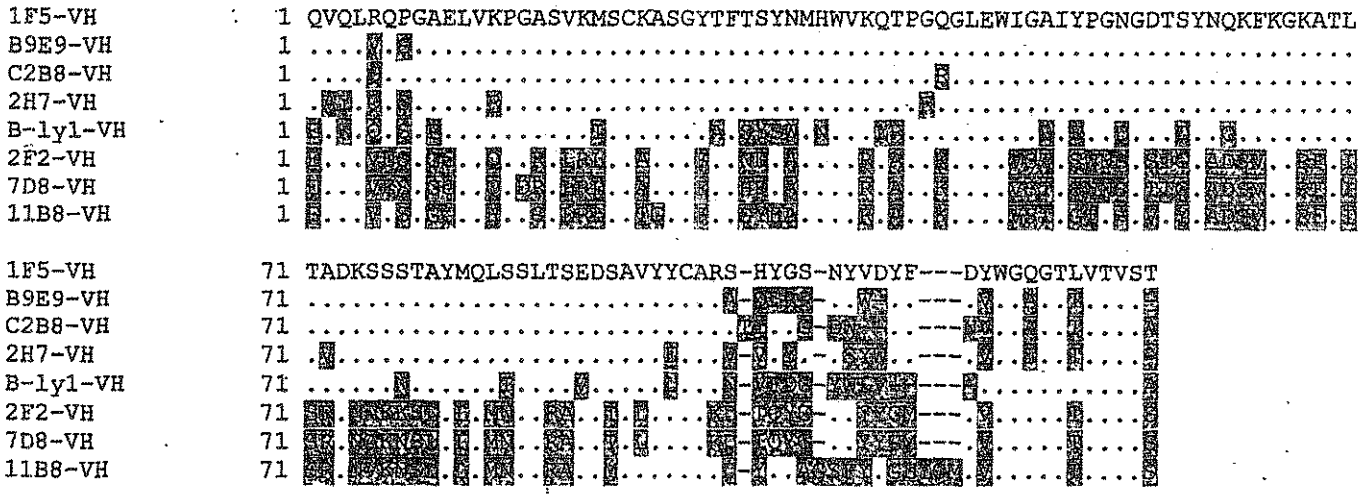
Figure 1


1F5-VH 1 QVQLRQPGAELVKPGASVKMSCKASGYTFTSYNMHWVKQTPGQGLEWIGAIYPGNGDTSYNQKFKGKATL
B9E9-VH 1
C2B8-VH 1
2H7-VH 1
B-1y1-VH 1
2F2-VH 1
7D8-VH 1
11B8-VH 1
1F5-VH 71 TADKSSSTAYMQLSSLTSEDSAVYYCARS-HYGS-NYVDYF---DYWGQGTLVTVST
B9E9-VH 71
C2B8-VH 71
2H7-VH 71
B-1y1-VH 71
2F2-VH 71
7D8-VH 71
11B8-VH 71

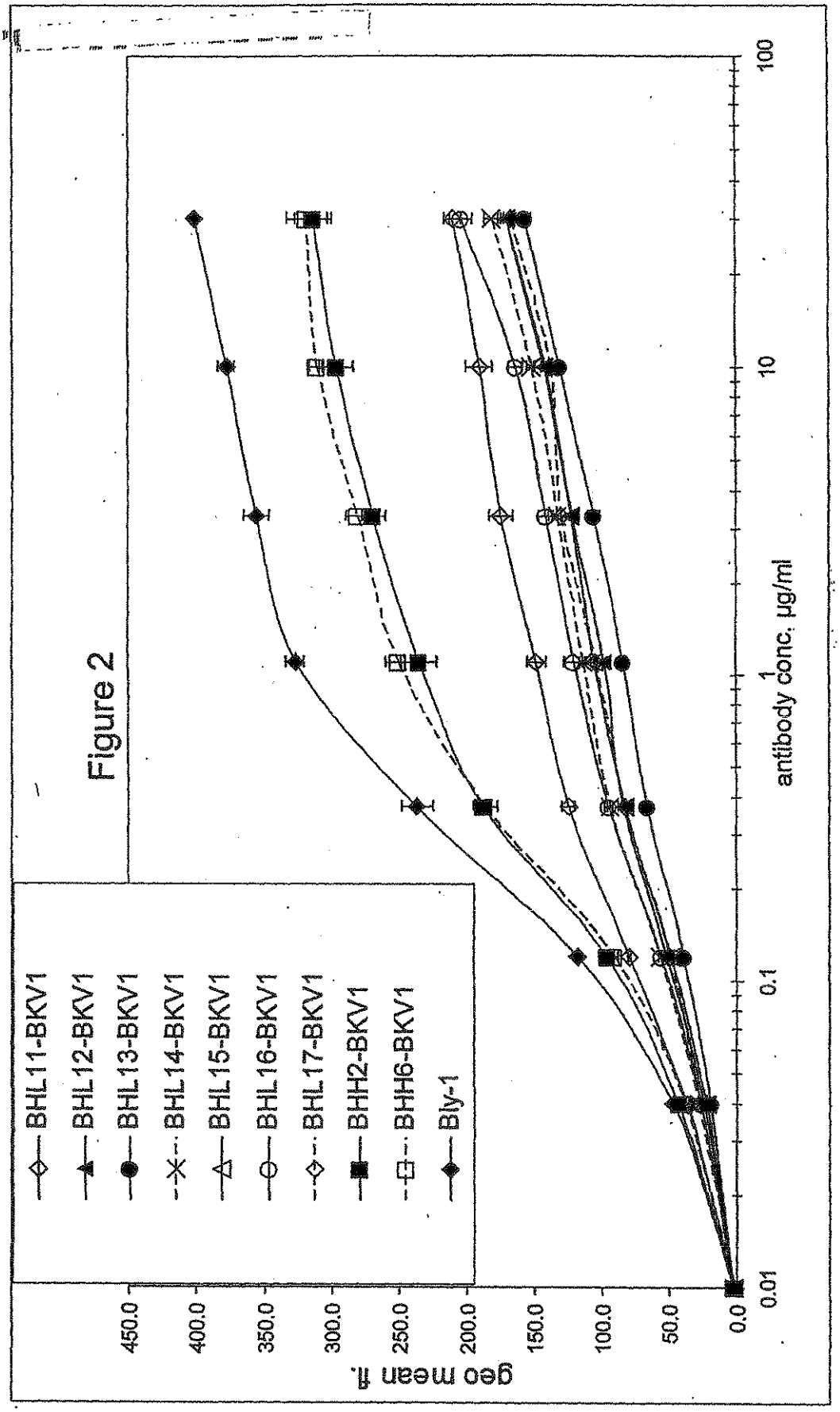

Figure 2
BHL11-BKV1
BHL12-BKV1
BHL13-BKV1
BHL14-BKV1
BHL15-BKV1
BHL16-BKV1
BHL17-BKV1
BHH2-BKV1
BHH6-BKV1
Bly-1
geo mean fl.
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
0.01
0.1
1
10
100
antibody conc. µg/ml

Figure 3

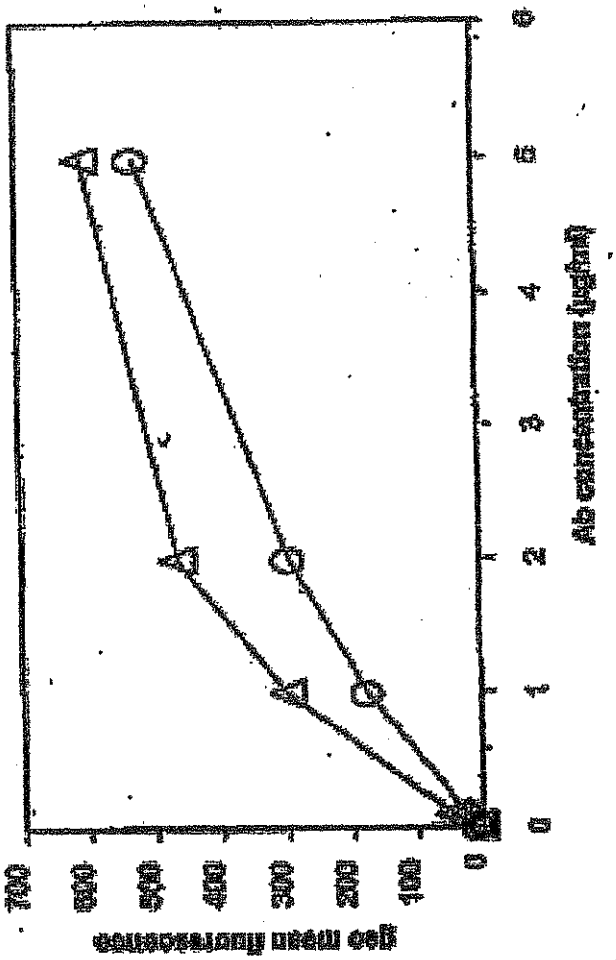


Figure 4

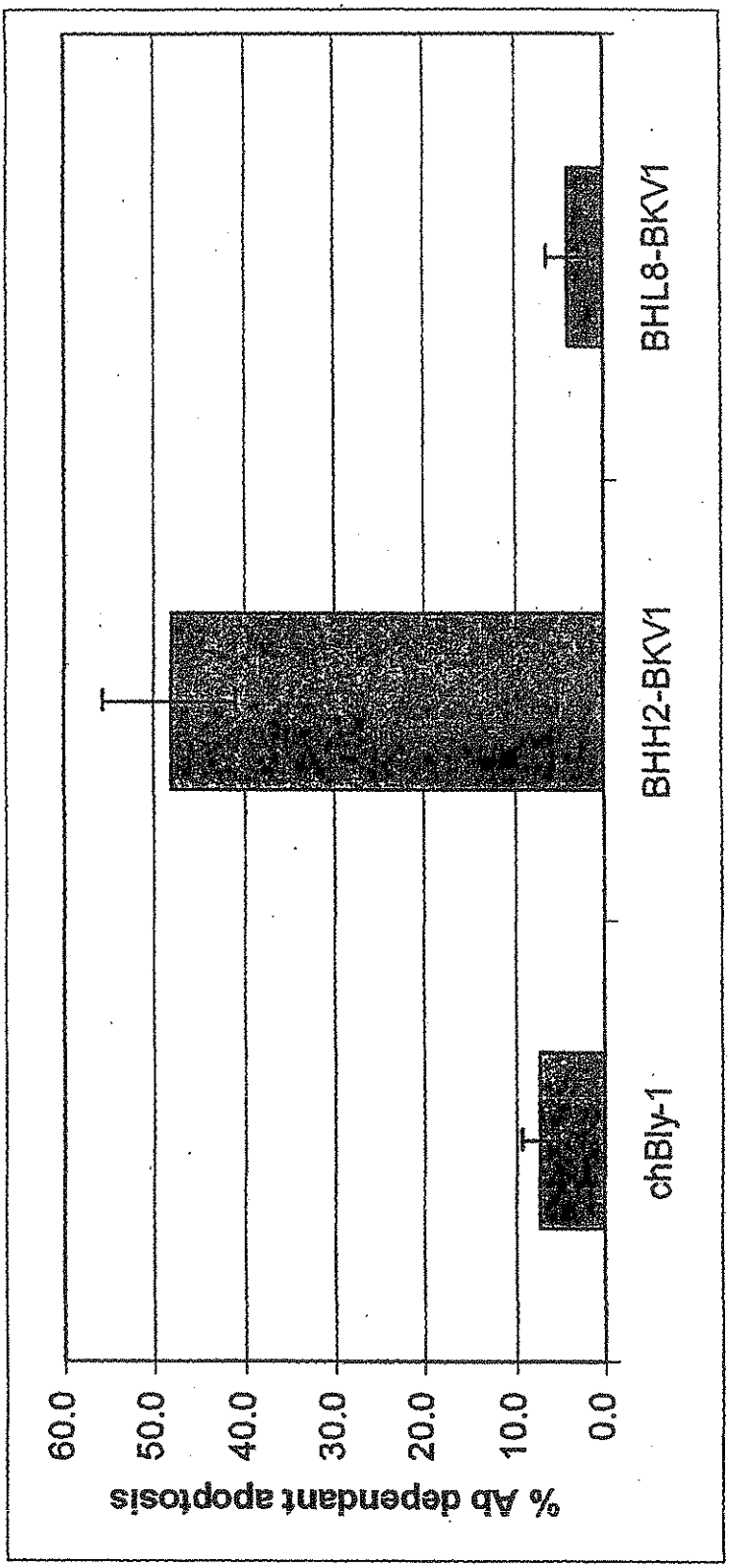

% Ab dependant apoptosis
60.0
50.0
40.0
30.0
20.0
10.0
0.0
chBly-1
BHH2-BKV1
BHL8-BKV1

Figure 5

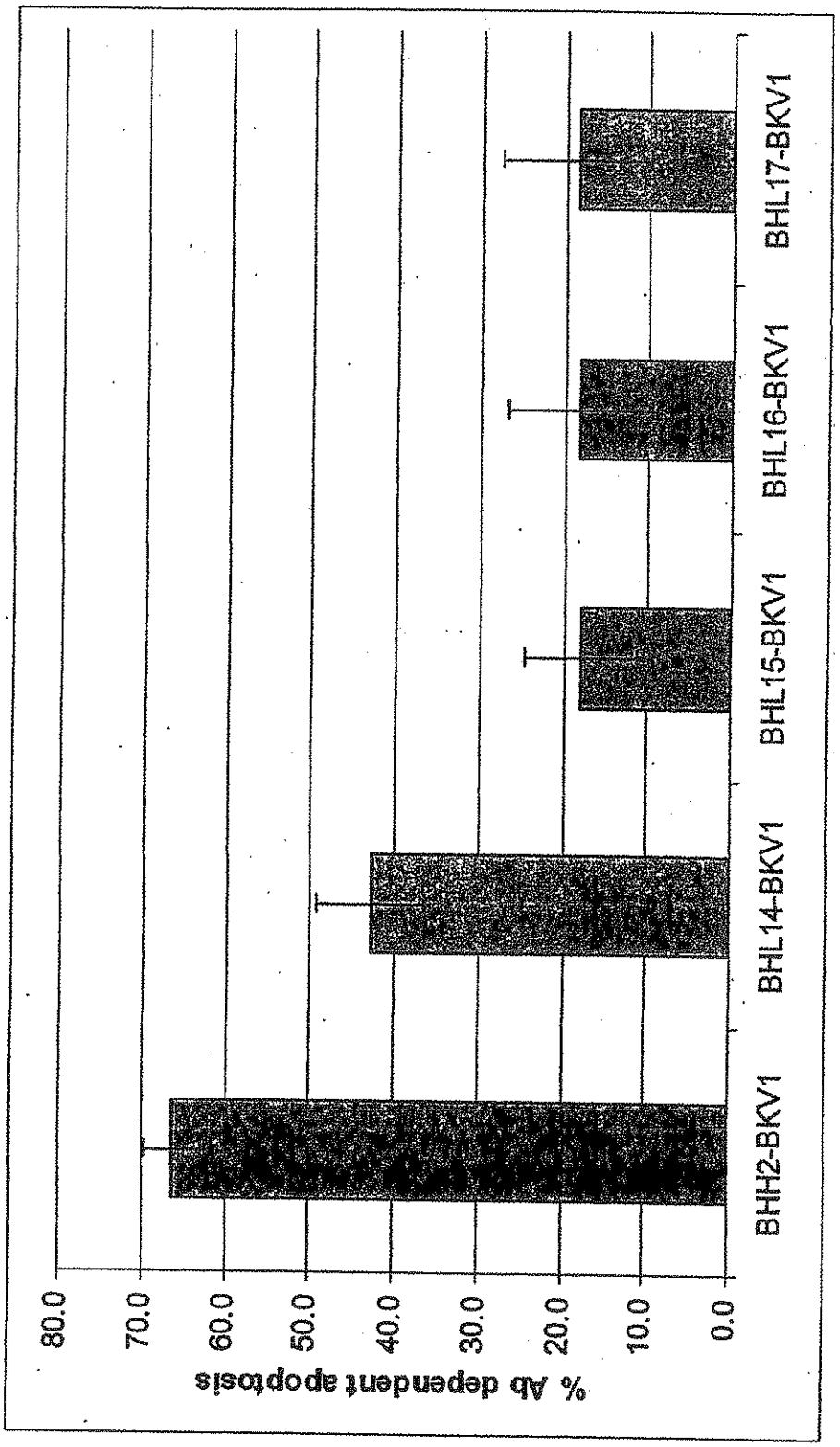

% Ab dependent apoptosis
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
BHH2-BKV1
BHL14-BKV1
BHL15-BKV1
BHL16-BKV1
BHL17-BKV1

Figure 6

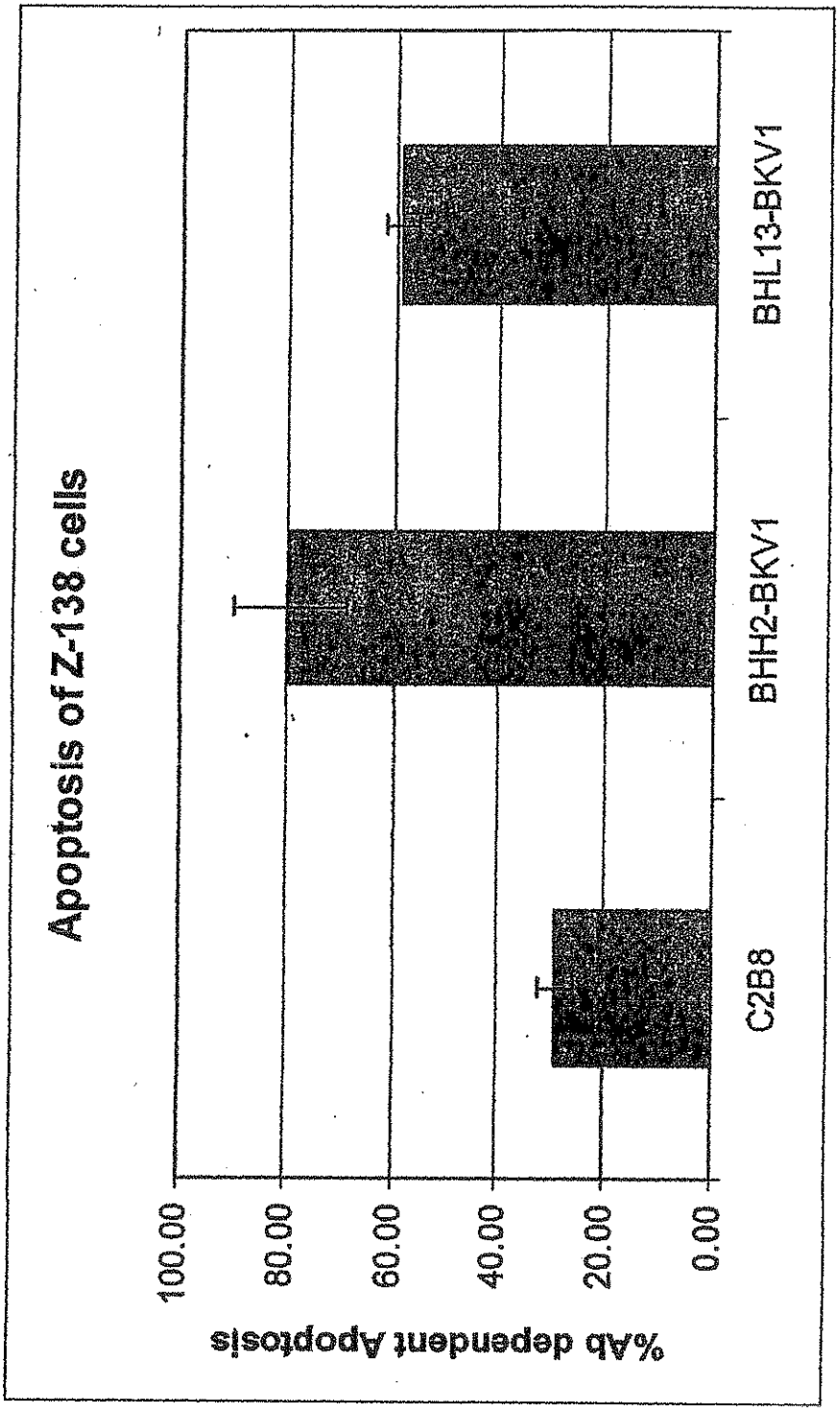

Apoptosis of Z-138 cells
%Ab dependent Apoptosis
100.00
80.00
60.00
40.00
20.00
0.00
C2B8
BHH2-BKV1
BHL13-BKV1

Figure 7

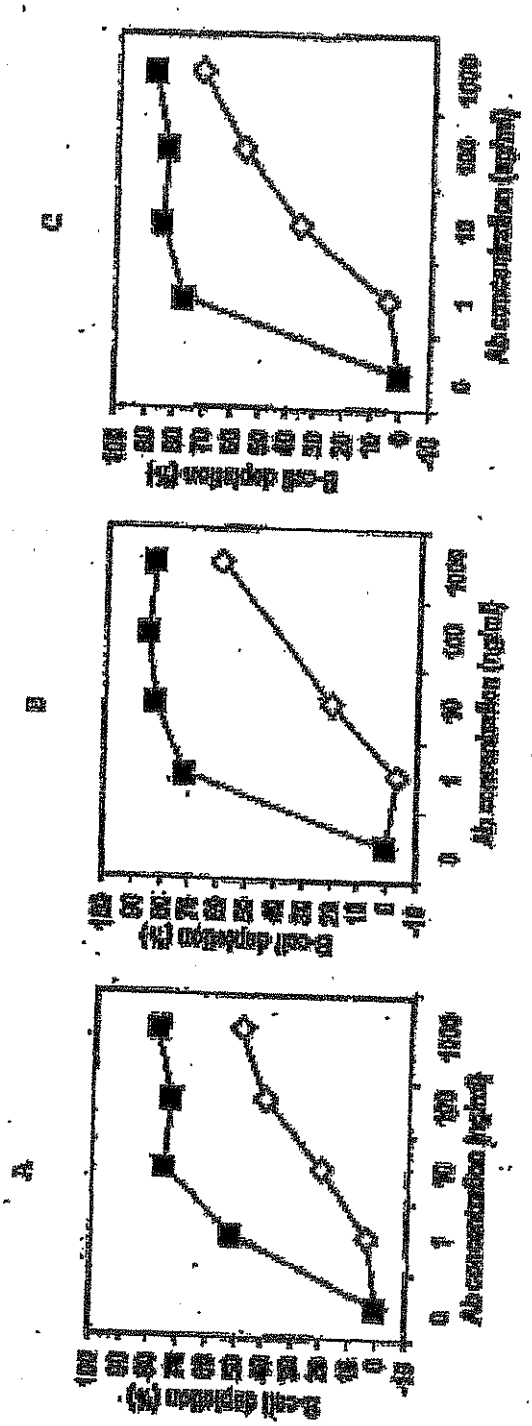


Figure 8A

1.relative percentages

	Bly-1 m1 031024 016	+ EndoH Bly-1 m1 031024 017
1053		
1256		
1282		
1298		3.70%
1339	18.60%	17.90%
1460		4.30%
1486	5.90%	5.50%
1502	5.10%	3.70%
1543	35.00%	39.20%
1622		
1647	4.60%	3.00%
1664	7%	
1680		
1688	11.00%	10.30%
1705	7.20%	7.30%
1810		
1826		
1850	5.90%	5.20%
1972		
2012		
	100%	100%

Figure 8B

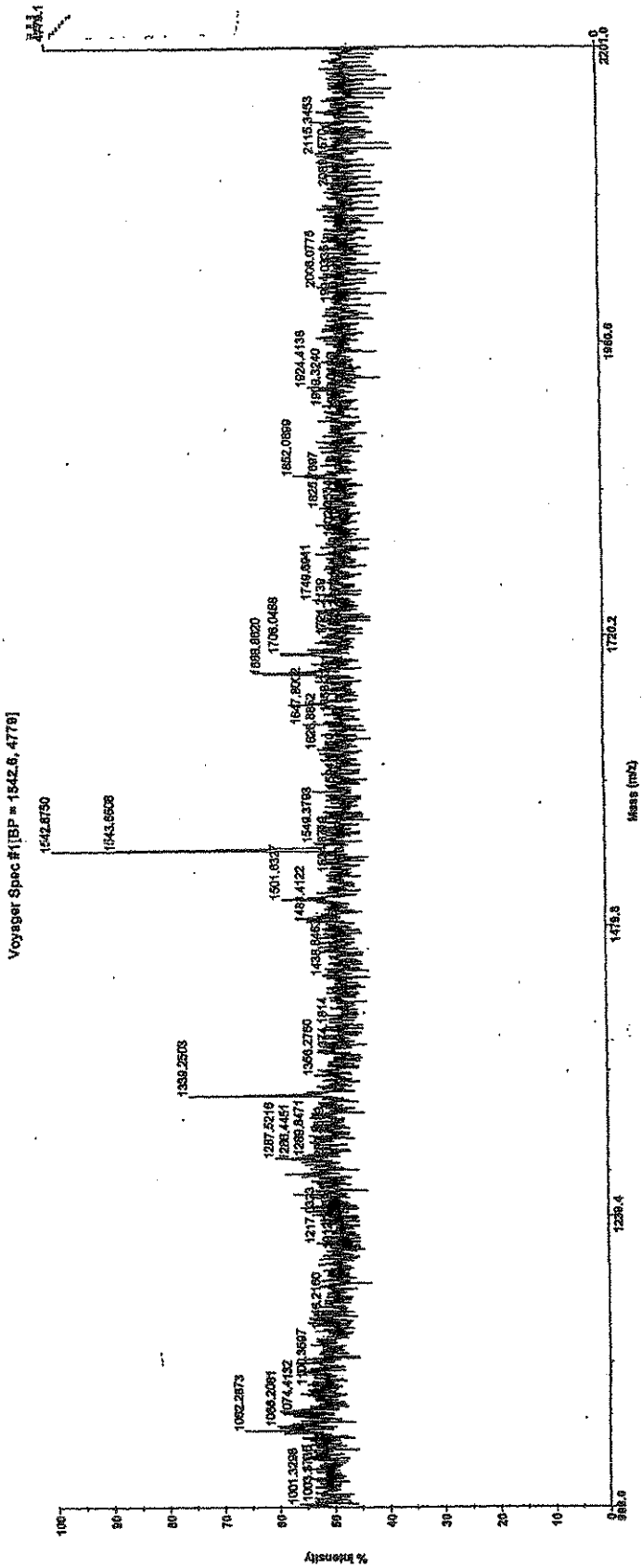

Voyager Spec #1[BP = 1542.6, 4779]
% Intensity
Mass (m/z)
1542.6750
1543.6606
1339.2503
1501.6327
1706.0488
1749.6941
1832.0699
1924.4138
2115.3453
1062.2873
1066.2061
1074.4132
1001.3597
1001.3288
1003.3705
1217.6013
1287.5218
1281.4451
1288.8471
1359.2750
1374.1914
1435.8451
1489.4122
1549.3783
1647.8012
1698.8820
1825.697
1910.3240
2006.0776
1239.4
1419.8
1599.8
1726.2
1960.6
2201.0

Figure 8C

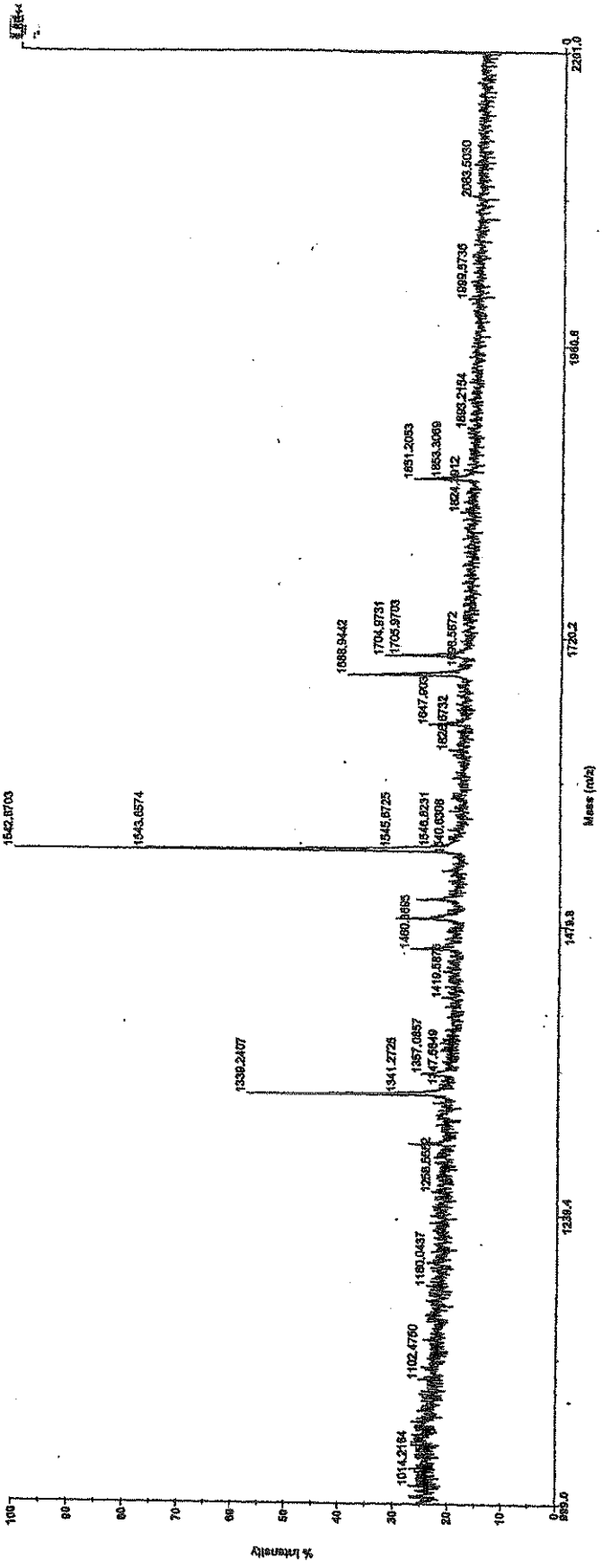

Voyager Spec #1[BP = 1542.8, 18388]
% Intensity
Mass (m/z)
1542.8703
1543.8574
1545.8725
1546.8231
1338.2407
1341.2725
1357.0857
1460.8695
1419.5878
1258.5556
1161.0437
1102.4760
1014.2184
1688.9442
1704.8731
1705.8703
1691.2053
1853.3069
1693.2154
1999.8736
2093.5030
1720.2
1960.8
1478.8
1238.4
999.0
2291.0

Figure 9

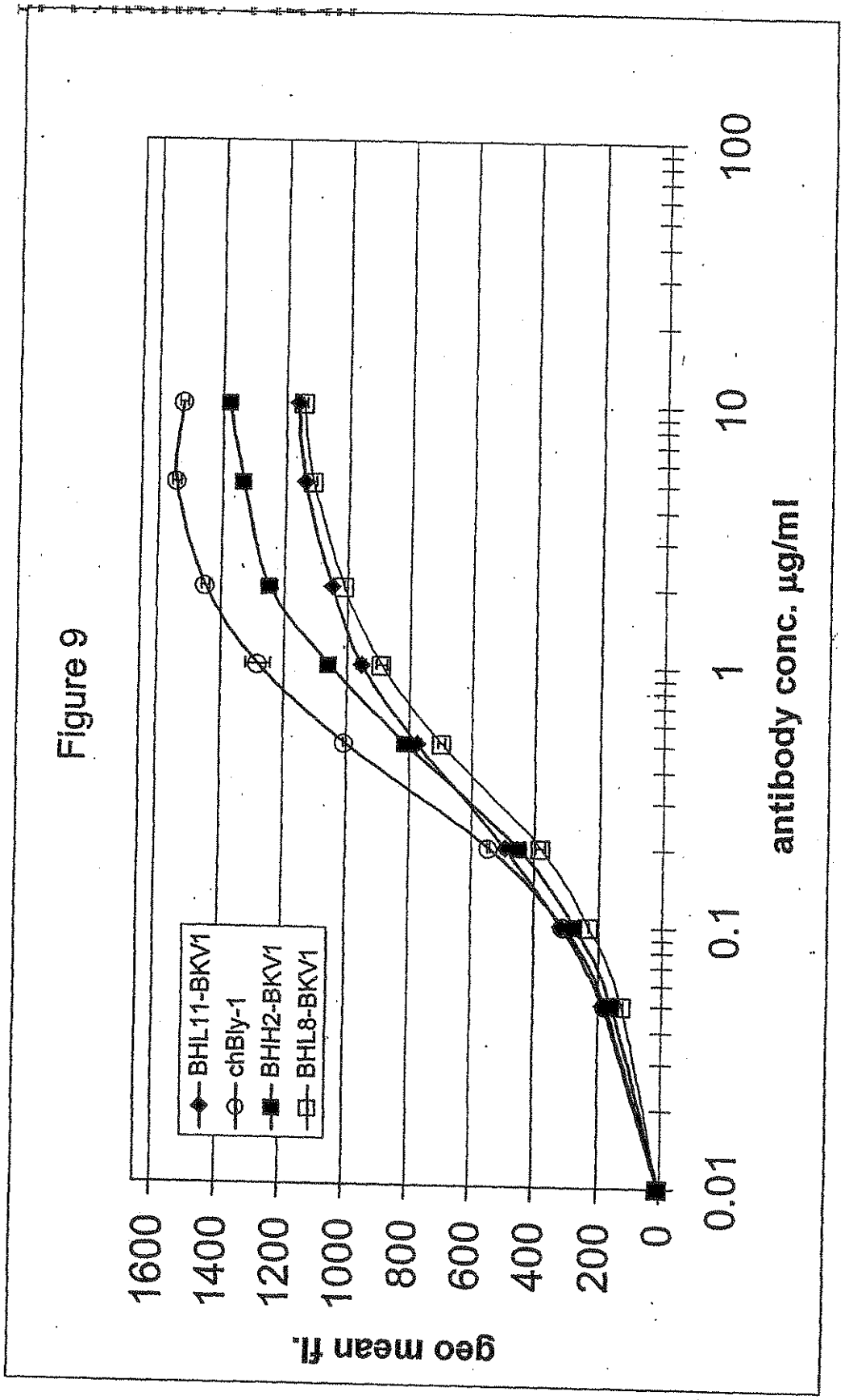

geo mean fl.
1600
1400
1200
1000
800
600
400
200
0
0.01
0.1
1
10
100
antibody conc. µg/ml
BHL11-BKV1
chBly-1
BHH2-BKV1
BHL8-BKV1

Figure 10

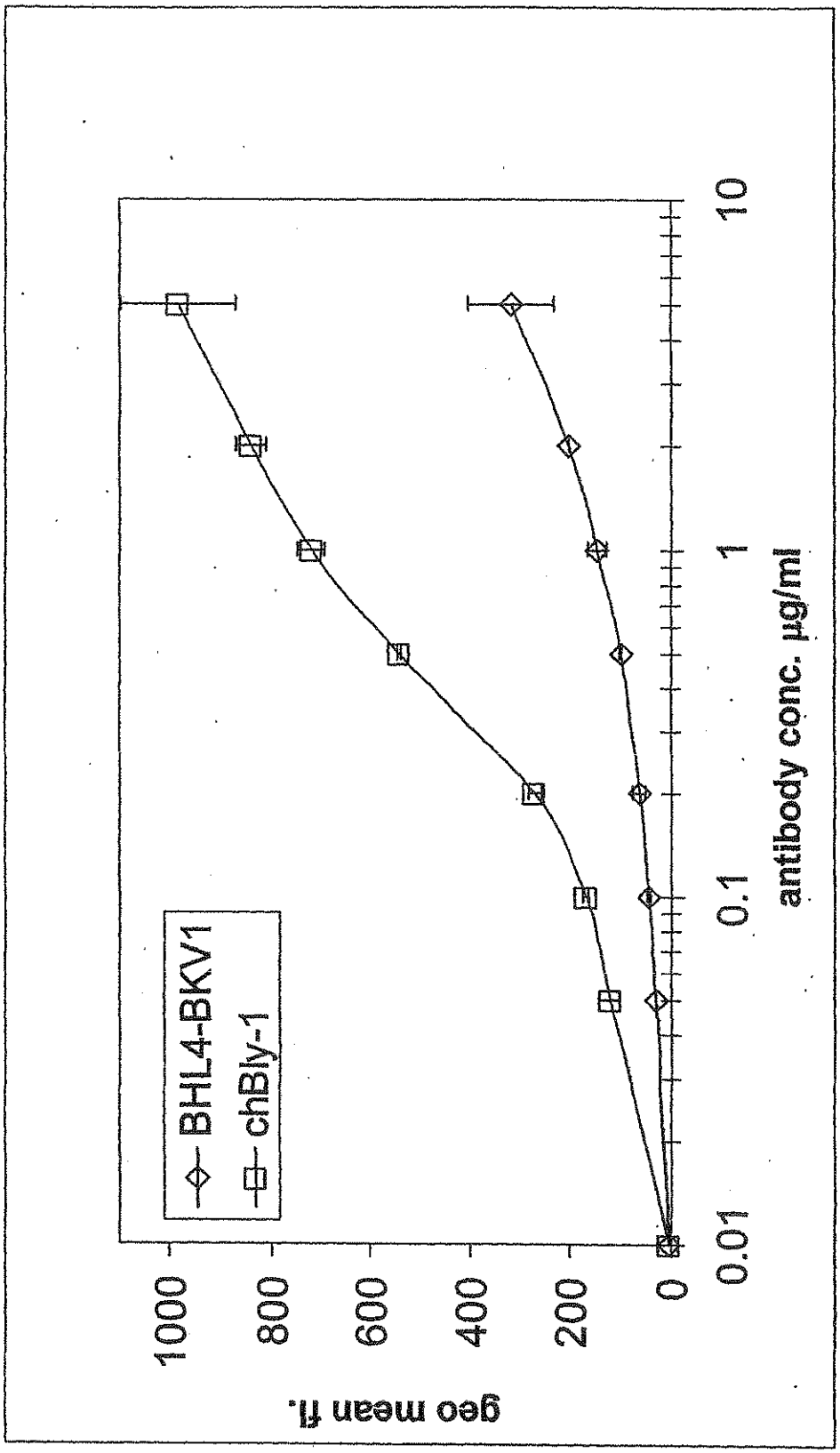

geo mean fl.
1000
800
600
400
200
0
0.01
0.1
1
10
antibody conc. µg/ml
BHL4-BKV1
chBly-1

Figure 11

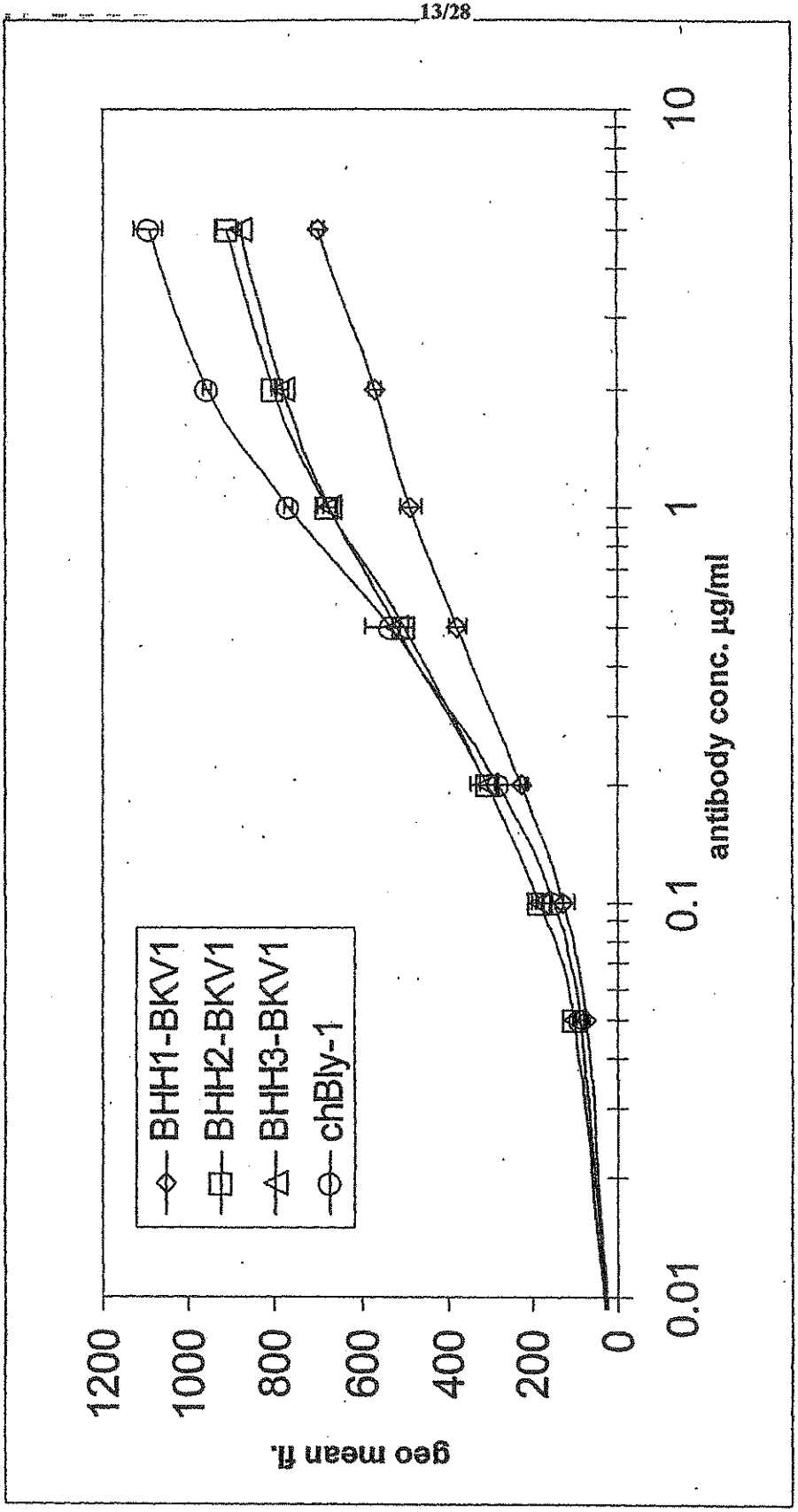

geo mean fl.
1200
1000
800
600
400
200
0
0.01
0.1
1
10
antibody conc. µg/ml
BHH1-BKV1
BHH2-BKV1
BHH3-BKV1
chBly-1

Figure 12

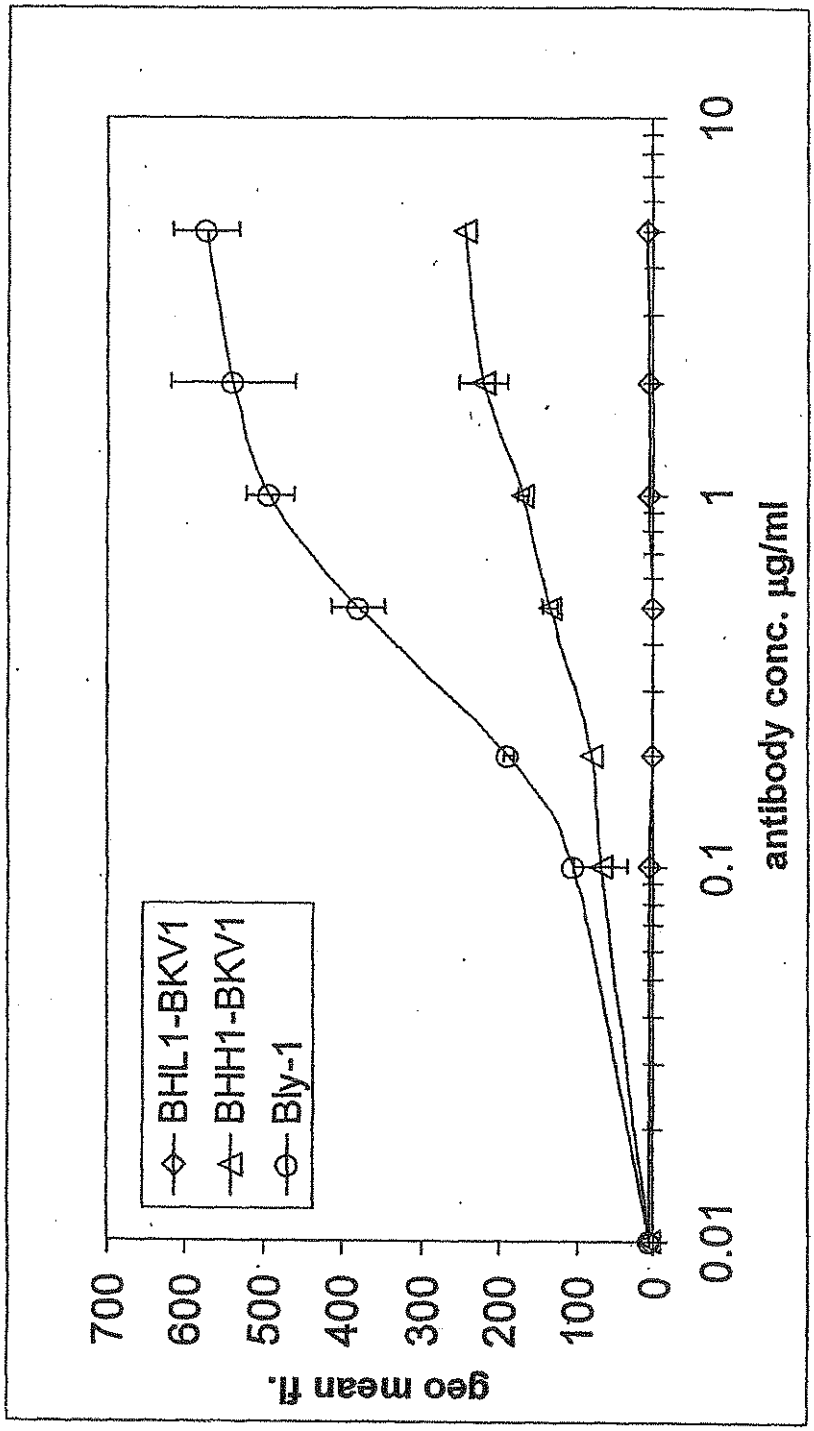

BHL1-BKV1
BHH1-BKV1
Bly-1
geo mean fl.
700
600
500
400
300
200
100
0
0.01
0.1
1
10
antibody conc. µg/ml

Figure 13

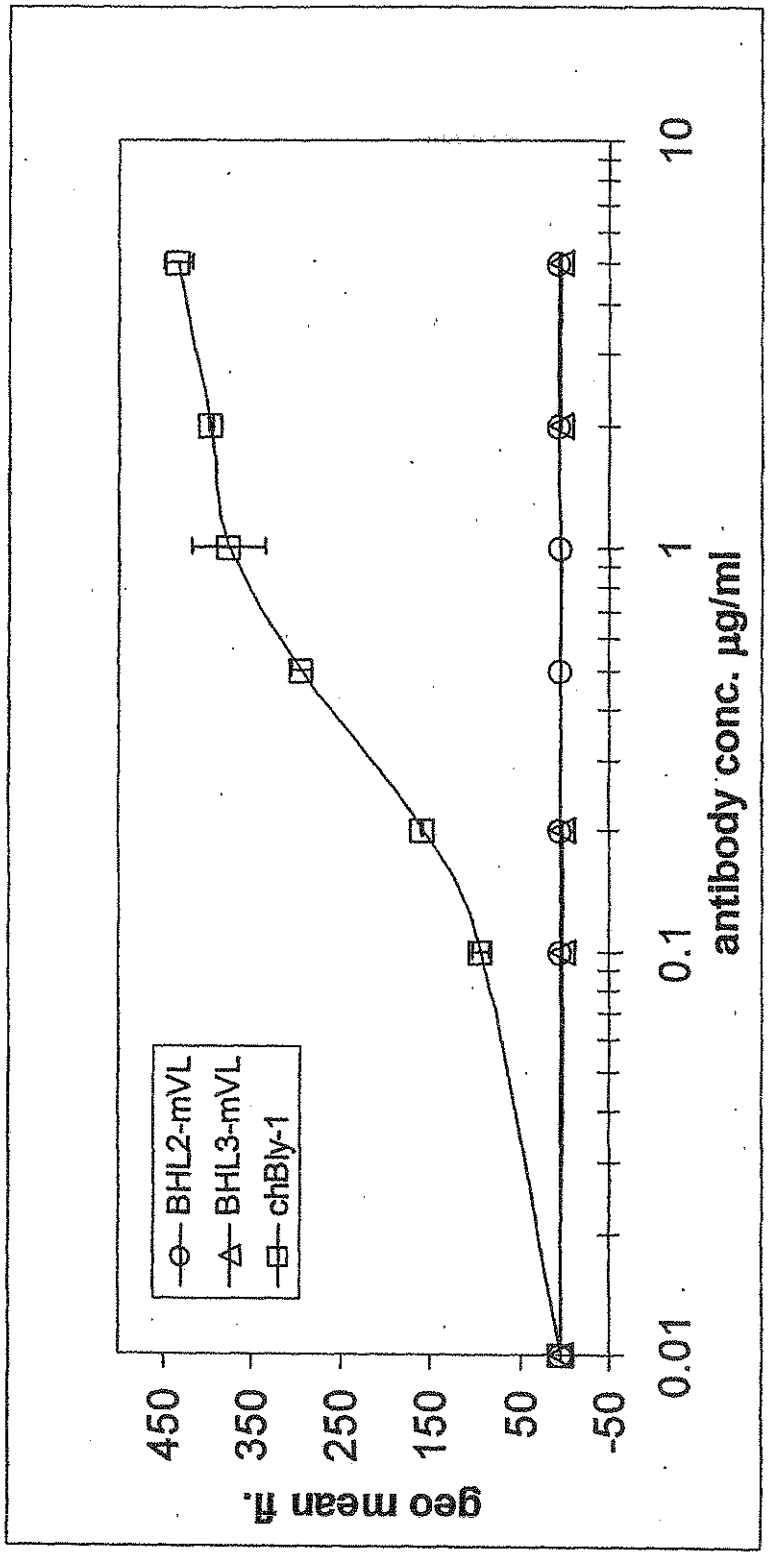

BHL2-mVL
BHL3-mVL
chBly-1
geo mean fl.
450
350
250
150
50
-50
0.01
0.1
1
10
antibody conc. µg/ml

Figure 14

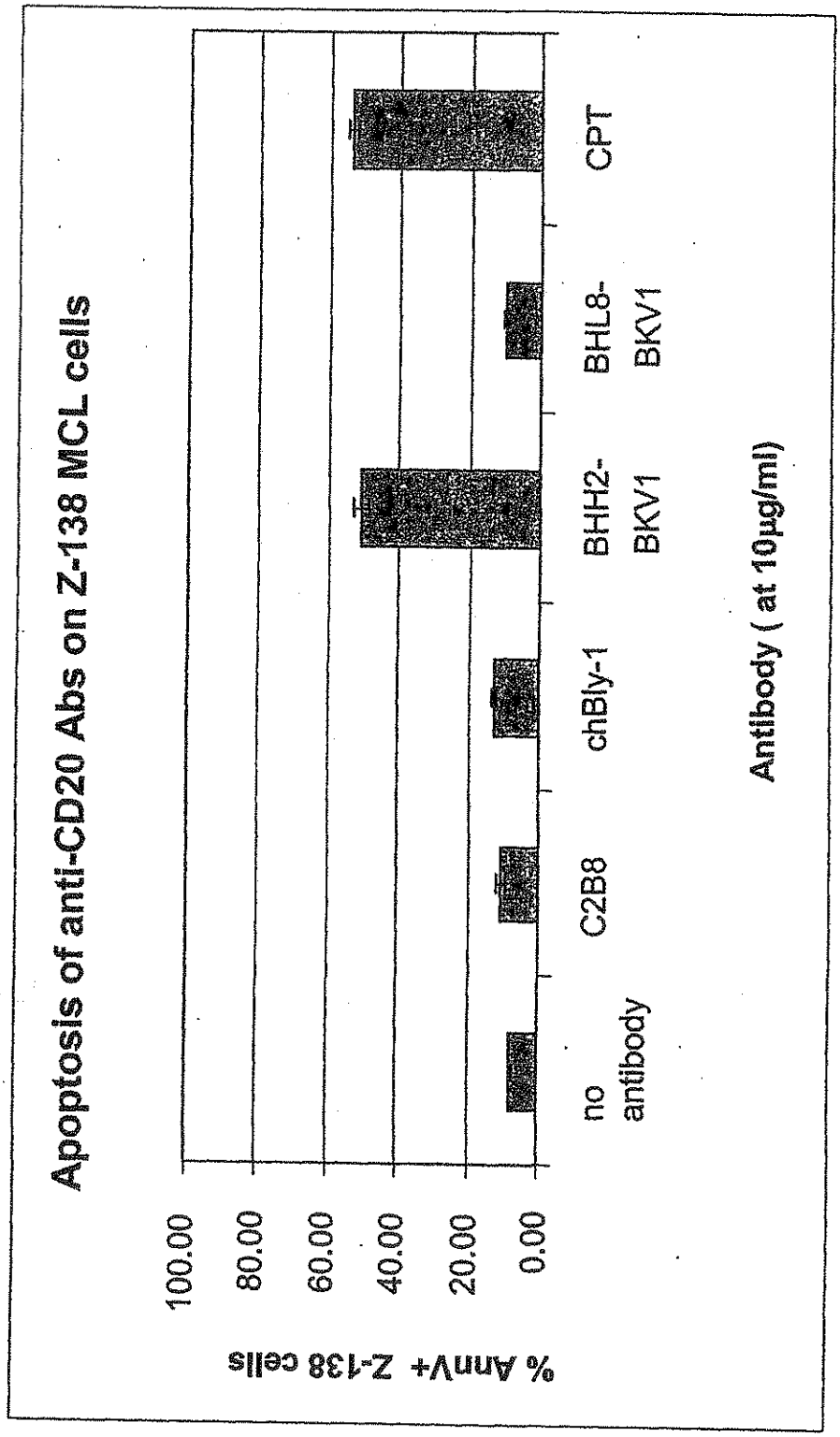

Apoptosis of anti-CD20 Abs on Z-138 MCL cells
% AnnV+ Z-138 cells
100.00
80.00
60.00
40.00
20.00
0.00
no antibody
C2B8
chBly-1
BHH2-BKV1
BHL8-BKV1
CPT
Antibody (at 10µg/ml)

Figure 15

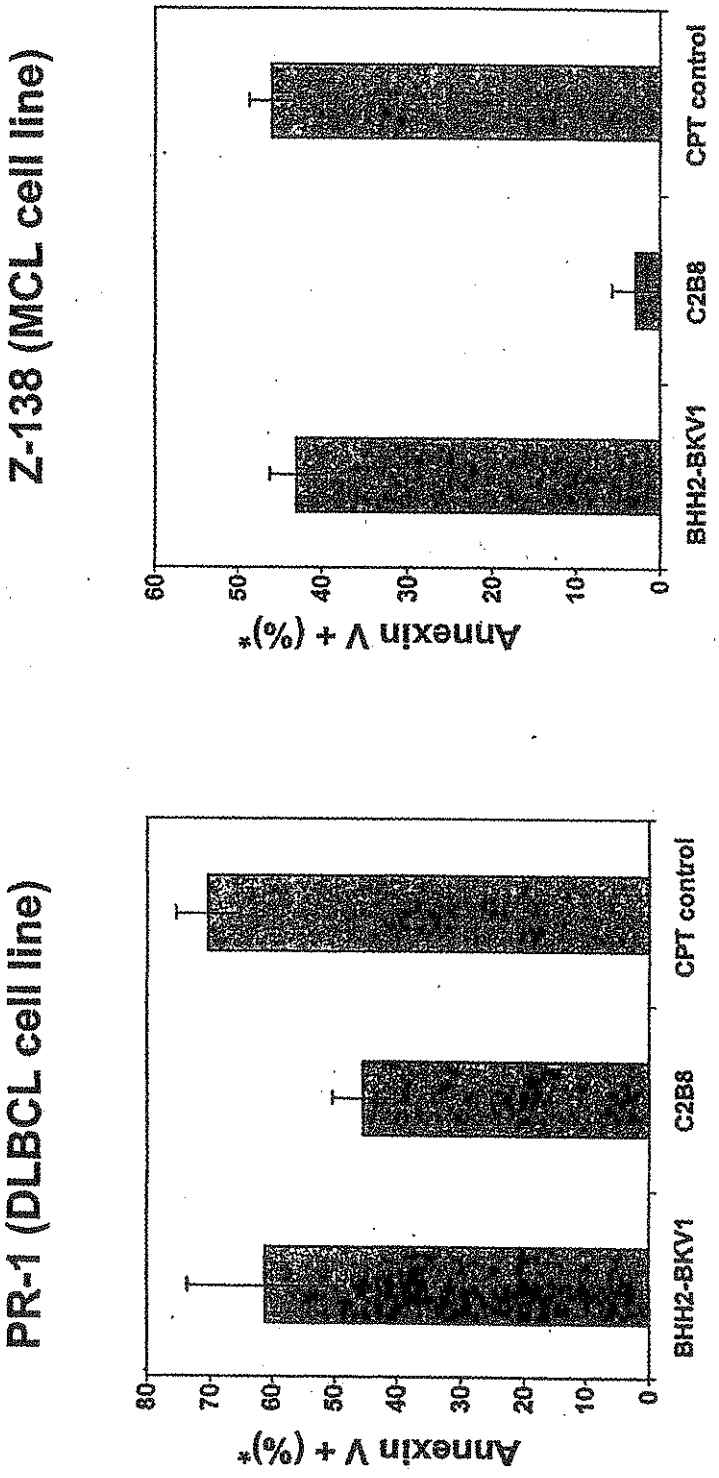

Z-138 (MCL cell line)
Annexin V + (%)*
0
10
20
30
40
50
60
BHH2-BKV1
C2B8
CPT control
PR-1 (DLBCL cell line)
Annexin V + (%)*
0
10
20
30
40
50
60
70
80
BHH2-BKV1
C2B8
CPT control

Figure 16

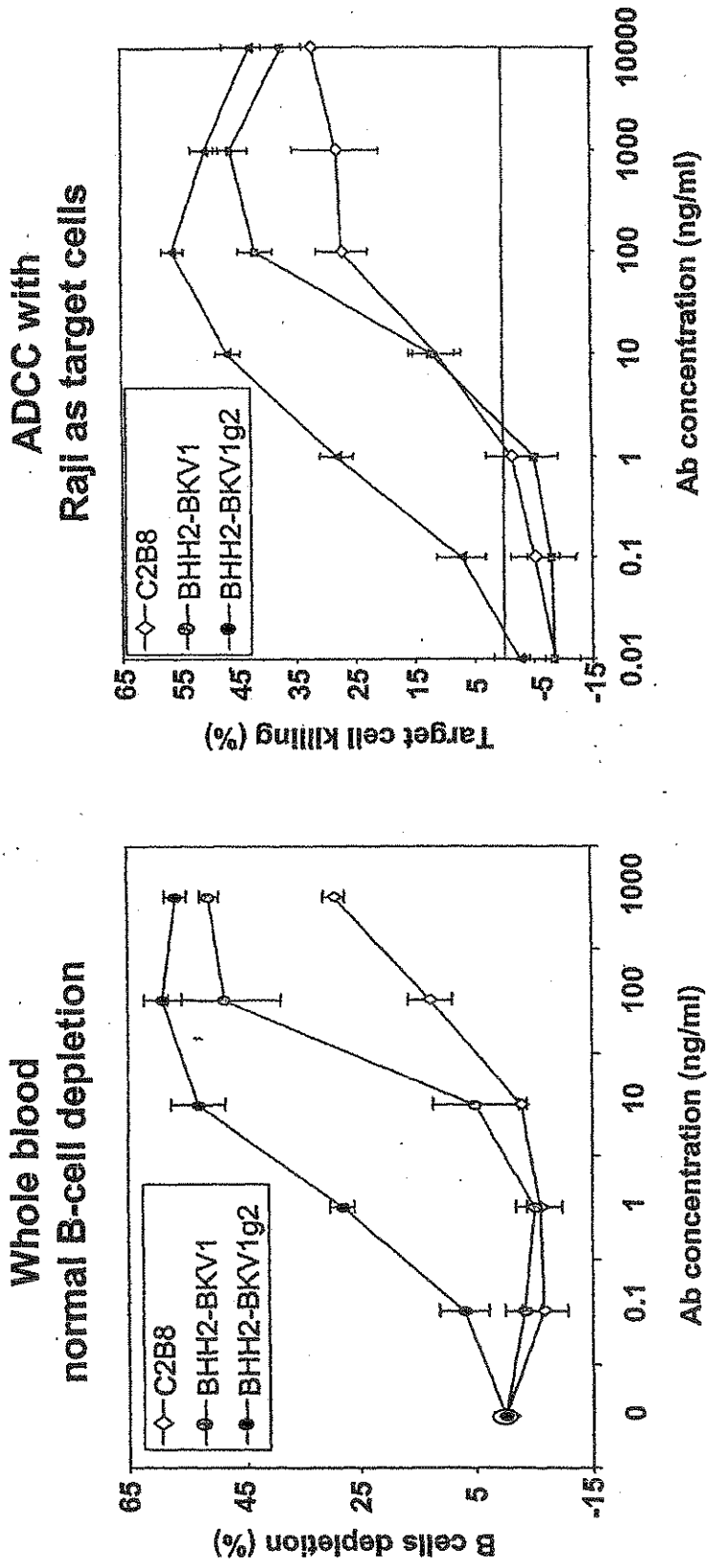

Whole blood
normal B-cell depletion
B cells depletion (%)
65
45
25
5
-15
0
0.1
1
10
100
1000
Ab concentration (ng/ml)
C2B8
BHH2-BKV1
BHH2-BKV1g2
ADCC with
Raji as target cells
Target cell killing (%)
65
55
45
35
25
15
5
-5
-15
0.01
0.1
1
10
100
1000
10000
Ab concentration (ng/ml)
C2B8
BHH2-BKV1
BHH2-BKV1g2

Figure 17

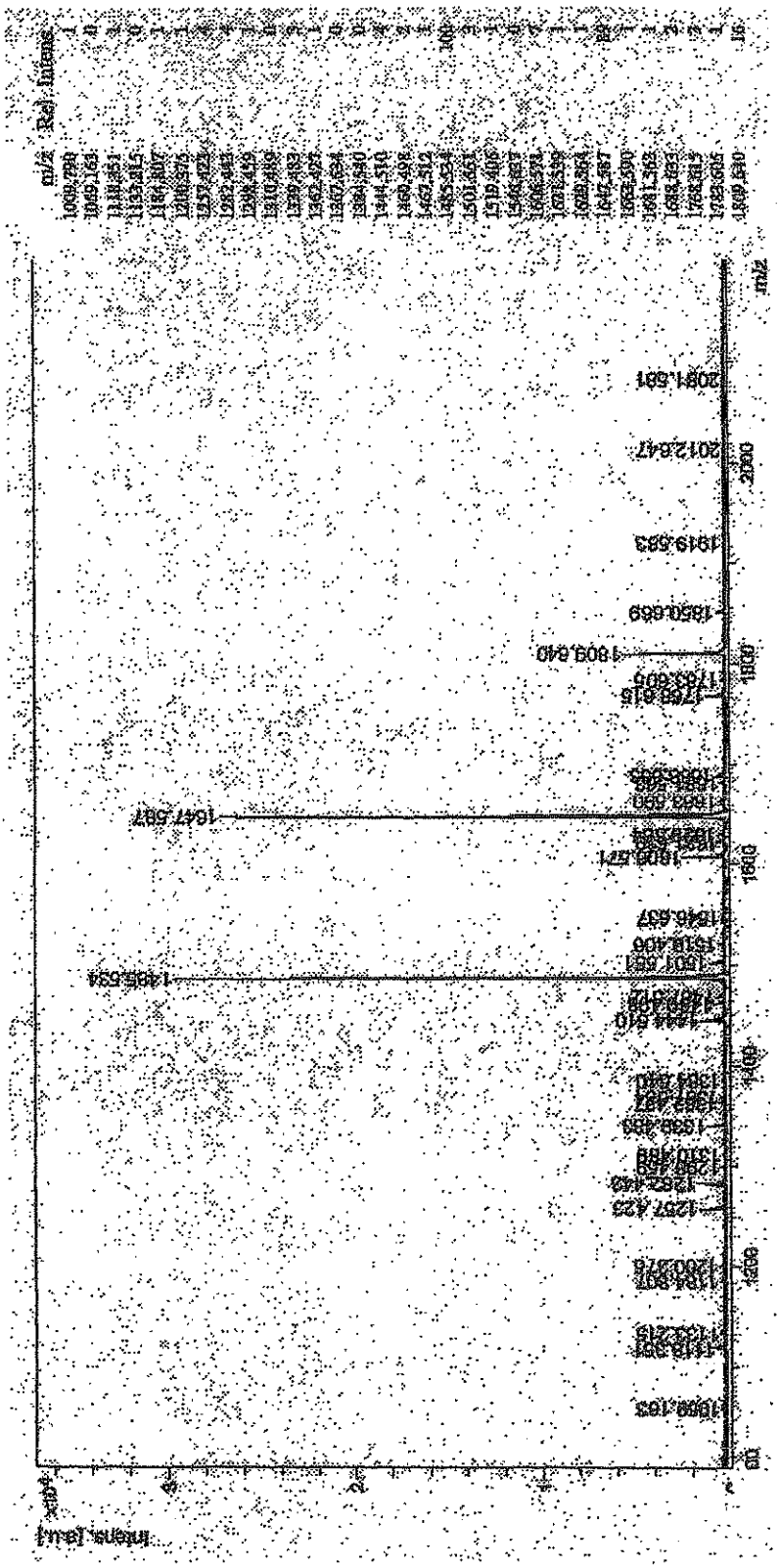

m/z
Rel. Intens.
Intens. [a.u.]
1647.587
1405.534
2091.601
2012.647
1919.583
1850.069
1809.640
1763.615
1733.609
1647.587
1605.571
1546.557
1516.400
1501.601
1446.610
1416.637
1383.492
1361.482
1336.436
1310.388
1257.423
1232.443
1200.376
1158.801
1132.219
1098.183
m/z

Figure 18

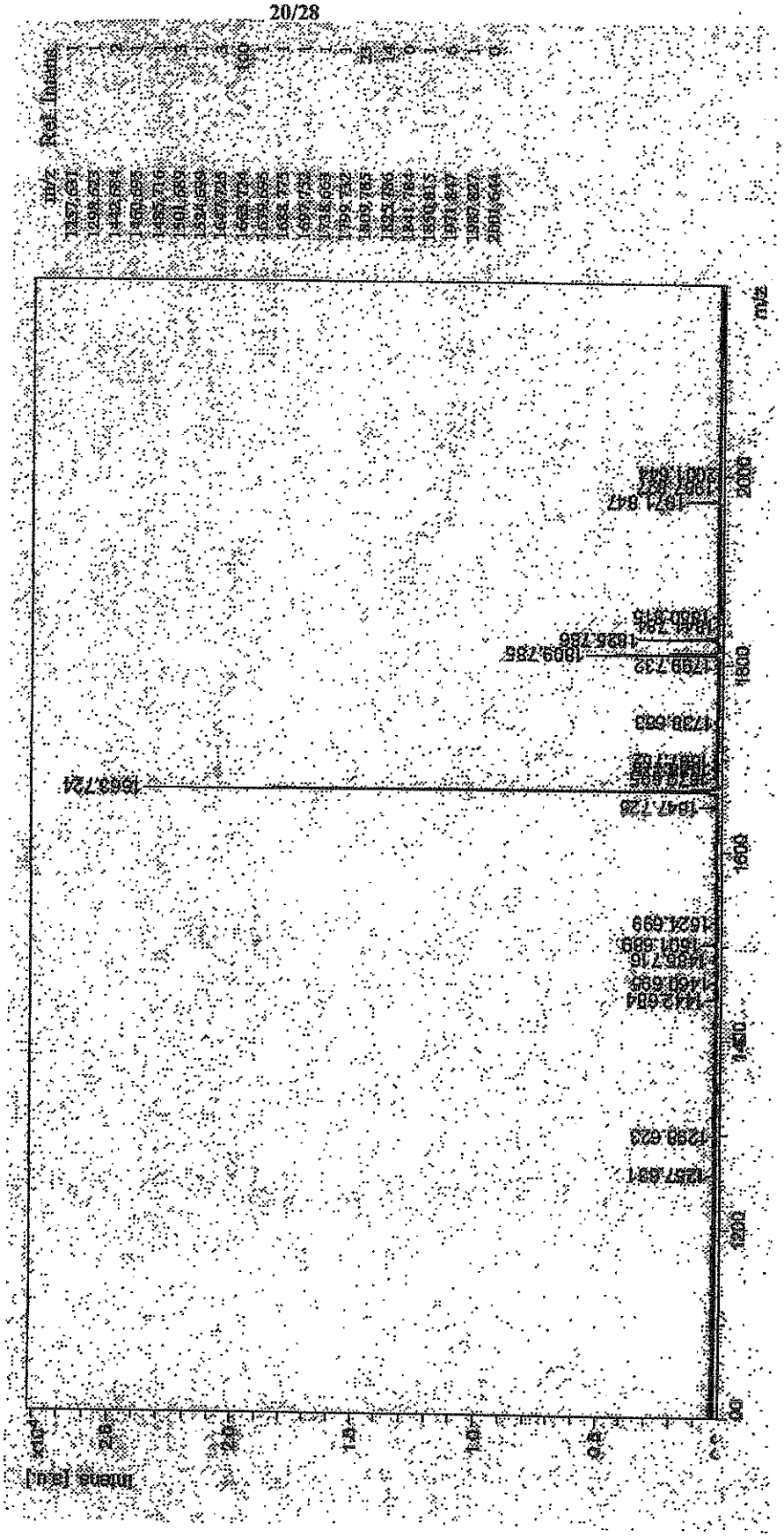

m/z
Ref. Ions
Intens. [a.u.]
1563.724
1809.785
1896.786
1674.847
1647.726
1730.653
1799.732
1621.699
1442.634
1440.699
1408.716
1601.669
1257.681
1298.623
1600
1800
2000
1400
1200

Figure 19

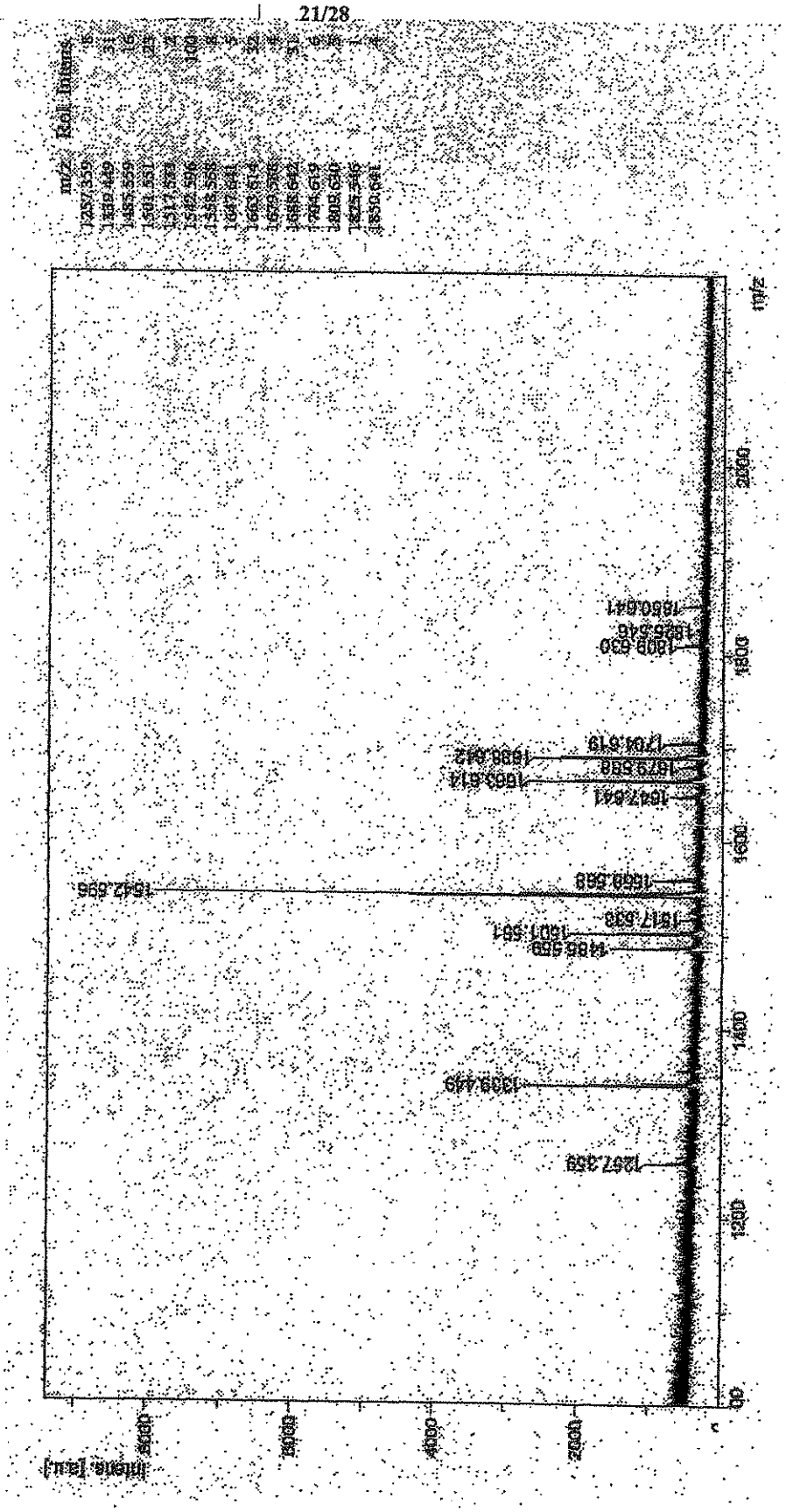

m/z
Rel. Intens.
1257.359
1439.449
1485.559
1591.551
1711.583
1742.596
1753.566
1847.651
1863.614
1879.598
1895.643
1904.659
1909.640
1935.646
1950.641
1267.359
1339.449
1486.588
1501.561
1517.538
1550.548
1642.596
1647.641
1663.614
1679.588
1688.642
1708.619
1809.630
1825.646
1850.641
m/z
Intens. [a.u.]

Figure 20

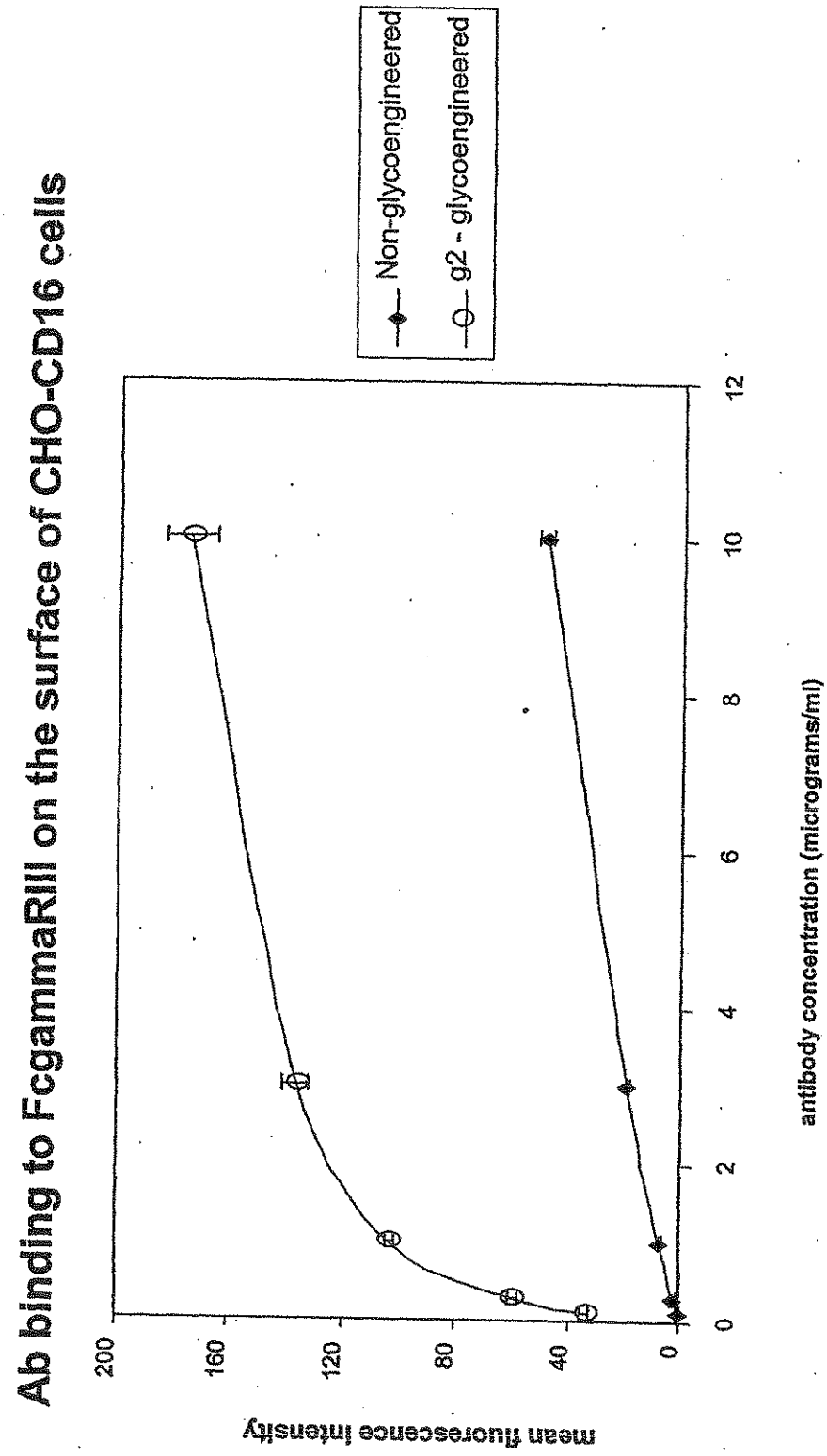

Ab binding to FcgammaRIII on the surface of CHO-CD16 cells
Non-glycoengineered
g2 - glycoengineered
mean fluorescence intensity
antibody concentration (micrograms/ml)
0
40
80
120
160
200
0
2
4
6
8
10
12

Figure 21

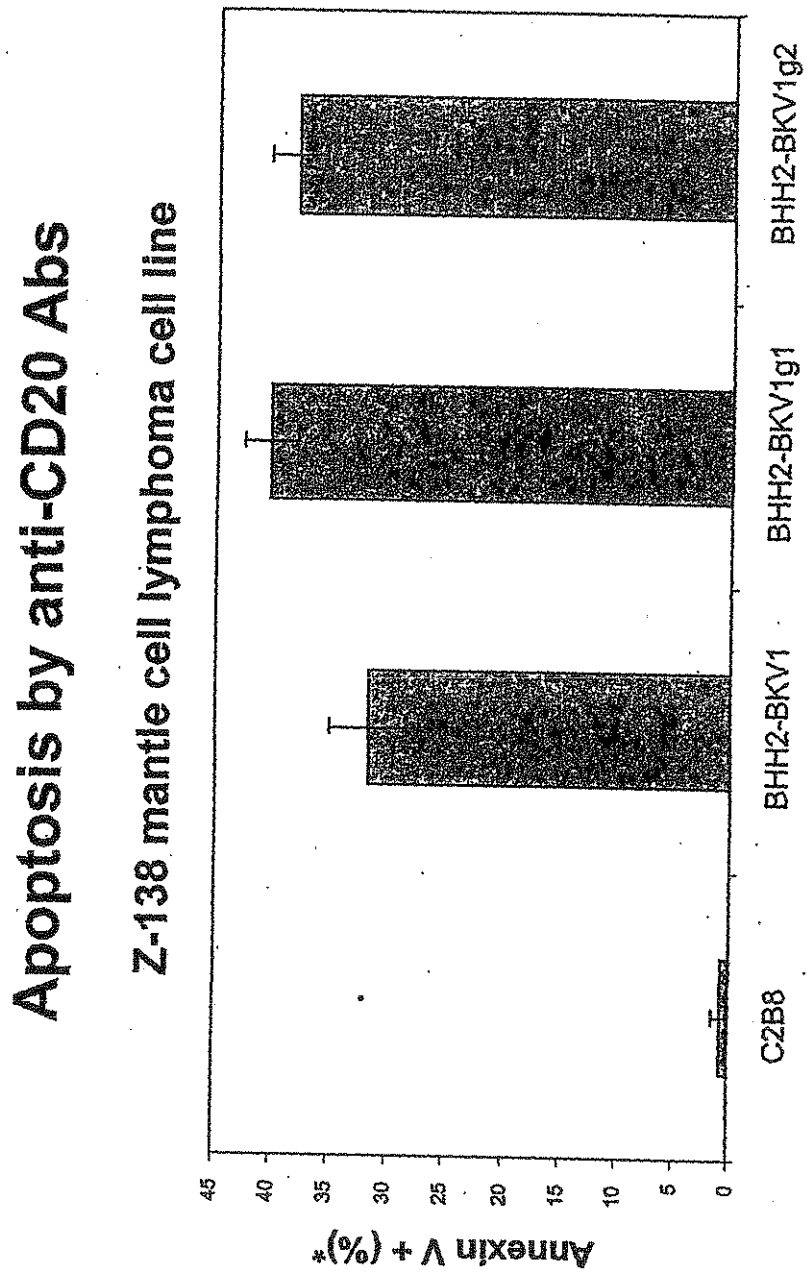

Apoptosis by anti-CD20 Abs
Z-138 mantle cell lymphoma cell line
Annexin V + (%)*
45
40
35
30
25
20
15
10
5
0
C2B8
BHH2-BKV1
BHH2-BKV1g1
BHH2-BKV1g2

Figure 22

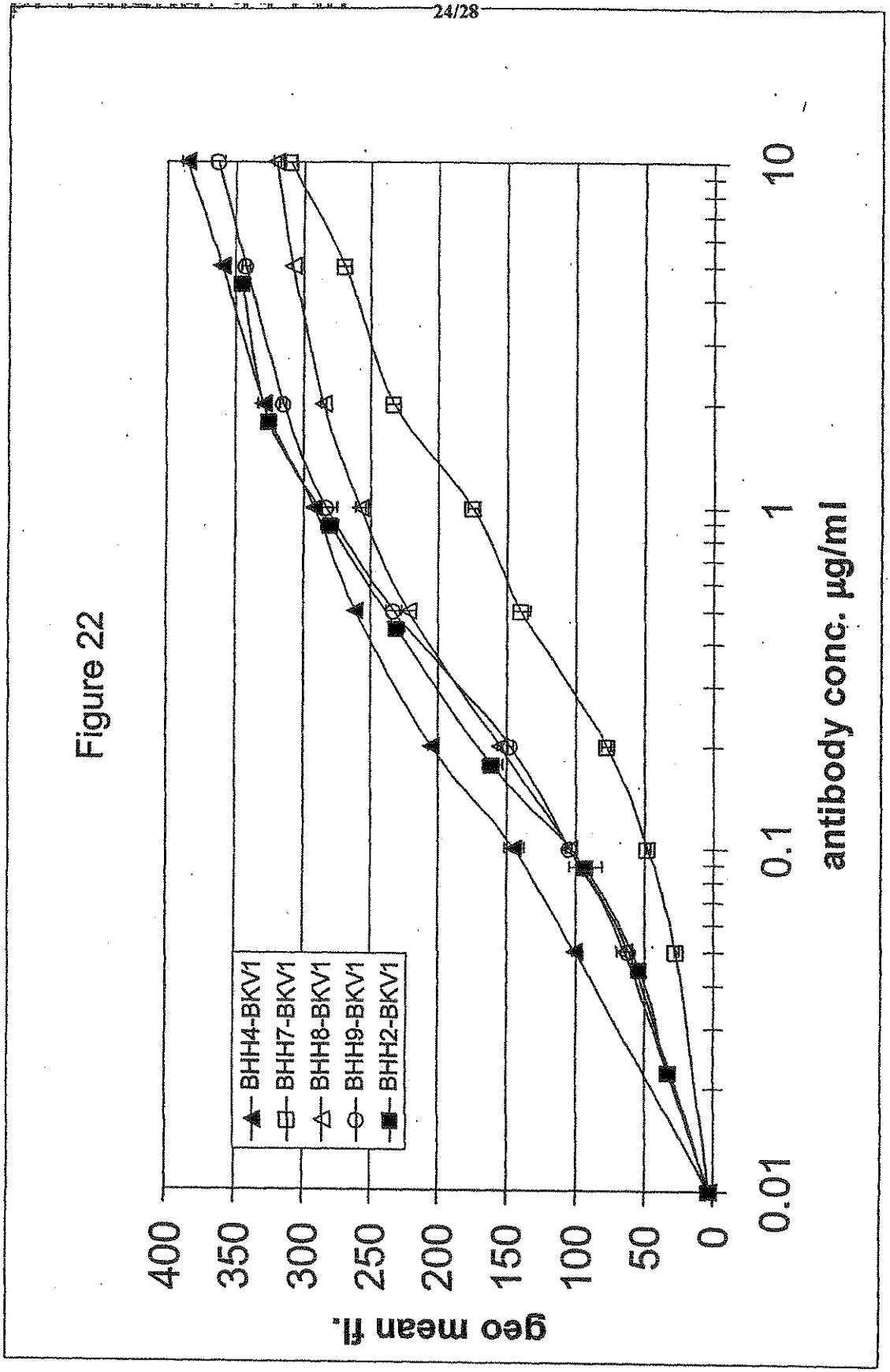

geo mean fl.
400
350
300
250
200
150
100
50
0
0.01
0.1
1
10
antibody conc. µg/ml
BHH4-BKV1
BHH7-BKV1
BHH8-BKV1
BHH9-BKV1
BHH2-BKV1

Figure 23

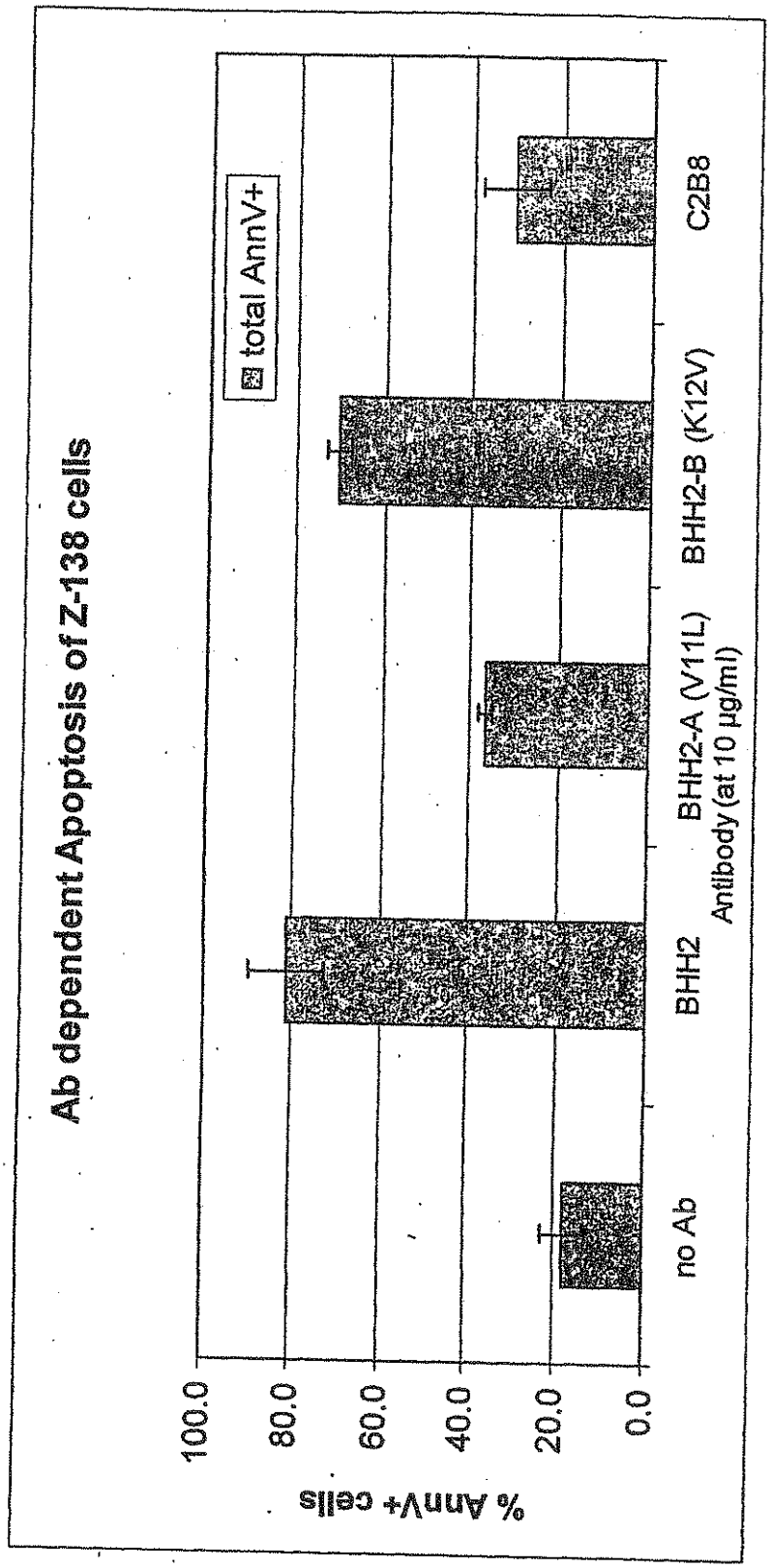

Ab dependent Apoptosis of Z-138 cells
total AnnV+
% AnnV+ cells
100.0
80.0
60.0
40.0
20.0
0.0
no Ab
BHH2
BHH2-A (V11L)
BHH2-B (K12V)
C2B8
Antibody (at 10 µg/ml)

Figure 24

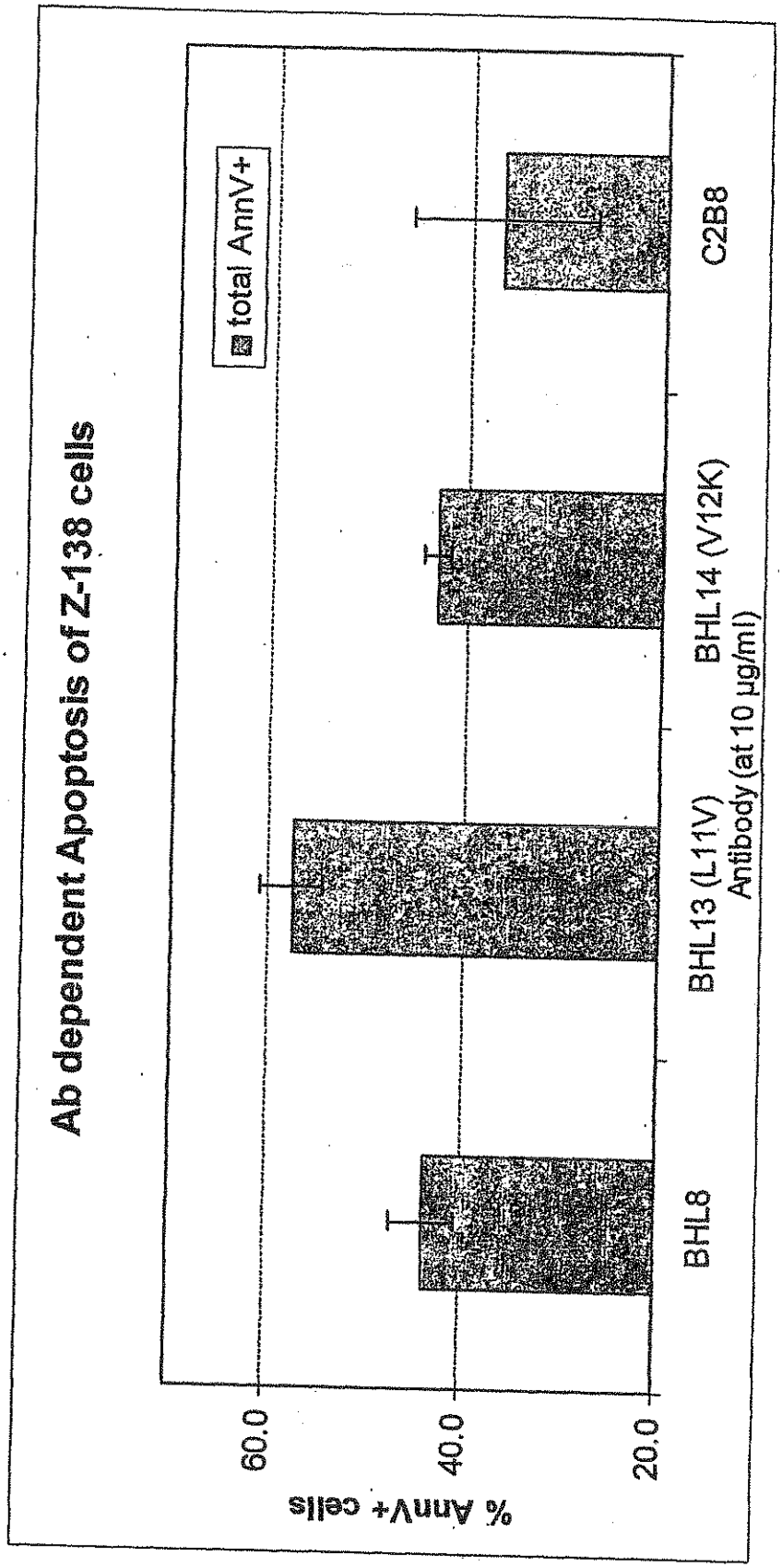
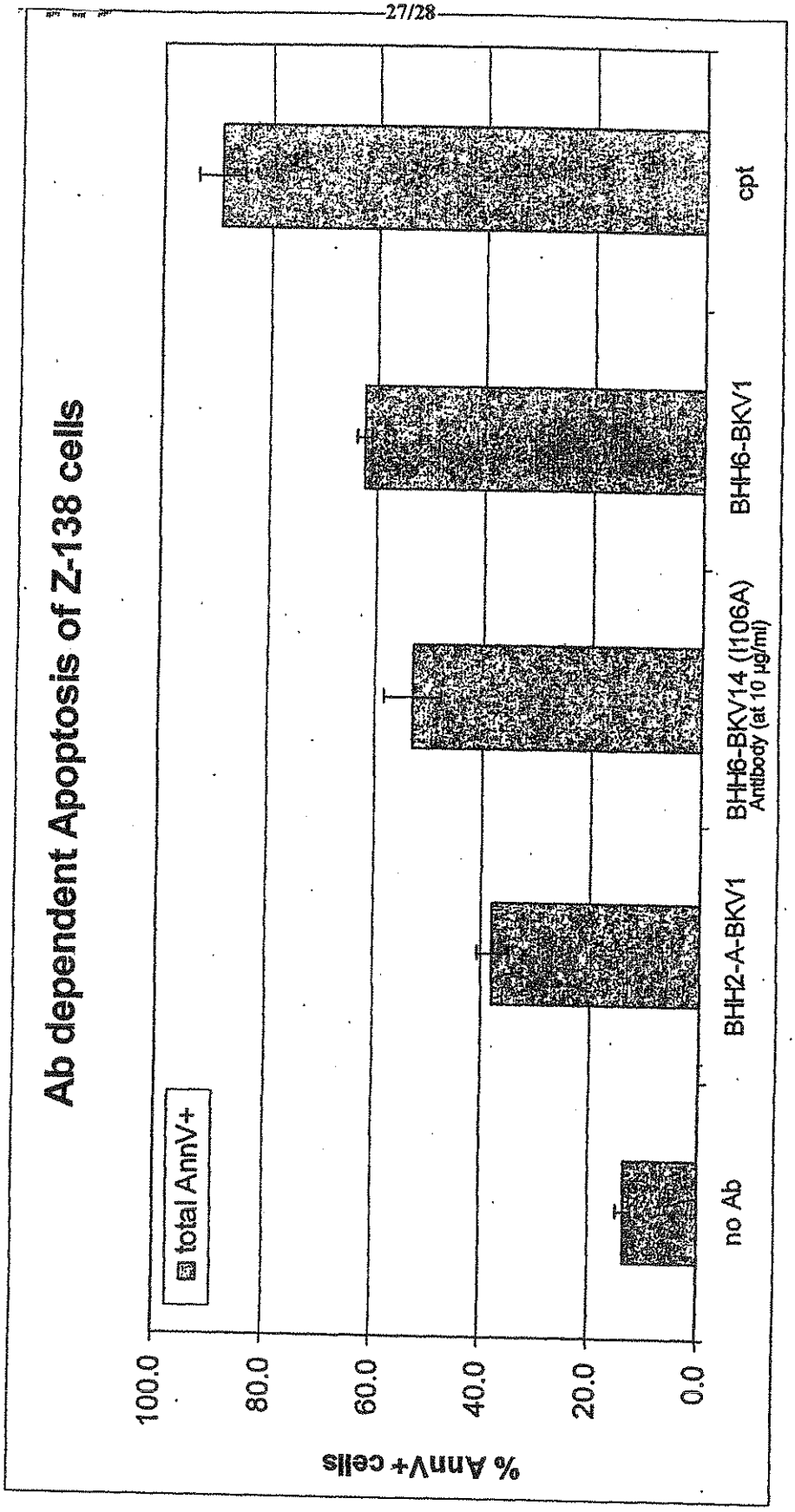

Ab dependent Apoptosis of Z-138 cells
total AnnV+
% AnnV+ cells
60.0
40.0
20.0
BHL8
BHL13 (L11V)
BHL14 (V12K)
C2B8
Antibody (at 10 µg/ml)

Figure 25


Ab dependent Apoptosis of Z-138 cells
total AnnV+
% AnnV+ cells
100.0
80.0
60.0
40.0
20.0
0.0
no Ab
BHH2-A-BKV1
BHH6-BKV14 (I106A)
Antibody (at 10 µg/ml)
BHH6-BKV1
cpt

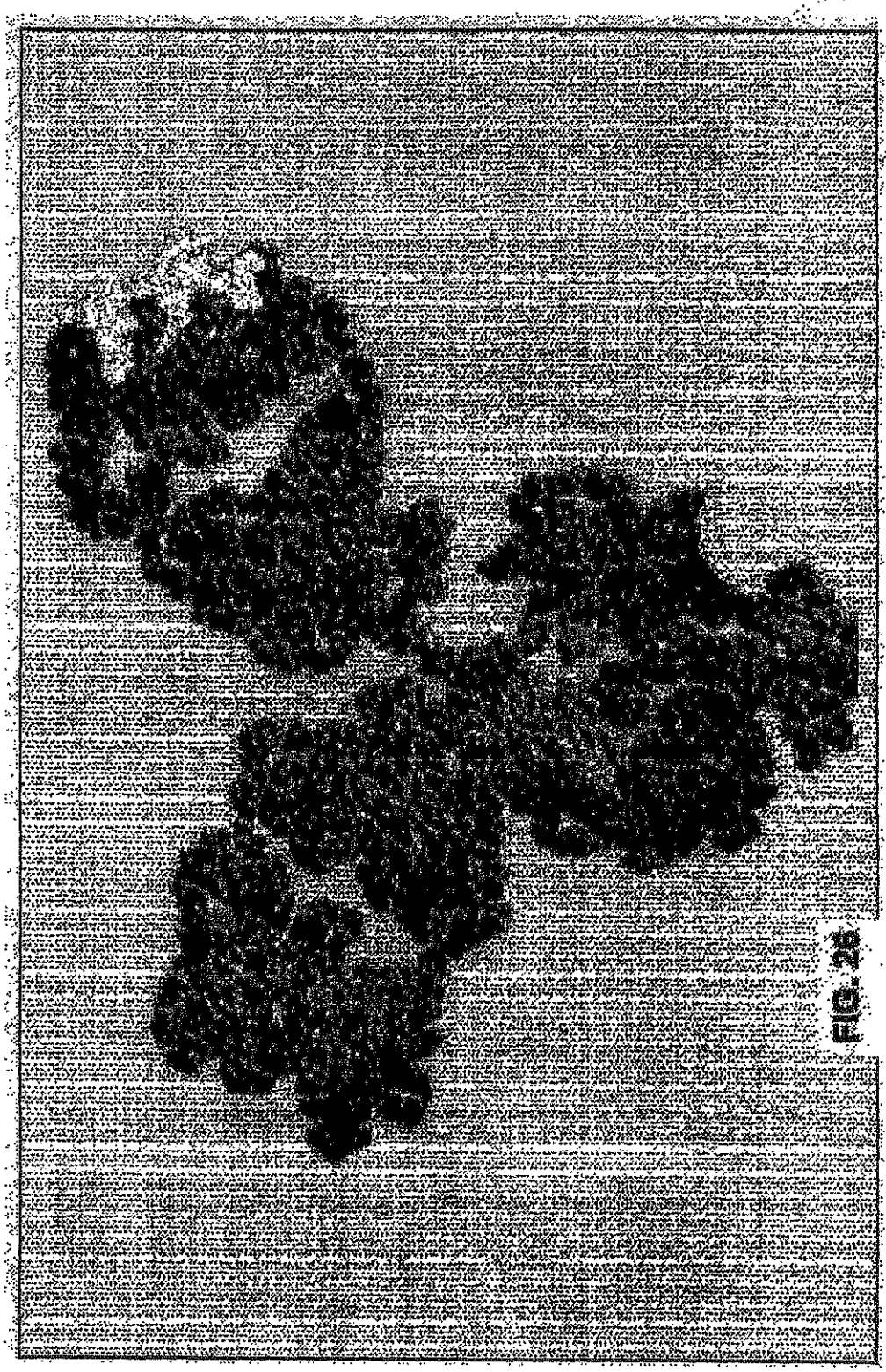


FIG. 28