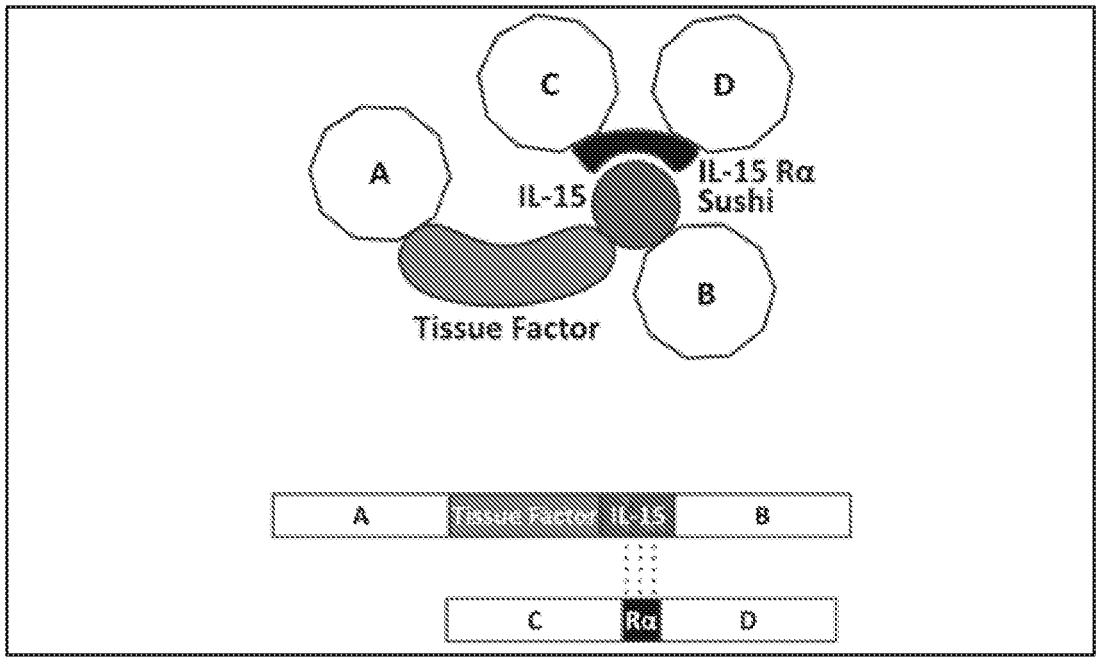


Figure 1

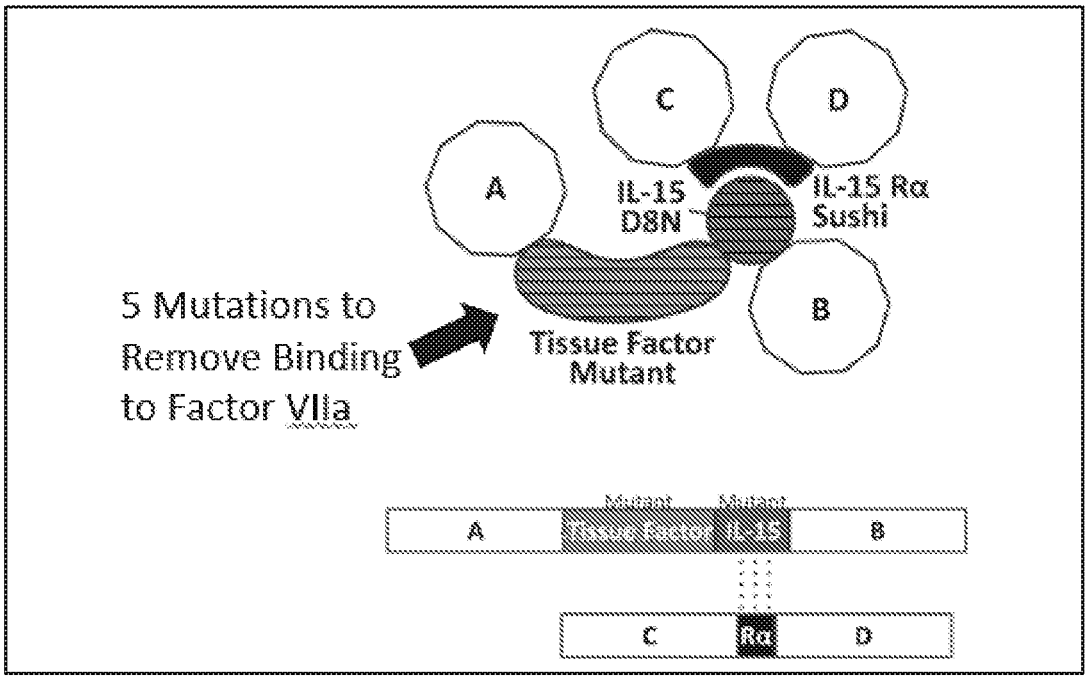


Figure 2



Figure 3



Figure 4

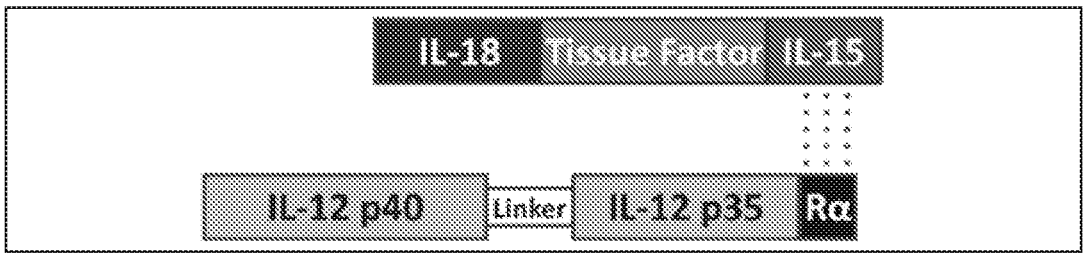


Figure 5

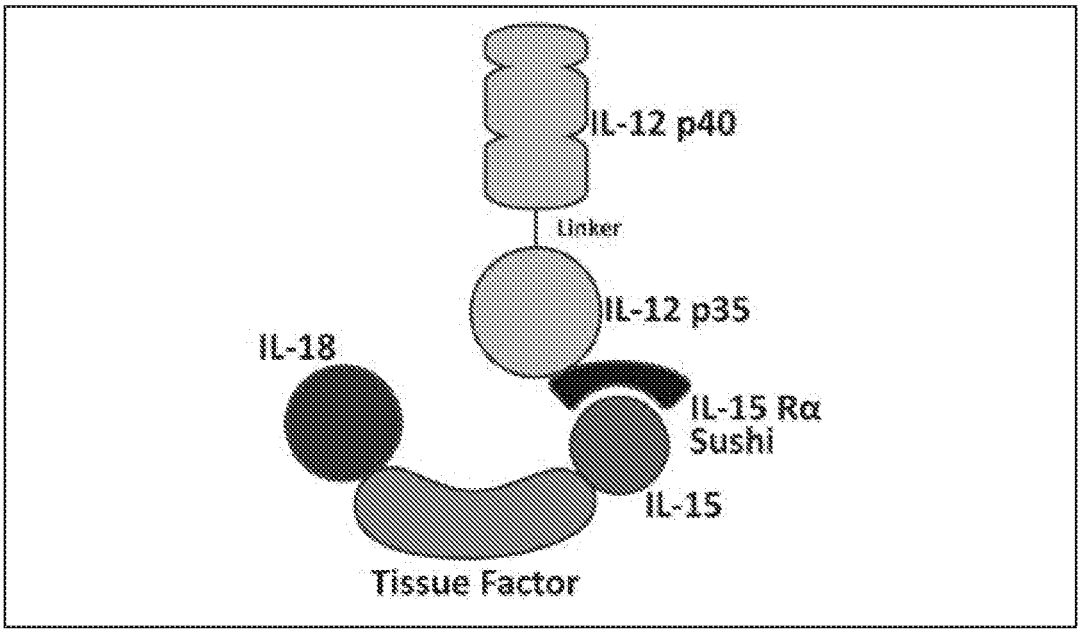


Figure 6

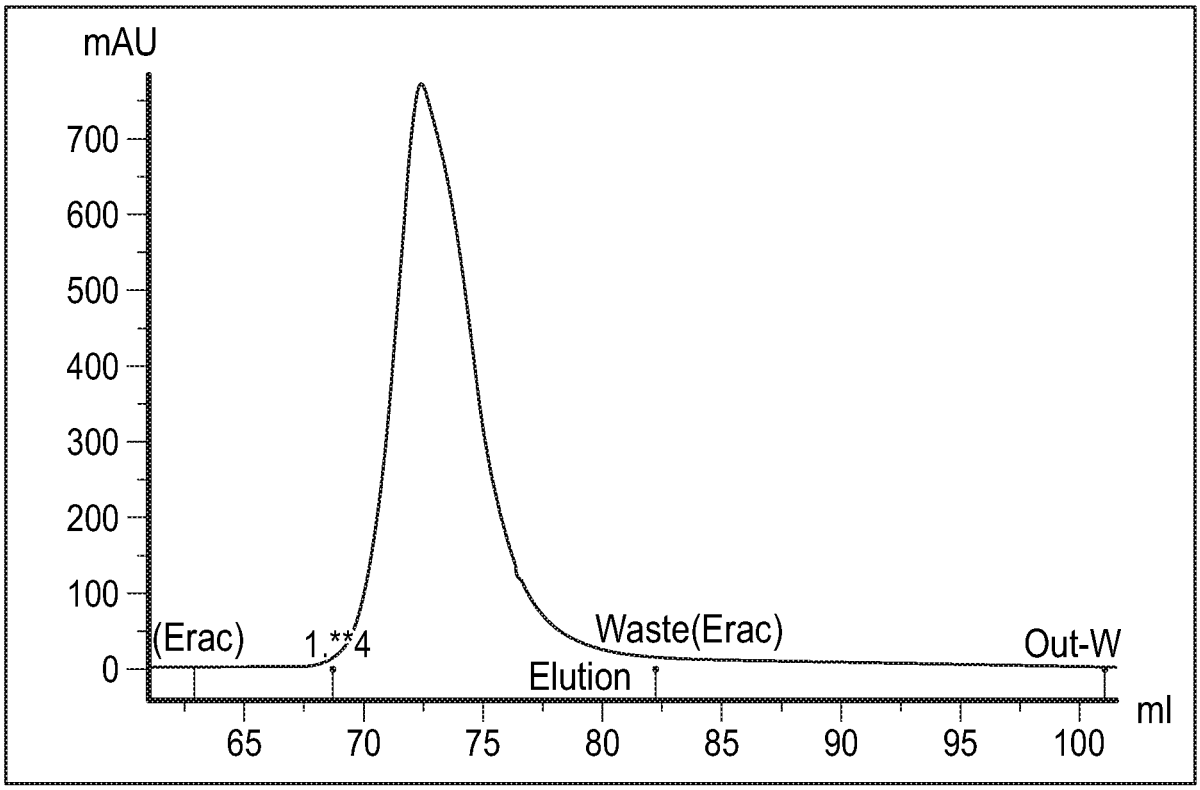


Figure 7

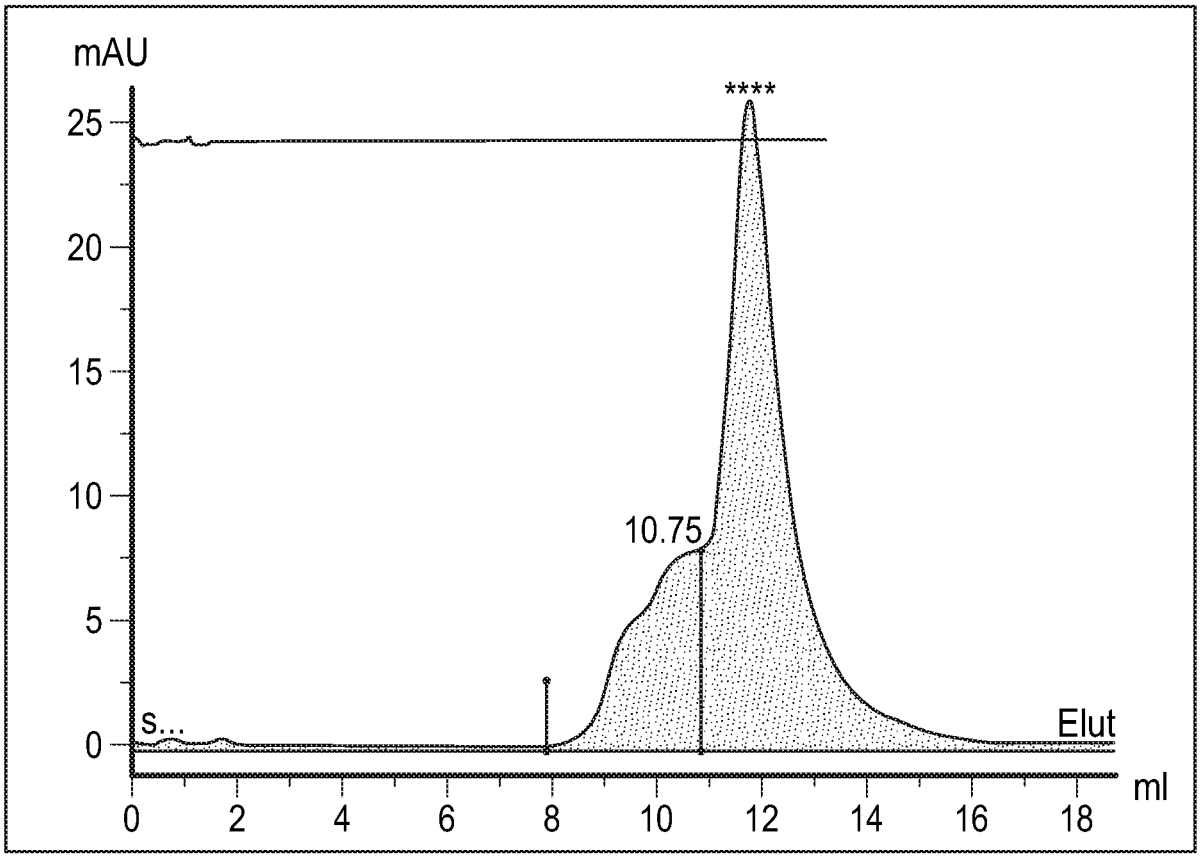


Figure 8

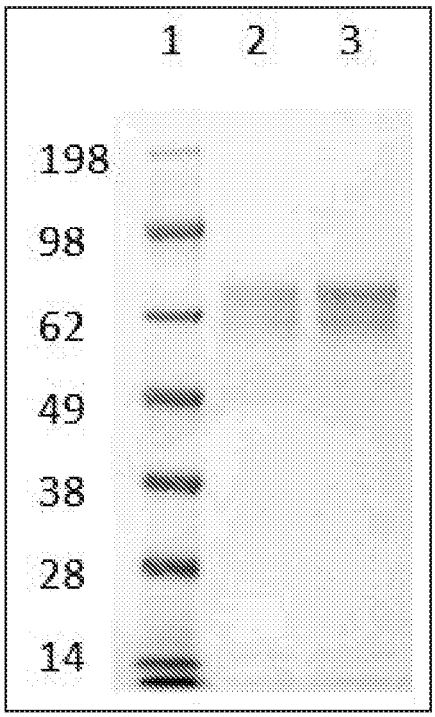


Figure 9

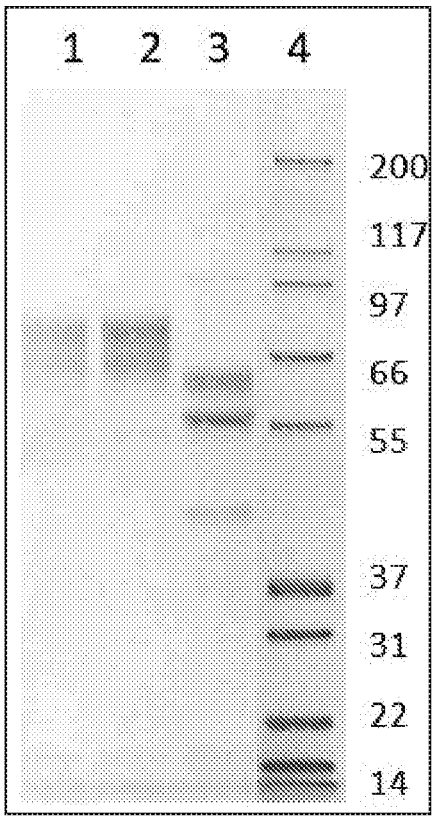


Figure 10

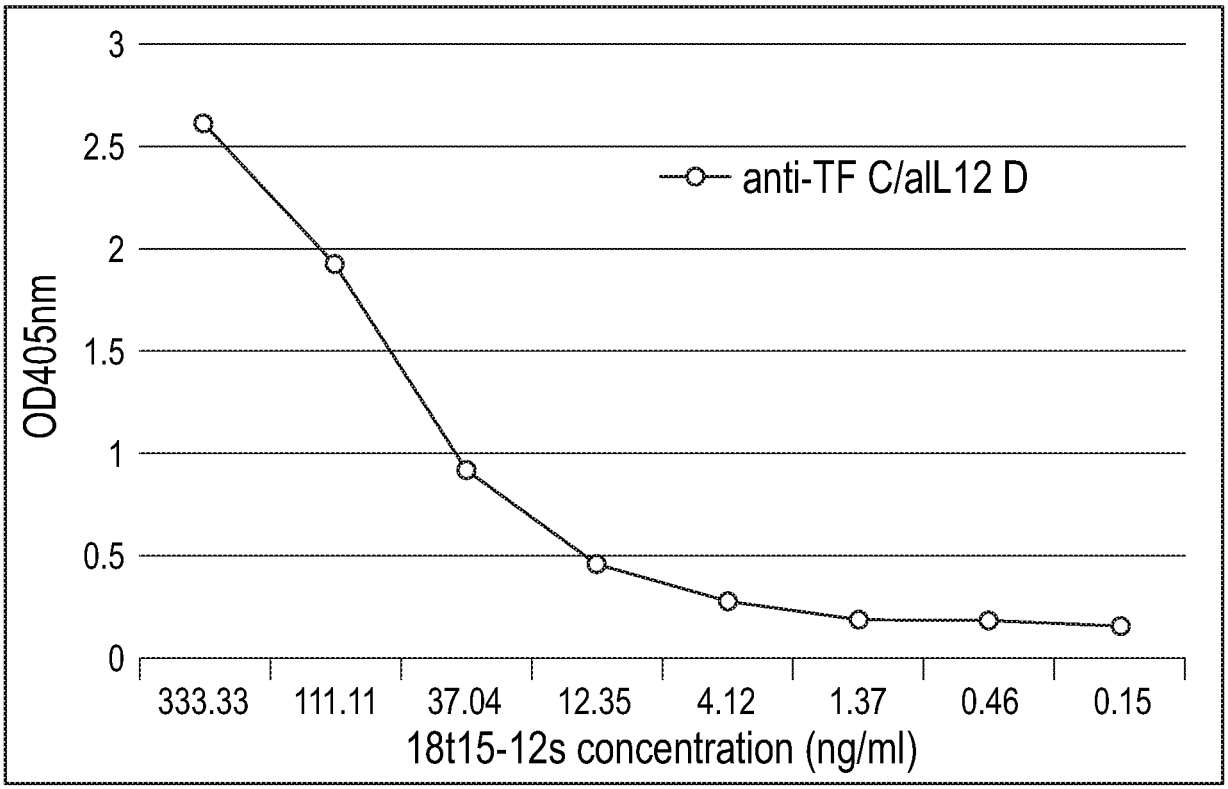


Figure 11

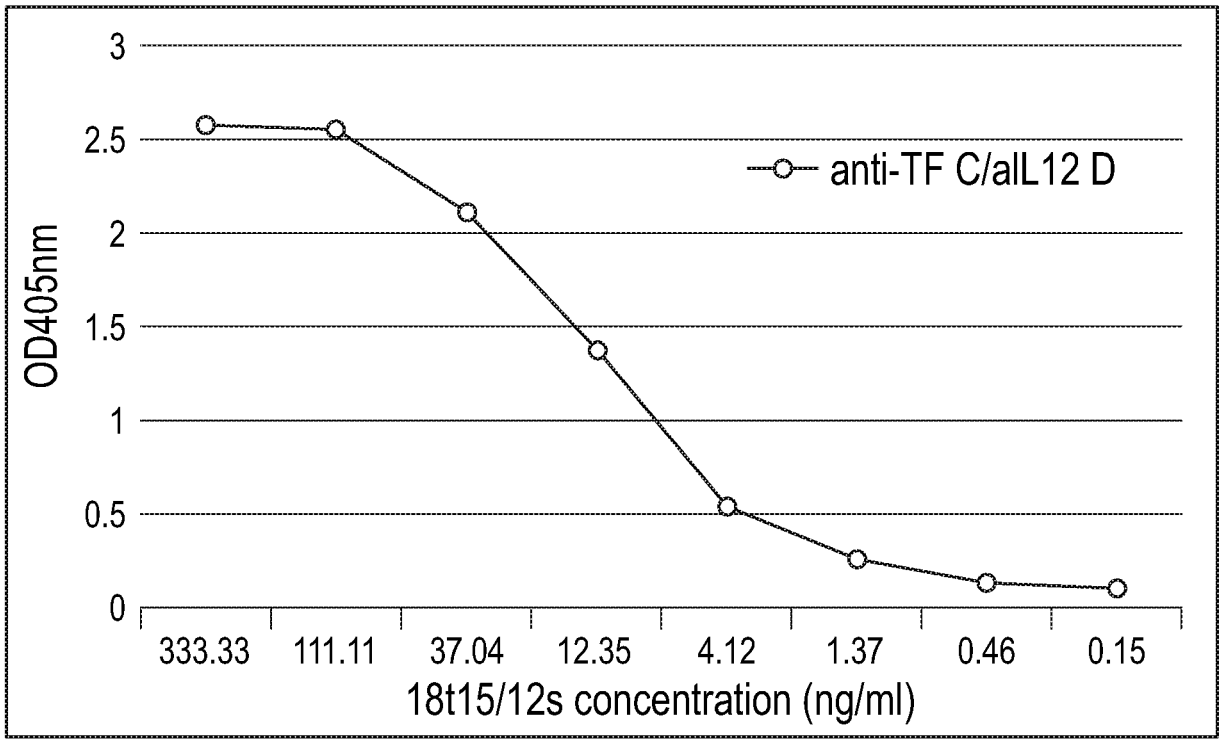


Figure 12

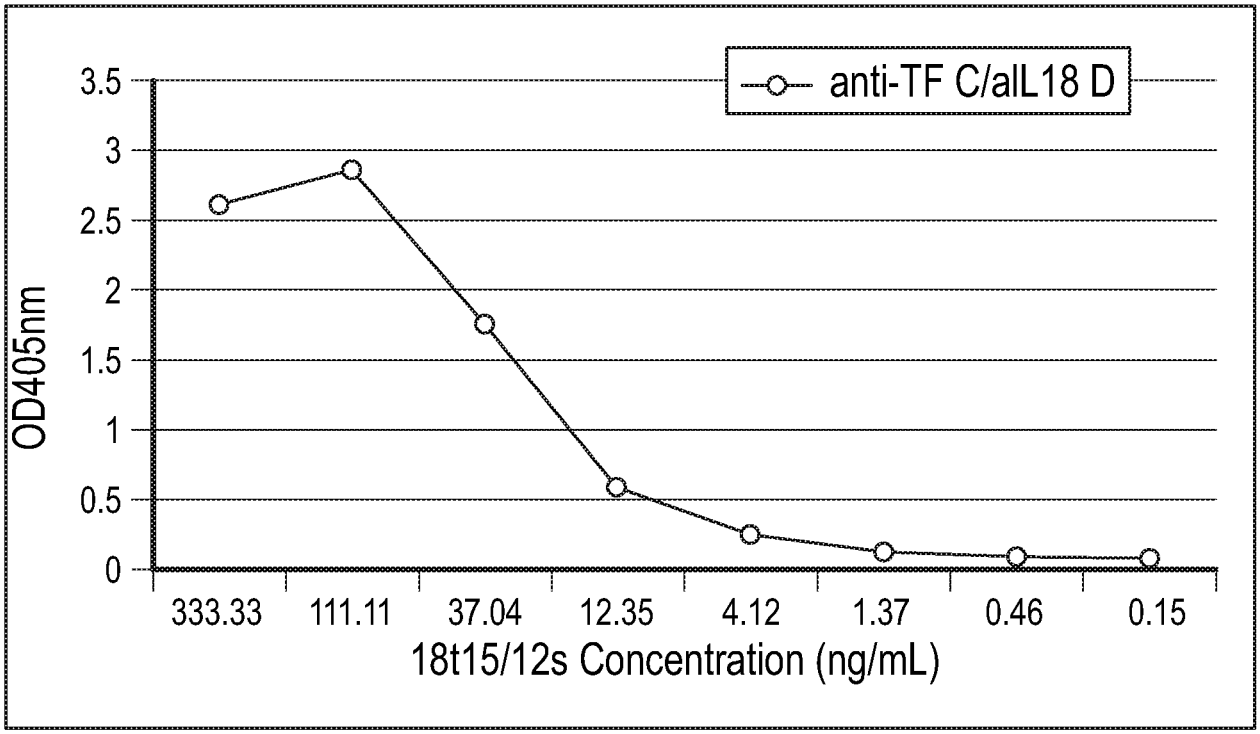


Figure 13

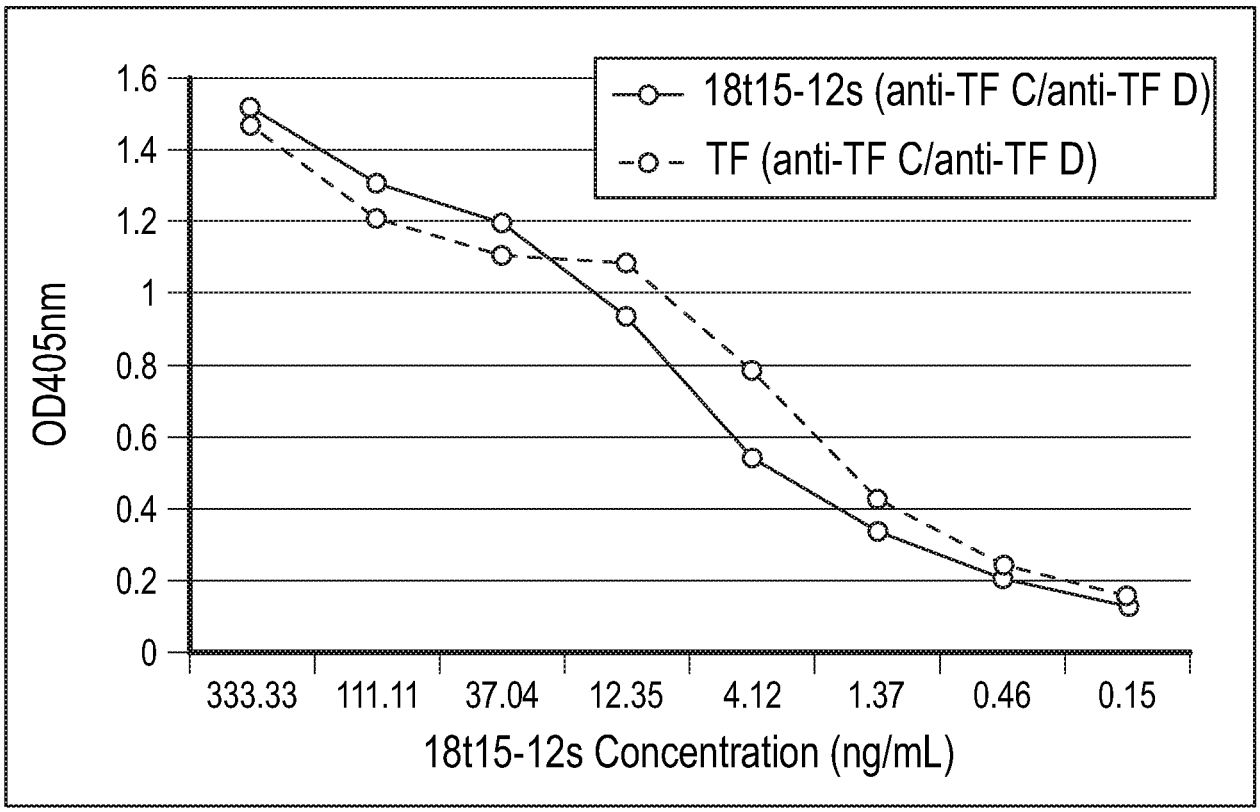


Figure 14

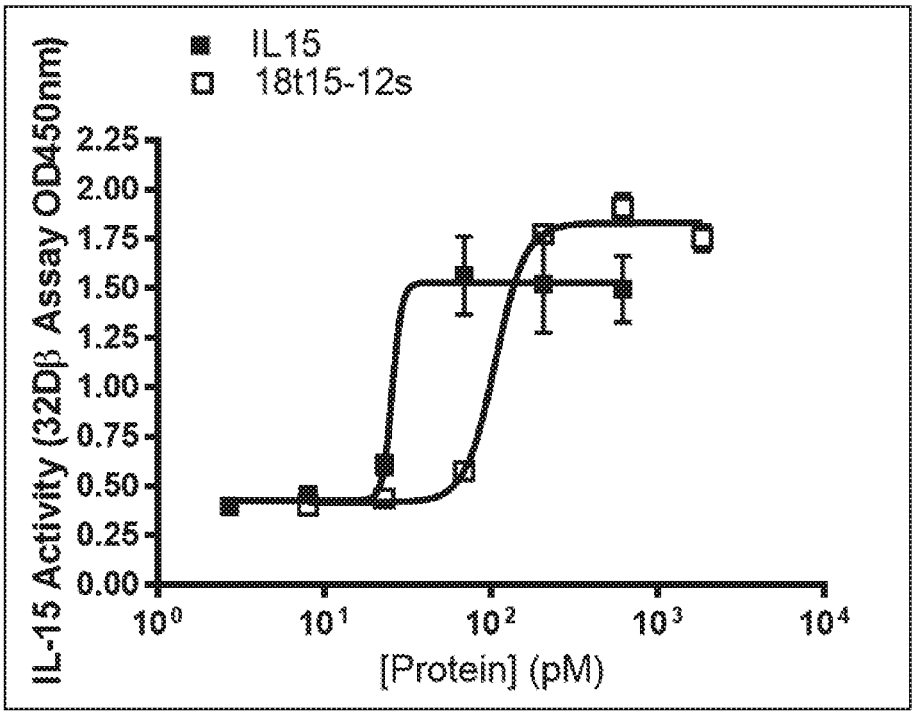


Figure 15

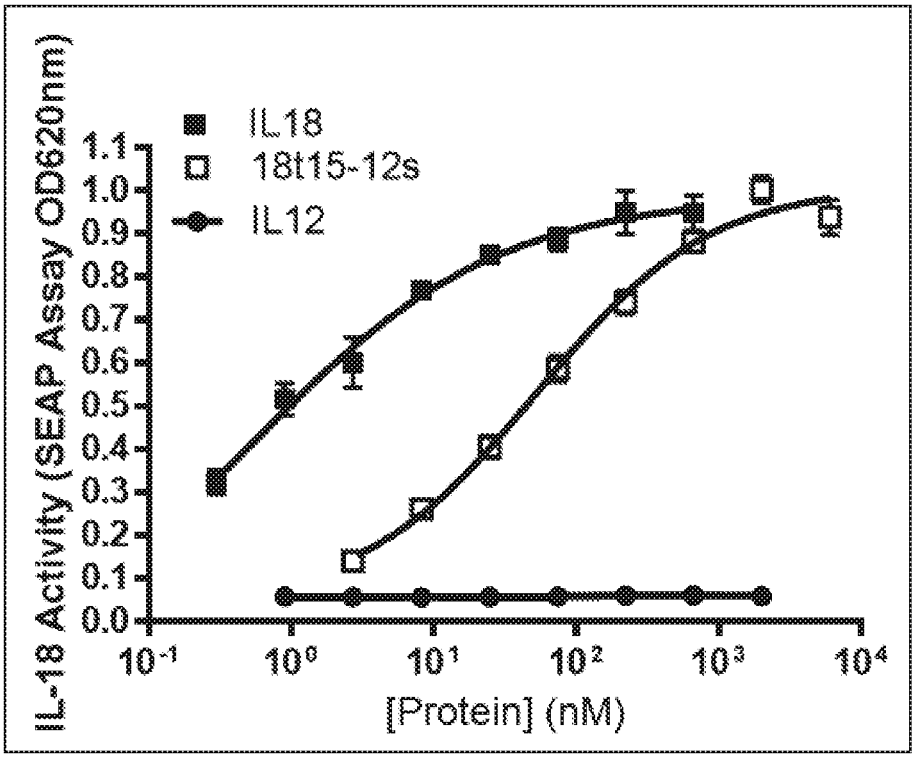


Figure 16

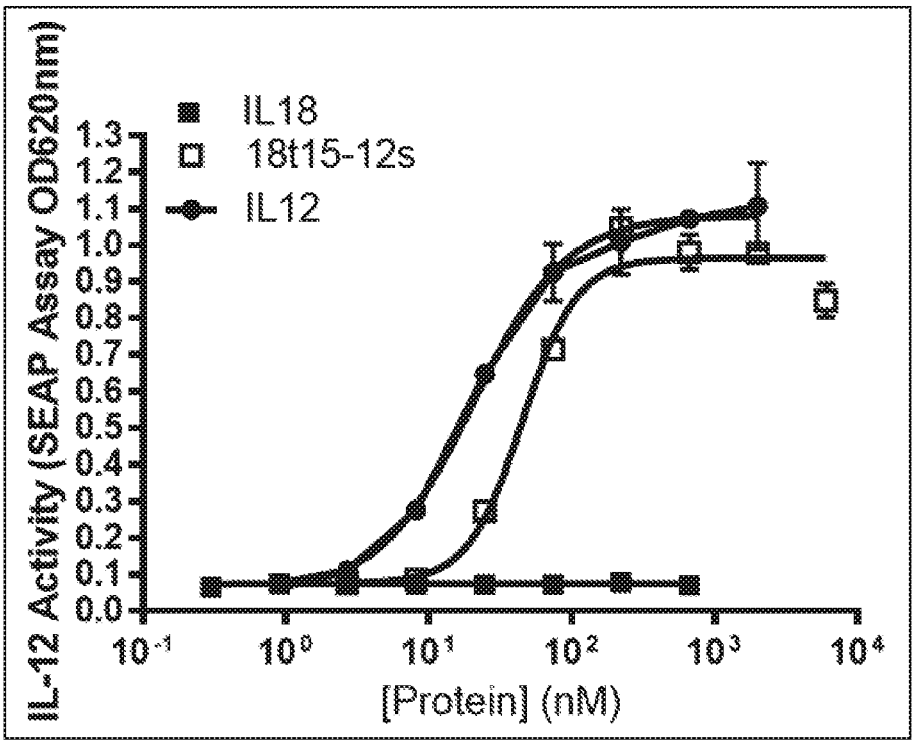


Figure 17

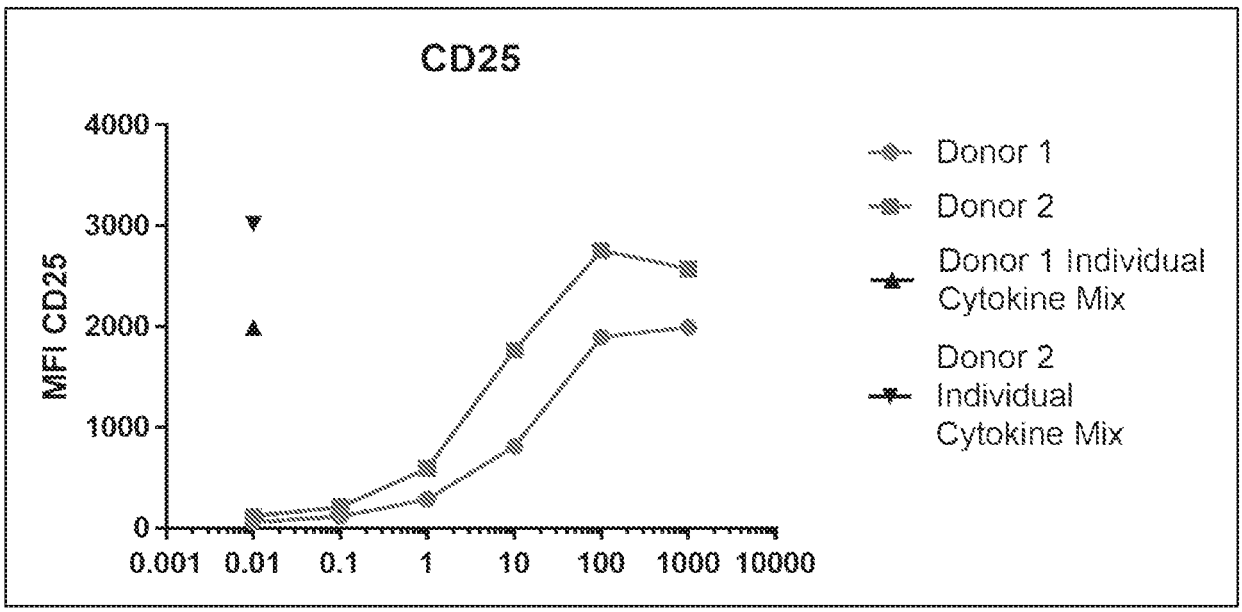


Figure 18A

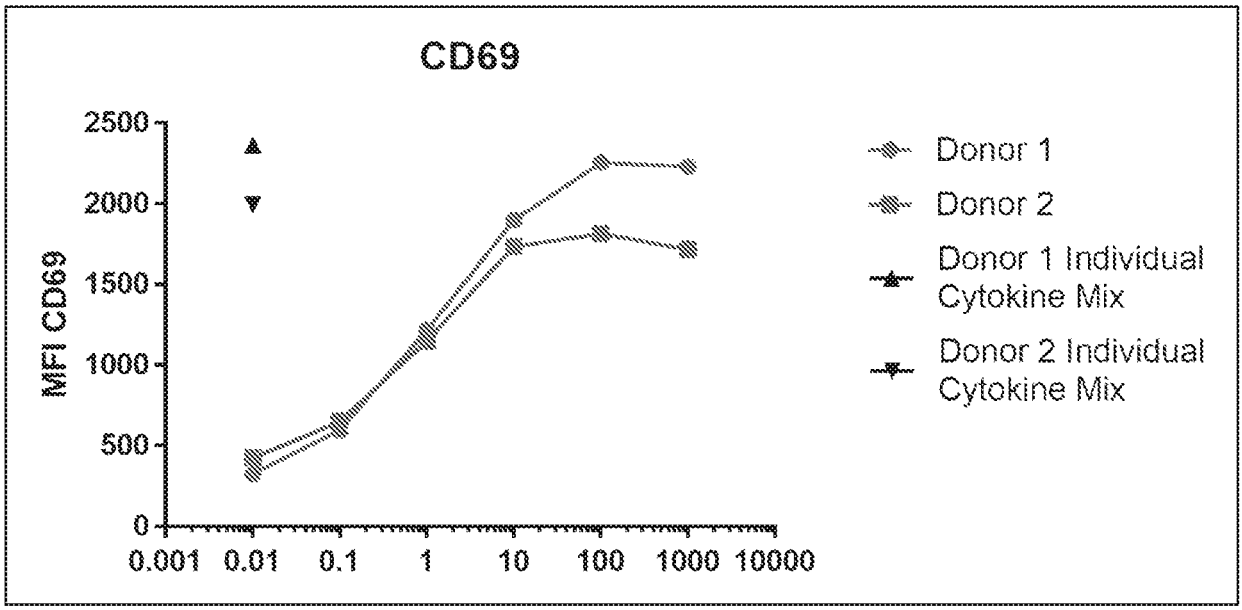


Figure 18B

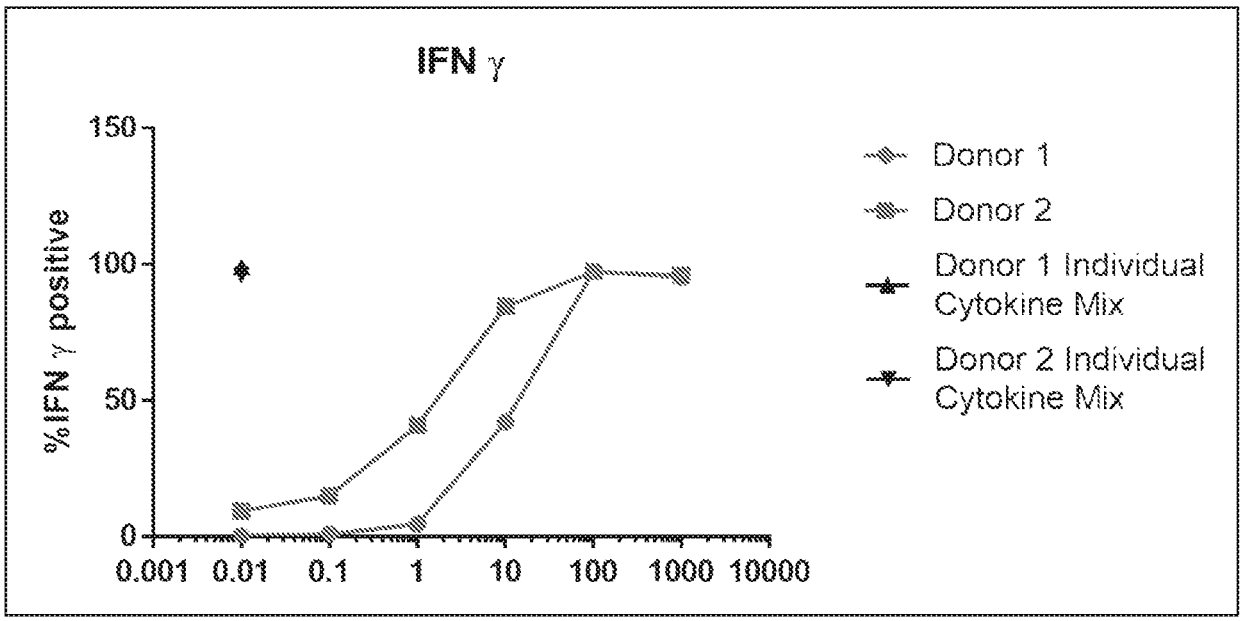


Figure 19

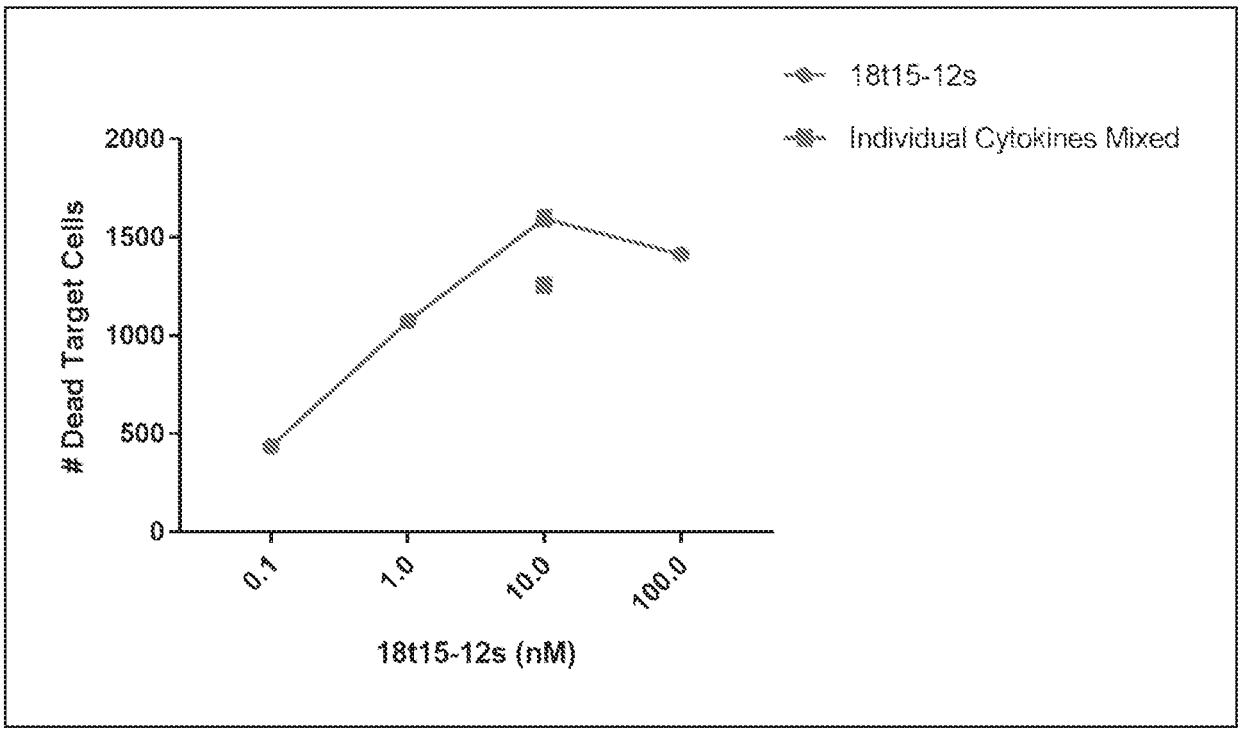

18t15-12s
Individual Cytokines Mixed
Dead Target Cells
2000
1500
1000
500
0
0.1
1.0
10.0
100.0
18t15-12s (nM)

Figure 20

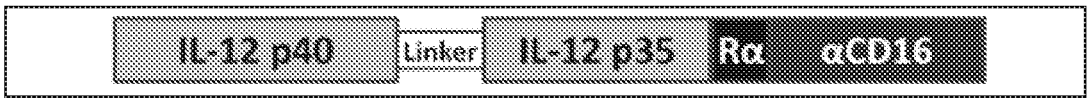


Figure 21



Figure 22

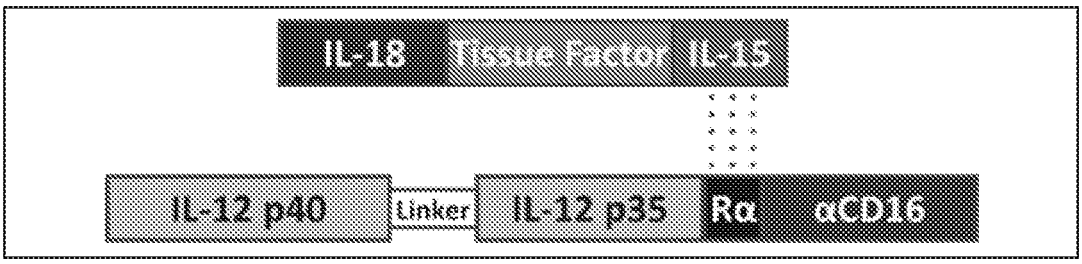


Figure 23

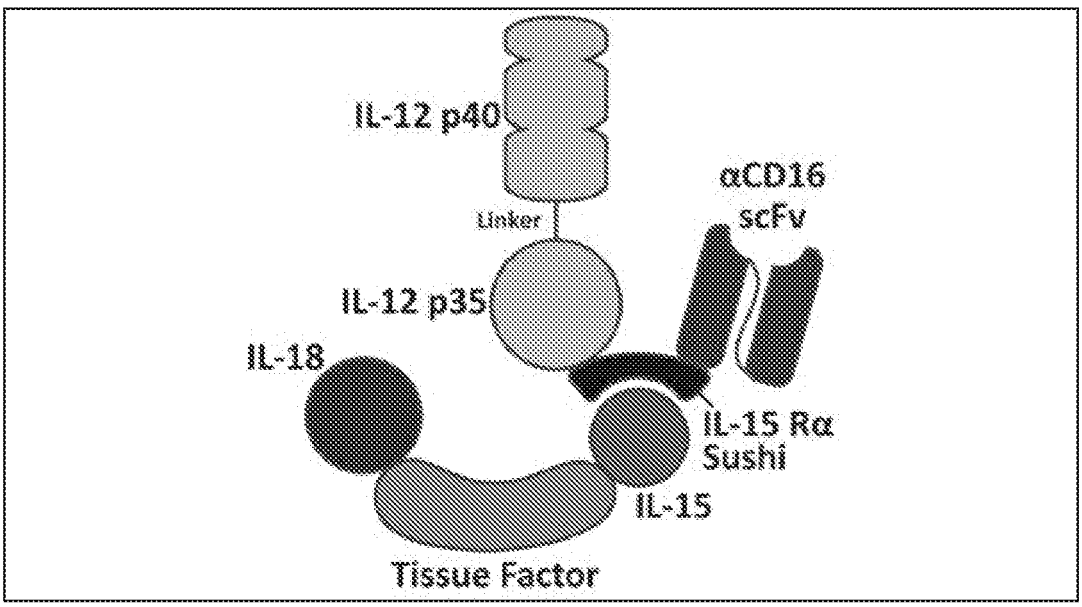


Figure 24

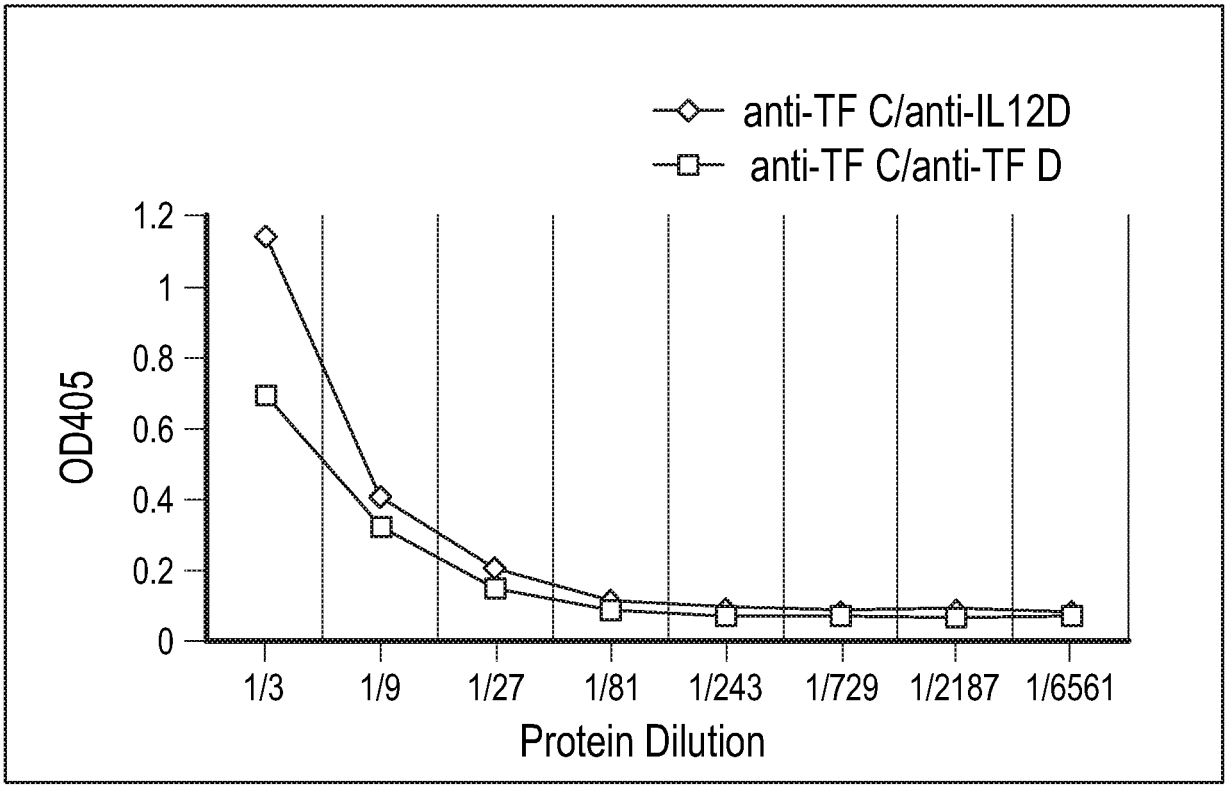

anti-TF C/anti-IL12D
anti-TF C/anti-TF D
OD405
1.2
1
0.8
0.6
0.4
0.2
0
1/3
1/9
1/27
1/81
1/243
1/729
1/2187
1/6561
Protein Dilution

Figure 25



Figure 26



Figure 27

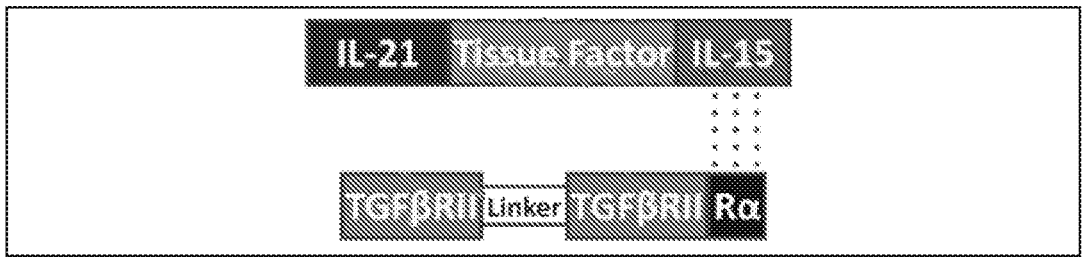


Figure 28

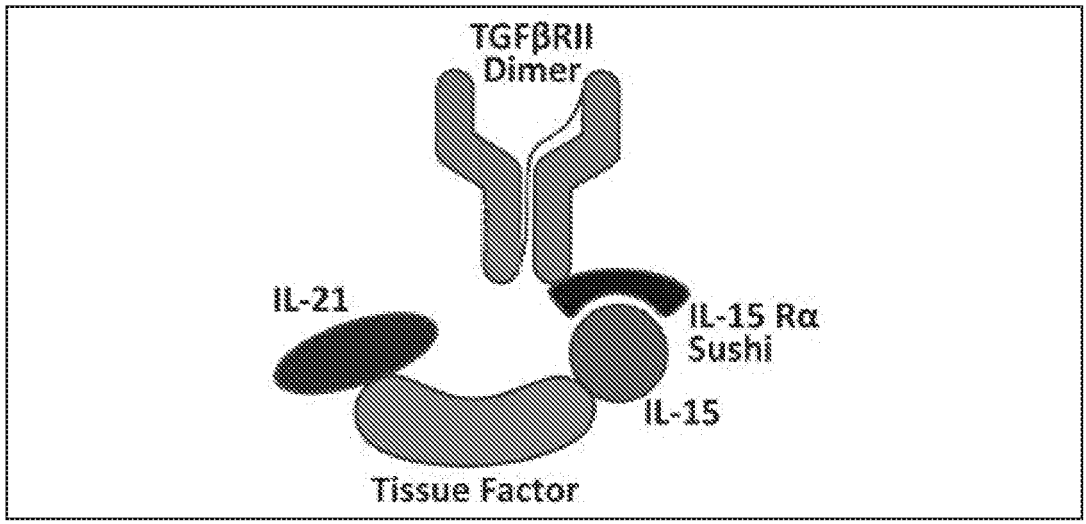


Figure 29

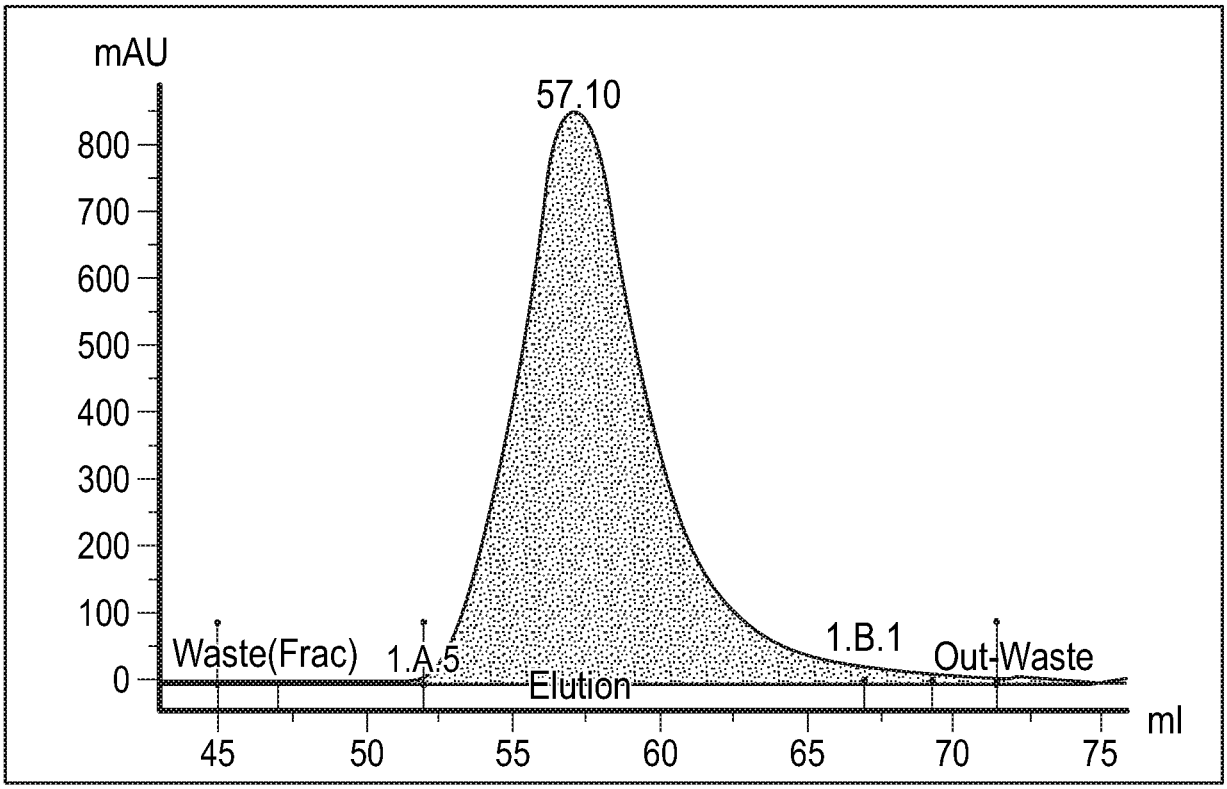


Figure 30

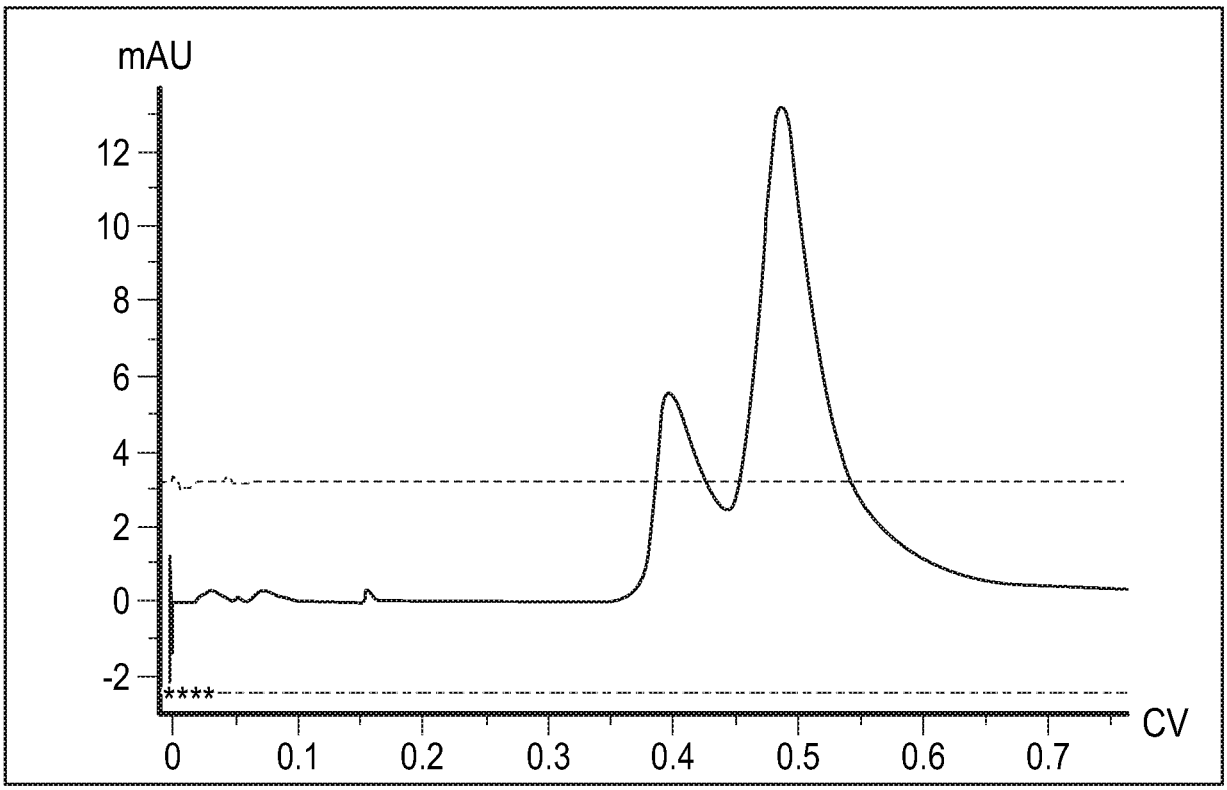


Figure 31

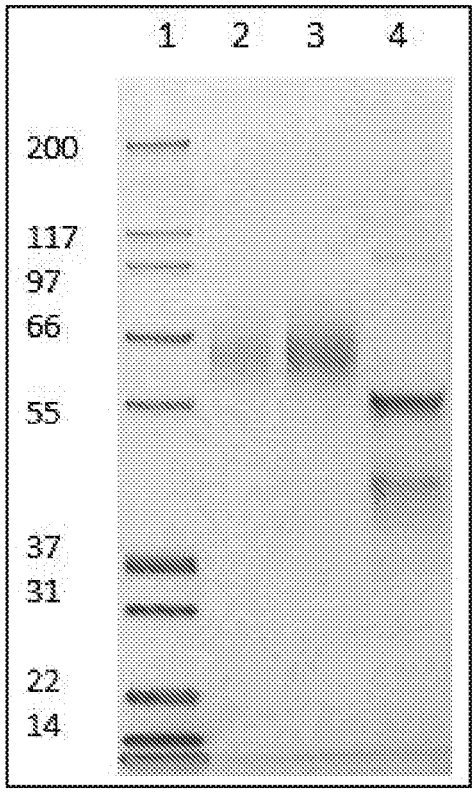


Figure 32

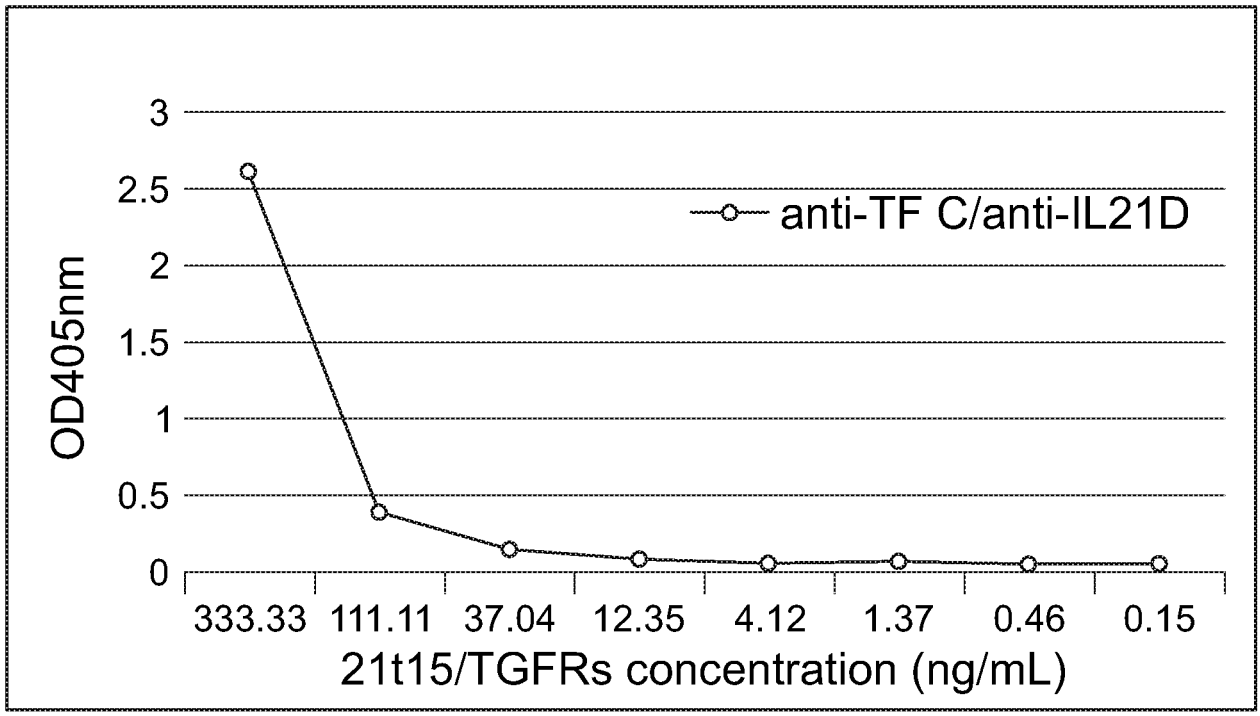


Figure 33

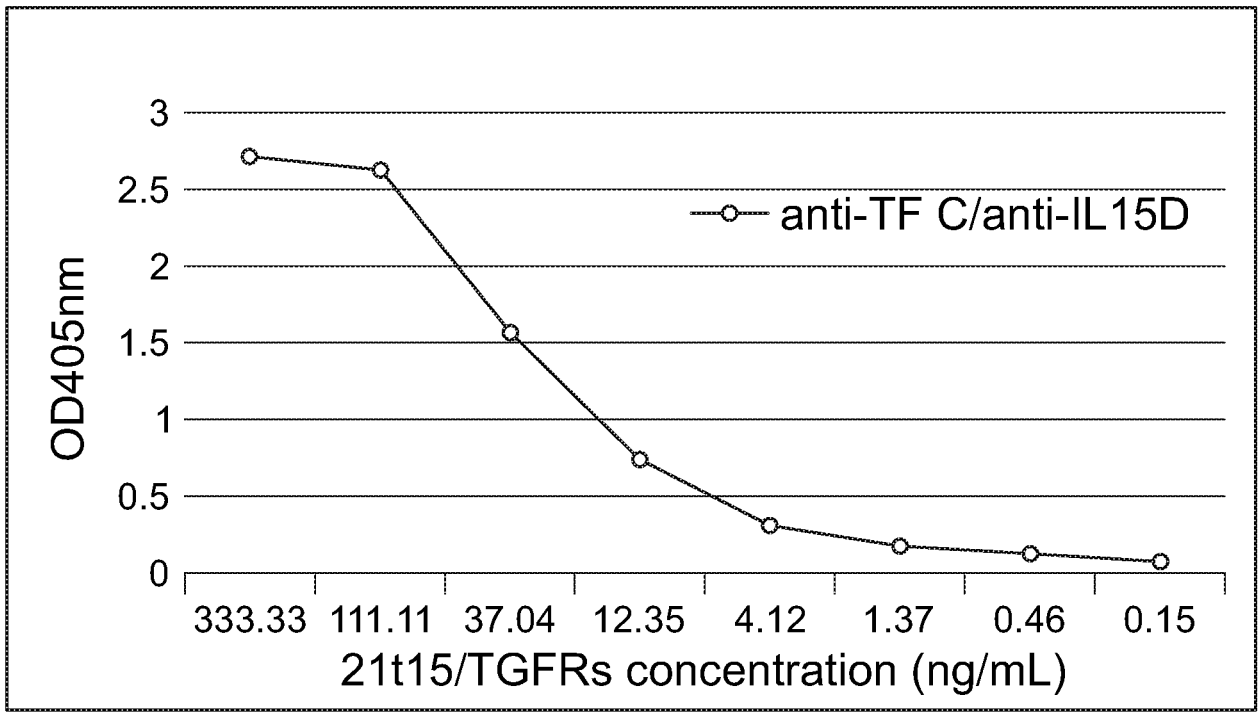


Figure 34

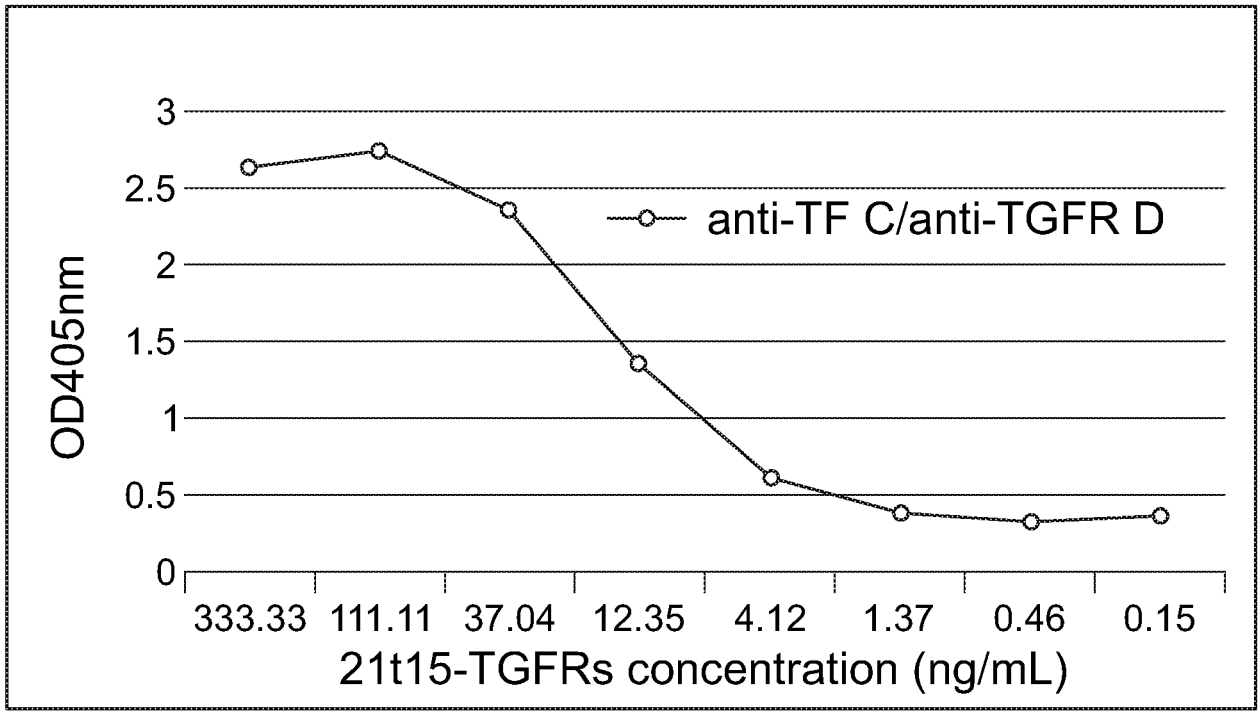


Figure 35

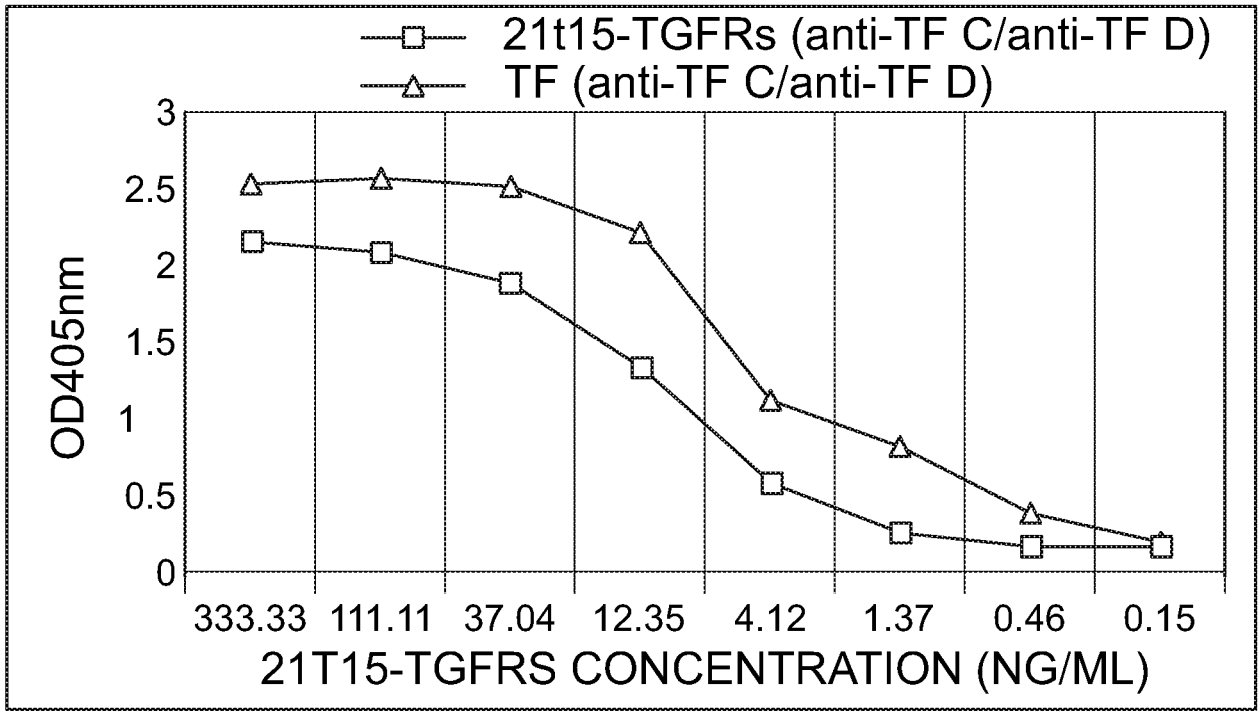


Figure 36

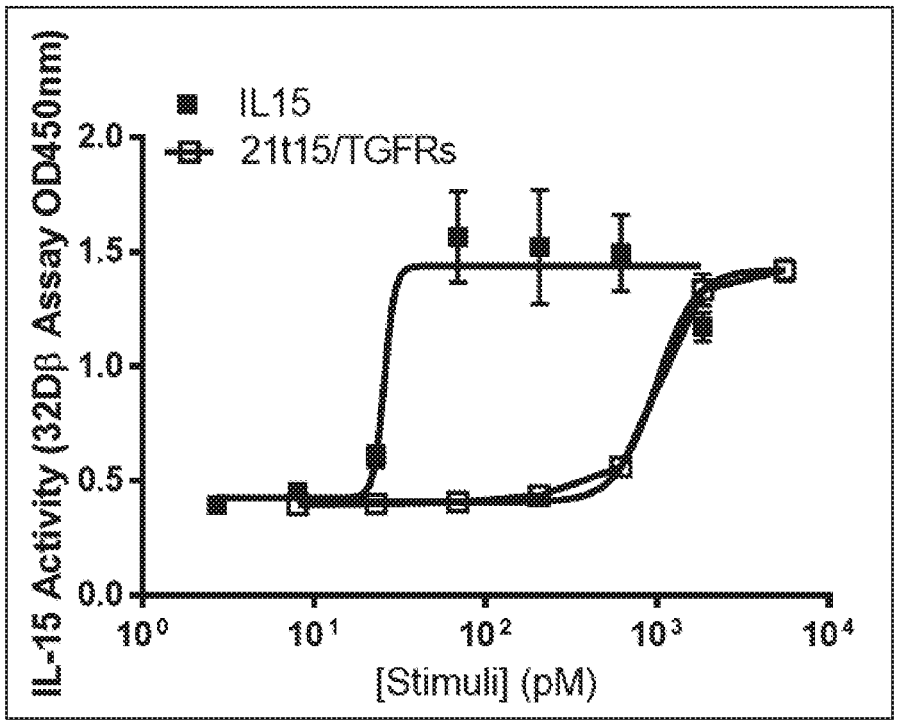


Figure 37

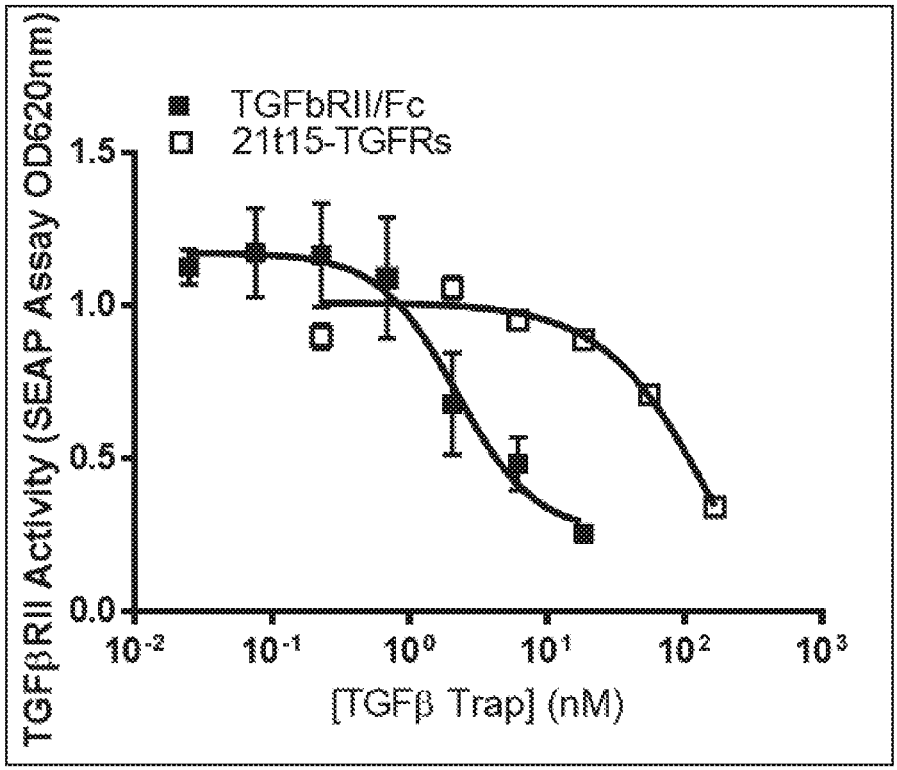


Figure 38

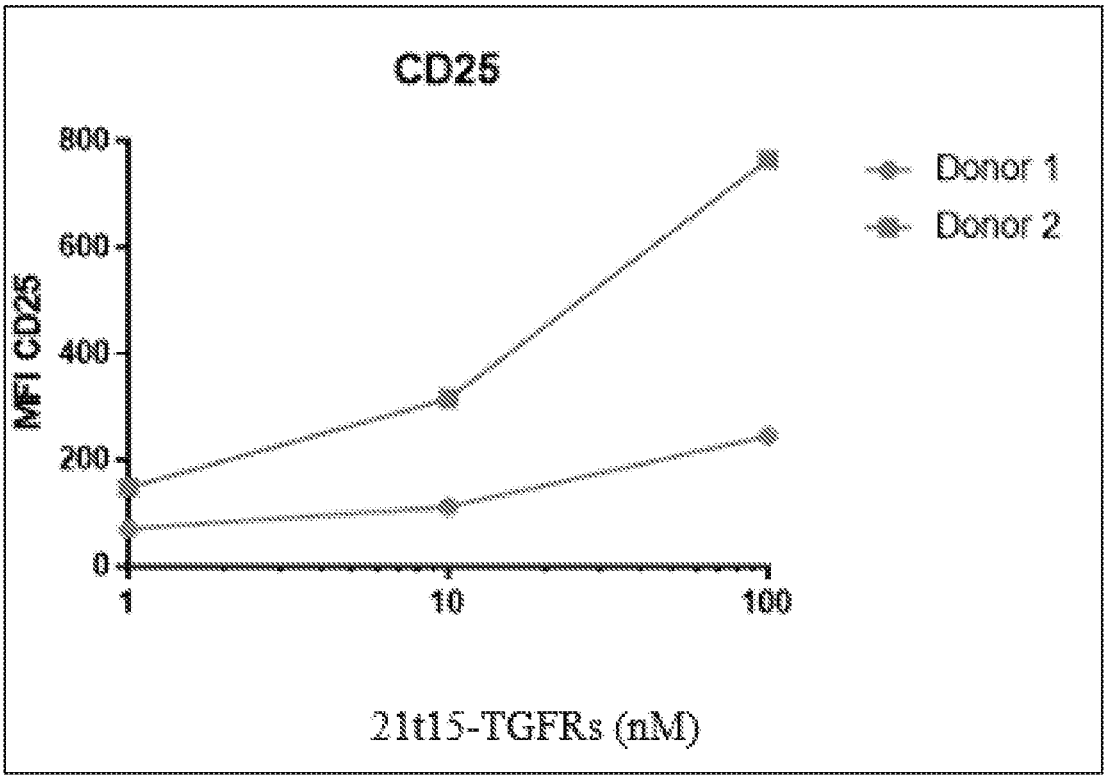


Figure 39

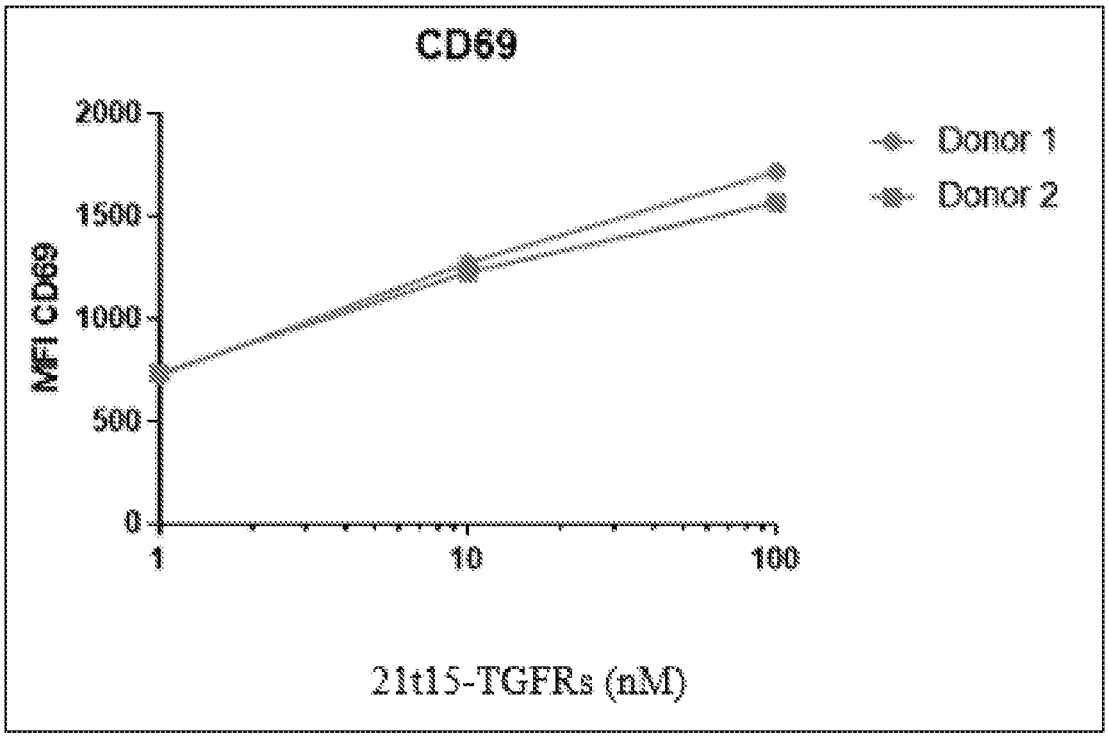


Figure 40

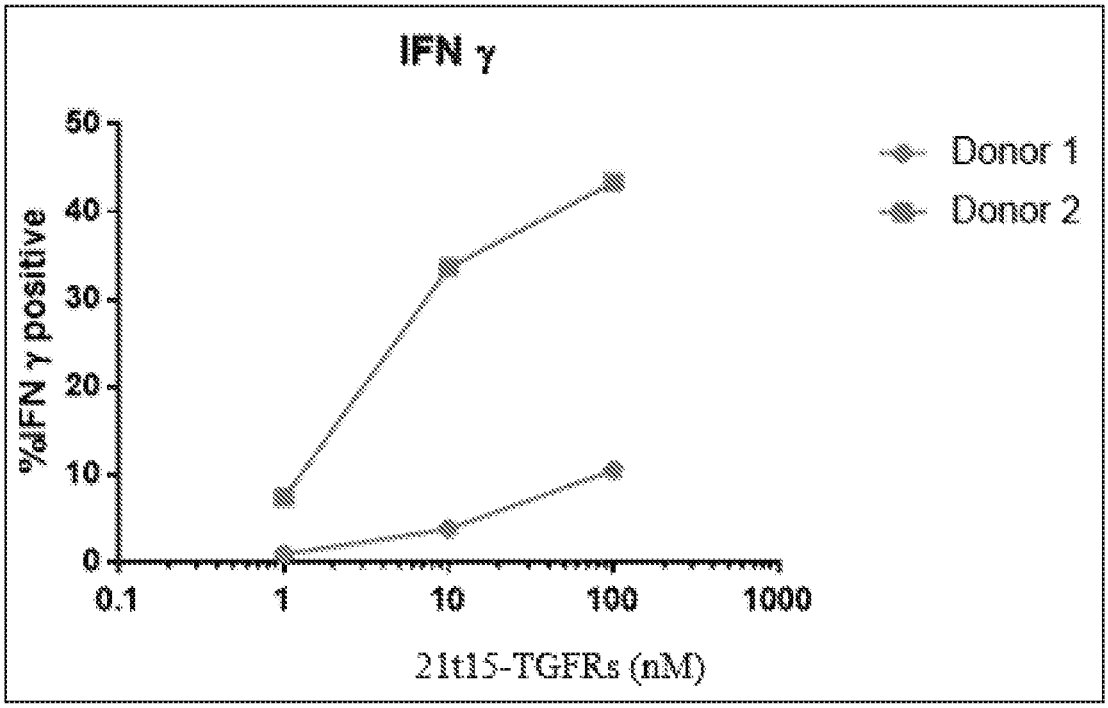


Figure 41

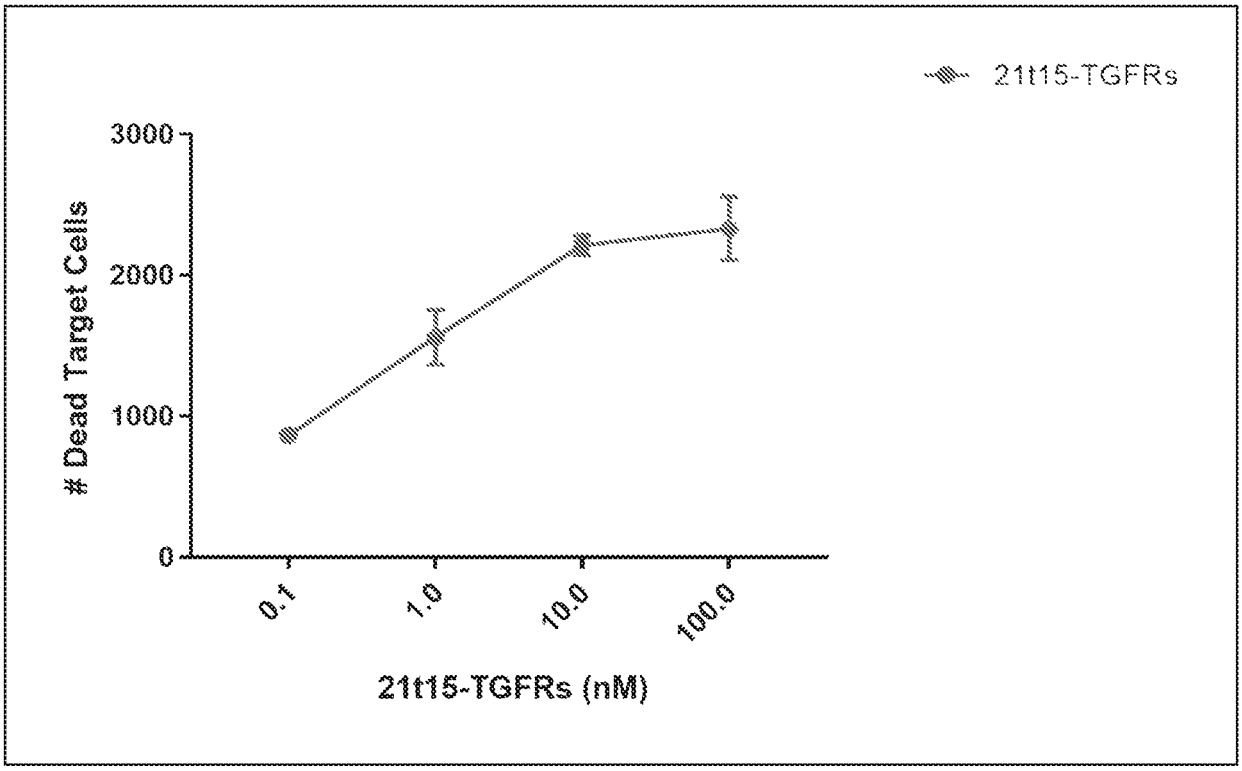

21t15-TGFRs
3000
2000
1000
0
Dead Target Cells
0.1
1.0
10.0
100.0
21t15-TGFRs (nM)

Figure 42



Figure 43



Figure 44

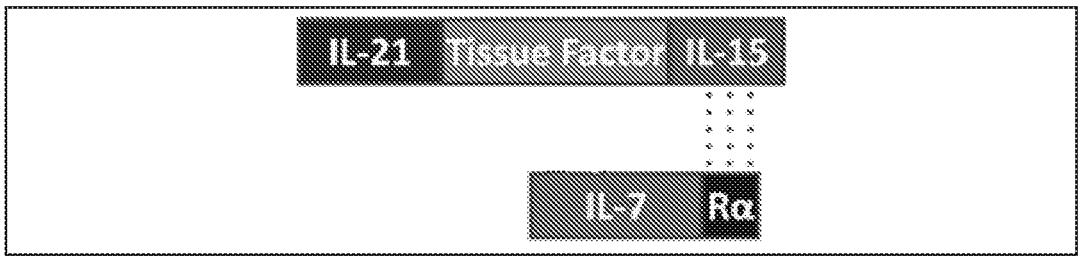


Figure 45

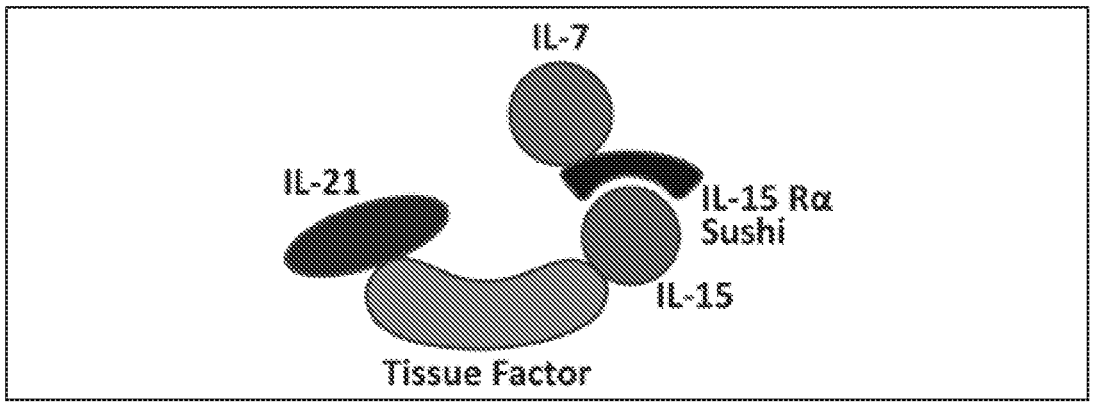


Figure 46

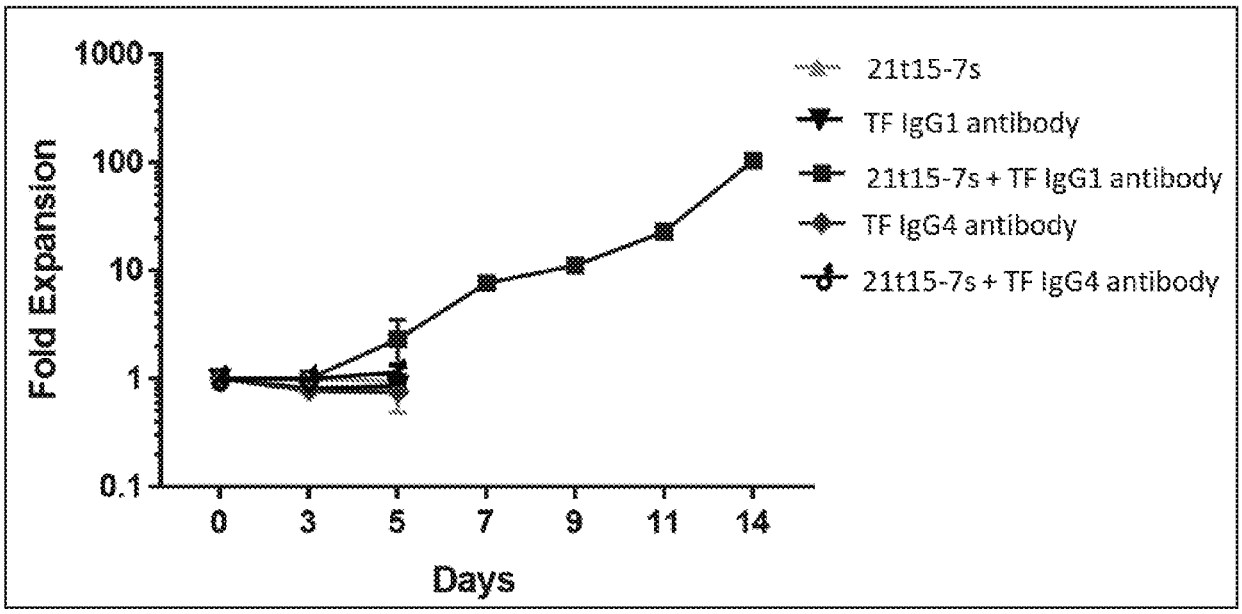


Figure 47

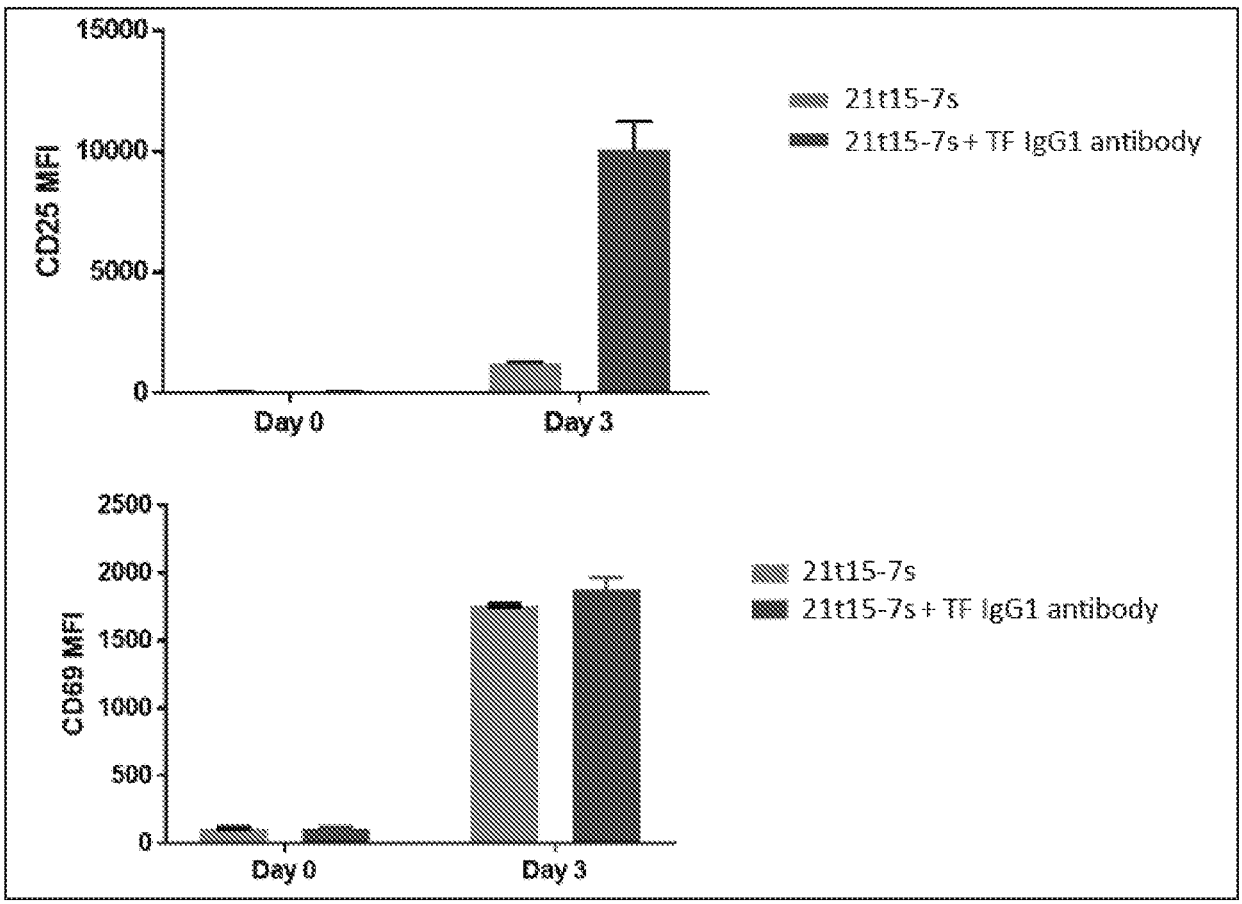


Figure 48

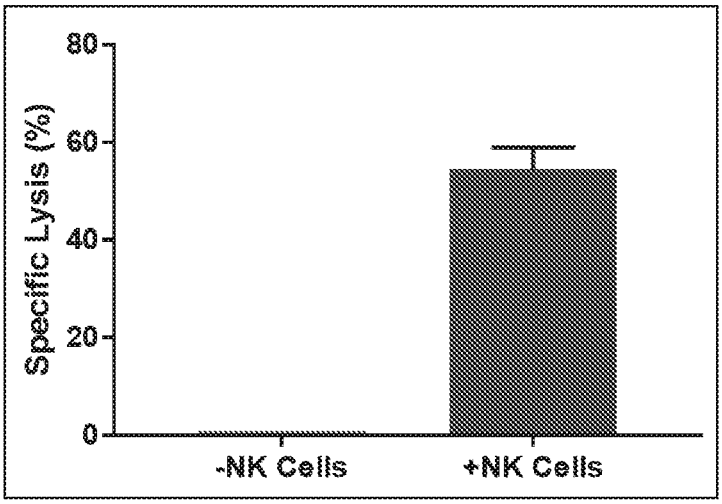


Figure 49



Figure 50



Figure 51

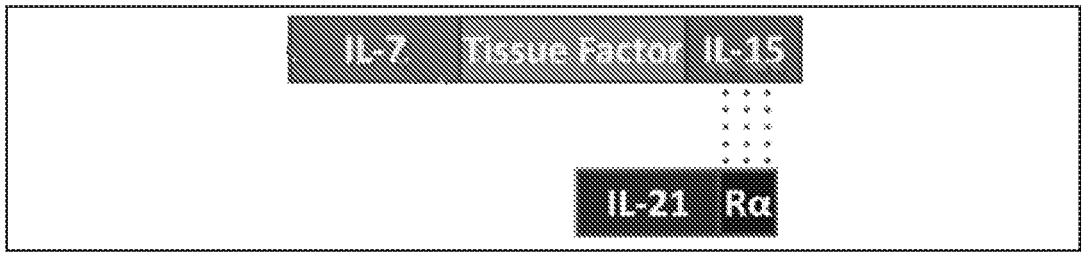


Figure 52

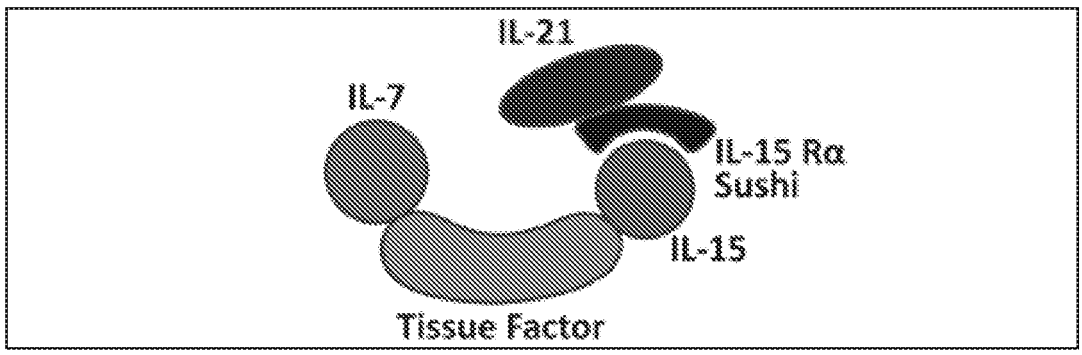


Figure 53

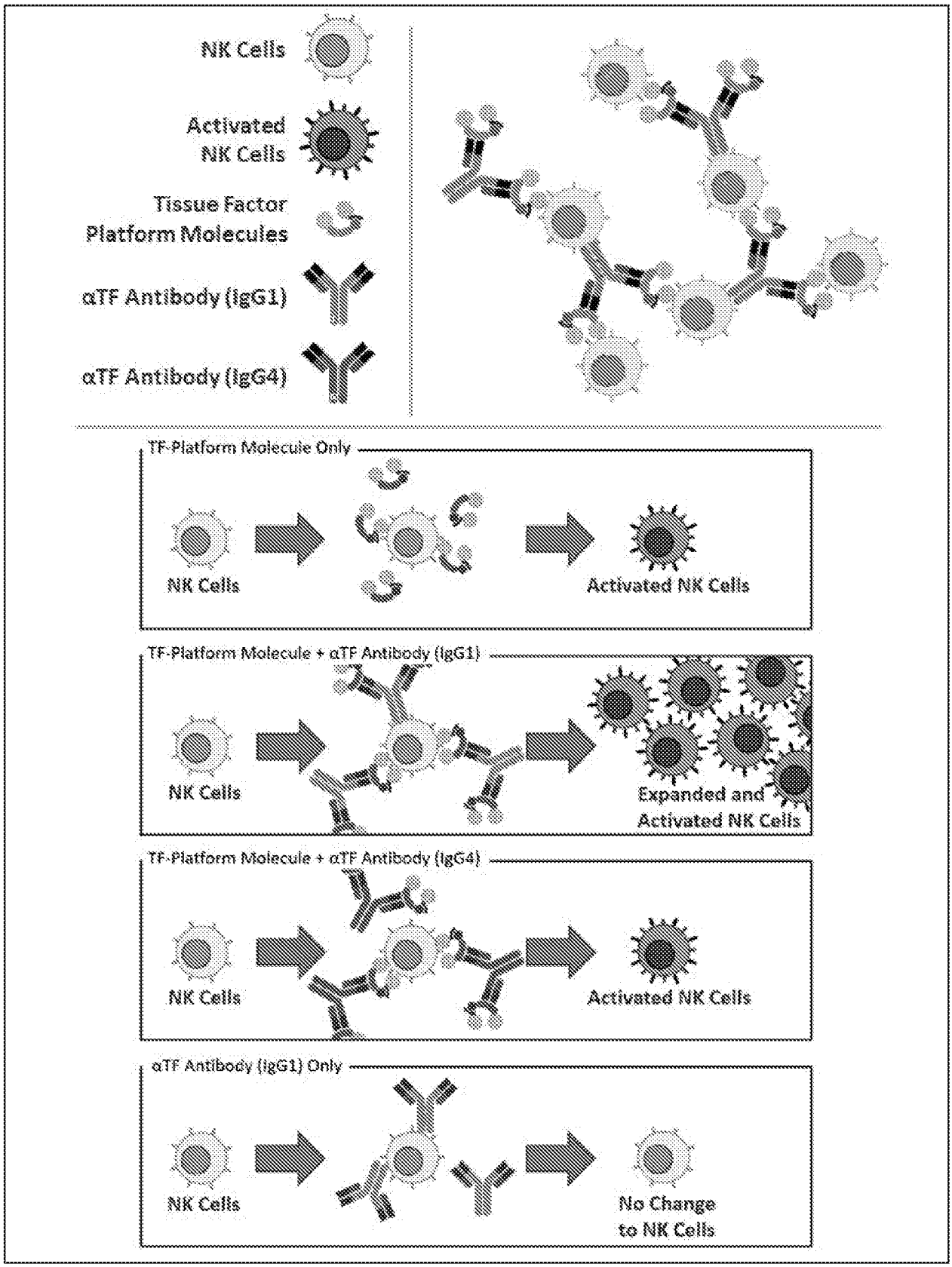

NK Cells
Activated NK Cells
Tissue Factor Platform Molecules
αTF Antibody (IgG1)
αTF Antibody (IgG4)
TF-Platform Molecule Only
NK Cells
Activated NK Cells
TF-Platform Molecule + αTF Antibody (IgG1)
NK Cells
Expanded and Activated NK Cells
TF-Platform Molecule + αTF Antibody (IgG4)
NK Cells
Activated NK Cells
αTF Antibody (IgG1) Only
NK Cells
No Change to NK Cells

Figure 54

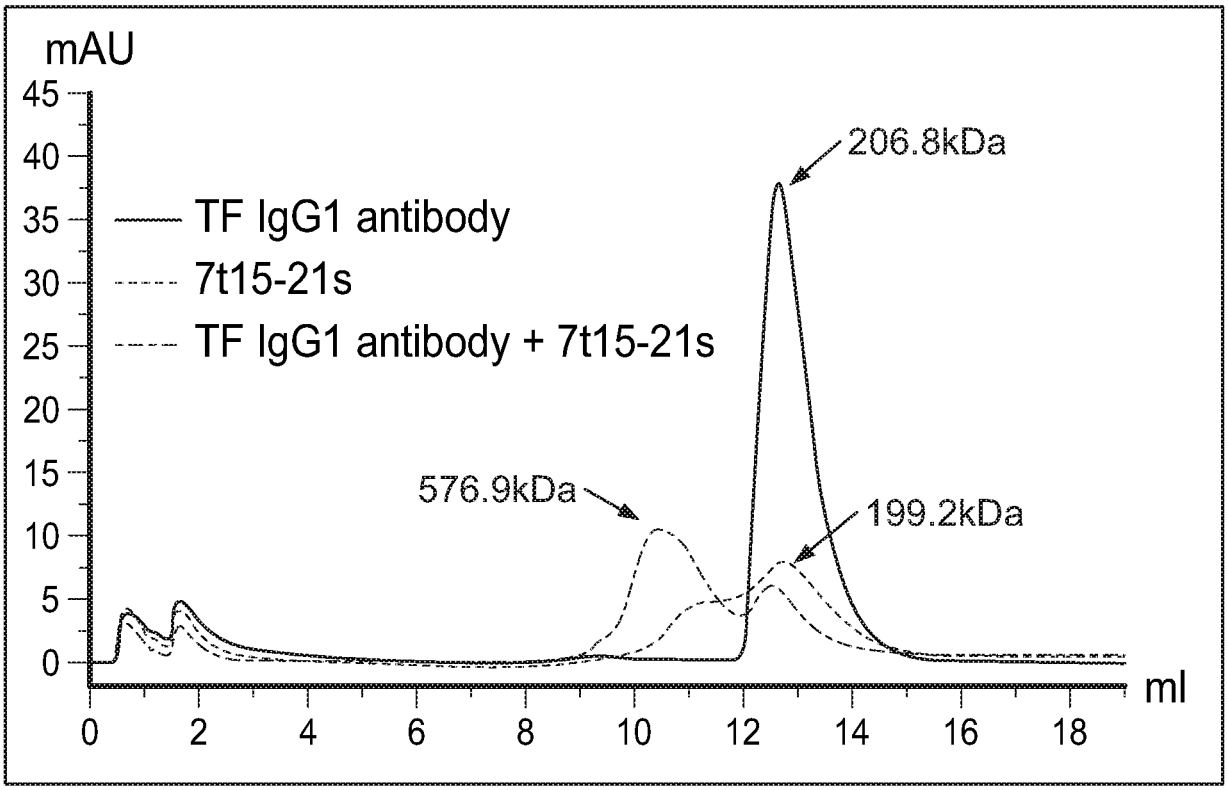

mAU
45
40
35
30
25
20
15
10
5
0
TF IgG1 antibody
7t15-21s
TF IgG1 antibody + 7t15-21s
206.8kDa
576.9kDa
199.2kDa
ml
0
2
4
6
8
10
12
14
16
18

Figure 55

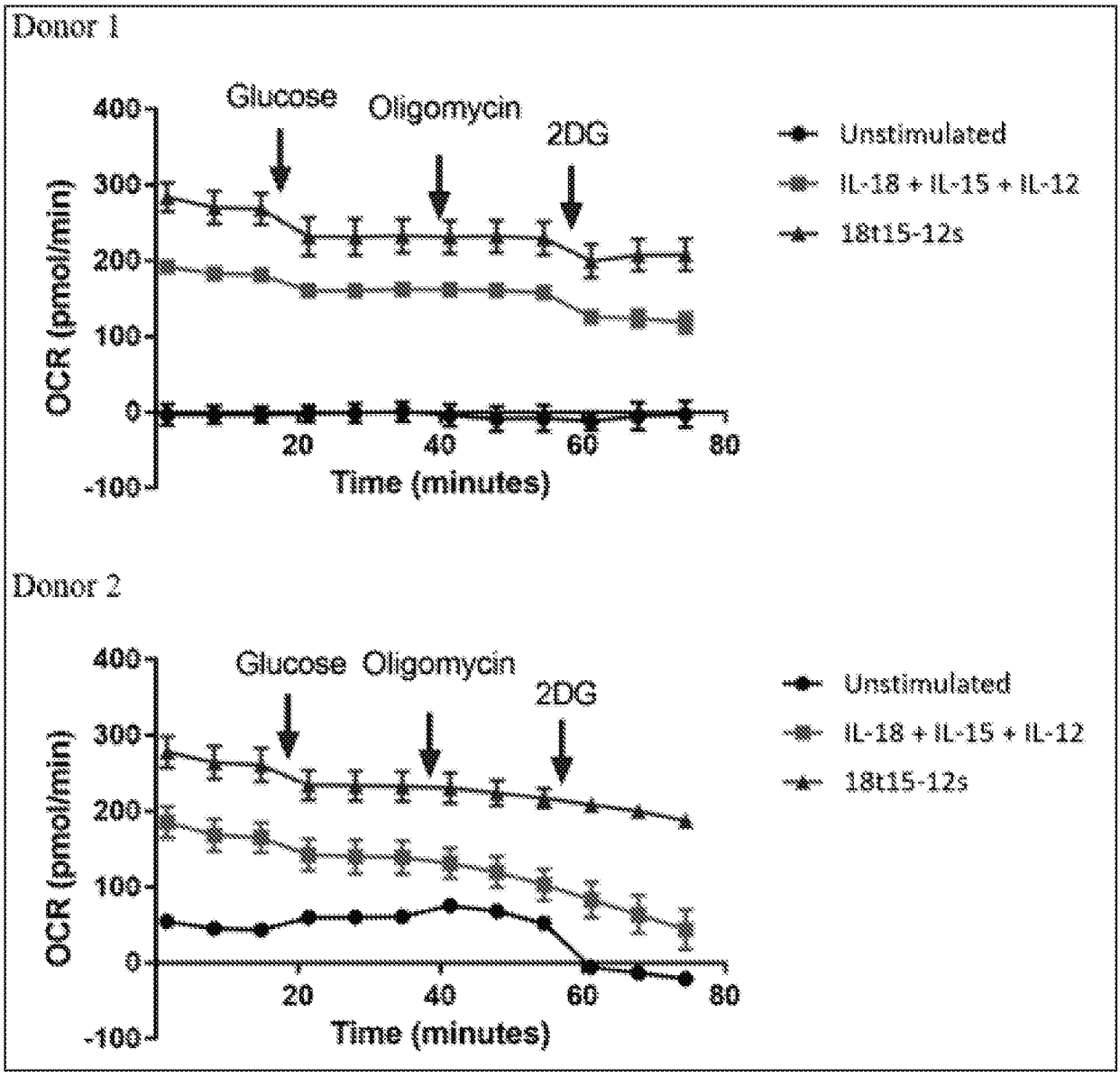

Donor 1
Glucose
Oligomycin
2DG
OCR (pmol/min)
400
300
200
100
0
-100
20
40
60
80
Time (minutes)
Unstimulated
IL-18 + IL-15 + IL-12
18t15-12s
Donor 2
Glucose
Oligomycin
2DG
OCR (pmol/min)
400
300
200
100
0
-100
20
40
60
80
Time (minutes)
Unstimulated
IL-18 + IL-15 + IL-12
18t15-12s

Figure 56

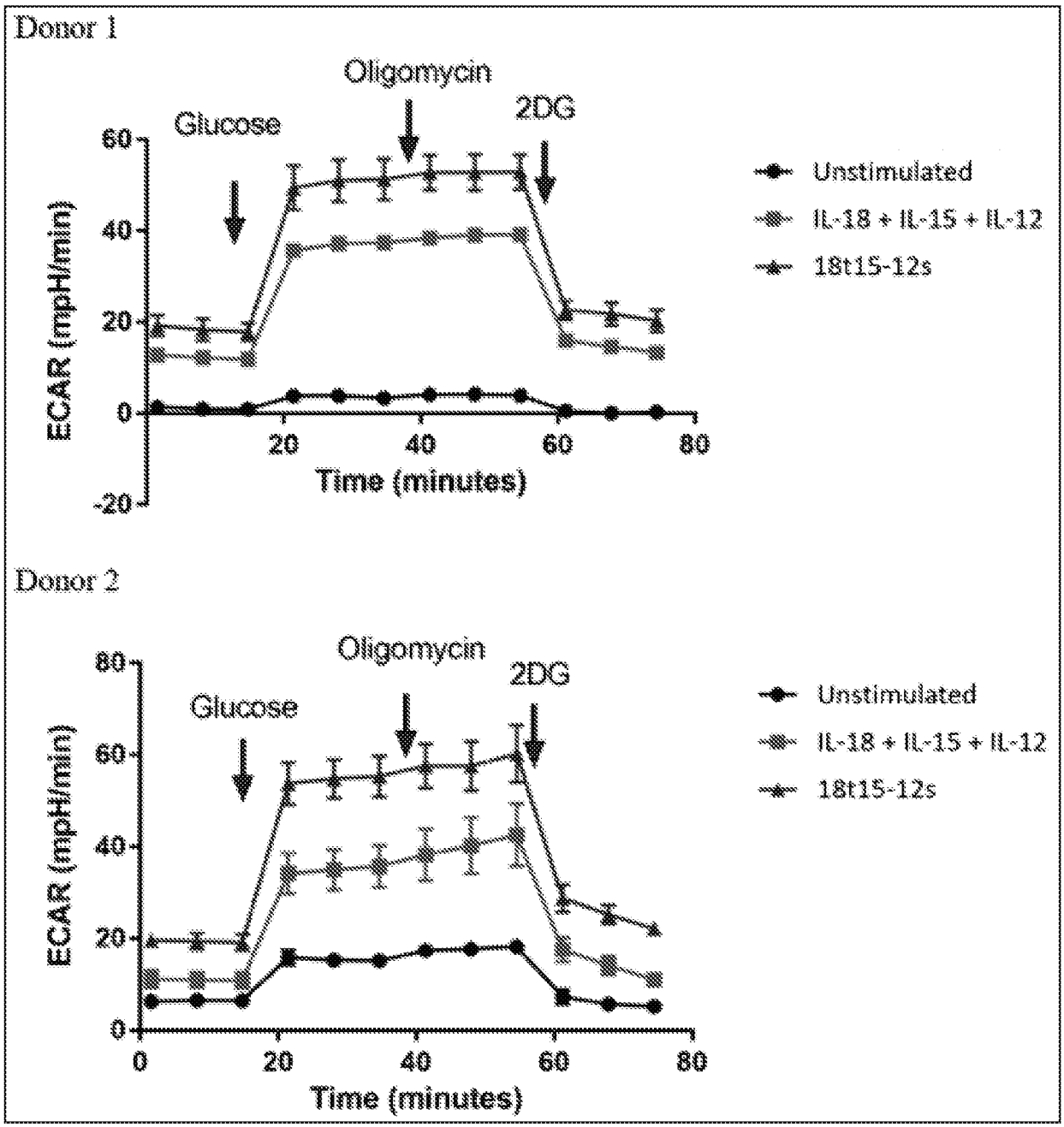

Donor 1
Oligomycin
Glucose
2DG
ECAR (mpH/min)
60
40
20
0
-20
20
40
60
80
Time (minutes)
Unstimulated
IL-18 + IL-15 + IL-12
18t15-12s
Donor 2
Oligomycin
Glucose
2DG
ECAR (mpH/min)
80
60
40
20
0
0
20
40
60
80
Time (minutes)
Unstimulated
IL-18 + IL-15 + IL-12
18t15-12s

Figure 57

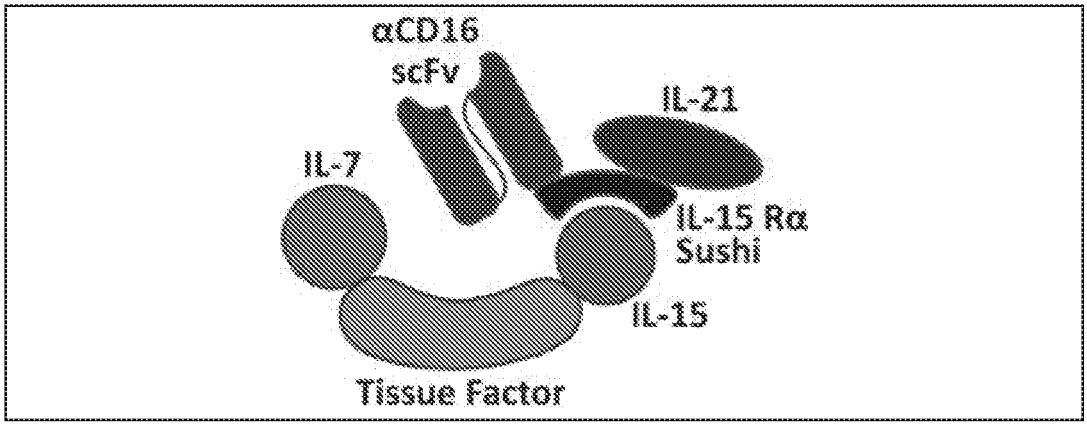


Figure 58

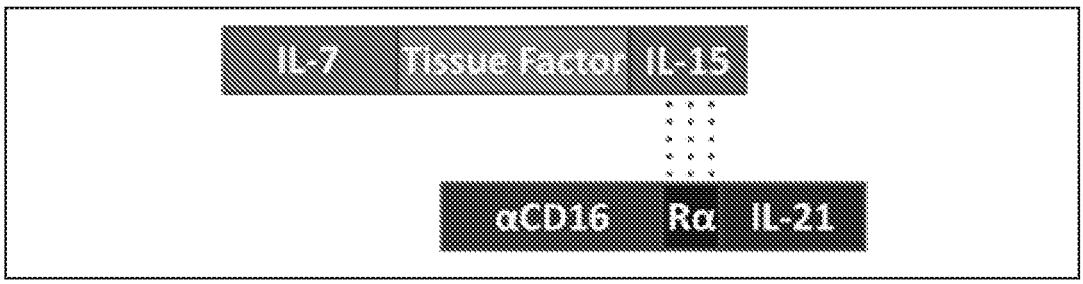


Figure 59

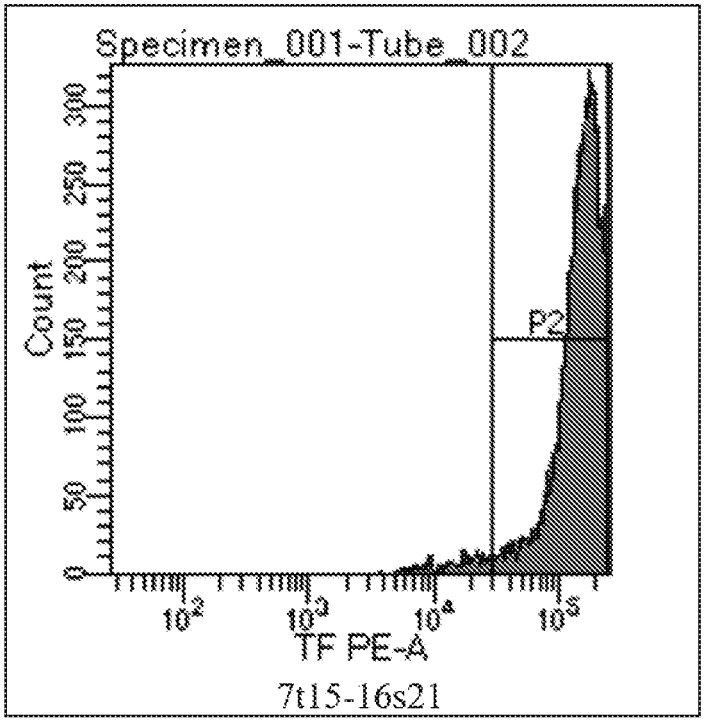


Figure 60A

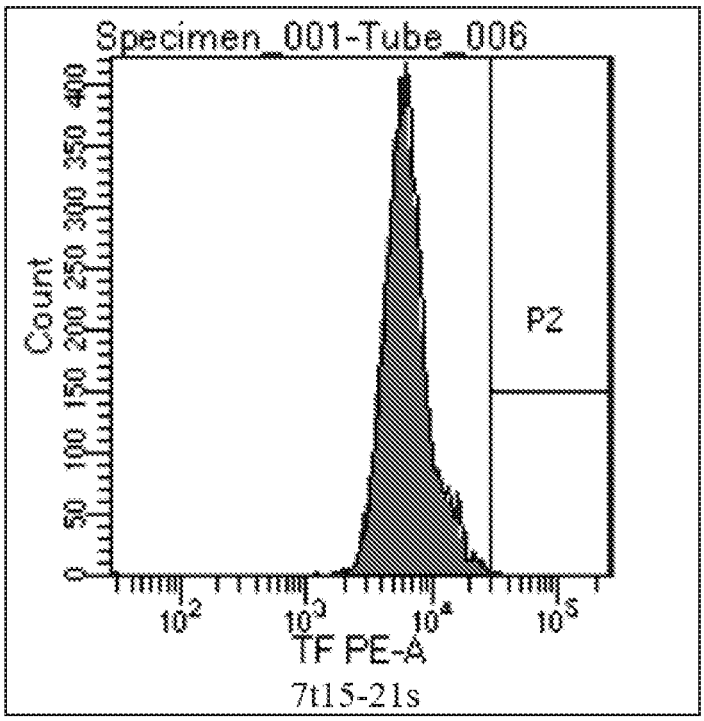


Figure 60B

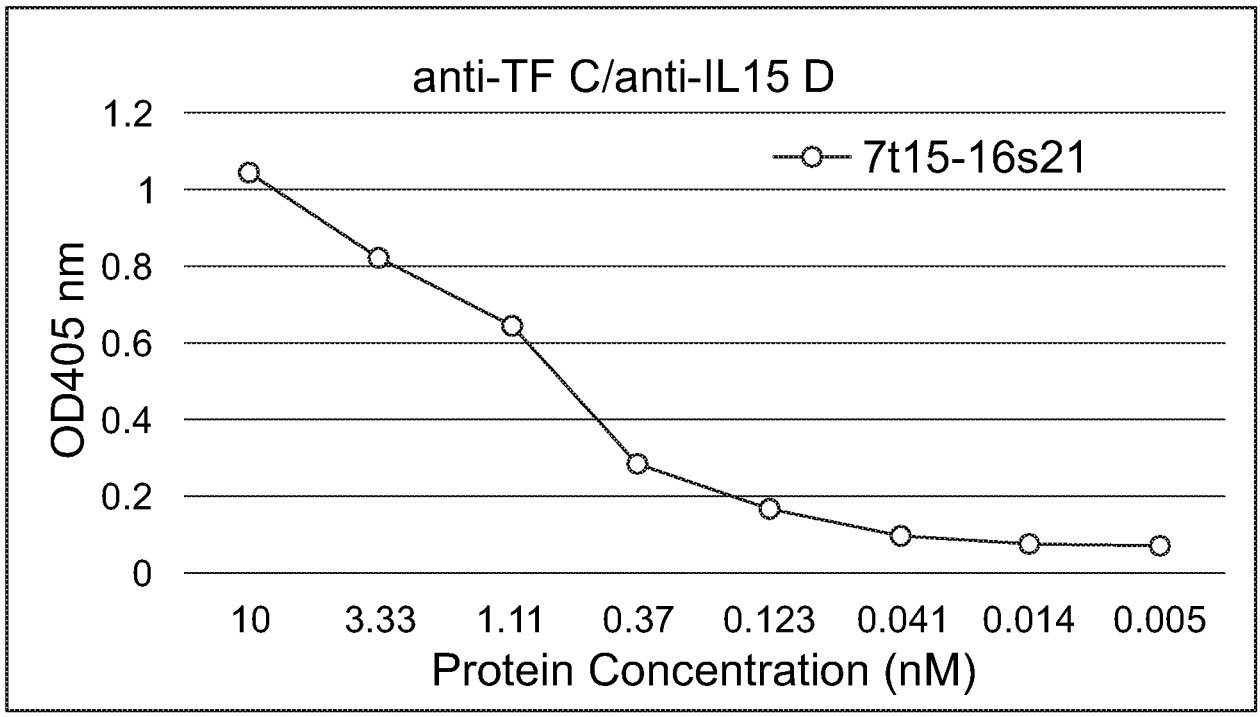


Figure 61A

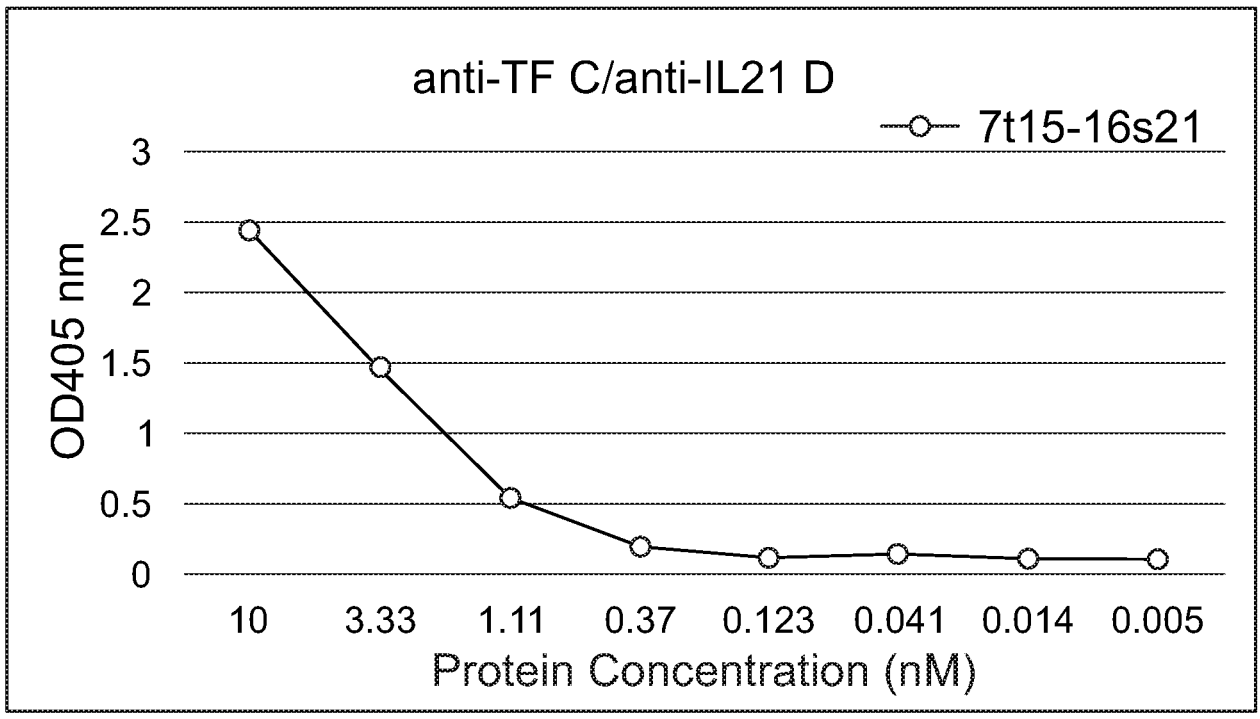


Figure 61B

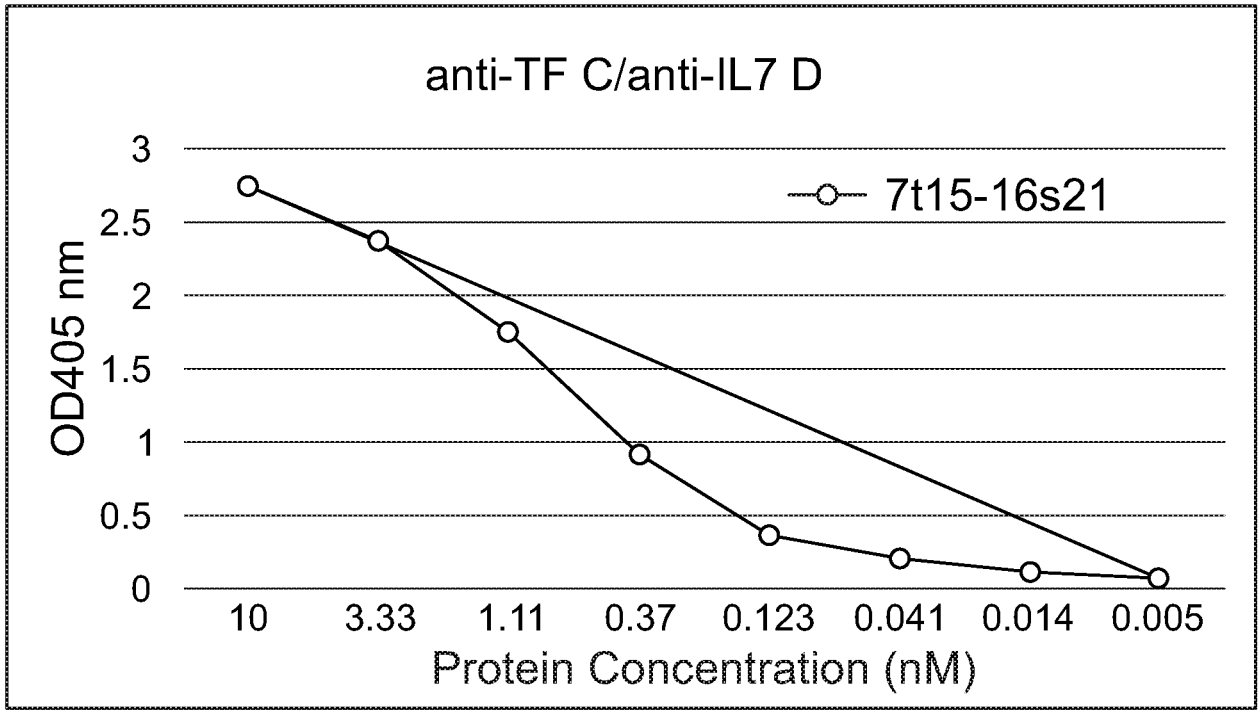


Figure 61C

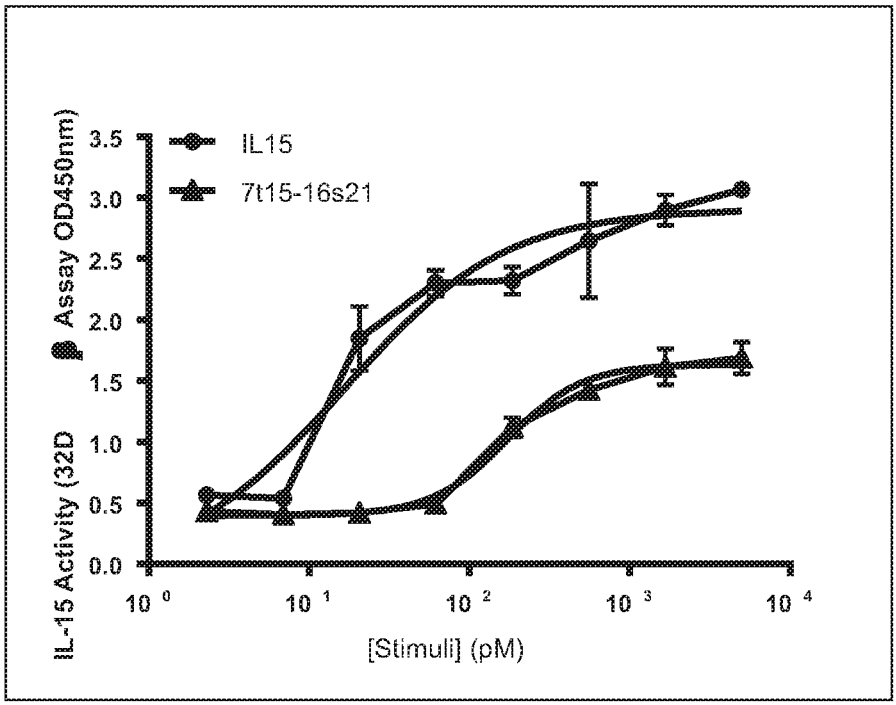


Figure 62

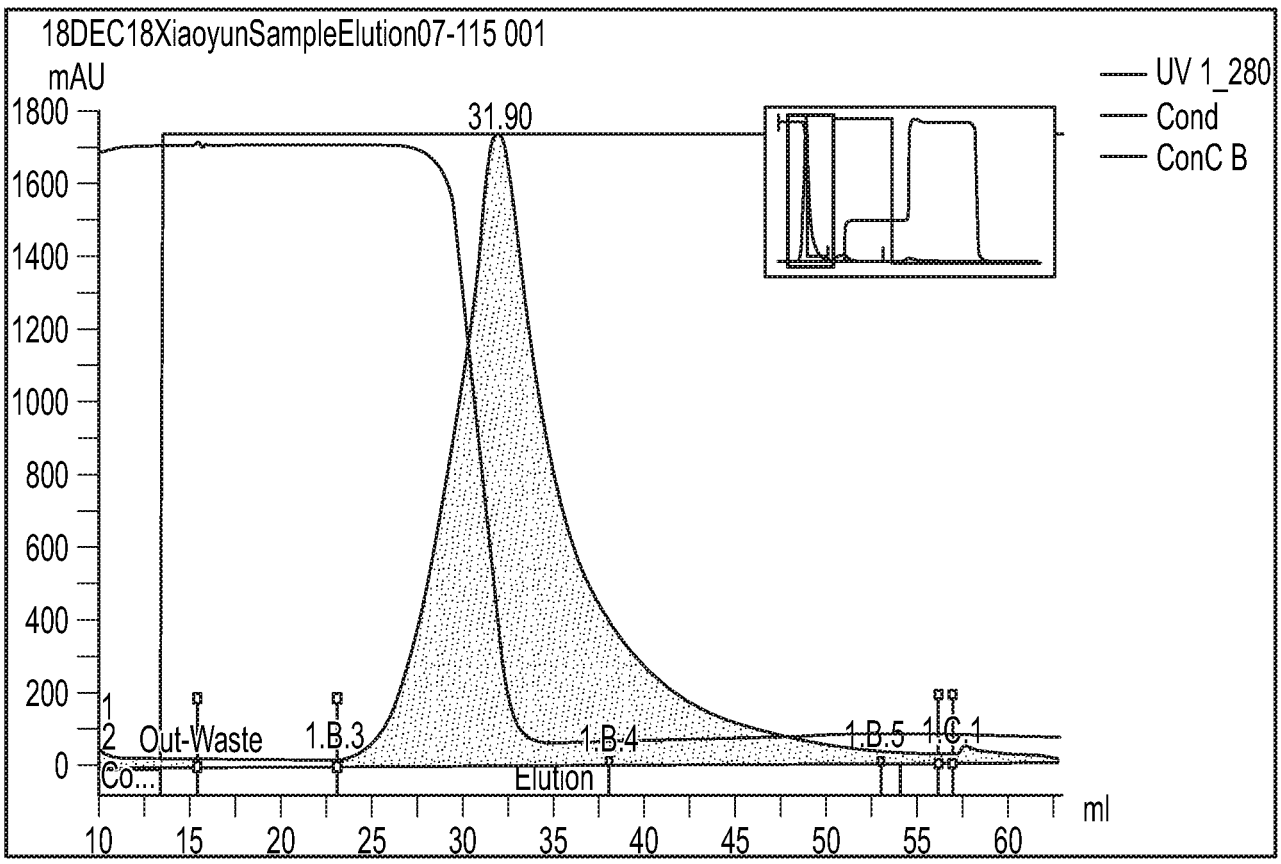

18DEC18XiaoyunSampleElution07-115 001
mAU
1800
1600
1400
1200
1000
800
600
400
200
0
31.90
UV 1_280
Cond
ConC B
1
2
Out-Waste
1.B.3
1.B.4
1.B.5
1.C.1
Co...
Elution
10
15
20
25
30
35
40
45
50
55
60
ml

Figure 63

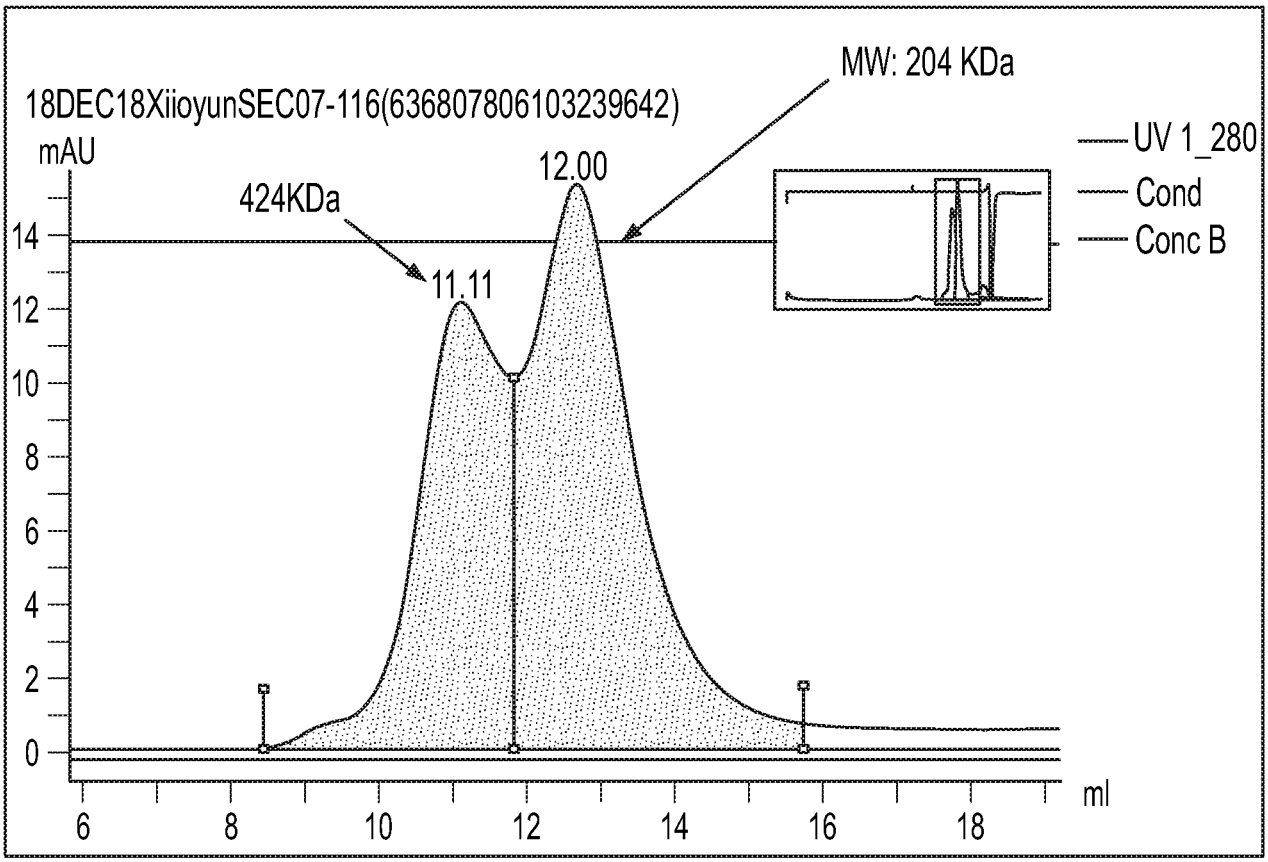

18DEC18XiioyunSEC07-116(636807806103239642)
MW: 204 KDa
mAU
12.00
424KDa
11.11
UV 1_280
Cond
Conc B
14
12
10
8
6
4
2
0
6
8
10
12
14
16
18
ml

Figure 64

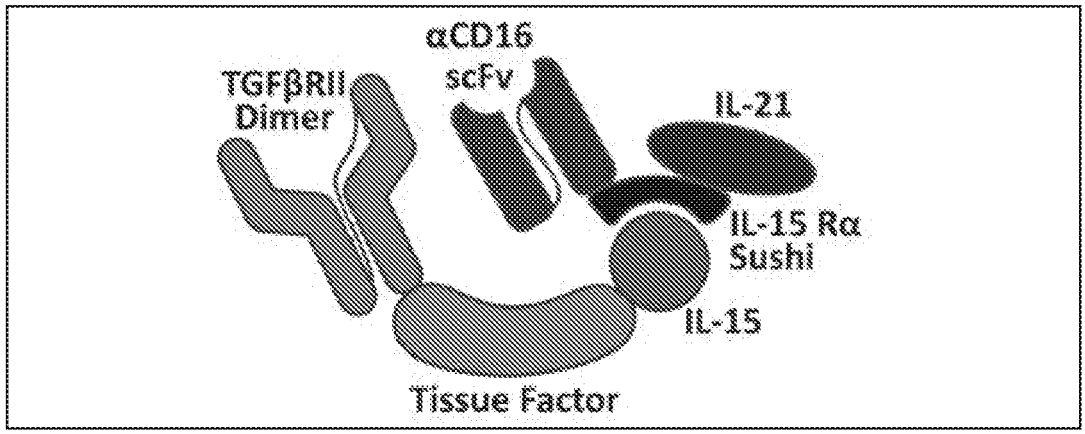


Figure 65

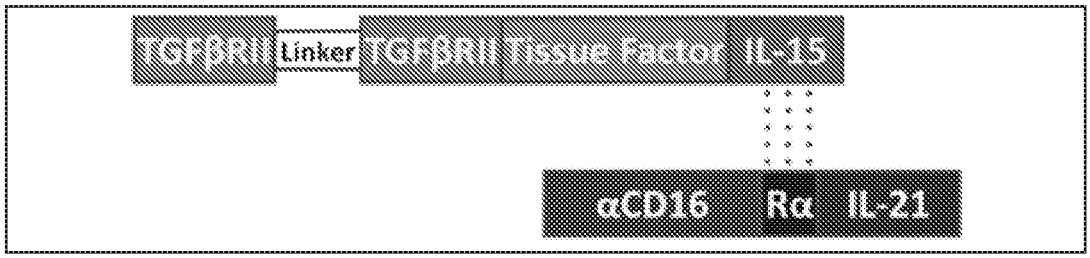


Figure 66

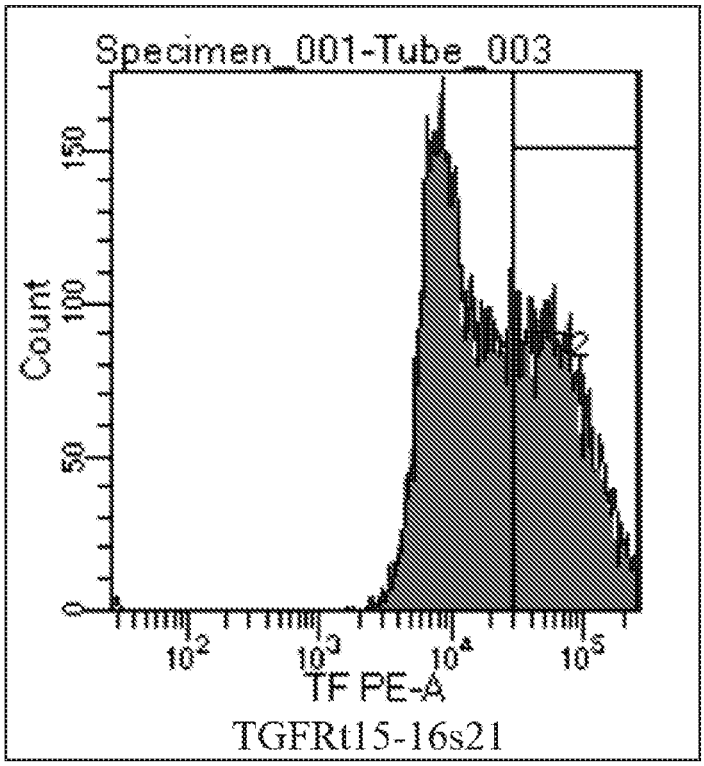


Figure 67A

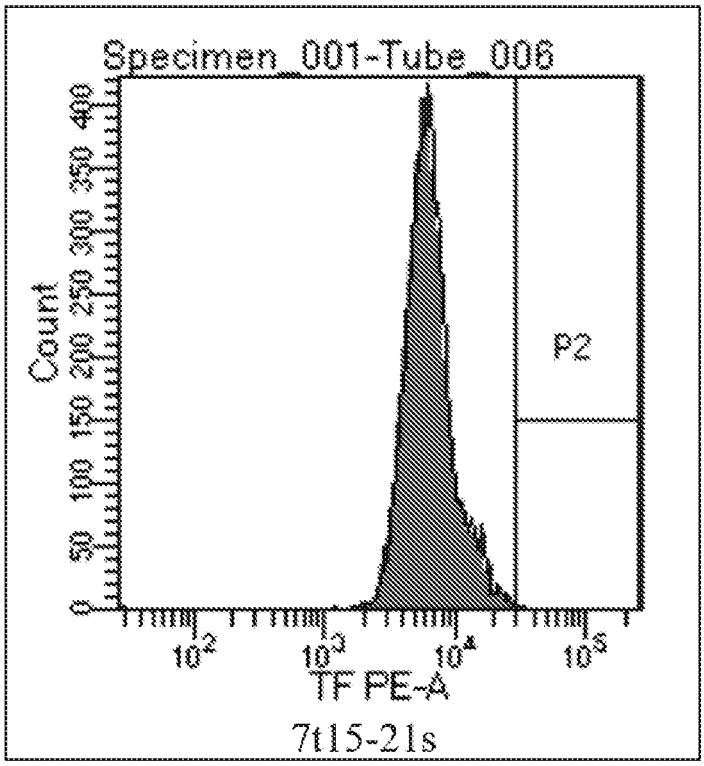


Figure 67B

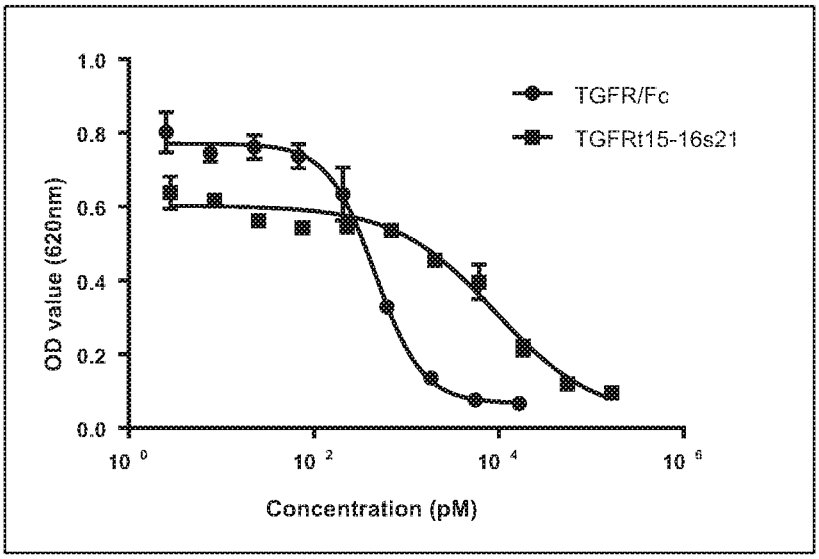


Figure 68

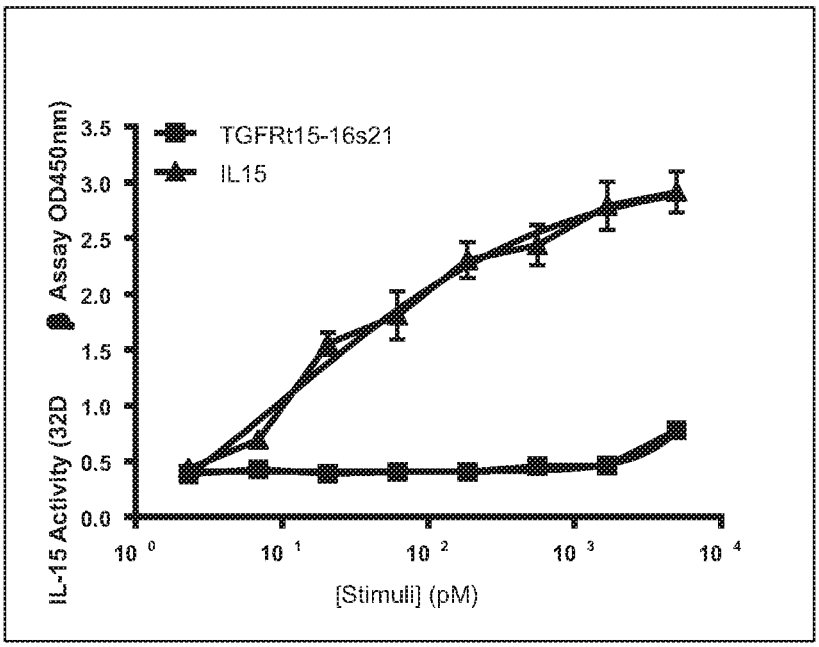


Figure 69

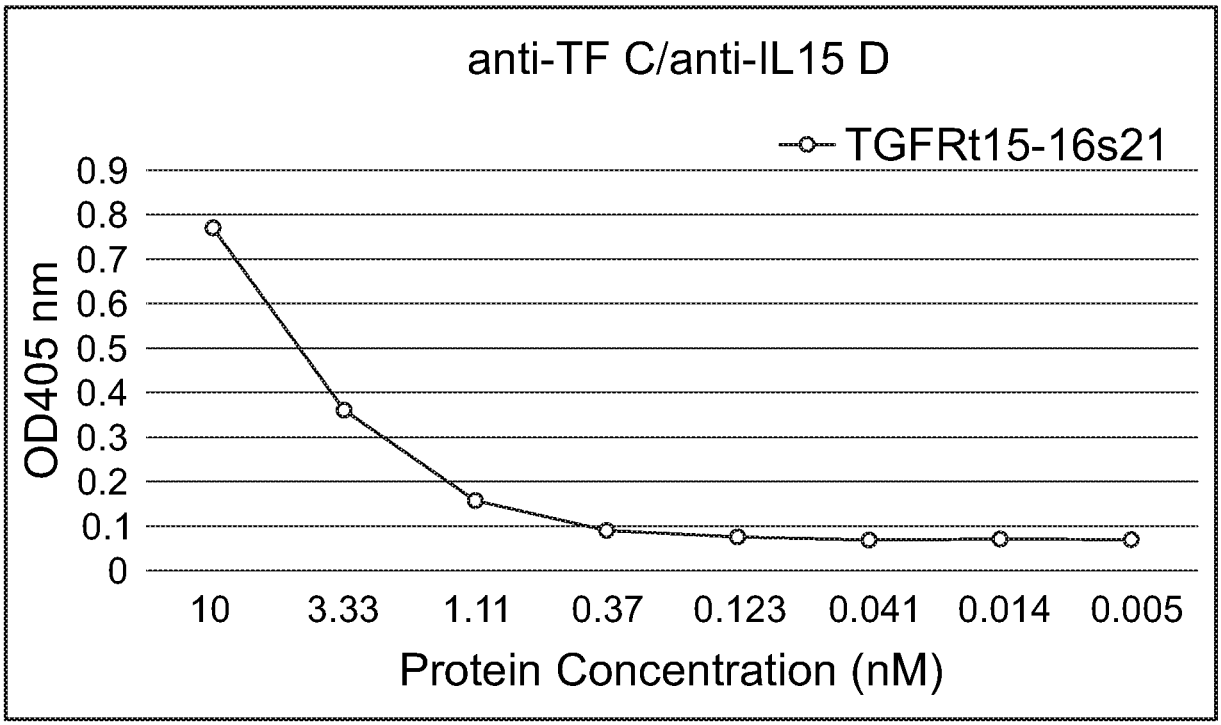


Figure 70A

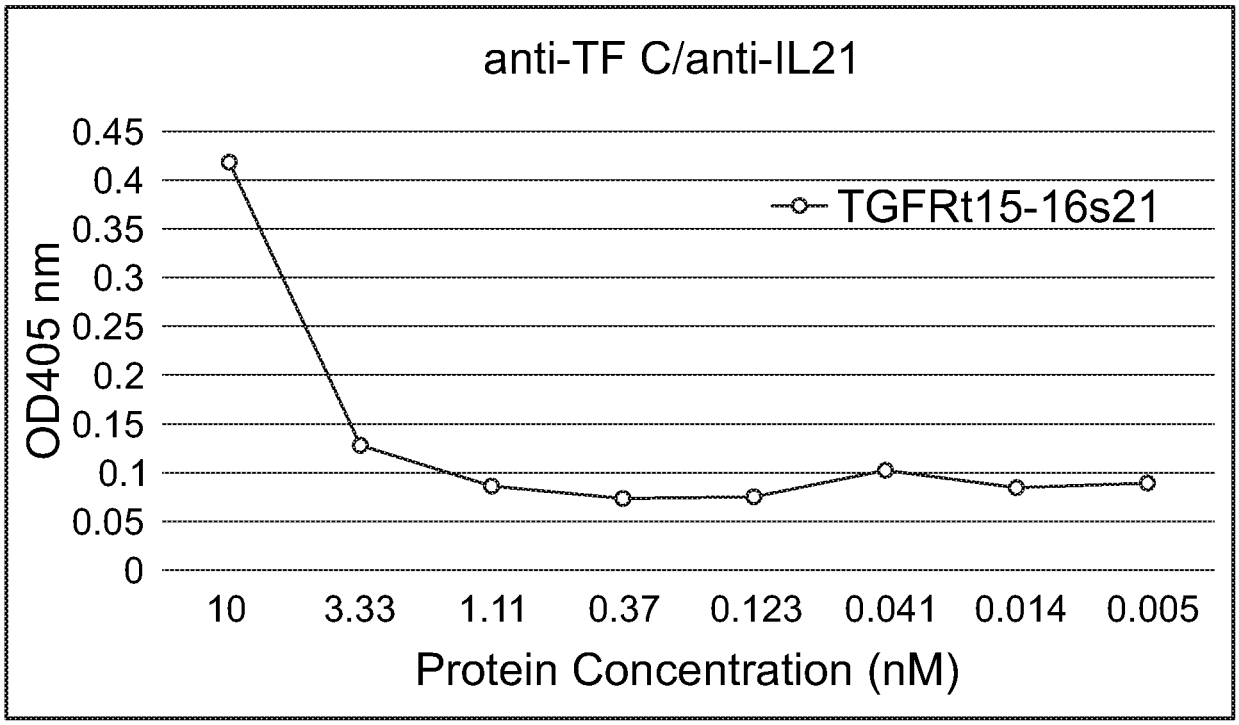


Figure 70B

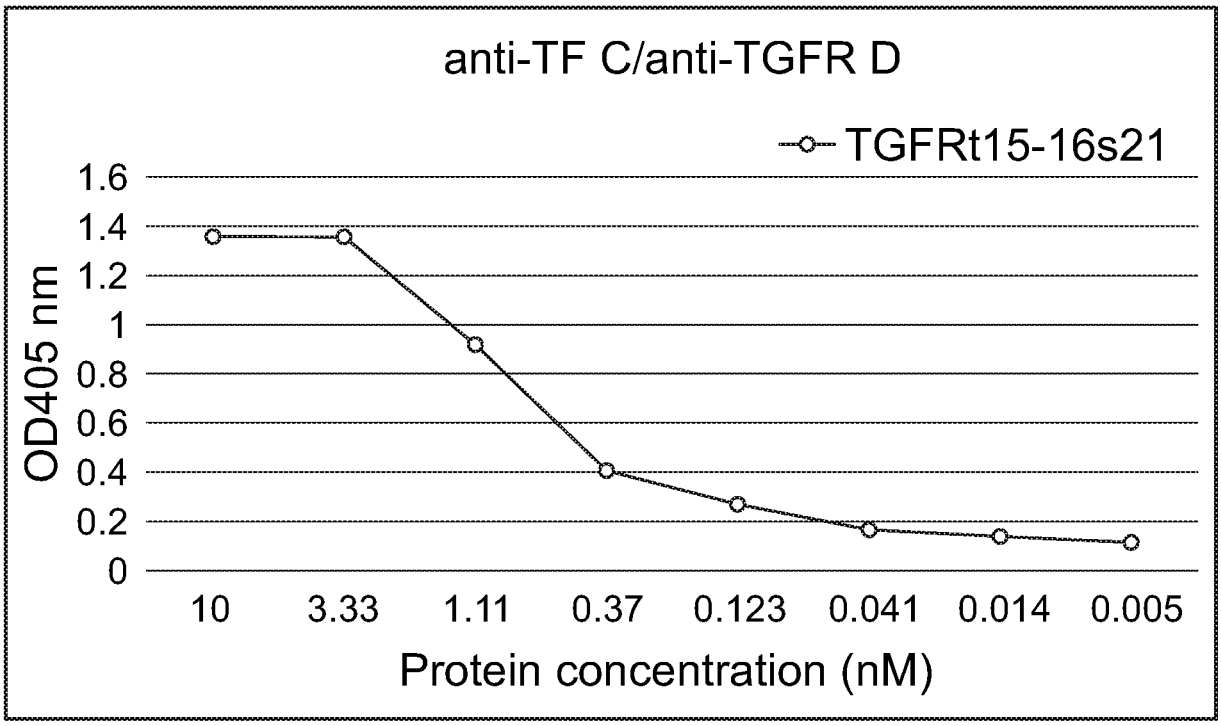

anti-TF C/anti-TGFR D
TGFRt15-16s21
OD405 nm
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
10
3.33
1.11
0.37
0.123
0.041
0.014
0.005
Protein concentration (nM)

Figure 70C

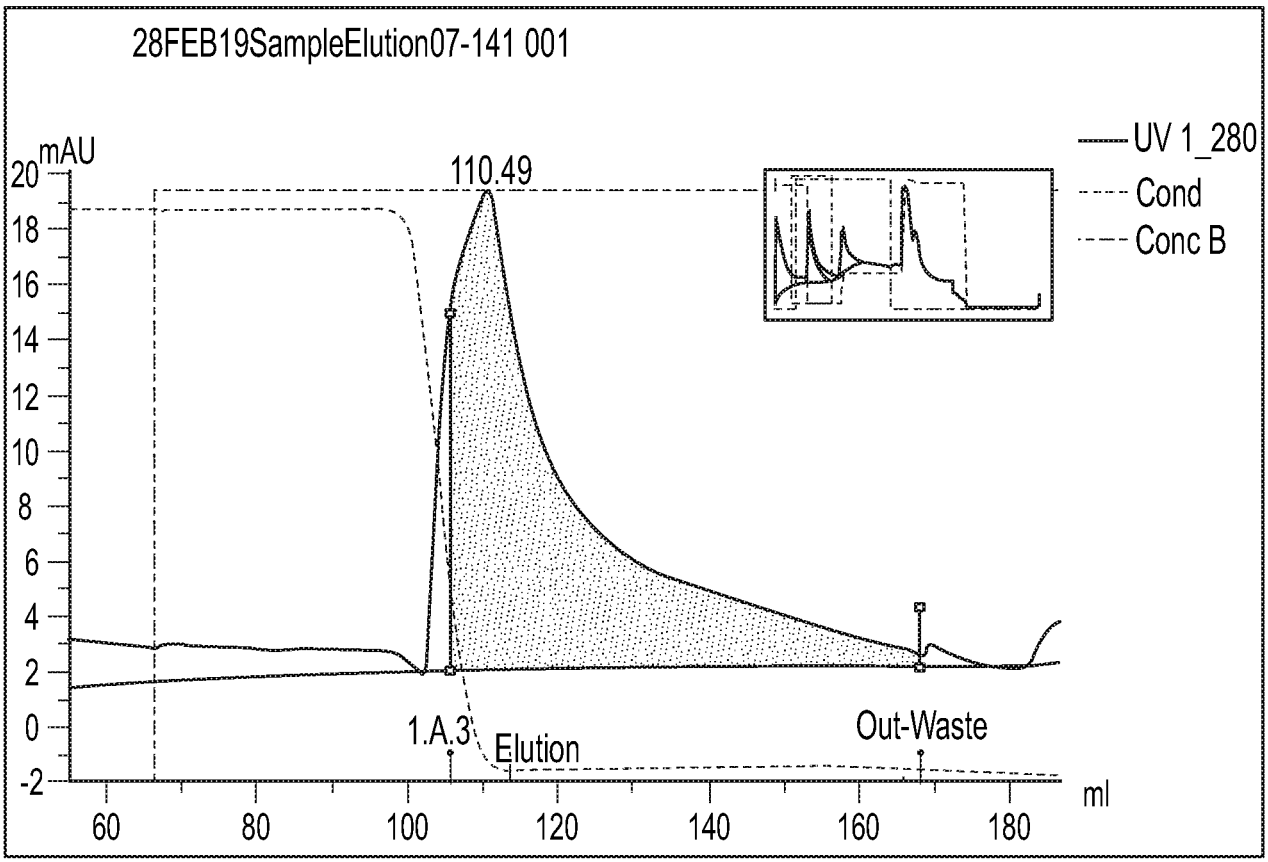


Figure 71

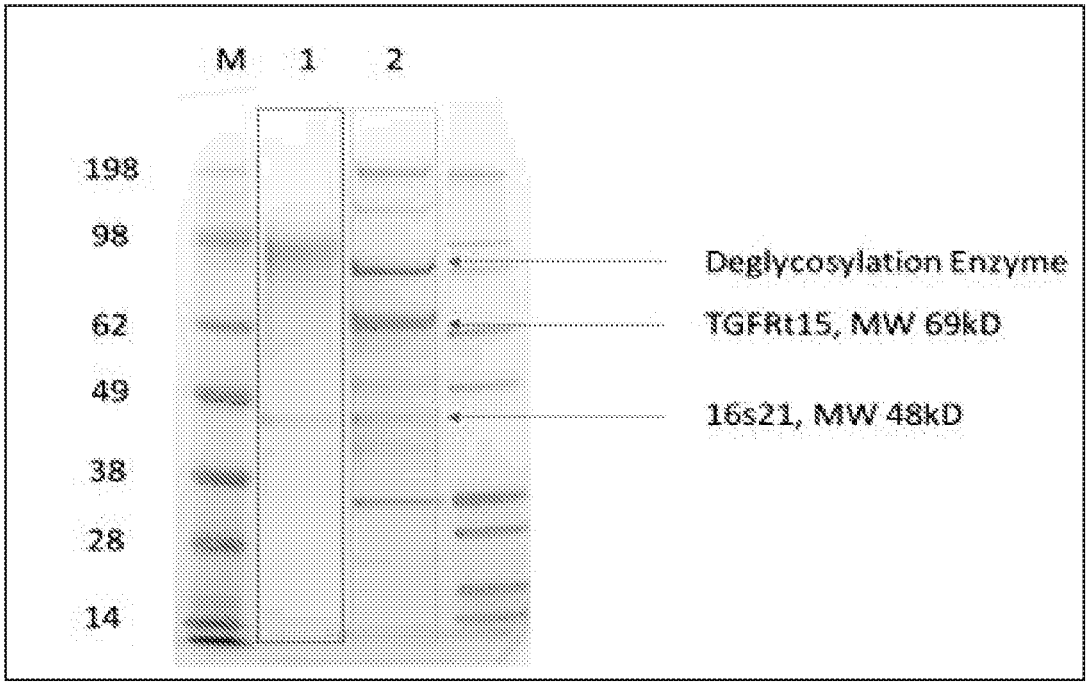


Figure 72

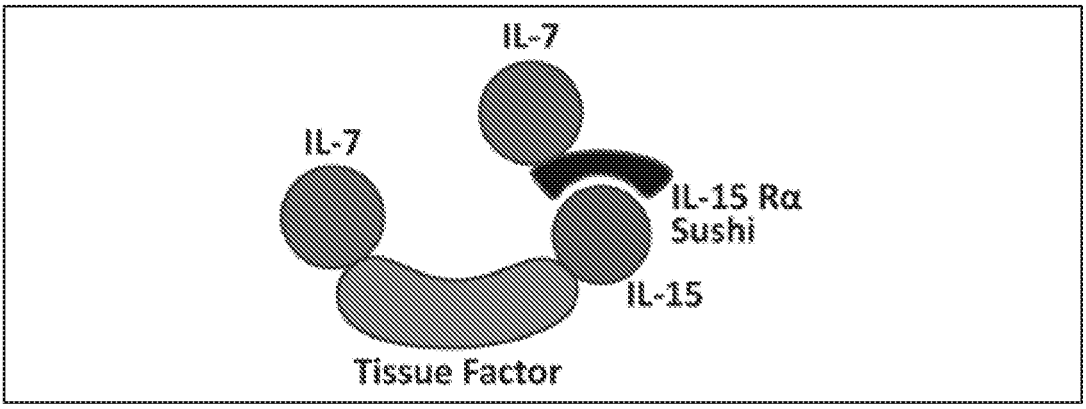


Figure 73

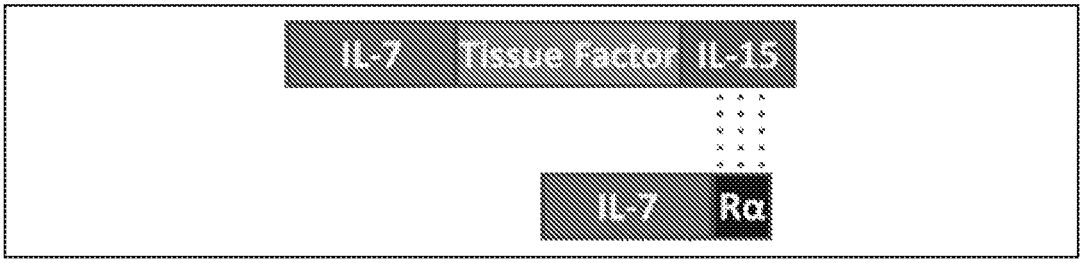


Figure 74

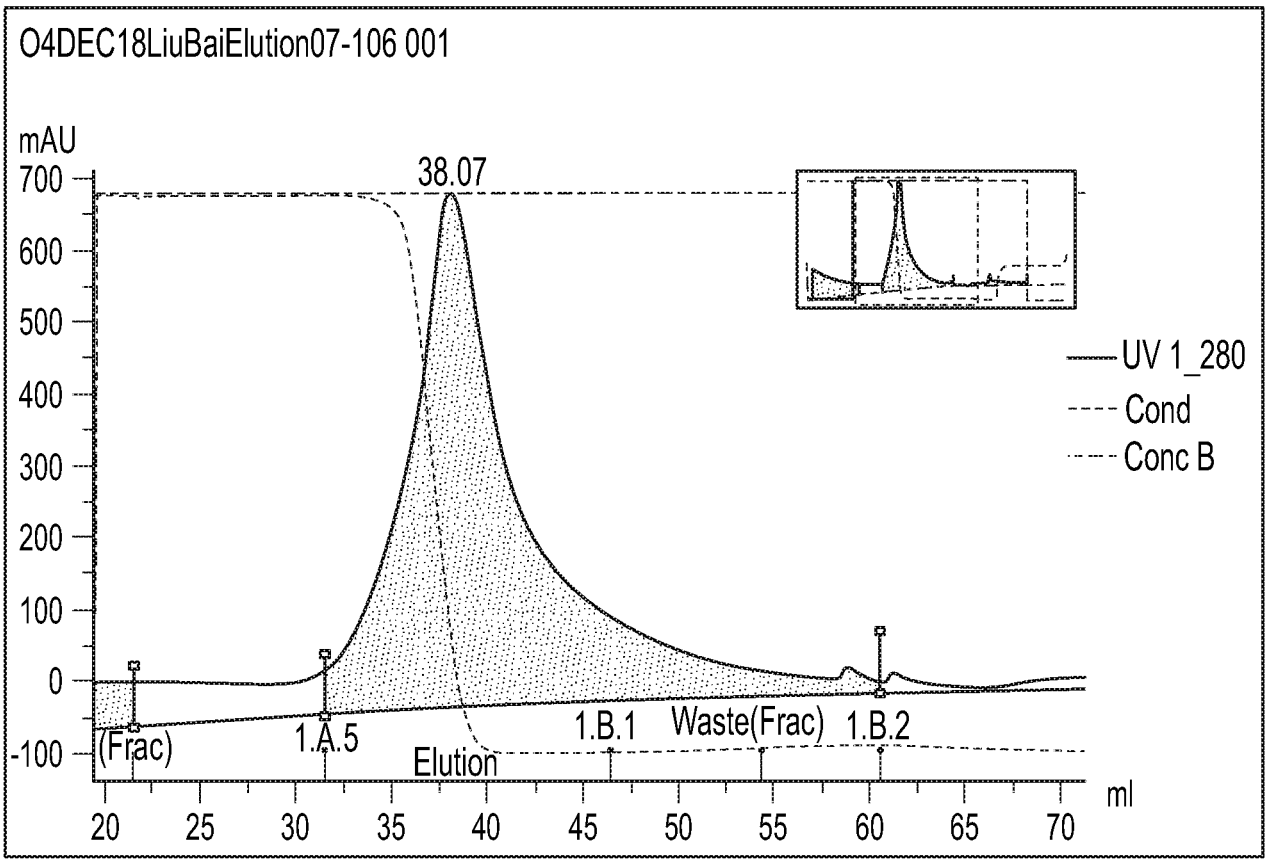


Figure 75

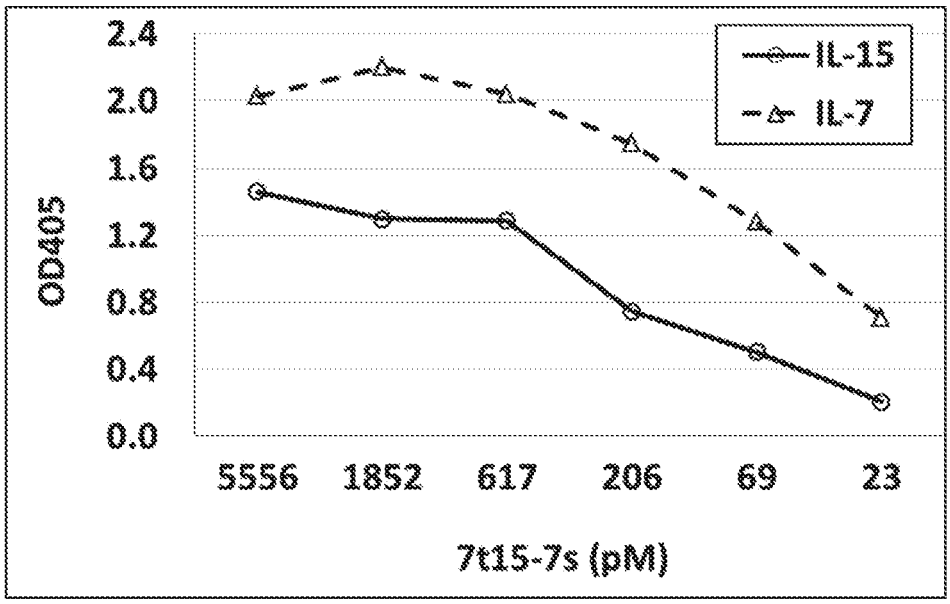


Figure 76

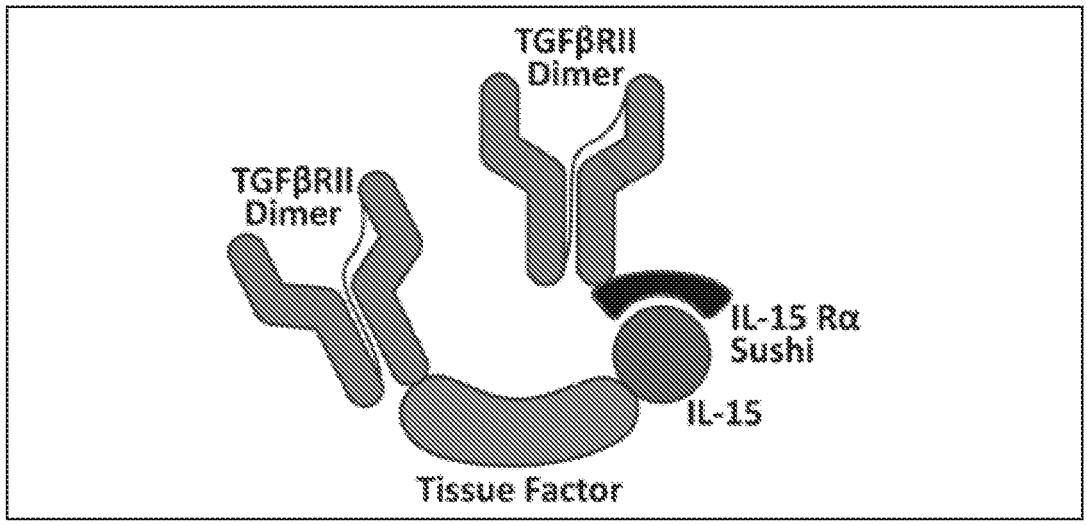


Figure 77

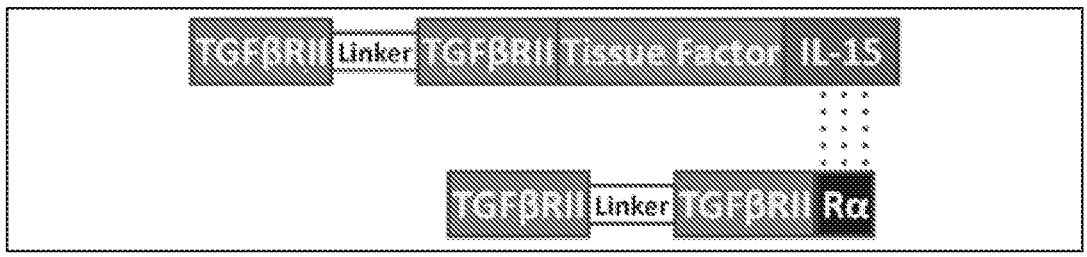


Figure 78

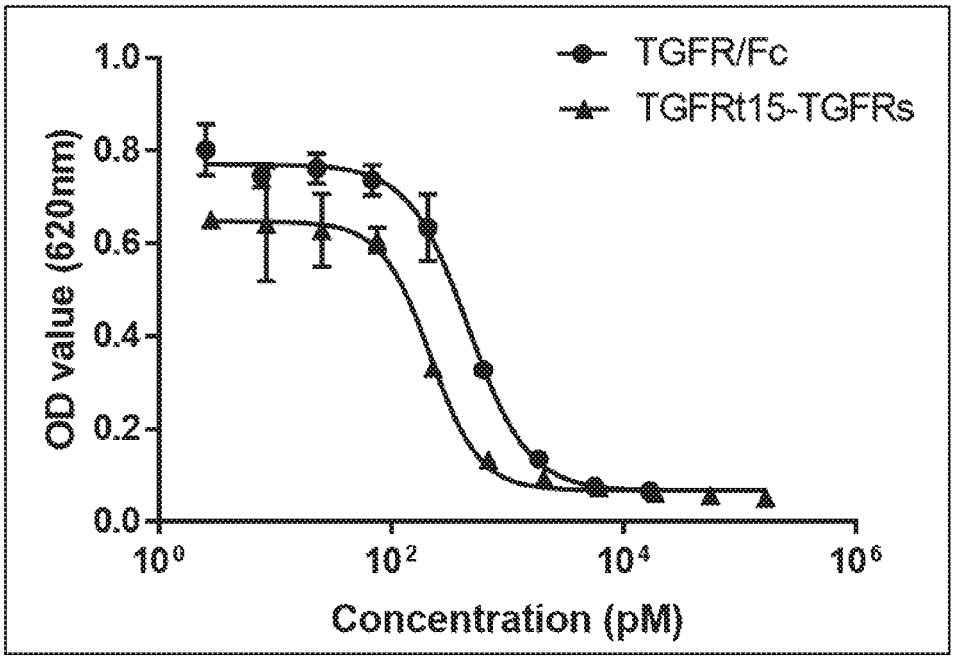


Figure 79

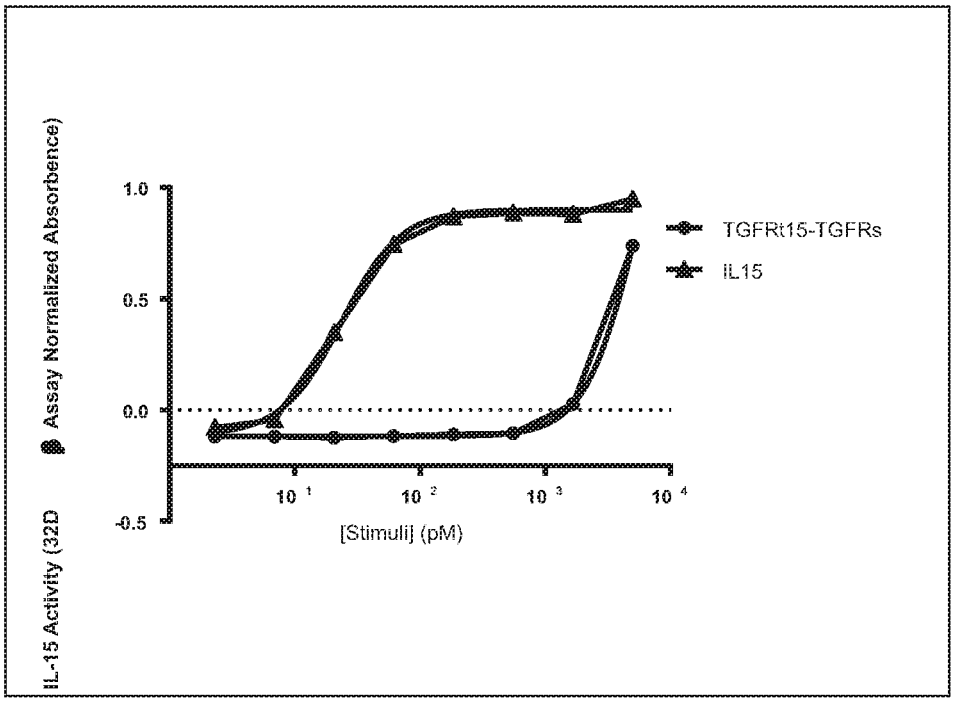


Figure 80

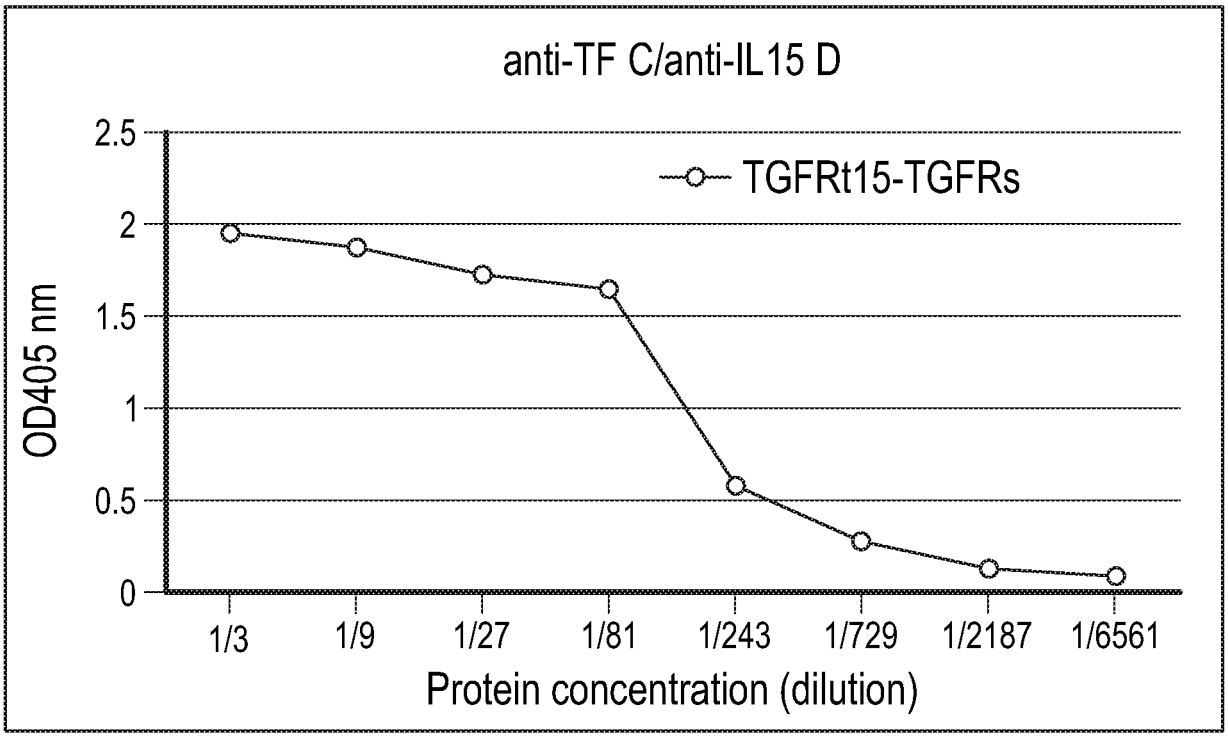


Figure 81A

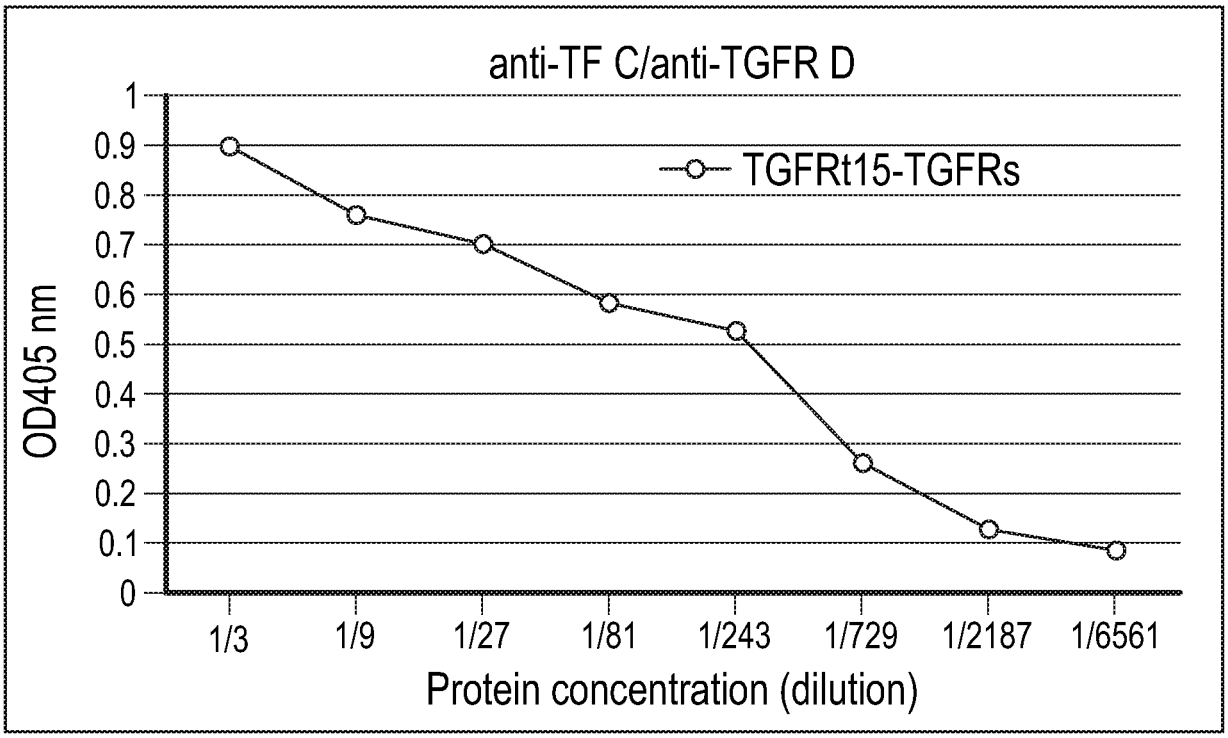


Figure 81B

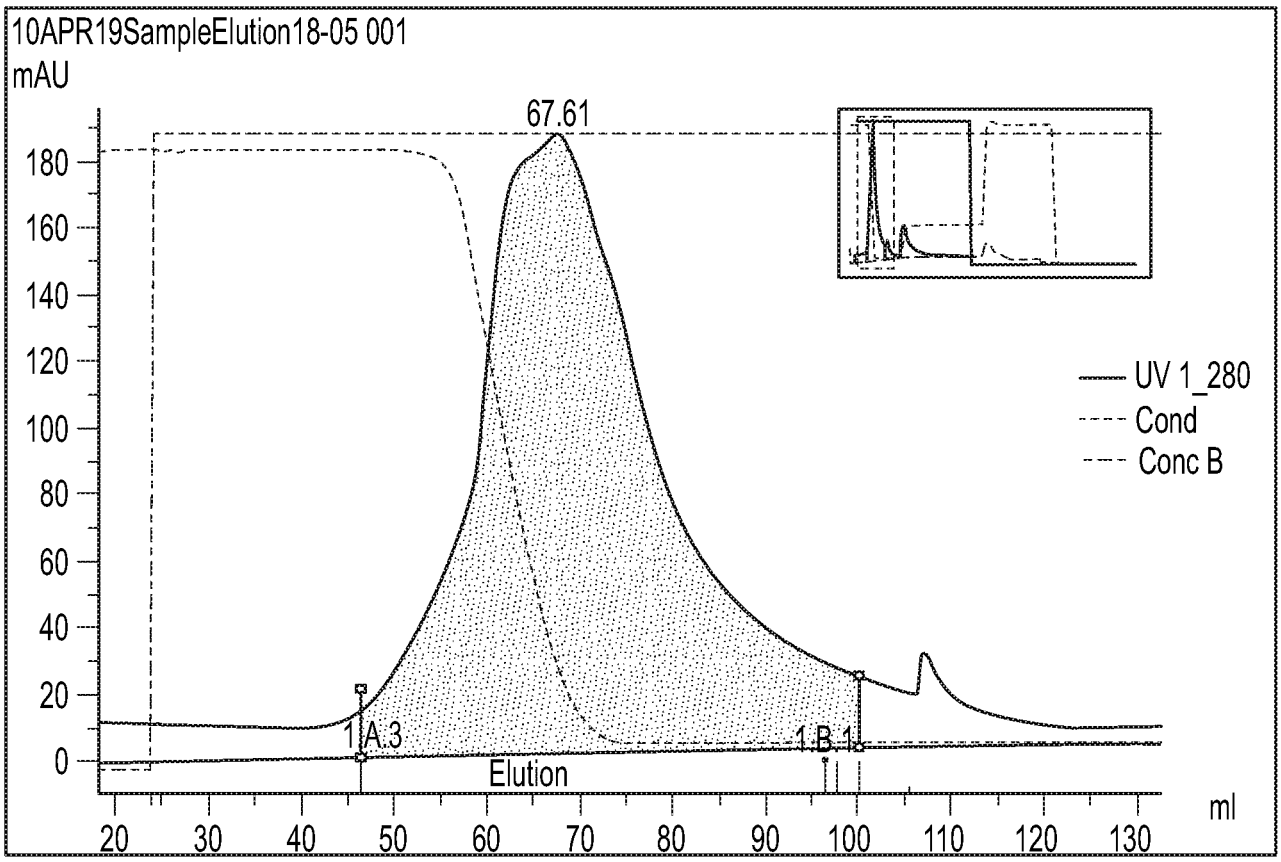


Figure 82

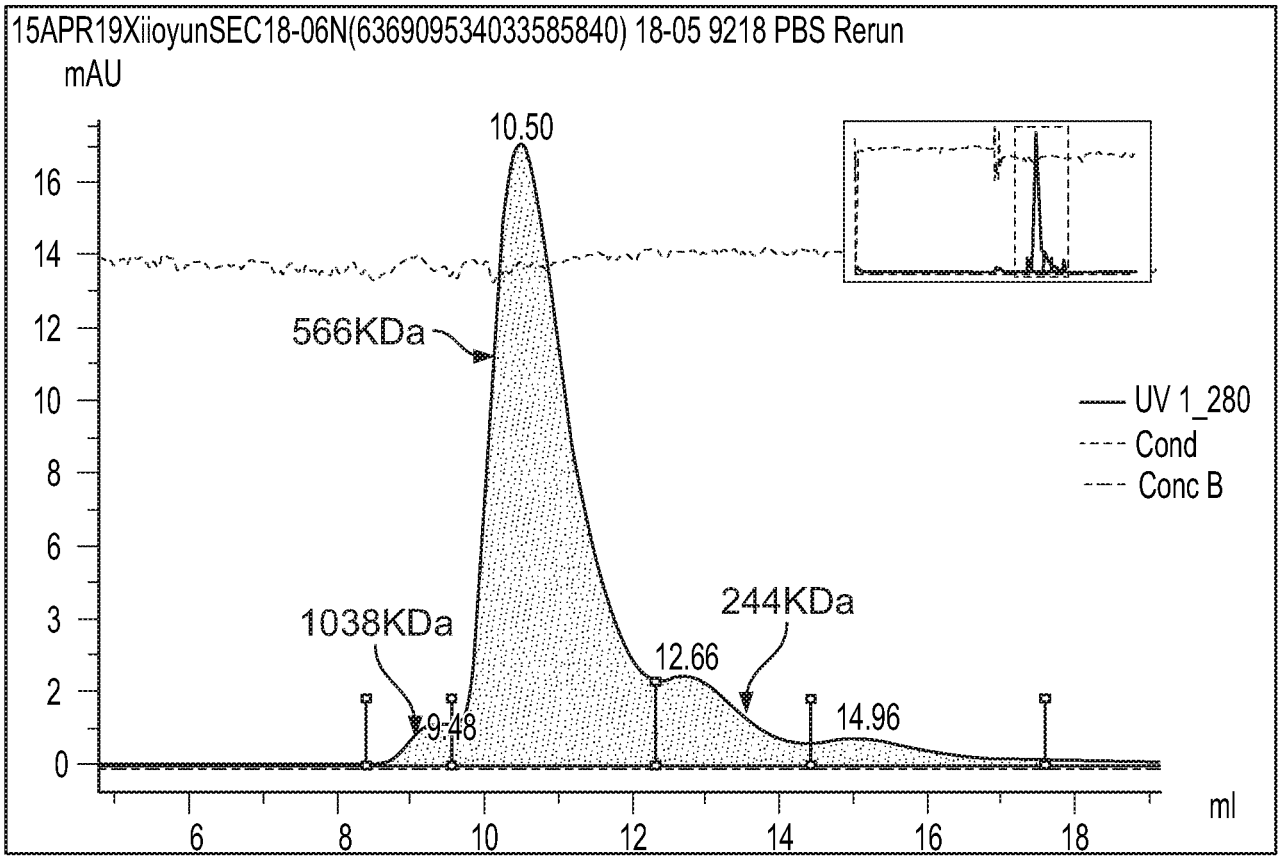


Figure 83

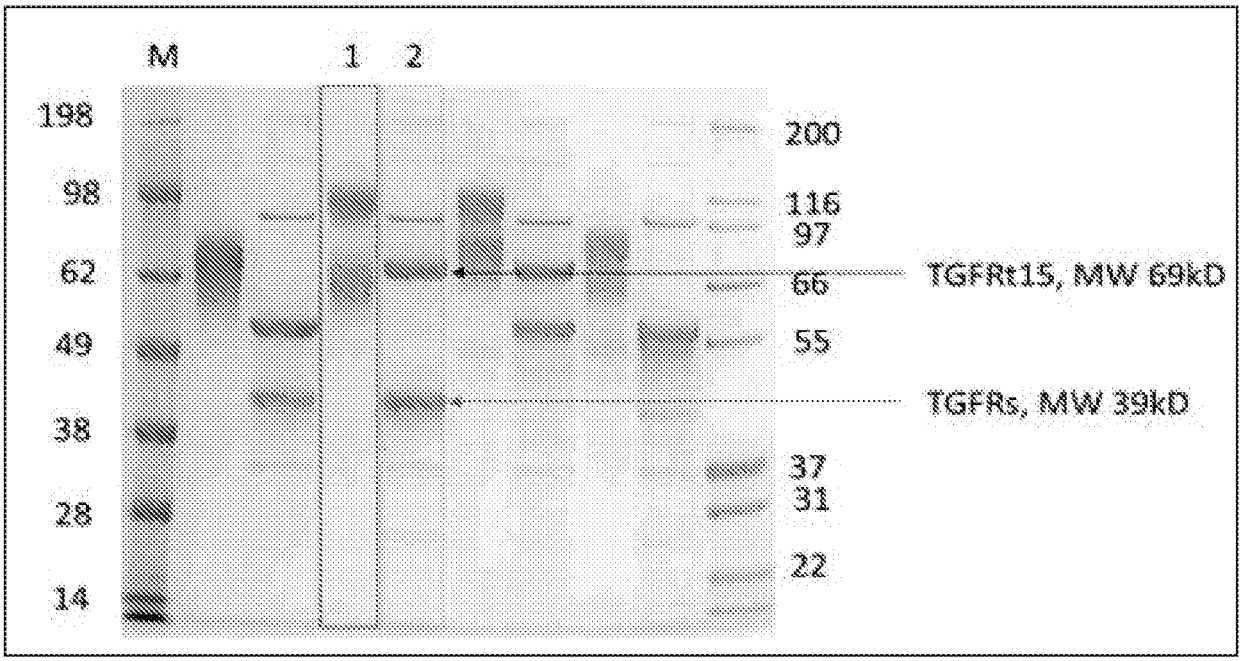


Figure 84

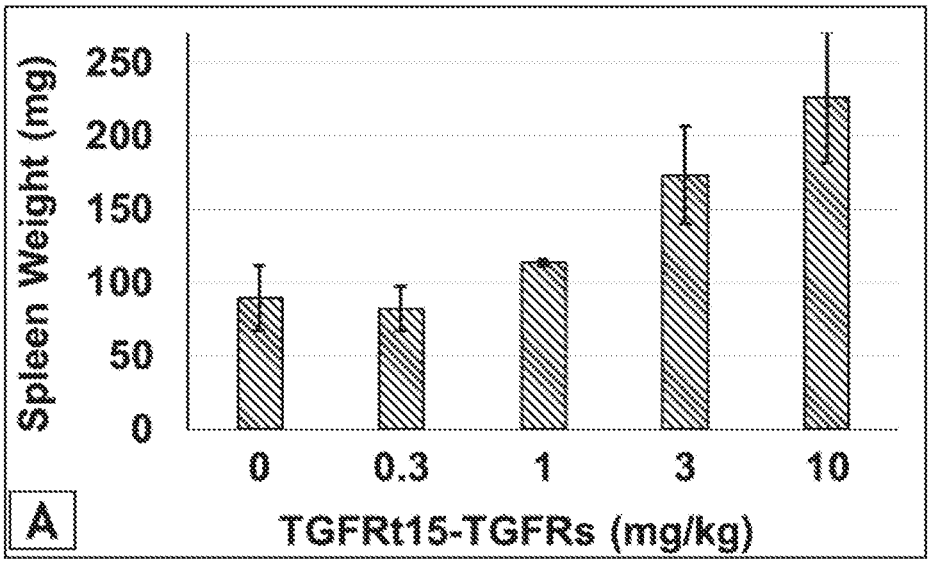


Figure 85A

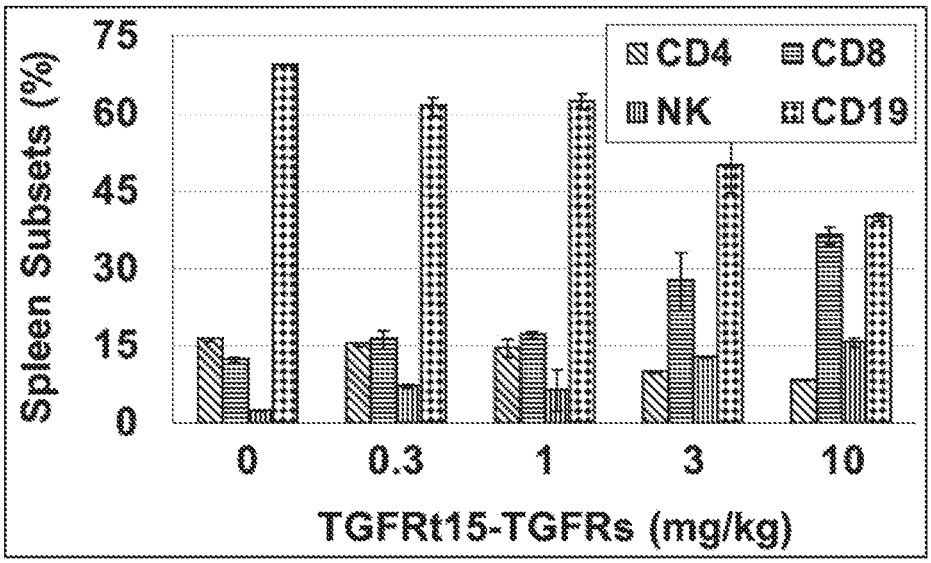


Figure 85B

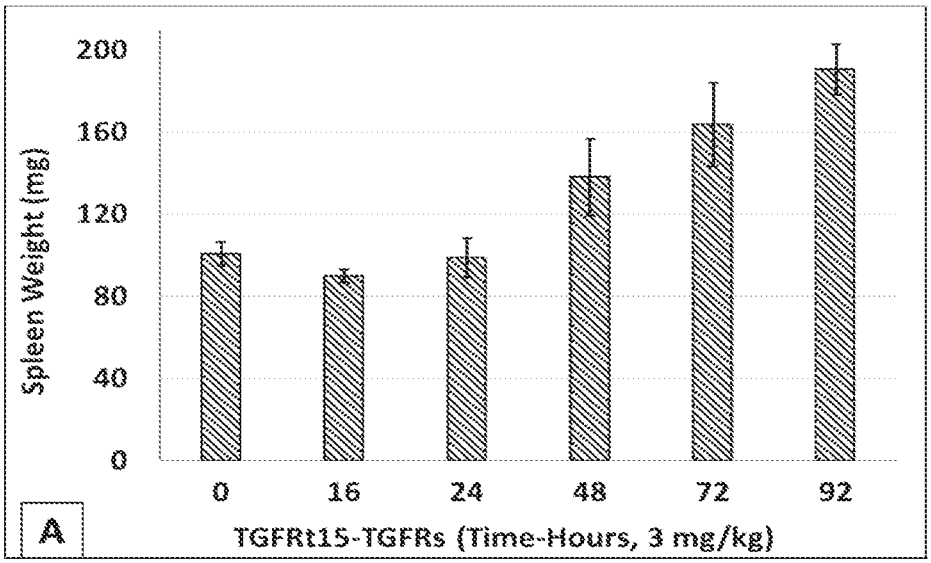


Figure 86A

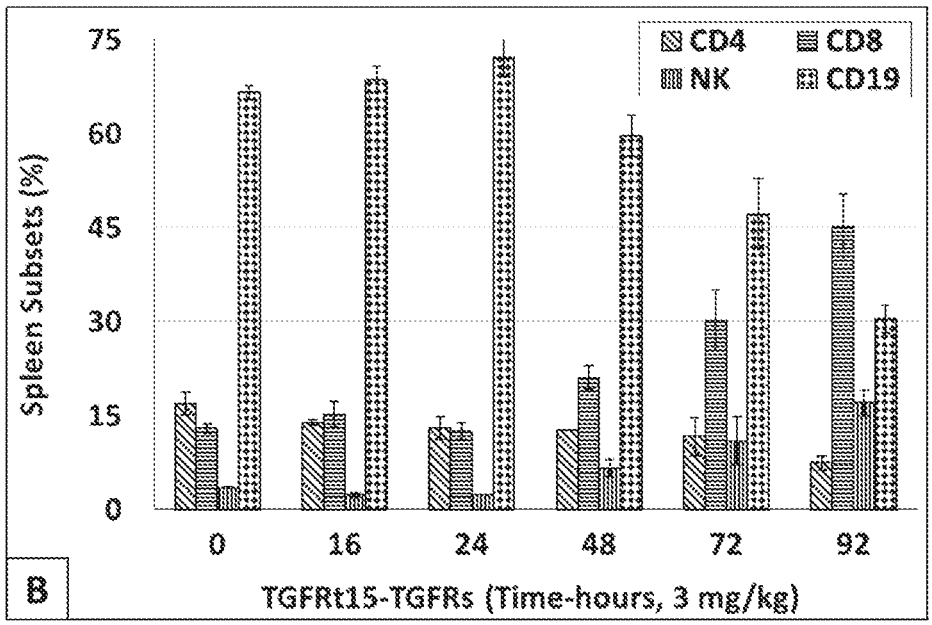


Figure 86B

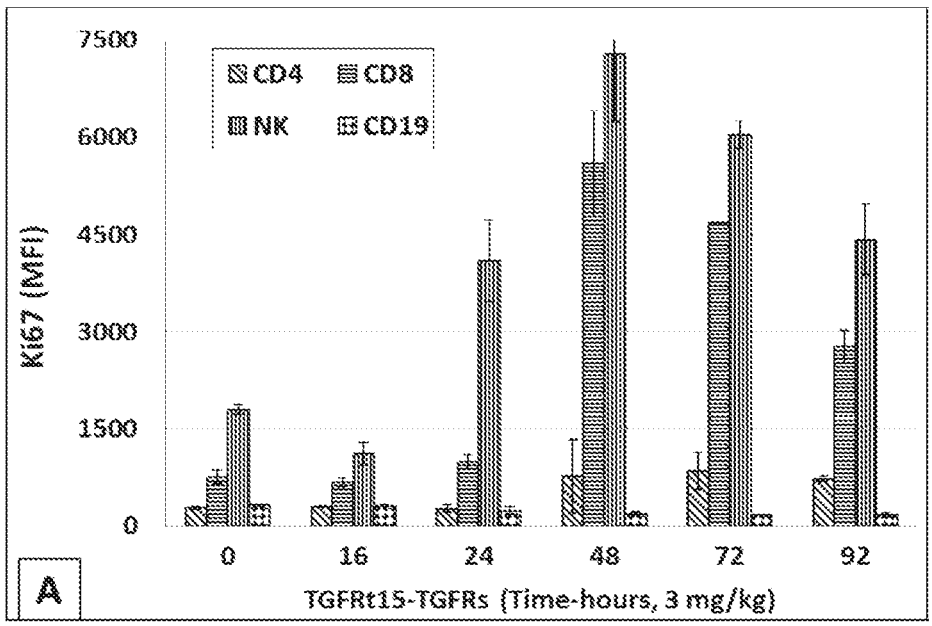


Figure 87A

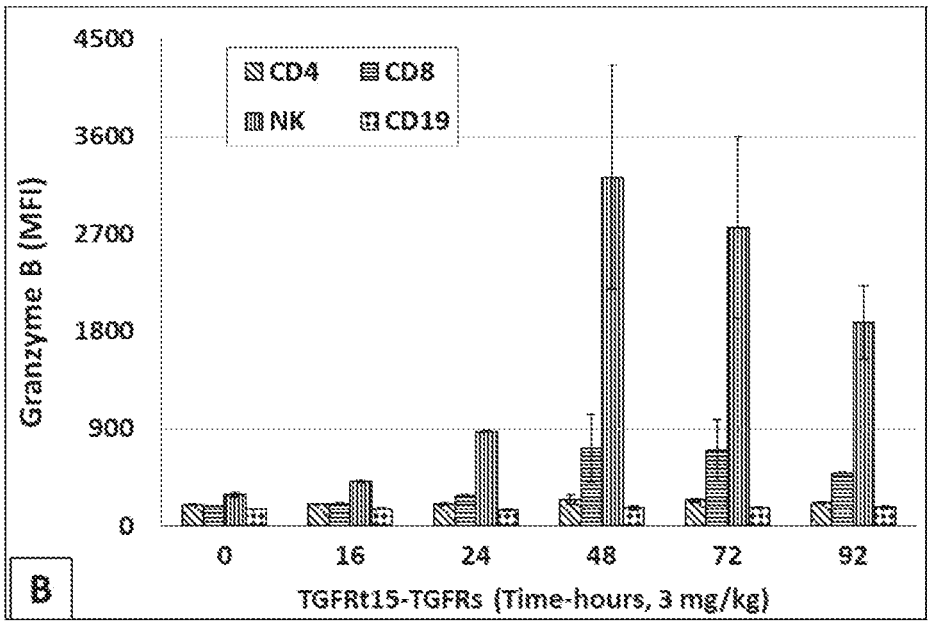


Figure 87B

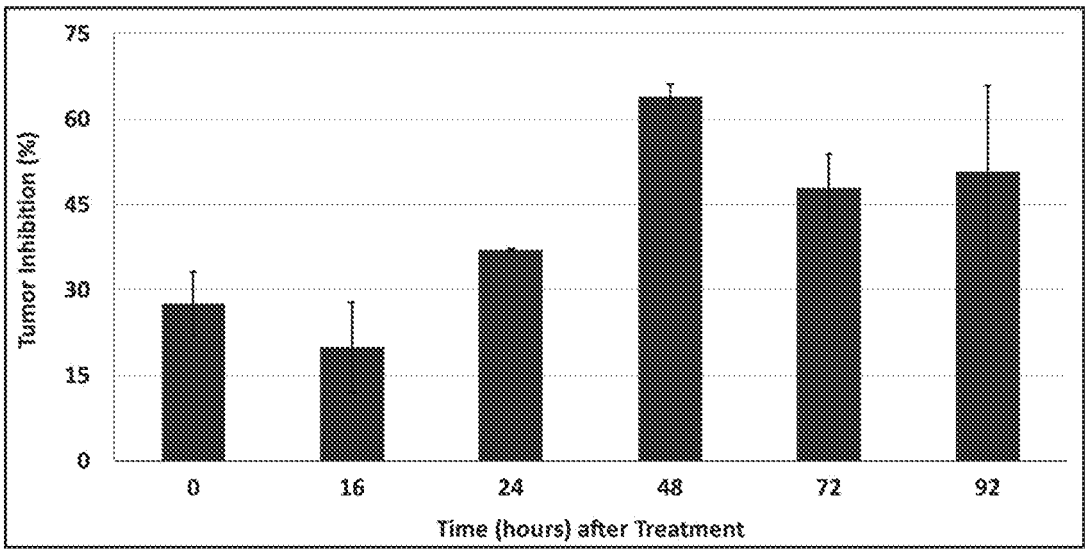


Figure 88

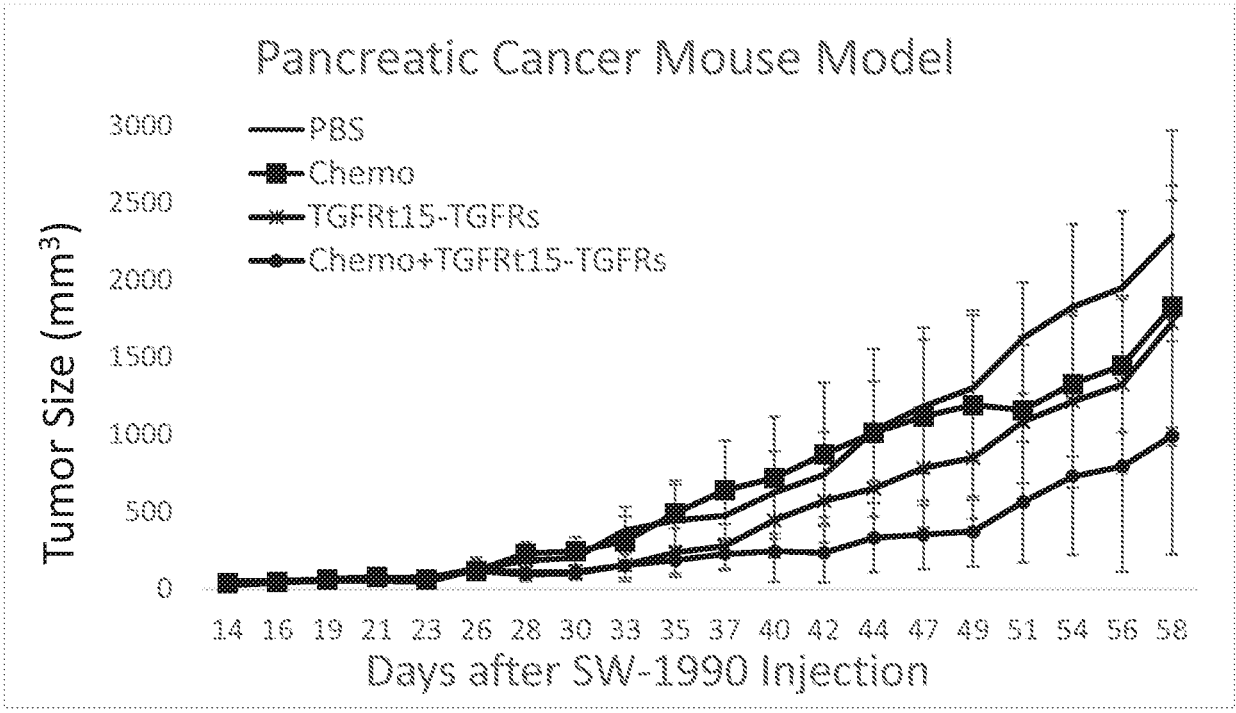


Figure 89

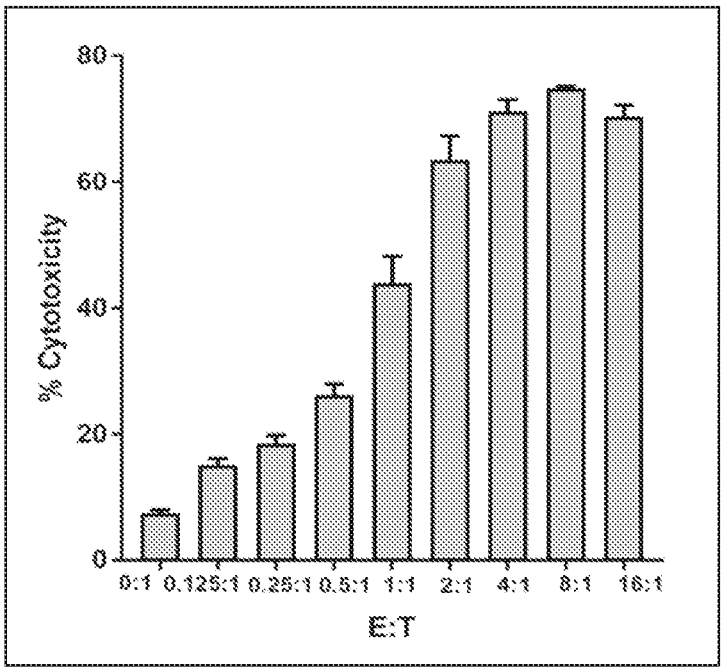


Figure 90

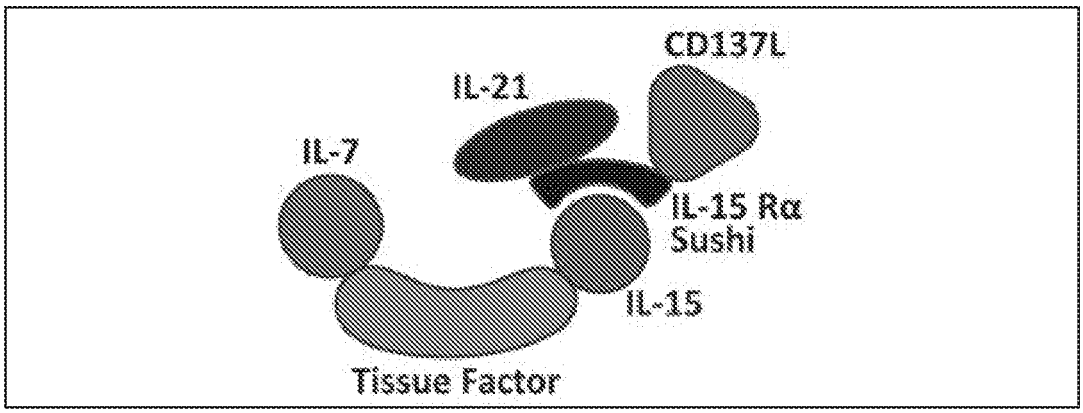


Figure 91

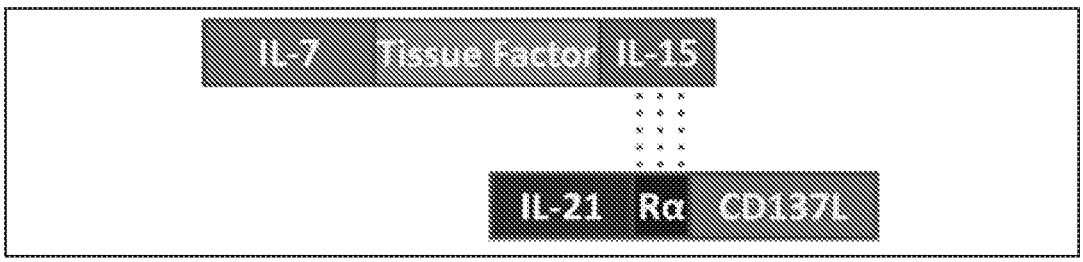


Figure 92

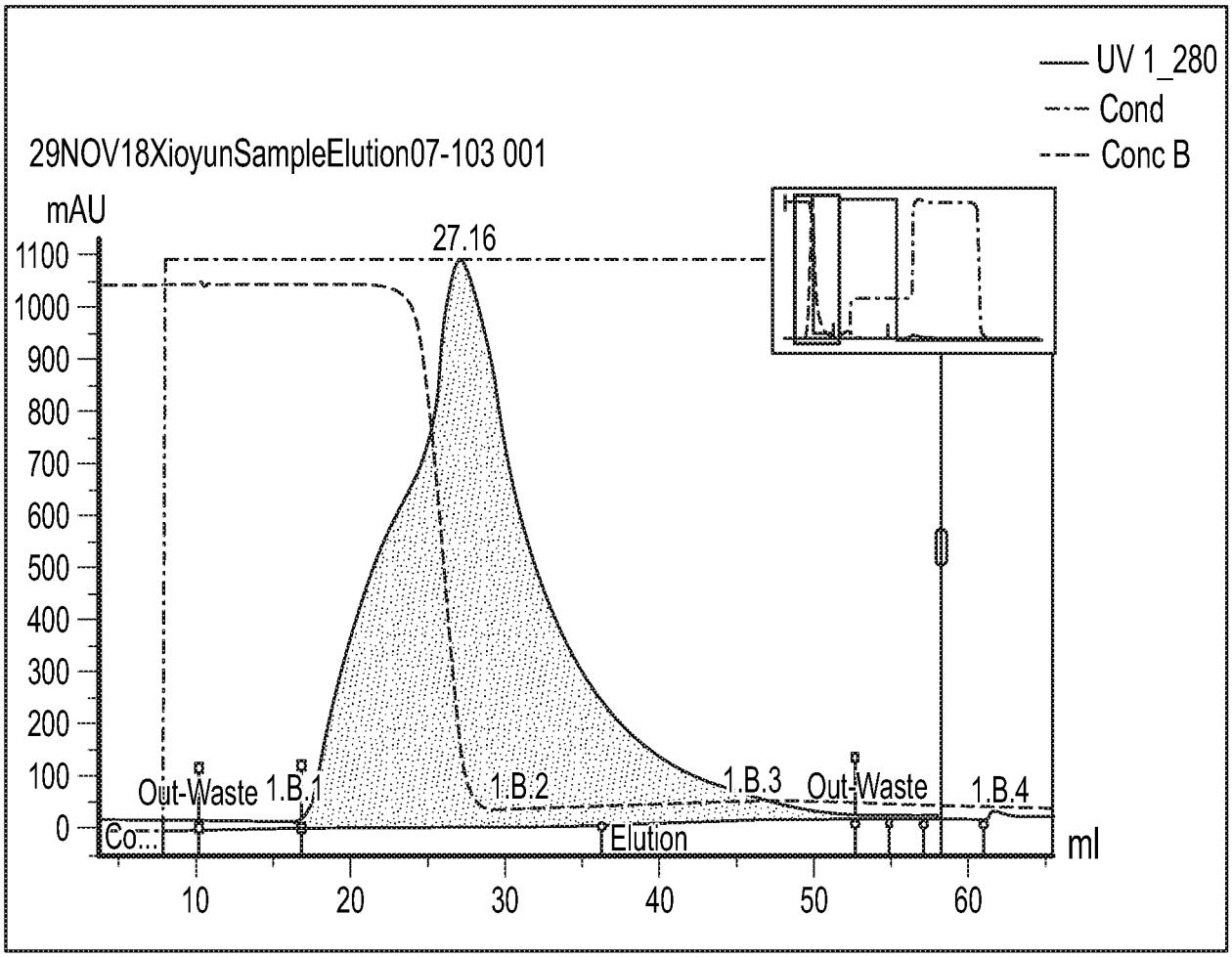

UV 1_280
Cond
Conc B
29NOV18XioyunSampleElution07-103 001
mAU
1100
1000
900
800
700
600
500
400
300
200
100
0
27.16
Out-Waste
1.B.1
1.B.2
1.B.3
Out-Waste
1.B.4
Co...
Elution
ml
10
20
30
40
50
60

Figure 93

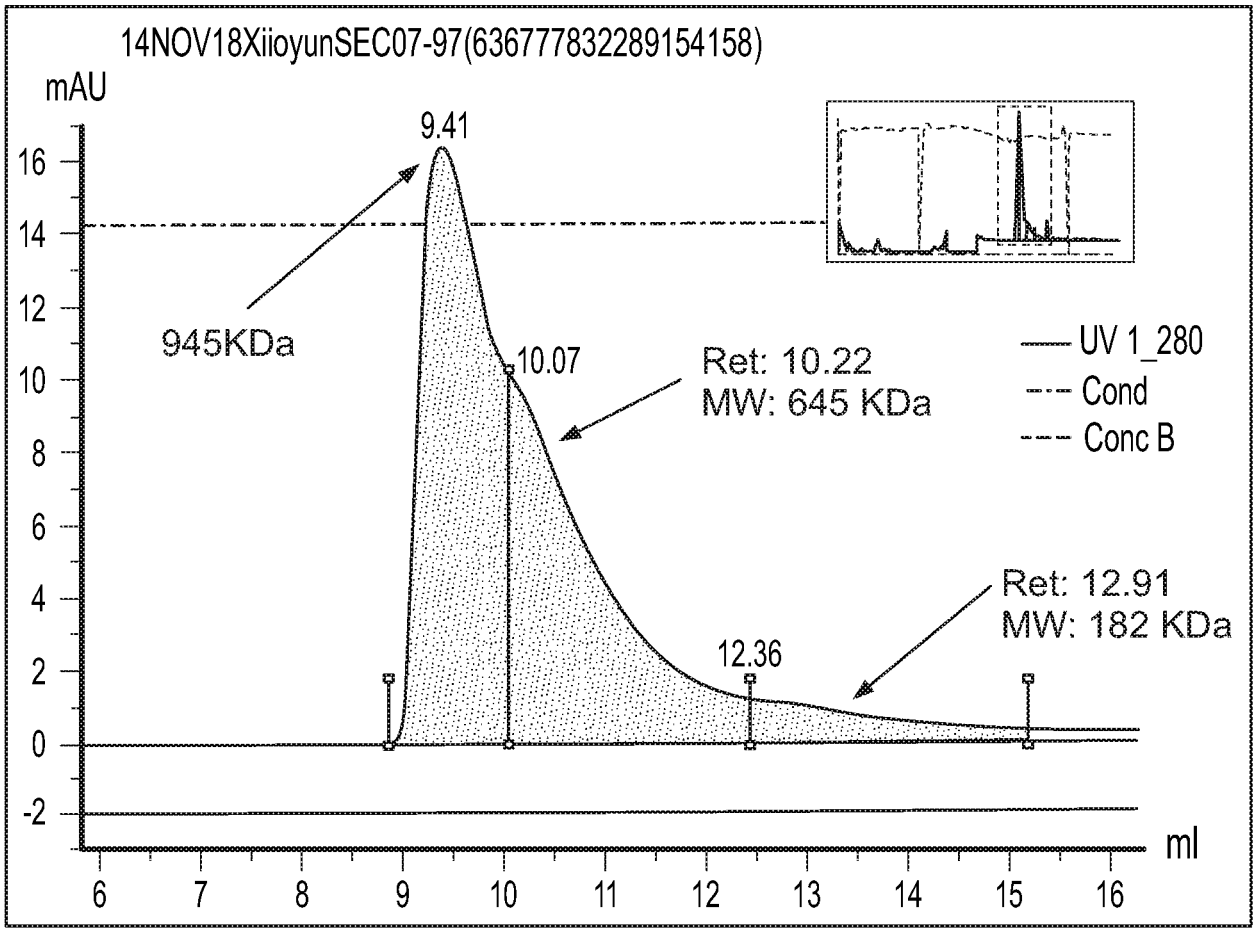

14NOV18XiioyunSEC07-97(636777832289154158)
mAU
16
14
12
10
8
6
4
2
0
-2
9.41
945KDa
10.07
Ret: 10.22
MW: 645 KDa
12.36
Ret: 12.91
MW: 182 KDa
UV 1_280
Cond
Conc B
ml
6
7
8
9
10
11
12
13
14
15
16

Figure 94

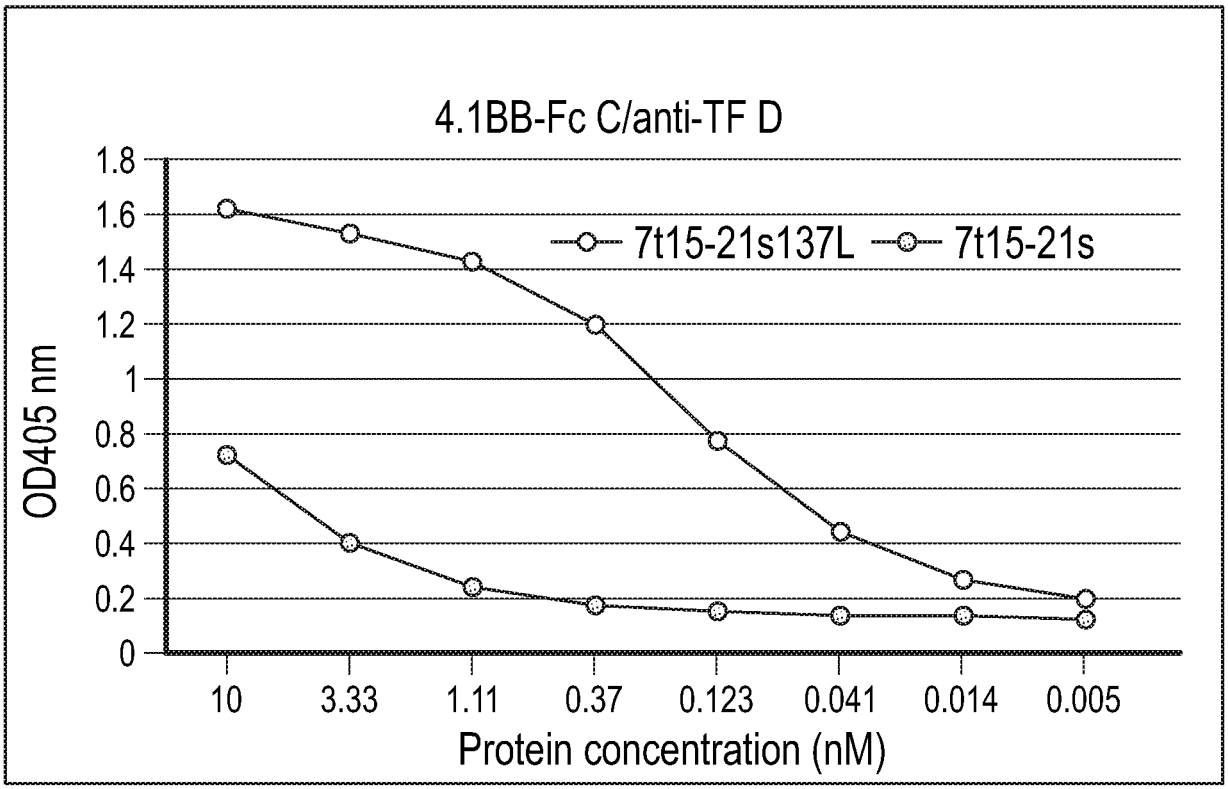

4.1BB-Fc C/anti-TF D
OD405 nm
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
7t15-21s137L
7t15-21s
10
3.33
1.11
0.37
0.123
0.041
0.014
0.005
Protein concentration (nM)

Figure 95

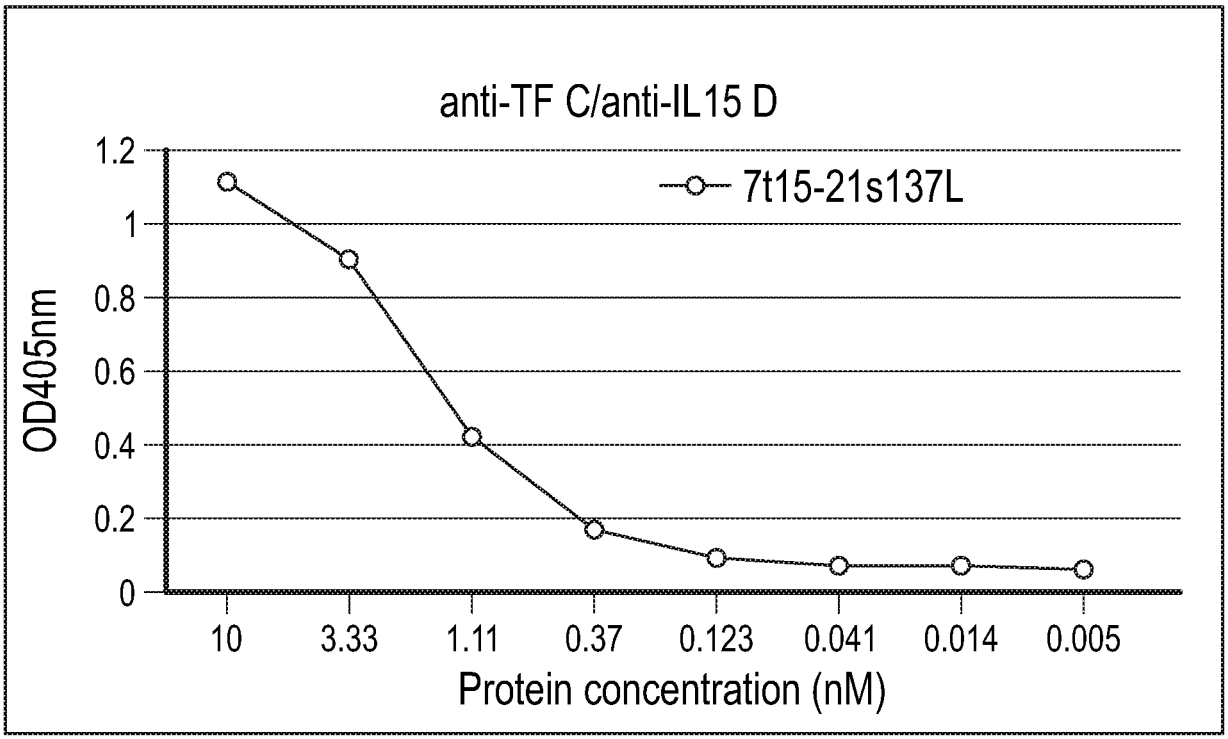


Figure 96A

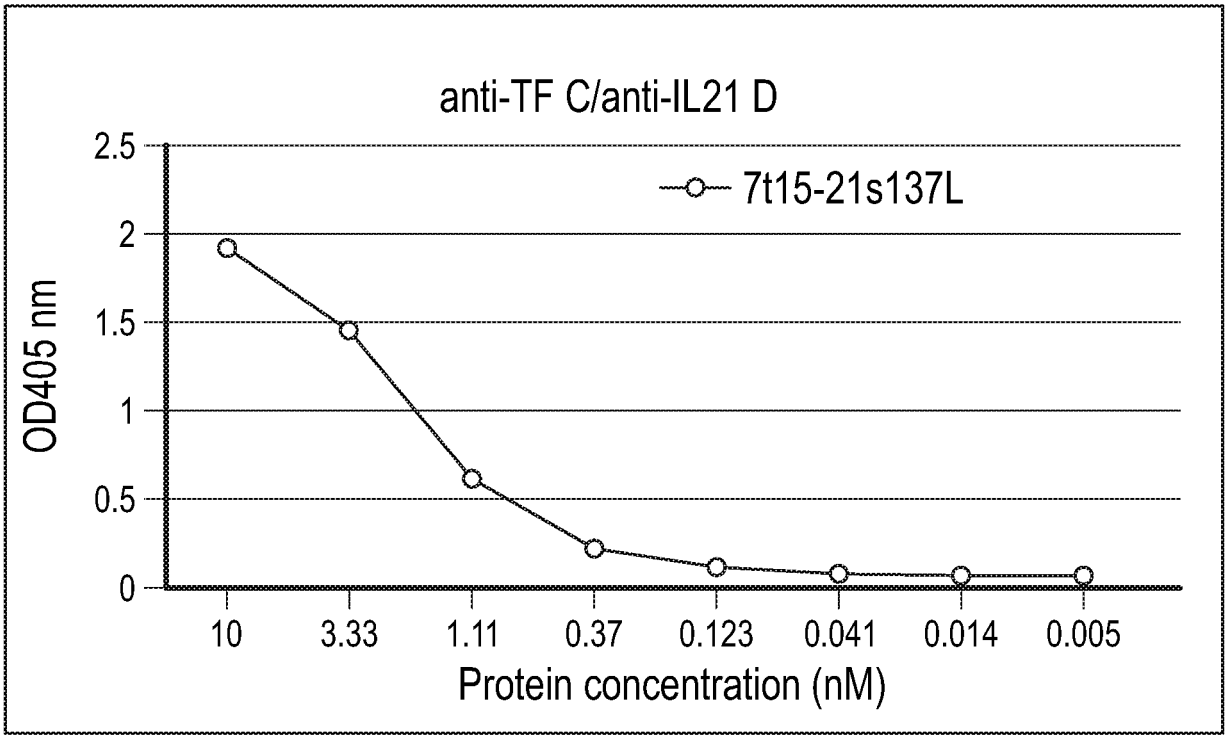


Figure 96B

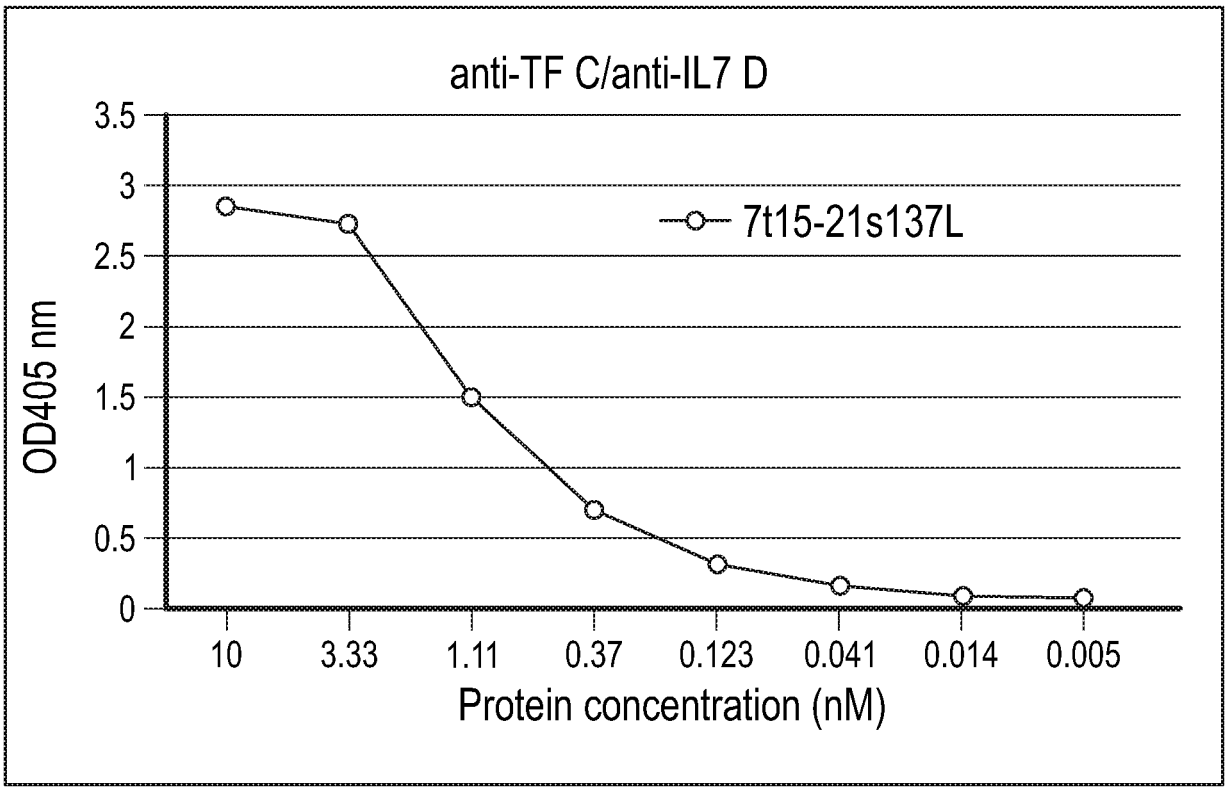

anti-TF C/anti-IL7 D
OD405 nm
3.5
3
2.5
2
1.5
1
0.5
0
7t15-21s137L
10
3.33
1.11
0.37
0.123
0.041
0.014
0.005
Protein concentration (nM)

Figure 96C

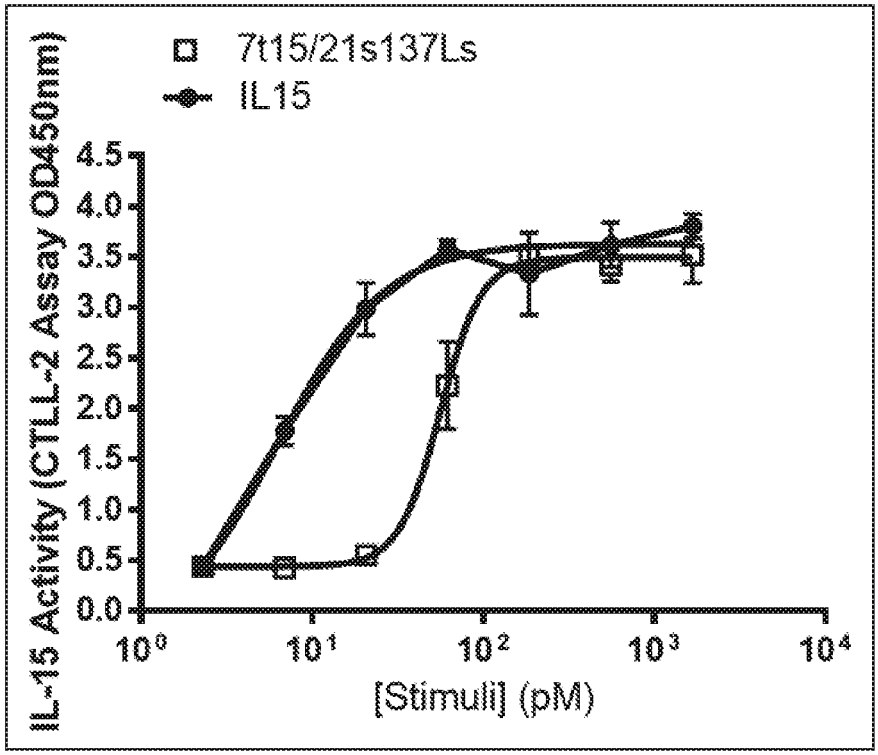


Figure 97

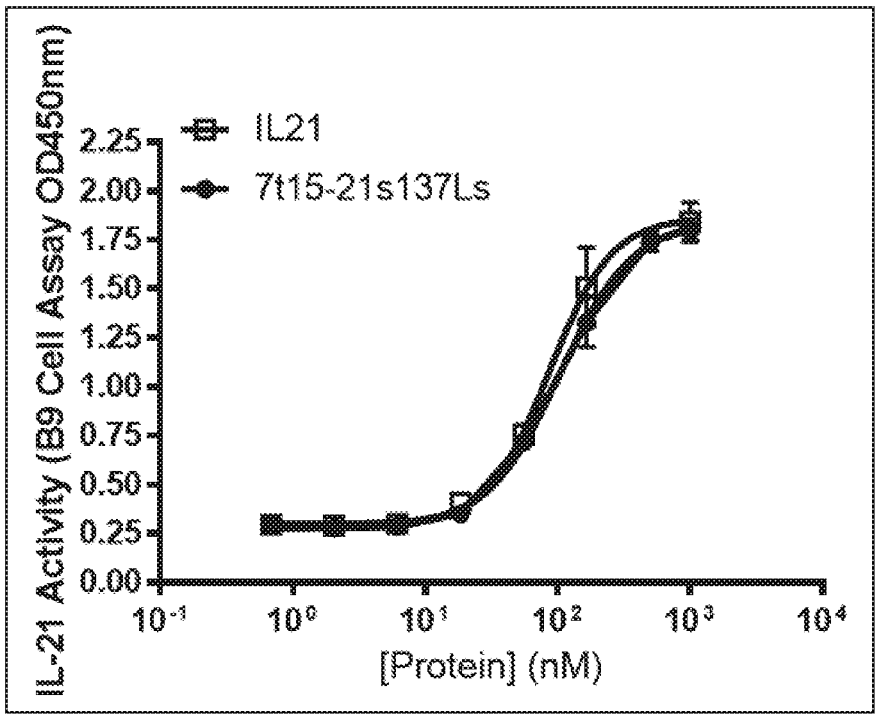


Figure 98

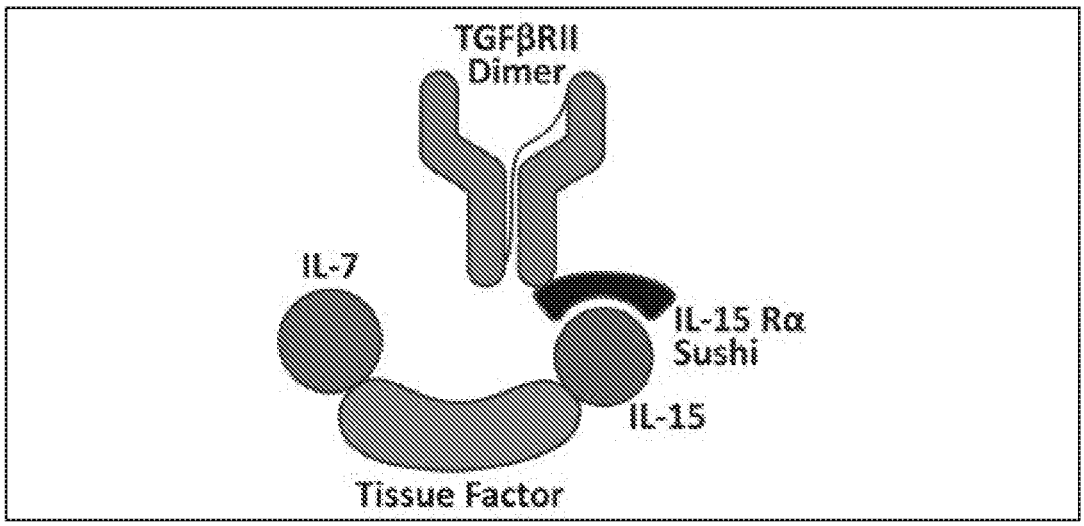


Figure 99

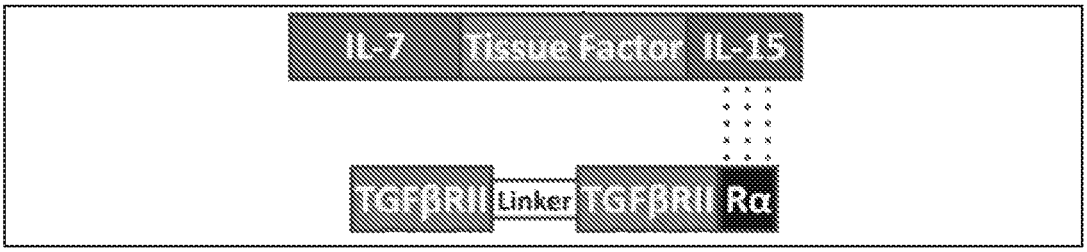


Figure 100

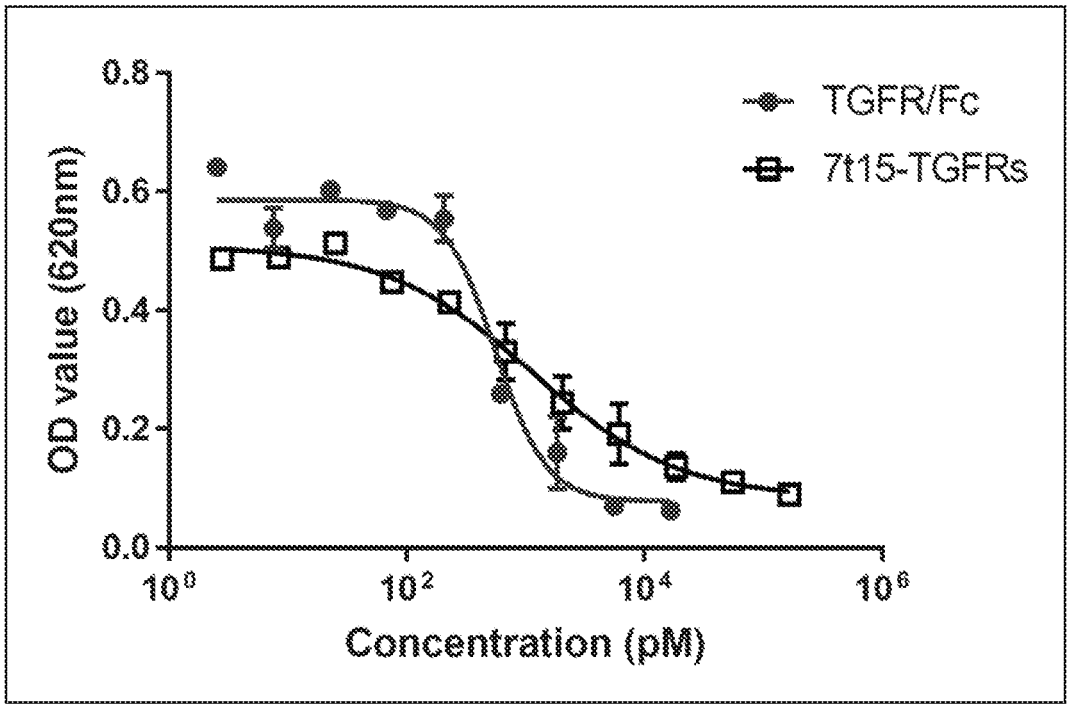

0.8
0.6
0.4
0.2
0.0
OD value (620nm)
TGFR/Fc
7t15-TGFRs
10^0
10^2
10^4
10^6
Concentration (pM)

Figure 101

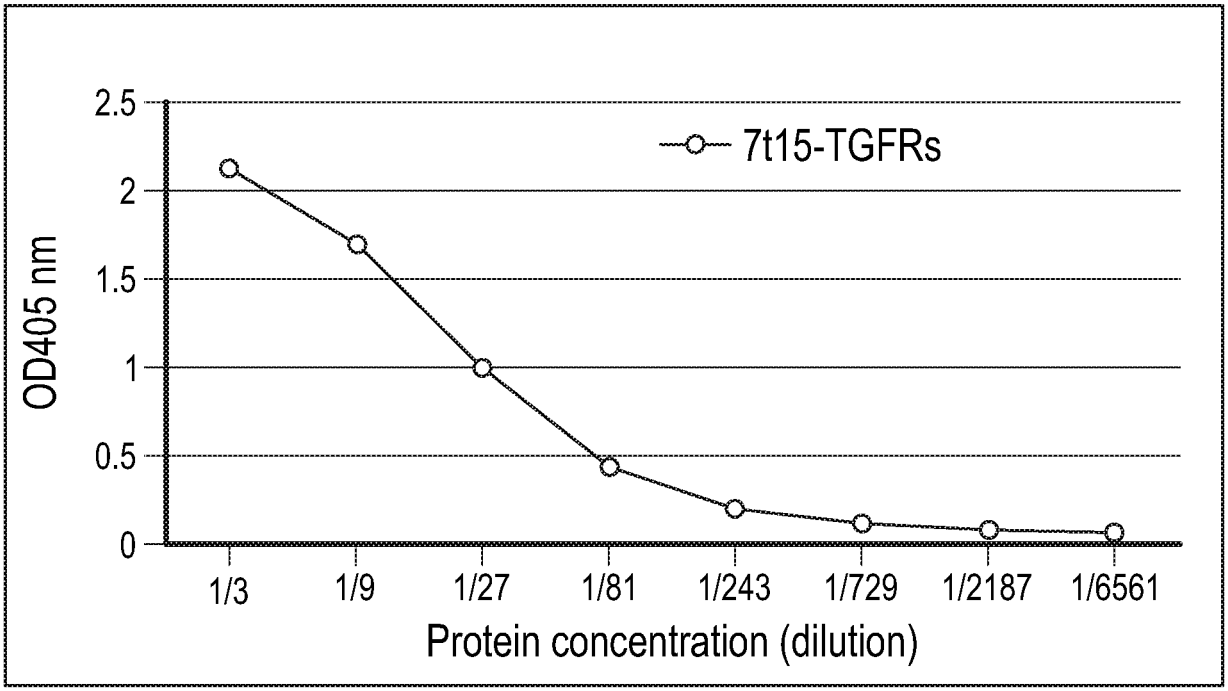


Figure 102A

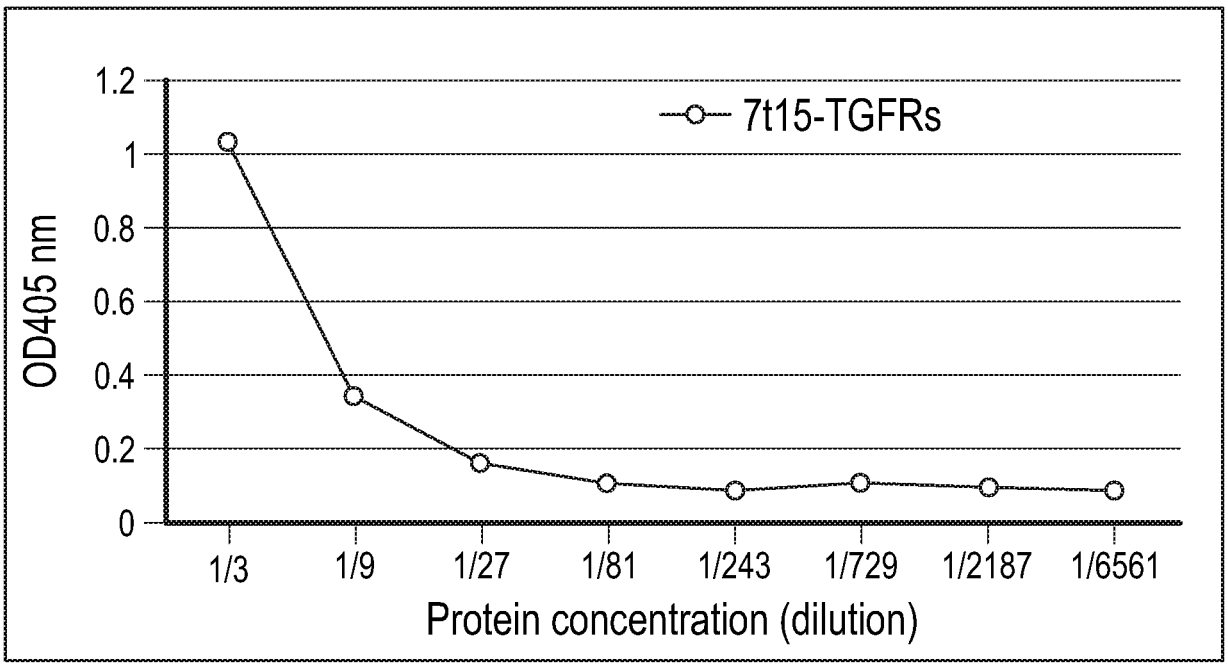


Figure 102B

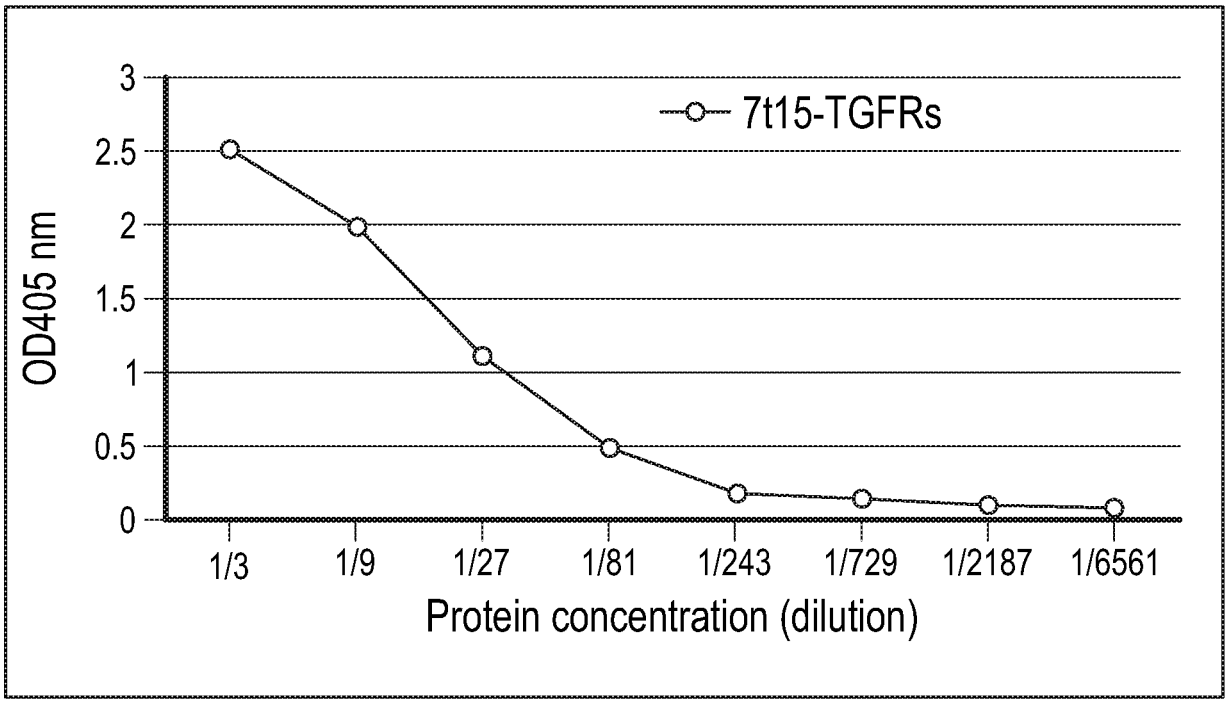

3
2.5
2
1.5
1
0.5
0
OD405 nm
7t15-TGFRs
1/3
1/9
1/27
1/81
1/243
1/729
1/2187
1/6561
Protein concentration (dilution)

Figure 102C

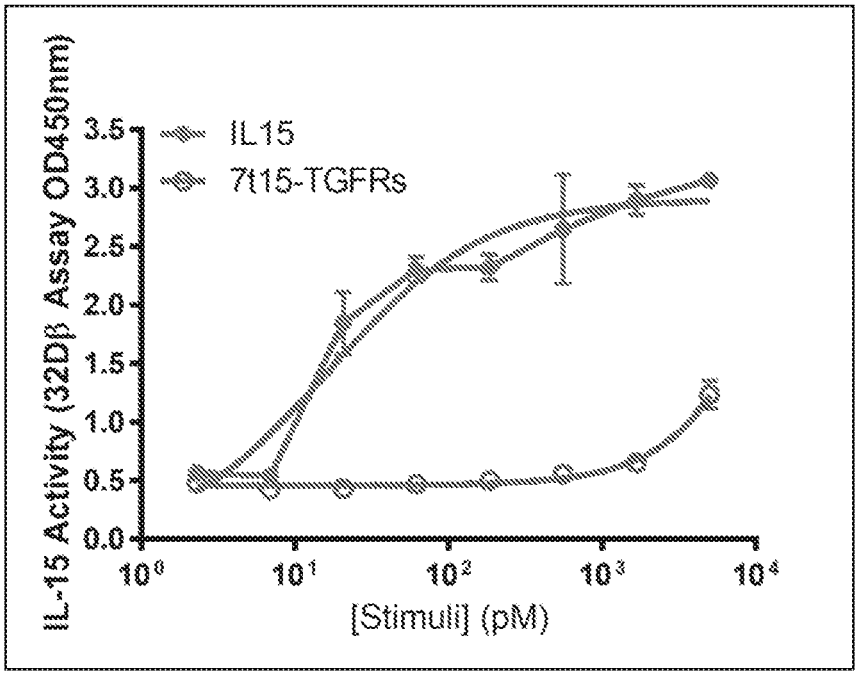


Figure 103

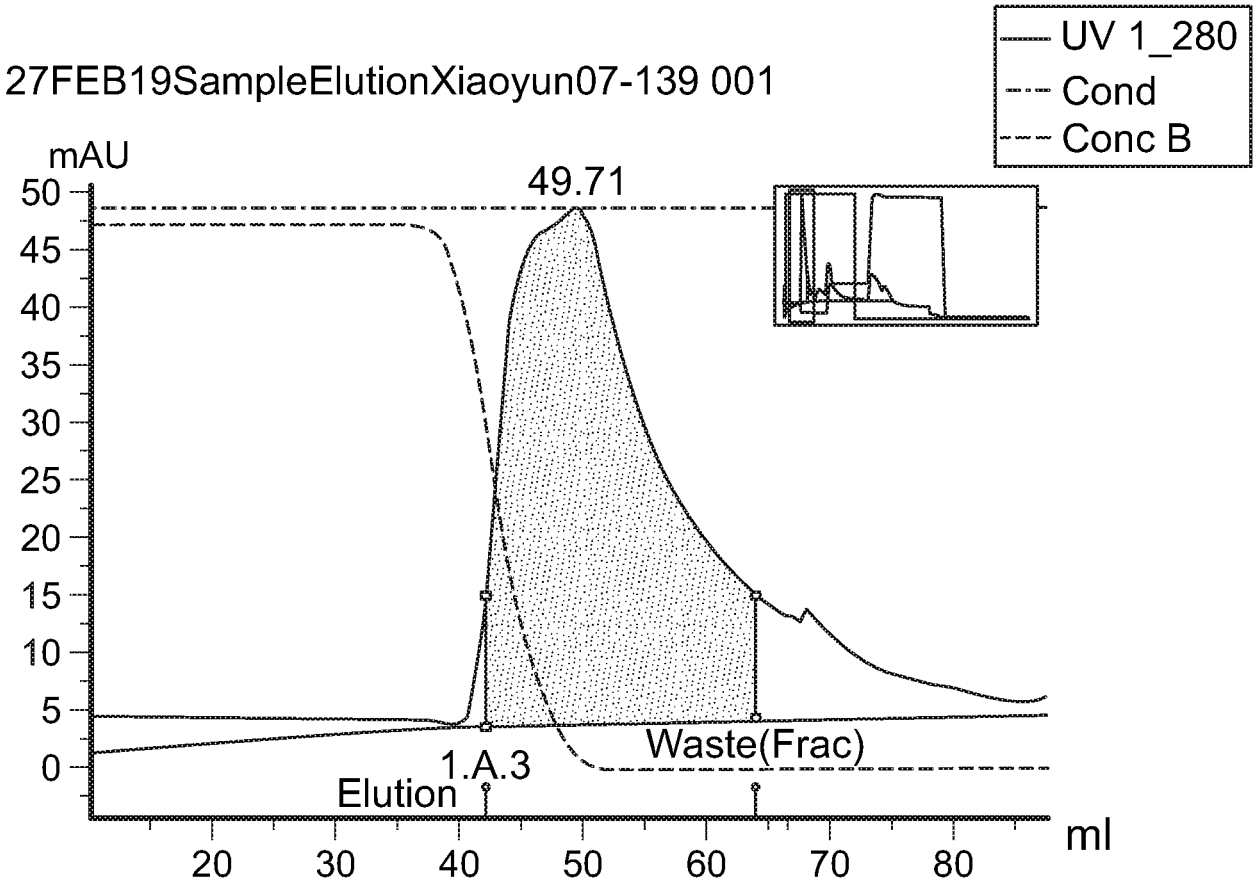


Figure 104

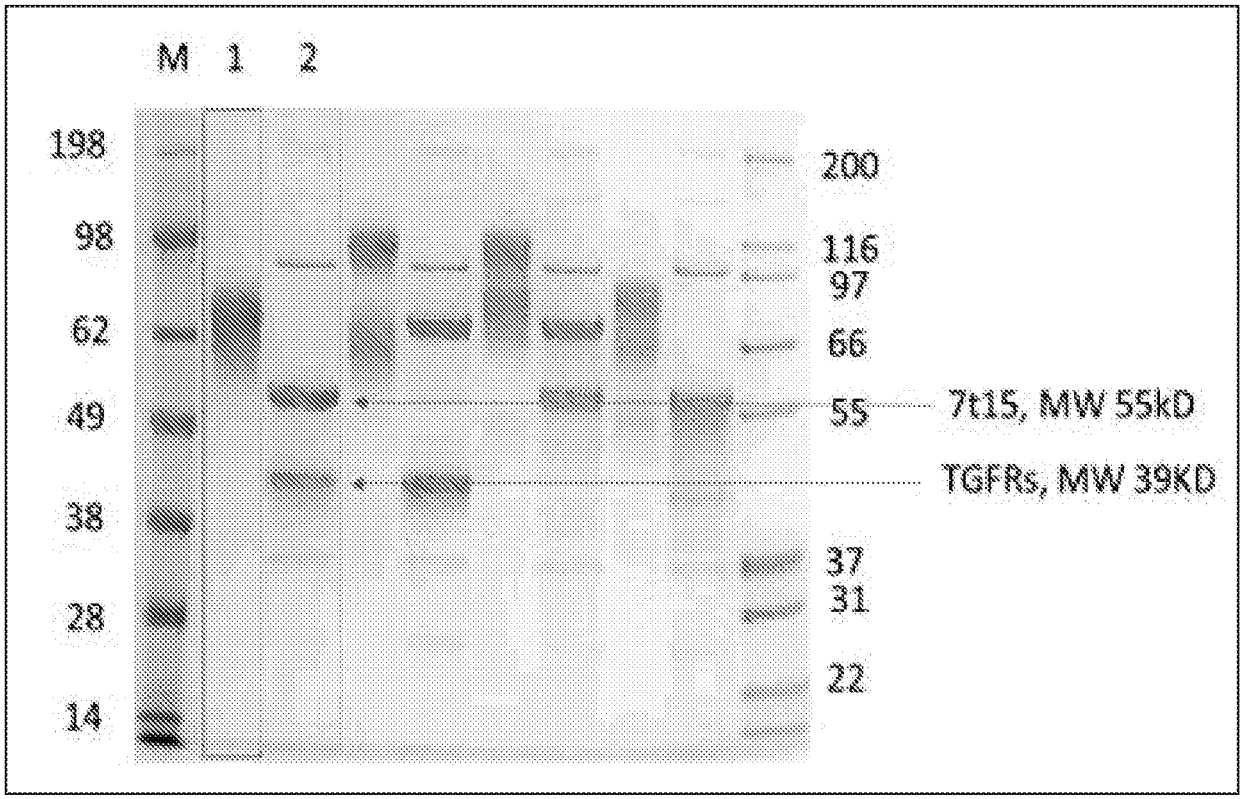


Figure 105

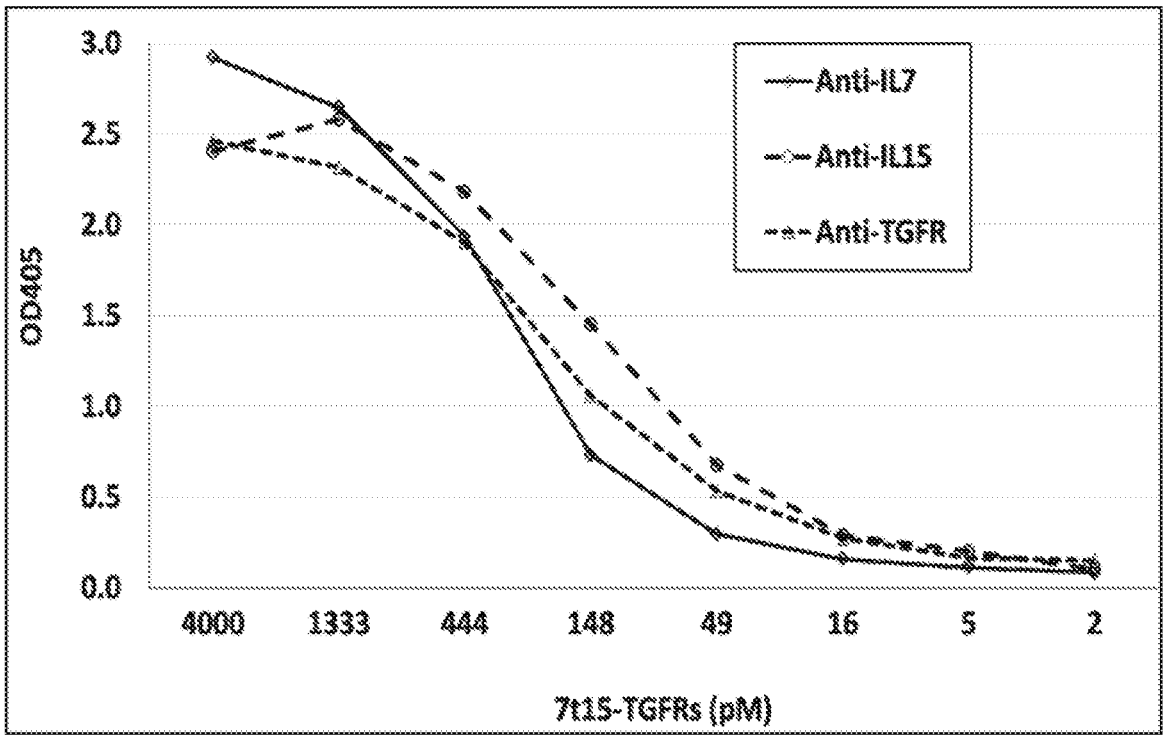


Figure 106

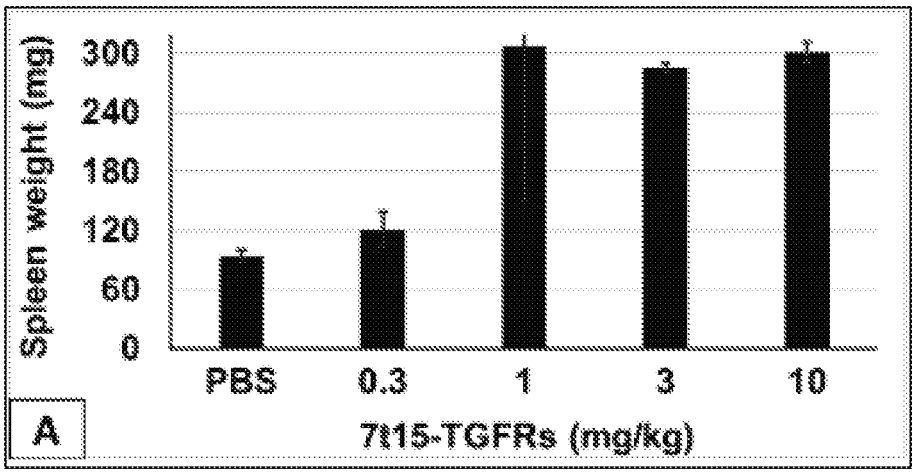


Figure 107A

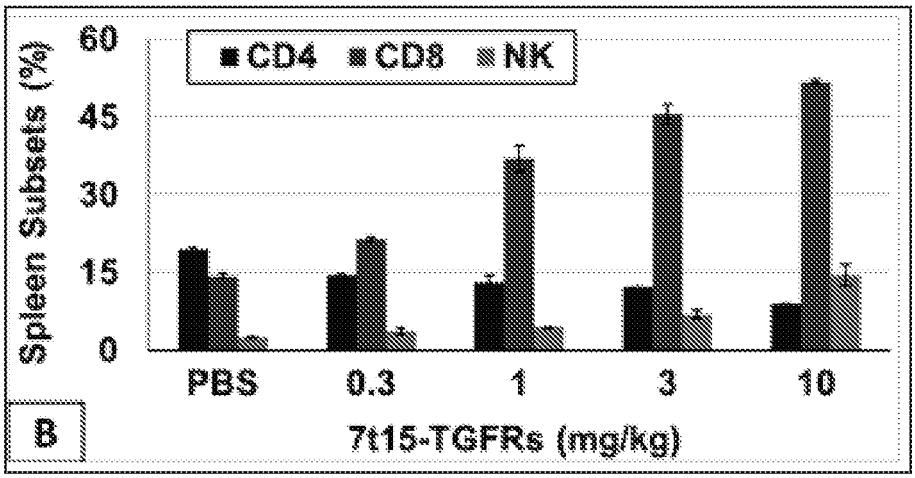


Figure 107B

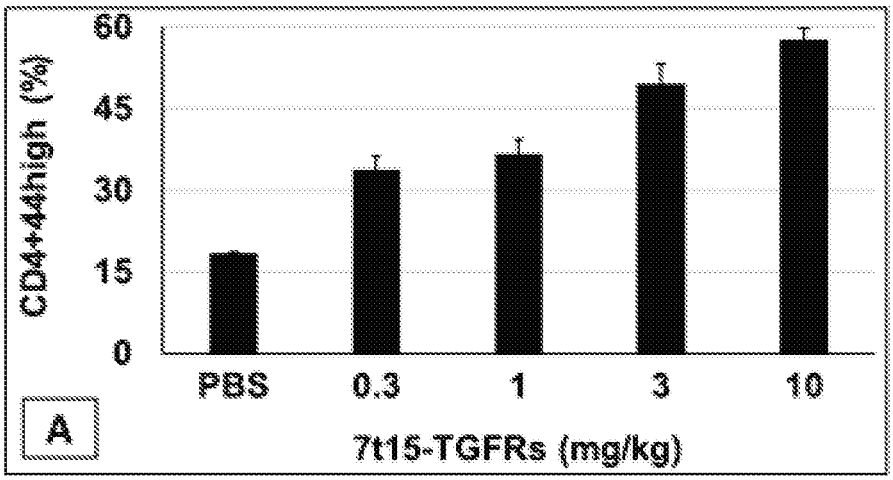


Figure 108A

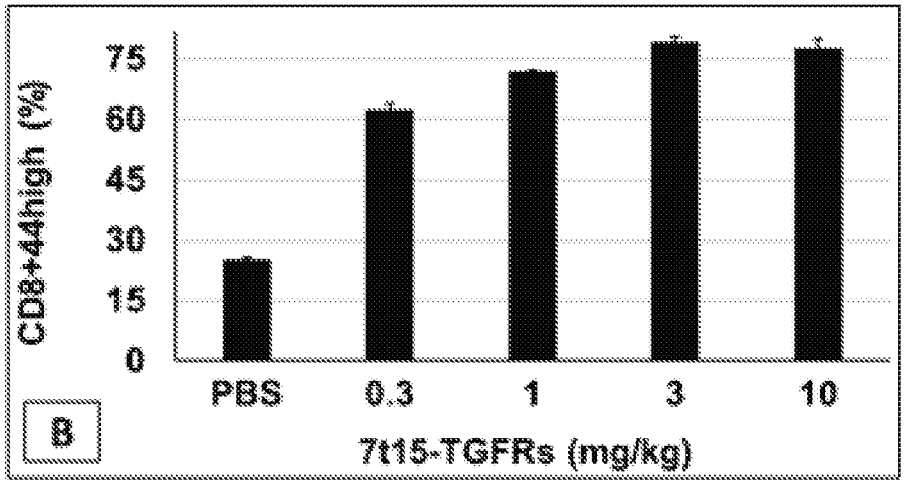


Figure 108B

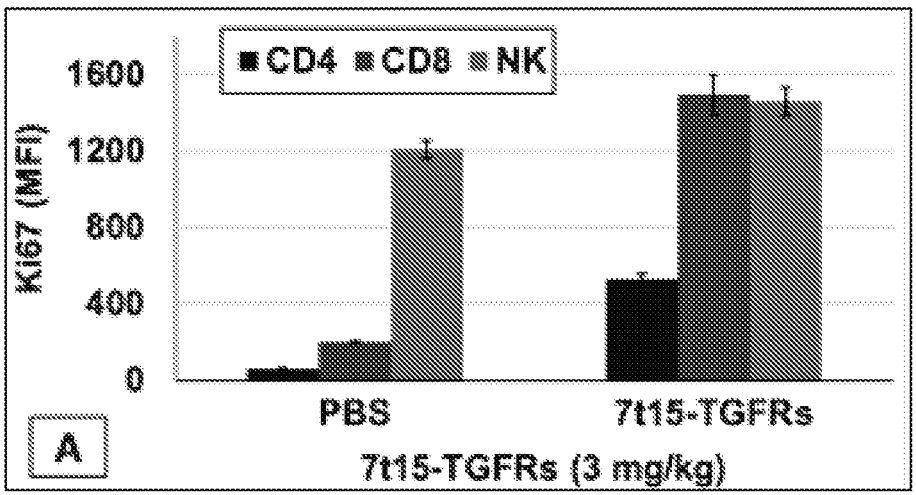


Figure 109A

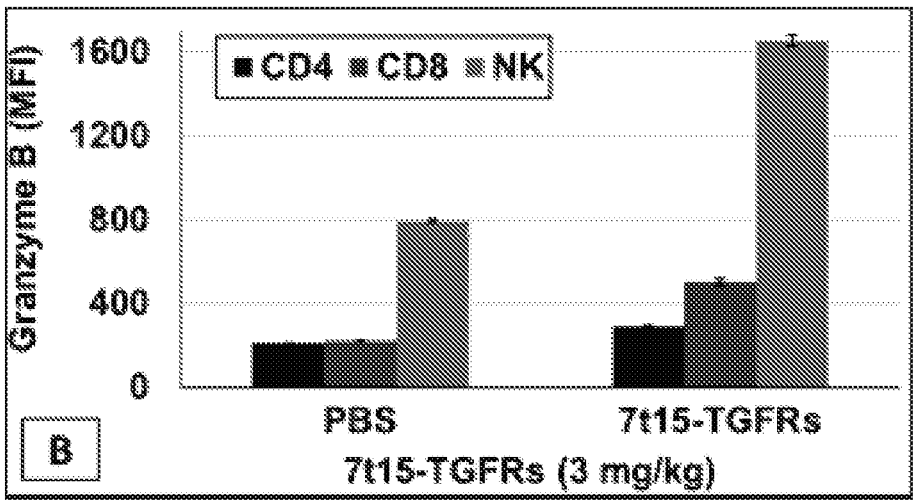


Figure 109B

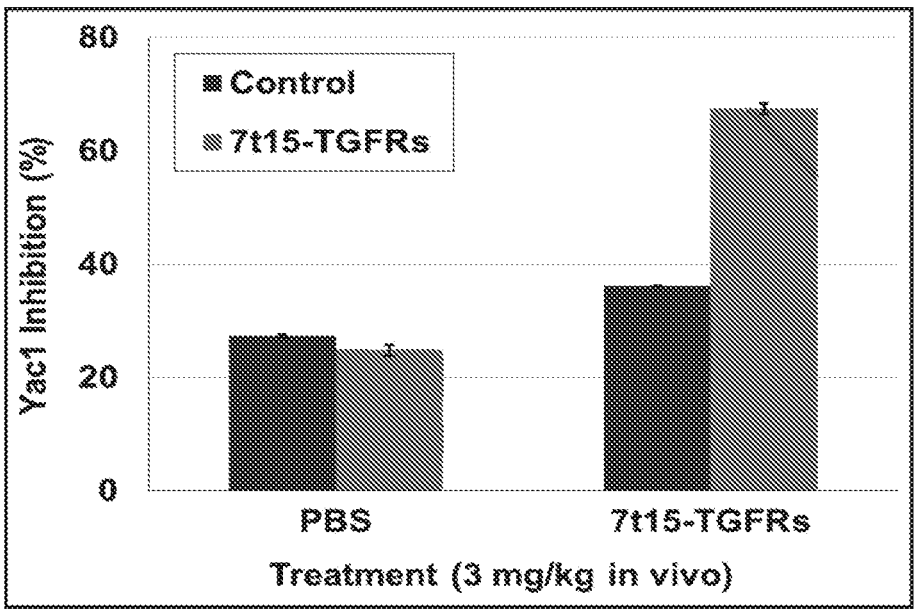


Figure 110

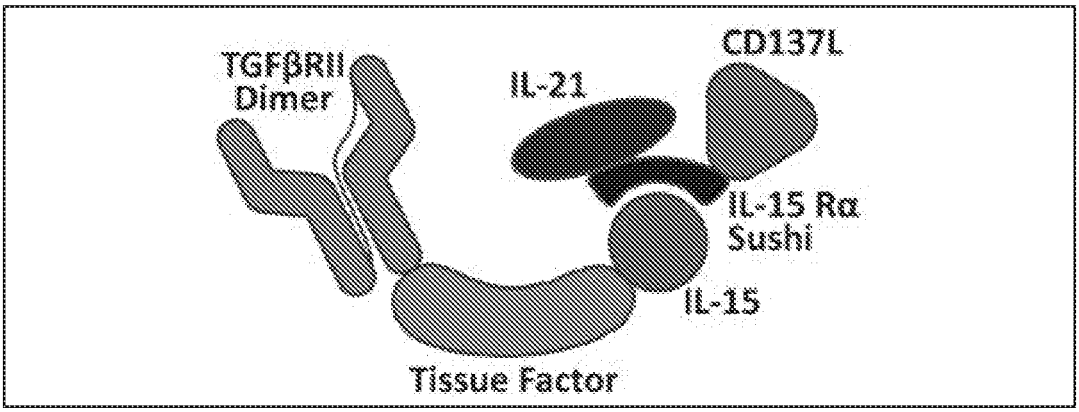


Figure 111

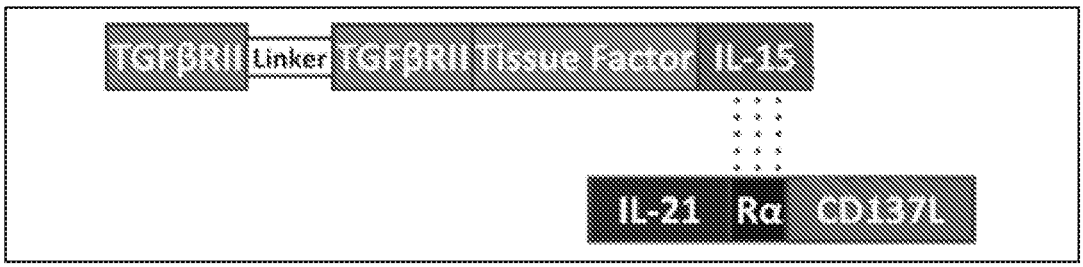


Figure 112

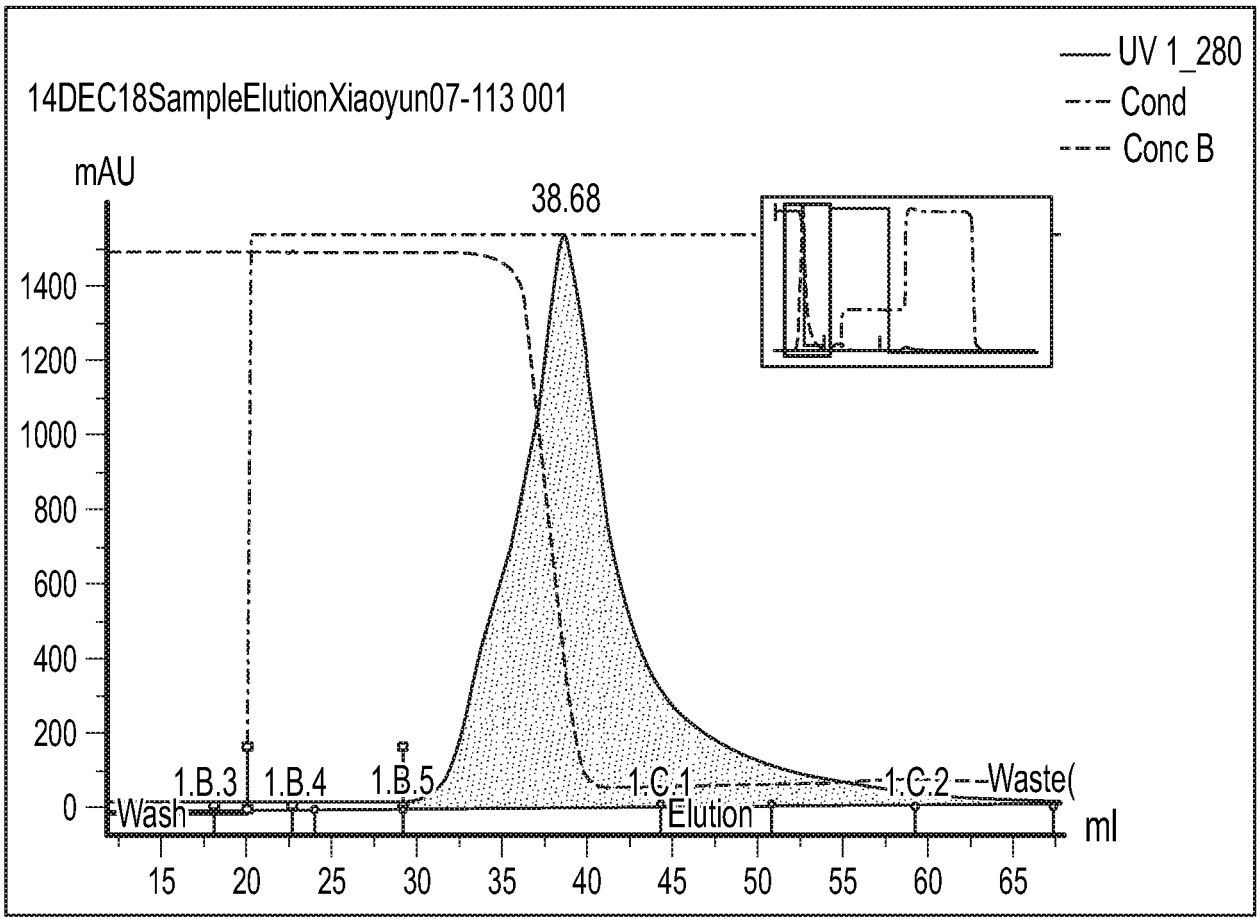

14DEC18SampleElutionXiaoyun07-113 001
UV 1_280
Cond
Conc B
mAU
38.68
1400
1200
1000
800
600
400
200
0
1.B.3
1.B.4
1.B.5
1.C.1
1.C.2
Waste(
Wash
Elution
ml
15
20
25
30
35
40
45
50
55
60
65

Figure 113

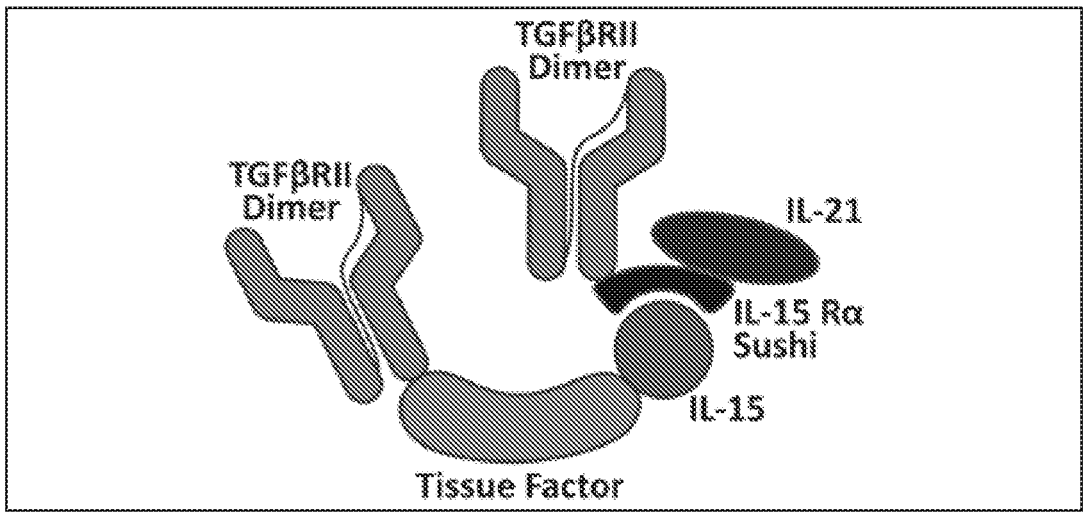


Figure 114

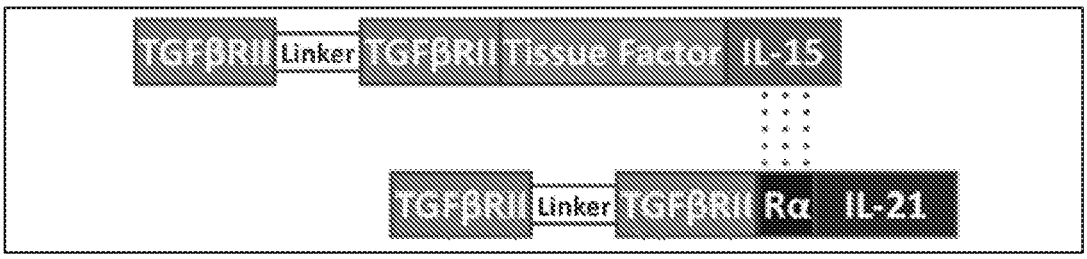


Figure 115

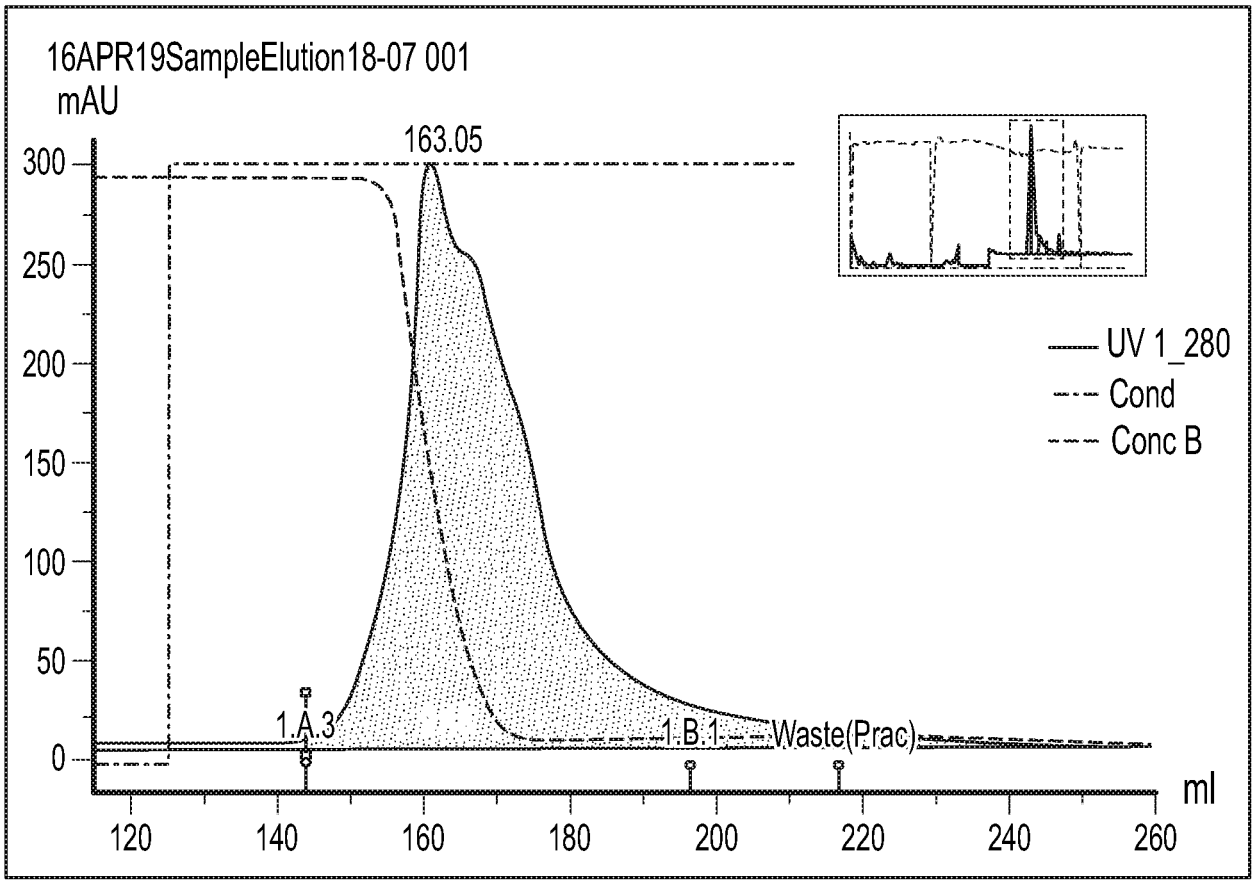


Figure 116

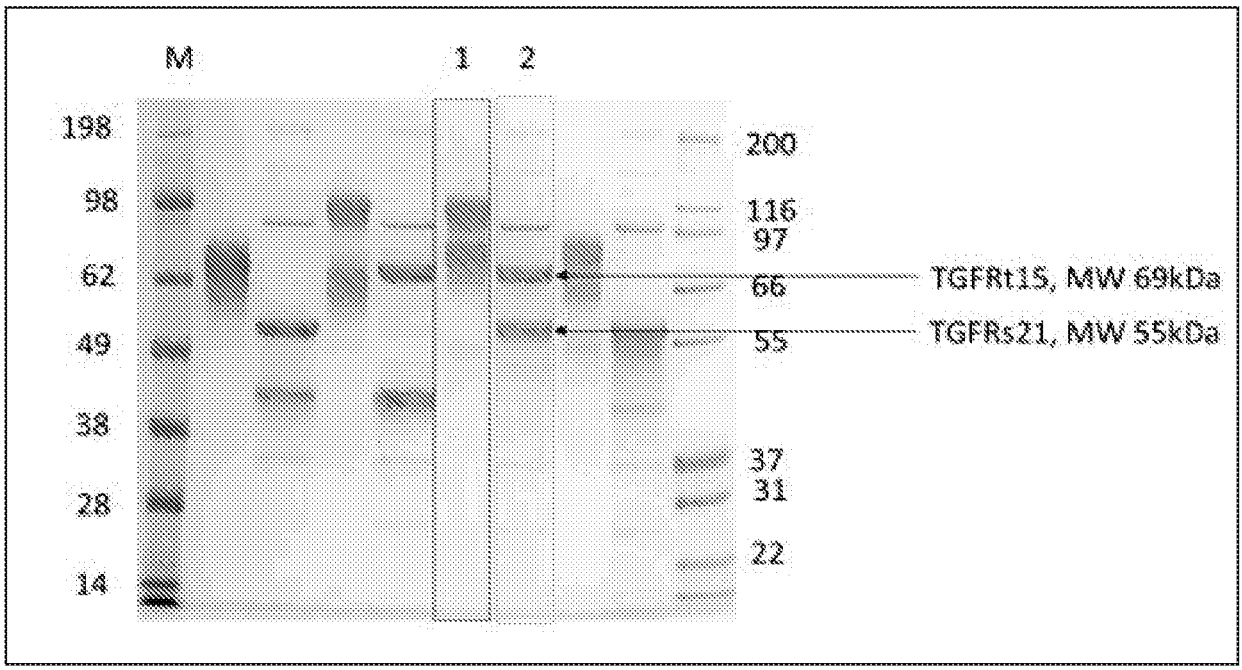


Figure 117

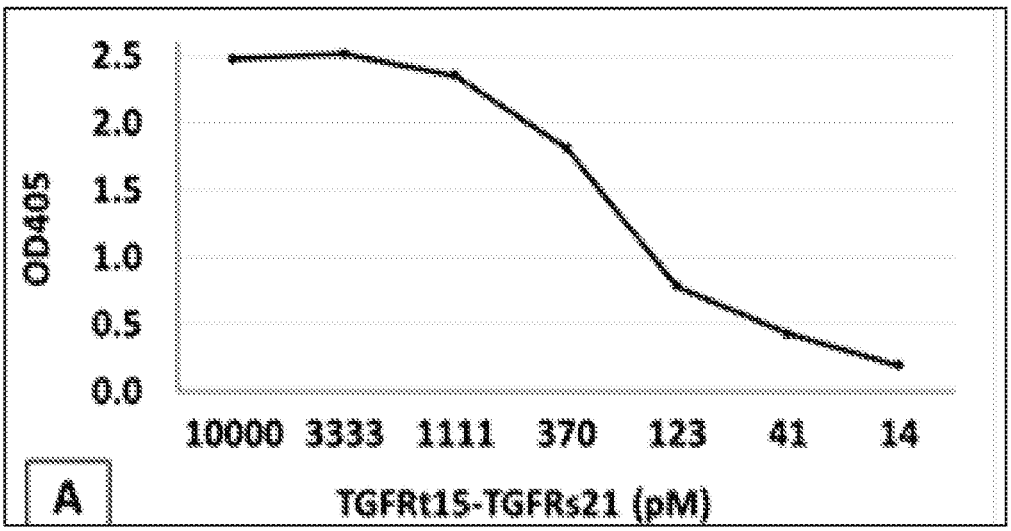


Figure 118A

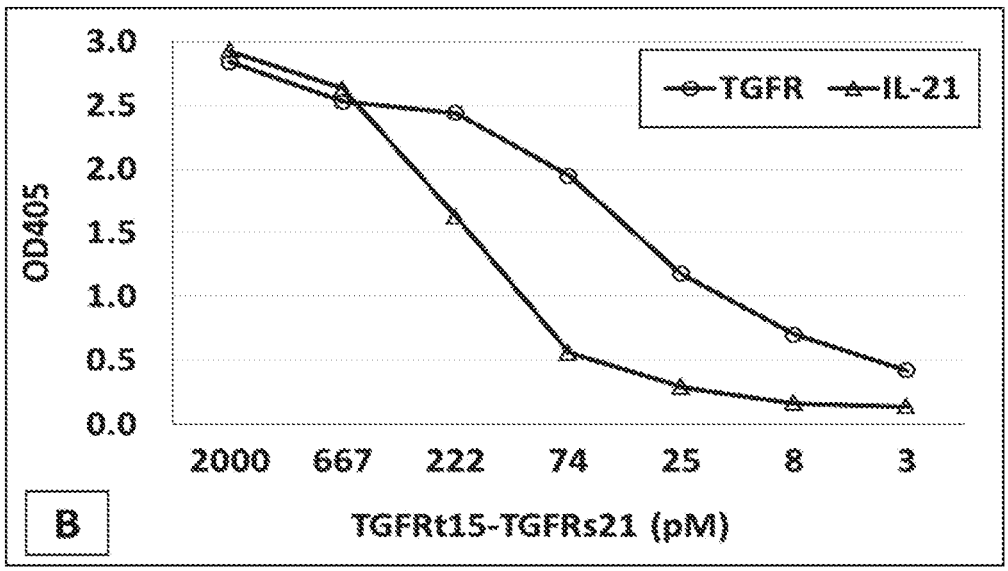


Figure 118B

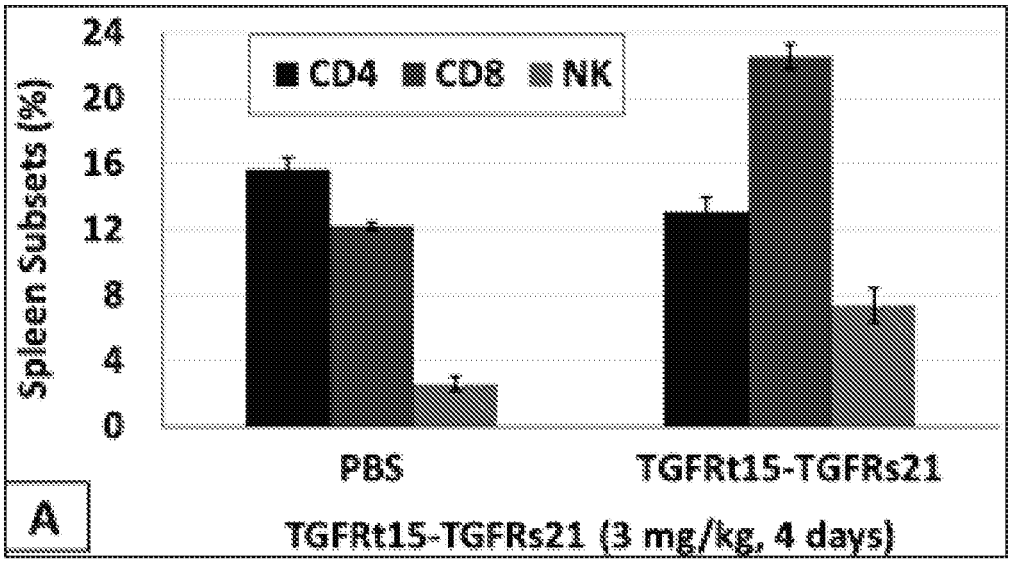


Figure 119A

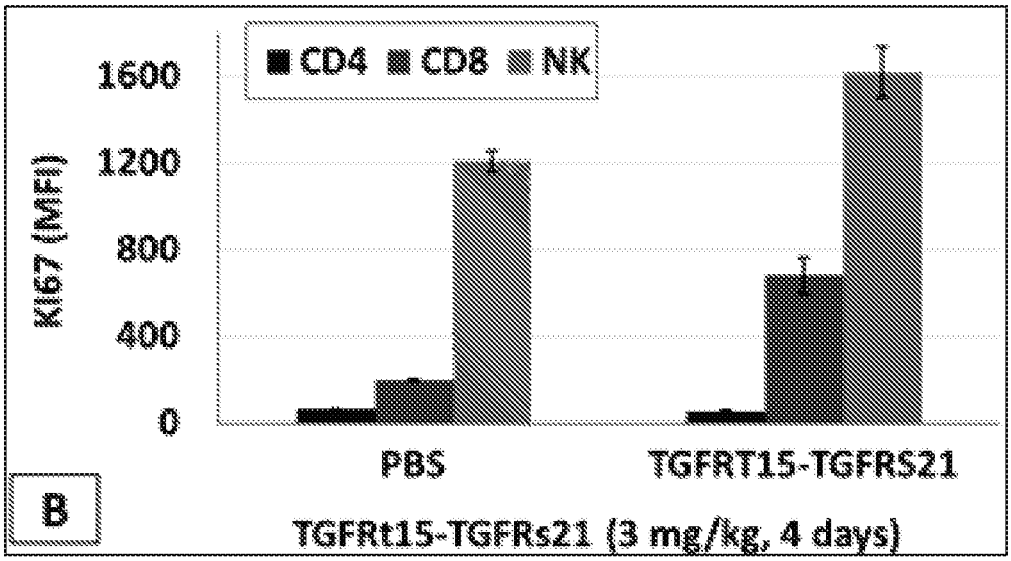


Figure 119B

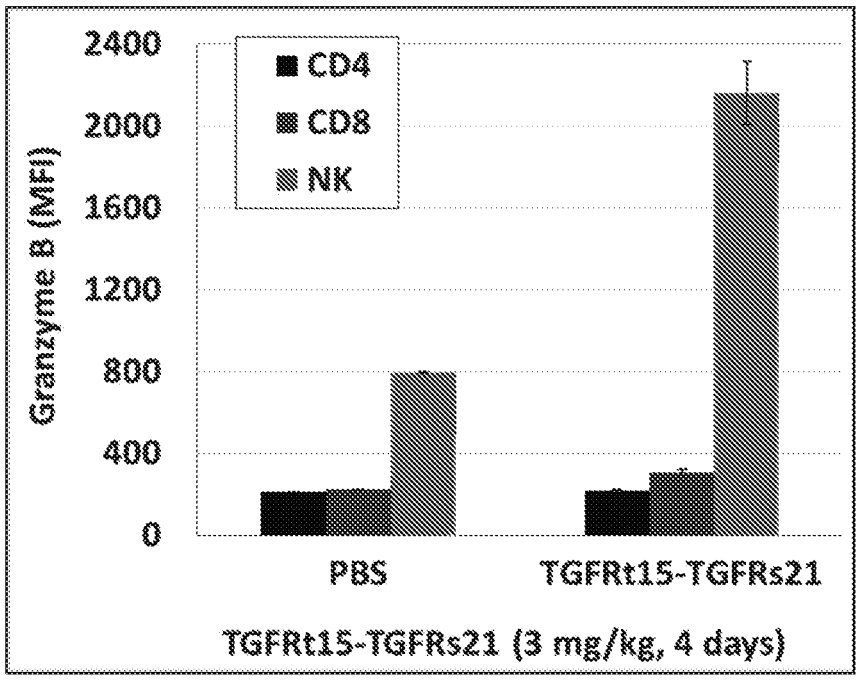


Figure 120

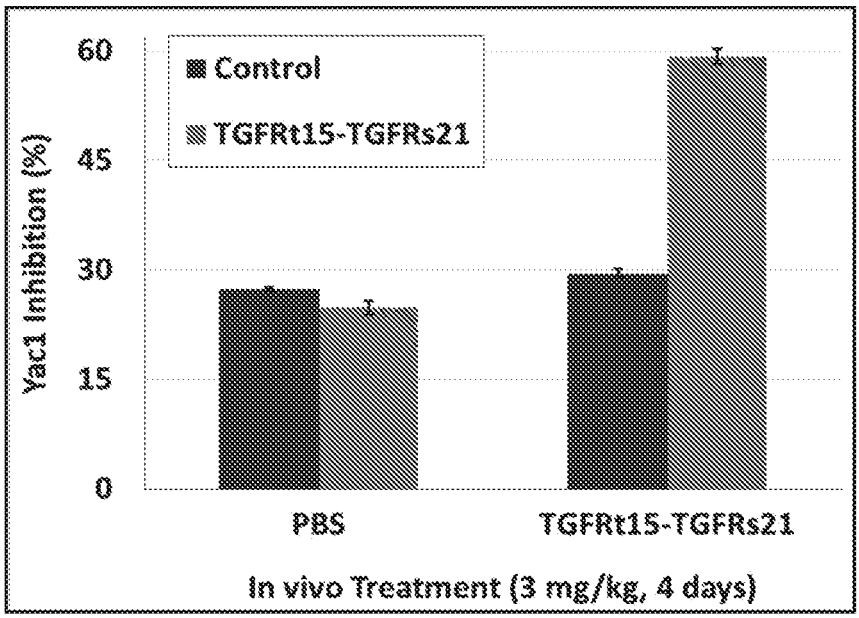


Figure 121

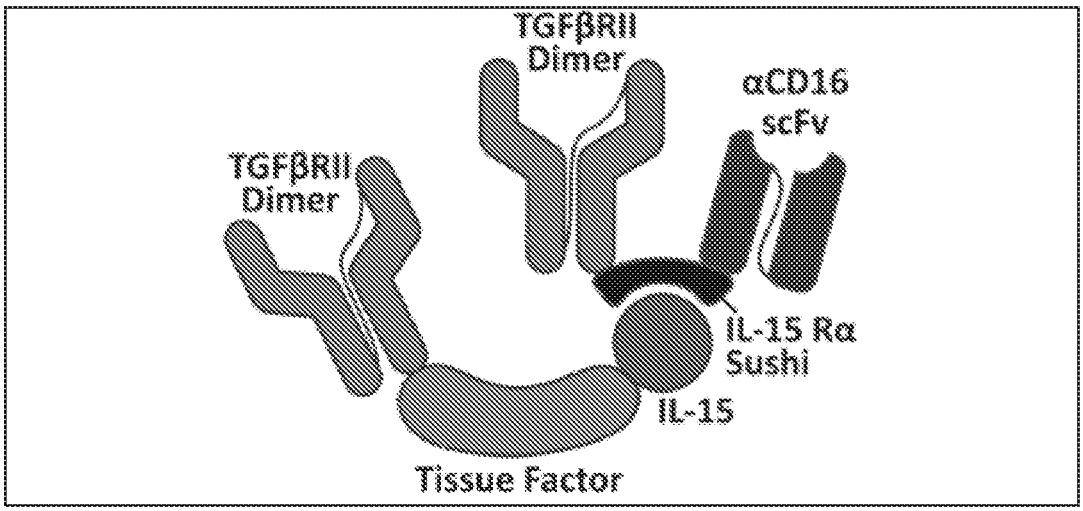


Figure 122

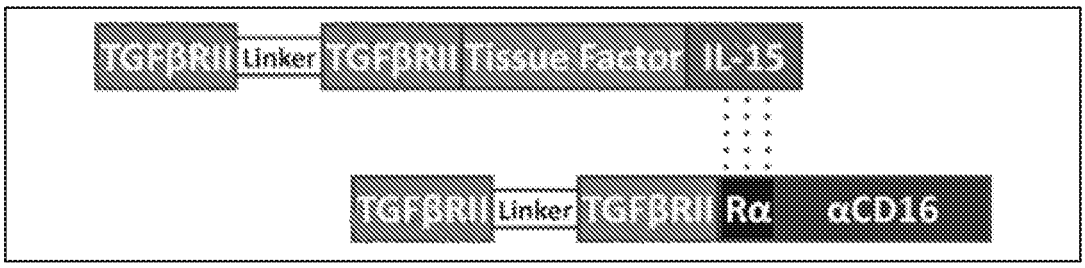


Figure 123

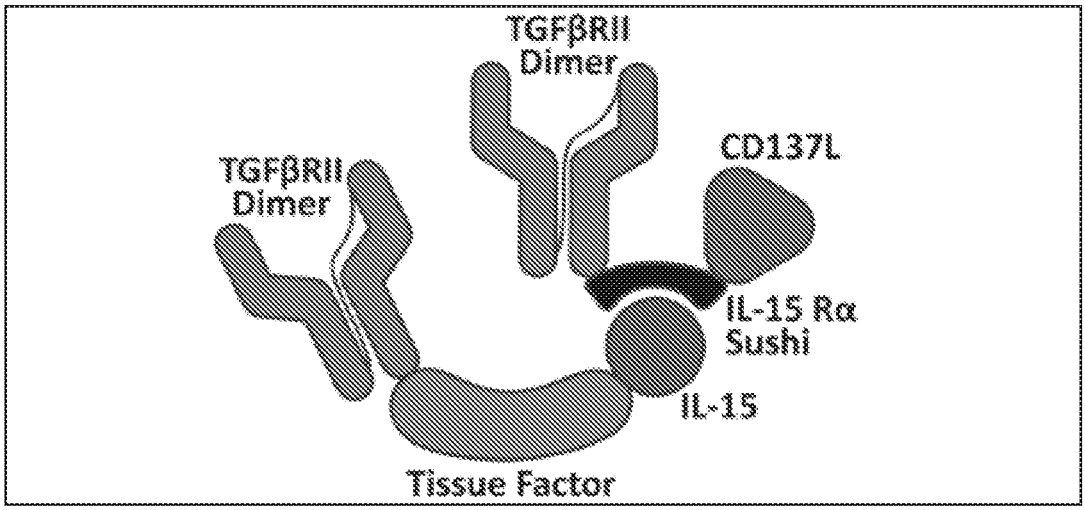


Figure 124

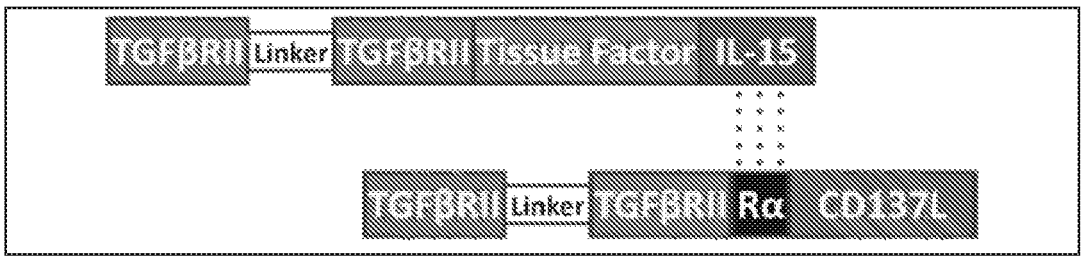


Figure 125

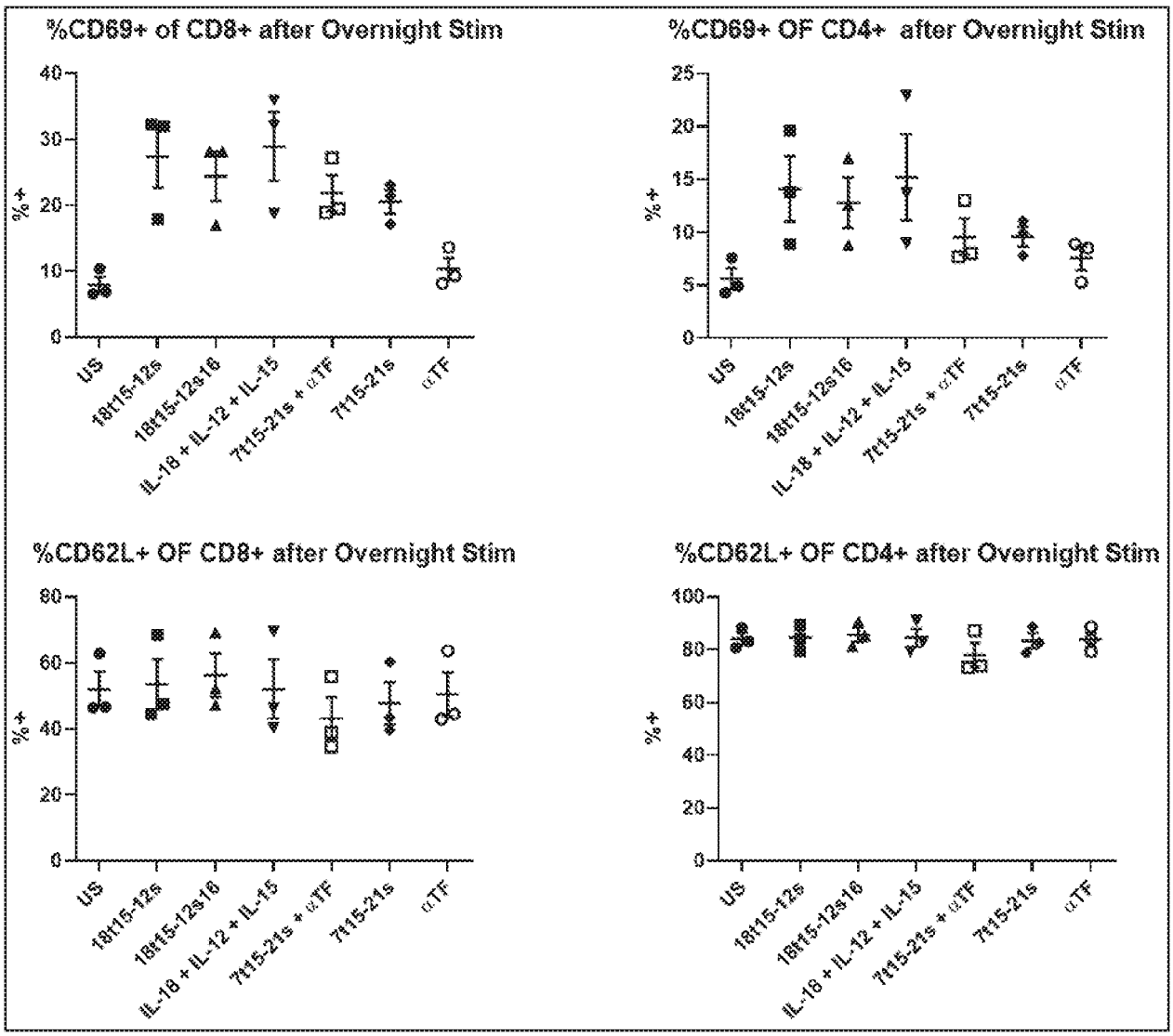

%CD69+ of CD8+ after Overnight Stim
%+
US
18t15-12s
18t15-12s16
IL-18 + IL-12 + IL-15
7t15-21s + αTF
7t15-21s
αTF
%CD69+ OF CD4+ after Overnight Stim
%CD62L+ OF CD8+ after Overnight Stim
%CD62L+ OF CD4+ after Overnight Stim

Figure 126

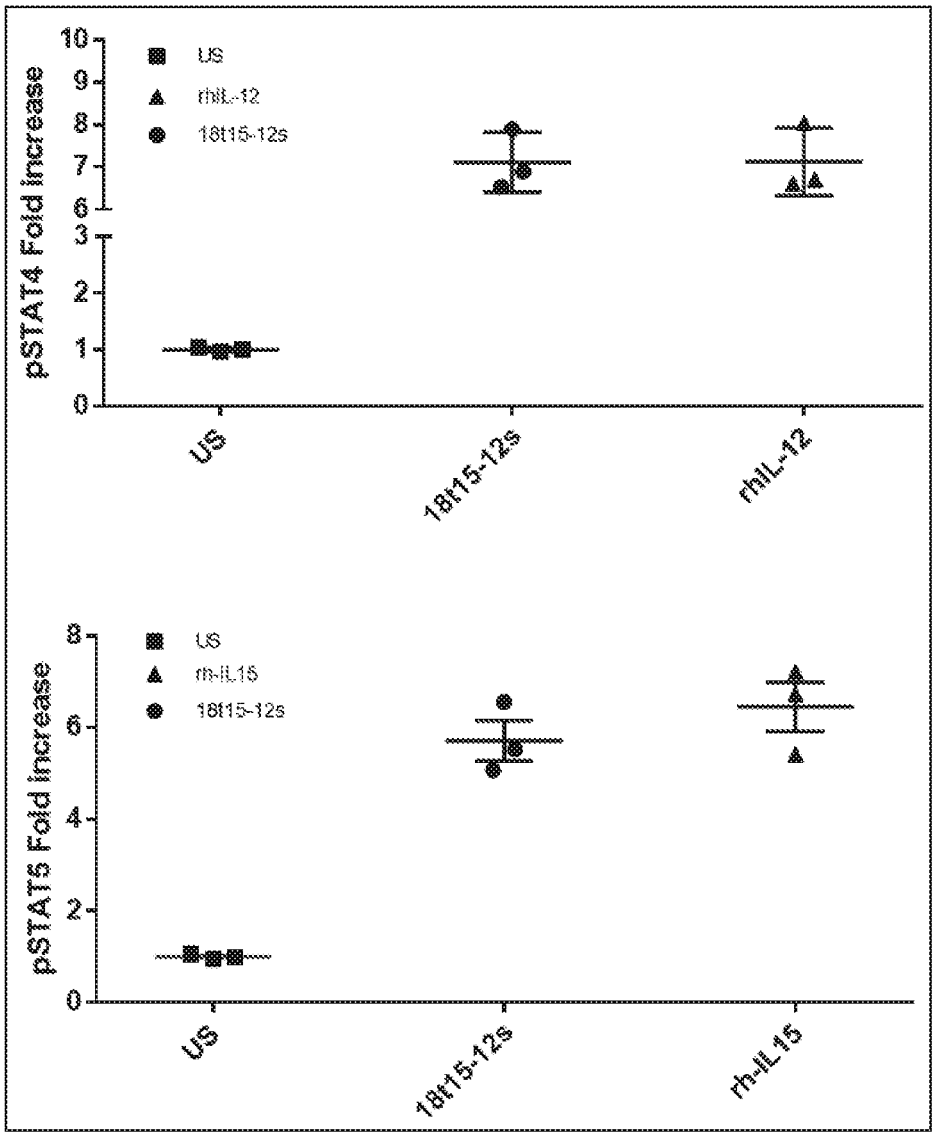

pSTAT4 Fold increase
US
rhIL-12
18t15-12s
US
18t15-12s
rhIL-12
pSTAT5 Fold increase
US
rh-IL15
18t15-12s
US
18t15-12s
rh-IL15

Figure 127

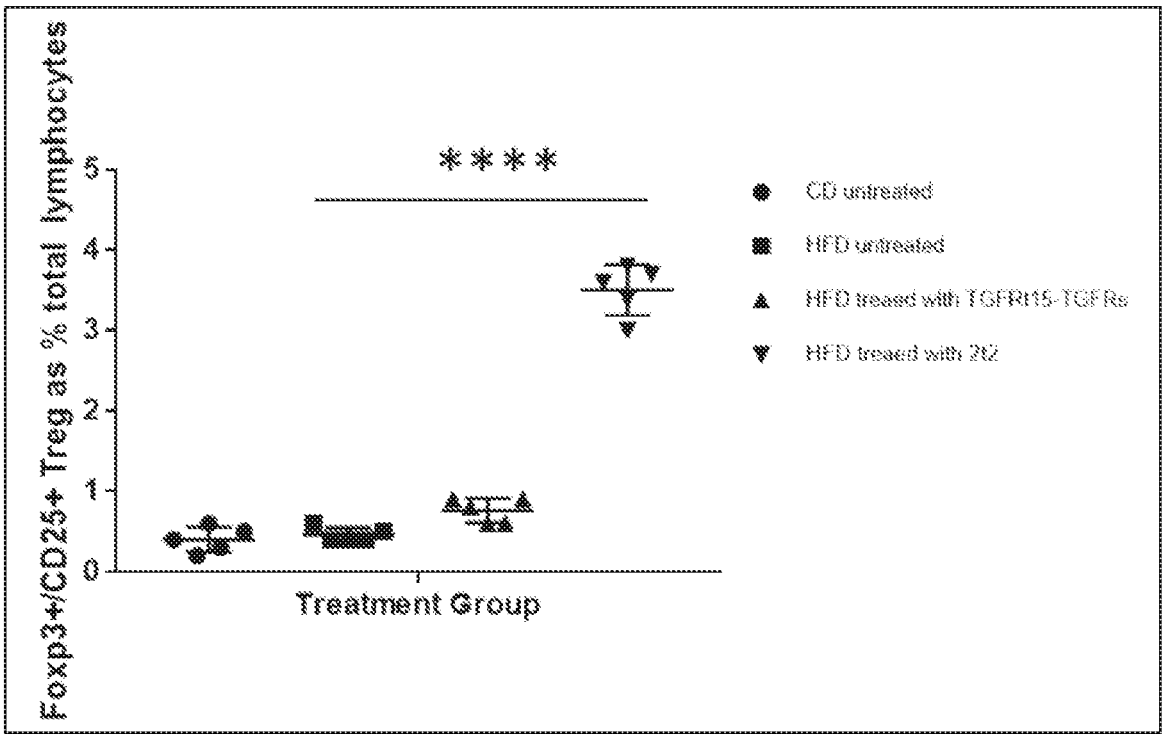


Figure 128A

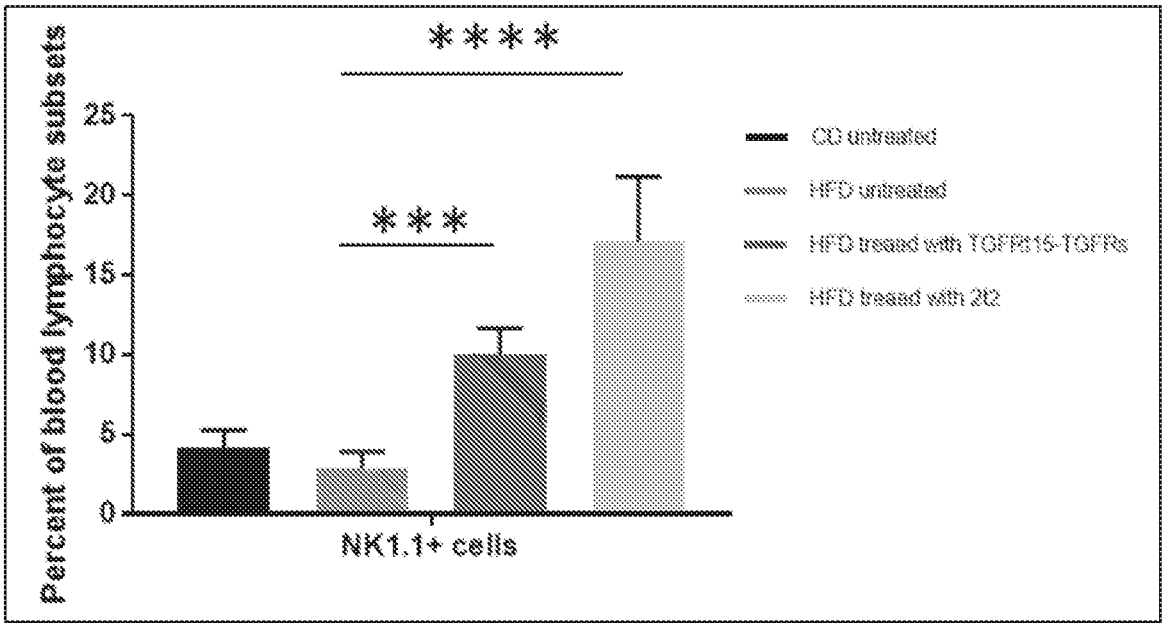


Figure 128B

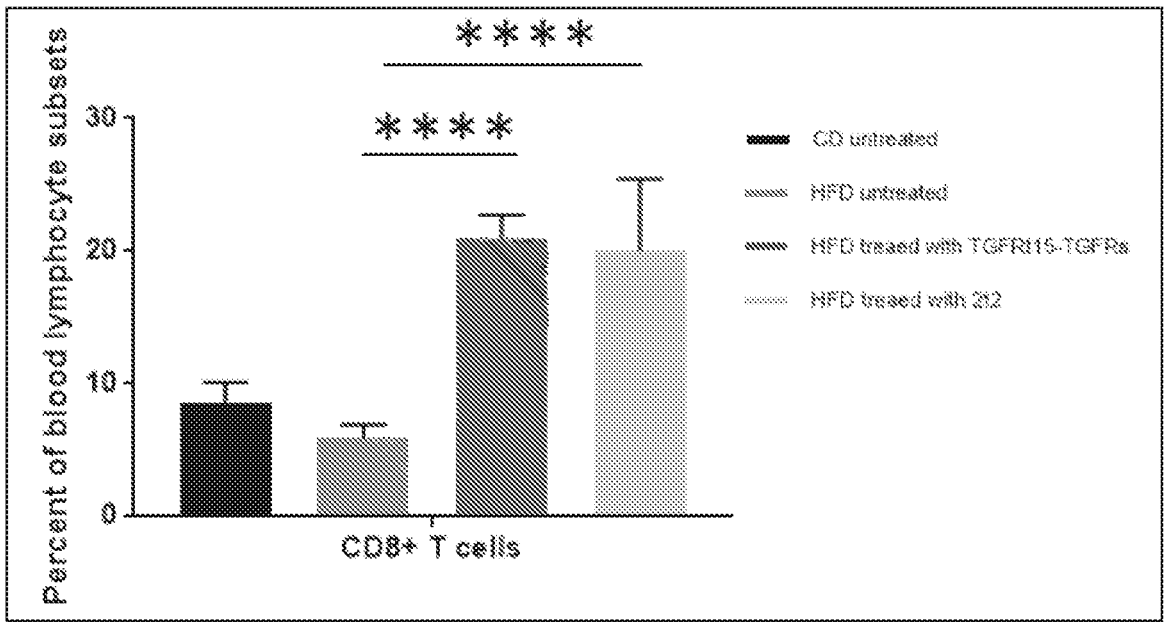

Percent of blood lymphocyte subsets
30
20
10
0
****
****
CD8+ T cells
CD untreated
HFD untreated
HFD treaed with TGFR1S-TGFRs
HFD treaed with 2i2

Figure 128C

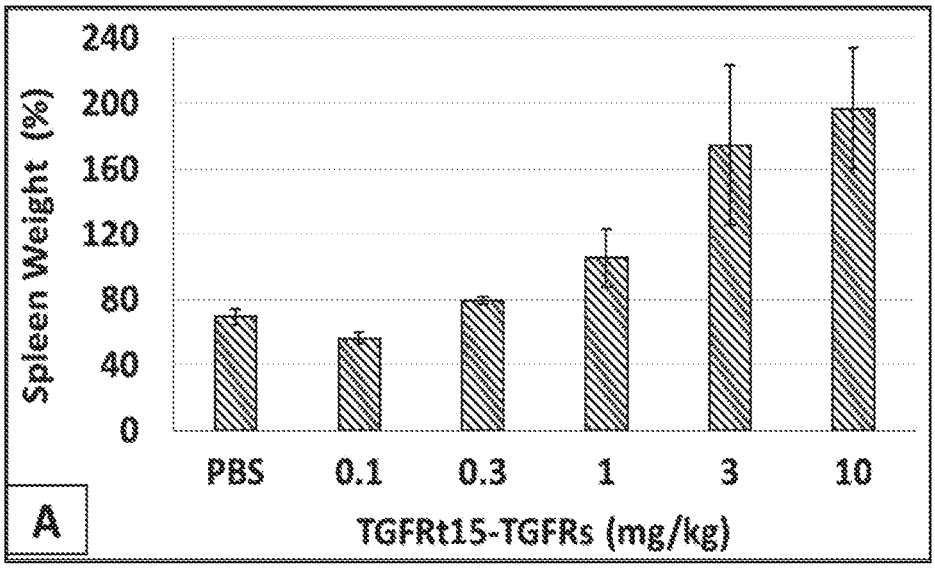


Figure 129A

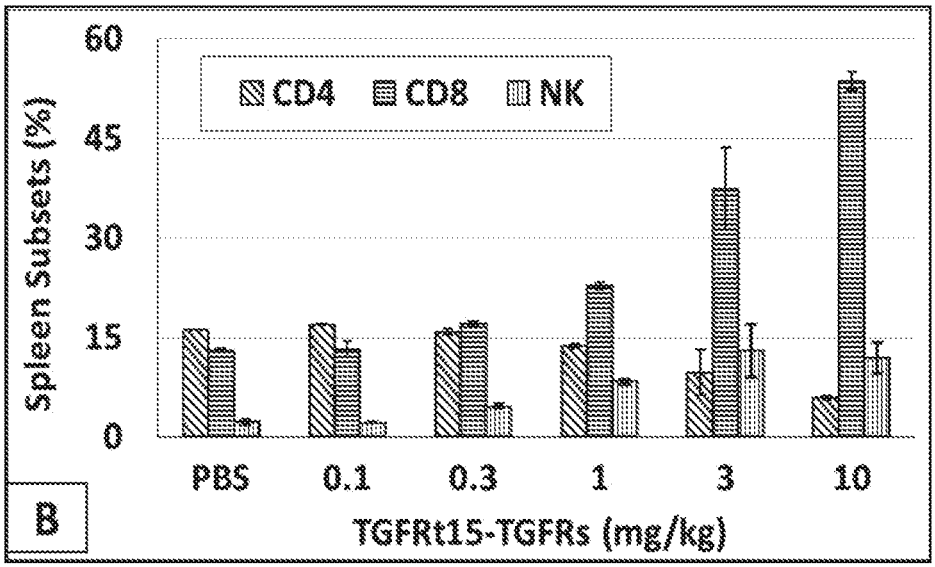


Figure 129B

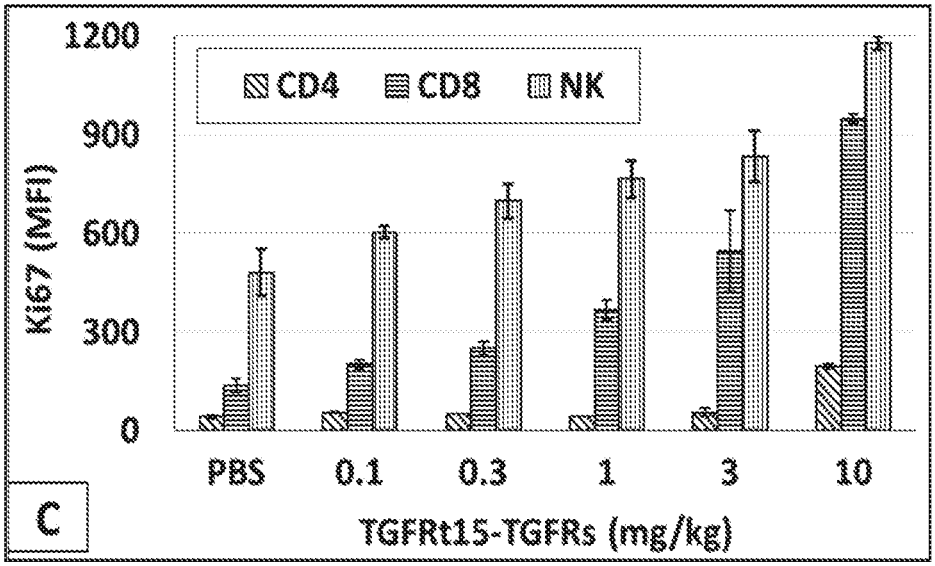

1200
900
600
300
0
Ki67 (MFI)
CD4
CD8
NK
PBS
0.1
0.3
1
3
10
TGFRt15-TGFRs (mg/kg)
C

Figure 129C

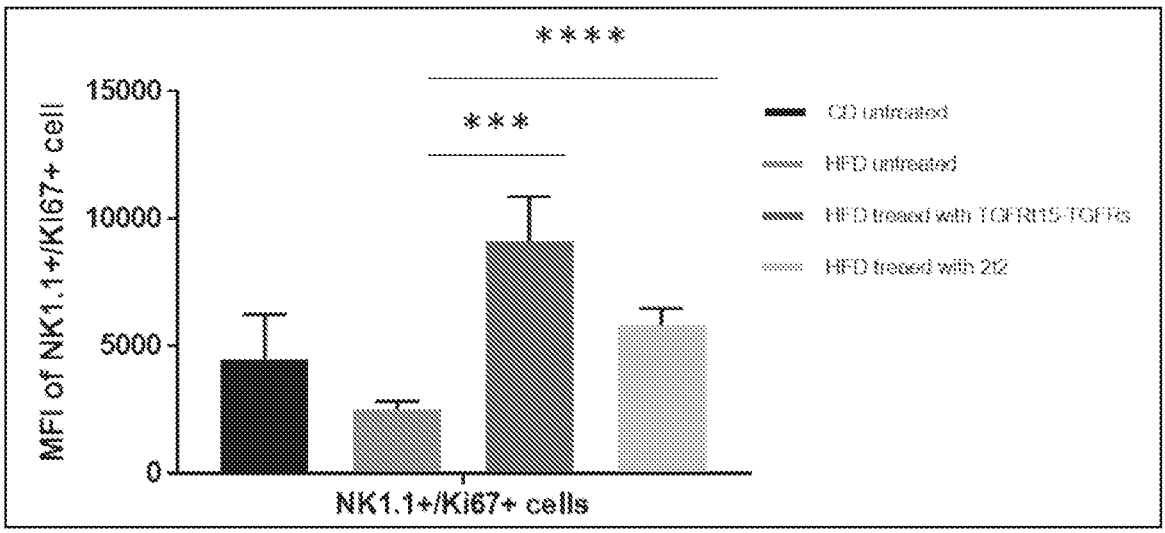


Figure 130A

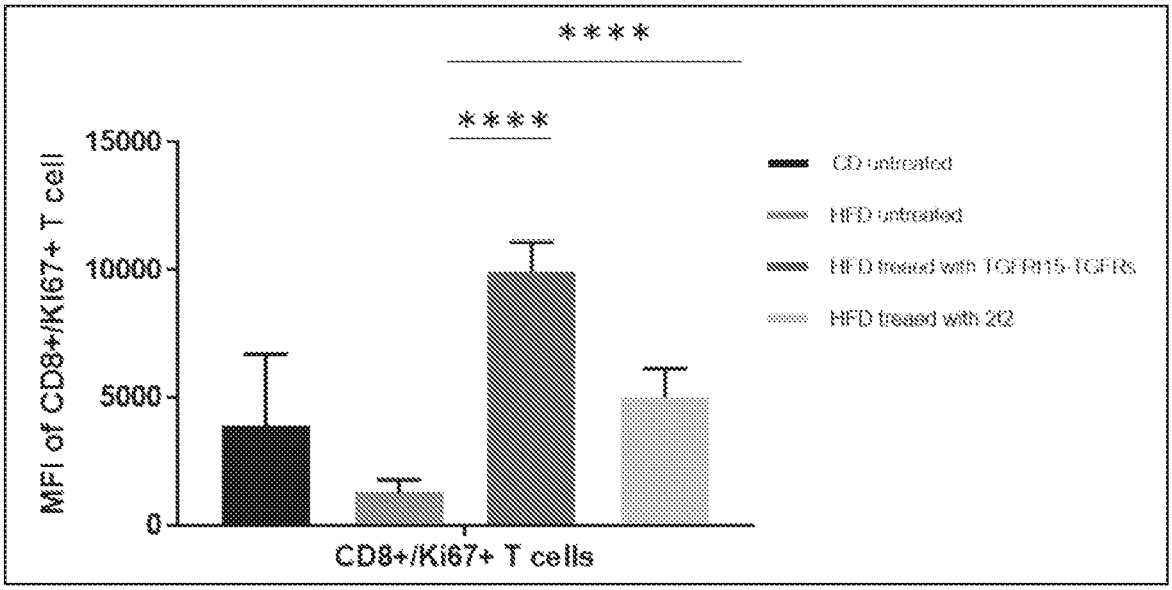


Figure 130B

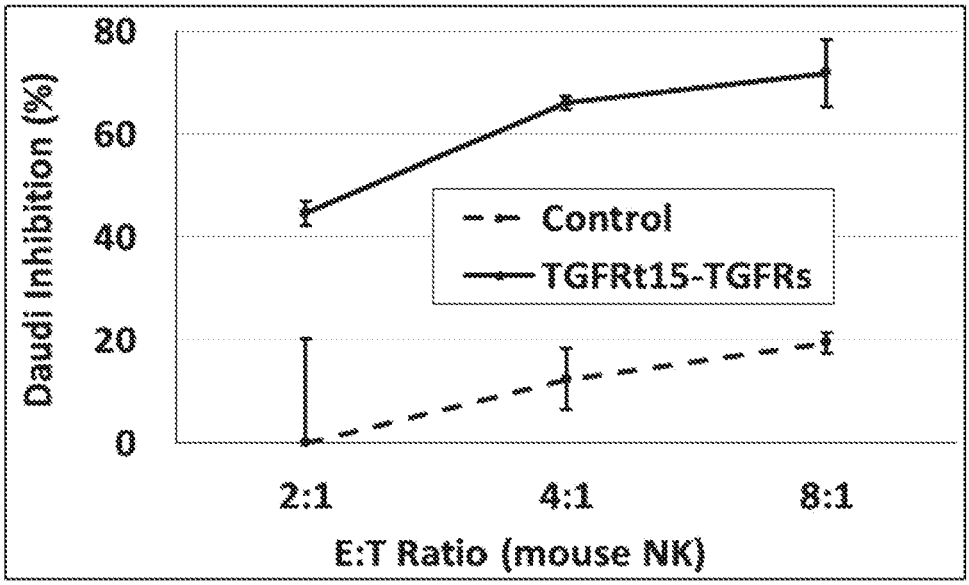


Figure 131A

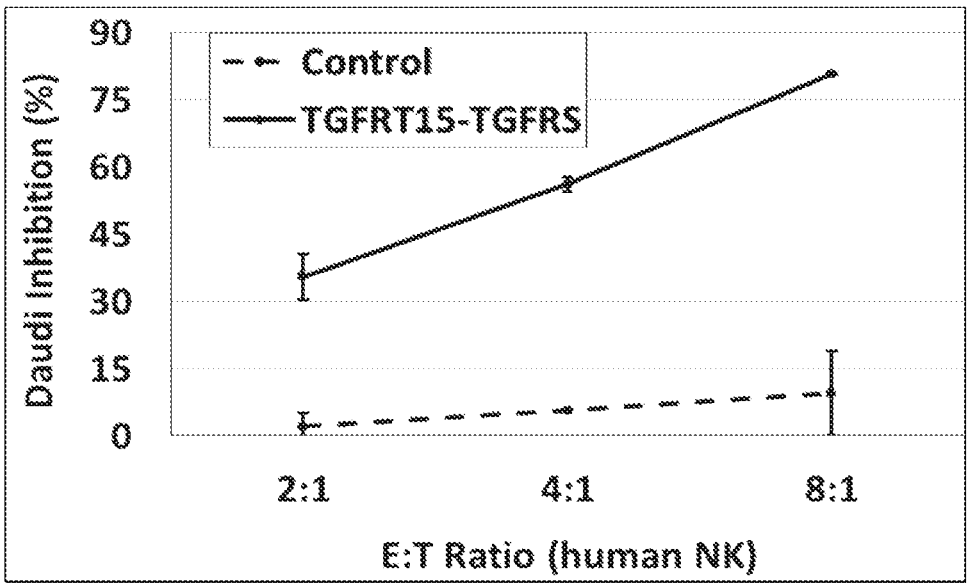


Figure 131B

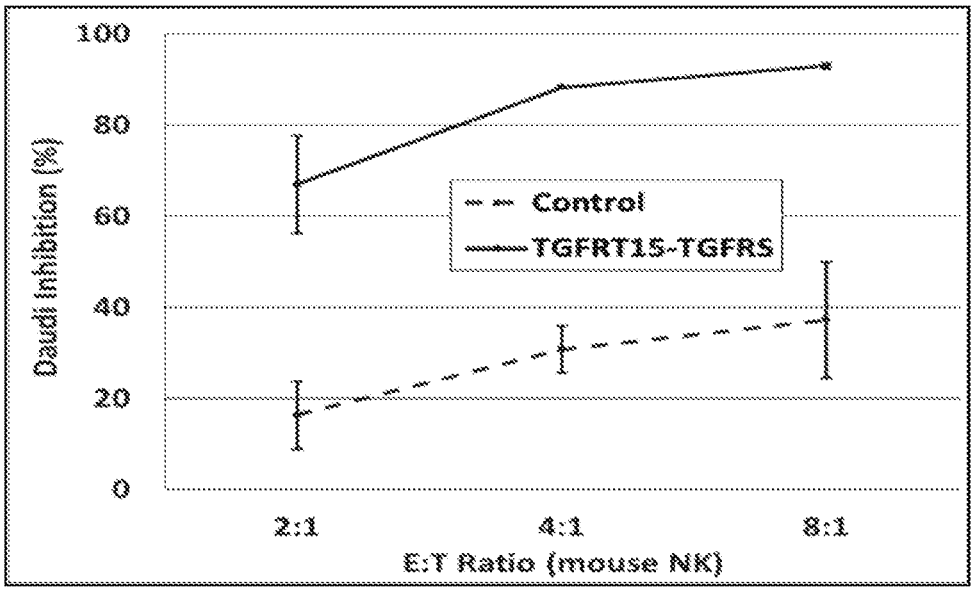


Figure 132A

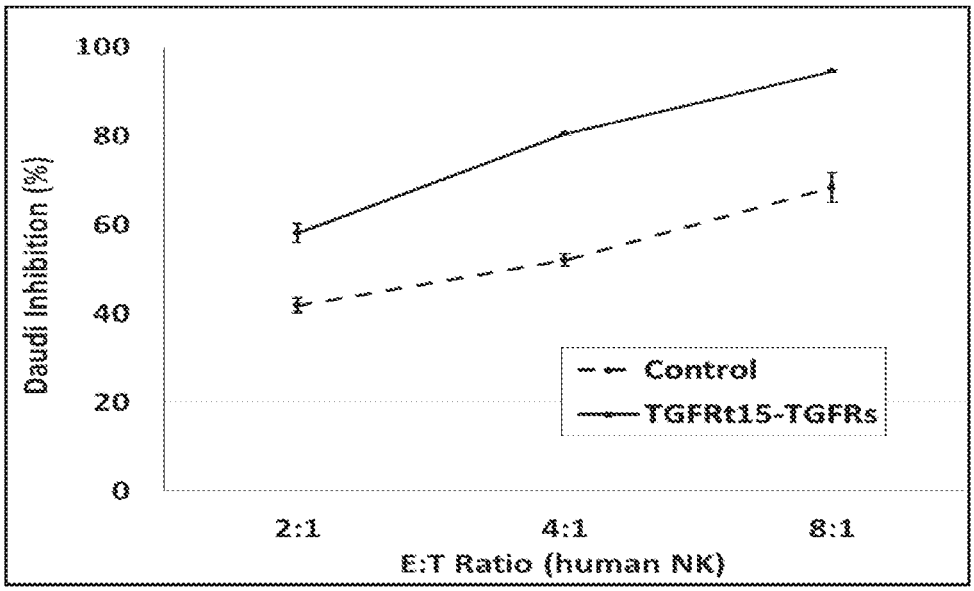
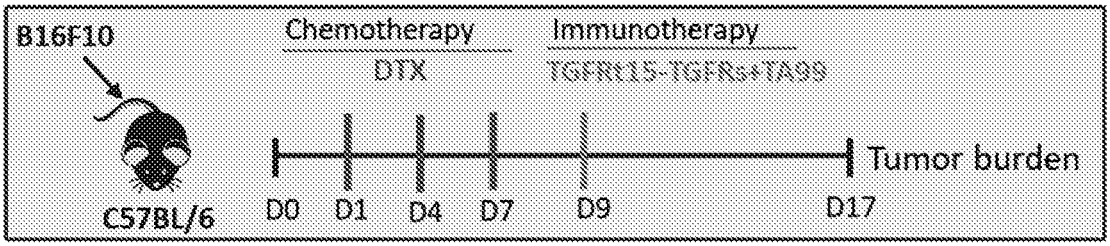


Figure 132B



DTX (10 mg/kg), TGFRt15-TGFRs (3mg/kg), TA99 (200 µg)

Figure 133A

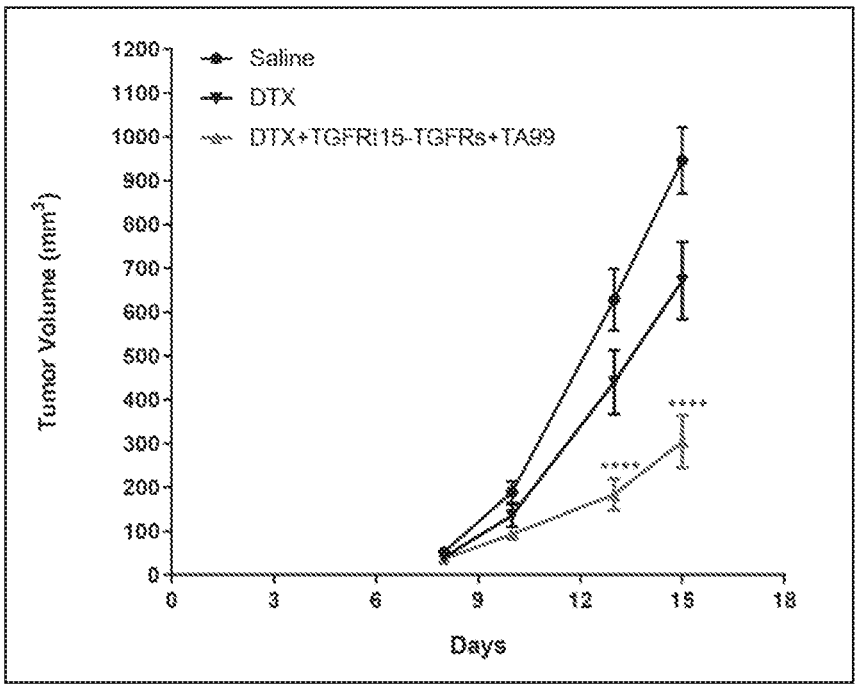


Figure 133B

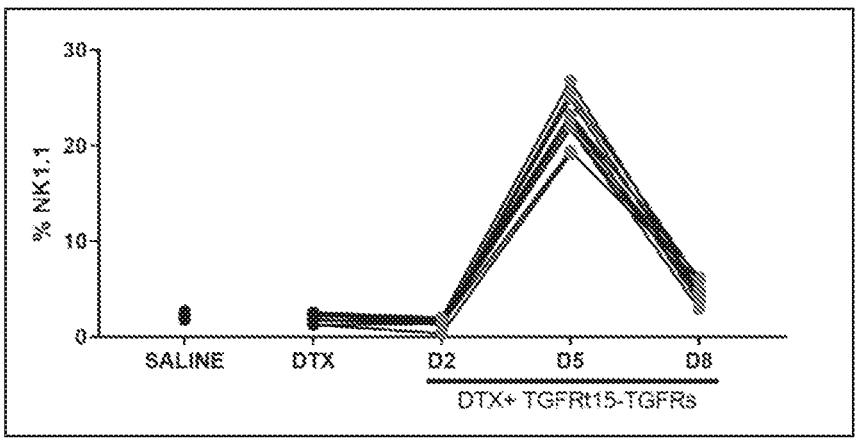


Figure 133C

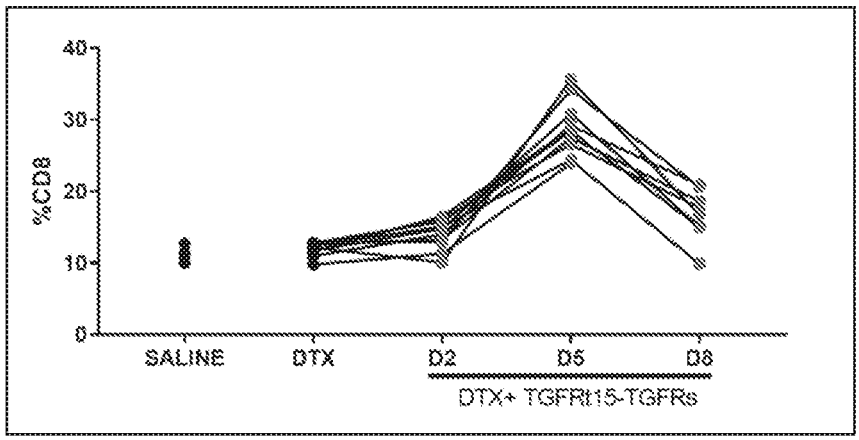


Figure 133D

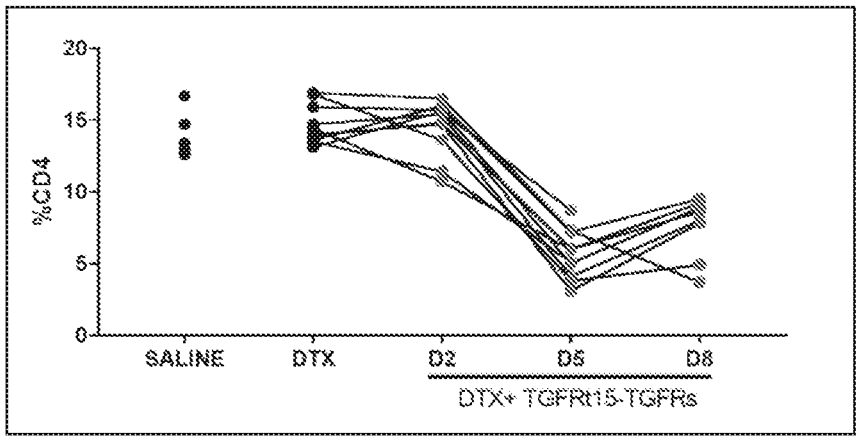


Figure 133E

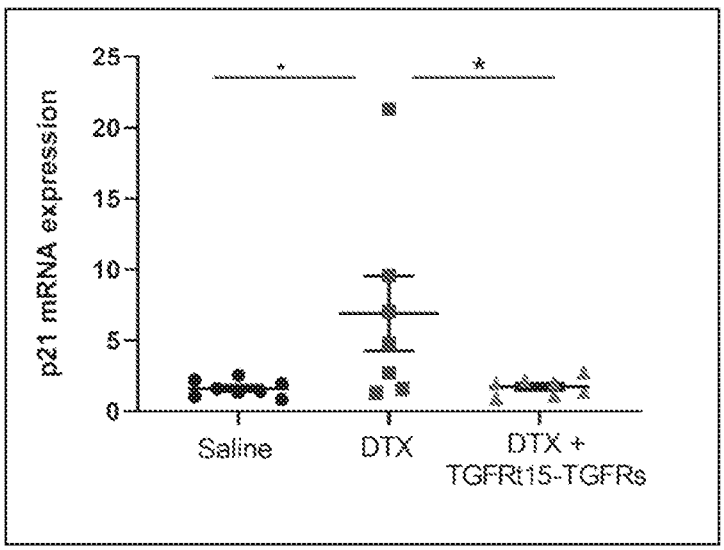


Figure 133F

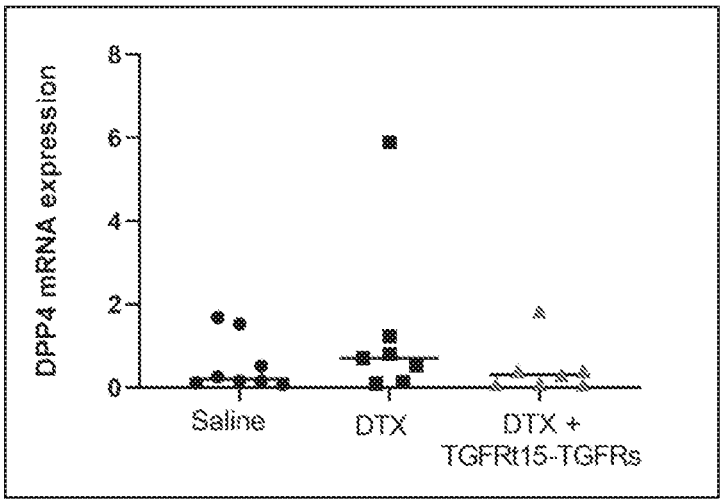


Figure 133G

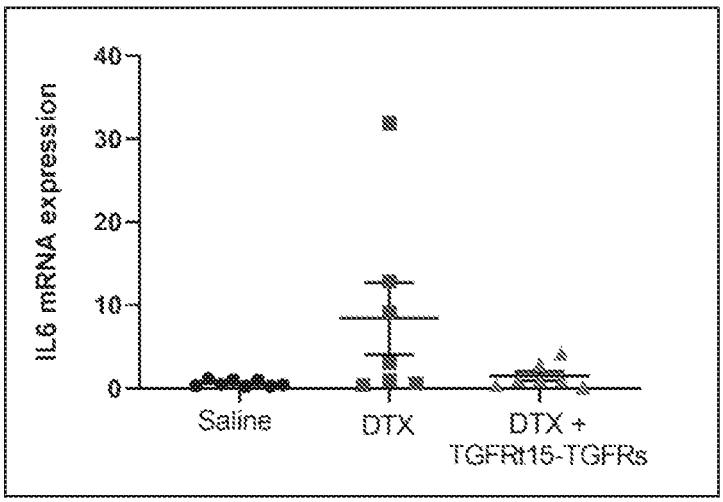


Figure 133H

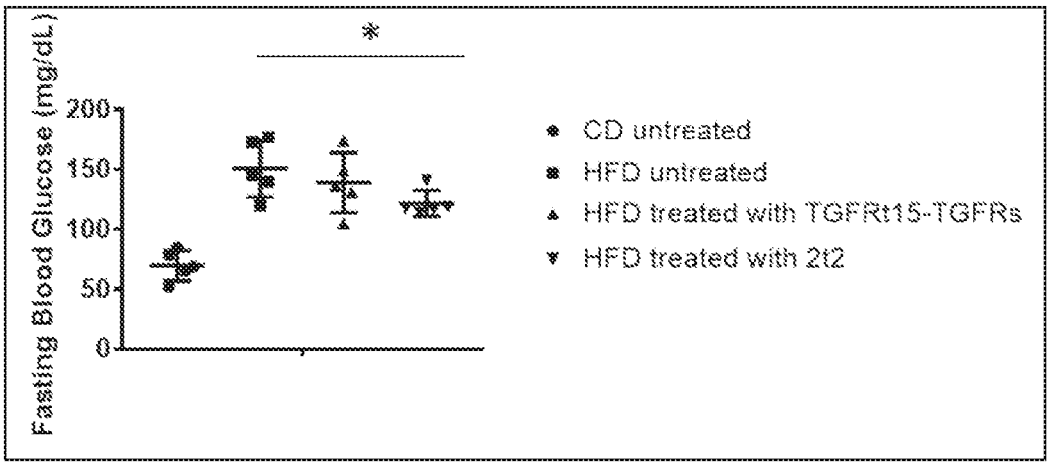


Figure 134A

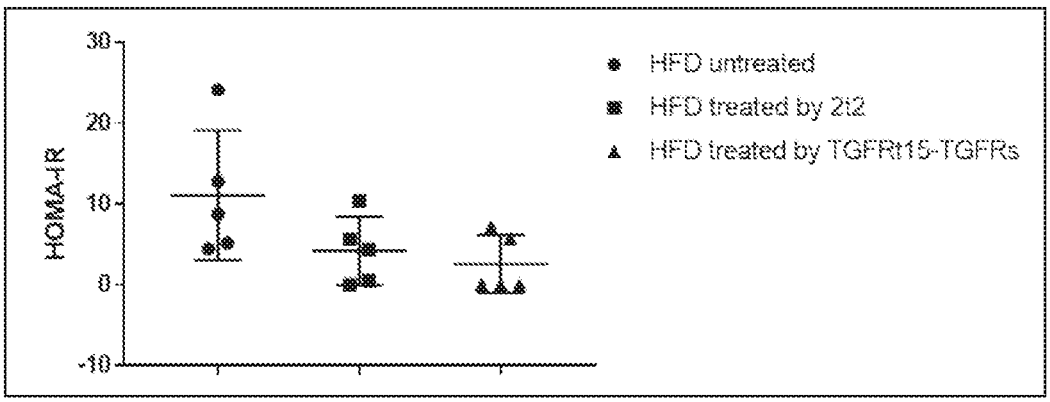


Figure 134B

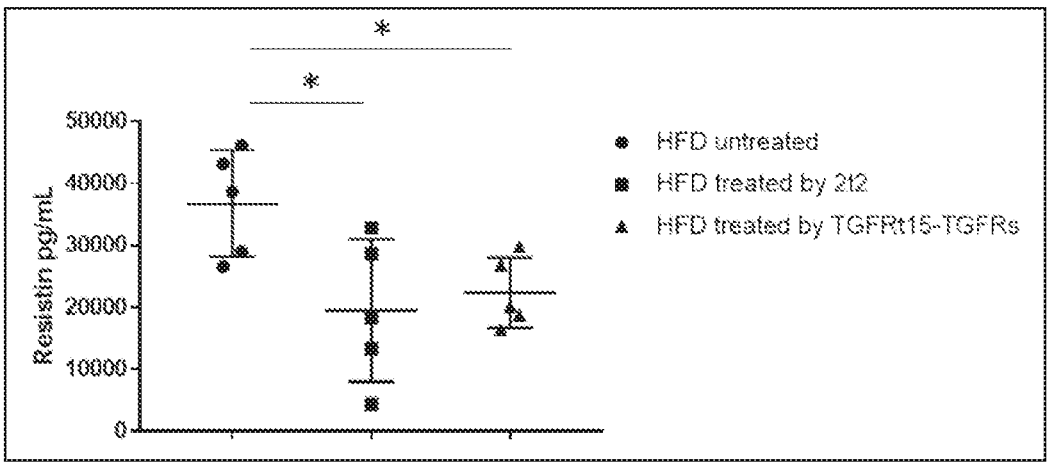


Figure 134C

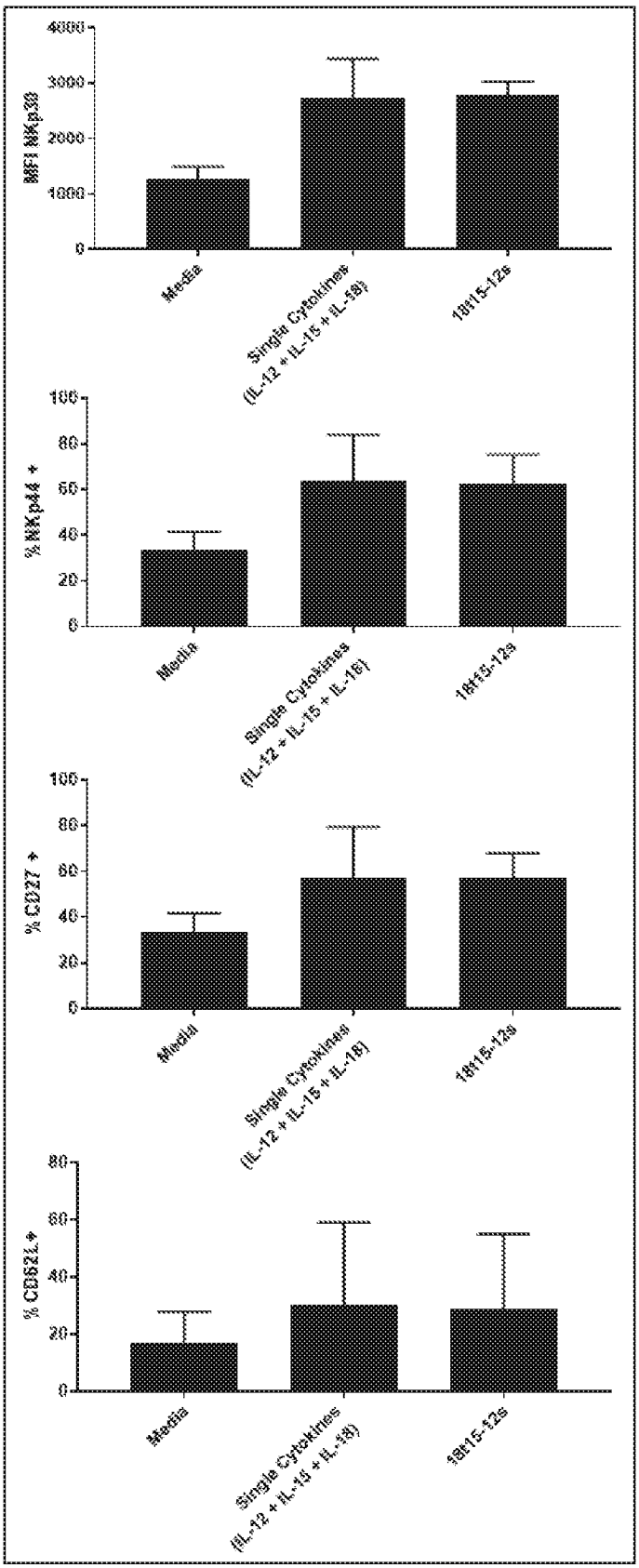

MFI NKp30
4000
3000
2000
1000
0
Media
Single Cytokines (IL-12 + IL-15 + IL-18)
18t15-12s
% NKp44 +
100
80
60
40
20
0
Media
Single Cytokines (IL-12 + IL-15 + IL-18)
18t15-12s
% CD27 +
100
80
60
40
20
0
Media
Single Cytokines (IL-12 + IL-15 + IL-18)
18t15-12s
% CD62L +
80
60
40
20
0
Media
Single Cytokines (IL-12 + IL-15 + IL-18)
18t15-12s

Figure 135

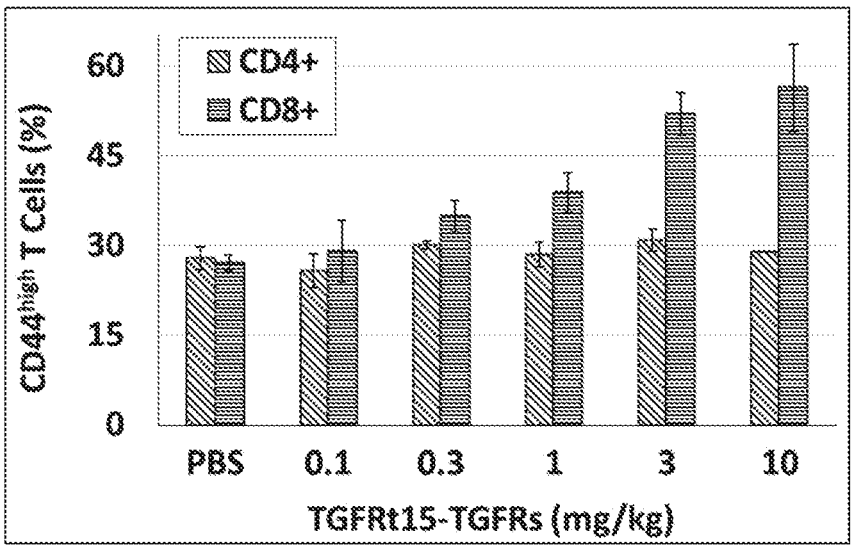


Figure 136

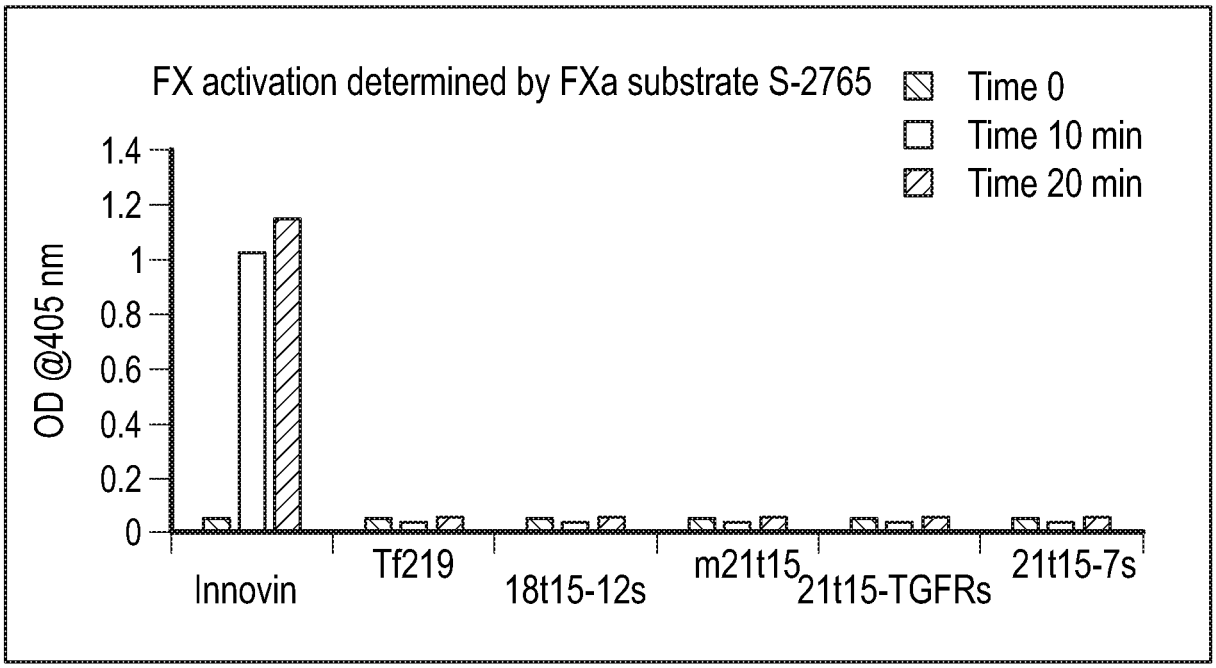


Figure 137

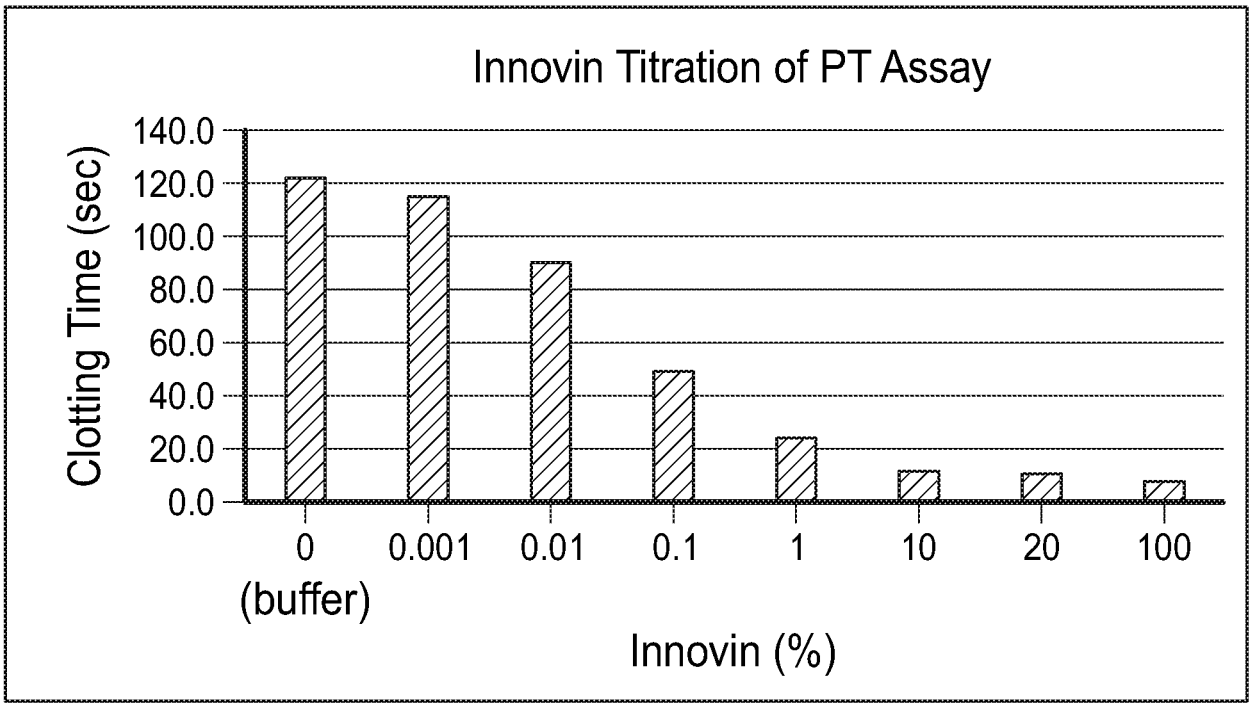


Figure 138

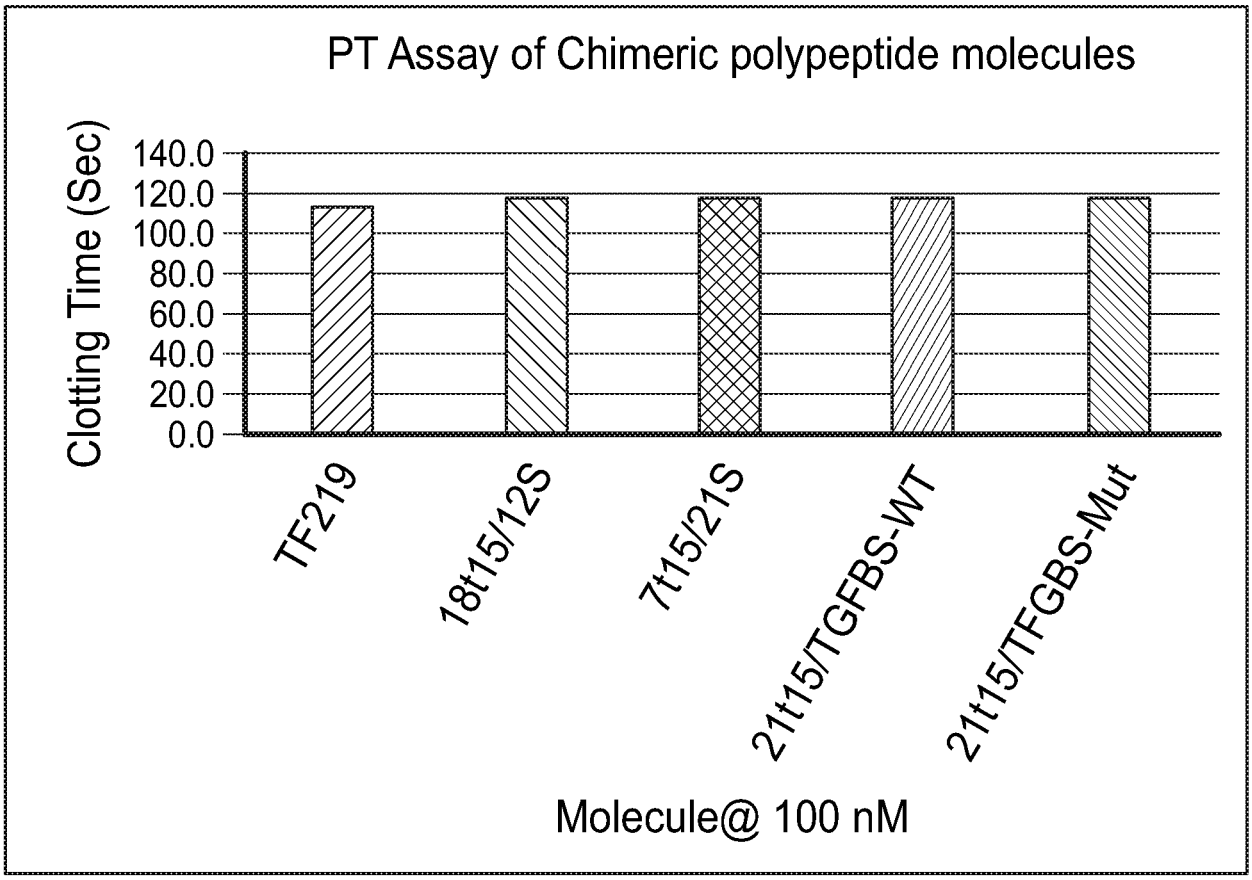


Figure 139

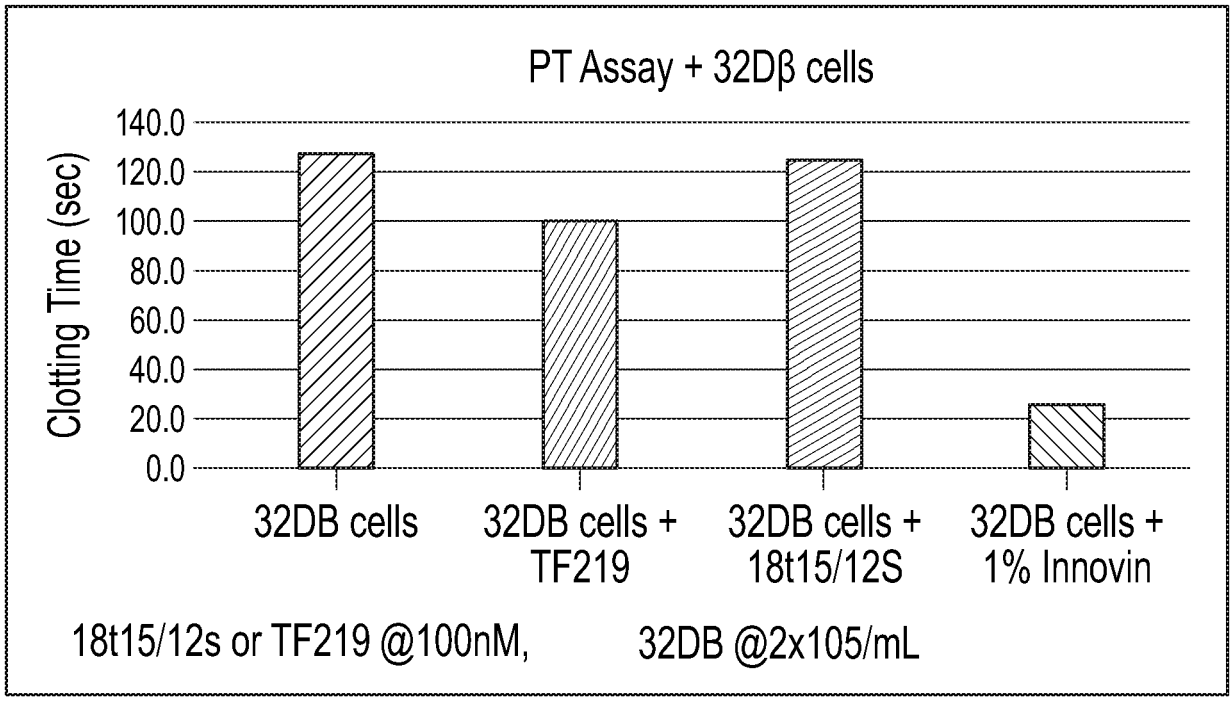


Figure 140

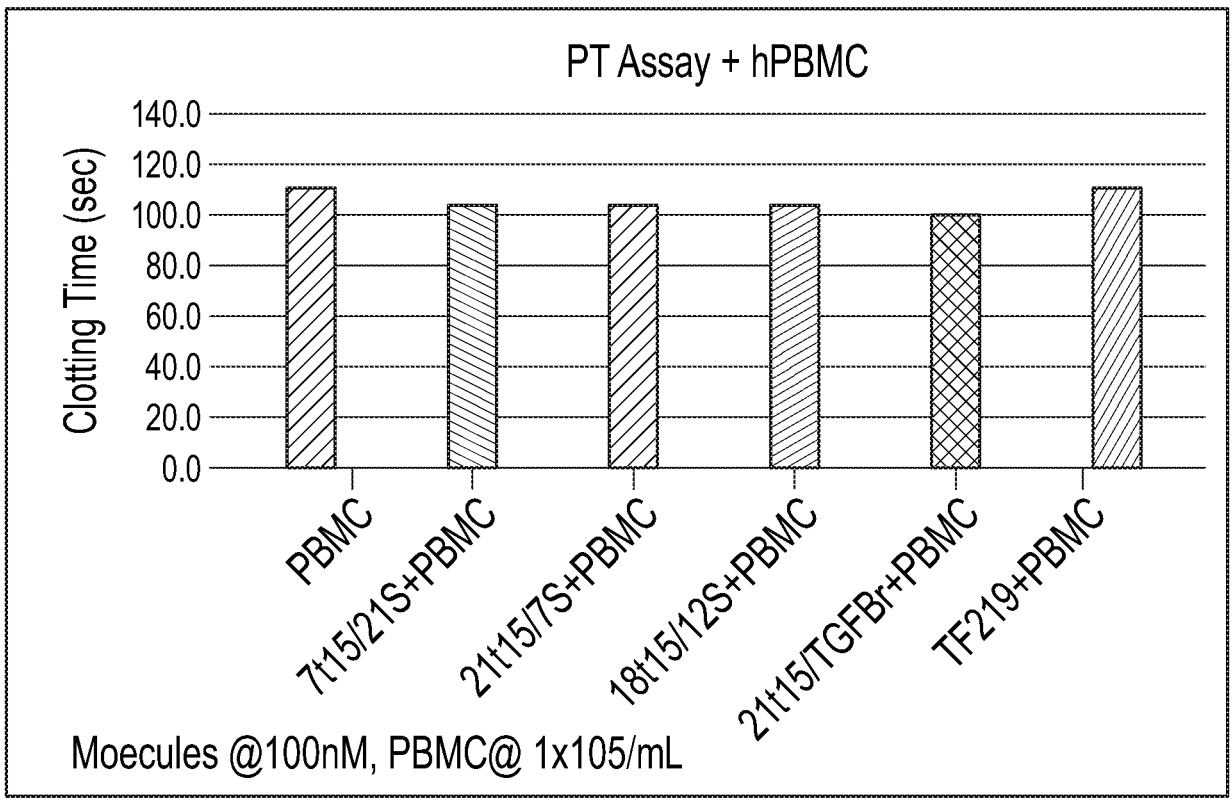


Figure 141

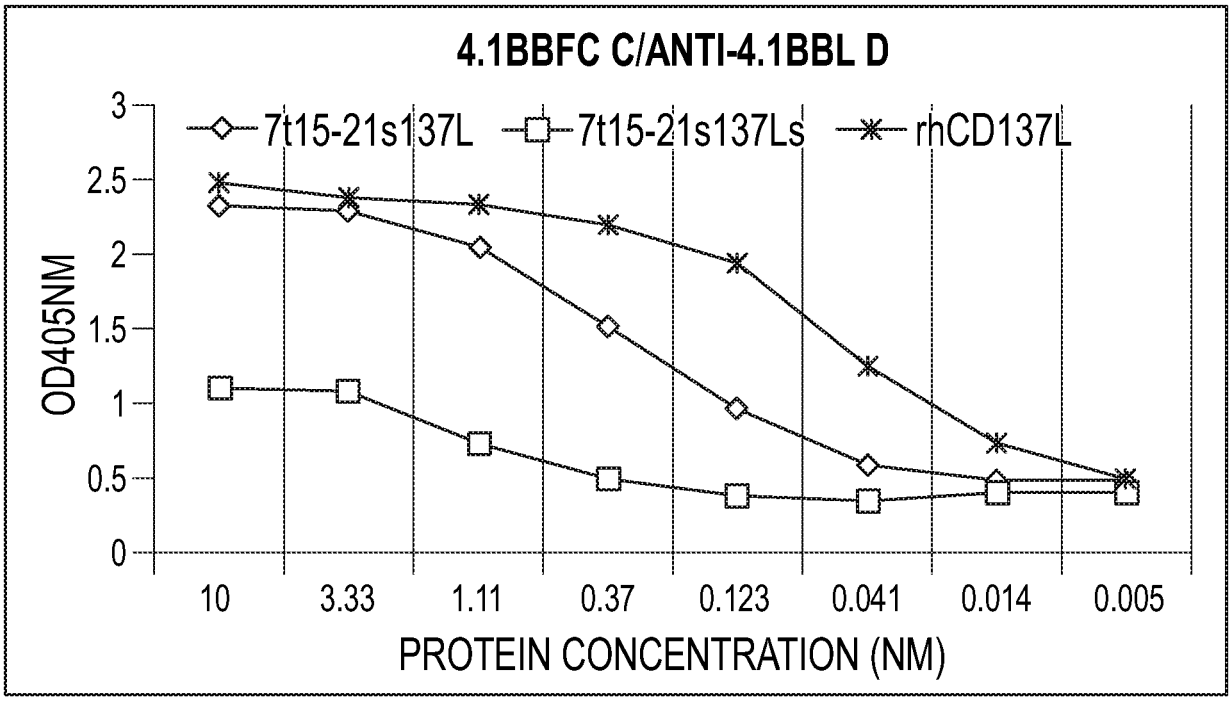


Figure 142

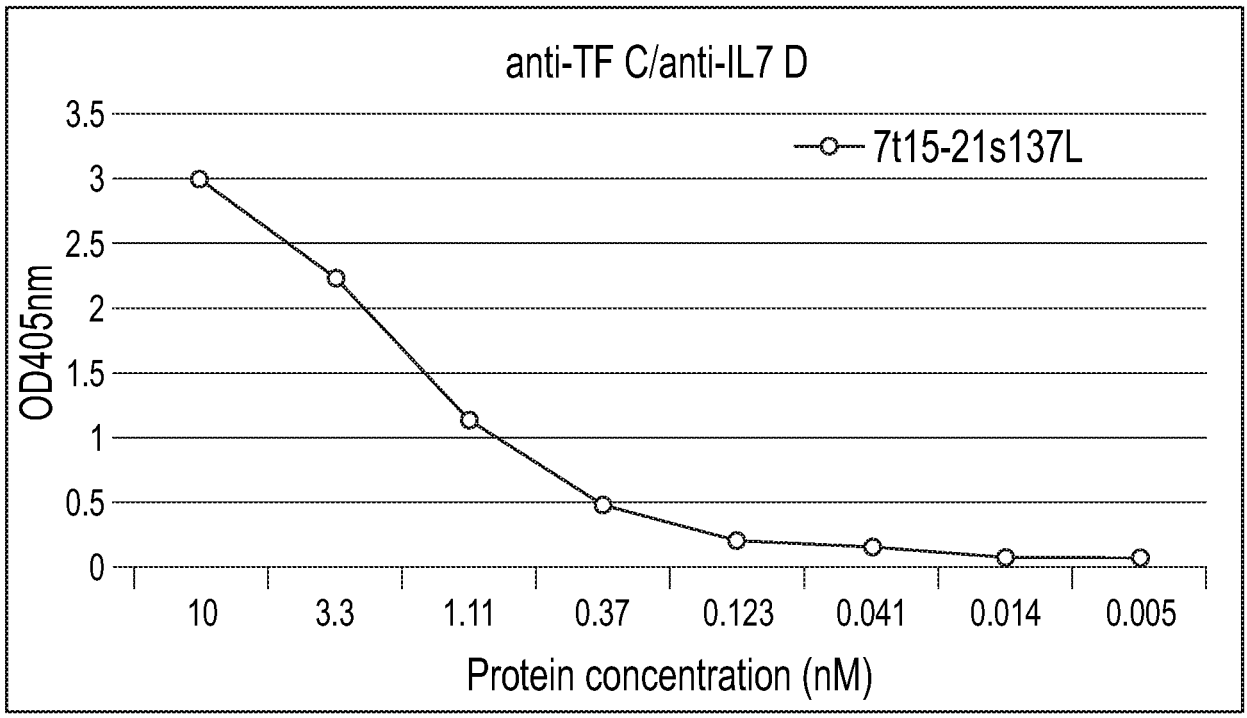


Figure 143A

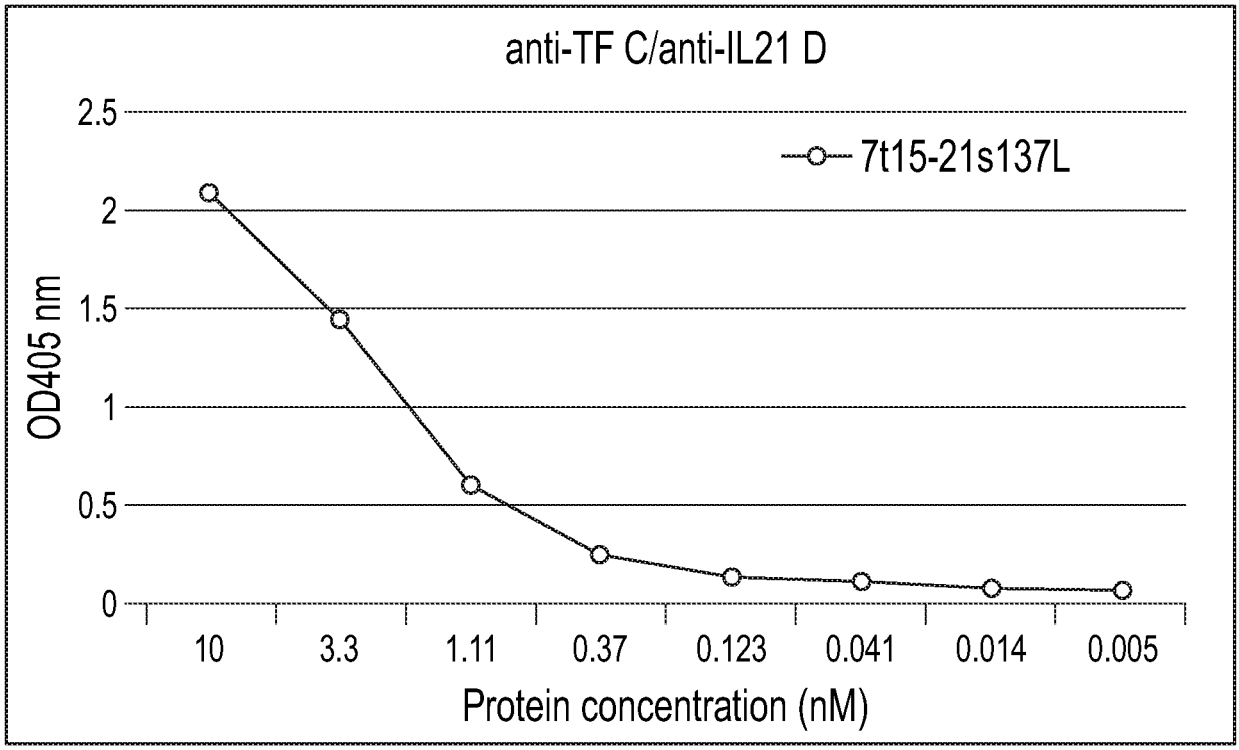


Figure 143B

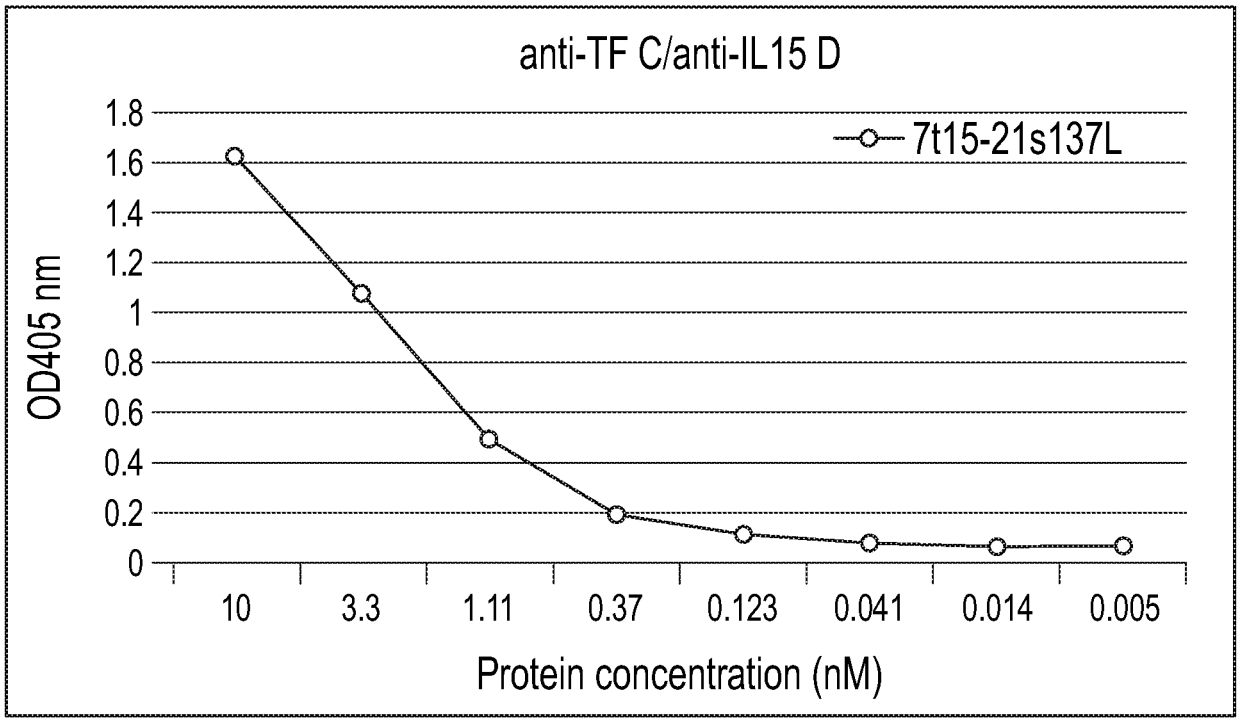


Figure 143C

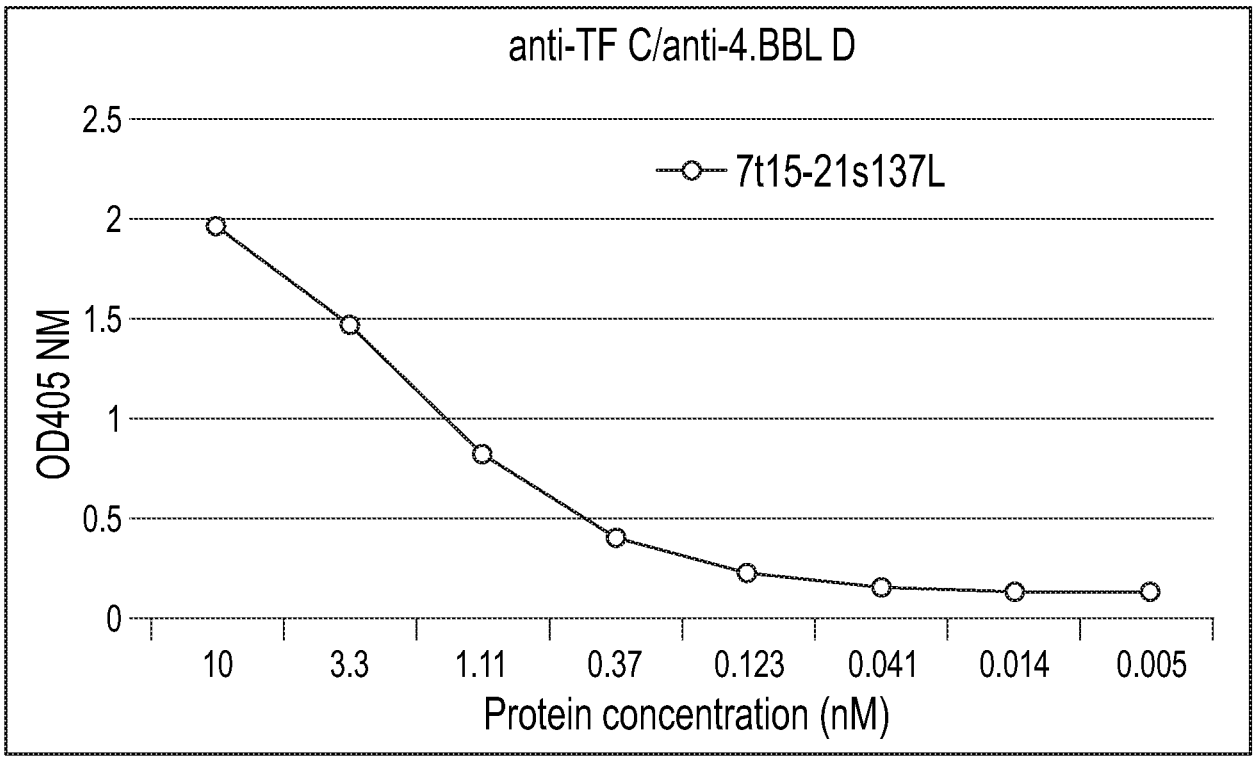


Figure 143D

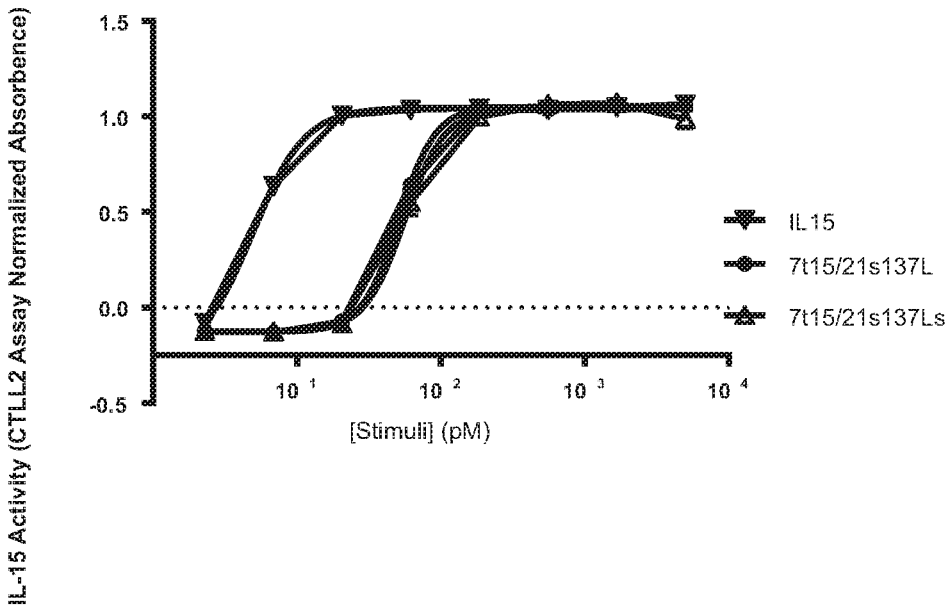


Figure 144