

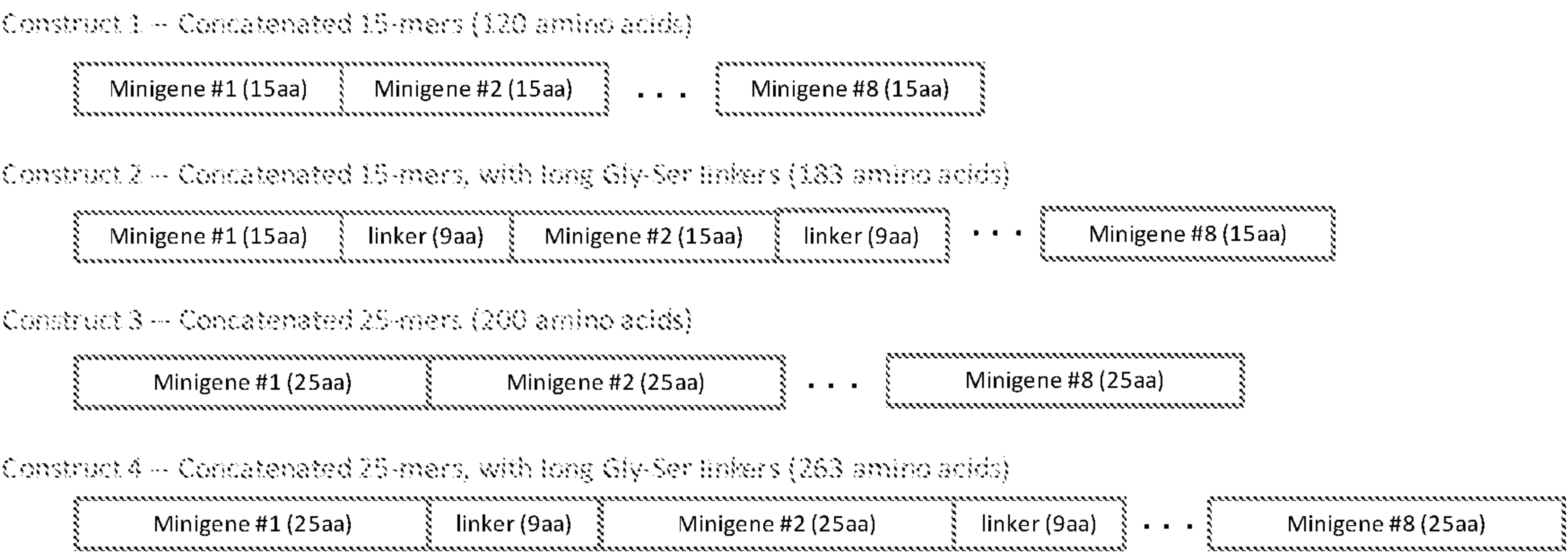


Figure 1

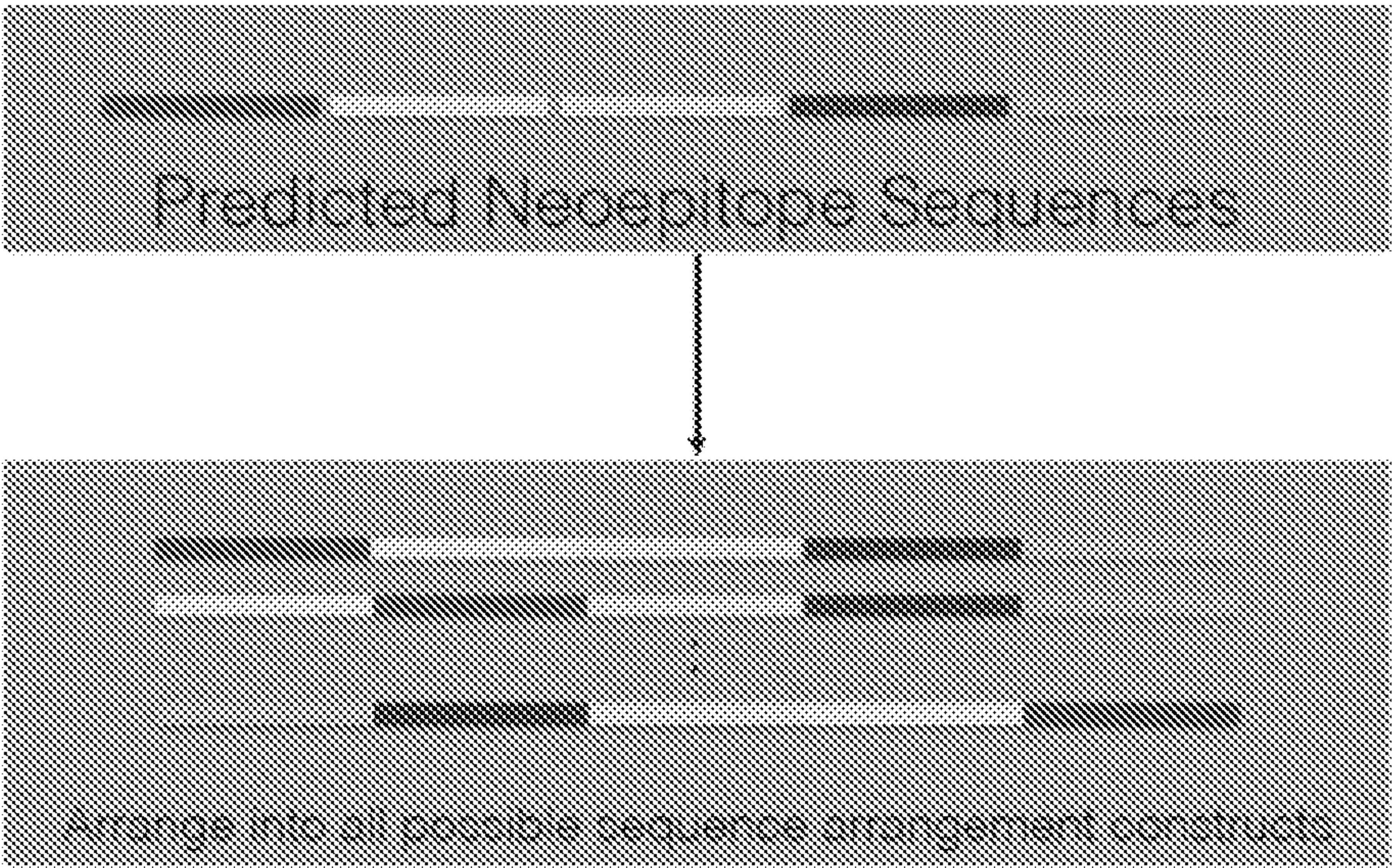
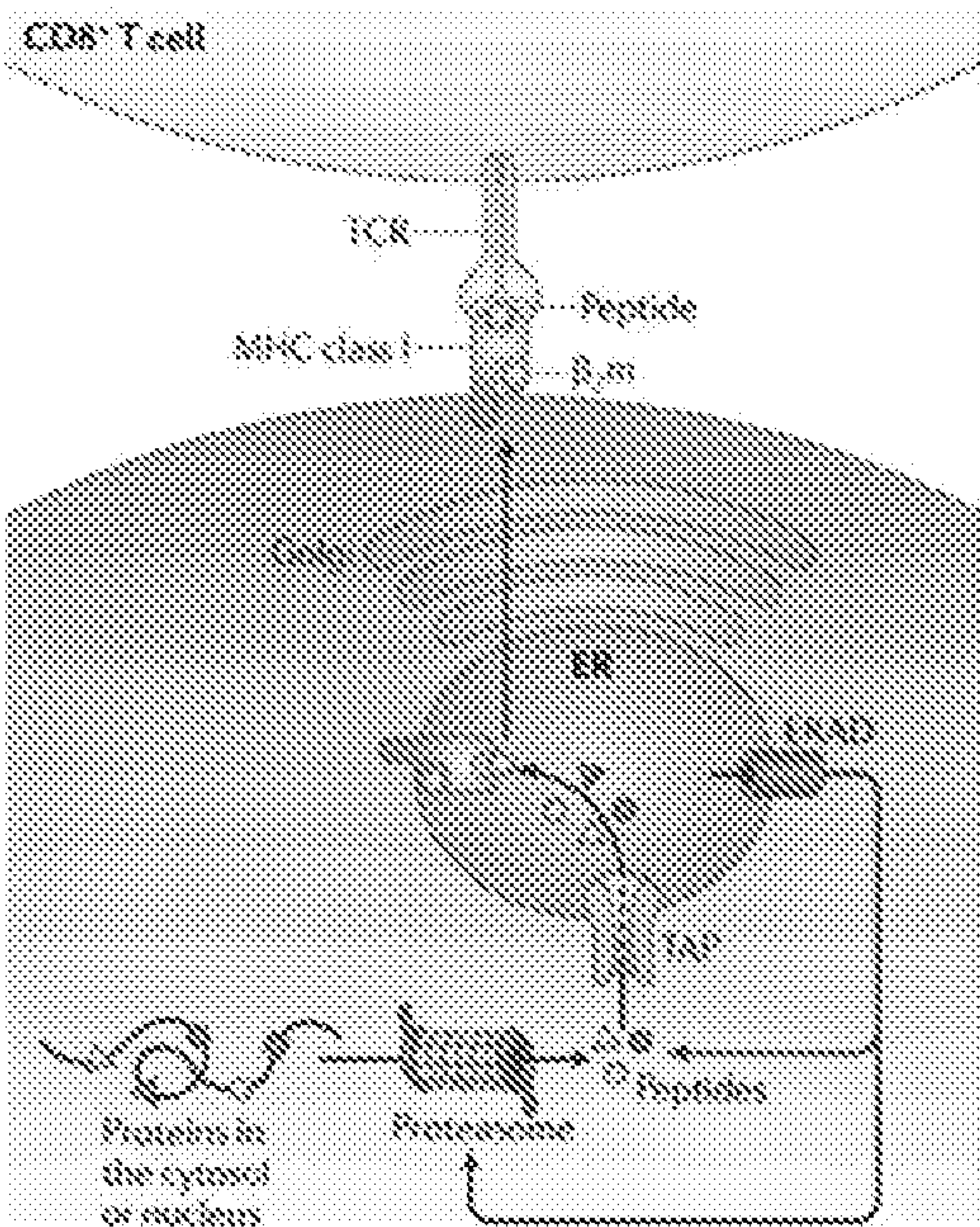
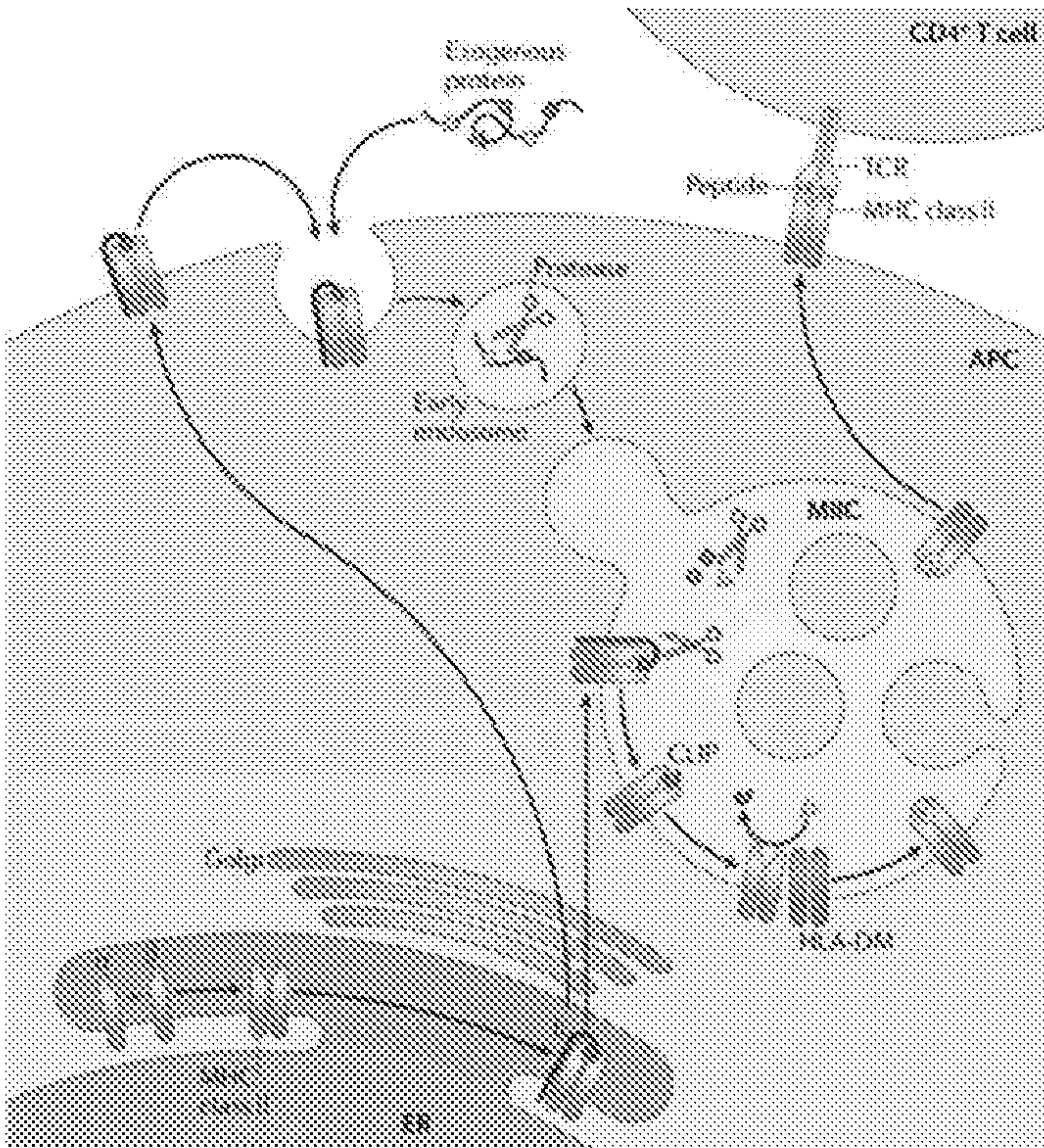


Figure 2



Prior Art Figure 3



Prior Art Figure 4

MDKITQYEKSLYYCSFLEALVRDVCIAAAACVDCLDRTNTAQVMVGKCALAYQLYAAA VVKAY
 LPVNESFAFTADLRSNTGGQAAAANILAVSFAPLVQLSKNDNGTPDSVGAAAAQS NYQHITNFE
 WCISILVELTRLEGAAAAYYTVFDRDNNRVSFANAVVLAAAAHSGLVTFQAFIDVMSRETTDT
 TADAAAALDLAALEDVSANCLTETLEDKNEGVA AA AVL SFVGQTRVLMINGEEVEETELMGAAA
AEVSGLEQLESIINF EKLTEWTSSNVAAAAMTEQQWNFAGIEAAASAIQGNVTSIHSLLDAAA
AEQKLISEEDL

Figure 5A

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
RGGRDKITQYEKSLYYCSFLEALVRDVCIAAAACVDCLDRTNTAQVMVGKCALAYQLYAAA VV
 KAYLPVNESFAFTADLRSNTGGQAAAANILAVSFAPLVQLSKNDNGTPDSVGAAAAQS NYQHIT
 NFEWCISILVELTRLEGAAAAYYTVFDRDNNRVSFANAVVLAAAAHSGLVTFQAFIDVMSRETT
 DTDADAAAALDLAALEDVSANCLTETLEDKNEGVA AA AVL SFVGQTRVLMINGEEVEETELMG
 AAAAEVSGLEQLESIINF EKLTEWTSSNVAAAAMTEQQWNFAGIEAAASAIQGNVTSIHSLLDAA
 AAEQKLISEEDL

Figure 5B

MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
RGDKITQYEKSLYYCSFLEALVRDVCIAAAACVDCLDRTNTAQVMVGKCALAYQLYAAA VVKAYLPVNE
 SFAFTADLRSNTGGQAAAANILAVSFAPLVQLSKNDNGTPDSVGAAAAQS NYQHITNFEWCISILVELTRL
 EGAAAAYYTVFDRDNNRVSFANAVVLAAAAHSGLVTFQAFIDVMSRETTDTADAAAALDLAALEDVSA
 NCLTETLEDKNEGVA AA AVL SFVGQTRVLMINGEEVEETELMGAAAAAEVSGLEQLESIINF EKLTEWTSSN
VAAAAMTEQQWNFAGIEAAASAIQGNVTSIHSLLDAAAAEQKLISEEDL

Figure 5C

MLLLPFQLLAVLFPGGNSEDKITQYEKSLYYCSFLEALVRDVCIGPGPGCVDCLDRTNTAQVMVGKCALA
 YQLYGPGPGVVKAYLPVNESFAFTADLRSTGGQGP GPNILAVSFAPLVQLSKNDNGTPDSVGGPGP
 GGSNYQHITNFEWCISILVELTRLEGGPGPGYYTVFDRDNNRVSFANAVVLGPGPGHSGLVTFQAFIDVM
 SRETTDDTDADGPGPGGLDLAALEDVSANCLTETLEDKNEGVGPGPGVLSFVGQTRVLMINGEEVEETEL
 MGGPGPGGEVSGLEQLESIINFEKLTEWTSSNVGGPGPGMTEQQWNFAGIEAAASAIQGNVTSIHSLDDY
 KDDDDKGS DYKDHDGDYKDHDIMLIPIAVGGALAGLV LIVLIAYLIGRK RSHAGYQTI

Figure 6A

MLLLPFQLLAVLFPGGNSEDKITQYEKSLYYCSFLEALVRDVCIGPGPGCVDCLDRTNTAQVMVGKCALAYQLYGPG
 PGVVKAYLPVNESFAFTADLRSTGGQGP GPNILAVSFAPLVQLSKNDNGTPDSVGGPGPGQSNYQHITNFEWCIS
 ILVELTRLEGGPGPGYYTVFDRDNNRVSFANAVVLGPGPGHSGLVTFQAFIDVMSRETTDDTDADGPGPGGLDLAALE
 DVSANCLTETLEDKNEGVGPGPGVLSFVGQTRVLMINGEEVEETELMGGPGPGGEVSGLEQLESIINFEKLTEWTSSN
 VGGPGPGMTEQQWNFAGIEAAASAIQGNVTSIHSLDDYKDDDDKGS DYKDHDGDYKDHDIMLIPIAVGGALAGLV
 LIVLIAYLIGRKRCFC

Figure 6B

MLLLPFQLLAVLFPGGNSEDKITQYEKSLYYCSFLEALVRDVCIGPGPGCVDCLDRTNTAQVMVGKCALA
 YQLYGPGPGVVKAYLPVNESFAFTADLRSTGGQGP GPNILAVSFAPLVQLSKNDNGTPDSVGGPGP
 GGSNYQHITNFEWCISILVELTRLEGGPGPGYYTVFDRDNNRVSFANAVVLGPGPGHSGLVTFQAFIDVM
 SRETTDDTDADGPGPGGLDLAALEDVSANCLTETLEDKNEGVGPGPGVLSFVGQTRVLMINGEEVEETEL
 MGGPGPGGEVSGLEQLESIINFEKLTEWTSSNVGGPGPGMTEQQWNFAGIEAAASAIQGNVTSIHSLDDY
 KDDDDKGS DYKDHDGDYKDHDIMLIPIAVGGALAGLV LIVLIAYLIGKKHCSYQDIL

Figure 6C

MLLLPFQLLAVLFPGGNSEALQAYHLDPQCWGVNVQPYSGSPANVAVYTALVEPHGRIMGLD
LPDGGHLTGPGPGDTDEAEDPEKMLANFESGKHKYRQTAMFTATMPPAVERLARSYLRRPAV
VYGGPGPGRRYLLQNTALEVFMANRTSVMFNFPEQATVKKVYSLPRVGVGTSYGLPQAGPGP
GKIEPDMMMSMEHSFETASHDGEAGPSPEVLQGGPGPGKVLMASTSYLPSQVTEMFNQGRAFA
AVRLPFCGHKNICSLTTTIQKIPRLLVGPGPGMPAAELALSAFLVLVFLWVHSLRRLLECFYVSVF
SNAAIHVYQYCFGLVYYGPGPGLELLHCPLGHCHLCSEPMFTFVYPTIFPLRETPMAGLHQRR
TSIGFVAYCGPGPGAHFRLVSKEKMPWDSIKLTFEATGPRHMSFYVRTHKGSTLSQWSLNGI
PVGPGPGGRTQQMLIPAWQQVTPMAPAAATLTFEGMAGSQRLGDWGMIPHNSNHYSVGP
GPGELQLVQLEGGGGSGTYRVGNAQPSSLADCLDAGDLAQRLREHGAEVPTEPKEGPGPGEL
EKFRKSEEGKQRAAAPSAASSPADVQSLKKAMSSLQNDRDRLLKELKNLGPGPGGKHDRDLLI
GTAKHGLNRTDYYIMNGPQLSFLDAYRNYAQHKRTDTQAPGSGPGPGILEVDKSGPITLLVQG
HMEGEVWGLSTHPYLPICATVSDDKTLRIWDLSPSGPGPGMLTARLLLPRLLCLQGRTTSYST
AAVLPNPIP NPEICYNKLFINNEWHD AVGPGPGGEVSGLEQLESII~~NEFEKLT~~EWTSNVGGPGPG
MTEQQWNFAGIEAAASAIQGNVTSIHSLDDYKDDDDKGSDYKDHDGDYKDHDIMLIPIAVGG
ALAGLVLILIAYLIGRKRSHAGYQTI

Figure 7A

MLLLP**PFQ**LLAVL**FP**GG**NSE**ALQAYHLD**PQ**CWGVNVQ**PY**SGSPANVAVY**TAL**VEPHGRIMGLDLPDGGH
LTGPGPGDTDEAEDPEKMLANFESGKHKYRQTAMFTATMPPAVERLARSYLRRPAVVYGP**GP**GRRYLL
QNTALEVFMANRTSVMFNFPEQATVKKVVS**SL**PRVGVGTSYGL**PQ**AGPGPGKIEPDMM**SM**EH**SF**ETAS
HDGEAGPSPEVLQGGPGGKVLMA**ST**SYLPSQVTEMFNQGRAFAAVRL**PF**CGHK**NI**CSLT**TI**QKIPRLLVG
PGPGMPAAELALS**AF**LVLVFLWVHSLRRLLEC**FY**VS**VS**FNAAIHVVQYCFGLVYYGP**GP**GLLELLHCPLG
HCHLCSEPMFTFVYPTIFPLRET**PM**AGLHQ**RR**TSIGFVAYCGPGPGAHFRLVSKEKMPWDSIKLTFEATG
PRHMSFYVRTHKGSTLSQWSLGNGIPVGPGPGGRTQQMLIPAWQQVTPMAPAAATLTFEGMAGSQRL
GDW**GK**MIPHSNHYN**SV**GP**GP**GELQLVQLEGGGGSGTYRVGNAQPSLADCLDAGDLAQRLREHGAEVP
TEPK**EG**PG**GP**GELEKFRKSEEGKQRAA**AP**SAASSPADVQSLKKAMSS**LQ**NDRDRLLKELKNLGP**GP**GGK
HDRDLLIGTAKHGLNRTDYI**IM**NGPQLSFLDAYR**NY**AQHKRTDTQAPGSGPGPGILEVDKSGPITLLVQG
HMEGEVWGLSTHPYLPICATVSDDKTLRIWDLSPSGPGPGMLTARLLLPRLLCLQGR**TT**SYSTA**AV**LPNPI
PNPEICYNKLFINNEWHD**AV**GP**GP**GE**EV**SGLEQ**LES**I**IN**FEKLTEWTSSNVGGPGPG**GM**TEQQWN**FAG**IEA
AASAIQGNVTSIHSLDDYKDDDDKGSYKDHGDYKDHDI**MLPIAVGGALAGLVLVLIAYLIGRKRCFC**

Figure 7B

MLLLPFQLLAVLFPGGNSEALQAYHLDPQCWGVNVQPYSGSPANVAVYTALVEPHGRIMGLDLPDGGH
LTGPGPGDTDEAEDPEKMLANFESGKHKYRQTAMFTATMPPAVERLARSYLRRPAVVYGP GPGRRYLL
QNTALEVFMANRTSVMFNFPEQATVKKVVSLSRVLGVGTSYGLPQAGPGPGKIEPDMMMSMEHSFETAS
HDGEAGPSPEVLQGGPGGKVLMASTSYLPSQVTEMFNQGRAFAAVRLPFCGHKNICSLTTIQIPRLLVG
PGPGMPAAELALSAFLVLVFLVWHSLRRLLECFYVSVFSNAAIHVVQYCFGLVYYGPGPGLELLELHCPLG
HCHLCSEPMFTFVYPTIFPLRETPMAGLHQRRTSIGFVAYCGPGPGAHFRLVSKEKMPWDSIKLTFEATG
PRHMSFYVRTHKGSTLSQWSLGNIGIPVGP GPGGRTQQMLIPAWQQVTPMAPAAATLTFEGMAGSQRL
GDWGMKIPHSNHYNVSGPGGELQLVQLEGGGGSGTYRVGNAQP SLADCLDAGDLAQRLREHGA EVP
TEPKEGPGPGELEKFRKSEEGKQRAAAPSAASSPADVQSLKKAMSSLQND RDRLLKELKNLGP GPGGK
HDRDLLIGTAKHGLNRTDYIIMNGPQLSFLDAYRNAQH KRTDTQAPGSGPGPGILEVDKSGPITLLVQG
HMEGEVWGLSTHPYLPICATVSDDKTLRIWDLSPSGPGPGMLTARLLLPRLLCLQGR TTSYSTAAVLNPNP
PNPEICYNKLFINNEWHDVGP GPGGEVSGLEQLESII NFEKLTEWTTSSNVGGPGPGMTEQQWNFAGIEA
AASAIQGNVTSIHSLLDDYKDDDDKGS DYKDHDGDYKDHDIMLIPIAVGGALAGLVLVLIAYLIGKKHCSY
QDIL

Figure 7C

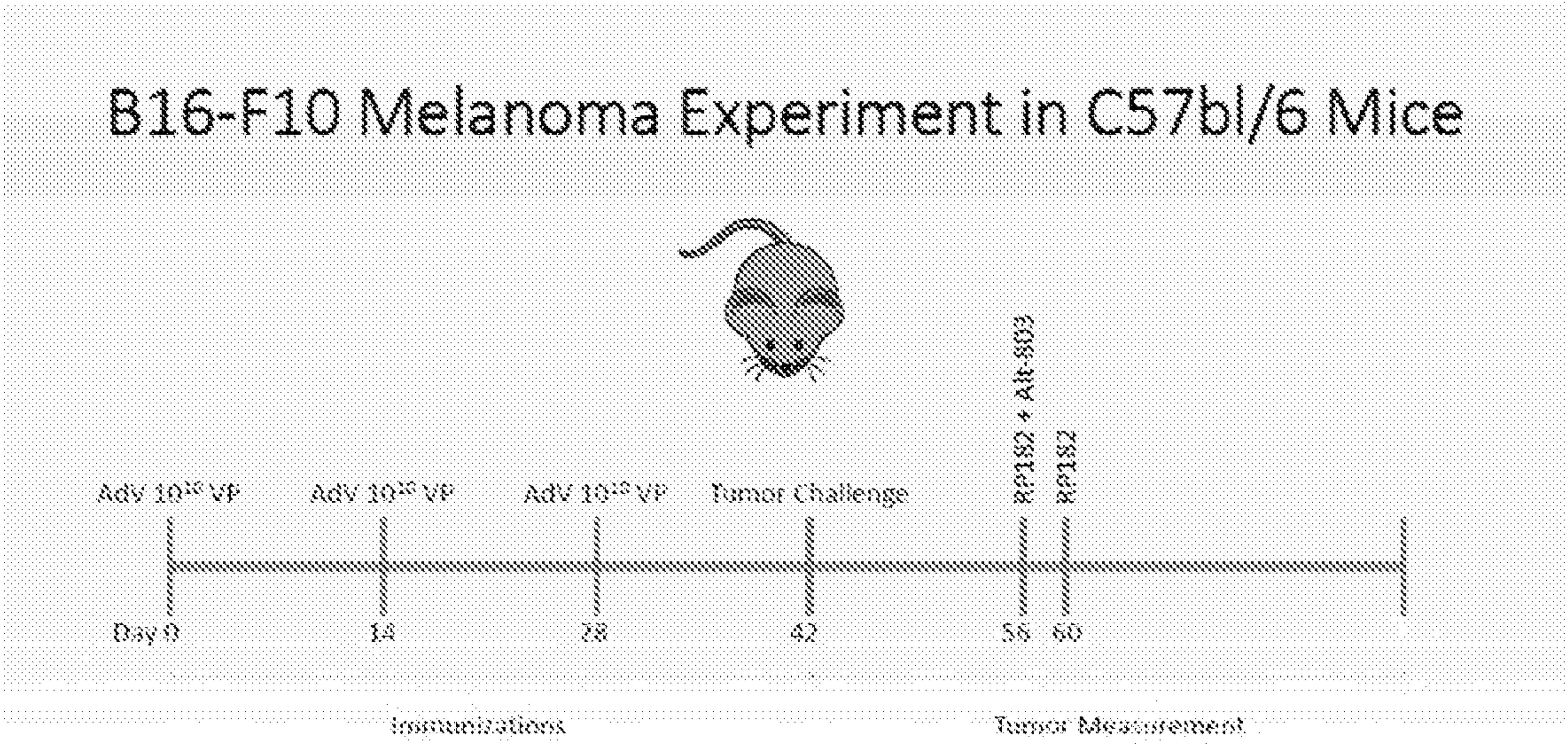


Figure 8

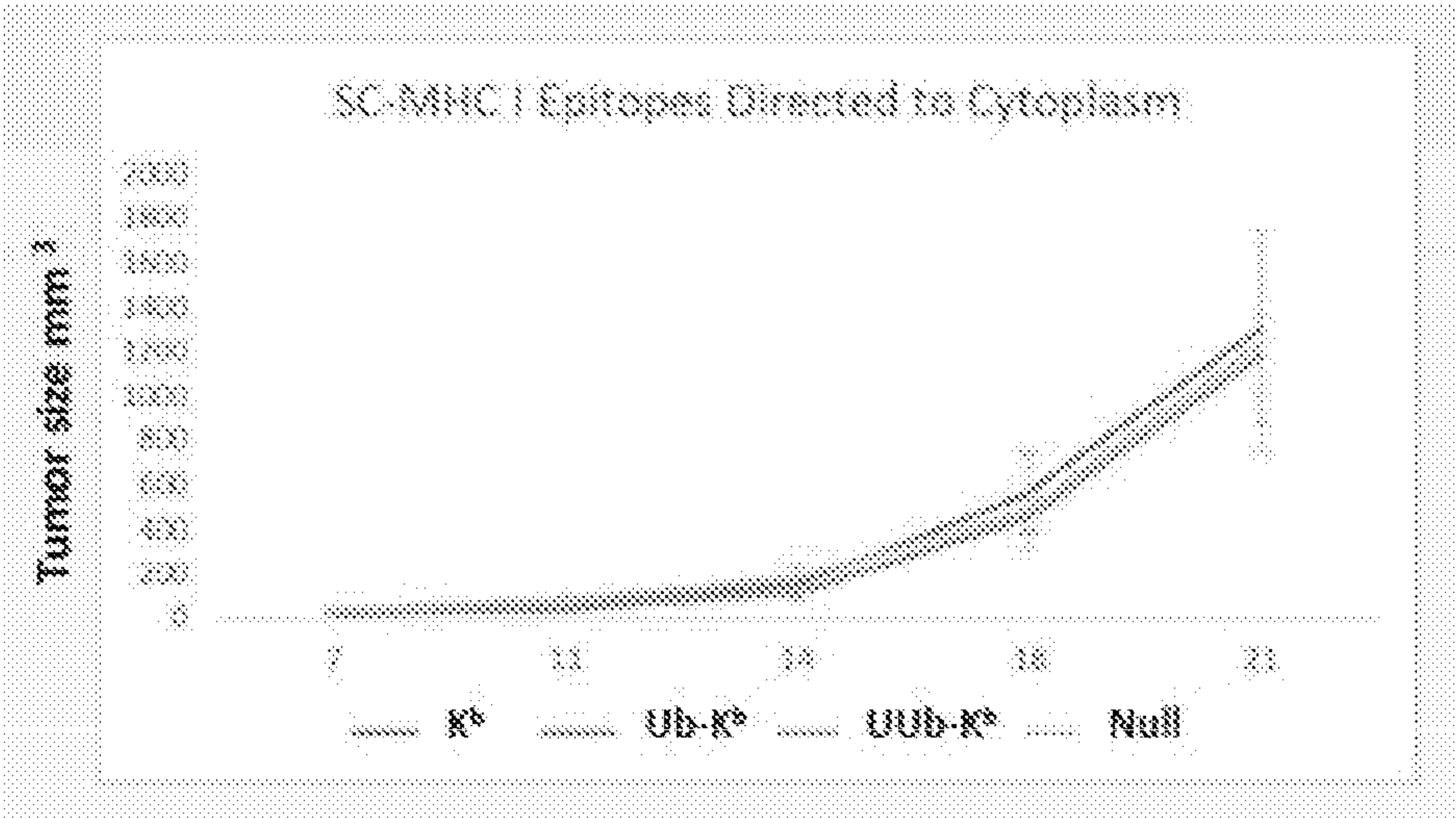


Figure 9A

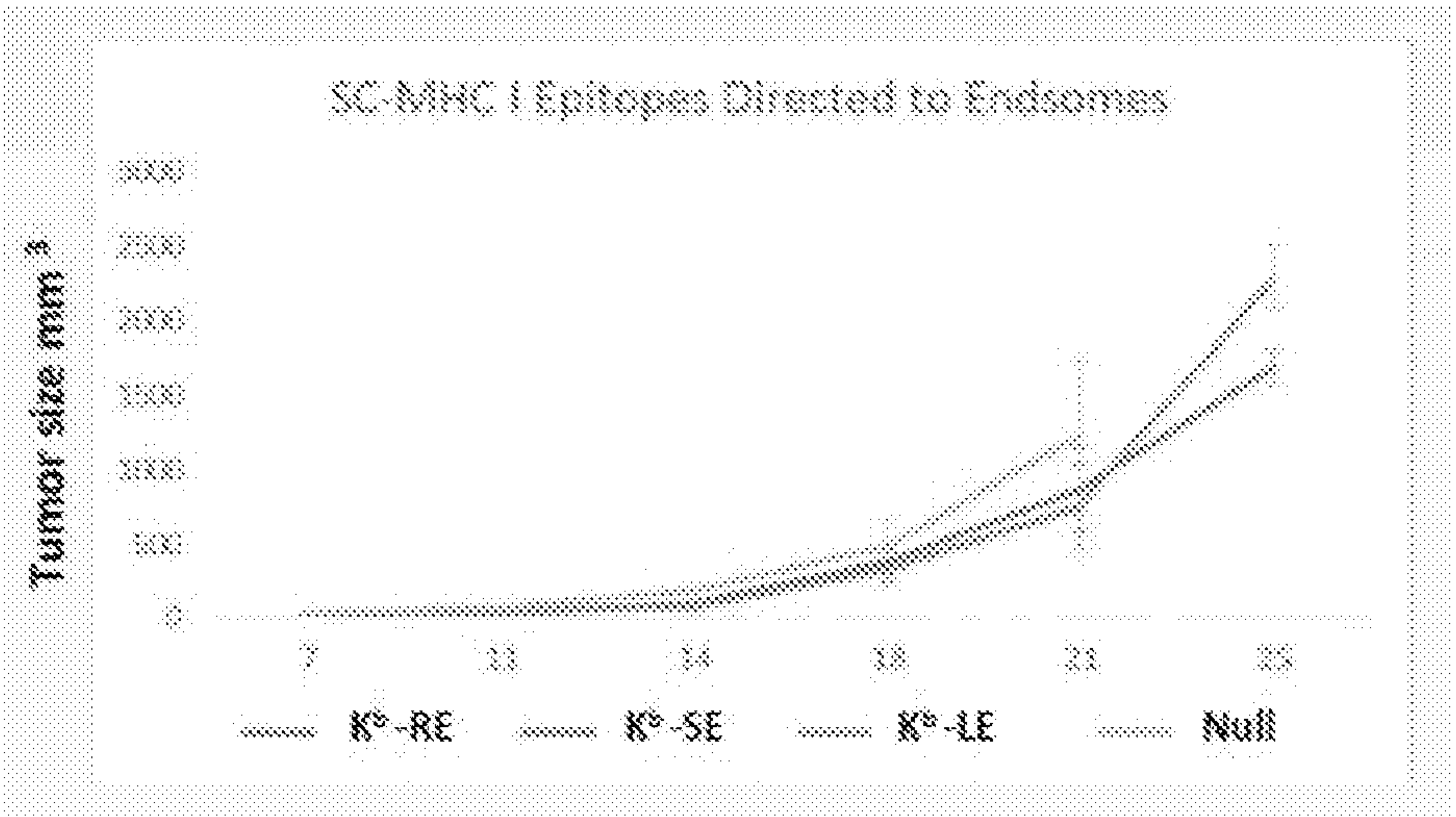


Figure 9B

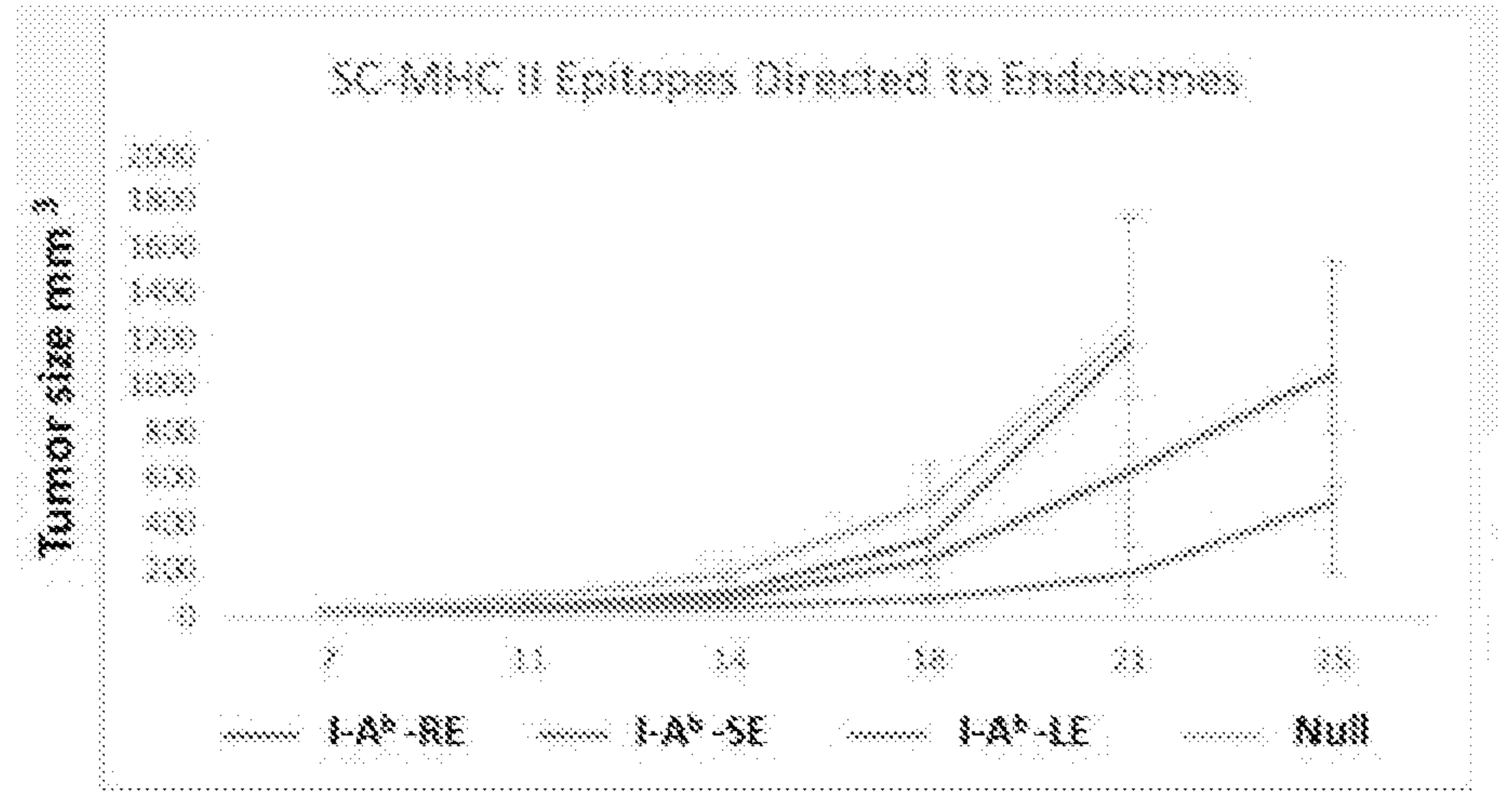


Figure 9C

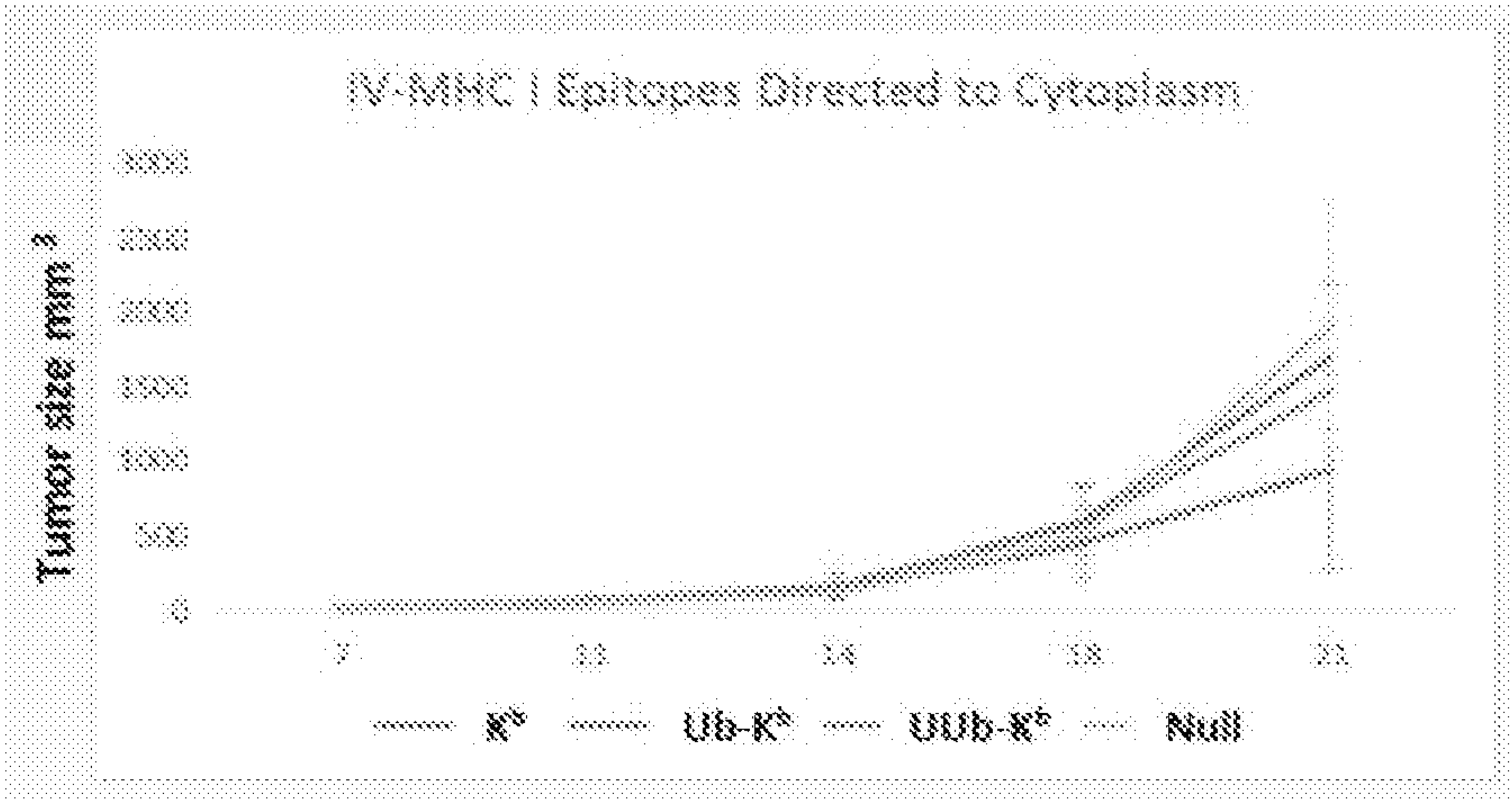


Figure 10A

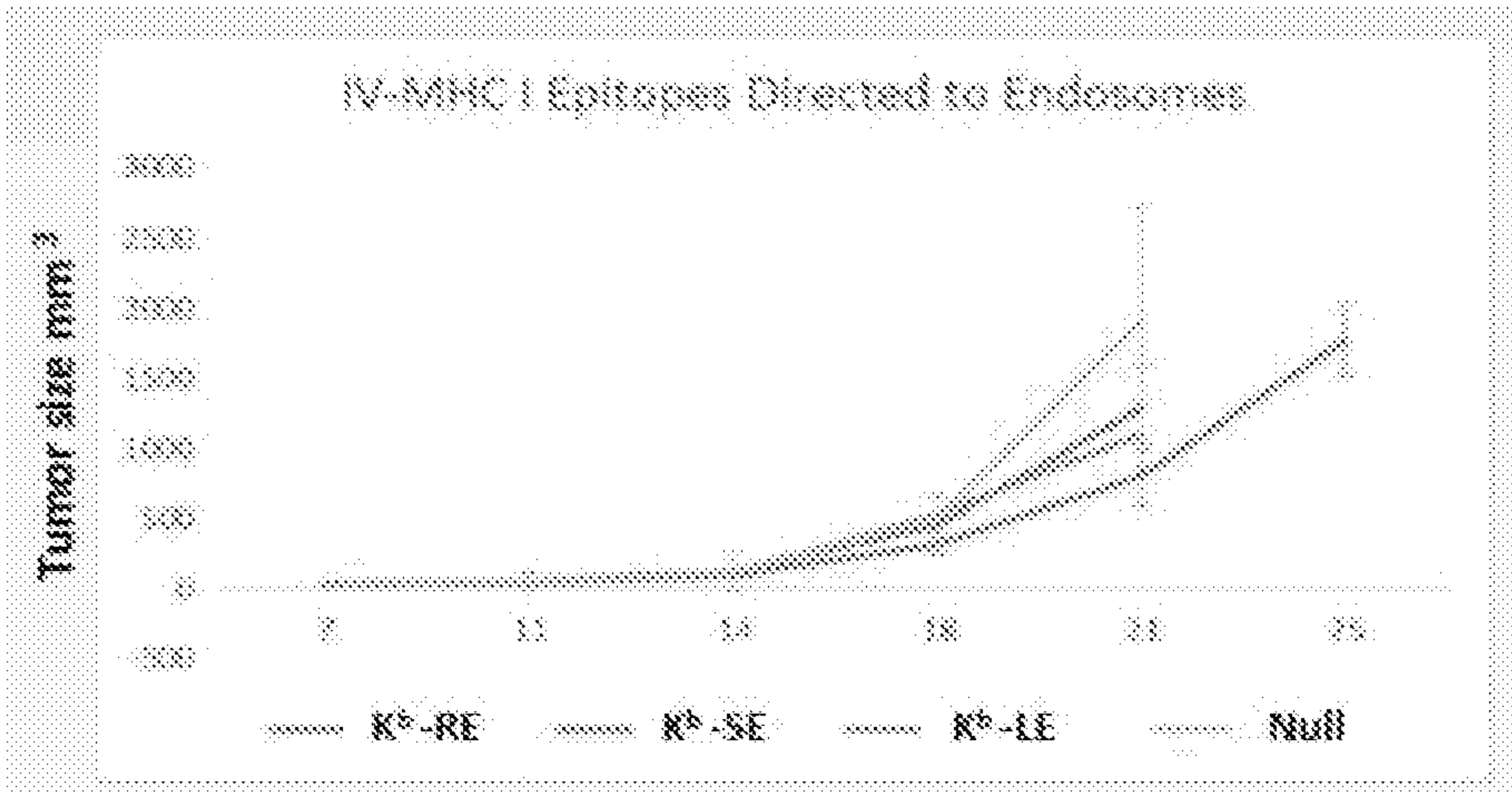


Figure 10B

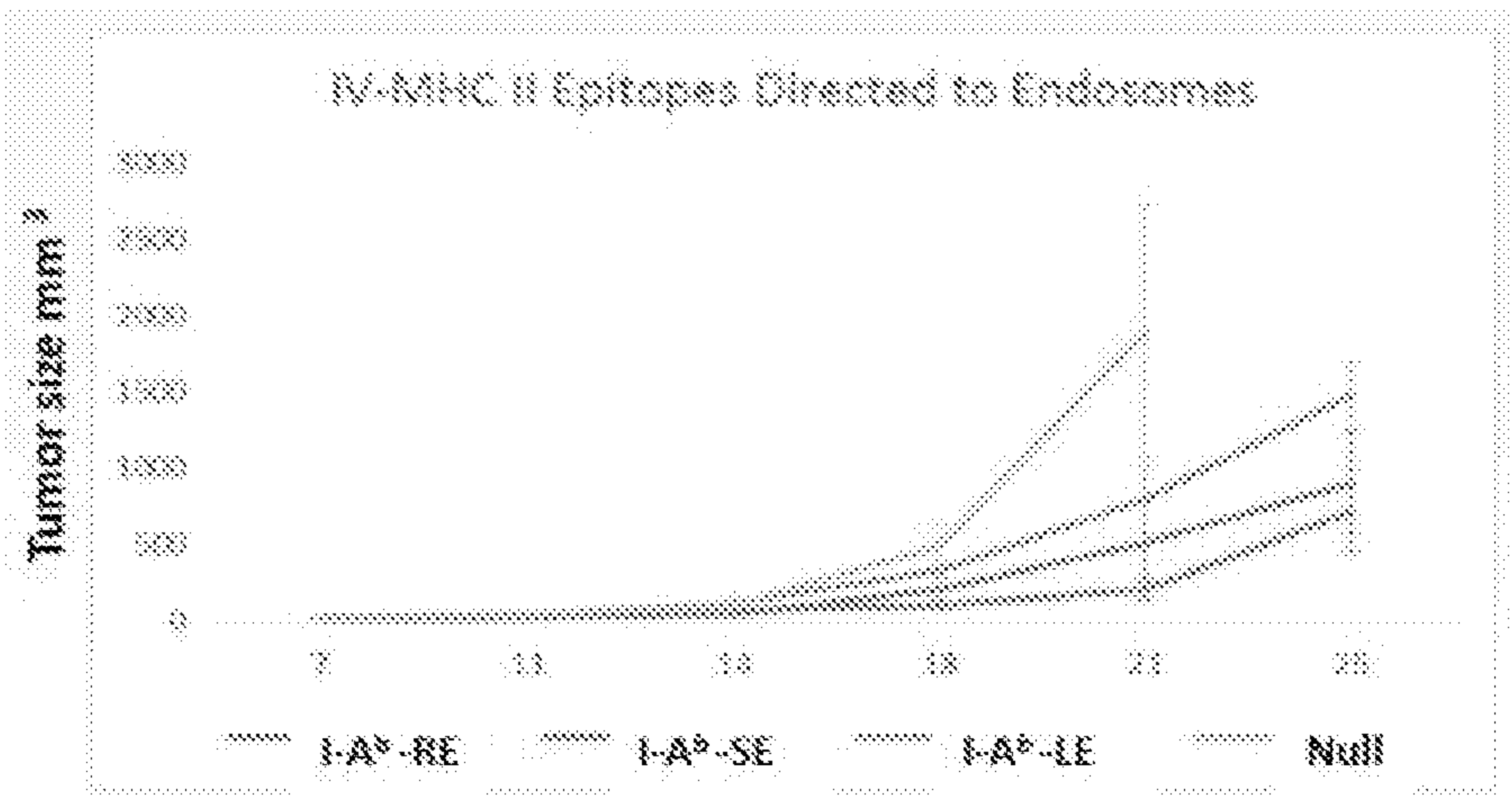


Figure 10C

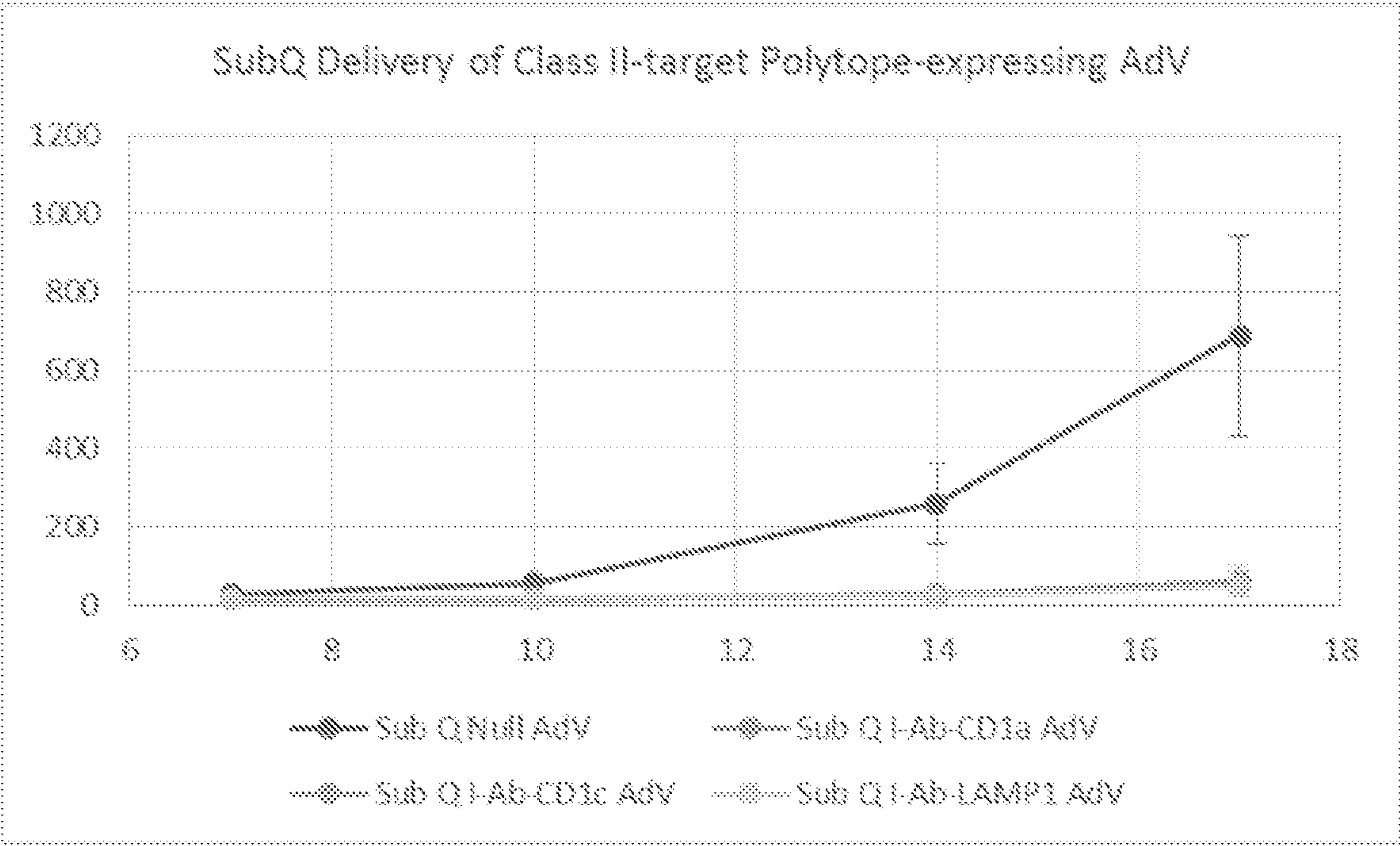


Figure 11A

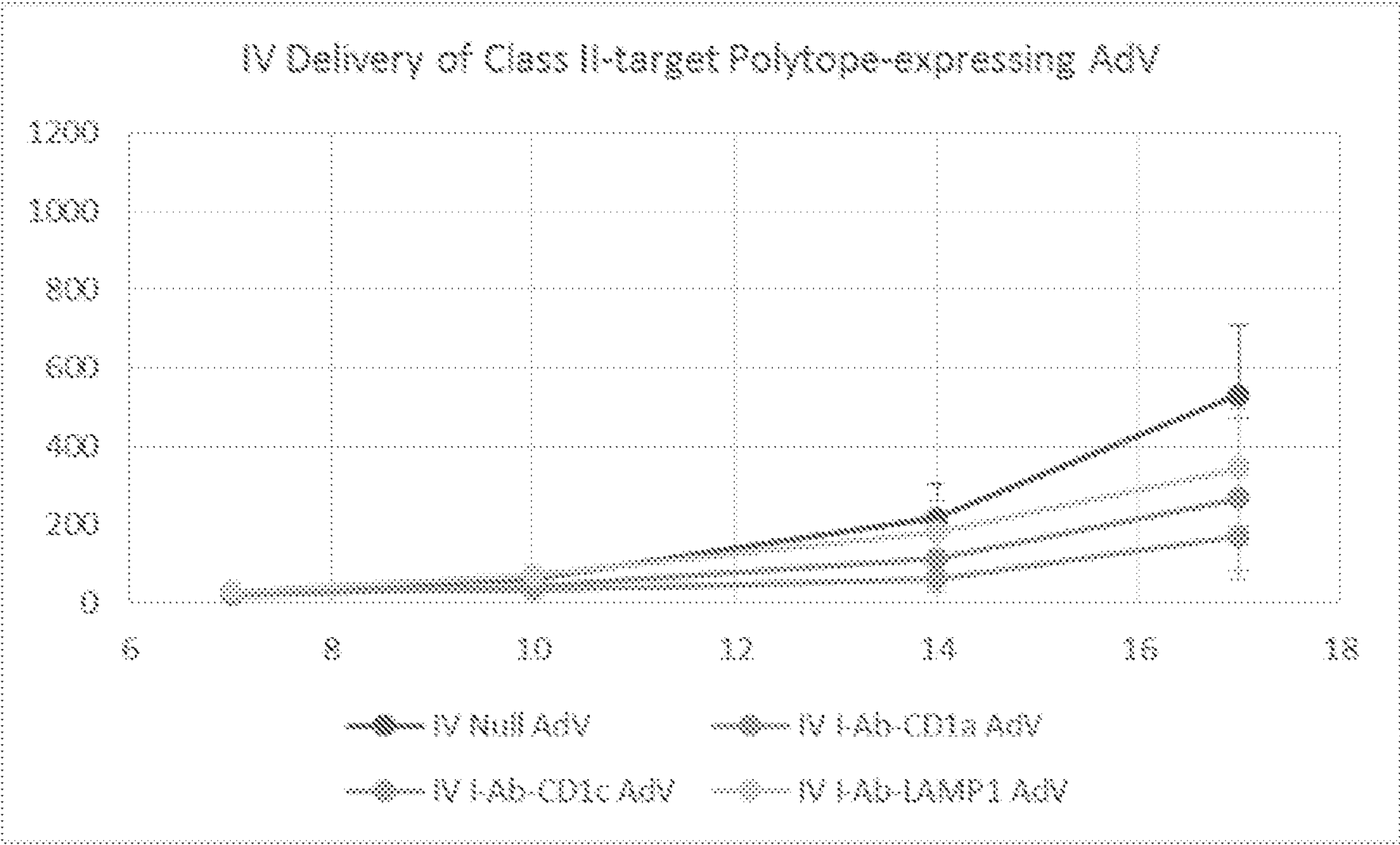


Figure 11B

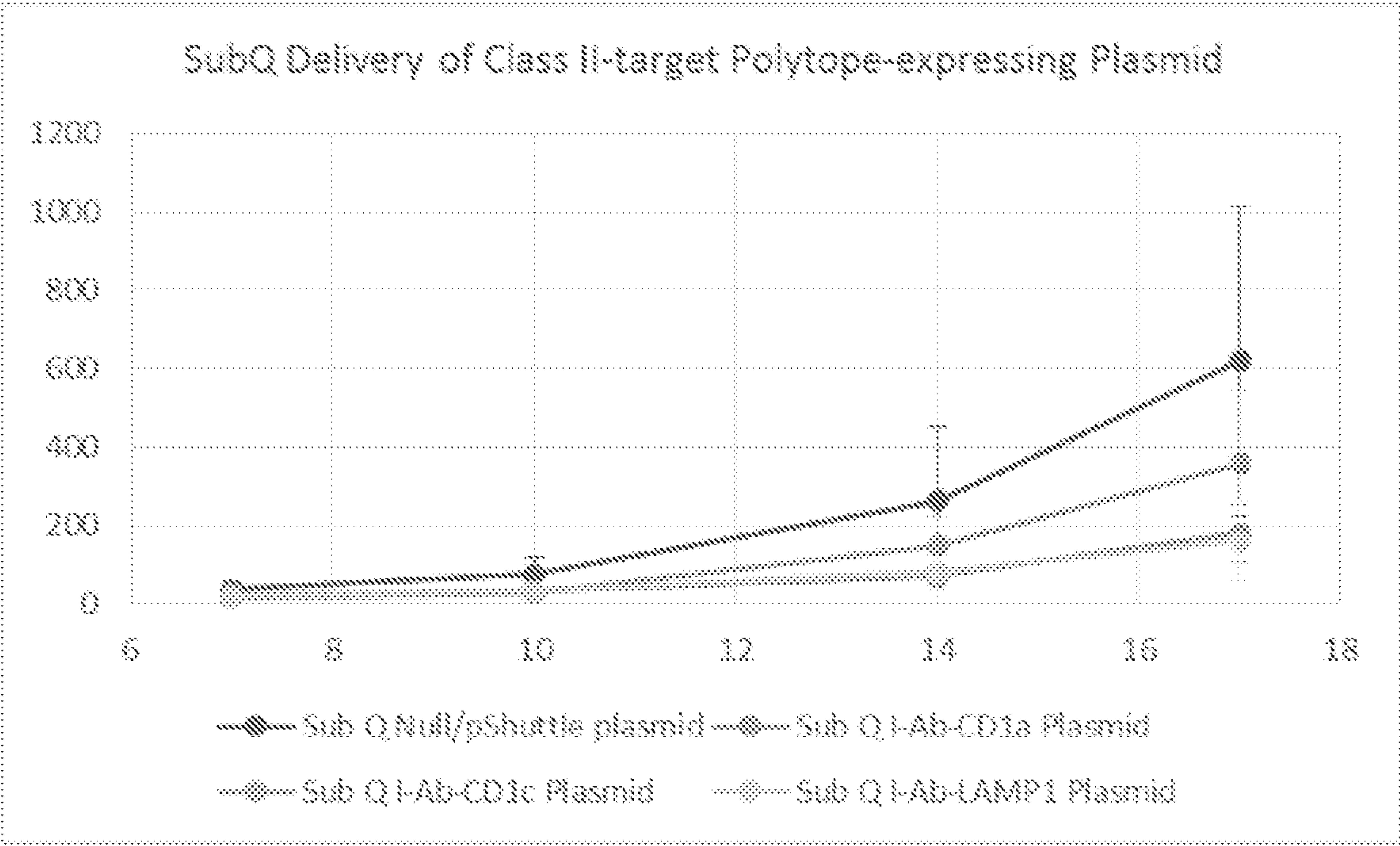


Figure 11C

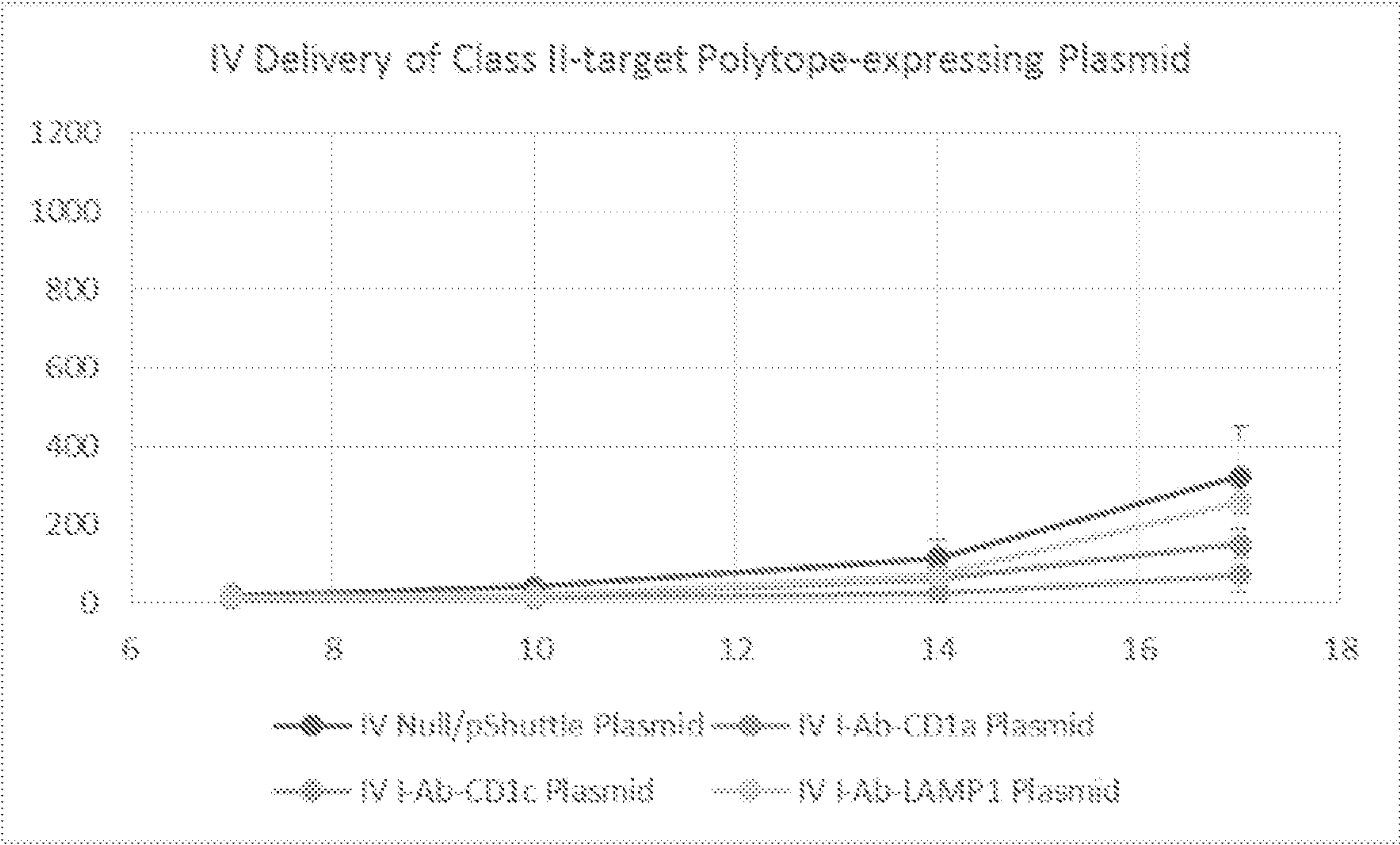


Figure 11D

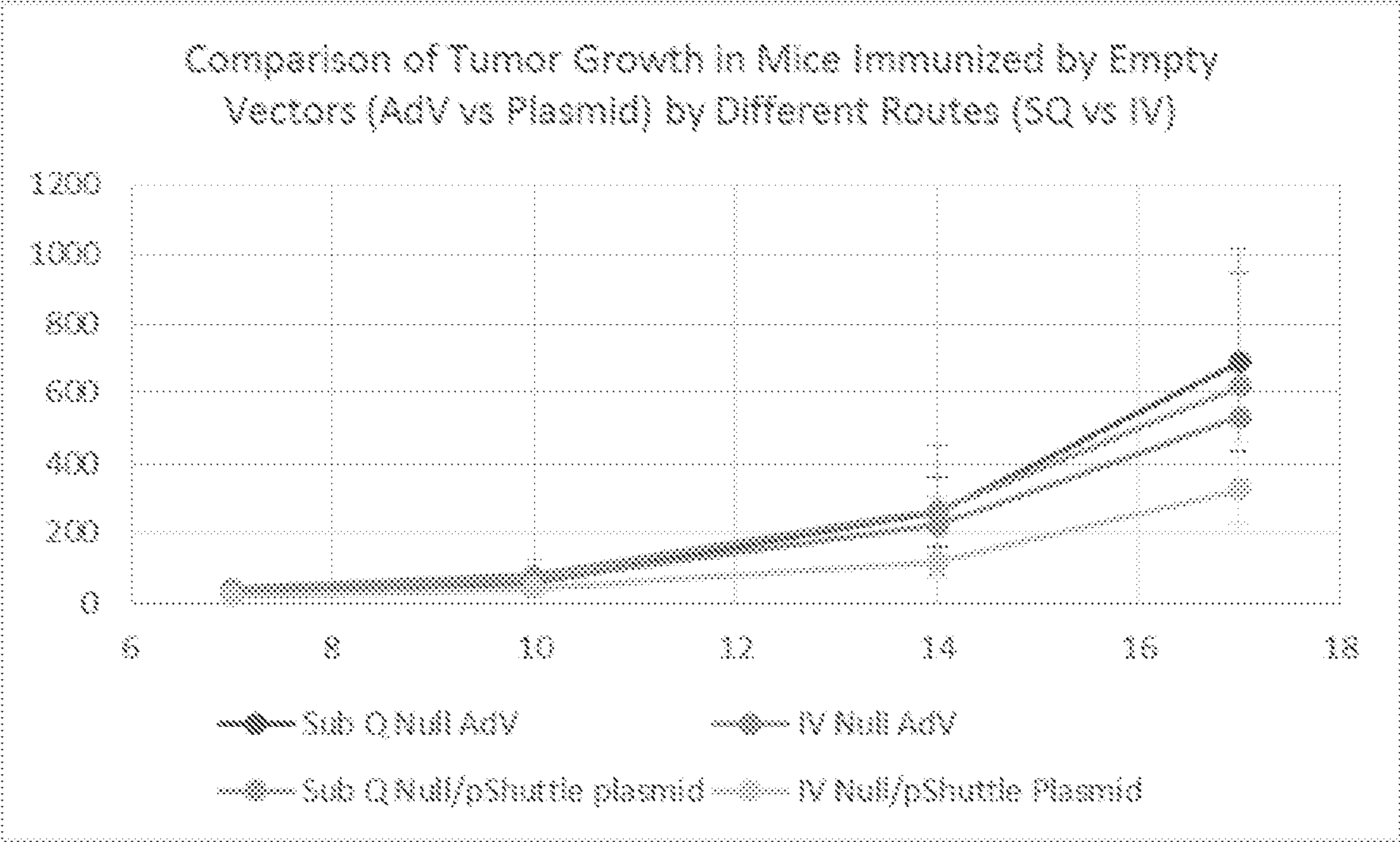


Figure 11E

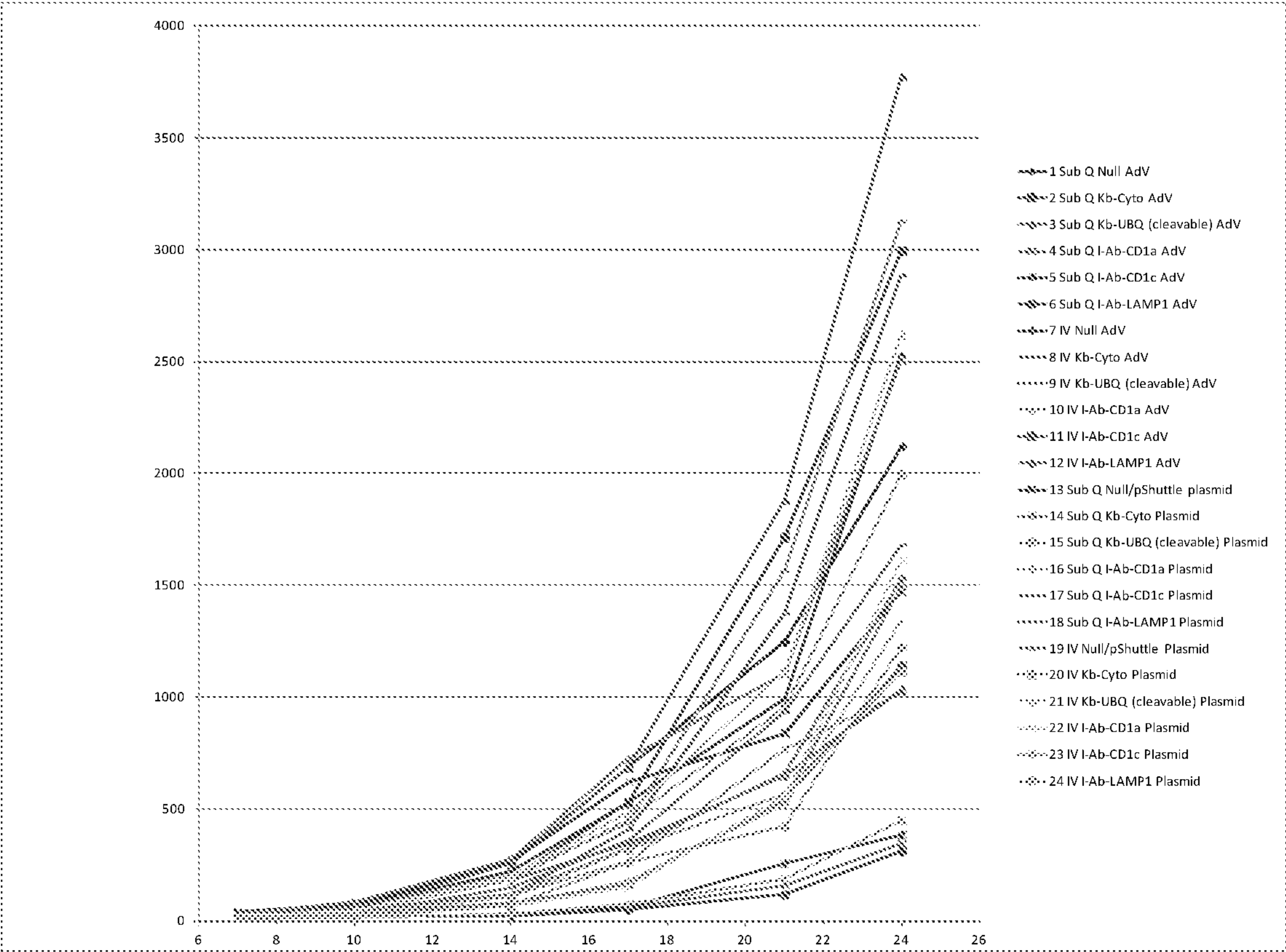


Figure 12