HUMAN Jag1 (SEQ ID NO:1)

MRSPRTRGRSGRPLSLLLALLCALRAKVCGASGQFELEILSMQNVNGELQNGNCCGGARN
PGDRKCTRDECDTYFKVCLKEYQSRVTAGGPCSFGSGSTPVIGGNTFNLKASRGNDRNRI
VLPFSFAWPRSYTLLVEAWDSSNDTVQPDSIIEKASHSGMINPSRQWQTLKQNTGVAHFE
YQIRVTCDDYYYGFGCNKFCRPRDDFFGHYACDQNGNKTCMEGWMGPECNRAICRQGCSP
KHGSCKLPGDCRCQYGWQGLYCDKCIPHPGCVHGICNEPWQCLCETNWGGQLCDKDLNYC
GTHQPCLNGGTCSNTGPDKYQCSCPEGYSGPNCEIAEHACLSDPCHNRGSCKETSLGFEC
ECSPGWTGPTCSTNIDDCSPNNCSHGGTCQDLVNGFKCVCPPQWTGKTCQLDANECEAKP
CVNAKSCKNLIASYYCDCLPGWMGQNCDININDCLGQCQNDASCRDLVNGYRCICPPGYA
GDHCERDIDECASNPCLNGGHCQNEINRFQCLCPTGFSGNLCQLDIDYCEPNPCQNGAQC
YNRASDYFCKCPEDYEGKNCSHLKDHCRTTPCEVIDSCTVAMASNDTPEGVRYISSNVCG
PHGKCKSQSGGKFTCDCNKGFTGTYCHENINDCESNPCRNGGTCIDGVNSYKCICSDGWE
GAYCETNINDCSQNPCHNGGTCRDLVNDFYCDCKNGWKGKTCHSRDSQCDEATCNNGGTC
YDEGDAFKCMCPGGWEGTTCNIARNSSCLPNPCHNGGTCVVNGESFTCVCKEGWEGPICA
QNTNDCSPHPCYNSGTCVDGDNWYRCECAPGFAGPDCRININECQSSPCAFGATCVDEIN
GYRCVCPPGHSGAKCQEVSGRPCITMGSVIPDGAKWDDDCNTCQCLNGRIACSKVWCGPR
PCLLHKGHSECPSGQSCIPILDDQCFVHPCTGVGECRSSSLQPVKTKCTSDSYYQDNCAN
ITFTFNKEMMSPGLTTEHICSELRNLNILKNVSAEYSIYIACEPSPSANNEIHVAISAED
IRDDGNPIKEITDKIIDLVSKRDGNSSLIAAVAEVRVQRRPLKNRTDFLVPLLSSVLTVA
WICCLVTAFYWCLRKRRKPGSHTHSASEDNTTNNVREQLNQIKNPIEKHGANTVPIKDYE
NKNSKMSKIRTHNSEVEEDDMDKHQQKARFAKQPAYTLVDREEKPPNGTPTKHPNWTNKQ
DNRDLESAQSLNRMEYIV

MURINE Jag1 (SEQ ID NO:2)

MRSPRTRGRPGRPLSLLLALLCALRAKVCGASGQFELEILSMQNVNGELQNGNCCGGVRN
PGDRKCTRDECDTYFKVCLKEYQSRVTAGGPCSFGSGSTPVIGGNTFNLKASRGNDRNRI
VLPFSFAWPRSYTLLVEAWDSSNDTIQPDSIIEKASHSGMINPSRQWQTLKQNTGIAHFE
YQIRVTCDDHYYGFGCNKFCRPRDDFFGHYACDQNGNKTCMEGWMGPDCNKAICRQGCSP
KHGSCKLPGDCRCQYGWQGLYCDKCIPHPGCVHGTCNEPWQCLCETNWGGQLCDKDLNYC
GTHQPCLNRGTCSNTGPDKYQCSCPEGYSGPNCEIAEHACLSDPCHNRGSCKETSSGFEC
ECSPGWTGPTCSTNIDDCSPNNCSHGGTCQDLVNGFKCVCPPQWTGKTCQLDANECEAKP
CVNARSCKNLIASYYCDCLPGWMGQNCDININDCLGQCQNDASCRDLVNGYRCICPPGYA
GDHCERDIDECASNPCLNGGHCQNEINRFQCLCPTGFSGNLCQLDIDYCEPNPCQNGAQC
YNRASDYFCKCPEDYEGKNCSHLKDHCRTTTCEVIDSCTVAMASNDTPEGVRYISSNVCG
PHGKCKSQSGGKFTCDCNKGFTGTYCHENINDCESNPCKNGGTCIDGVNSYKCICSDGWE
GAHCENNINDCSQNPCHYGGTCRDLVNDFYCDCKNGWKGKTCHSRDSQCDEATCNNGGTC
YDEVDTFKCMCPGGWEGTTCNIARNSSCLPNPCHNGGTCVVNGDSFTCVCKEGWEGPICT
QNTNDCSPHPCYNSGTCVDGDNWYRCECAPGFAGPDCRININECQSSPCAFGATCVDEIN
GYQCICPPGHSGAKCHEVSGRSCITMGRVILDGAKWDDDCNTCQCLNGRVACSKVWCGPR
PCRLHKSHNECPSGQSCIPVLDDQCFVRPCTGVGECRSSSLQPVKTKCTSDSYYQDNCAN
ITFTFNKEMMSPGLTTEHICSELRNLNILKNVSAEYSIYIACEPSLSANNEIHVAISAED
IRDDGNPVKEITDKIIDLVSKRDGNSSLIAAVAEVRVQRRPLKNRTDFLVPLLSSVLTVA
WVCCLVTAFYWCVRKRRKPSSHTHSAPEDNTTNNVREQLNQIKNPIEKHGANTVPIKDYE
NKNSKMSKIRTHNSEVEEDDMDKHQQKVRFAKQPVYTLVDREEKAPSGTPTKHPNWTNKQ
DNRDLESAQSLNRMEYIV

FIG. 1

HUMAN Jag2 (SEQ ID NO:3)

MRAQGRGRLPRRLLLLLALWVQAARPMGYFELQLSALRNVNGELLSGACCDGDGRTTRAG
GCGHDECDTYVRVCLKEYQAKVTPTGPCSYGHGATPVLGGNSFYLPPAGAAGDRARARAR
AGGDQDPGLVVIPFQFAWPRSFTLIVEAWDWDNDTTPNEELLIERVSHAGMINPEDRWKS
LHFSGHVAHLELQIRVRCDENYYSATCNKFCRPRNDFFGHYTCDQYGNKACMDGWMGKEC
KEAVCKQGCNLLHGGCTVPGECRCSYGWQGRFCDECVPYPGCVHGSCVEPWQCNCETNWG
GLLCDKDLNYCGSHHPCTNGGTCINAEPDQYRCTCPDGYSGRNCEKAEHACTSNPCANGG
SCHEVPSGFECHCPSGWSGPTCALDIDECASNPCAAGGTCVDQVDGFECICPEQWVGATC
QLDANECEGKPCLNAFSCKNLIGGYYCDCIPGWKGINCHINVNDCRGQCQHGGTCKDLVN
GYQCVCPRGFGGRHCELERDECASSPCHSGGLCEDLADGFHCHCPQGFSGPLCEVDVDLC
EPSPCRNGARCYNLEGDYYCACPDDFGGKNCSVPREPCPGGACRVIDGCGSDAGPGMPGT
AASGVCGPHGRCVSQPGGNFSCICDSGFTGTYCHENIDDCLGQPCRNGGTCIDEVDAFRC
FCPSGWEGELCDTNPNDCLPDPCHSRGRCYDLVNDFYCACDDGWKGKTCHSREFQCDAYT
CSNGGTCYDSGDTFRCACPPGWKGSTCAVAKNSSCLPNPCVNGGTCVGSGASFSCICRDG
WEGRTCTHNTNDCNPLPCYNGGICVDGVNWFRCECAPGFAGPDCRINIDECQSSPCAYGA
TCVDEINGYRCSCPPGRAGPRCQEVIGFGRSCWSRGTPFPHGSSWVEDCNSCRCLDGRRD
CSKVWCGWKPCLLAGQPEALSAQCPLGQRCLEKAPGQCLRPPCEAWGECGAEEPPSTPCL
PRSGHLDNNCARLTLHFNRDHVPQGTTVGAICSGIRSLPATRAVARDRLLVLLCDRASSG
ASAVEVAVSFSPARDLPDSSLIQGAAHAIVAAITQRGNSSLLLAVTEVKVETVVTGGSST
GLLVPVLCGAFSVLWLACVVLCVWWTRKRRKERERSRLPREESANNQWAPLNPIRNPIER
PGGHKDVLYQCKNFTPPPRRADEALPGPAGHAAVREDEEDEDLGRGEEDSLEAEKFLSHK
FTKDPGRSPGRPAHWASGPKVDNRAVRSINEARYAGKE

MURINE Jag2 (SEQ ID NO:4)

MRARGWGRLPRRLLLLLVLCVQATRPMGYFELQLSALRNVNGELLSGACCDGDGRTTRAG
GCGRDECDTYVRVCLKEYQAKVTPTGPCSYGYGATPVLGGNSFYLPPAGAAGDRARARSR
TGGHQDPGLVVIPFQFAWPRSFTLIVEAWDWDNDTTPDEELLIERVSHAGMINPEDRWKS
LHFSGHVAHLELQIRVRCDENYYSATCNKFCRPRNDFFGHYTCDQYGNKACMDGWMGKEC
KEAVCKQGCNLLHGGCTVPGECRCSYGWQGKFCDECVPYPGCVHGSCVEPWHCDCETNWG
GLLCDKDLNYCGSHHPCVNGGTCINAEPDQYLCACPDGYLGKNCERAEHACASNPCANGG
SCHEVPSGFECHCPSGWSGPTCALDIDECASNPCAAGGTCVDQVDGFECICPEQWVGATC
QLDANECEGKPCLNAFSCKNLIGGYYCDCLPGWKGINCQININDCHGQCQHGGTCKDLVN
GYQCVCPRGFGGRHCELEYDKCASSPCRRGGICEDLVDGFRCHCPRGLSGLHCEVDMDLC
EPSPCLNGARCYNLEGDYYCACPEDFGGKNCSVPRDTCPGGACRVIDGCGFEAGSRARGV
APSGICGPHGHCVSLPGGNFSCICDSGFTGTYCHENIDDCMGQPCRNGGTCIDEVDSFRC
FCPSGWEGELCDINPNDCLPDPCHSRGRCYDLVNDFYCACDDGWKGKTCHSREFQCDAYT
CSNGGTCYDSGDTFRCACPPGWKGSTCTIAKNSSCVPNPCVNGGTCVGSGDSFSCICRDG
WEGRTCTHNTNDCNPLPCYNGGICVDGVNWFRCECAPGFAGPDCRINIDECQSSPCAYGA
TCVDEINGYRCSCPPGRSGPRCQEVVIFTRPCWSRGMSFPHGSSWMEDCNSCRCLDGHRD
CSKVWCGWKPCLLSGQPSDPSAQCPPGQQCQEKAVGQCLQPPCENWGECTAEEPLPPSTP
CQPRSSHLDNNCARLTLRFNRDQVPQGTTVGAICSGIRALPATRAAAHDRLLLLLCDRAS
SGASAVEVAMSFSPARDLPDSSLIQSTAHAIVAAITQRGNSSLLLAVTEVKVETVVMGGS
STGLLVPVLCSVFSVLWLACVVICVWWTRKRRKERERSRLPRDESTNNQWAPLNPIRNPI
ERPGGSGLGTGGHKDILYQCKNFTPPPRRAGEALPGPAGHGAGGEDEEDEELSRGDGDSP
EAEKFISHKFTKDPSCSLGRPACWAPGPKVDNRAVRSTKDVRRAGRE

FIG. 2

Sequence of expressed protein murine Jag1-DSL-EGF1-4 (mouse Jag1 antigen)

ADLGSQFELEILSMQNVNGELQNGNCCGGVRNPGDRKCTRDECDTYFKVCLKEYQSRVTAGGPC
SFGSGSTPVIGGNTFNLKASRGNDRNRIVLPFSFAWPRSYTLLVEAWDSSNDTIQPDSIIEKAS
HSGMINPSRQWQTLKQNTGIAHFEYQIRVTCDDHYYGFGCNKFCRPRDDFFGHYACDQNGNKTC
MEGWMGPDCNKAICRQGCSPKHGSCKLPGDCRCQYGWQGLYCDKCIPHPGCVHGTCNEPWQCLC
ETNWGGQLCDKDLNYCGTHQPCLNRGTCSNTGPDKYQCSCPEGYSGPNCEIAEHACLSDPCHNR
GSCKETSSGFECECSPGWTGPTCSTNIDD**EFGLVPRGSGHHHHHH** **(SEQ ID NO. 5)**

FIG. 3A

Sequence of expressed protein human Jag1-DSL-EGF1-4 (human Jag1 antigen)

QFELEILSMQNVNGELQNGNCCGGARNPGDRKCTRDECDTYFKVCLKEYQSRVTAGGPCSFGSG
STPVIGGNTFNLKASRGNDRNRIVLPFSFAWPRSYTLLVEAWDSSNDTVQPDSIIEKASHSGMI
NPSRQWQTLKQNTGVAHFEYQIRVTCDDYYYGFGCNKFCRPRDDFFGHYACDQNGNKTCMEGWM
GPECNRAICRQGCSPKHGSCKLGDCRCQYGWQGLYCDKCIPHPGCVHGICNEPWQCLCETNWGG
QLCDKDLNYCGTHQPCLNGGTCSNTGPDKYQCSCPEGYSGPNCEIAEHACLSDPCHNRGSCKET
SLGFECECSPGWTGPTCSTNIDD **(SEQ ID NO. 6)**

FIG. 3B

Sequence of expressed protein murine Jag2-DSL-EGF1-4 (mouse Jag2 antigen)

ADLGSMGYFELQLSALRNVNGELLSGACCDGDGRTTRAGGCGRDECDTYVRVCLKEYQAKVTPT
GPCSYGYGATPVLGGNSFYLPPAGAAGDRARARSRTGGHQDPGLVVIPFQFAWPRSFTLIVEAW
DWDNDTTPDEELLIERVSHAGMINPEDRWKSLHFSGHVAHLELQIRVRCDENYYSATCNKFCRP
RNDFFGHYTCDQYGNKACMDGWMGKECKEAVCKQGCNLLHGGCTVPGECRCSYGWQGKFCDECV
PYPGCVHGSCVEPWHCDCETNWGGLLCDKDLNYCGSHHPCVNGGTCINAEPDQYLCACPDGYLG
KNCERAEHACASNPCANGGSCHEVPSGFECHCPSGWNGPTCALDIDE**EFGLVPRGSGHHHHHH**
(SEQ ID NO. 7)

FIG. 3C

Sequence of expressed protein human Jag2-DSL-EGF1-4 (human Jag2 antigen)

ARPMGYFELQLSALRNVNGELLSGACCDGDGRTTRAGGCGHDECDTYVRVCLKEYQAKVTPTGP
CSYGHGATPVLGGNSFYLPPAGAAGDRARARARAGGDQDPGLVVIPFQFAWPRSFTLIVEAWDW
DNDTTPNEELLIERVSHAGMINPEDRWKSLHFSGHVAHLELQIRVRCDENYYSATCNKFCRPRN
DFFGHYTCDQYGNKACMDGWMGKECKEAVCKQGCNLLHGGCTVPGECRCSYGWQGRFCDECVPY
PGCVHGSCVEPWQCNCETNWGGLLCDKDLNYCGSHHPCTNGGTCINAEPDQYRCTCPDGYSGRN
CEKAEHACTSNPCANGGSCHEVPSGFECHCPSGWSGPTCALDIDE**EFGLVPRGSGHHHHHH**
(SEQ ID NO. 8)

FIG. 3D

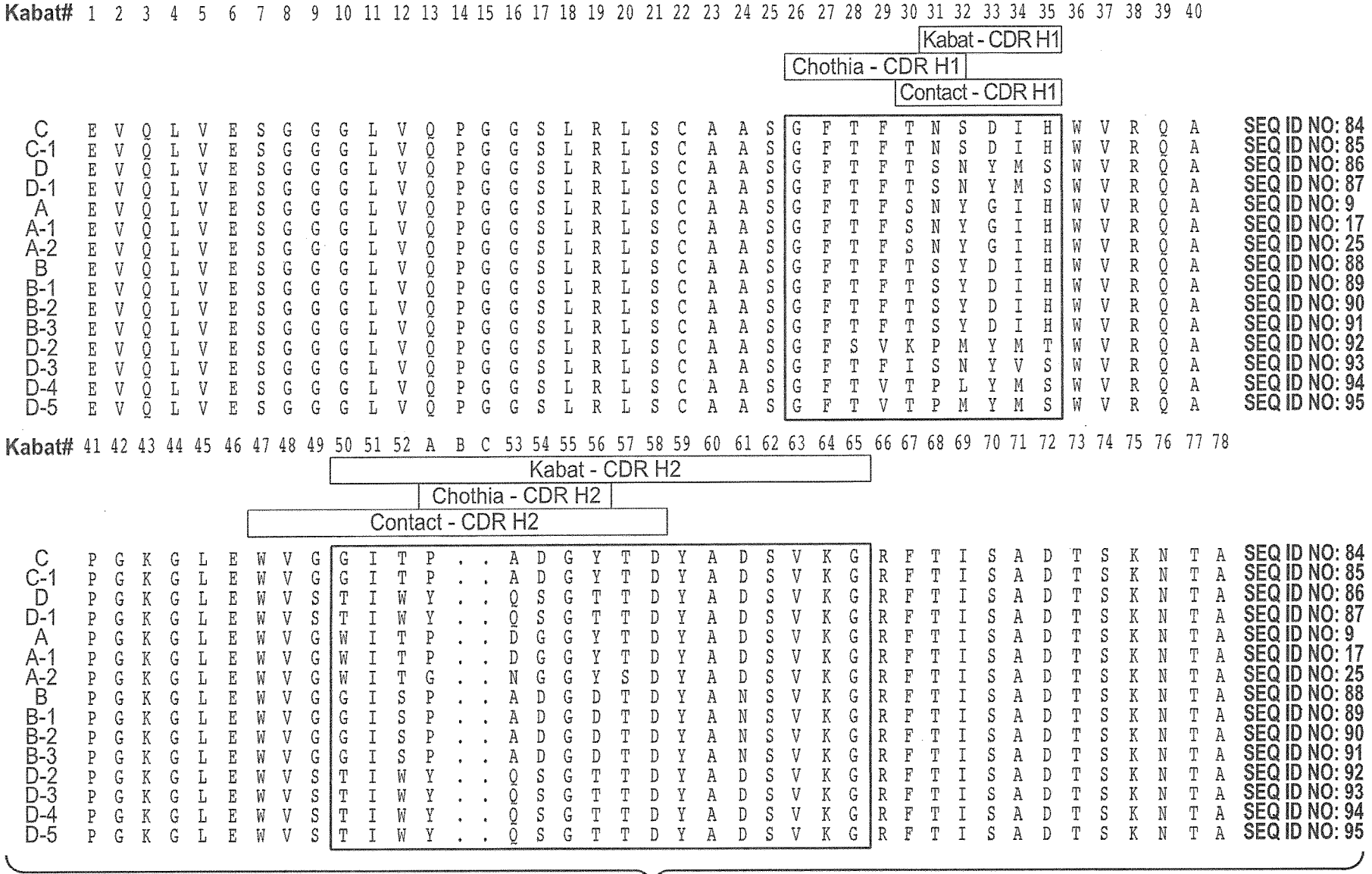

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D-5 P G K G L E W V S T I W Y . . Q S G T T D Y A D S V K G R F T I S A D T S K N T A SEQ ID NO: 95

FIG. 4A-1

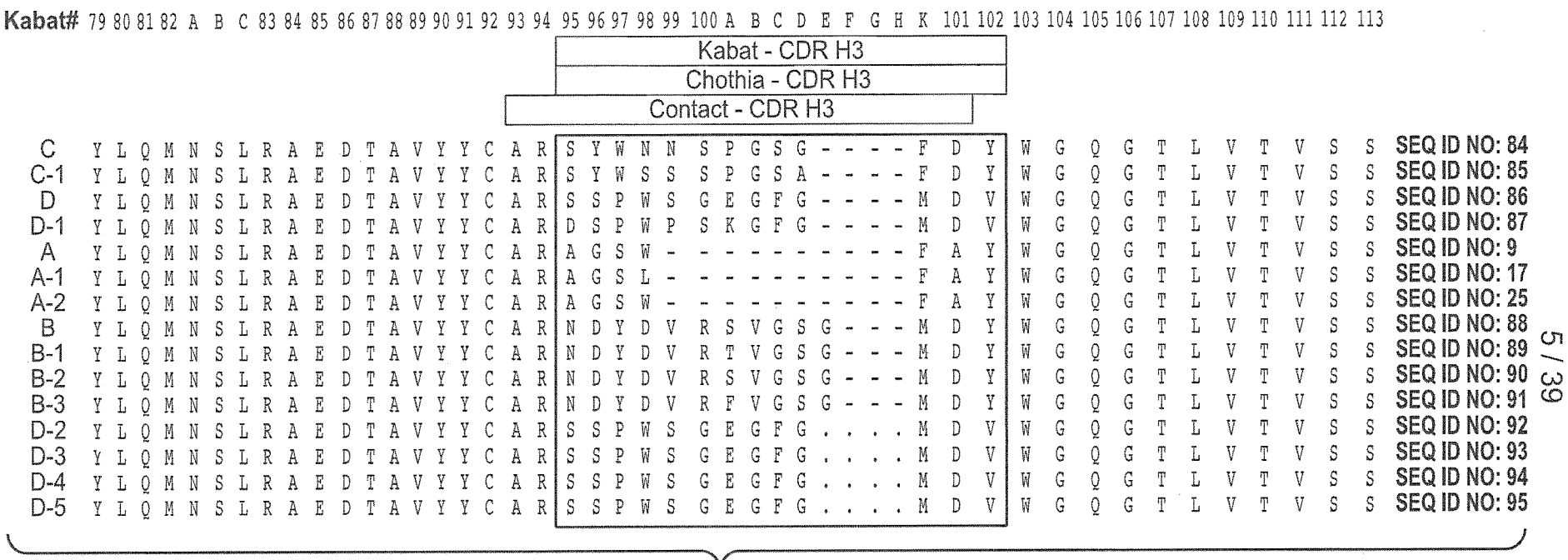

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Contact - CDR H3
C Y L Q M N S L R A E D T A V Y Y C A R S Y W N N S P G S G - - - - F D Y W G Q G T L V T V S S SEQ ID NO: 84
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D-5 Y L Q M N S L R A E D T A V Y Y C A R S S P W S G E G F G . . . . M D V W G Q G T L V T V S S SEQ ID NO: 95

FIG. 4A-2

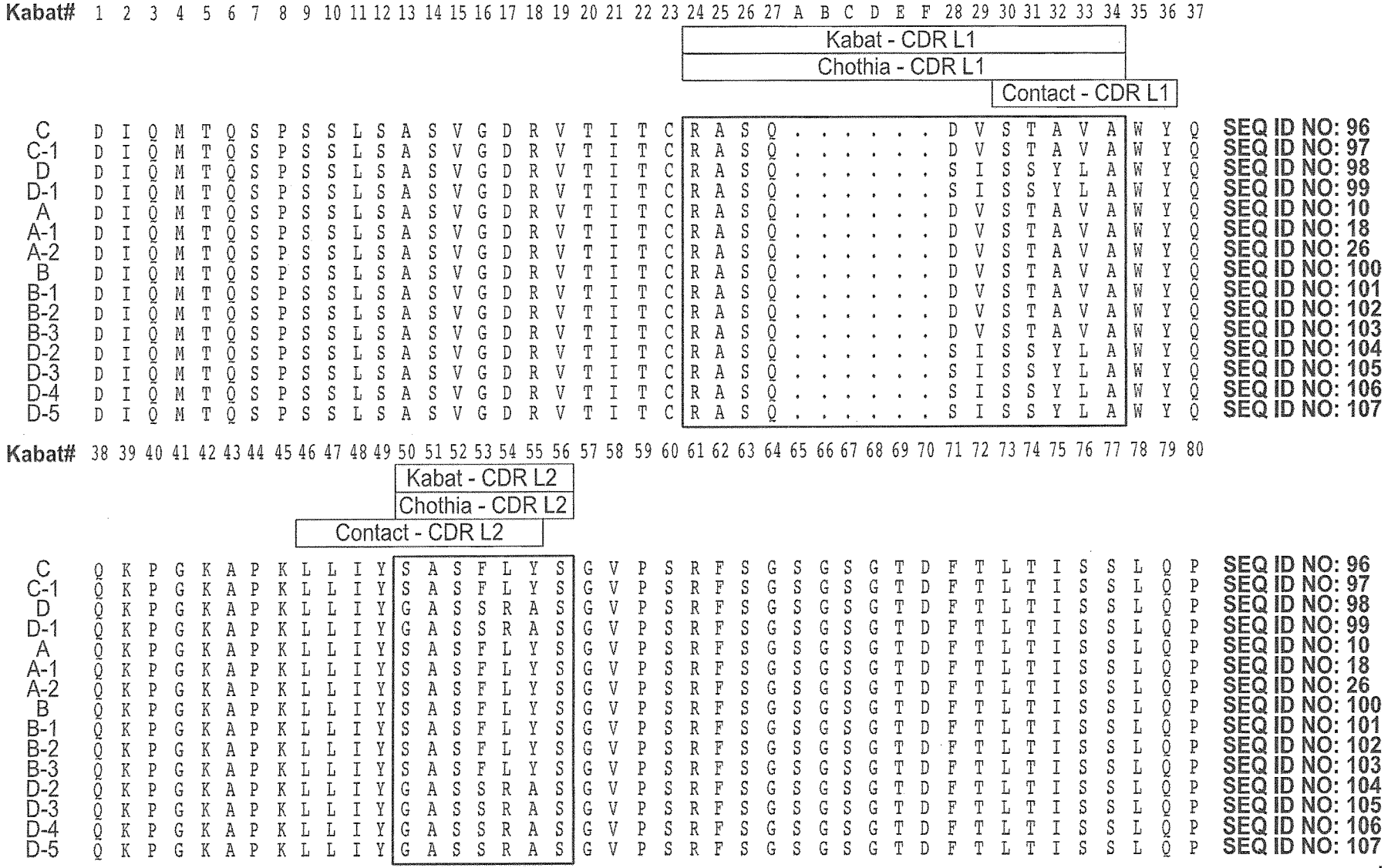

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FIG 4B-1

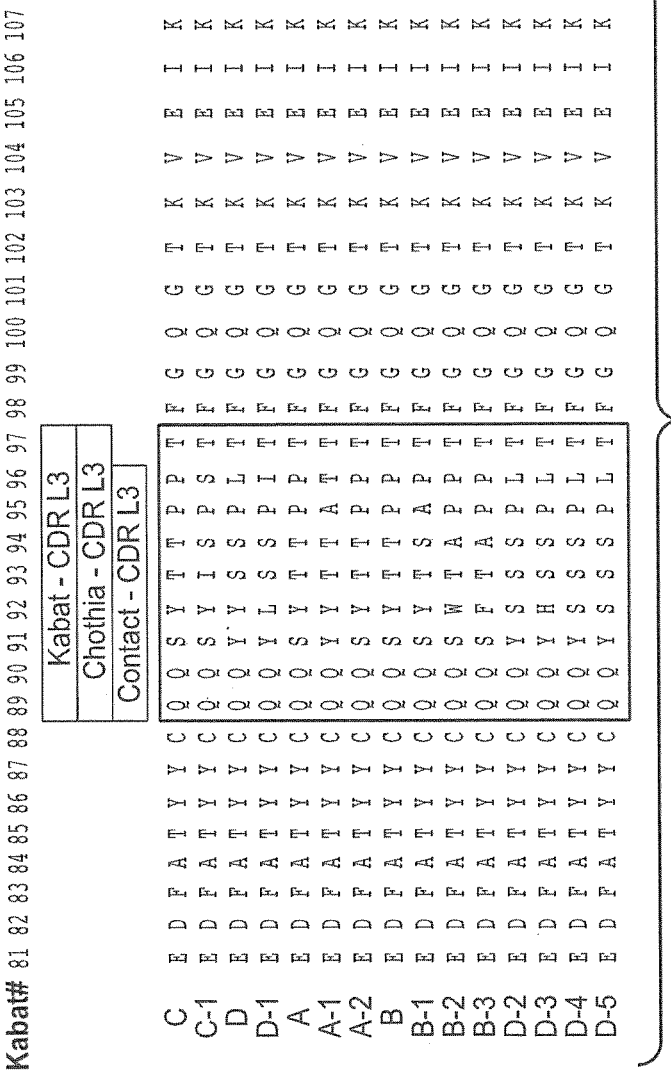

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FIG. 4B-2

HVR-H1 Sequences

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HVR-H2 Sequence

	Kabat Number																	SEQ ID NO
Antibody #	50	51	52	52A	53	54	55	56	57	58	59	60	61	62	63	64	65	
A, A-1, A-1 (S101T)	W	I	T	P	D	G	G	Y	T	D	Y	A	D	S	V	K	G	36 (also 12, 20)
A-2	W	I	T	G	N	G	G	Y	S	D	Y	A	D	S	V	K	G	28
Consensus	W	I	T	P/G	D/N	G	G	Y	T/S	D	Y	A	D	S	V	K	G	71

FIG. 5A

HVR-H3 Sequence

	Kabat Number							SEQ ID NO
Antibody #	95	96	97	98	100k	101	102	
A, A-2	A	G	S	W	F	A	Y	13 (also 29)
A-1	A	G	S	L	F	A	Y	21
A-1 (S101T)	A	G	T	L	F	A	Y	37
Consensus	A	G	S/T	W/L	F	A	Y	77

FIG. 5B

FIG. 6

HVR-L1 Sequences

	Kabat Number											SEQ ID NO
Antibody #	24	25	26	27	28	29	30	31	32	33	34	
A, A-1, A-2, A-1 (S101T)	R	A	S	Q	D	V	S	T	A	V	A	38 (also 14, 22, 30)

HVR-L2 Sequences

	Kabat Number							SEQ ID NO
Antibody #	50	51	52	53	54	55	56	
A, A-1, A-2, A-1 (S101T)	S	A	S	F	L	Y	S	39 (also 15, 23, 31)

HVR-L3 Sequences

	Kabat Number									SEQ ID NO
Clone #	89	90	91	92	93	94	95	96	97	
A, A-2	Q	Q	S	Y	T	T	P	P	T	16 (also 32)
A-1, A-1 (S101T)	Q	Q	Y	Y	T	T	A	T	T	40 (also 24)
Consensus	Q	Q	S/Y	Y	T	T	P/A	P/T	T	74

Framework Sequences of Antibodies A, A-1, A-2 Light Chain Variable Domain

LC-FR1 ^{1}Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys^{23} **SEQ ID NO: 43**

LC-FR2 ^{35}Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr^{49} **SEQ ID NO: 44**

LC-FR3 ^{57}Gly Val Pro Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys^{88} **SEQ ID NO: 45**

LC-FR4 ^{98}Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg^{108} **SEQ ID NO: 46**

Framework Sequences of Antibodies A, A-1, A-2 Heavy Chain Variable Domain

HC-FR1 ^{1}Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser^{25} **SEQ ID NO: 47**

HC-FR2 ^{36}Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Gly^{49} **SEQ ID NO: 4**

HC-FR3 ^{66}Arg Phe Thr Ile Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg^{94} **SEQ ID NO: 49**

HC-FR4 ^{103}Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser^{113} **SEQ ID NO: 50**

FIG. 7

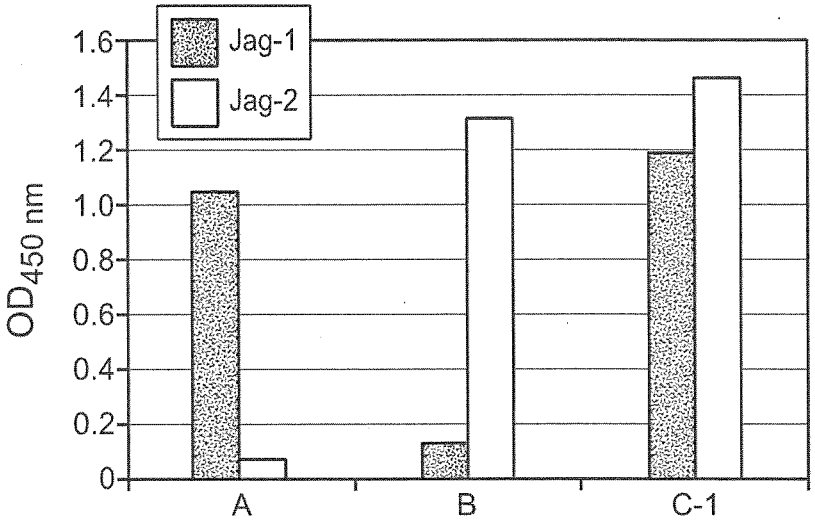


FIG. 8

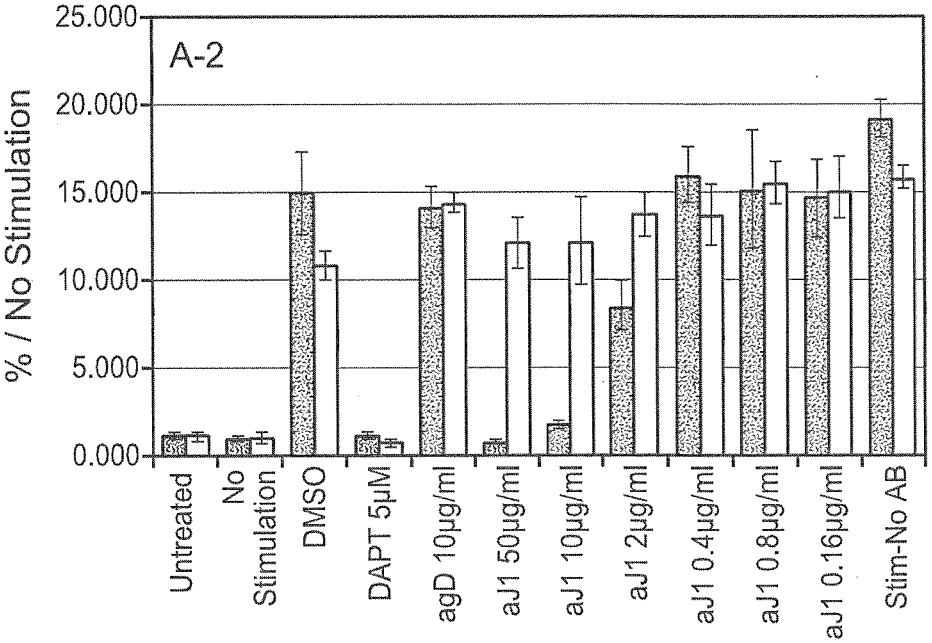

A-2
% / No Stimulation
25.000
20.000
15.000
10.000
5.000
0.000
Untreated
No Stimulation
DMSO
DAPT 5µM
agD 10µg/ml
aJ1 50µg/ml
aJ1 10µg/ml
aJ1 2µg/ml
aJ1 0.4µg/ml
aJ1 0.8µg/ml
aJ1 0.16µg/ml
Stim-No AB

FIG. 9A

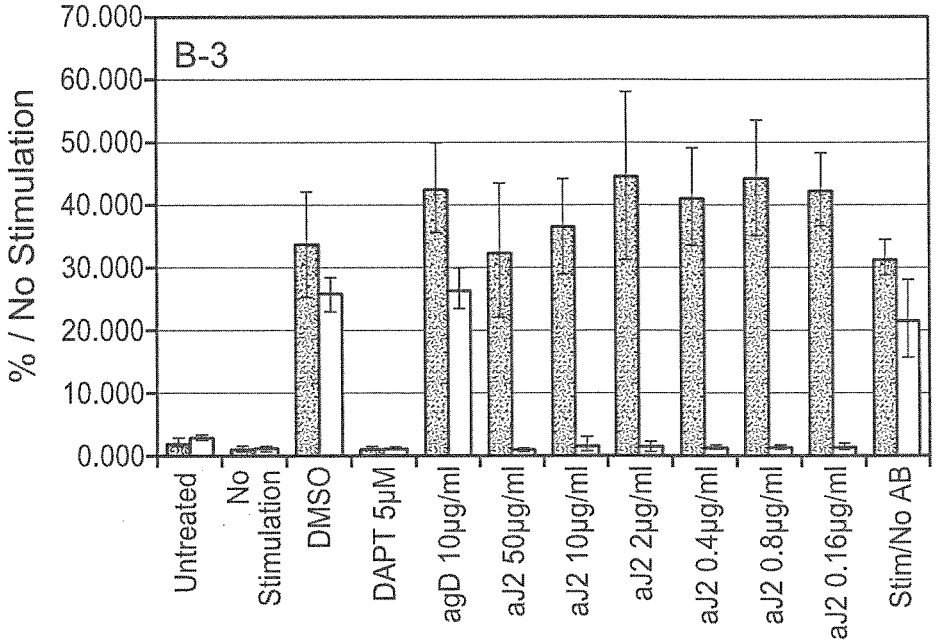

B-3
% / No Stimulation
70.000
60.000
50.000
40.000
30.000
20.000
10.000
0.000
Untreated
No Stimulation
DMSO
DAPT 5µM
agD 10µg/ml
aJ2 50µg/ml
aJ2 10µg/ml
aJ2 2µg/ml
aJ2 0.4µg/ml
aJ2 0.8µg/ml
aJ2 0.16µg/ml
Stim/No AB

FIG. 9B

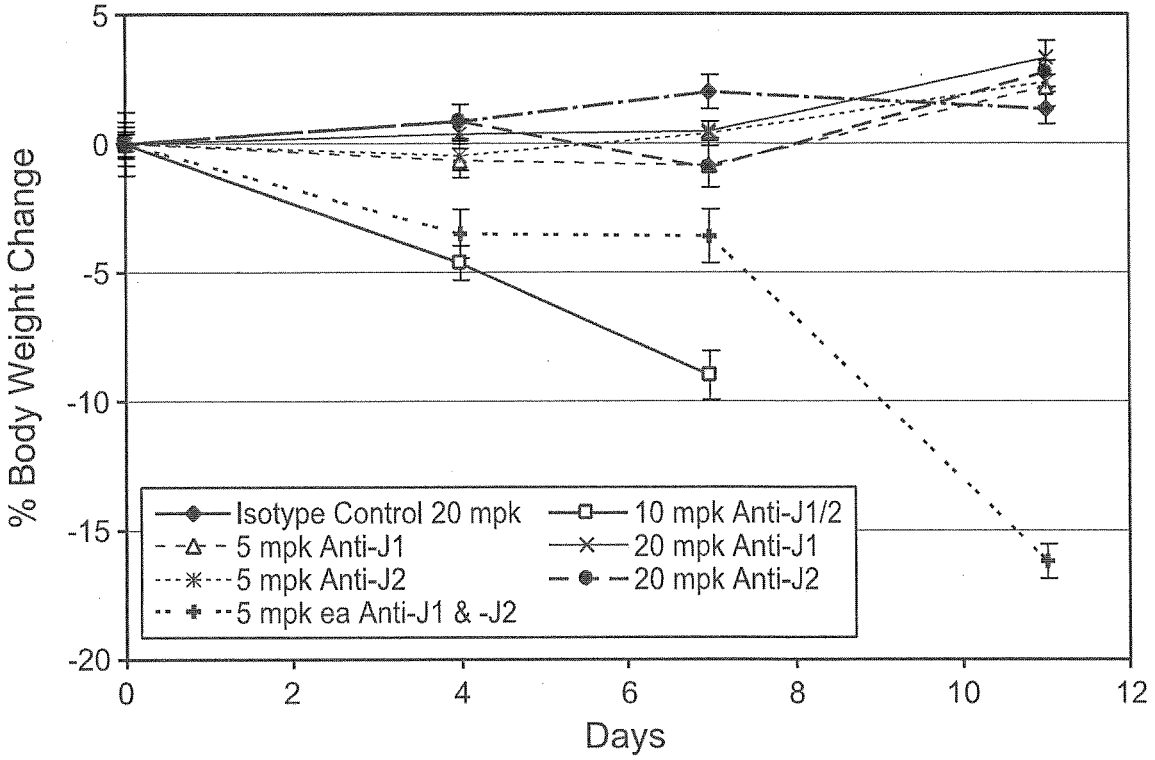


FIG. 10A

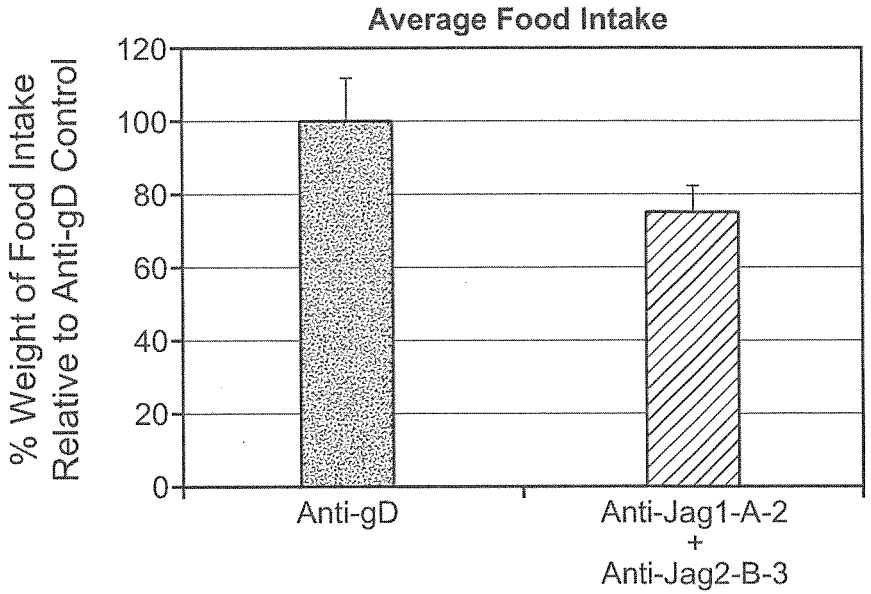


FIG. 10B

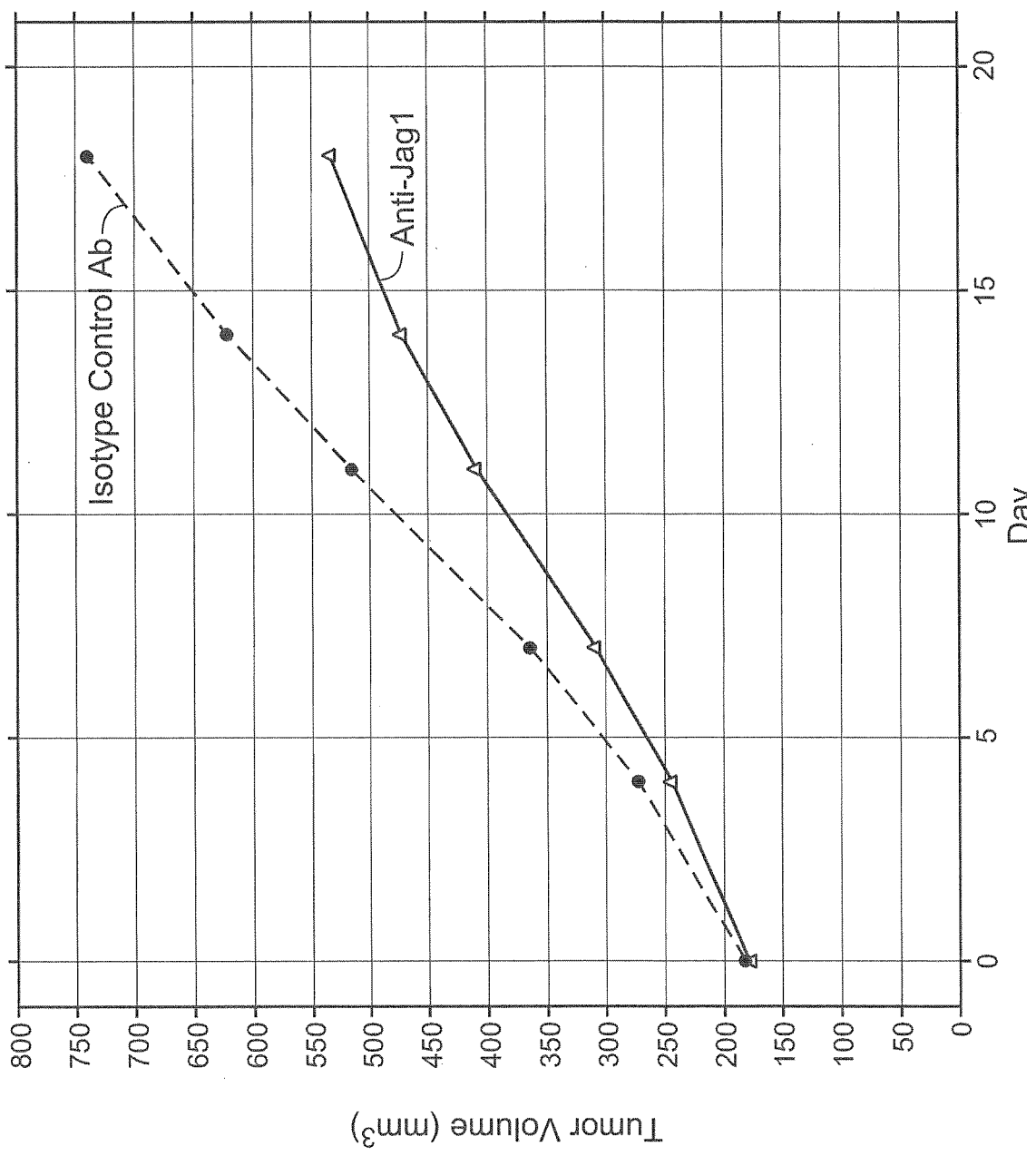

Tumor Volume (mm3)
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
0
5
10
15
20
Day
Isotype Control Ab
Anti-Jag1

FIG. 11A-1

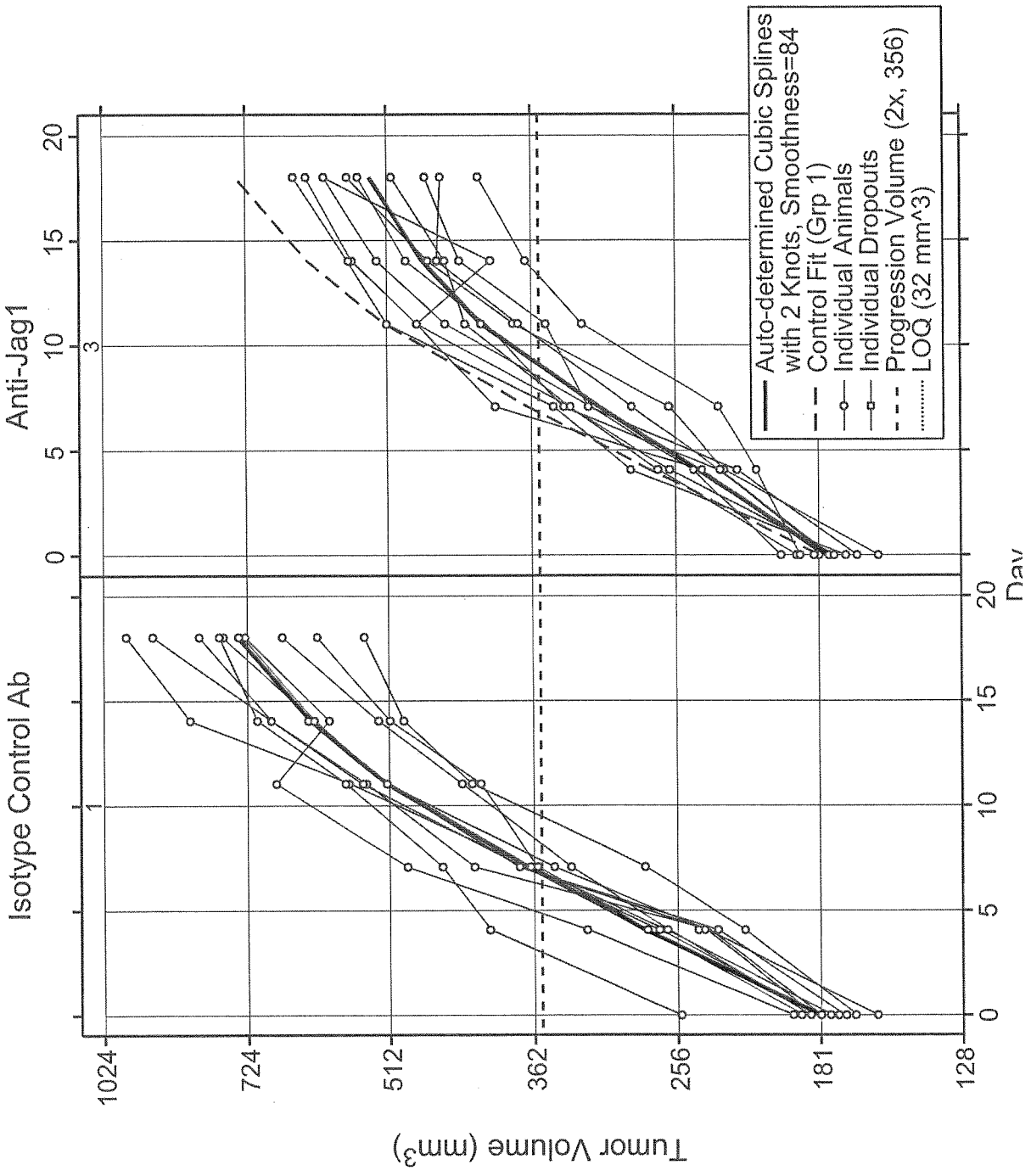

Isotype Control Ab
Anti-Jag1
Tumor Volume (mm3)
1024
724
512
362
256
181
128
0
5
10
15
20
Day
Auto-determined Cubic Splines with 2 Knots, Smoothness=84
Control Fit (Grp 1)
Individual Animals
Individual Dropouts
Progression Volume (2x, 356)
LOQ (32 mm^3)

FIG. 11A-2

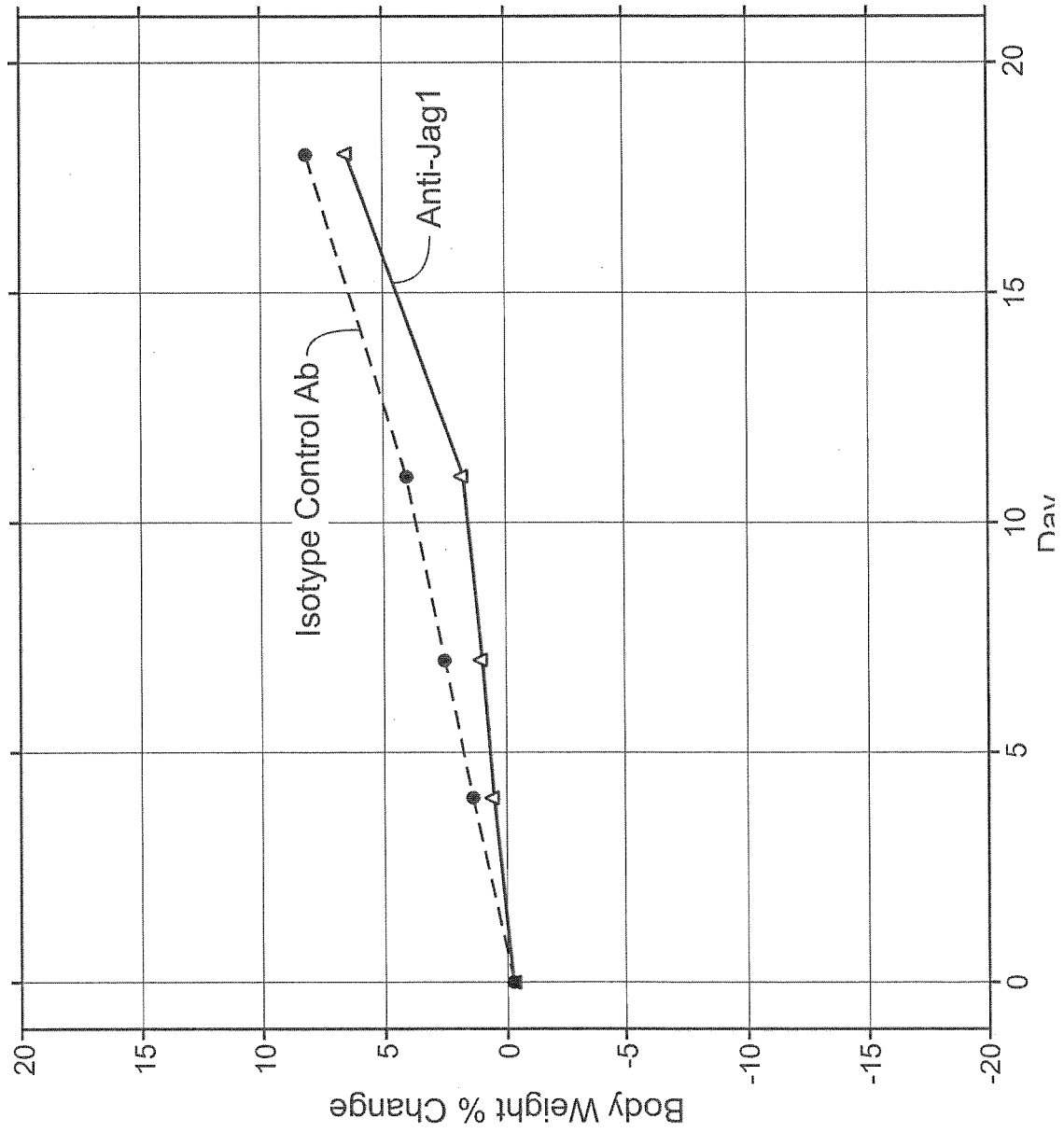

Body Weight % Change
20
15
10
5
0
-5
-10
-15
-20
0
5
10
15
20
Day
Isotype Control Ab
Anti-Jag1

FIG. 11B-1

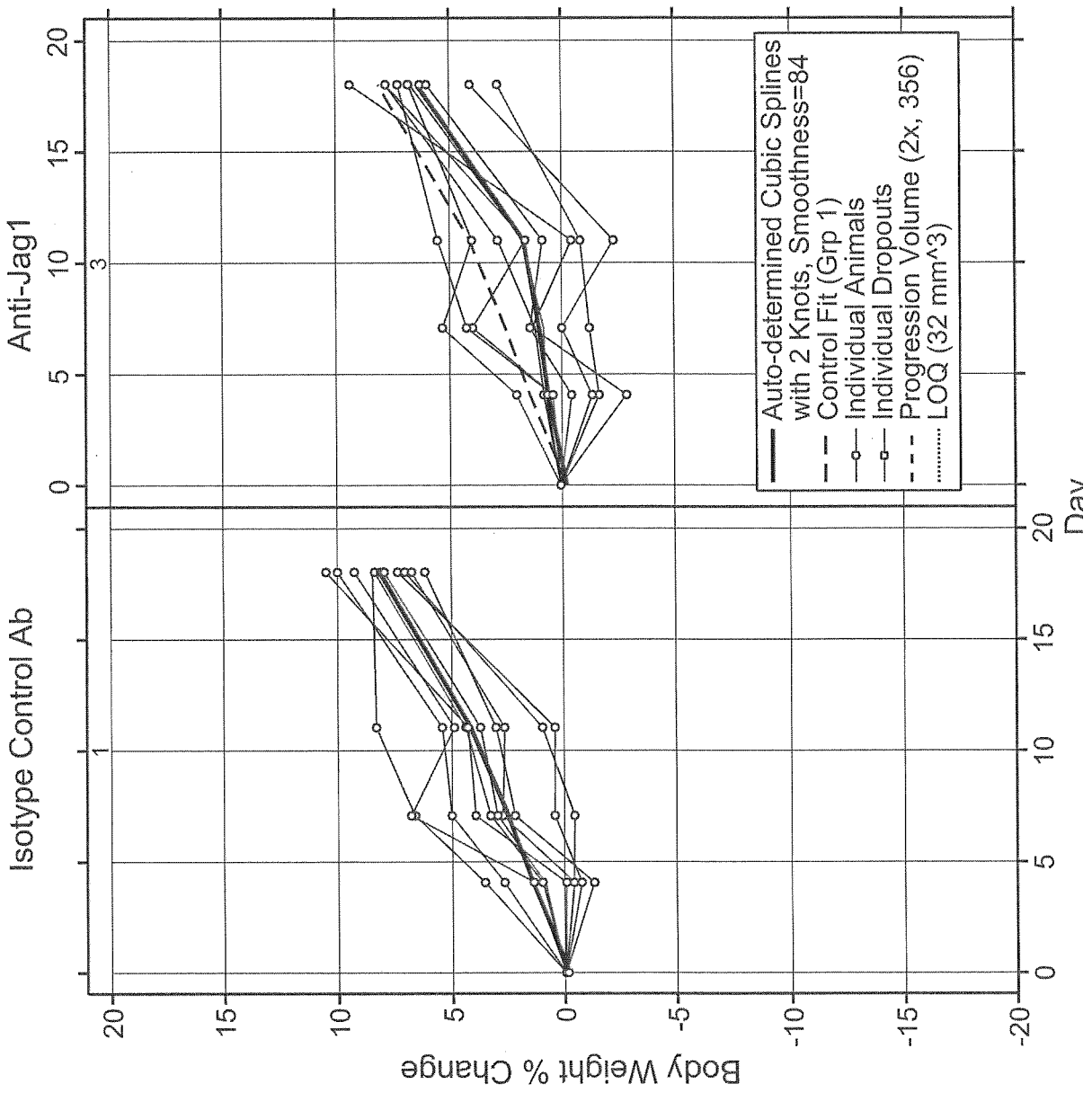

Isotype Control Ab
Anti-Jag1
Body Weight % Change
Day
Auto-determined Cubic Splines with 2 Knots, Smoothness=84
Control Fit (Grp 1)
Individual Animals
Individual Dropouts
Progression Volume (2x, 356)
LOQ (32 mm^3)

FIG. 11B-2

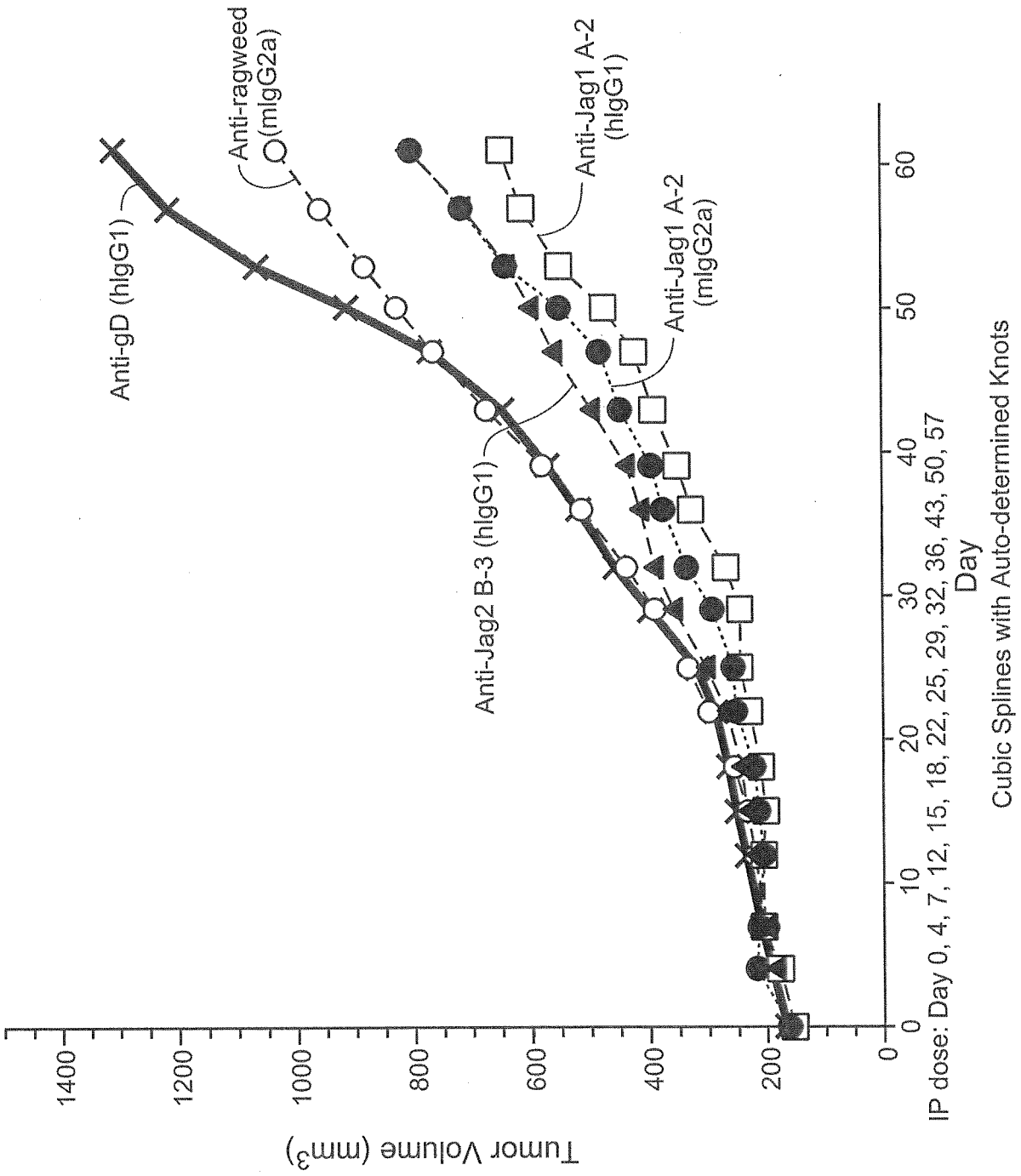

Anti-gD (hIgG1)
Anti-ragweed (mIgG2a)
Anti-Jag2 B-3 (hIgG1)
Anti-Jag1 A-2 (hIgG1)
Anti-Jag1 A-2 (mIgG2a)
Tumor Volume (mm3)
1400
1200
1000
800
600
400
200
0
0
10
20
30
40
50
60
IP dose: Day 0, 4, 7, 12, 15, 18, 22, 25, 29, 32, 36, 43, 50, 57
Day
Cubic Splines with Auto-determined Knots

FIG. 12A

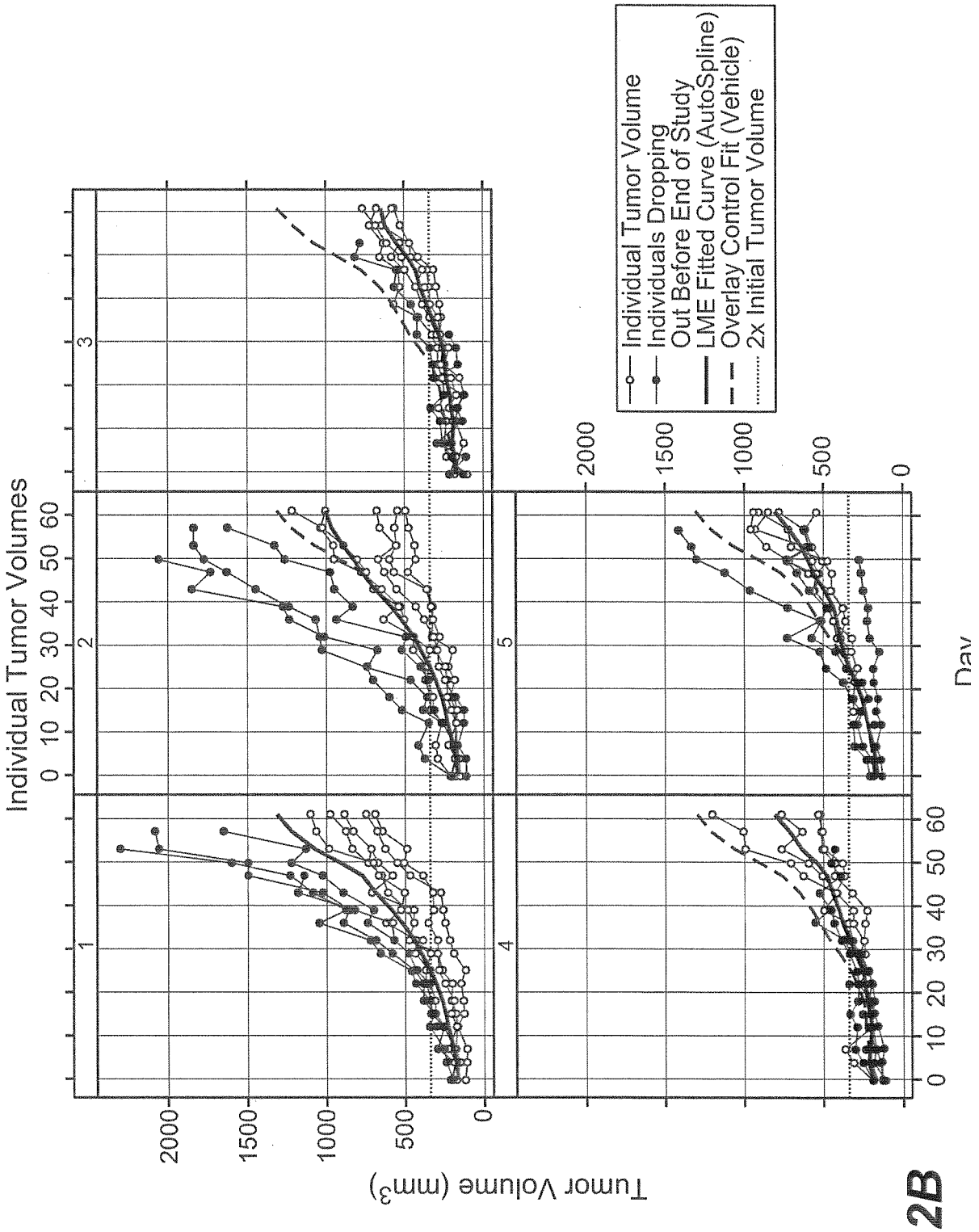

Individual Tumor Volumes
Tumor Volume (mm3)
Day
Individual Tumor Volume
Individuals Dropping Out Before End of Study
LME Fitted Curve (AutoSpline)
Overlay Control Fit (Vehicle)
2x Initial Tumor Volume

FIG. 12B

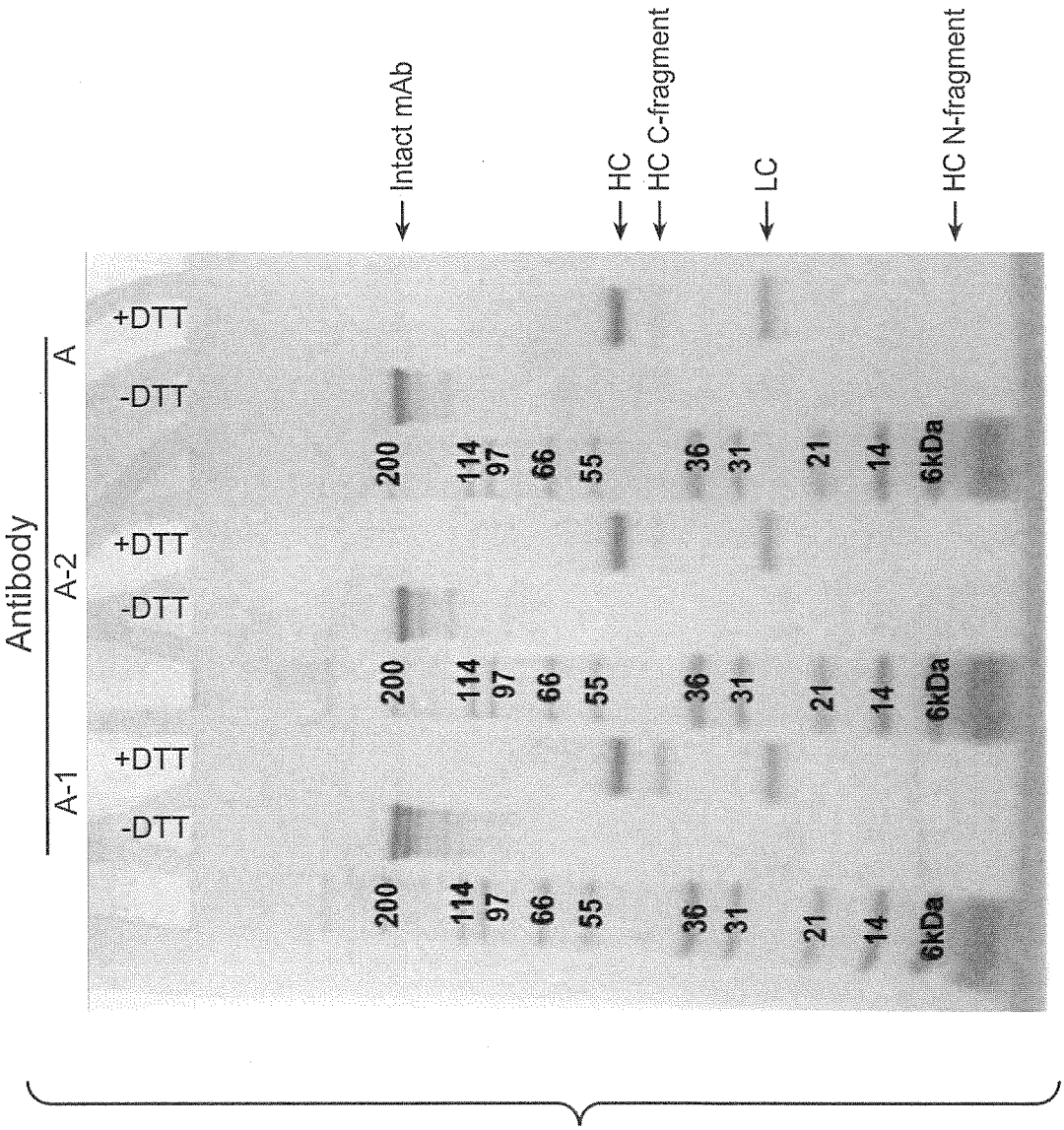

Antibody
A-1
A-2
A
+DTT
-DTT
+DTT
-DTT
+DTT
-DTT
Intact mAb
HC
HC C-fragment
LC
HC N-fragment
200
114
97
66
55
36
31
21
14
6kDa

FIG. 13A

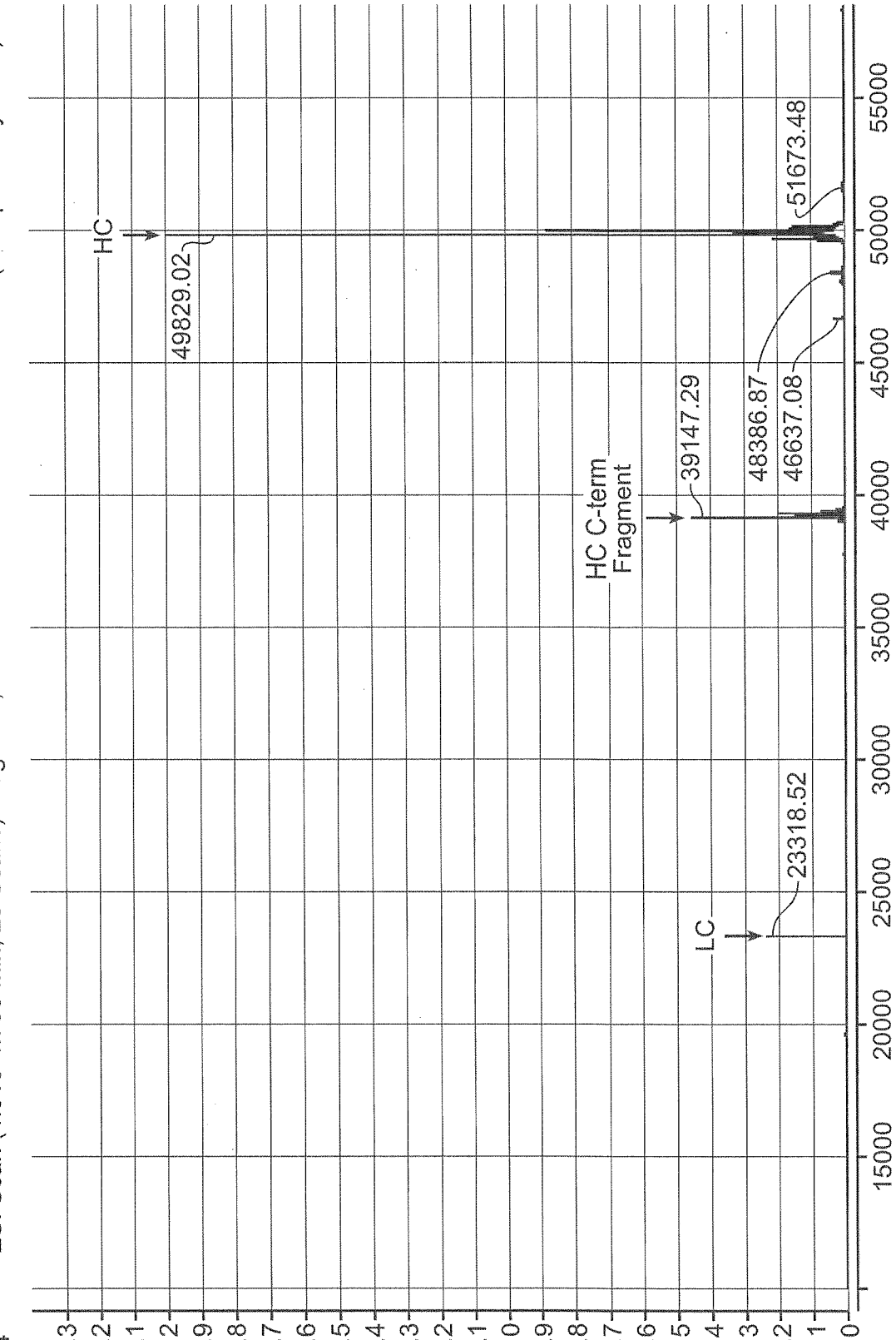

+ESI Scan (4.016-4.793 Min, 28 Scans) Frag=250,0V BCP68 R 04213.d Deconvoluted (Isotope Widty=12.6)
x10^4
HC
49829.02
HC C-term Fragment
39147.29
LC
23318.52
48386.87
46637.08
51673.48
Counts vs. Deconvoluted Mass (amu)

FIG. 13B

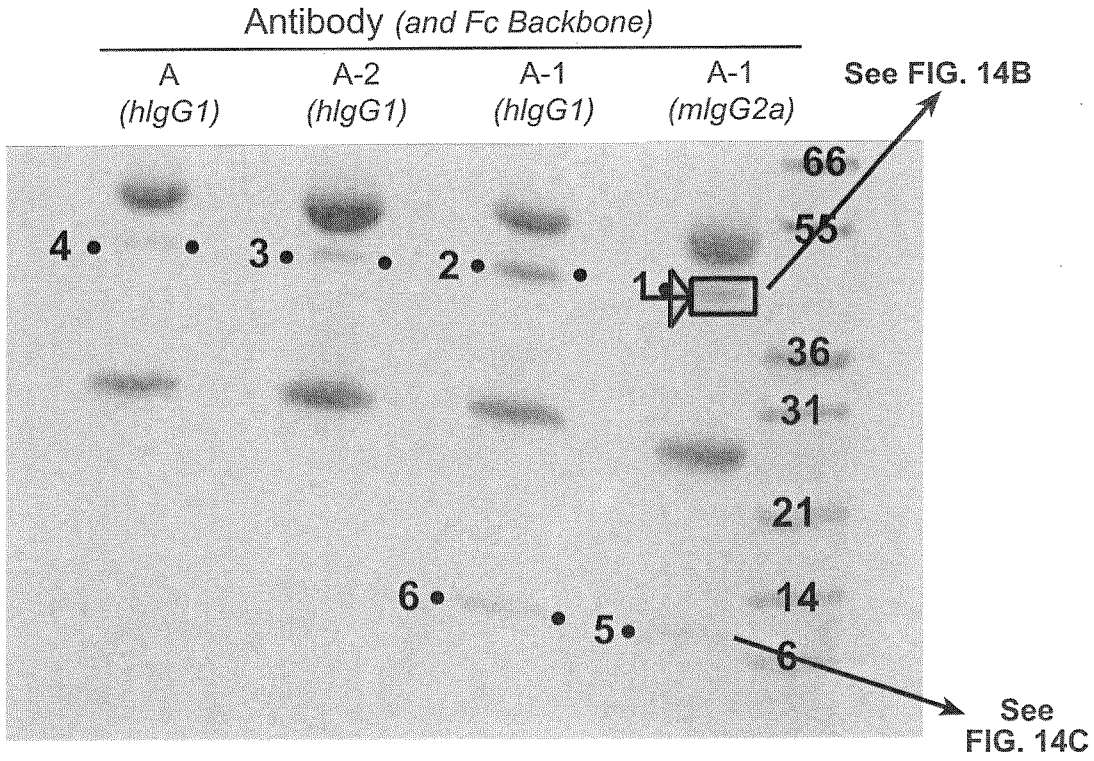
FIG. 13C

```
1    EVQLVESGGG LVQPGGSLRL SCAASGFTFS NYGIHWVRQA PGKGLEWVGW ITGNGGYSDY   60
61   ADSVKGRFTI SADTSKNTAY LQMNSLRAED TAVYYCARAG SWFAYWGQGT LVTVSSASTK   120
121  GPSVFPLAPS SKSTSGGTAA LGCLVKDYFP EPVTVSWNSG ALTSGVHTFP AVLQSSGLYS   180
181  LSSVVTVPSS SLGTQTYICN VNHKPSNTKV DKKVEPKSCD KTHTCPPCPA PELLGGPSVF   240
241  LFPPKPKDTL MISRTPEVTC VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR   300
301  VVSVLTVLHQ DWLNGKEYKC KVSNKALPAP IEKTISKAKG QPREPQVYTL PPSREEMTKN   360
361  QVSLTCLVKG FYPSDIAVEW ESNGQPENNY KTTPPVLDSD GSFFLYSKLT VDKSRWQQGN   420
421  VFSCSVMHEA LHNHYTQKSL SLSPG     445
```

SEQ ID NO: 108

=CDR

FIG. 14A



Sequence Data Results															
Cycle/Run	1/3	2/4	3/5	4/6	5/7	6/8	7/9	8/10	9/11	10/12	11/13	12/14	13/15	14/16	15/17
Sequence 1	S 0.527	L 0.785	F	A 0.745	Y 1.177	-	G 0.166	Q 0.377	G 0.206	T 0.231	L 0.241	V 0.231	(T) 0.162	V 0.109	-

SEQ ID NO: 109

p1.PUR42676

```
  1   MGWSCIILFLVATATGAYAEVQLVESGGGLVQPGGSLRLSCAASGFTFSNYGIHWVRQAPGKGLEWVGWITPDGGYTDYA
                            |
 81   DSVKGRFTISADTSKNTAYLQMNSLRAEDTAVYYCARAGSLFAYWGQGTLVTVSSASTKGPSVYPLAPVCGDTTGSSVTL
                                                 120----------
161   GCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIK
241   PCPPCKCPAPNLLGGPSVFIFPPKIKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDYNSTLRV
321   VSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPPEBEMTKKQVTLTCMVTDFMPEDIYVEWT
401   NNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSRTPGKMGWSCIILFLVATAT
481   GVHSDIQMTQSPSSLSASVGDRVTITCRASQDVSTAVAWYQQKPGKAPKLLIYSASFLYSGVPSRFSGSGSGTDFTLTIS
561   SLQPEDFATYYCQQYYTTATTFGQGTKVEIKRADAAPTVSIFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQ
641   NGVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC
```

SEQ ID NO: 110

FIG. 14B

Sequence Data Results															
Cycle/Run	1/20	2/21	3/22	4/23	5/24	6/25	7/26	8/27	9/28	10/29	11/30	12/31	13/32	14/33	15/34
Sequence 1	E 0.704	V 0.761	Q 0.500	L 0.754	V 0.579	E 0.411	S 0.319	G 0.473	G 0.573	G 0.632	L 0.380	V 0.238	Q 0.265	P 0.443	G

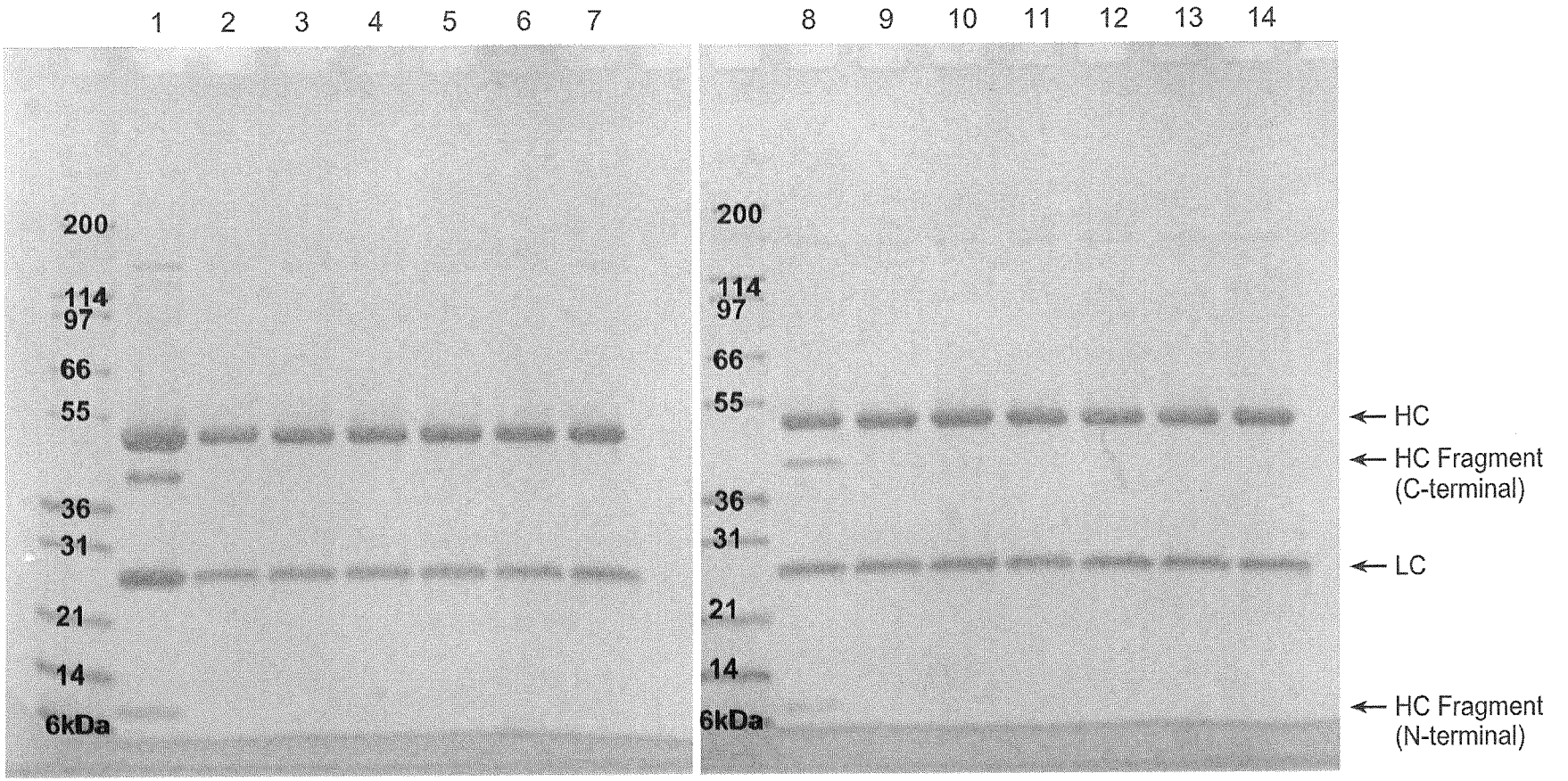
SEQ ID NO: 111

p1.PUR42676

```
  1   MGWSCIILFLVATATGAYAEVQLVESGGGLVQPGGSLRLSCAASGFTFSNYGIHWVRQAPGKGLEWVGWITPDGGYTDYA
                          |0----------
 81   DSVKGRFTISADTSKNTAYLQMNSLRAEDTAVYYCARAGSLFAYWGQGTLVTVSSASTKGPSVYPLAPVCGDTTGSSVTL
161   GCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKIEPRGPTIK
241   PCPPCKCPAPNLLGGPSVFIFPPKIKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDYNSTLRV
321   VSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPPEEEMTKKQVTLTCMVTDFMPEDIYVEWT
401   NNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSRTPGKMGWSCIILFLVATAT
481   GVHSDIQMTQSPSSLSASVGDRVTITCRASQDVSTAVAWYQQKPGKAPKLLIYSASFLYSGVPSRFSGSGSGTDFTLTIS
561   SLQPEDFATYYCQQYYTTATTFGQGTKVEIKRADAAPTVSIFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQ
641   NGVLNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNRNEC
```

SEQ ID NO: 110

FIG. 14C



1. A-1 (S101, WT)
2. A-1 S101D
3. A-1 S101E
4. A-1 S101G
5. A-1 S101H
6. A-1 S101I
7. A-1 S101K

8. A-1 (S101, WT)
9. A-1 S101L
10. A-1 S101N
11. A-1 S101Q
12. A-1 S101R
13. A-1 S101T
14. A-1 S101V

FIG. 15

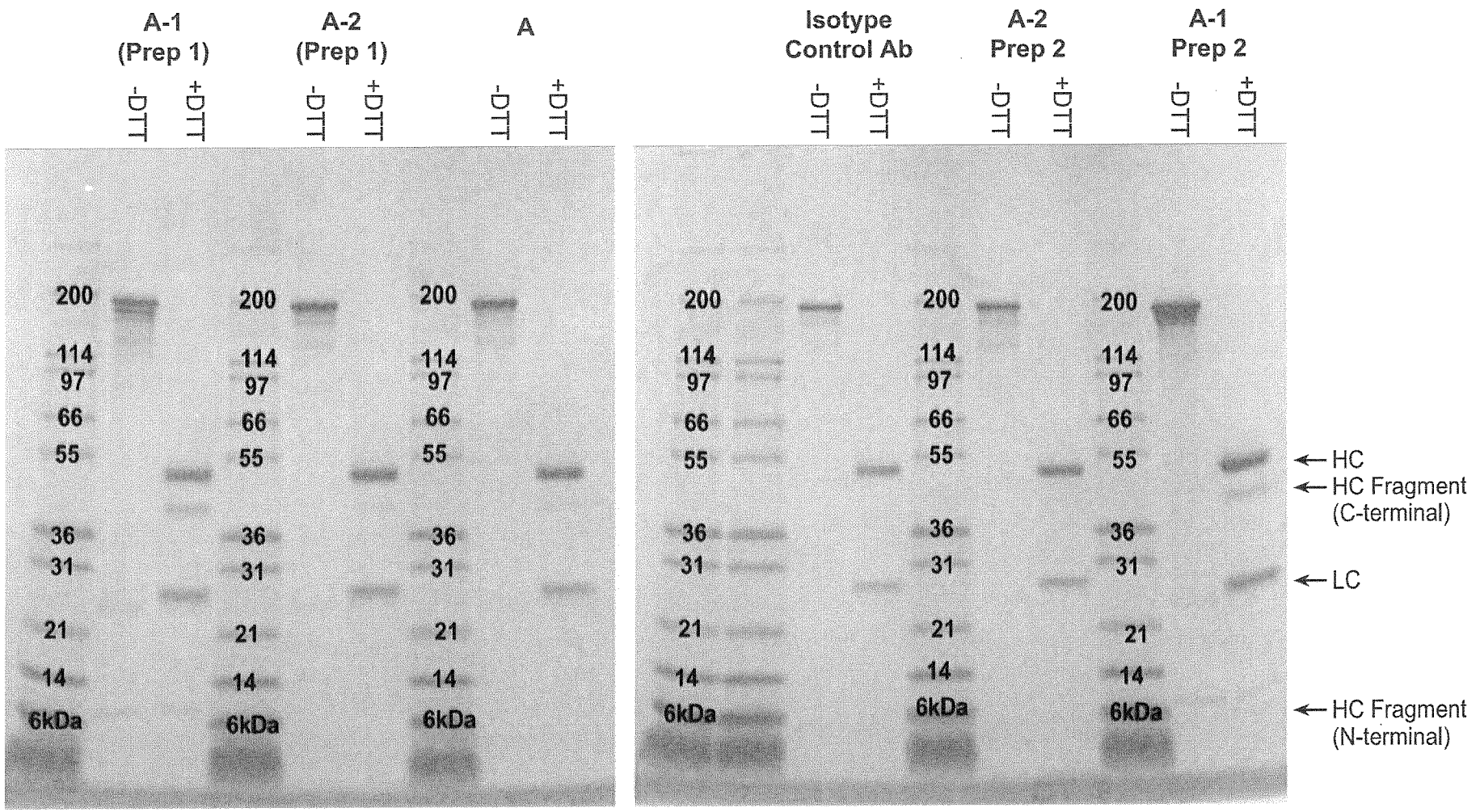

A-1
(Prep 1)
A-2
(Prep 1)
A
Isotype
Control Ab
A-2
Prep 2
A-1
Prep 2
-DTT
+DTT
200
114
97
66
55
36
31
21
14
6kDa
HC
HC Fragment
(C-terminal)
LC
HC Fragment
(N-terminal)

FIG. 16A

	% HC C-term Fragment	
	70°	95°
A-1 (Prep 1)	24.2	27.0
A-2 (Prep 2)	5.1	6.0
A-2 (Prep 2)	3.7	4.4
A	7.1	8.2
A-1 (Prep 2)	18.4	14.4

FIG. 16B

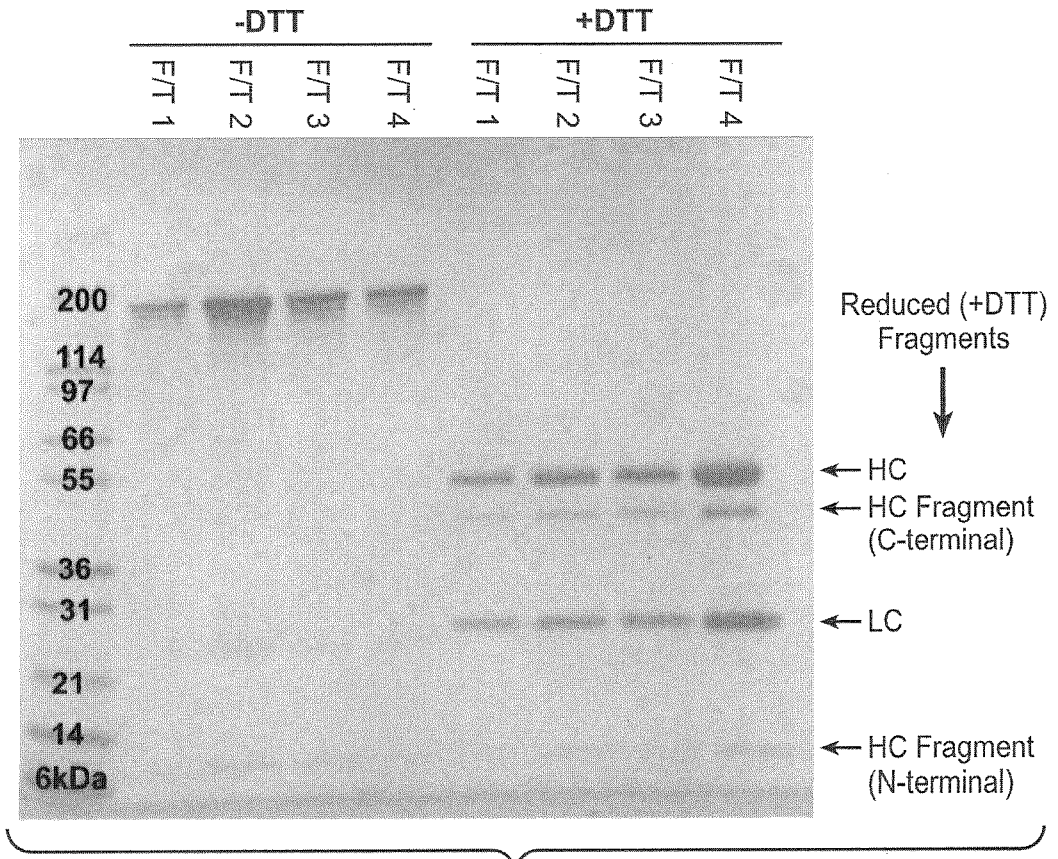


FIG. 17A

	% HC C-term Fragment
F/T 1	14.8
F/T 2	14.1
F/T 3	14.8
F/T 4	19.6

FIG. 17B

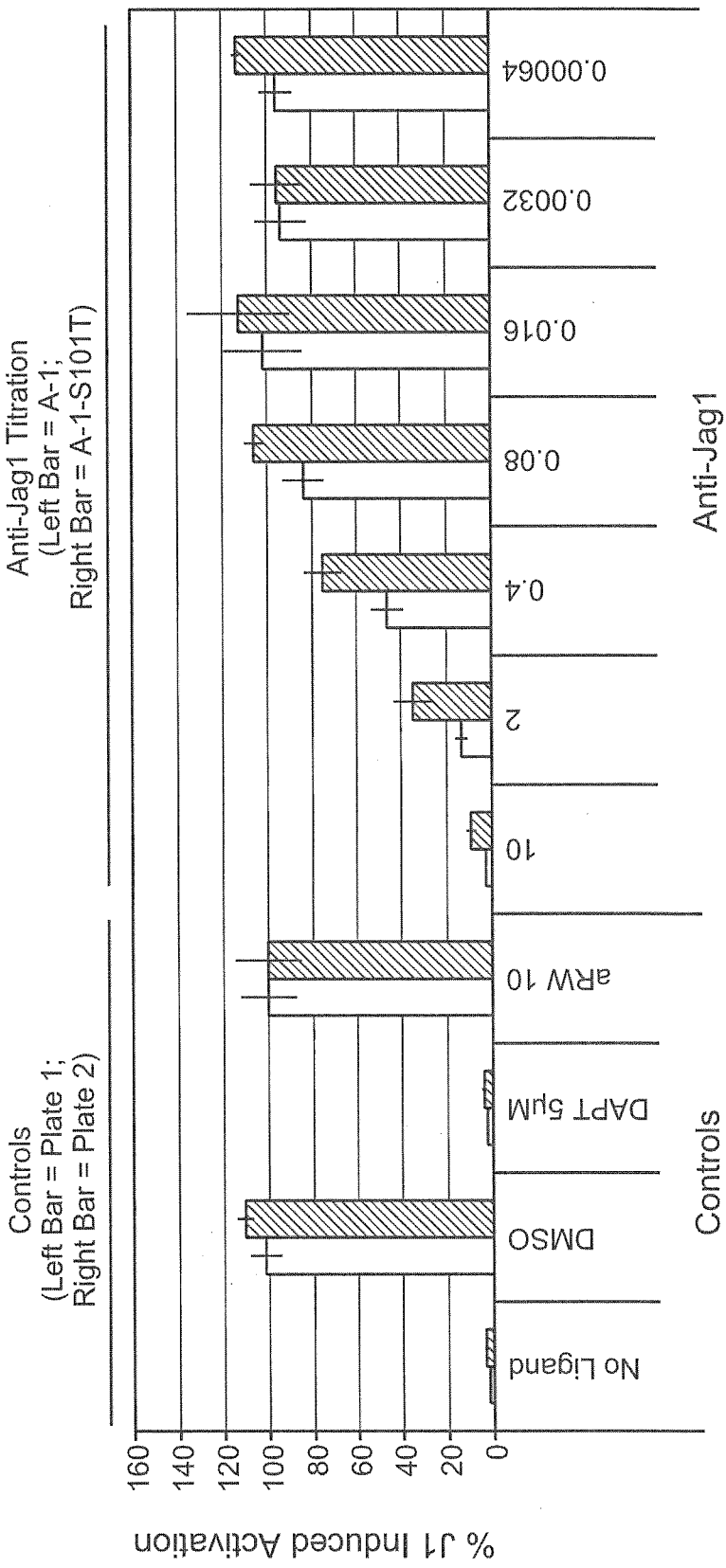

% J1 Induced Activation
160
140
120
100
80
60
40
20
0
No Ligand
DMSO
DAPT 5μM
aRW 10
10
2
0.4
0.08
0.016
0.0032
0.00064
Controls
Anti-Jag1
Controls
(Left Bar = Plate 1;
Right Bar = Plate 2)
Anti-Jag1 Titration
(Left Bar = A-1;
Right Bar = A-1-S101T)

FIG. 18A

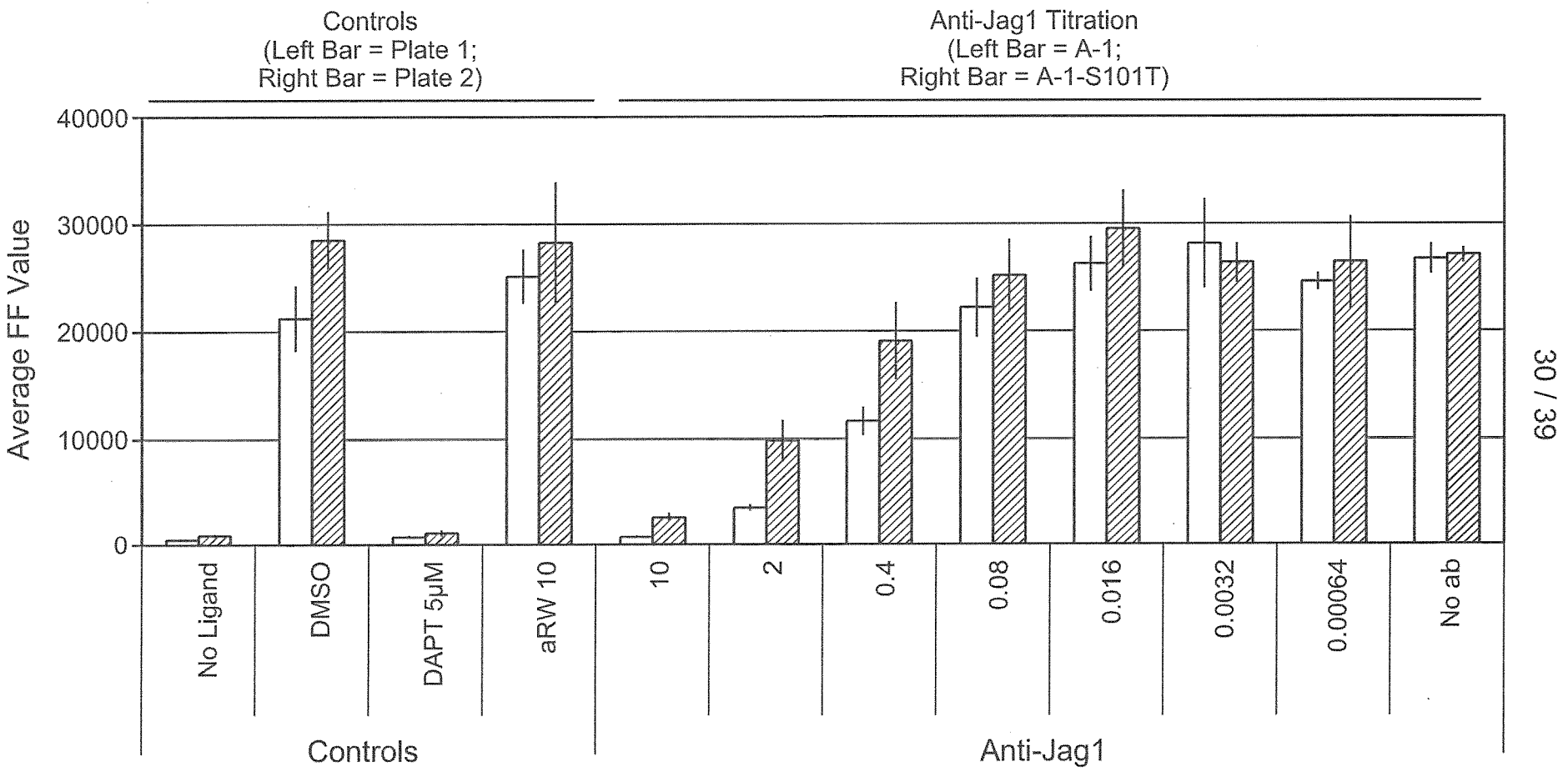

Controls
(Left Bar = Plate 1;
Right Bar = Plate 2)
Anti-Jag1 Titration
(Left Bar = A-1;
Right Bar = A-1-S101T)
Average FF Value
40000
30000
20000
10000
0
No Ligand
DMSO
DAPT 5µM
aRW 10
10
2
0.4
0.08
0.016
0.0032
0.00064
No ab
Controls
Anti-Jag1

FIG. 18B

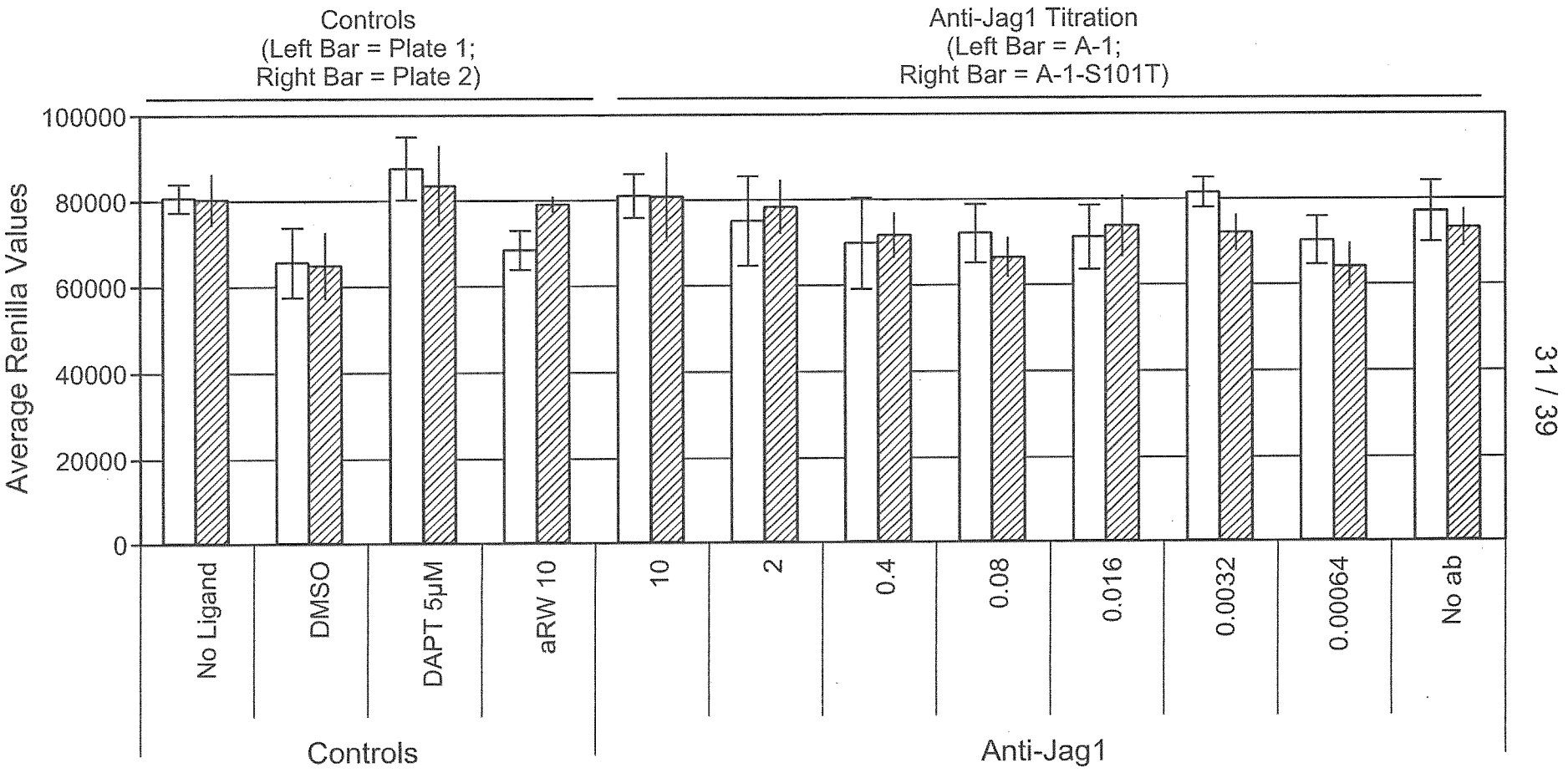

Controls
(Left Bar = Plate 1;
Right Bar = Plate 2)
Anti-Jag1 Titration
(Left Bar = A-1;
Right Bar = A-1-S101T)
Average Renilla Values
100000
80000
60000
40000
20000
0
No Ligand
DMSO
DAPT 5µM
aRW 10
10
2
0.4
0.08
0.016
0.0032
0.00064
No ab
Controls
Anti-Jag1

FIG. 18C

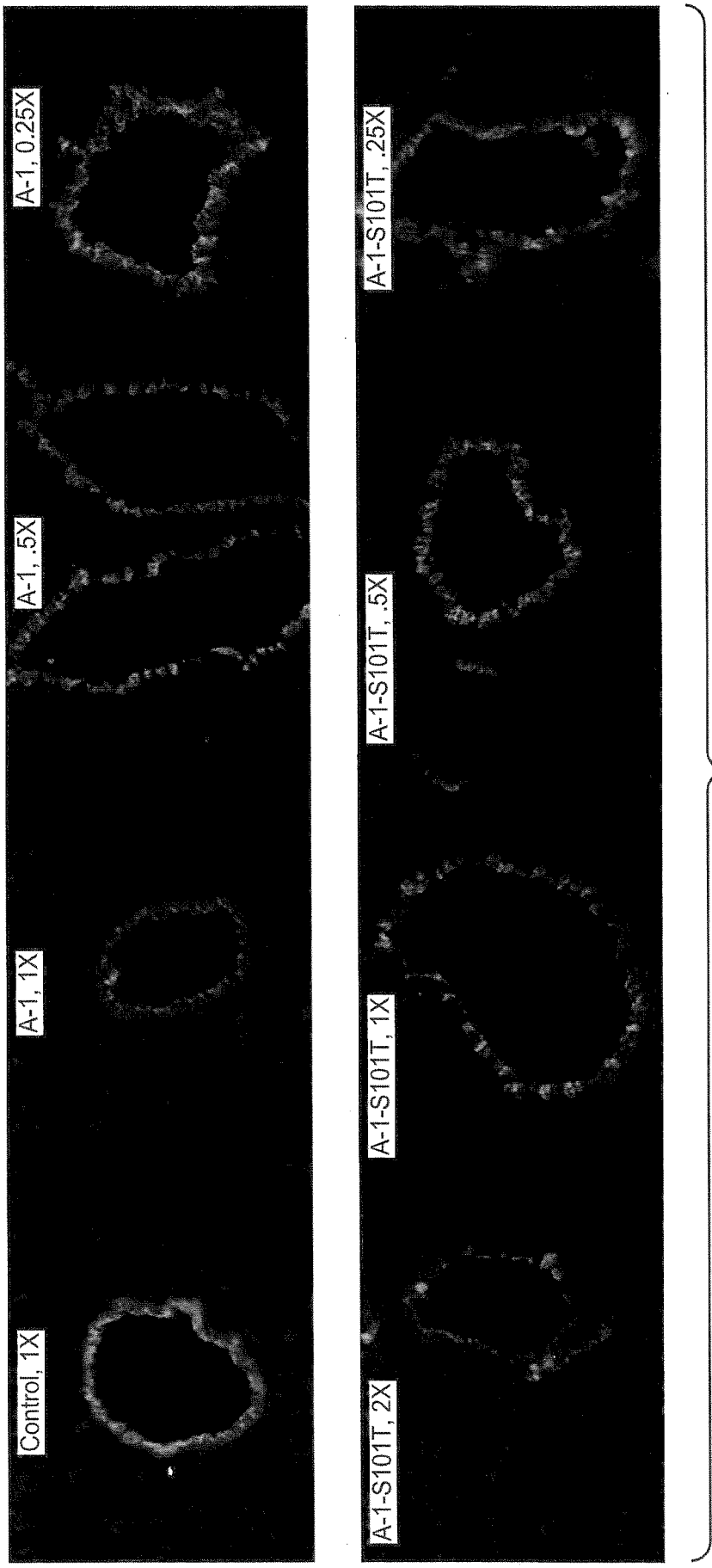

Control, 1X
A-1, 1X
A-1, .5X
A-1, 0.25X
A-1-S101T, 2X
A-1-S101T, 1X
A-1-S101T, .5X
A-1-S101T, .25X

FIG. 19

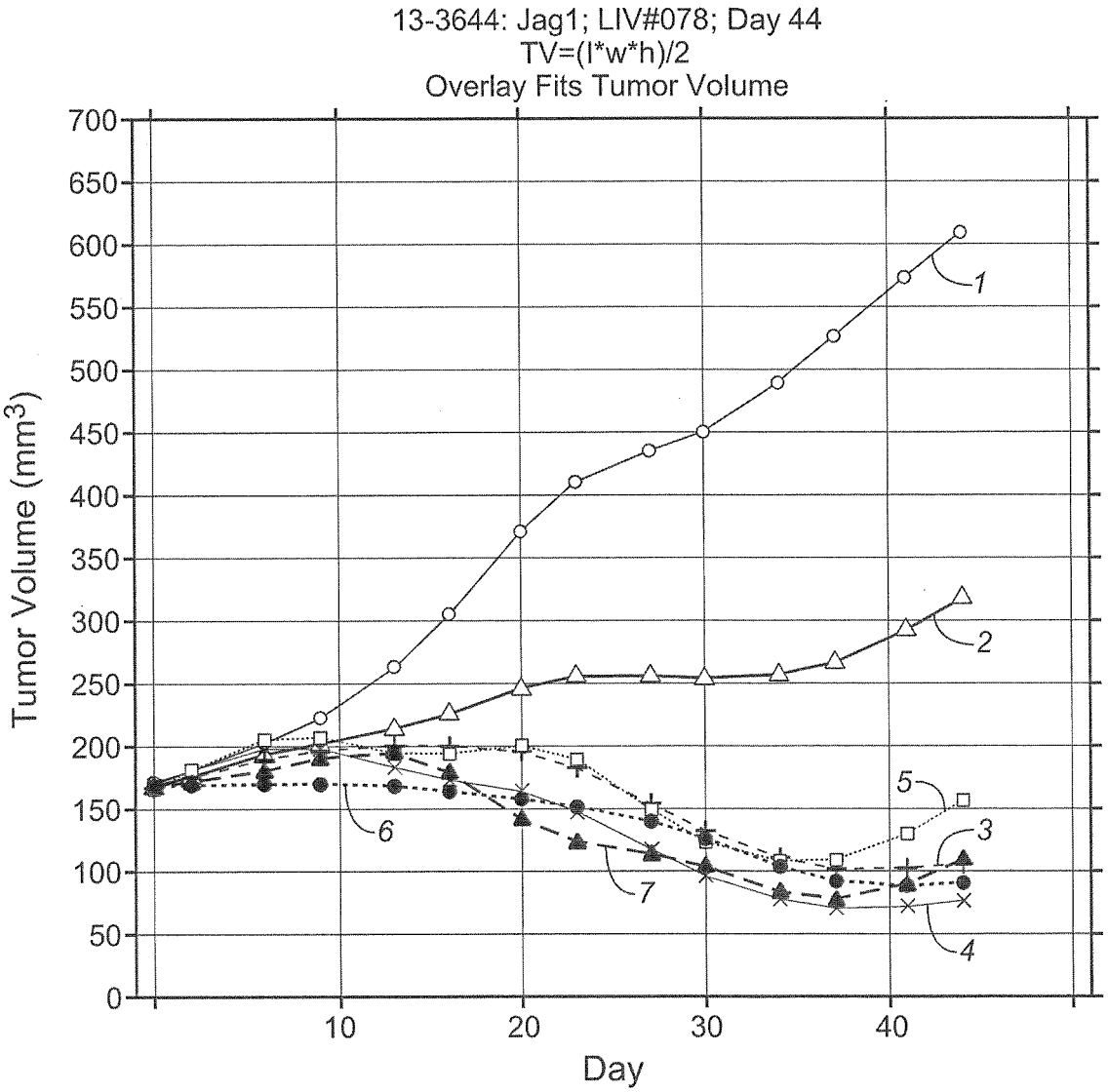


FIG. 20A

#	Group Name	Dose (mg/kg)	Vol Last Day	AUC/Day % TGI (Lower, Upper)	TTP 2X	PR
1	Anti-Ragweed (Isotype Control)	10	610	0 (0, 0)	18.5	0
2	Anti-Jag1 A-1-S101T	3	318	65 (3, 93)	NA	0
3	Anti-Jag1 A-1-S101T	10	106	103 (80, 129)	NA	7
4	Anti-Jag1 A-1-S101T	30	76	114 (95, 142)	NA	7
5	Anti-Jag1 A-1-S101T (1x Every 3 Weeks)	30	156	100 (73, 124)	NA	5
6	Anti-Jag1 A-1-DANG (Effectorless)	10	88	114 (94, 144)	NA	6
7	Anti-Jag1 A-1	10	109	115 (92, 146)	NA	6

FIG. 20B

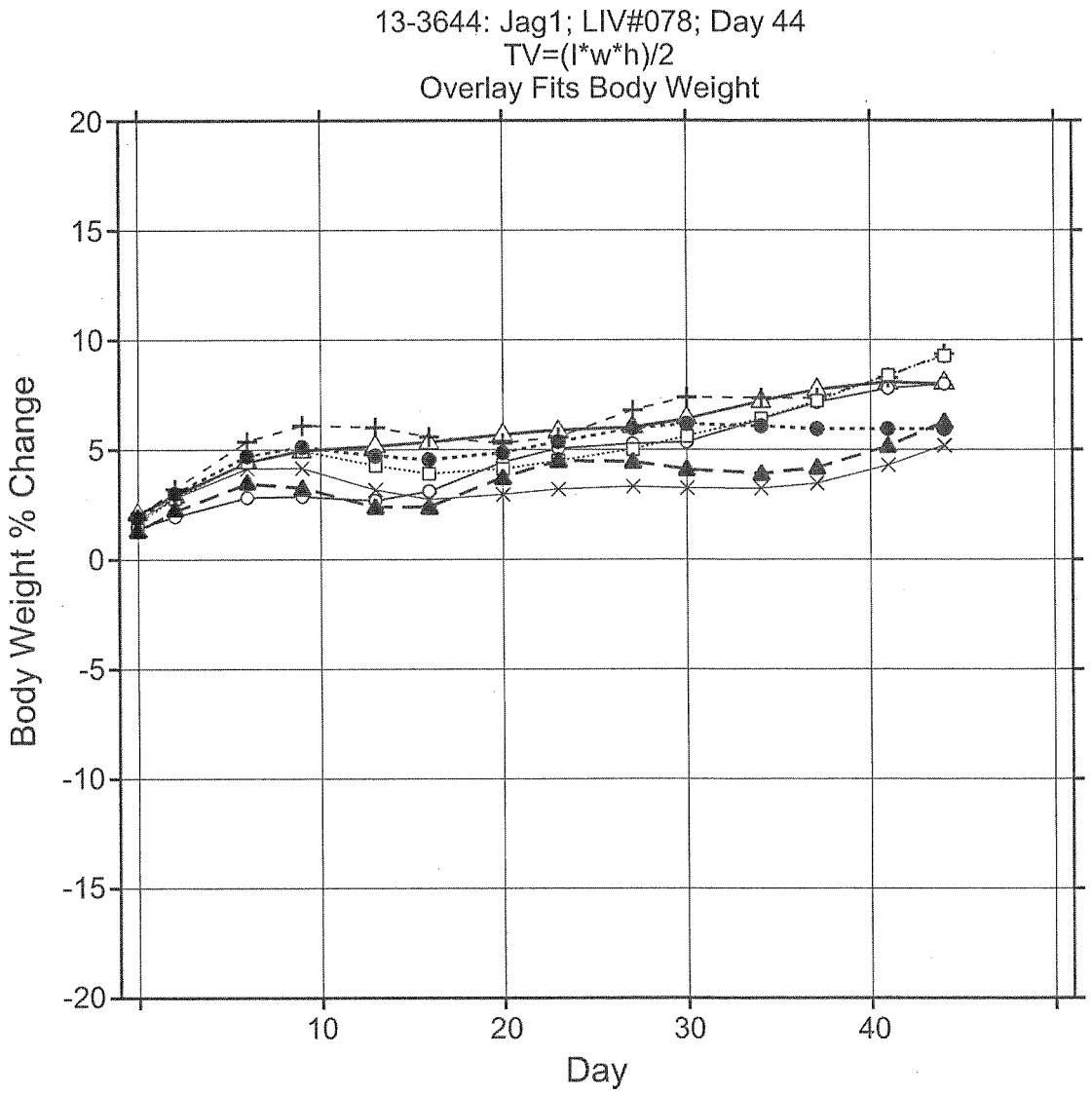


FIG. 21A

#	Group Name	Dose (mg/kg)	% BW Last Day	Max % BW	Max % BW Day	AUC/Day (Lower, Upper)
1	Anti-Ragweed (Isotype Control)	10	7.48	8.69	41	213 (129,338)
2	Anti-Jag1 A-1-S101T	3	7.84	8.71	37	77 (26, 137)
3	Anti-Jag1 A-1-S101T	10	9.53	9.53	44	15 (-24, 64)
4	Anti-Jag1 A-1-S101T	30	5.08	5.5	2	-11 (-47, 24)
5	Anti-Jag1 A-1-S101T (1x Every 3 Weeks)	30	8.72	9.13	41	33 (-9, 87)
6	Anti-Jag1 A-1-DANG (Effectorless)	10	5.94	7.45	37	-10 (-52, 36)
7	Anti-Jag1 A-1	10	6.29	6.29	44	-13 (52, 25)

FIG. 21B

CDR Sequences According to Kabat Definition are Underlined

Light Chain Variable Region

CDR L1 - Contact
CDR L1 - Chothia
CDR L1 - Kabat

Kabat Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
A-1 (S101T)	D	I	Q	M	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	R	A	S	Q	D	V	S	T	A	V	A	W	Y	Q	Q	K	P	G	K

CDR L2 - Contact
CDR L2 - Chothia
CDR L2 - Kabat

Kabat Number	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
A-1 (S101T)	A	P	K	L	L	I	Y	S	A	S	F	L	Y	S	G	V	P	S	R	F	S	G	S	G	S	G	T	D	F	T	L	T	I	S	S	L	Q	P	E	D	F	A

CDR L3 - Contact
CDR L3 - Chothia
CDR L3 - Kabat

Kabat Number	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107
A-1 (S101T)	T	Y	Y	C	Q	Q	Y	Y	T	T	A	T	T	F	G	Q	G	T	K	V	E	I	K

SEQ ID NO: 34

FIG. 22A

Heavy Chain Variable Region

CDR H1 - Contact
CDR H1 - Chothia
CDR H1 - Kabat

Kabat Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
A-1 (S101T)	E	V	Q	L	V	E	S	G	G	G	L	V	Q	P	G	G	S	L	R	L	S	C	A	A	S	G	F	T	F	S	N	Y	G	I	H	W	V	R	Q	A	P	G

CDR H2 - Contact
CDR H2 - Chothia
CDR H2 - Kabat

Kabat Number	43	44	45	46	47	48	49	50	51	52	52a	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	82a
A-1 (S101T)	K	G	L	E	W	V	G	W	I	T	P	D	G	G	Y	T	D	Y	A	D	S	V	K	G	R	F	T	I	S	A	D	T	S	K	N	T	A	Y	L	Q	M	N

CDR H3 - Contact
CDR H3 - Chothia
CDR H3 - Kabat

Kabat Number	82b	82c	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	101	102	103	104	105	106	107	108	109	110	111	112	113
A-1 (S101T)	S	L	R	A	E	D	T	A	V	Y	Y	C	A	R	A	G	T	L	F	A	Y	W	G	Q	G	T	L	V	T	V	S	S

SEQ ID NO: 33

FIG. 22B

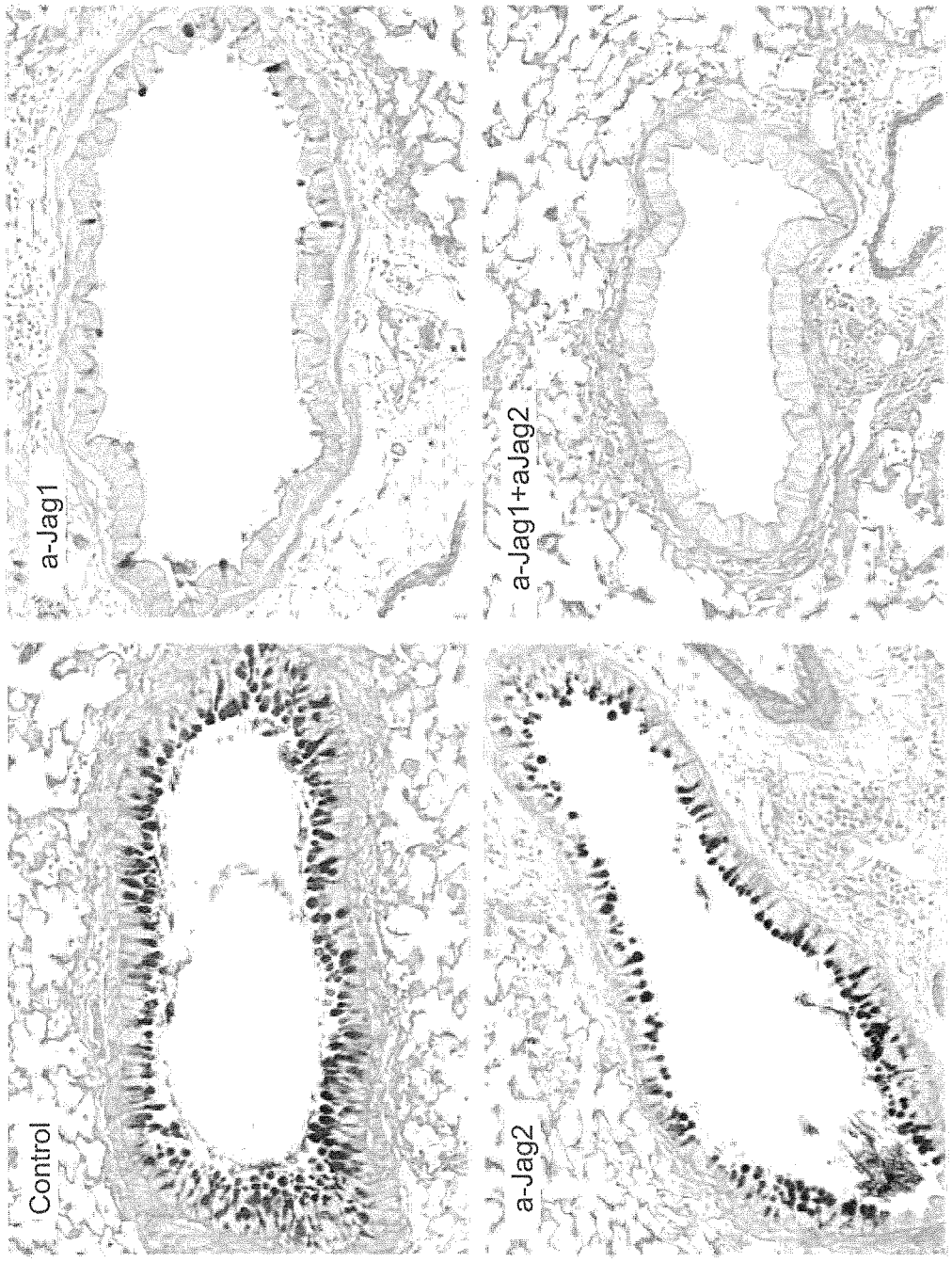


FIG. 23A

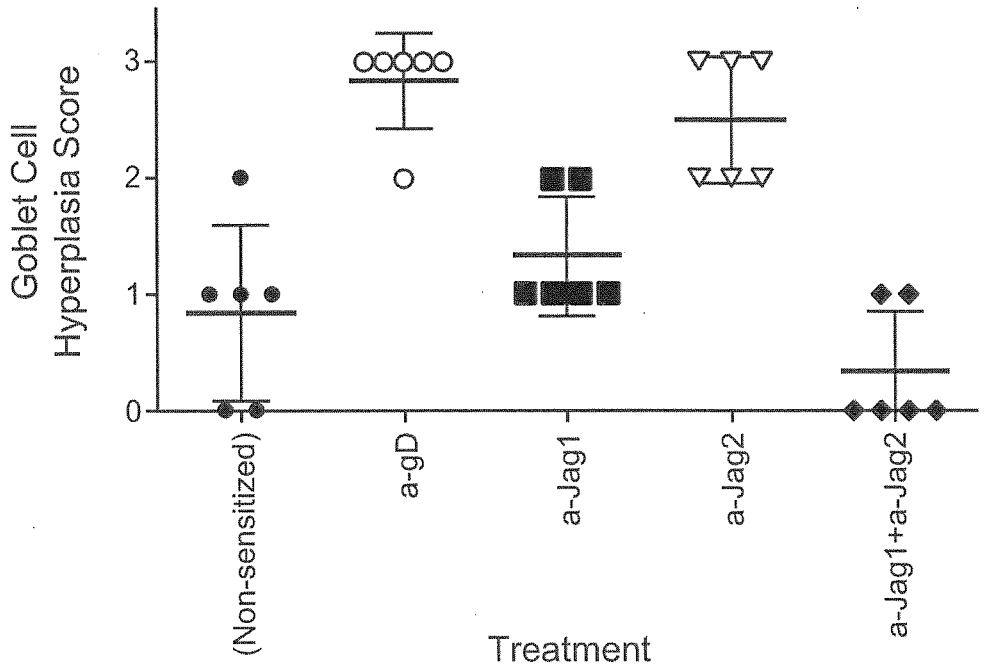


FIG. 23B

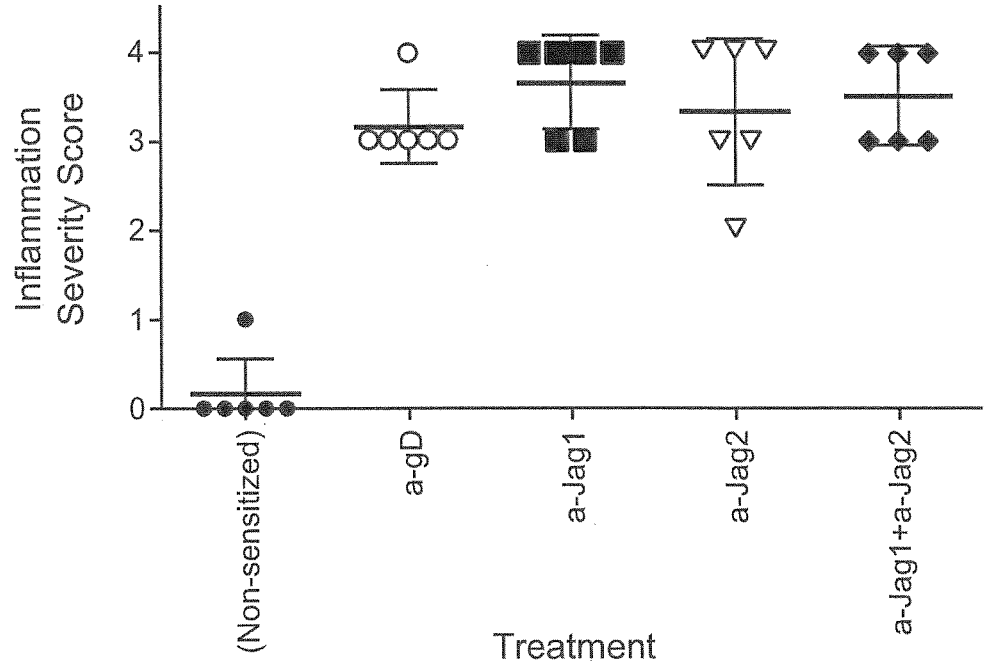
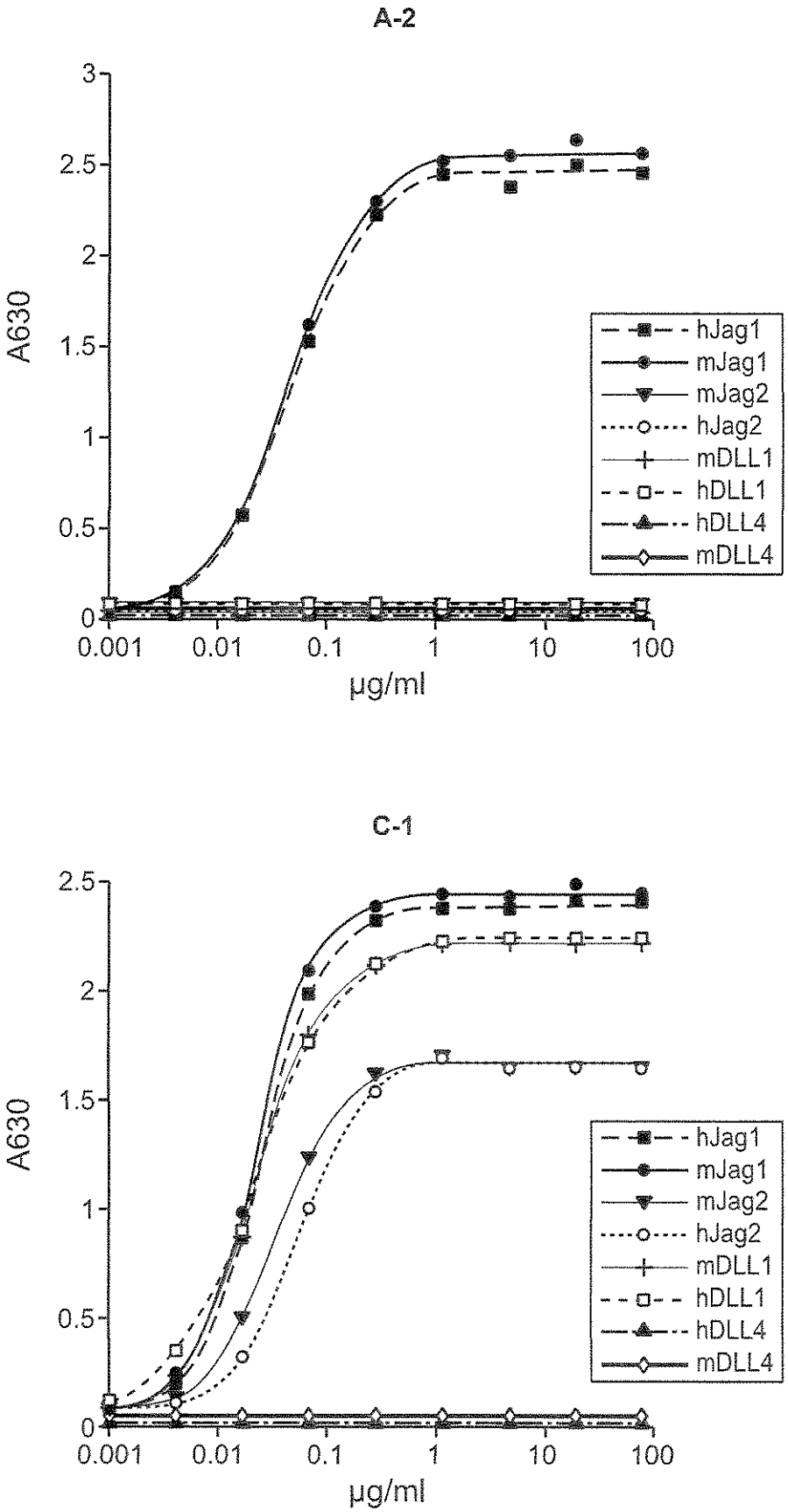


FIG. 23C

FIG. 24


A-2
A630
3
2.5
2
1.5
1
0.5
0
0.001
0.01
0.1
1
10
100
µg/ml
hJag1
mJag1
mJag2
hJag2
mDLL1
hDLL1
hDLL4
mDLL4
C-1
A630
2.5
2
1.5
1
0.5
0
0.001
0.01
0.1
1
10
100
µg/ml
hJag1
mJag1
mJag2
hJag2
mDLL1
hDLL1
hDLL4
mDLL4

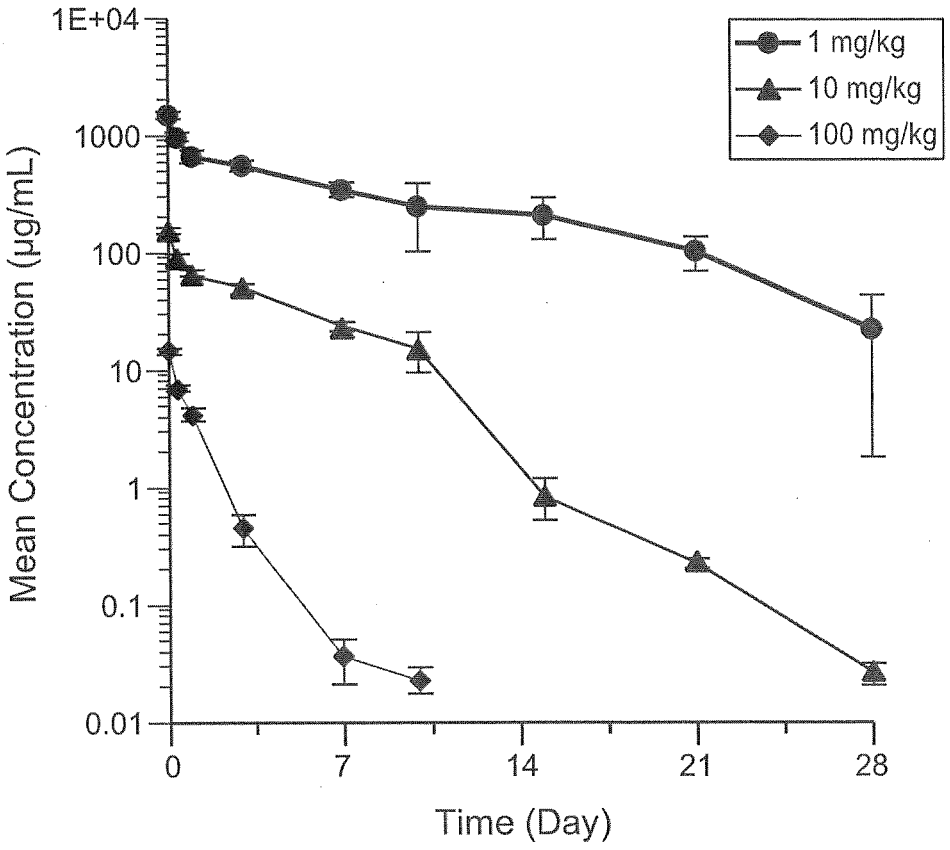

1E+04
1000
100
10
1
0.1
0.01
Mean Concentration (µg/mL)
0
7
14
21
28
Time (Day)
1 mg/kg
10 mg/kg
100 mg/kg

FIG. 25