FIG. 1

```
ATGGAGTTTG GGCTGAGCTG GGTTTTCCTT GTTGCTATTA TAAAAGGTGT  50
CCAGTGTCAG GTGCAGCTGG TGGAGTCCGG GGGAGGCTTG GTCAAGCCTG 100
GAGGGTCCCT GAGACTCTCC TGTGCAGCCT CTGGATTCAC TTTCAGTGAC 150
TACTATATGA GCTGGATCCG CCAGGCTCCA GGGAAGGGGC TGGAATGGGT 200
TTCATACATT AGTAGTAGTG GTAGTACCAG AGACTACGCA GACTCTGTGA 250
AGGGCCGATT CACCATCTCC AGGGACAACG CCAAGAACTC ACTGTATCTG 300
CAAATGAACA GCCTGAGAGC CGAGGACACG GCCGTGTATT ACTGTGTGAG 350
AGATGGAGTG GAAACTACTT TTTACTACTA CTACTACGGT ATGGACGTCT 400
GGGGCCAAGG GACCACGGTC ACCGTCTCCT CAGCCTCCAC CAAGGGCCCA 450
TCGGTCTTCC CCCTGGCGCC CTGCTCCAGG AGCACCTCCG AGAGCACAGC 500
GGCCCTGGGC TGCCTGGTCA AGGACTACTT CCCCGAACCG GTGACGGTGT 550
CGTGGAACTC AGGCGCTCTG ACCAGCGGCG TGCACACCTT CCCAGCTGTC 600
CTACAGTCCT CAGGACTCTA CTCCCTCAGC AGCGTGGTGA CCGTGCCCTC 650
CAGCAACTTC GGCACCCAGA CCTACACCTG CAACGTAGAT CACAAGCCCA 700
GCAACACCAA GGTGGACAAG ACAGTTGAGC GCAAATGTTG TGTCGAGTGC 750
CCACCGTGCC CAGCACCACC TGTGGCAGGA CCGTCAGTCT TCCTCTTCCC 800
CCCAAAACCC AAGGACACCC TCATGATCTC CCGGACCCCT GAGGTCACGT 850
GCGTGGTGGT GGACGTGAGC CACGAAGACC CCGAGGTCCA GTTCAACTGG 900
TACGTGGACG GCGTGGAGGT GCATAATGCC AAGACAAAGC CACGGGAGGA 950
GCAGTTCAAC AGCACGTTCC GTGTGGTCAG CGTCCTCACC GTTGTGCACC 1000
AGGACTGGCT GAACGGCAAG GAGTACAAGT GCAAGGTCTC CAACAAAGGC 1050
CTCCCAGCCC CCATCGAGAA AACCATCTCC AAAACCAAAG GGCAGCCCCG 1100
AGAACCACAG GTGTACACCC TGCCCCCATC CCGGGAGGAG ATGACCAAGA 1150
ACCAGGTCAG CCTGACCTGC CTGGTCAAAG GCTTCTACCC CAGCGACATC 1200
GCCGTGGAGT GGGAGAGCAA TGGGCAGCCG GAGAACAACT ACAAGACCAC 1250
ACCTCCCATG CTGGACTCCG ACGGCTCCTT CTTCCTCTAC AGCAAGCTCA 1300
CCGTGGACAA GAGCAGGTGG CAGCAGGGGA ACGTCTTCTC ATGCTCCGTG 1350
ATGCATGAGG CTCTGCACAA CCACTACACG CAGAAGAGCC TCTCCCTGTC 1400
TCCGGGTAAA TGA                                         1413
```

FIG. 2

```
ATGGACATGA GGGTCCCCGC TCAGCTCCTG GGGCTCCTGC TGCTCTGGTT   50
CCCAGGTGCC AGGTGTGACA TCCAGATGAC CCAGTCTCCA TCCTCCCTGT  100
CTGCATCTGT AGGAGACAGA GTCACCATCA CTTGCCGGGC AAGTCAGGAC  150
ATTAGACGTG ATTTAGGCTG GTATCAGCAG AAACCAGGGA AAGCTCCTAA  200
GCGCCTGATC TATGCTGCAT CCCGTTTACA AAGTGGGGTC CCATCAAGGT  250
TCAGCGGCAG TGGATCTGGG ACAGAATTCA CTCTCACAAT CAGCAGCCTG  300
CAGCCTGAAG ATTTTGCAAC TTATTACTGT CTACAGCATA ATAATTATCC  350
TCGGACGTTC GGCCAAGGGA CCAAGGTGGA AATCAAACGA ACTGTGGCTG  400
CACCATCTGT CTTCATCTTC CCGCCATCTG ATGAGCAGTT GAAATCTGGA  450
ACTGCCTCTG TTGTGTGCCT GCTGAATAAC TTCTATCCCA GAGAGGCCAA  500
AGTACAGTGG AAGGTGGATA ACGCCCTCCA ATCGGGTAAC TCCCAGGAGA  550
GTGTCACAGA GCAGGACAGC AAGGACAGCA CCTACAGCCT CAGCAGCACC  600
CTGACGCTGA GCAAAGCAGA CTACGAGAAA CACAAAGTCT ACGCCTGCGA  650
AGTCACCCAT CAGGGCCTGA GCTCGCCCGT CACAAAGAGC TTCAACAGGG  700
GAGAGTGTTA GTGACCCGGG AACGACCG                          728
```

FIG. 3

MEFGLSWVFL VAIIKGVQCQ AQLVESGGGL VKPGGSLRLS CAASGFTFSD YYMSWIRQAP GKGLEWVSYI SSSGSTRDYA DSVKGRFTIS RDNAKNSLYL
MEFGLSWVFL VAIIKGVQCQ VQLVESGGGL VKPGGSLRLS CAASGFTFSD YYMSWIRQAP GKGLEWVSYI SSSGSTIYYA DSVKGRFTIS RDNAKNSLYL

QMNSLRAEDT AVYYCVR--D GVETTF-YYY YYGMDVWGQG TTVTVSS**AST KGPSVFPLAP CSRSTSESTA ALGCLVKDYF PEPVTVSWNS GALTSGVHTF**
QMNSLRAEDT AVYYCARVLR FLEWLLYYYY YYGMDVWGQG TTVTVSS**AST KGPSVFPLAP CSRSTSESTA ALGCLVKDYF PEPVTVSWNS GALTSGVHTF**

PAVLQSSGLY SLSSVVTVPS SNFGTQTYTC NVDHKPSNTK VDKTVERKCC VECPPCPAPP VAGPSVFLFP PKPKDTLMIS RTPEVTCVVV DVSHEDPEVQ
PAVLQSSGLY SLSSVVTVPS SNFGTQTYTC NVDHKPSNTK VDKTVERKCC VECPPCPAPP VAGPSVFLFP PKPKDTLMIS RTPEVTCVVV DVSHEDPEVQ

FNWYVDGVEV HNAKTKPREE QFNSTFRVVS VLTVVHQDWL NGKEYKCKVS NKGLPAPIEK TISKTKGQPRE PQVYTLPPS REEMTKNQVS LTCLVKGFYP
FNWYVDGVEV HNAKTKPREE QFNSTFRVVS VLTVVHQDWL NGKEYKCKVS NKGLPAPIEK TISKTKGQPRE PQVYTLPPS REEMTKNQVS LTCLVKGFYP

SDIAVEWESN GQPENNYKTT PPMLDSDGSF FLYSKLTVDK SRWQQGNVFS CSVMHEALHN HYTQKSLSLSP GK
SDIAVEWESN GQPENNYKTT PPMLDSDGSF FLYSKLTVDK SRWQQGNVFS CSVMHEALHN HYTQKSLSLSP GK

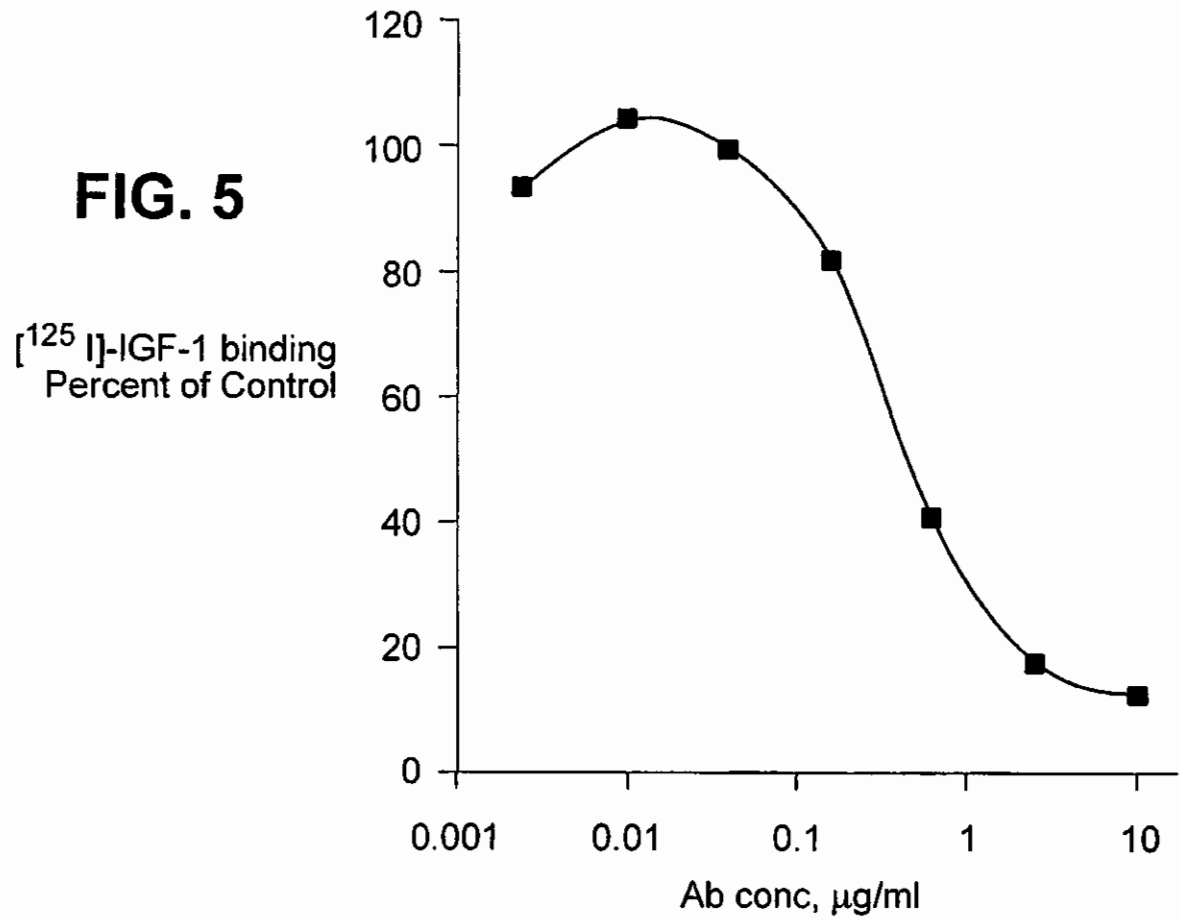
FIG. 4

*MDMRVPAQLL GLLLLWFPGA RC*DIQMTQSP SSLSASVGDR VTFTCRASQD IRRDLGWYQQ KPGKAPKRLI YAASRLQSGV PSRFSGSGSG TEFTLTISSL
*MDMRVPAQLL GLLLLWFPGA RC*DIQMTQSP SSLSASVGDR VTITCRASQG IRNDLGWYQQ KPGKAPKRLI YAASSLQSGV PSRFSGSGSG TEFTLTISSL

QPEDFATYYC LQHNNYPRTF GQGTEVEIIR **TVAAPSVPIF PPSDEQLXSG TASVVCLLNN FYPREAKVQW KVDNALQSGN SQESVTEQDS KDSTYSLSST**
QPEDFATYYC LQHNSYPWTF GQGTKVEIKR **TVAAPSVFIP PPSDEQLKSG TASVVCLLNN FYPREAKVQW KVDNALQSGN SQESVTEQDS KDSTYSLSST**

LTLSKADYEK HKVYACEVTH QGLSSPVTKS FNRGRC
LTLSKADYEK HKVYACEVTH QGLSSPVTKS FNRGEC

FIG. 5


[125 I]-IGF-1 binding
Percent of Control
120
100
80
60
40
20
0
0.001
0.01
0.1
1
10
Ab conc, µg/ml

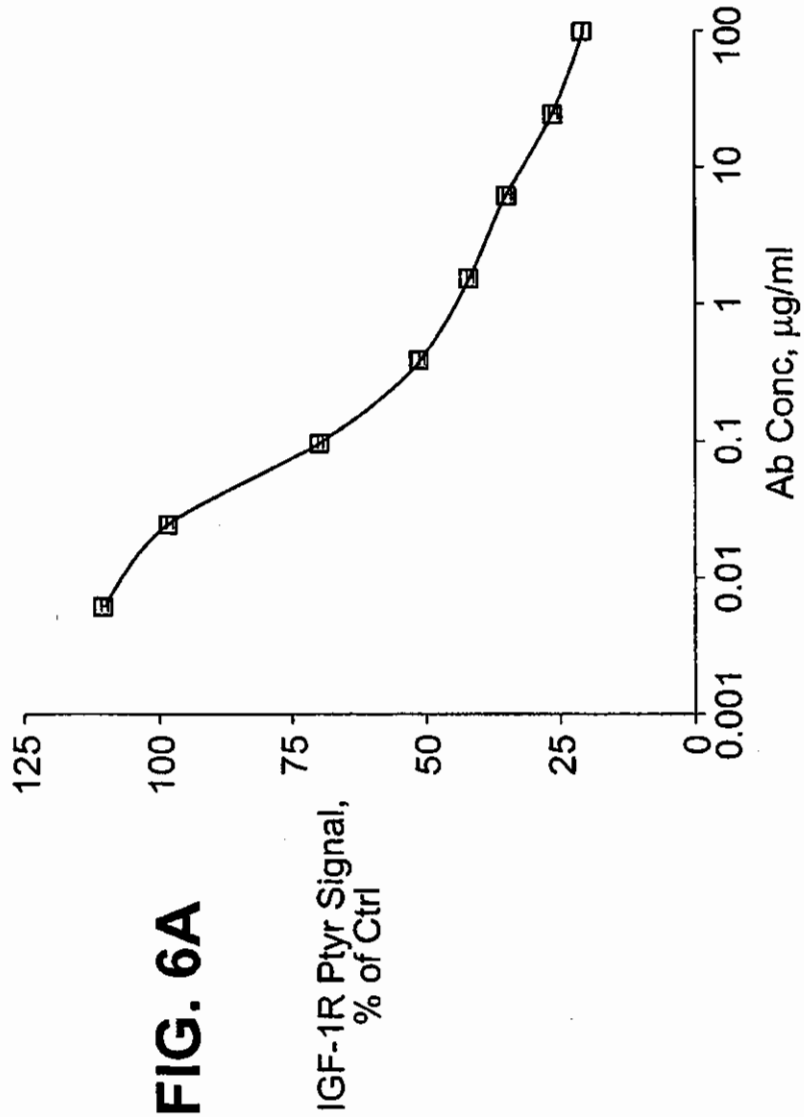
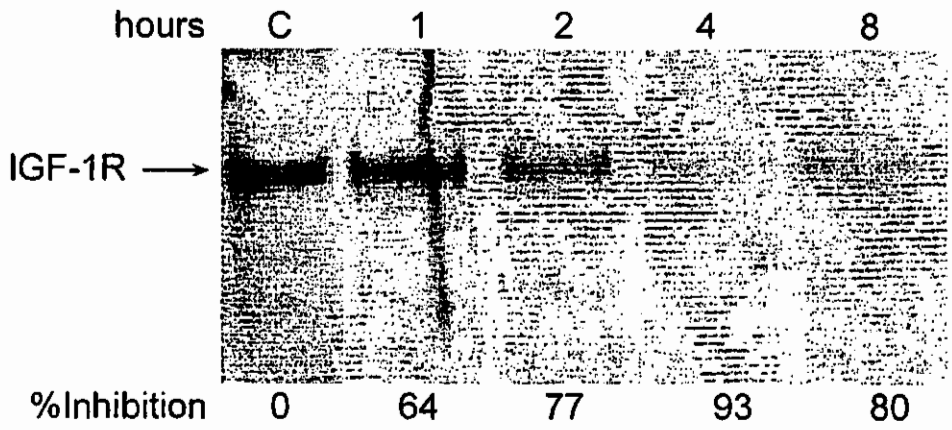

125
100
75
50
25
0
IGF-1R Ptyr Signal, % of Ctrl
0.001
0.01
0.1
1
10
100
Ab Conc, µg/ml

FIG. 6A

FIG. 6B



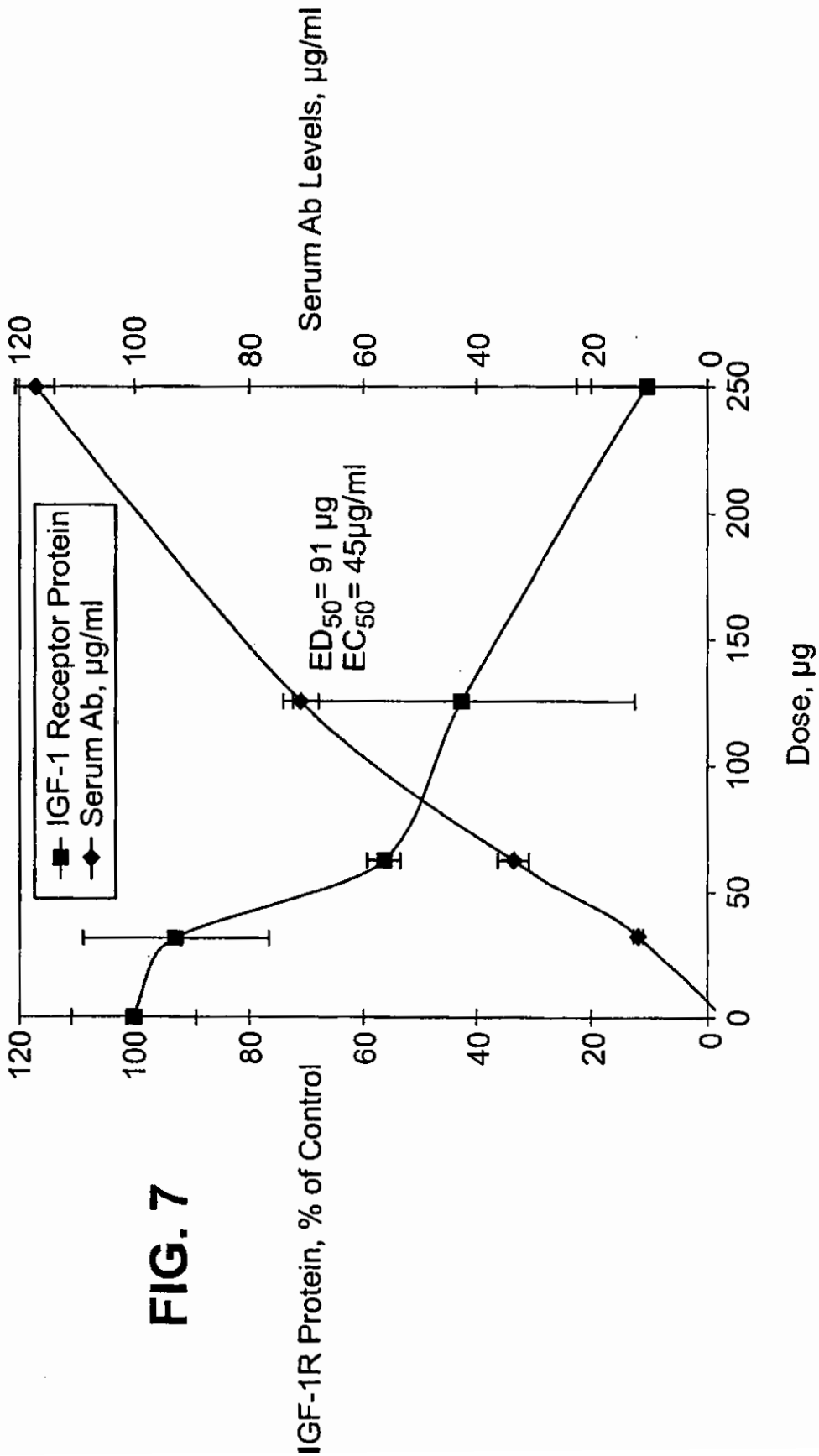

IGF-1R Protein, % of Control
Serum Ab Levels, µg/ml
Dose, µg
IGF-1 Receptor Protein
Serum Ab, µg/ml
ED50= 91 µg
EC50= 45µg/ml
120
100
80
60
40
20
0
250
200
150
100
50

FIG. 7

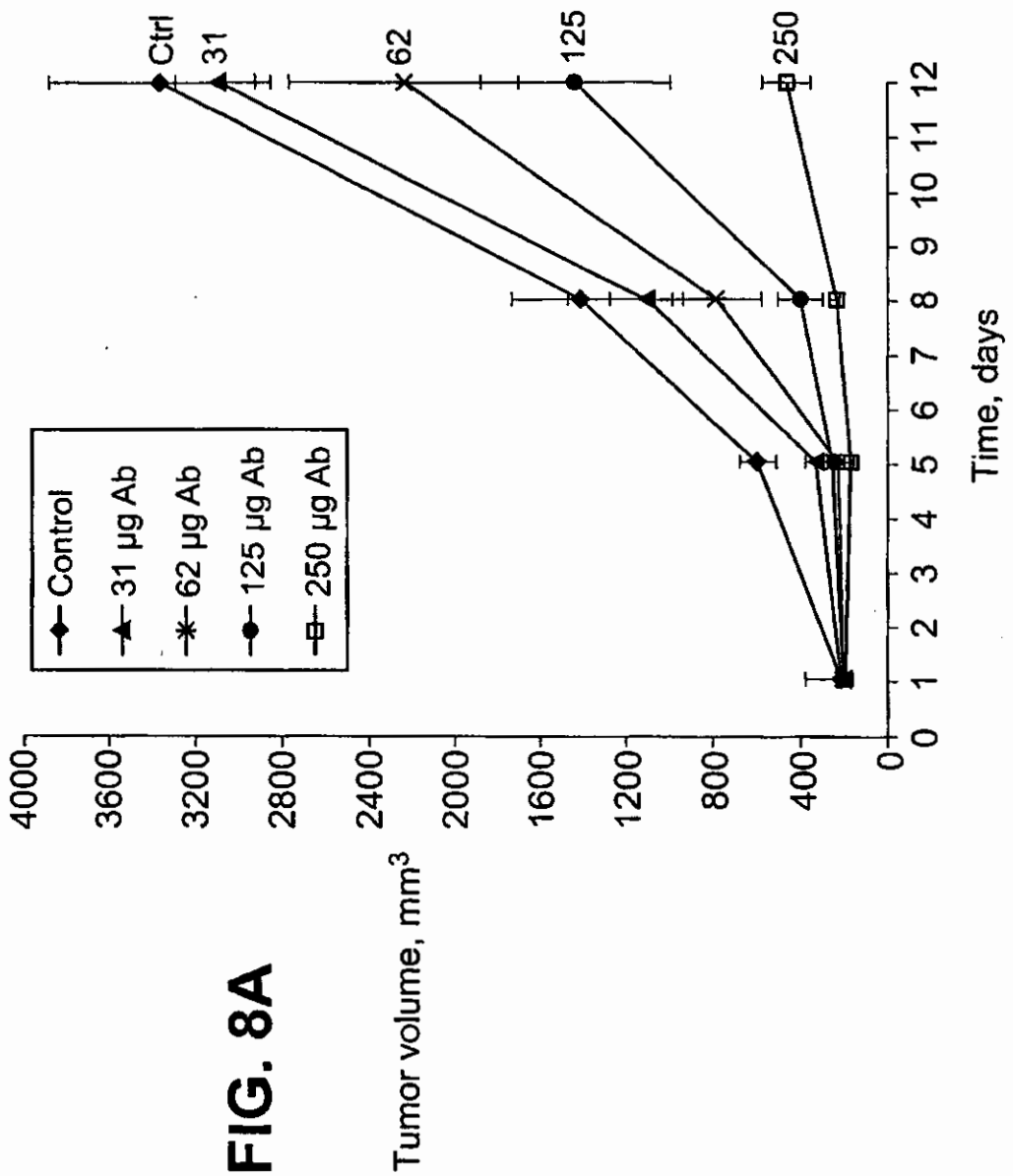

Control
31 µg Ab
62 µg Ab
125 µg Ab
250 µg Ab
Ctrl
31
62
125
250
Tumor volume, mm3
Time, days
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
0 1 2 3 4 5 6 7 8 9 10 11 12

FIG. 8A

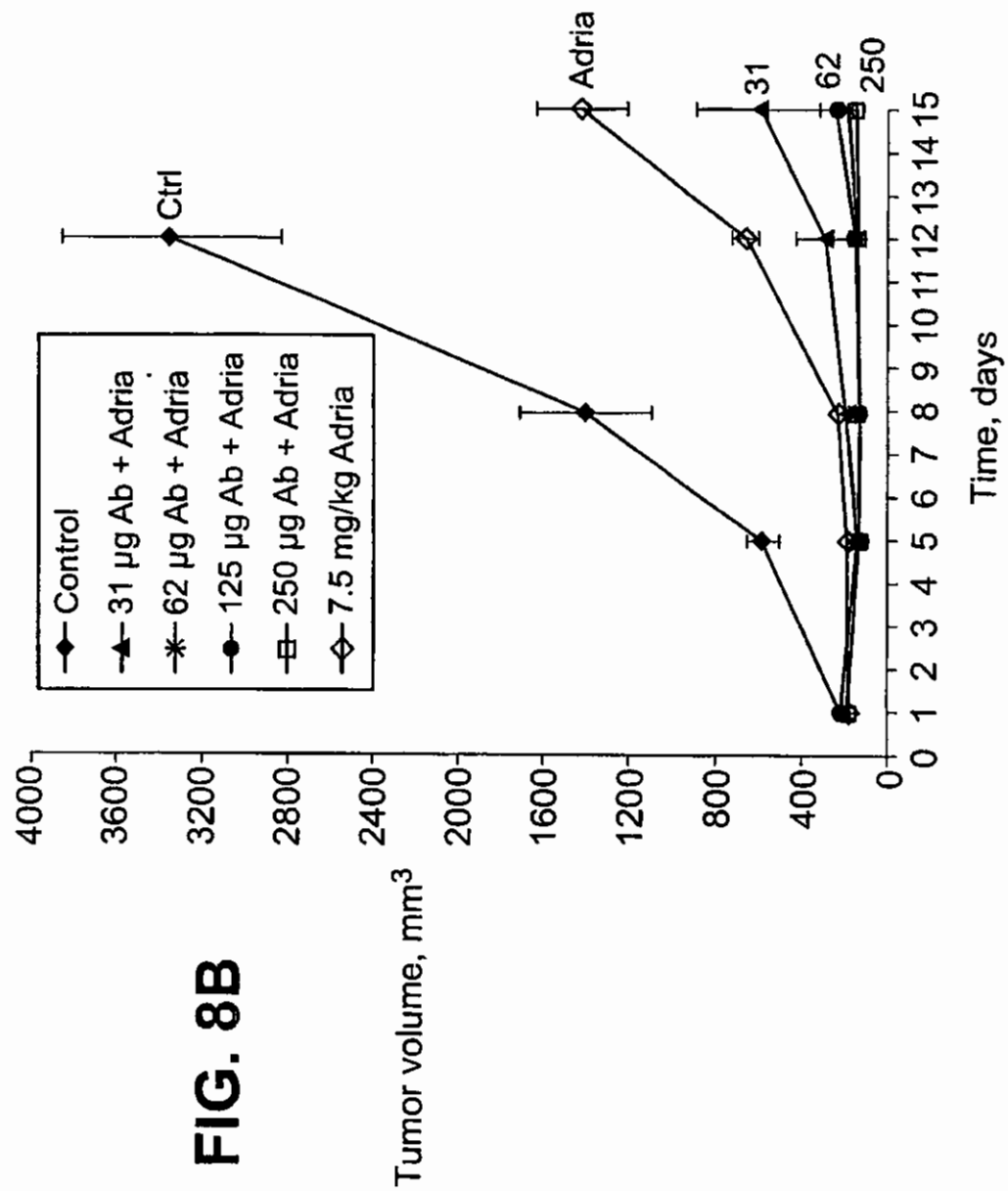

Control
31 µg Ab + Adria
62 µg Ab + Adria
125 µg Ab + Adria
250 µg Ab + Adria
7.5 mg/kg Adria
Ctrl
Adria
31
62
250
Tumor volume, mm3
Time, days
0
400
800
1200
1600
2000
2400
2800
3200
3600
4000
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

FIG. 8B

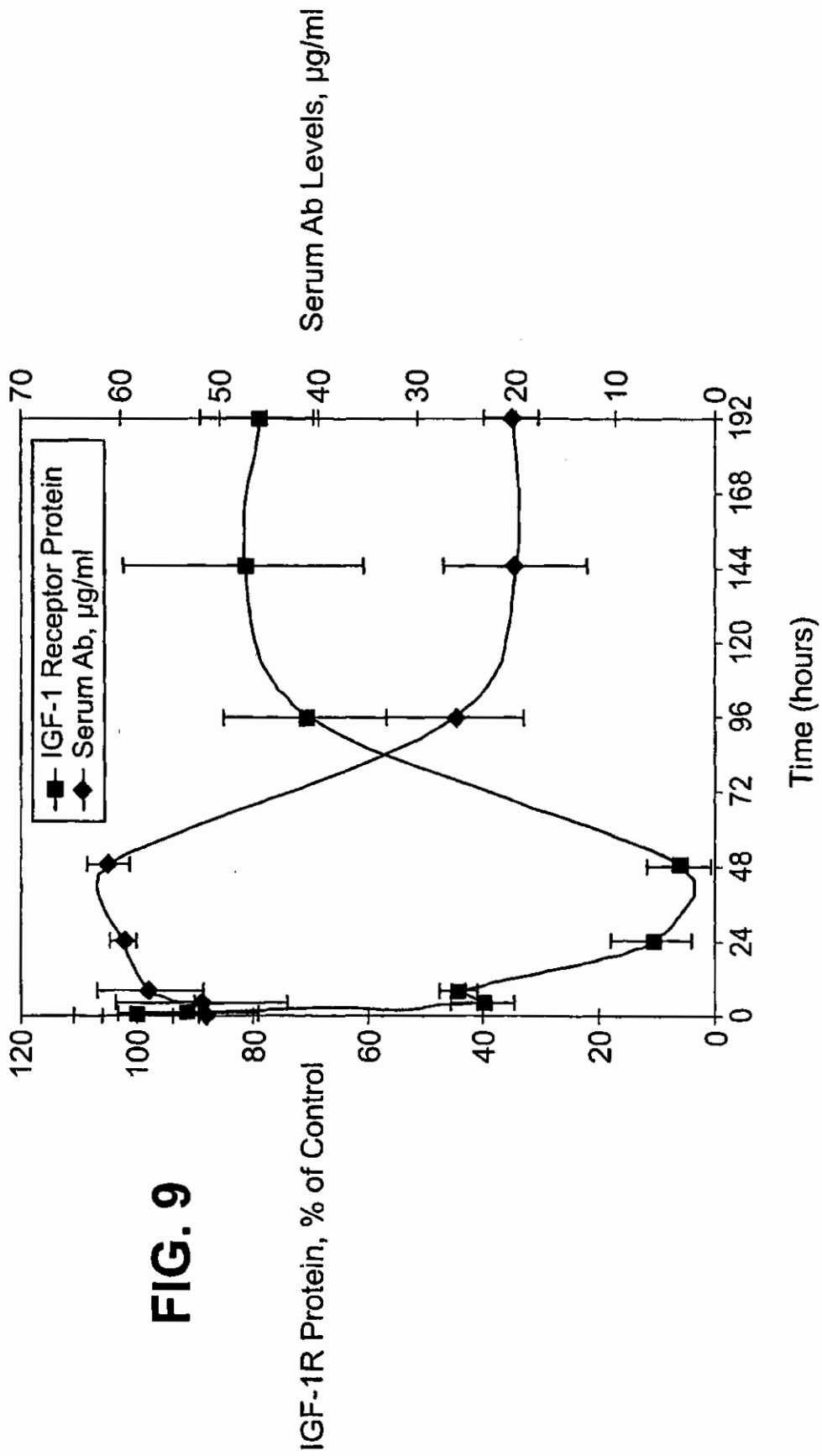

IGF-1 Receptor Protein
Serum Ab, µg/ml
IGF-1R Protein, % of Control
Serum Ab Levels, µg/ml
Time (hours)
120
100
80
60
40
20
0
70
60
50
40
30
20
10
0
0
24
48
72
96
120
144
168
192

FIG. 9

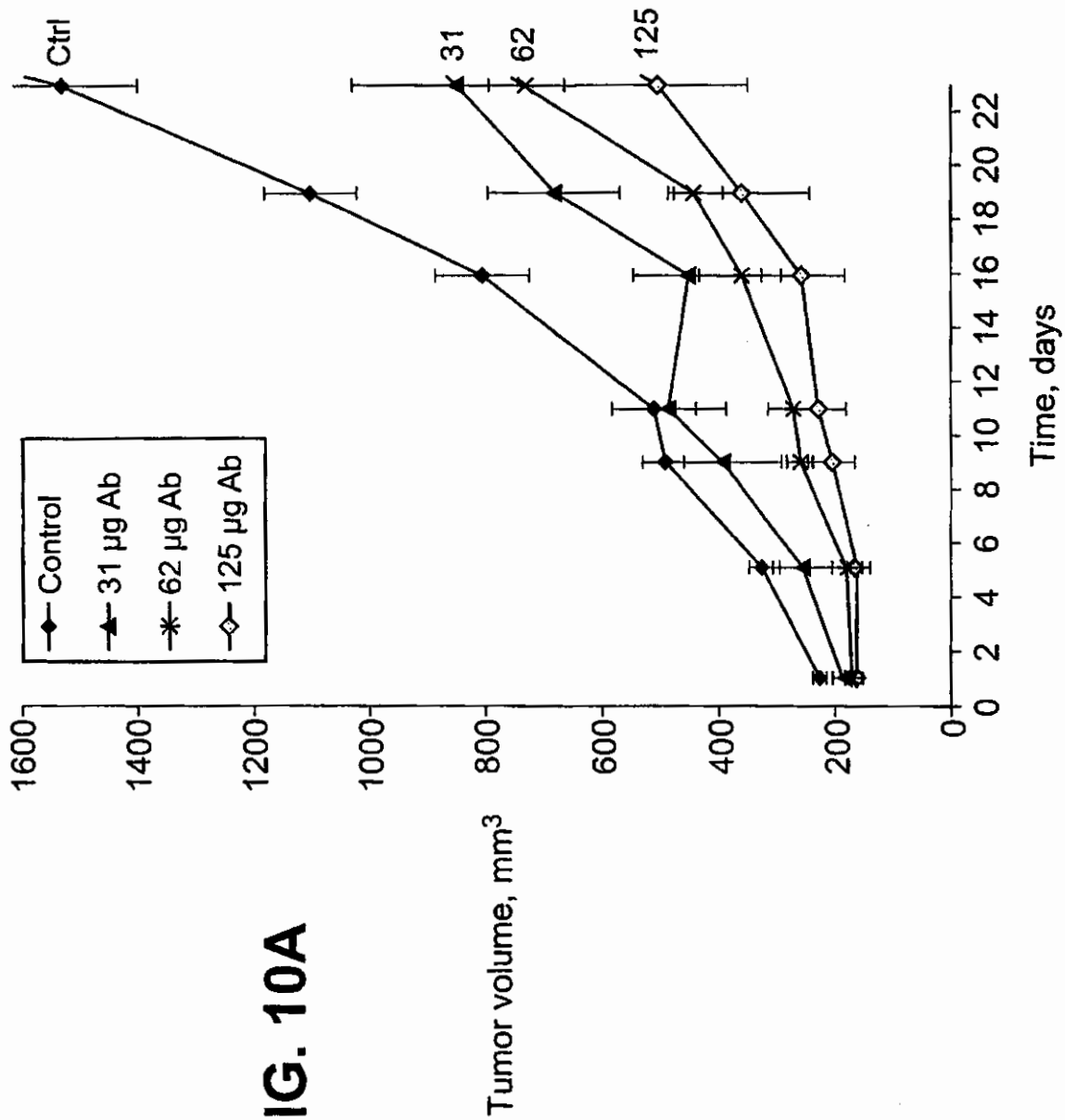

Ctrl
31
62
125
Control
31 µg Ab
62 µg Ab
125 µg Ab
Tumor volume, mm3
Time, days
0
200
400
600
800
1000
1200
1400
1600
0 2 4 6 8 10 12 14 16 18 20 22

FIG. 10A

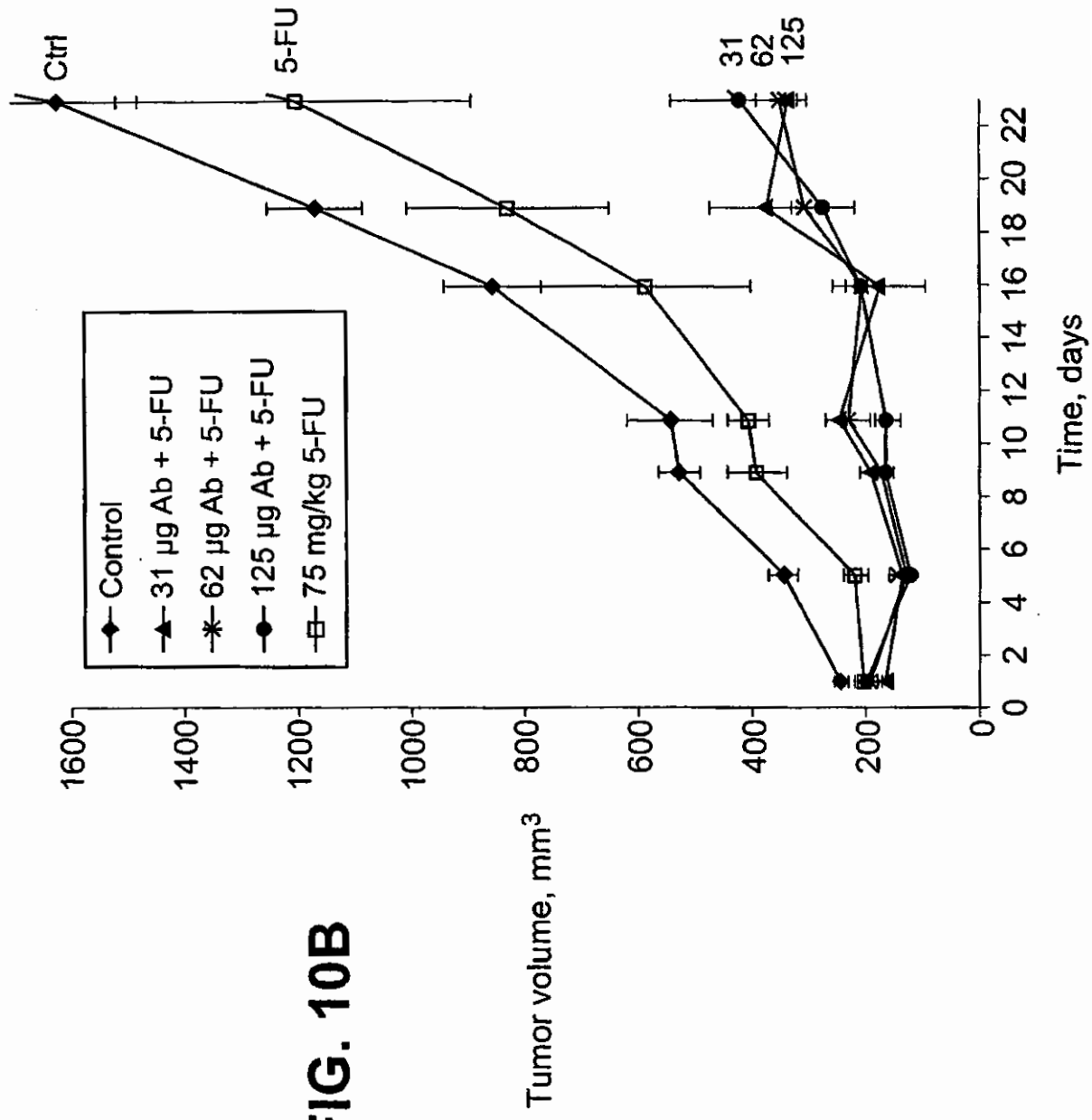
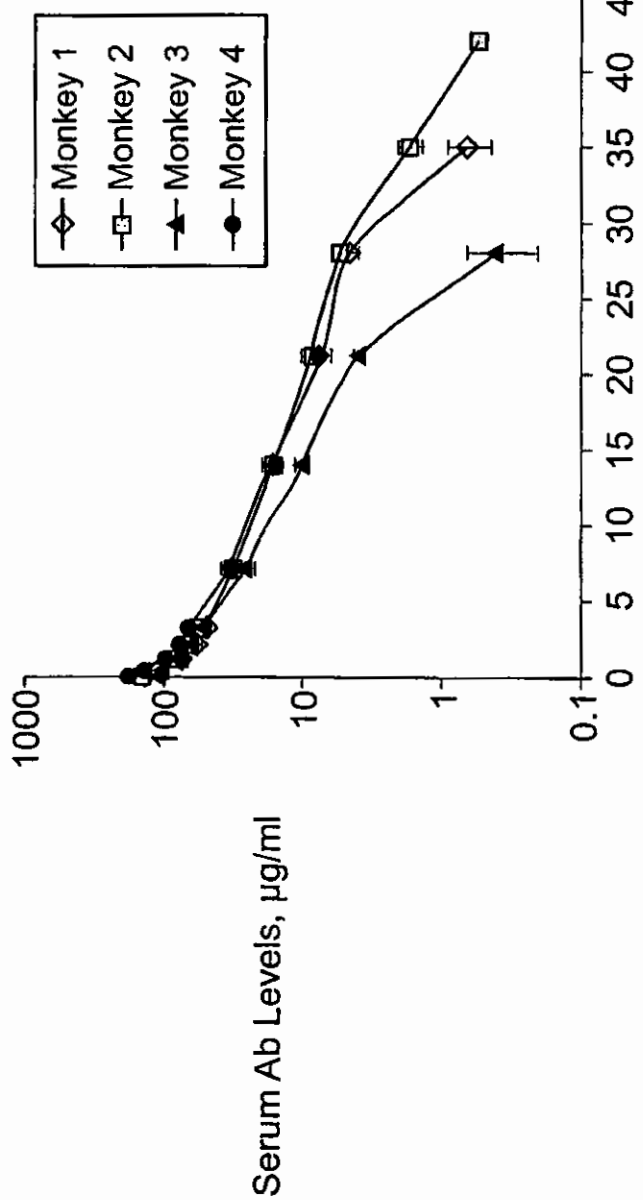

Ctrl
5-FU
31
62
125
Control
31 µg Ab + 5-FU
62 µg Ab + 5-FU
125 µg Ab + 5-FU
75 mg/kg 5-FU
Tumor volume, mm3
Time, days
0
200
400
600
800
1000
1200
1400
1600
0 2 4 6 8 10 12 14 16 18 20 22

FIG. 10B

FIG. 11



Ab	Dose (mg/kg)	CL (mL/min/k	Vd_{ss} (L/kg)	$t_{1/2}$ (day)	$AUC_{0-\infty}$ (µg•h/ml)
2.12.1 fx	5	0.0051	0.054	6.1 ± 1.3	16600 ± 2000
2.12.1	5	0.0062	0.065	6.8 ± 3.2	16100 ± 6700

*N=2/sex

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gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac acctcccatg 1260
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gtcaccatca cttgccgggc aagtcaggac attagacgtg atttaggctg gtatcagcag 180

aaaccaggga aagctcctaa gcgcctgatc tatgctgcat cccgtttaca aagtggggtc 240

ccatcaaggt tcagcggcag tggatctggg acagaattca ctctcacaat cagcagcctg 300

cagcctgaag attttgcaac ttattactgt ctacagcata ataattatcc tcggacgttc 360

ggccaaggga ccaaggtgga aatcaaacga actgtggctg caccatctgt cttcatcttc 420

ccgccatctg atgagcagtt gaaatctgga actgcctctg ttgtgtgcct gctgaataac 480

ttctatccca gagaggccaa agtacagtgg aaggtggata acgccctcca atcgggtaac 540

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ctgacgctga gcaaagcaga ctacgagaaa cacaaagtct acgcctgcga agtcacccat 660

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aacgaccg 728

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20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Asp Tyr Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Arg Asp Tyr Ala
65 70 75 80

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
85 90 95

Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Asp Gly Val Glu Thr Thr Phe Tyr Tyr Tyr Tyr

115 120 125

Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
130 135 140

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg
145 150 155 160

Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
165 170 175

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
180 185 190

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
195 200 205

Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly Thr Gln Thr
210 215 220

Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys Val Asp Lys
225 230 235 240

Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys Pro Ala Pro
245 250 255

Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
260 265 270

Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
275 280 285

Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly
290 295 300

Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn
305 310 315 320

Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp
325 330 335

Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro
340 345 350

Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu
355 360 365

Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn
370 375 380

Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile

385 390 395 400

Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
405 410 415

Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
420 425 430

Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
435 440 445

Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
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Ser Leu Ser Pro Gly Lys
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20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Ser Asp Tyr Tyr Met Ser Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60

Glu Trp Val Ser Tyr Ile Ser Ser Ser Gly Ser Thr Ile Tyr Tyr Ala
65 70 75 80

Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn
85 90 95

Ser Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
100 105 110

Tyr Tyr Cys Ala Arg Val Leu Arg Phe Leu Glu Trp Leu Leu Tyr Tyr
115 120 125

Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr
130 135 140

Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro
145 150 155 160

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Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
                165                 170                 175

Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala
            180                 185                 190

Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly
        195                 200                 205

Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Asn Phe Gly
    210                 215                 220

Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro Ser Asn Thr Lys
225                 230                 235                 240

Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu Cys Pro Pro Cys
                245                 250                 255

Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
            260                 265                 270

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
        275                 280                 285

Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
    290                 295                 300

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
305                 310                 315                 320

Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
                325                 330                 335

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
            340                 345                 350

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
        355                 360                 365

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
    370                 375                 380

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
385                 390                 395                 400

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
                405                 410                 415

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
            420                 425                 430
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Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
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20 25 30

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
35 40 45

Gln Asp Ile Arg Arg Asp Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys
50 55 60

Ala Pro Lys Arg Leu Ile Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val
65 70 75 80

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr
85 90 95

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln
100 105 110

His Asn Asn Tyr Pro Arg Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
115 120 125

Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
130 135 140

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
145 150 155 160

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
165 170 175

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
180 185 190

Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
195 200 205

Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
210 215 220

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
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1 5 10 15

Phe Pro Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
20 25 30

Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser
35 40 45

Gln Gly Ile Arg Asn Asp Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys
50 55 60

Ala Pro Lys Arg Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val
65 70 75 80

Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr
85 90 95

Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln
100 105 110

His Asn Ser Tyr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile
115 120 125

Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp
130 135 140

Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn
145 150 155 160

Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu
165 170 175

Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp
180 185 190

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Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr
        195                 200                 205

Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
    210                 215                 220

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
225                 230                 235
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