

FIG. 1A

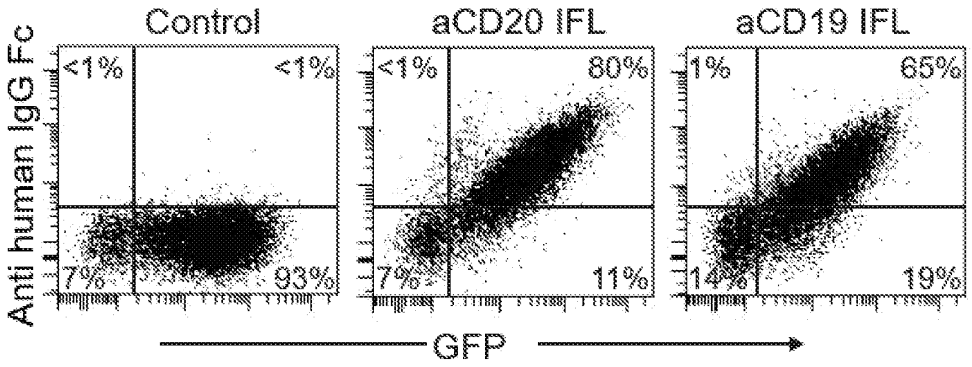


FIG. 1B

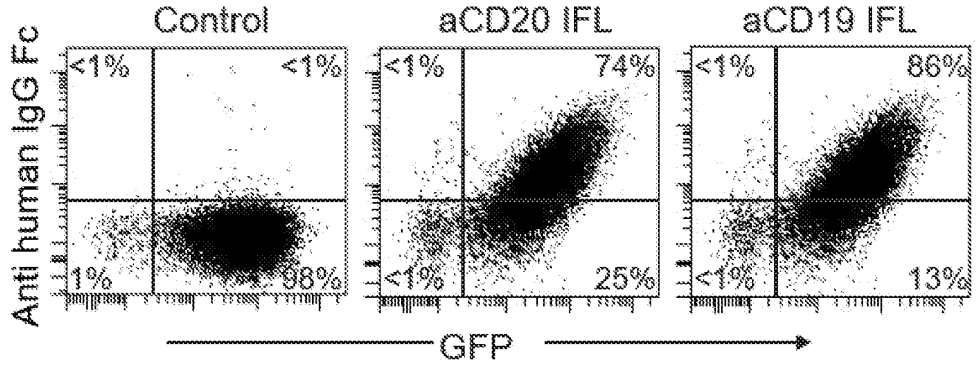


FIG. 1C

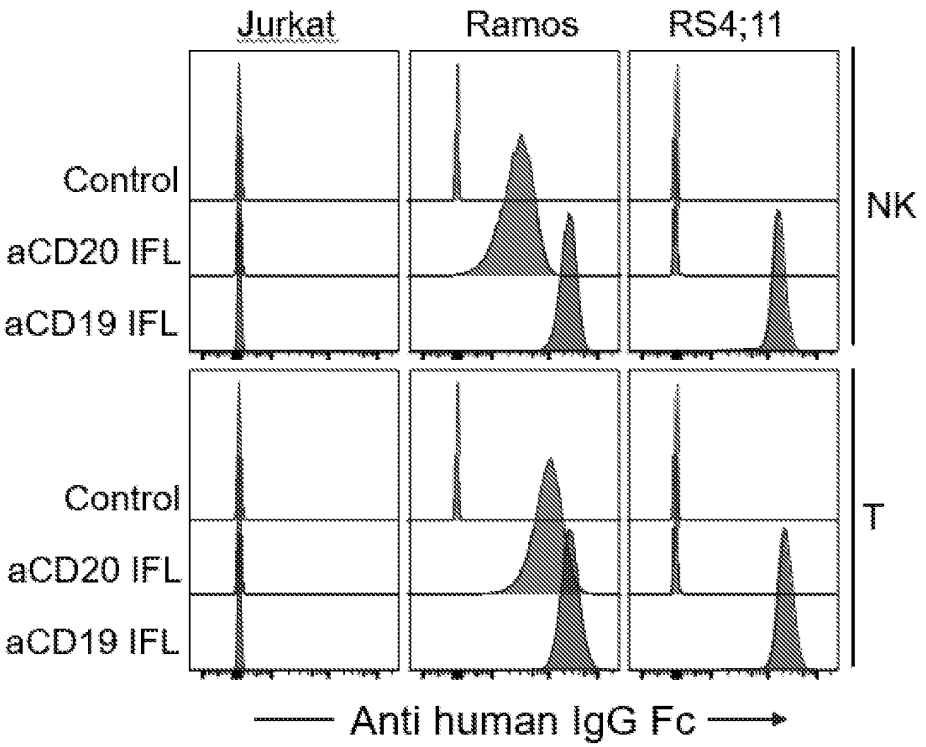

Jurkat
Ramos
RS4;11
Control
aCD20 IFL
aCD19 IFL
NK
Control
aCD20 IFL
aCD19 IFL
T
Anti human IgG Fc

FIG. 2

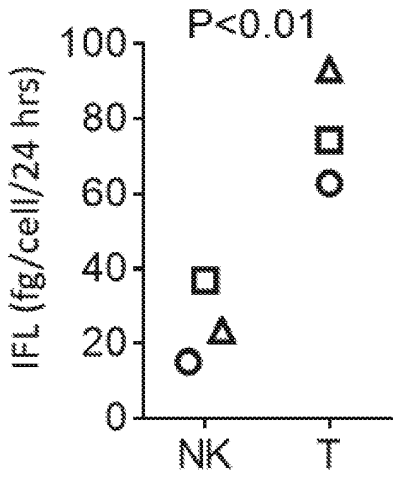

P<0.01
IFL (fg/cell/24 hrs)
100
80
60
40
20
0
NK
T

FIG. 3A

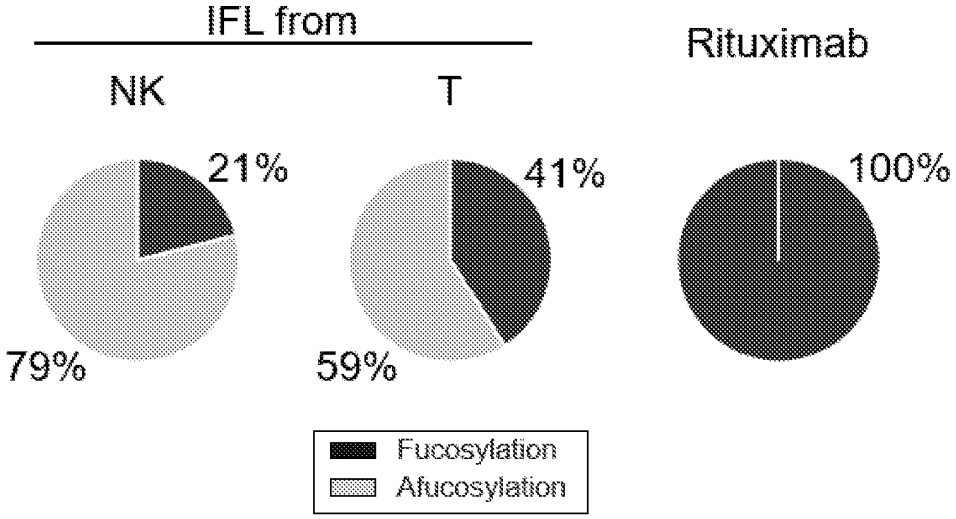

IFL from
NK
T
Rituximab
21%
79%
41%
59%
100%
Fucosylation
Afucosylation

FIG. 3B

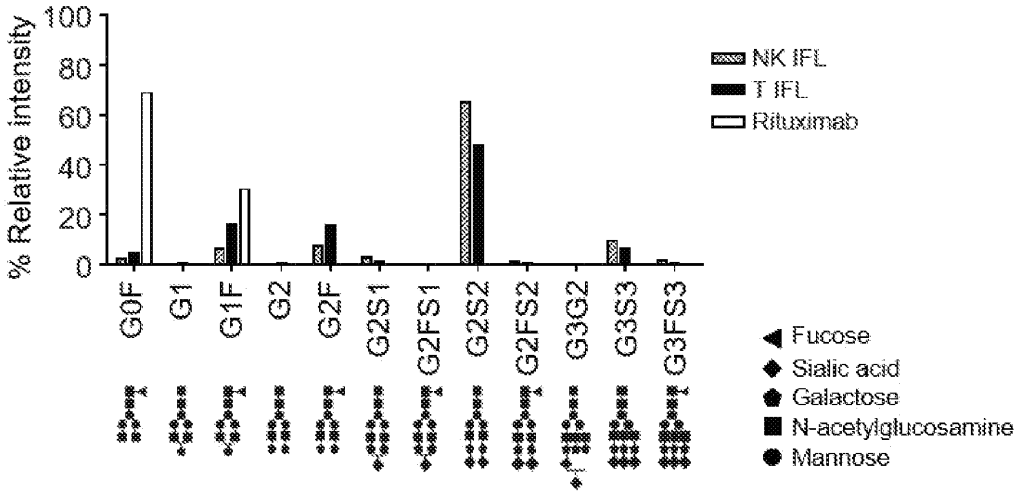

% Relative intensity
100
80
60
40
20
0
G0F
G1
G1F
G2
G2F
G2S1
G2FS1
G2S2
G2FS2
G3G2
G3S3
G3FS3
NK IFL
T IFL
Rituximab
Fucose
Sialic acid
Galactose
N-acetylglucosamine
Mannose

FIG. 3C

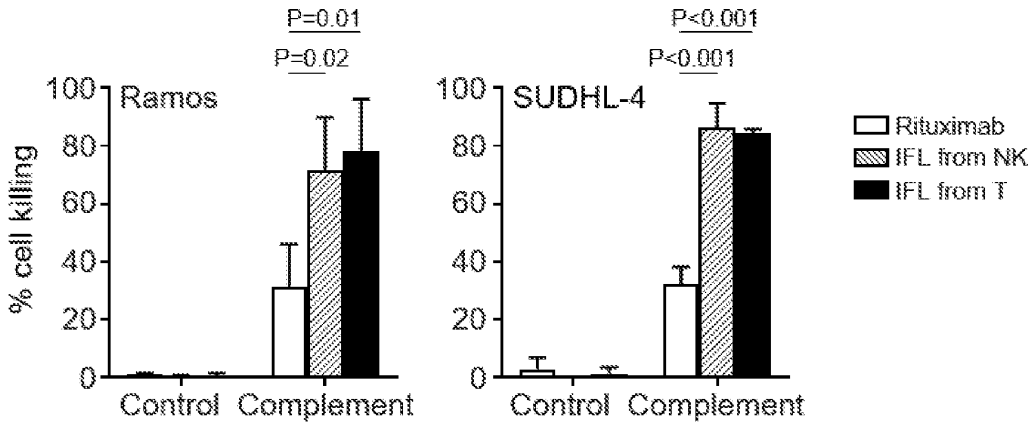

P=0.01
P=0.02
P<0.001
P<0.001
Ramos
SUDHL-4
% cell killing
100
80
60
40
20
0
Control
Complement
Rituximab
IFL from NK
IFL from T

FIG. 4A

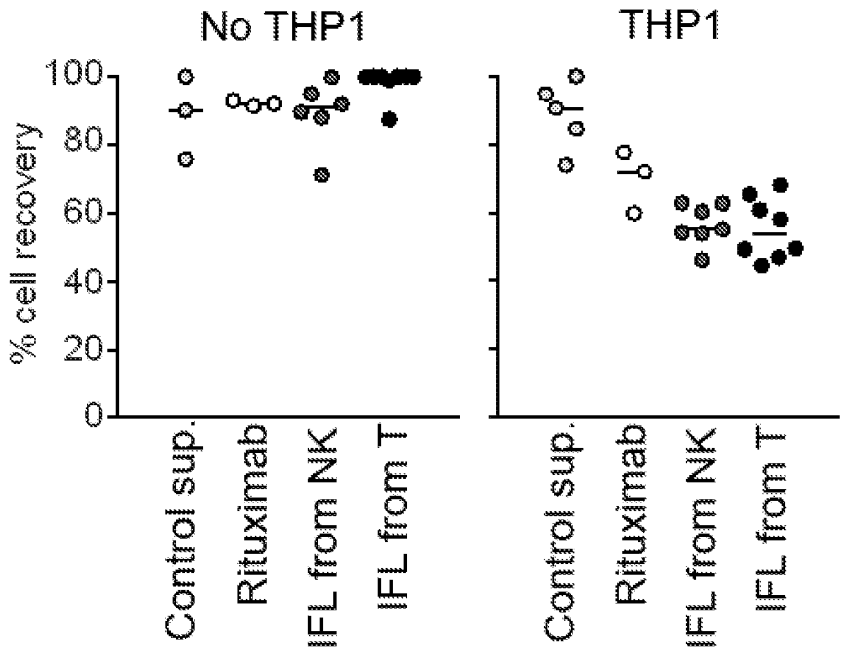

No THP1
THP1
% cell recovery
100
80
60
40
20
0
Control sup.
Rituximab
IFL from NK
IFL from T

FIG. 4B

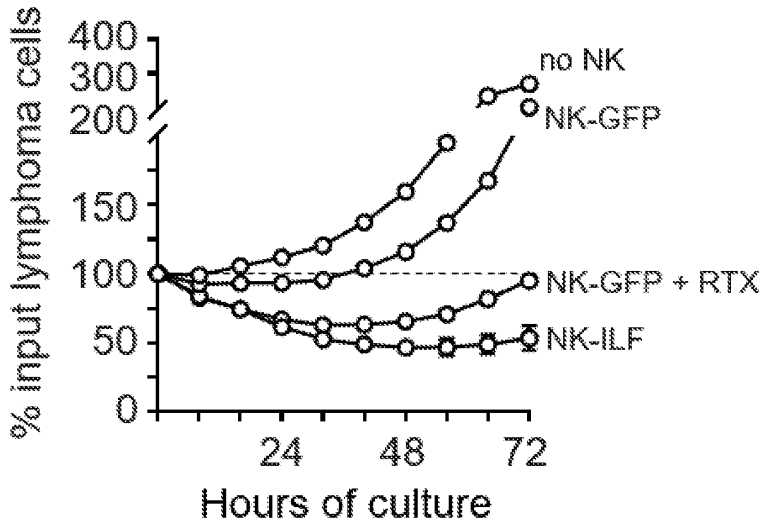

% input lymphoma cells
400
300
200
150
100
50
0
24
48
72
Hours of culture
no NK
NK-GFP
NK-GFP + RTX
NK-ILF

FIG. 5A

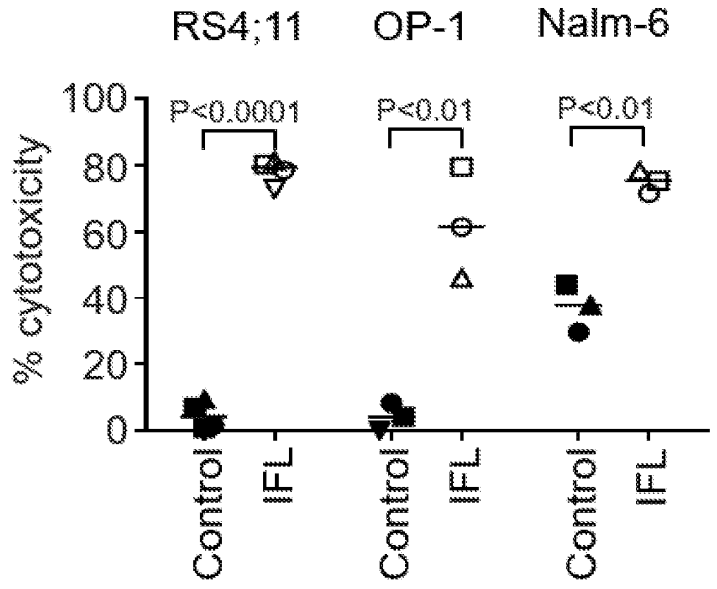

RS4;11
OP-1
Nalm-6
% cytotoxicity
100
80
60
40
20
0
P<0.0001
P<0.01
P<0.01
Control
IFL
Control
IFL
Control
IFL

FIG. 5B

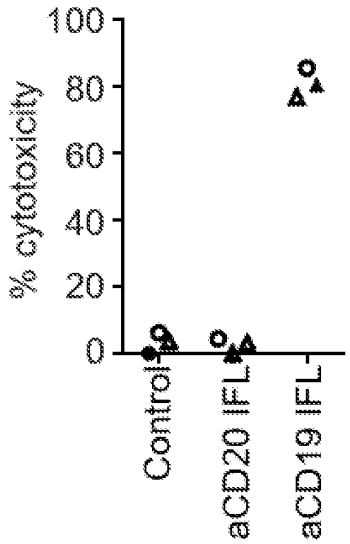


FIG. 5C

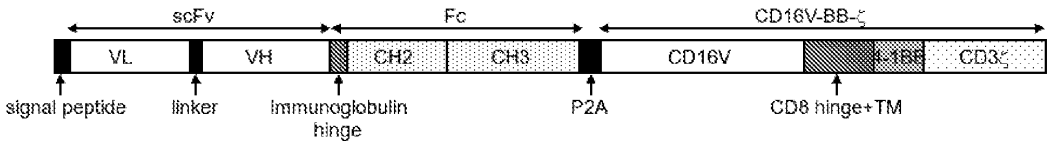


FIG. 6A

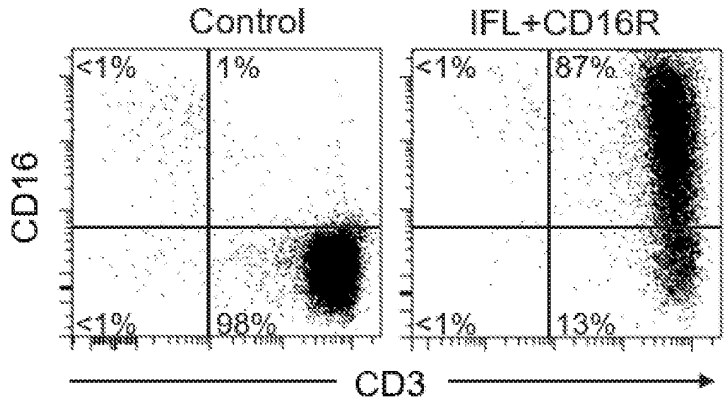


FIG. 6B

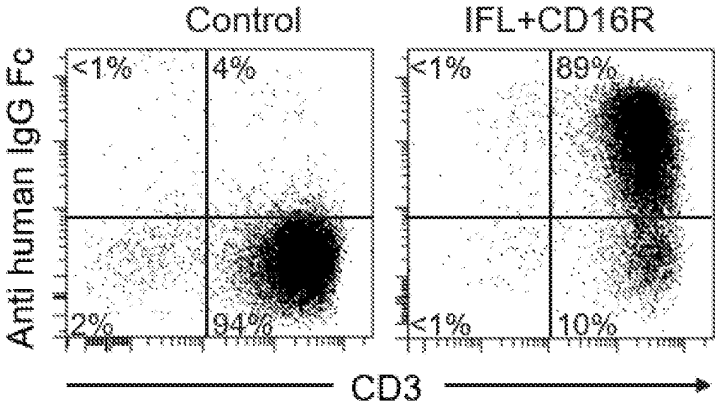


FIG. 6C

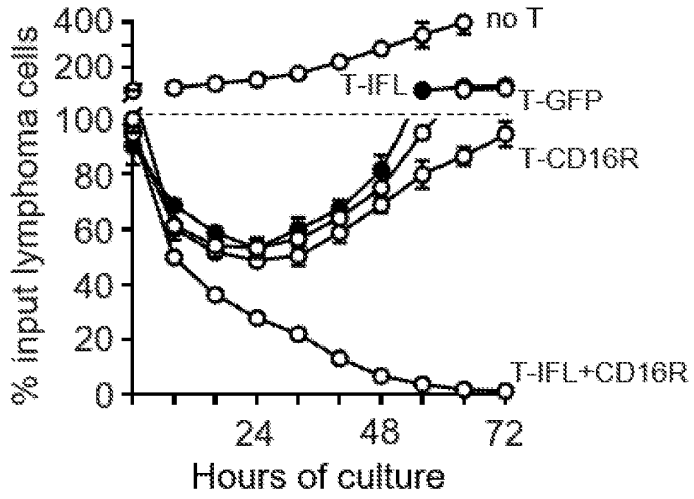

400
200
100
80
60
40
20
0
% input lymphoma cells
no T
T-IFL
T-GFP
T-CD16R
T-IFL+CD16R
24
48
72
Hours of culture

FIG. 6D

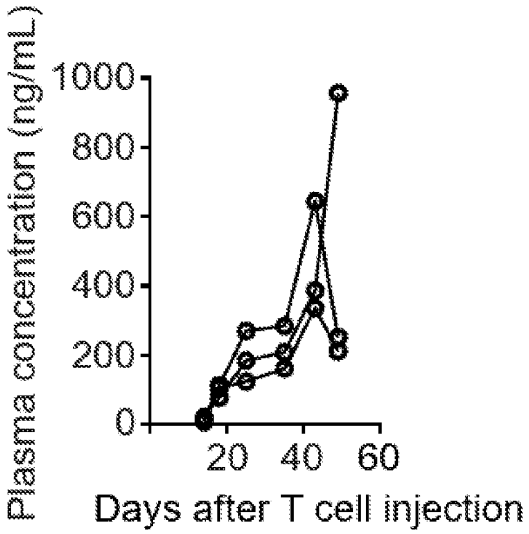
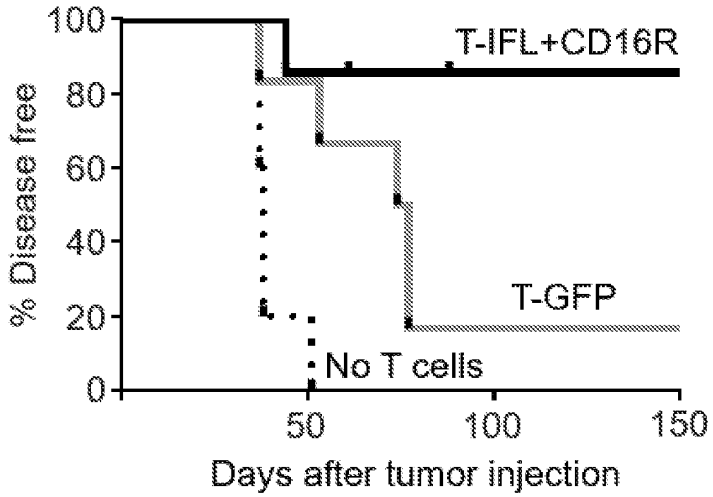


FIG. 7A



No T cells vs T-GFP	P = 0.0107
No T cells vs T-IFL+CD16R	P = 0.0013
T-GFP vs T-IFL+CD16R	P = 0.0358

FIG. 7B

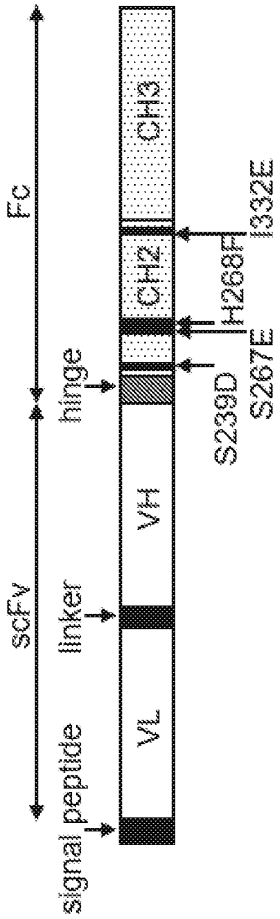

Fc
scFv
signal peptide
linker
hinge
VL
VH
CH2
CH3
S239D
S267E
H268F
I332E

FIG. 8A

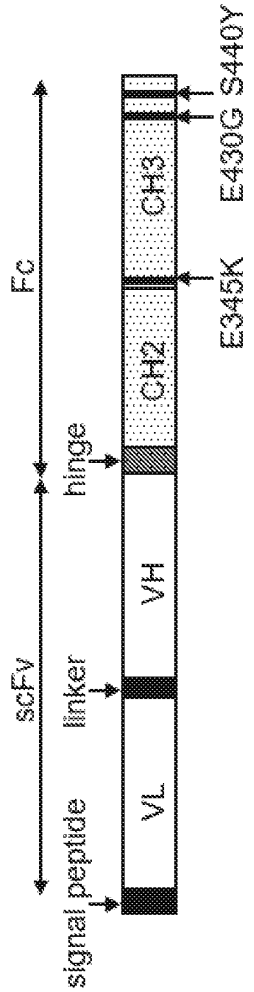

Fc
scFv
signal peptide
linker
hinge
VL
VH
CH2
CH3
E345K
E430G S440Y

FIG. 8B

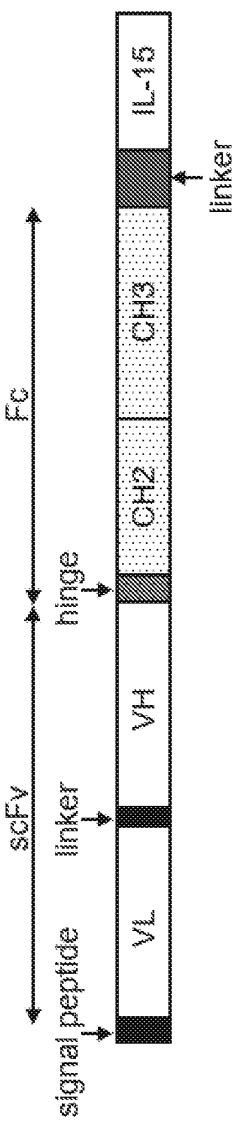

signal peptide
VL
linker
VH
hinge
CH2
CH3
IL-15
linker
scFv
Fc

FIG. 8C

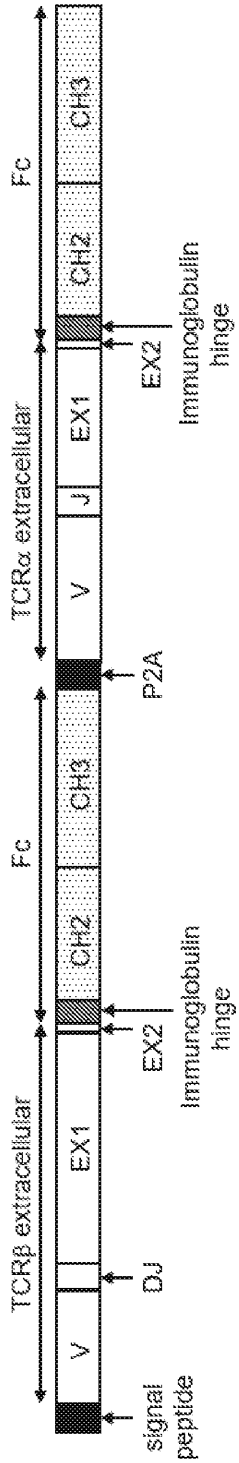

signal peptide
V
DJ
EX1
EX2
Immunoglobulin hinge
CH2
CH3
Fc
TCRβ extracellular
P2A
V
J
EX1
EX2
Immunoglobulin hinge
CH2
CH3
Fc
TCRα extracellular

FIG. 8D

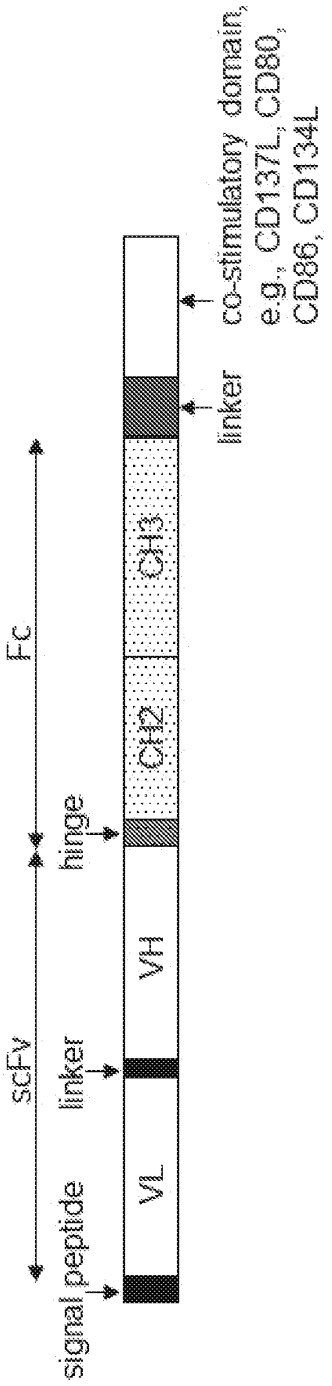

signal peptide
VL
linker
scFv
VH
hinge
CH2
CH3
Fc
linker
co-stimulatory domain, e.g., CD137L, CD80, CD86, CD134L

FIG. 8E

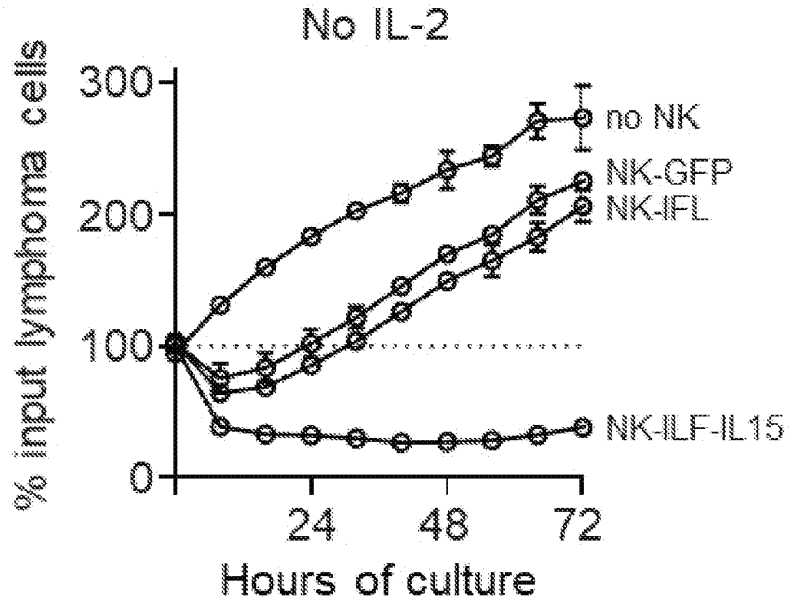

No IL-2
% input lymphoma cells
300
200
100
0
24
48
72
Hours of culture
no NK
NK-GFP
NK-IFL
NK-ILF-IL15

FIG. 9A

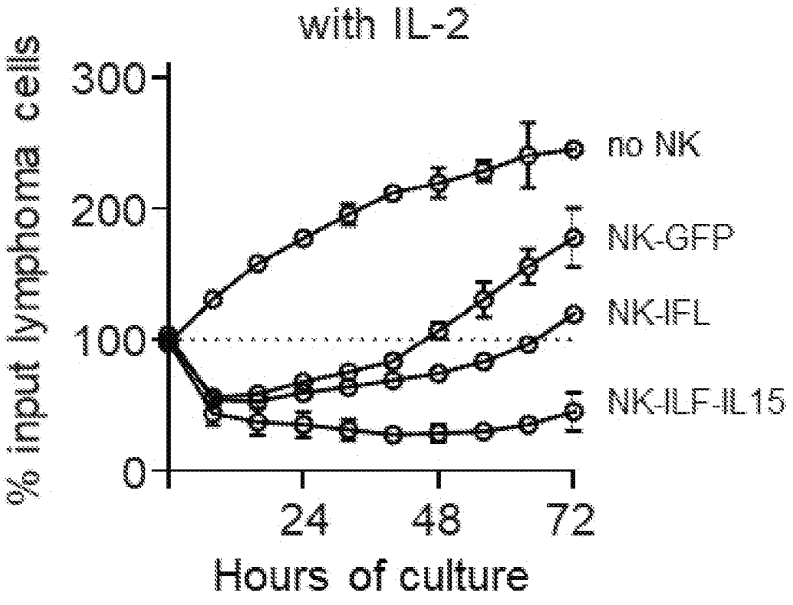

with IL-2
% input lymphoma cells
300
200
100
0
24
48
72
Hours of culture
no NK
NK-GFP
NK-IFL
NK-ILF-IL15

FIG. 9B