

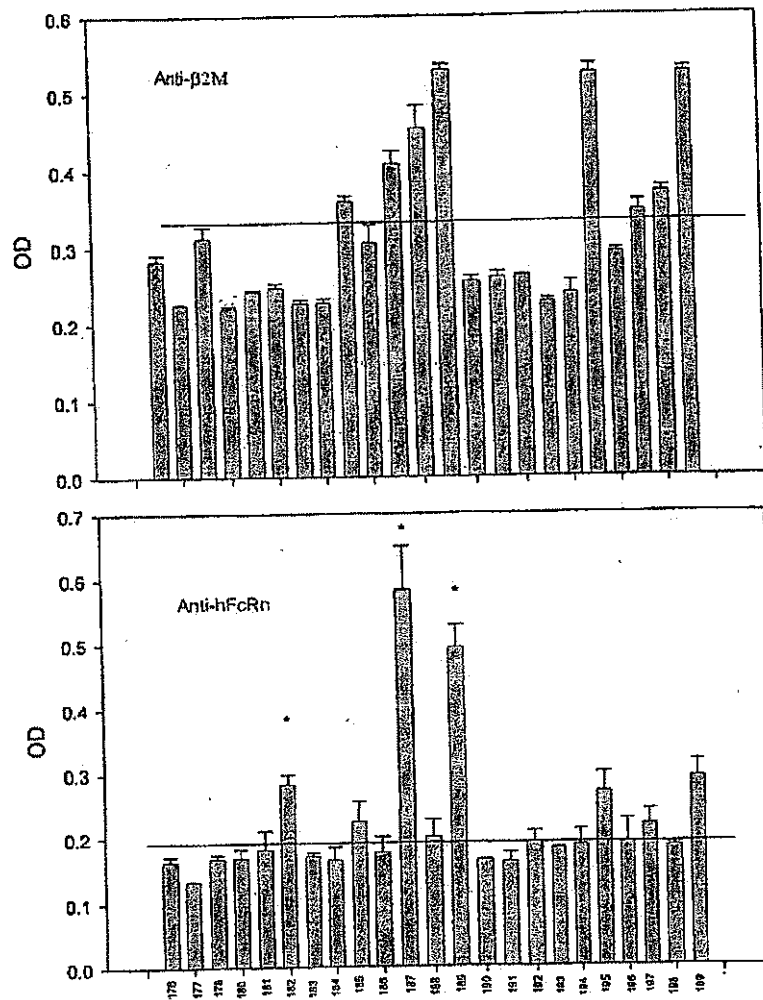


Figure 1

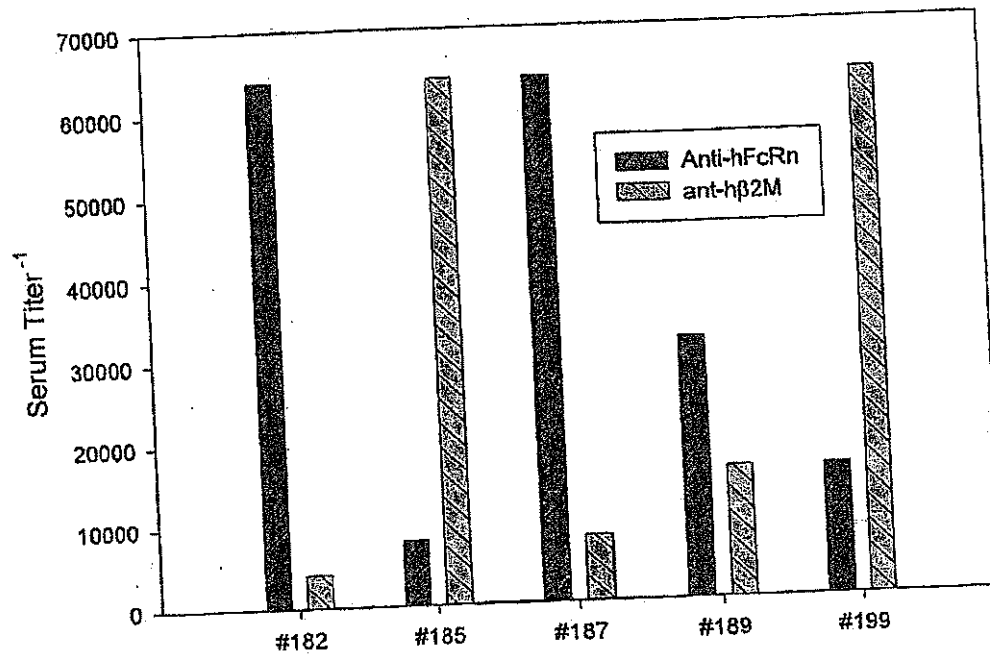


Figure 2

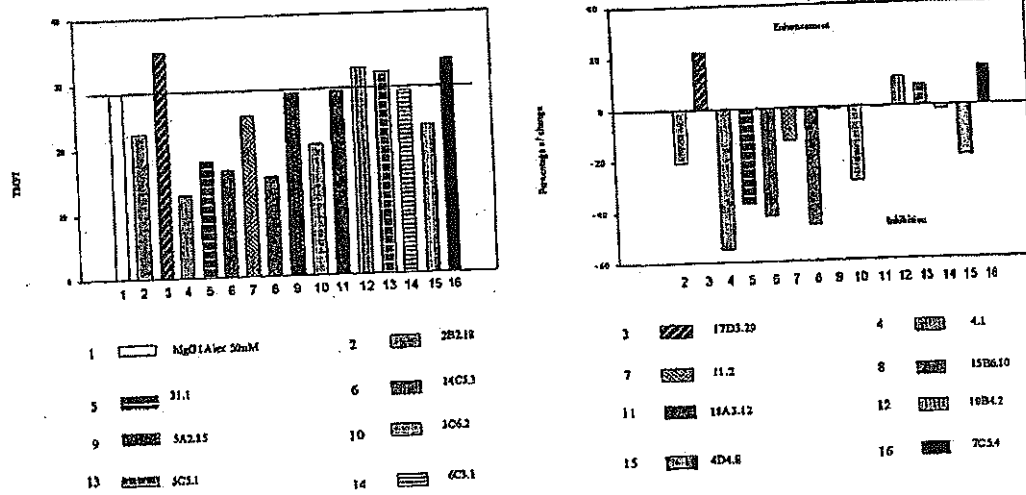


Figure 3A

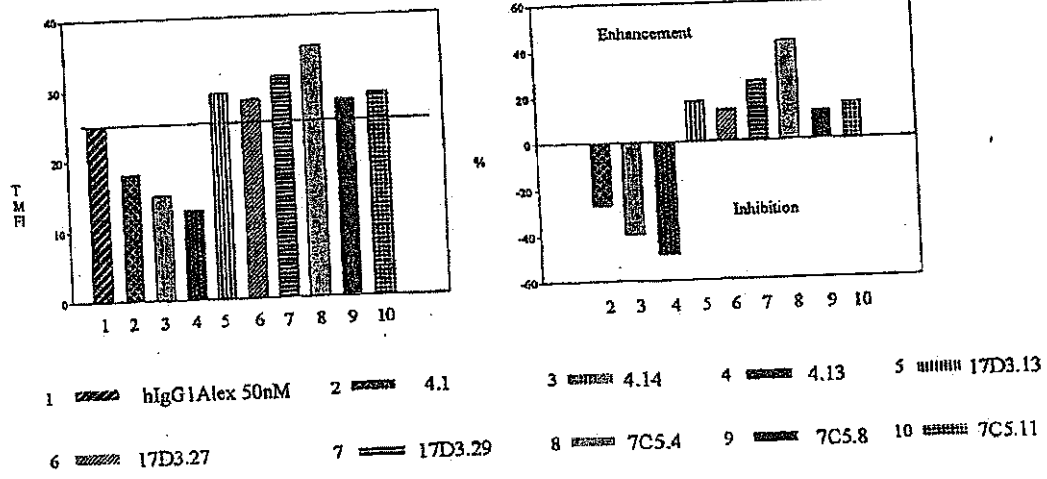
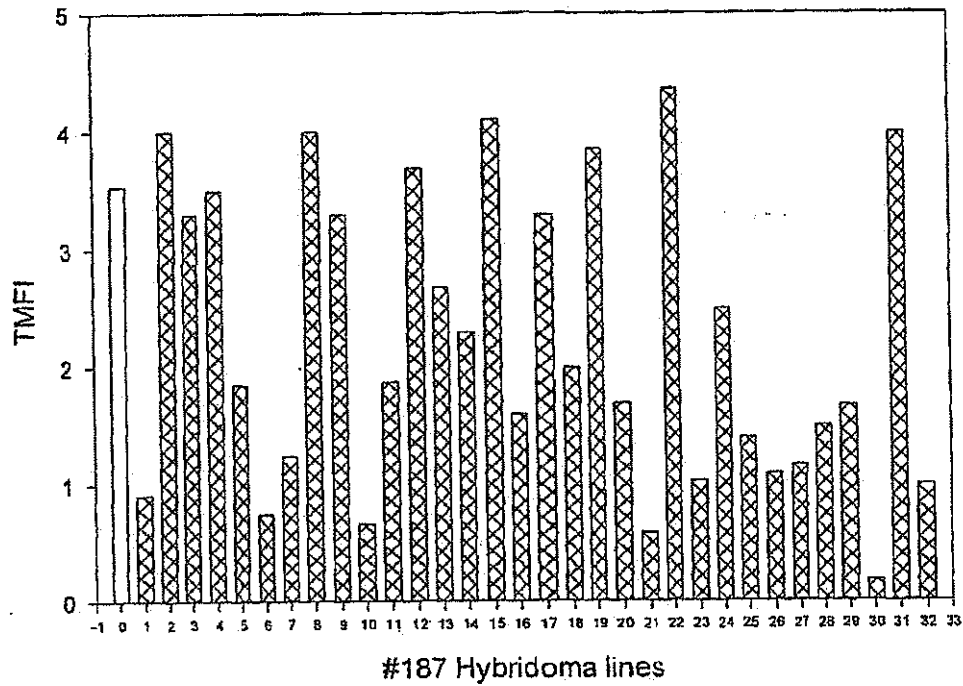


Figure 3B



- 0: TMFI of the tube containing Alexa fluor 488 labeled hlgG1 alone.
- 1: TMFI of positive control 15B6.1 (anti-hFcRn blocking mAB from #182 fusion)
- 2-4, 6-7, 9, 12-13, 15-17, 19-20, 22-28, 31-32: anti-hFcRn mAB sups.
- 5, 8, 10, 11, 14, 18, 21, 29 and 30: anti-human β -2M mAB sups.

Figure 4A

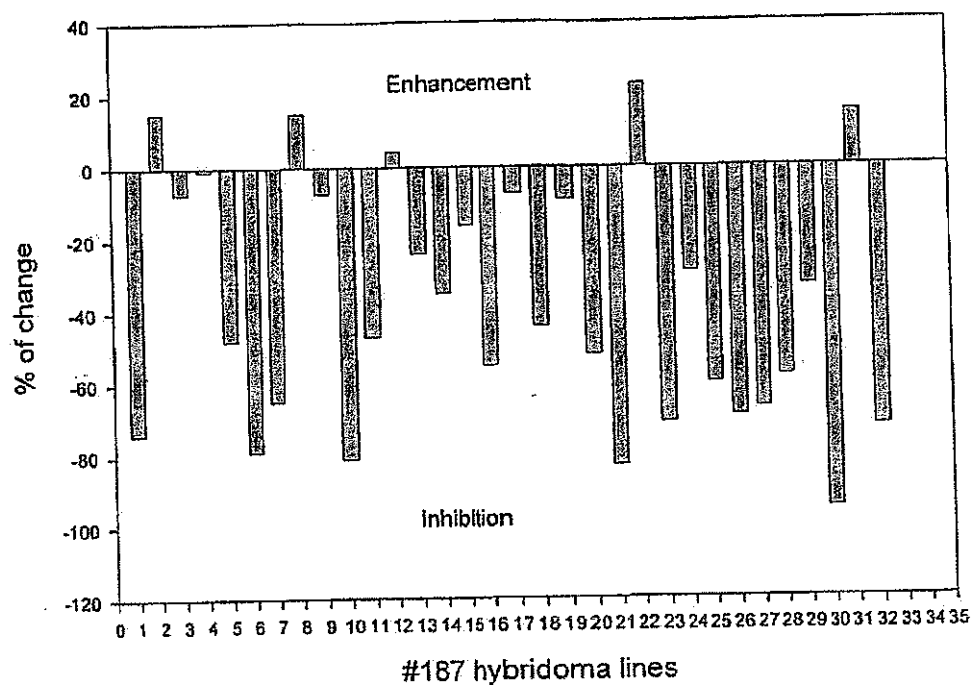


Figure 4B

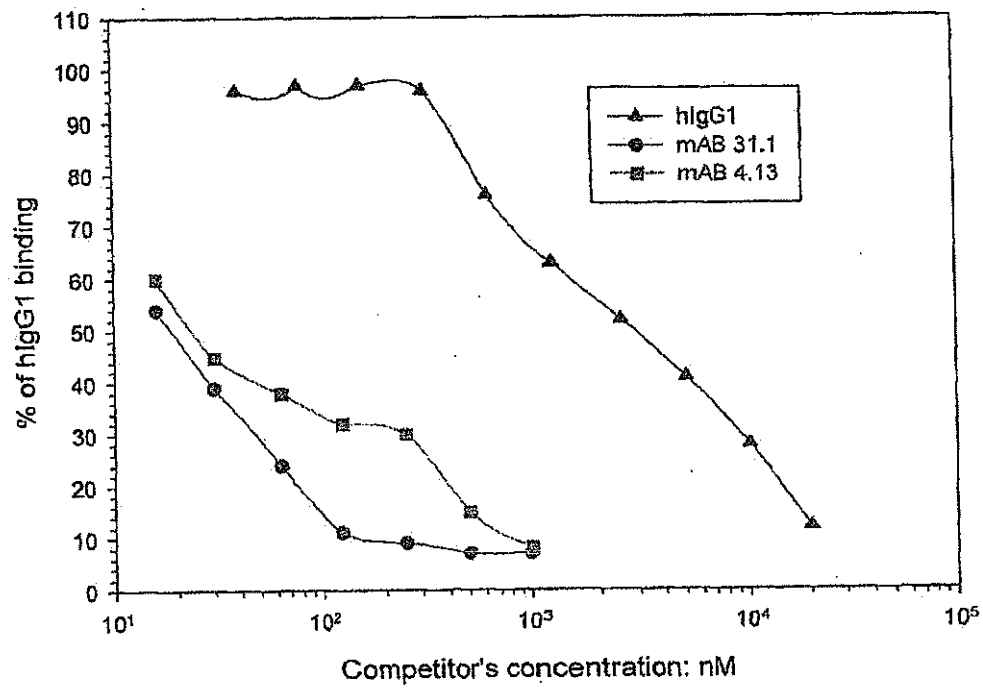


Figure 5A

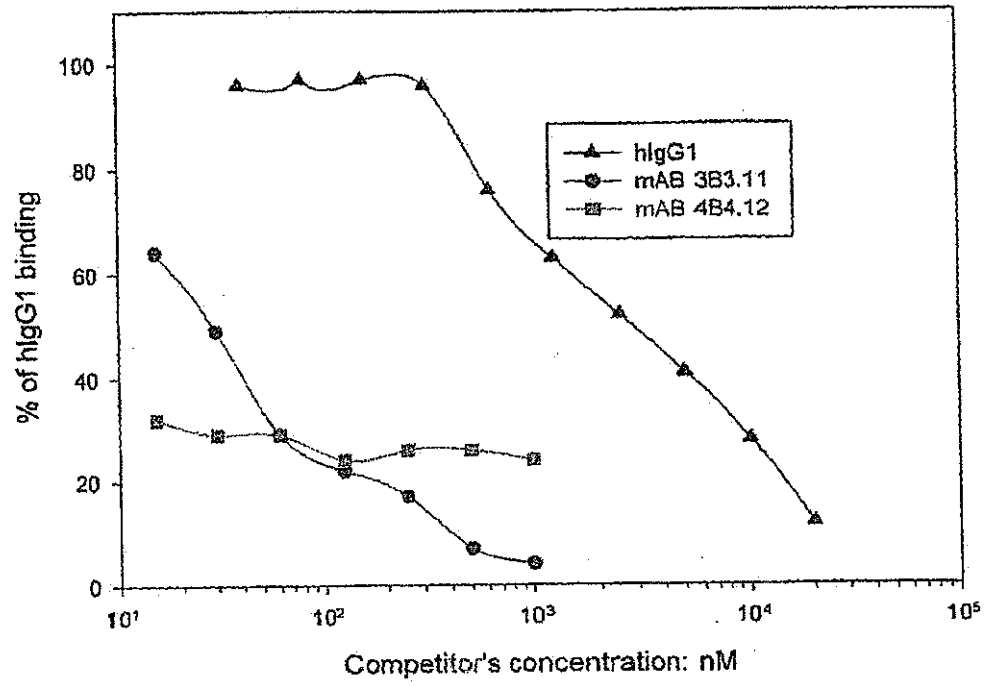
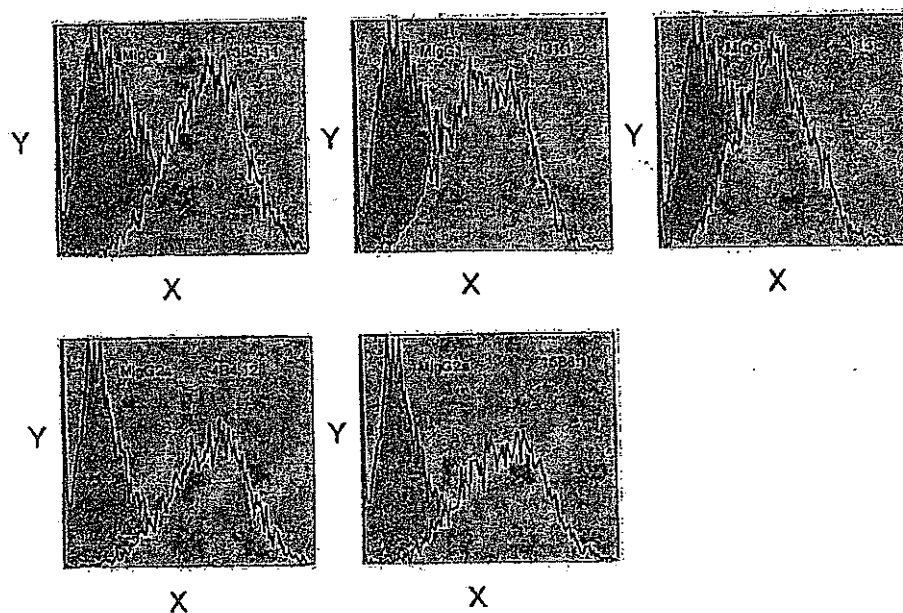


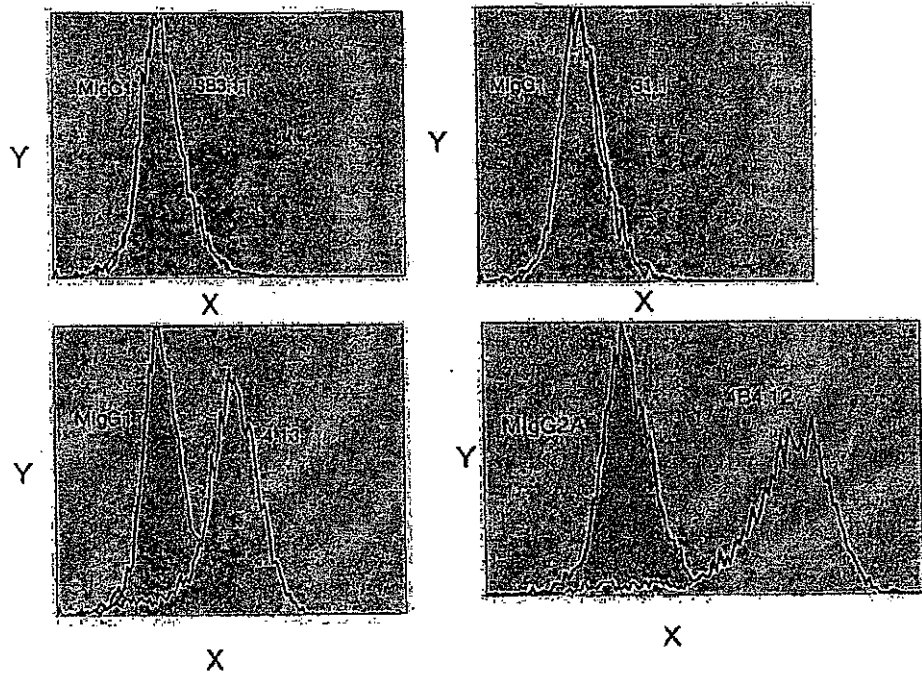
Figure 5B



X is fluorescent intensity

Y is cell number

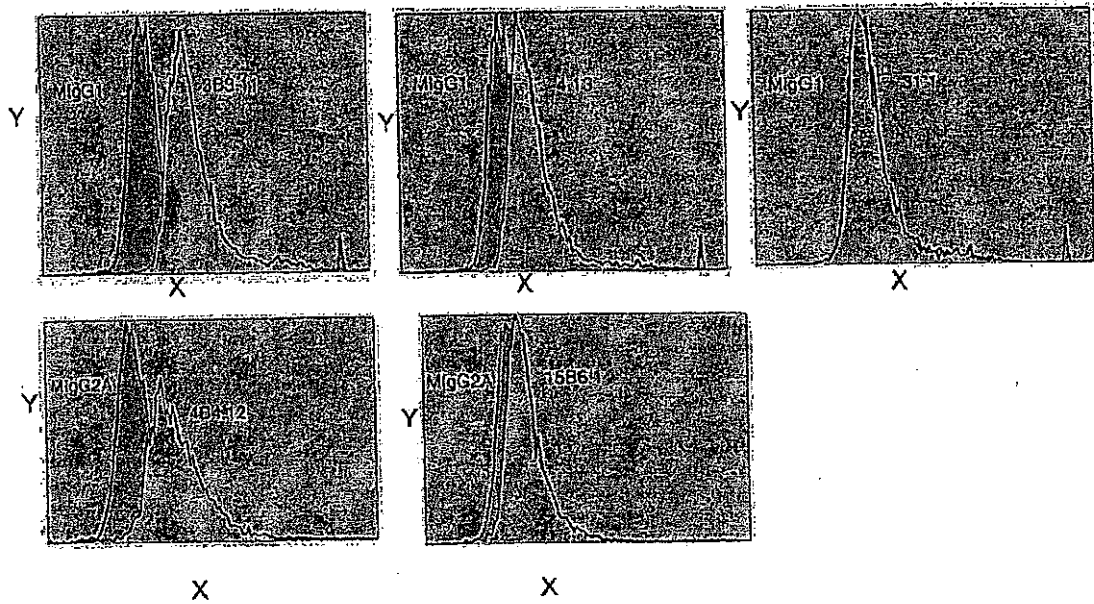
Figure 6



X is fluorescent intensity

Y is cell number

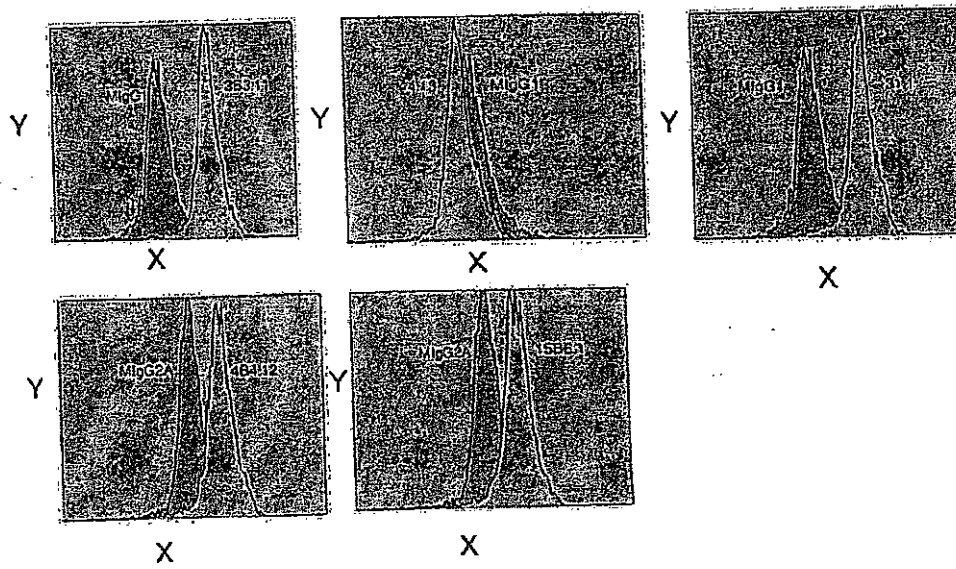
Figure 7



X is fluorescent intensity

Y is cell number

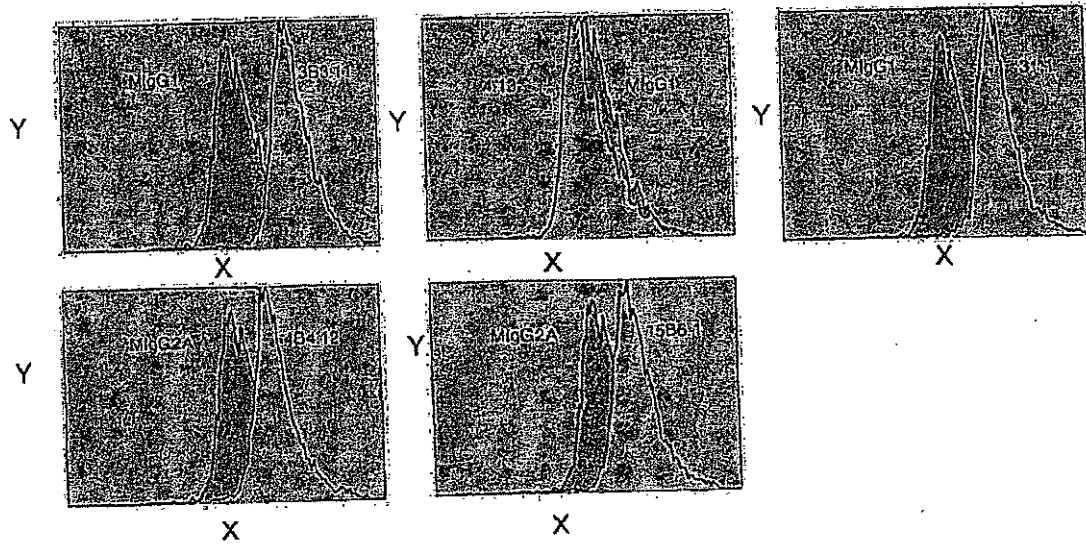
Figure 8



X is fluorescent intensity

Y is cell number

Figure 9



X is fluorescent intensity

Y is cell number

Figure 10

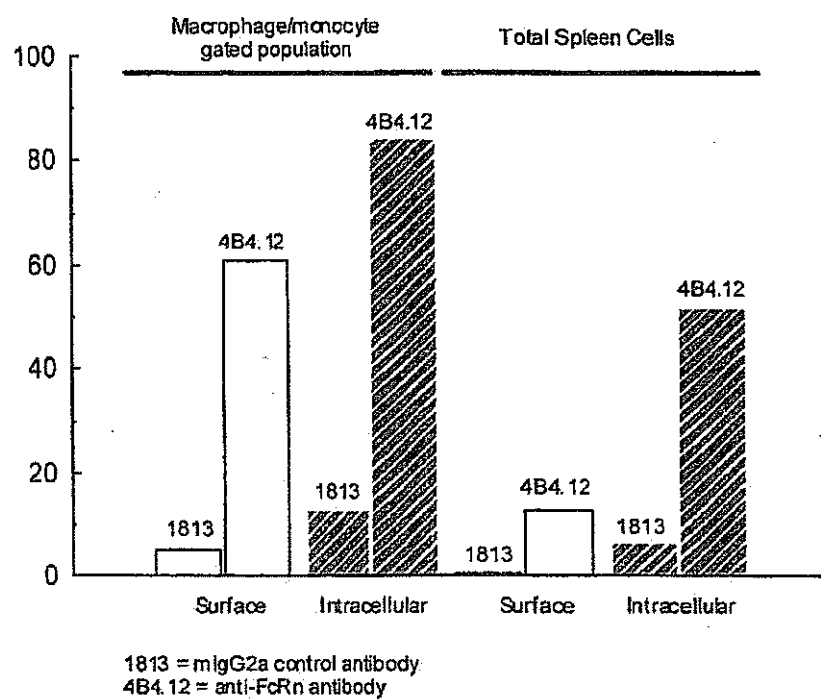


Figure 11A

Figure 11B

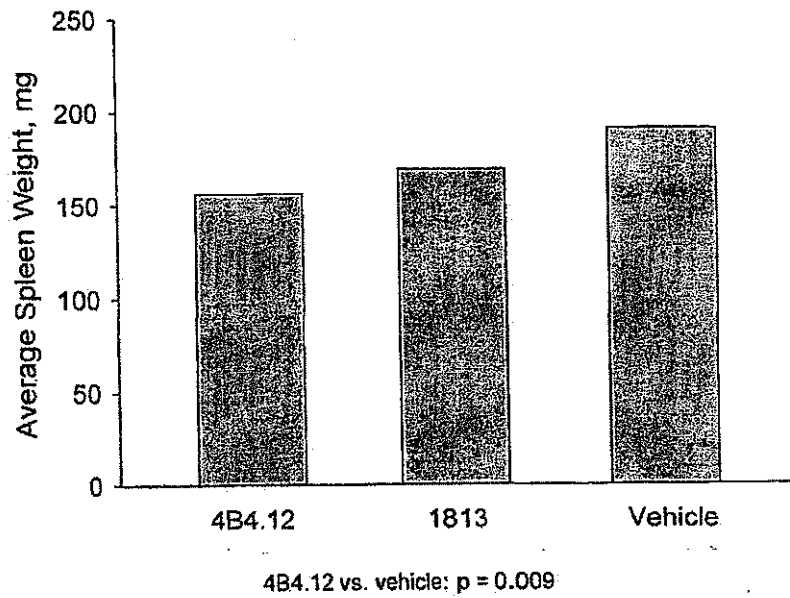


Figure 12A

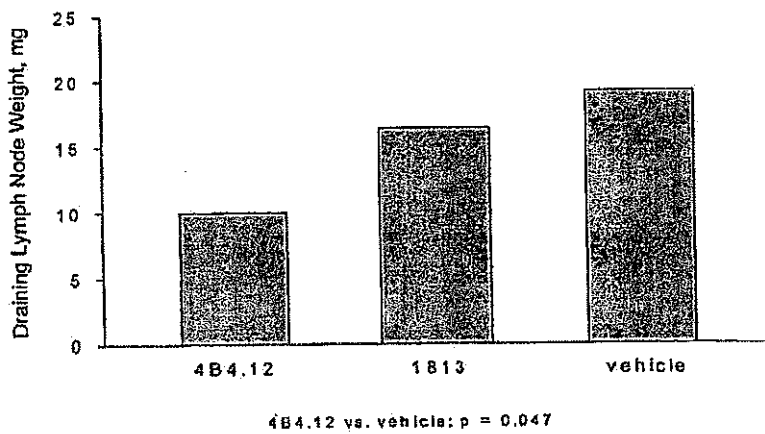


Figure 12B

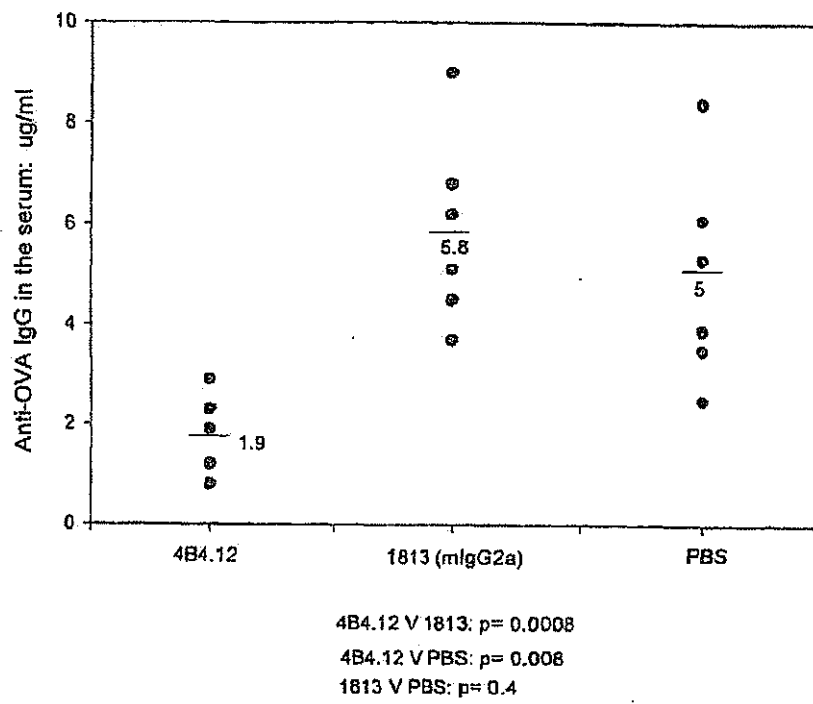


Figure 13

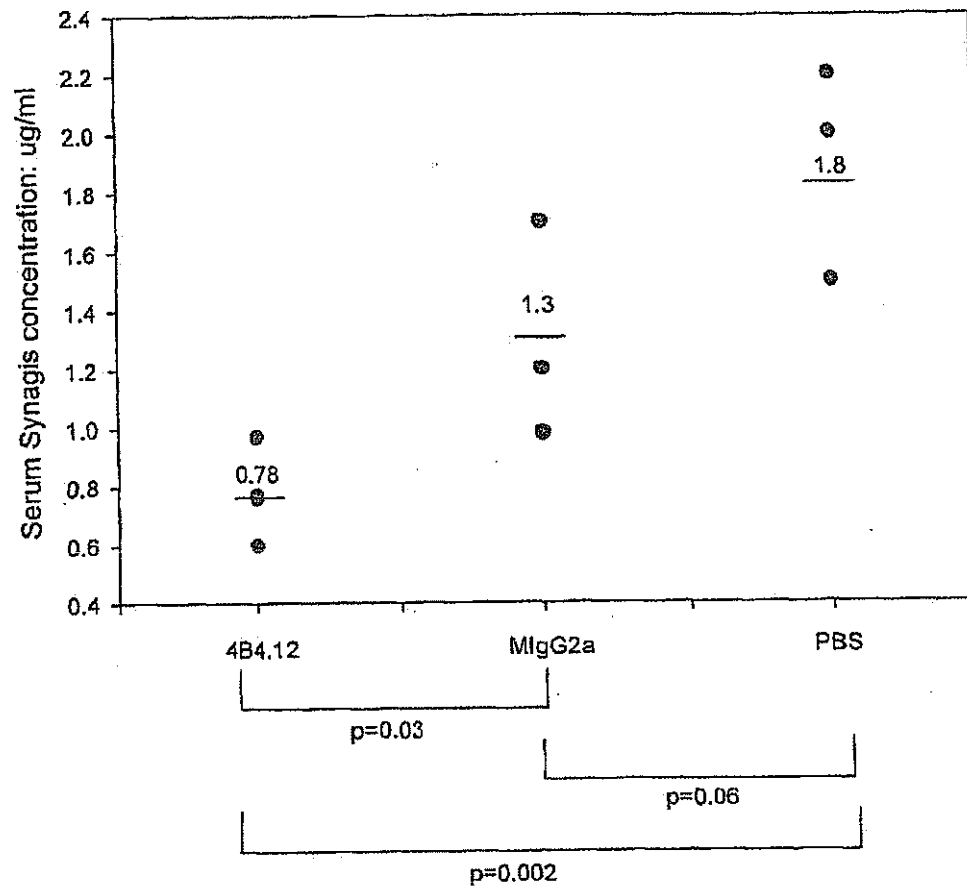


Figure 14

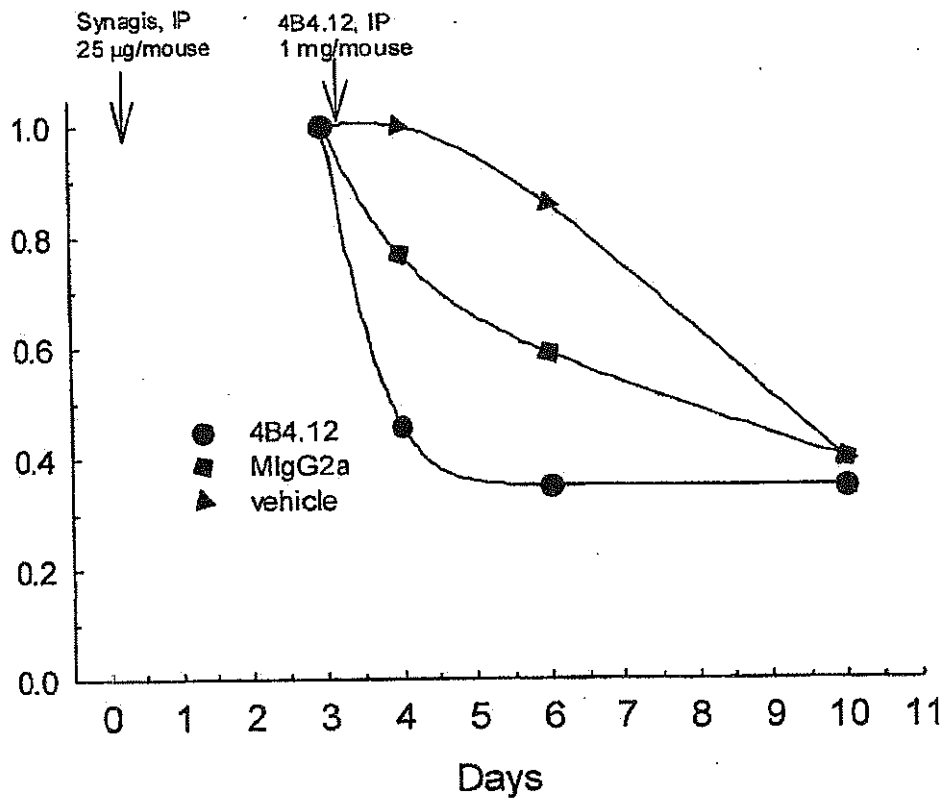
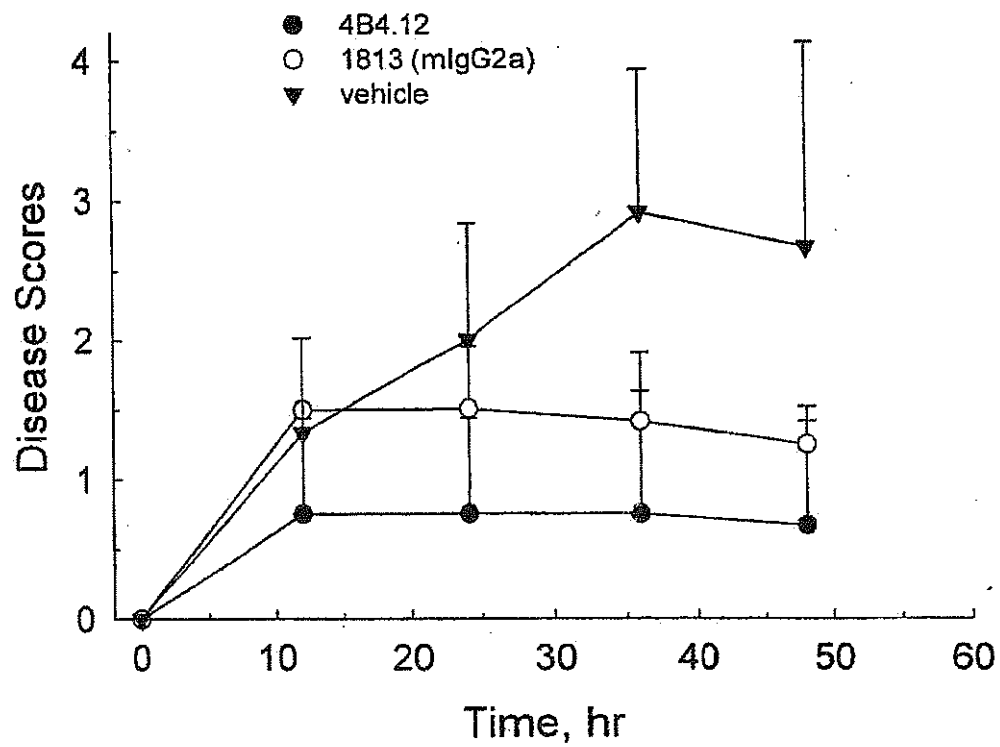


Figure 15



Student's T test:

4B4.12 vs. 1813: $p = 0.00001$

4B4.12 vs. vehicle: $p = 0.006$

1813 vs. vehicle: $p = 0.07$

Figure 16

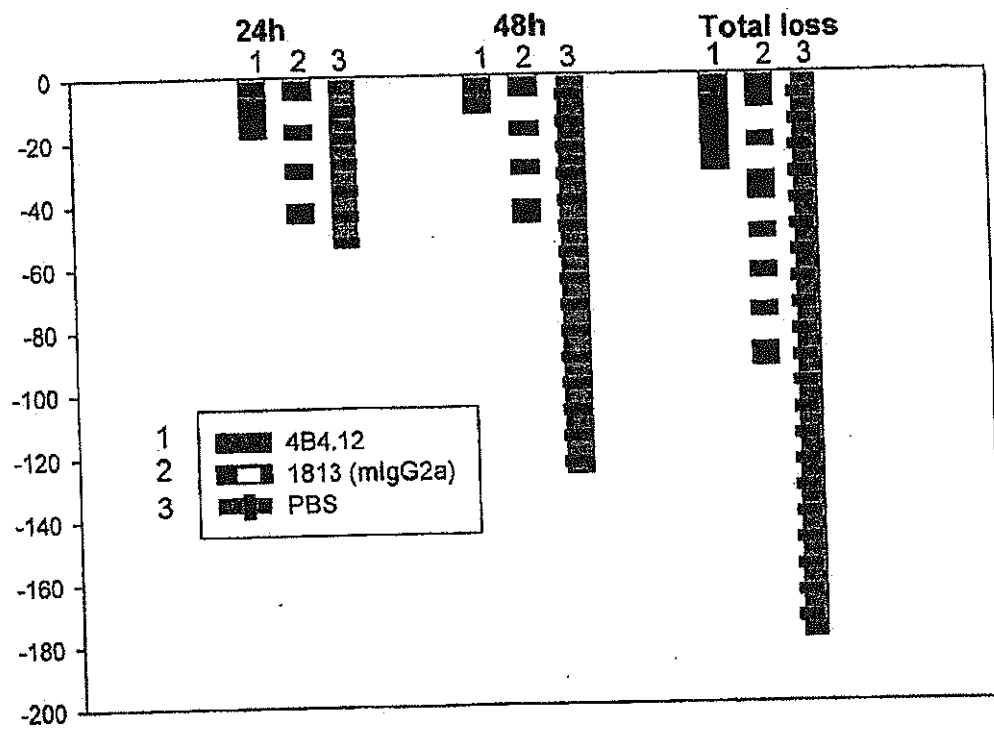
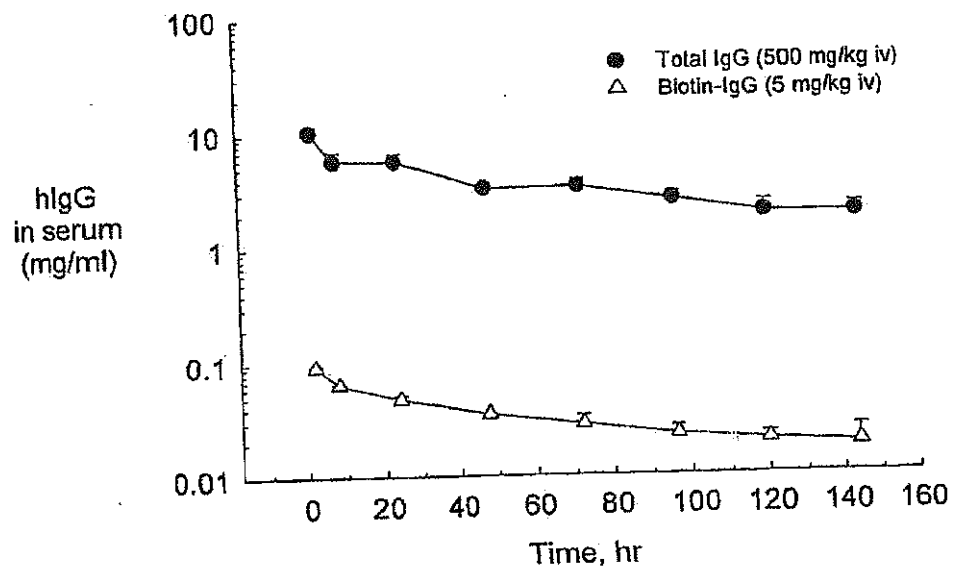


Figure 17

Intravenous Human IgG in Tg32B Mice
(hFcRn +/+, h β 2m +/+, mFcRn -/-, m β 2m -/-)



	$t_{1/2}$ (hr)	C _{max} (mg/ml)	AUC (hr*mg/ml)
Total IgG	78	10.41	739
Biotin IgG	87	0.093	7.19

Figure 18

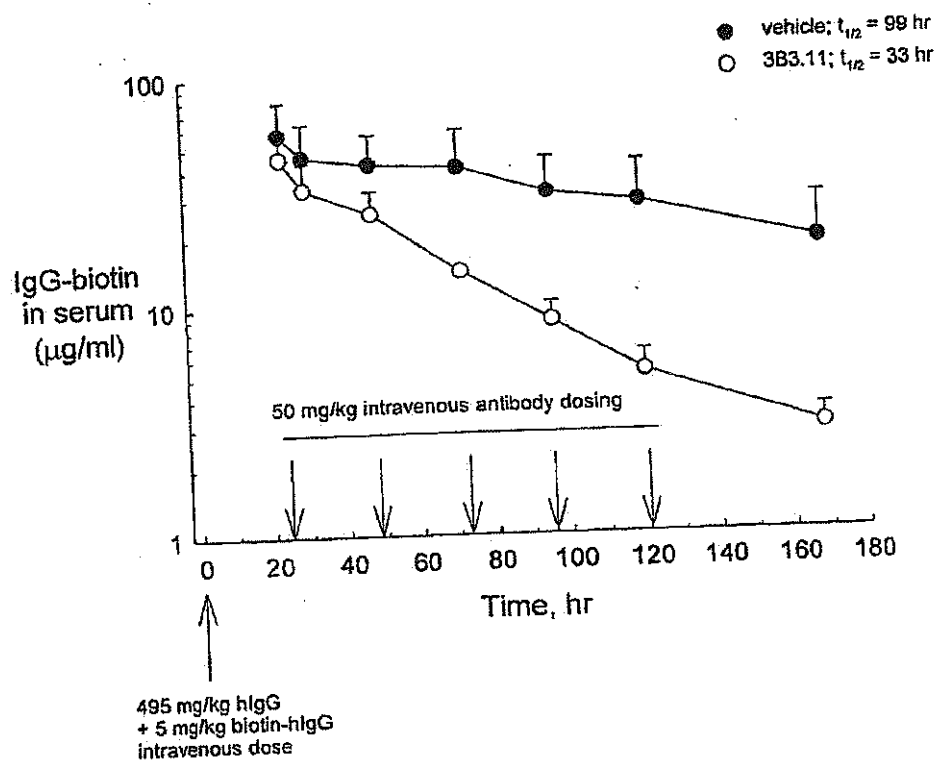


Figure 19

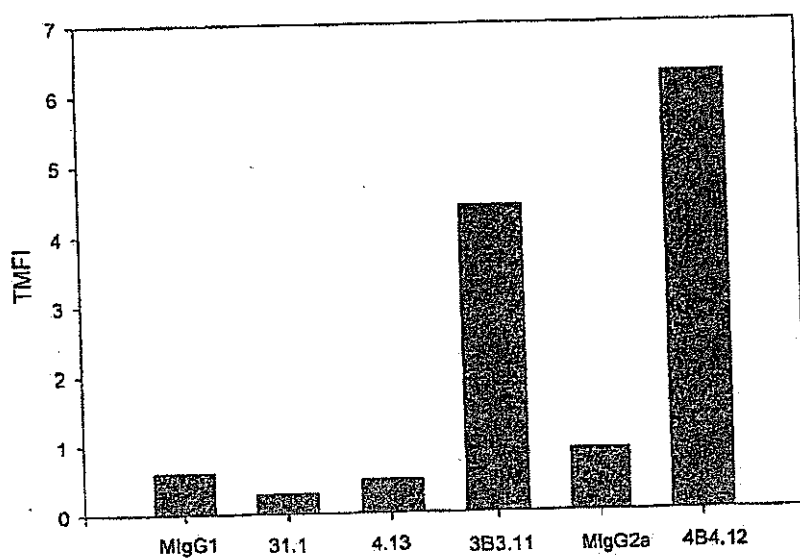


Figure 20

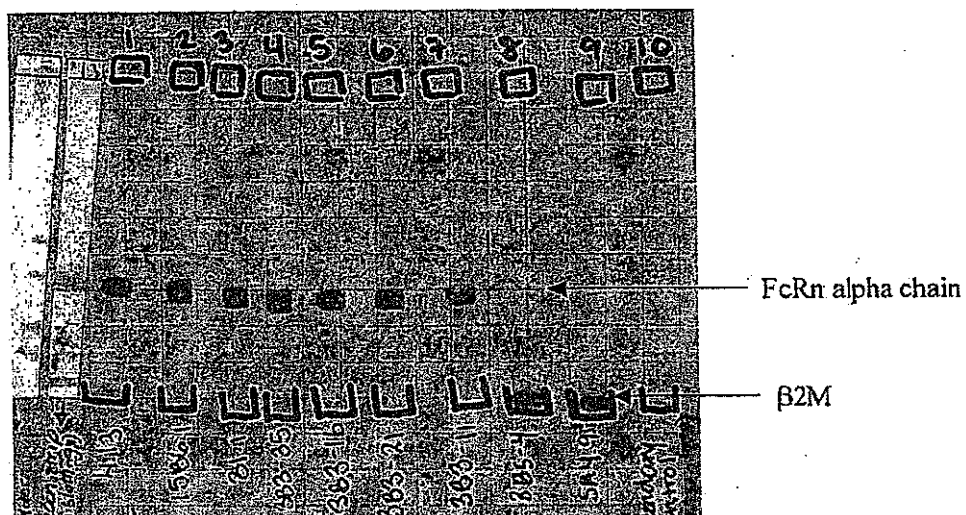


Figure 21

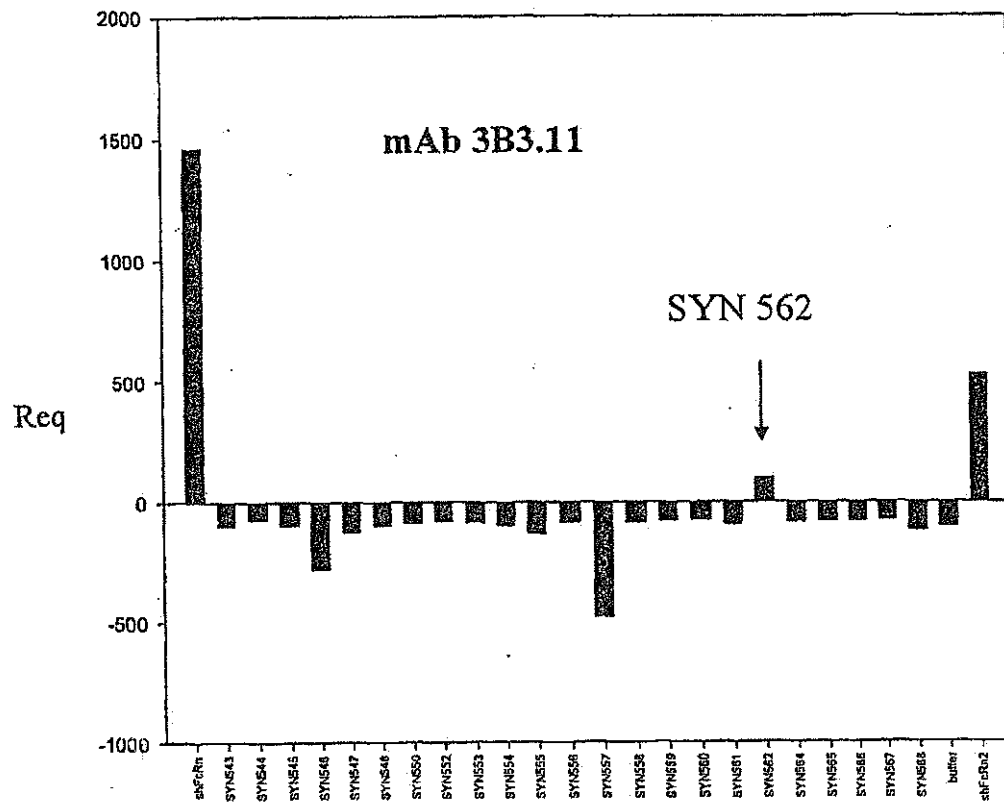


Figure 22A

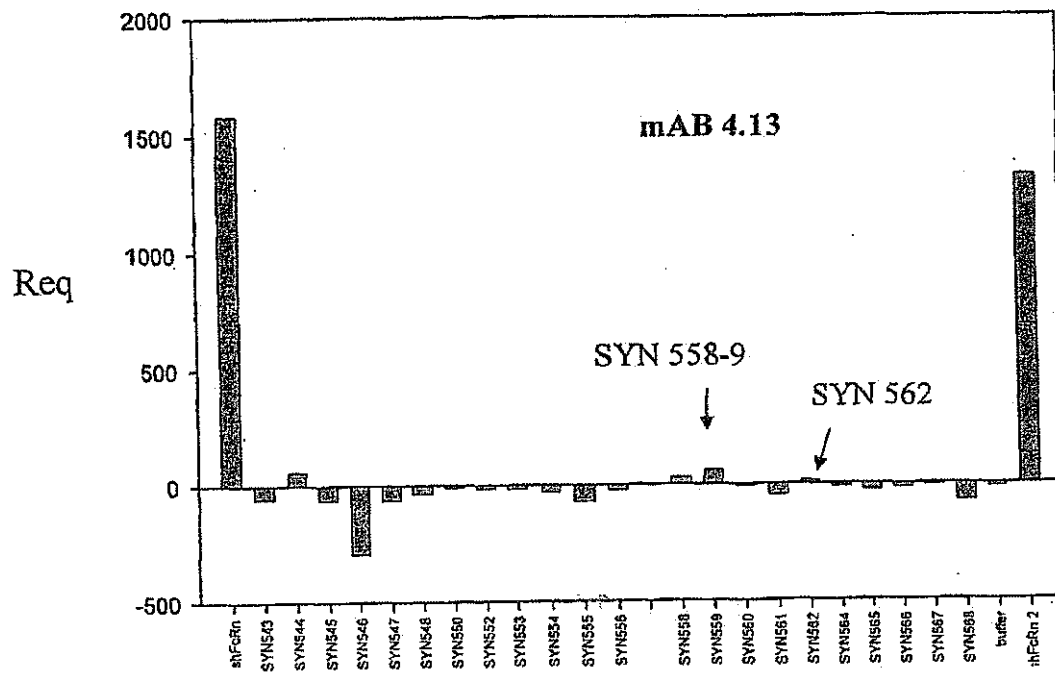


Figure 22B

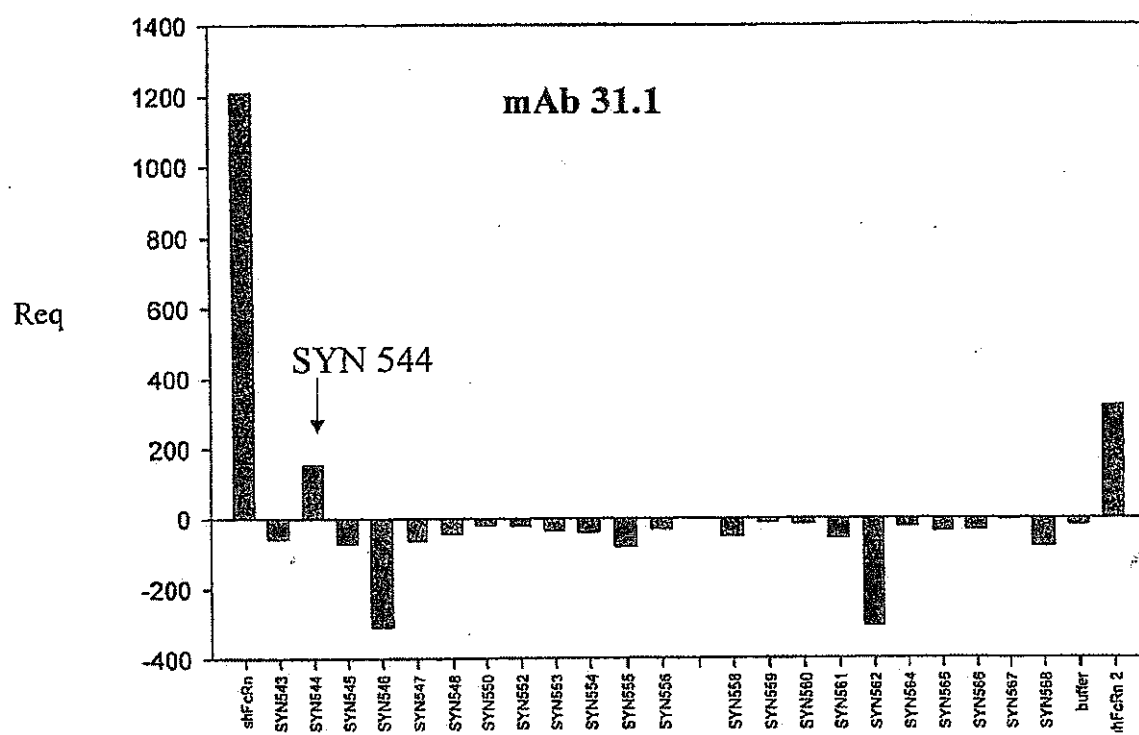


Figure 22C

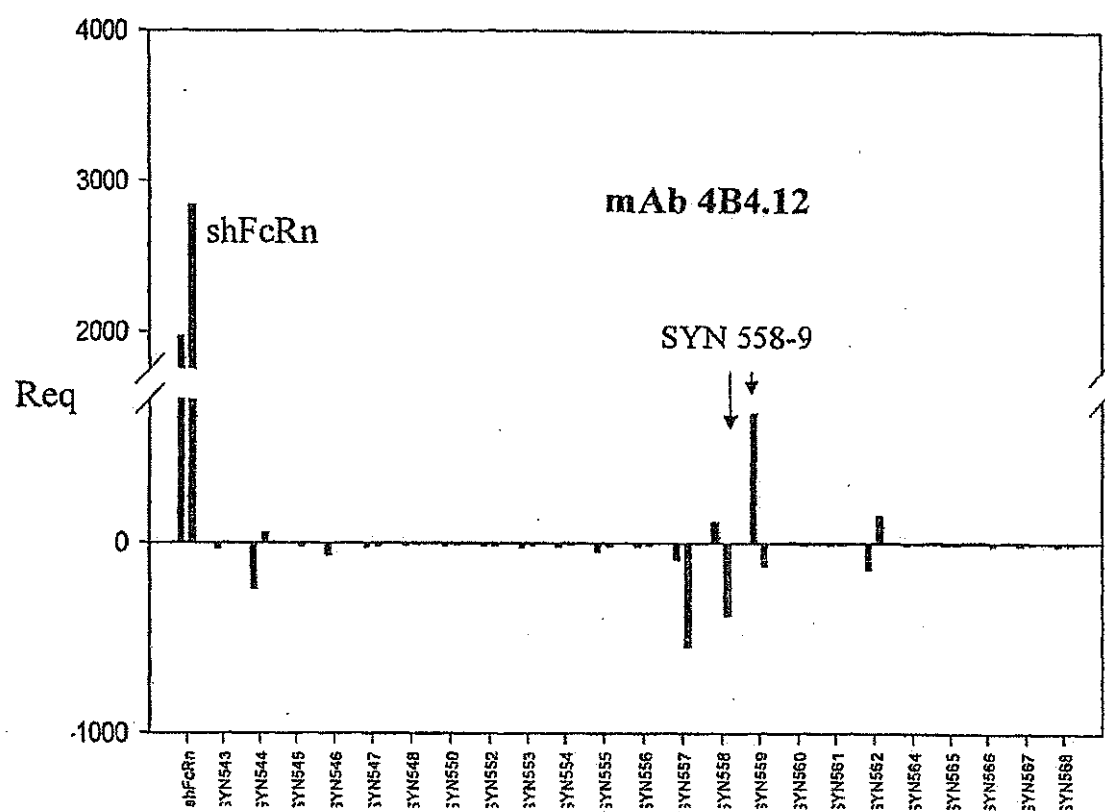


Figure 22D

FIGURE 23

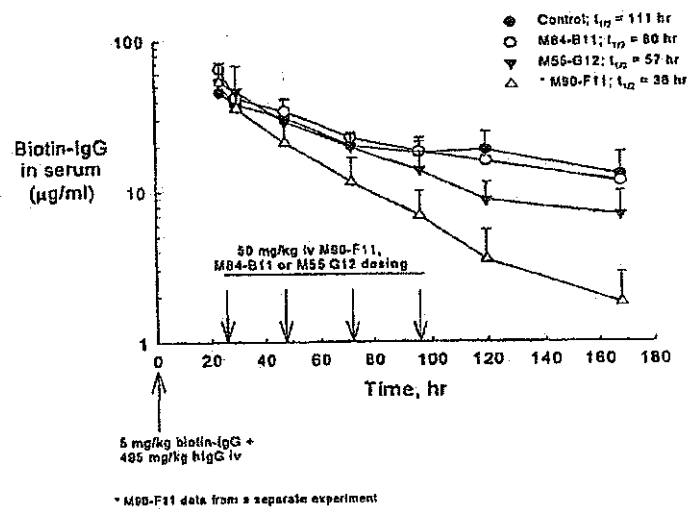


FIGURE 24

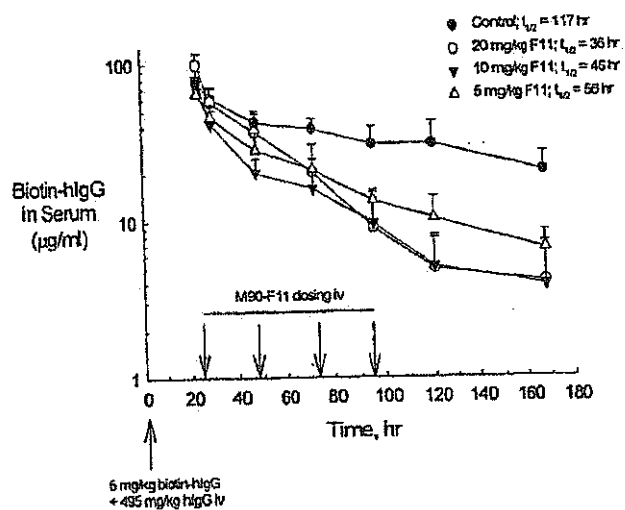


FIGURE 25

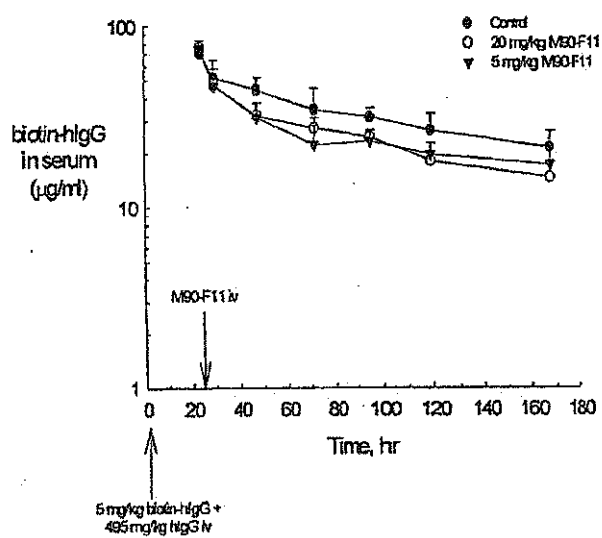


FIGURE 26

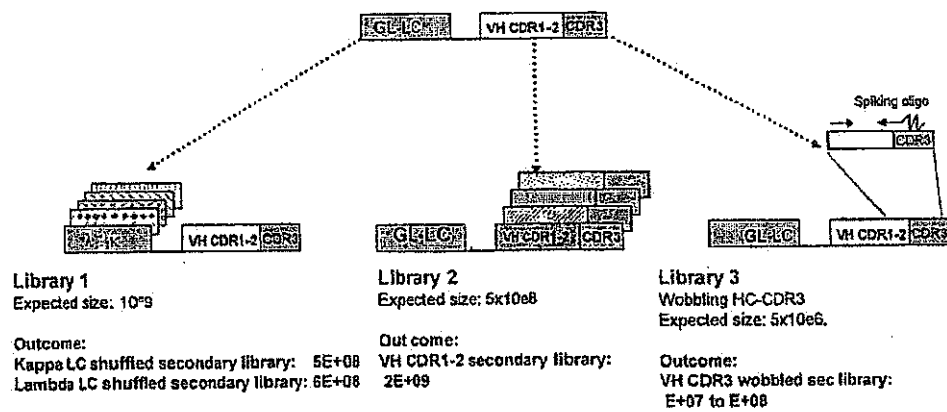


FIGURE 27

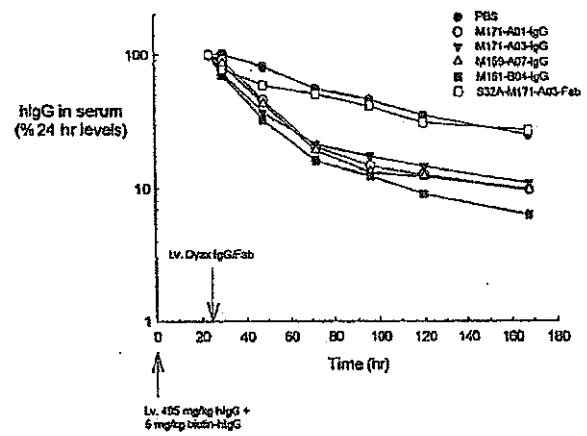
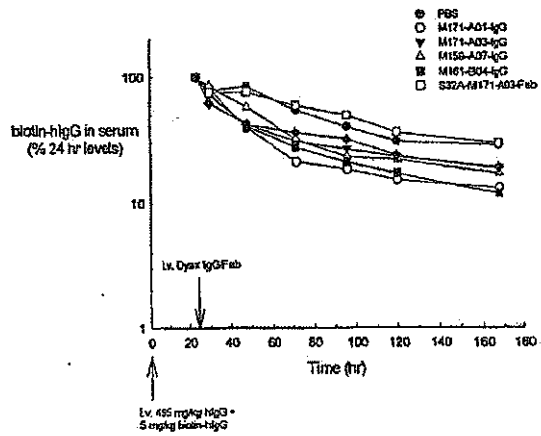


FIGURE 28

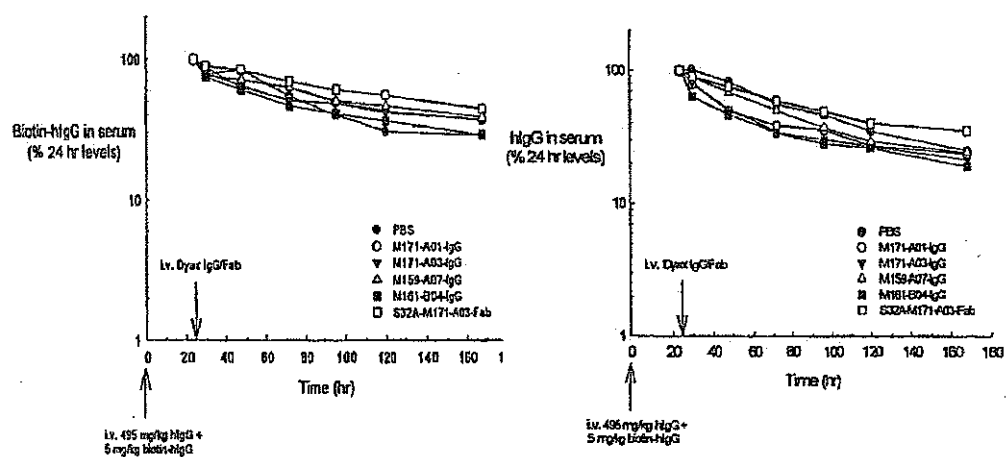


FIGURE 29

532A-M0090-F11 (532A-R0004-E04)

LIGHT: V:VL2_2b2; J:JL1

	FR1-L	CDR1-L	FR2-L	CDR2-L
532A-M0090-F11:	QSVLTQPASVSGSPGQSITISC	TGTGSDVGSYNLVS	WYQKYPGKAPKLIY	GDSQRPS
GERMLINE:	QSALTQPASVSGSPGQSITISC	TGTSSDVGSYNLVS	WYQQHPGKAPKLMY	EVSKRPS

	FR3-L	CDR3-L	FR4-L
532A-M0090-F11:	GLSSRFSGSKSGNSASLTISGLQAEDEADYYCC	SYAGSGIYYV	FGSGTKVTVL
GERMLINE:	GVSNRFSGSKSGNTASLTISGLQAEDEADYYCC	SYAGSSTFYV	FGTGTKVTVL

532A-M0090-F11 (SEQ ID NO: 177);
 GERMLINE (SEQ ID NO: 178)

 LC-lambda1

532A-M0090-F11-C
 SPKANPTVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKADGSPVKAGVETTKPSKQSNKYAASSYL

GERMLINE-C:
 GPKANPTVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKADGSPVKAGVETTKPSKQSNKYAASSYL

532A-M0090-F11-C SLTPEQWKSHRSYSCQVTHEGSTVEKTVAPAECS (SEQ ID NO: 179)
 GERMLINE-C: SLTPEQWKSHRSYSCQVTHEGSTVEKTVAPTECS (SEQ ID NO: 180)

 HEAVY: V:VH3-23; J:JH4

	FR1-H	CDR1-H	FR2-H	CDR2-H
532A-M0090-F11:	EVQLLESGGGLVQPGGSLRLSCAASGFTFS	EYAMG	WVRQAPGKGLEWVS	
SIGSSGGQTKY				
GERMLINE:	EVQLLESGGGLVQPGGSLRLSCAASGFTFS	SYAMS	WVRQAPGKGLEWVS	
AISGSGGSTYY				

	FR3-H	CDR3-H	FR4-H
532A-M0090-F11:	ADSVKG RFTISRDN SKNTLYLQMNSLRAEDTAVYYCAR	LSTGELY	WGQGLTVTVSS
GERMLINE:	ADSVKG RFTISRDN SKNTLYLQMNSLRAEDTAVYYCAK		Y WGQGLTVTVSS

532A-M0090-F11 (SEQ ID NO: 111);
 GERMLINE (SEQ ID NO: 113)

FIGURE 30

```

• (a, z) ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
• (f) -----
• (a, z) GVHTFPAVLQSSGLYSLSSVTVFSSSLGTQTYICNVNHKPSNTKVDKK
• (f) -----
• (a, z) VEPKSCDKTHTCPFPCAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVTV
• (f) -----
• (a, z) DVSHEDPEVKFNWYVDGVEVHNAKTKFREQYNSTYRVVSVLTVLHQDW
• (f) -----
• (a, z) LNKKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVYTLPPSPREPQVYT
• (f) -----
• (a, z) LPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD
• (f) -----E-M-----
• (a, z) SDGSFFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK*
• (f) -----

```

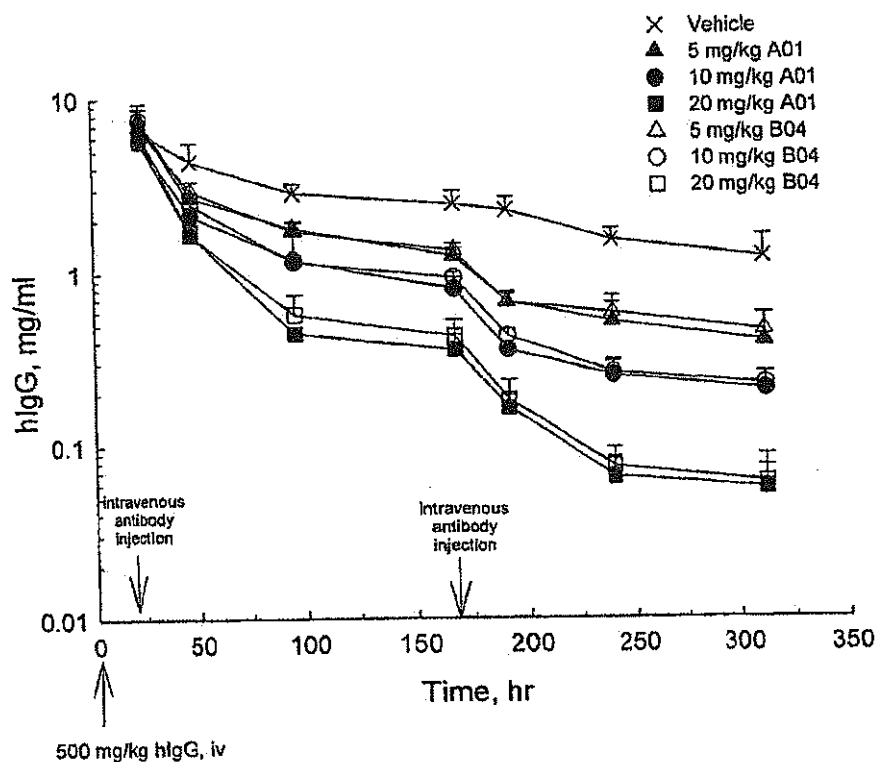
(a, z) (SEQ ID NO: 115)

(f) (SEQ ID NO: 116)

FIGURE 31

Catabolism of hlgG in Tg32B Mice

A



B

Catabolism of hlgG in Tg32B Mice

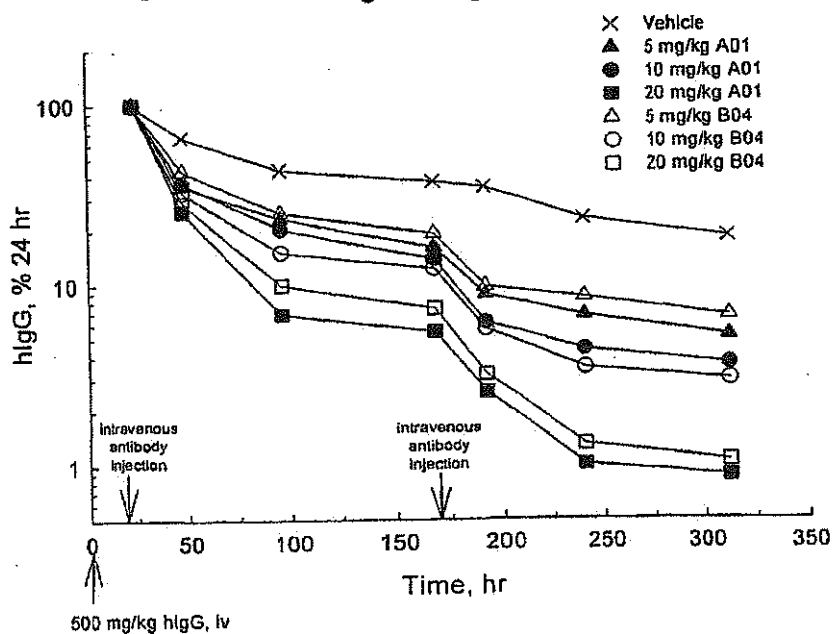


FIGURE 32

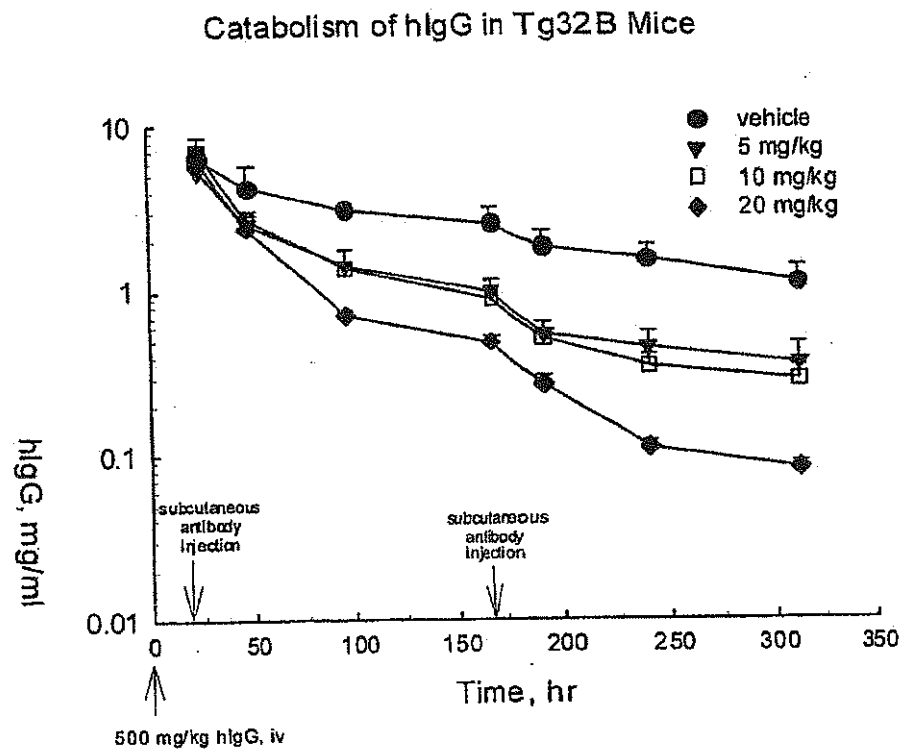
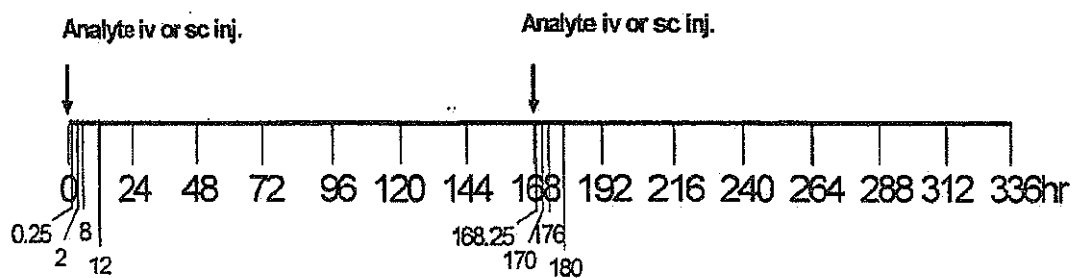


FIGURE 33

A



B

Group 1 - Control

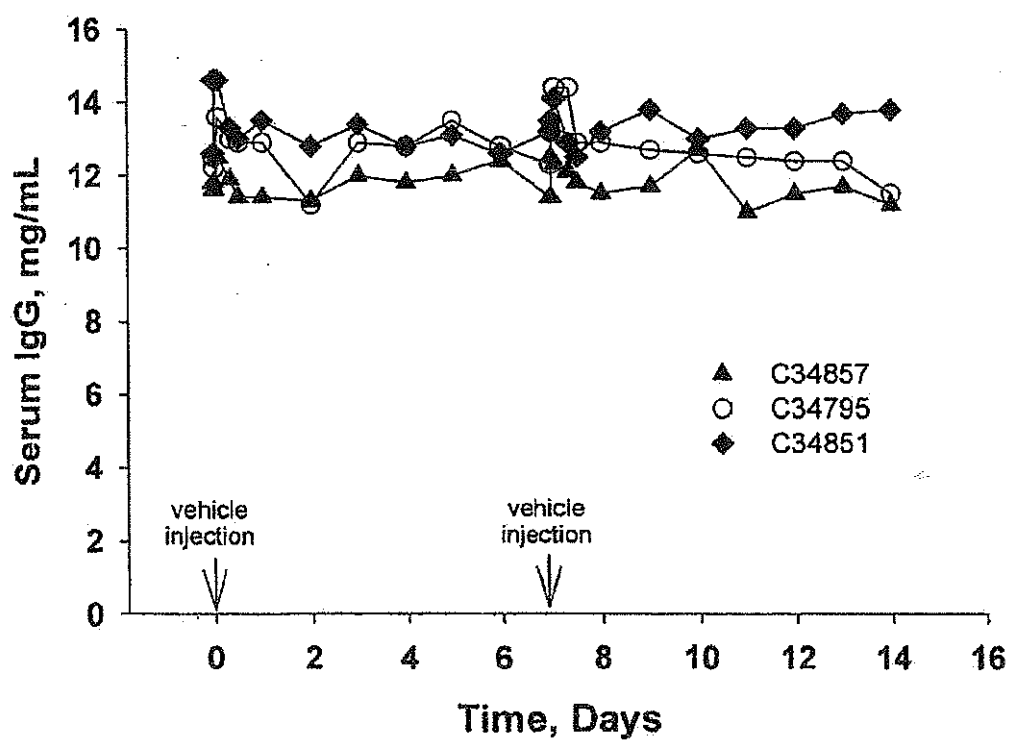
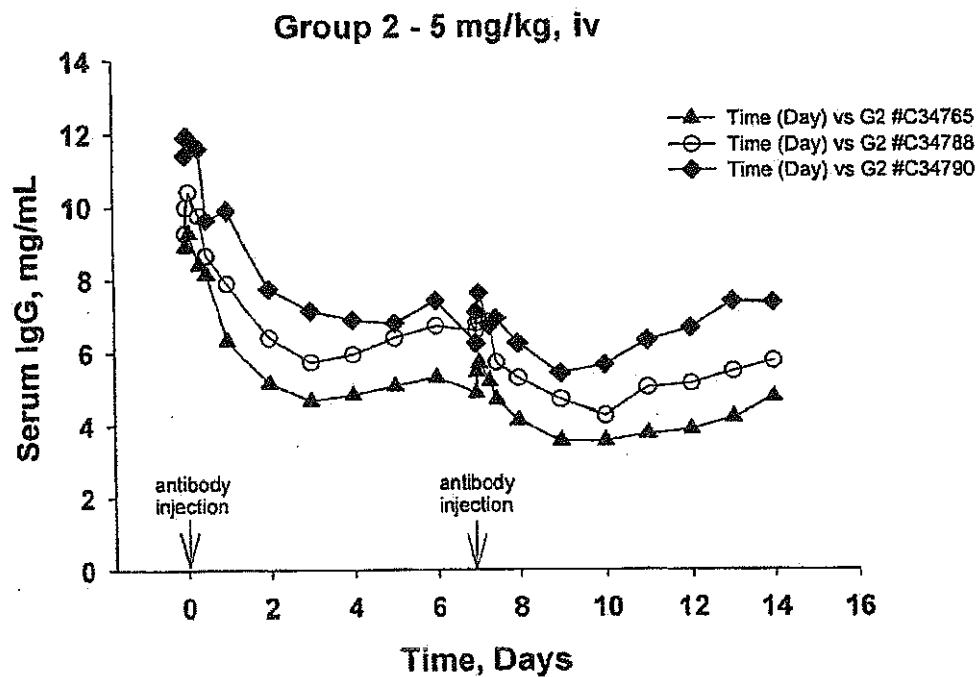
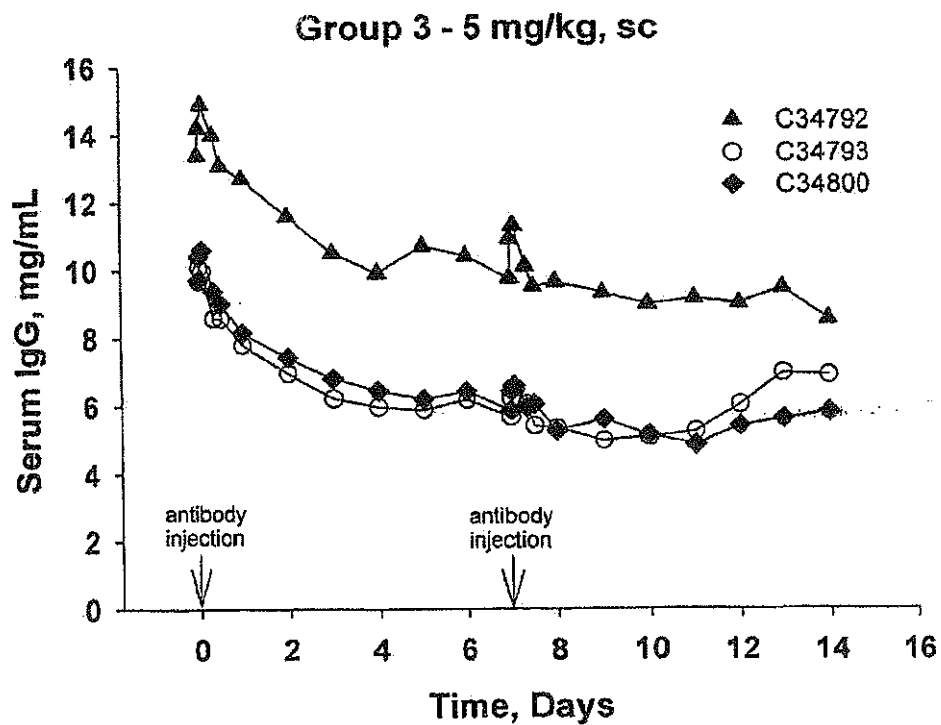


FIGURE 34

A



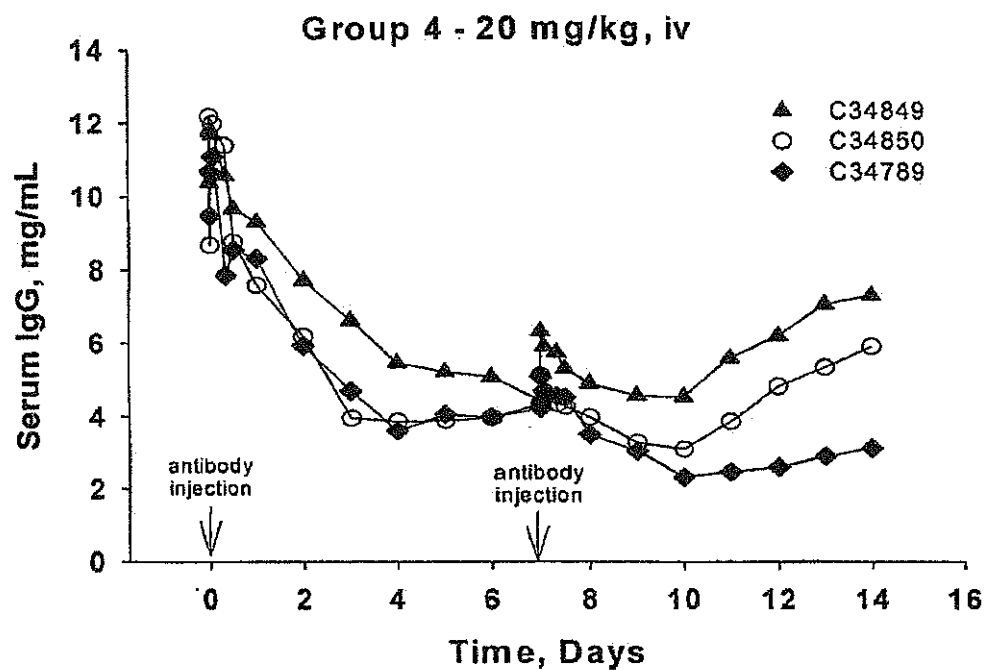
B



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FIGURE 35

A



B

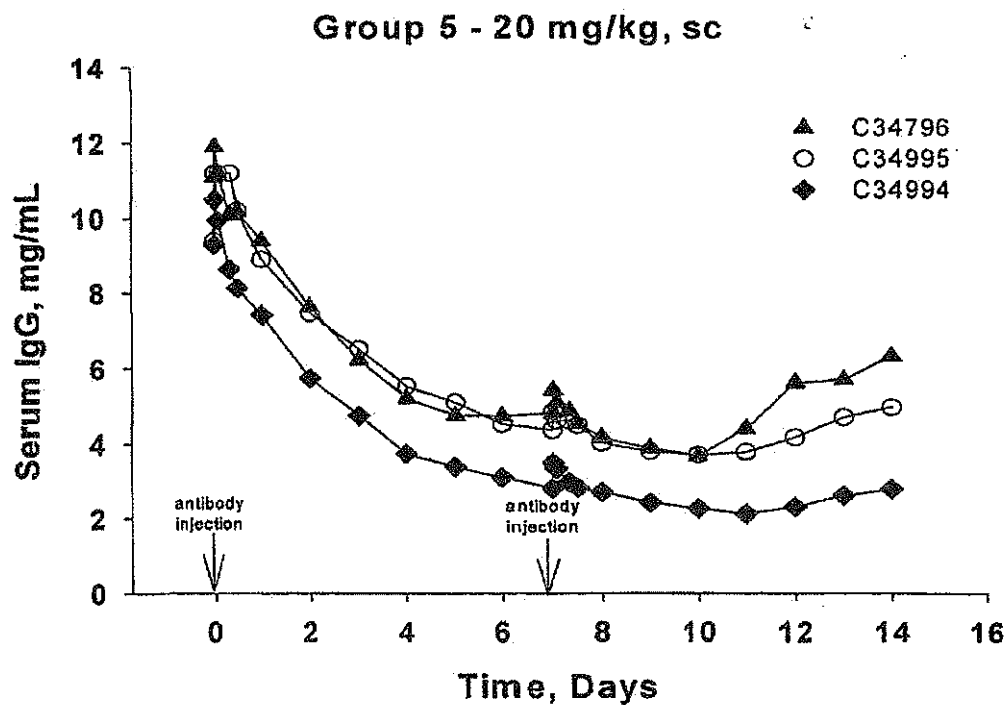


FIGURE 36

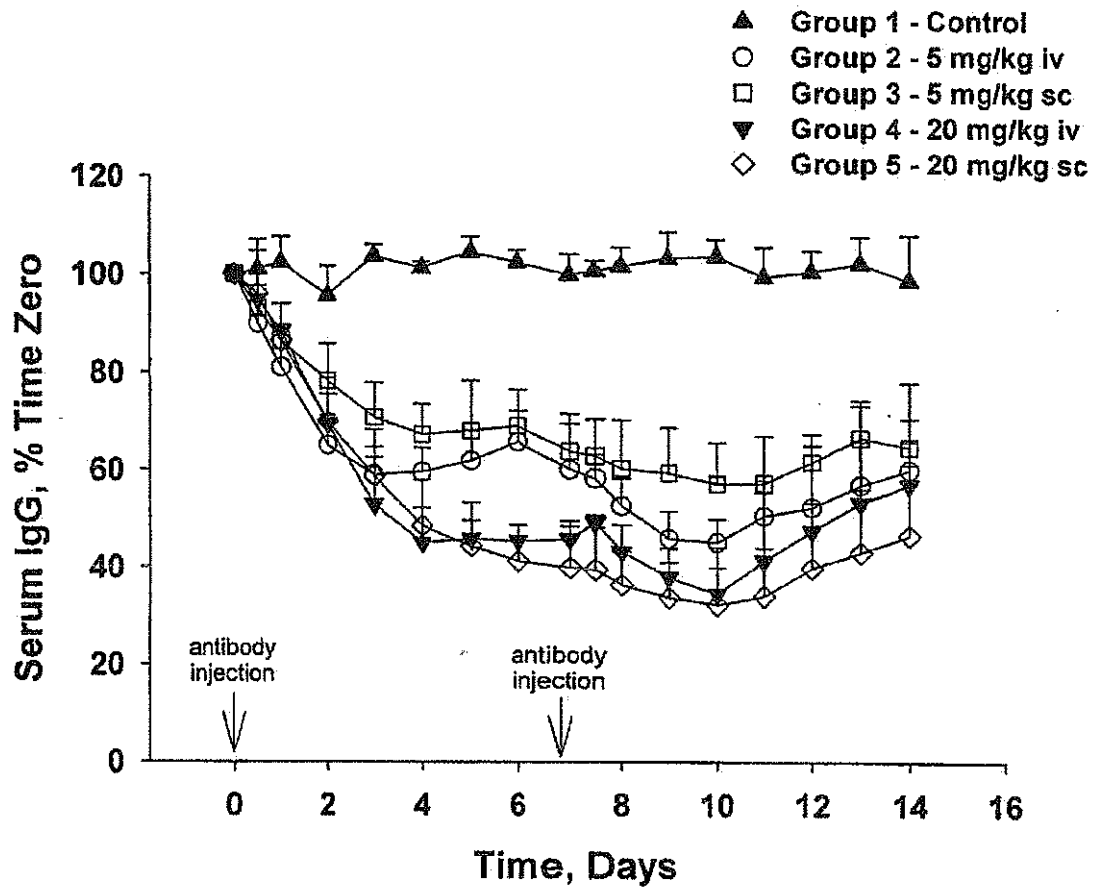


FIGURE 37

A.

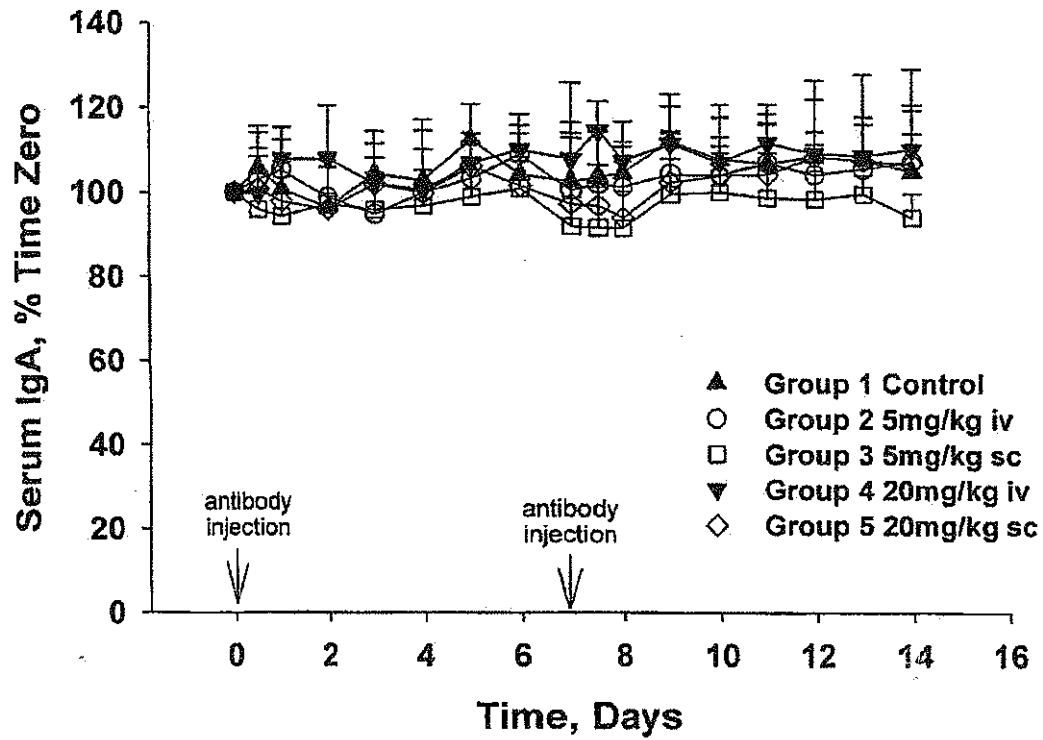


FIGURE 37

B

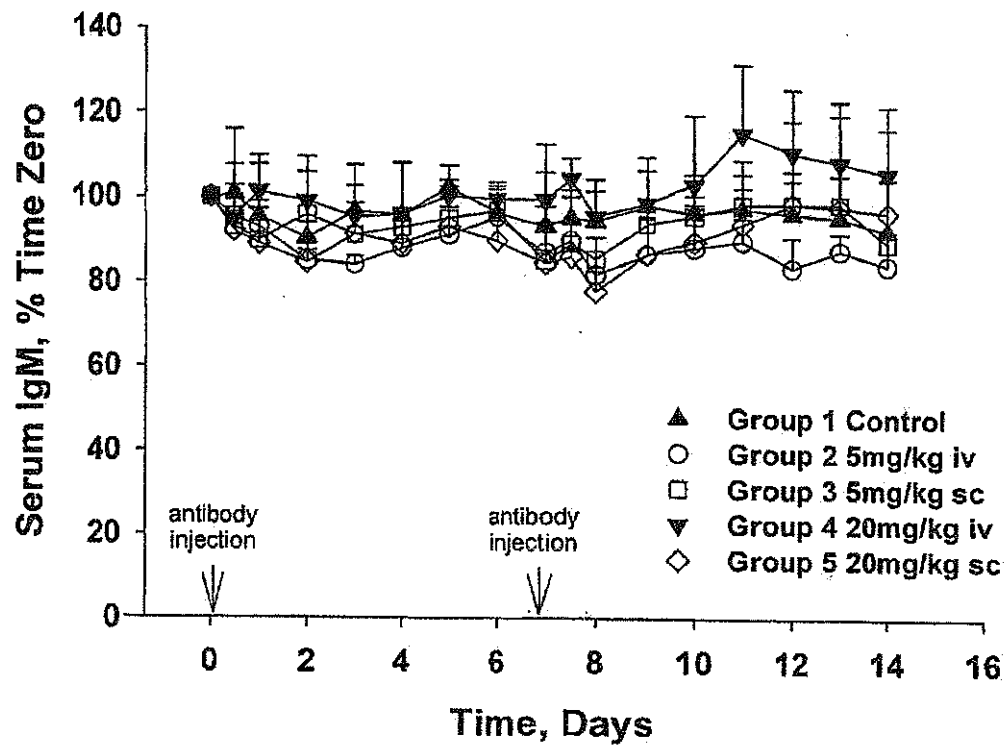


FIGURE 37

C

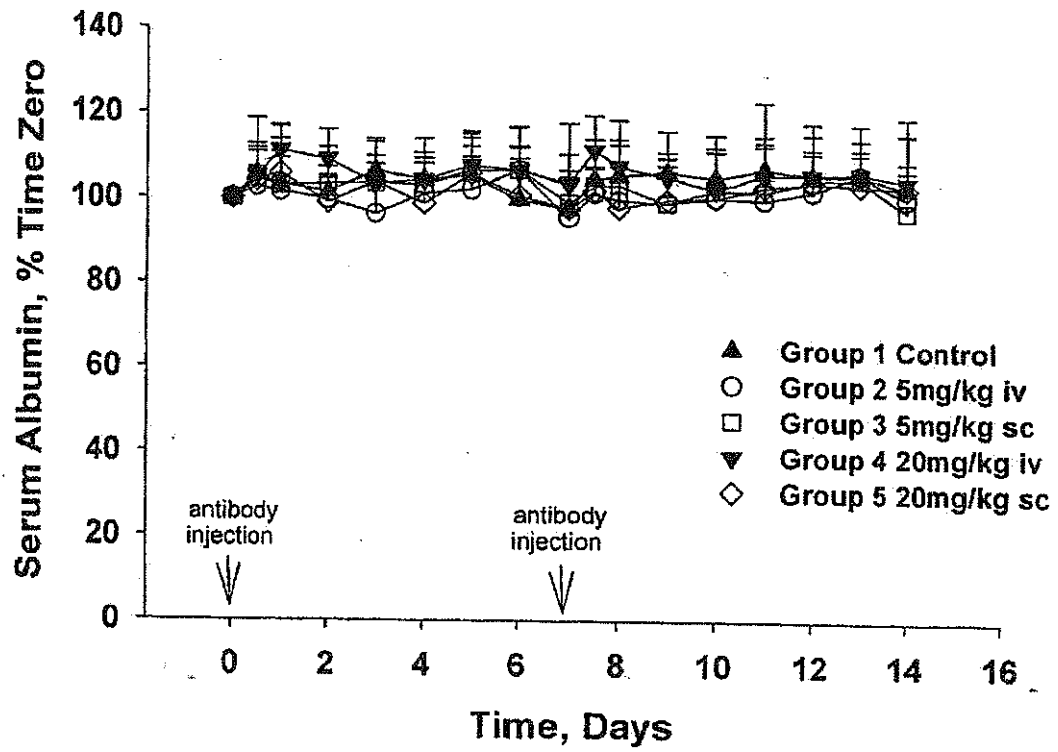


FIGURE 38

DX-2504 (532A-M0161-B04)Light V gene = VL2_2b2; J gene = JL1

	FR1-L	CDR1-L	FR2-L	CDR2-L
GERMLINE:	QSALTQPASVSGSPGQSITISC	TCTSSDVCGSYNIVS	WYQHPGKAPKLMY	GVSKRPS
DX-2504:	QSALTQPASVSGSPGQSITISC	TCTSSDVCGSYNIVS	WYQHPGKAPKLMY	GVSKRPS

	FR3-L	CDR3-L	FR4-L
GERMLINE:	GVSNRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	FGTGTKVTVL
DX-2504:	GVSNRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	FGTGTKVTVL

GERMLINE (SEQ ID NO: 181); DX-2504 (SEQ ID NO: 182)

Heavy V gene = VH3-23; J gene = JH3

	FR1-H	CDR1-H	FR2-H
GERMLINE:	EVQLLESGGGLVQPGGSLRLSCAASGFTFS	SYAM	WVRQAPGKGLEWVS
DX-2504:	EVQLLESGGGLVQPGGSLRLSCAASGFTFS	SYAM	WVRQAPGKGLEWVS

	FR3-H	CDR3-H	FR4-H
GERMLINE:	RFTISRDNKNTLYLQMNSLRAEDTAVYYCAK	YALGSS	WGQGTMTVTVSS
DX-2504:	RFTISRDNKNTLYLQMNSLRAEDTAVYYCAR	YALGSS	WGQGTMTVTVSS

GERMLINE (SEQ ID NO: 183); DX-2504 (SEQ ID NO: 184)

Top Alignments against Germline sequences

DX-2504:	QSALTQPASVSGSPGQSITISC	TCTSSDVCGSYNIVS	WYQHPGKAPKLMY	GVSKRPS
VL2_2b2:	QSALTQPASVSGSPGQSITISC	TCTSSDVCGSYNIVS	WYQHPGKAPKLMY	GVSKRPS
VL2_2e2:	QSALTQPRSVSGSPGQSVTISC	TCTSSDVCGSYNIVS	WYQHPGKAPKLMY	GVSKRPS
VL2_2a2:	QSALTQPASVSGSPGQSITISC	TCTSSDVCGSYNIVS	WYQHPGKAPKLMY	GVSKRPS
VL2_2c:	QSALTQPPSVSGSPGQSVTISC	TCTSSDVCGSYNIVS	WYQHPGKAPKLMY	GVSKRPS
VL2_2d:	QSALTQPPSVSGSPGQSVTISC	TCTSSDVCGSYNIVS	WYQPPGTAPKLMY	GVSKRPS

DX-2504:	GVSNRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	FGTGTKVTVL
VL2_2b2:	GVSNRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	
VL2_2e2:	GVPDRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	
VL2_2a2:	GVSNRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	
VL2_2c:	GVPDRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	
VL2_2d:	GVPDRFGSGKSGNTASLTISGLQAEDEADYYC	CSYAGSSITW	

DX-2504: SEQ ID NO: 185; VL2_2b2: SEQ ID NO: 186; VL2_2e2: SEQ ID NO: 187;
 VL2_2a2: SEQ ID NO: 188; VL2_2c: SEQ ID NO: 189; VL2_2d: SEQ ID NO: 190;