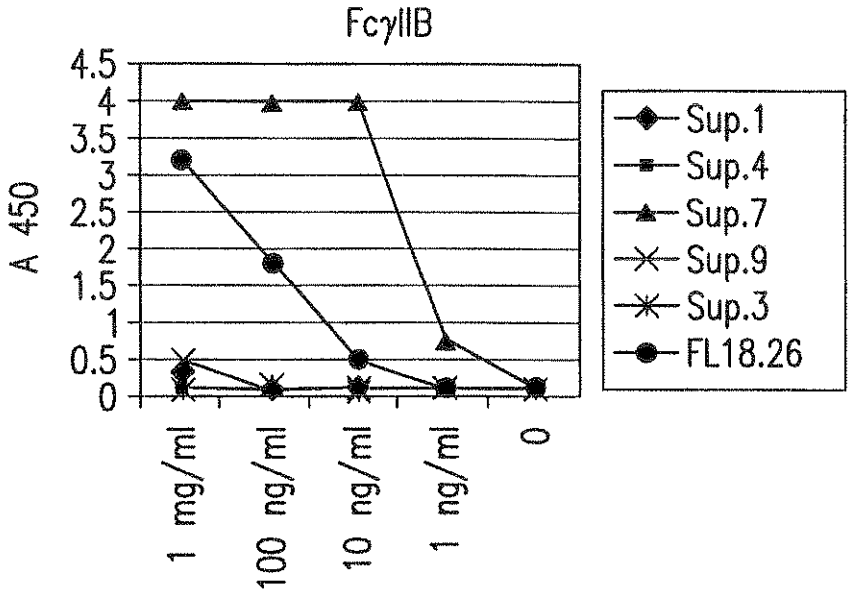

FcγIIB
A 450
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1 mg/ml
100 ng/ml
10 ng/ml
1 ng/ml
0
Sup.1
Sup.4
Sup.7
Sup.9
Sup.3
FL18.26

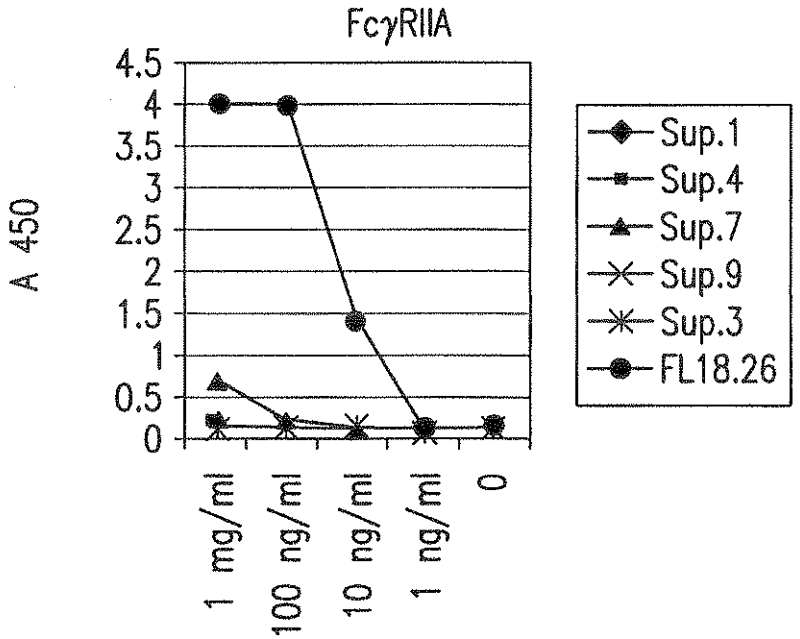
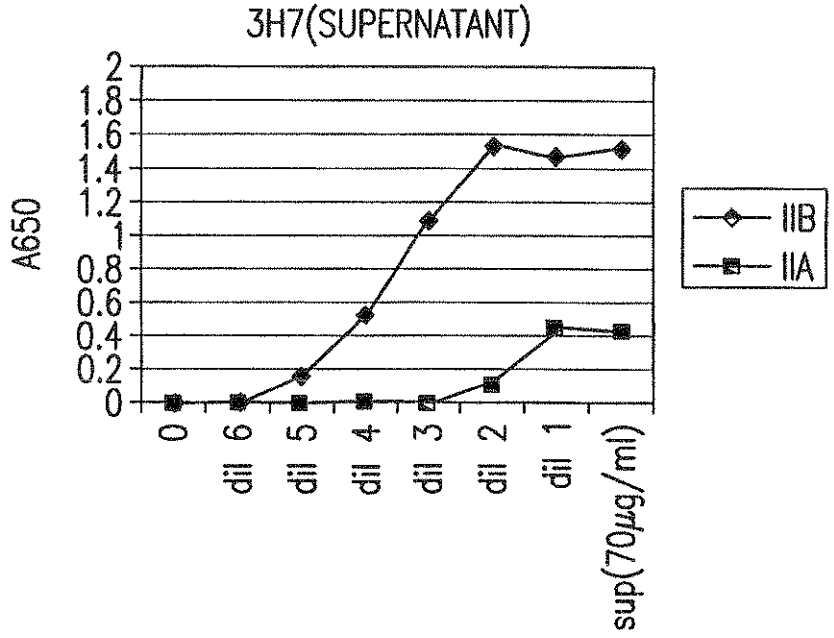

FcγRIIA
A 450
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1 mg/ml
100 ng/ml
10 ng/ml
1 ng/ml
0
Sup.1
Sup.4
Sup.7
Sup.9
Sup.3
FL18.26

FIG. 1A


3H7(SUPERNATANT)
A650
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
dil 6
dil 5
dil 4
dil 3
dil 2
dil 1
sup(70μg/ml)
IIB
IIA

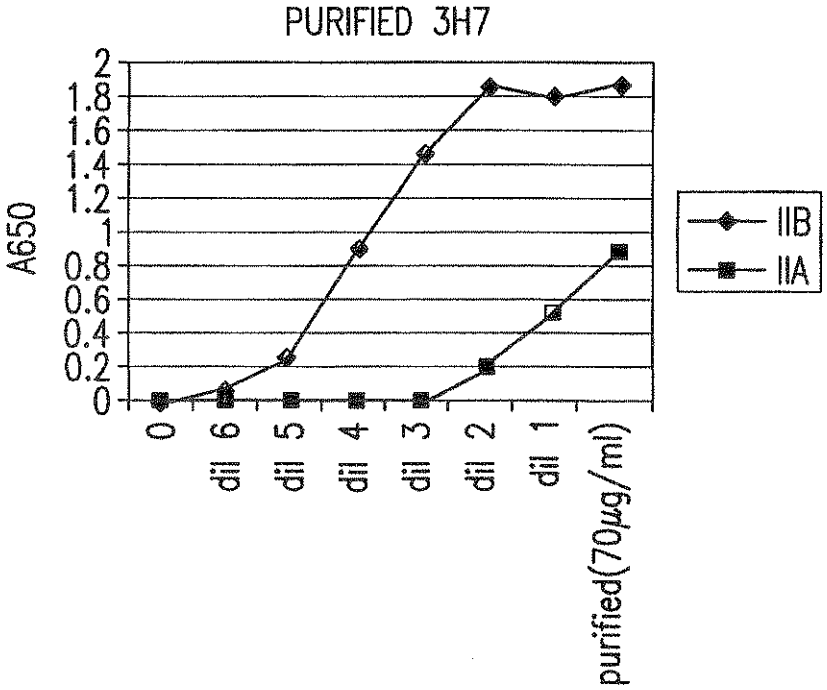

PURIFIED 3H7
A650
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
dil 6
dil 5
dil 4
dil 3
dil 2
dil 1
purified(70μg/ml)
IIB
IIA

FIG. 1B

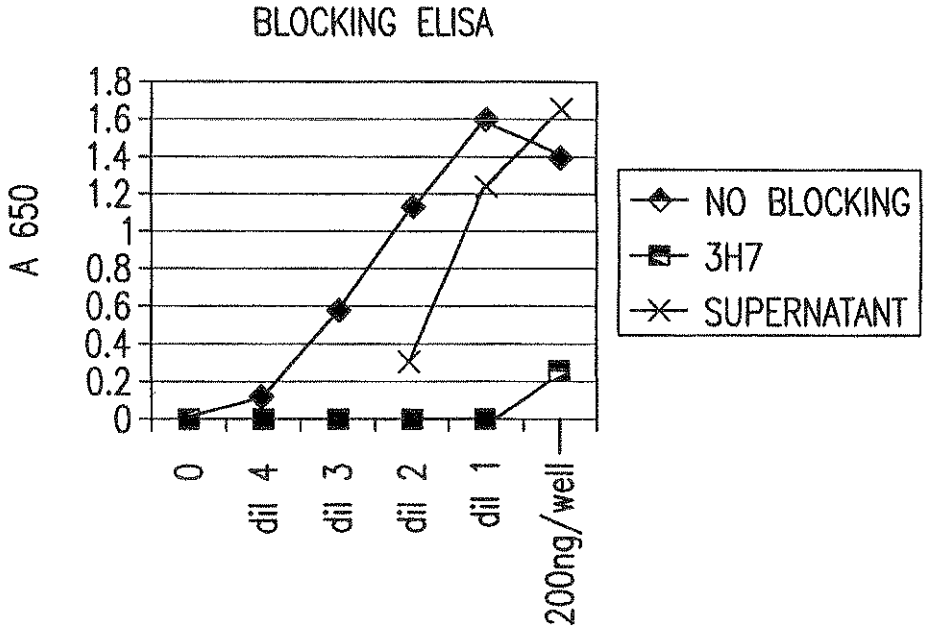

BLOCKING ELISA
A 650
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
dil 4
dil 3
dil 2
dil 1
200ng/well
NO BLOCKING
3H7
SUPERNATANT

FIG.2

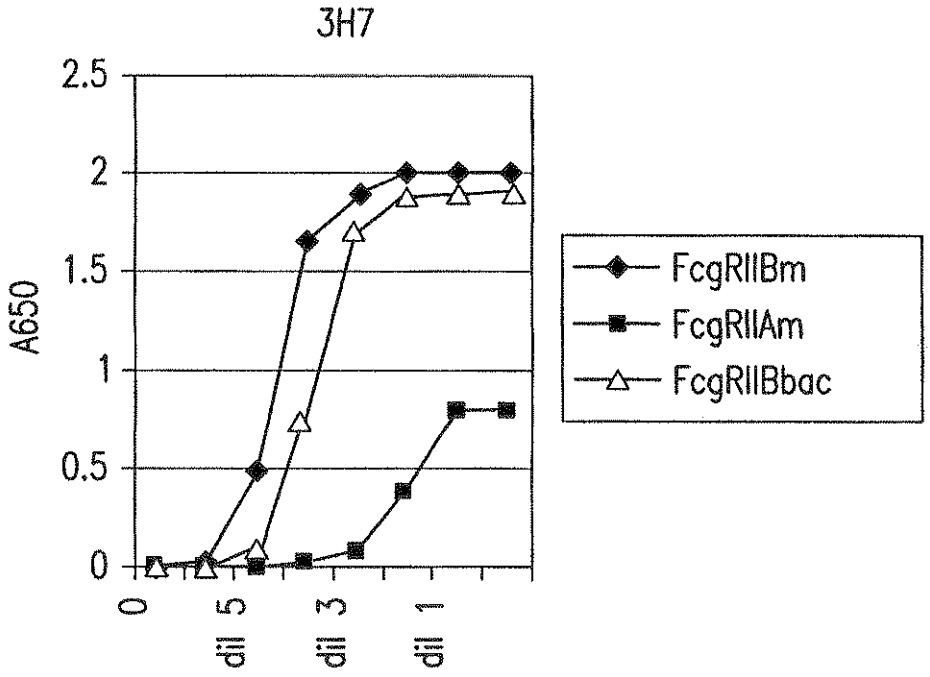

3H7
2.5
2
1.5
1
0.5
0
A650
0
dil 5
dil 3
dil 1
FcgRIIBm
FcgRIIAm
FcgRIIBbac

FIG.3

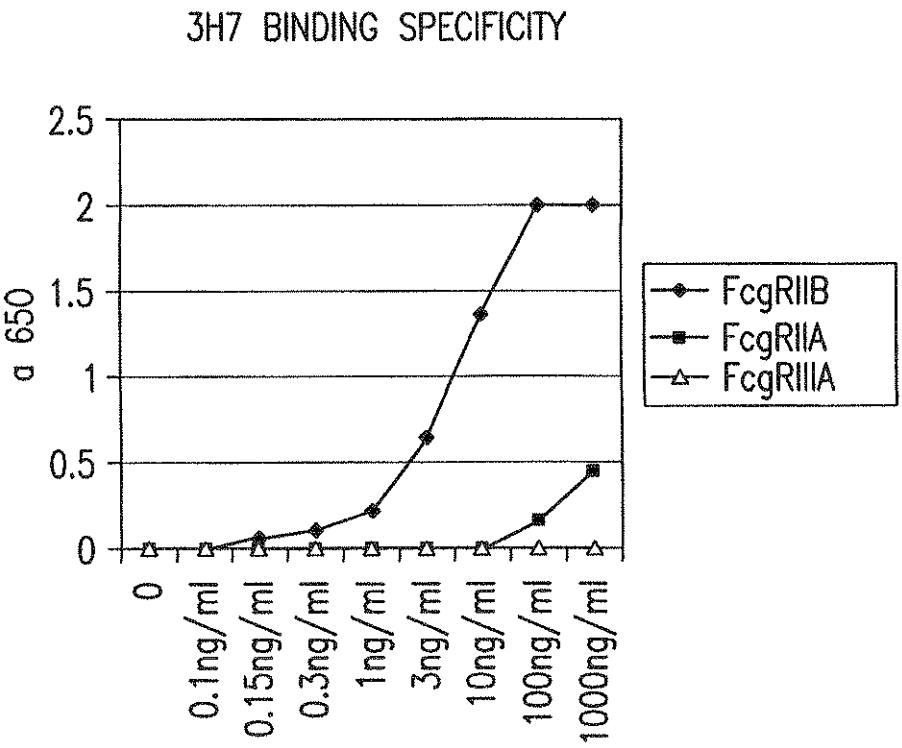

3H7 BINDING SPECIFICITY
a 650
2.5
2
1.5
1
0.5
0
0
0.1ng/ml
0.15ng/ml
0.3ng/ml
1ng/ml
3ng/ml
10ng/ml
100ng/ml
1000ng/ml
FcgRIIB
FcgRIIA
FcgRIIIA

FIG.4

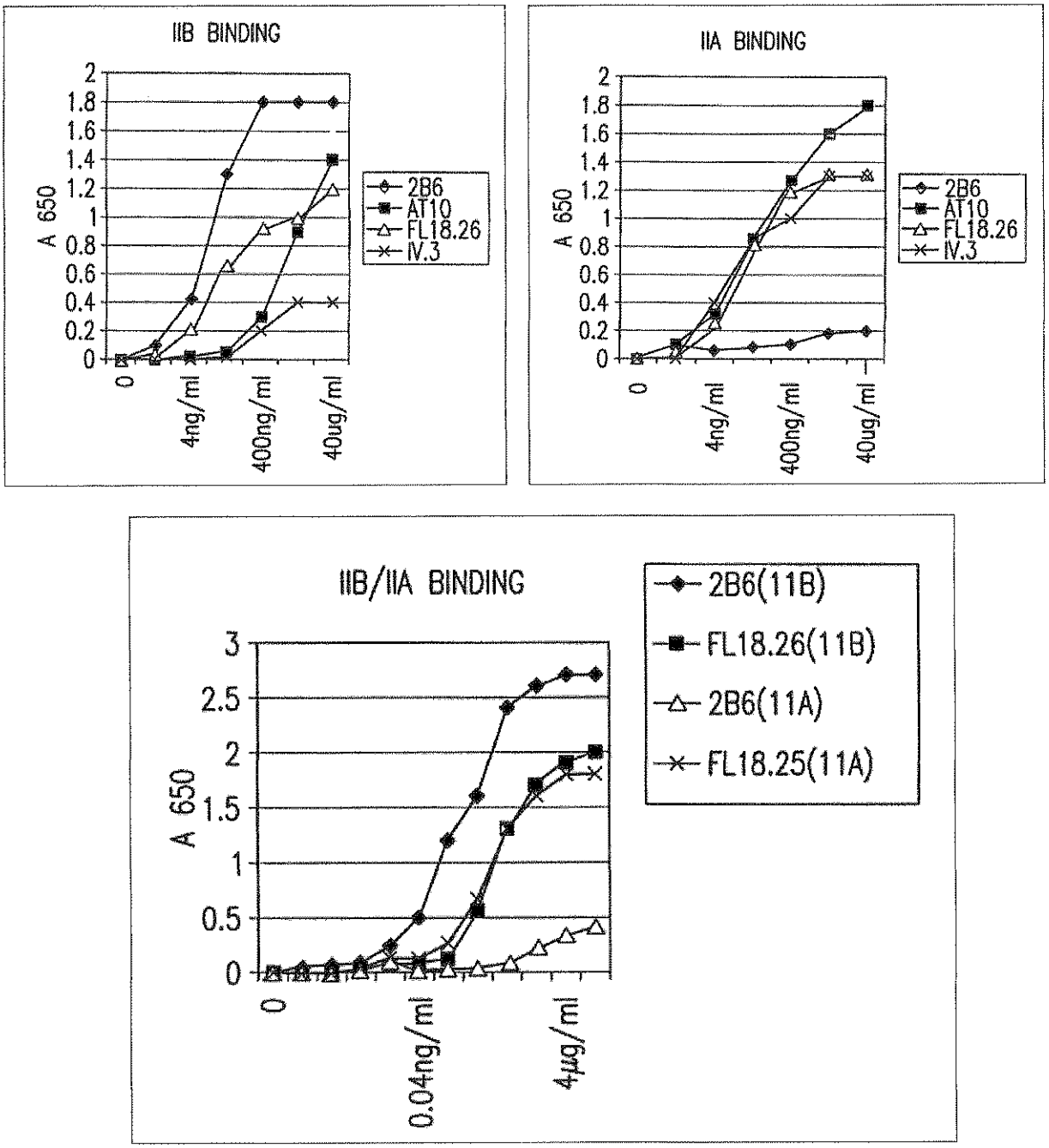

IIB BINDING
A 650
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
4ng/ml
400ng/ml
40ug/ml
2B6
AT10
FL18.26
IV.3
IIA BINDING
A 650
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
4ng/ml
400ng/ml
40ug/ml
2B6
AT10
FL18.26
IV.3
IIB/IIA BINDING
A 650
3
2.5
2
1.5
1
0.5
0
0
0.04ng/ml
4µg/ml
2B6(11B)
FL18.26(11B)
2B6(11A)
FL18.25(11A)

FIG. 5

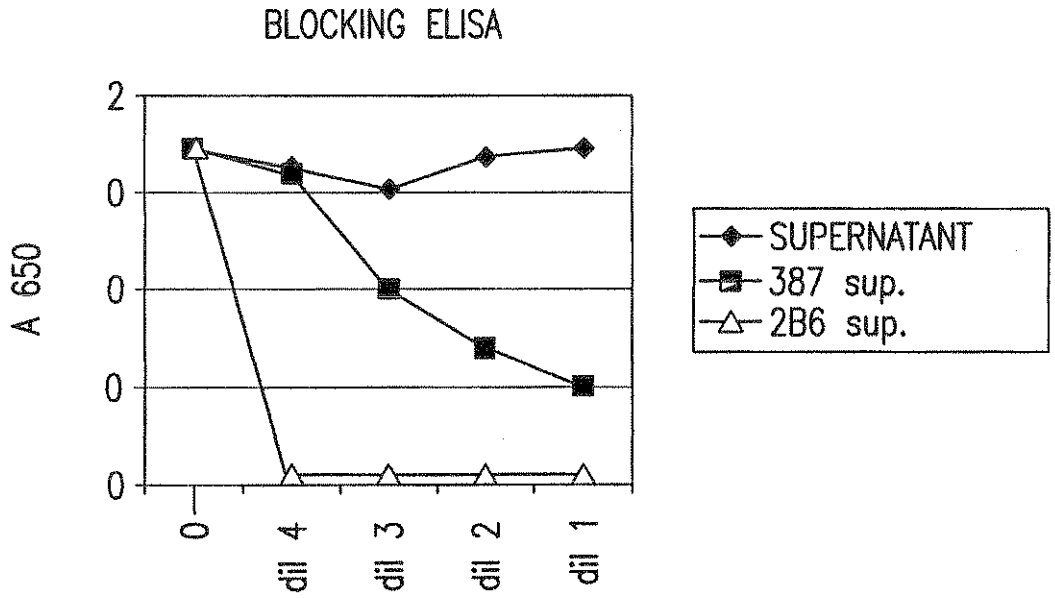

BLOCKING ELISA
A 650
2
0
0
0
0
0
dil 4
dil 3
dil 2
dil 1
SUPERNATANT
387 sup.
2B6 sup.

FIG.6A

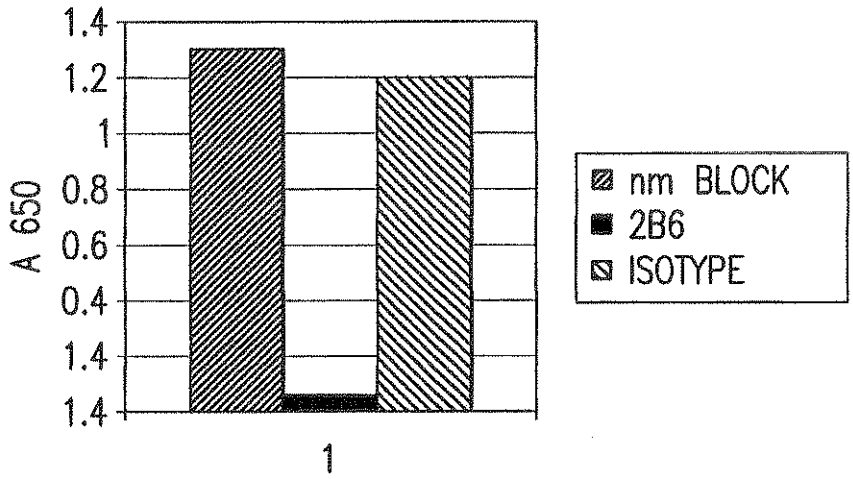

A 650
1.4
1.2
1
0.8
0.6
0.4
1.4
1.4
1
nm BLOCK
2B6
ISOTYPE

FIG.6B

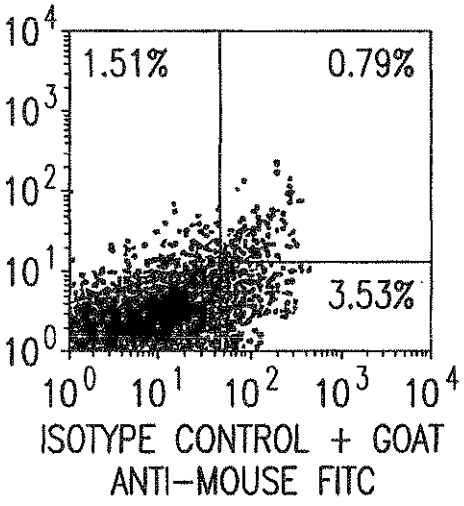


FIG.7A

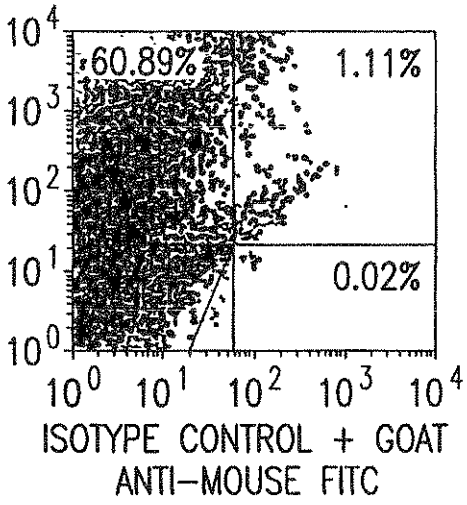


FIG.7B

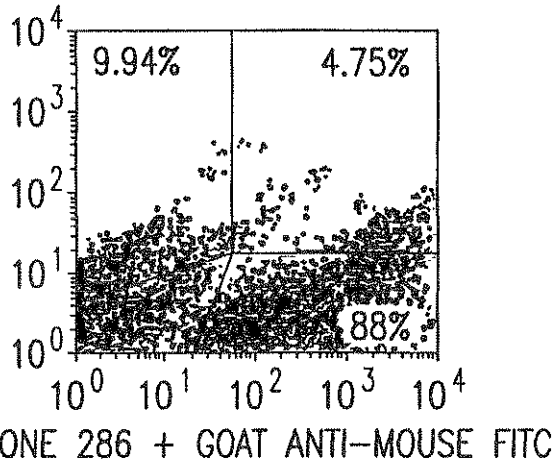


FIG.7C

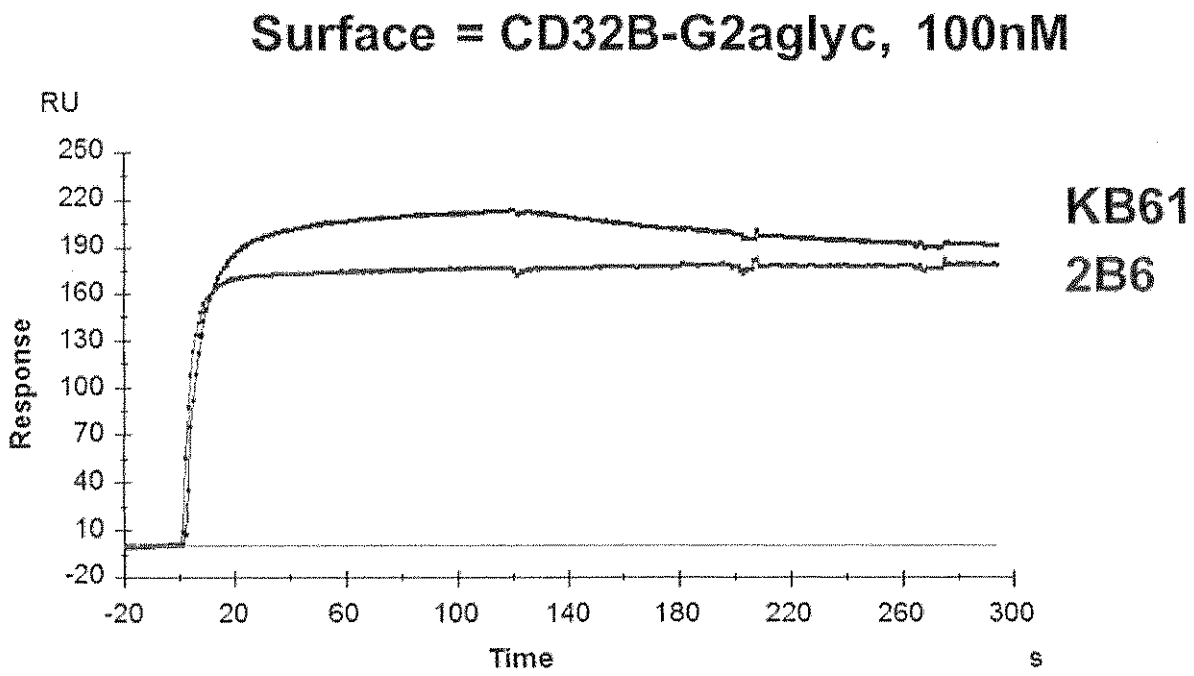


Figure 8A

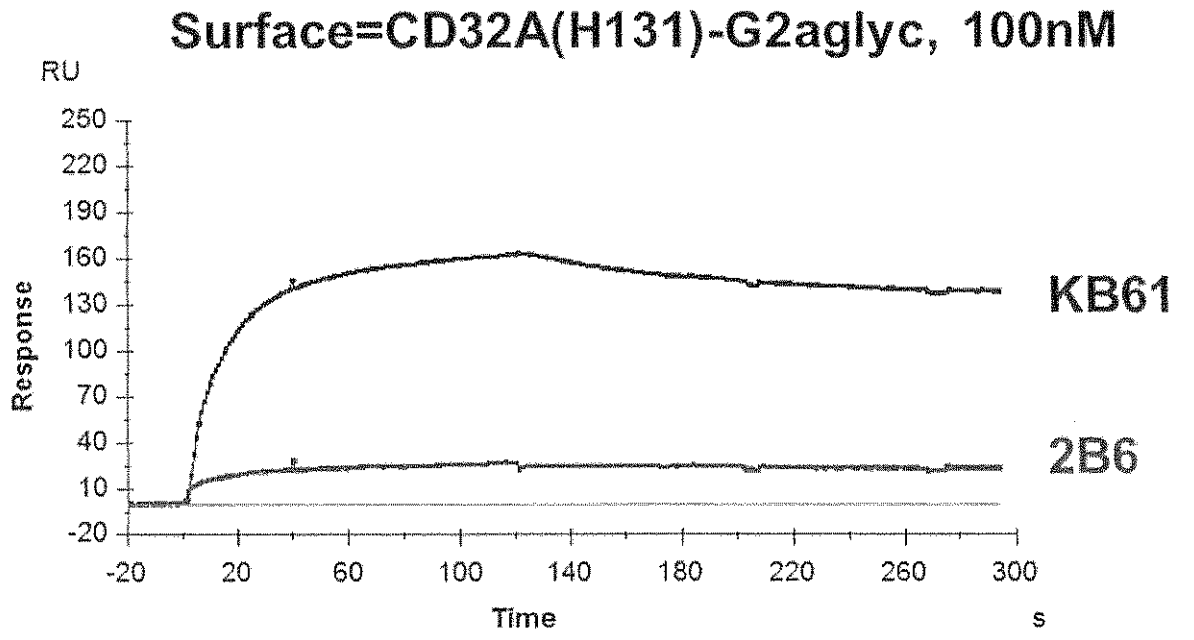


Figure 8B

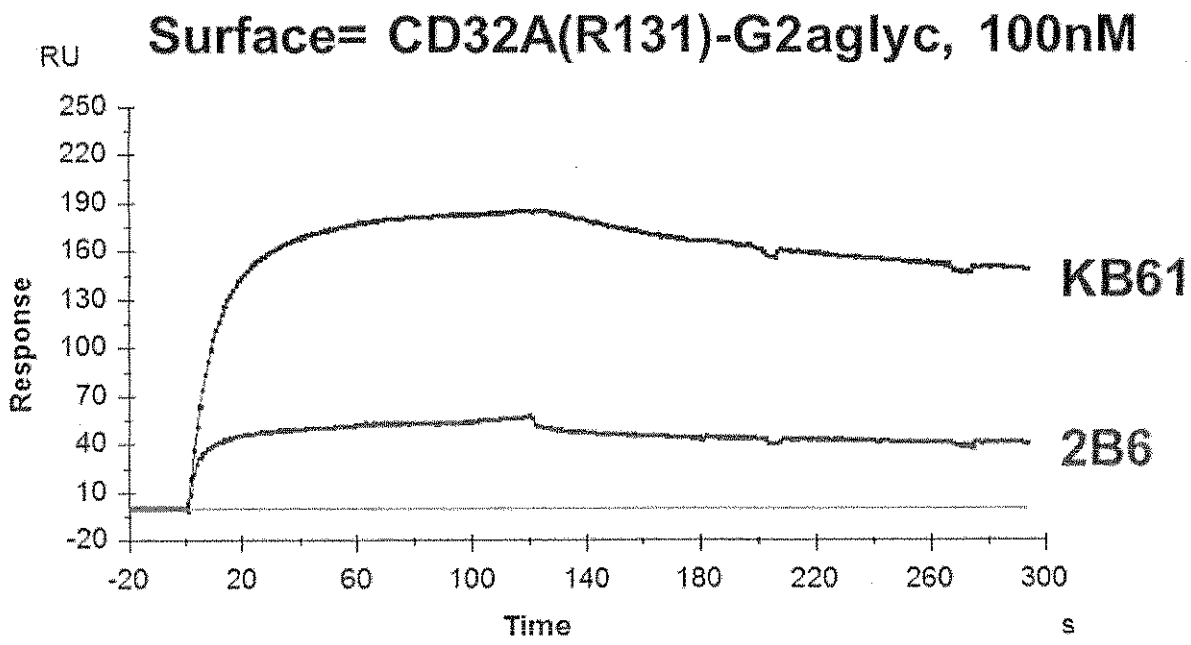

Surface= CD32A(R131)-G2aglyc, 100nM
RU
250
220
190
160
130
100
70
40
10
-20
Response
KB61
2B6
-20
20
60
100
140
180
220
260
300
Time
s

Figure 8C

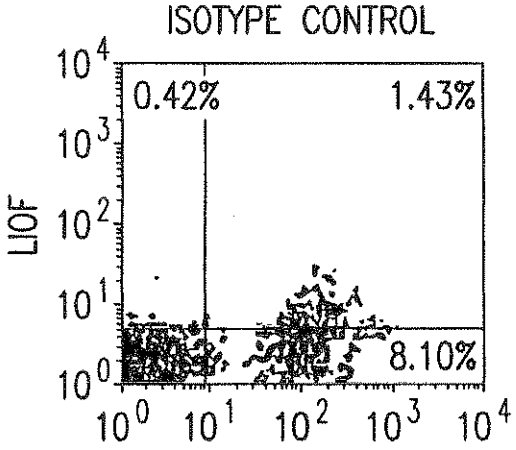


FIG. 9A

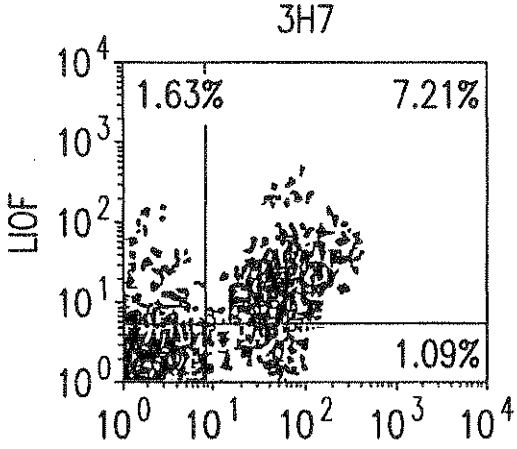


FIG. 9B

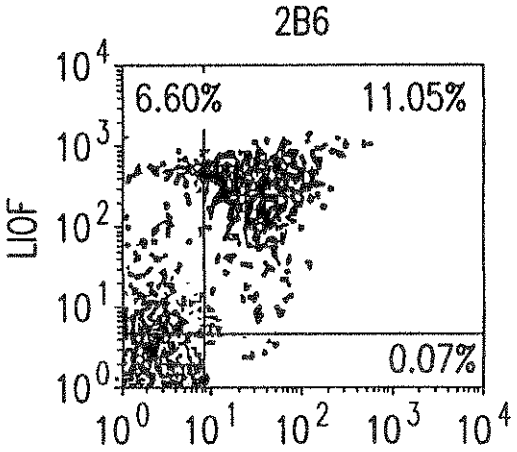


FIG. 9C

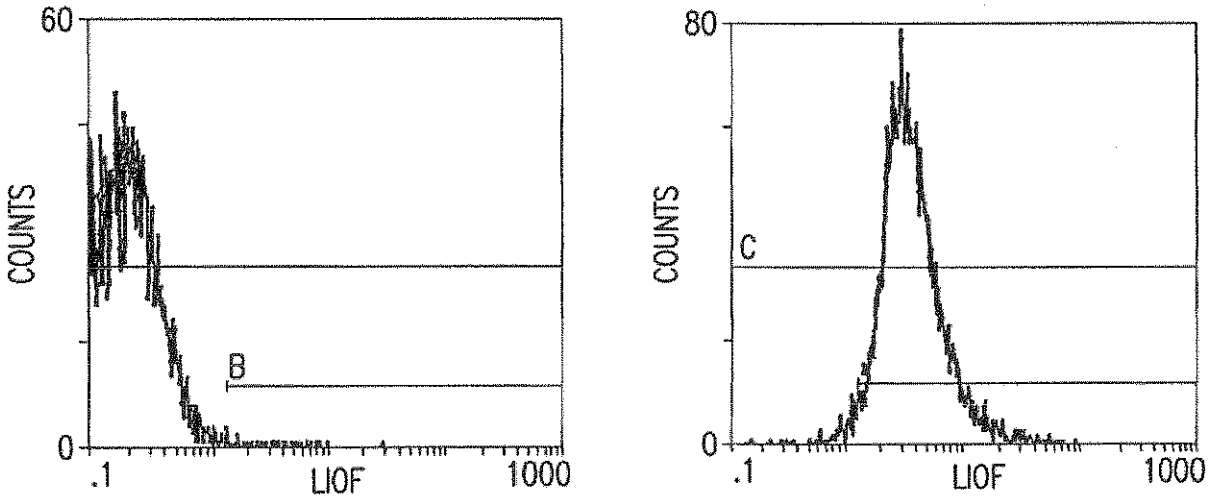


FIG. 10A

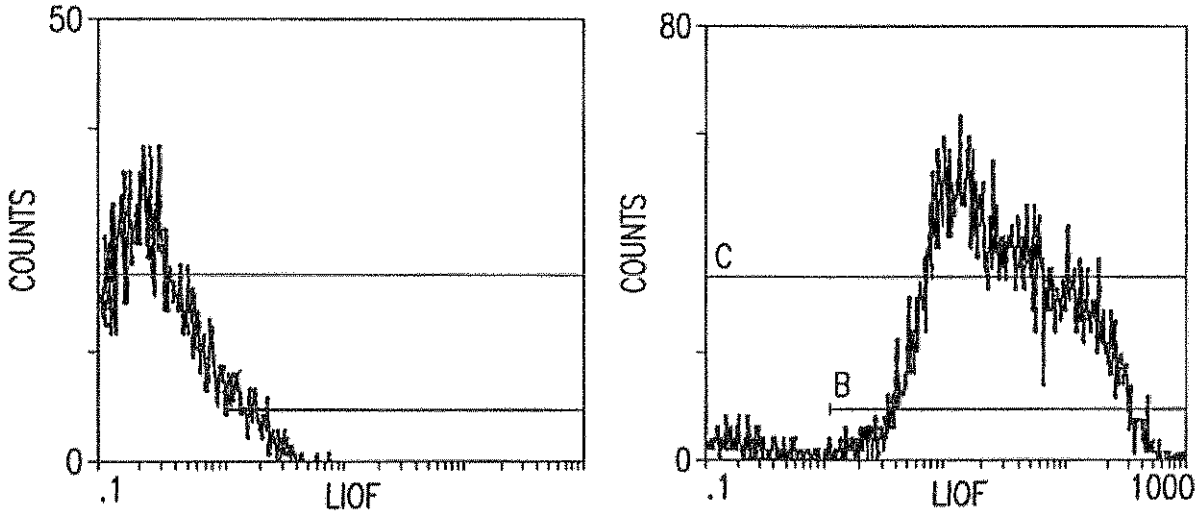


FIG. 10B

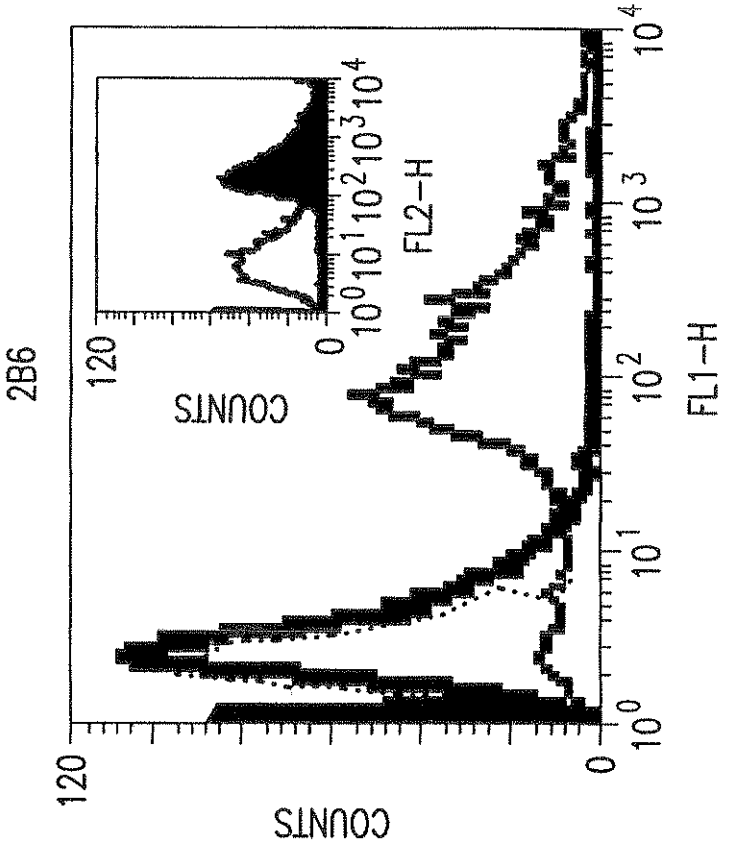


FIG. 11B

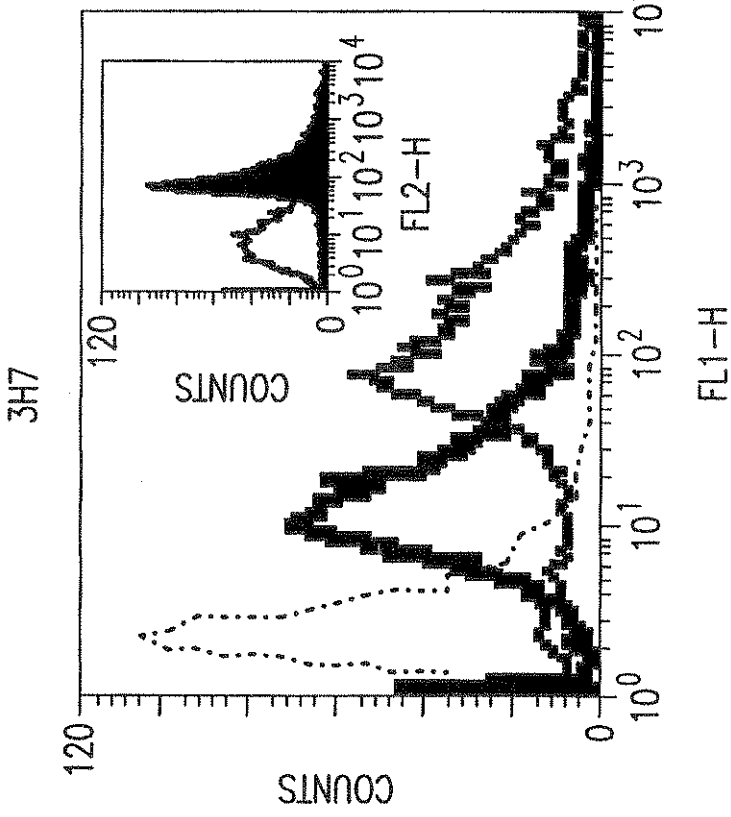


FIG. 11A

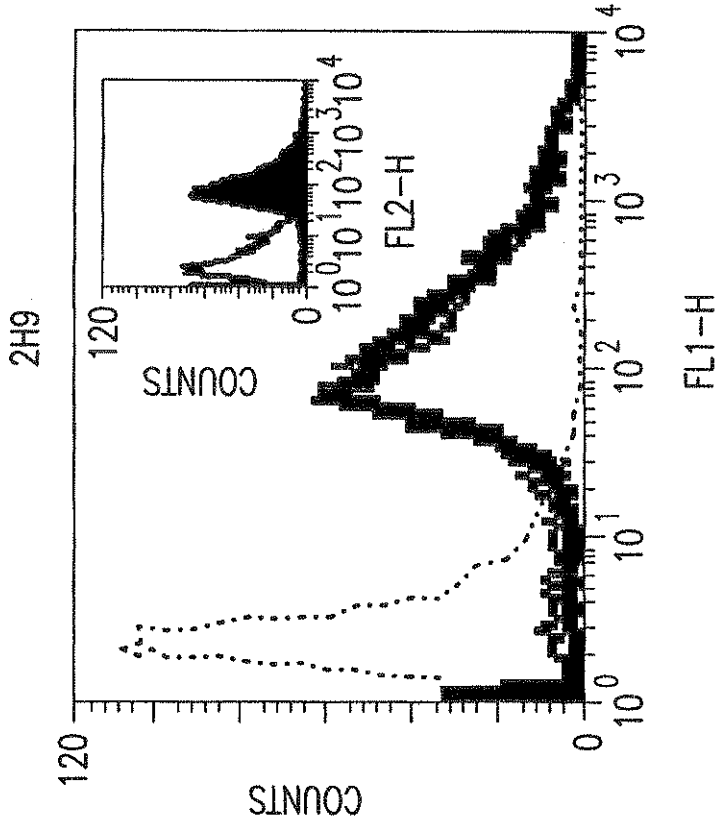


FIG. 11D

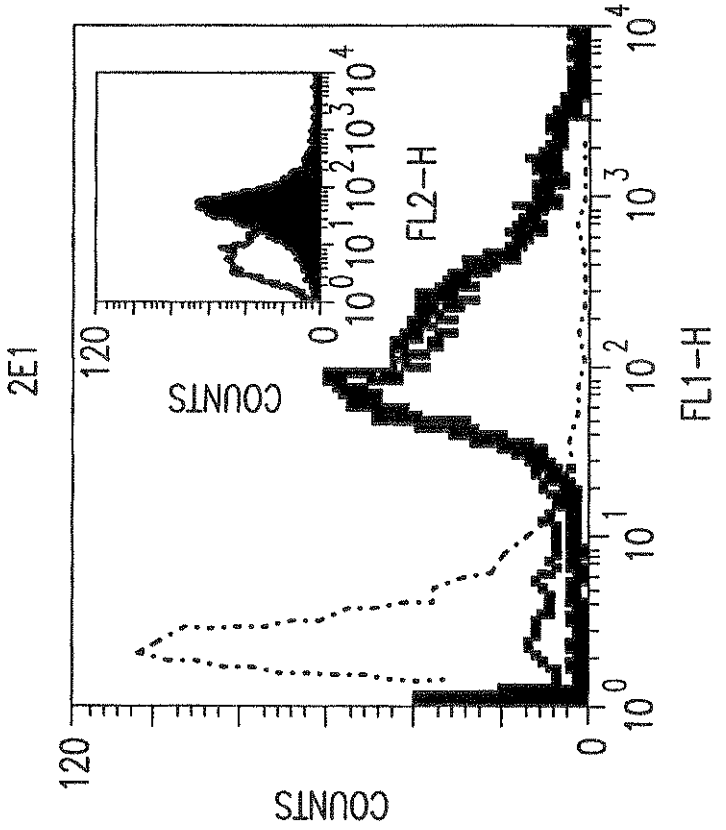


FIG. 11C

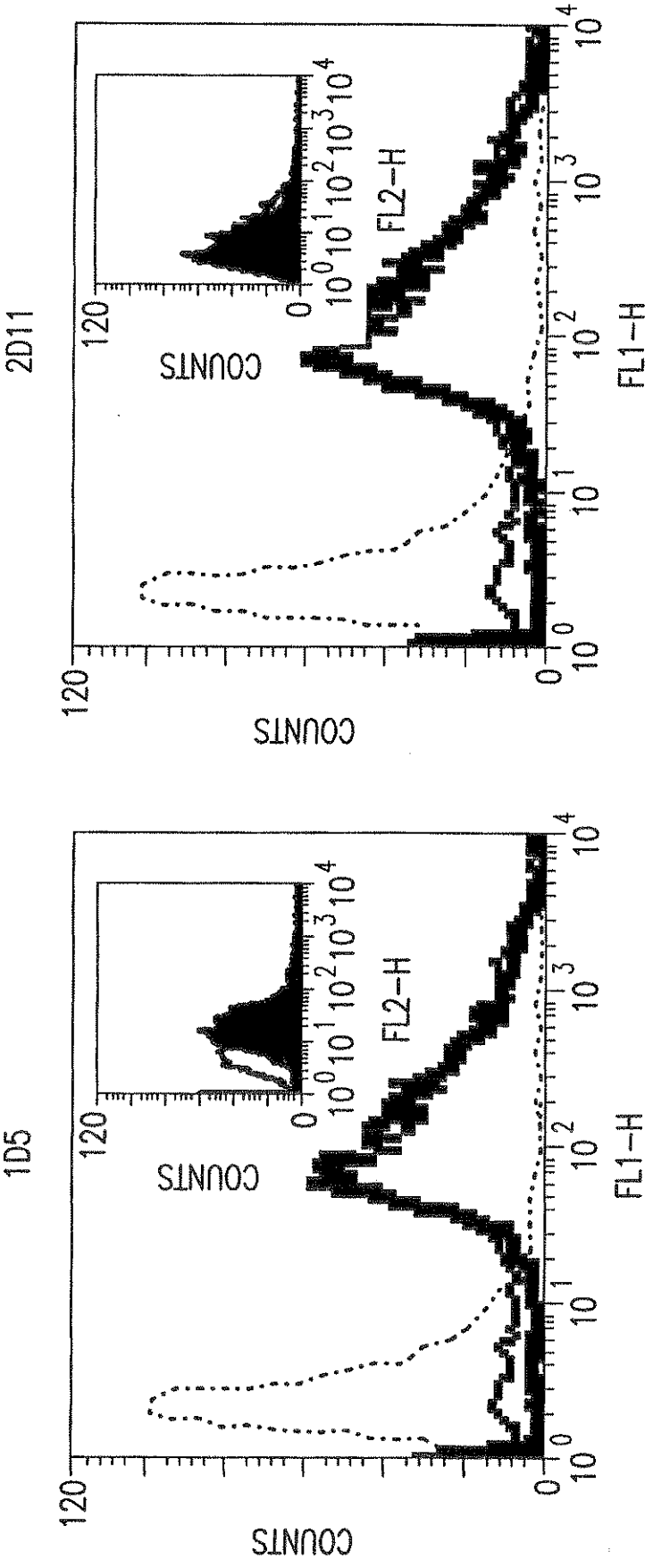


FIG. 11F

FIG. 11E

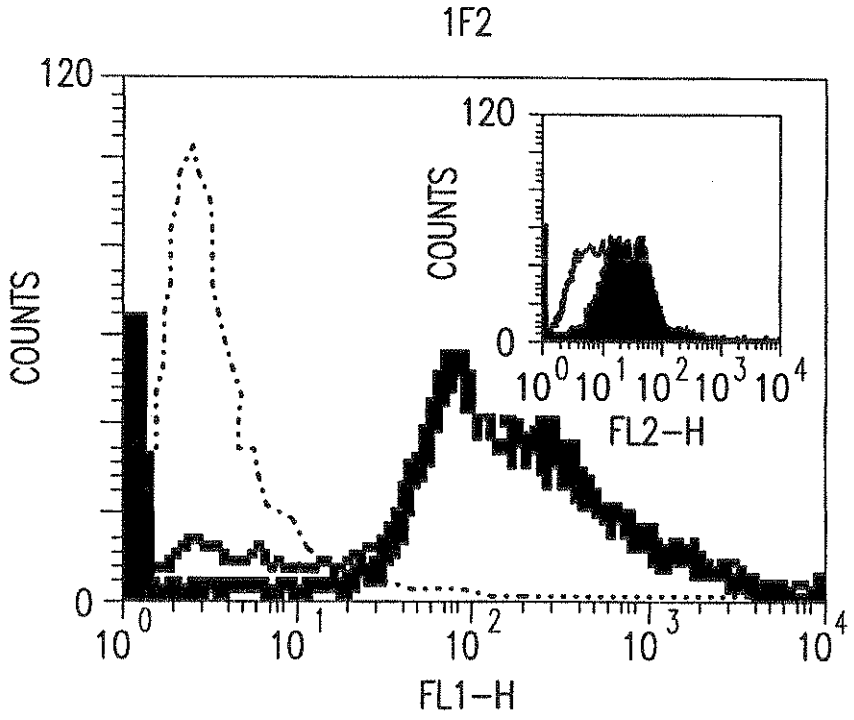
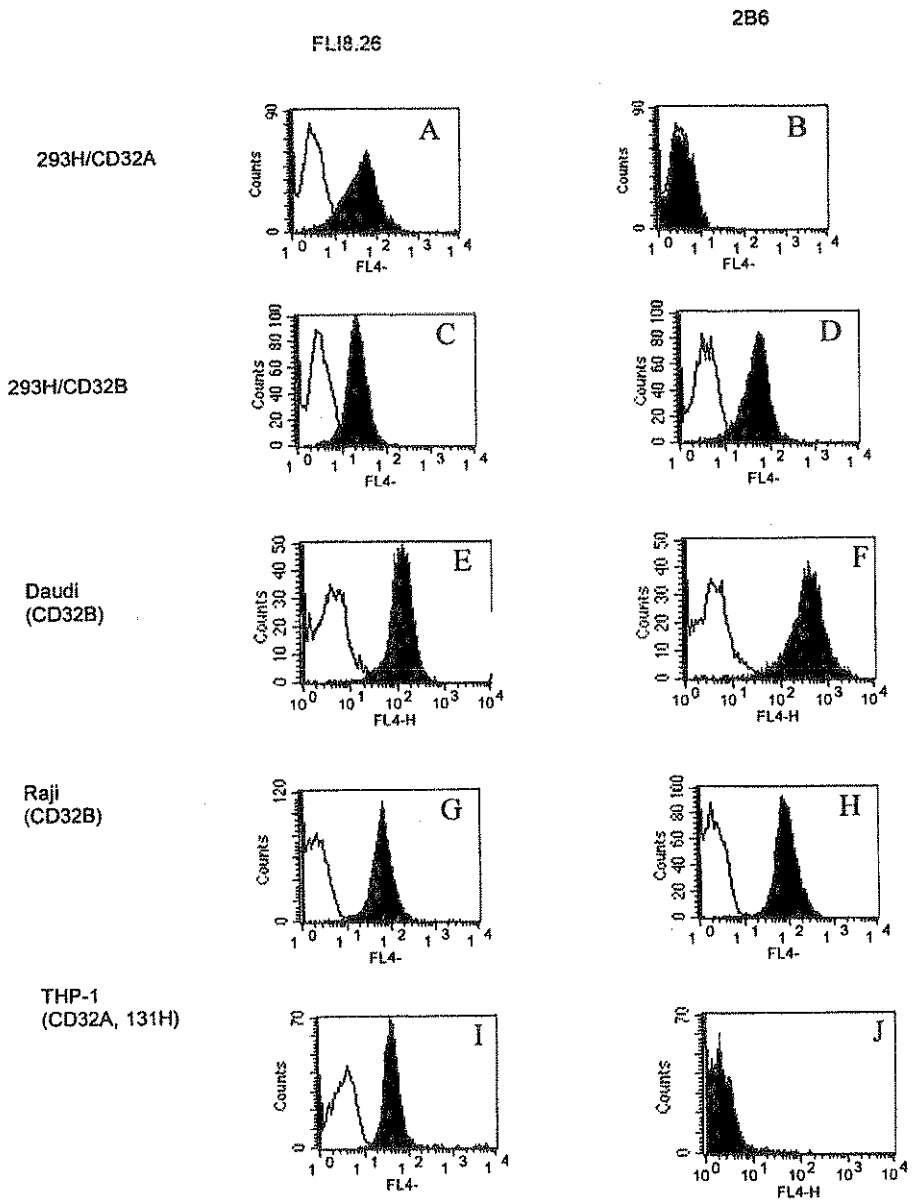

1F2
120
COUNTS
0
10^0 10^1 10^2 10^3 10^4
FL1-H
120
COUNTS
0
10^0 10^1 10^2 10^3 10^4
FL2-H

FIG. 11G


FLI8.26
2B6
293H/CD32A
293H/CD32B
Daudi
(CD32B)
Raji
(CD32B)
THP-1
(CD32A, 131H)
A
B
C
D
E
F
G
H
I
J
Counts
FL4-
FL4-H

FIGS. 12A-12J

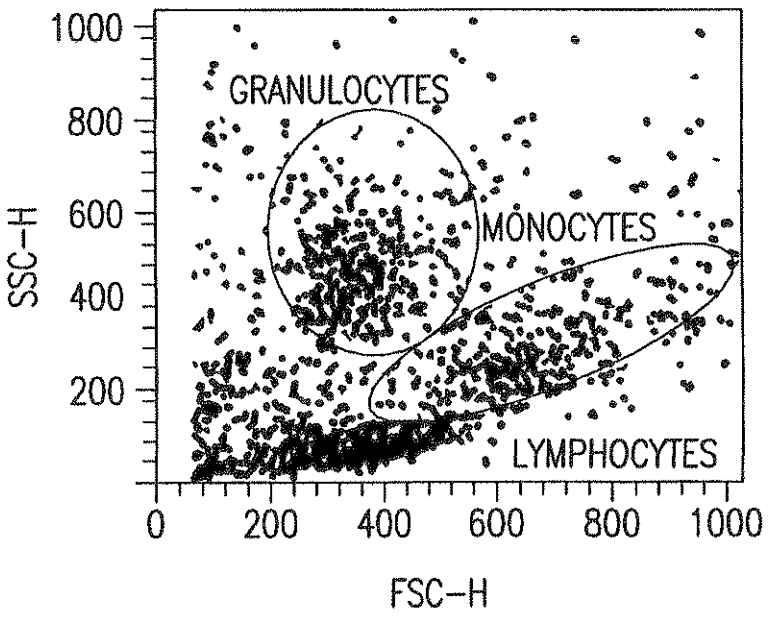

1000
800
600
400
200
SSC-H
GRANULOCYTES
MONOCYTES
LYMPHOCYTES
0
200
400
600
800
1000
FSC-H

FIG. 13A

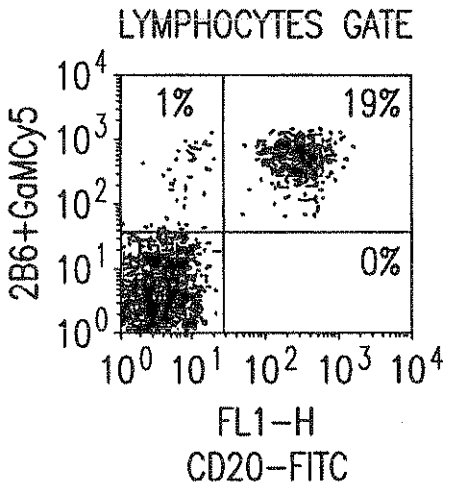


FIG. 13B

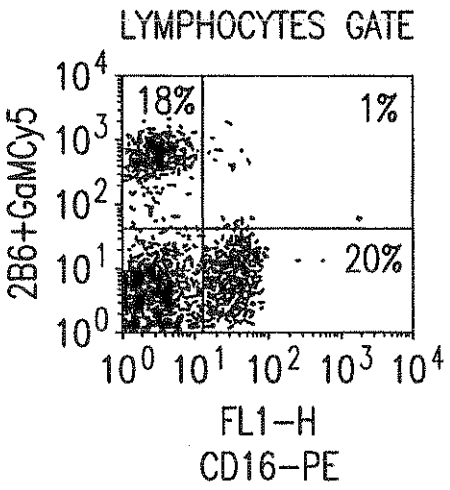


FIG. 13C

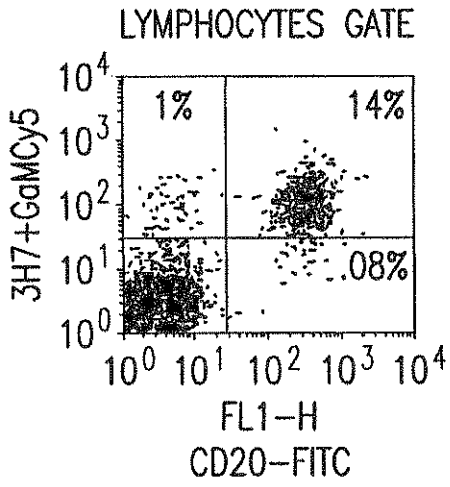


FIG. 13D

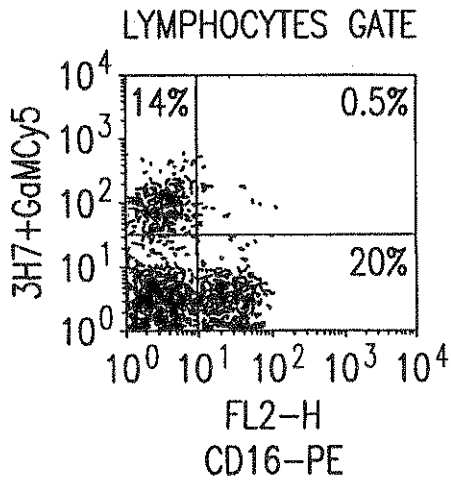


FIG. 13E

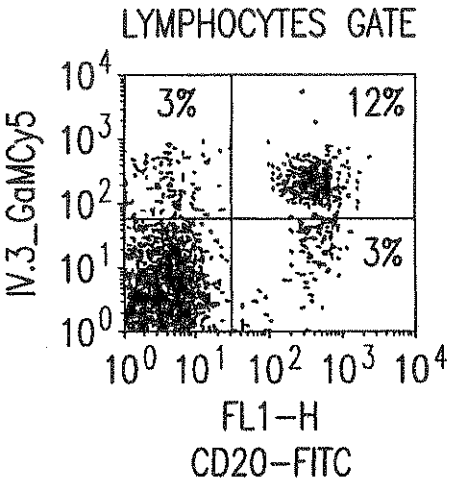


FIG. 13F

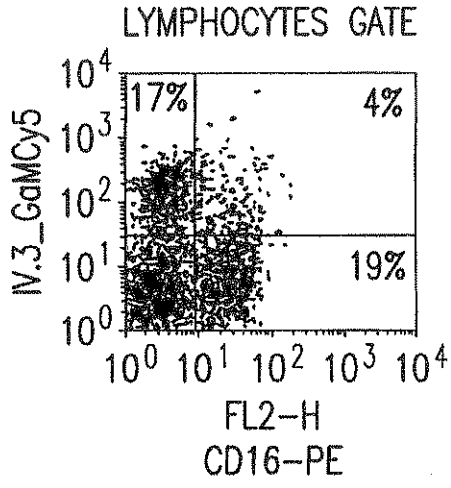


FIG. 13G

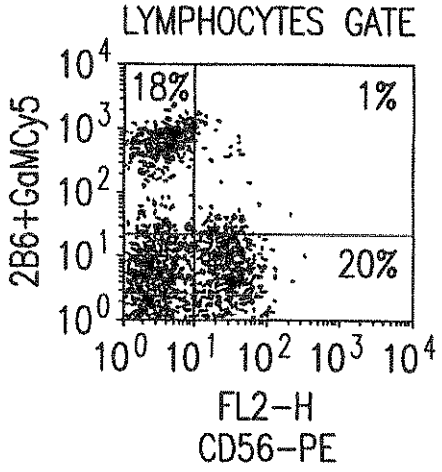


FIG. 13H

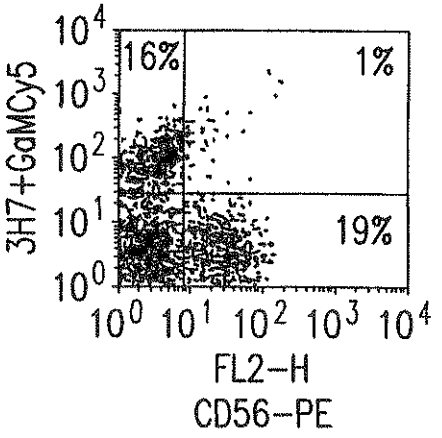


FIG. 13I

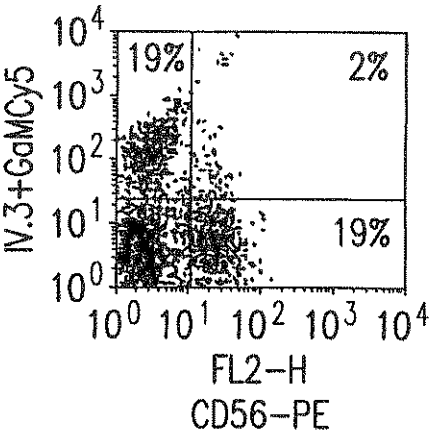


FIG. 13J

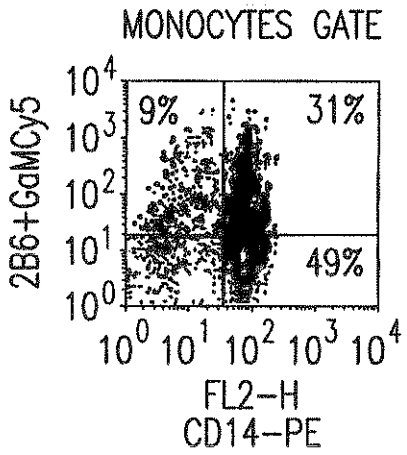


FIG. 13K

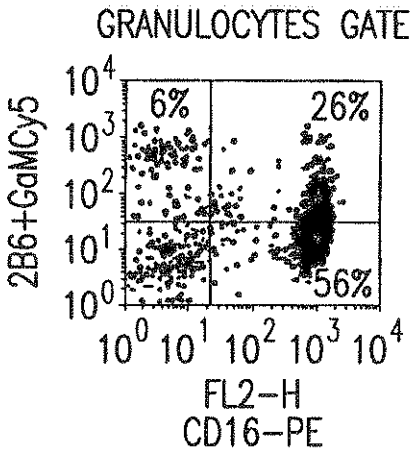


FIG. 13L

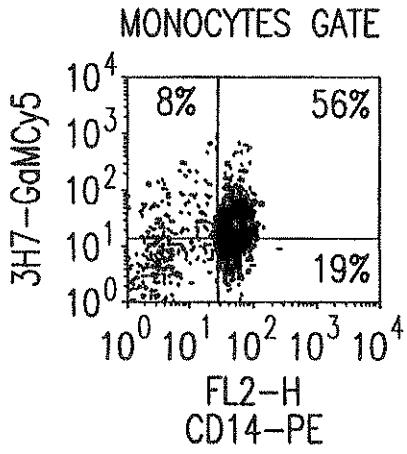


FIG. 13M

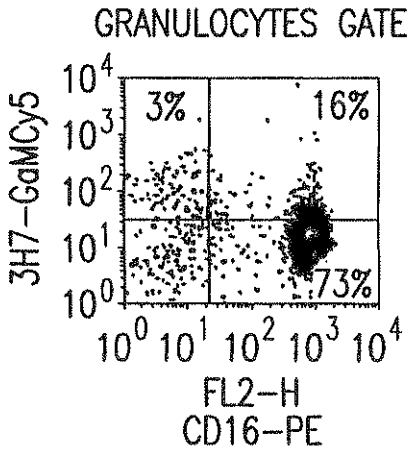


FIG. 13N

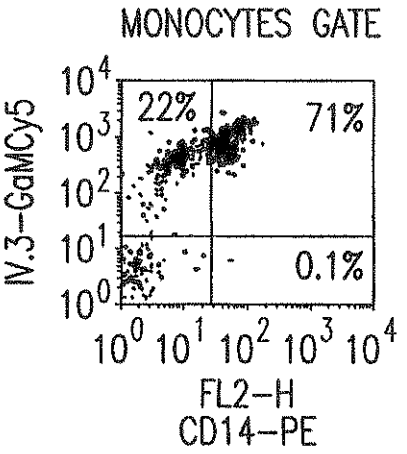


FIG. 13O

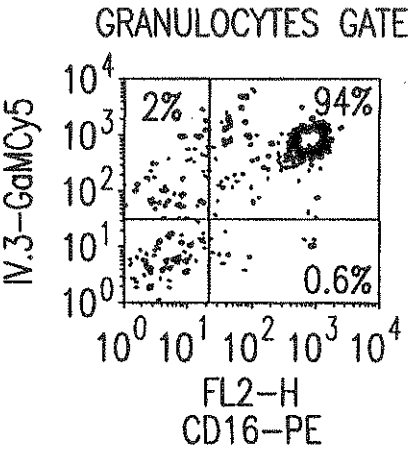
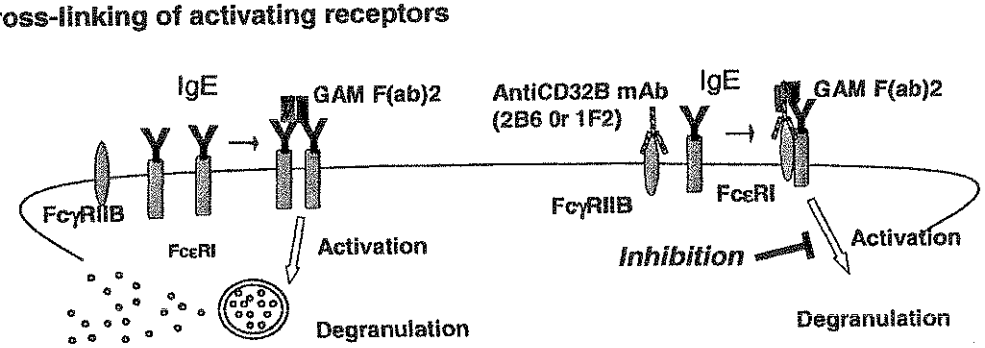
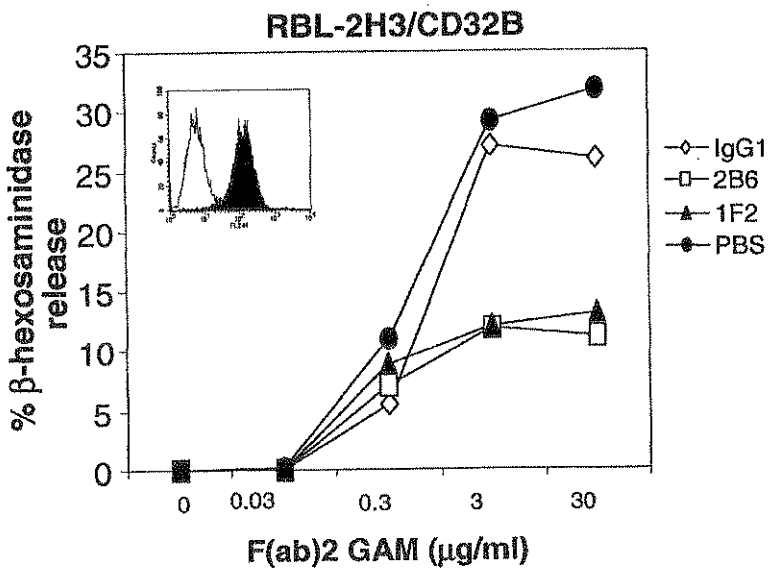


FIG. 13P

A



B



FIGS. 14A AND 14B

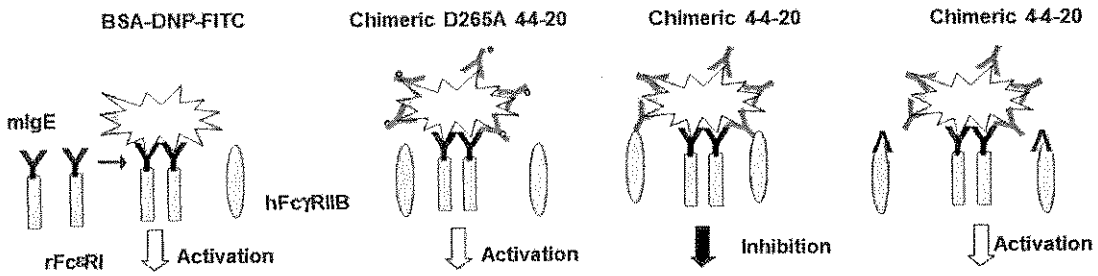


Figure 15A

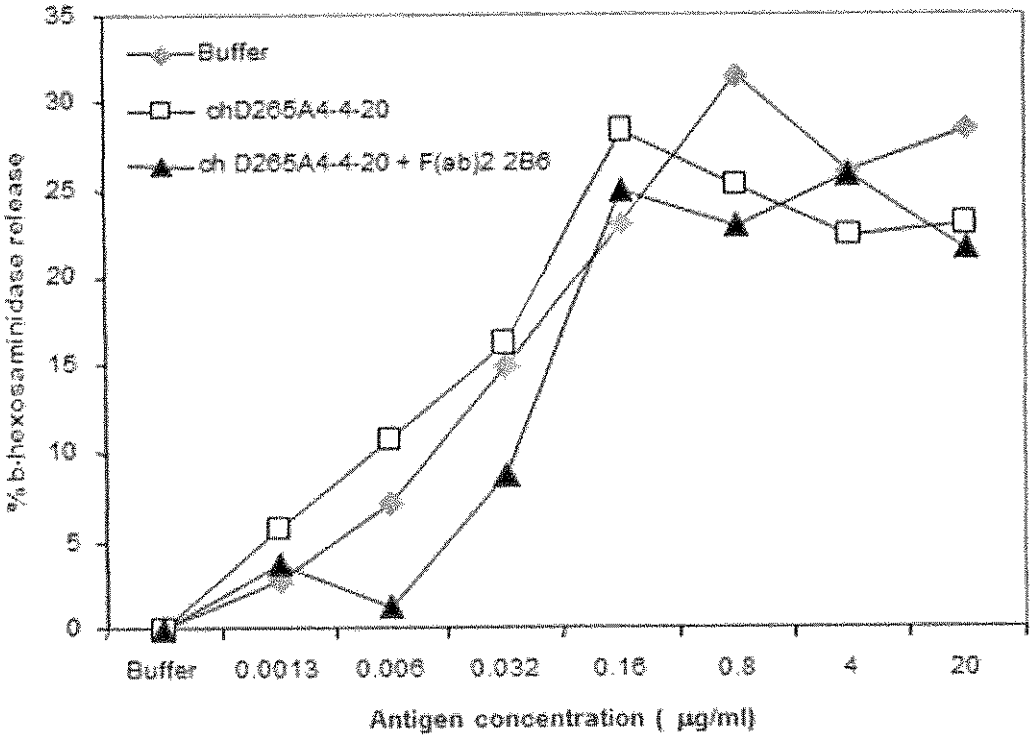


Figure 15B

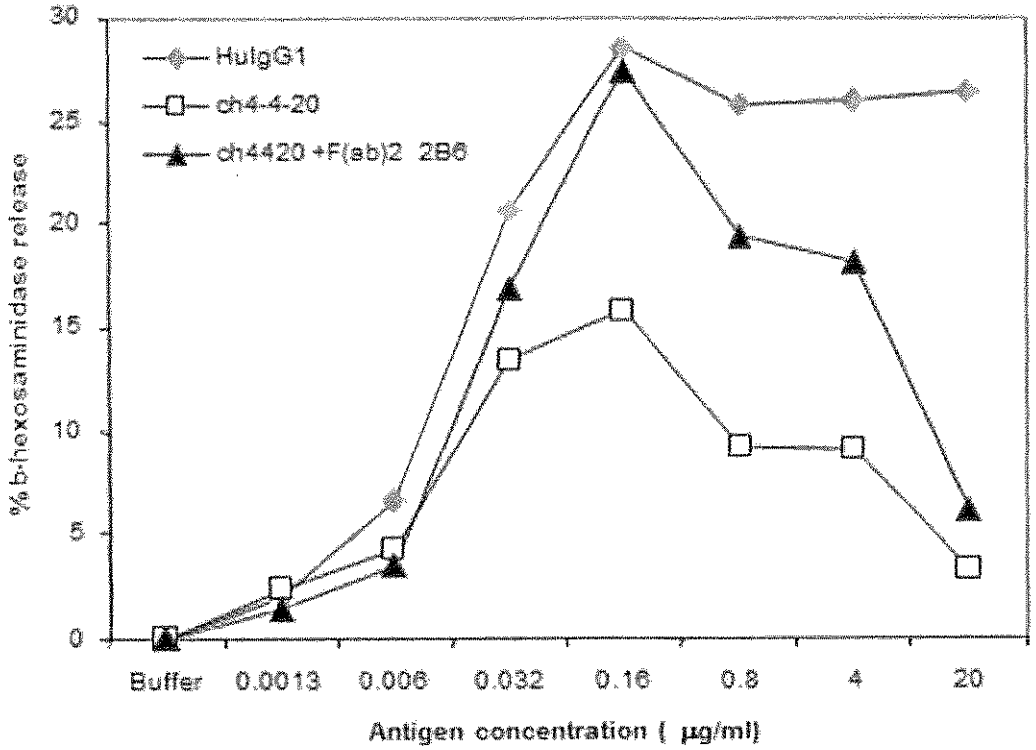

HuIgG1
ch4-4-20
ch4420 +F(ab)2 2B6
% b-hexosaminidase release
30
25
20
15
10
5
0
Buffer
0.0013
0.006
0.032
0.16
0.8
4
20
Antigen concentration (µg/ml)

Figure 15C

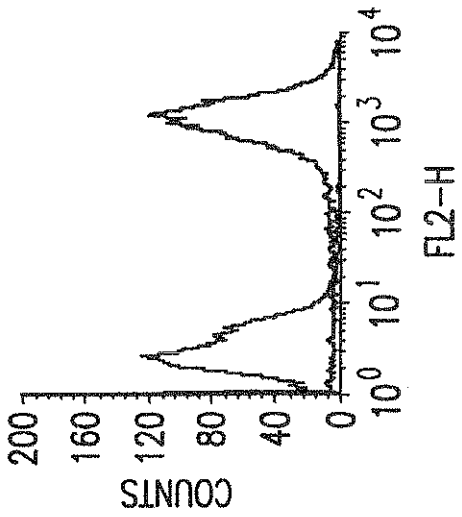


FIG. 16C

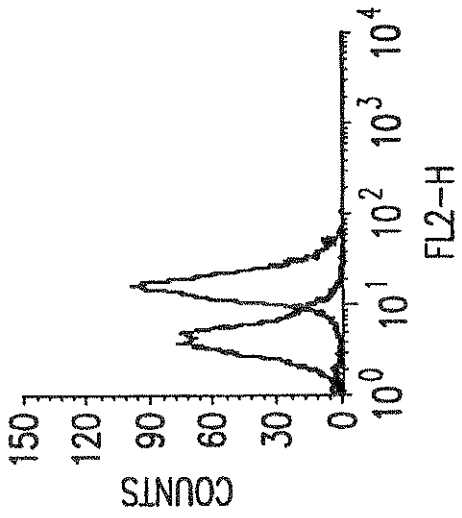


FIG. 16B

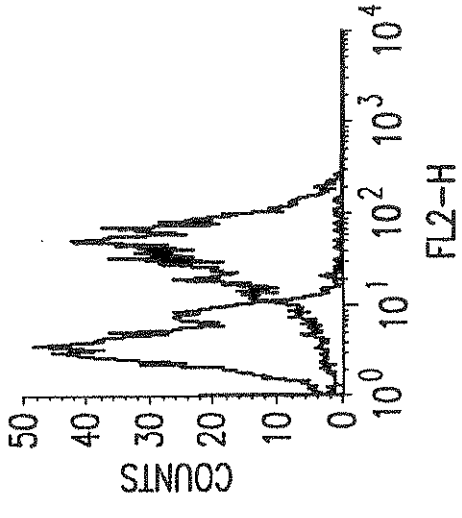


FIG. 16A

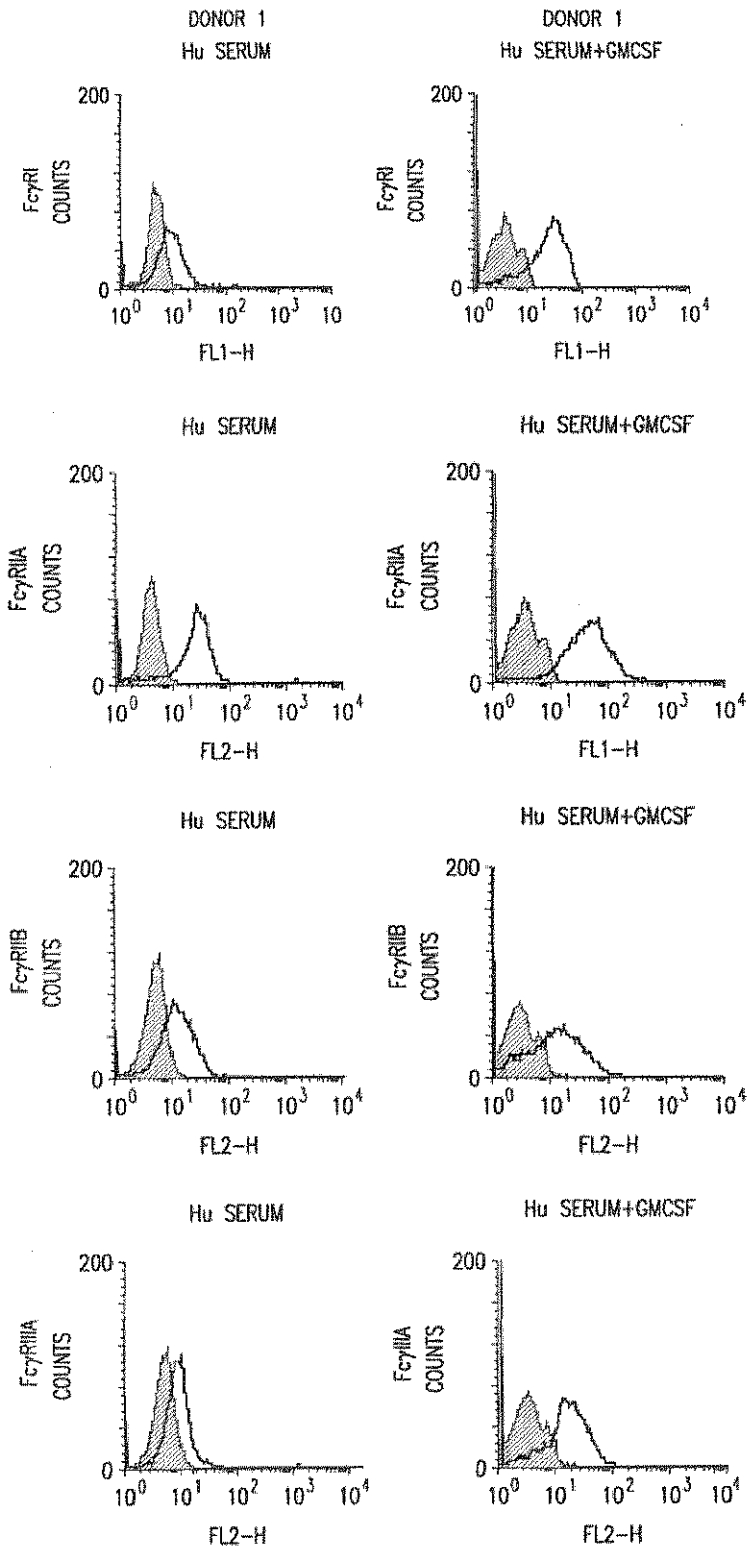

DONOR 1
Hu SERUM
DONOR 1
Hu SERUM+GMCSF
FcγRI COUNTS
200
0
FL1-H
Hu SERUM
Hu SERUM+GMCSF
FcγRIIA COUNTS
FL2-H
FL1-H
Hu SERUM
Hu SERUM+GMCSF
FcγRIIB COUNTS
FL2-H
Hu SERUM
Hu SERUM+GMCSF
FcγRIIIA COUNTS
FcγIIIA COUNTS
FL2-H

FIG. 17A

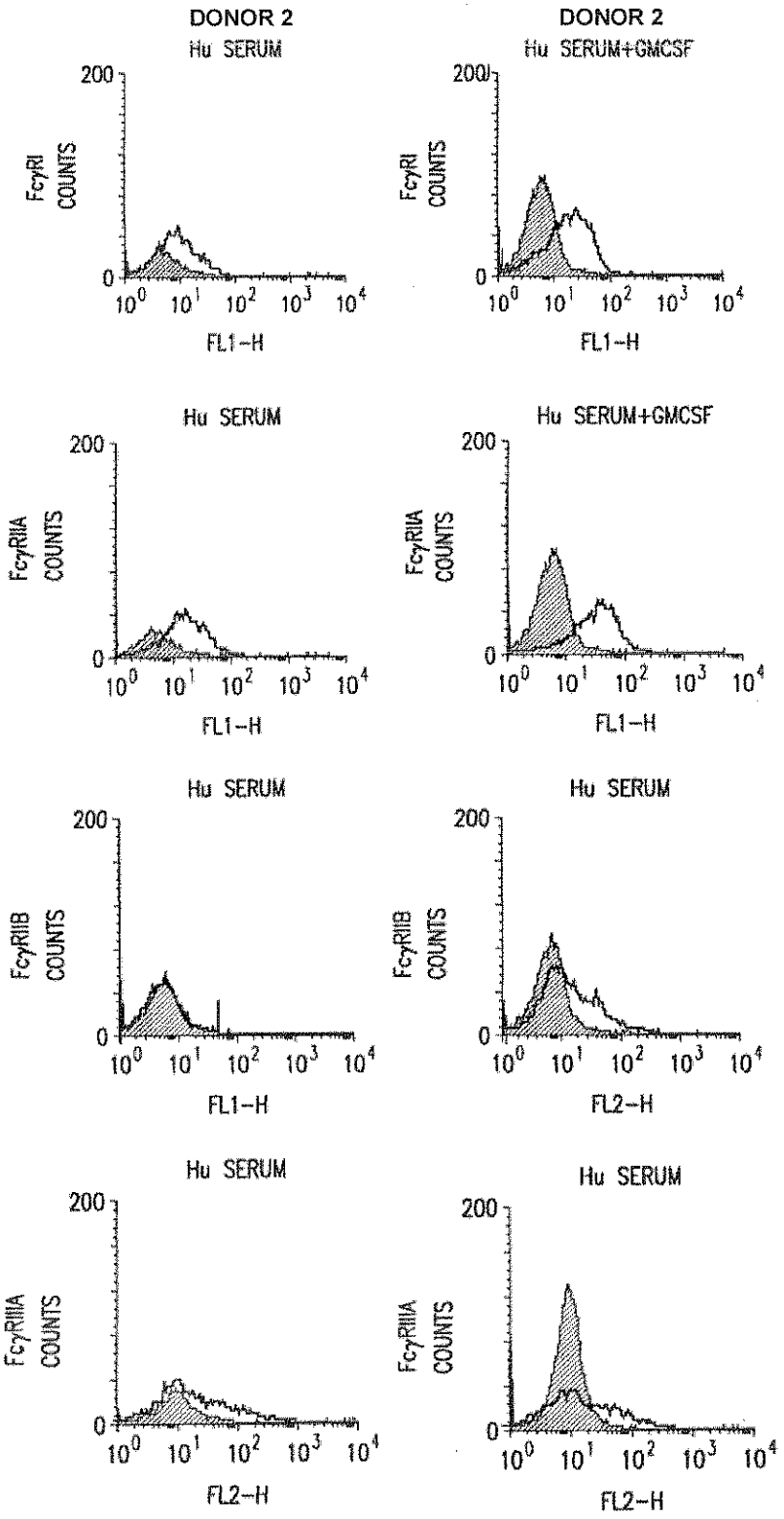

DONOR 2
Hu SERUM
DONOR 2
Hu SERUM+GMCSF
FcγRI COUNTS
FcγRIIA COUNTS
FcγRIIB COUNTS
FcγRIIIA COUNTS
200
0
10^0 10^1 10^2 10^3 10^4
FL1-H
FL2-H

FIG. 17B

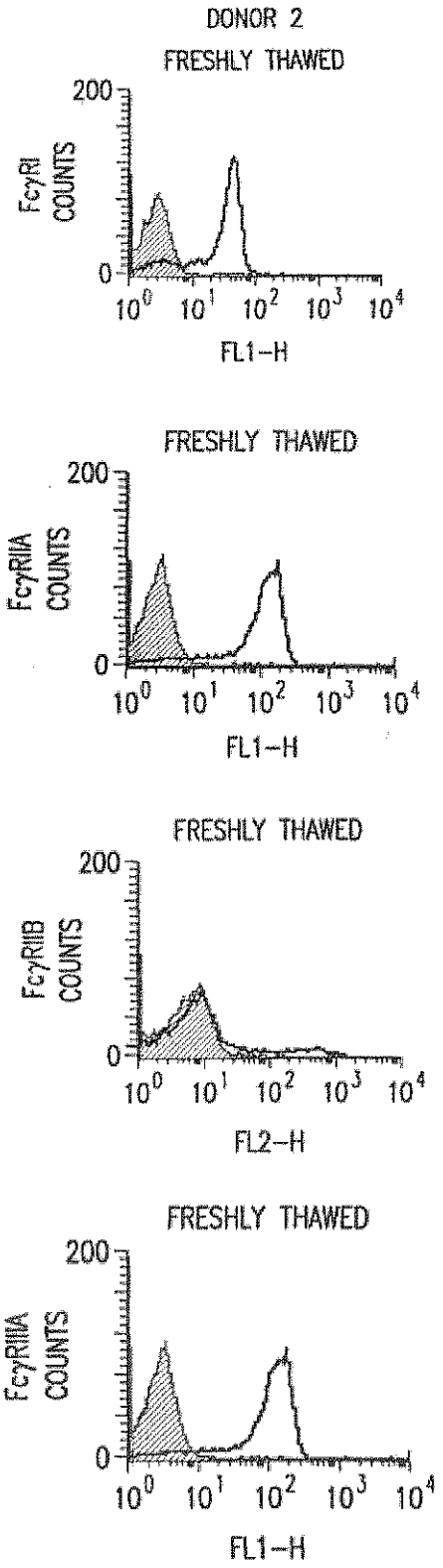

DONOR 2
FRESHLY THAWED
200
0
FcγRI COUNTS
10^0 10^1 10^2 10^3 10^4
FL1-H
FRESHLY THAWED
200
0
FcγRIIA COUNTS
10^0 10^1 10^2 10^3 10^4
FL1-H
FRESHLY THAWED
200
0
FcγRIIB COUNTS
10^0 10^1 10^2 10^3 10^4
FL2-H
FRESHLY THAWED
200
0
FcγRIIIA COUNTS
10^0 10^1 10^2 10^3 10^4
FL1-H

FIG. 17C

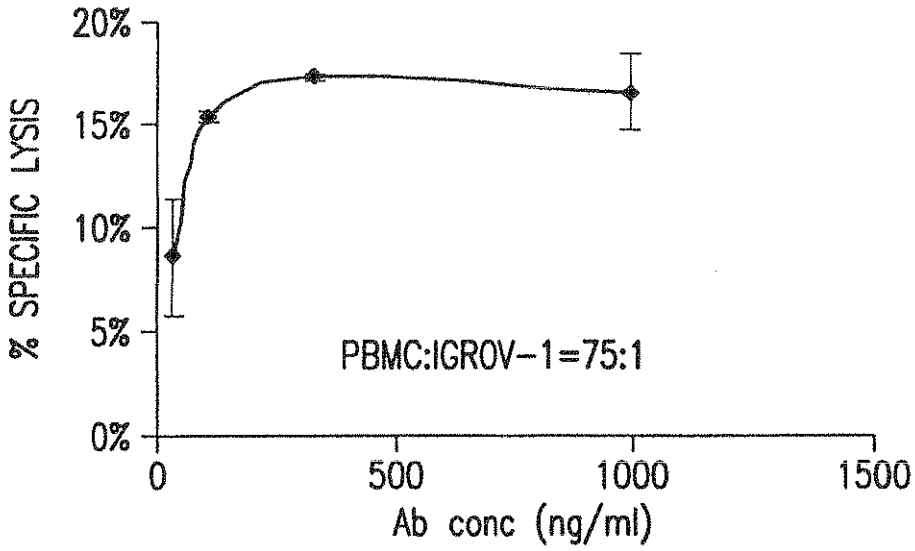


FIG. 18A

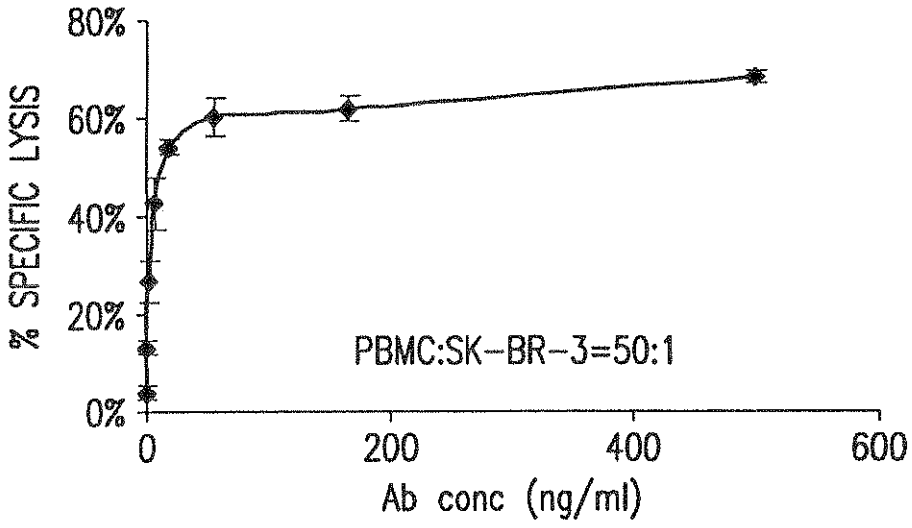


FIG. 18B

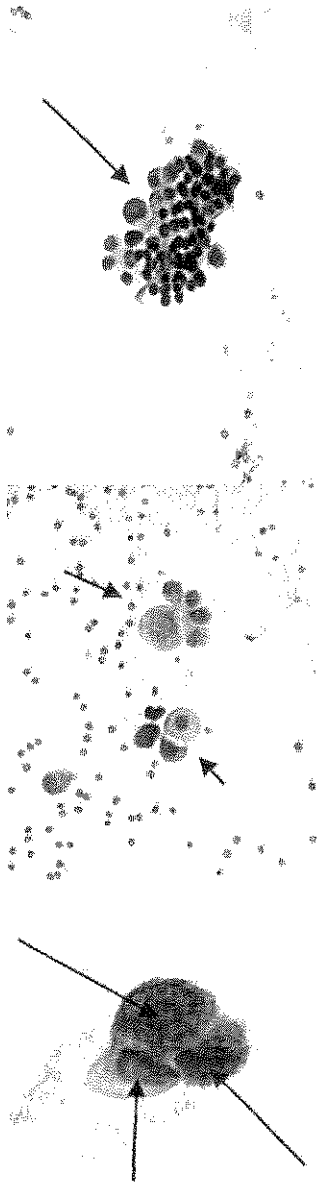


Fig. 19C

Fig 19B

Fig. 19A

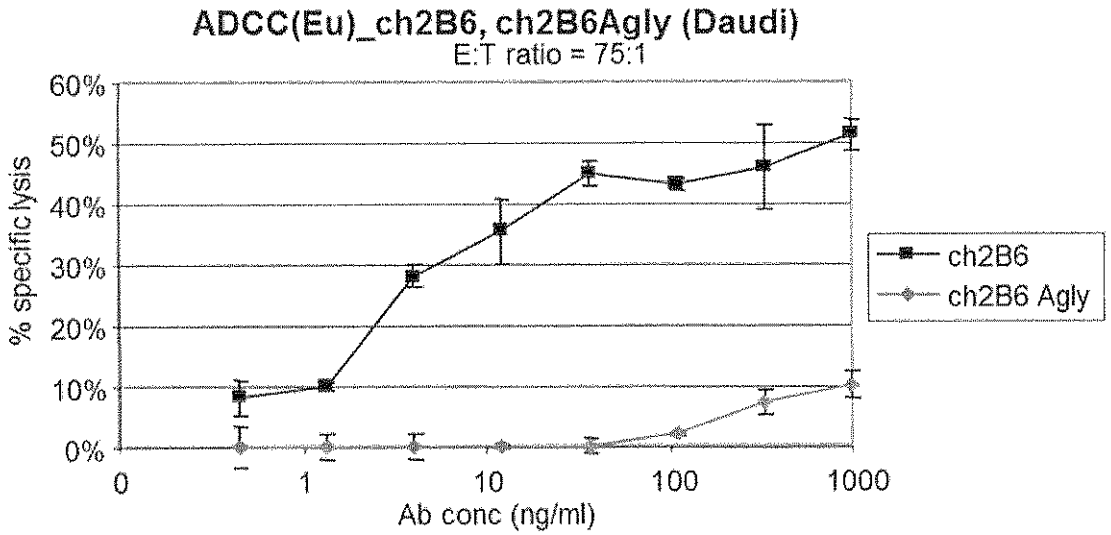


Figure 20

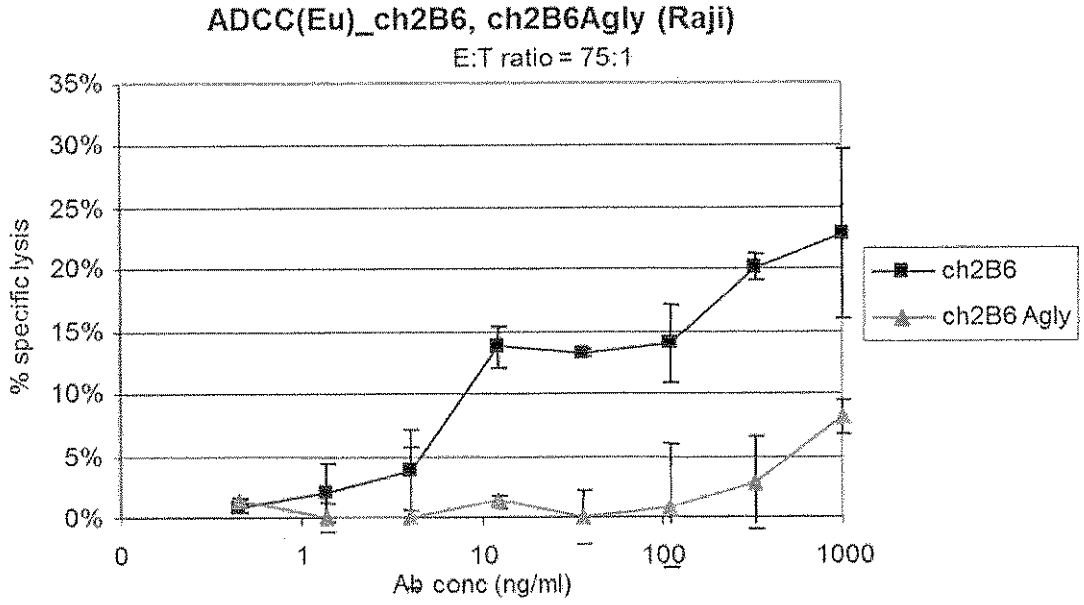


Figure 21

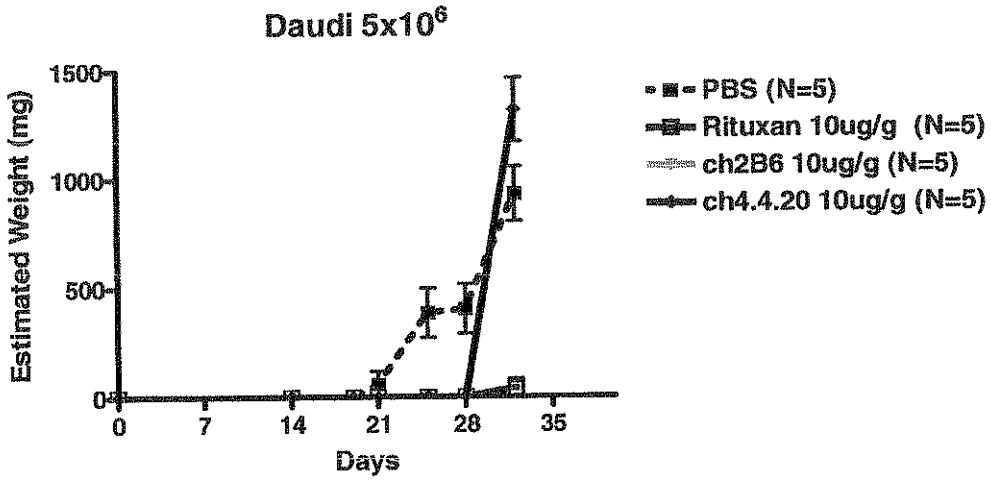

Daudi 5x10^6
Estimated Weight (mg)
1500
1000
500
0
0
7
14
21
28
35
Days
PBS (N=5)
Rituxan 10ug/g (N=5)
ch2B6 10ug/g (N=5)
ch4.4.20 10ug/g (N=5)

FIG. 22

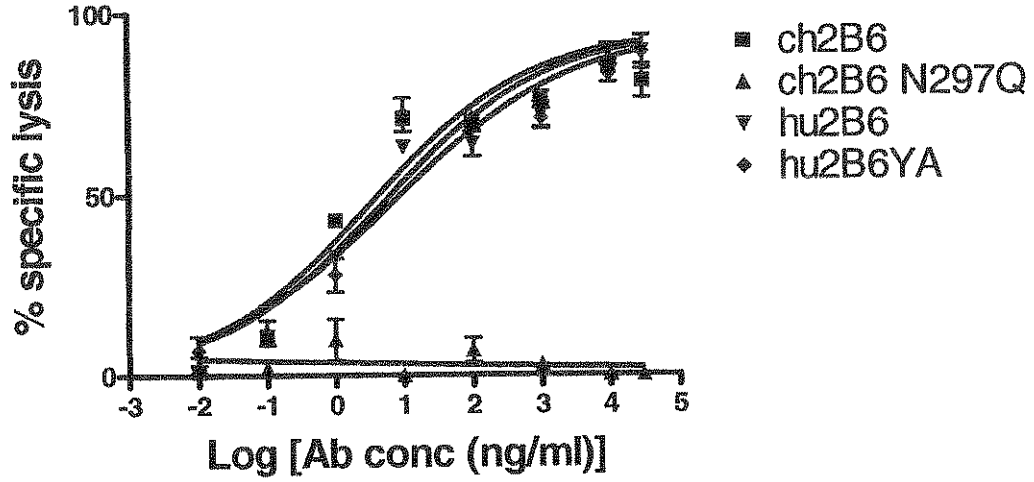
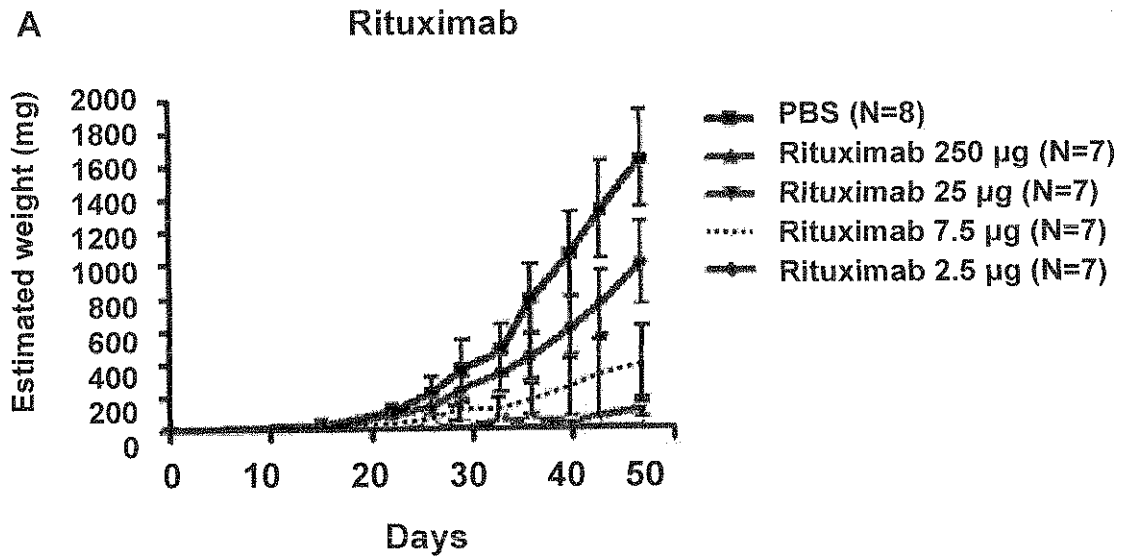
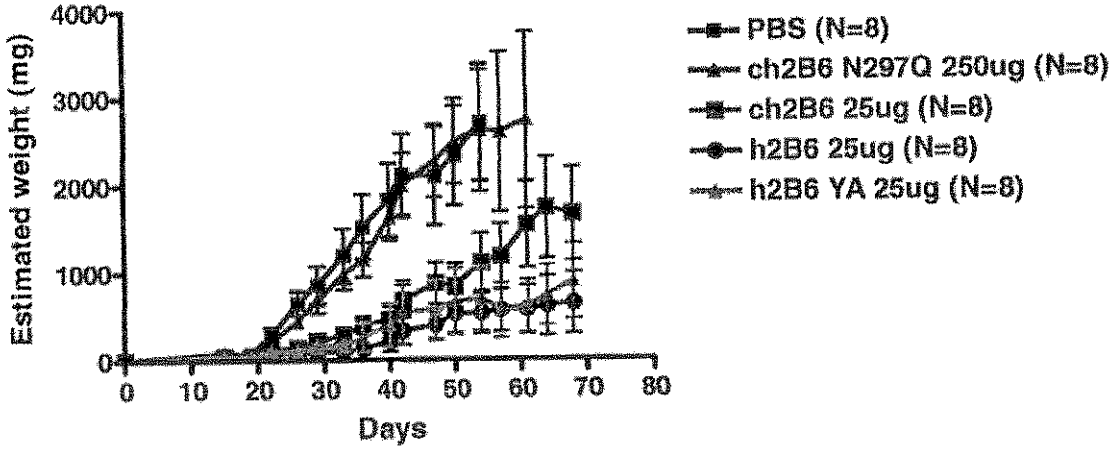

100
50
0
% specific lysis
-3
-2
-1
0
1
2
3
4
5
Log [Ab conc (ng/ml)]
ch2B6
ch2B6 N297Q
hu2B6
hu2B6YA

FIG. 23

A

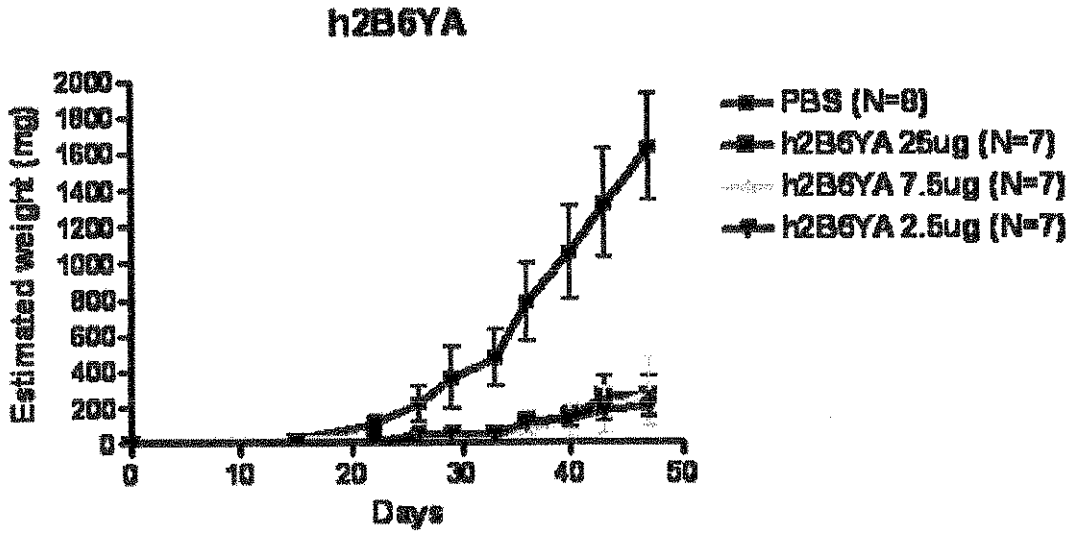


B

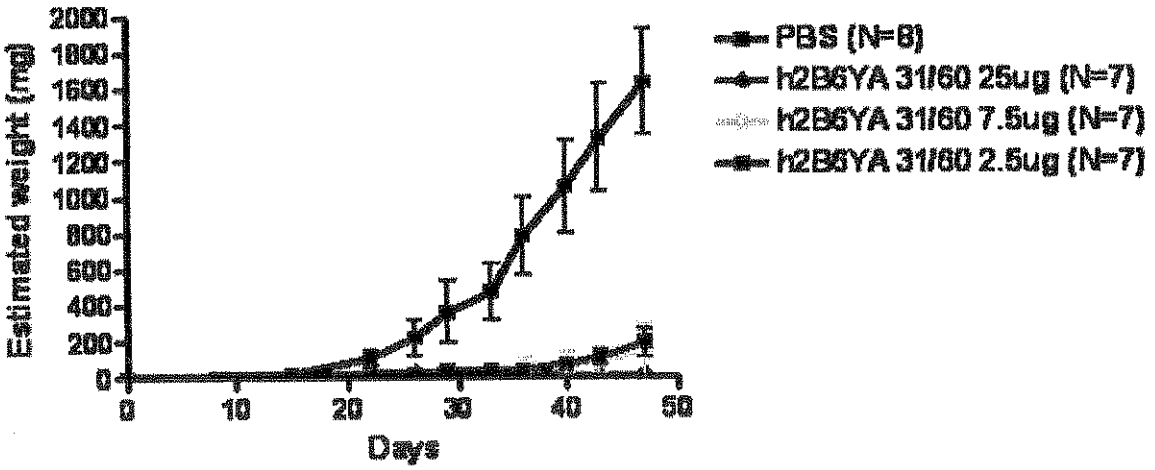


Figures 24A and 24B

C

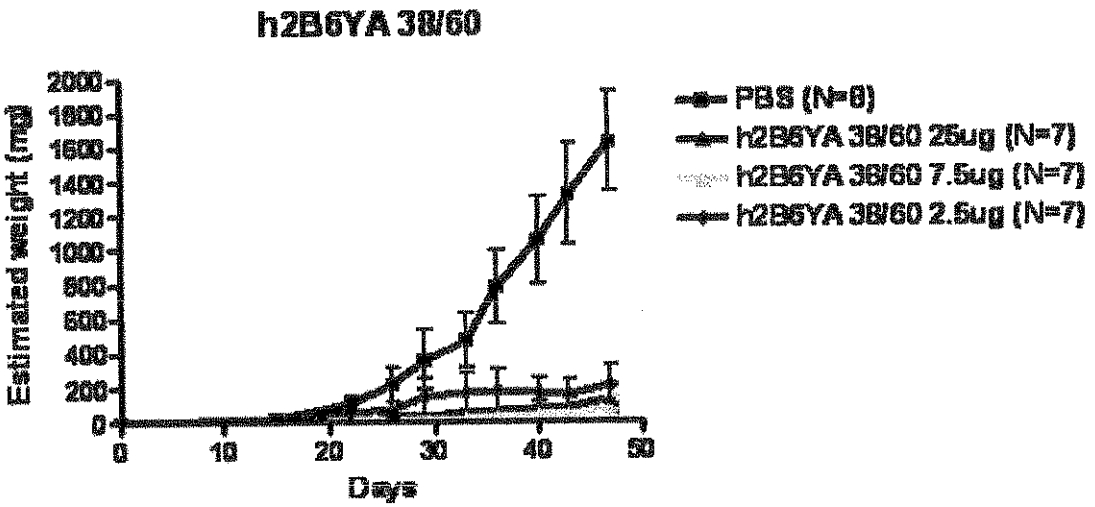


D

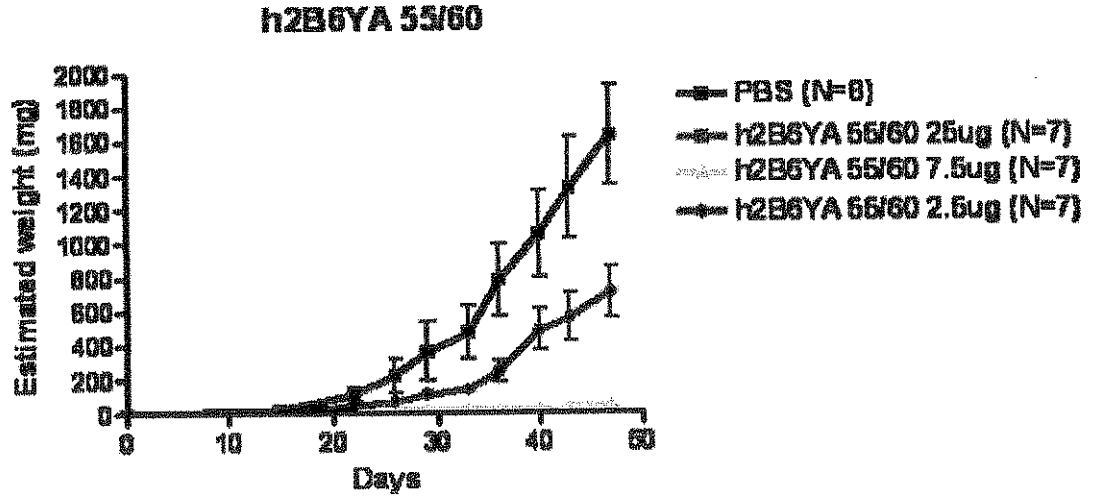


FIGS. 24C & 24D

E



F



FIGS. 24E & 24F

G

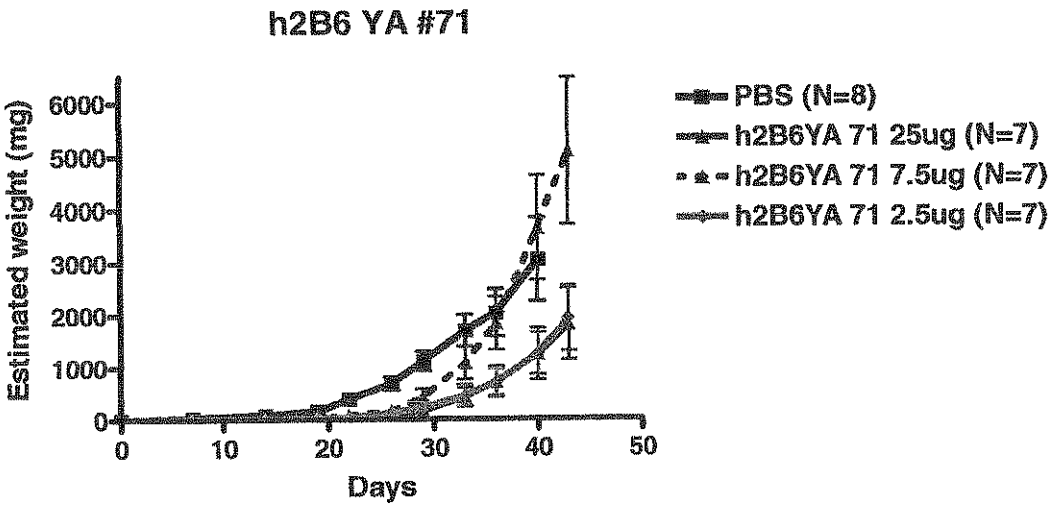

h2B6 YA #71
Estimated weight (mg)
6000
5000
4000
3000
2000
1000
0
0
10
20
30
40
50
Days
PBS (N=8)
h2B6YA 71 25ug (N=7)
h2B6YA 71 7.5ug (N=7)
h2B6YA 71 2.5ug (N=7)

FIG. 24G

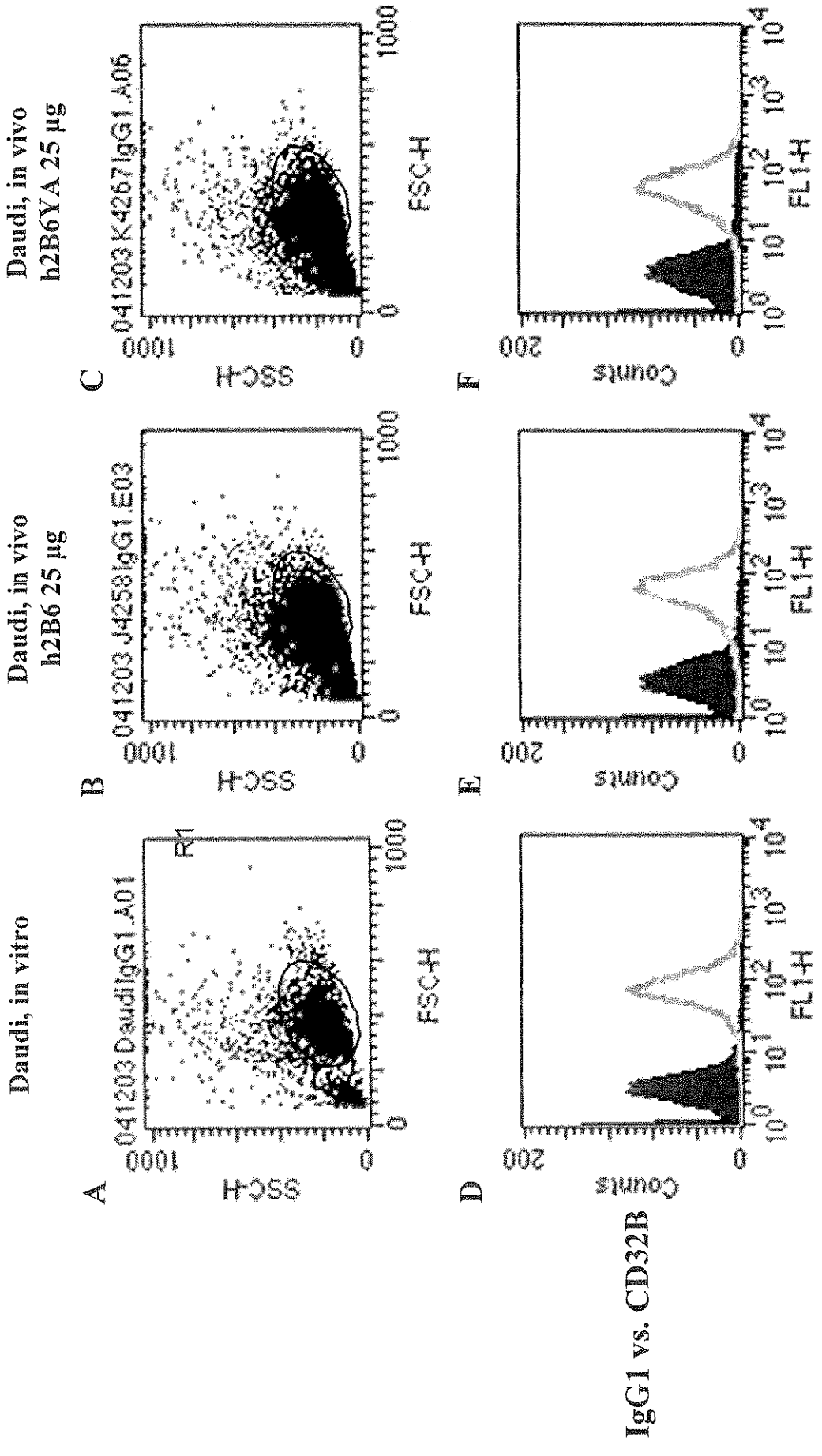

Daudi, in vitro
Daudi, in vivo
h2B6 25 µg
Daudi, in vivo
h2B6YA 25 µg
A
B
C
D
E
F
041203 DaudiIgG1.A01
041203 J4258IgG1.E03
041203 K4267IgG1.A06
R1
SSC-H
FSC-H
Counts
FL1-H
IgG1 vs. CD32B

Figure 25A-F

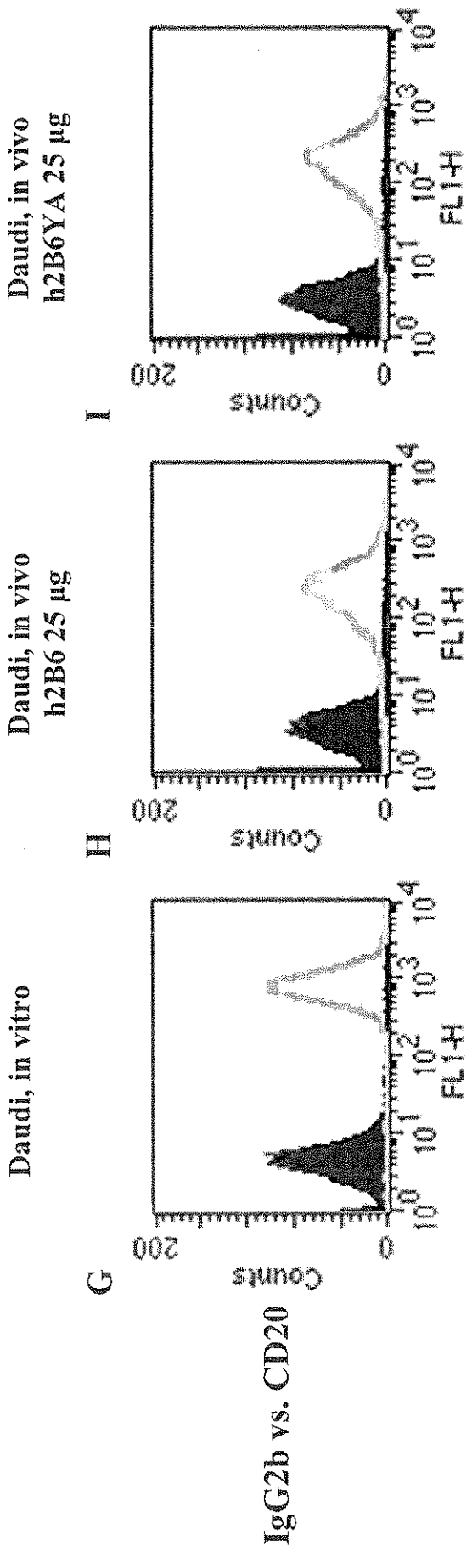

Daudi, in vitro
Daudi, in vivo
h2B6 25 µg
Daudi, in vivo
h2B6YA 25 µg
G
H
I
Counts
200
0
FL1-H
IgG2b vs. CD20

Figure 25G-I

Figure 26A

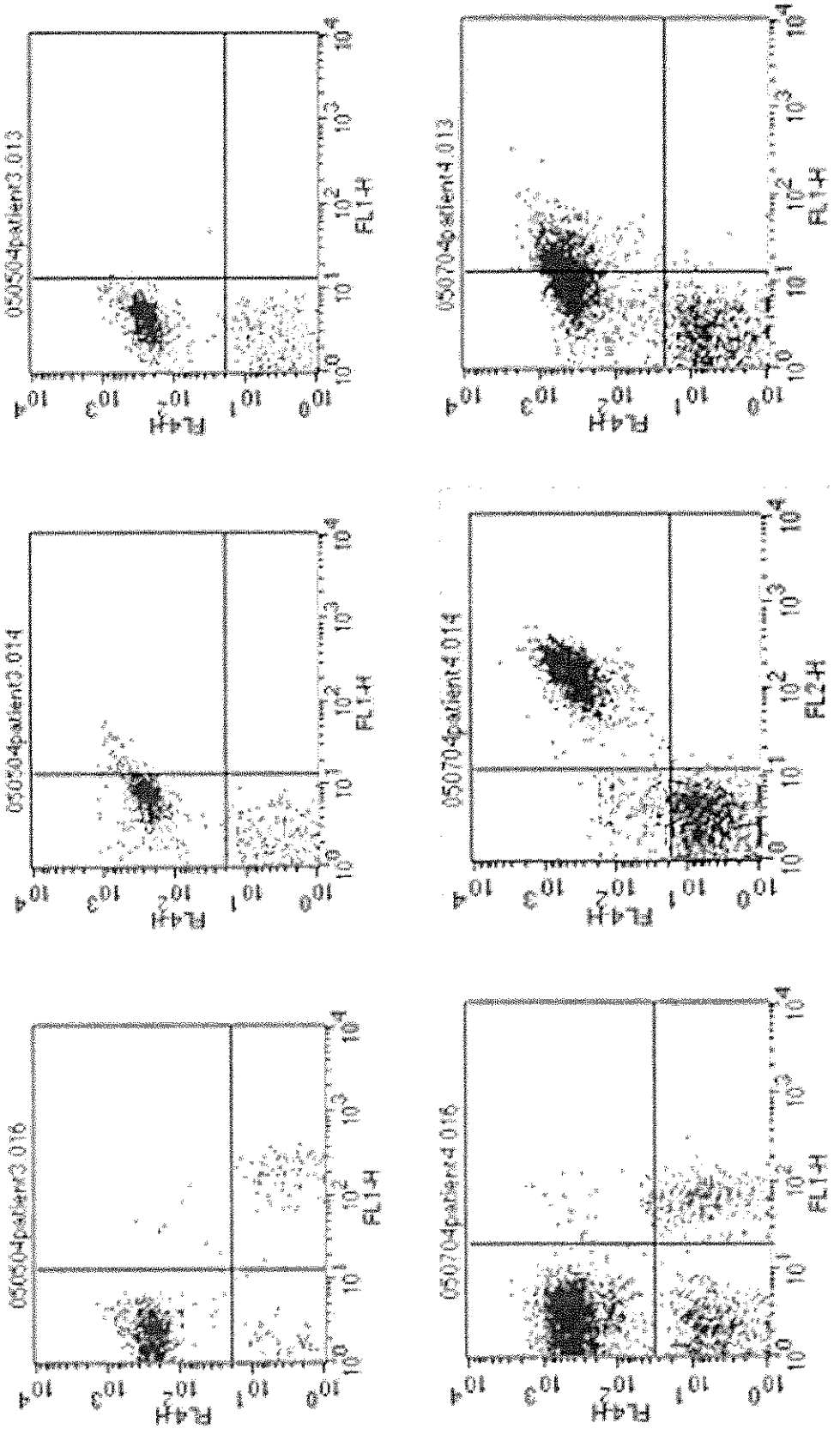

050504-patient3 013
050704-patient4 013
050504-patient3 014
050704-patient4 014
050504-patient3 016
050704-patient4 016
FL1-H
FL2-H
FL4-H
CD20
CD19
CD3
Pt. 3
CD32B
Pt. 4
CD32B

Figure 26B

Figure 26C

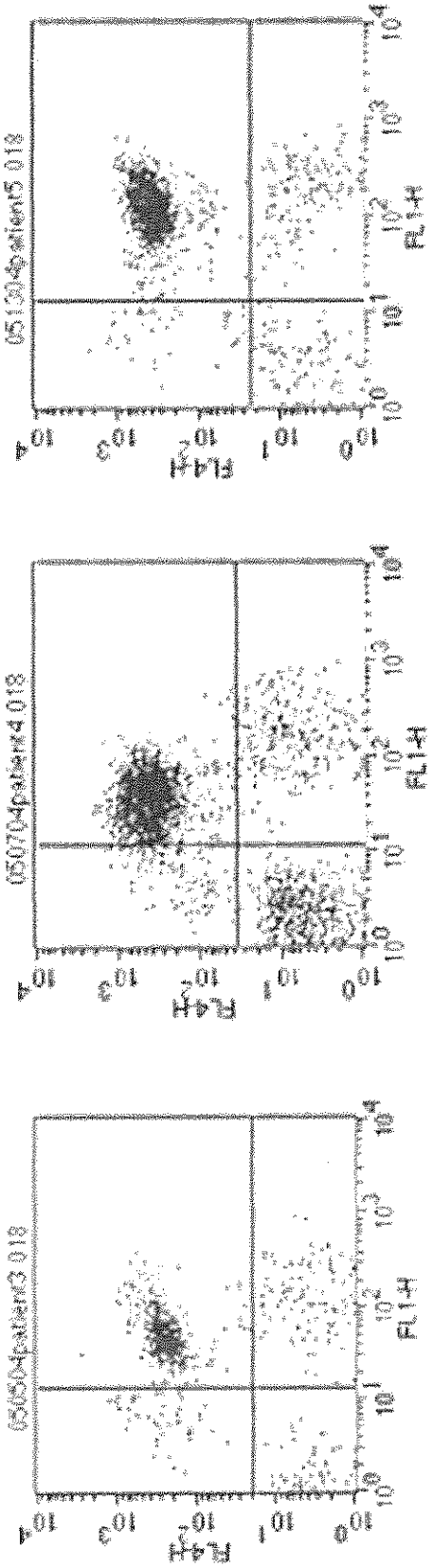


Figure 26D

Daudi B Cells

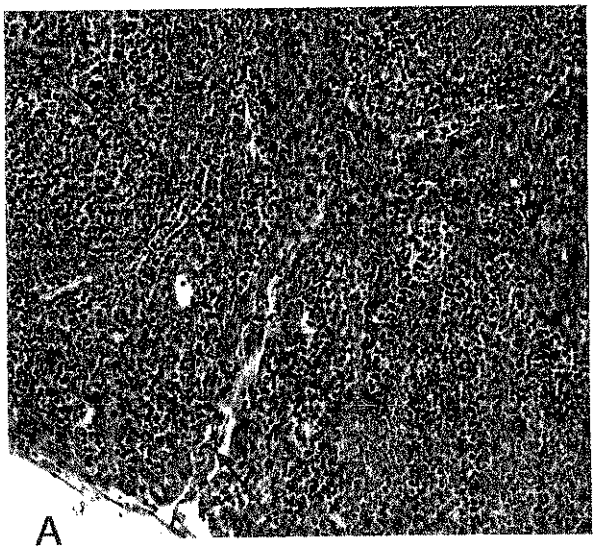


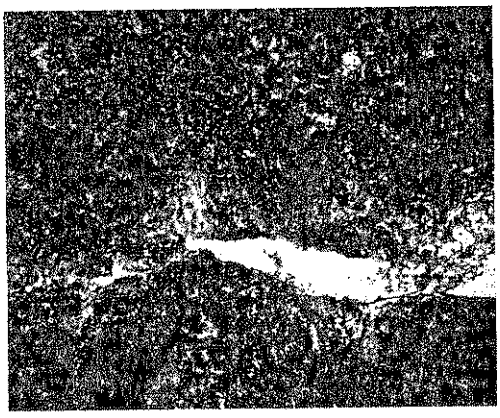
Anti CD32B, 40x

Anti CD20, 40x

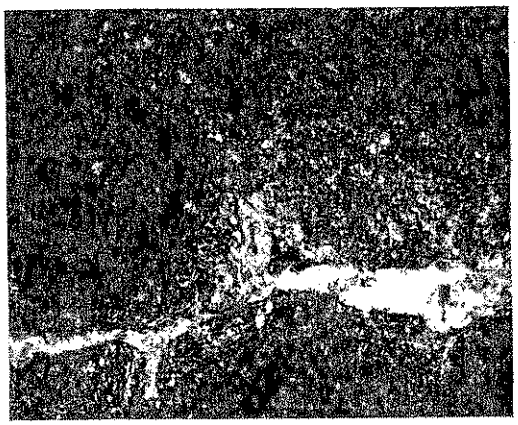
FIGS. 27A & 27B

Tonsils





Anti CD32B, 40x



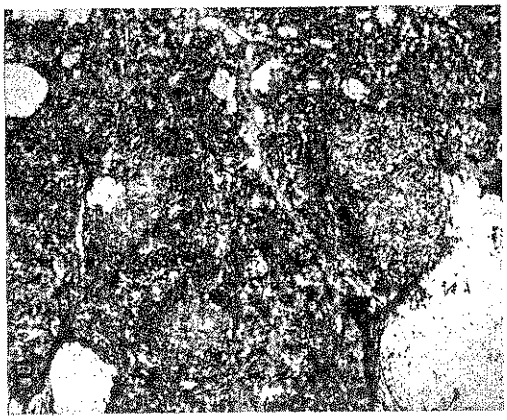
Anti CD20, 40x

FIG. 28

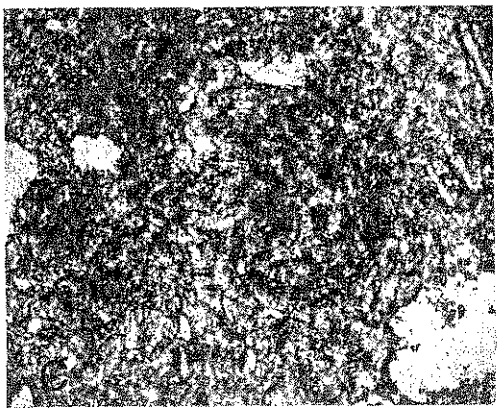
Normal Lymph Node

(MG04-NDRI-11)





Anti CD32B, 4x

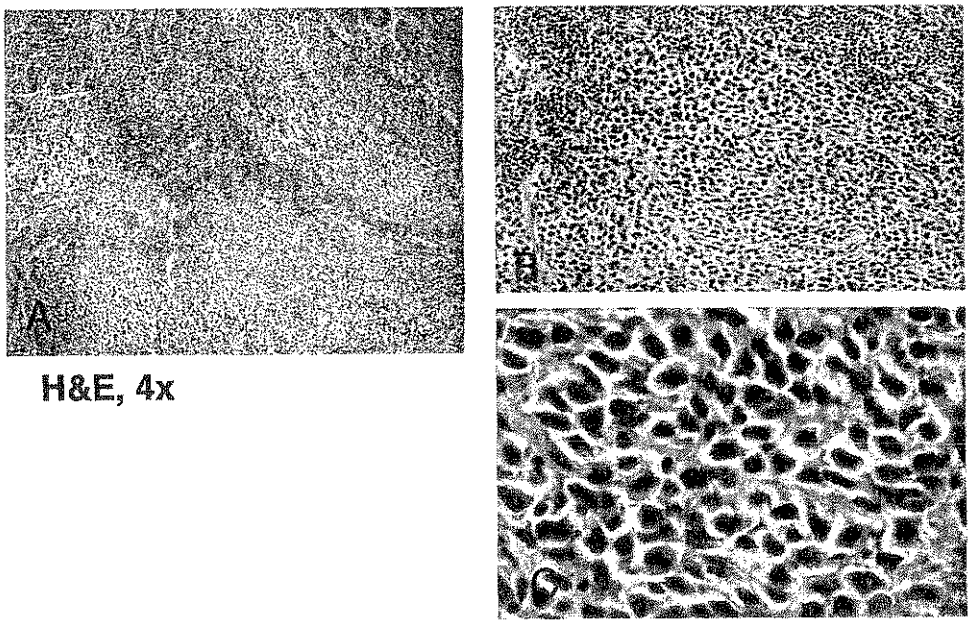


Anti CD20, 4x

FIG. 29

Diffuse Large B Cell Lymphoma

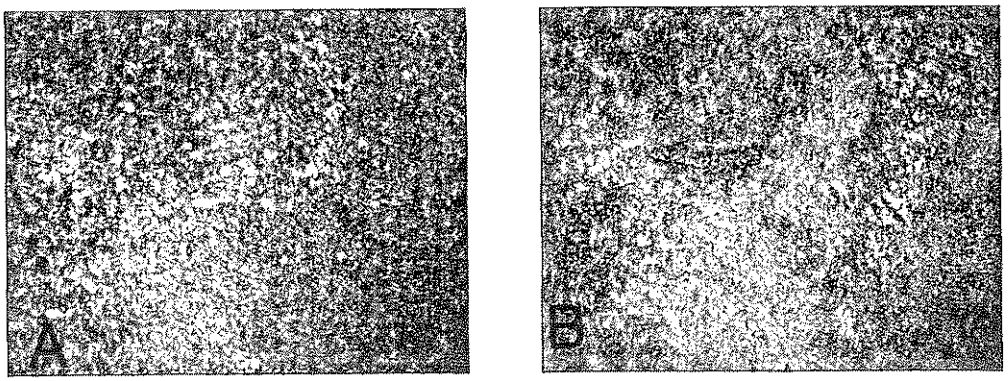
Lymph node (MG04-CHTN-19)



H&E, 4x

H&E, 20X

FIG. 30



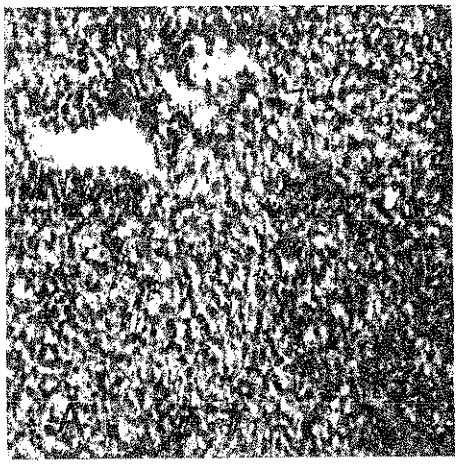
Anti CD32B, 4x

Anti CD20, 4x

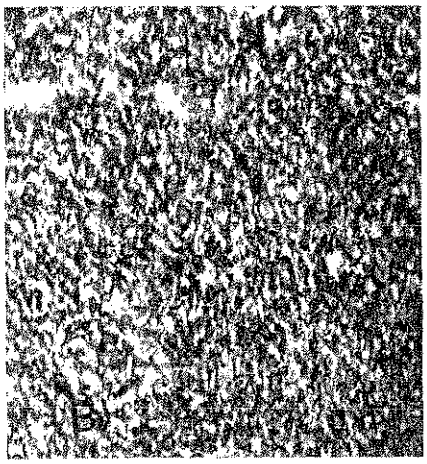
FIG. 31

Diffuse Large B Cell Lymphoma

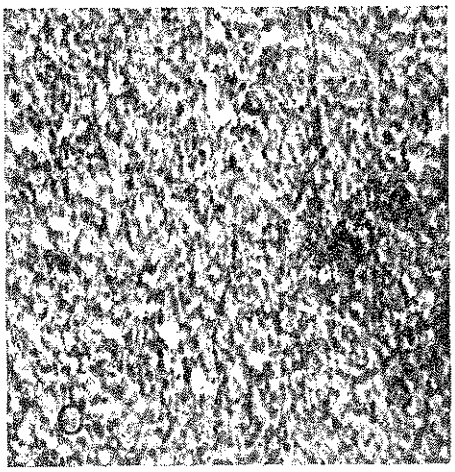
Lymph node (MG04-CHTN-19)



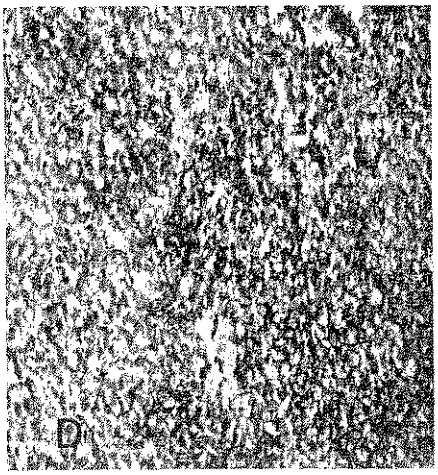
Iso-control (IgG1)



CD32B
(m2B6)



Iso-control (IgG2a)



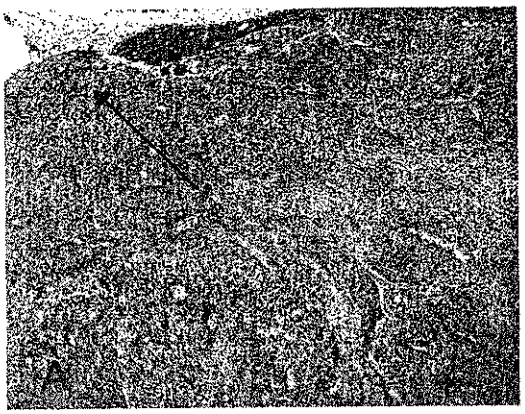
CD20 (1F5)

10x.

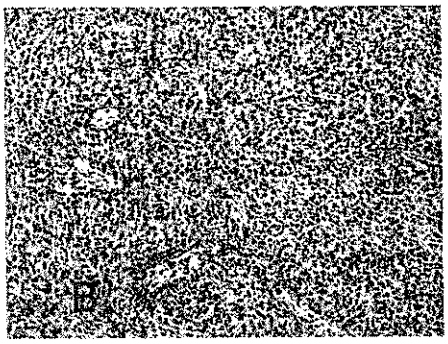
FIG. 32

Diffuse Large B Cell Lymphoma

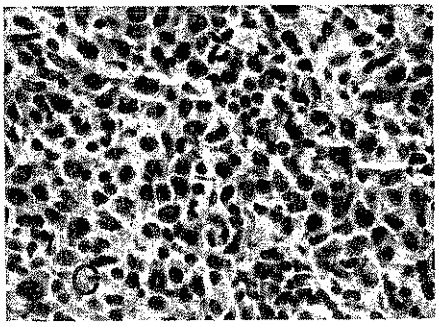
Lymph node (MG04-CHTN-22)



H&E, 4x

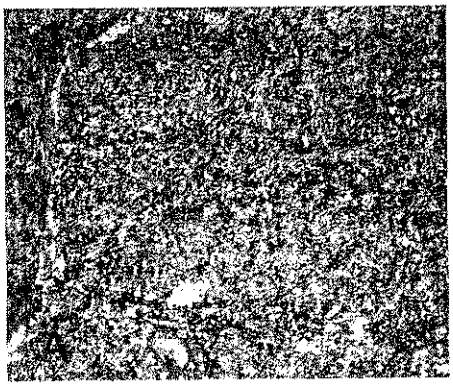


H&E, 10x

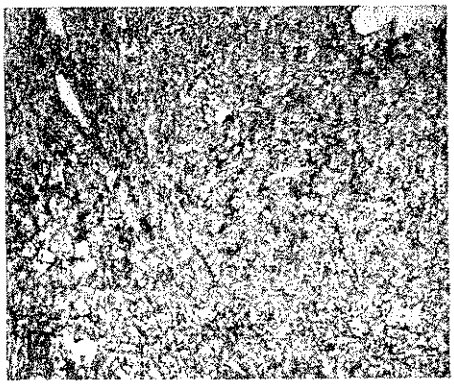


H&E, 20X

FIG. 33



Anti CD32B, 4x



Anti
CD20, 4x

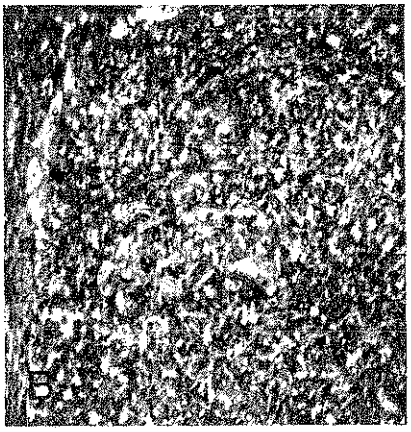
FIG. 34

Diffuse Large B Cell Lymphoma

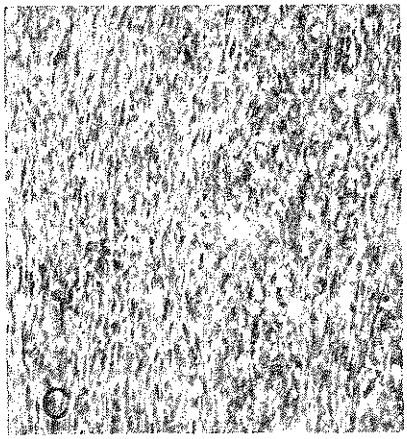
Lymph node (MG04-CHTN-22)



Iso-control (IgG1)



CD32B
(m2B6)



Iso-control (IgG2a)

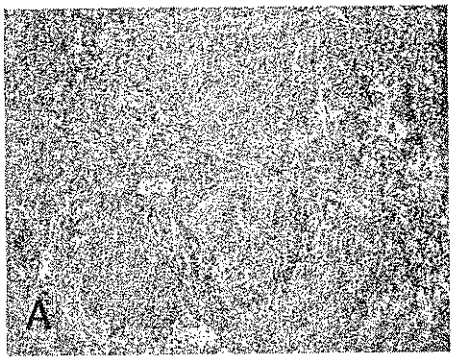


CD20 (1F5)

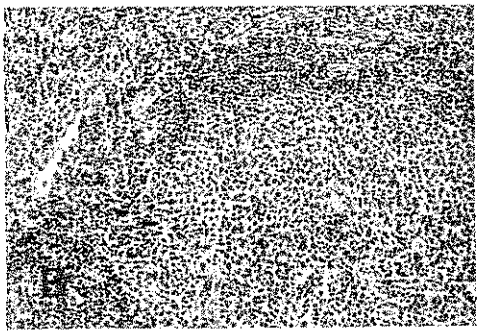
10x.

FIG. 35

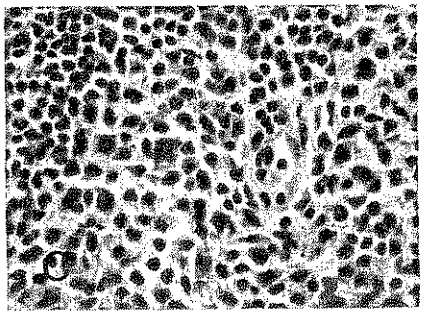
Follicular Lymphoma With Areas Of Diffuse Large B Cell Lymphoma
Lymph node (MG04-CHTN-26)



H&E, 4x

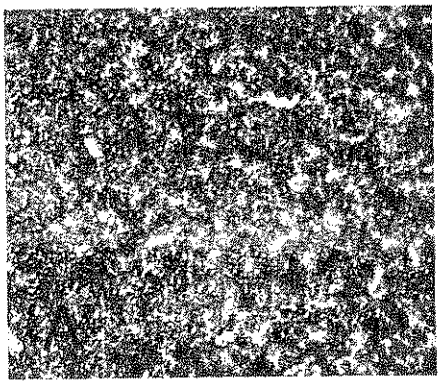


H&E, 10x

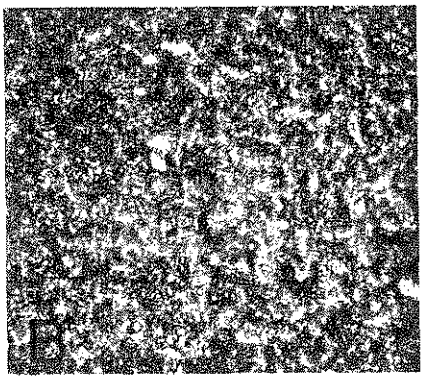


H&E, 20X

FIG. 36



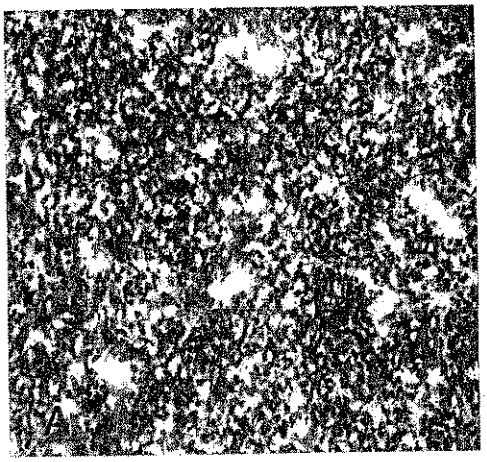
Anti CD32B, 4x



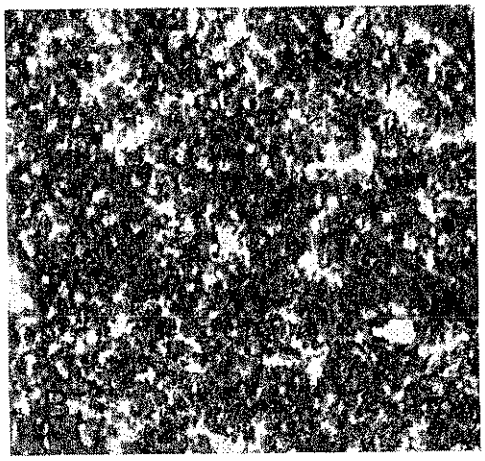
Anti CD20, 4x

FIG. 37

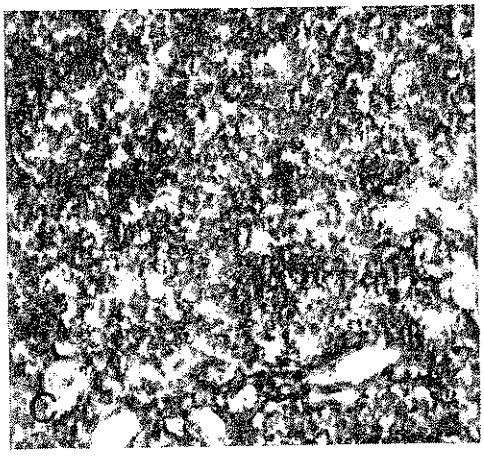
Follicular Lymphoma With Areas Of Diffuse Large B Cell Lymphoma
Lymph node (MG04-CHTN-26)



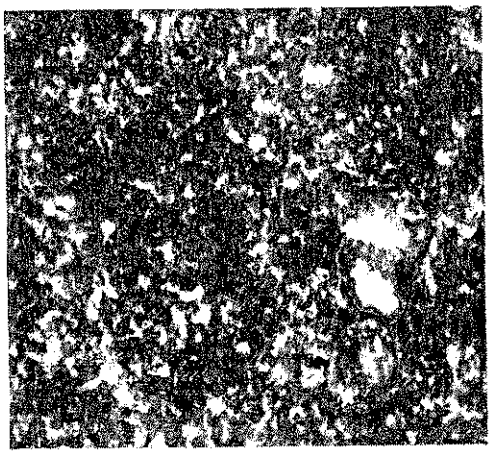
Iso-control (IgG1)



CD32B
(m2B6)



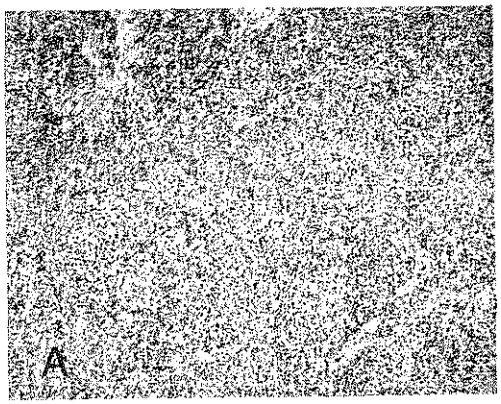
Iso-control (IgG2a)



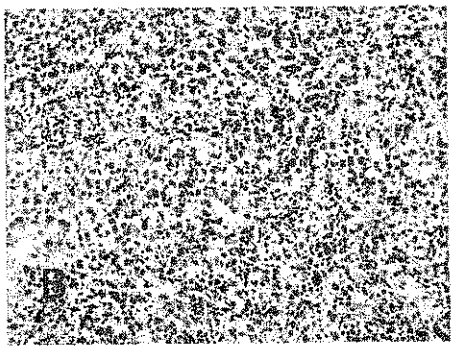
CD20 (1F5)

FIG. 38

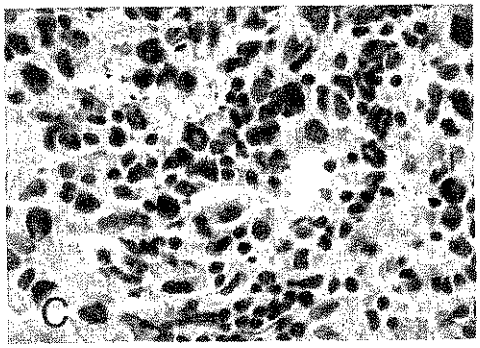
Diffuse Large B Cell Lymphoma
Lymph node (MG04-CHTN-27)



H&E, 4x

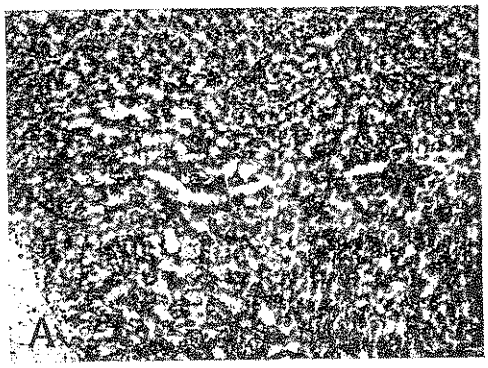


H&E, 10x

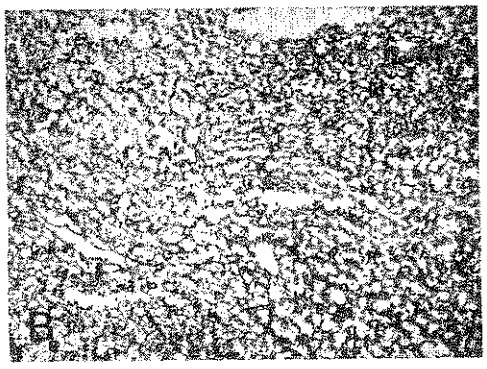


H&E, 20X

FIG. 39



Anti CD32B, 4x

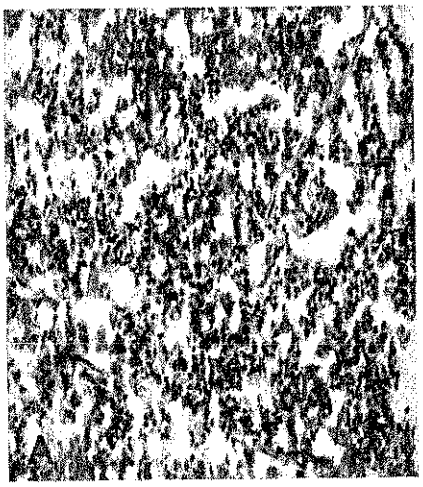


Anti
CD20, 4x

FIG. 40

Diffuse Large B Cell Lymphoma

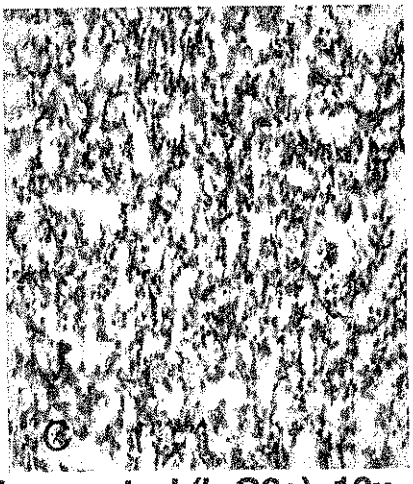
Lymph node (MG04-CHTN-27)



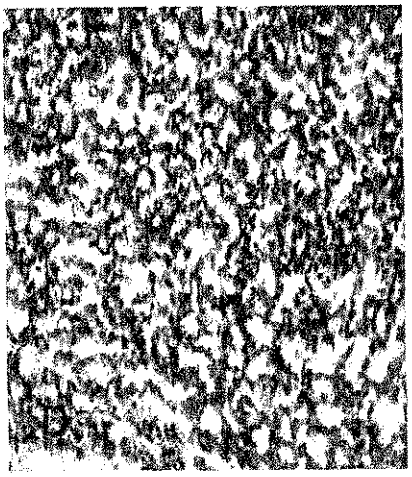
Iso-control (IgG1), 10x



CD32B
(m2B6), 10x



Iso-control (IgG2a), 10x

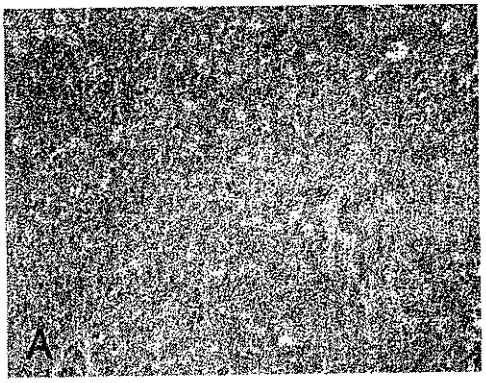


CD20
(1F5), 10x

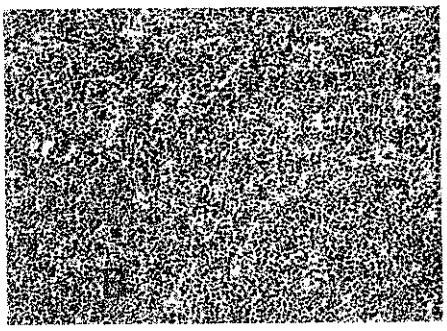
FIG. 41

Diffuse B Cell Lymphoma

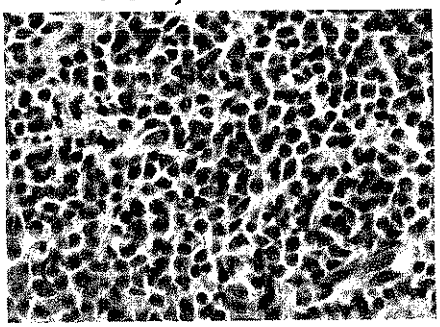
Lymph node (MG05-CHTN-03)



H&E, 4x

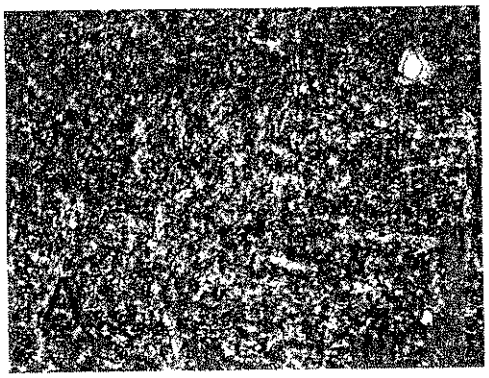


H&E, 10x

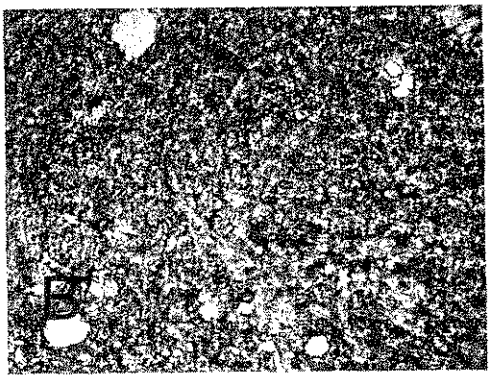


H&E, 20X

FIG. 42



Anti CD32B, 4x

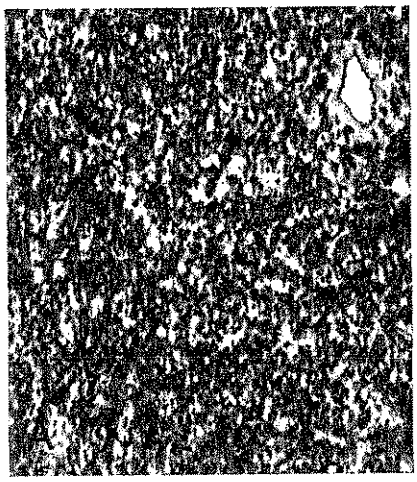


Anti
CD20, 4x

FIG. 43

Diffuse Large B Cell Lymphoma

Lymph node (MG05-CHTN-03)



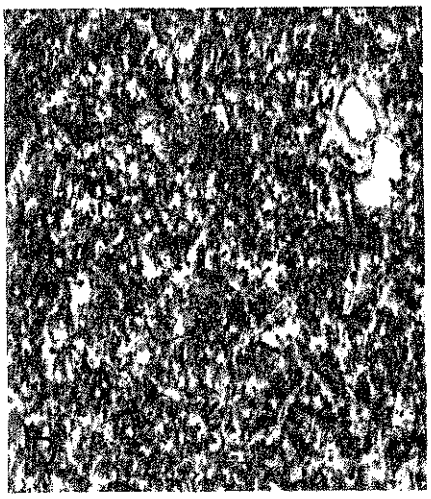
Iso-control (IgG1)



CD32B (m2B6)



Iso-control (IgG2a)

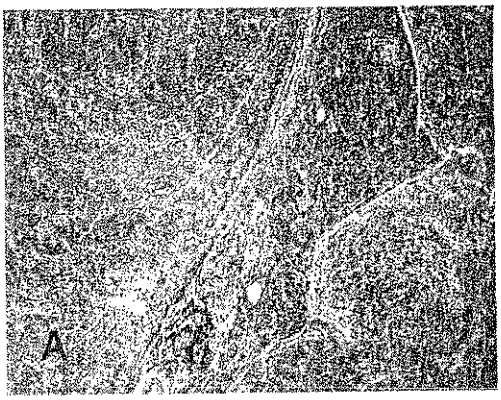


CD20 (1F5)

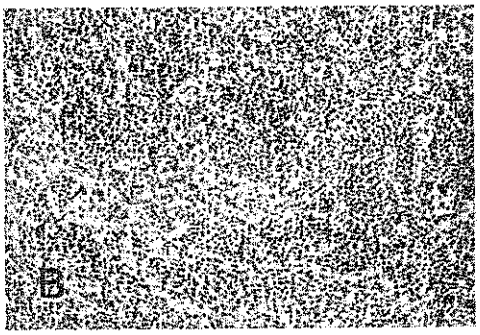
FIG. 44

Diffuse Large B Cell Lymphoma

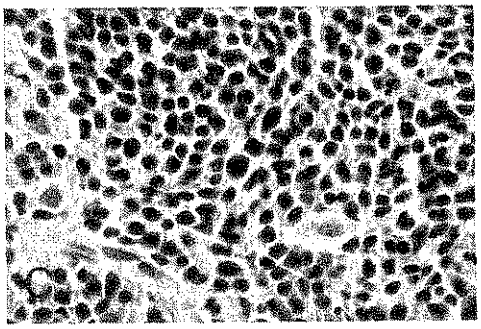
Lymph node (MG05-CHTN-05)



H&E, 4x

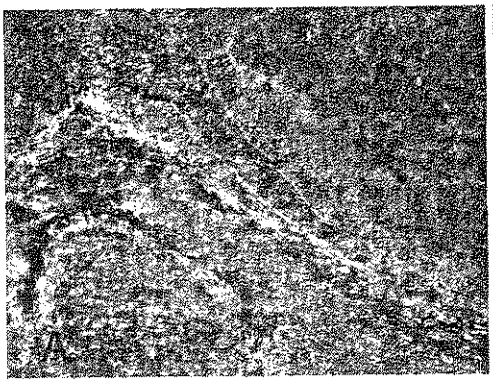


H&E, 10x

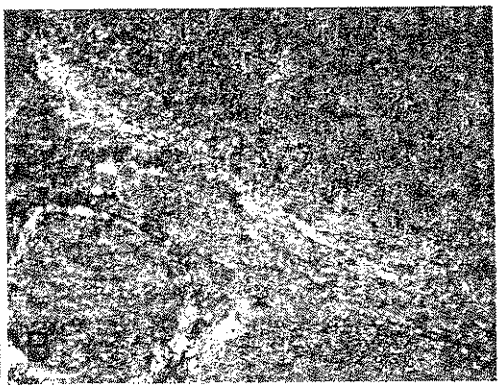


H&E, 20X

FIG. 45



Anti CD32B, 4x

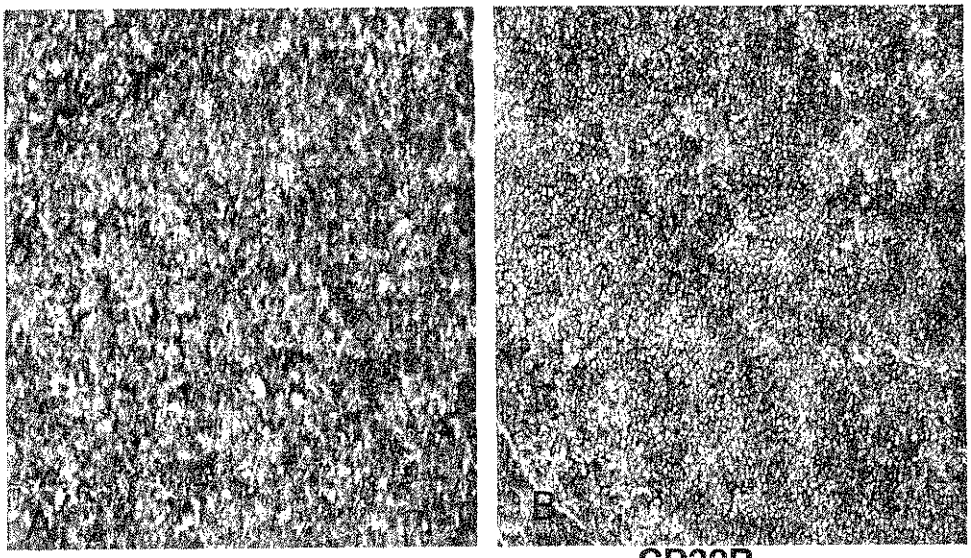


Anti CD20, 4x

FIG. 46

Diffuse Large B Cell Lymphoma

Lymph node (MG05-CHTN-05)



Iso-control (IgG1)

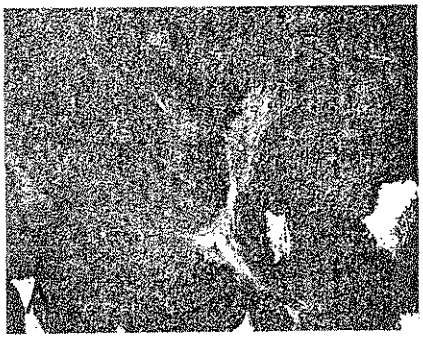
CD32B (m2B6)

Iso-control (IgG2a)

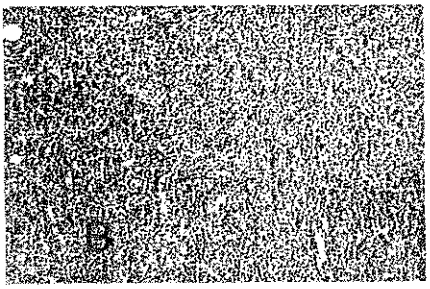
CD20 (1F5)

FIG. 47

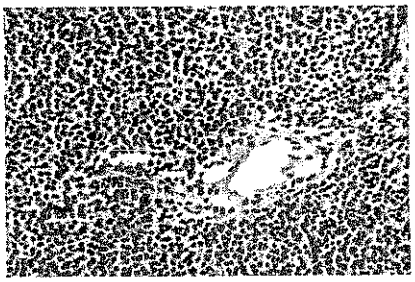
Small Lymphocytic Lymphoma
Lymph node (MG04-CHTN-30)



H&E, 4x

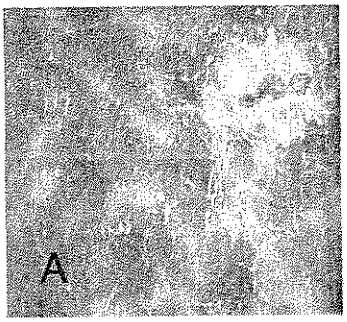


H&E, 10x

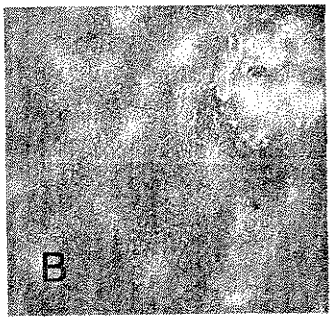


H&E, 20X

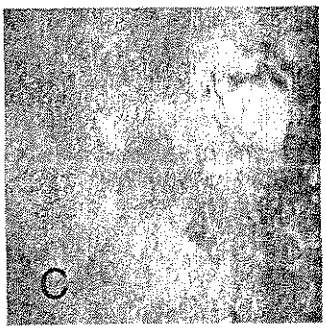
FIG. 48



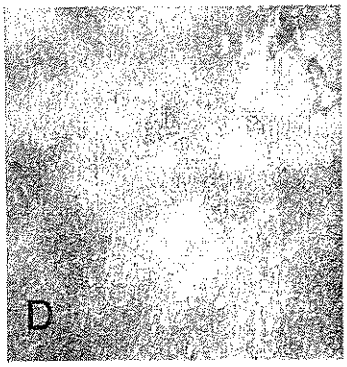
Iso-control (IgG1)



CD32B
(m2B6)



Iso-control (IgG2a)

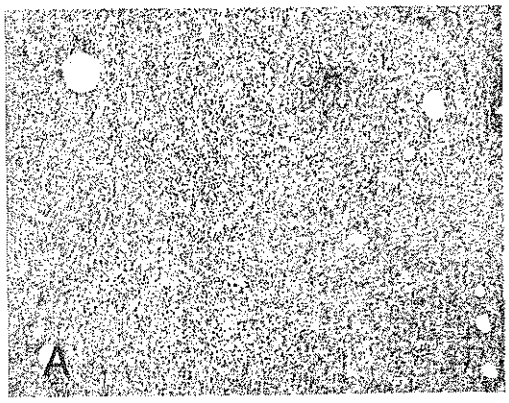


CD20 (1F5)

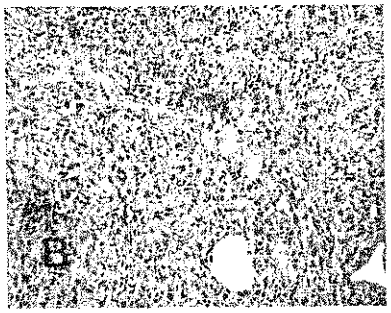
FIG. 49

Diffuse Large B Cell Lymphoma

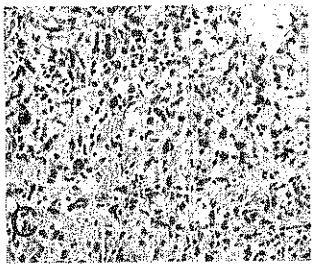
Lymph node (MG04-CHTN-31)



H-E Stain 4x



H&E, 10x

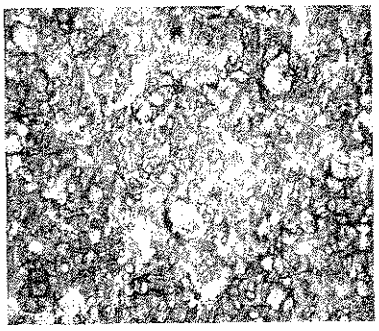


H&E, 20X

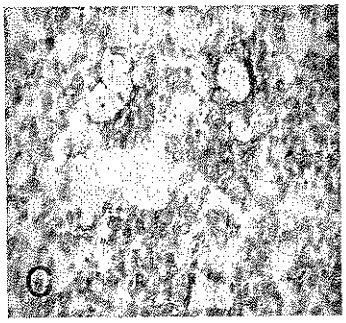
FIG. 50



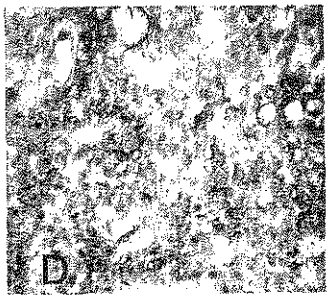
Iso-control (IgG1)



CD32B
(m2B6)



Iso-control (IgG2a)

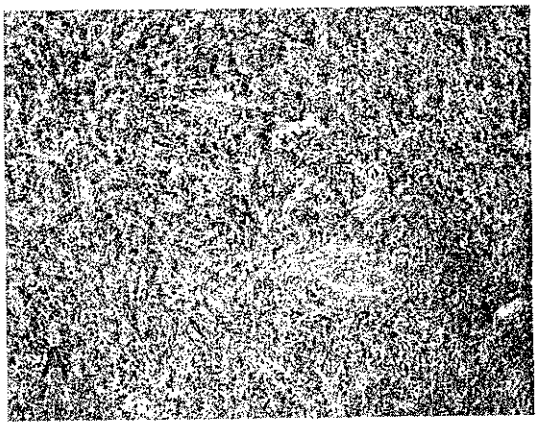


CD20 (1F5)

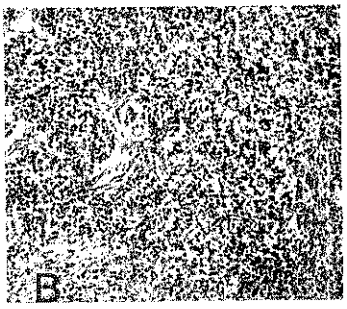
FIG. 51

Diffuse Large B Cell Lymphoma

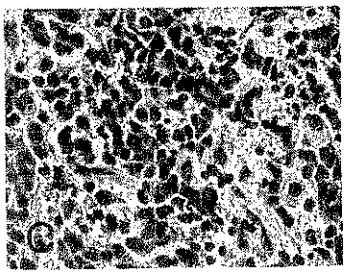
Spleen (MG04-CHTN-36)



H-E Stain 4x

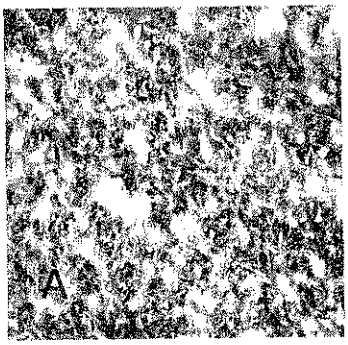


H&E, 10x

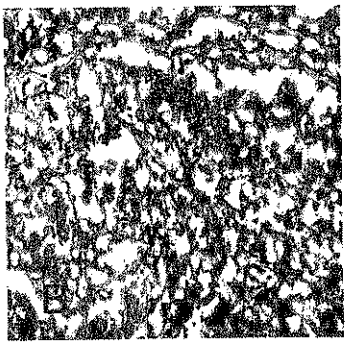


H&E, 40X

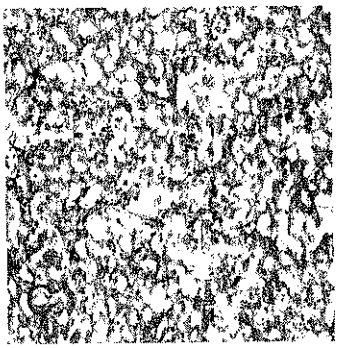
FIG. 52



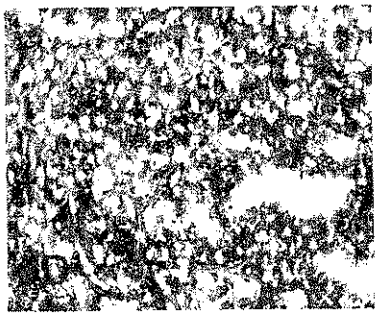
Iso-control (IgG1)



CD32B
(m2B6)



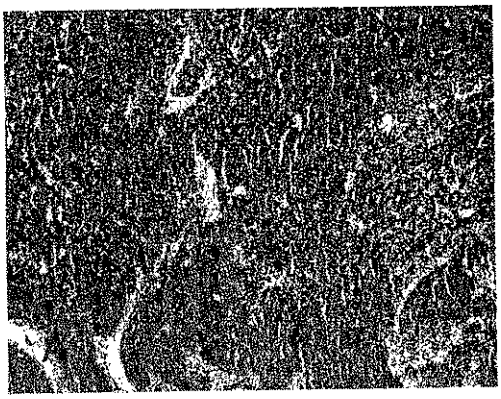
Iso-control (IgG2a)



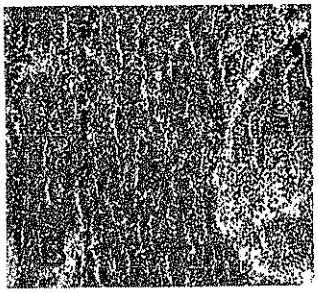
CD20 (1F5)

FIG. 53

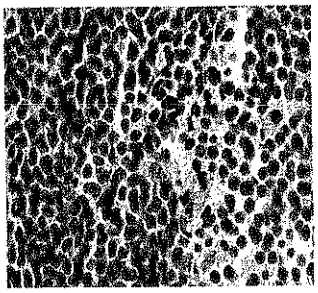
Mantle Cell Lymphoma/Diffuse Small Cleaved Cell Lymphoma
Lymph node (MG04-CHTN-41)



H-E Stain 4x

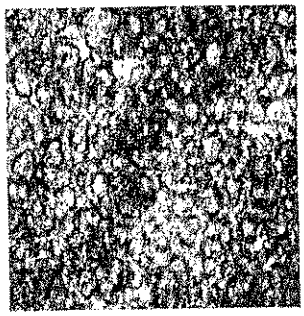


H&E, 10x

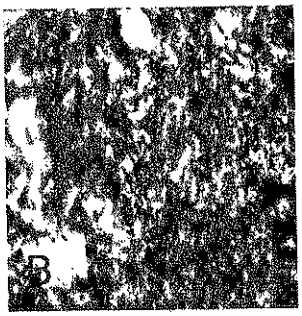


H&E, 20X

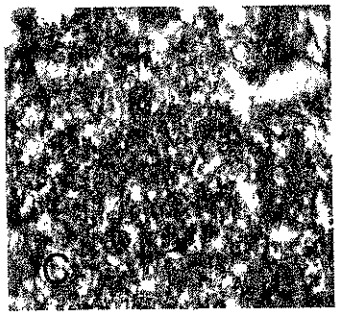
FIG. 54



Iso-control (IgG1)



CD32B
(m2B6)



Iso-control (IgG2a)

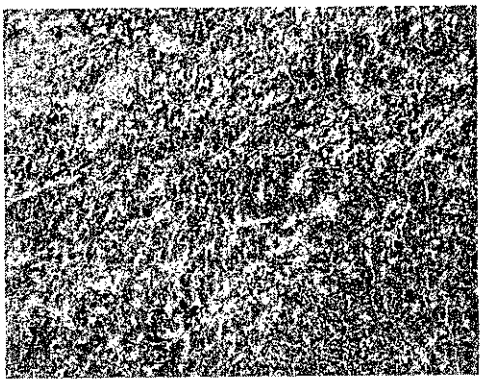


CD20 (1F5)

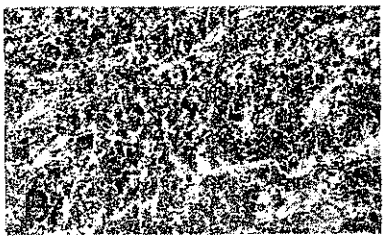
FIG. 55

Diffuse Large B Cell Lymphoma

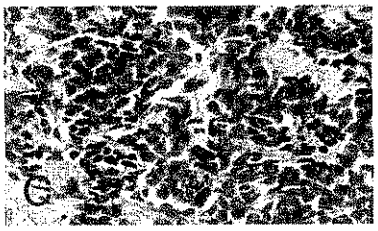
Lymph Node (MG04-CHTN-05)



H&E, 4x



H&E, 10x



H&E, 20X

FIG. 56



Iso-control (IgG1)



CD32B
(m2B6)



Iso-control (IgG2a)



CD20 (1F5)

FIG. 57