HEAVY CHAIN

```
                 .............FR1.............  CDR1_  .....FR2.....  _______CDR2_____
G28-1            AVQLQQSGPESEKPGASVKISCKASGYSFT GYNMN WVKQNNGKSLEWIG NIDPYYGGTTYNRKFKG
CAS-024          EVQLVQSGAEVKKPGESLKISCKGSGYSFT GYNMN WVRQMPGKGLEWMG NIDPYYGGTTYNRKFKG
Consensus        -VQL-QSG-E--KPG-S-KISCK-SGYSFT GYNMN WV-Q--GK-LEW-G NIDPYYGGTTYNRKFKG

                 .............FR3.............  __CDR3_  .....FR4...
G28-1            KATLTVDKSSSTAYMQLKSLTSEDSAVYYCAR SVGPMDY WGQGTSVTVSS
CAS-024          QVTISADKSISTAYLQWSSLKASDTAMYYCAR SVGPFDS WGQGTLVTVSS
Consensus        --T---DKS-STAY-Q--SL---D-A-YYCAR SVGP-D- WGQGT-VTVSS
```

LIGHT CHAIN

```
                 ........FR1.............  ___CDR1____  ......FR2......  _CDR2__
G28-1            DIQMTQSPASLSASVGETVTITC  RTSENVYSYLA  WYQQKQGKSPQLLVS FAKTLAE
CAS-024          EIVLTQSPATLSLSPGERATLSC  RASENVYSYLA  WYQQKPGQAPRLLIY FAKTLAE
Consensus        -I--TQSPATLS-S-GE--T--C  R-SENVYSYLA  WYQQK-G--P-LL-- FAKTLAE

                 .............FR3.............  __CDR3___  ....FR4...
G28-1            GVPSRFSGSGSGTQFSLKISSLQPEDSGSYFC  QHHSDNPWT  FGGGTELEIK
CAS-024          GIPARFSGSGSGTDFTLTISSLEPEDFAVYYC  QHHSDNPWT  FGQGTKVEIK
Consensus        G-P-RFSGSGSGT-F-L-ISSL-PED---Y-C  QHHSDNPWT  FG-GT--EIK
```

Fig. 1

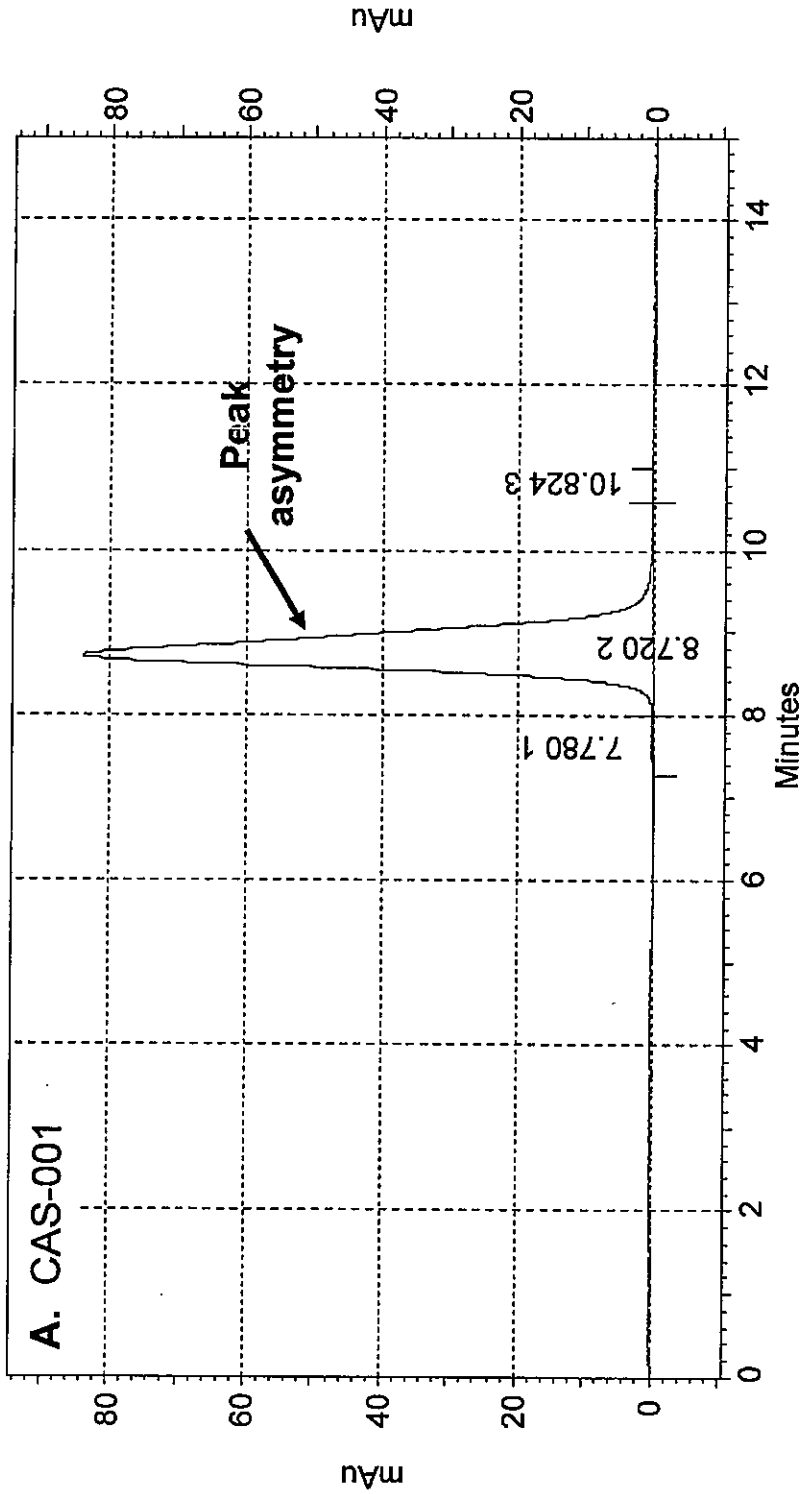

mAu
80
60
40
20
0
A. CAS-001
0
2
4
6
8
10
12
14
Minutes
7.780 1
8.720 2
10.824 3
Peak asymmetry
mAu

Fig. 2A

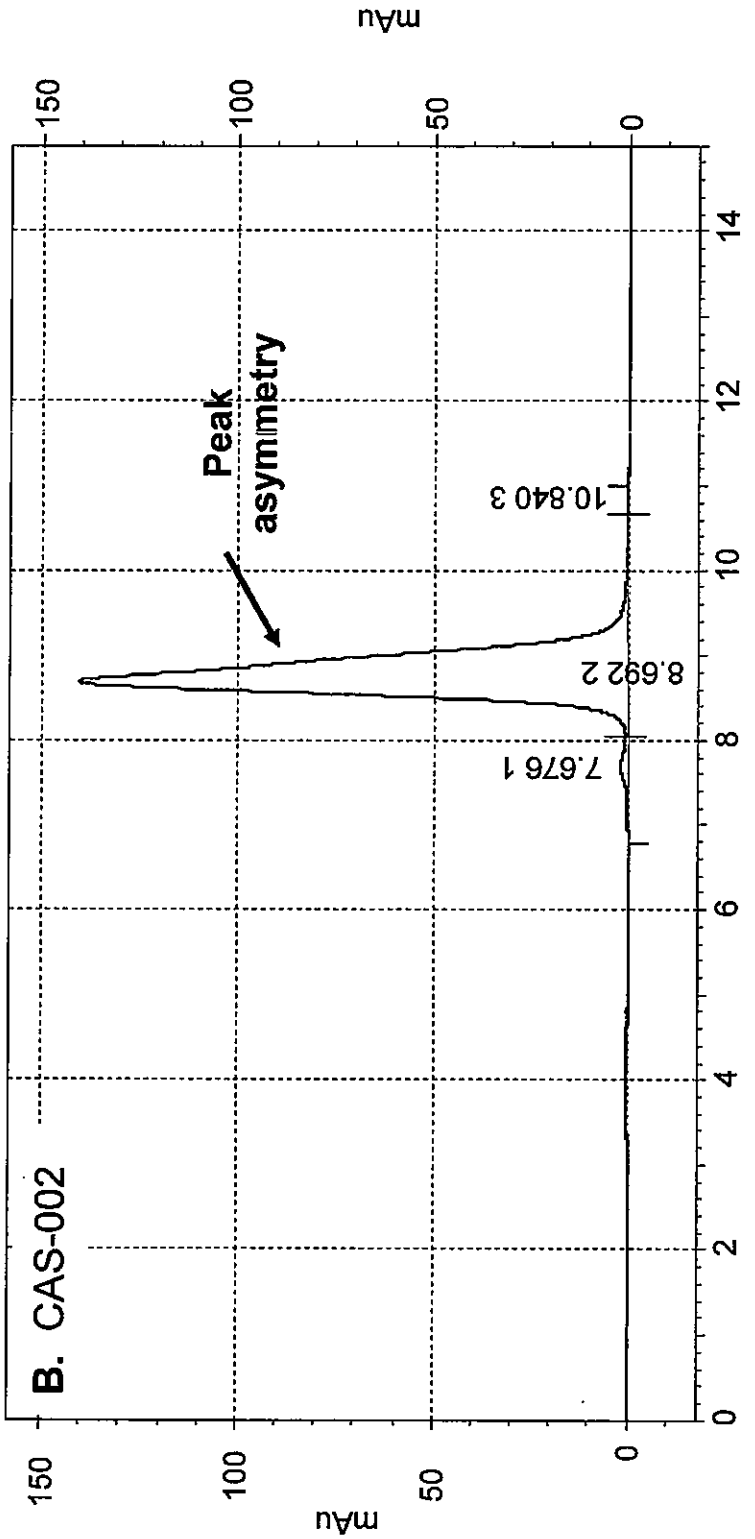

mAu
150
100
50
0
B. CAS-002
Peak asymmetry
10.840 3
8.692 2
7.676 1
0
2
4
6
8
10
12
14
Minutes

Fig. 2B

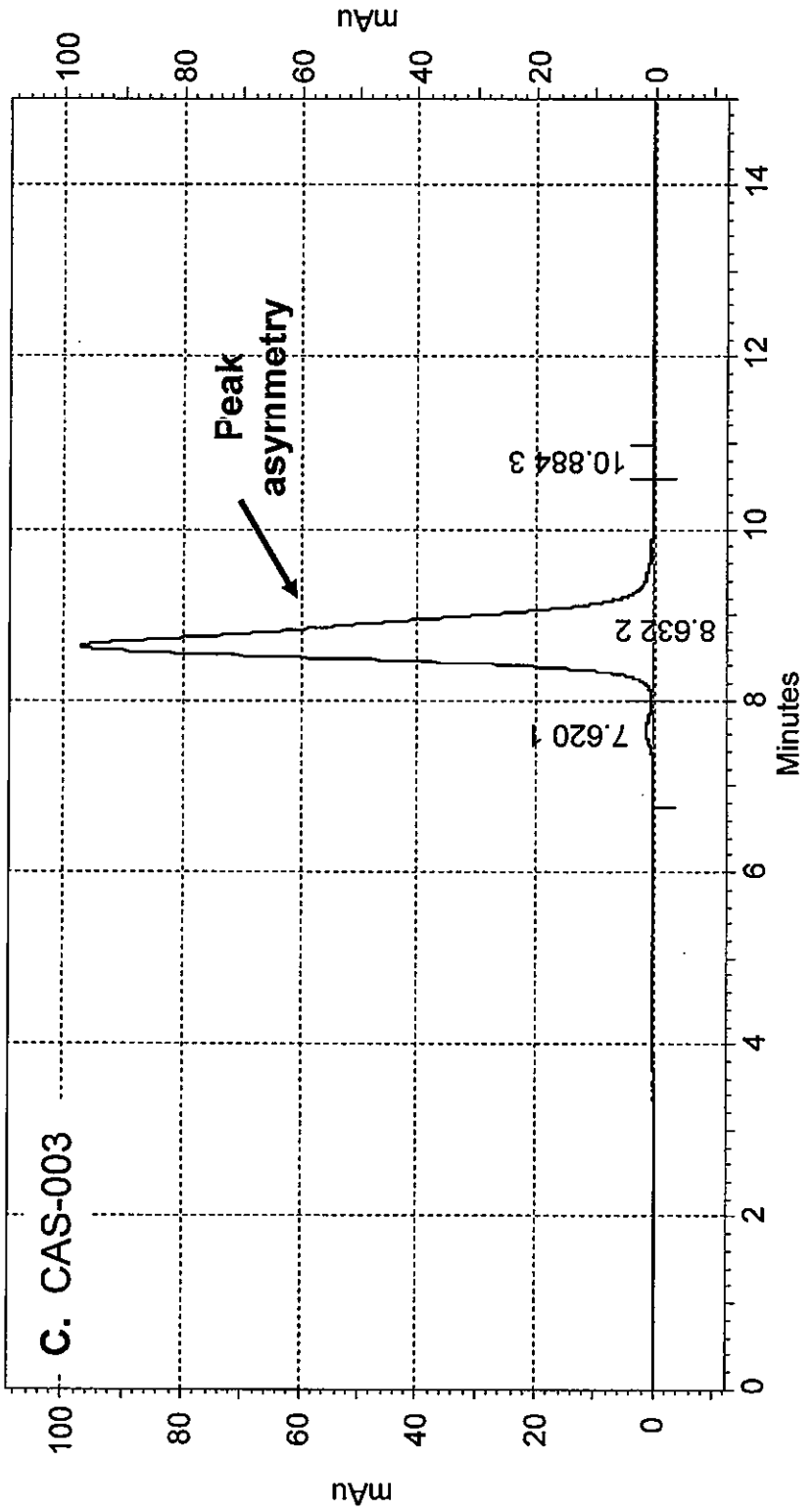


Fig. 2C

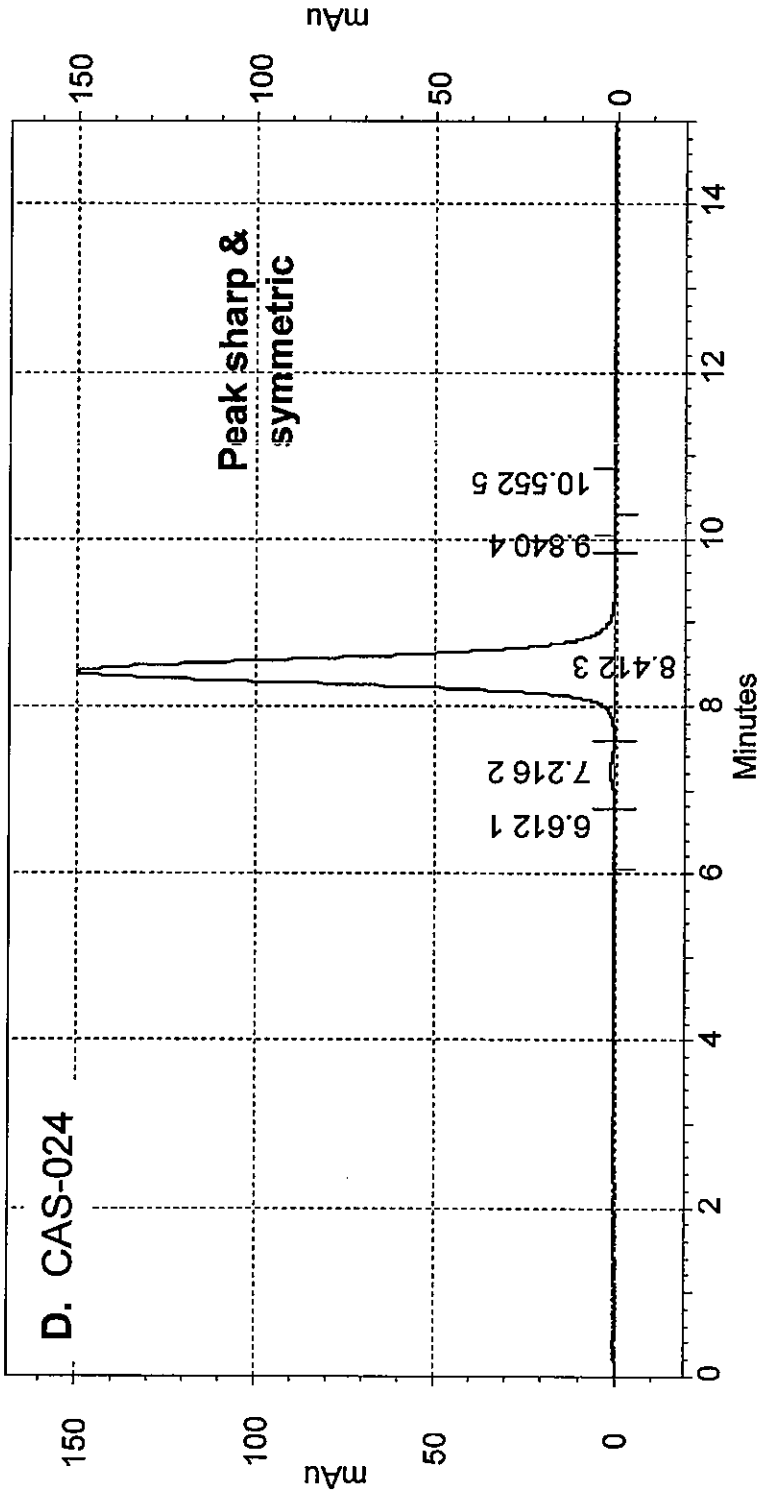

mAu
150
100
50
0
D. CAS-024
Peak sharp & symmetric
10.552 5
9.840 4
8.412 3
7.216 2
6.612 1
Minutes
0
2
4
6
8
10
12
14

Fig. 2D

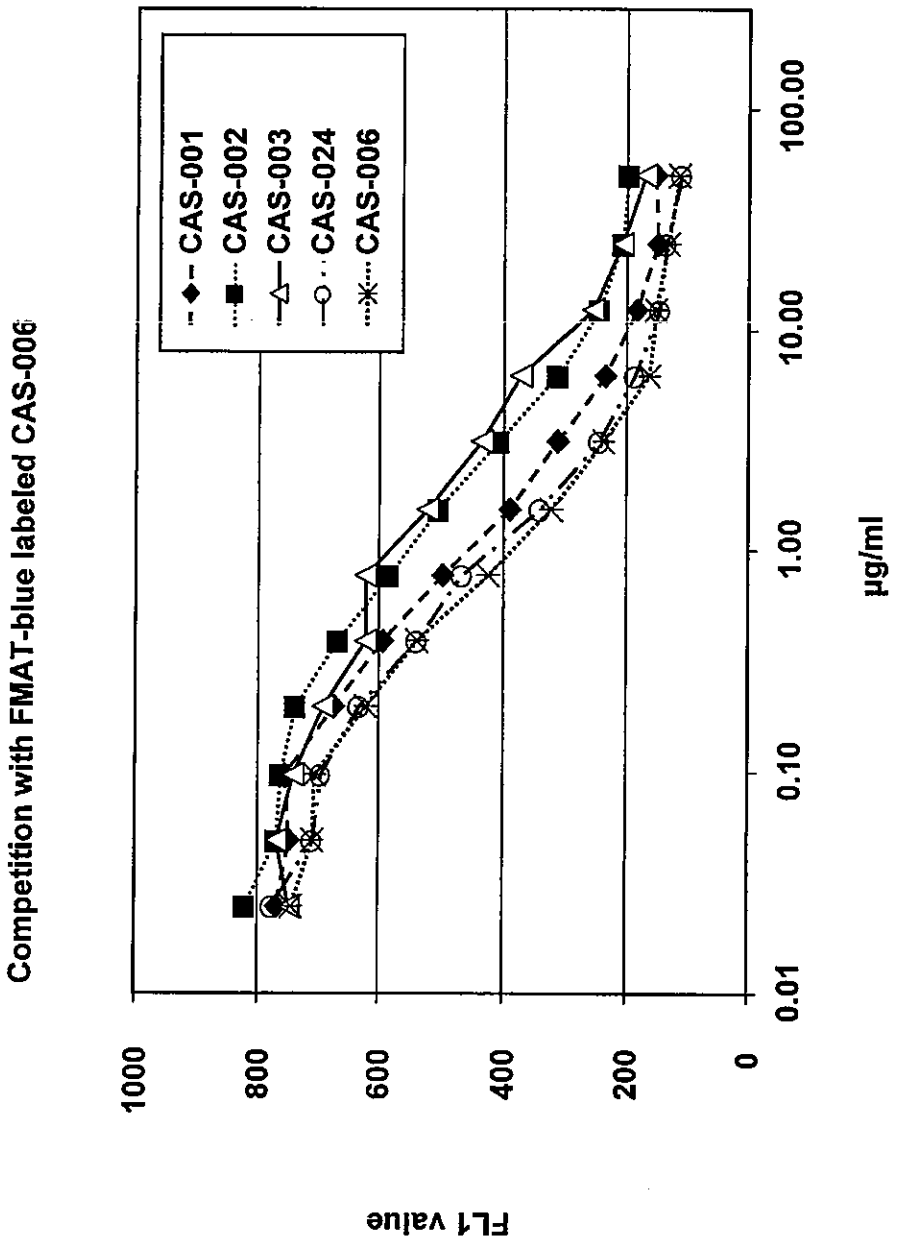

Competition with FMAT-blue labeled CAS-006
CAS-001
CAS-002
CAS-003
CAS-024
CAS-006
1000
800
600
400
200
0
FL1 value
0.01
0.10
1.00
10.00
100.00
µg/ml

Fig. 3

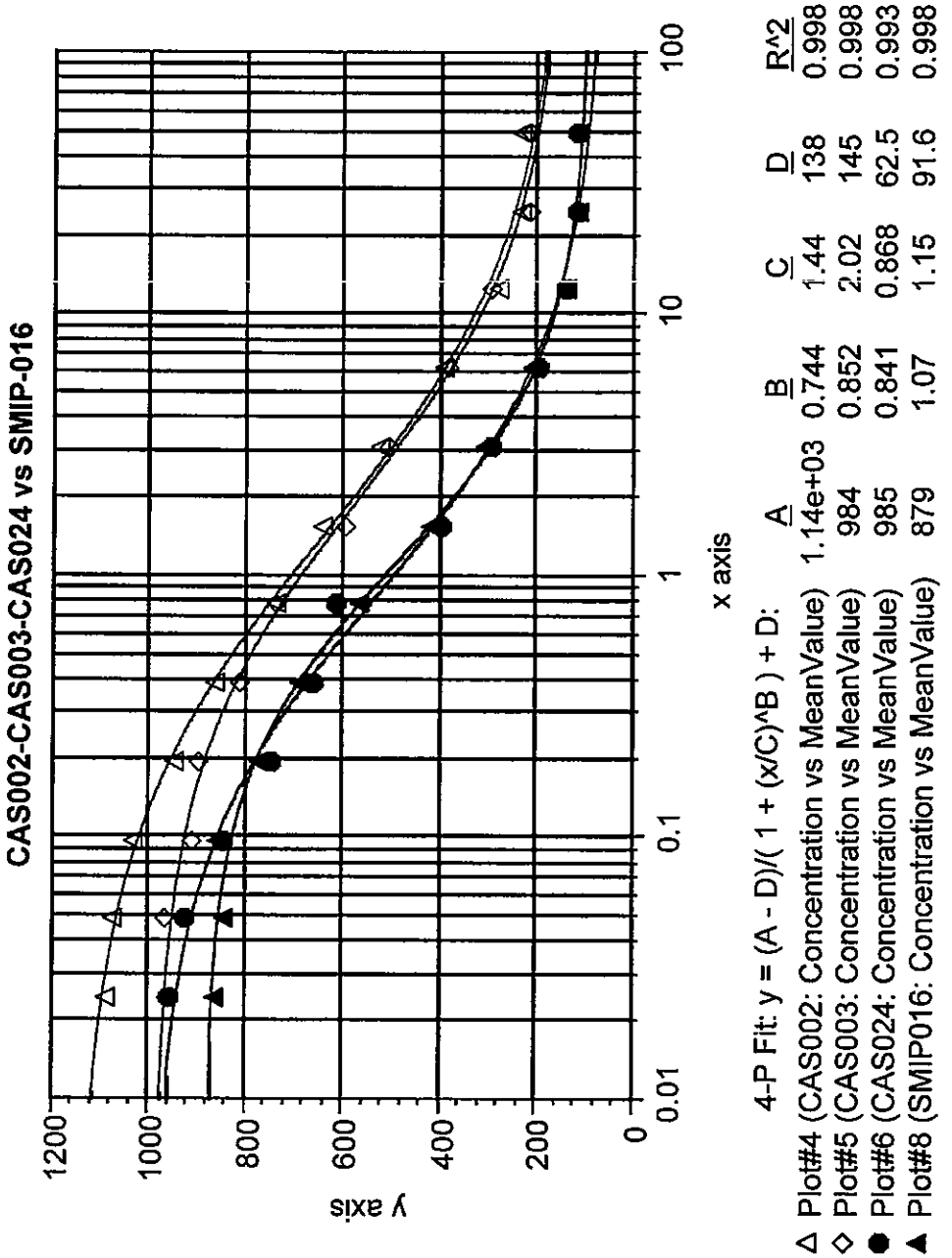

CAS002-CAS003-CAS024 vs SMIP-016
y axis
x axis
1200
1000
800
600
400
200
0
0.01
0.1
1
10
100
4-P Fit: y = (A - D)/(1 + (x/C)^B) + D:
A B C D R^2
△ Plot#4 (CAS002: Concentration vs MeanValue) 1.14e+03 0.744 1.44 138 0.998
◇ Plot#5 (CAS003: Concentration vs MeanValue) 984 0.852 2.02 145 0.998
● Plot#6 (CAS024: Concentration vs MeanValue) 985 0.841 0.868 62.5 0.993
▲ Plot#8 (SMIP016: Concentration vs MeanValue) 879 1.07 1.15 91.6 0.998
Curve Fit Option - Fixed Weight Value

Fig. 4A

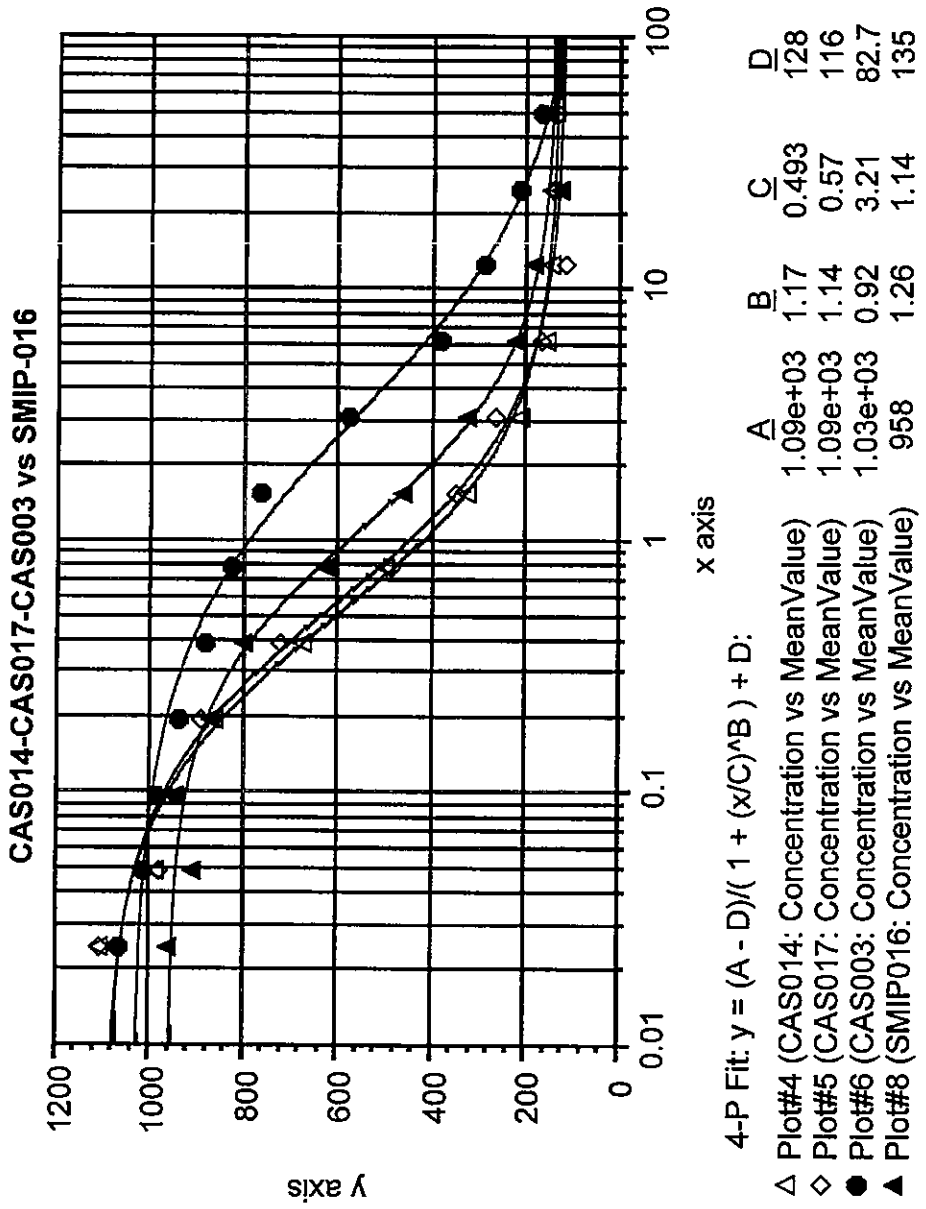

CAS014-CAS017-CAS003 vs SMIP-016
y axis
x axis
1200
1000
800
600
400
200
0
0.01
0.1
1
10
100
4-P Fit: y = (A - D)/(1 + (x/C)^B) + D:
A B C D R^2
△ Plot#4 (CAS014: Concentration vs MeanValue) 1.09e+03 1.17 0.493 128 0.996
◇ Plot#5 (CAS017: Concentration vs MeanValue) 1.09e+03 1.14 0.57 116 0.995
● Plot#6 (CAS003: Concentration vs MeanValue) 1.03e+03 0.92 3.21 82.7 0.994
▲ Plot#8 (SMIP016: Concentration vs MeanValue) 958 1.26 1.14 135 0.997
Curve Fit Option - Fixed Weight Value

Fig. 4B

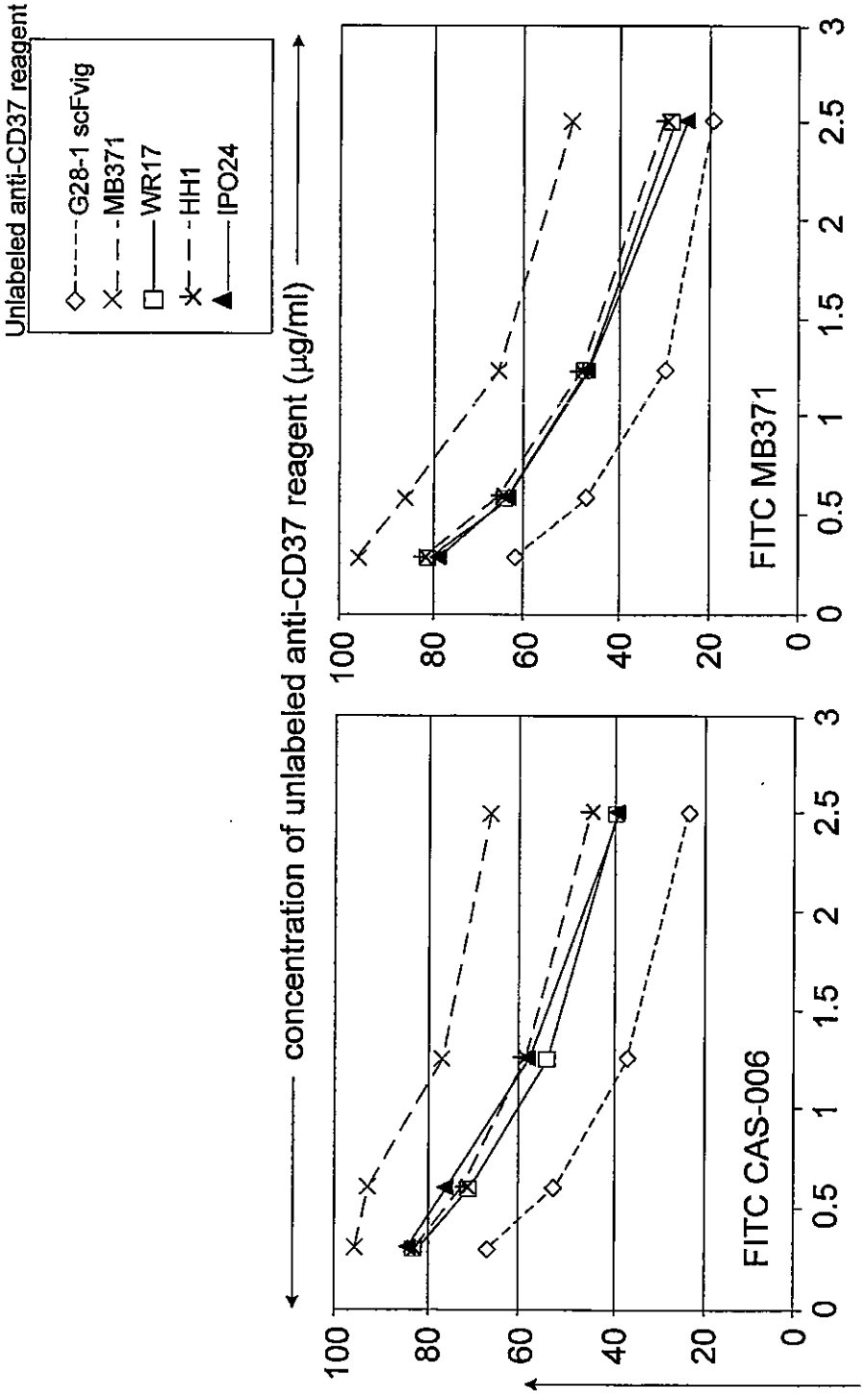

Unlabeled anti-CD37 reagent
G28-1 scFvig
MB371
WR17
HH1
IPO24
concentration of unlabeled anti-CD37 reagent (µg/ml)
FITC MB371
FITC CAS-006
0
20
40
60
80
100
0
0.5
1
1.5
2
2.5
3

Fig. 5B

Fig. 5A

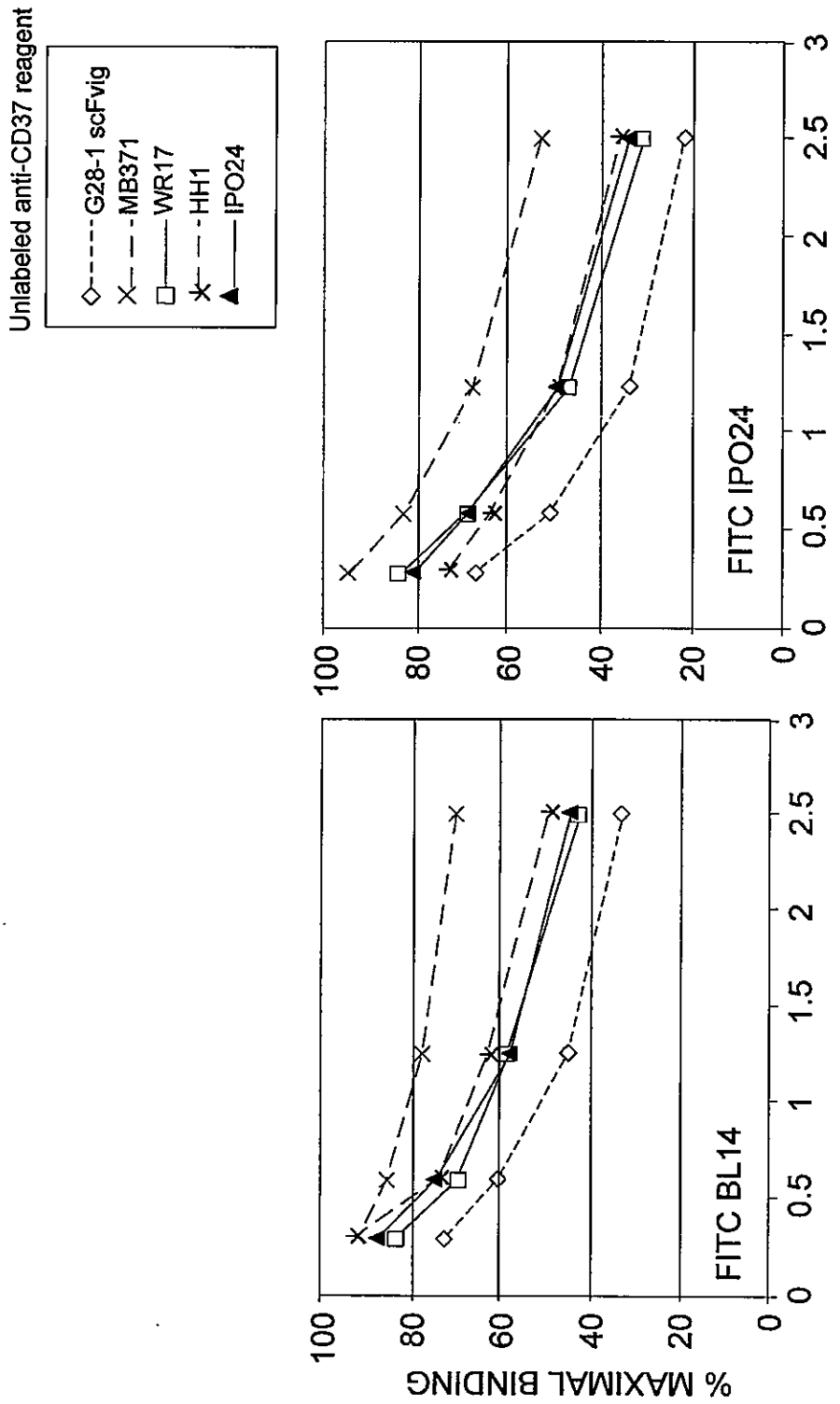

Unlabeled anti-CD37 reagent
G28-1 scFvig
MB371
WR17
HH1
IPO24
% MAXIMAL BINDING
FITC BL14
FITC IPO24
0
20
40
60
80
100
0
0.5
1
1.5
2
2.5
3

Fig. 5C

Fig. 5D

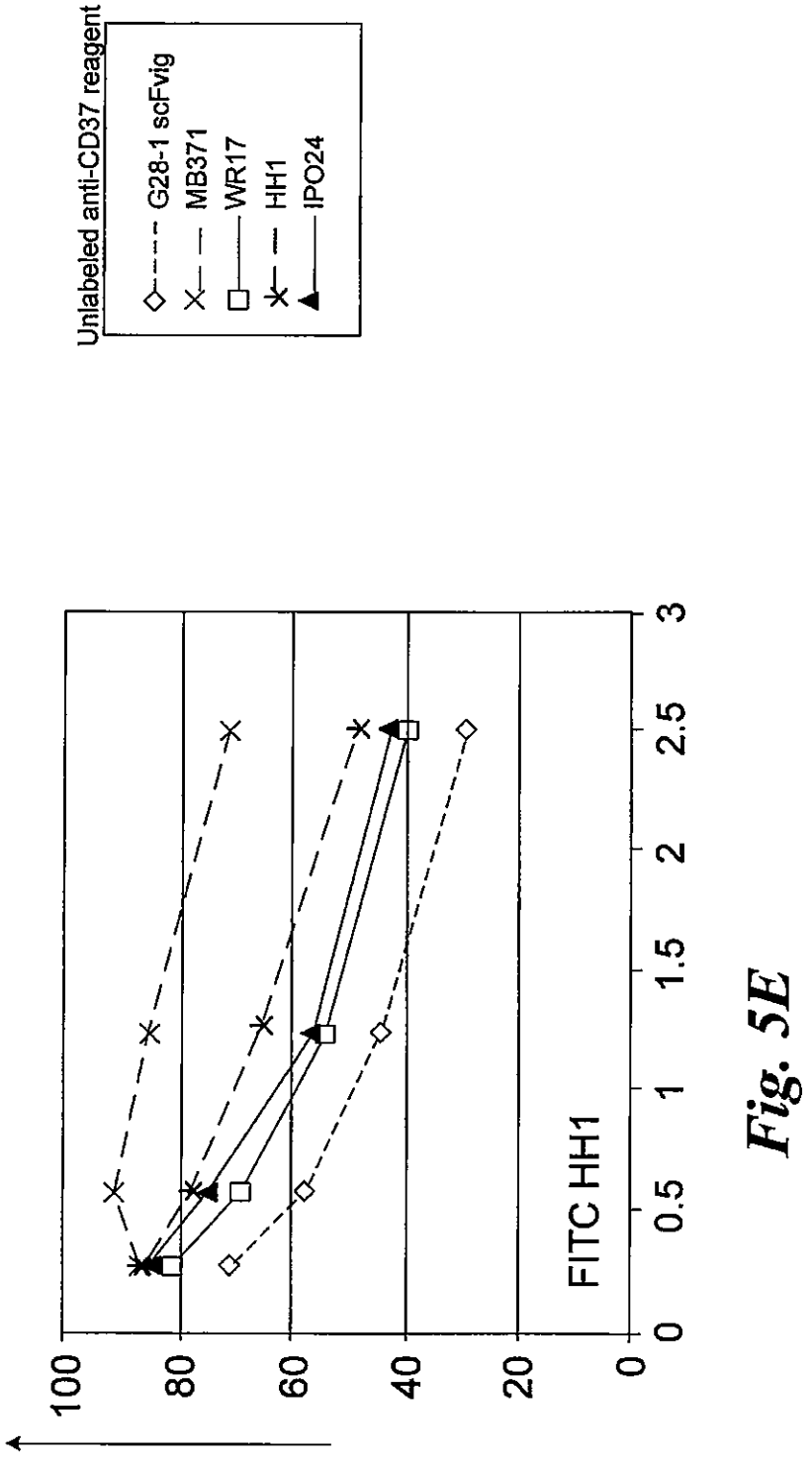

Unlabeled anti-CD37 reagent
G28-1 scFvig
MB371
WR17
HH1
IPO24
100
80
60
40
20
0
0
0.5
1
1.5
2
2.5
3
FITC HH1

Fig. 5E

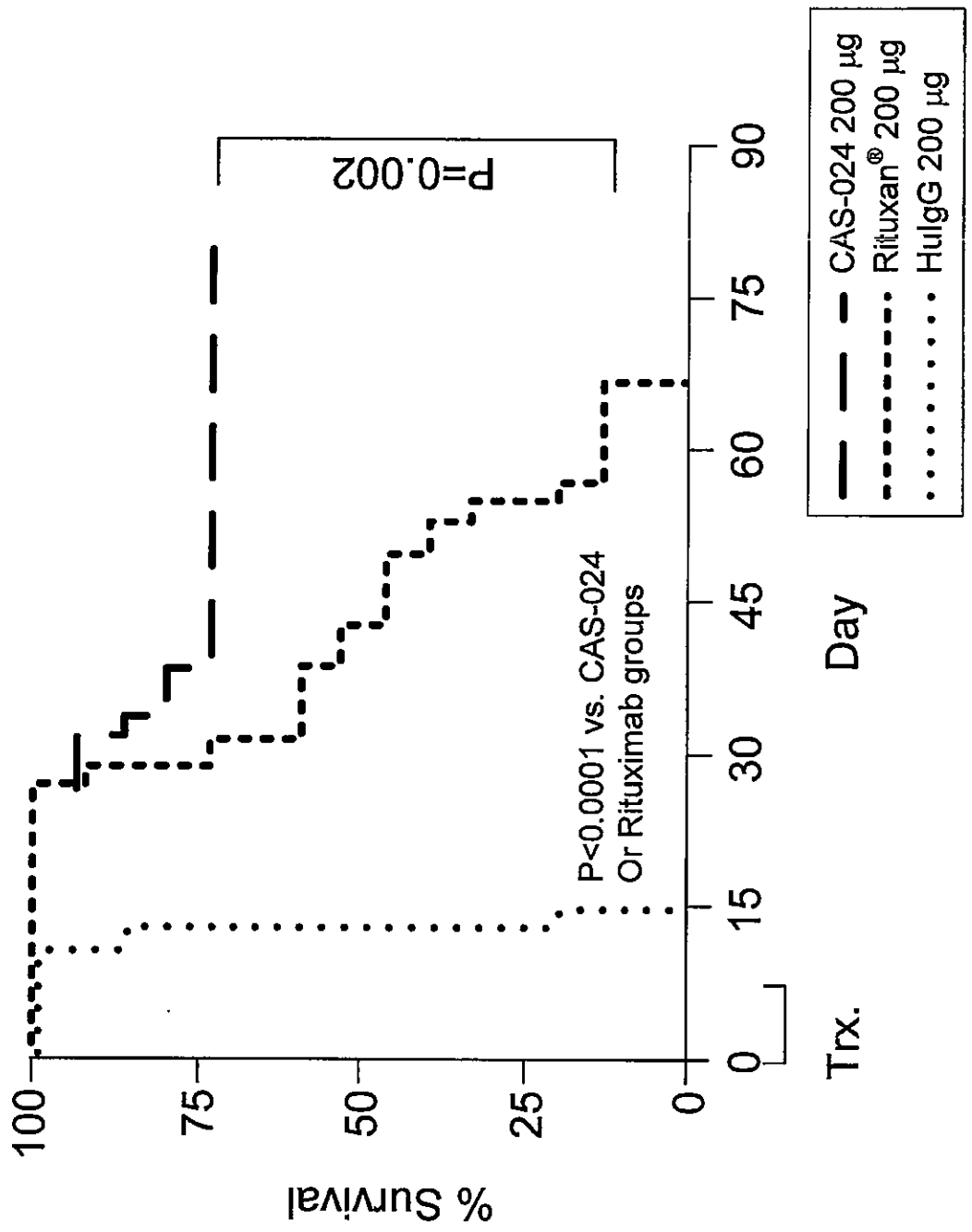

% Survival
100
75
50
25
0
Trx.
0
15
30
45
60
75
90
Day
P=0.002
P<0.0001 vs. CAS-024
Or Rituximab groups
CAS-024 200 µg
Rituxan® 200 µg
HulgG 200 µg

Fig. 6A

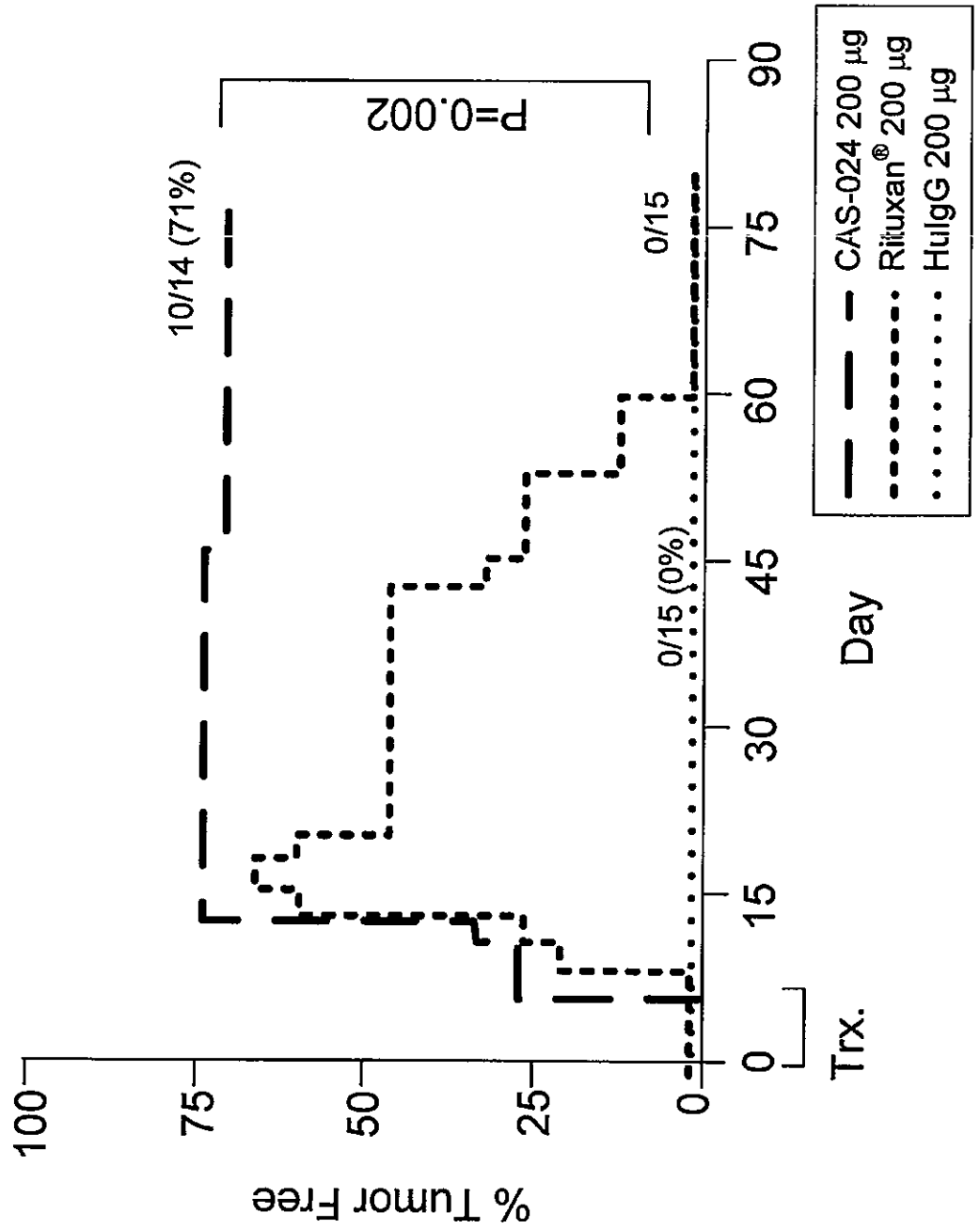

% Tumor Free
100
75
50
25
0
Trx.
0
15
30
45
60
75
90
Day
0/15 (0%)
0/15
10/14 (71%)
P=0.002
CAS-024 200 µg
Rituxan® 200 µg
HulgG 200 µg

Fig. 6B

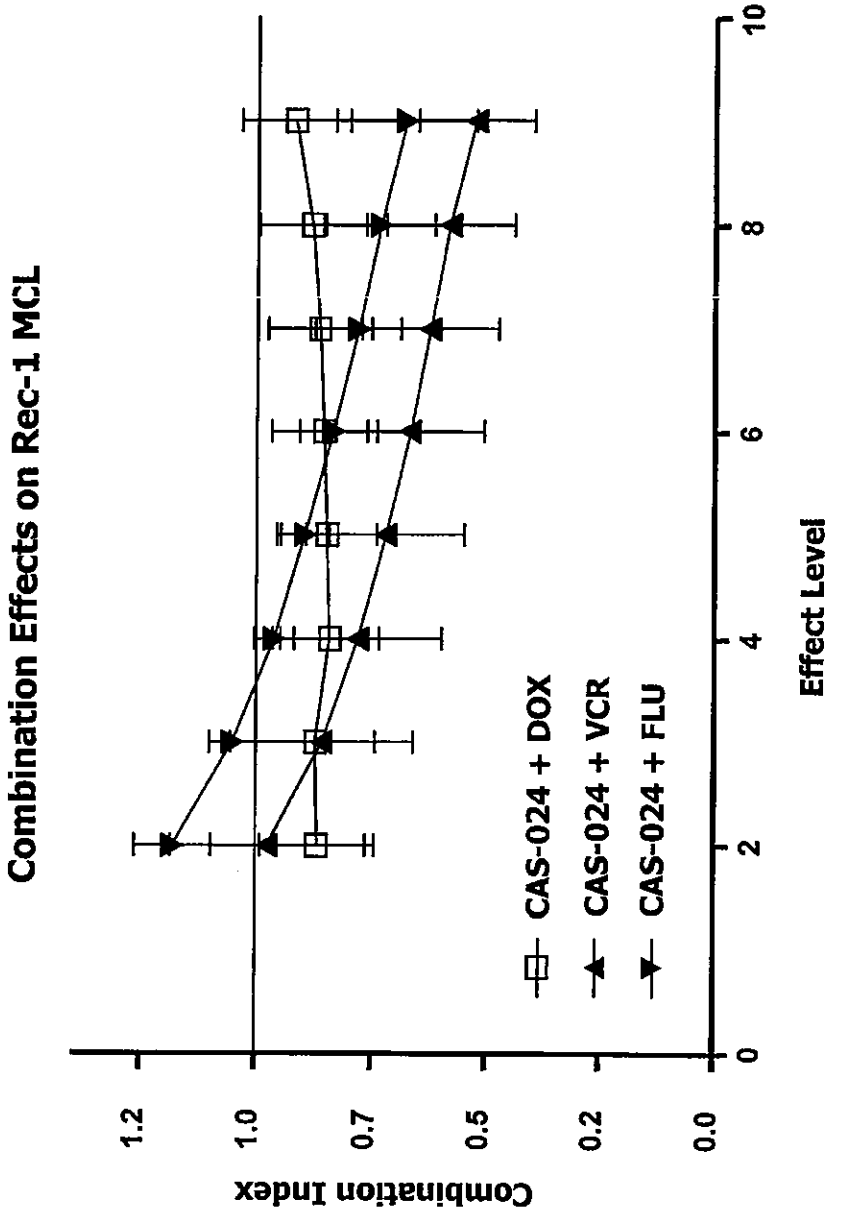

Combination Effects on Rec-1 MCL
Combination Index
1.2
1.0
0.7
0.5
0.2
0.0
Effect Level
0
2
4
6
8
10
CAS-024 + DOX
CAS-024 + VCR
CAS-024 + FLU

Fig. 7

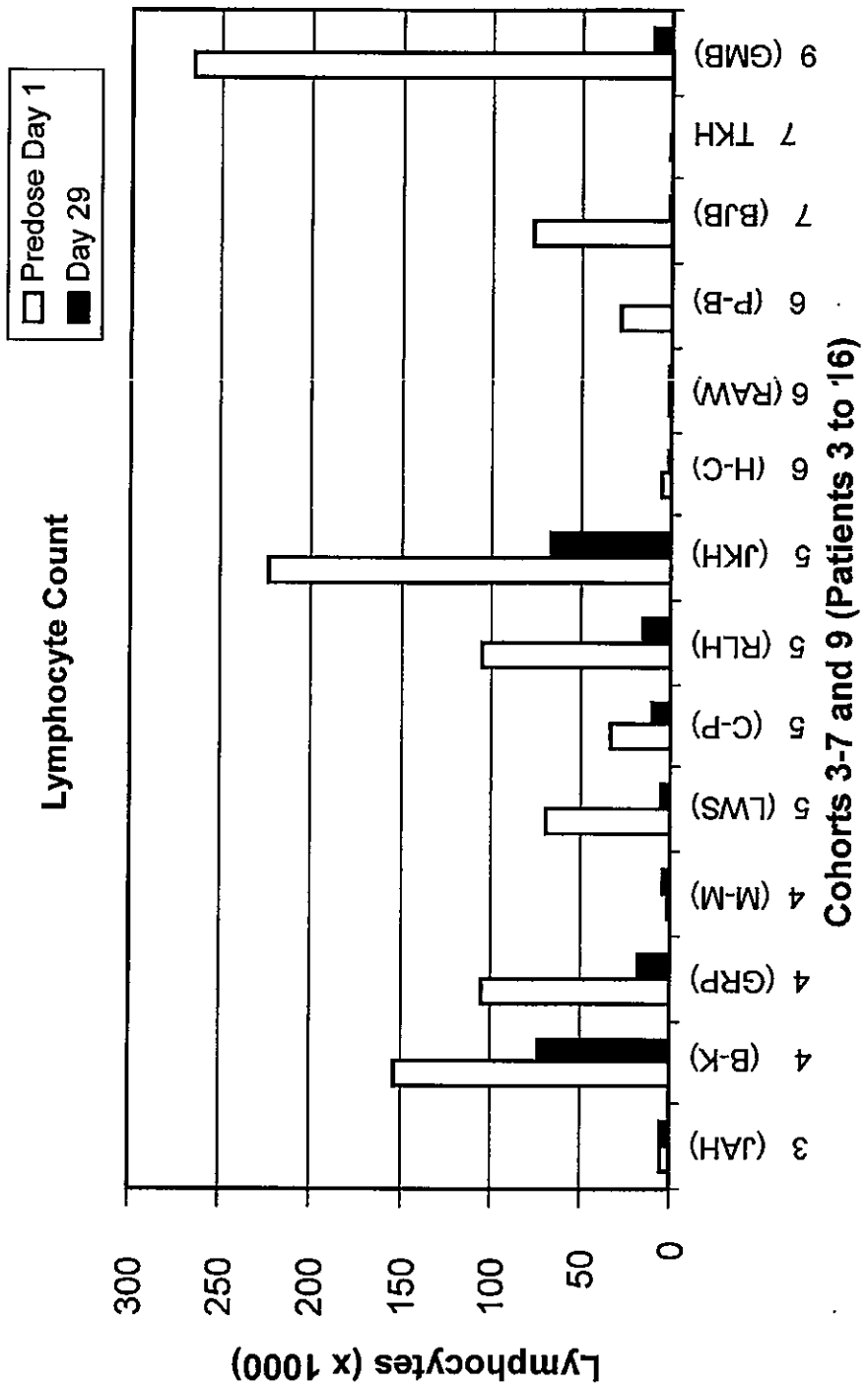

Lymphocyte Count
Predose Day 1
Day 29
Lymphocytes (x 1000)
300
250
200
150
100
50
0
Cohorts 3-7 and 9 (Patients 3 to 16)
3 (JAH)
4 (B-K)
4 (GRP)
4 (M-M)
5 (LWS)
5 (C-P)
5 (RLH)
5 (JKH)
6 (H-C)
6 (RAW)
6 (P-B)
7 (BJB)
7 TKH
9 (GMB)

Fig. 8

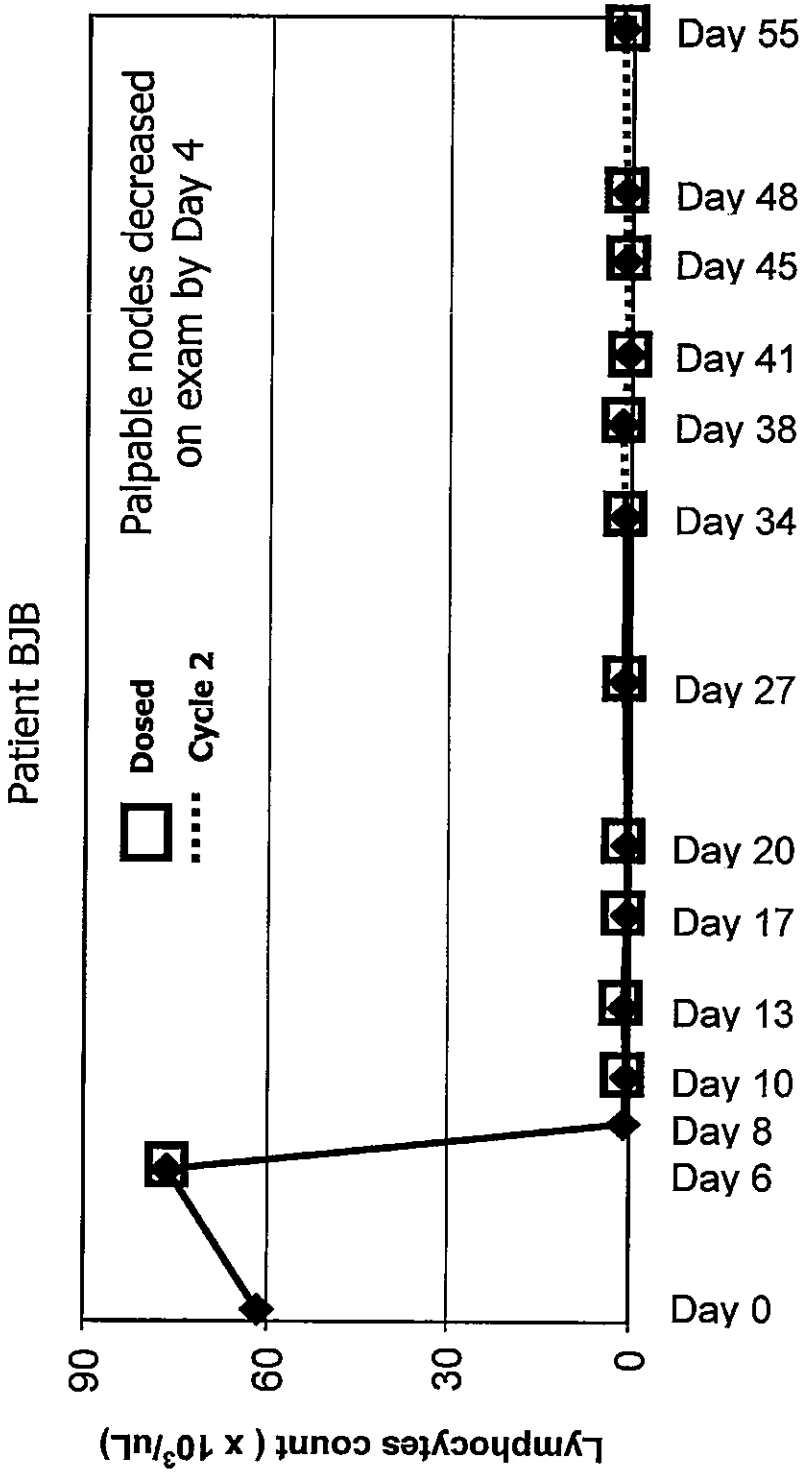

Patient BJB
Palpable nodes decreased on exam by Day 4
Dosed
Cycle 2
Day 55
Day 48
Day 45
Day 41
Day 38
Day 34
Day 27
Day 20
Day 17
Day 13
Day 10
Day 8
Day 6
Day 0
90
60
30
0
Lymphocytes count (x 10³/uL)

Fig. 9

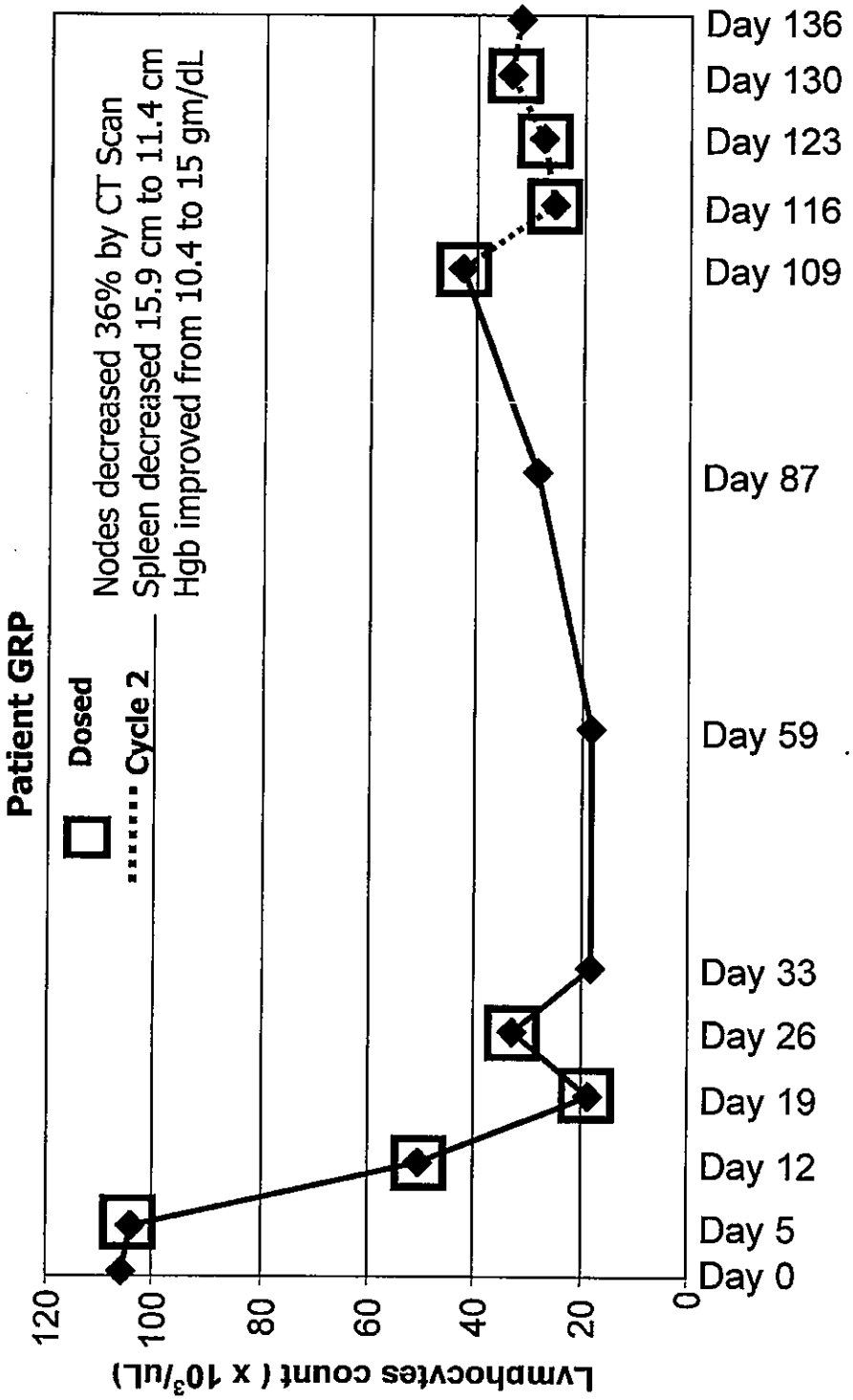

Patient GRP
Dosed
Cycle 2
Nodes decreased 36% by CT Scan
Spleen decreased 15.9 cm to 11.4 cm
Hgb improved from 10.4 to 15 gm/dL
Day 136
Day 130
Day 123
Day 116
Day 109
Day 87
Day 59
Day 33
Day 26
Day 19
Day 12
Day 5
Day 0
120
100
80
60
40
20
0
Lymphocytes count (x 10³/uL)

Fig. 10

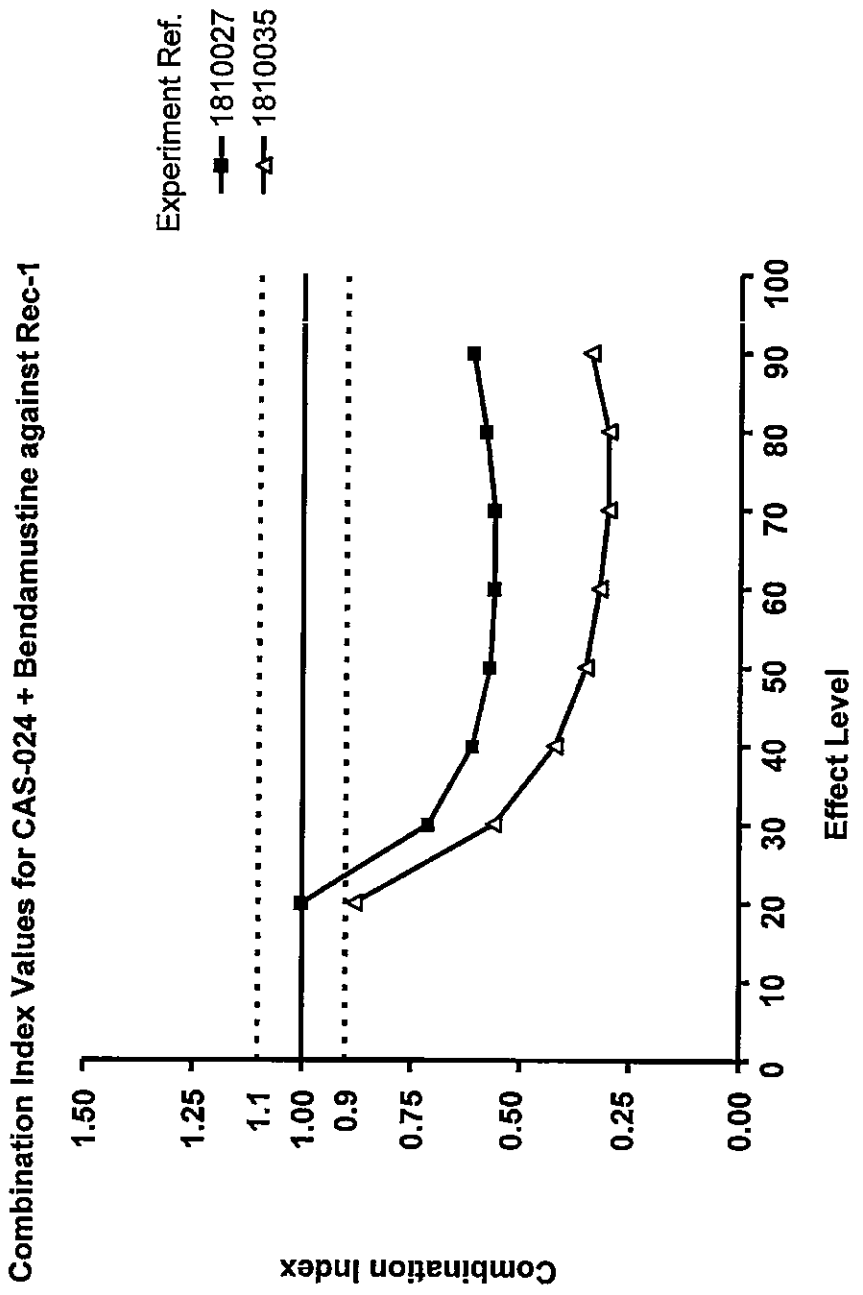

Combination Index Values for CAS-024 + Bendamustine against Rec-1
Experiment Ref.
1810027
1810035
Combination Index
1.50
1.25
1.1
1.00
0.9
0.75
0.50
0.25
0.00
0
10
20
30
40
50
60
70
80
90
100
Effect Level

Fig. 11

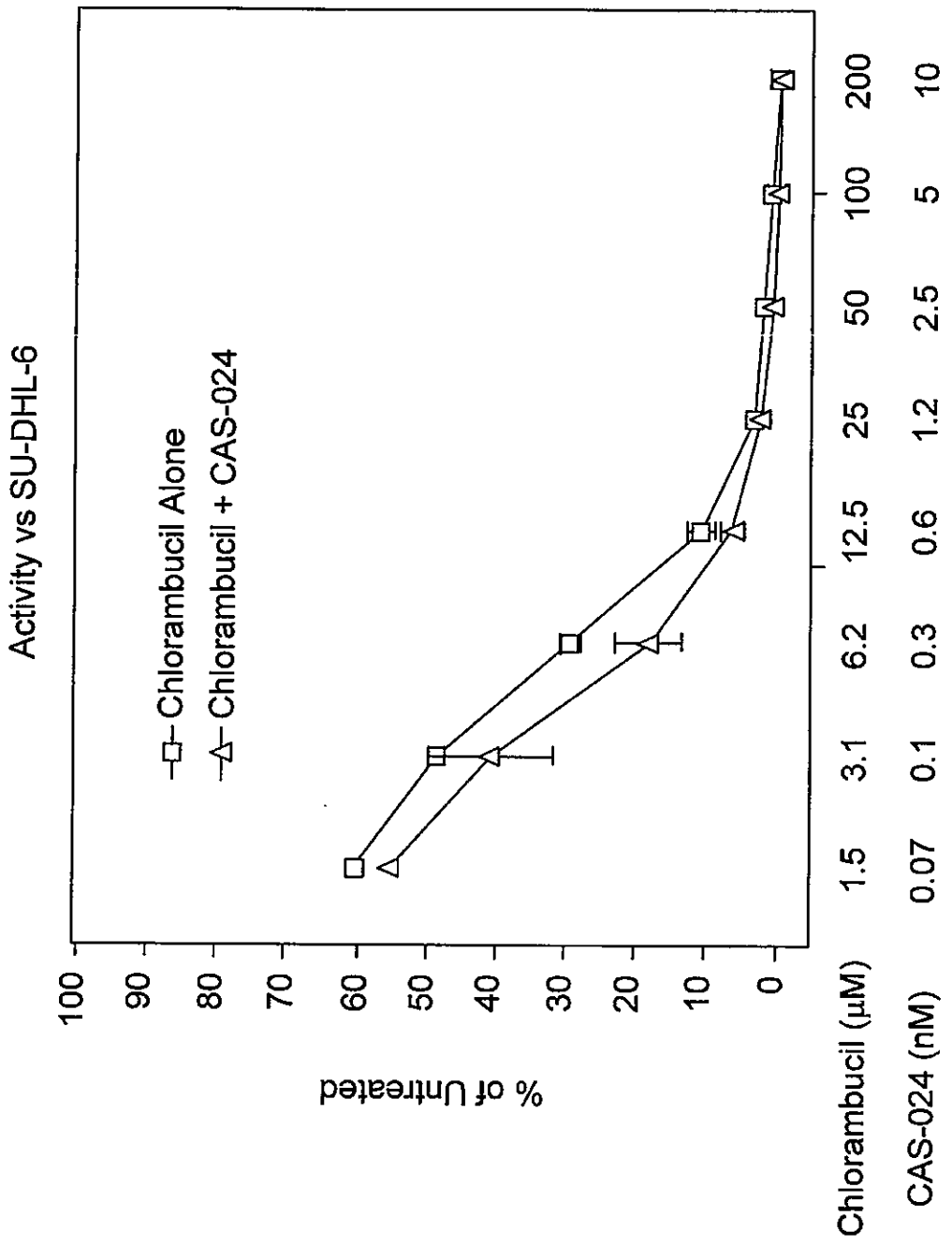

Activity vs SU-DHL-6
Chlorambucil Alone
Chlorambucil + CAS-024
% of Untreated
100
90
80
70
60
50
40
30
20
10
0
Chlorambucil (µM) 1.5 3.1 6.2 12.5 25 50 100 200
CAS-024 (nM) 0.07 0.1 0.3 0.6 1.2 2.5 5 10

Fig. 12

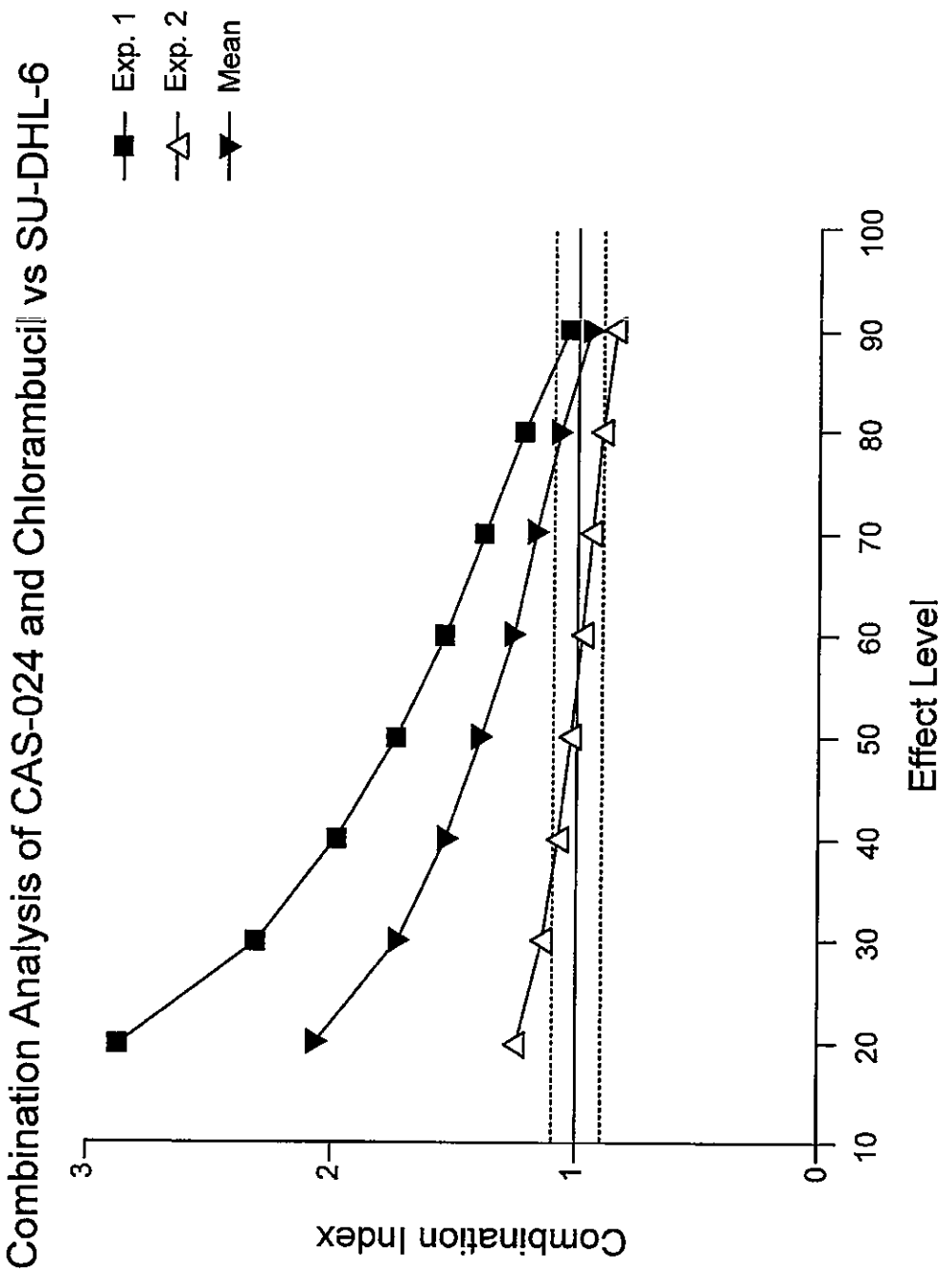

Combination Analysis of CAS-024 and Chlorambucil vs SU-DHL-6
Exp. 1
Exp. 2
Mean
Combination Index
3
2
1
0
10
20
30
40
50
60
70
80
90
100
Effect Level

Fig. 13

Comparison in Kruskal-Wallis test with Dunn's Multiple Comparison Post-test	p value
hulgG vs CAS-024	< 0.001
hulgG vs Bendamustine	< 0.05
hulgG vs CAS-024+Bendamustine	< 0.001
CAS-024 vs Bendamustine	> 0.05
CAS-024 vs CAS-024+Bendamustine	> 0.05
Bendamustine vs CAS-024+ Bendamustine	< 0.01

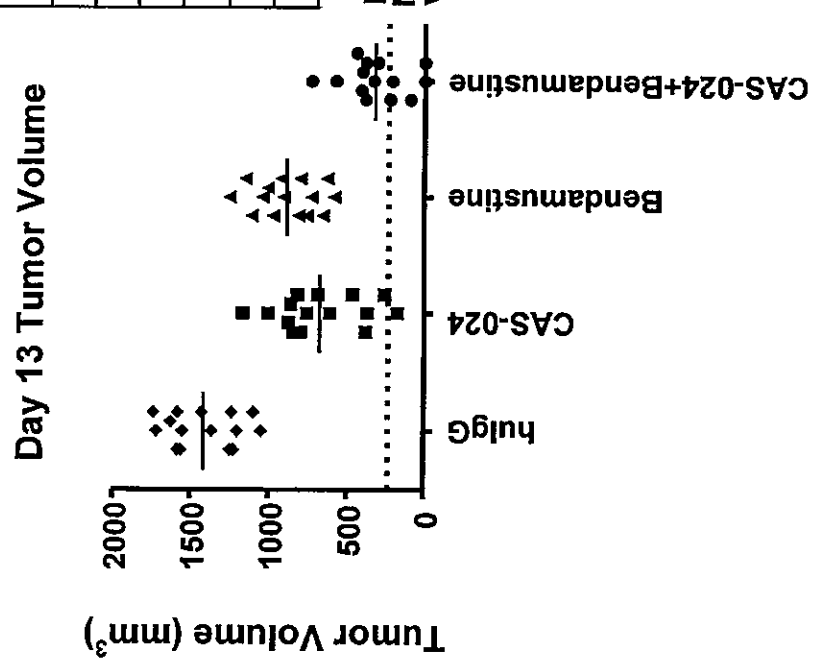


Fig. 14A

Comparison in Kruskal-Wallis test with Dunn's Multiple Comparison Post-test	p value
hulgG vs CAS-024	< 0.001
hulgG vs Bendamustine	< 0.05
hulgG vs CAS-024+Bendamustine	< 0.001
CAS-024 vs Bendamustine	> 0.05
CAS-024 vs CAS-024+Bendamustine	> 0.05
Bendamustine vs CAS-024+ Bendamustine	< 0.01

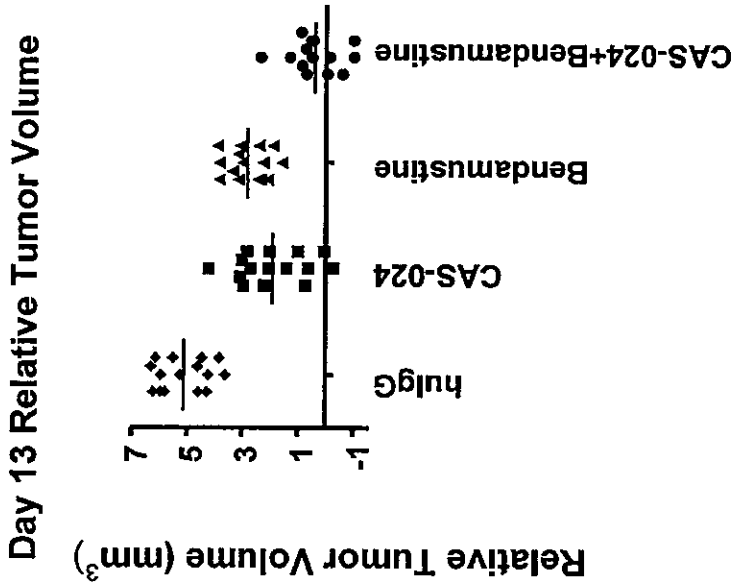


Fig. 14B

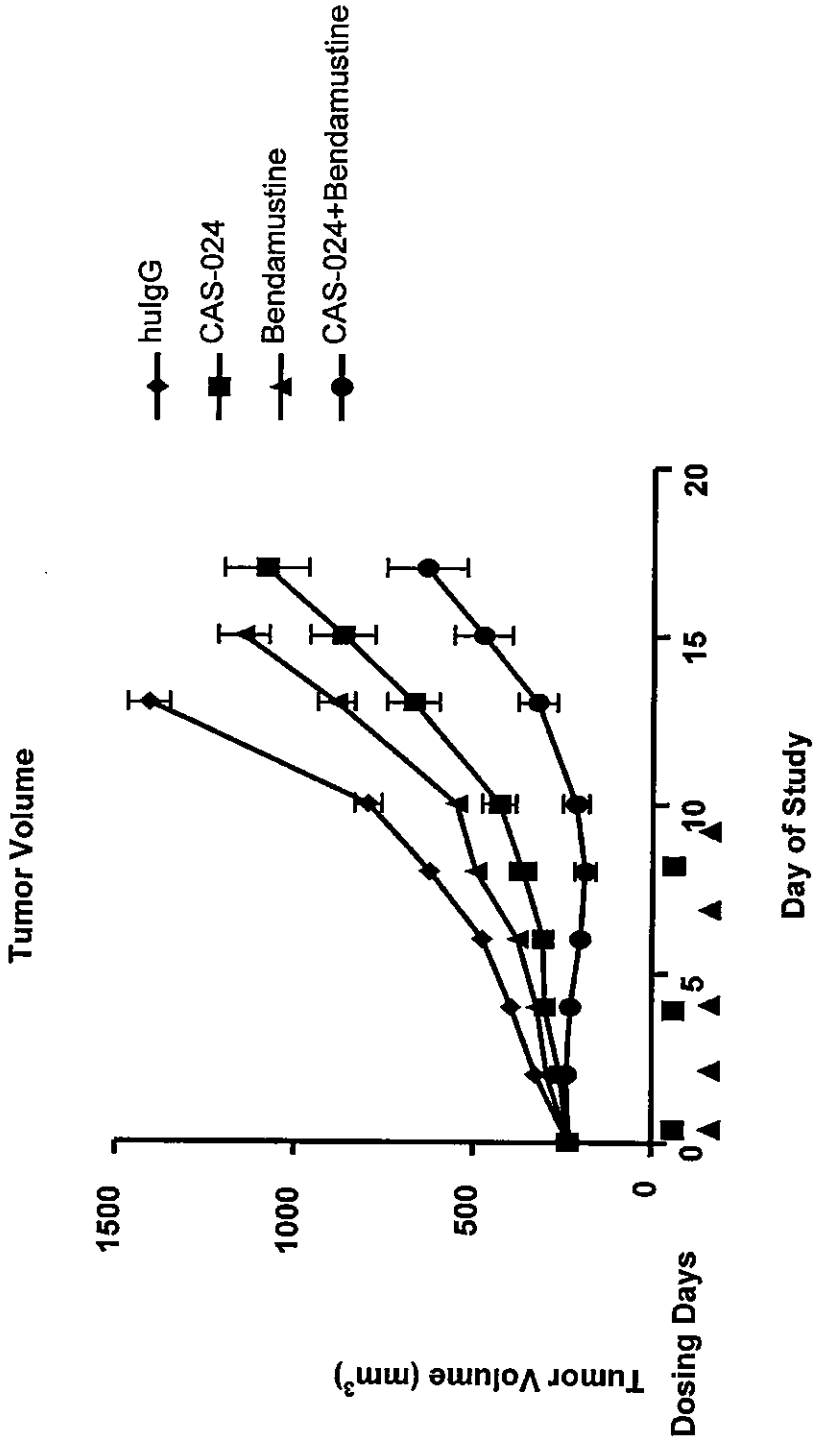

huIgG
CAS-024
Bendamustine
CAS-024+Bendamustine
Tumor Volume
Tumor Volume (mm³)
1500
1000
500
0
Dosing Days
0
5
10
15
20
Day of Study

Fig. 15

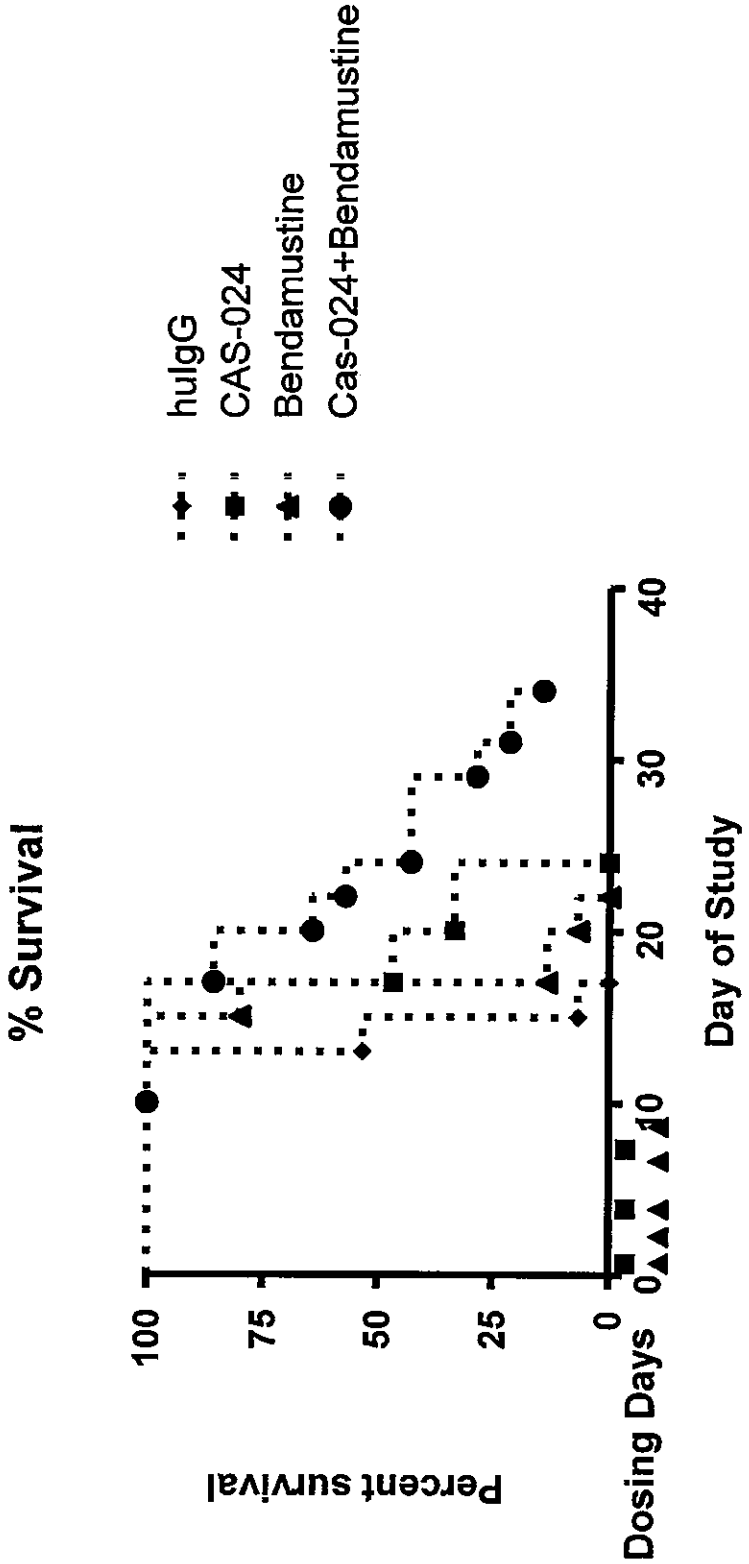

% Survival
Percent survival
100
75
50
25
0
Dosing Days
0
10
20
30
40
Day of Study
hulgG
CAS-024
Bendamustine
Cas-024+Bendamustine

Fig. 16

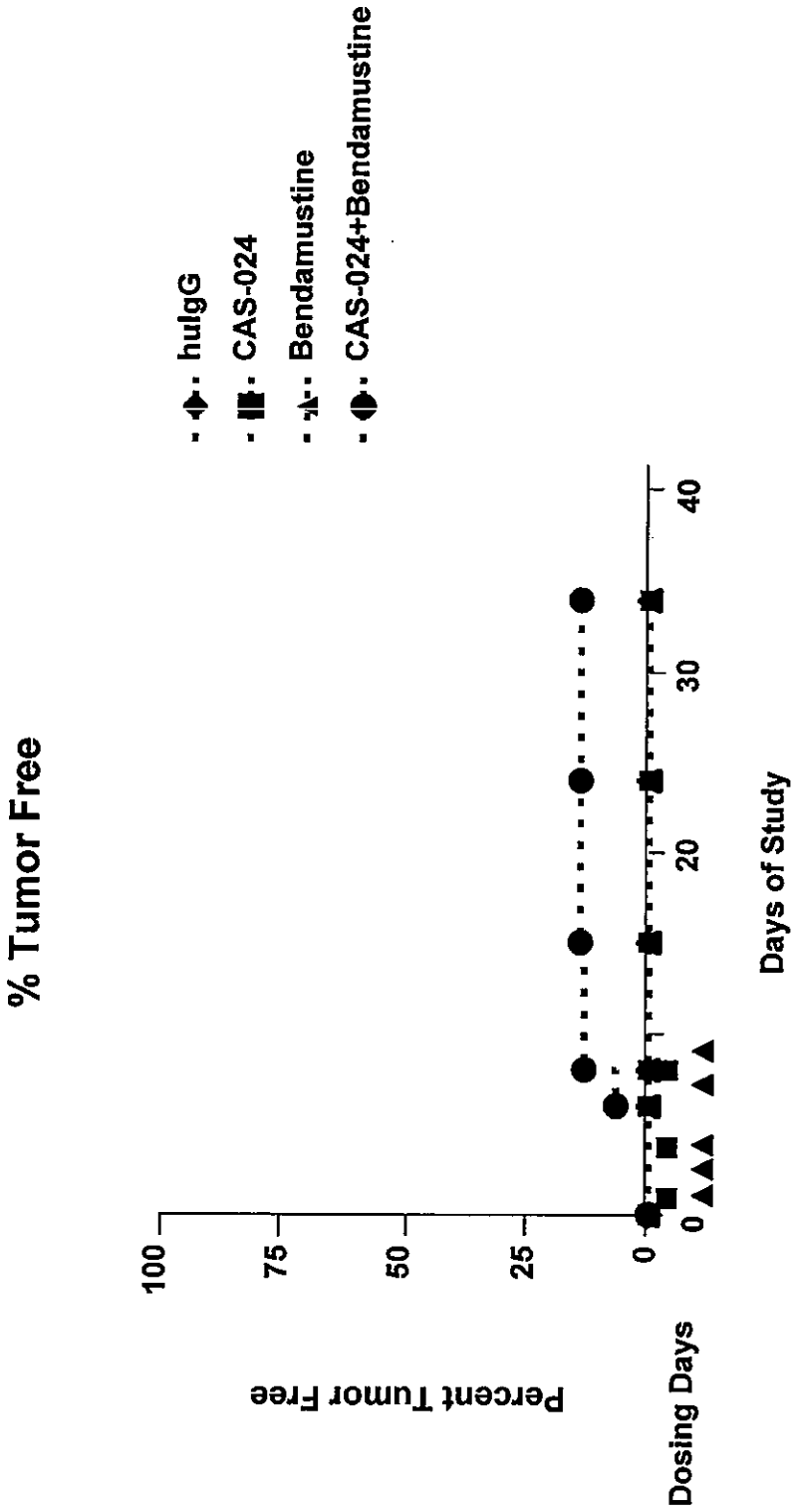

% Tumor Free
huIgG
CAS-024
Bendamustine
CAS-024+Bendamustine
100
75
50
25
0
0
20
30
40
Days of Study
Percent Tumor Free
Dosing Days

Fig. 17