FIG. 1

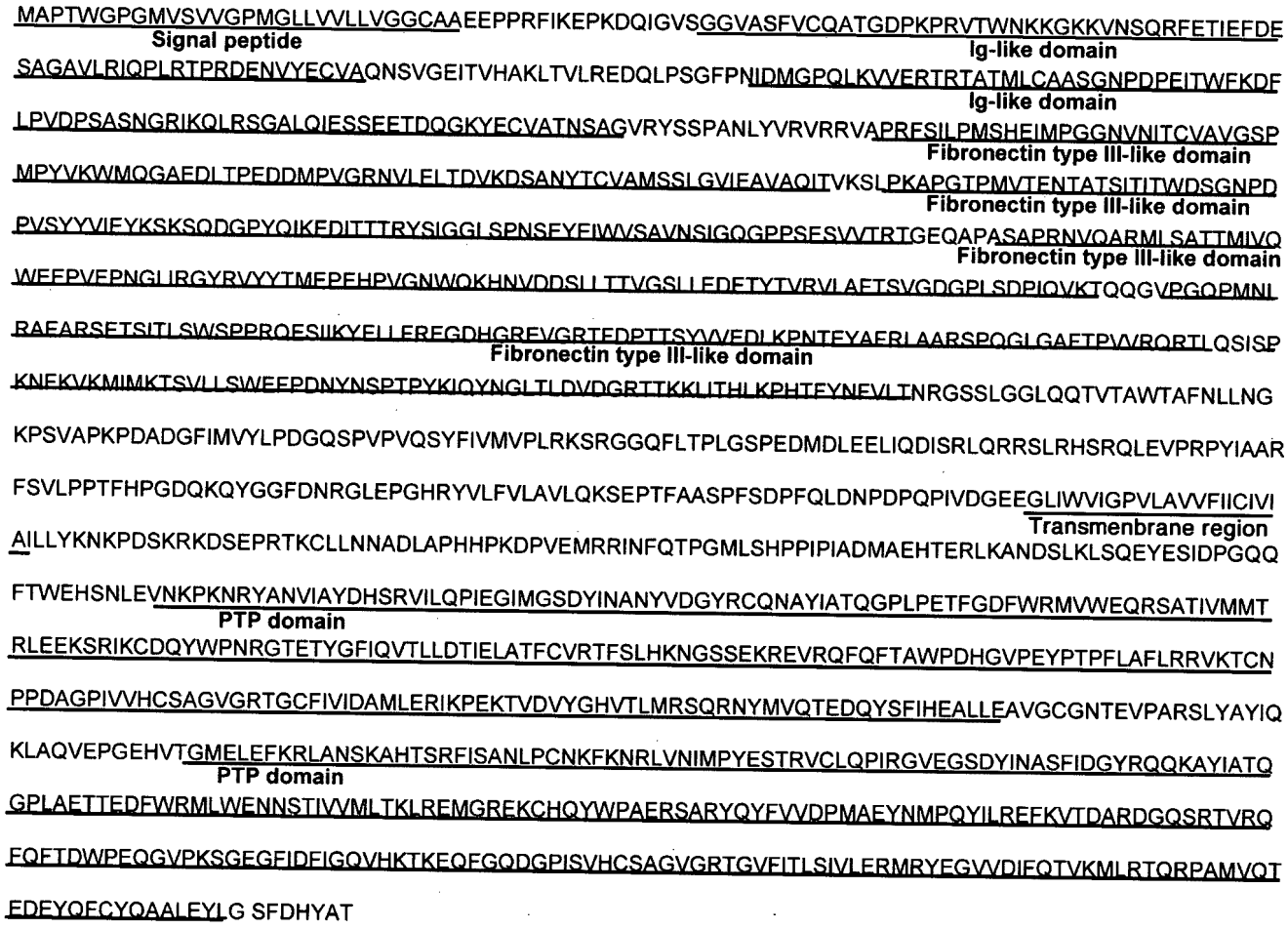

Signal peptide
Ig-like domain
Ig-like domain
Fibronectin type III-like domain
Fibronectin type III-like domain
Fibronectin type III-like domain
Fibronectin type III-like domain
Transmenbrane region
PTP domain
PTP domain

FIG. 2

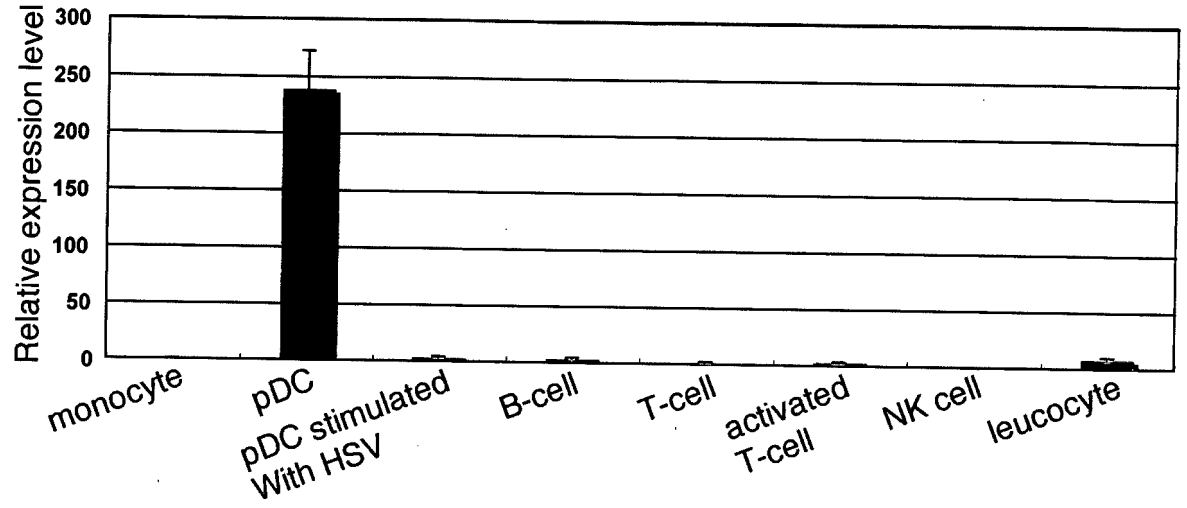

Relative expression level
300
250
200
150
100
50
0
monocyte
pDC
pDC stimulated With HSV
B-cell
T-cell
activated T-cell
NK cell
leucocyte

FIG. 3

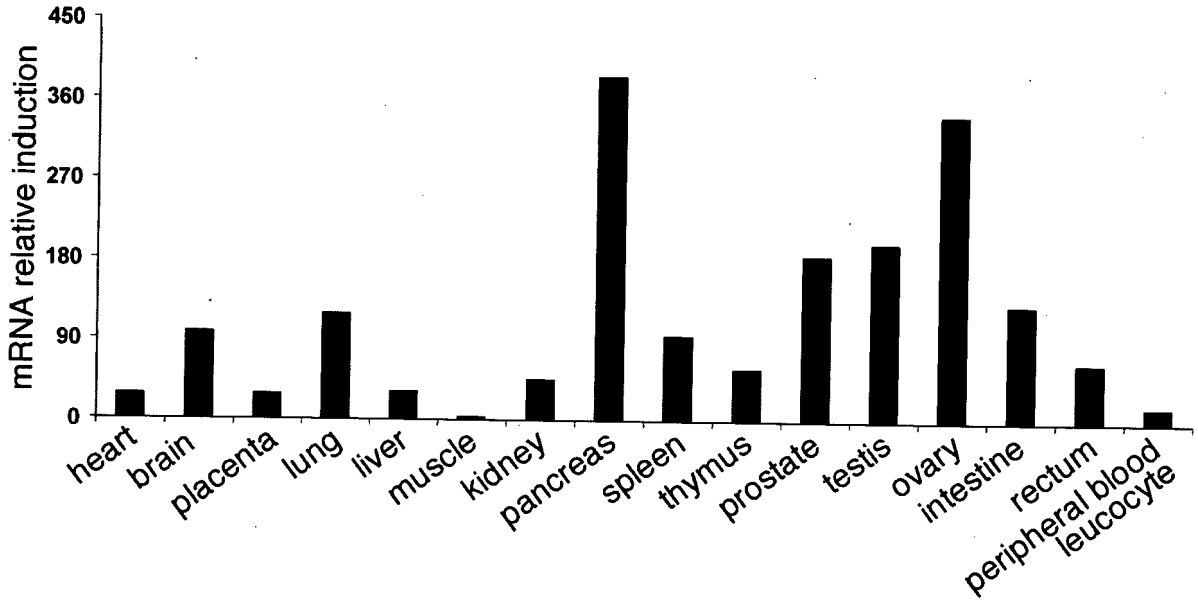

mRNA relative induction
450
360
270
180
90
0
heart
brain
placenta
lung
liver
muscle
kidney
pancreas
spleen
thymus
prostate
testis
ovary
intestine
rectum
peripheral blood leucocyte

FIG. 4

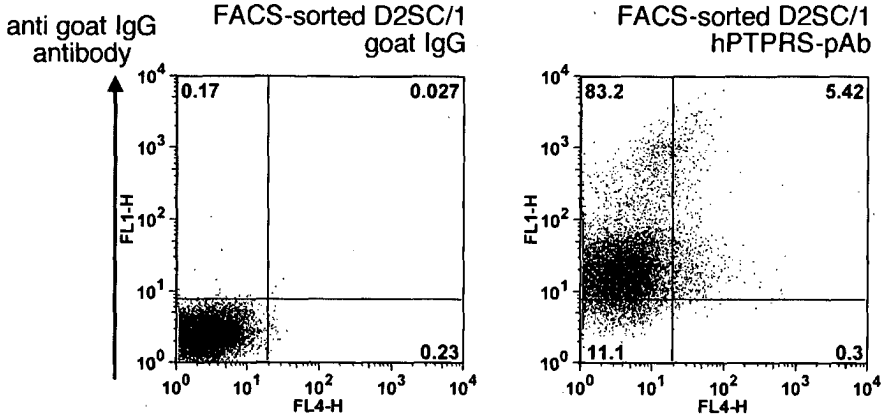
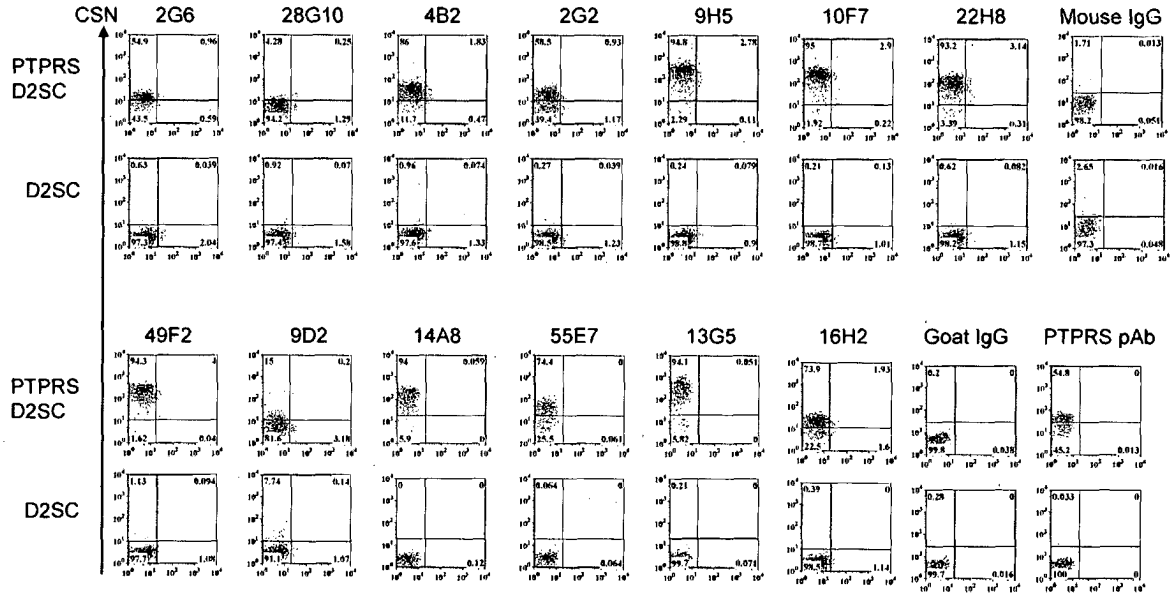
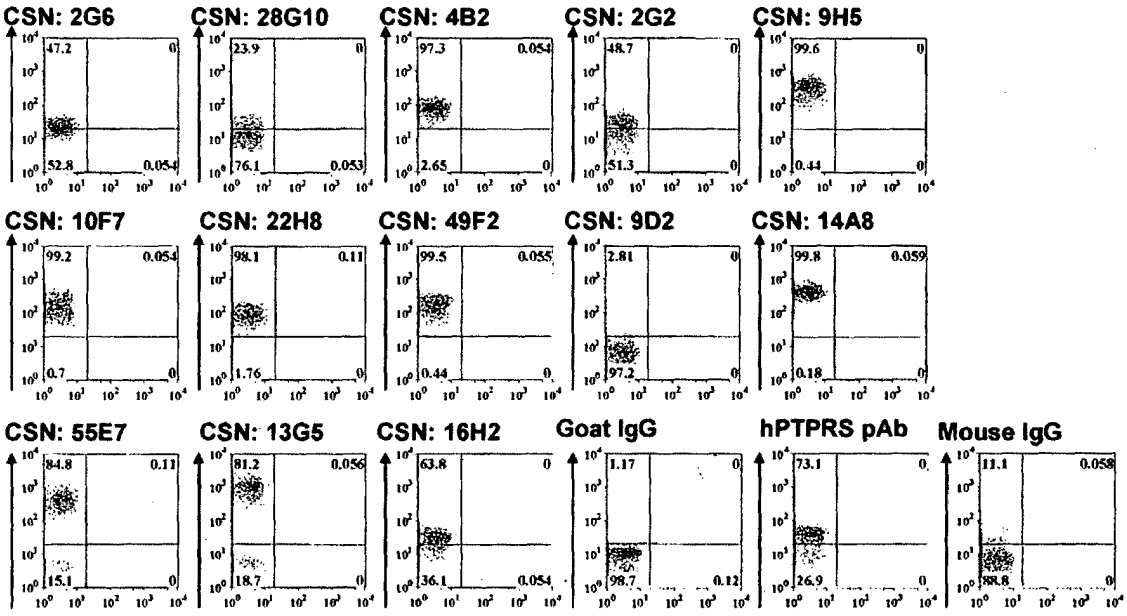


FIG. 5



CSN: culture supernatant

FIG. 6



CSN: culture supernatant

FIG. 7

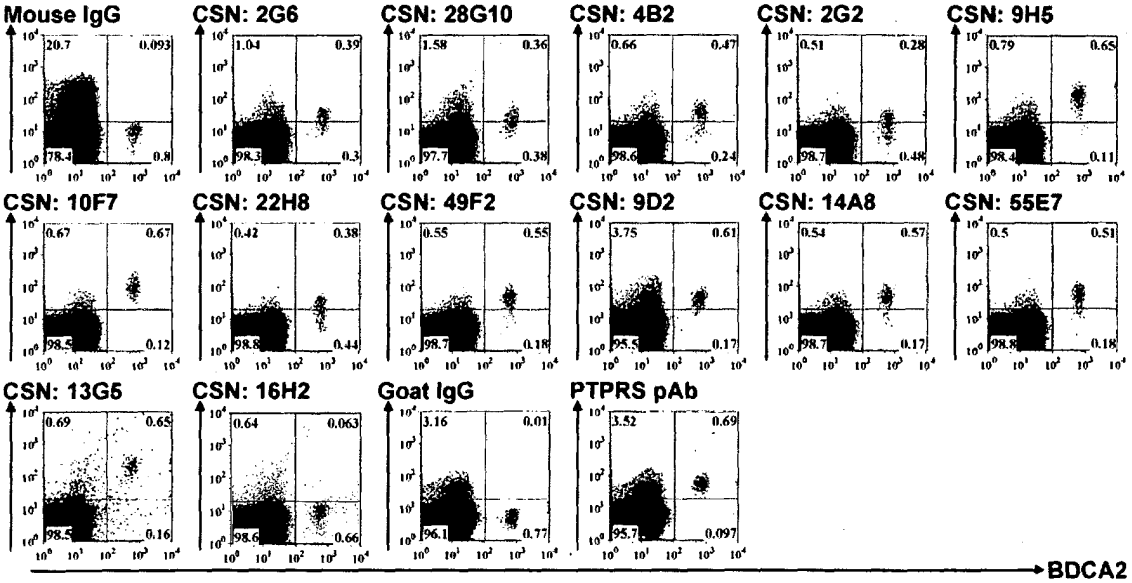


FIG. 8

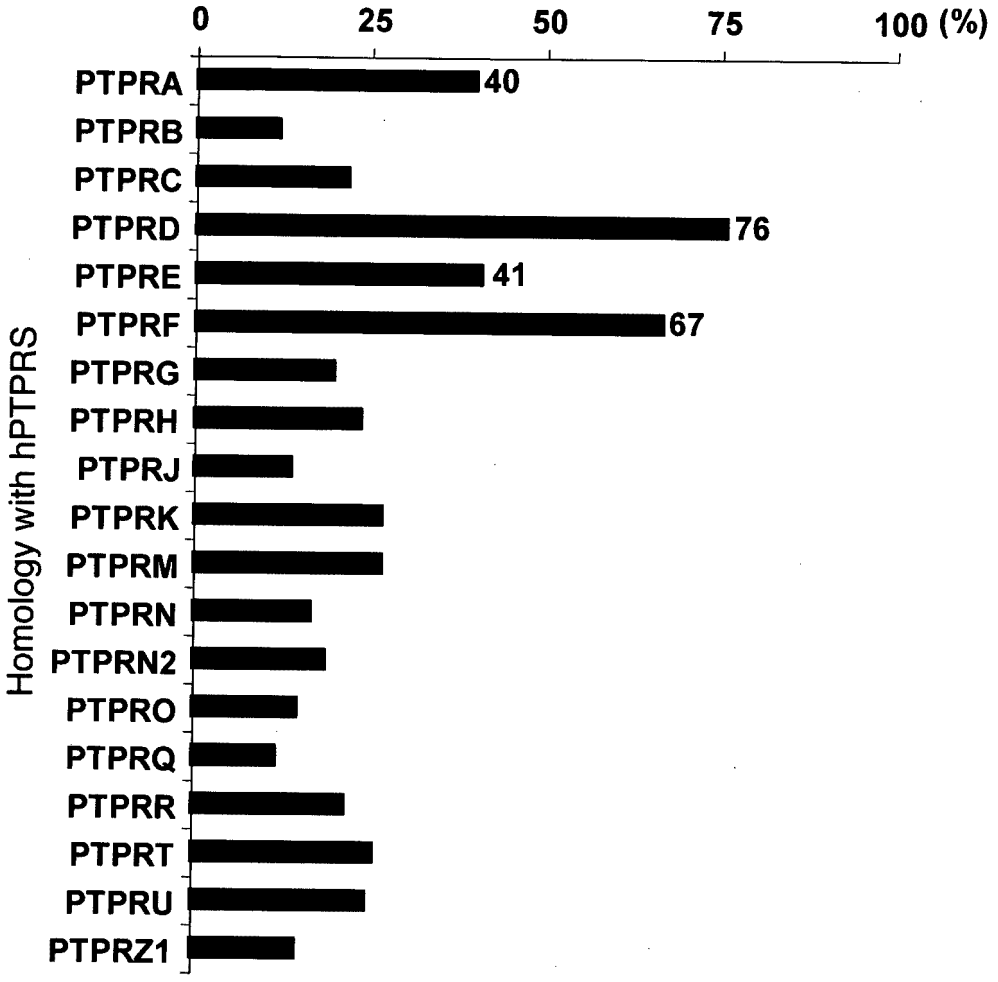

0
25
50
75
100 (%)
Homology with hPTPRS
PTPRA
40
PTPRB
PTPRC
PTPRD
76
PTPRE
41
PTPRF
67
PTPRG
PTPRH
PTPRJ
PTPRK
PTPRM
PTPRN
PTPRN2
PTPRO
PTPRQ
PTPRR
PTPRT
PTPRU
PTPRZ1

FIG. 9A

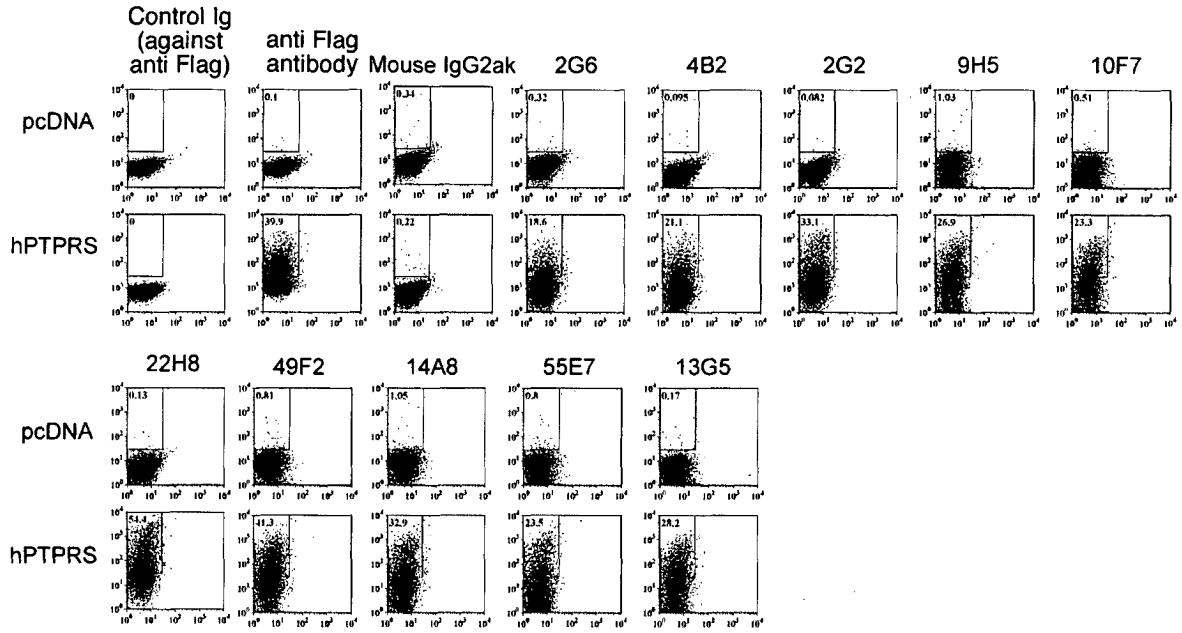

Control Ig (against anti Flag)
anti Flag antibody
Mouse IgG2ak
2G6
4B2
2G2
9H5
10F7
pcDNA
hPTPRS
22H8
49F2
14A8
55E7
13G5
pcDNA
hPTPRS

FIG. 9B

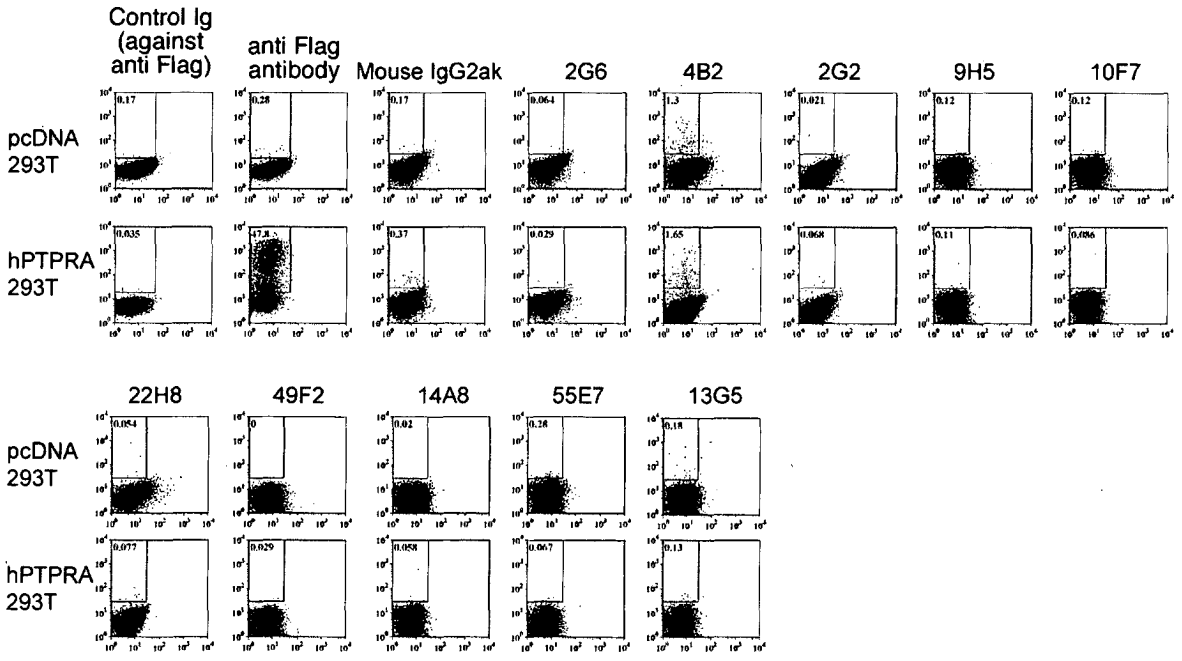

Control Ig (against anti Flag)
anti Flag antibody
Mouse IgG2ak
2G6
4B2
2G2
9H5
10F7
pcDNA 293T
hPTPRA 293T
22H8
49F2
14A8
55E7
13G5
pcDNA 293T
hPTPRA 293T

FIG. 9C

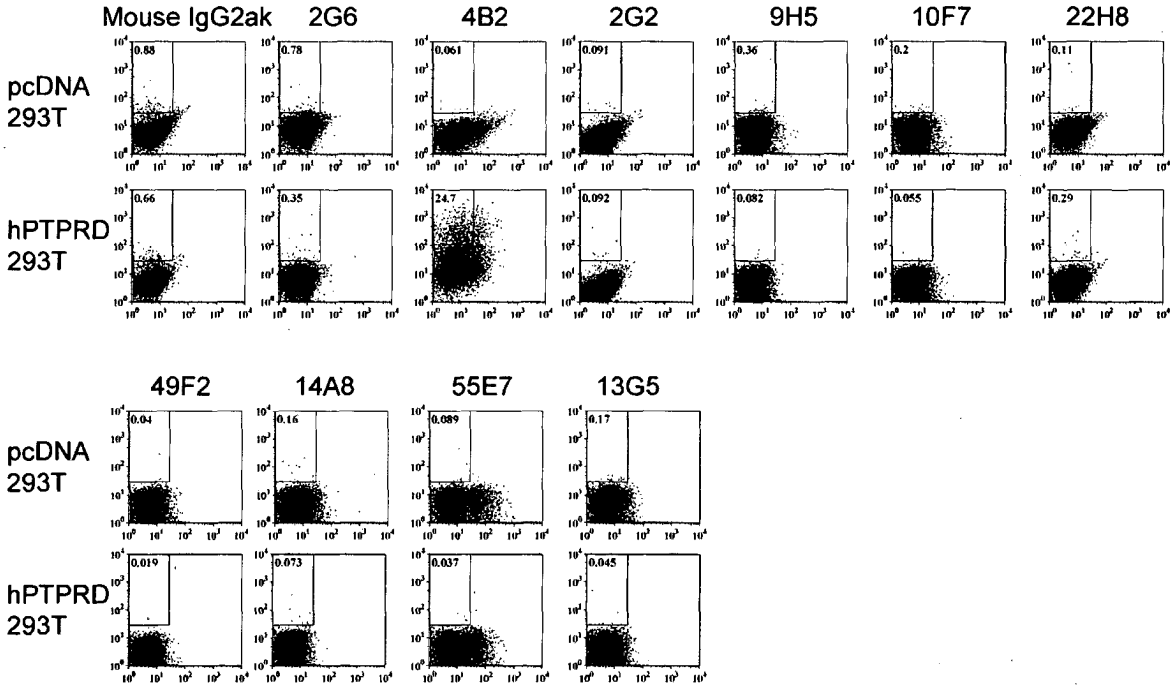

Mouse IgG2ak
2G6
4B2
2G2
9H5
10F7
22H8
pcDNA 293T
hPTPRD 293T
0.88
0.78
0.061
0.091
0.36
0.2
0.11
0.66
0.35
24.7
0.092
0.082
0.055
0.29
49F2
14A8
55E7
13G5
0.04
0.16
0.089
0.17
0.019
0.073
0.037
0.045

FIG. 9D

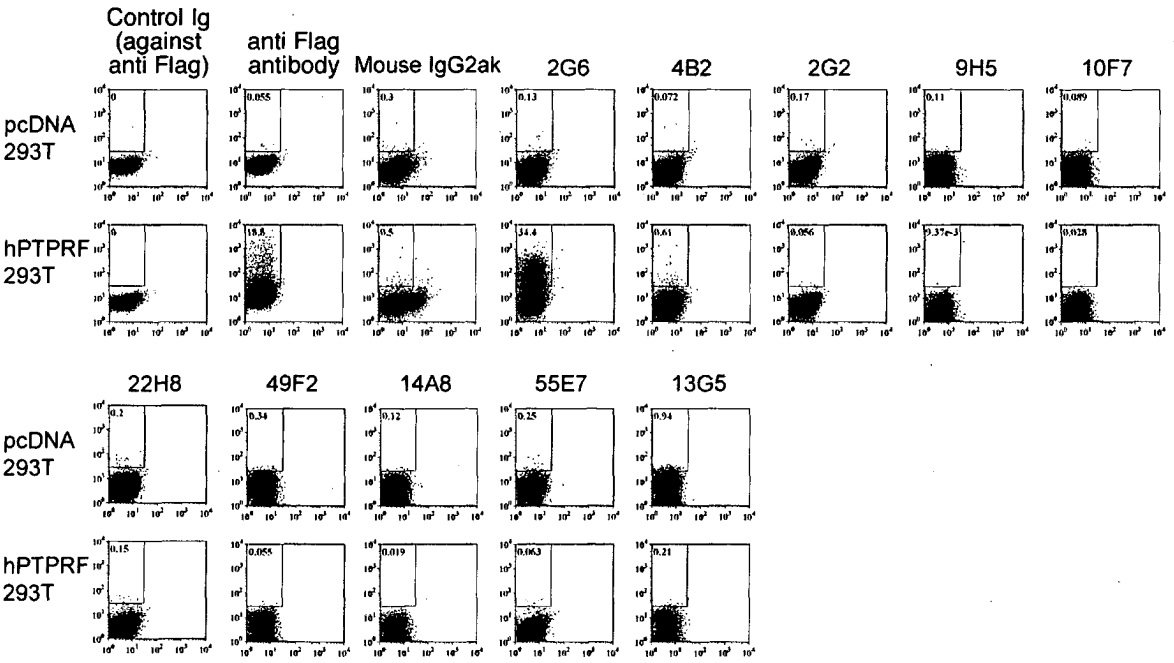

Control Ig (against anti Flag)
anti Flag antibody
Mouse IgG2ak
2G6
4B2
2G2
9H5
10F7
pcDNA 293T
hPTPRF 293T
0
0.055
0.3
0.13
0.072
0.17
0.11
0.089
0
18.8
0.5
34.4
0.61
0.056
9.37e-3
0.028
22H8
49F2
14A8
55E7
13G5
0.2
0.34
0.12
0.25
0.94
0.15
0.055
0.019
0.063
0.21

FIG. 10

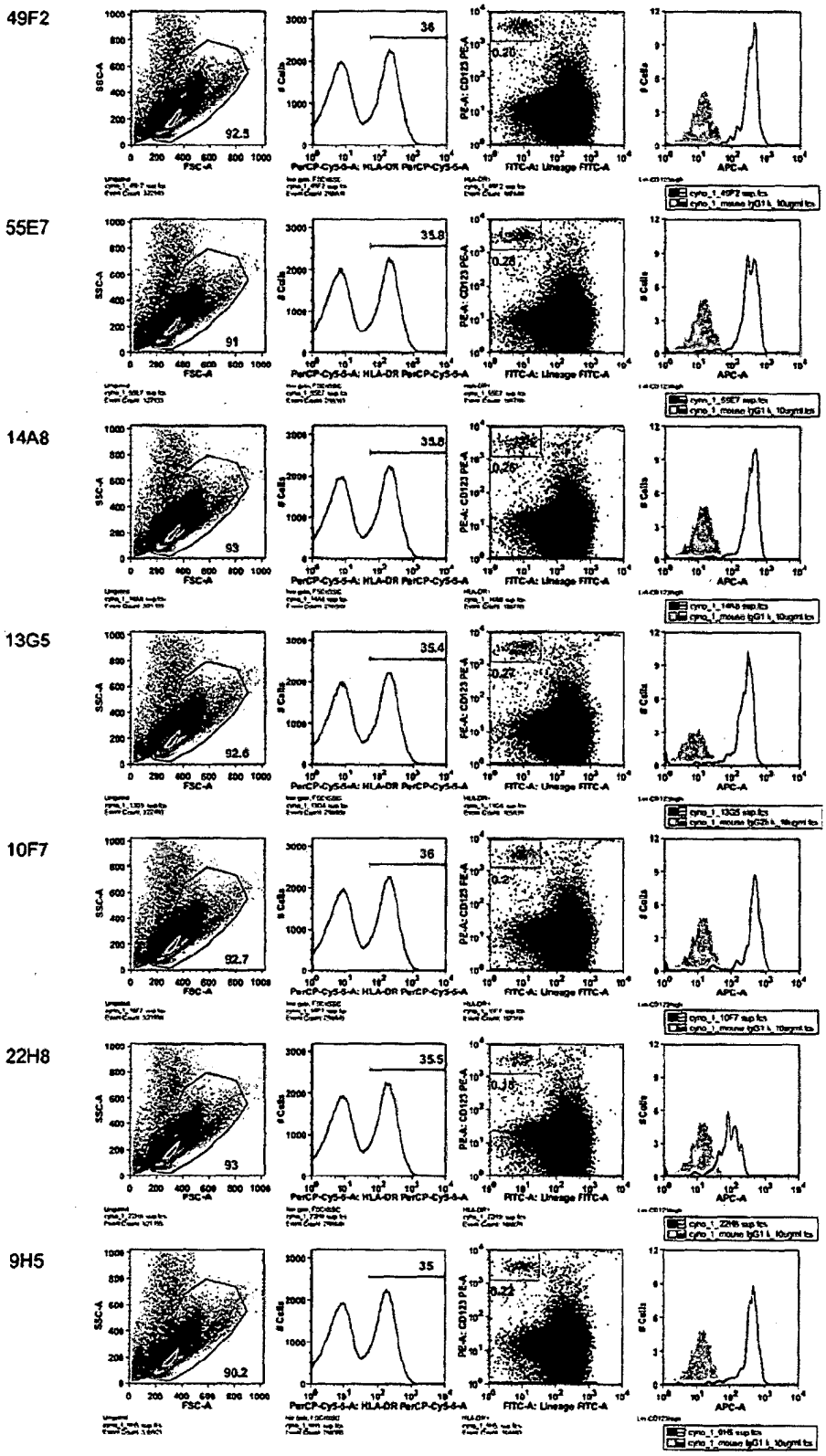

49F2
55E7
14A8
13G5
10F7
22H8
9H5
SSC-A
FSC-A
Cells
PerCP-Cy5-5-A: HLA-DR PerCP-Cy5-5-A
PE-A: CD123 PE-A
FITC-A: Lineage FITC-A
APC-A
92.5
36
0.20
91
35.8
0.28
93
35.6
0.26
92.6
35.4
0.27
92.7
36
0.2
93
35.5
0.16
90.2
35
0.21

FIG. 11A

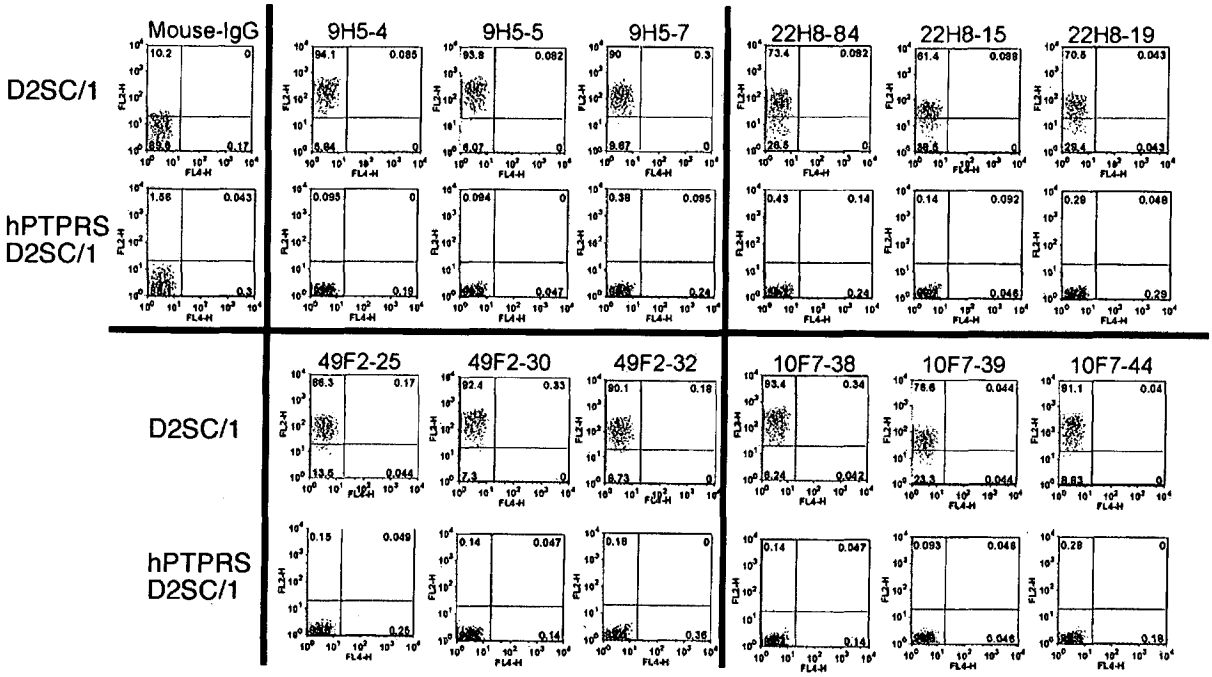


FIG. 11B

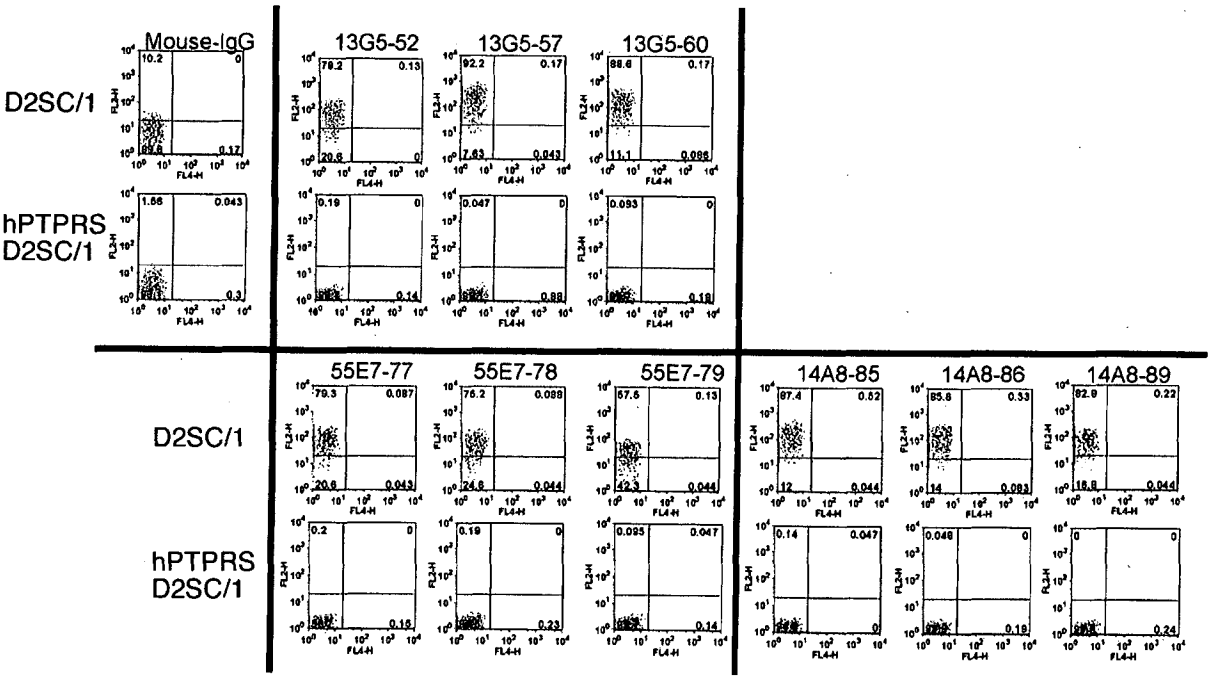


FIG. 11C

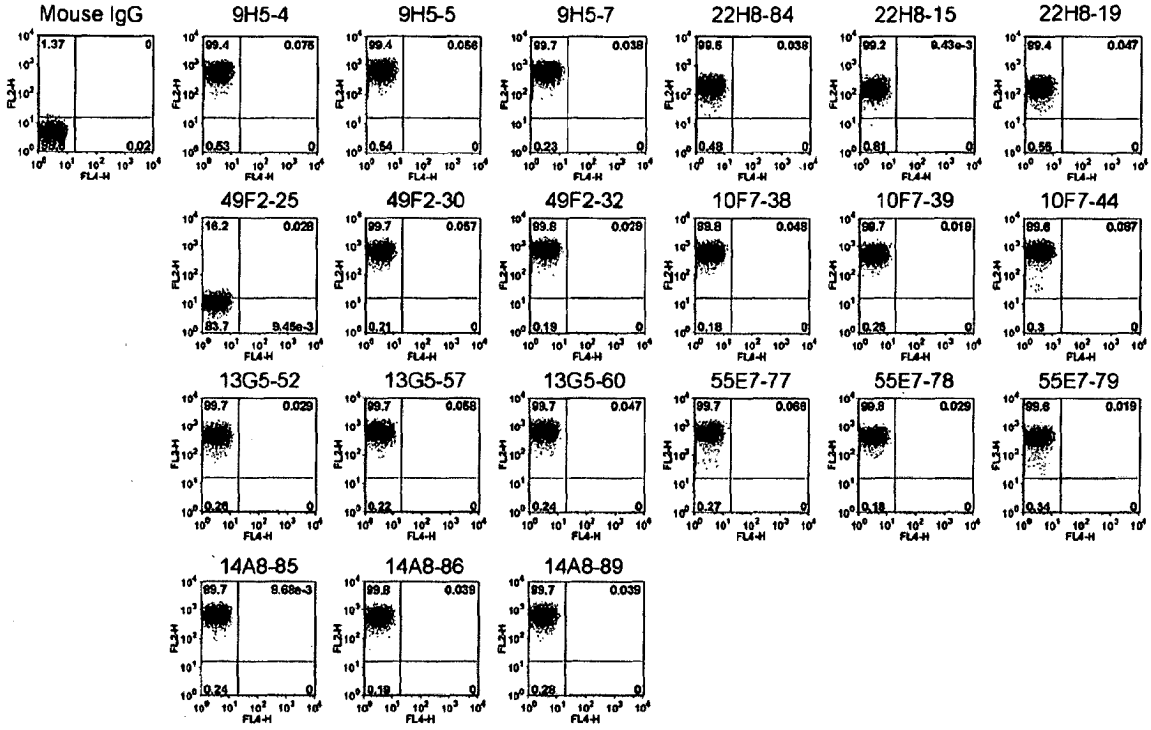


FIG. 11D

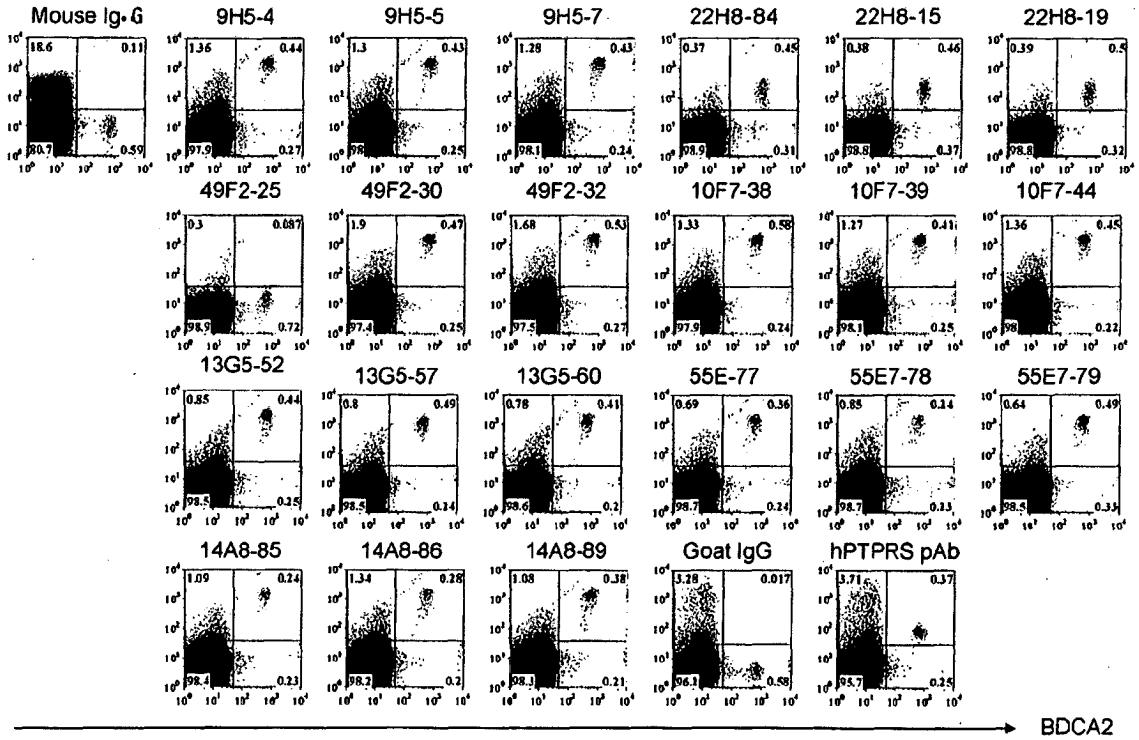


FIG. 12

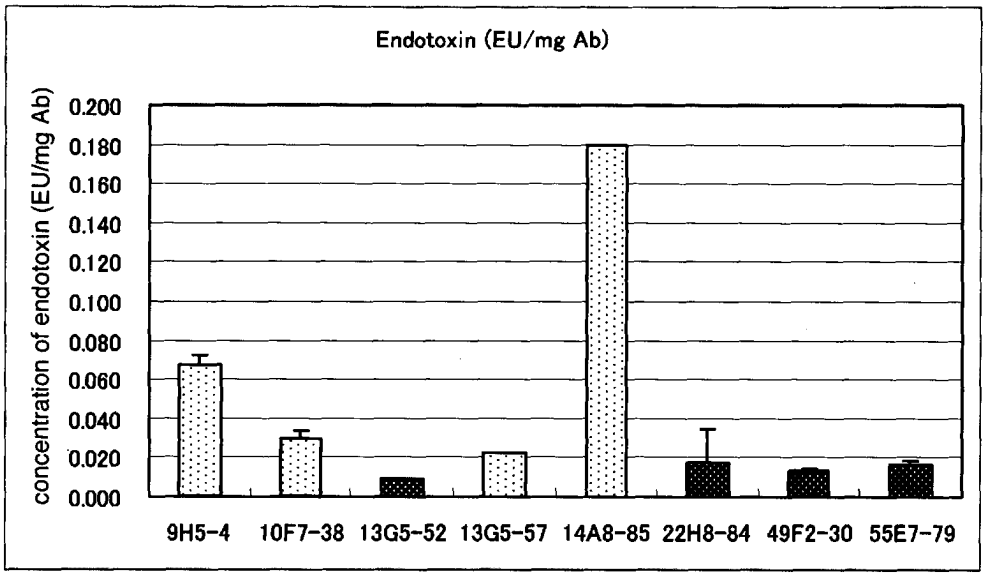
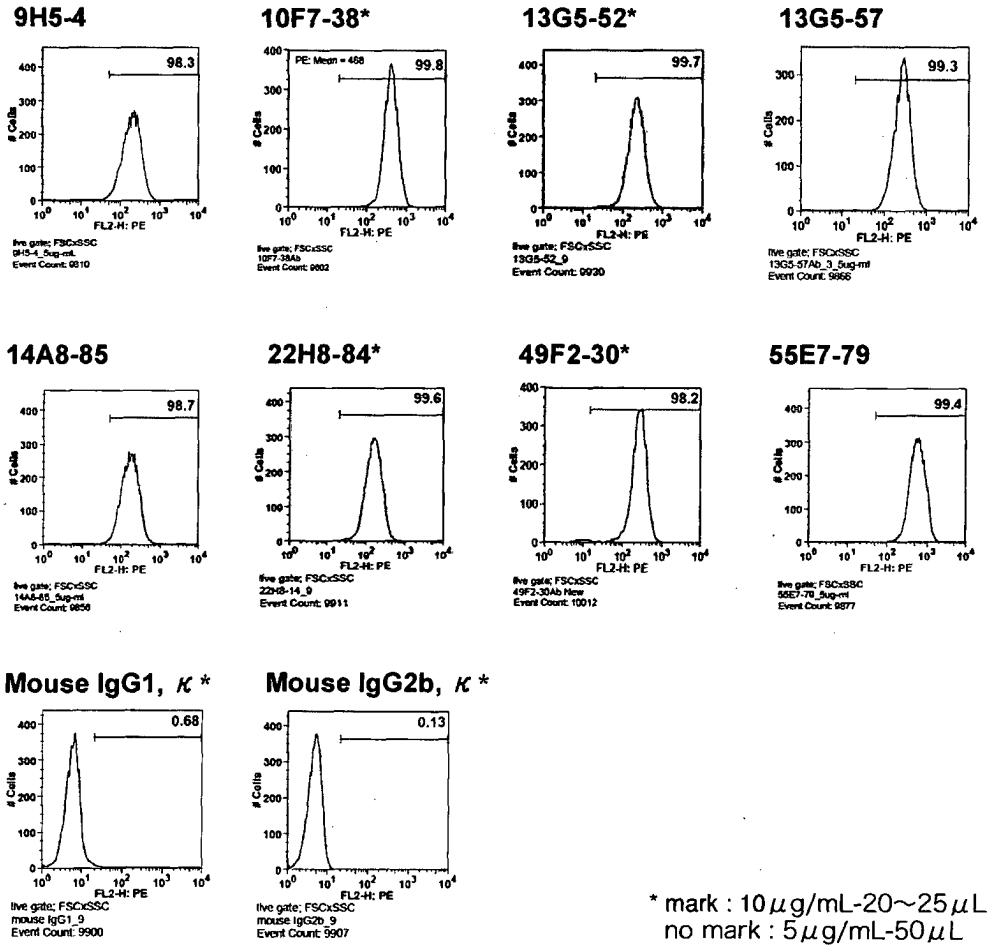


FIG. 13



* mark : 10μg/mL-20~25μL
no mark : 5μg/mL-50μL

FIG. 14

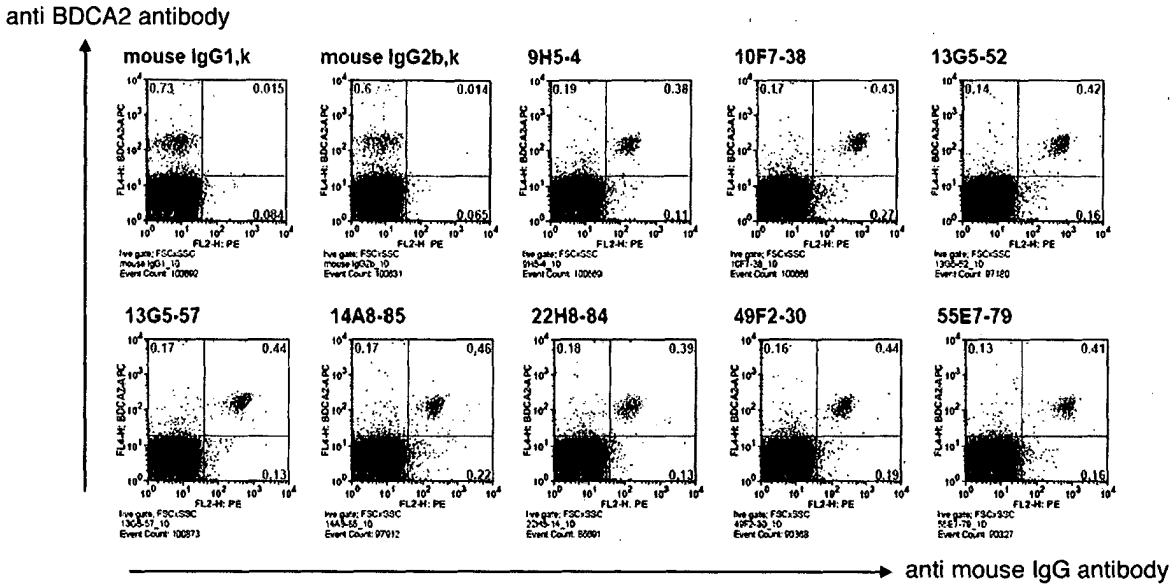

anti BDCA2 antibody
mouse IgG1,k
mouse IgG2b,k
9H5-4
10F7-38
13G5-52
13G5-57
14A8-85
22H8-84
49F2-30
55E7-79
anti mouse IgG antibody

FIG. 15

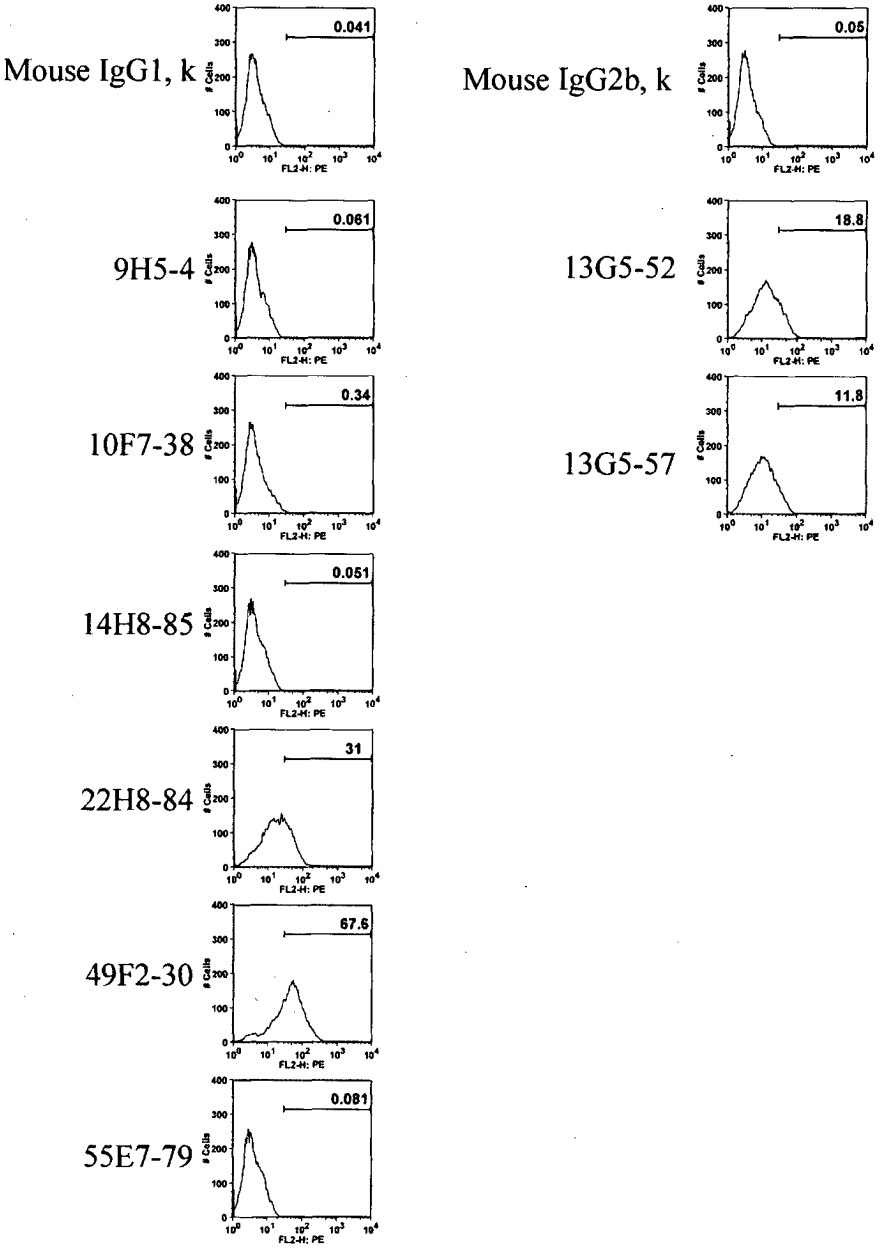
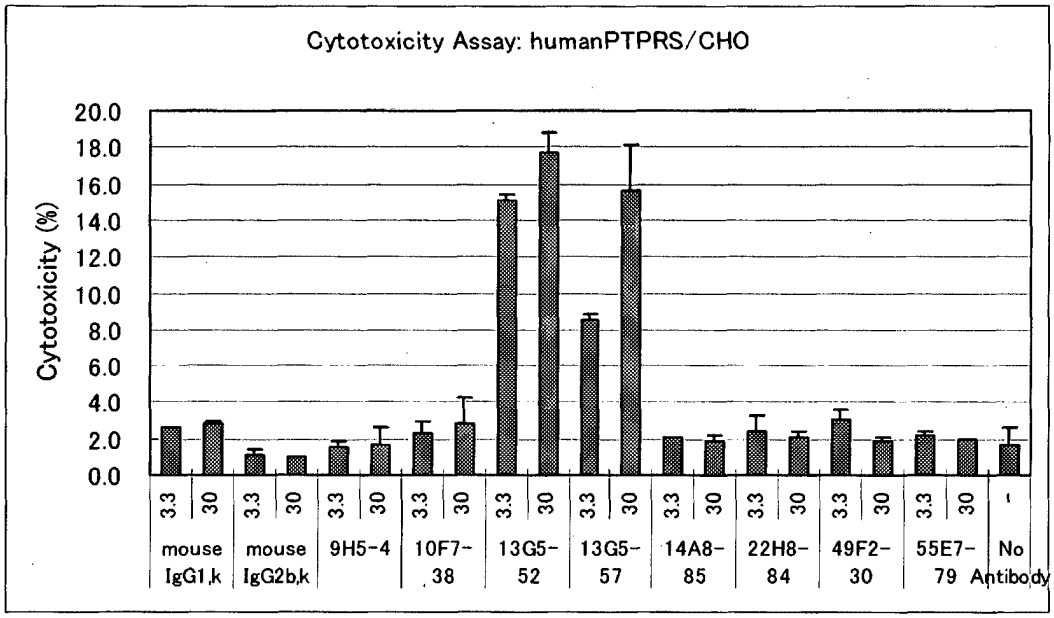

Mouse IgG1, k
0.041
Mouse IgG2b, k
0.05
9H5-4
0.061
13G5-52
18.8
10F7-38
0.34
13G5-57
11.8
14H8-85
0.051
22H8-84
31
49F2-30
67.6
55E7-79
0.081
Cells
FL2-H: PE

FIG. 16

A


Cytotoxicity Assay: humanPTPRS/CHO
Cytotoxicity (%)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
3.3
30
mouse IgG1,k
mouse IgG2b,k
9H5-4
10F7-38
13G5-52
13G5-57
14A8-85
22H8-84
49F2-30
55E7-79
No Antibody

B

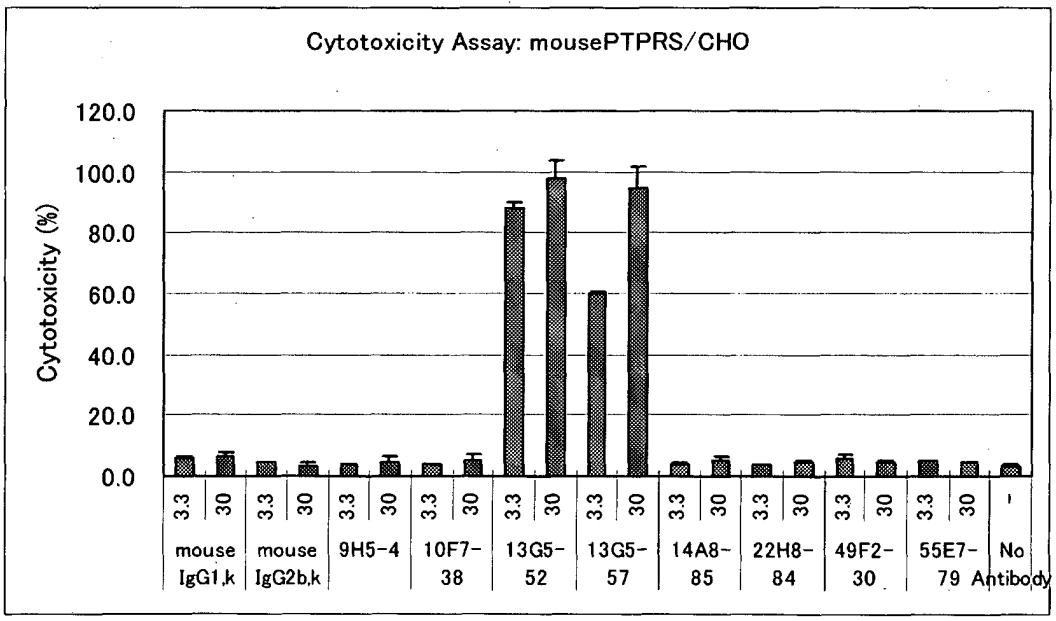
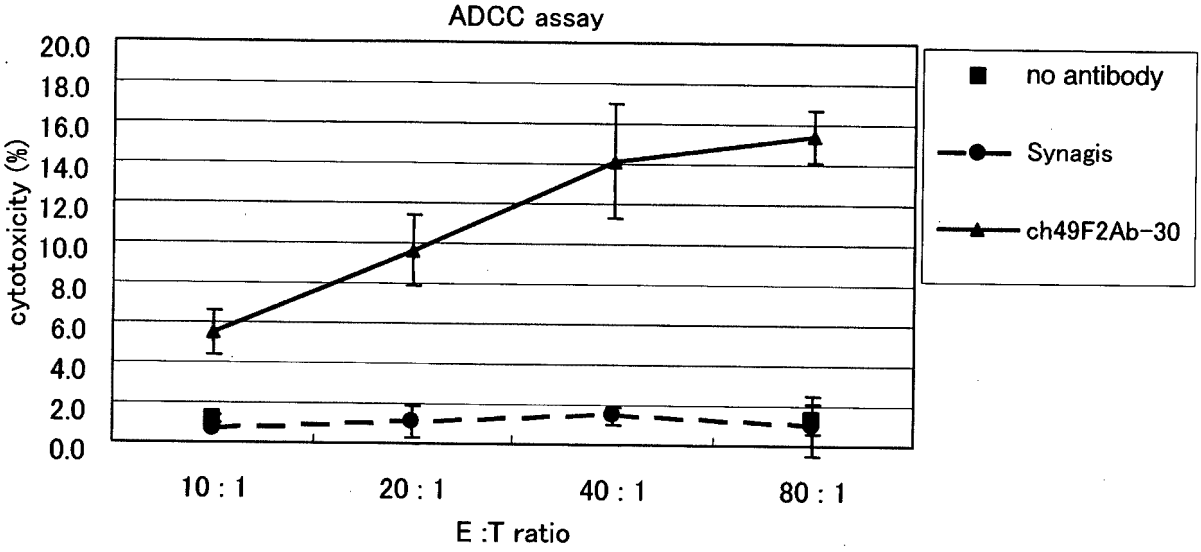

Cytotoxicity Assay: mousePTPRS/CHO
Cytotoxicity (%)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
3.3
30
mouse IgG1,k
mouse IgG2b,k
9H5-4
10F7-38
13G5-52
13G5-57
14A8-85
22H8-84
49F2-30
55E7-79
No Antibody

FIG. 17

A


ADCC assay
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
cytotoxicity (%)
10 : 1
20 : 1
40 : 1
80 : 1
E :T ratio
no antibody
Synagis
ch49F2Ab-30

B

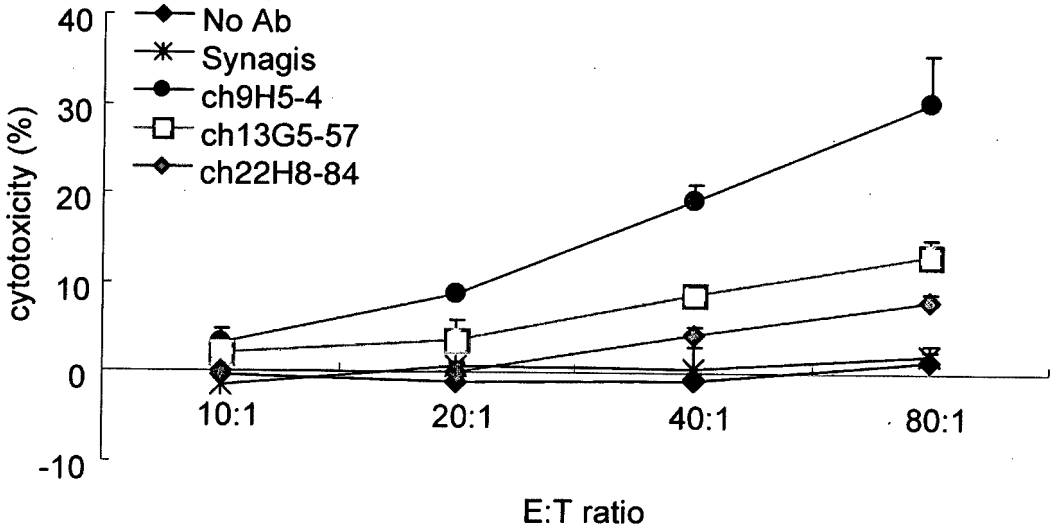
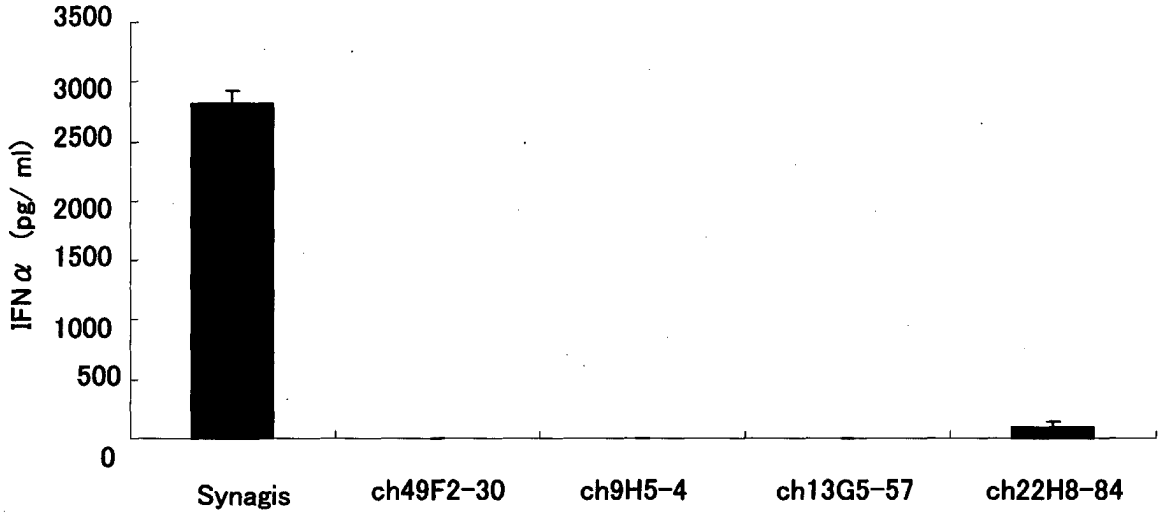
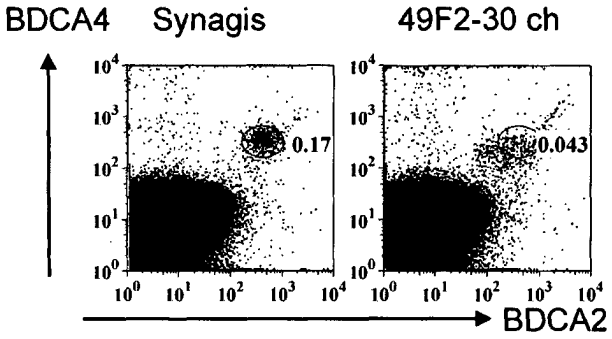

40
30
20
10
0
-10
cytotoxicity (%)
No Ab
Synagis
ch9H5-4
ch13G5-57
ch22H8-84
10:1
20:1
40:1
80:1
E:T ratio

FIG. 18

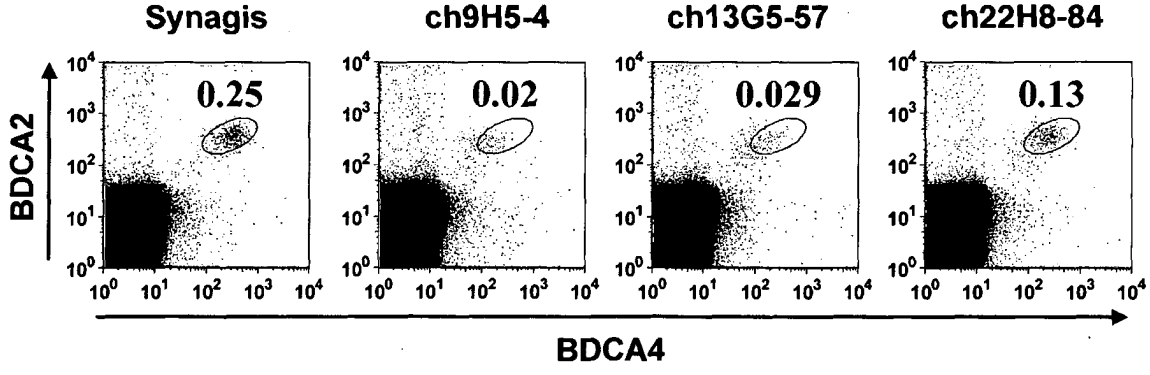
A


3500
3000
2500
2000
1500
1000
500
0
IFNα (pg/ml)
Synagis
ch49F2-30
ch9H5-4
ch13G5-57
ch22H8-84

B


BDCA4
Synagis
49F2-30 ch
0.17
0.043
BDCA2

C


Synagis
ch9H5-4
ch13G5-57
ch22H8-84
0.25
0.02
0.029
0.13
BDCA2
BDCA4