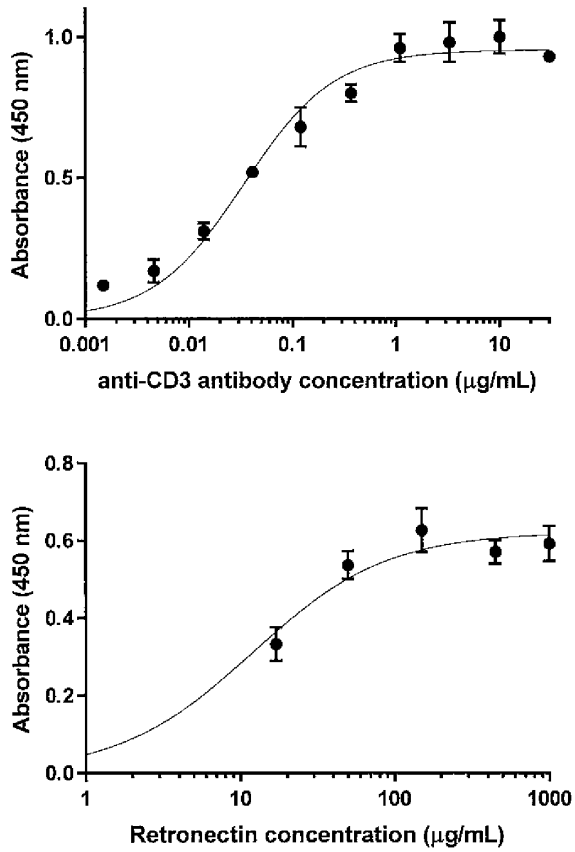
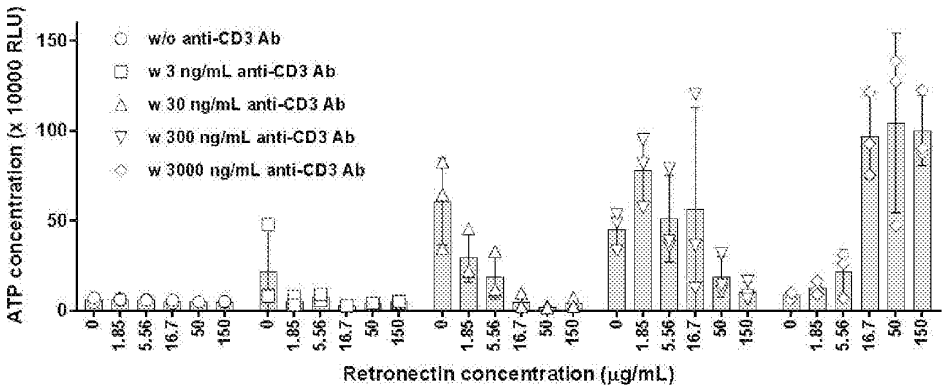
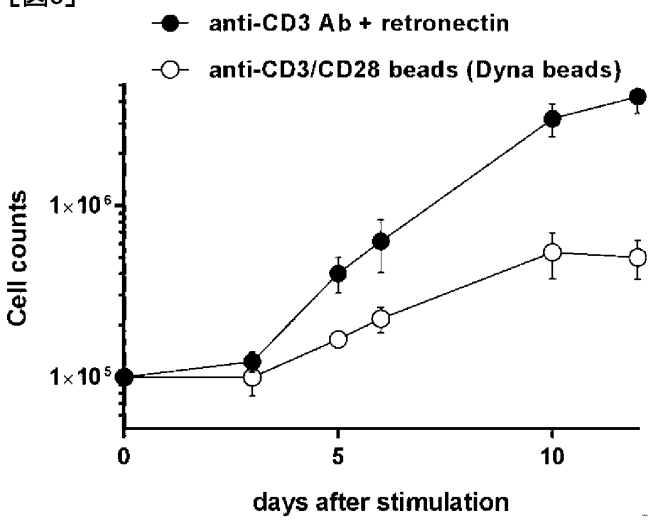
[図1]


Absorbance (450 nm)
1.0
0.5
0.0
0.001
0.01
0.1
1
10
anti-CD3 antibody concentration (μg/mL)
Absorbance (450 nm)
0.8
0.6
0.4
0.2
0.0
1
10
100
1000
Retronectin concentration (μg/mL)

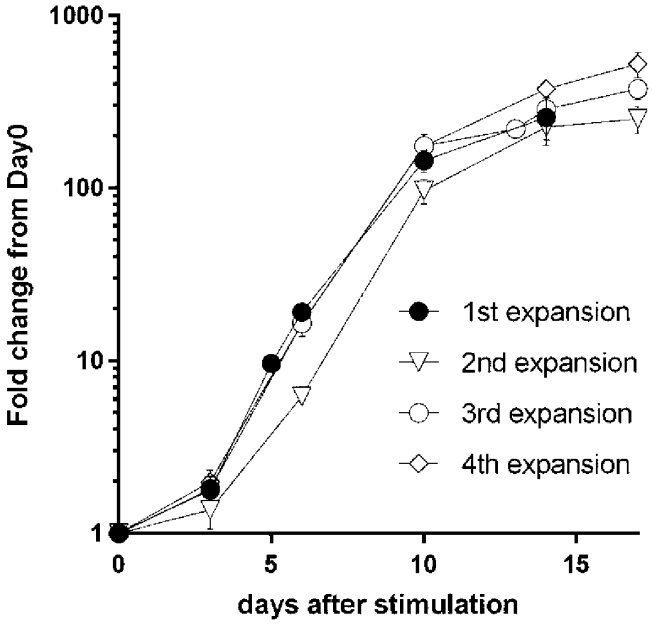
[図2]


ATP concentration (x 10000 RLU)
150
100
50
0
w/o anti-CD3 Ab
w 3 ng/mL anti-CD3 Ab
w 30 ng/mL anti-CD3 Ab
w 300 ng/mL anti-CD3 Ab
w 3000 ng/mL anti-CD3 Ab
0
1.85
5.56
16.7
50
150
Retronectin concentration (μg/mL)

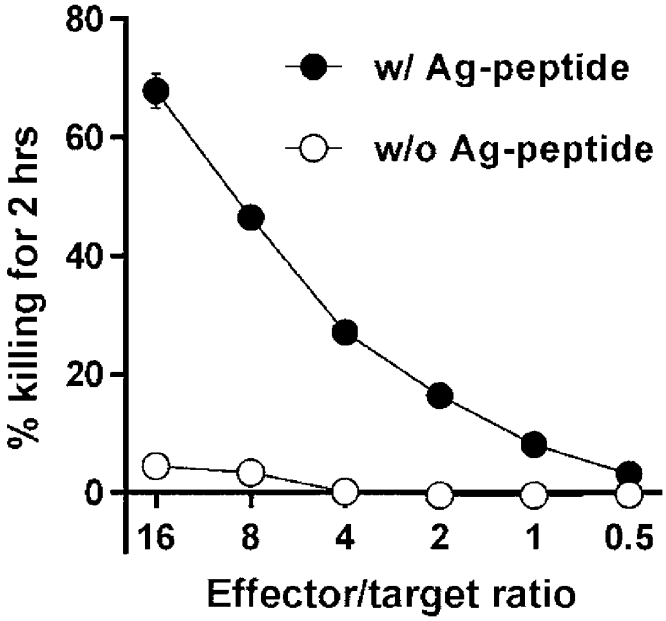
[図3]


anti-CD3 Ab + retronectin
anti-CD3/CD28 beads (Dyna beads)
Cell counts
1×10⁶
1×10⁵
0
5
10
days after stimulation

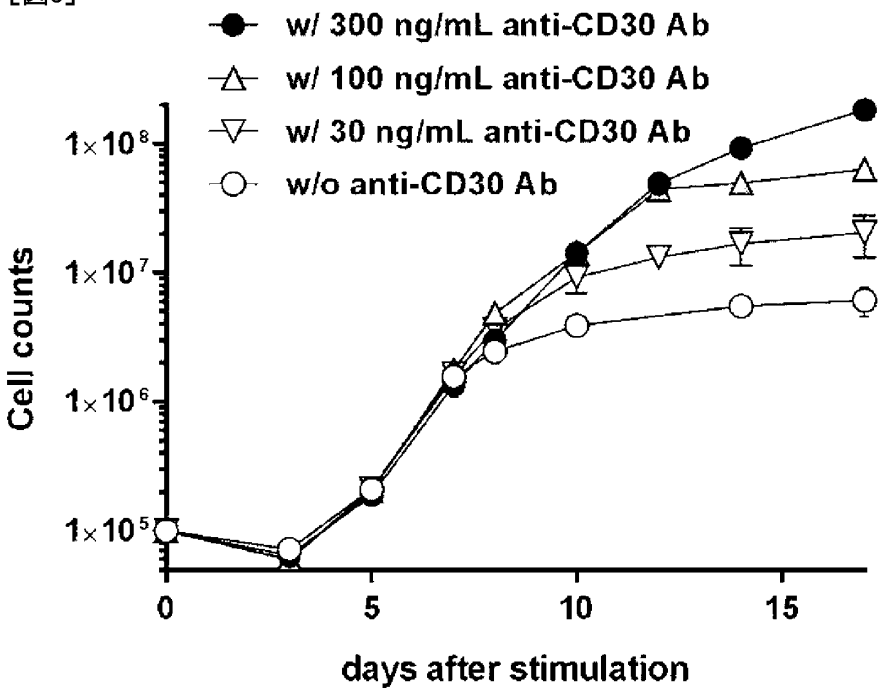
[図4]


Fold change from Day0
1000
100
10
1
0
5
10
15
days after stimulation
1st expansion
2nd expansion
3rd expansion
4th expansion

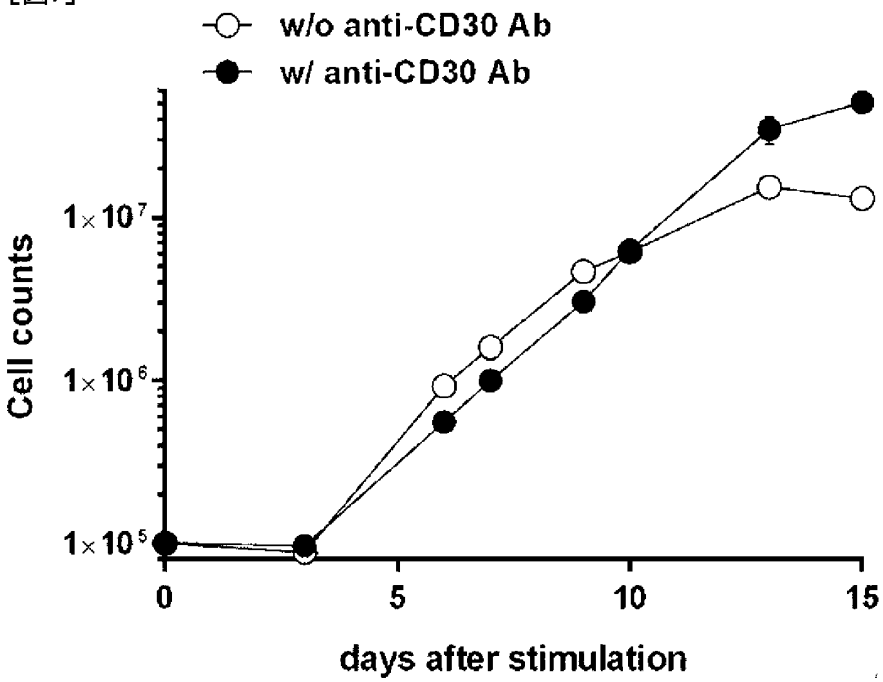
[図5]


80
60
40
20
0
% killing for 2 hrs
w/ Ag-peptide
w/o Ag-peptide
16
8
4
2
1
0.5
Effector/target ratio

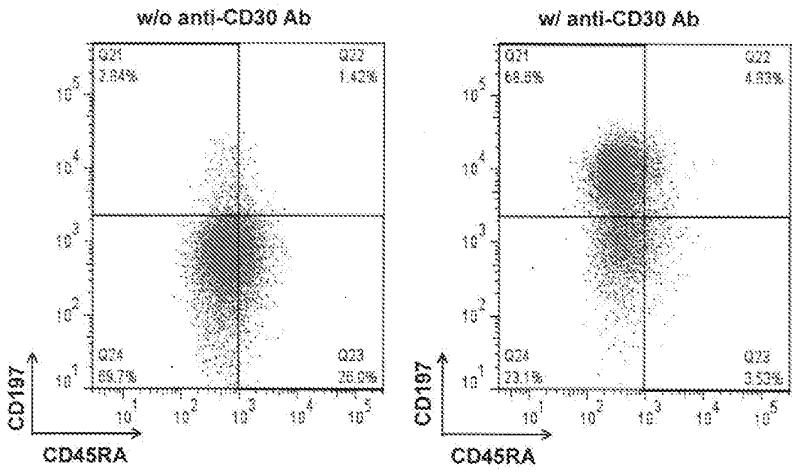
[図6]


w/ 300 ng/mL anti-CD30 Ab
w/ 100 ng/mL anti-CD30 Ab
w/ 30 ng/mL anti-CD30 Ab
w/o anti-CD30 Ab
1×10⁸
1×10⁷
1×10⁶
1×10⁵
Cell counts
0
5
10
15
days after stimulation

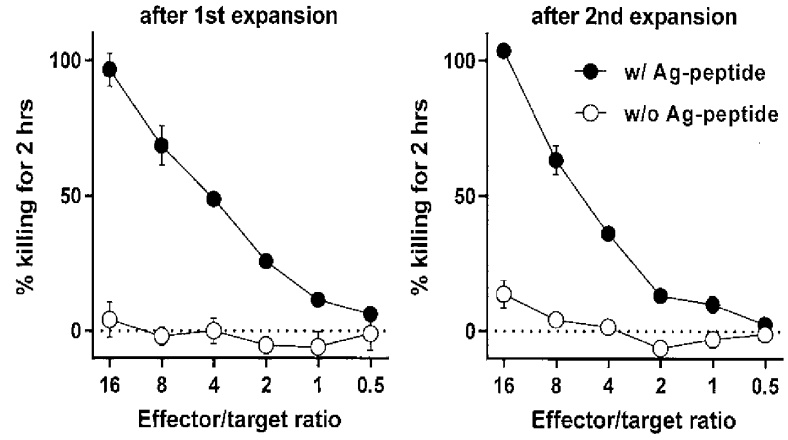
[図7]


w/o anti-CD30 Ab
w/ anti-CD30 Ab
Cell counts
1×10^7
1×10^6
1×10^5
0
5
10
15
days after stimulation

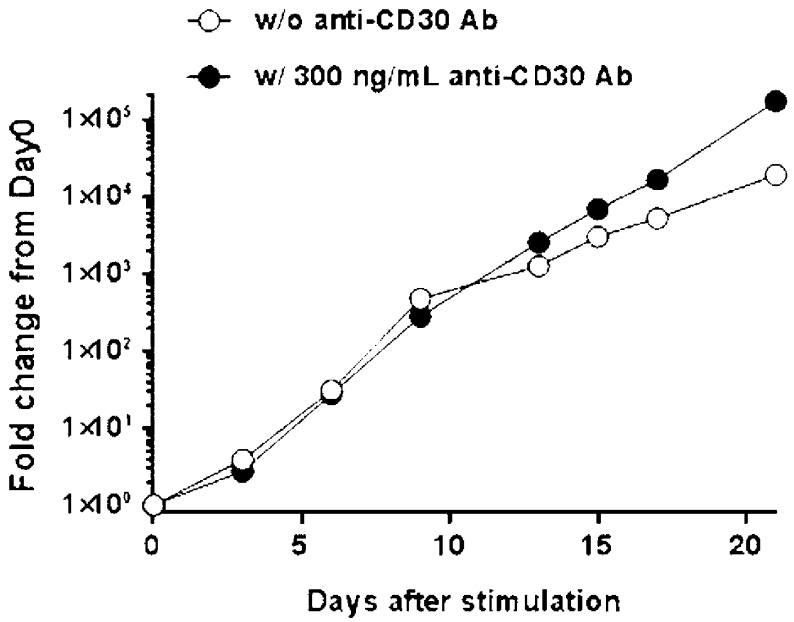
[図8]


w/o anti-CD30 Ab
w/ anti-CD30 Ab
CD197
CD45RA

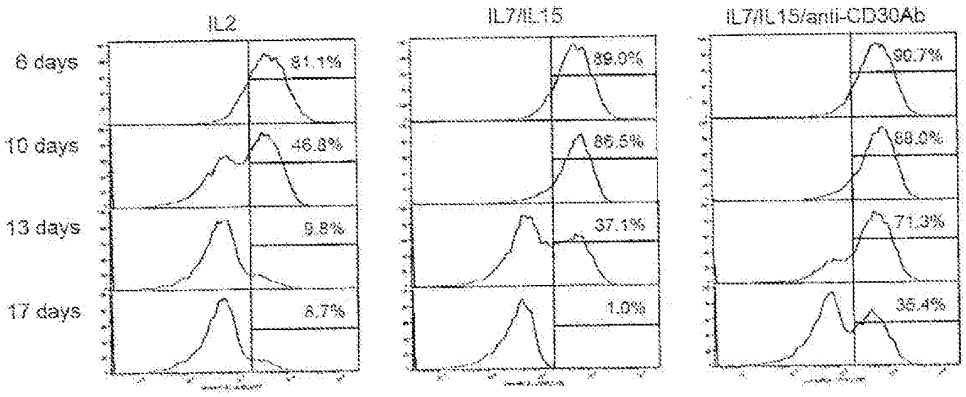
[図9]


after 1st expansion
after 2nd expansion
w/ Ag-peptide
w/o Ag-peptide
% killing for 2 hrs
100
50
0
16
8
4
2
1
0.5
Effector/target ratio

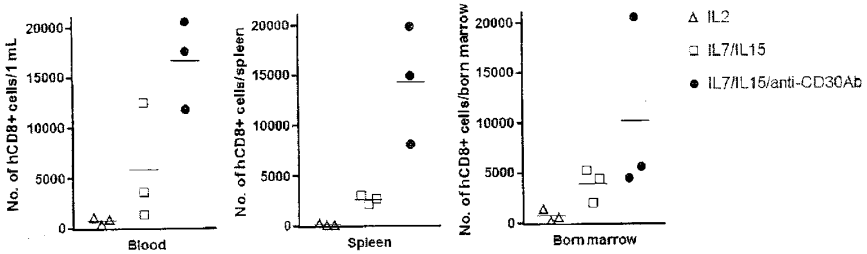
[図10]


w/o anti-CD30 Ab
w/ 300 ng/mL anti-CD30 Ab
Fold change from Day0
1×10⁵
1×10⁴
1×10³
1×10²
1×10¹
1×10⁰
0
5
10
15
20
Days after stimulation

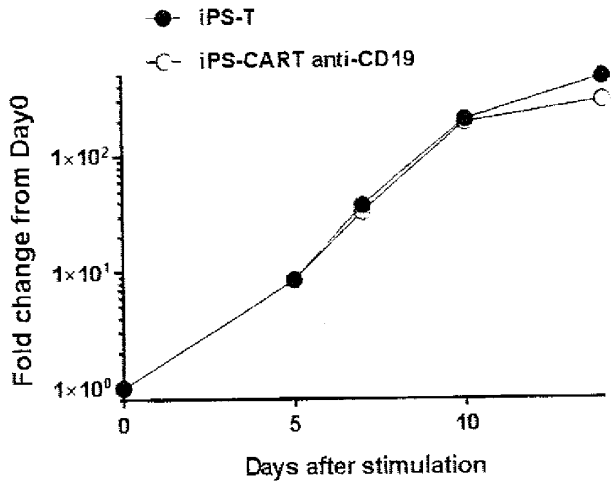
[図11]


IL2
IL7/IL15
IL7/IL15/anti-CD30Ab
6 days
10 days
13 days
17 days
81.1%
46.8%
9.8%
8.7%
89.0%
86.5%
37.1%
1.0%
90.7%
88.0%
71.3%
35.4%

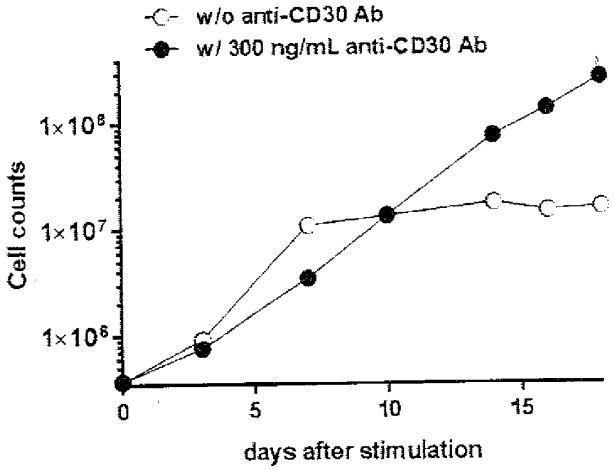
[図12]


No. of hCD8+ cells/1 mL
No. of hCD8+ cells/spleen
No. of hCD8+ cells/born marrow
20000
15000
10000
5000
0
Blood
Spleen
Born marrow
IL2
IL7/IL15
IL7/IL15/anti-CD30Ab

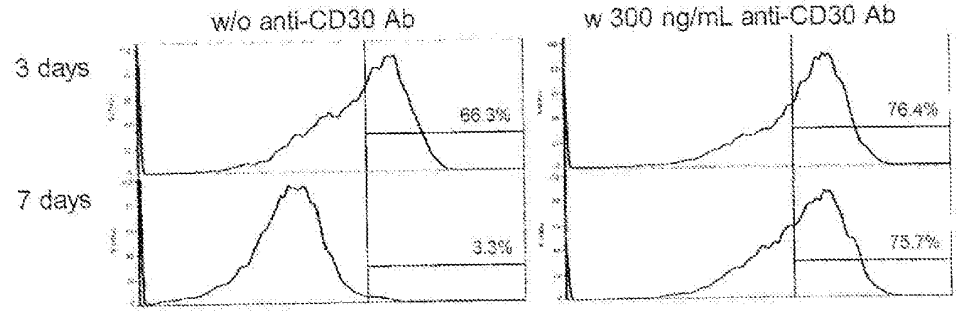
[図13]


iPS-T
iPS-CART anti-CD19
Fold change from Day0
1×10²
1×10¹
1×10⁰
0
5
10
Days after stimulation

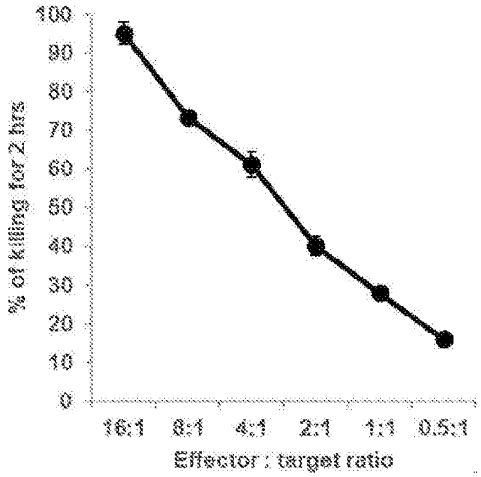
[図14]


w/o anti-CD30 Ab
w/ 300 ng/mL anti-CD30 Ab
Cell counts
1×10⁸
1×10⁷
1×10⁶
0
5
10
15
days after stimulation

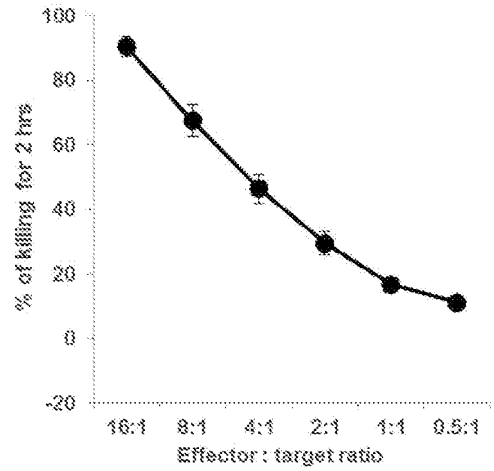
[図15]


w/o anti-CD30 Ab
w 300 ng/mL anti-CD30 Ab
3 days
7 days
66.3%
3.3%
76.4%
75.7%

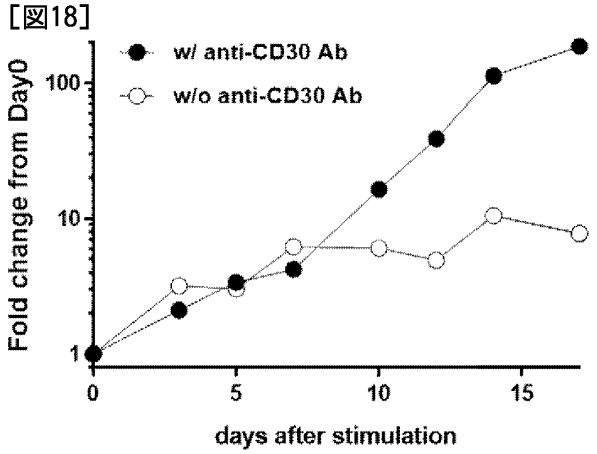
[図16]


% of killing for 2 hrs
100
90
80
70
60
50
40
30
20
10
0
16:1
8:1
4:1
2:1
1:1
0.5:1
Effector : target ratio

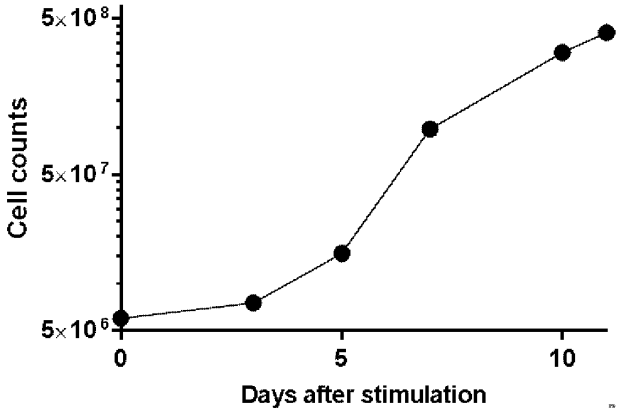
[図17]


% of killing for 2 hrs
100
80
60
40
20
0
-20
16:1
8:1
4:1
2:1
1:1
0.5:1
Effector : target ratio

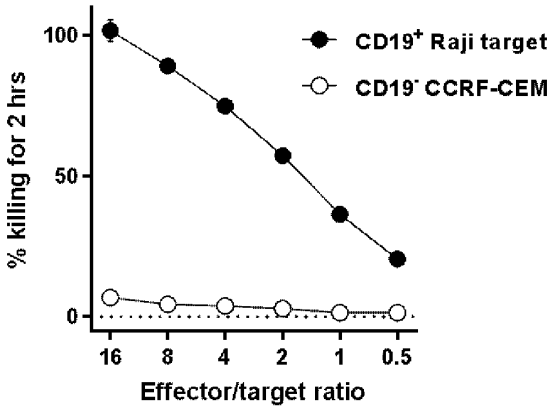
[図18]


w/ anti-CD30 Ab
w/o anti-CD30 Ab
Fold change from Day0
100
10
1
0
5
10
15
days after stimulation

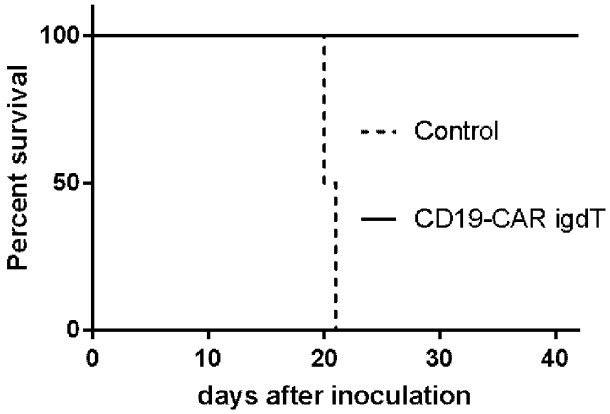
[図19]



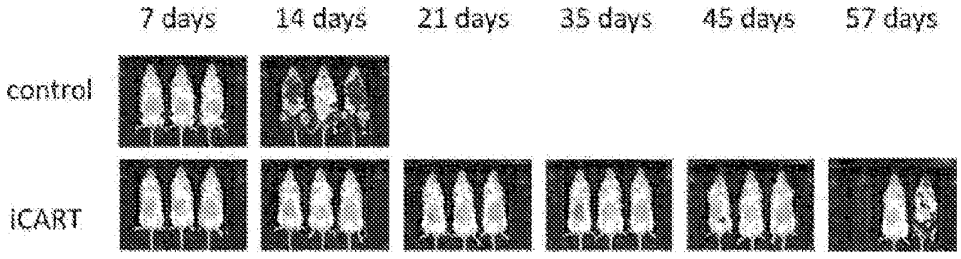
[図20]



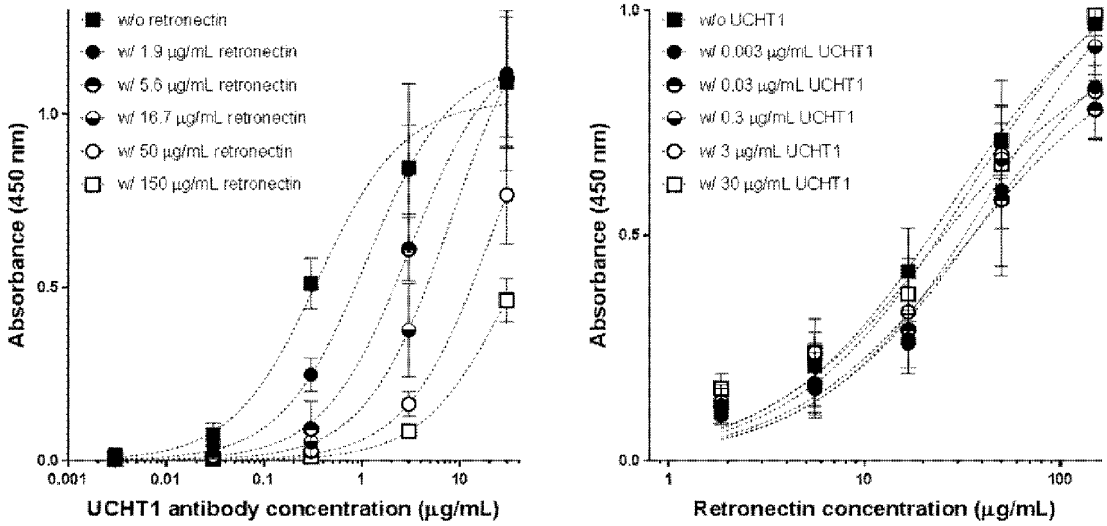
[図21]



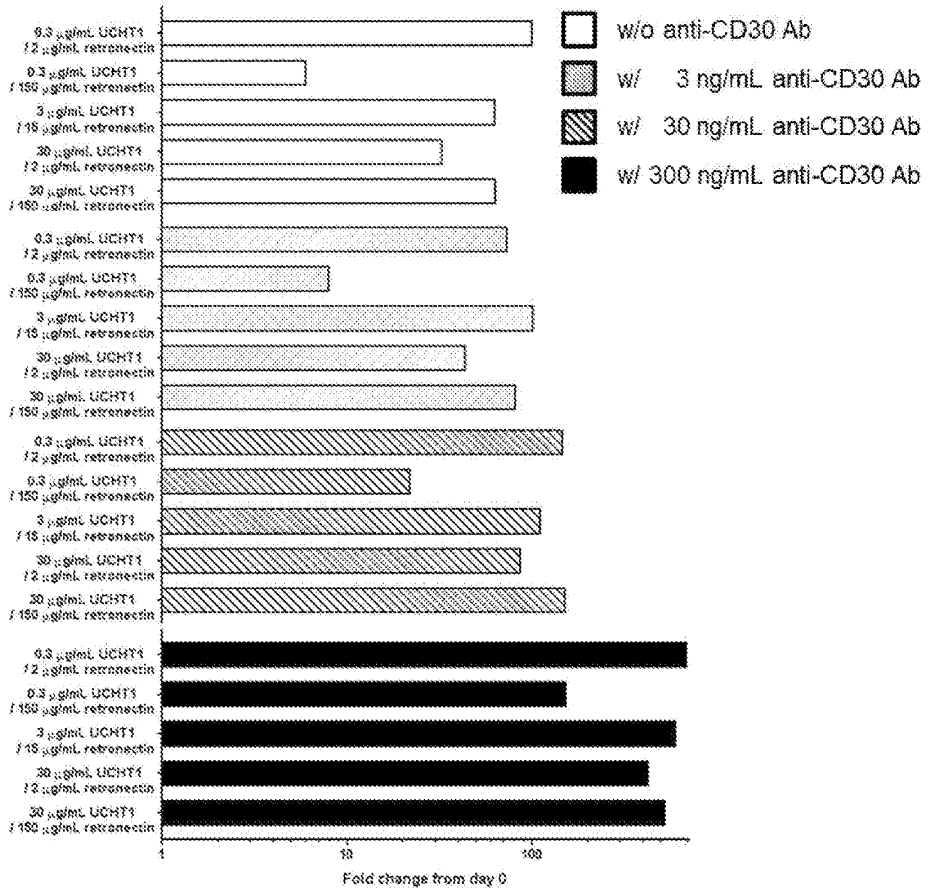
[図22]



[図23]


w/o retronectin
w/ 1.9 μg/mL retronectin
w/ 5.6 μg/mL retronectin
w/ 16.7 μg/mL retronectin
w/ 50 μg/mL retronectin
w/ 150 μg/mL retronectin
Absorbance (450 nm)
UCHT1 antibody concentration (μg/mL)
w/o UCHT1
w/ 0.003 μg/mL UCHT1
w/ 0.03 μg/mL UCHT1
w/ 0.3 μg/mL UCHT1
w/ 3 μg/mL UCHT1
w/ 30 μg/mL UCHT1
Absorbance (450 nm)
Retronectin concentration (μg/mL)

[図24]


w/o anti-CD30 Ab
w/ 3 ng/mL anti-CD30 Ab
w/ 30 ng/mL anti-CD30 Ab
w/ 300 ng/mL anti-CD30 Ab
Fold change from day 0