FIG. 1

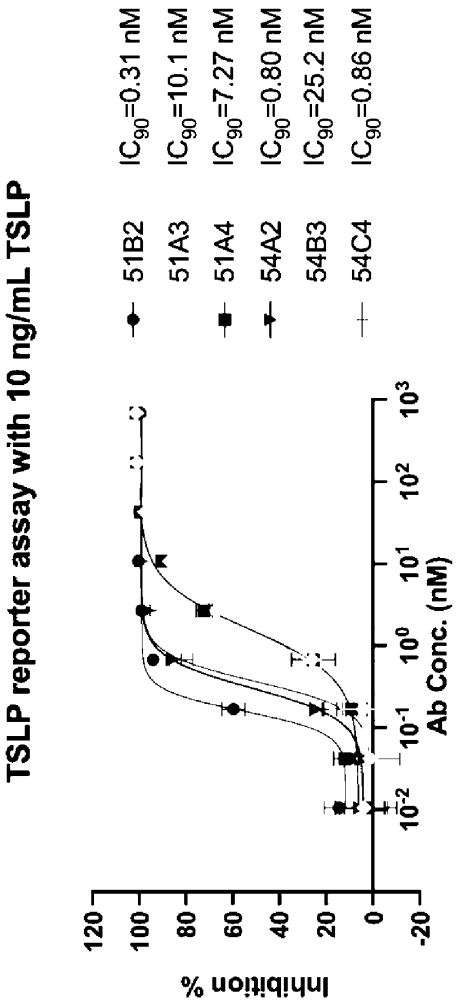

TSLP reporter assay with 10 ng/mL TSLP
51B2 IC90=0.31 nM
51A3 IC90=10.1 nM
51A4 IC90=7.27 nM
54A2 IC90=0.80 nM
54B3 IC90=25.2 nM
54C4 IC90=0.86 nM
Inhibition %
120
100
80
60
40
20
0
-20
10-2
10-1
100
101
102
103
Ab Conc. (nM)

FIG. 2

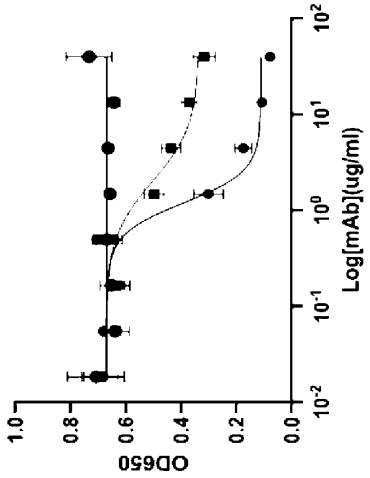


FIG. 3A

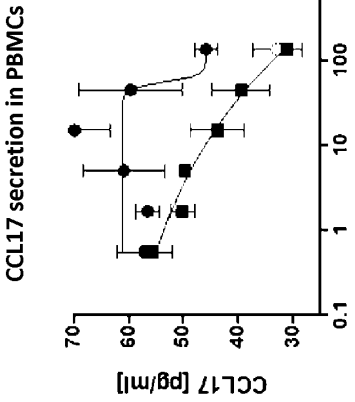


FIG. 3B

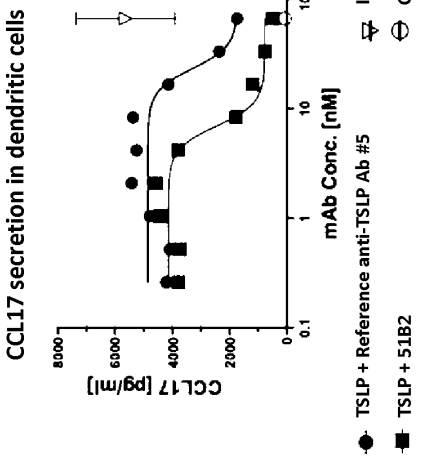


FIG. 4

Initial Identification of Top hz51B2 Leads in TSLP-Blocking Report Assay

Samples used in the assay: ProA pools from 4 ml small scale transient transfections

huTSLP	CH51B2	L1H1	L1H2	L1H9	L1H10	L2H1	L2H2	L2H4	L2H6	L2H9	L2H10	L3H1	L3H3	L3H4	L3H8	L3H9	L3H10	L4H1	L4H7	L4H8	L4H9	L4H10
IC_{50} (nM)	0.3349	0.9809	0.6173	0.5429	0.5923	0.7288	0.5871	0.5728	0.7098	0.4776	0.4931	0.6082	0.9968	1.032	0.9177	0.3546	0.6331	1.001	1.113	0.9694	0.4971	0.6302
IC_{90} (nM)	0.9911	5.249	3.373	1.651	0.9891	2.948	1.603	5.772	5.831	1.662	2.731	4.396	5.859	7.912	6.394	1.524	1.989	4.302	6.645	14.51	1.866	2.434

cyTSLP	CH51B2	L1H1	L1H2	L1H9	L1H10	L2H1	L2H2	L2H4	L2H6	L2H9	L2H10	L3H1	L3H3	L3H4	L3H8	L3H9	L3H10	L4H1	L4H7	L4H8	L4H9	L4H10
IC_{50} (nM)	32.81	N/A	154.9	128.6	117.3	159.2	110.9	172.0	167.4	63.37	103.0	252.4	N/A	1046	1267	78.81	122.9	290.5	N/A	361.7	66.40	107.9
IC_{90} (nM)	327.3	N/A	1403	2929	1600	1567	933.0	1009	1054	383.1	669.5	2569	N/A	26037	35768	2330	1284	2010	N/A	9754	643.4	342.7

FIG. 5A

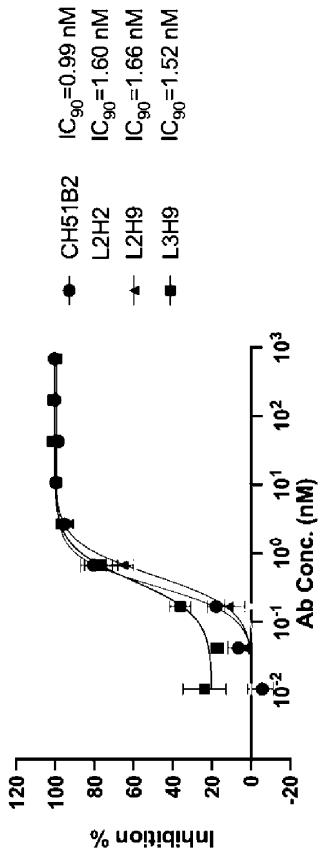

TSLP reporter assay with 10 ng/mL TSLP
CH51B2 IC90=0.99 nM
L2H2 IC90=1.60 nM
L2H9 IC90=1.66 nM
L3H9 IC90=1.52 nM
Inhibition %
120
100
80
60
40
20
0
-20
10-2 10-1 100 101 102 103
Ab Conc. (nM)

FIG. 5B

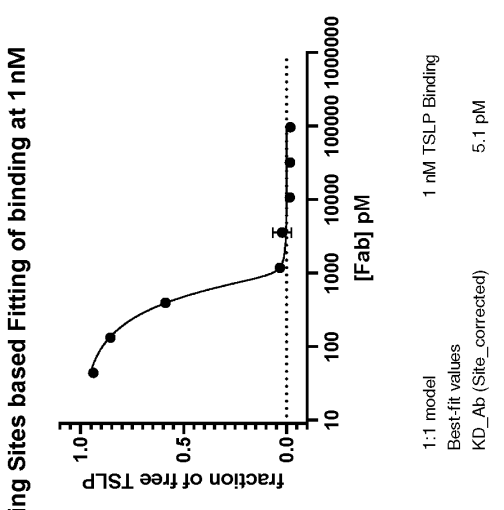

Binding Sites based Fitting of binding at 1 nM TSLP
fraction of free TSLP
1.0
0.5
0.0
10 100 1000 10000 100000 1000000
[Fab] pM
1:1 model
Best-fit values
KD_Ab (Site_corrected)
1 nM TSLP Binding
5.1 pM

FIG. 6B

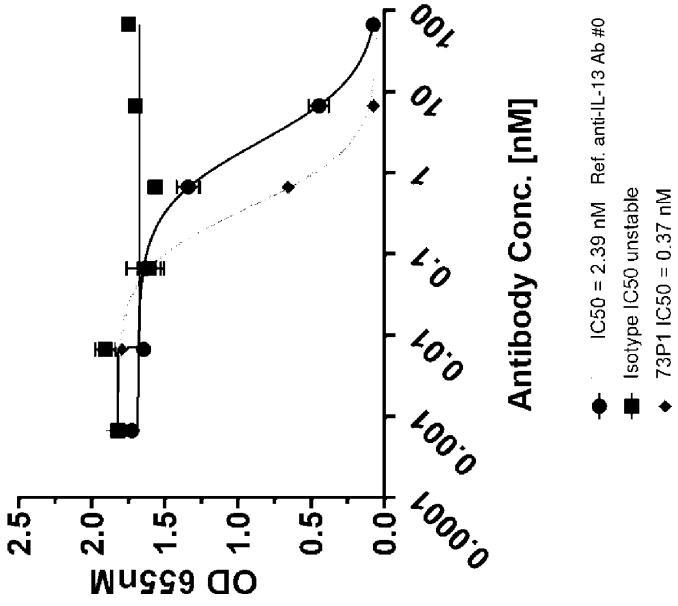

Cyno IL13
OD 655nM
2.5
2.0
1.5
1.0
0.5
0.0
0.0001
0.001
0.01
0.1
1
10
100
Antibody Conc. [nM]
IC50 = 2.39 nM Ref. anti-IL-13 Ab #0
Isotype IC50 unstable
73P1 IC50 = 0.37 nM

FIG. 6A

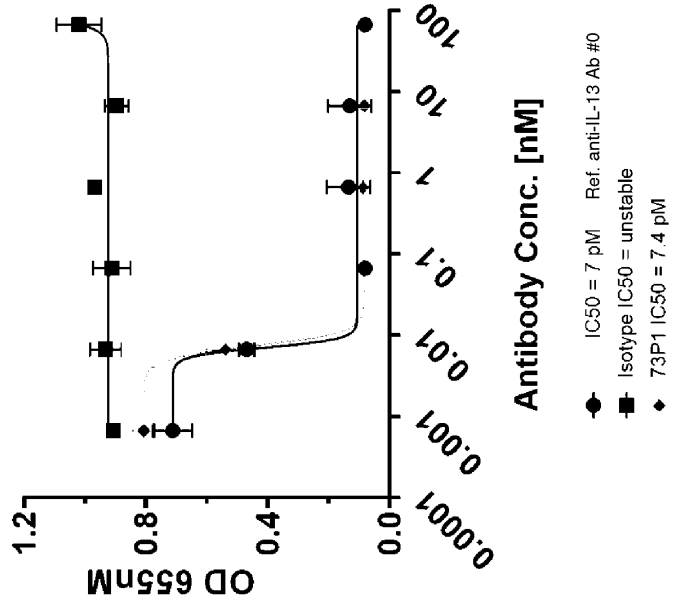

Human IL13
OD 655nM
1.2
0.8
0.4
0.0
0.0001
0.001
0.01
0.1
1
10
100
Antibody Conc. [nM]
IC50 = 7 pM Ref. anti-IL-13 Ab #0
Isotype IC50 = unstable
73P1 IC50 = 7.4 pM

FIG. 7A

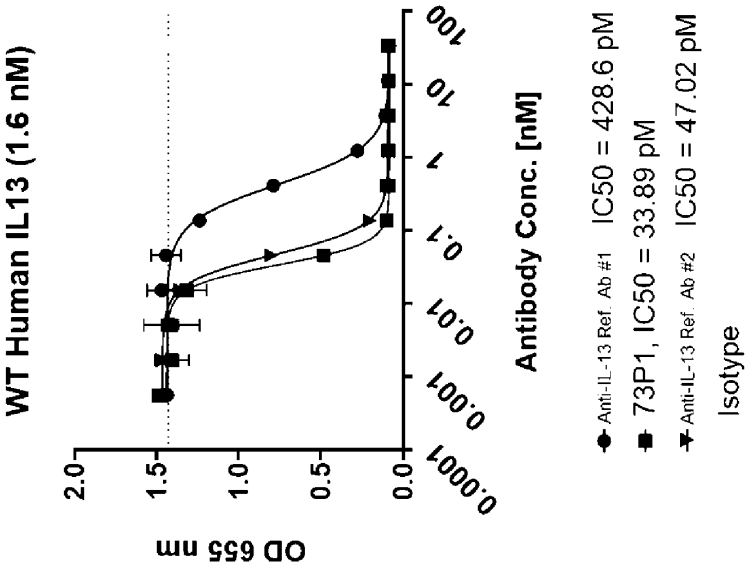

WT Human IL13 (1.6 nM)
OD 655 nm
2.0
1.5
1.0
0.5
0.0
0.0001
0.001
0.01
0.1
1
10
100
Antibody Conc. [nM]
Anti-IL-13 Ref. Ab #1 IC50 = 428.6 pM
73P1, IC50 = 33.89 pM
Anti-IL-13 Ref. Ab #2 IC50 = 47.02 pM
Isotype

FIG. 7B

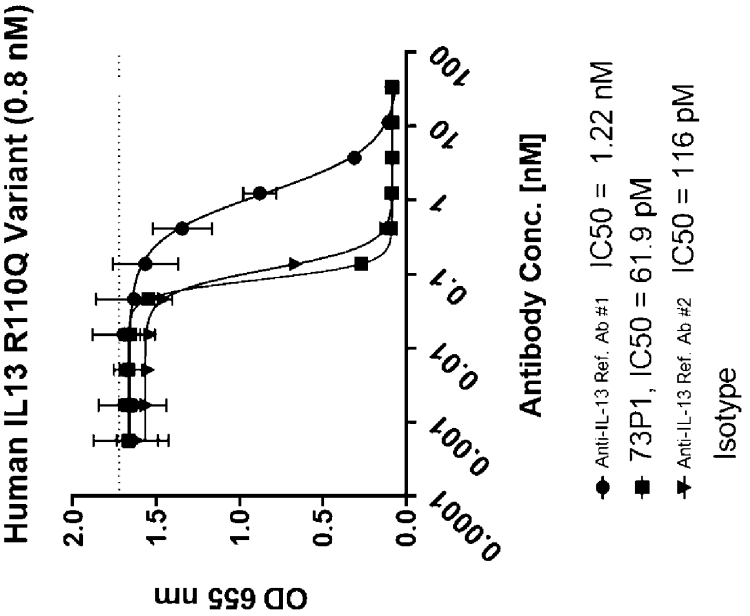

Human IL13 R110Q Variant (0.8 nM)
OD 655 nm
2.0
1.5
1.0
0.5
0.0
0.0001
0.001
0.01
0.1
1
10
100
Antibody Conc. [nM]
Anti-IL-13 Ref. Ab #1 IC50 = 1.22 nM
73P1, IC50 = 61.9 pM
Anti-IL-13 Ref. Ab #2 IC50 = 116 pM
Isotype

FIG. 8A
PX128-A

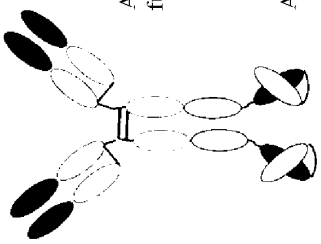


FIG. 8B
PX128-B

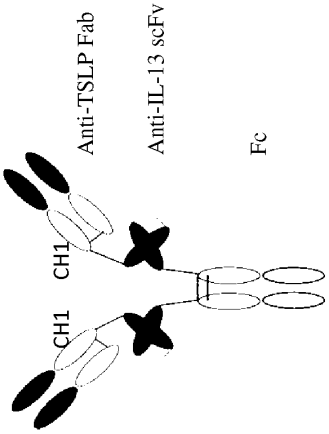


FIG. 8C
PX128-C

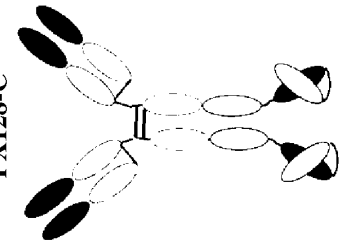


FIG. 8D
PX128-D

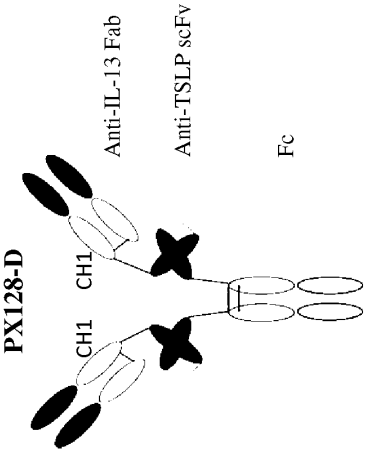


FIG. 9A

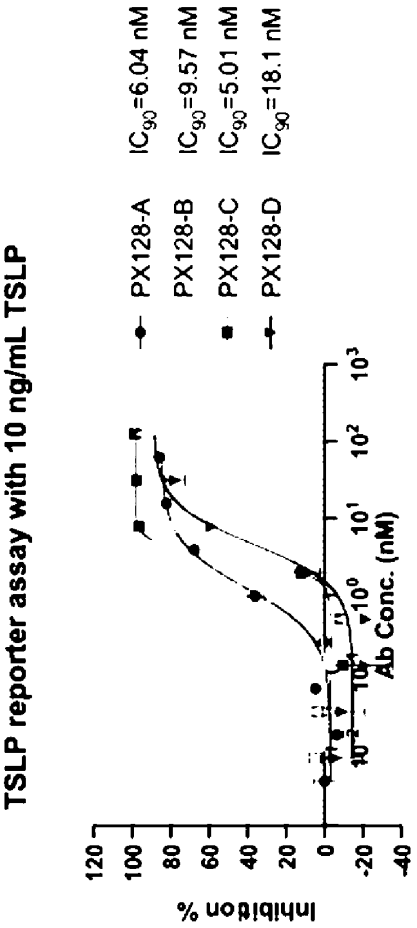

TSLP reporter assay with 10 ng/mL TSLP
PX128-A
PX128-B
PX128-C
PX128-D
IC90=6.04 nM
IC90=9.57 nM
IC90=5.01 nM
IC90=18.1 nM
Inhibition %
Ab Conc. (nM)

FIG. 9B

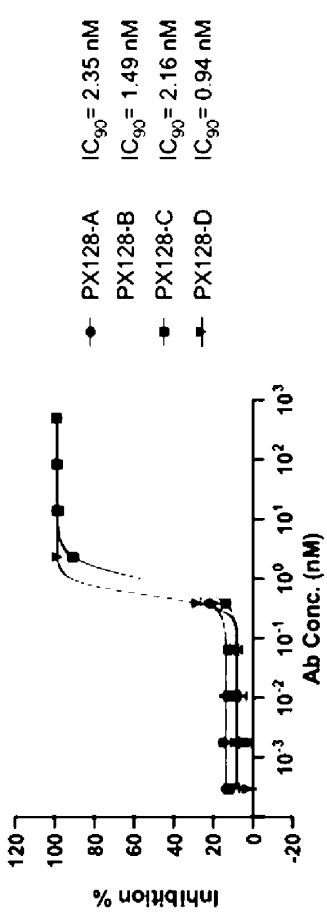

IL-13 reporter assay with 10 ng/mL IL-13
PX128-A
PX128-B
PX128-C
PX128-D
IC90= 2.35 nM
IC90= 1.49 nM
IC90= 2.16 nM
IC90= 0.94 nM
Inhibition %
Ab Conc. (nM)

FIG. 10

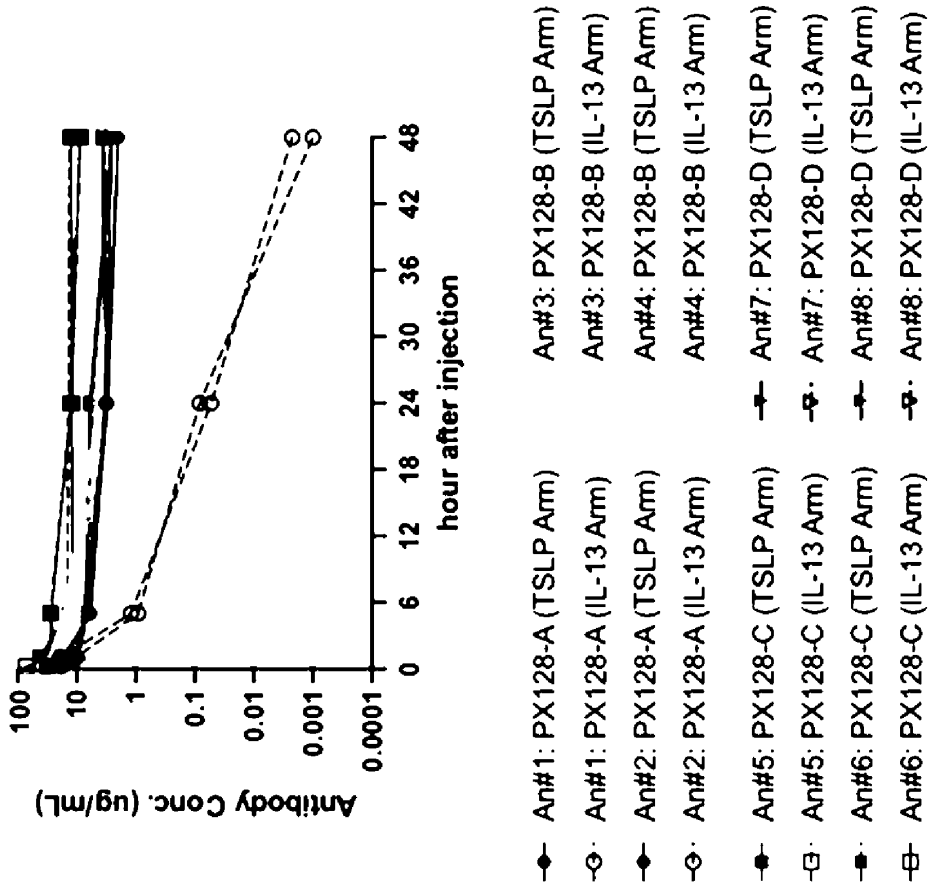

Antibody Conc. (ug/mL)
100
10
1
0.1
0.01
0.001
0.0001
0
6
12
18
24
30
36
42
48
hour after injection
An#1: PX128-A (TSLP Arm)
An#1: PX128-A (IL-13 Arm)
An#2: PX128-A (TSLP Arm)
An#2: PX128-A (IL-13 Arm)
An#5: PX128-C (TSLP Arm)
An#5: PX128-C (IL-13 Arm)
An#6: PX128-C (TSLP Arm)
An#6: PX128-C (IL-13 Arm)
An#3: PX128-B (TSLP Arm)
An#3: PX128-B (IL-13 Arm)
An#4: PX128-B (TSLP Arm)
An#4: PX128-B (IL-13 Arm)
An#7: PX128-D (TSLP Arm)
An#7: PX128-D (IL-13 Arm)
An#8: PX128-D (TSLP Arm)
An#8: PX128-D (IL-13 Arm)

FIG. 11A
PX128-I1

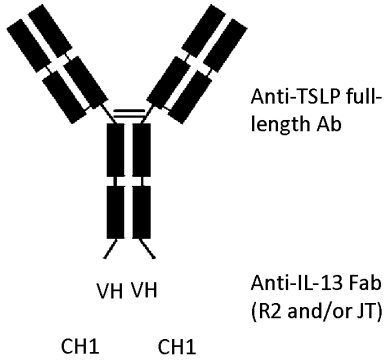


FIG. 11B
PX128-I2

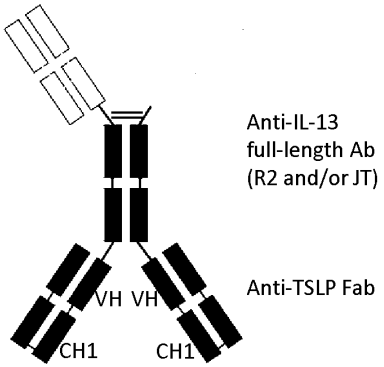


FIG. 11C
PX128-I3

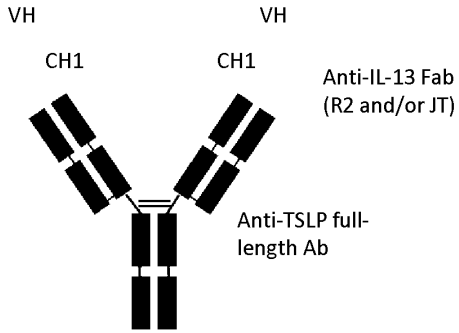


FIG. 11D
PX128-I4

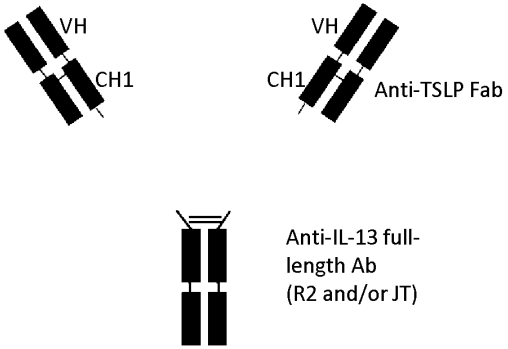


FIG. 12A

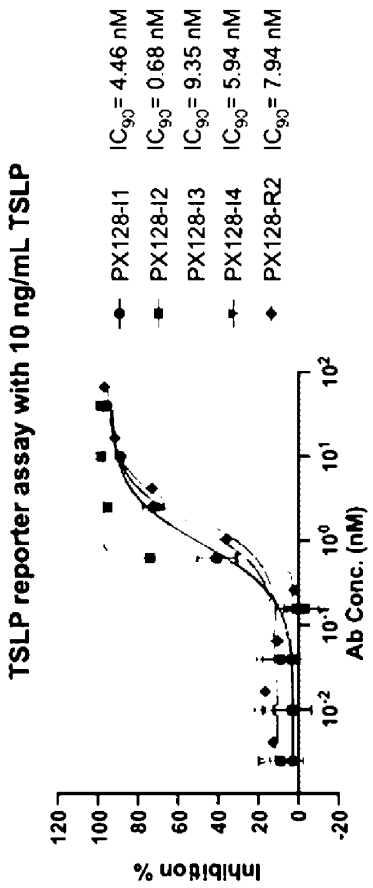


FIG. 12B

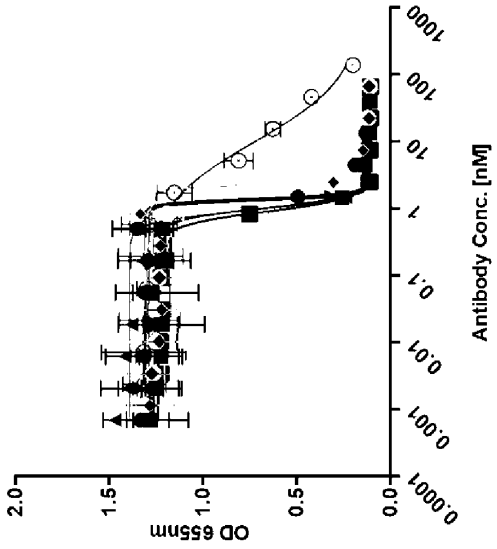


FIG. 13
PX128-R2

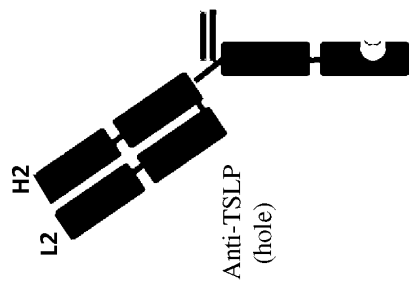


FIG. 14
PX128-JT

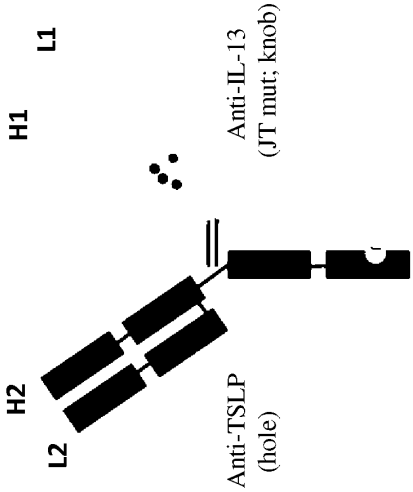


FIG. 15
PX128-JT/R2

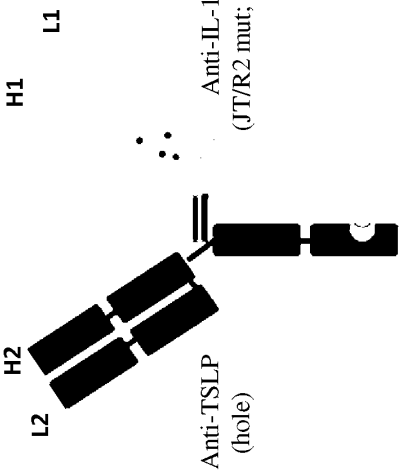


FIG. 16

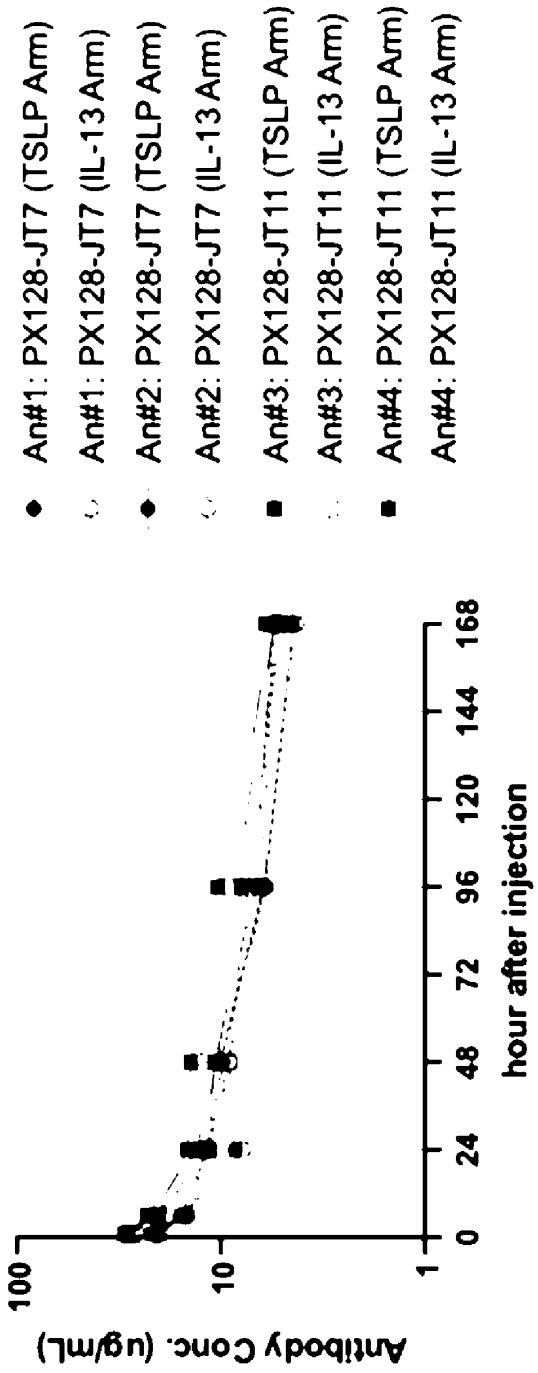

An#1: PX128-JT7 (TSLP Arm)
An#1: PX128-JT7 (IL-13 Arm)
An#2: PX128-JT7 (TSLP Arm)
An#2: PX128-JT7 (IL-13 Arm)
An#3: PX128-JT11 (TSLP Arm)
An#3: PX128-JT11 (IL-13 Arm)
An#4: PX128-JT11 (TSLP Arm)
An#4: PX128-JT11 (IL-13 Arm)
Antibody Conc. (ug/mL)
100
10
1
0
24
48
72
96
120
144
168
hour after injection

FIG. 17A

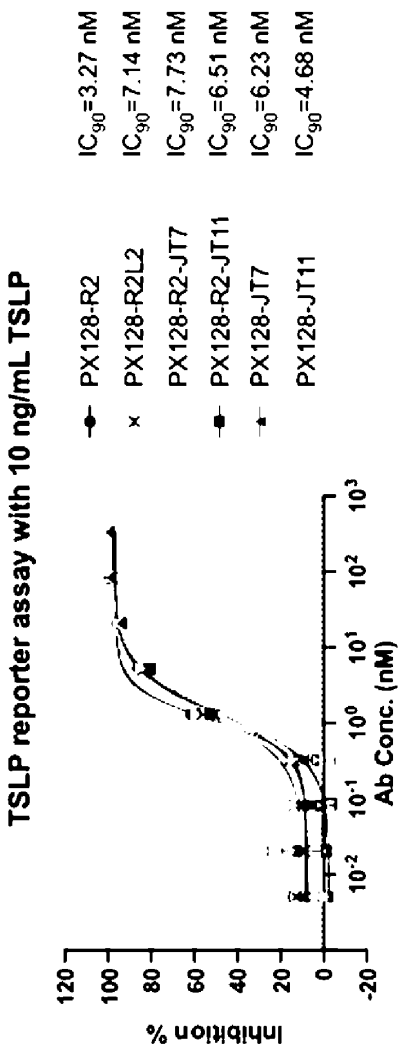


FIG. 17B

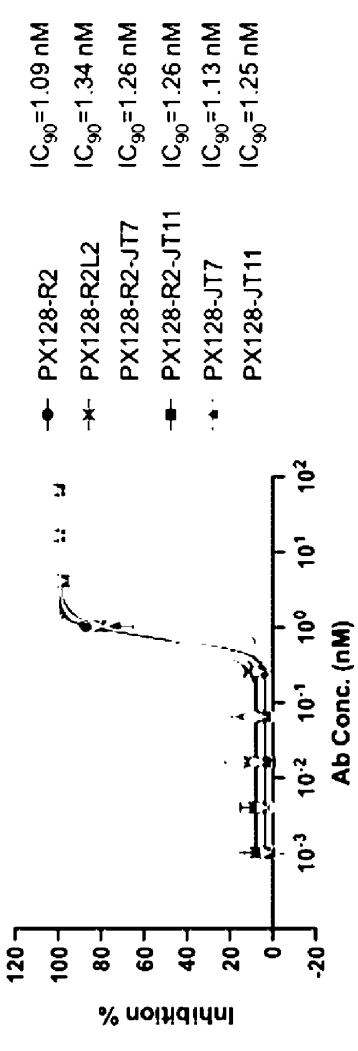


FIG. 18A

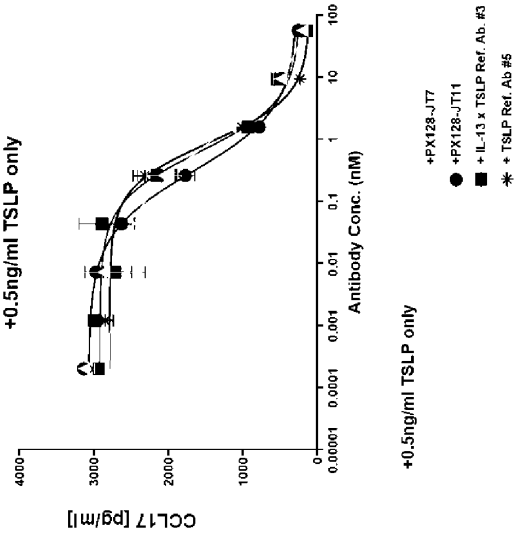


FIG. 18B

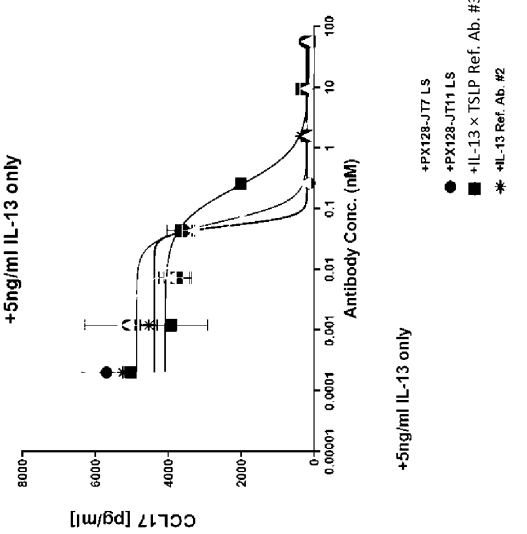


FIG. 18C

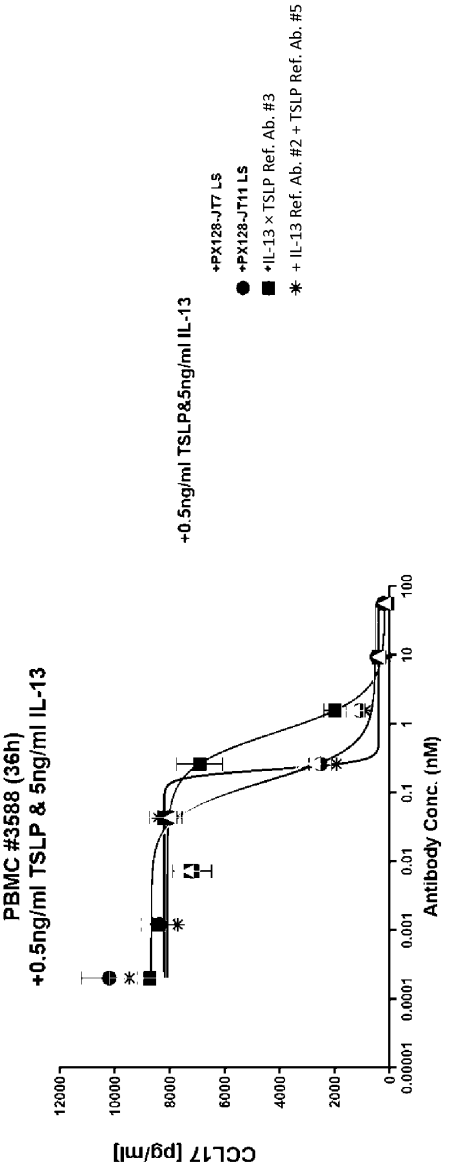
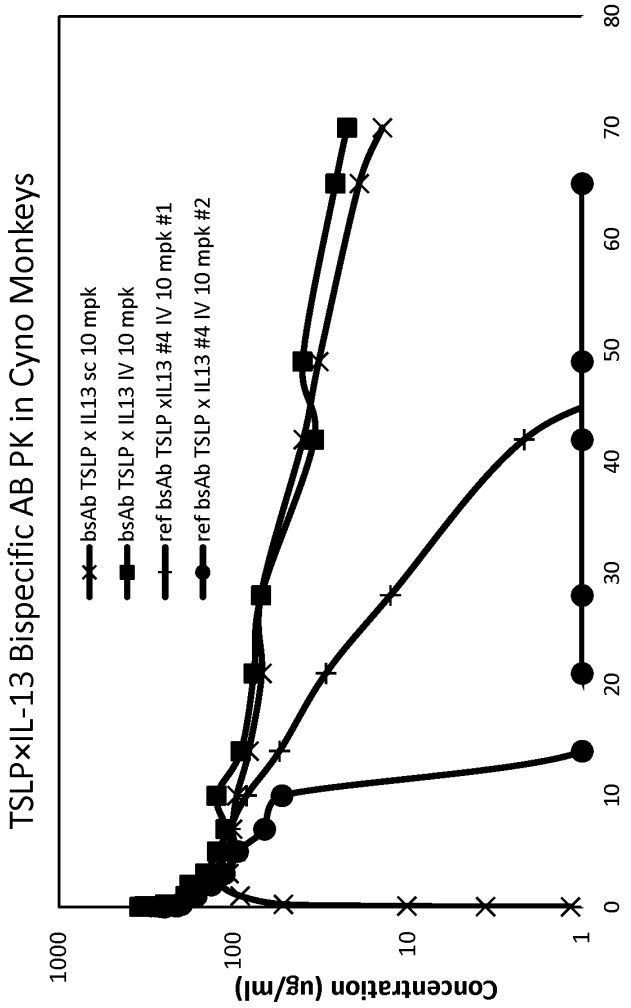


FIG. 19



Molecule	Half-life in Cyno
PX128-JT11 (IV)	26 days
IL-13×TSLP×HSA Ref. Ab. #4 (IV)	4.75 days