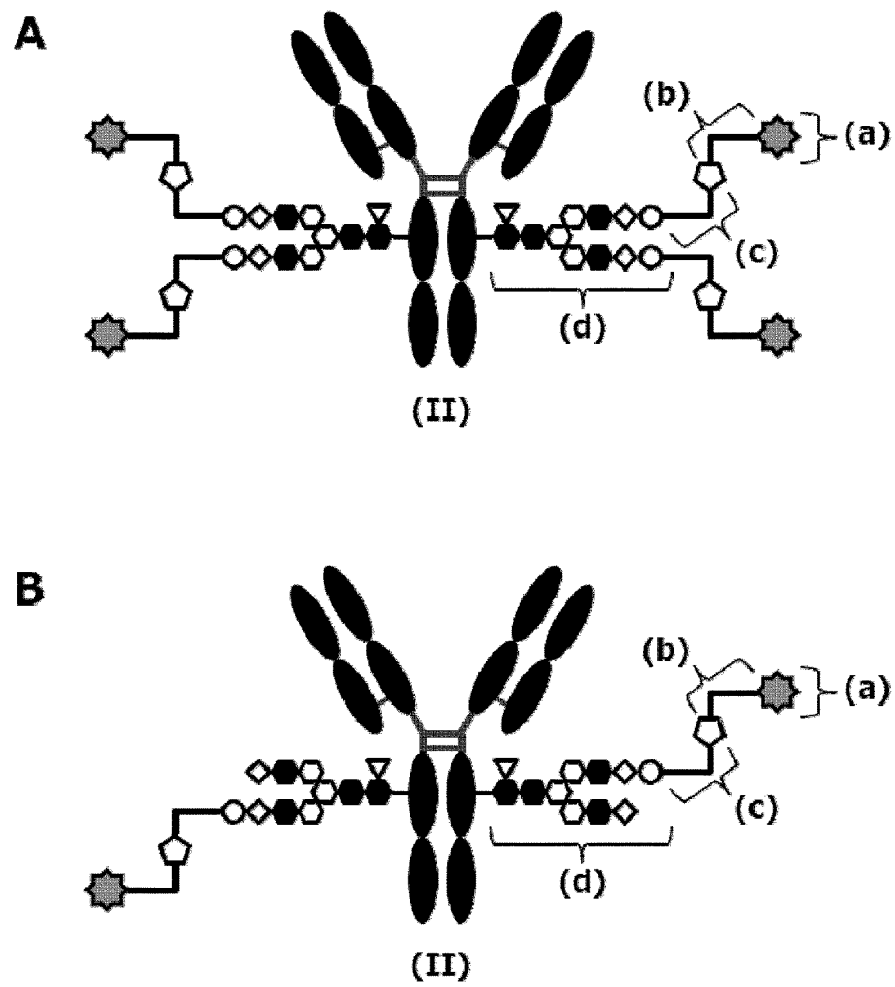
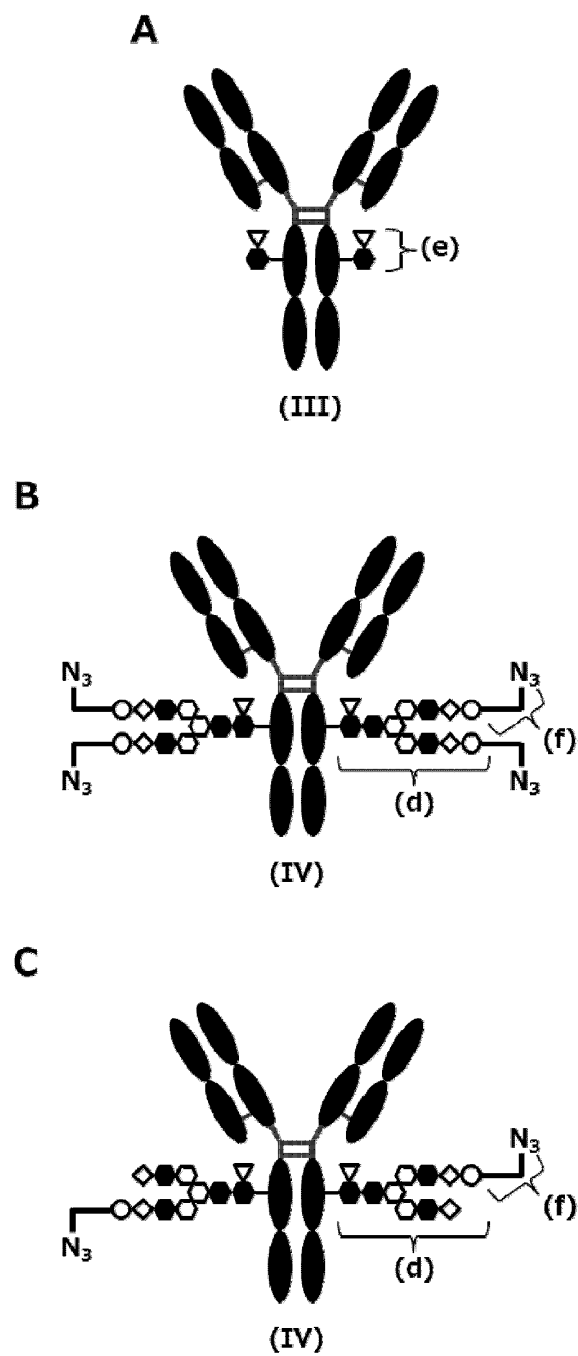


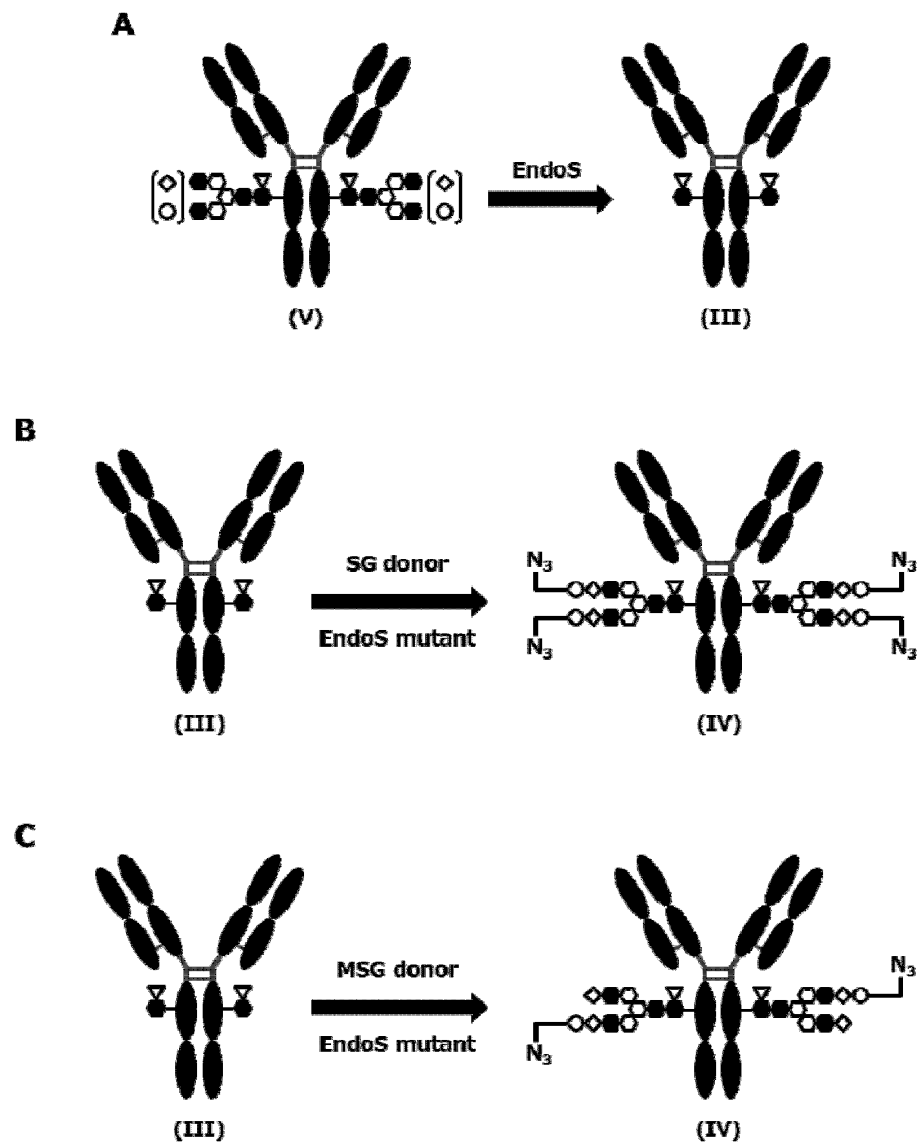
[図1]



[図2]



[図3]



[図4]

トラスツズマブ軽鎖のアミノ酸配列（配列番号1）

DIQMTQSPSSLSASVGDRVTITCRASQDVNTAVAWYQQKPGKAPKLLIYSASFLYSGVPS
RFSGSRSGDFTLTITSSLPEDFATYYCQQHYTTPPTFGQGTKVEIKRTVAAPSVFIFPP
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSSTLT
LSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

トラスツズマブ重鎖のアミノ酸配列（配列番号2）

EVQLVESGGGLVQPGGSLRLSCAASGFNIKDTYIHWVRQAPGKGLEWVARIYPTNGYTRY
ADSVKGRFTISADTSKNTAYLQMNSLRAEDTAVYYCSRWGGDGFYAMDYWGQGLTVTVSS
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
GLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGG
PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

[図5]

改変抗HER2抗体の軽鎖のアミノ酸配列（配列番号1）

DIQMTQSPSSLSASVGDRVTITCRASQDVNTAVAWYQQKPGKAPKLLIYSASFLYSGVPS
RFGSGRSGTDFTLTISSLQPEDFATYYCQQHYTTPPTFGQGTKVEIKRTVAAPSVFIFPP
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTLSSTLT
LSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

改変抗HER2抗体の重鎖のアミノ酸配列（配列番号3）

EVQLVESGGGLVQPGGSLRLSCAASGFNIKDTYIHWVRQAPGKGLEWVARIYPTNGYTRY
ADSVKGRFTISADTSKNTAYLQMNSLRAEDTAVYYCSRWGGDGFYAMDYWGQGTLLTVSS
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSS
GLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPEAAG
GPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRE
EMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR
WQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

（下線は、L A L A 変異部分を示す。）

[図6]

(a) ヒト STING 野生型のアミノ酸配列

MPHSSLHPSIPCPRGHGAQKAALVLLSACLVTWGLGEPPEHTLRYLVLHLASLQLGLLL
 NGVCSLAEELRHIHSRYRGSYWRTVRACLGCP LRRGALLLLSIYFYSLPNAVGPPFTWM
 LALLGLSQALNILLGLKGLAPAEISAVCEKGNFNVAHGLAWSYYIGYLRLILPELQARIR
 TYNQHYNLLRGAVSQRLYILLPLDCGVPDNL SMADPNIRFLDKLPQQTGDRA GIKDRVY
 SNSIYELLENGQRAGTCVLEYATPLQTLFAMSQYSQAGFSREDRLEQAKLFCRTLEDILA
 DAPESQNNCRLIAYQEPADDSSFSLSQEVLRLRQEEKEEVTVGSLKTSAVPSTSTMSQE
 PELLISGMEKPLPLRTDFS

(b) ヒト STING REF 変異型 (R232H) のアミノ酸配列

MPHSSLHPSIPCPRGHGAQKAALVLLSACLVTWGLGEPPEHTLRYLVLHLASLQLGLLL
 NGVCSLAEELRHIHSRYRGSYWRTVRACLGCP LRRGALLLLSIYFYSLPNAVGPPFTWM
 LALLGLSQALNILLGLKGLAPAEISAVCEKGNFNVAHGLAWSYYIGYLRLILPELQARIR
 TYNQHYNLLRGAVSQRLYILLPLDCGVPDNL SMADPNIRFLDKLPQQTGD HAGIKDRVY
 SNSIYELLENGQRAGTCVLEYATPLQTLFAMSQYSQAGFSREDRLEQAKLFCRTLEDILA
 DAPESQNNCRLIAYQEPADDSSFSLSQEVLRLRQEEKEEVTVGSLKTSAVPSTSTMSQE
 PELLISGMEKPLPLRTDFS

(下線は、R232H 変異の場所を示す。)

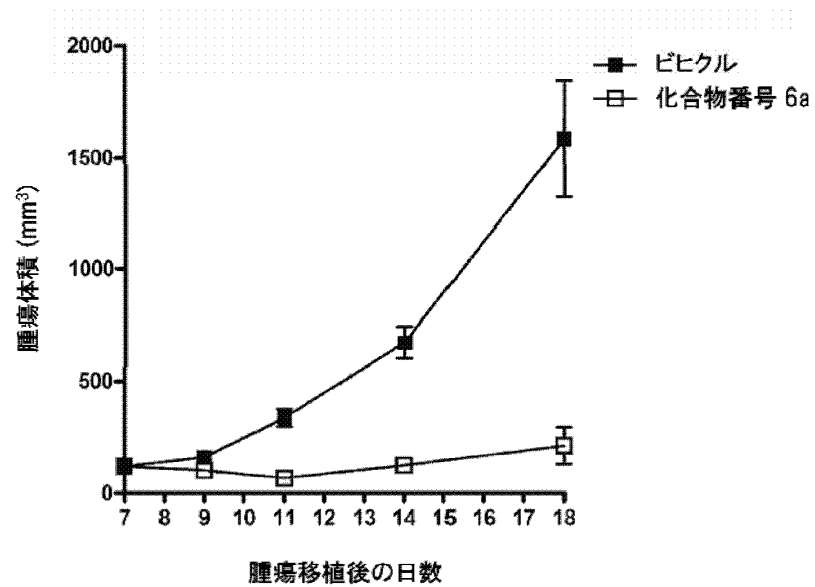
(c) ヒト STING HAQ 変異体 (R71H, G230A, R293Q) のアミノ酸配列

MPHSSLHPSIPCPRGHGAQKAALVLLSACLVTWGLGEPPEHTLRYLVLHLASLQLGLLL
 NGVCSLAEEL HHIHSRYRGSYWRTVRACLGCP LRRGALLLLSIYFYSLPNAVGPPFTWM
 LALLGLSQALNILLGLKGLAPAEISAVCEKGNFNVAHGLAWSYYIGYLRLILPELQARIR
 TYNQHYNLLRGAVSQRLYILLPLDCGVPDNL SMADPNIRFLDKLPQQT ADRA GIKDRVY
 SNSIYELLENGQRAGTCVLEYATPLQTLFAMSQYSQAGFSREDRLEQAKLFC QTLEDILA
 DAPESQNNCRLIAYQEPADDSSFSLSQEVLRLRQEEKEEVTVGSLKTSAVPSTSTMSQE
 PELLISGMEKPLPLRTDFS

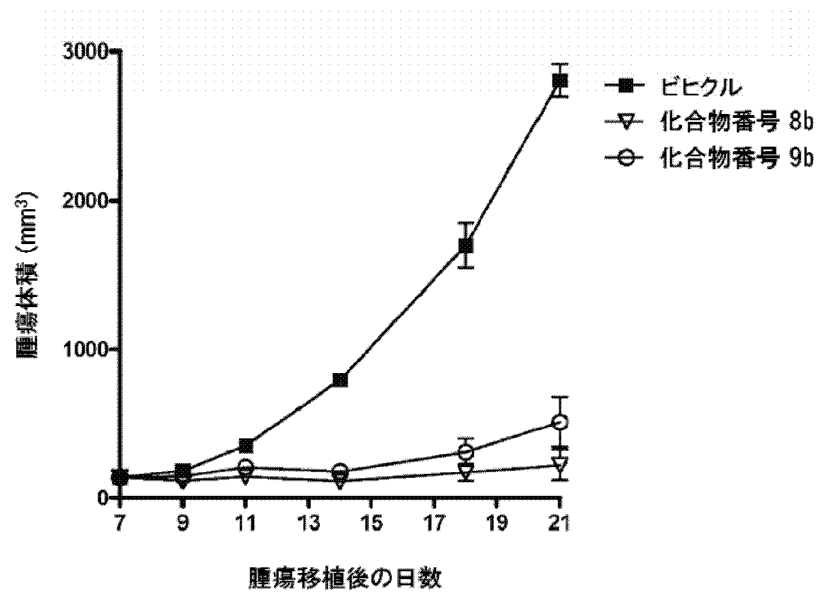
(3つの下線は、それぞれ、R71H 変異、G230A 変異及び R293Q 変異の場所を示す。)

[図7]

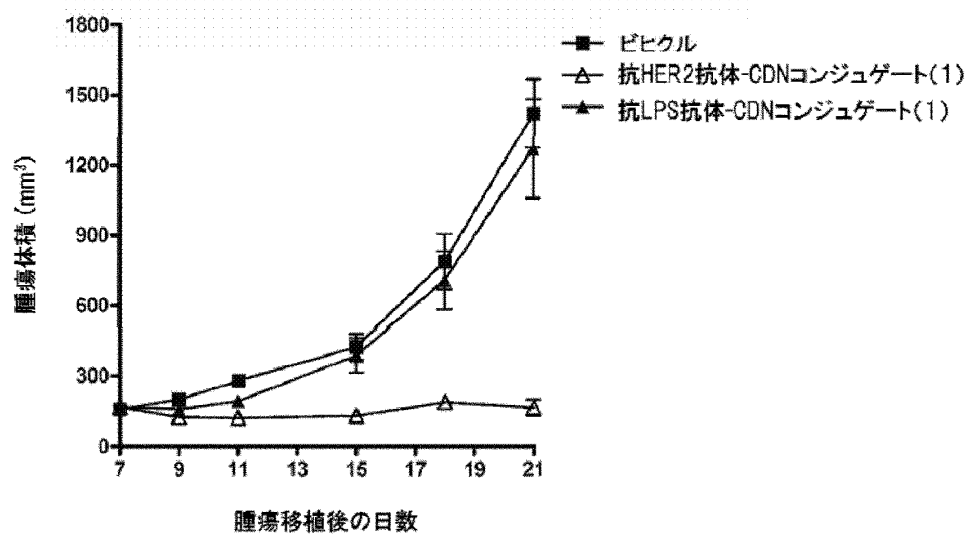
(a)



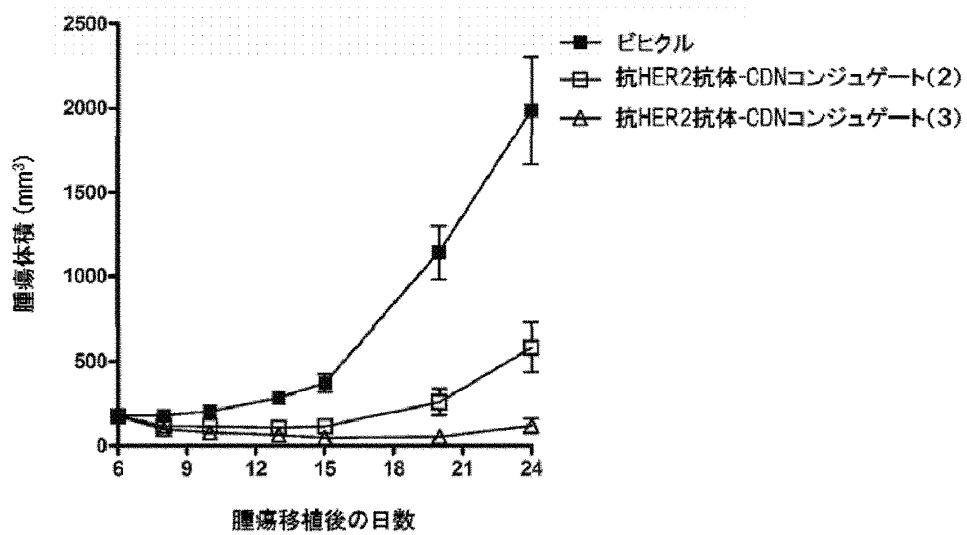
(b)



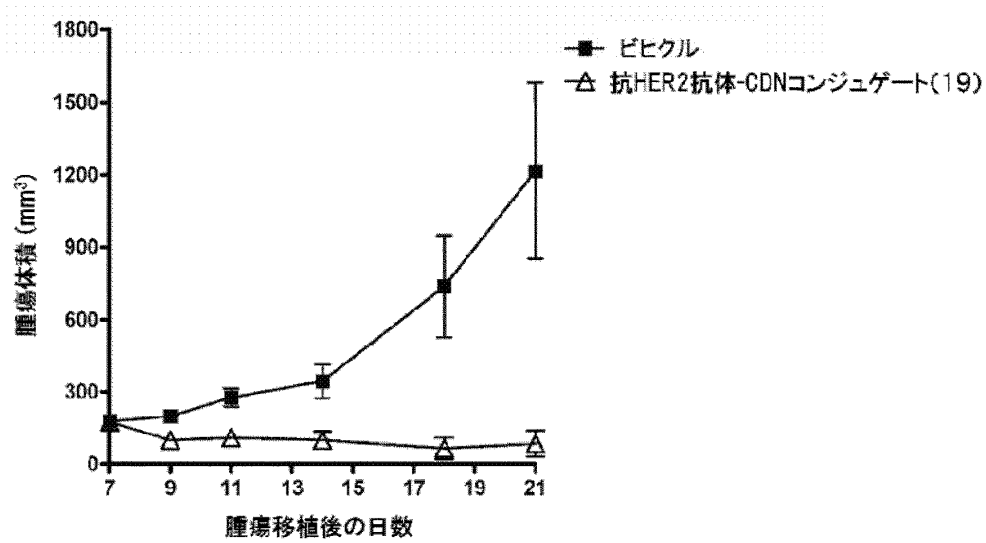
[図8]



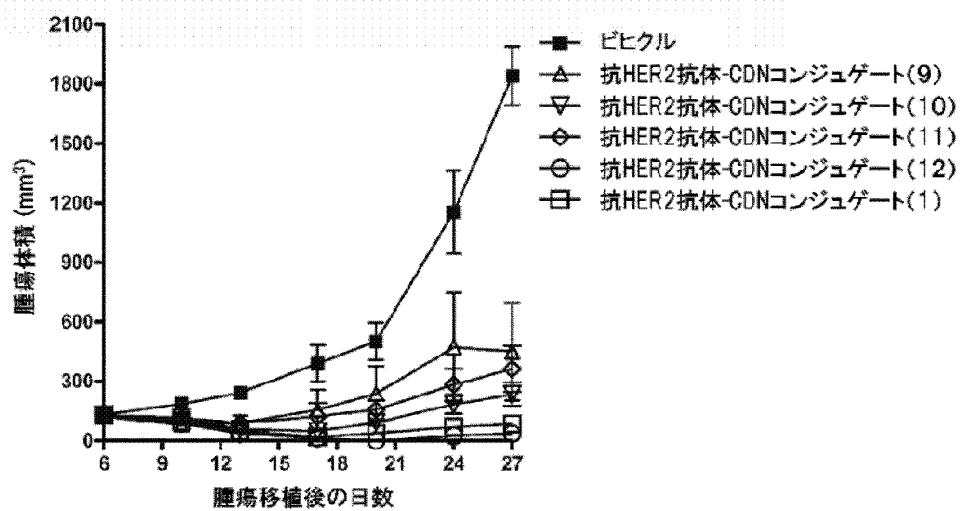
[図9]



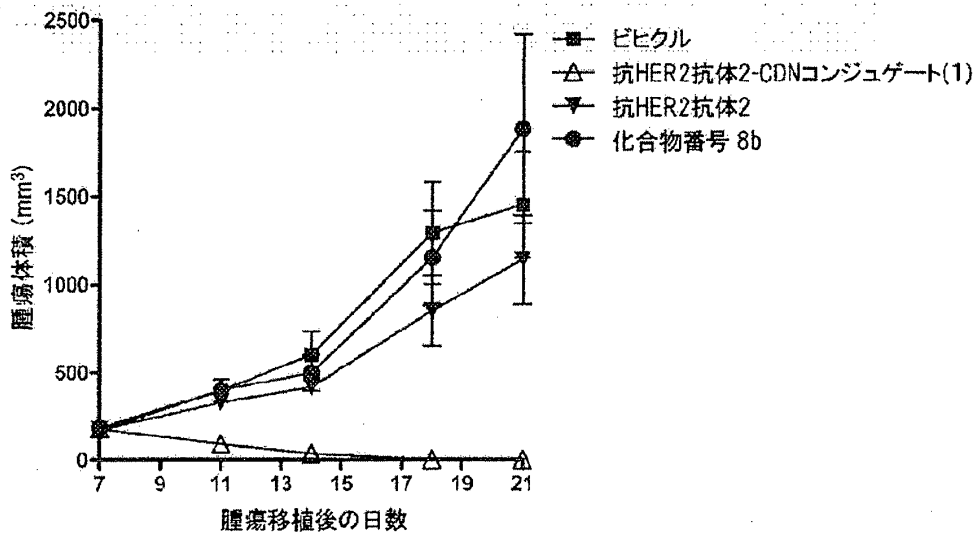
[図10]



[図11]

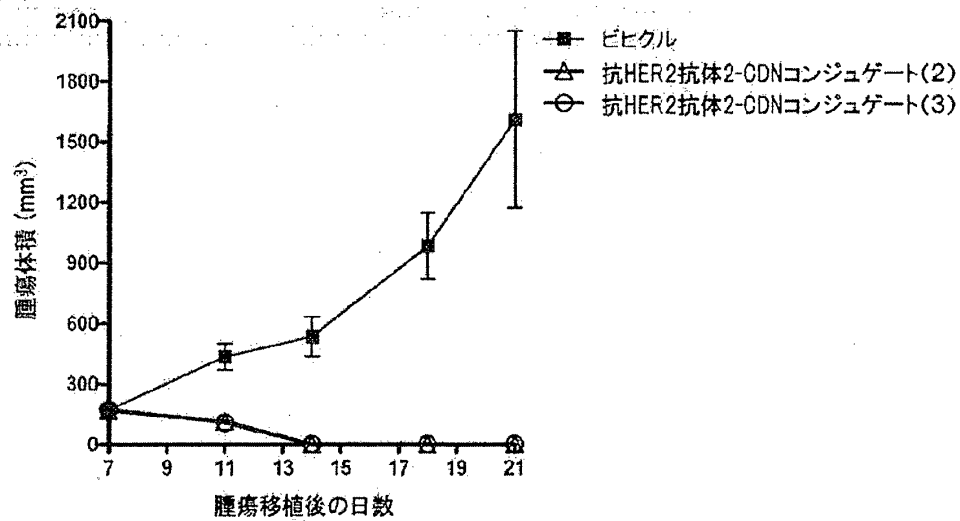


[図12]



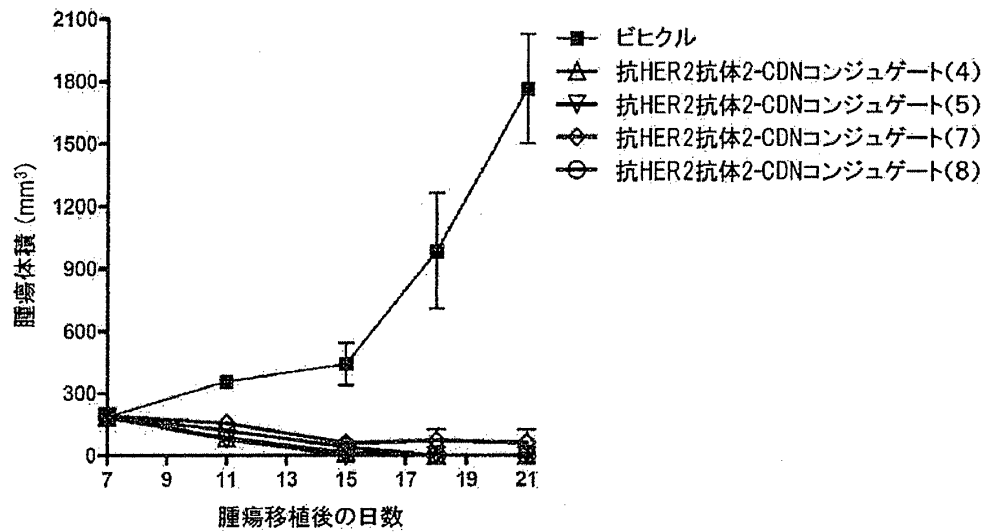
[図13(a)]

(a)



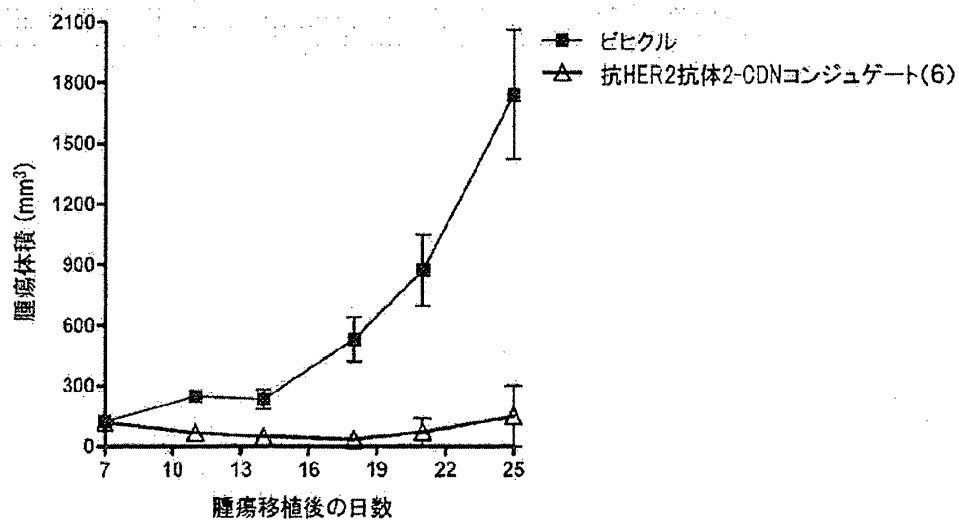
[図13(b)]

(b)

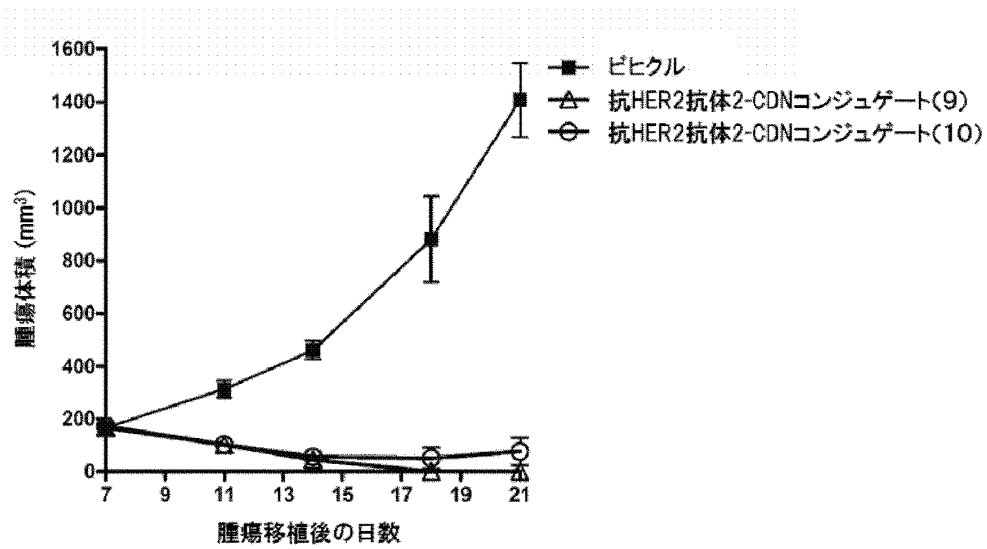


[図13(c)]

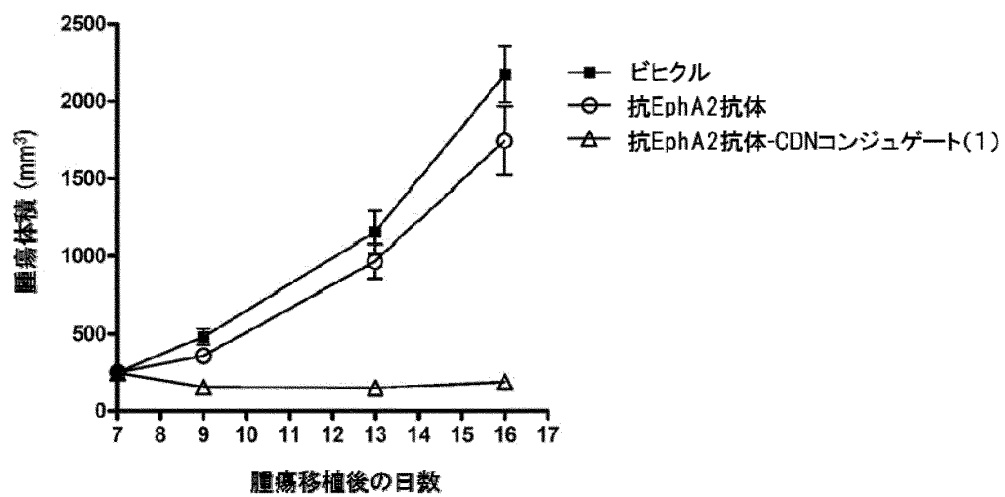
(c.)



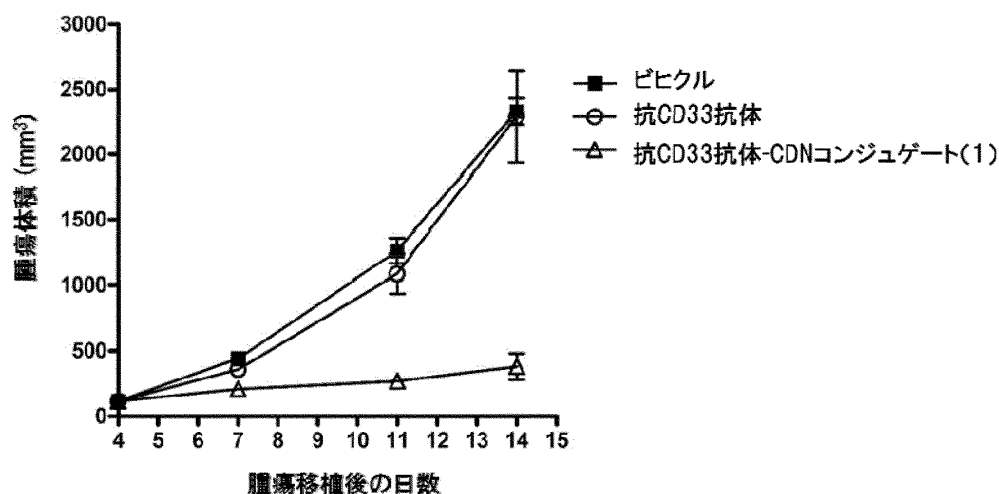
[図14]



[図15]



[図16]



[図17]

ペルツズマブ軽鎖のアミノ酸配列（配列番号28）

DIQMTQSPSSLSASVGDRVTITCKASQDVSIGVAWYQQKPGKAPKLLIYSASYRYTGVP
 RFSGSGSGTDFTLTISLQPEDFATYYCQQYYIYPYTFGQGTKVEIKRTVAAPSVFIFPP
 SDEQLKSGTASVVCLLNFPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSLSSTLT
 LSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

ペルツズマブ重鎖のアミノ酸配列（配列番号29）

EVQLVESGGGLVQPGGSLRLSCAASGFTFTDYTMDWVRQAPGKGLEWVADVPNPSSGSIY
 NQRFKGRFTLSVDRSKNTLYLQMNSLRAEDTAVYYCARNLGPSFYFDYWGQGTLLTVSSA
 STKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSG
 LYSLSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPCPAPELLGGP
 SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNS
 TYRVSVLTIVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEM
 TKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQ
 QGNVFSCSVMHEALHNHYTQKSLSLSPGK

[図18]

改変抗HER2抗体2の軽鎖のアミノ酸配列（配列番号28）

DIQMTQSPSSLSASVGDRVITCKASQDVSIGVAWYQQKPGKAPKLLIYSASYRYTGVP
RFSGSGSGTDFTLTISSLQPEDFATYYCQQYYIYPYTFGGGTKVEIKRTVAAPSVFIFPP
SDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTLSSTLT
LSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

改変抗HER2抗体2の重鎖のアミノ酸配列（配列番号30）

EVQLVESGGGLVQPGGSLRLSCAASGFTFTDYTMDWVRQAPGKGLEWVADVPNPSSGGSIY
NQRFKGRFTLSVDRSKNTLYLQMNSLRAEDTAVYYCARNLGPSFYFDYWGGGTLVTVSSA
STKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSG
LYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEAAGG
PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREE
MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

（下線は、K214R変異及びLALA変異部分を示す。）

[図19]

抗CD33抗体の軽鎖のアミノ酸配列（配列番号31）

DIQLTQSPSTLSASVGDRVTITCRASESLDNYGIRFLTWFAQKPGKAPKLLMYAASNQGS
GVPSRFSGSGSGTEFTLTISSLQPDDFATYYCQQTKEVPWFSFGGQTKVEVKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKSTYSLS
STLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

抗CD33抗体の重鎖のアミノ酸配列（配列番号32）

EVQLVQSGAEVKKPGSSVKVCKASGYTITDSNIHWVRQAPGQSLEWIGYIYPYNGGTDY
NQKFKNRATLTVDNPTNTAYMELSSLRSEDTAFYYCVNGNPWLAYWGQGTLLTVSSASTK
GPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYS
LSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEAAGGPSVF
LFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYR
VVSVELTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN
QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGN
VFSCSVMHEALHNHYTQKSLSLSPGK

[図20]

抗E p h A 2抗体の軽鎖のアミノ酸配列（配列番号33）

DIVMTQSPLSLPVTGPGEPAISCRSSQSIVHSSGITYLEWYLQKPGQSPQLLIYKVSNRF
SGVPDRFSGSGSGTDFTLKISRVEAEDVGVYYCFQGSHVPTYFGQGTKVEIKRTVAAPSV
FIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSL
SSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

抗E p h A 2抗体の重鎖のアミノ酸配列（配列番号34）

QVQLVQSGAEVKKPGASVKVSCKASGYTFIDYSMHWRQAPGGGLEWMGWINTYTGEPTY
SDDFKGRVTITADTSTSTAYLELSSLRSEDVAVYYCATYYRYERDFDYWGQGLTVTVSSA
STKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSG
LYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGP
SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNS
TYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEM
TKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQ
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

[図21]

抗C D H 6抗体の軽鎖のアミノ酸配列（配列番号35）

DIQMTQSPSSLSASVGDRVTITCKASQNIYKNLAWYQQKPGKAPKLLIYDANTLQTGVPS
RFSGSGSGSDFTLTISLQPEDFATYFCQQYYSGWAFGGGKVEIKRTVAAPSVFIFPPS
DEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSSTLT
LSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

抗C D H 6抗体の重鎖のアミノ酸配列（配列番号36）

EVQLVQSGAEVKKPGASVKVSCKASGYTFTRNFMHWVRQAPGGGLEWMGWIIYPGDGETEY
AQKFQGRVTITADTSTSTAYMELSSLRSEDVAVYYCARGVYGGFAGGYFDFWGQGLTVTV
SSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQ
SSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEAA
GGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALGAPIEKTISKAKGQPREPQVYTLPPSR
EEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

[図22]

