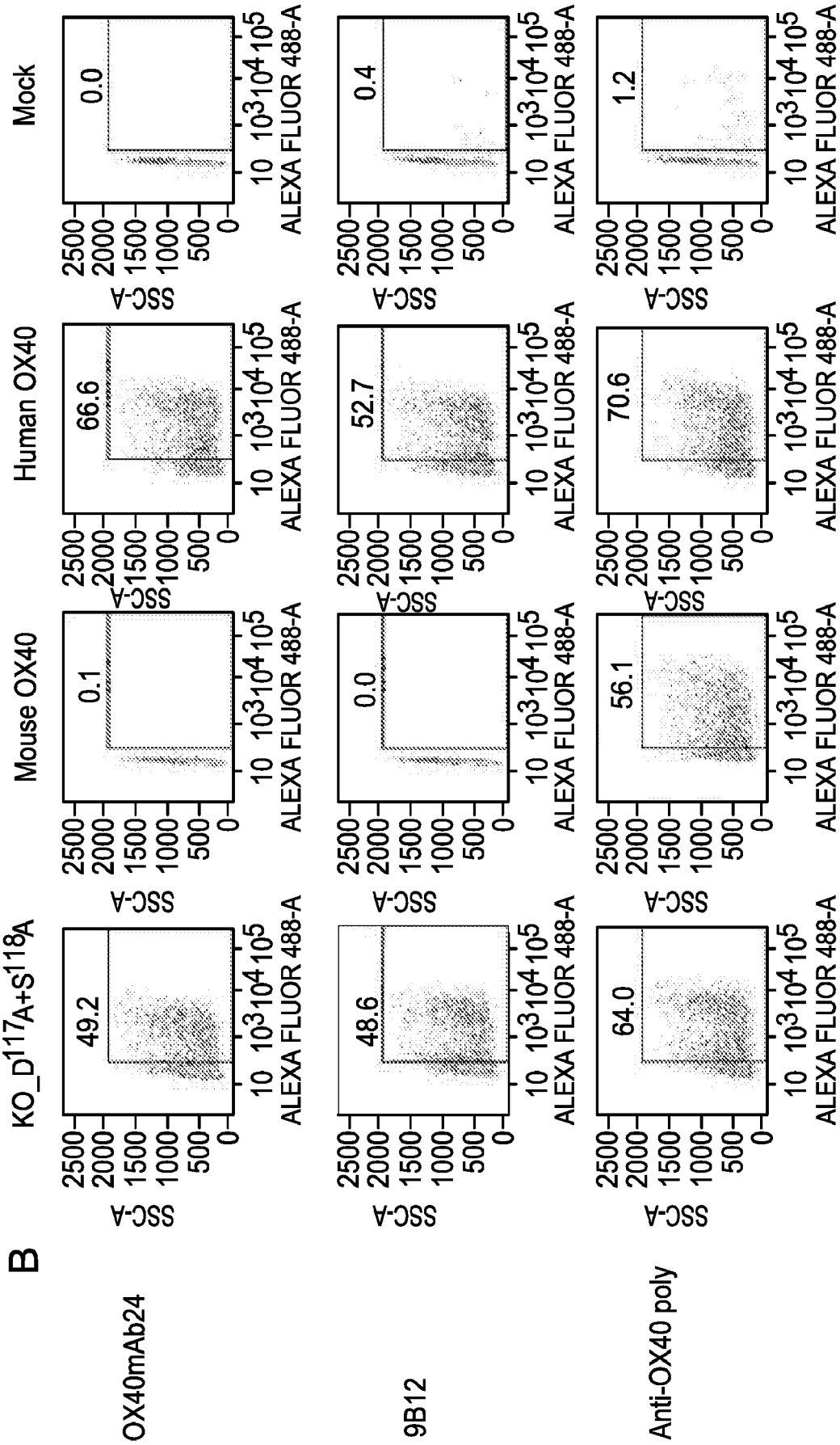
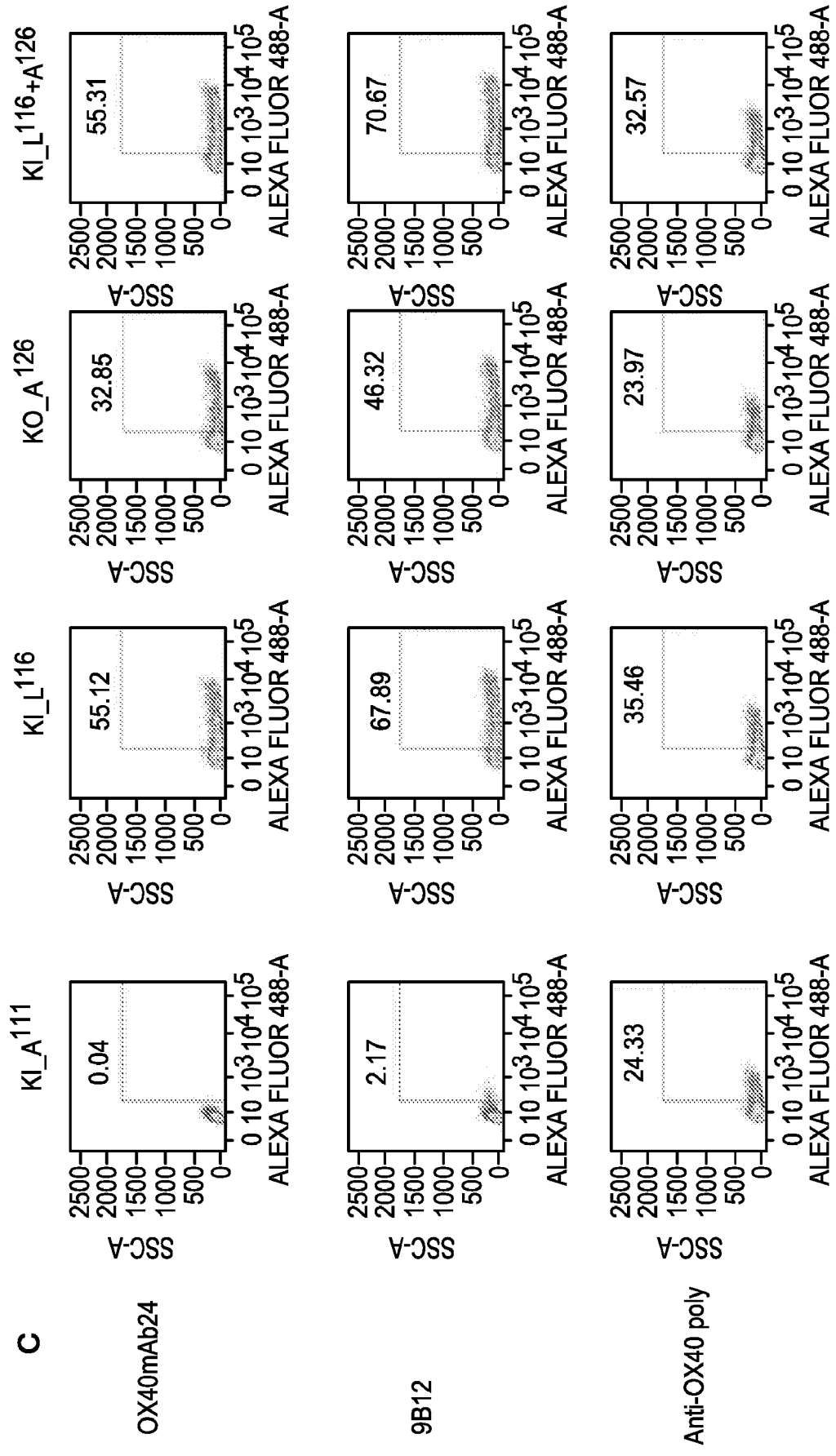


FIGURE 32C


C
OX40mAb24
9B12
Anti-OX40 poly
KI_A111
KI_L116
KO_A126
KI_L116+A126
0.04
55.12
32.85
55.31
2.17
67.89
46.32
70.67
24.33
35.46
23.97
32.57
SSC-A
ALEXA FLUOR 488-A

(FIGURE 32C con't)

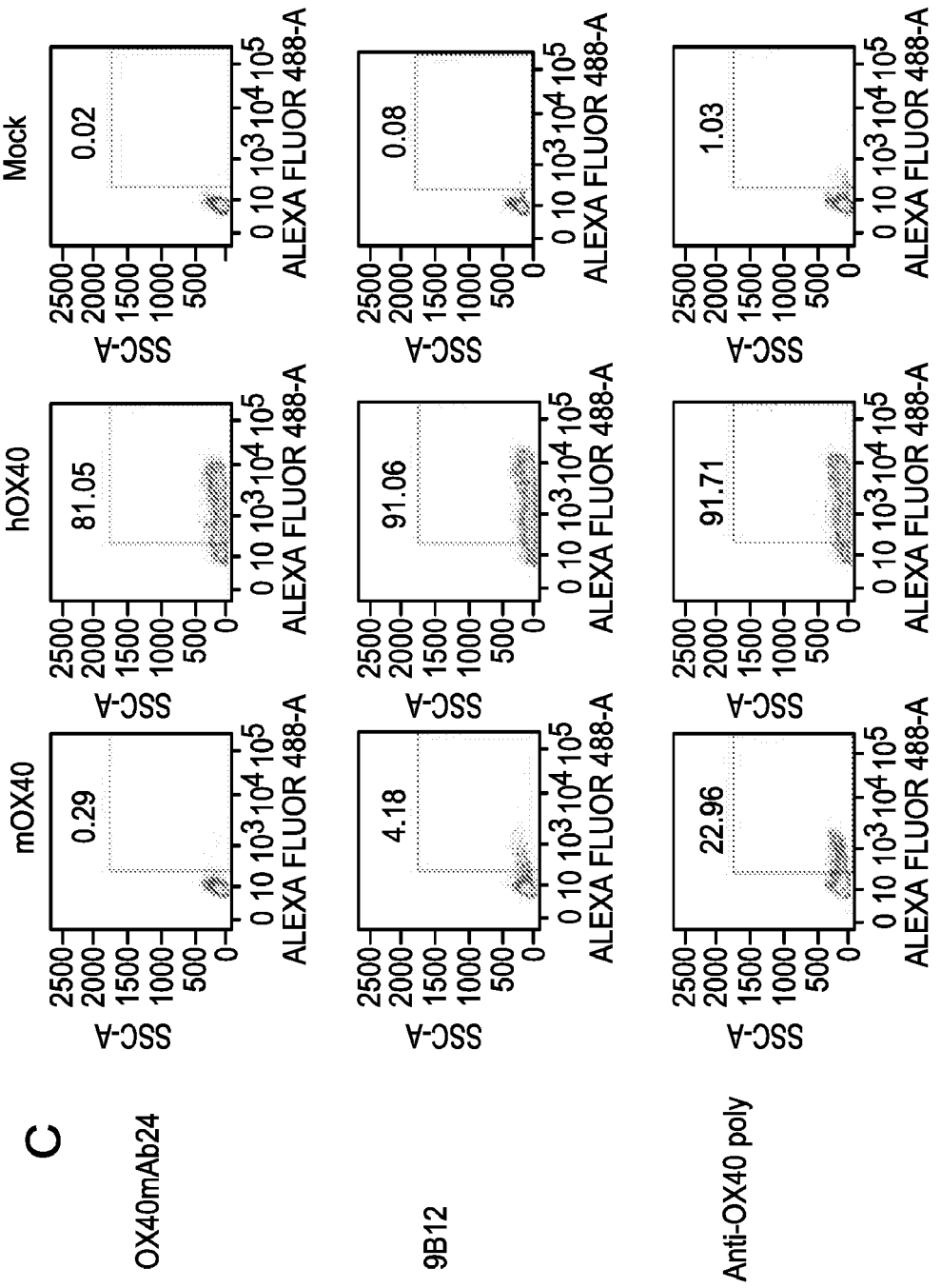


FIGURE 33A-D

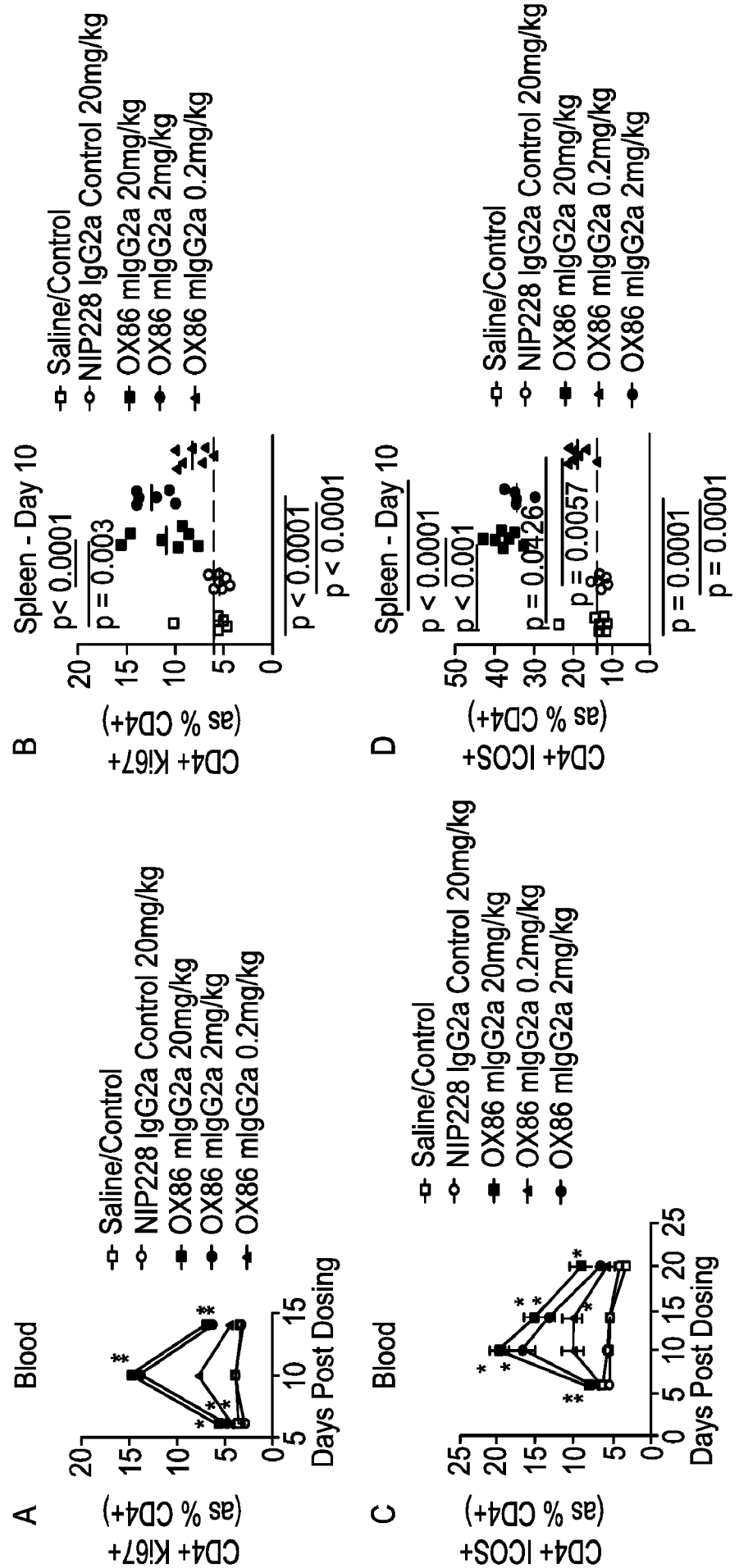

A
Blood
CD4+ Ki67+ (as % CD4+)
Days Post Dosing
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 mIgG2a 20mg/kg
OX86 mIgG2a 2mg/kg
OX86 mIgG2a 0.2mg/kg
B
Spleen - Day 10
CD4+ Ki67+ (as % CD4+)
p< 0.0001
p = 0.003
p < 0.0001
p < 0.0001
C
Blood
CD4+ ICOS+ (as % CD4+)
Days Post Dosing
D
Spleen - Day 10
CD4+ ICOS+ (as % CD4+)
p < 0.0001
p < 0.001
p = 0.0426
p = 0.0057
p = 0.0001
p = 0.0001

FIGURE 34A-B

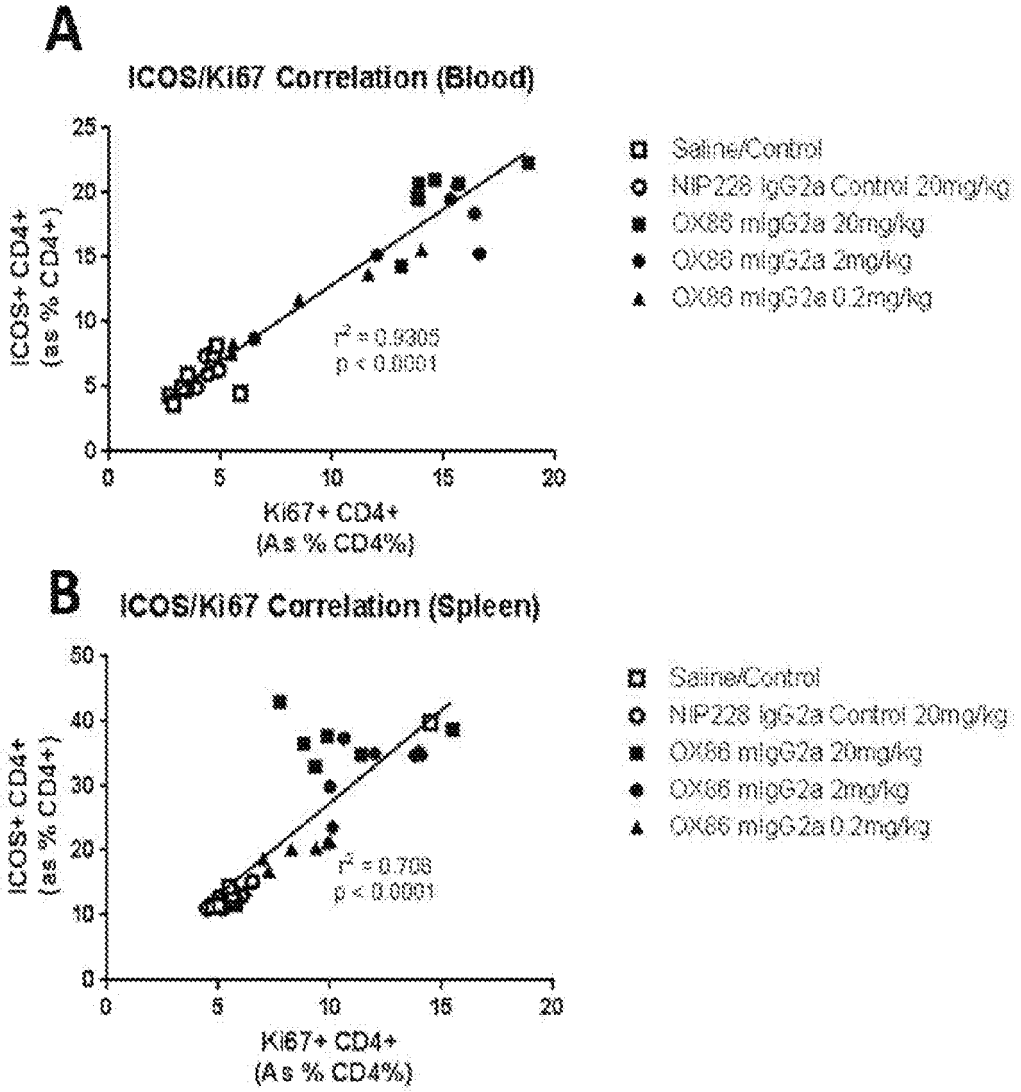

A
ICOS/Ki67 Correlation (Blood)
ICOS+ CD4+
(as % CD4+)
Ki67+ CD4+
(As % CD4%)
r² = 0.9305
p < 0.0001
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 migG2a 20mg/kg
OX86 migG2a 2mg/kg
OX86 migG2a 0.2mg/kg
B
ICOS/Ki67 Correlation (Spleen)
ICOS+ CD4+
(as % CD4+)
Ki67+ CD4+
(As % CD4%)
r² = 0.708
p < 0.0001
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 migG2a 20mg/kg
OX86 migG2a 2mg/kg
OX86 migG2a 0.2mg/kg

FIGURE 35A-D

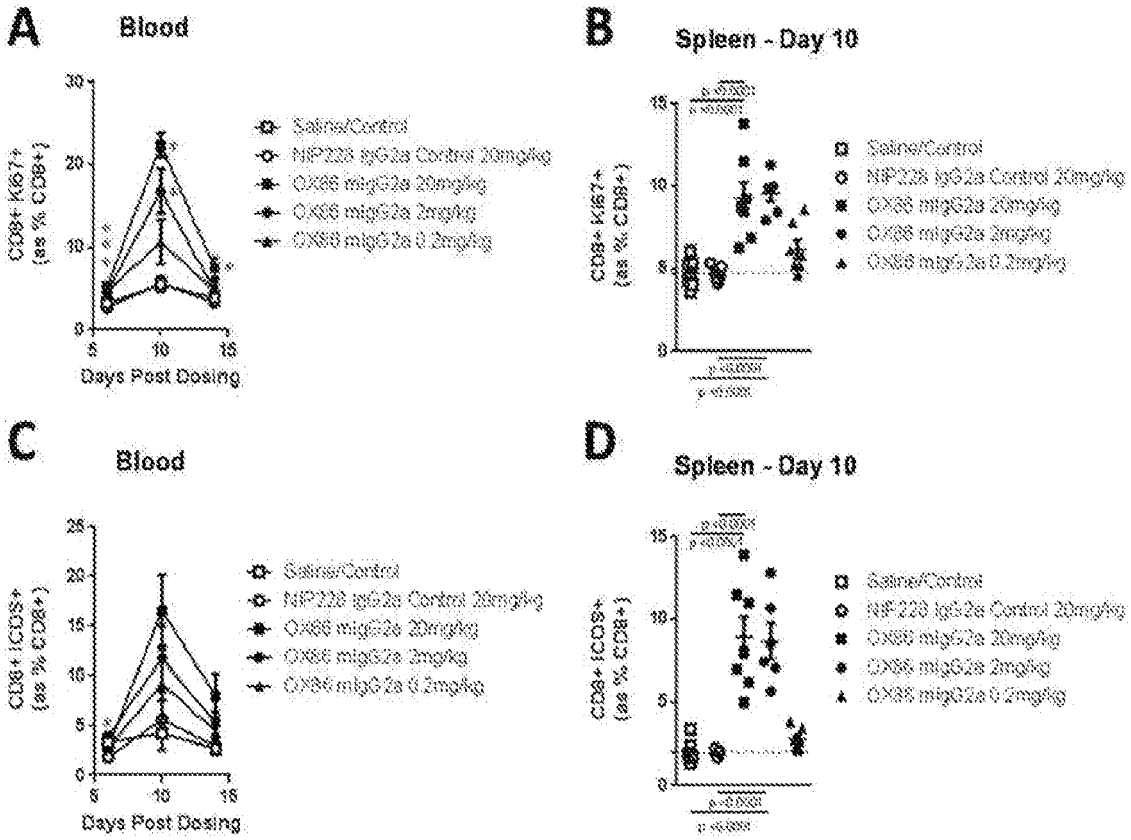

A
Blood
CD8+ Ki67+ (as % CD8+)
Days Post Dosing
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 mIgG2a 20mg/kg
OX86 mIgG2a 2mg/kg
OX86 mIgG2a 0.2mg/kg
B
Spleen - Day 10
CD8+ Ki67+ (as % CD8+)
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 mIgG2a 20mg/kg
OX86 mIgG2a 2mg/kg
OX86 mIgG2a 0.2mg/kg
C
Blood
CD8+ ICOS+ (as % CD8+)
Days Post Dosing
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 mIgG2a 20mg/kg
OX86 mIgG2a 2mg/kg
OX86 mIgG2a 0.2mg/kg
D
Spleen - Day 10
CD8+ ICOS+ (as % CD8+)
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 mIgG2a 20mg/kg
OX86 mIgG2a 2mg/kg
OX86 mIgG2a 0.2mg/kg

FIGURE 36A-B

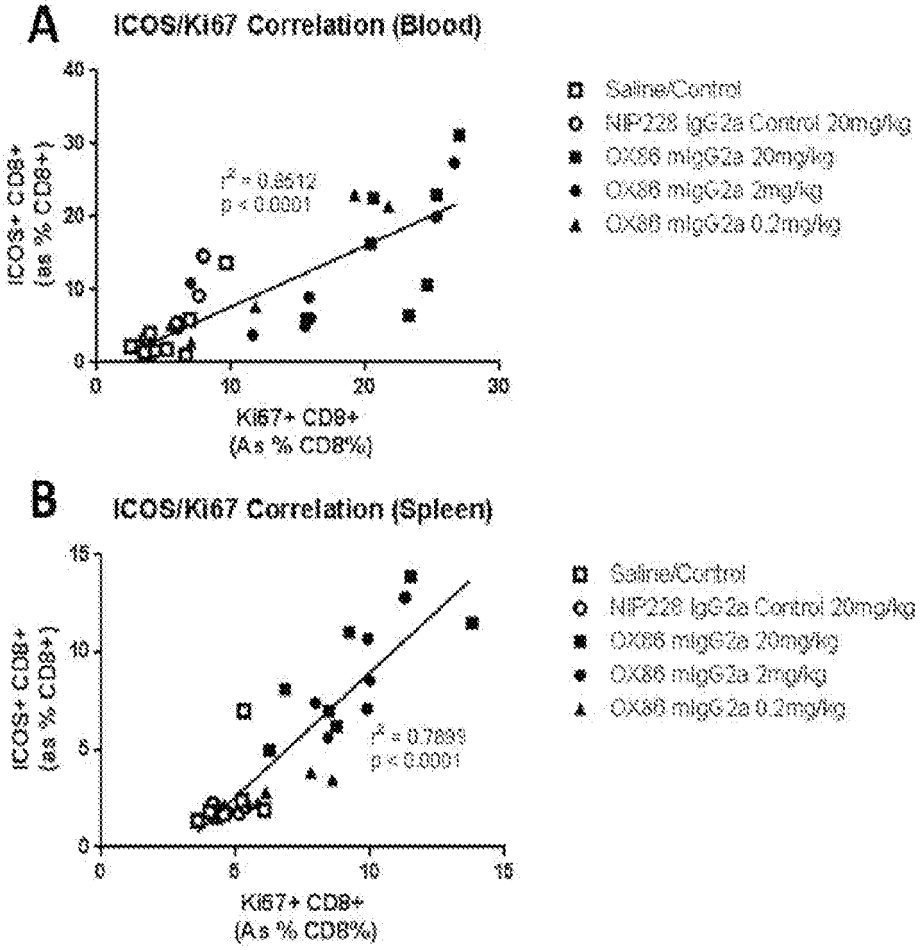

A
ICOS/Ki67 Correlation (Blood)
ICOS+ CD8+
(as % CD8+)
Ki67+ CD8+
(As % CD8%)
r² = 0.8512
p < 0.0001
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 mIgG2a 20mg/kg
OX86 mIgG2a 2mg/kg
OX86 mIgG2a 0.2mg/kg
B
ICOS/Ki67 Correlation (Spleen)
ICOS+ CD8+
(as % CD8+)
Ki67+ CD8+
(As % CD8%)
r² = 0.7699
p < 0.0001
Saline/Control
NIP228 IgG2a Control 20mg/kg
OX86 mIgG2a 20mg/kg
OX86 mIgG2a 2mg/kg
OX86 mIgG2a 0.2mg/kg

FIGURE 37A-D

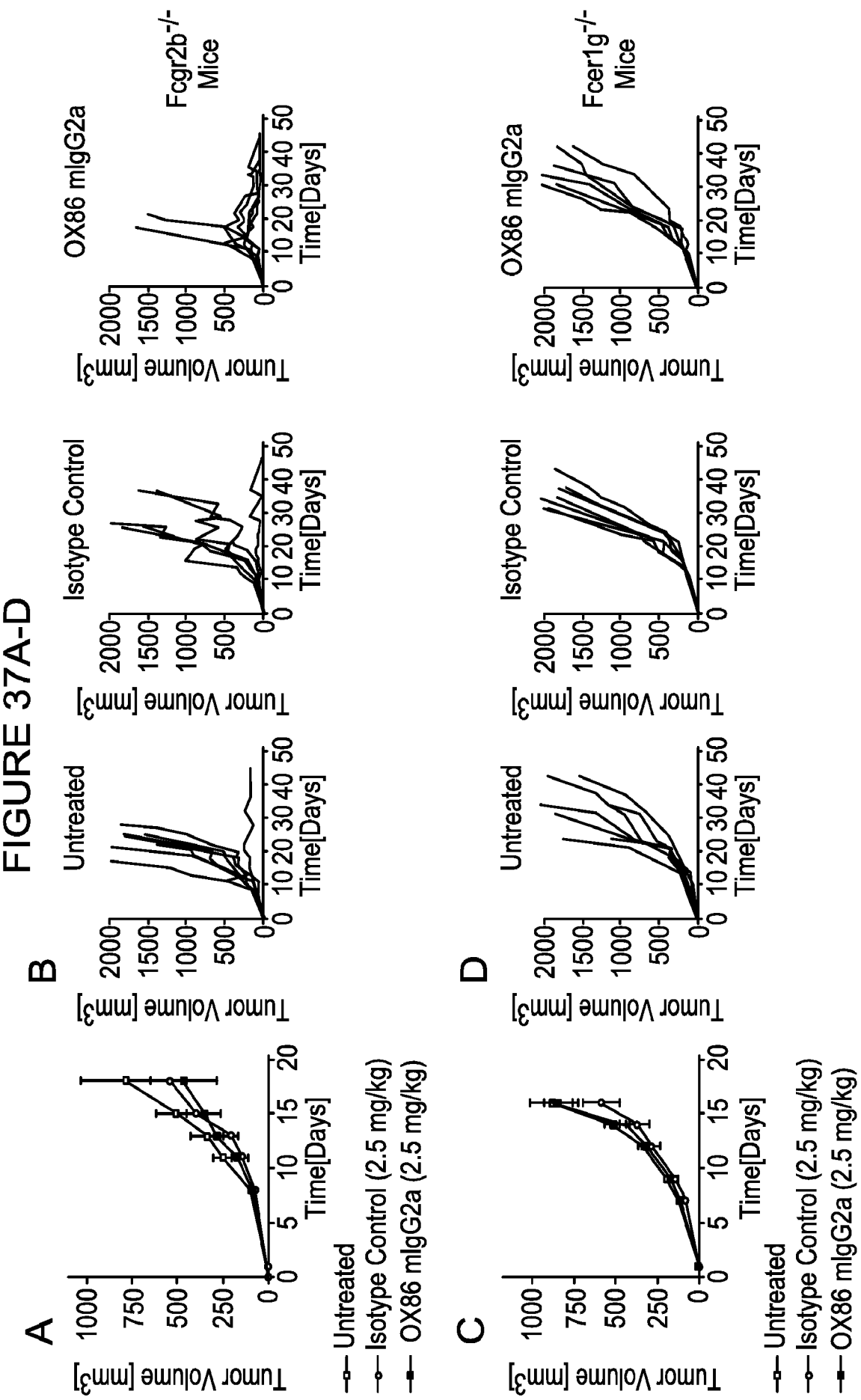

A
B
C
D
Untreated
Isotype Control
OX86 mIgG2a
Fcgr2b-/- Mice
Fcer1g-/- Mice
Tumor Volume [mm3]
Time[Days]
Untreated
Isotype Control (2.5 mg/kg)
OX86 mIgG2a (2.5 mg/kg)

FIGURE 38A-D

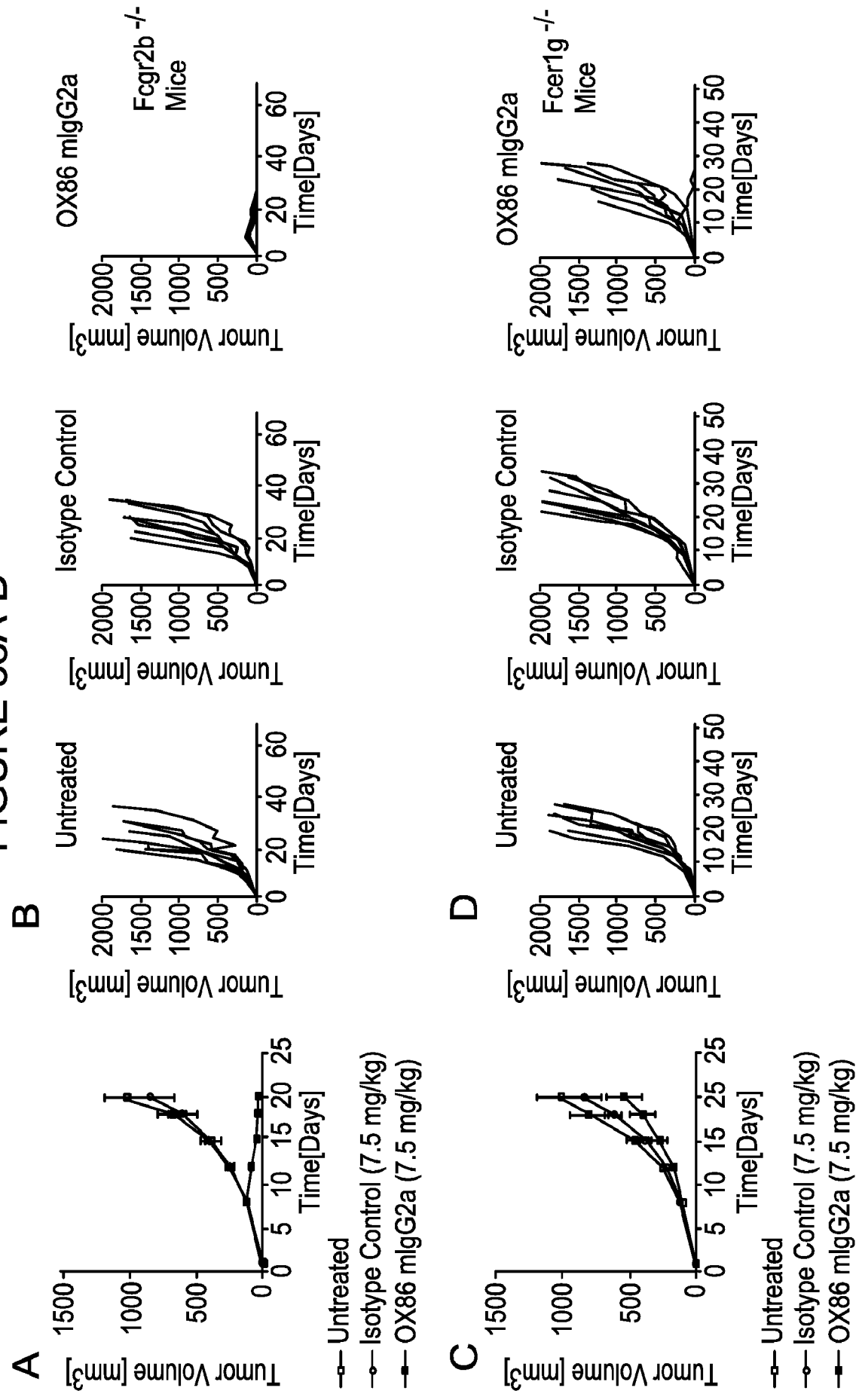

A
B
C
D
Tumor Volume [mm3]
Time[Days]
Untreated
Isotype Control
OX86 mIgG2a
Fcgr2b -/- Mice
Fcer1g -/- Mice
Isotype Control (7.5 mg/kg)
OX86 mIgG2a (7.5 mg/kg)

FIGURE 39A-B

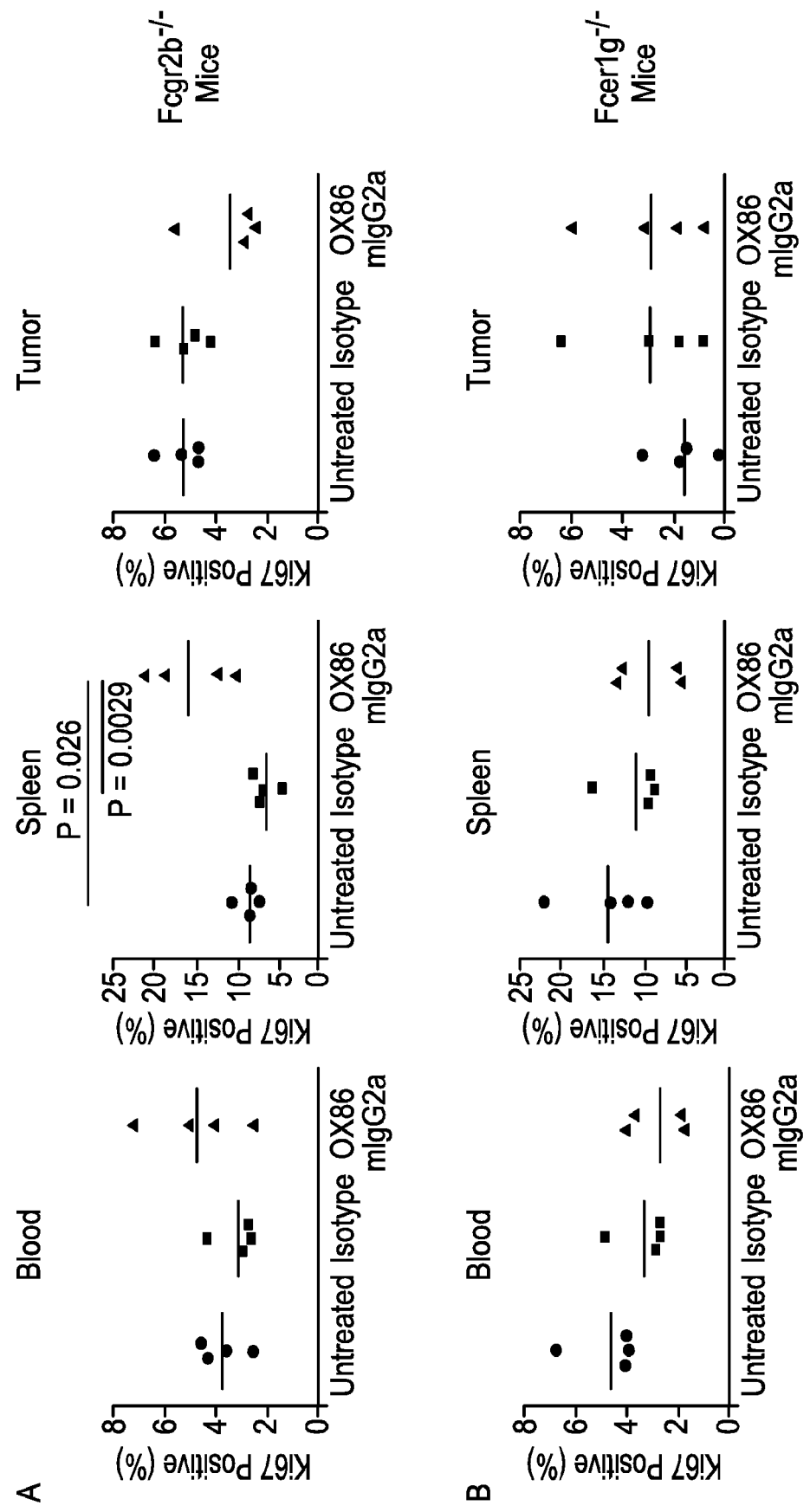

A
Blood
Spleen
P = 0.026
P = 0.0029
Tumor
Fcgr2b-/- Mice
B
Blood
Spleen
Tumor
Fcer1g-/- Mice
Ki67 Positive (%)
Untreated Isotype OX86 mIgG2a

FIGURE 40A-B

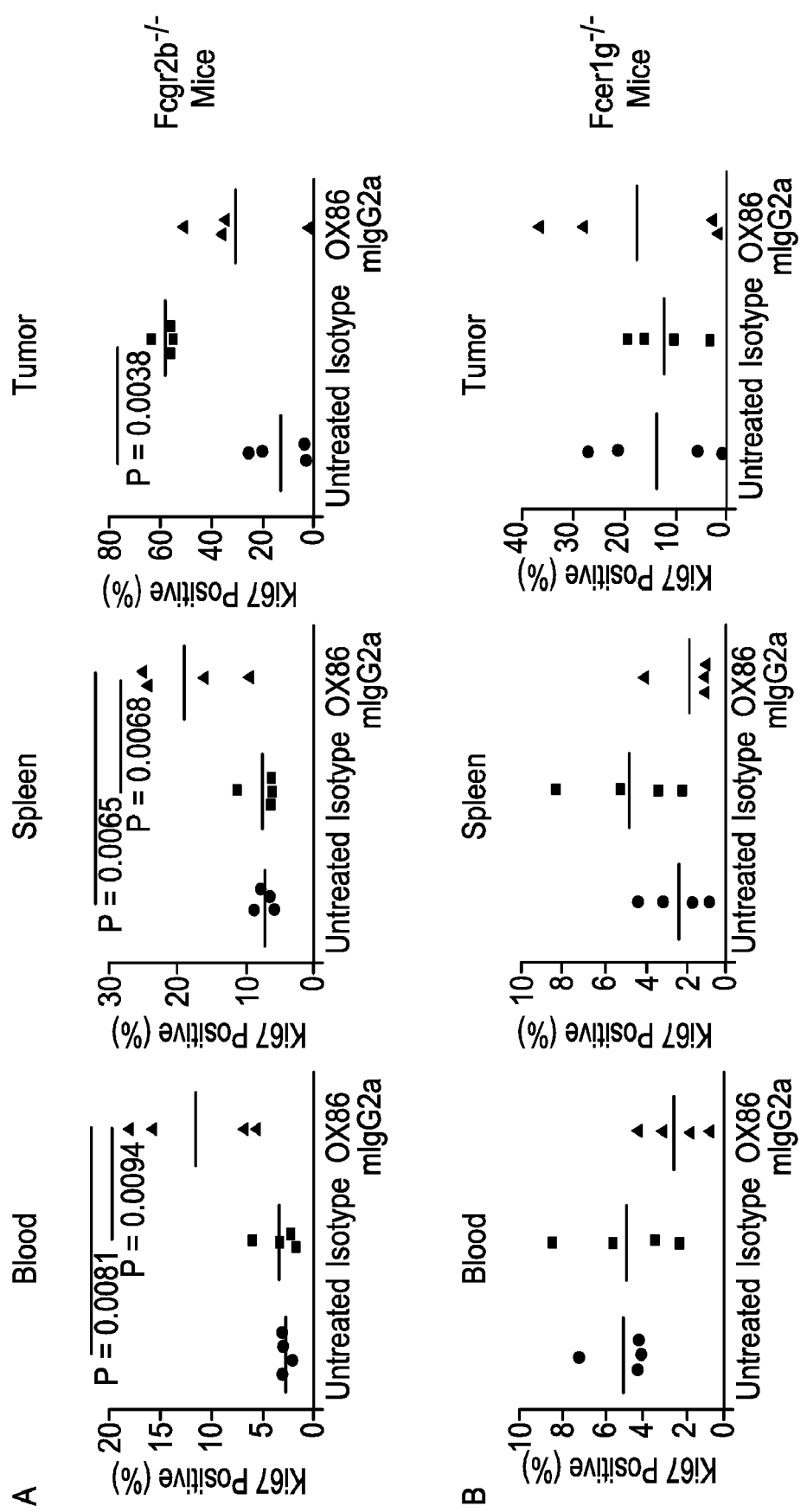

A
Blood
Spleen
Tumor
Fcgr2b-/- Mice
B
Fcer1g-/- Mice
Ki67 Positive (%)
P = 0.0081
P = 0.0094
P = 0.0065
P = 0.0068
P = 0.0038
Untreated Isotype OX86 mIgG2a

FIGURE 41A-B

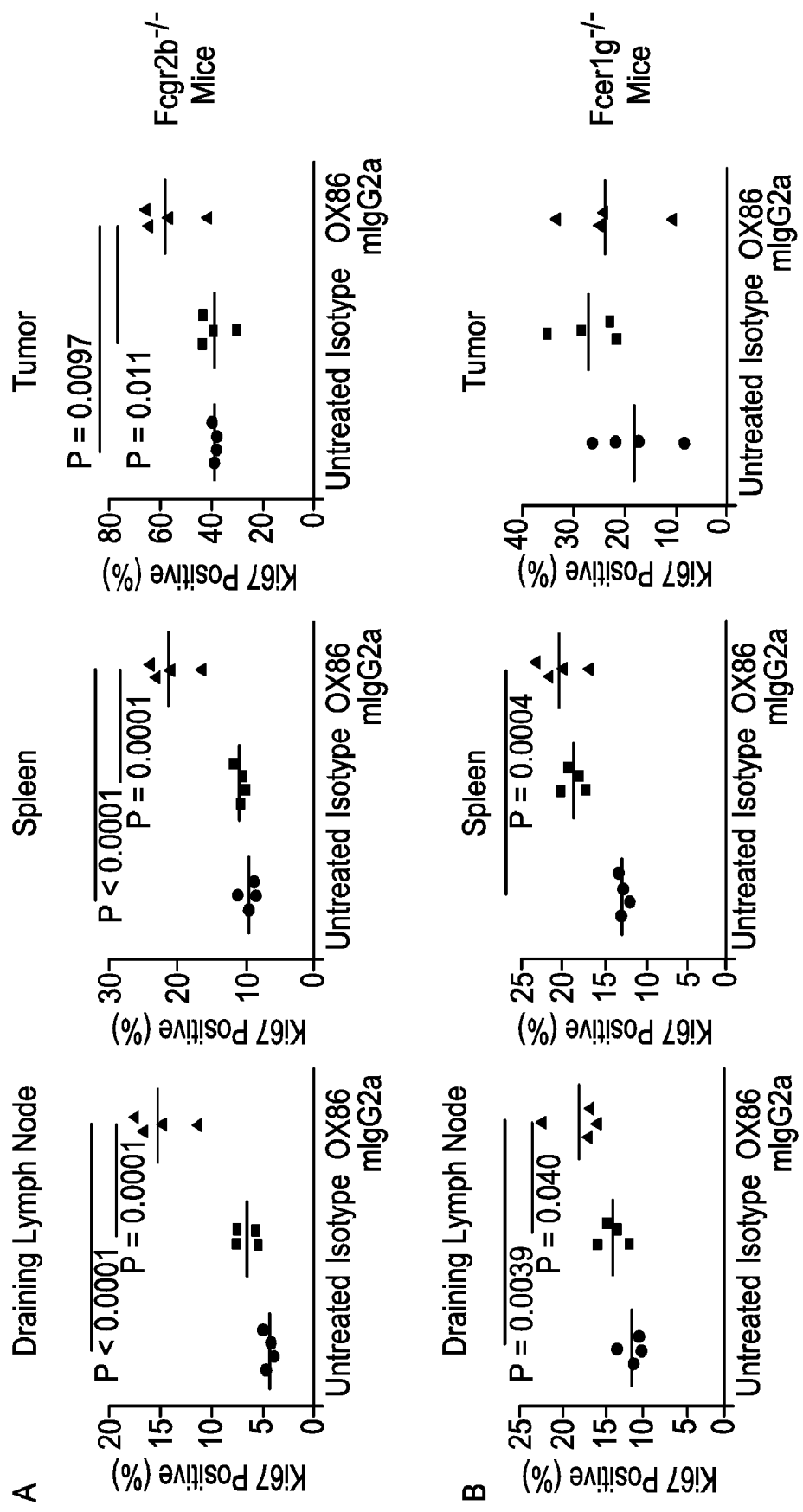

A
Draining Lymph Node
Spleen
Tumor
B
Draining Lymph Node
Spleen
Tumor
Ki67 Positive (%)
P < 0.0001
P = 0.0001
P < 0.0001
P = 0.0001
P = 0.0097
P = 0.011
P = 0.0039
P = 0.040
P = 0.0004
Untreated
Isotype
OX86
mIgG2a
Fcgr2b-/- Mice
Fcer1g-/- Mice

FIGURE 42A-B

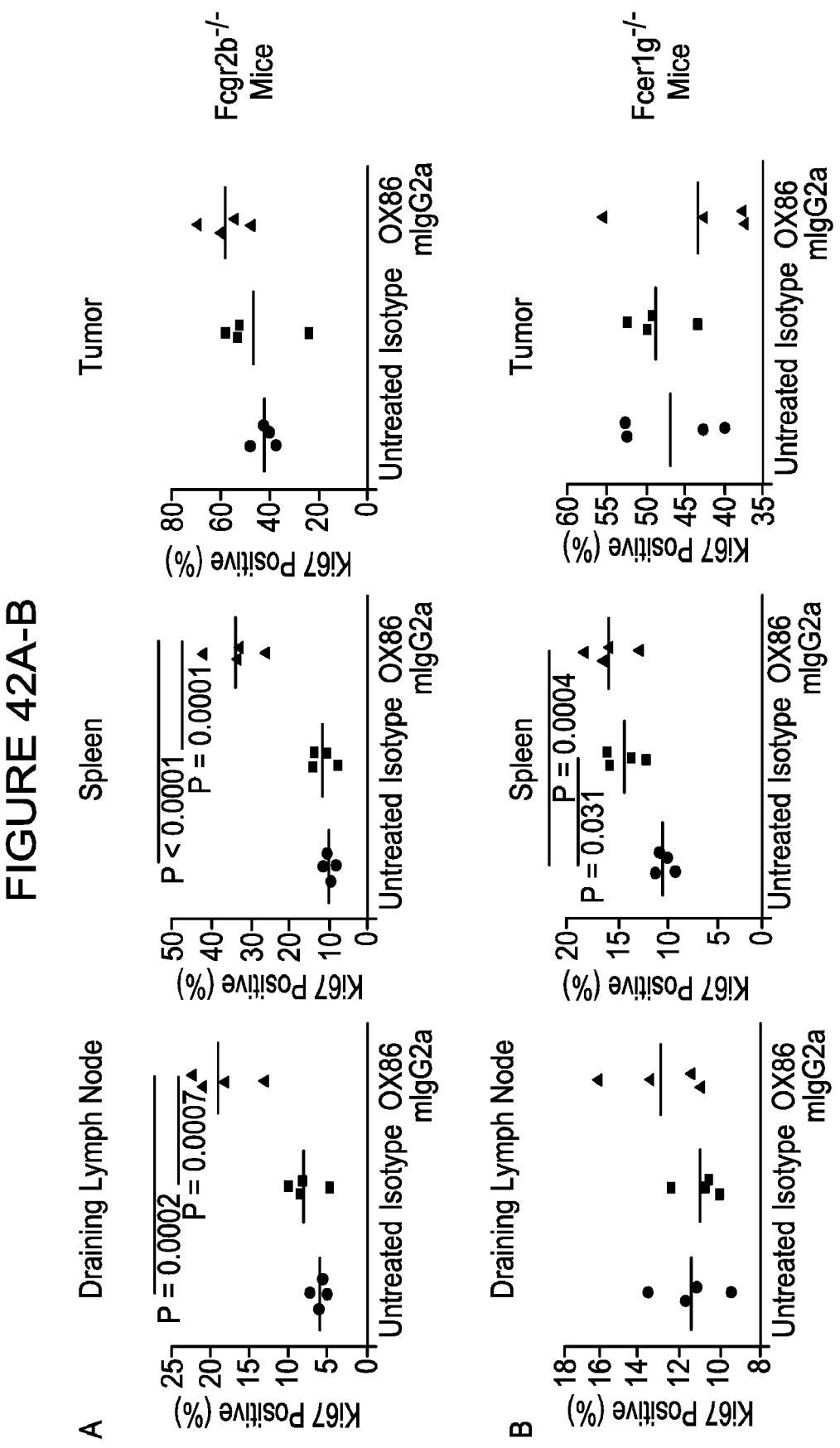

A
Draining Lymph Node
Spleen
Tumor
Fcgr2b-/- Mice
B
Draining Lymph Node
Spleen
Tumor
Fcer1g-/- Mice
Ki67 Positive (%)
P = 0.0002
P = 0.0007
P < 0.0001
P = 0.0001
P = 0.031
P = 0.0004
Untreated
Isotype
OX86
mIgG2a

FIGURE 43A-B

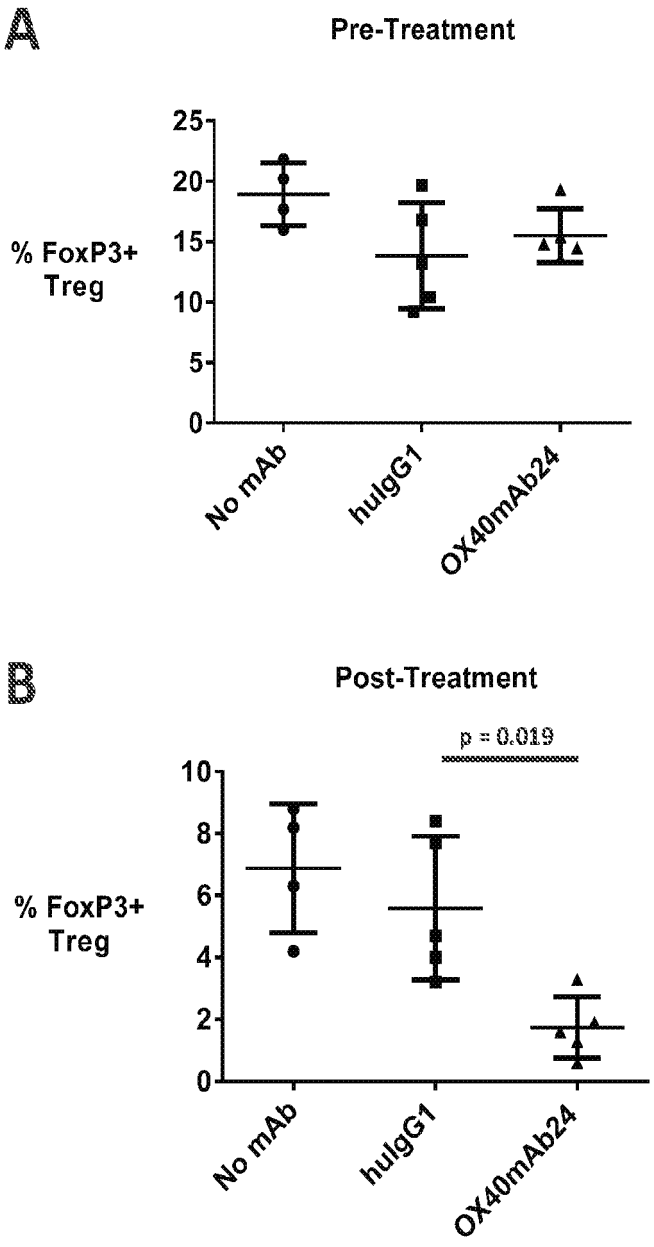

A
Pre-Treatment
% FoxP3+ Treg
25
20
15
10
5
0
No mAb
huIgG1
OX40mAb24
B
Post-Treatment
p = 0.019
% FoxP3+ Treg
10
8
6
4
2
0
No mAb
huIgG1
OX40mAb24

FIGURE 44A-D

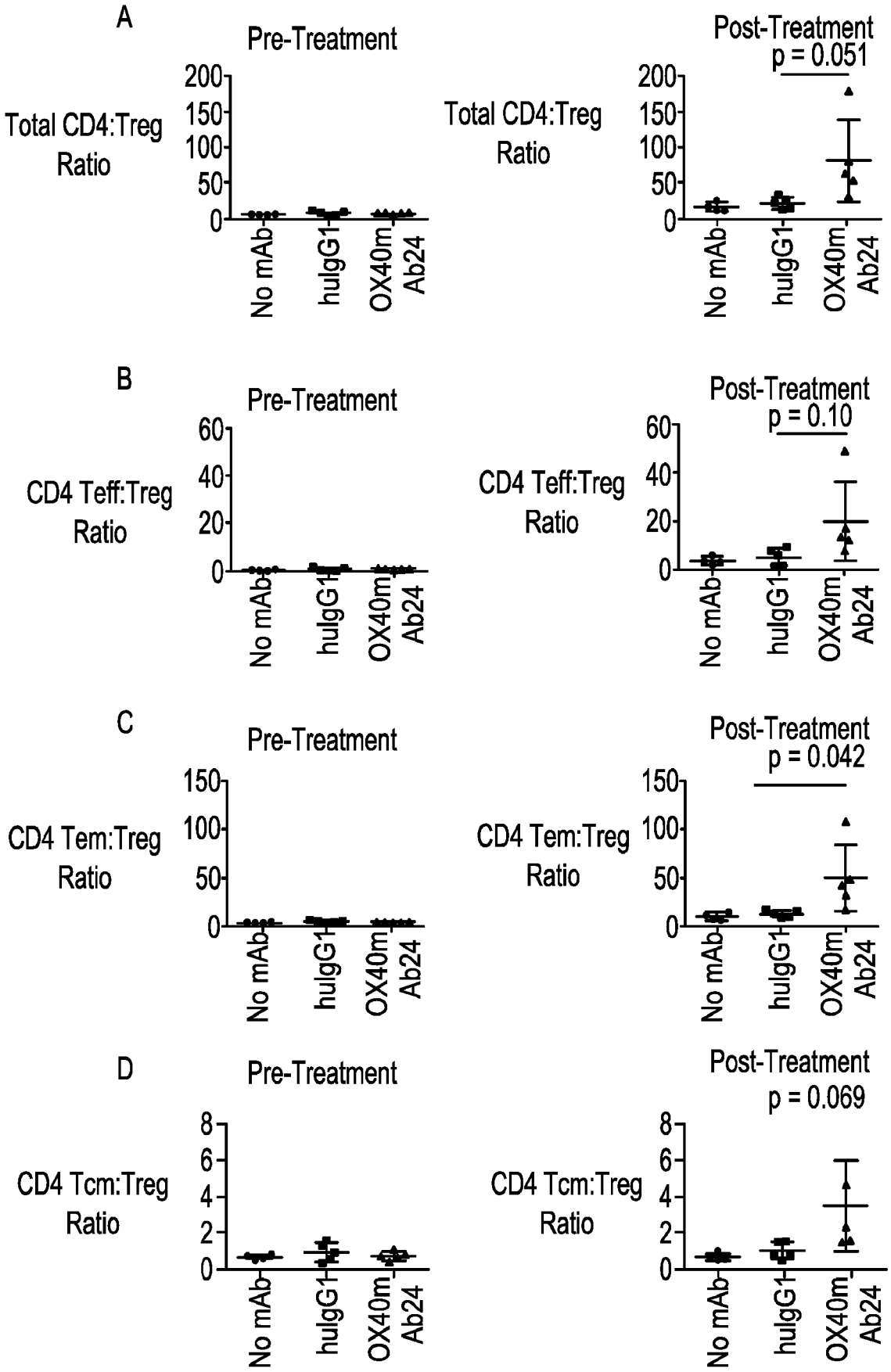

A
Pre-Treatment
Post-Treatment
p = 0.051
Total CD4:Treg Ratio
200
150
100
50
0
No mAb
huIgG1
OX40m Ab24
B
Pre-Treatment
Post-Treatment
p = 0.10
CD4 Teff:Treg Ratio
60
40
20
0
C
Pre-Treatment
Post-Treatment
p = 0.042
CD4 Tem:Treg Ratio
150
100
50
0
D
Pre-Treatment
Post-Treatment
p = 0.069
CD4 Tcm:Treg Ratio
8
6
4
2
0

FIGURE 45A-B

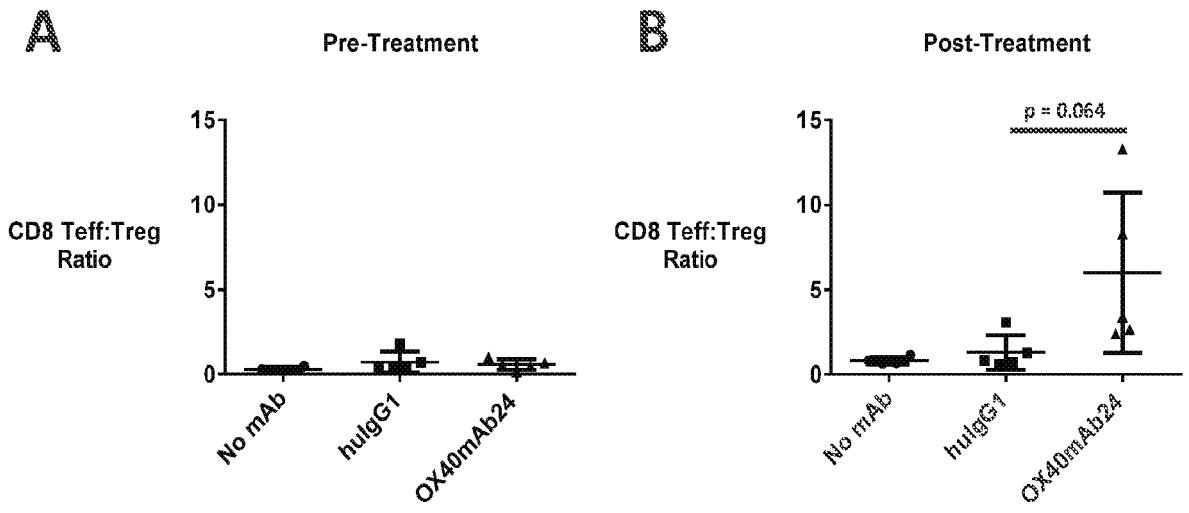
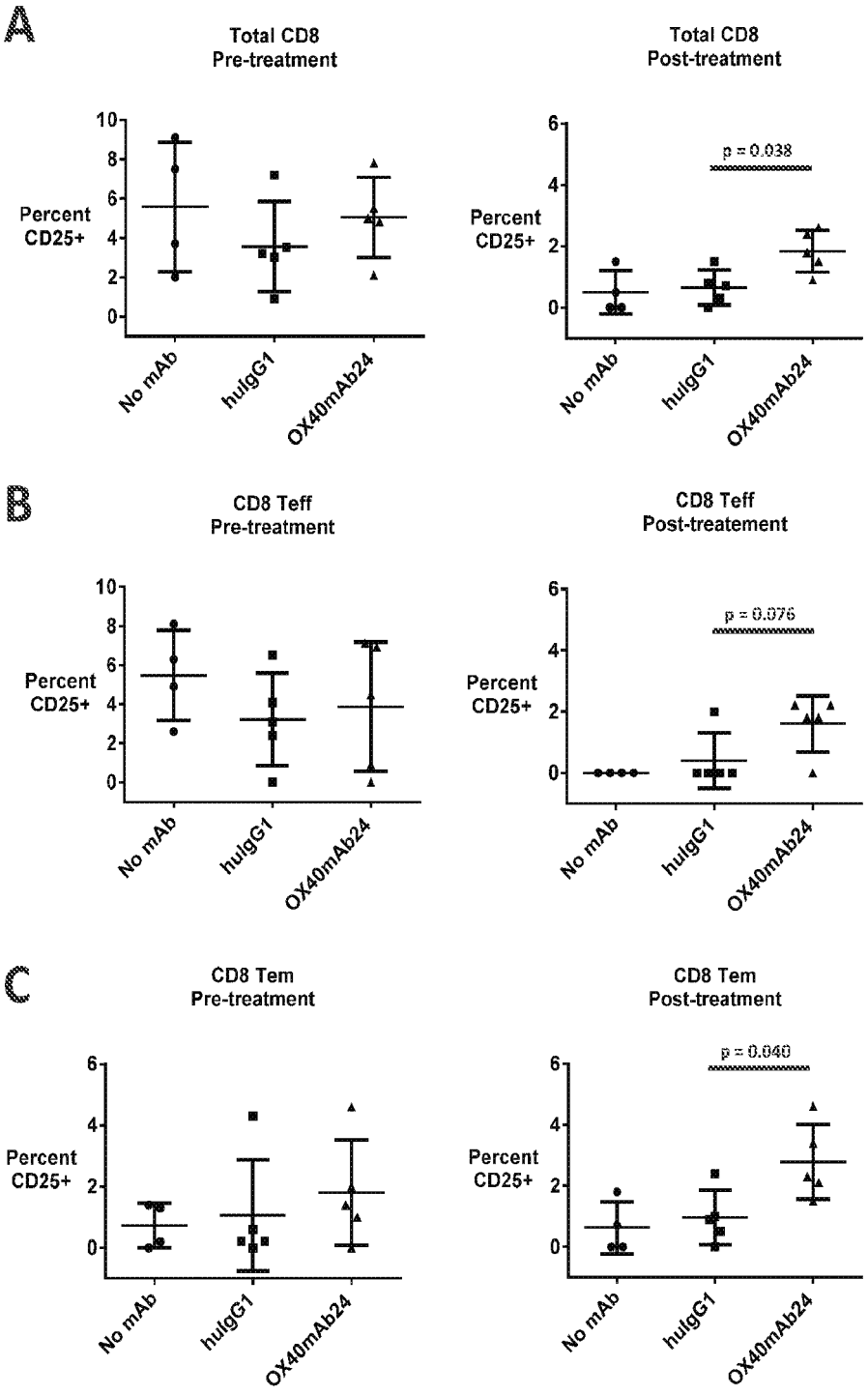

A
Pre-Treatment
CD8 Teff:Treg Ratio
15
10
5
0
No mAb
huIgG1
OX40mAb24
B
Post-Treatment
p = 0.064
CD8 Teff:Treg Ratio
15
10
5
0
No mAb
huIgG1
OX40mAb24

FIGURE 46A-C


A
Total CD8
Pre-treatment
Percent
CD25+
10
8
6
4
2
0
No mAb
huIgG1
OX40mAb24
Total CD8
Post-treatment
p = 0.038
Percent
CD25+
6
4
2
0
No mAb
huIgG1
OX40mAb24
B
CD8 Teff
Pre-treatment
Percent
CD25+
10
8
6
4
2
0
No mAb
huIgG1
OX40mAb24
CD8 Teff
Post-treatement
p = 0.076
Percent
CD25+
6
4
2
0
No mAb
huIgG1
OX40mAb24
C
CD8 Tem
Pre-treatment
Percent
CD25+
6
4
2
0
No mAb
huIgG1
OX40mAb24
CD8 Tem
Post-treatment
p = 0.040
Percent
CD25+
6
4
2
0
No mAb
huIgG1
OX40mAb24