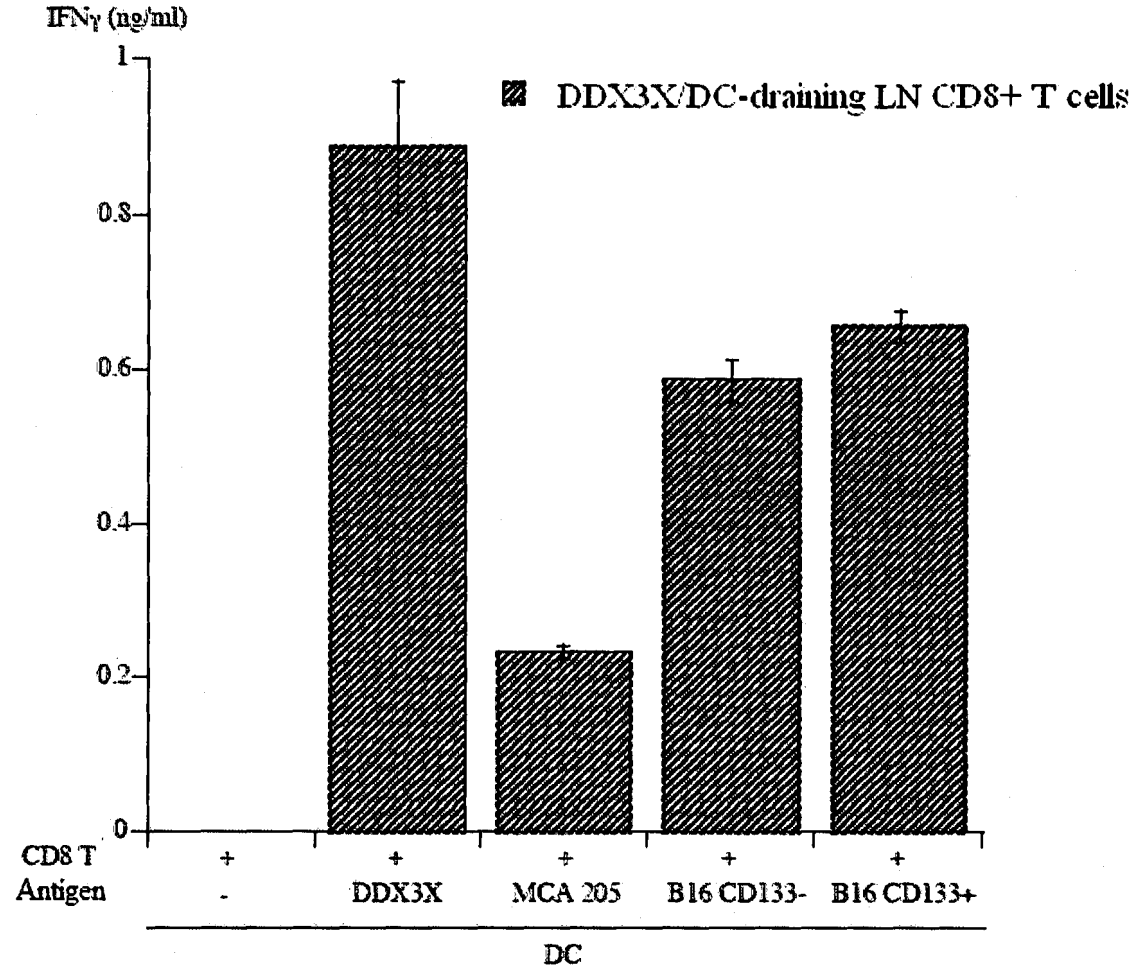
[Fig.1]

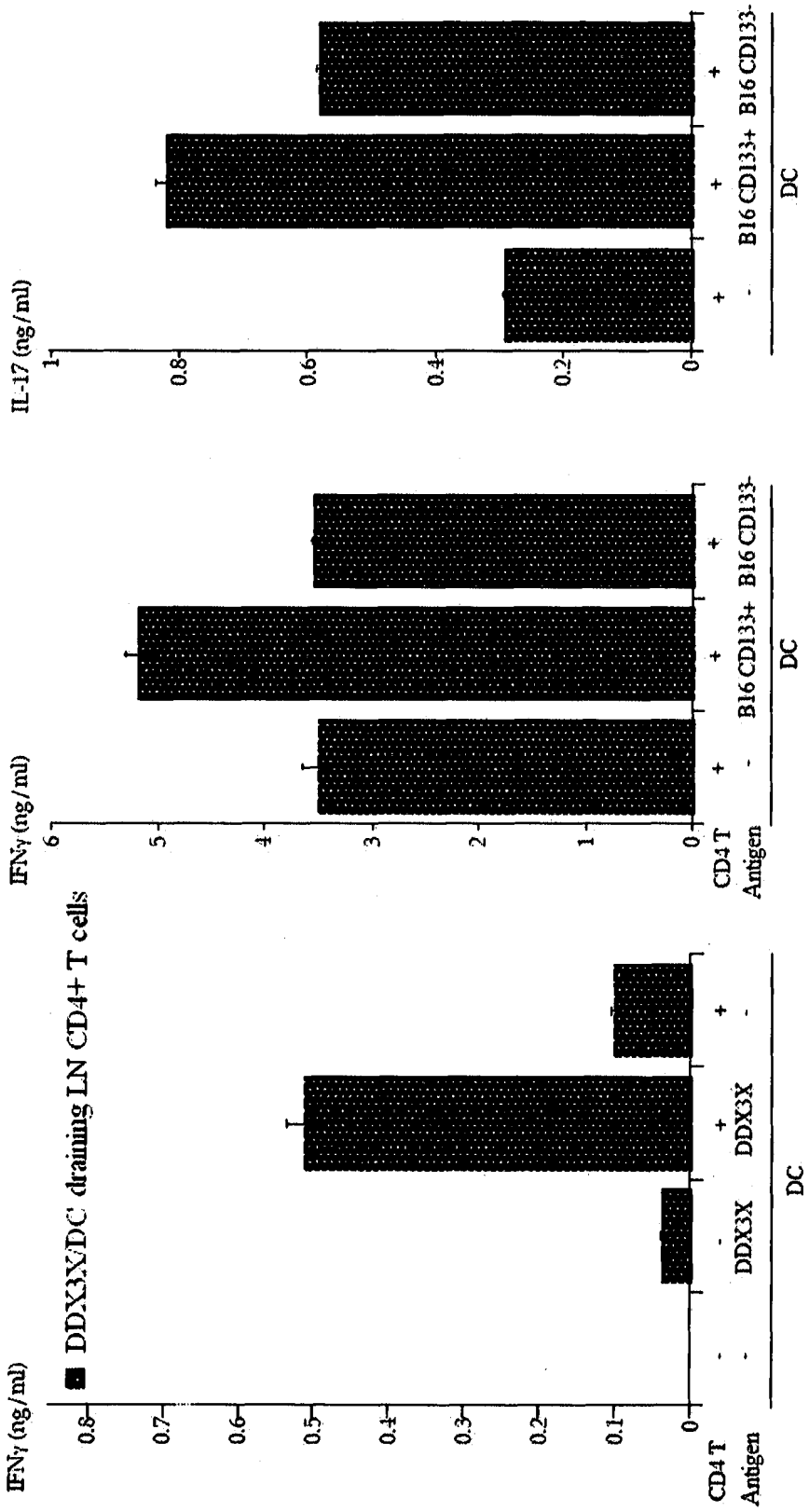
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241 qiysdgpgea lramkengry grrkqypisl vlaptrelav qiyeearkfs yrsrvrpcvv
301 yggadigqqi rdlergchll vatpgrlvdm mergkigldf ckylvldead rmldmgfepq
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541 atsffnerni nitkdlldll veakqevpsw lenmayehhy kgssrgrsks srfsggfgar
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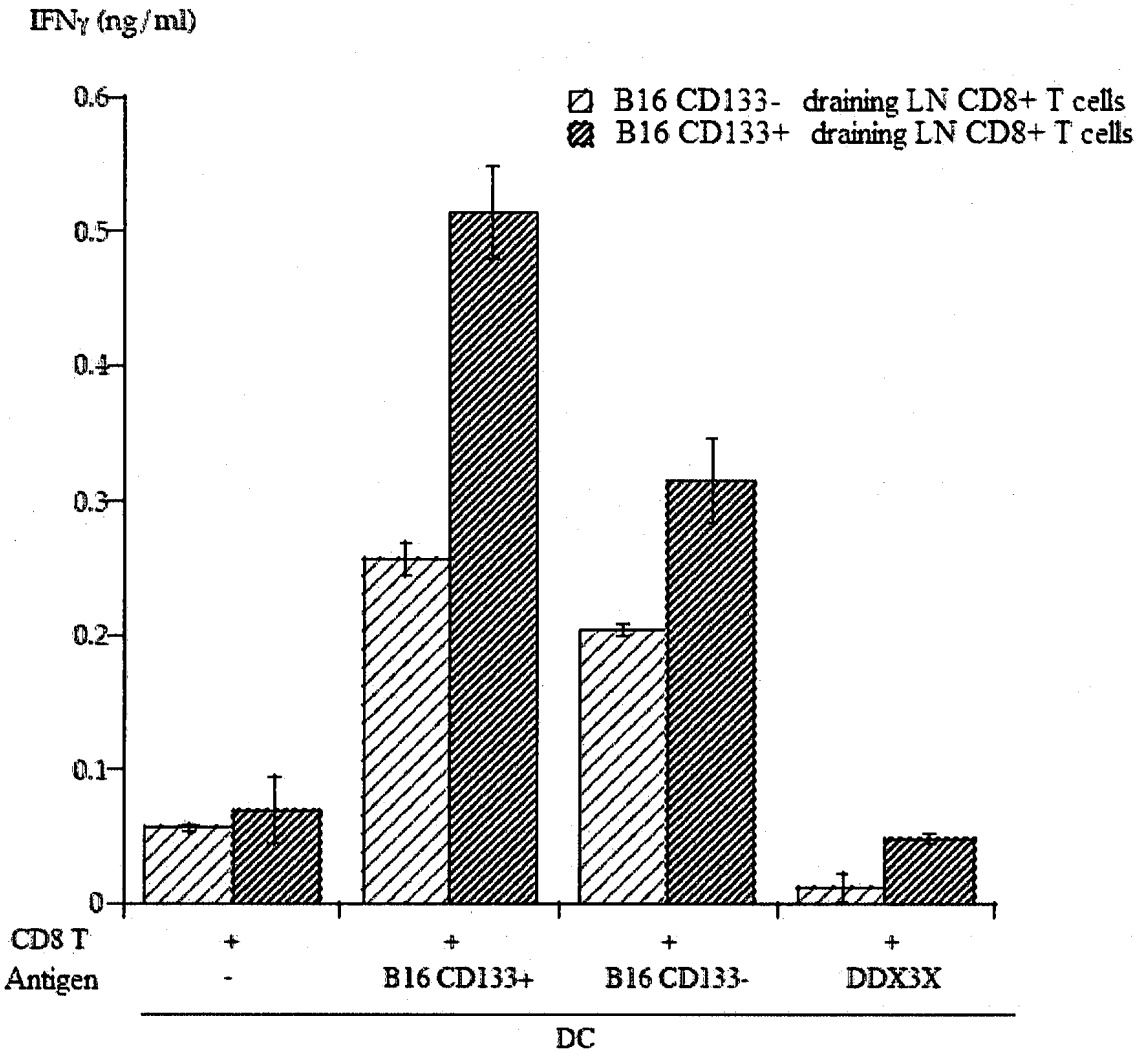
[Fig.2]


IFNγ (ng/ml)
1
0.8
0.6
0.4
0.2
0
DDX3X/DC-draining LN CD8+ T cells
CD8 T
Antigen
+
-
+
DDX3X
+
MCA 205
+
B16 CD133-
+
B16 CD133+
DC

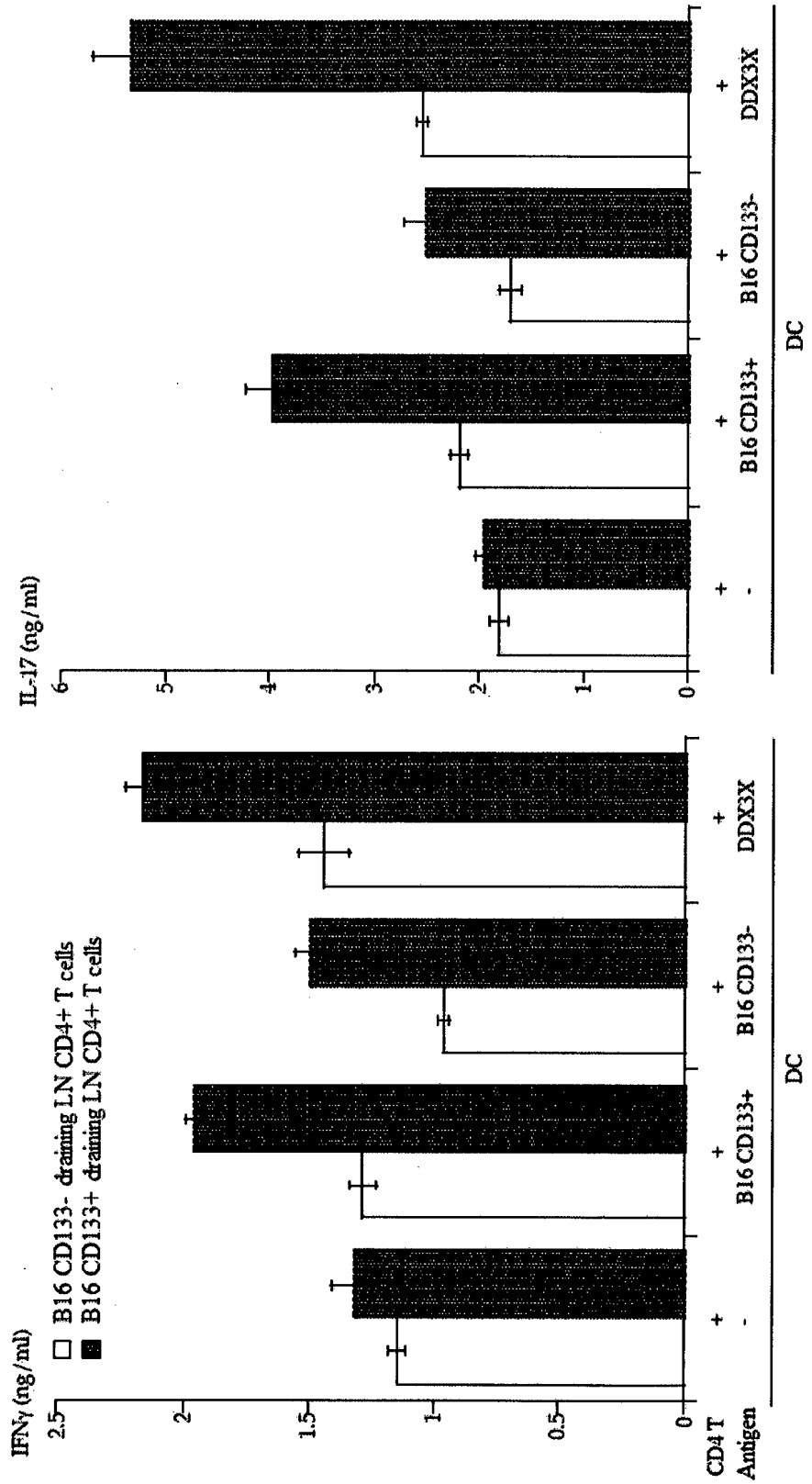
[Fig.3]


IFNγ (ng/ml)
DDX3X/DC draining LN CD4+ T cells
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
CD4 T - - +
Antigen - DDX3X DDX3X -
DC
IFNγ (ng/ml)
6
5
4
3
2
1
0
CD4 T + + +
Antigen - B16 CD133+ B16 CD133-
DC
IL-17 (ng/ml)
1
0.8
0.6
0.4
0.2
0
+ + +
- B16 CD133+ B16 CD133-
DC

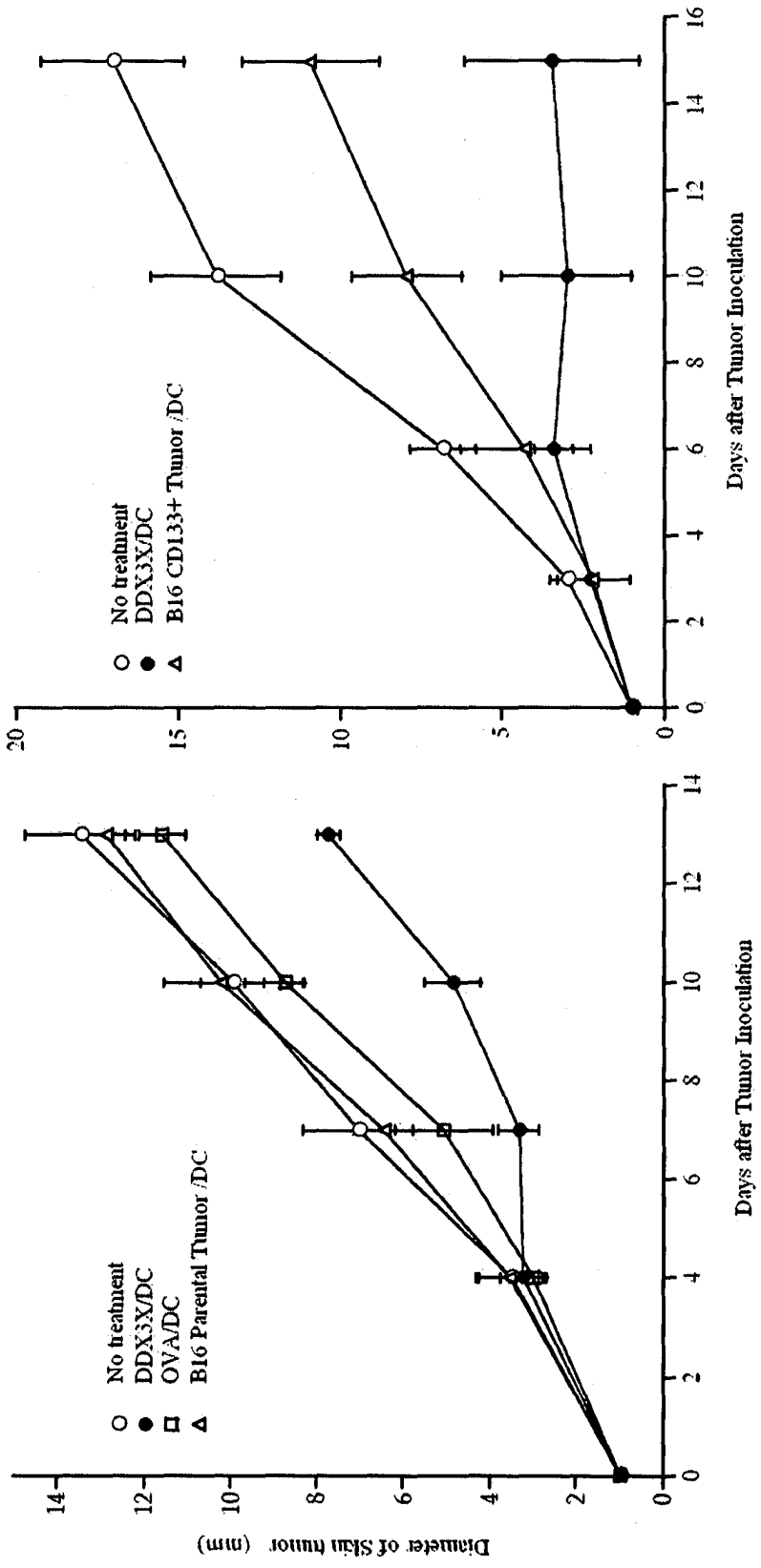
[Fig.4]


IFNγ (ng/ml)
B16 CD133- draining LN CD8+ T cells
B16 CD133+ draining LN CD8+ T cells
0.6
0.5
0.4
0.3
0.2
0.1
0
CD8 T + + + +
Antigen - B16 CD133+ B16 CD133- DDX3X
DC

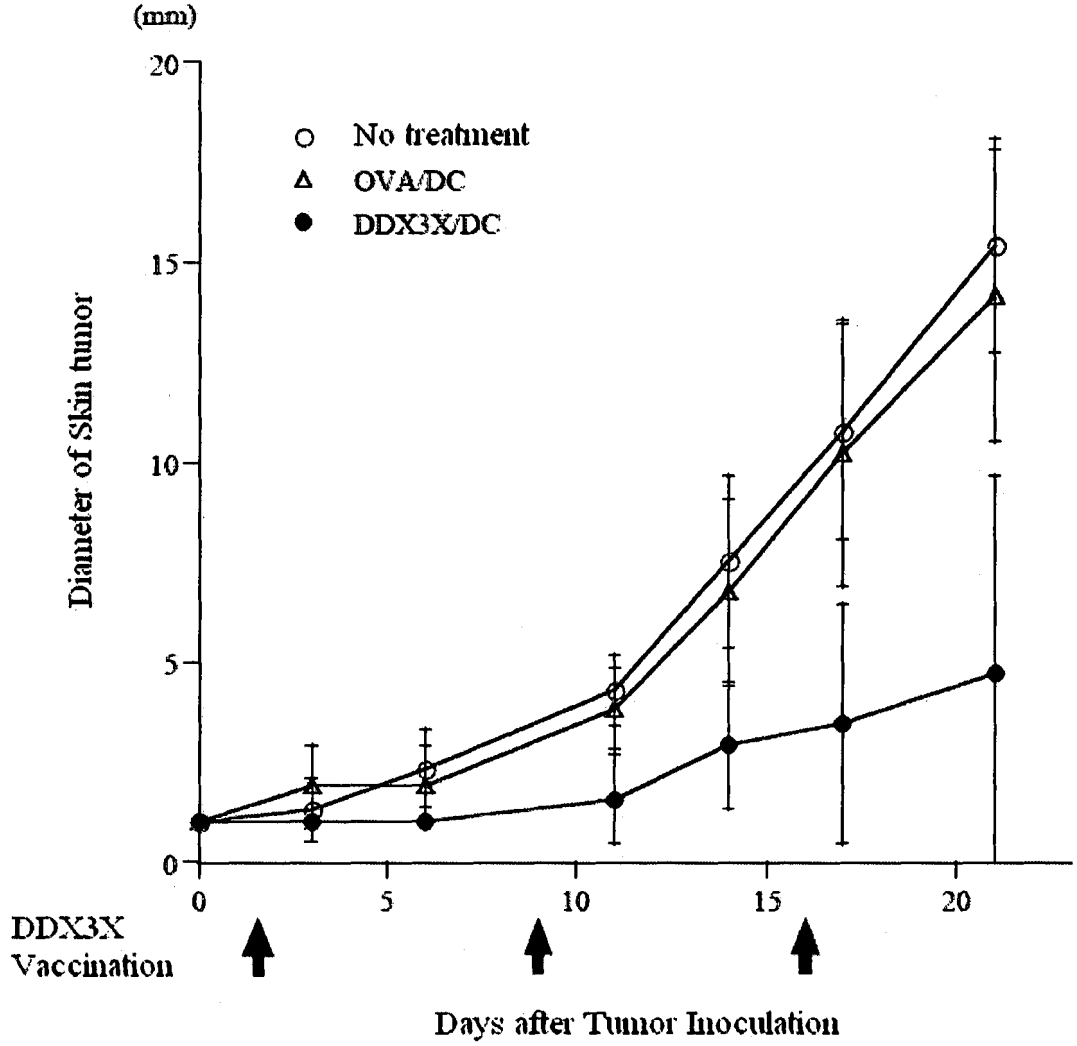
[Fig.5]


IFNγ (ng/ml)
□ B16 CD133- draining LN CD4+ T cells
■ B16 CD133+ draining LN CD4+ T cells
2.5
2
1.5
1
0.5
0
CD4 T
Antigen
-
+
+
+
DC
B16 CD133+
B16 CD133-
DDX3X
IL-17 (ng/ml)
6
5
4
3
2
1
0

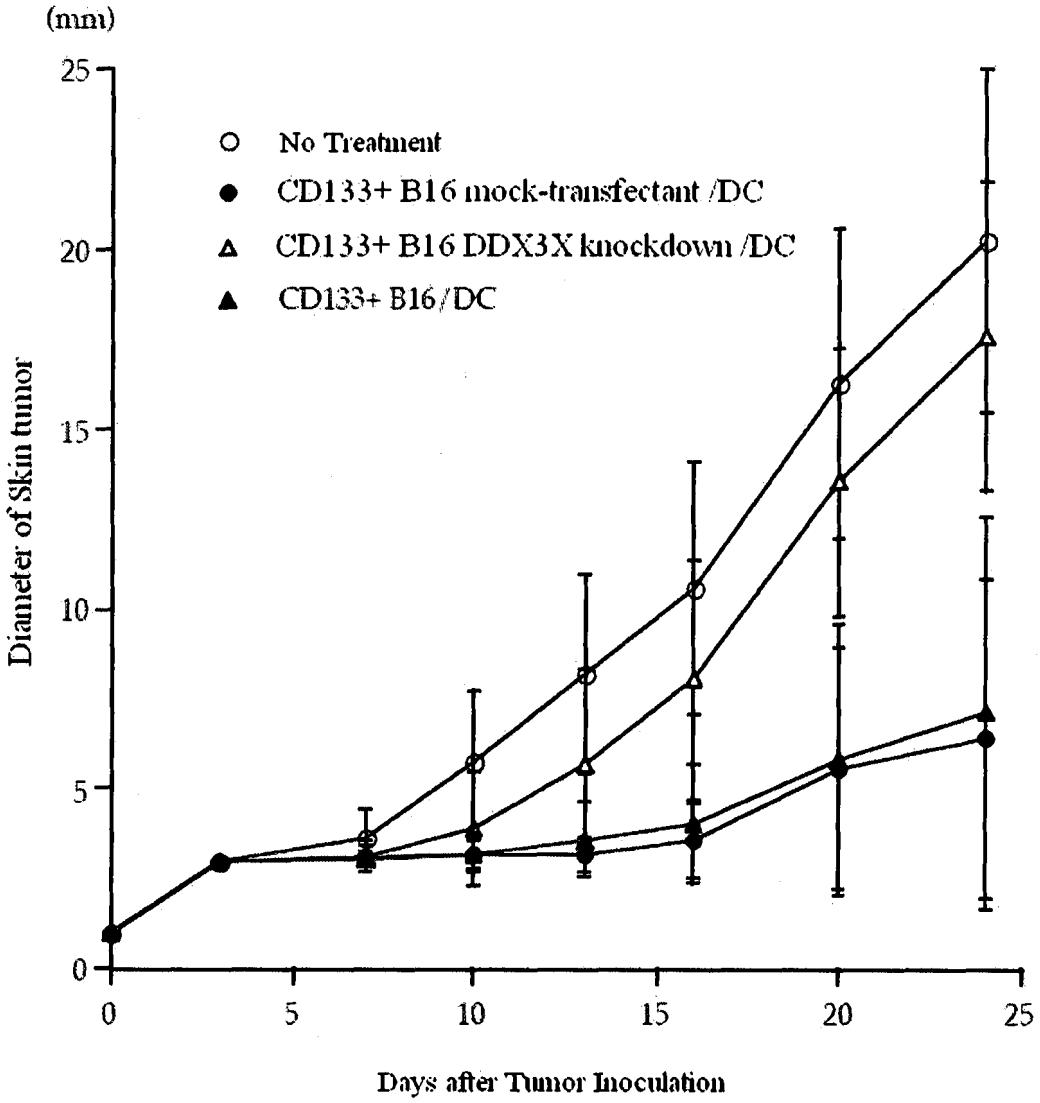
[Fig.6]


Diameter of Skin tumor (mm)
Days after Tumor Inoculation
No treatment
DDX3X/DC
OVA/DC
B16 Parental Tumor /DC
Days after Tumor Inoculation
No treatment
DDX3X/DC
B16 CD133+ Tumor /DC

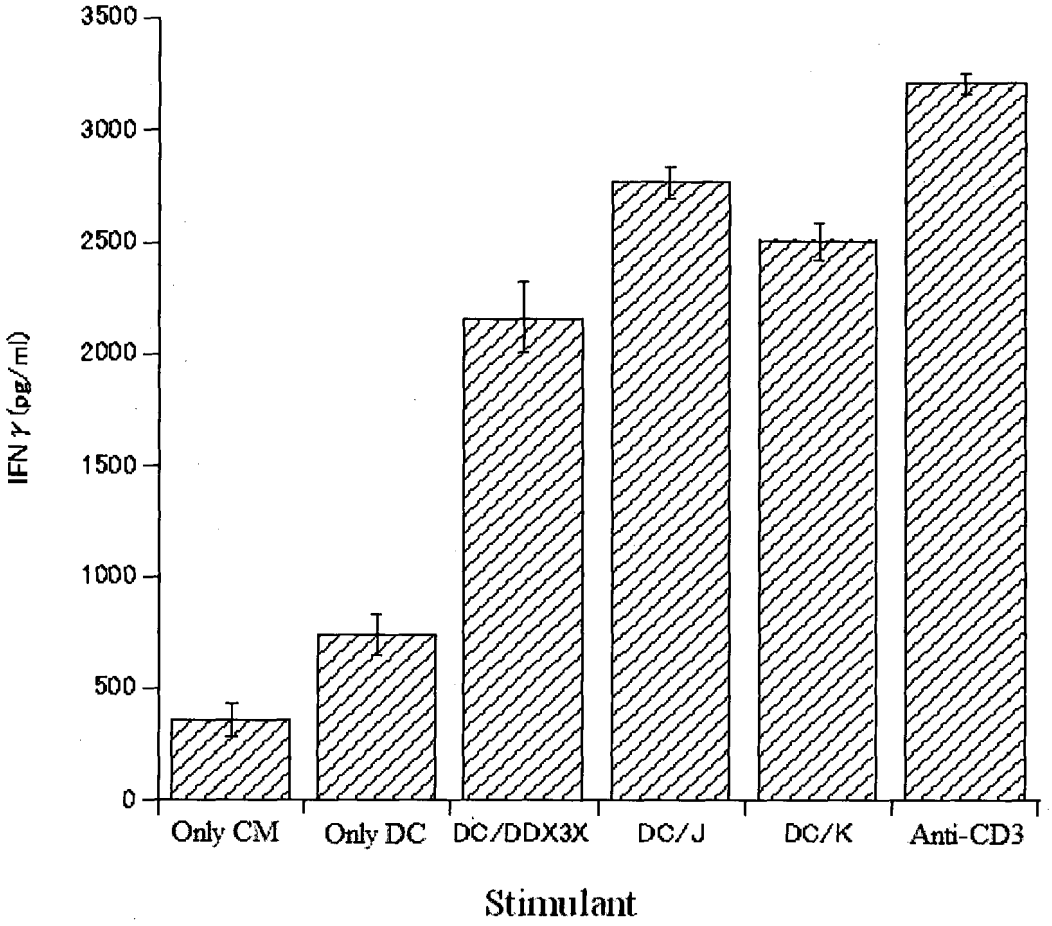
[Fig.7]


(mm)
20
15
10
5
0
Diameter of Skin tumor
No treatment
OVA/DC
DDX3X/DC
0
5
10
15
20
DDX3X
Vaccination
Days after Tumor Inoculation

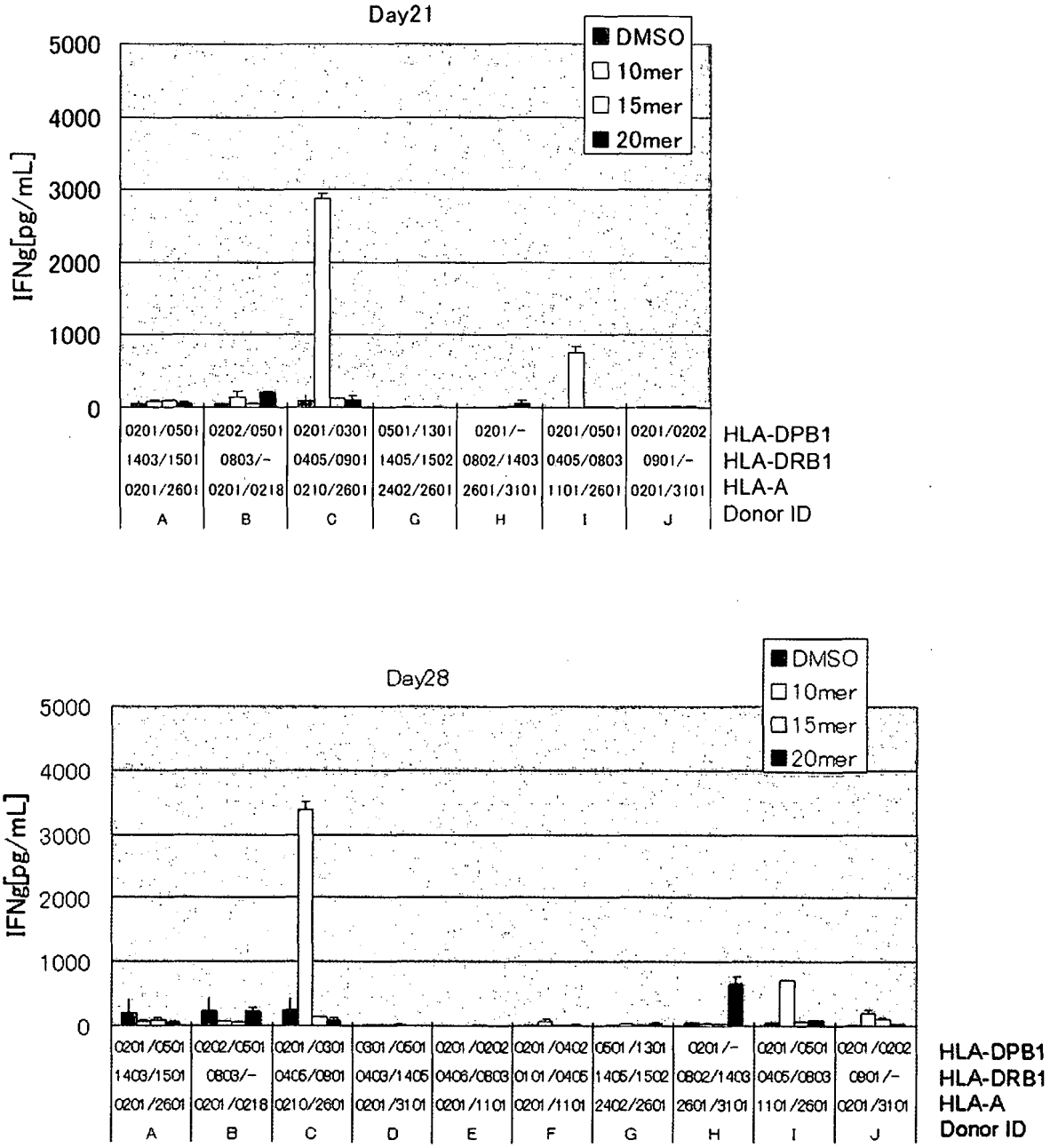
[Fig.8]


(mm)
25
20
15
10
5
0
Diameter of Skin tumor
No Treatment
CD133+ B16 mock-transfectant /DC
CD133+ B16 DDX3X knockdown /DC
CD133+ B16/DC
0
5
10
15
20
25
Days after Tumor Inoculation

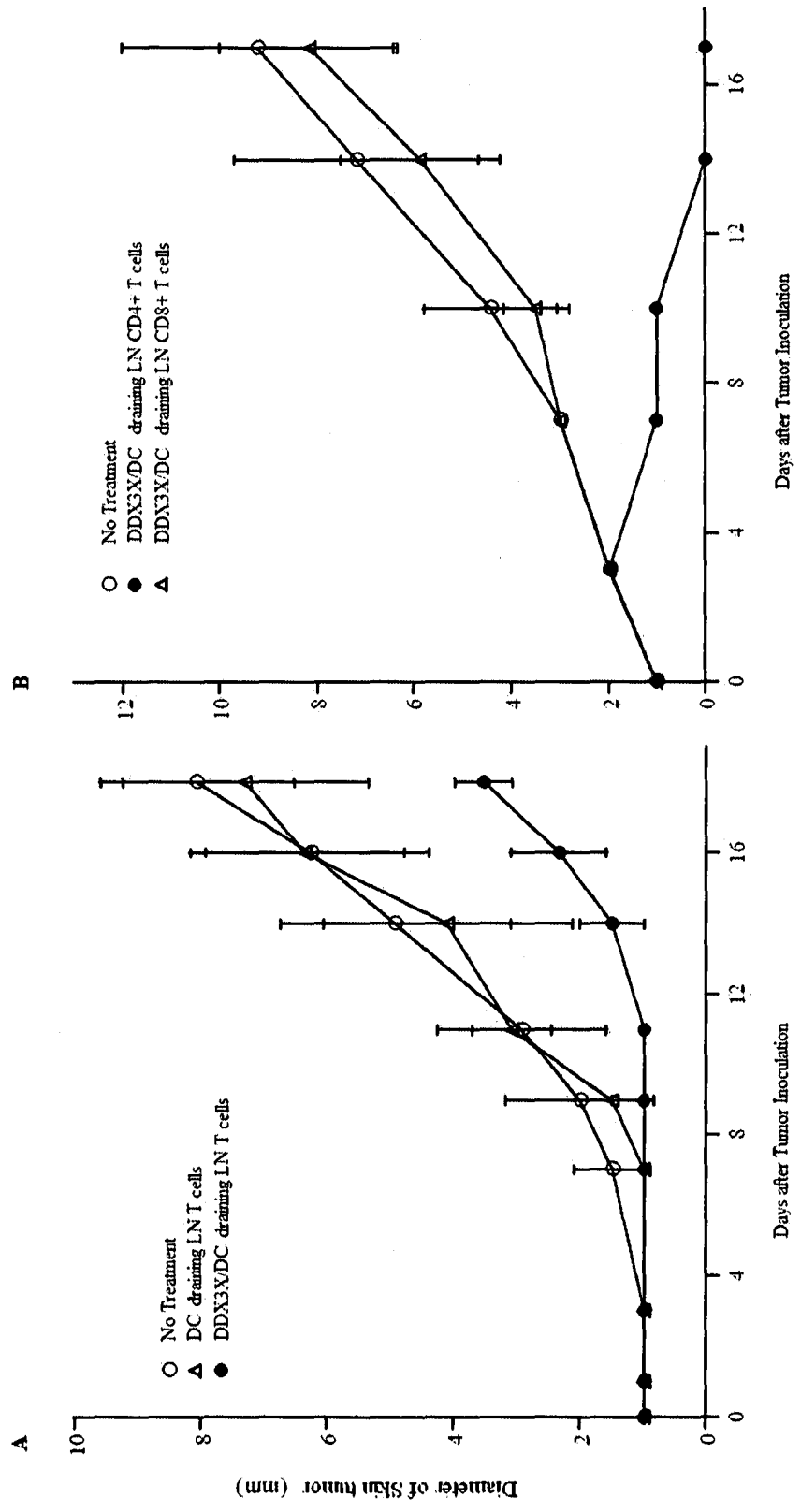
[Fig.9]


3500
3000
2500
2000
1500
1000
500
0
IFN γ (pg/ml)
Only CM
Only DC
DC/DDX3X
DC/J
DC/K
Anti-CD3
Stimulant

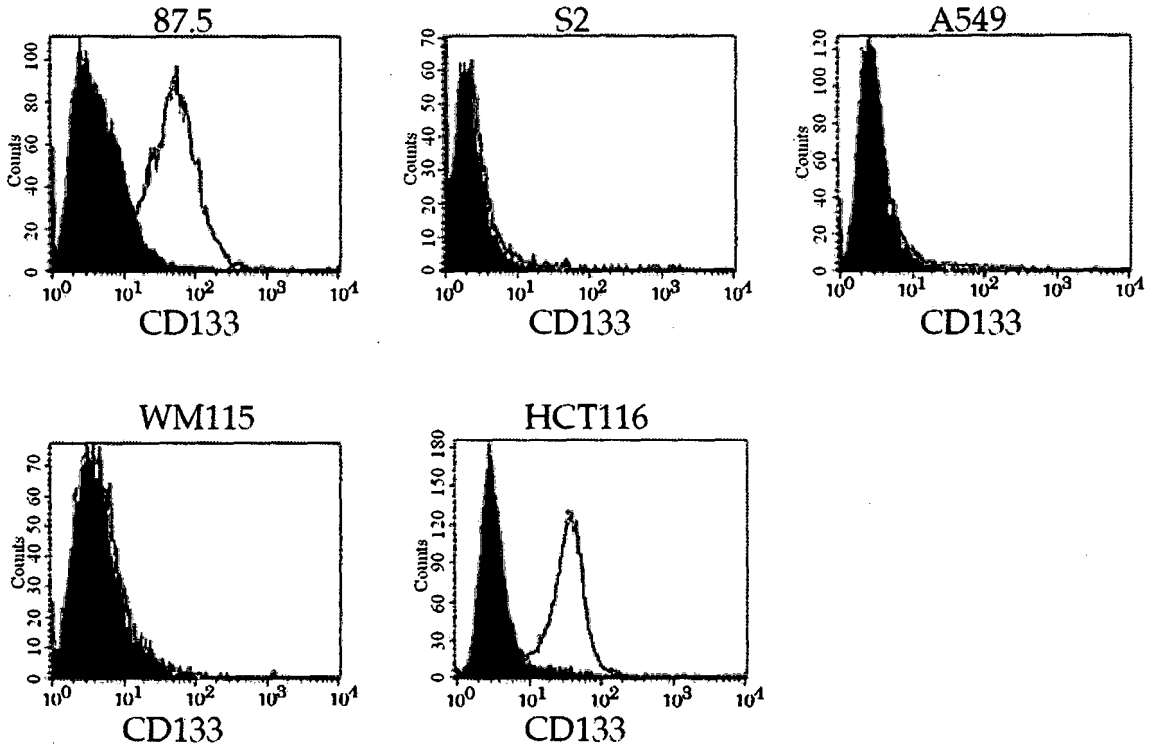
[Fig.10]


Day21
DMSO
10mer
15mer
20mer
IFNg[pg/mL]
5000
4000
3000
2000
1000
0
0201/0501 1403/1501 0201/2601 A
0202/0501 0803/- 0201/0218 B
0201/0301 0405/0901 0210/2601 C
0501/1301 1405/1502 2402/2601 G
0201/- 0802/1403 2601/3101 H
0201/0501 0405/0803 1101/2601 I
0201/0202 0901/- 0201/3101 J
HLA-DPB1
HLA-DRB1
HLA-A
Donor ID
Day28
DMSO
10mer
15mer
20mer
IFNg[pg/mL]
5000
4000
3000
2000
1000
0
0201/0501 1403/1501 0201/2601 A
0202/0501 0803/- 0201/0218 B
0201/0301 0405/0901 0210/2601 C
0301/0501 0403/1405 0201/3101 D
0201/0202 0406/0803 0201/1101 E
0201/0402 0101/0405 0201/1101 F
0501/1301 1405/1502 2402/2601 G
0201/- 0802/1403 2601/3101 H
0201/0501 0405/0803 1101/2601 I
0201/0202 0901/- 0201/3101 J
HLA-DPB1
HLA-DRB1
HLA-A
Donor ID

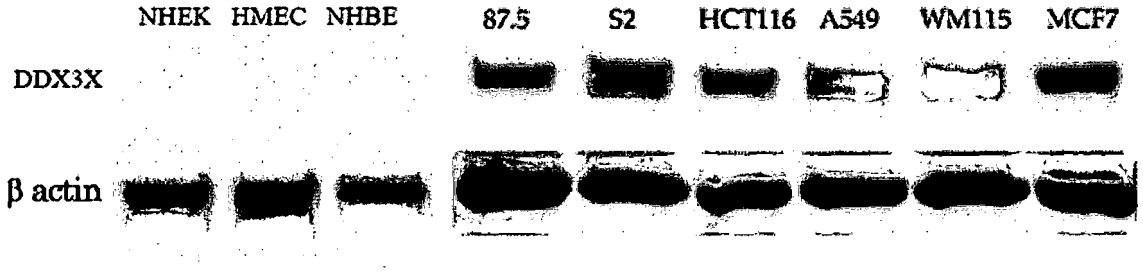
[Fig.11]


A
B
Diameter of Skin tumor (mm)
Days after Tumor Inoculation
No Treatment
DC draining LN T cells
DDX3X/DC draining LN T cells
DDX3X/DC draining LN CD4+ T cells
DDX3X/DC draining LN CD8+ T cells

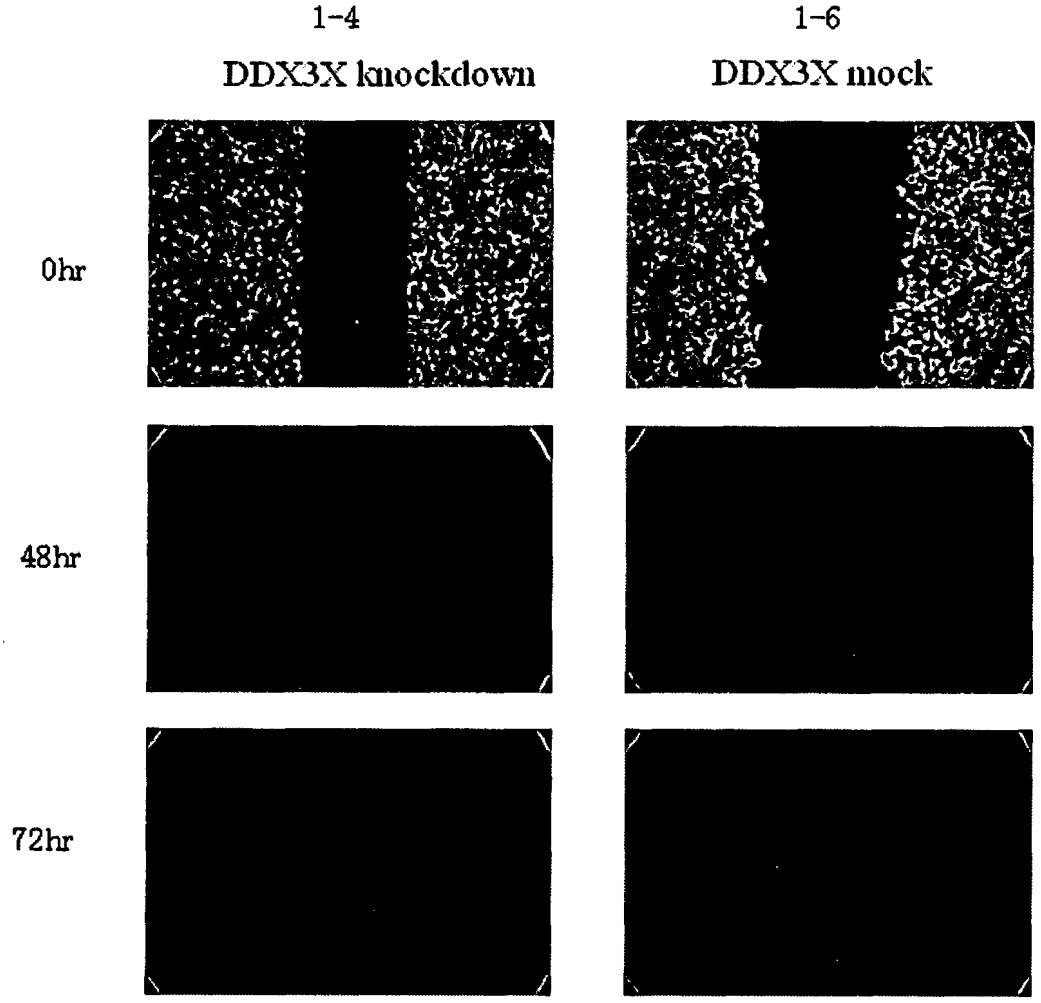
[Fig.12]


87.5
S2
A549
WM115
HCT116
Counts
CD133

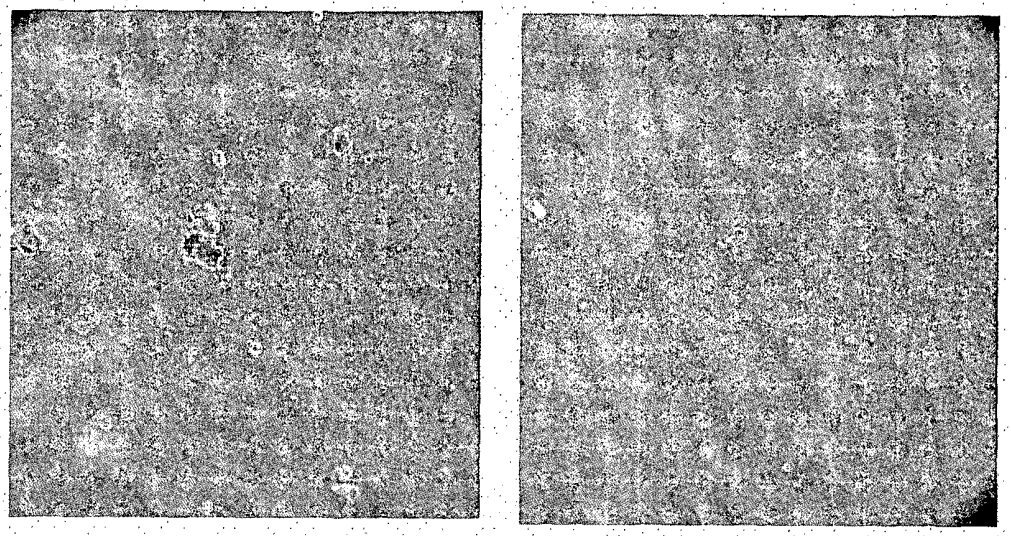
[Fig.13]


NHEK
HMEC
NHBE
87.5
S2
HCT116
A549
WM115
MCF7
DDX3X
β actin

[Fig.14]



[Fig.15]



CD133+ 1-4 Cell (DDX3X knockdown)