

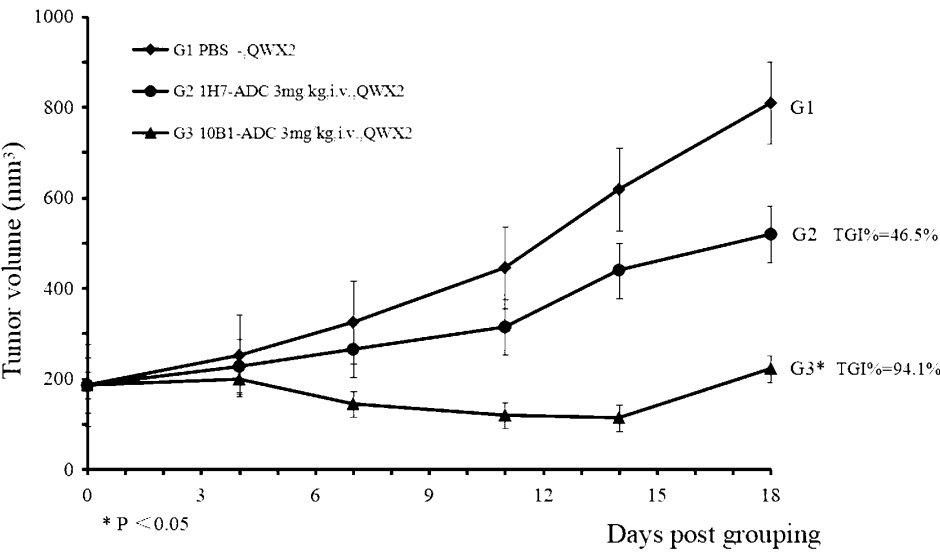


FIG. 1

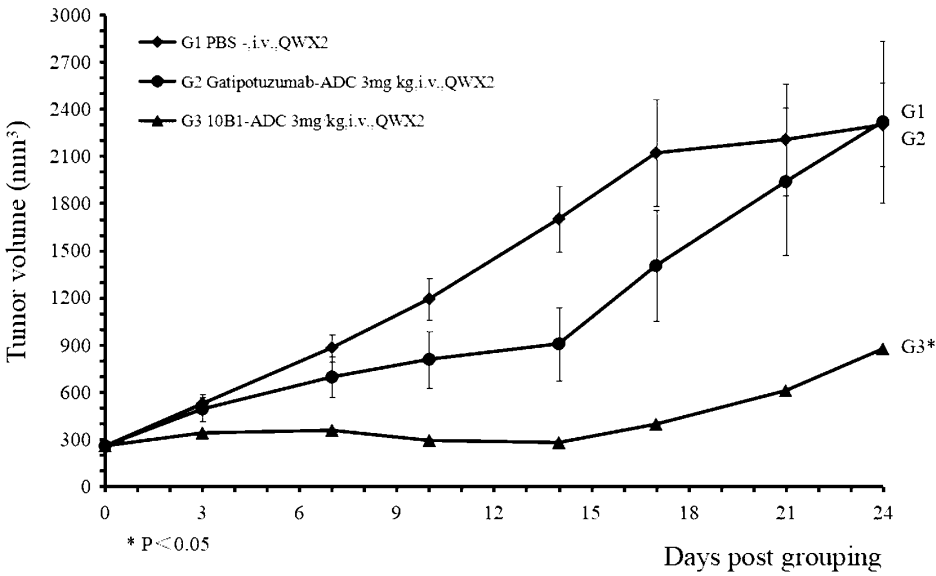


FIG. 2

Kabat CDR for anti-MUC1 antibody

Ab	VH CDR1	SEQ ID NO:	VH CDR2	SEQ ID NO:	VH CDR3	SEQ ID NO:	VL CDR1	SEQ ID NO:	VL CDR2	SEQ ID NO:	VL CDR3	SEQ ID NO:
9H4	RYTMH	4	IISYDGSNKYQ ADSVKG	5	DWAMVVLN PTFFDY	6	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3
10B1	SYGMH	7	VISYDGSNKYY ADSVKG	8	DRRGFYESG NYYNVPFDY	9	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3
10B1-AG	SYGMH	7	VISYAGSNKYY ADSVKG	63	DRRGFYESG NYYNVPFDY	9	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3
10B1-AA	SYGMH	7	VISYAASNKYY ADSVKG	64	DRRGFYESG NYYNVPFDY	9	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3
10G12	TYTIS	10	WISAFGTNTN YARKVQG	11	EELRGFDY	12	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3
11A6	IYSII	13	WISAYNDNTN YARKLQG	14	MGESDAFDI	15	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3
11D6	TYTIS	16	WSSAYTGNTN YAQRLQG	17	EELRGFDY	18	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3
11E8	SYAMH	19	VISDDGINKYY ADSVKG	20	ALPTIFGWWM YFYVGLDV	21	RASQSVSS YLA	1	DASNRAT	2	QQRSNWPPT	3

FIG. 3

Chothia CDR for anti-MUC1 antibody

Ab	VH CDR1	SEQ ID NO:	VH CDR2	SEQ ID NO:	VH CDR3	SEQ ID NO:	VL CDR1	SEQ ID NO:	VL CDR2	SEQ ID NO:	VL CDR3	SEQ ID NO:
9H4	GFTFNRY	25	SYDGSN	26	DWAMVVLNPT FFDY	27	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24
10B1	GFTFSSY	28	SYDGSN	29	DRRGFYESGNY YNNVPFDY	30	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24
10B1-AG	GFTFSSY	28	SYAGSN	65	DRRGFYESGNY YNNVPFDY	30	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24
10B1-AA	GFTFSSY	28	SYAASN	66	DRRGFYESGNY YNNVPFDY	30	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24
10G12	GYTFTTY	31	SAFTGN	32	EELRGFDY	33	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24
11A6	GYTFTIY	34	SAYNDN	35	MGESDAFDI	36	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24
11D6	GYTFTTY	37	SAYTGN	38	EELRGFDY	39	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24
11E8	GFTFSSY	40	SDDGIN	41	ALPTIFGVWVY FYGLDV	42	RASQSVSSYLA	22	DASNRAT	23	QQRSNWP PT	24

FIG. 4

[illegible]

FIG. 5

Monkey MUC1 (fasMUC1)	ASDSAGSASTLVHSTTSARATTTASKSTPFSPSHHSDPTTLASHSTKTDASSTHHSTVPPFTSSNHSTSPQLSLGVSSFFLHFHISNLQFNSSLE DPSTNYYQQLQRDISELFLQYKQGDFLGLSNIMFRPGSVVVOQSTLVFREGTNNVHDVETQFNQRKTEAASRYNLTISDISVRDVPFPFSAQTGA GVPGWG	51
Dog MUC1 (dMUC1)	GNSSLTSSPASSSSSTLRKHSSSLTSSPASSSTSLGKLSSSLTSPVSGSIITPAQHGTSPTSSPASSSSSTLRKHSSSLTSSPASSSTSLGKHSSS SLTSSPVSGSIITPAQHGTSPTSGPASSSSSTLRKHSSSLTSSPASSSTSLRKHSSSLTSSPASSSTSLGKLSSSPTSRPAPSSSTSLGKHSSSLT SSPVSGSIITPAQHGTSPTSGPASSSSSTLRKHSSSLTSSPASSSTSLRKHSSSLTSSPASSSTSLGKLSSSPTSRPAPSSSTSLGKHSSSLTSSP VSGSIITPAQHGTSPTSGPASSSSSTLRKHSSSLTSSPASSSTSLGKHSSSLTSSPVSGSIITPAQHGTSPTSRPAPSLTSLRKHSSSLTSSPAP SLTSLRKHSSSLTSSPASSSTSSPTGSPVSGSTTTPAQHGTSSTSLASSSTSLGKLSSSWASSHTTRTTASTTNHNMPEPISSNHSTSPQIR ISFFFLSILNLQFNSSLENPNYYQELQRNISELFLQIQGYEFLGLYNIRFRPGSVVVESTLAFRNGATDANKVKTQFEDSKEGARYNLNMISSV RDVSFPSSAPFKSGVPGWGIALLVLCVLALAIYVVALTVCQCRKNC	52
Mouse MUC1 (mMUC1)	LPSEENSVTSSQDTSSSLASTTTPVHSSNDPATRPPGDSTSSPVQSSTSSPATRAPEDSTSTAVLSGTSSPATTPVNSASSPVAHGDTSSPATSL SKDSNSPVVHSGTSSAPATTAPVDSTSSPVHGGTSSPATSPGDSTSSPDHSTSSPATRAPEDSTSTAVLSGTSSPATTPVDSSTSPVAHDD TSSPATSLSEDSASSPVAHGTSPTSPATSPLRDSTSSPVHSSASIQNIKTSLDASTPDHNGTSVTTTSSALGSATSPDHSGTSTTTNSESVALTPV YSSMPFTTKVTSGSAIIPDHNGSSVLTSSVLGSATSLVNTSAIATTPVNGTQSPVSPQVPSPMTMATTSSHTSIASSYSTVPFTSSNSSPQ LSGVSSFFFLSFYIQNHFPNSLEDPSNNYYQELKRNISGLFLQIFNGDFLGISSIKFRSGSVVVESTVVFREGTFSASDVKSQLIQHKKEADDYNLTIS EVKNEMQFPFSAQSRPGVPG	53
human MUC1b (hMUC1b)	SVVQLTLAFREGTINVHDVETQFNQYKTEAASRYNLTISDVSVSDVPFPFSAQSGAGVPG	54
human MUC18 (hMUC18)	VPGEAEQPAPELVEVEGSTALLKCGLSQSGNLSHVDWFSVHKERTLIFRVRQGGQSQSEPEYEQRLSLQDRGATLALTQVTPQDERIFLCQ GKRPRSQEYRIQLRVYKAPPEEPIQVNPGLIPVNSKEPEEVA TCVGRNGYPIQVWYKNGRPLKEEKNRVHIQSSQTVESSGLYTLQSLKAQLV KEDKDAQFYCELNVRLPSGNHMKESREVTVPFYPTKEVWLEVEPVGMLKEGDRVEIRCIADGNPPHFSISKQNPSTREAEFEETNDNGVLV EPARKEHSGRYECQGLDIDTMSILLSEPOELLVNYVSDVRVSPAAPERQEGSSLLTCEAESQDLFEQWLREETGQVLERGPVLQHLDLKREAG GGYRCVASVPISIPGLNRTLQLVNVAIFGPPWMAFERKVMVKNMVLNLSCEASGHPRTISWNVNGTASEQDQDPQRVLSLTNLVLTPELLE TGVECTASNDLGKNTSILFLELVNLTTLTPDSNTTTGLSTSTASPHTRANSSTSTERKLPEPESRG	55
hMUC16 (12067-13286)	AATVPFMVPFTLNFTITNLQYEEDMRHPGSRKFNATERELQGLLPLFRNSSLEYLYSGCRLASLRPEKDSATAVDAICTHRPDPEDLGLDRERL YWELSNLTNGIQELGPYTLDRNSLYVNGFTHRSSMPTTSTPGTSTVDVGTSGTPSSSPSTTAGPLMPFTLNFTITNLQYEEDMRRTGSRKFN MESVLQGLLKPLKNTSVGLYSGCRLTLRPEKDGAATGVDAICTHRLDKPSGLNREQLYWELSKLTNDIEELGPYTLDRNSLYVNGFTHQSSV STTTPGTSTVDLRTSGTPSSLSPTIMAAGPLVPFTLNFTITNLQYGEDMGHPGSRKFNTERVLLGLLGPFKNTSVGGLYSGCRLTSLRSEK GAATGVDAICIIHLDKPSGLNRELYWELSQLTNGIKELGPYTLDRNSLYVNGFTHRTSVTSTPGTSTGTDGTSPTFSLPSPATAGPLLVLT LNFTITNLKYEEDMRHPGSRKFNTERVLTQLLGPMMKNTSVGLYSGCRLTLRSEKDGAAATGVDAICTHRLDKPSGVDRQELYWELSQLTNG IKELGPYTLDRNSLYVNGFTHWIPVPTSTPGTSTVDLKGSTPSSLPSTTAGPLVPFTLNFTITNLKYEEDMRHPGSRKFNTERVLTQLLGPMMF KNTSVGLYSGCRLTLRSEKDGAAATGVDAICTHRLDKPSGVDRQELYWELSQLTNGIKELGPYTLDRNSLYVNGFTHQTSAPNTSTPGTSTVD	56

FIG. 5 (Continued)

	LGSTGTPSSLPSTSAGPLLVPTFLNFTITNLQYEEDMHHPGSRKFNTERVLQGLLGPMPKFNKTSVGLLYSGCRLTLRLPEKNGAATGMDAICSH RLDPKSPGLNREQLYWELSQLTHGKELGPTYLDRNSLYVNGFTHRSSHVAPTSTPGTSDLTGTSPTSSLPSPPTTAVPLLVPTFLNFTITNLQYGE DMRHPGSRKFNTERVLQGLLGPLFKNSSVGPLYSGCRLISRSEKDGAAATGDAICTHHLNPQSPGLDREQLYWQLSQMTNGIKELGPTYLDR NSLYVNGFTHRSSGLTTSTPWTSTVDLGTSGTPSPVPTTTGPLLVPFTLNFTITNLQYEENMGHPGSRKFNITESVLQGLLKPLFKSTSVGPLY GCRLTLRPEKDGAVTRVDAICTHRPDKIPGLDRQQLYWELSQLTHSITELGPTYLDRDSLTVNGFTQ	
1H7 VH	EVQLQQSGAELAKPGASVKMSCKVSGYTFTSYWMHWKQRPQGGLWIGVINPGTGYIEYNQKFQDKATLTADKSSSTAYMQLSSLTSEDSA VYYCASSTAPFDYWGGQTTLTVSS	57
1H7 VL	DIVITQSPSSMYASLGERVTITCKASQDIKSVLSWYQQKPKWSPKTLIYYATRLADGVPSRFSGSGSQDYSLTISSLESDDTATYCYCLQYDESPYTF GGGTKEIK	58
Gatipotuzumab VH	EVQLVESGGGLVQPGGSMRLSCVASGFPFSPSYWMNWNVRQAPGKLEWVGEIRLKSNNYTHYAESVKGRFTISRDDSKNSLYLQMNSLKTE DTAVVYCTRHYFDYWGGGTLTVSS	59
Gatipotuzumab VL	DIVMTQSPLSNPVTGPESASISCRSSKLLHSNGITYFFWYLQKPGQSPQLLIYQMSNLASGVPDRFSGSGSGTDFTLRISRVEAEDVGVYCAQN LELPPTFGQGTKVEIK	60
10B1-AG VH	QVTLKESGGGVVQPGRSRLRSCAASGFTFSYGMHWVRQAPGKLEWVAVISYAGSNKYVADSVKGRFTISRDNNSKNTLYLQMNSLRAEDTA VYYCANDRRGFYESGNYNVPFDYWGGGTLTVSS	61
10B1-AA VH	QVTLKESGGGVVQPGRSRLRSCAASGFTFSYGMHWVRQAPGKLEWVAVISYAAASKNYVADSVKGRFTISRDNNSKNTLYLQMNSLRAEDTA VYYCANDRRGFYESGNYNVPFDYWGGGTLTVSS	62
hMUC16 (13287-14451)	RSSVPTTSTPGFTVQPETSETPSLPGPTATGPVLLPFTLNFTITNLQYEEDMRRPGSRKFNTERVLQGLLMPLFKNTSVSSLYSGCRLTLRPEK DGAATRVDAVCTHRPDKSPGLDRERLYWKLSQLTHGITELGPTYLDRHSLVNGFTHQSSMTTTRPTDSTMHLATSRTPASLSGPMTASPLL VLFTINFTITNLRYEENMHHPGSRKFNTERVLQGLLRVPFKNTSVGPLYSGCRLTLRPPKDGAAATKVDAICTYRPDKSPGLDREQLYWELSQL THSITELGPTYLDRDSLTVNGFTQRSSVPTTSIPGTPVDLGTSGTPVSKPGPSAASPLLVLFTLNFTITNLRYEENMQHPGSRKFNTERVLQGLL RSLFKSTSVGPLYSGCRLTLRPEKDGATGVDAICTHHPDPKSPRLDREQLYWELSQLTHNITELGPYALDNDSLFVNGFTHRSSVSTTSTPGTPT VYLGASKTPASIFGSPSAASHLLIIFLTNFTITNLRYEENMMWPGSRKFNTERVLQGLLRPLFKNTSVGPLYSGCRLTLRPEKDGATGVDAICTHRP DPTGPGLDREQLYLELSQLTHSITELGPTYLDRDSLTVNGFTHRSSVPTTSTGVVSEEPFTLNFTINNLRYMADMGQPSLKFNTIDNNVMQHLLS PLFQRSSLGARYTGCRIALRSVKNGAETRVDLLCTYQLPSGGPLIKQVFHELSSQTHGITRLGPYSLDKDSLNLNGYNPEPDPPTTPKPATT FLPPLSEATTAMGYHLKTLTLNFTISNLQYSPDMGKSATFNSTEGVLQHLRLPLFQKSSMGPFFYLCQLISRPEKDGAAATGVDTTCTYHPDPV GPGLDIQQLYWELSQLTHGVTQLGFYVLDRLDSLFINGYAPQNLIRGEYQINFHIVNWNLSNPDPSTSEYITLLRDIQDKVTTLYKGSQQLHDTFRF CLVTNLTMDSVLTVKALFSSNLDPSLVEQVFLDKTLNASFHWLGSYQLDIHVTEMESSVYQPTSSSTQHFYLNFTITNLPSYQDKAQPGTT NYQRNKRNIEDALNQLFRNSSIKSYFSDCCQVSTFRSPNRRHHTGVDSL CNFSPLARVRDRAVYEEFLMRTRNGTQLQNFTLDRSSVLVDGYSPN RNEPLTGNSDLP	67

FIG. 5 (Continued)

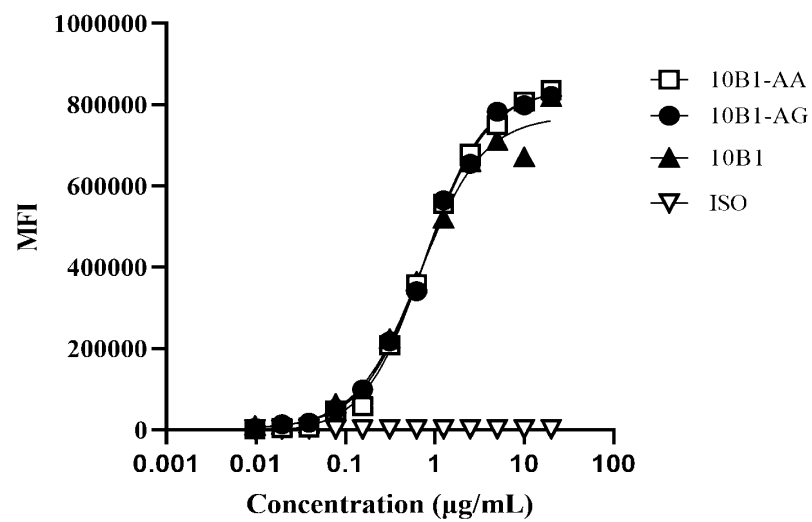


FIG. 6

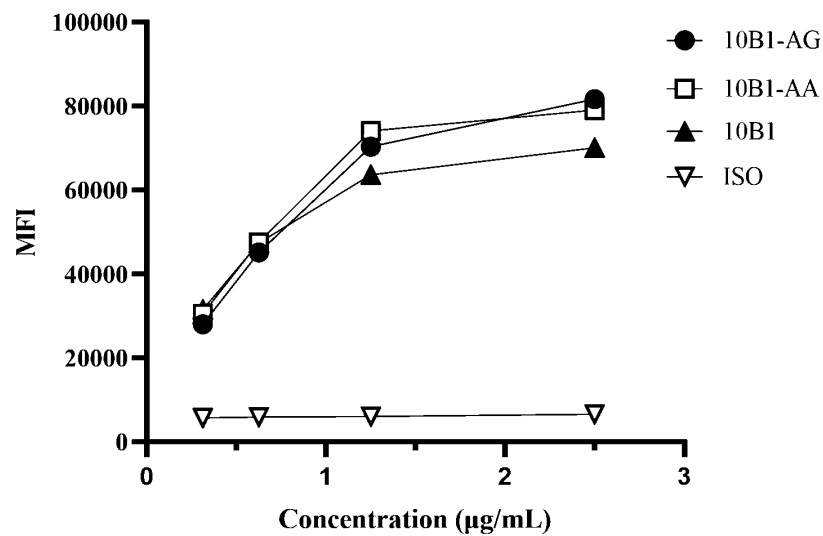


FIG. 7

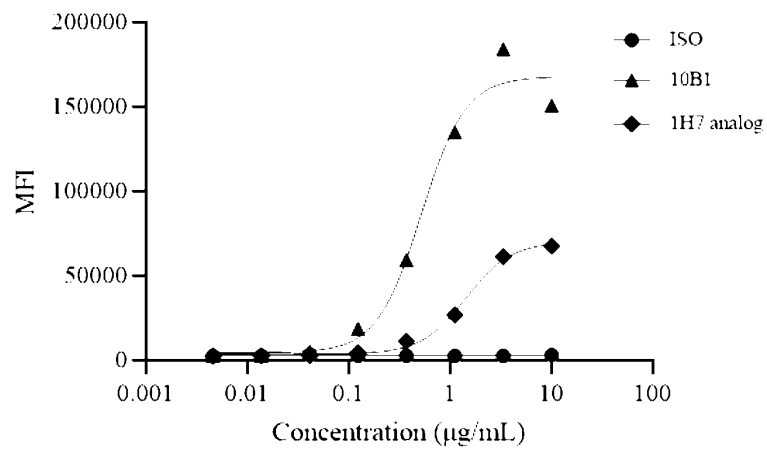


FIG. 8

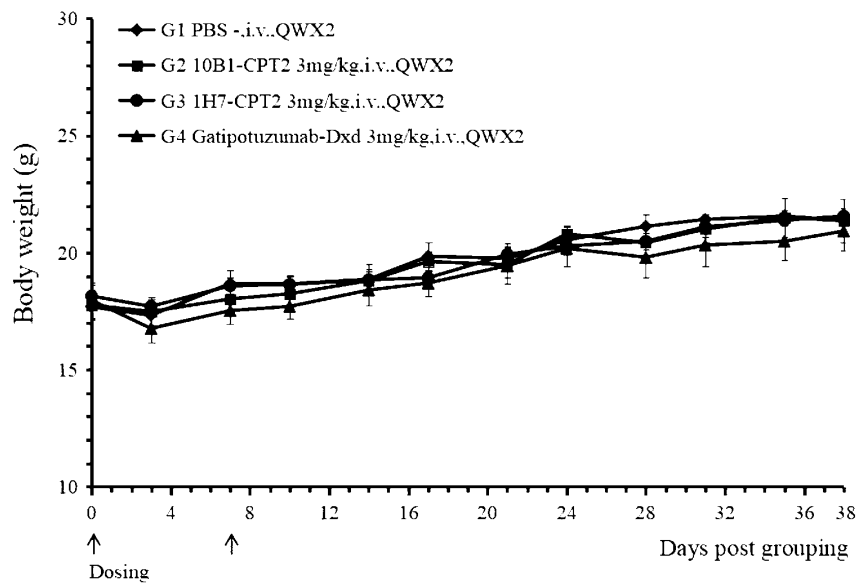


FIG. 9

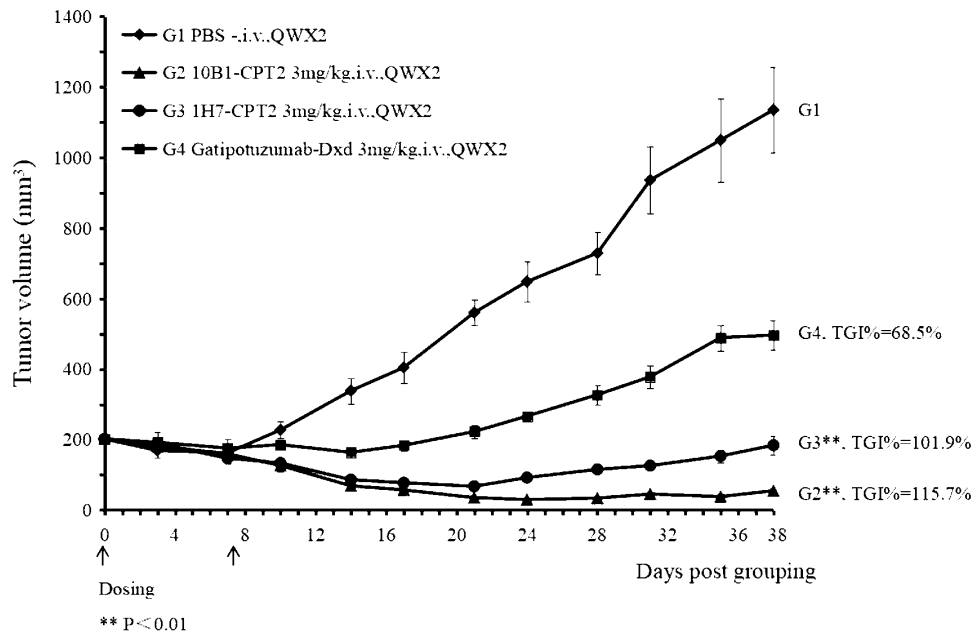


FIG. 10

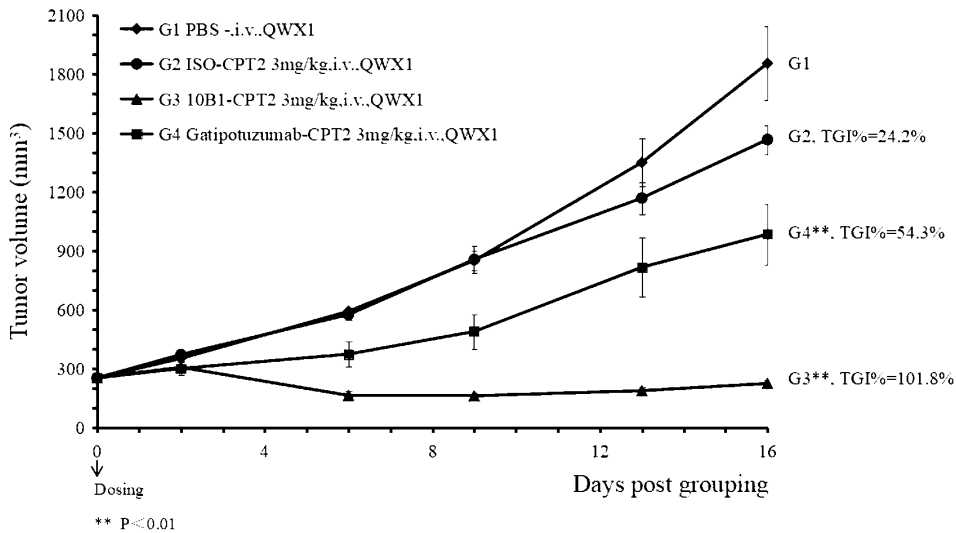


FIG. 11

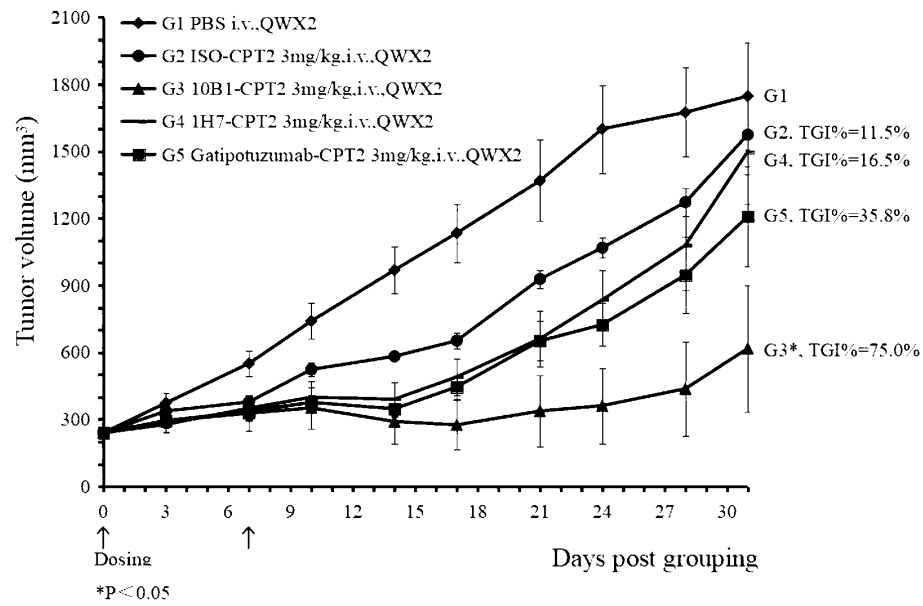


FIG. 12

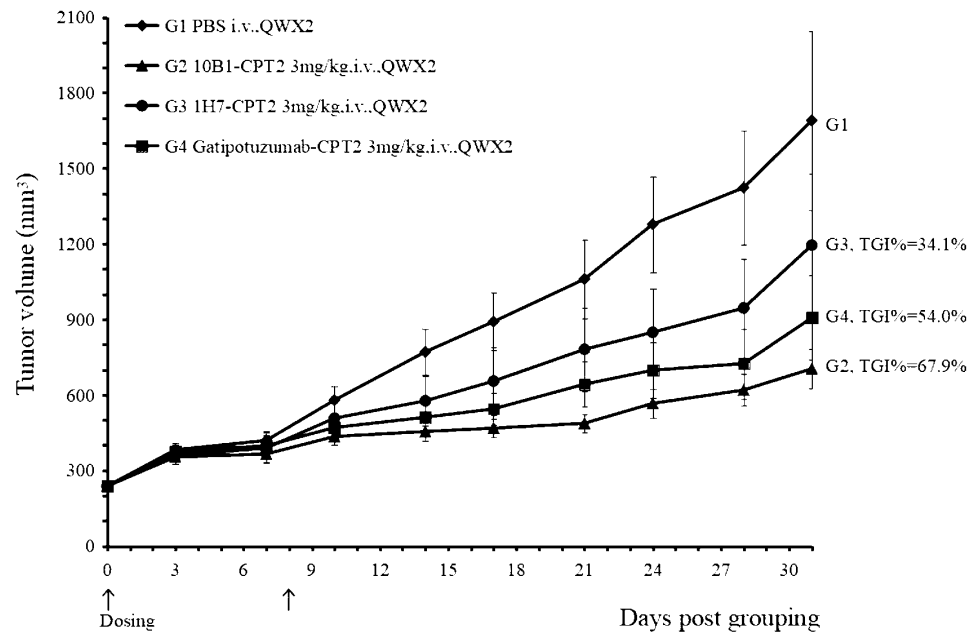


FIG. 13