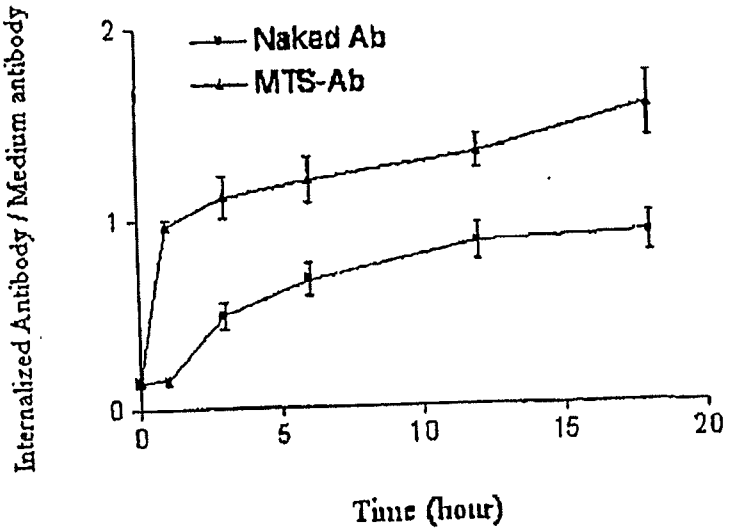

Internalized Antibody / Medium antibody
2
1
0
Naked Ab
MTS-Ab
0
5
10
15
20
Time (hour)

FIG. 1

TransMabs

Inhibition of Cell Death in Normal Cells

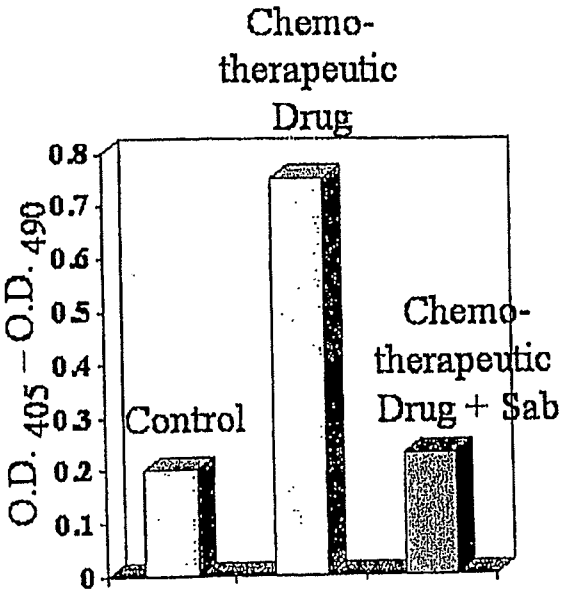


FIG. 2

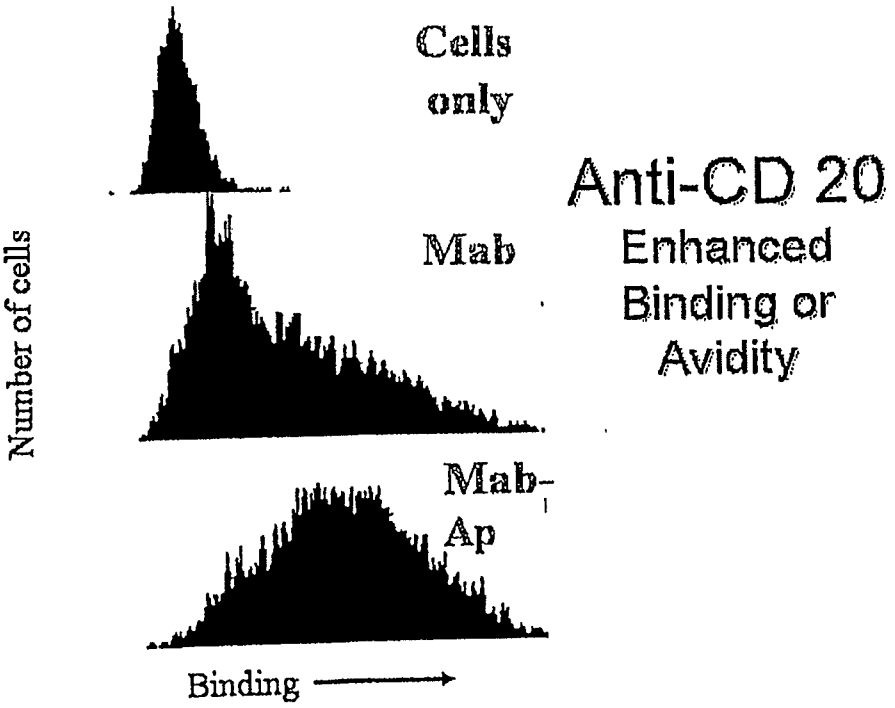

Cells only
Mab
Mab-Ap
Number of cells
Binding
Anti-CD 20
Enhanced Binding or Avidity

FIG. 3

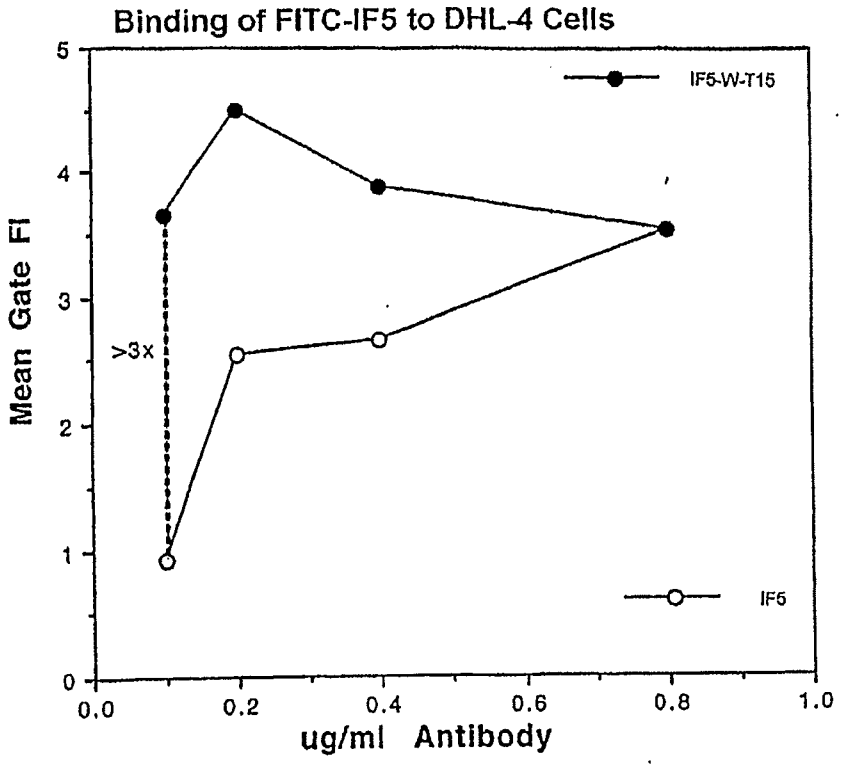

Binding of FITC-IF5 to DHL-4 Cells
IF5-W-T15
IF5
>3x
Mean Gate FI
ug/ml Antibody
0
1
2
3
4
5
0.0
0.2
0.4
0.6
0.8
1.0

FIG. 4

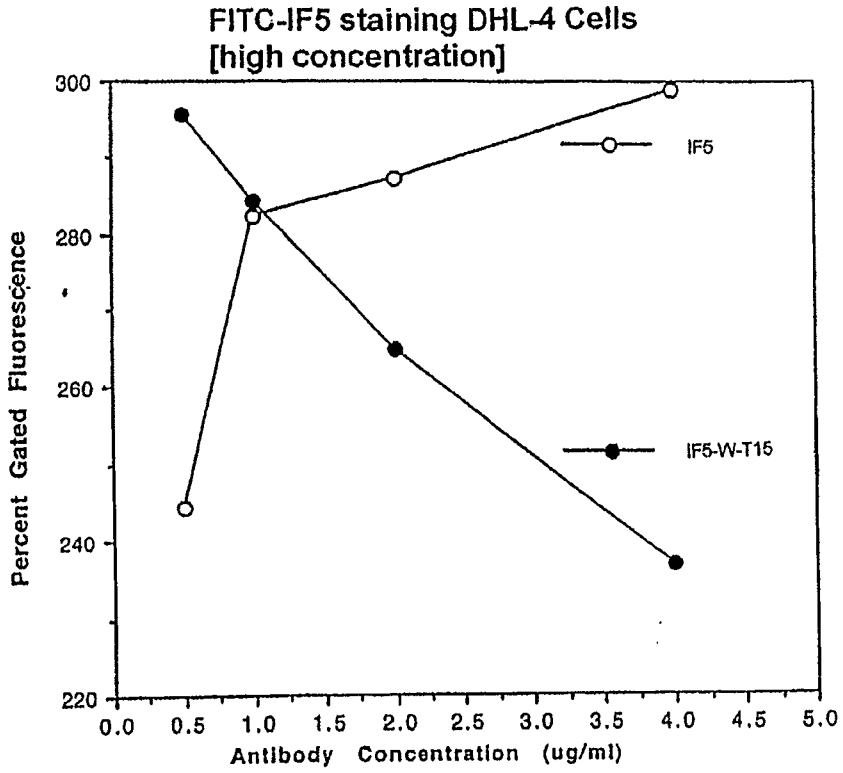

FITC-IF5 staining DHL-4 Cells
[high concentration]
Percent Gated Fluorescence
300
280
260
240
220
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
Antibody Concentration (ug/ml)
IF5
IF5-W-T15

FIG. 5

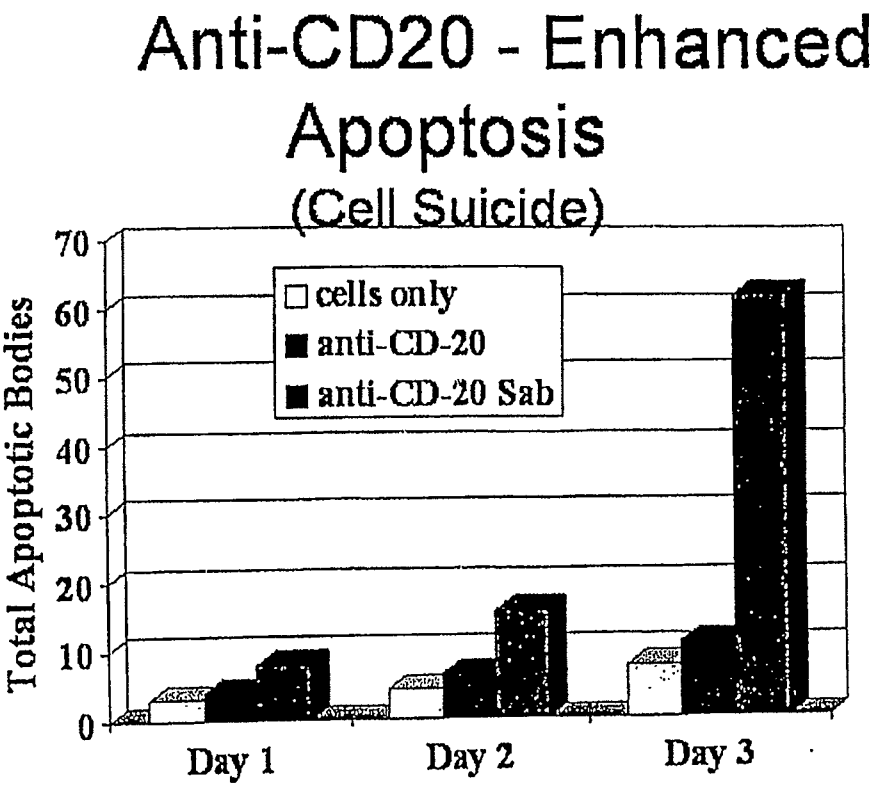

Anti-CD20 - Enhanced Apoptosis
(Cell Suicide)
Total Apoptotic Bodies
70
60
50
40
30
20
10
0
cells only
anti-CD-20
anti-CD-20 Sab
Day 1
Day 2
Day 3

FIG. 6

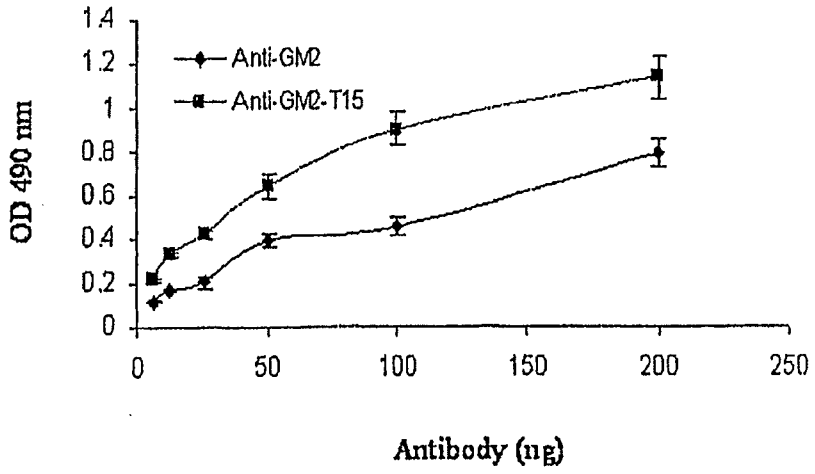

1.4
1.2
1
0.8
0.6
0.4
0.2
0
OD 490 nm
Anti-GM2
Anti-GM2-T15
0
50
100
150
200
250
Antibody (ng)

FIG. 7

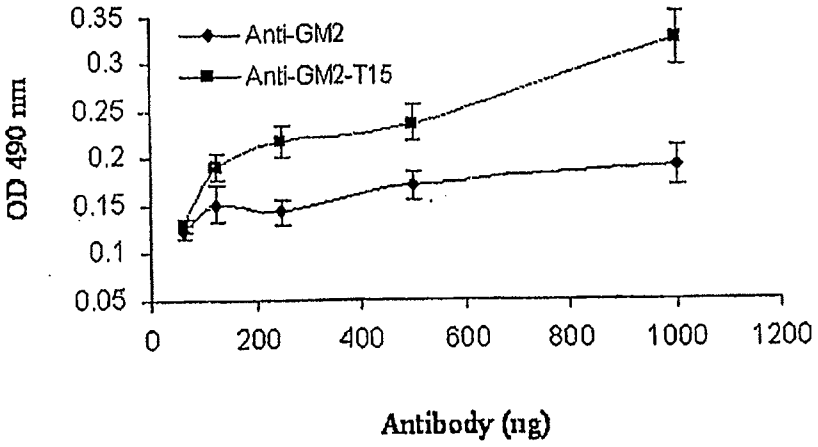

0.35
0.3
0.25
0.2
0.15
0.1
0.05
OD 490 nm
Anti-GM2
Anti-GM2-T15
0
200
400
600
800
1000
1200
Antibody (ng)

FIG. 8

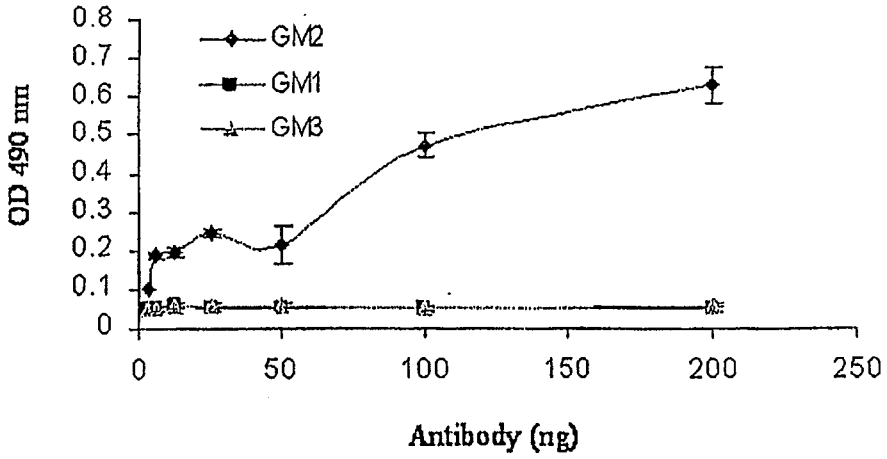

0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
OD 490 nm
GM2
GM1
GM3
0
50
100
150
200
250
Antibody (ng)

FIG. 9

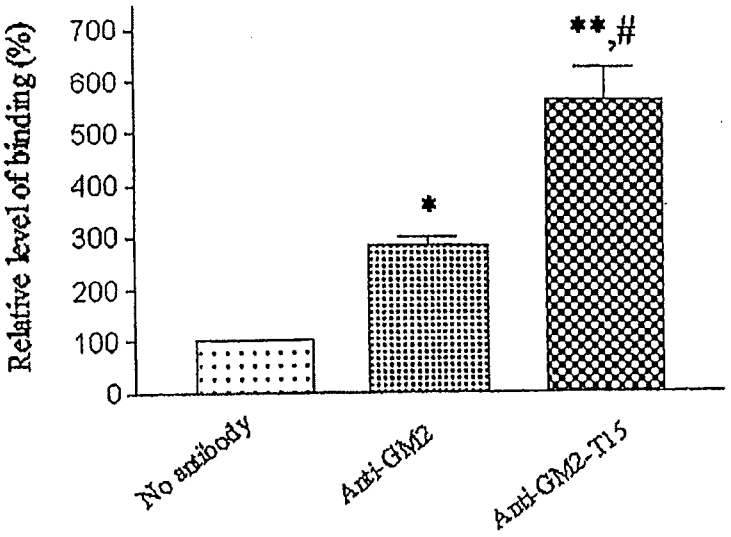

Relative level of binding (%)
700
600
500
400
300
200
100
0
**,#
*
No antibody
Anti-GM2
Anti-GM2-T15

FIG. 10

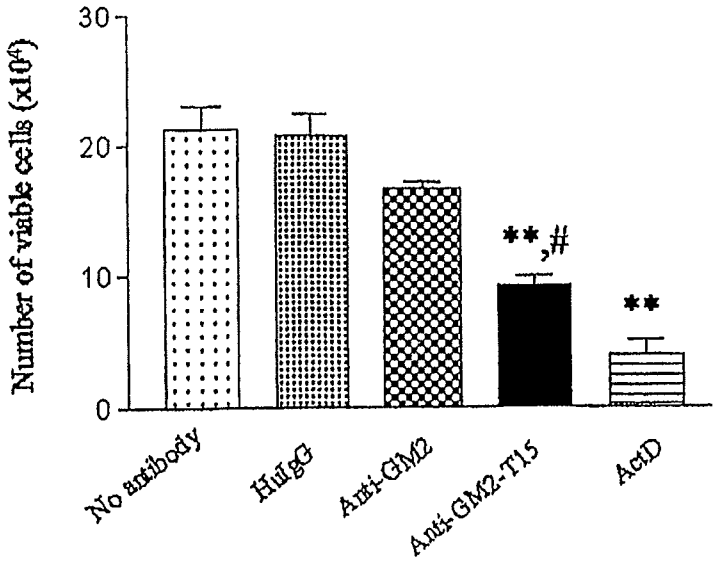

Number of viable cells (x10⁴)
30
20
10
0
**,#
**
No antibody
HuIgG
Anti-GM2
Anti-GM2-T15
ActD

FIG. 11

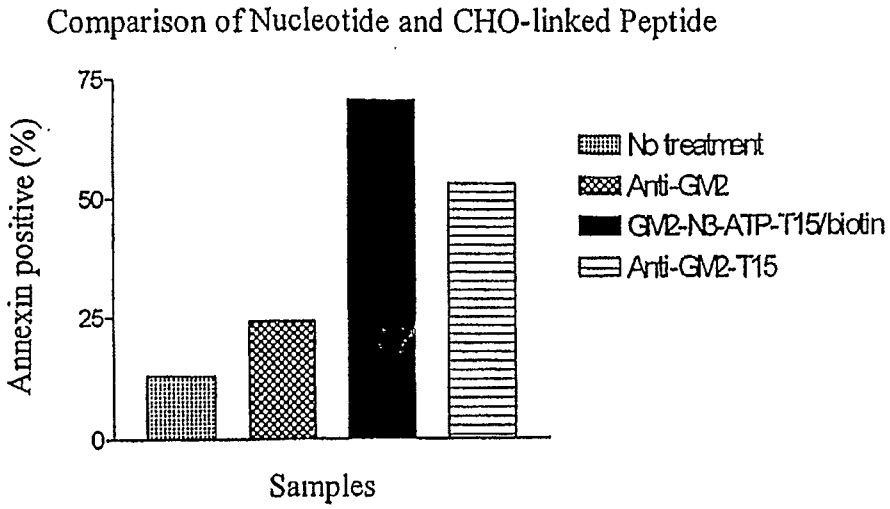

Comparison of Nucleotide and CHO-linked Peptide
Annexin positive (%)
75
50
25
0
Samples
No treatment
Anti-GM2
GM2-NB-ATP-T15/biotin
Anti-GM2-T15

FIG. 12

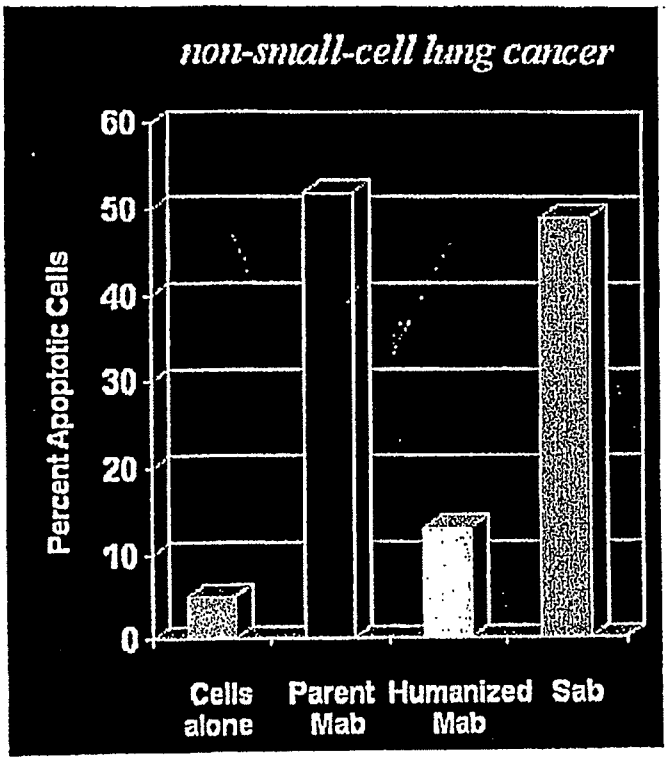

non-small-cell lung cancer
Percent Apoptotic Cells
60
50
40
30
20
10
0
Cells alone
Parent Mab
Humanized Mab
Sab

FIG. 13

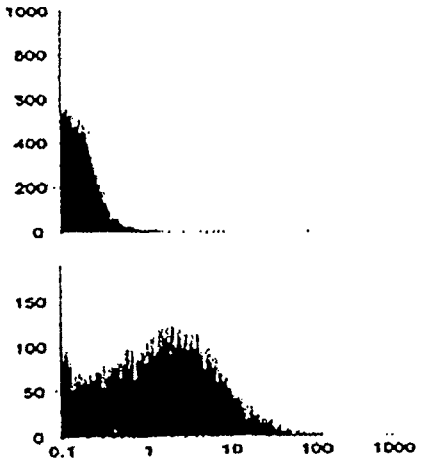


FIG. 14

FIG. 15

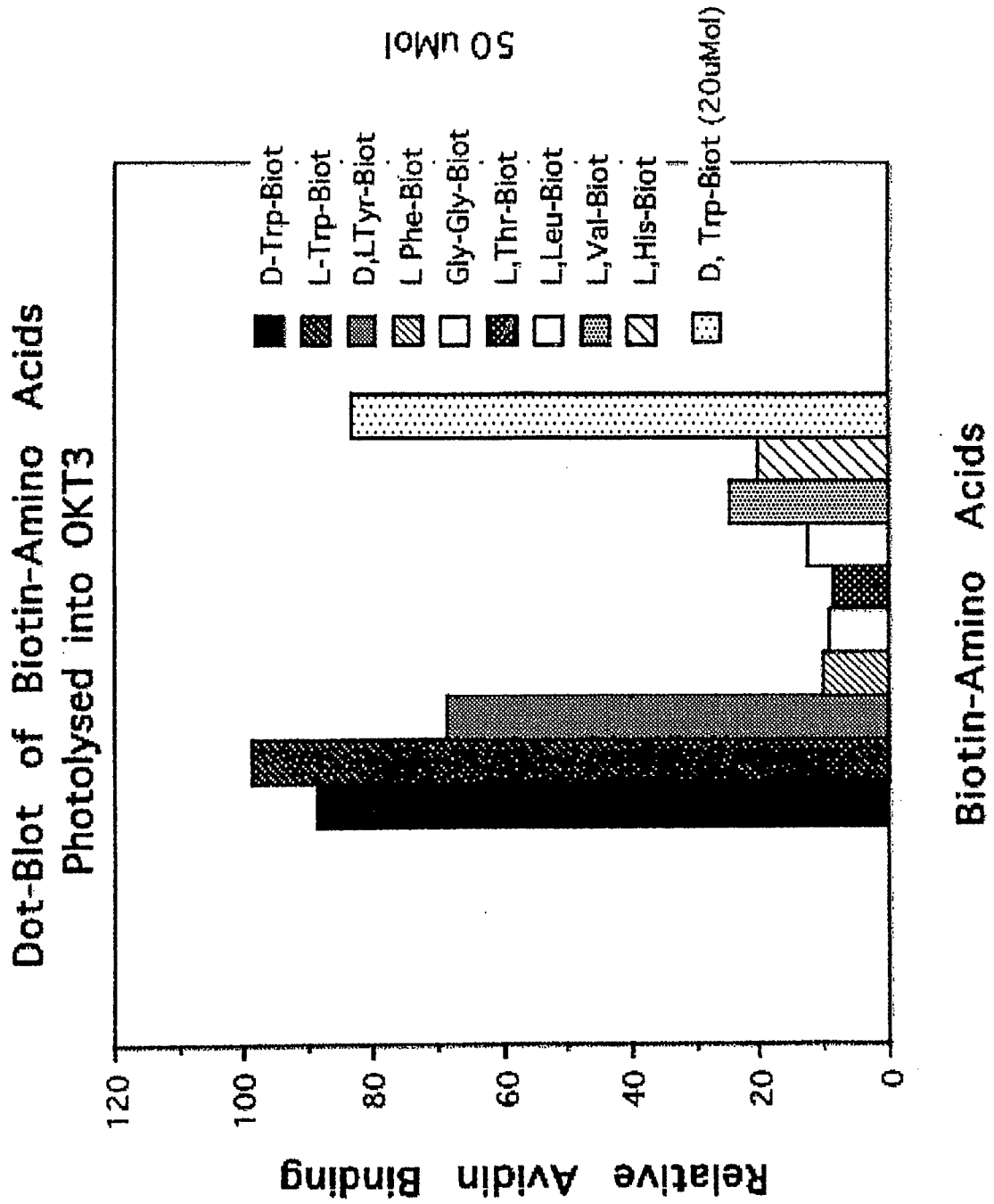

Dot-Blot of Biotin-Amino Acids
Photolysed into OKT3
50 uMol
D-Trp-Biot
L-Trp-Biot
D,LTyr-Biot
L Phe-Biot
Gly-Gly-Biot
L,Thr-Biot
L,Leu-Biot
L,Val-Biot
L,His-Biot
D, Trp-Biot (20uMol)
Relative Avidin Binding
120
100
80
60
40
20
0
Biotin-Amino Acids

FIG. 16A

PANEL A

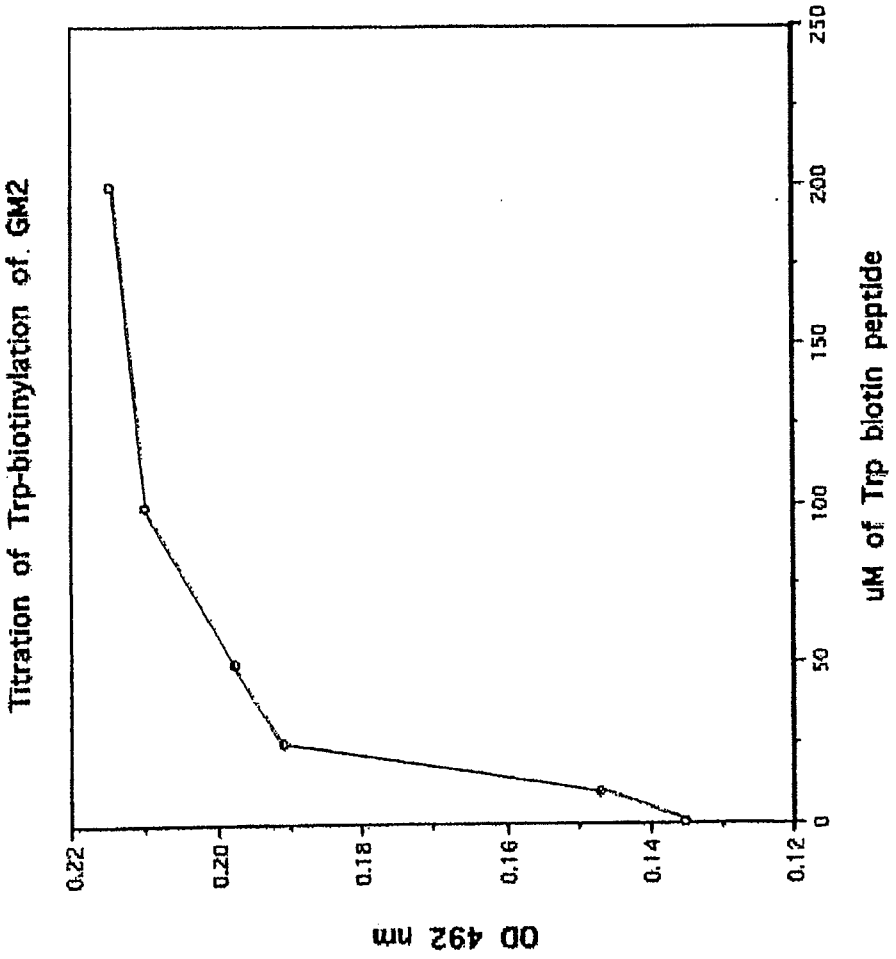


FIG. 16B

PANEL B

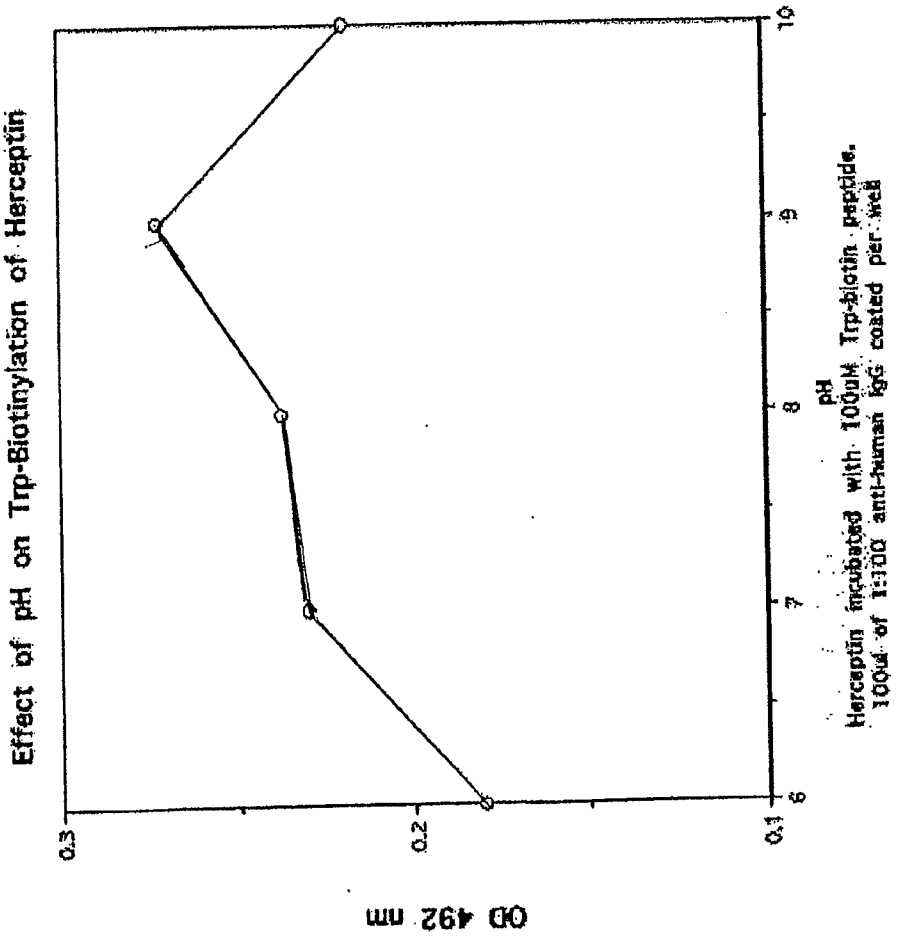


FIG. 17

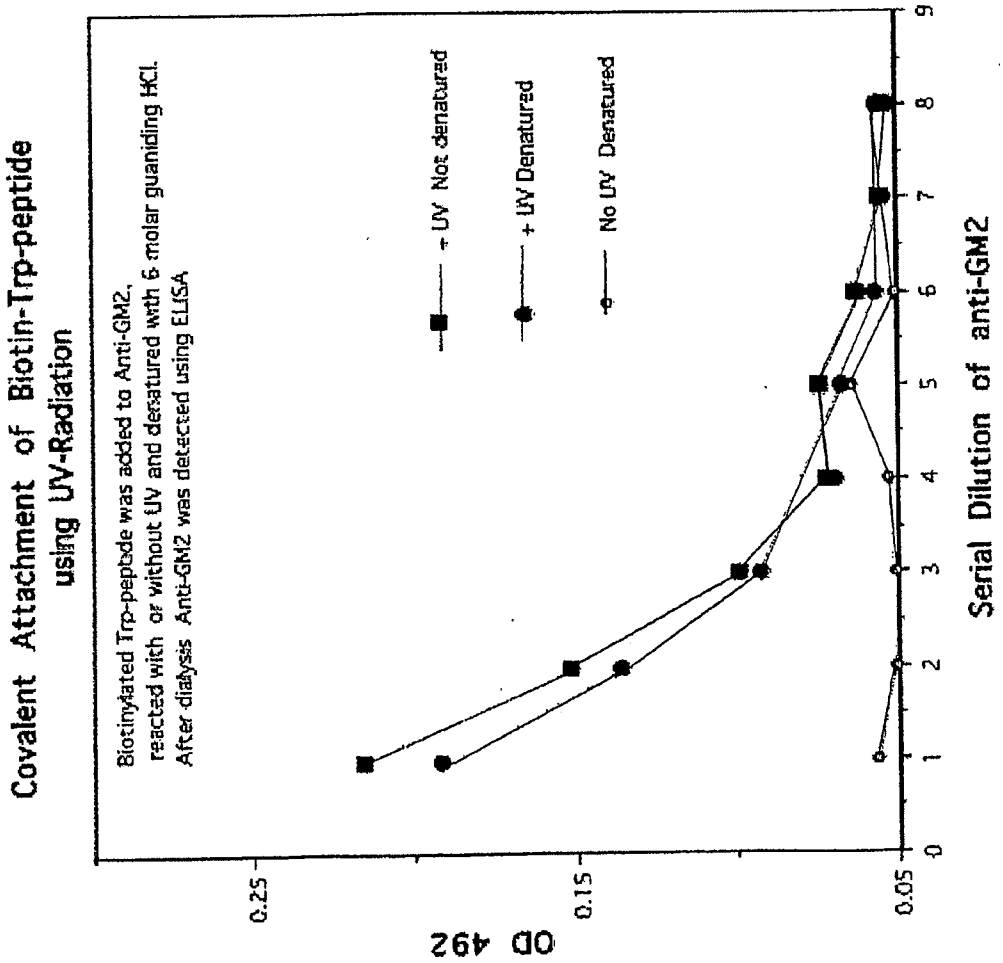

Covalent Attachment of Biotin-Trp-peptide
using UV-Radiation
Biotinylated Trp-peptide was added to Anti-GM2,
reacted with or without UV and denatured with 6 molar guaniding HCl.
After dialysis Anti-GM2 was detected using ELISA
+ UV Not denatured
+ UV Denatured
No UV Denatured
OD 492
0.25
0.15
0.05
0
1
2
3
4
5
6
7
8
9
Serial Dilution of anti-GM2

FIG. 18A

PANEL A

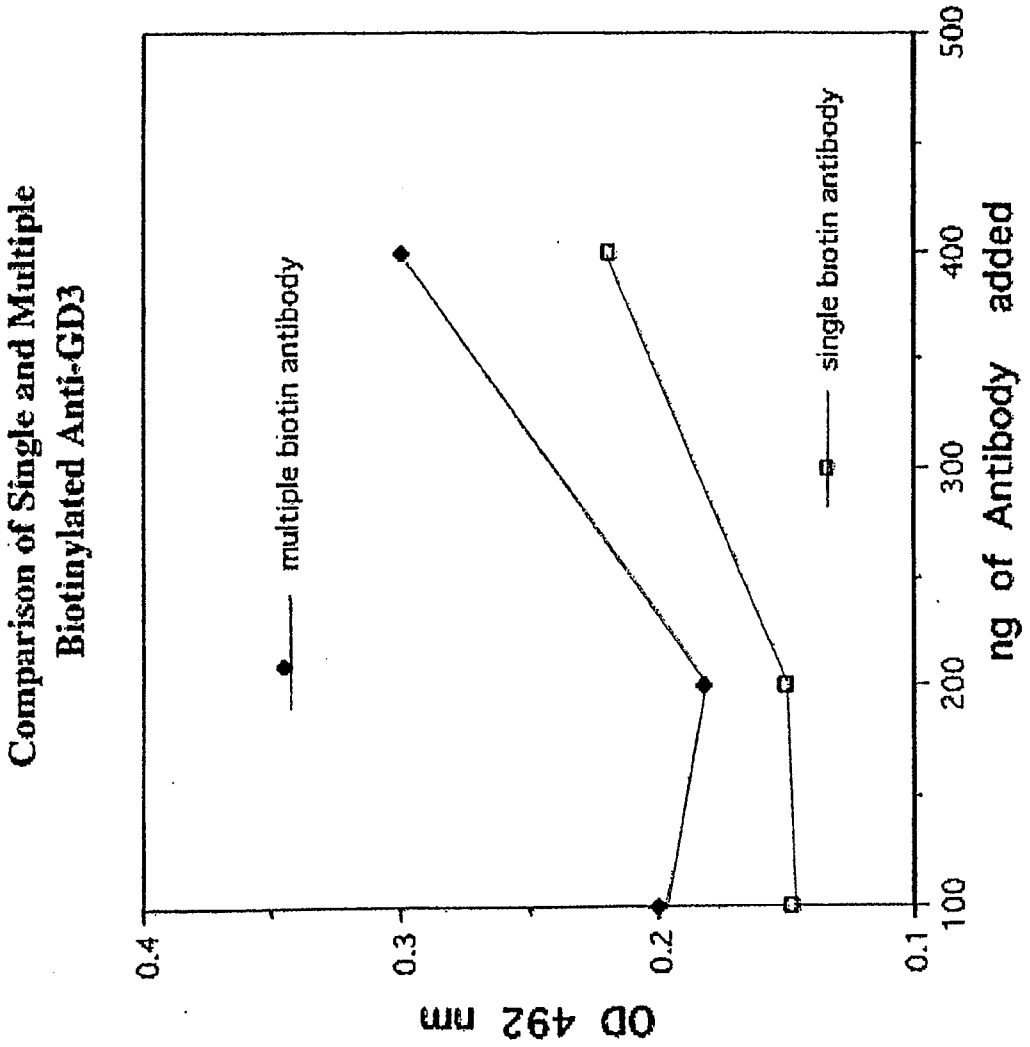


FIG. 18B

PANEL B

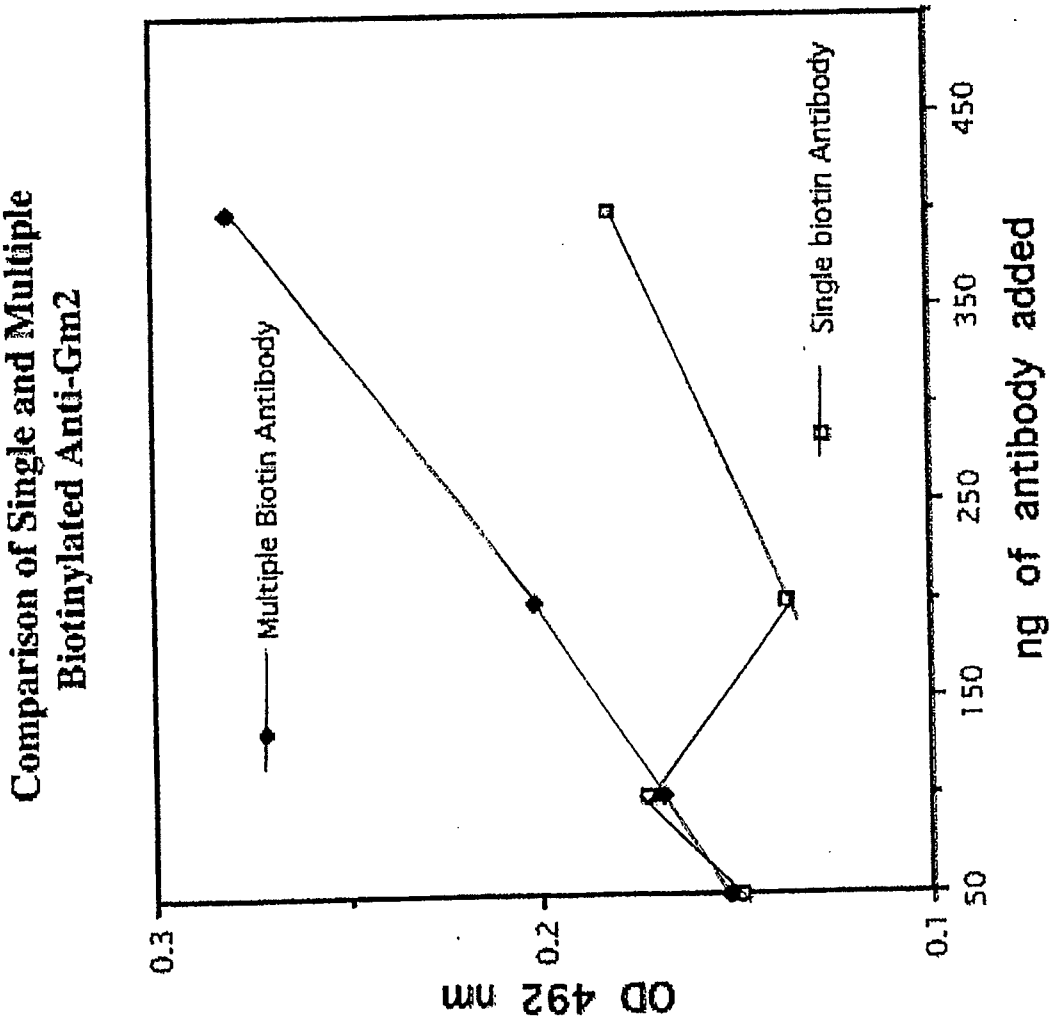


FIG. 19

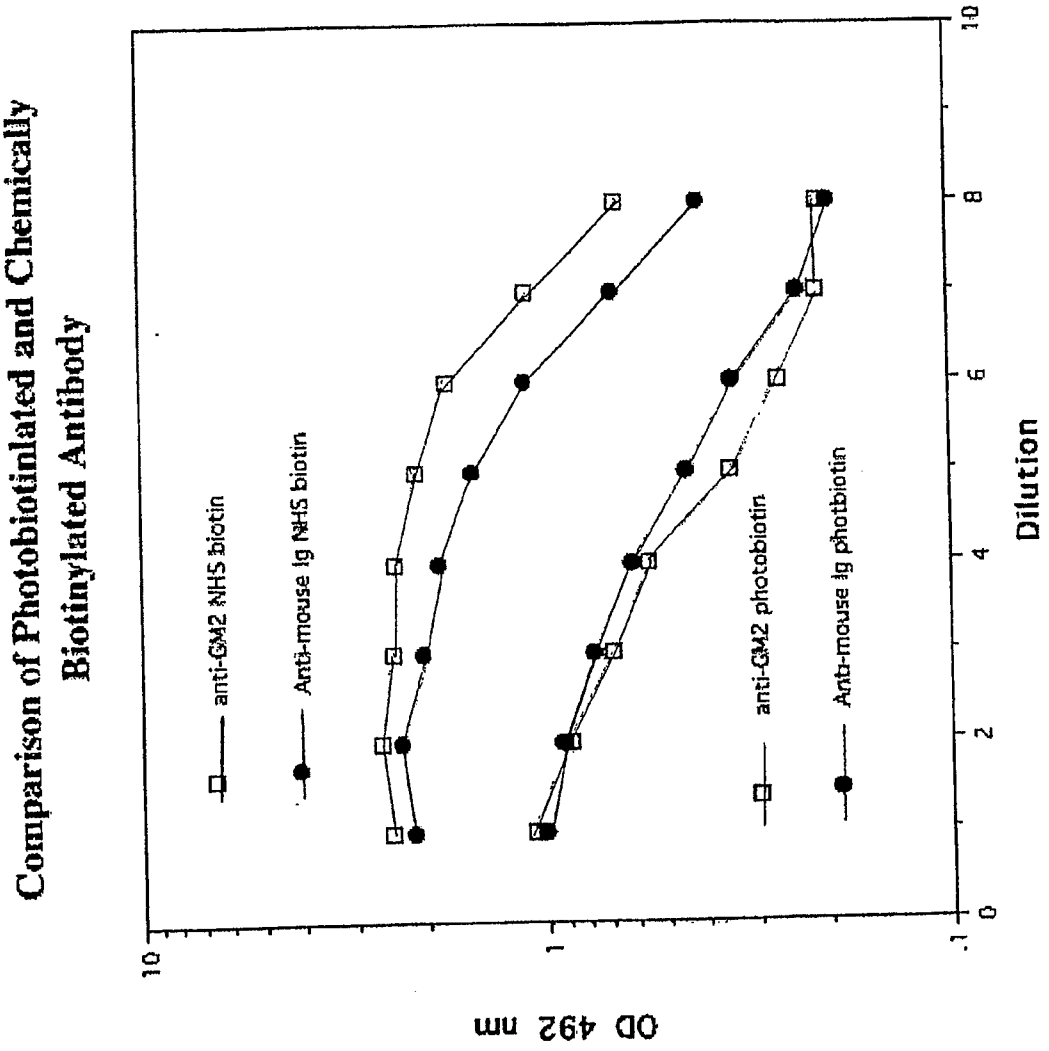

Comparison of Photobiotinlated and Chemically Biotinylated Antibody
anti-GM2 NHS biotin
Anti-mouse Ig NHS biotin
anti-GM2 photobiotin
Anti-mouse ig photbiotin
OD 492 nm
Dilution
10
1
.1
0
2
4
6
8
10

FIG. 20

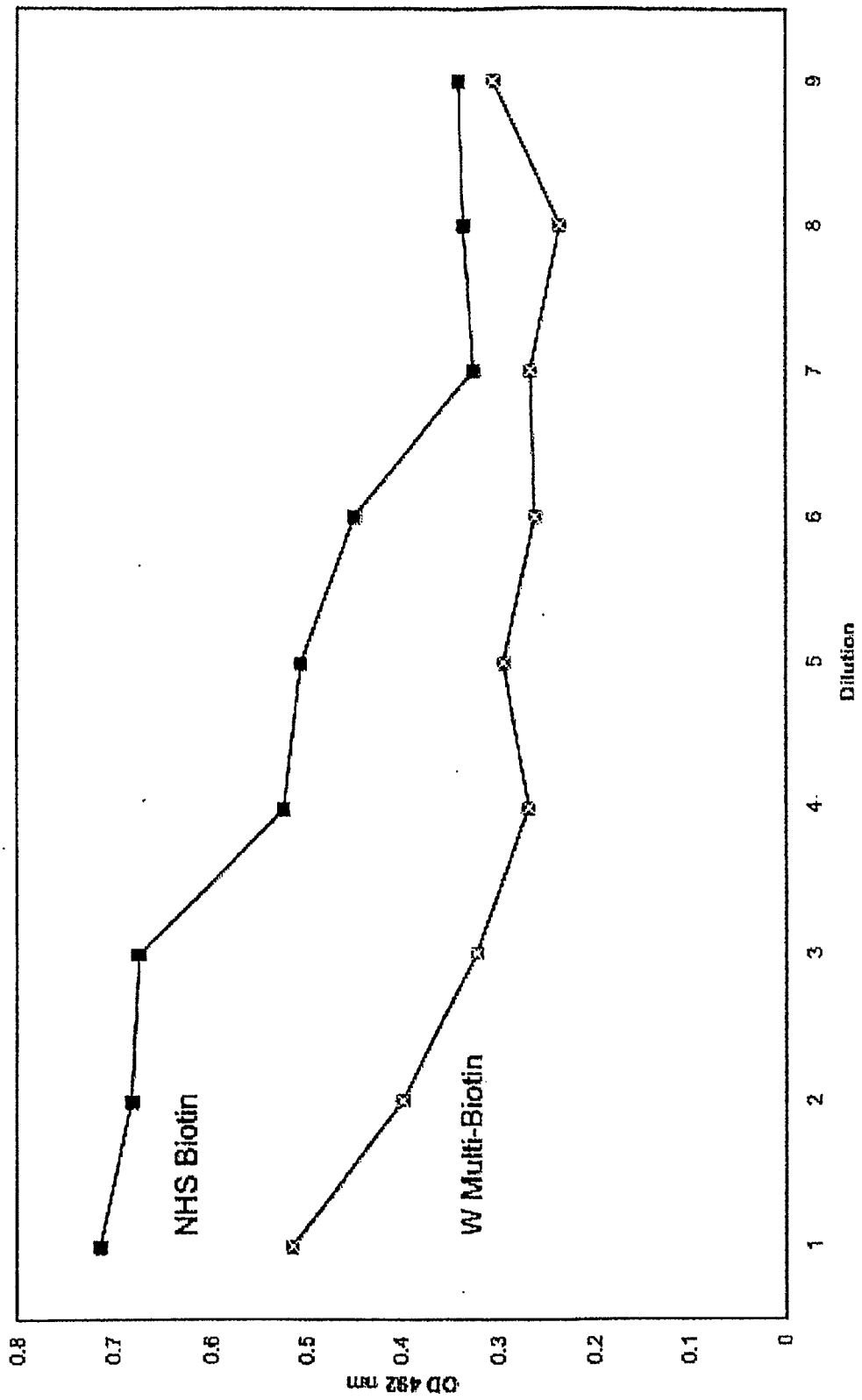

Comparison of anti-GM3: Photo- vs. Chemical-Biotinylation
NHS Biotin
W Multi-Biotin
OD 492 nm
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1
2
3
4
5
6
7
8
9
Dilution

FIG. 21

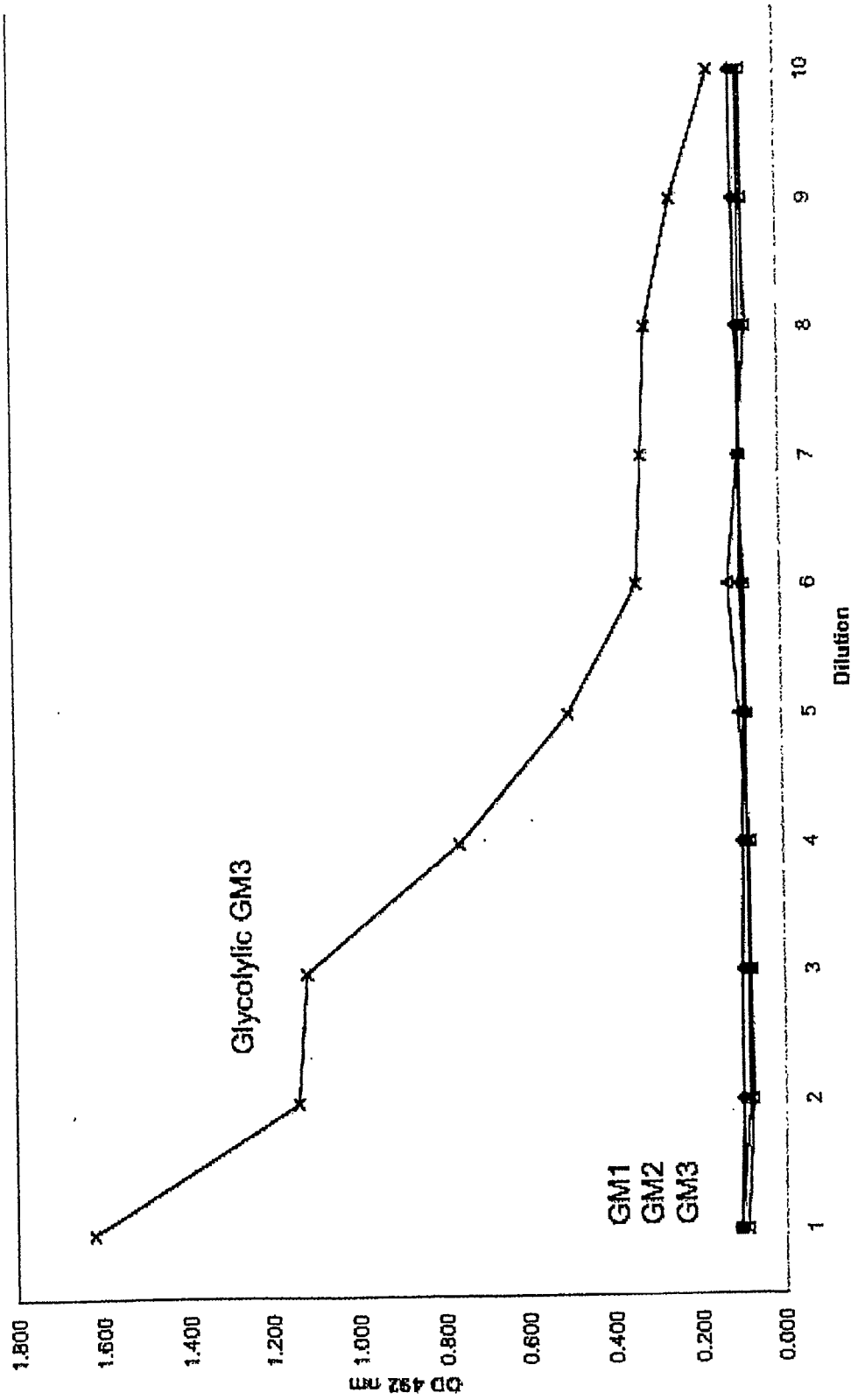
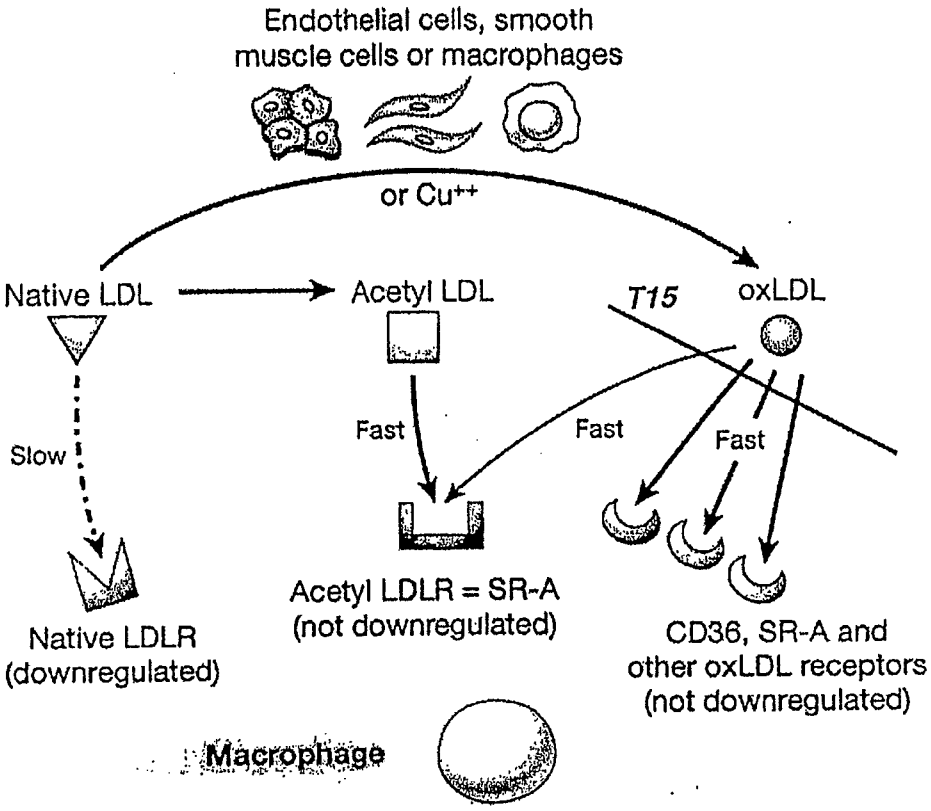

Antigen specific binding of photobiotinylated anti-glycolytic GM3
Glycolytic GM3
GM1
GM2
GM3
OD 492 nm
Dilution
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
1
2
3
4
5
6
7
8
9
10

FIG. 22


Endothelial cells, smooth
muscle cells or macrophages
or Cu++
Native LDL
Acetyl LDL
T15
oxLDL
Slow
Fast
Fast
Fast
Native LDLR
(downregulated)
Acetyl LDLR = SR-A
(not downregulated)
CD36, SR-A and
other oxLDL receptors
(not downregulated)
Macrophage