Fig. 1

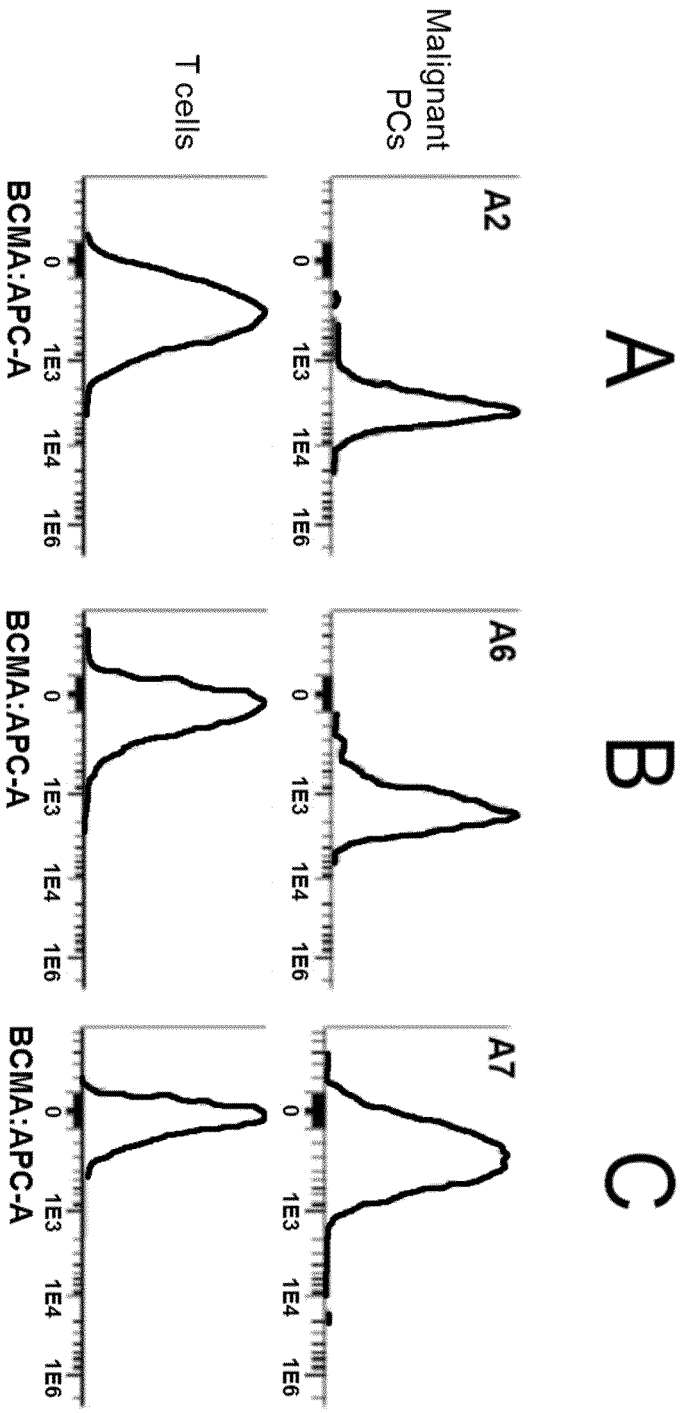


Fig. 2

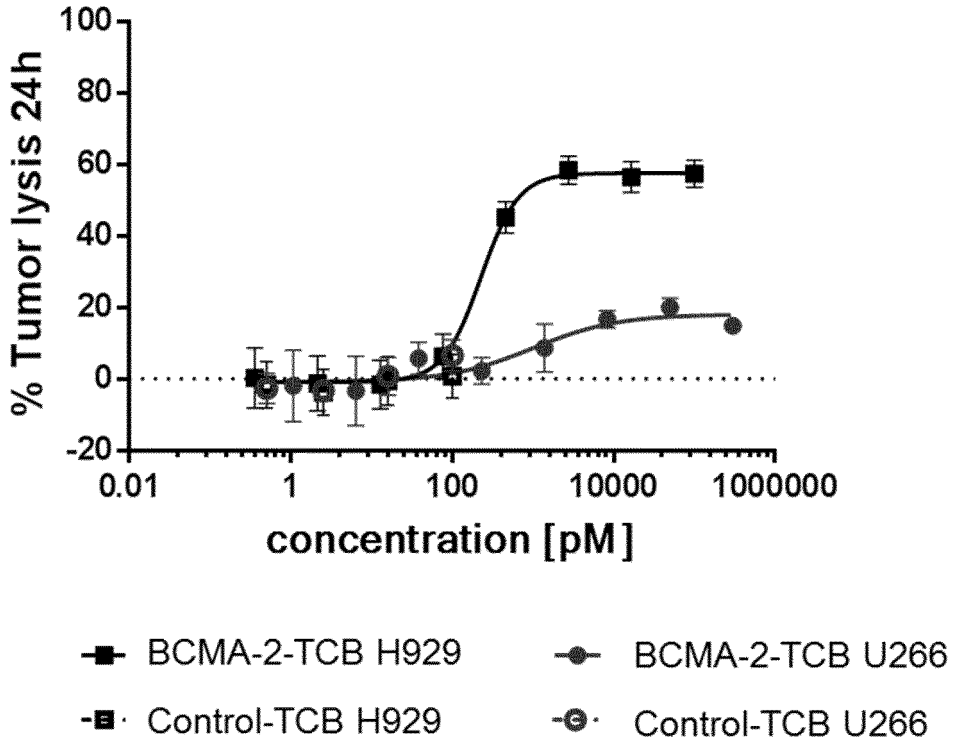

100
80
60
40
20
0
-20
% Tumor lysis 24h
0.01
1
100
10000
1000000
concentration [pM]
BCMA-2-TCB H929
BCMA-2-TCB U266
Control-TCB H929
Control-TCB U266

Fig. 2.1

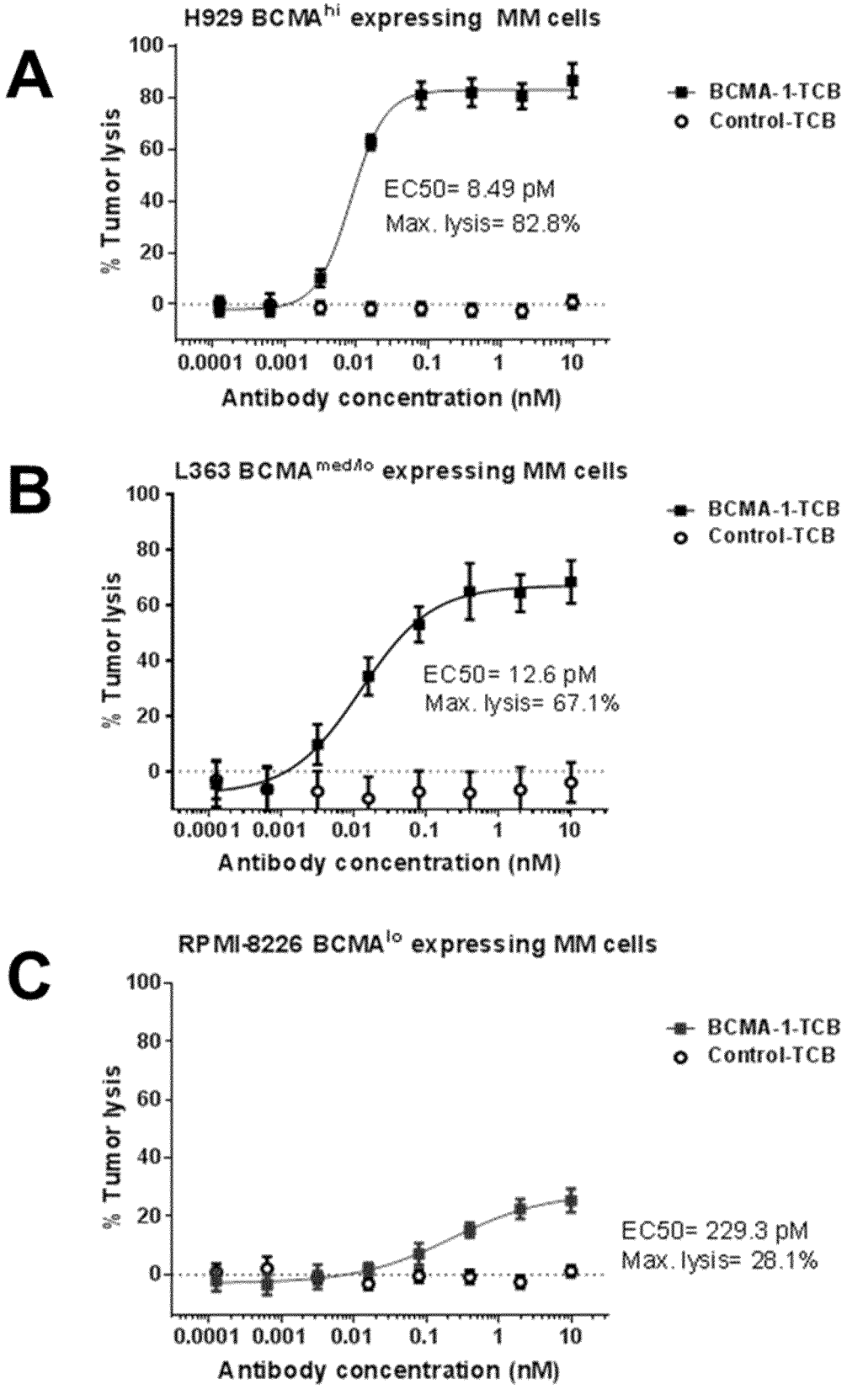

A
H929 BCMA^hi expressing MM cells
% Tumor lysis
100
80
60
40
20
0
EC50= 8.49 pM
Max. lysis= 82.8%
BCMA-1-TCB
Control-TCB
0.0001 0.001 0.01 0.1 1 10
Antibody concentration (nM)
B
L363 BCMA^med/lo expressing MM cells
% Tumor lysis
EC50= 12.6 pM
Max. lysis= 67.1%
BCMA-1-TCB
Control-TCB
Antibody concentration (nM)
C
RPMI-8226 BCMA^lo expressing MM cells
% Tumor lysis
EC50= 229.3 pM
Max. lysis= 28.1%
BCMA-1-TCB
Control-TCB
Antibody concentration (nM)

Fig. 3

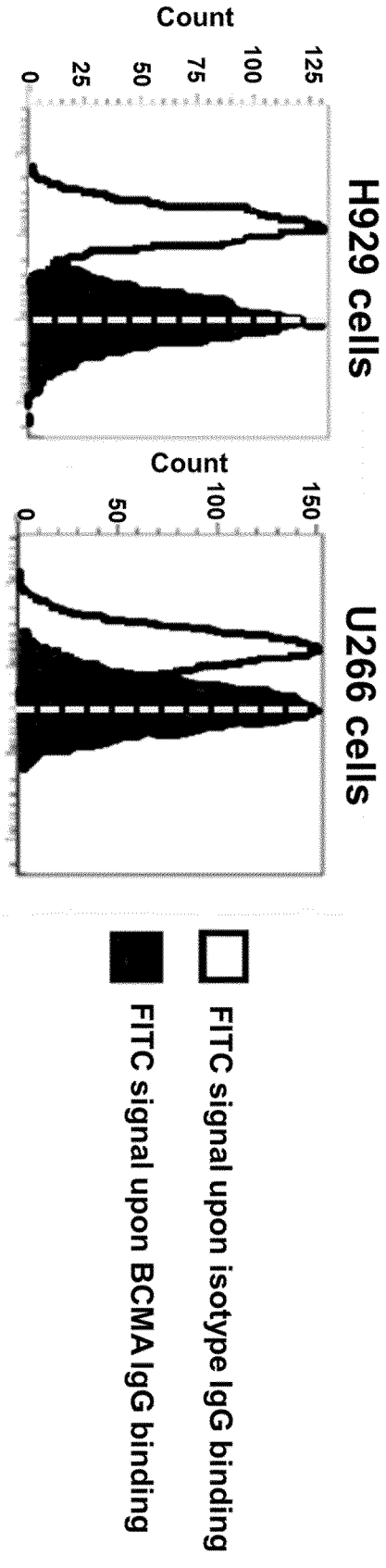

Count
0
25
50
75
100
125
H929 cells
Count
0
50
100
150
U266 cells
FITC signal upon BCMA IgG binding
FITC signal upon isotype IgG binding

Fig. 4

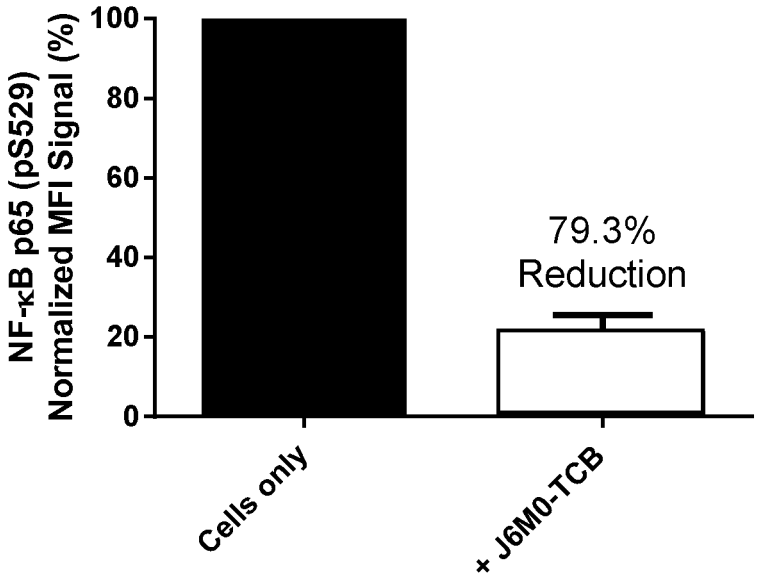

NF-κB p65 (pS529)
Normalized MFI Signal (%)
100
80
60
40
20
0
79.3%
Reduction
Cells only
+ J6M0-TCB

Fig. 5

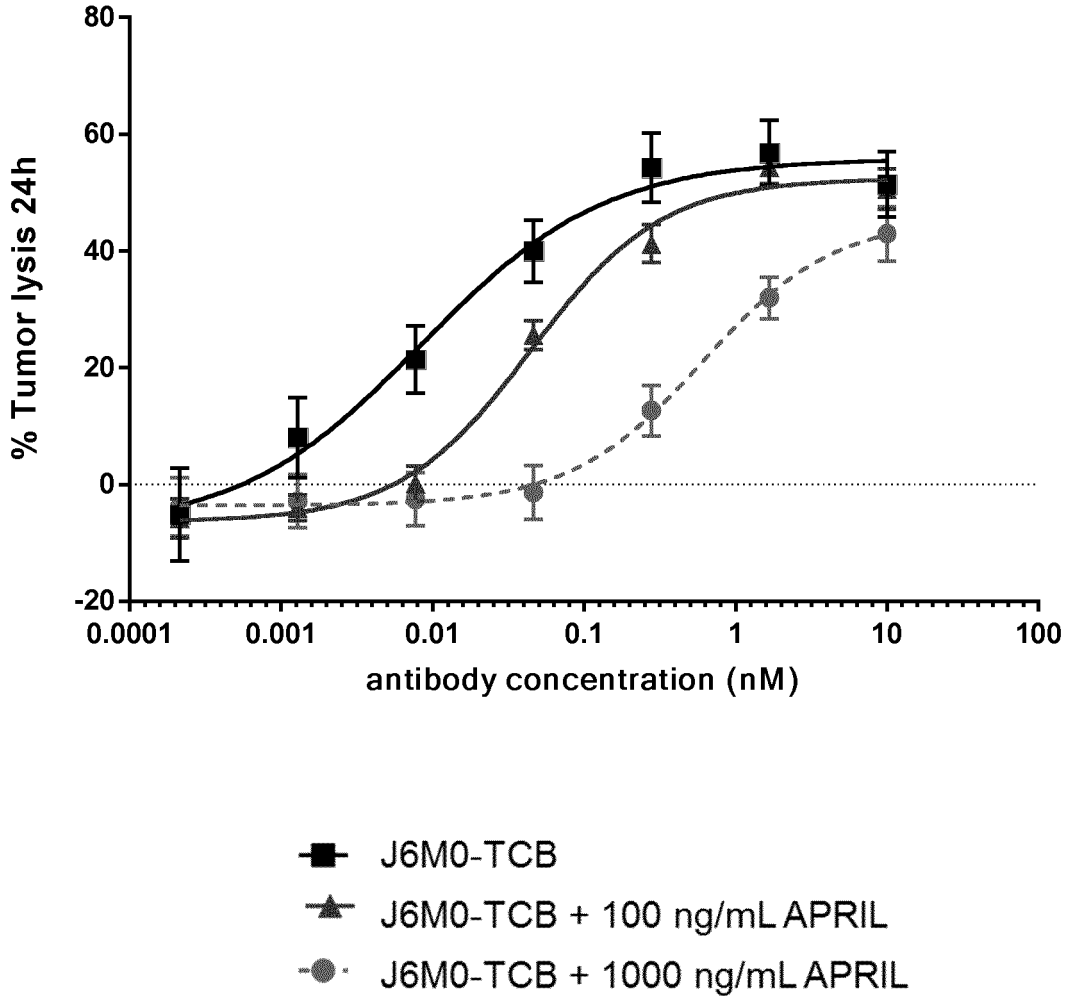

80
60
40
20
0
-20
% Tumor lysis 24h
0.0001
0.001
0.01
0.1
1
10
100
antibody concentration (nM)
J6M0-TCB
J6M0-TCB + 100 ng/mL APRIL
J6M0-TCB + 1000 ng/mL APRIL

Fig. 6

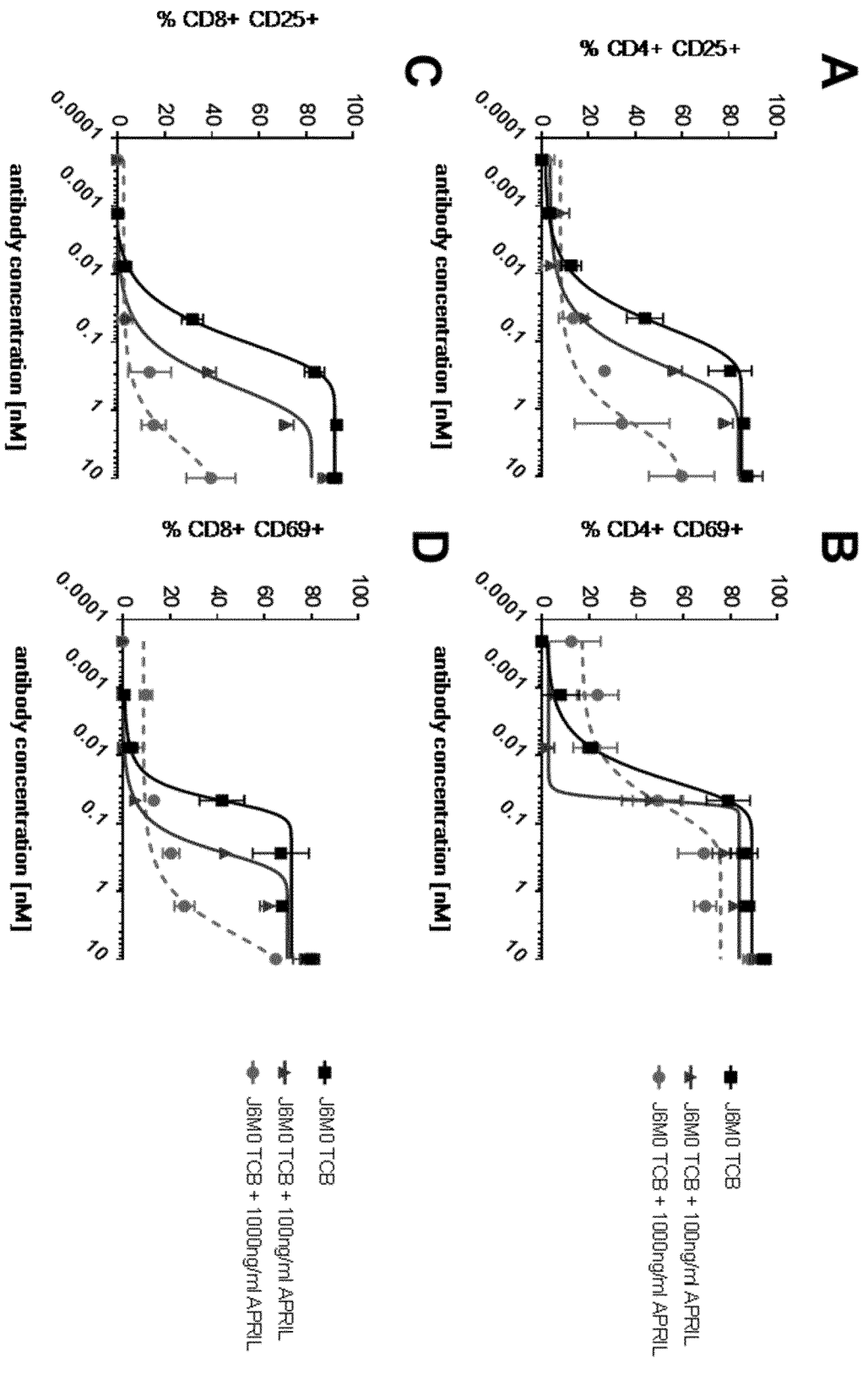
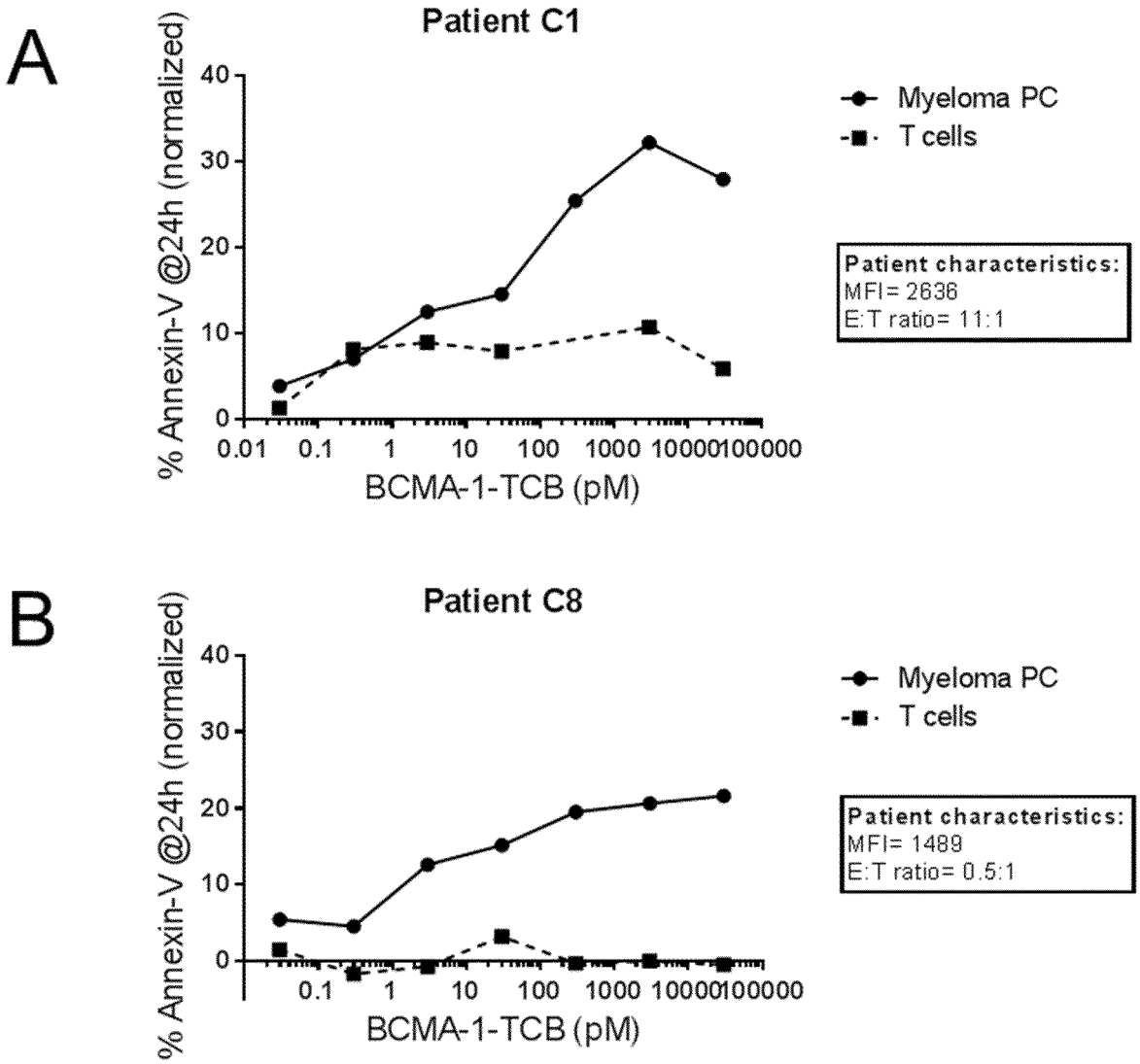

A
% CD4+ CD25+
B
% CD4+ CD69+
C
% CD8+ CD25+
D
% CD8+ CD69+
antibody concentration [nM]
0.0001
0.001
0.01
0.1
1
10
0
20
40
60
80
100
J6M0 TCB
J6M0 TCB + 100ng/ml APRIL
J6M0 TCB + 1000ng/ml APRIL

Fig. 7


A
Patient C1
% Annexin-V @24h (normalized)
40
30
20
10
0
0.01
0.1
1
10
100
1000
10000
100000
BCMA-1-TCB (pM)
Myeloma PC
T cells
Patient characteristics:
MFI= 2636
E:T ratio= 11:1
B
Patient C8
% Annexin-V @24h (normalized)
40
30
20
10
0
0.1
1
10
100
1000
10000
100000
BCMA-1-TCB (pM)
Myeloma PC
T cells
Patient characteristics:
MFI= 1489
E:T ratio= 0.5:1