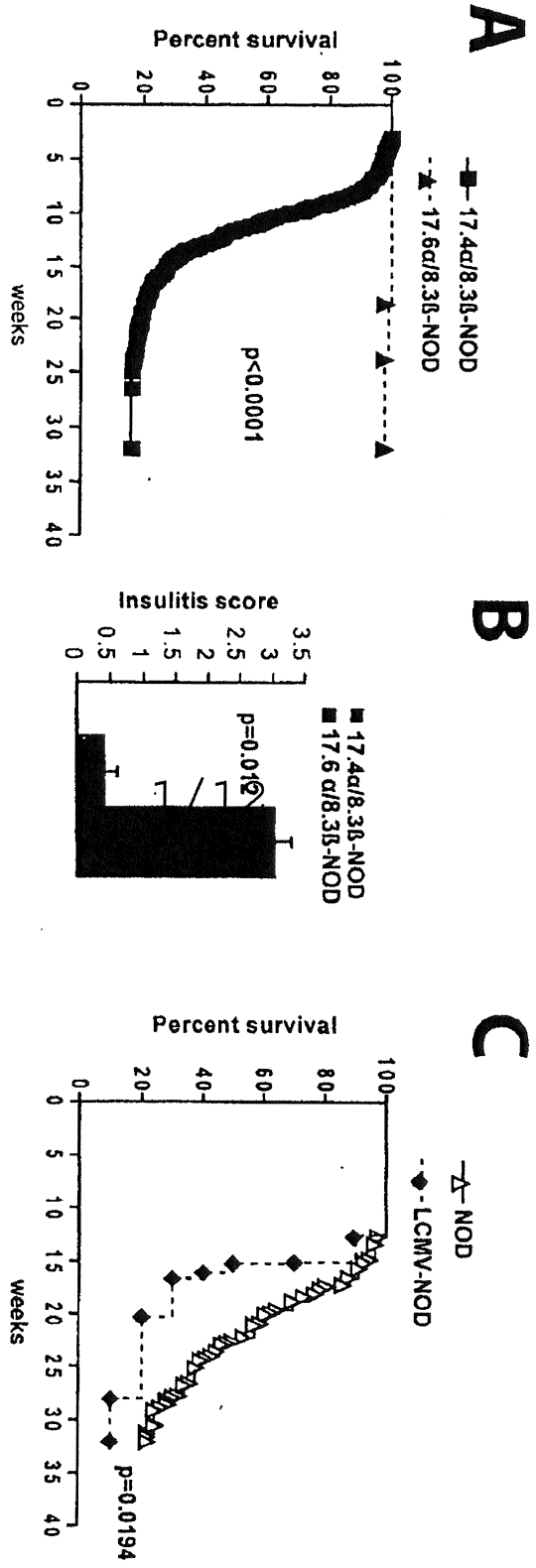
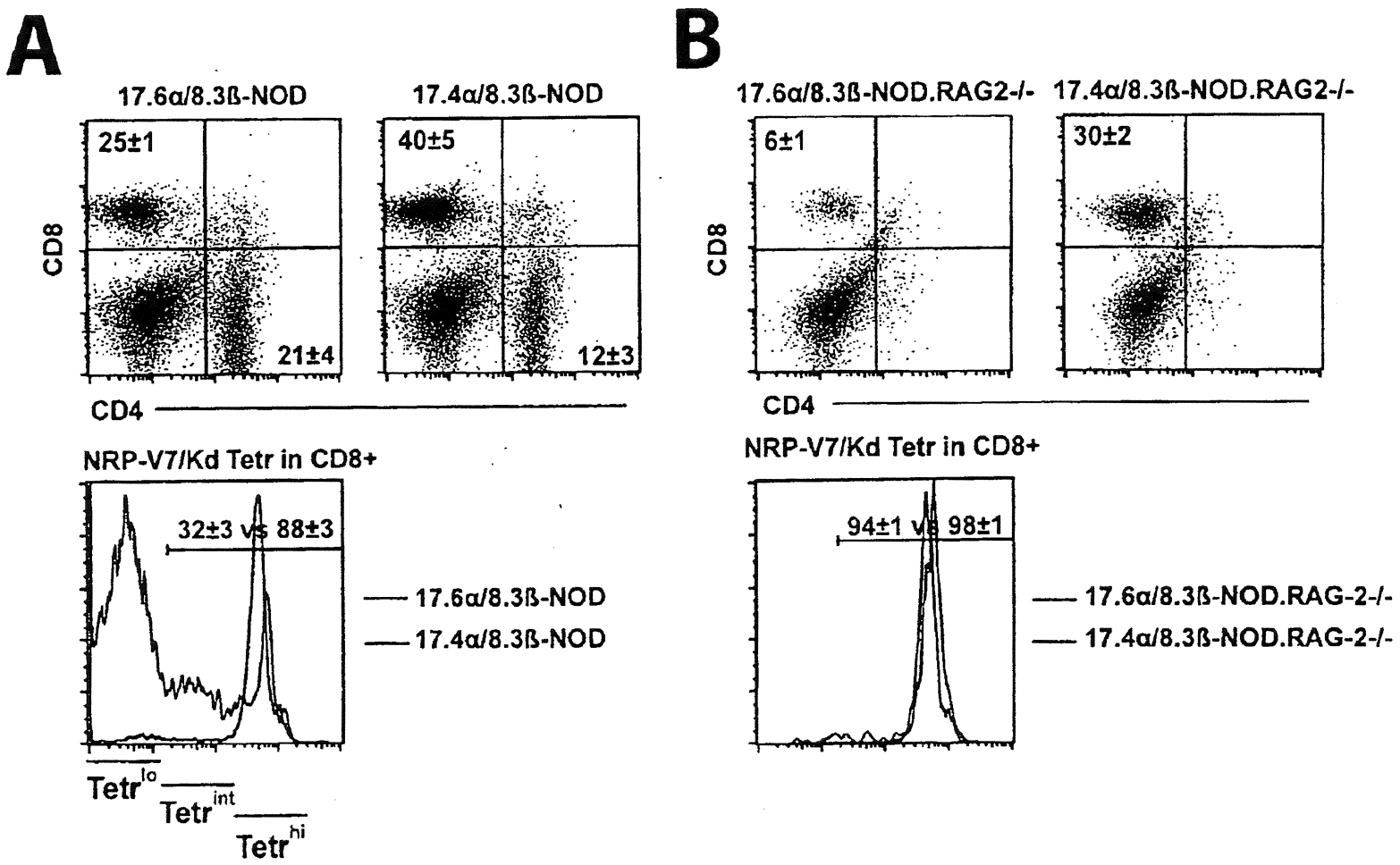

A
Percent survival
17.4α/8.3β-NOD
17.6α/8.3β-NOD
p<0.0001
weeks
B
Insulitis score
p=0.012
17.4α/8.3β-NOD
17.6 α/8.3β-NOD
C
Percent survival
NOD
LCMV-NOD
p=0.0194
weeks

FIGS 1A - 1C


A
17.6α/8.3ß-NOD
17.4α/8.3ß-NOD
25±1
21±4
40±5
12±3
CD8
CD4
NRP-V7/Kd Tetr in CD8+
32±3 vs 88±3
17.6α/8.3ß-NOD
17.4α/8.3ß-NOD
Tetr lo
Tetr int
Tetr hi
B
17.6α/8.3ß-NOD.RAG2-/-
17.4α/8.3ß-NOD.RAG2-/-
6±1
30±2
CD8
CD4
NRP-V7/Kd Tetr in CD8+
94±1 vs 98±1
17.6α/8.3ß-NOD.RAG-2-/-
17.4α/8.3ß-NOD.RAG-2-/-

FIGS 2A – 2B

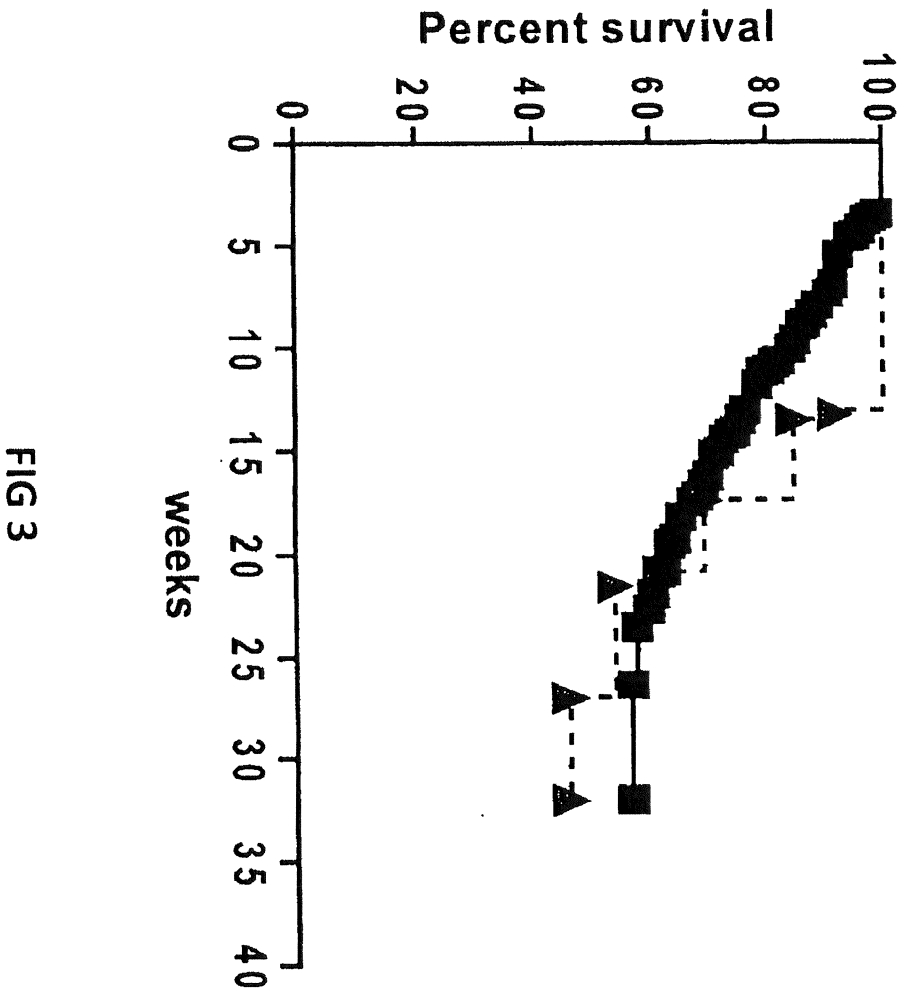
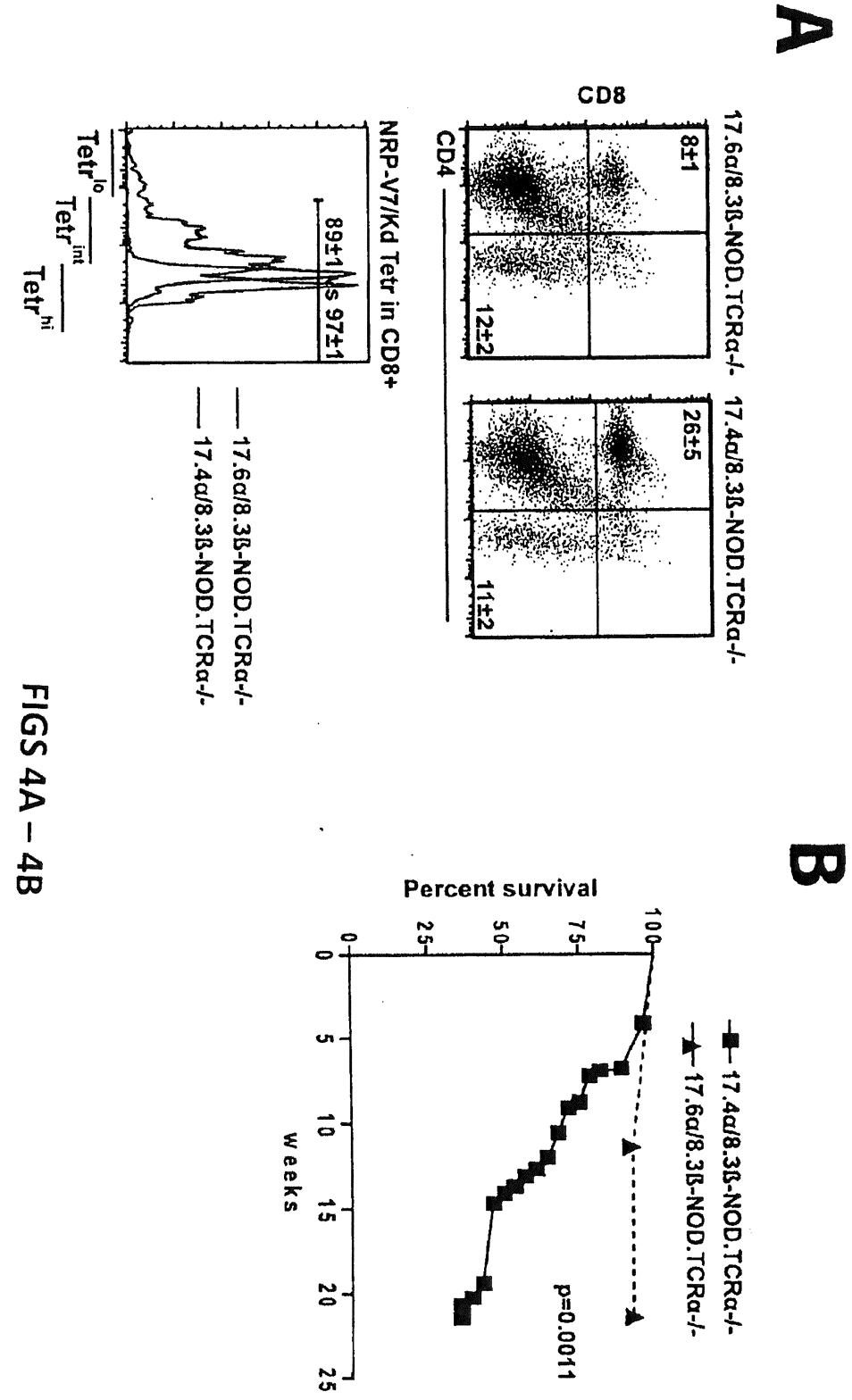
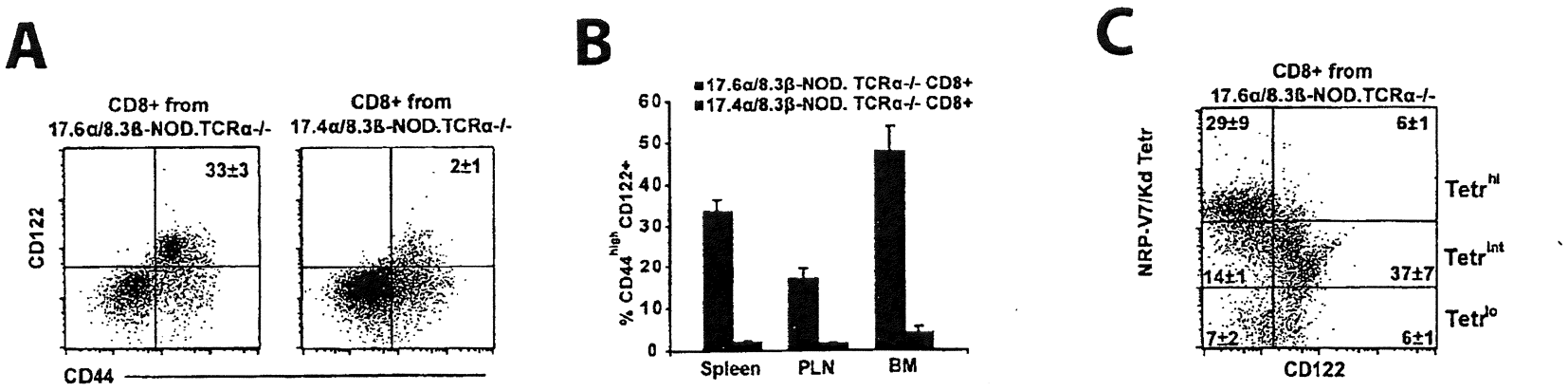

Percent survival
0
20
40
60
80
100
0
5
10
15
20
25
30
35
40
weeks
17.4α/8.3β-NOD.RAG2-/-
17.6α/8.3β-NOD.RAG2-/-

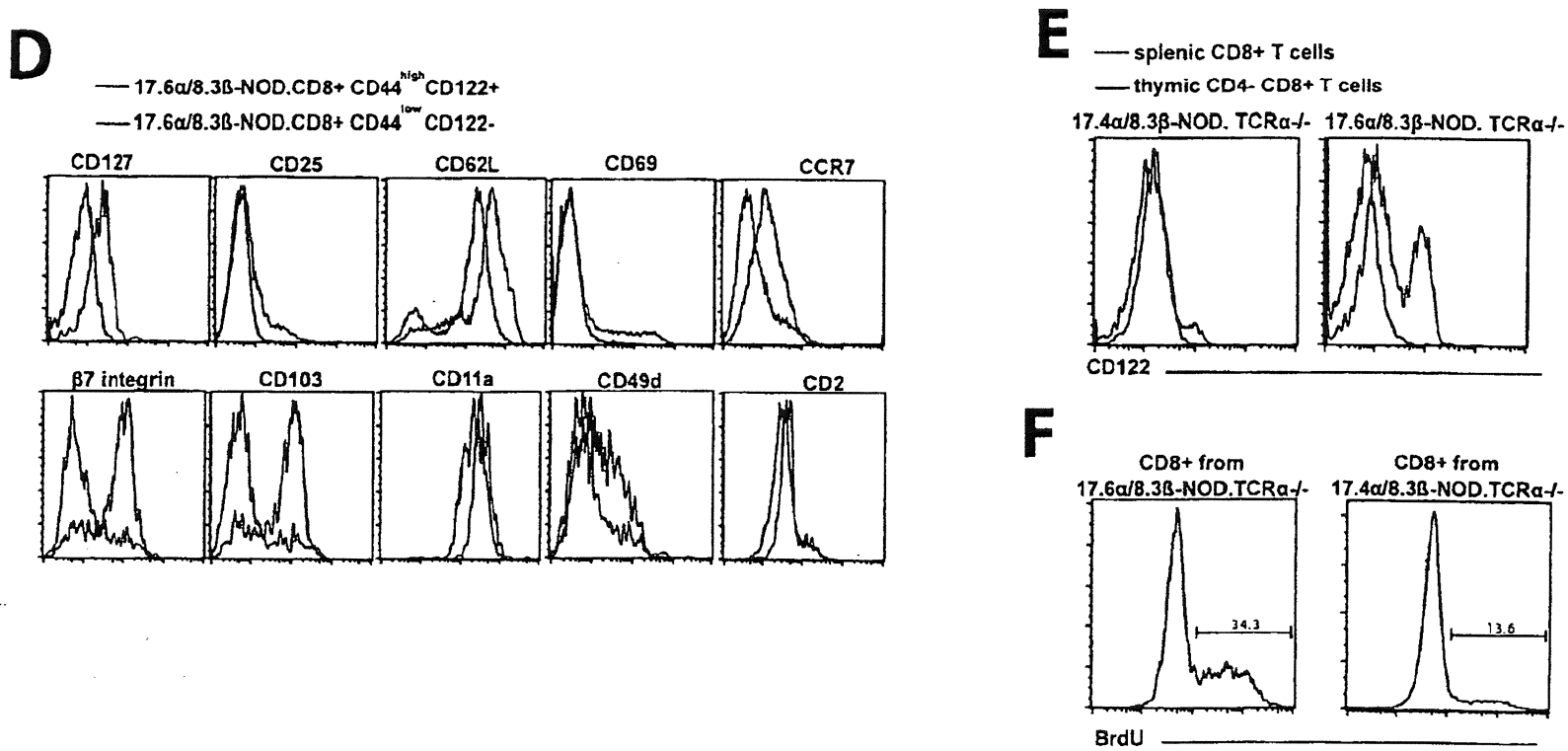
FIG 3


A
17.6α/8.3ß-NOD.TCRα-/-
17.4α/8.3ß-NOD.TCRα-/-
CD8
CD4
8±1
12±2
26±5
11±2
NRP-V7/Kd Tetr in CD8+
89±1
s 97±1
Tetr lo
Tetr int
Tetr hi
17.6α/8.3ß-NOD.TCRα-/-
17.4α/8.3ß-NOD.TCRα-/-
B
17.4α/8.3ß-NOD.TCRα-/-
17.6α/8.3ß-NOD.TCRα-/-
Percent survival
0
25
50
75
100
0
5
10
15
20
25
weeks
p=0.0011

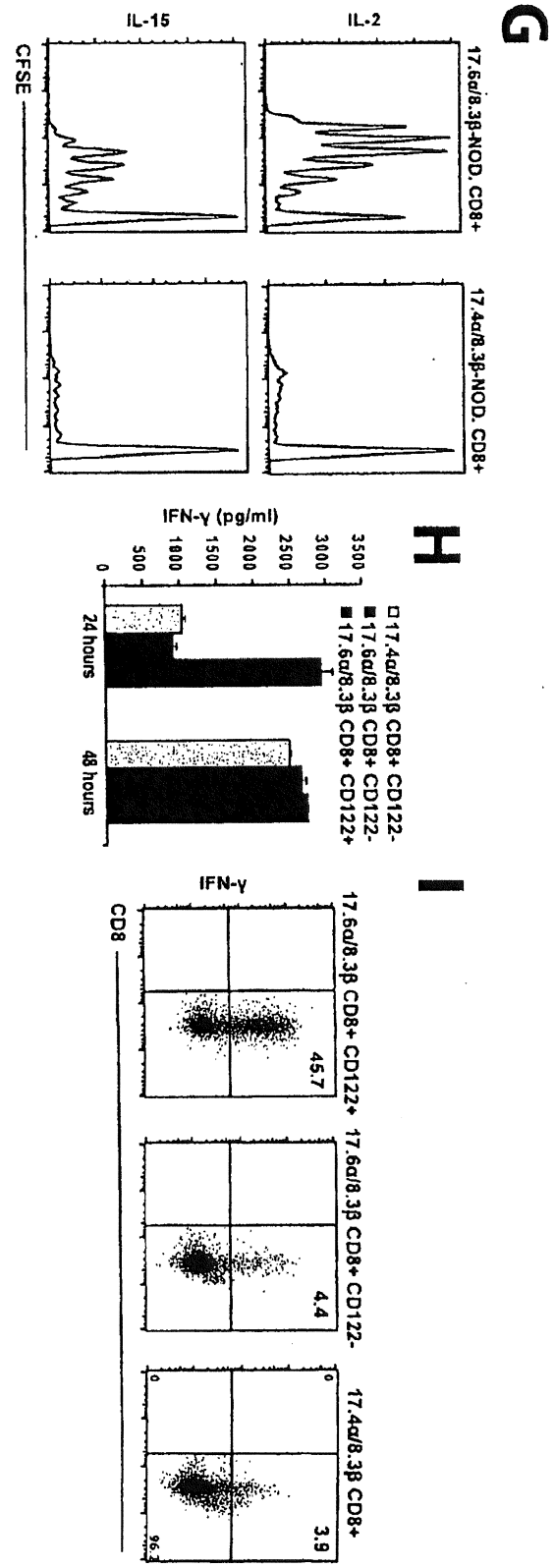
FIGS 4A – 4B


A
CD8+ from
17.6α/8.3ß-NOD.TCRα-/-
33±3
CD8+ from
17.4α/8.3ß-NOD.TCRα-/-
2±1
CD122
CD44
B
17.6α/8.3β-NOD. TCRα-/- CD8+
17.4α/8.3β-NOD. TCRα-/- CD8+
% CD44high CD122+
60
50
40
30
20
10
0
Spleen
PLN
BM
C
CD8+ from
17.6α/8.3ß-NOD.TCRα-/-
NRP-V7/Kd Tetr
29±9
6±1
Tetrhi
Tetrint
14±1
37±7
Tetrlo
7±2
6±1
CD122

FIGS 5A – 5C


D
17.6α/8.3ß-NOD.CD8+ CD44high CD122+
17.6α/8.3ß-NOD.CD8+ CD44low CD122-
CD127
CD25
CD62L
CD69
CCR7
β7 integrin
CD103
CD11a
CD49d
CD2
E
splenic CD8+ T cells
thymic CD4- CD8+ T cells
17.4α/8.3β-NOD. TCRα-/-
17.6α/8.3β-NOD. TCRα-/-
CD122
F
CD8+ from 17.6α/8.3ß-NOD.TCRα-/-
CD8+ from 17.4α/8.3ß-NOD.TCRα-/-
34.3
13.6
BrdU

FIGS 5D – 5F


G
IL-15
IL-2
CFSE
17.6α/8.3β-NOD. CD8+
17.4α/8.3β-NOD. CD8+
H
IFN-γ (pg/ml)
0
500
1000
1500
2000
2500
3000
3500
24 hours
48 hours
17.4α/8.3β CD8+ CD122-
17.6α/8.3β CD8+ CD122-
17.6α/8.3β CD8+ CD122+
I
IFN-γ
CD8
17.6α/8.3β CD8+ CD122+
45.7
17.6α/8.3β CD8+ CD122-
4.4
17.4α/8.3β CD8+
3.9
96.2

FIGS 5G – 5I

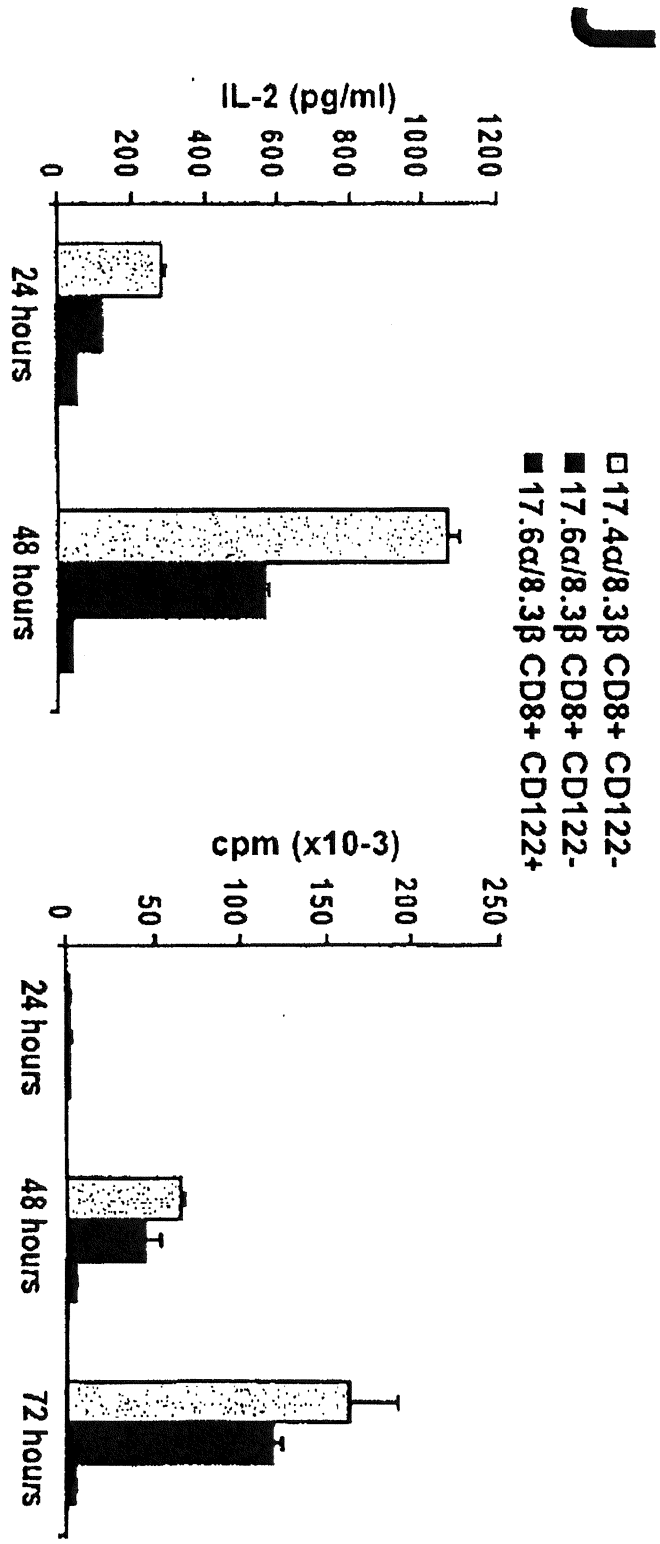
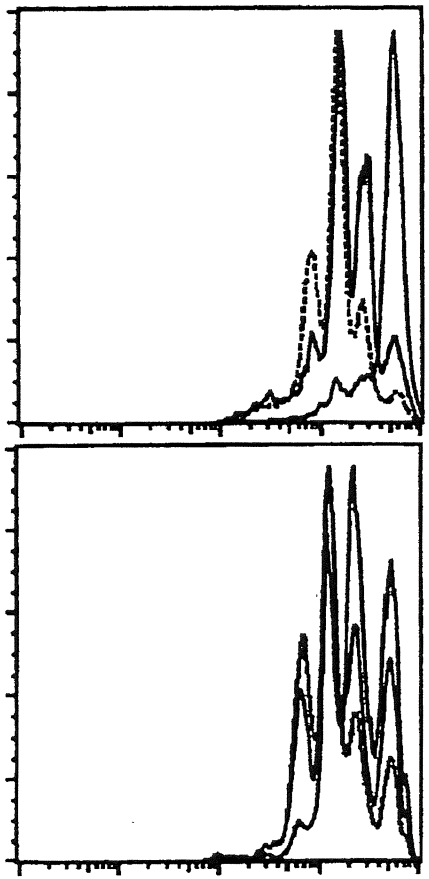

IL-2 (pg/ml)
0
200
400
600
800
1000
1200
24 hours
48 hours
17.4α/8.3β CD8+ CD122-
17.6α/8.3β CD8+ CD122-
17.6α/8.3β CD8+ CD122+
cpm (x10-3)
0
50
100
150
200
250
24 hours
48 hours
72 hours

FIG 5J

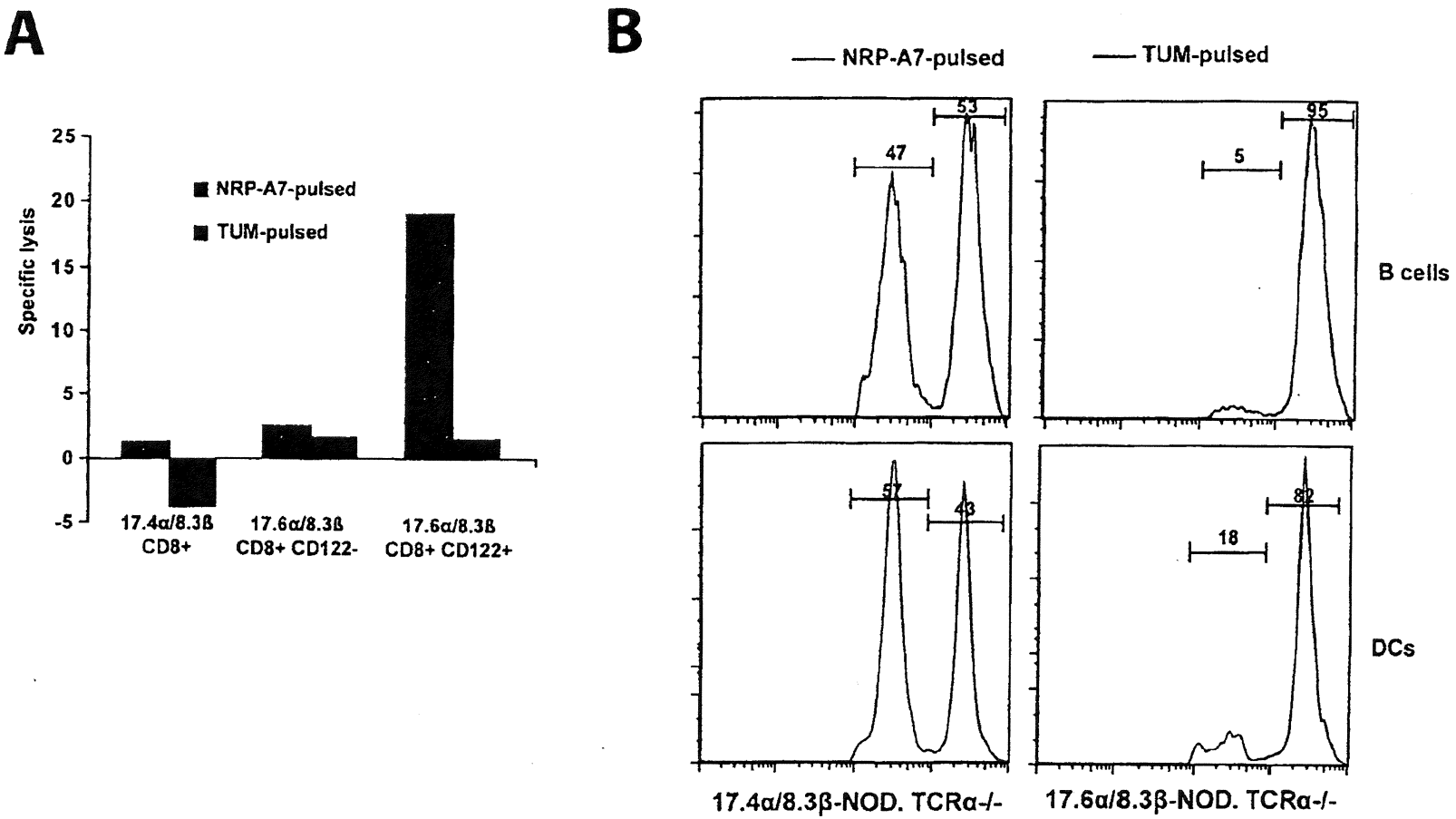


------ 17.4α/8.3β CD8+ alone
——17.4α/8.3β CD8+ with 17.6α/8.3β CD8+ CD122+
——17.4α/8.3β CD8+ with 17.6α/8.3β CD8+ CD122-

------ 17.4α/8.3β CD8+ alone
—— 17.4α/8.3β CD8+ with 17.4α/8.3β CD8+
—— 17.4α/8.3β CD8+ with LCMV TCR-tg CD8+

CFSE

FIG 6


A
Specific lysis
25
20
15
10
5
0
-5
NRP-A7-pulsed
TUM-pulsed
17.4α/8.3ß CD8+
17.6α/8.3ß CD8+ CD122-
17.6α/8.3ß CD8+ CD122+
B
NRP-A7-pulsed
TUM-pulsed
53
47
95
5
B cells
57
43
82
18
DCs
17.4α/8.3β-NOD. TCRα-/-
17.6α/8.3β-NOD. TCRα-/-

FIGS 7A – 7B

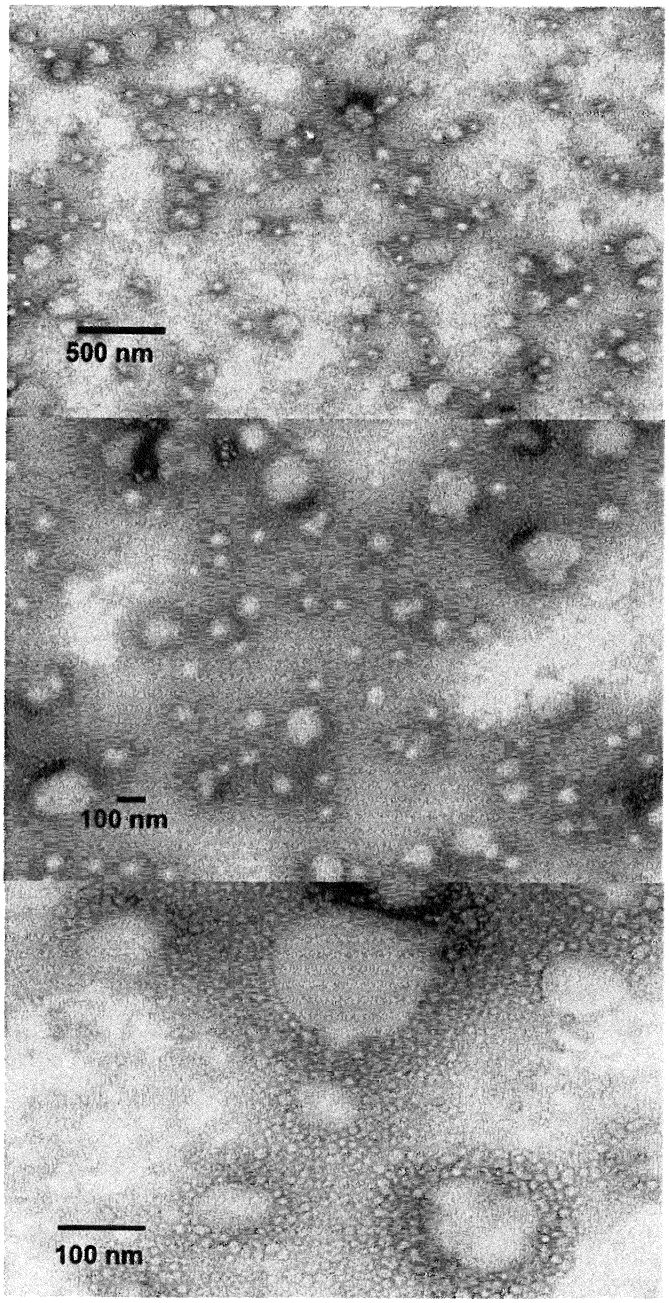


Fig. 8

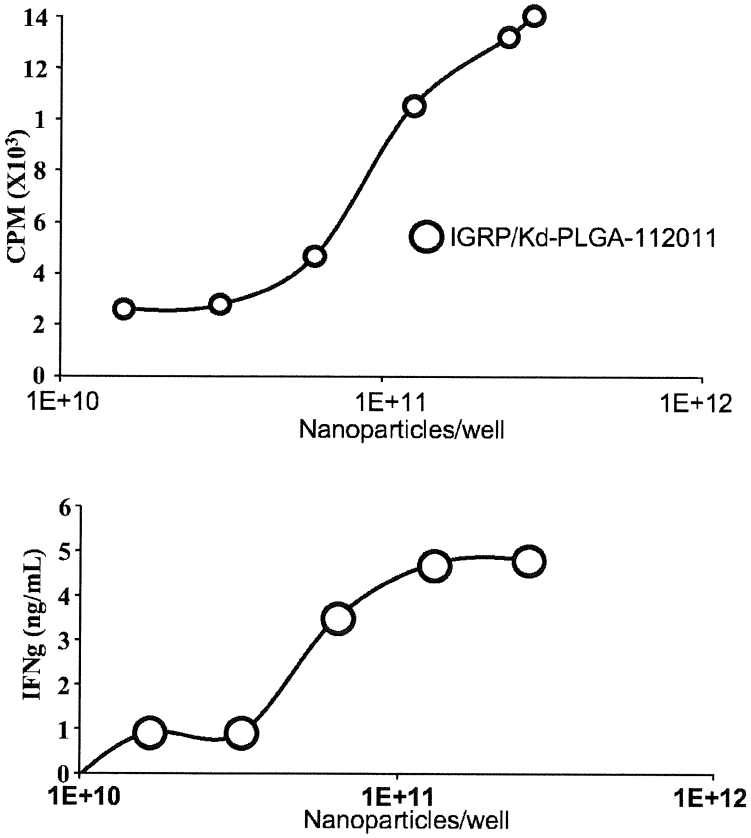

14
12
1
8
6
4
2
0
CPM (X10³)
IGRP/Kd-PLGA-112011
1E+10
1E+11
1E+12
Nanoparticles/well
6
5
4
3
2
1
0
IFNg (ng/mL)
1E+10
1E+11
1E+12
Nanoparticles/well

Fig. 9