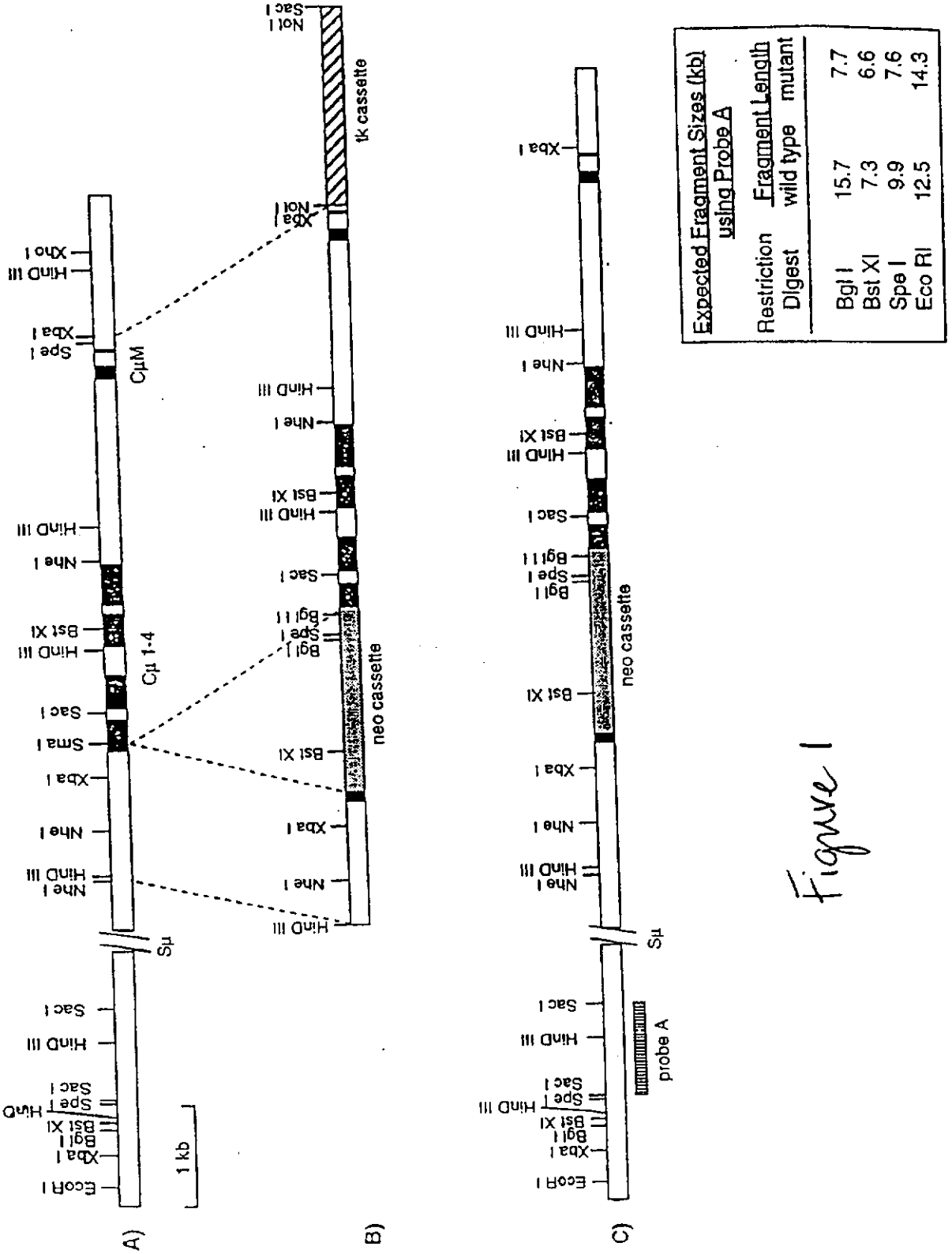

Expected Fragment Sizes (kb) using Probe A
Restriction Digest
Fragment Length wild type
Fragment Length mutant
Bgl I 15.7 7.7
Bst XI 7.3 6.6
Spe I 9.9 7.6
Eco RI 12.5 14.3
A)
B)
C)
1 kb
Sμ
Cμ 1-4
CμM
neo cassette
tk cassette
probe A
EcoR I
Xba I
Bgl I
Bst XI
Spe I
Sac I
Hind III
Nhe I
Not I
Xho I

Figure 1

Figure 2

MEDAREX

Development of HuMAbs

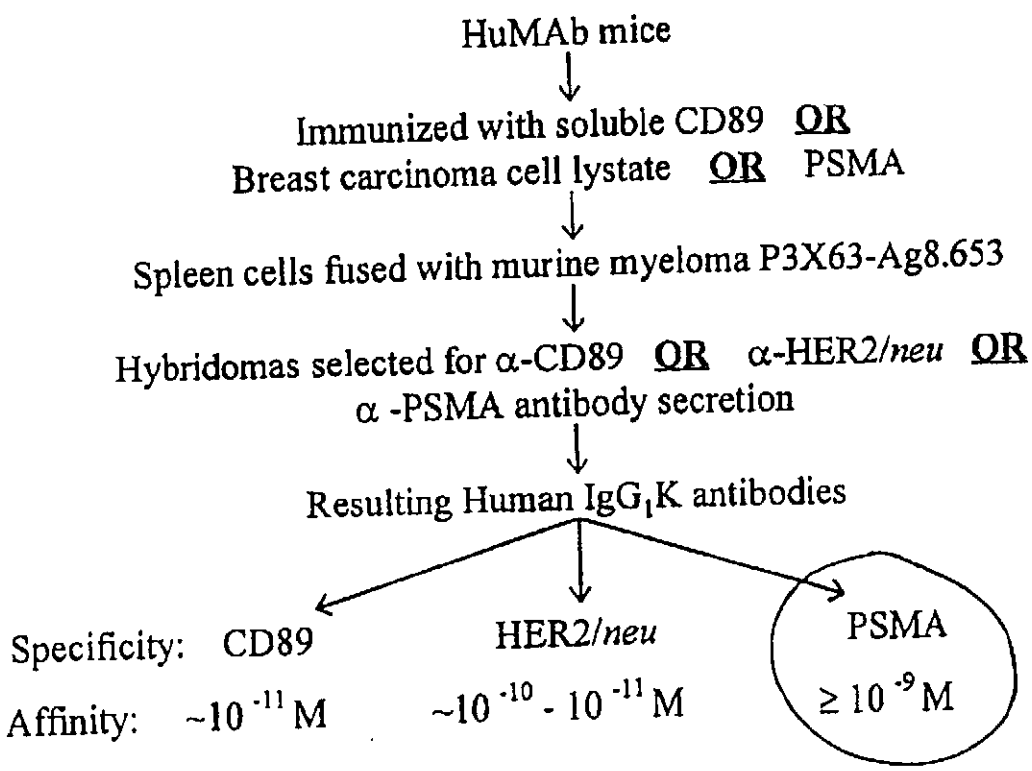
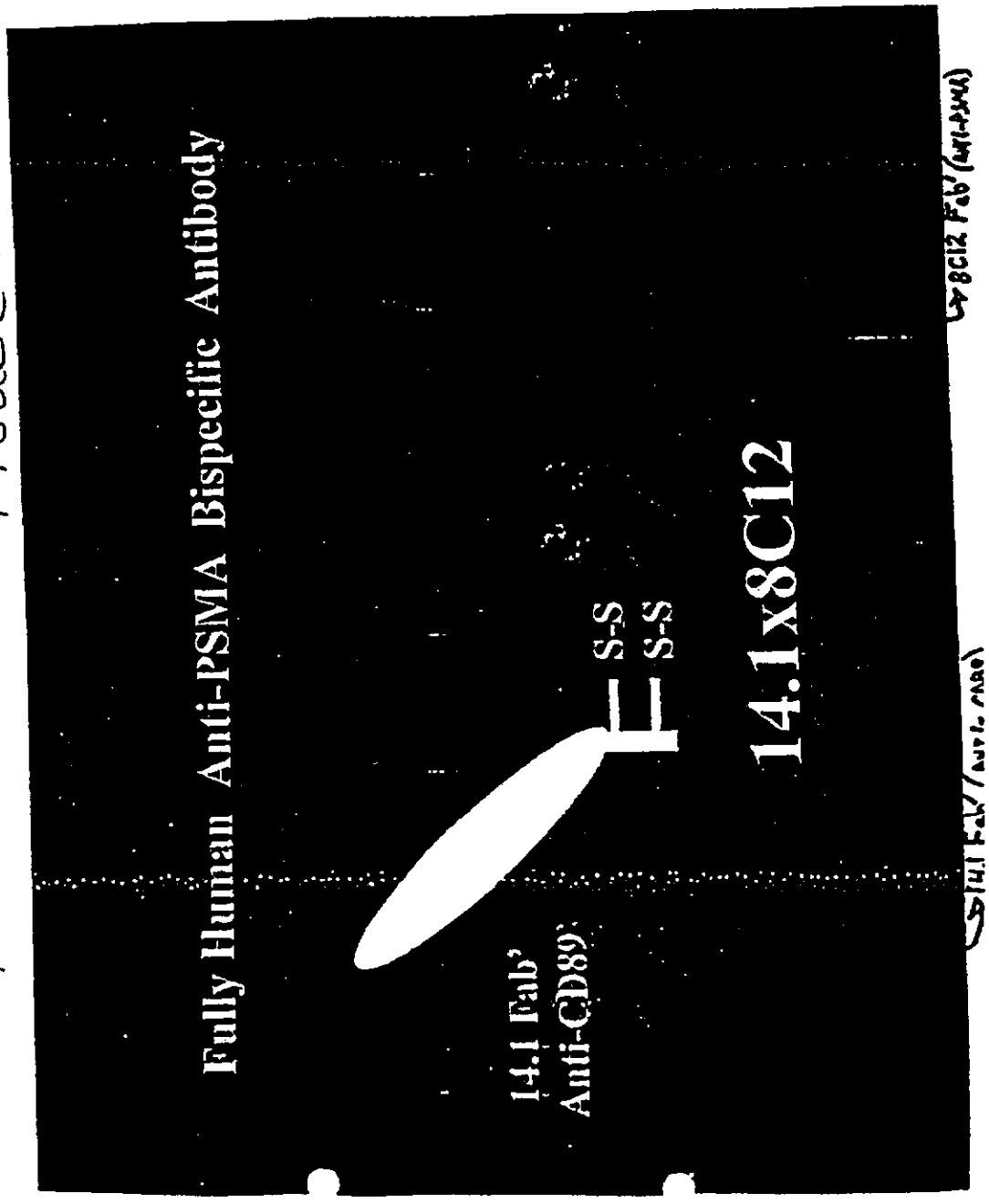


FIGURE 3


Fully Human Anti-PSMA Bispecific Antibody
14.1 Fab'
Anti-CD89
S-S
S-S
14.1x8C12

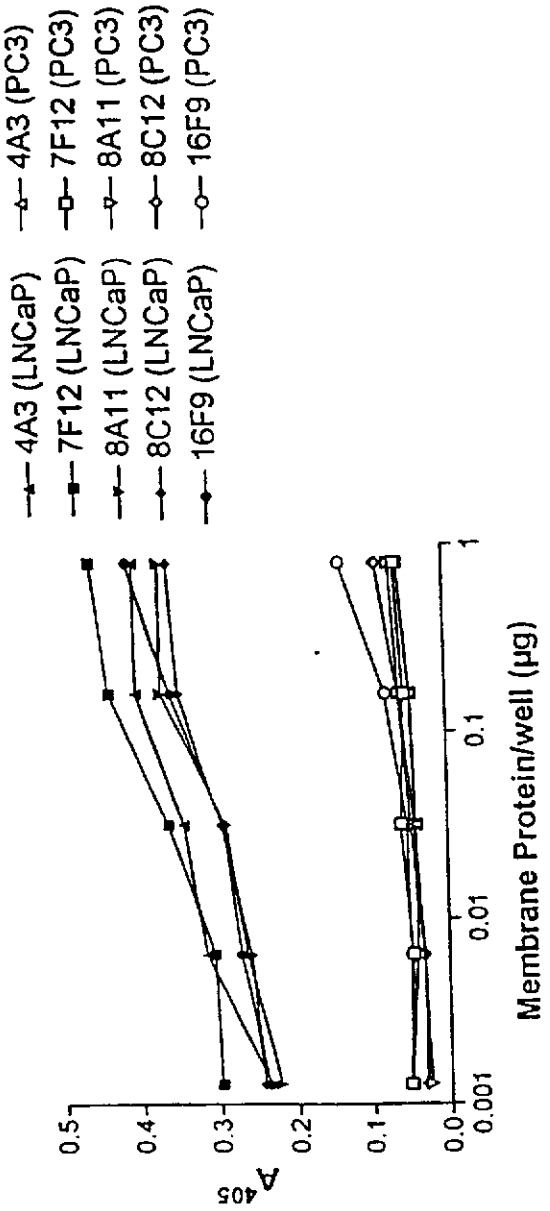

4A3 (LNCaP)
7F12 (LNCaP)
8A11 (LNCaP)
8C12 (LNCaP)
16F9 (LNCaP)
4A3 (PC3)
7F12 (PC3)
8A11 (PC3)
8C12 (PC3)
16F9 (PC3)
A405
0.5
0.4
0.3
0.2
0.1
0.0
0.001
0.01
0.1
1
Membrane Protein/well (µg)

Figure 4

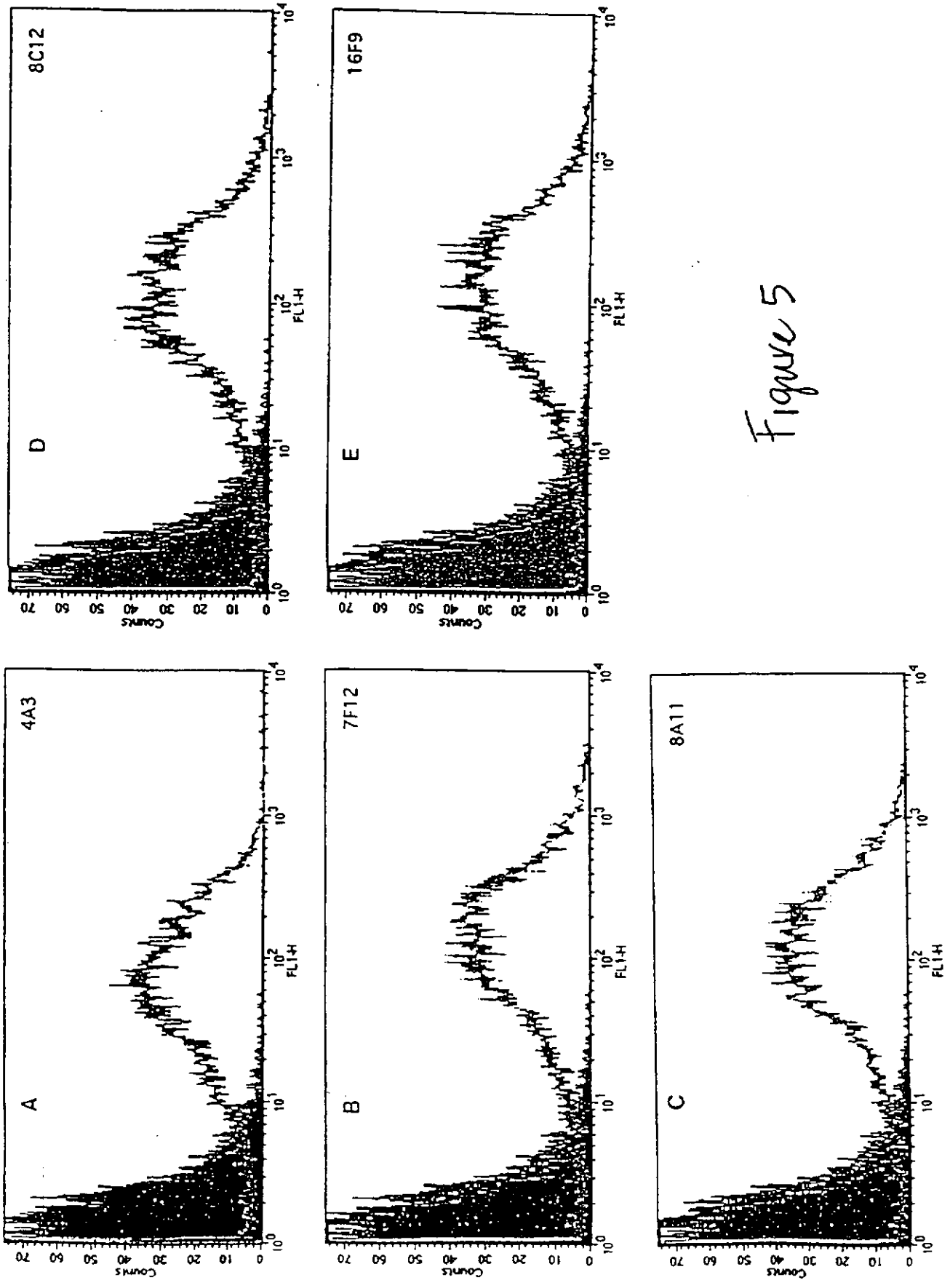
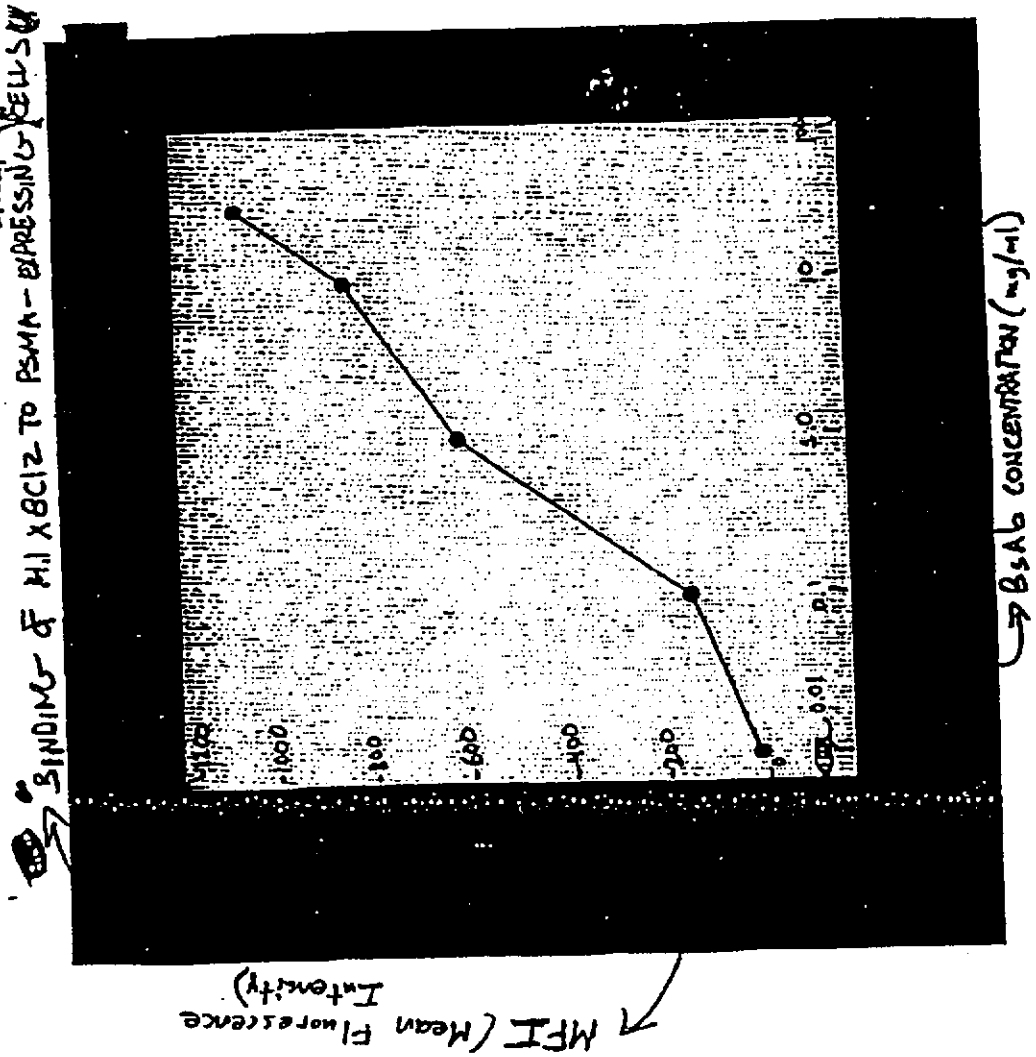


Figure 5

Figure 6


BINDING OF H1 X BC12 TO PSMA-EXPRESSING LNCaP CELLS
MFI (Mean Fluorescence Intensity)
BsAb CONCENTRATION (ng/ml)
10
1.0
0.1
0.01
0.001
0
200
400
600
800
1000
1200

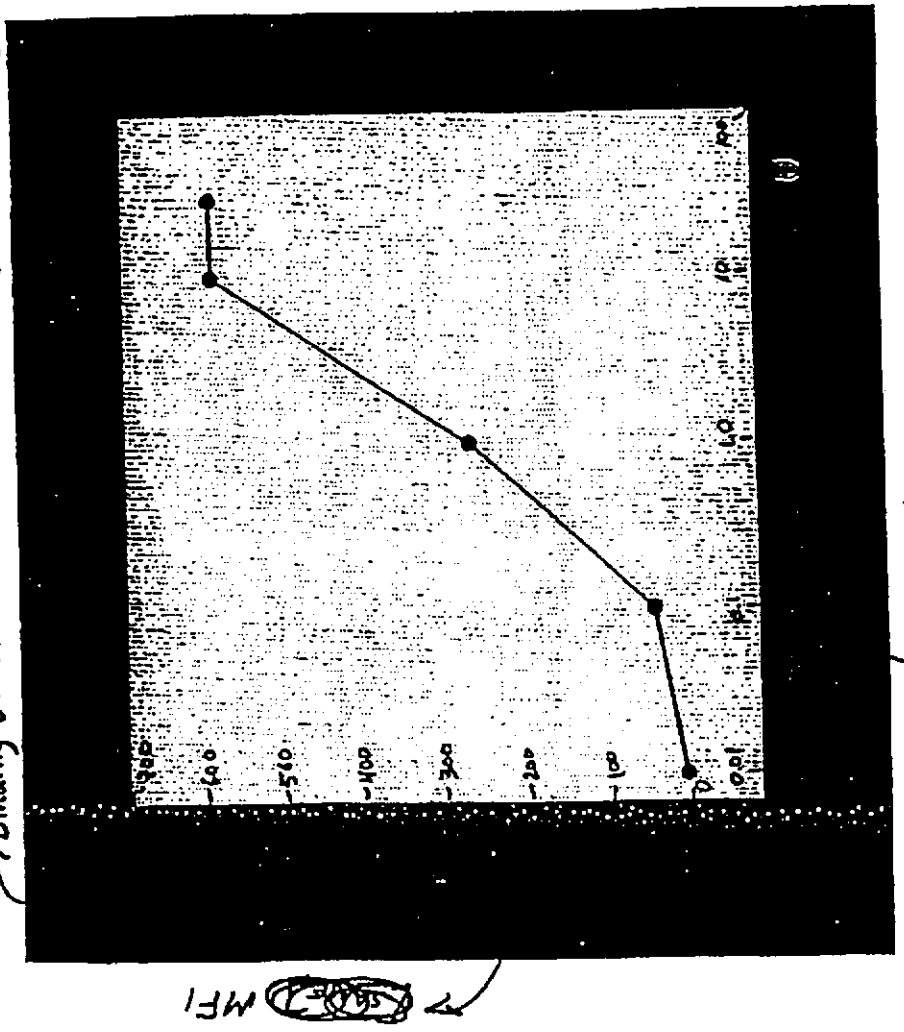

Binding of 14.1 x 8C12 to CD89-Expressing U937 Cells
MFI
[Bispecific Antibody Concentration] ng/ml
590
510
400
300
200
100
0
0.01
1
10
60
100
1000

Figure 7

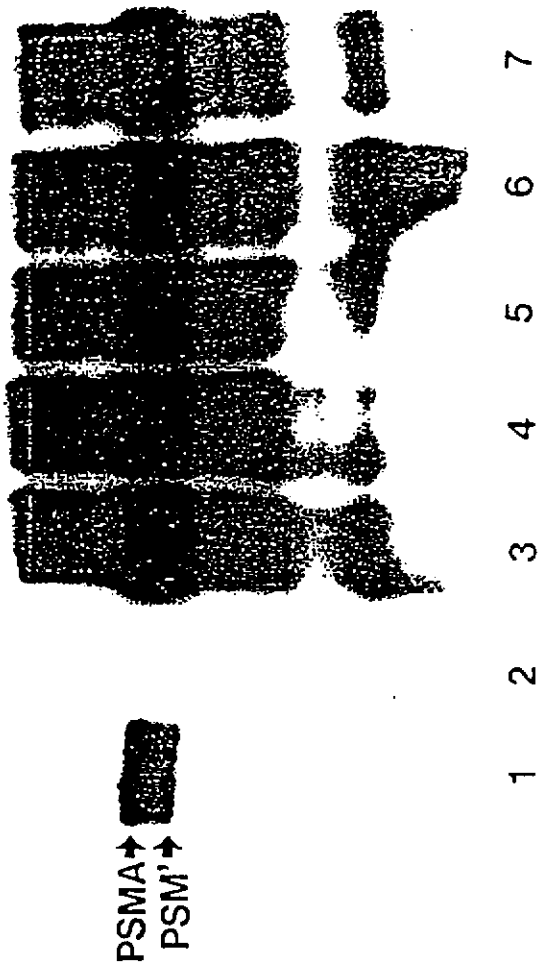


Figure 8

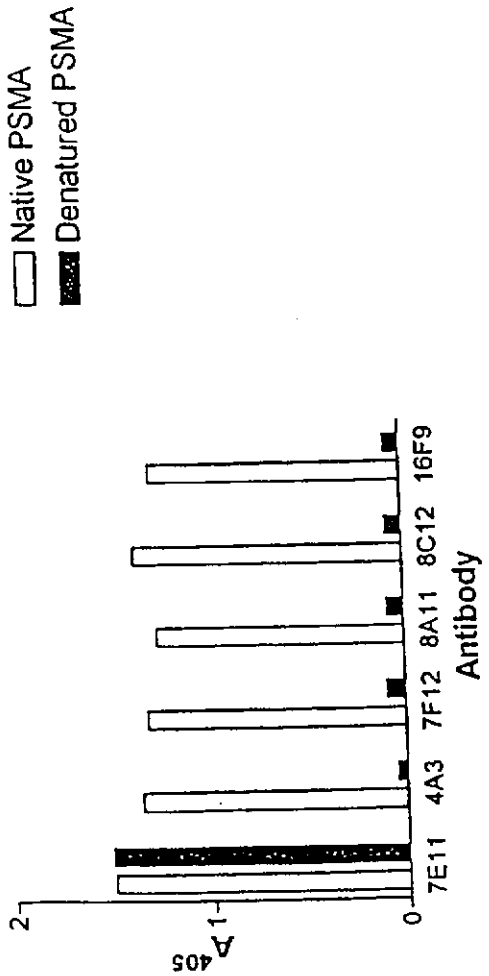

Native PSMA
Denatured PSMA
A405
2
1
0
7E11
4A3
7F12
8A11
8C12
16F9
Antibody

Figure 9

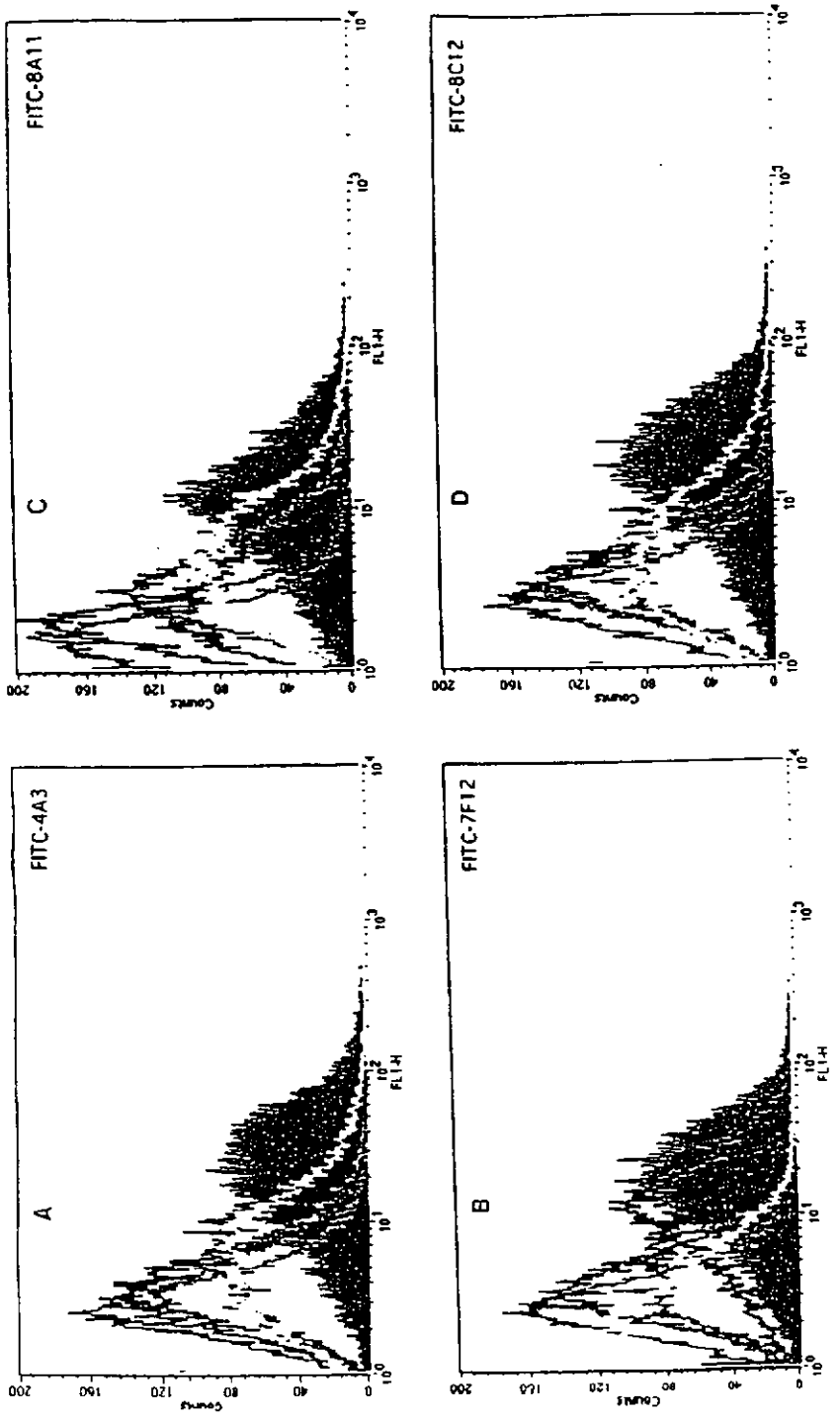


Figure 1D

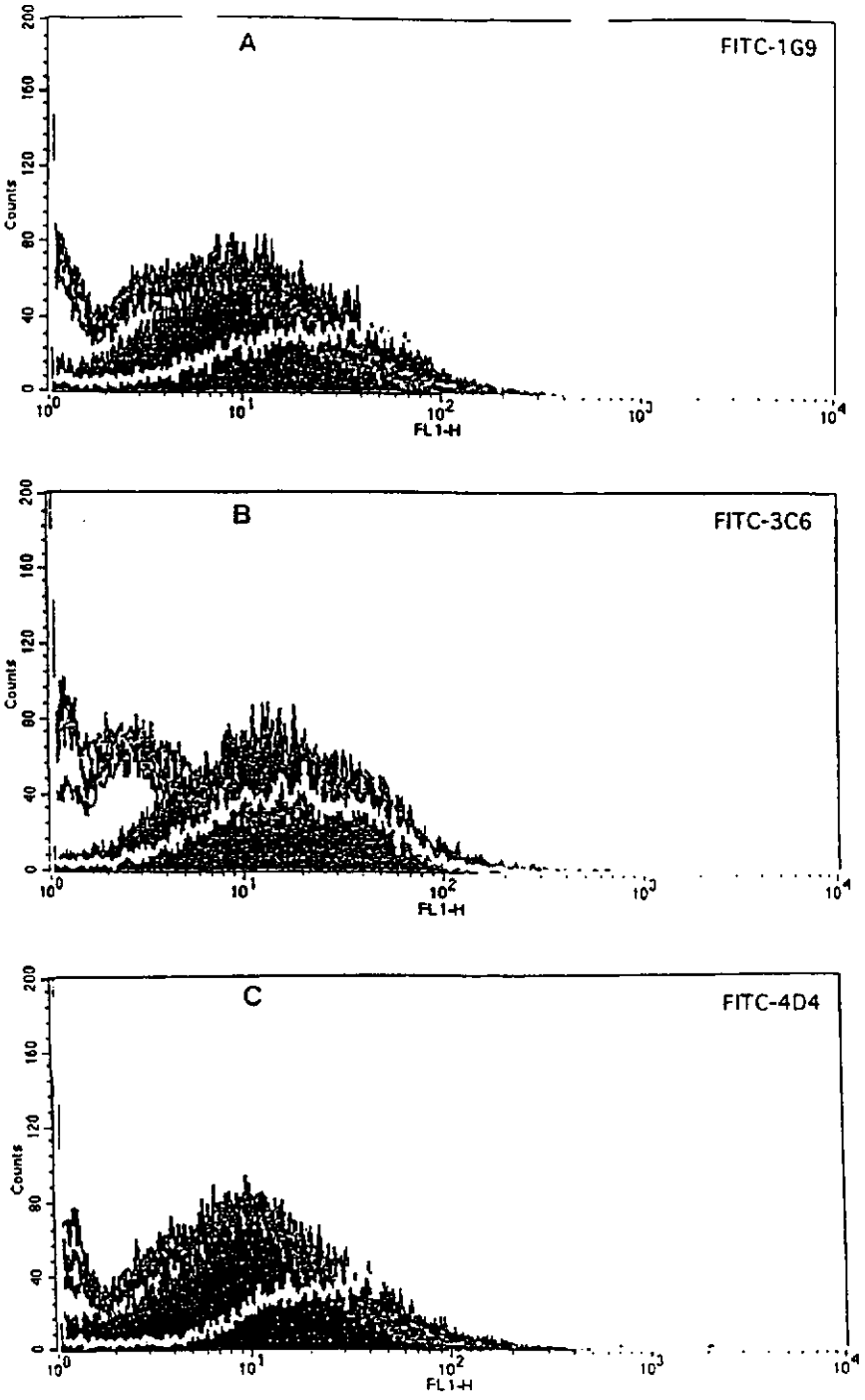


Figure 11

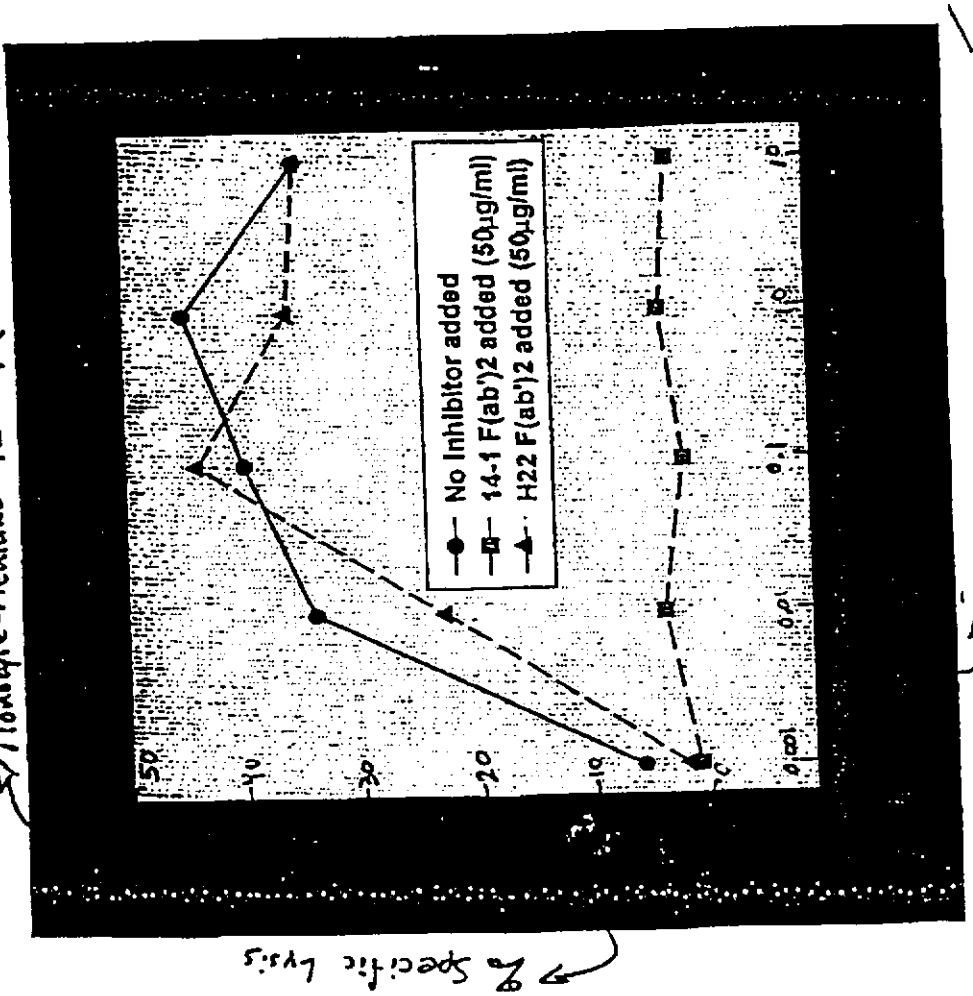

Monocyte-Mediated ADCC via 14.1 x 8C12 BsAb
% Specific Lysis
[BsAb concentration mg/ml]
No Inhibitor added
14-1 F(ab')2 added (50µg/ml)
H22 F(ab')2 added (50µg/ml)
50
40
30
20
10
0
10
1
0.1
0.01
0.001

Figure 12A

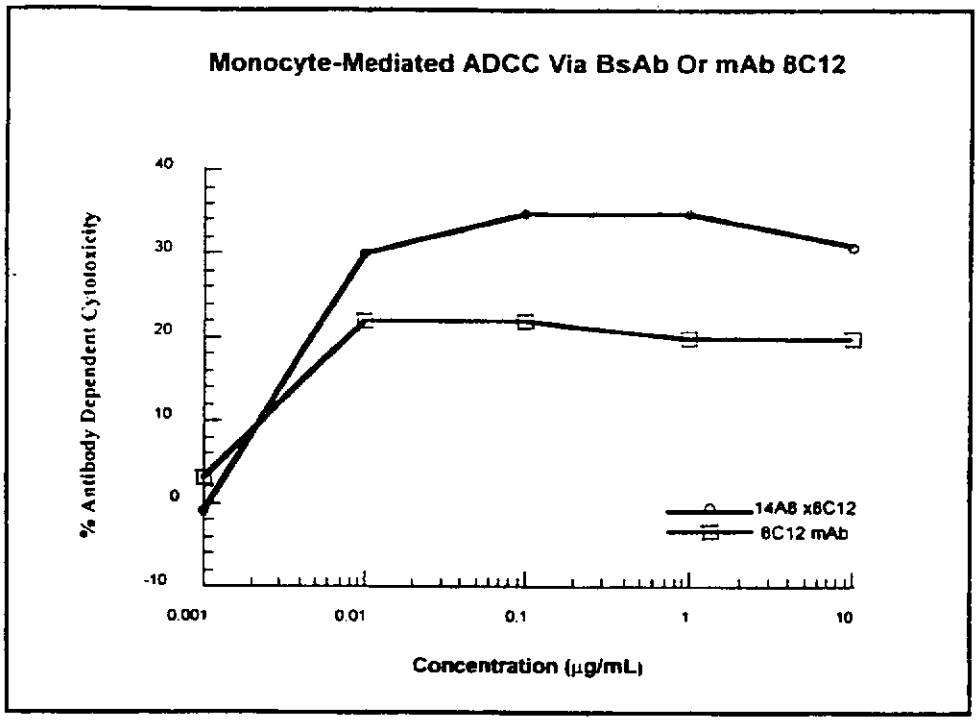

Monocyte-Mediated ADCC Via BsAb Or mAb 8C12
% Antibody Dependent Cytotoxicity
40
30
20
10
0
-10
0.001
0.01
0.1
1
10
Concentration (µg/mL)
14A8 x8C12
8C12 mAb

FIGURE 12B

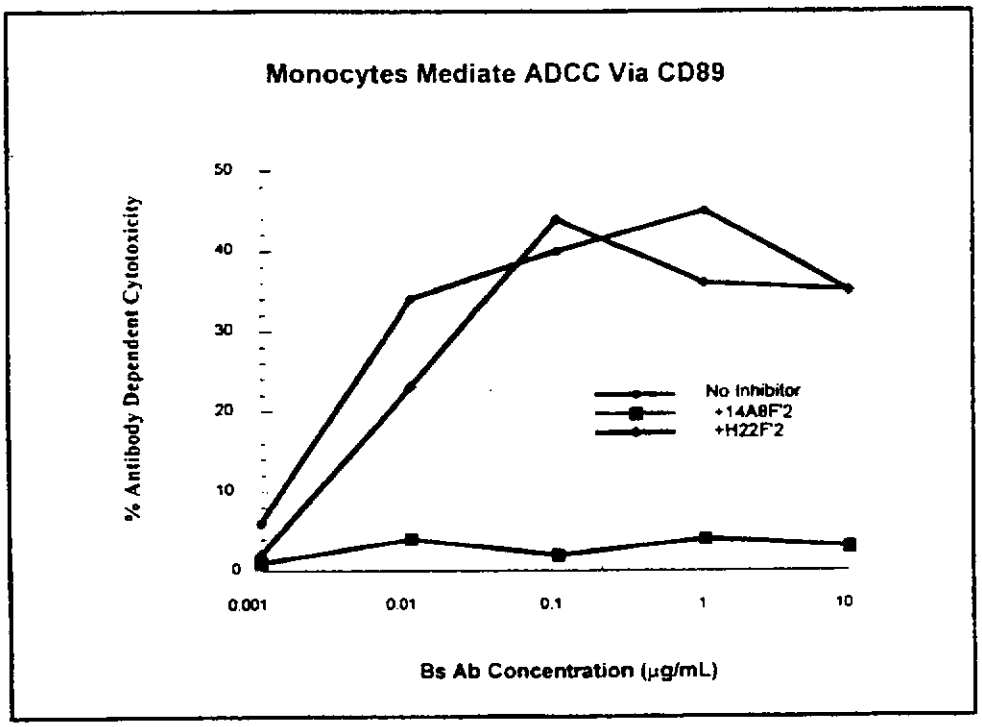

Monocytes Mediate ADCC Via CD89
% Antibody Dependent Cytotoxicity
50
40
30
20
10
0
0.001
0.01
0.1
1
10
Bs Ab Concentration (µg/mL)
No Inhibitor
+14A8F'2
+H22F'2

FIGURE 12C

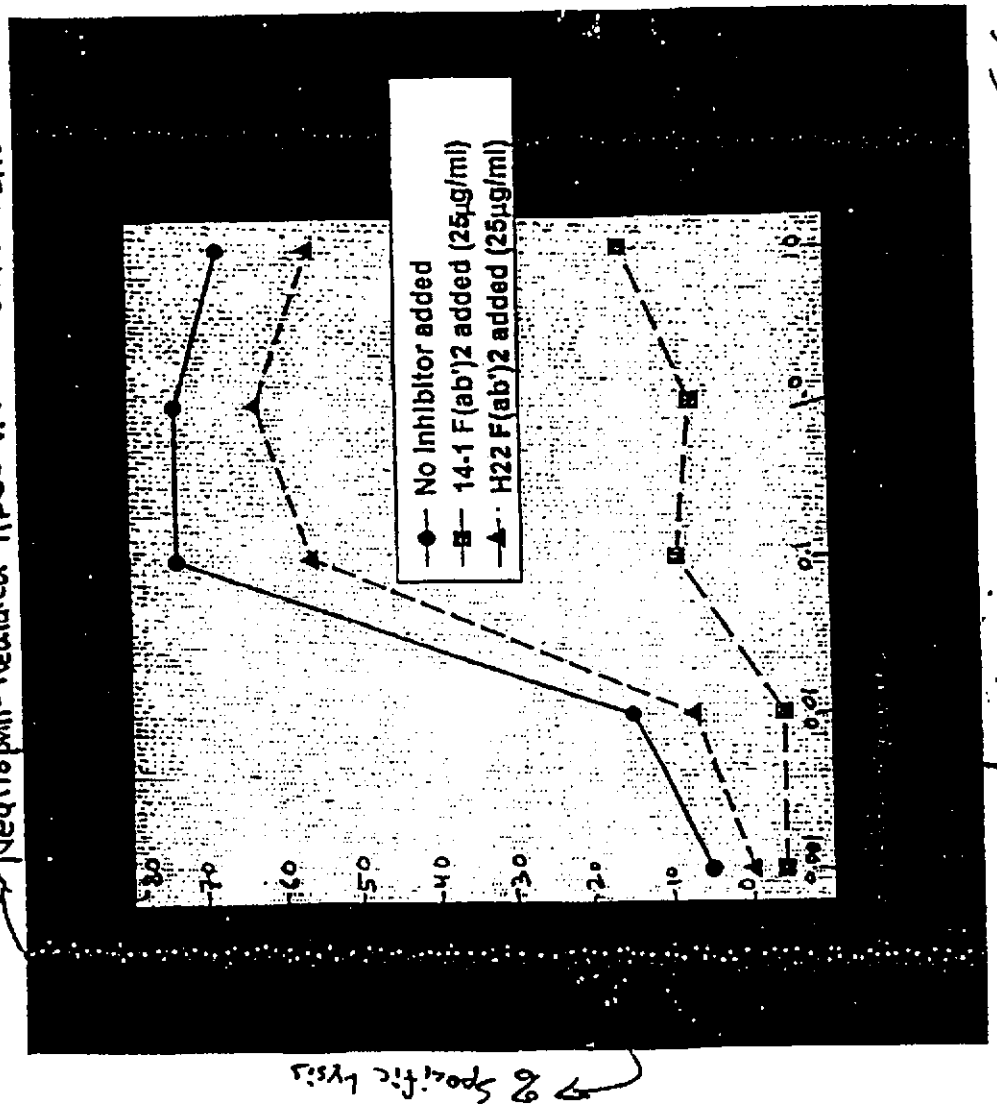

Neutrophil-Mediated ADCC via 14.1 x 8C12 BsAb
No Inhibitor added
14-1 F(ab')2 added (25µg/ml)
H22 F(ab')2 added (25µg/ml)
% Specific Lysis
[BsAb Concentration ng/ml]

Figure 13A

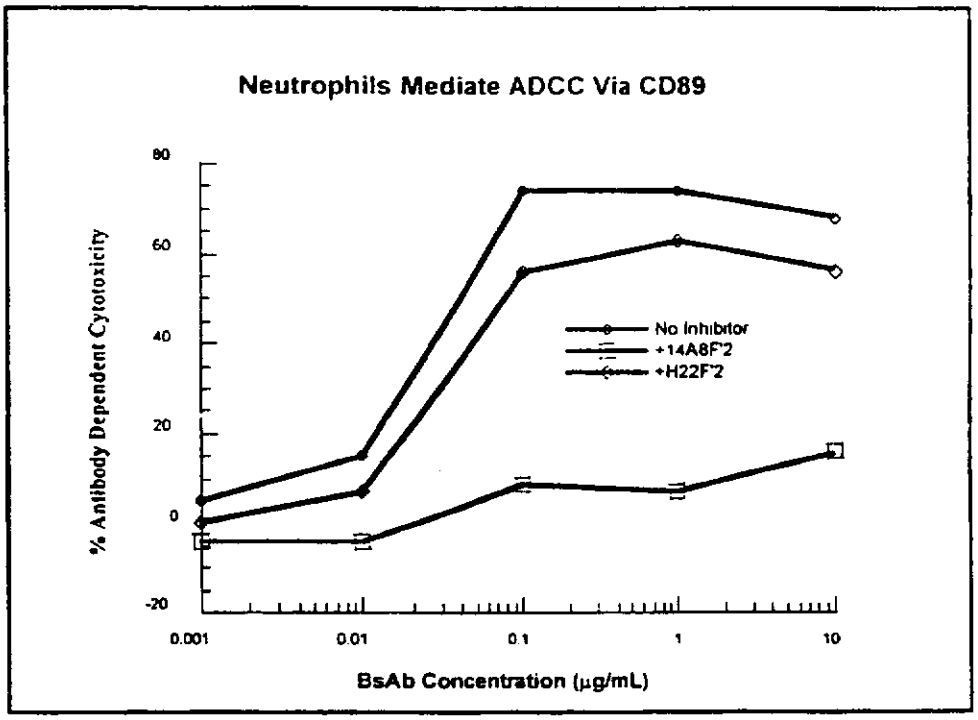

Neutrophils Mediate ADCC Via CD89
% Antibody Dependent Cytotoxicity
80
60
40
20
0
-20
0.001
0.01
0.1
1
10
BsAb Concentration (µg/mL)
No Inhibitor
+14A8F'2
+H22F'2

FIGURE 13B

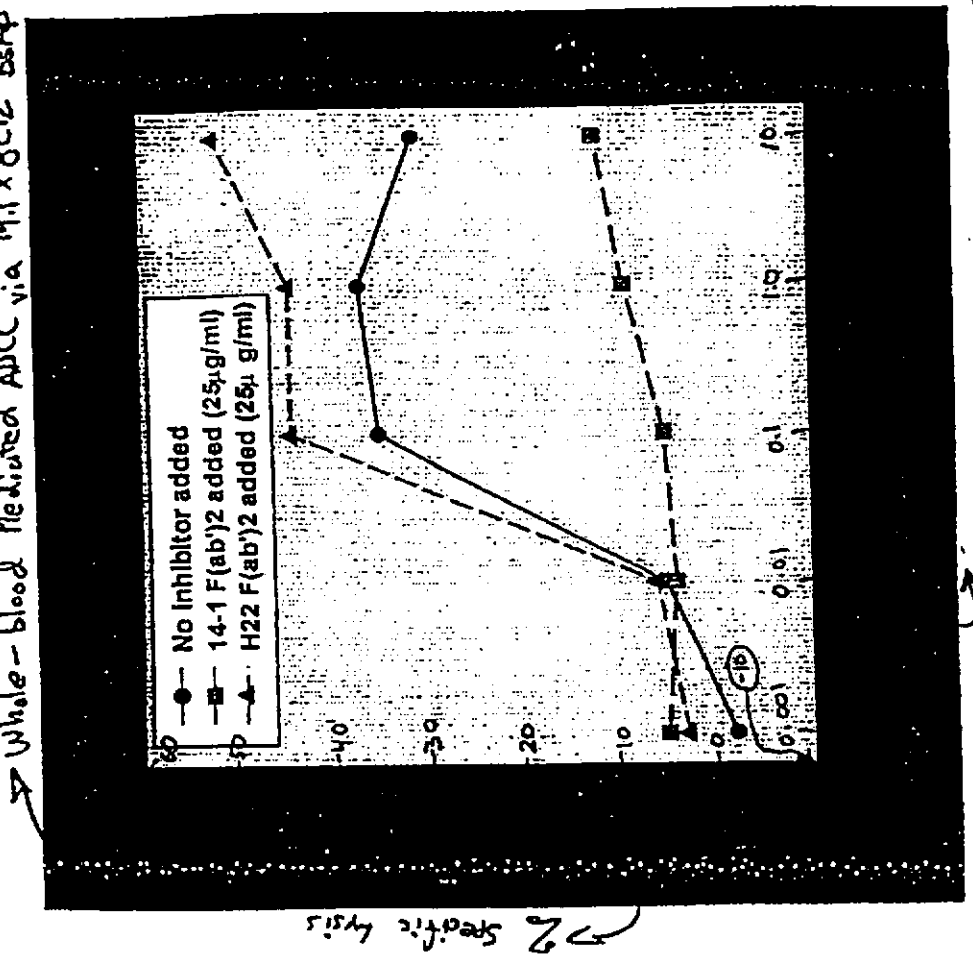

Whole-blood Mediated ADCC via 14.1 x 8C12 BsAb
% Specific Lysis
No Inhibitor added
14.1 F(ab')2 added (25µg/ml)
H22 F(ab')2 added (25µ g/ml)
40
30
20
10
0
10
1.0
0.1
0.01
0.001
-10
[BsAb concentration mg/ml]

Figure 14A

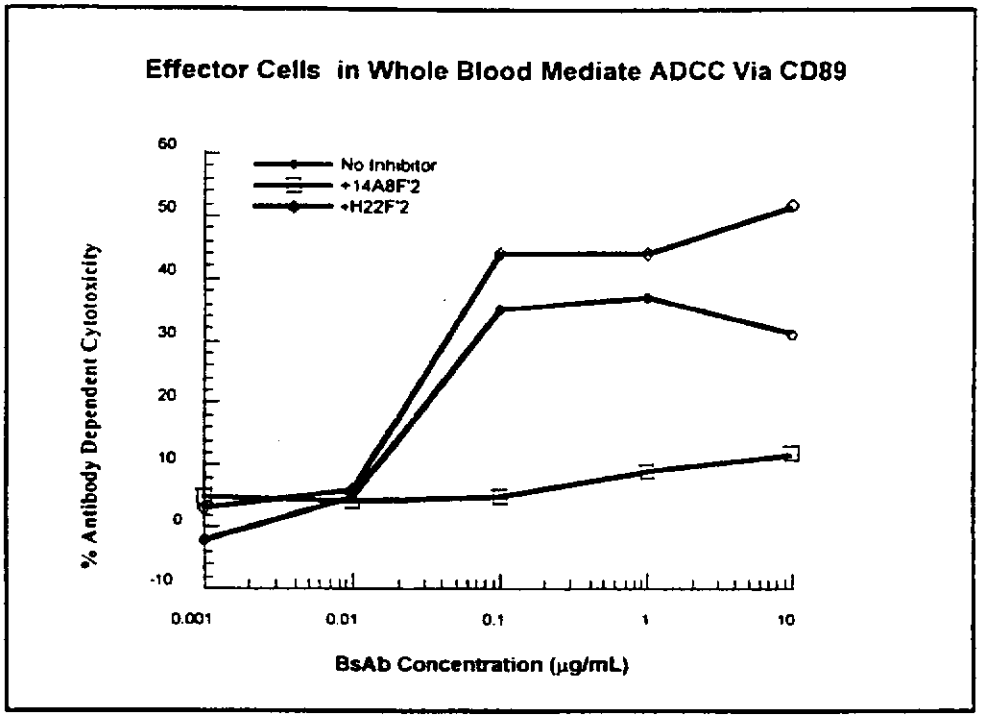

Effector Cells in Whole Blood Mediate ADCC Via CD89
No Inhibitor
+14A8F'2
+H22F'2
% Antibody Dependent Cytotoxicity
60
50
40
30
20
10
0
-10
0.001
0.01
0.1
1
10
BsAb Concentration (µg/mL)

FIGURE 14B

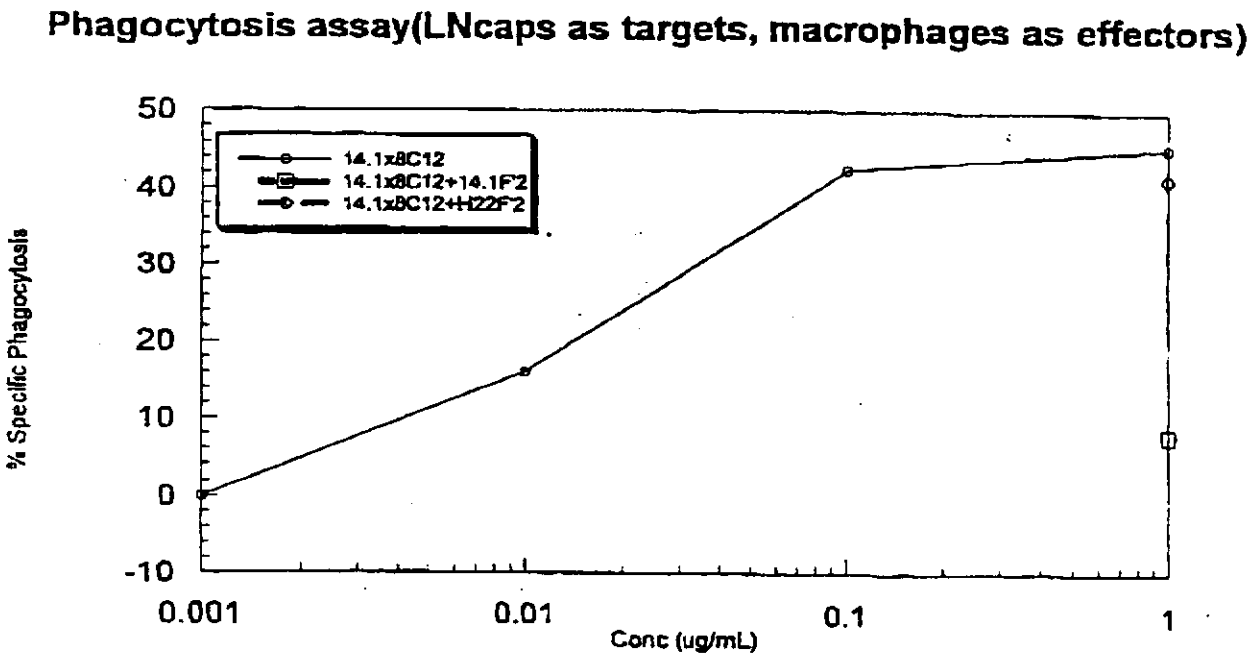

Phagocytosis assay(LNcaps as targets, macrophages as effectors)
% Specific Phagocytosis
50
40
30
20
10
0
-10
0.001
0.01
0.1
1
Conc (ug/mL)
14.1x8C12
14.1x8C12+14.1F2
14.1x8C12+H22F2

Figure 15

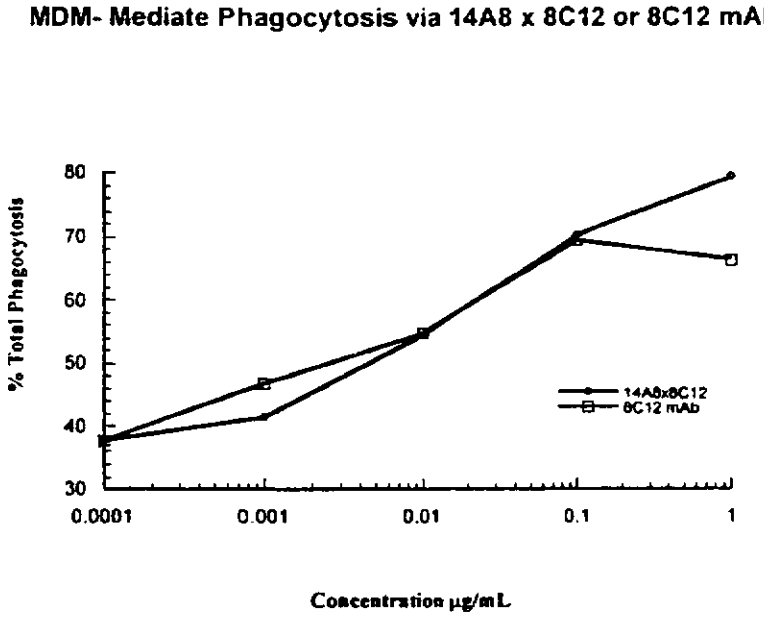

MDM- Mediate Phagocytosis via 14A8 x 8C12 or 8C12 mAb
% Total Phagocytosis
80
70
60
50
40
30
0.0001
0.001
0.01
0.1
1
14A8x8C12
8C12 mAb
Concentration µg/mL

FIGURE 16

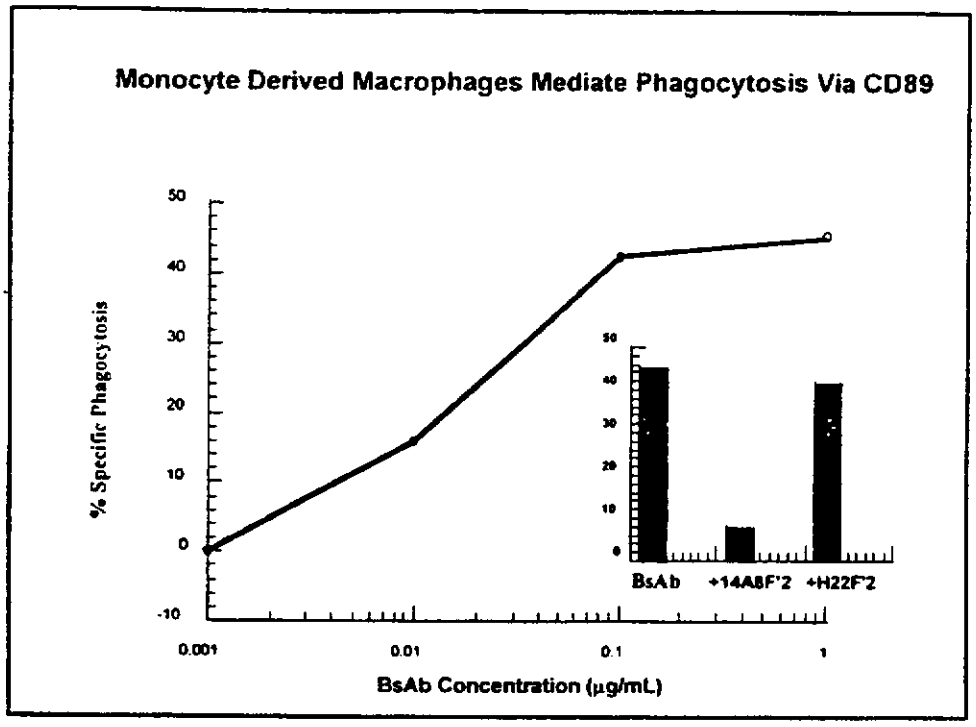

Monocyte Derived Macrophages Mediate Phagocytosis Via CD89
% Specific Phagocytosis
50
40
30
20
10
0
-10
0.001
0.01
0.1
1
BsAb Concentration (µg/mL)
BsAb
+14A8F'2
+H22F'2

FIGURE 17