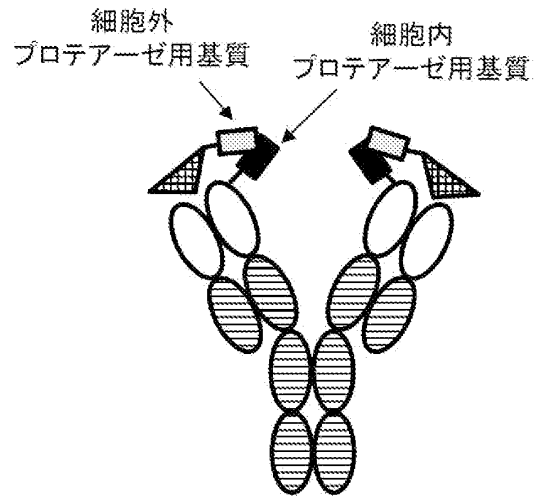
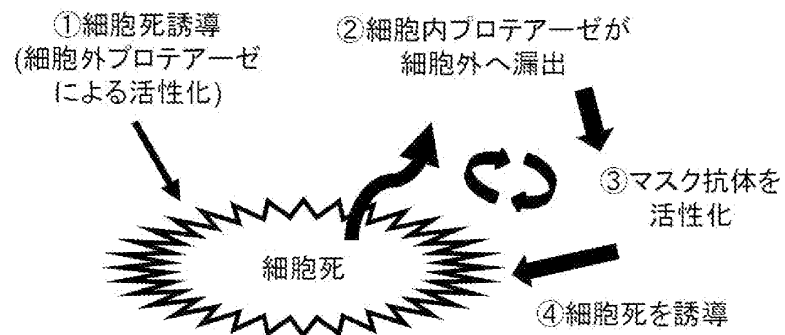


[図1]

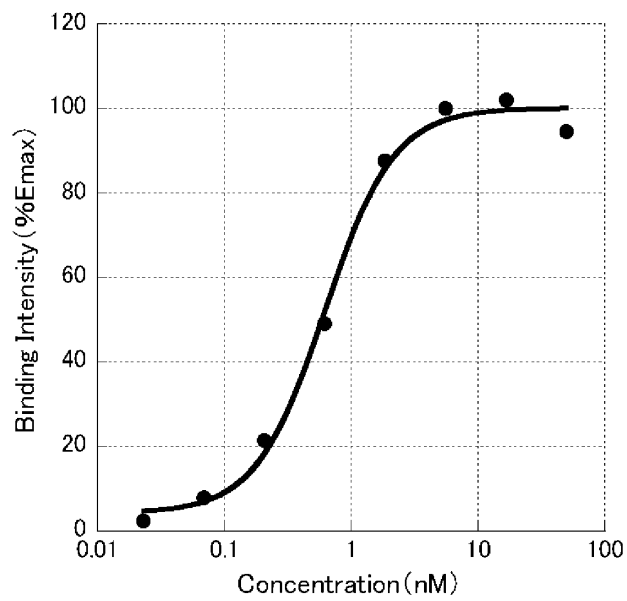
A



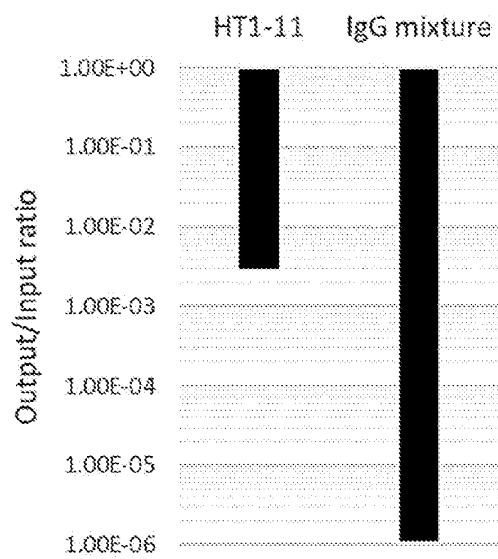
B



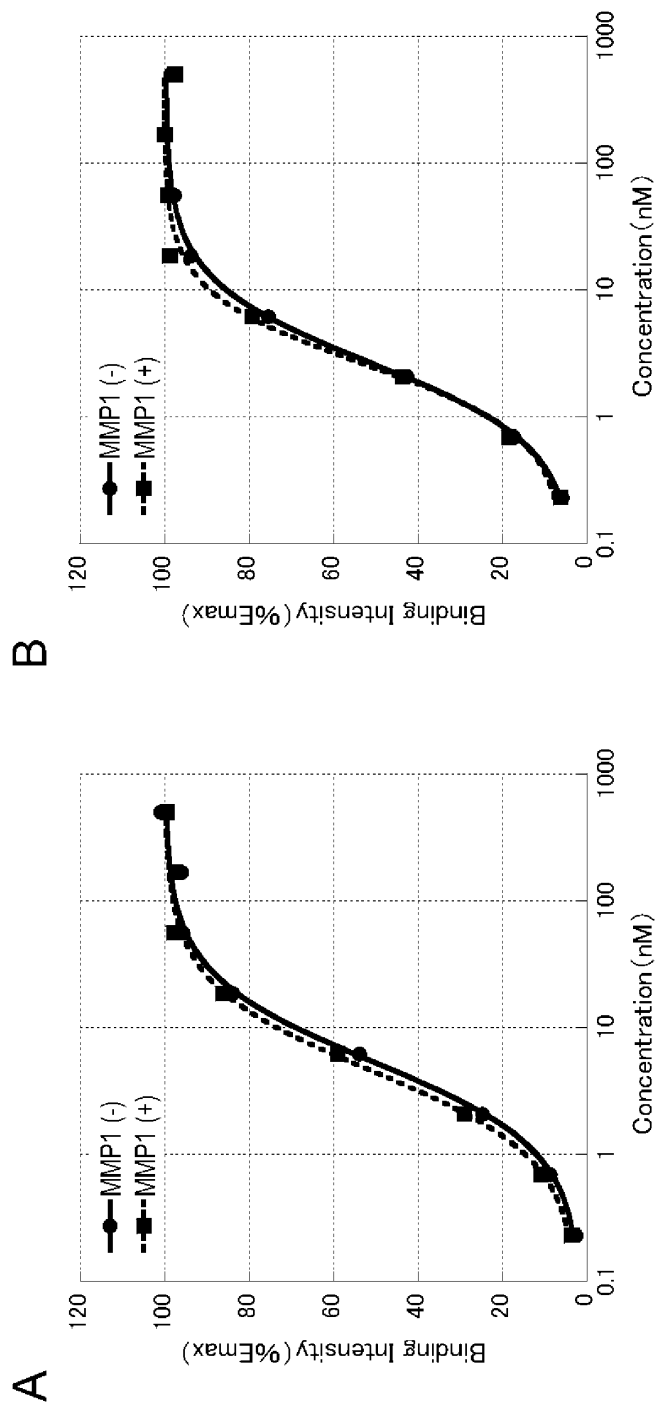
[図2]



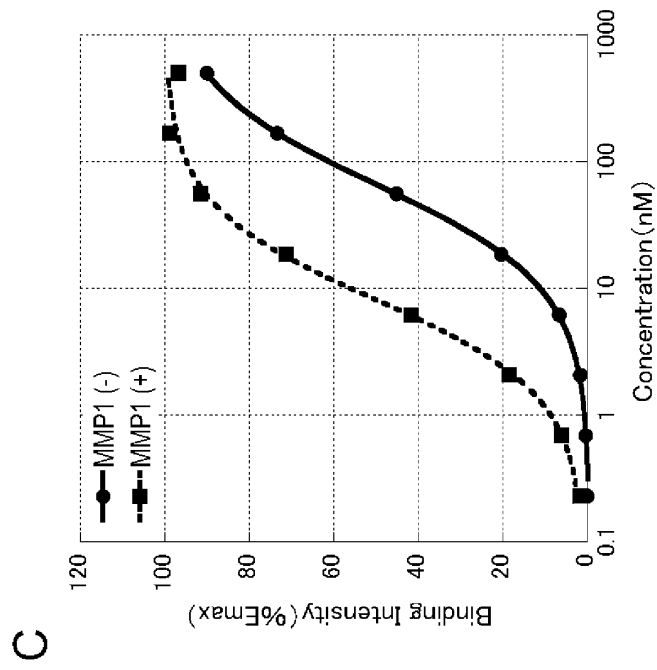
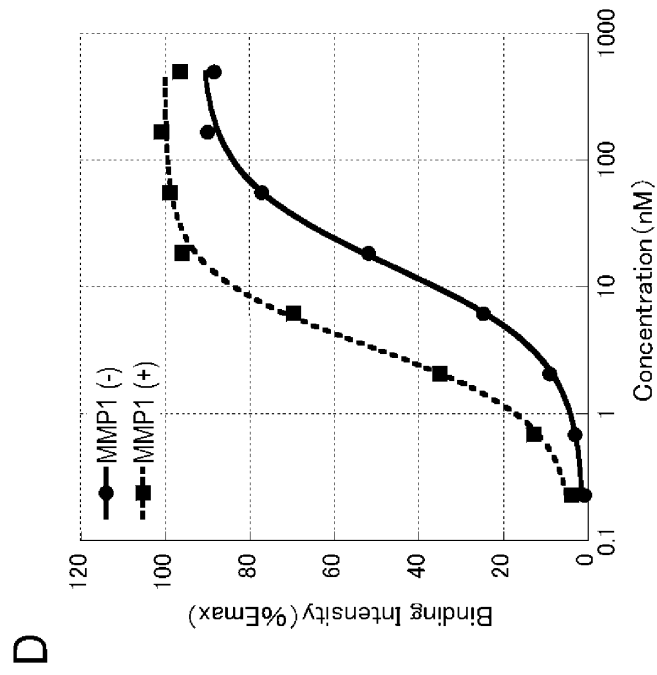
[図3]



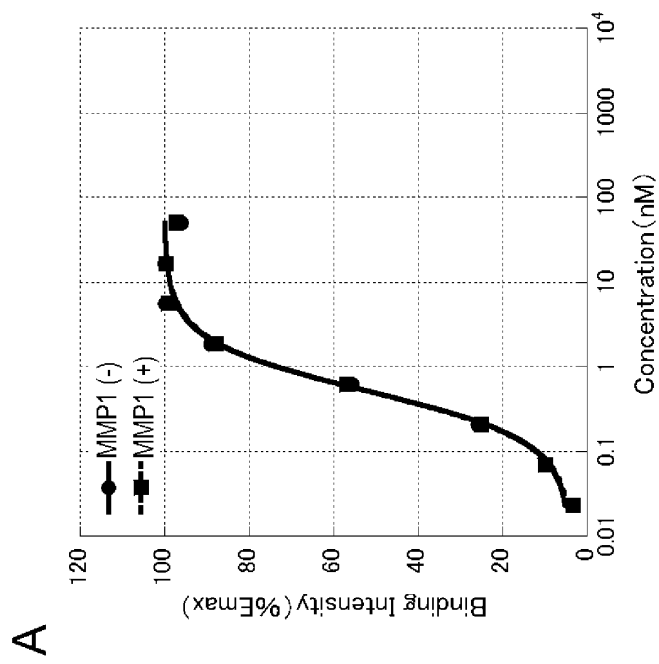
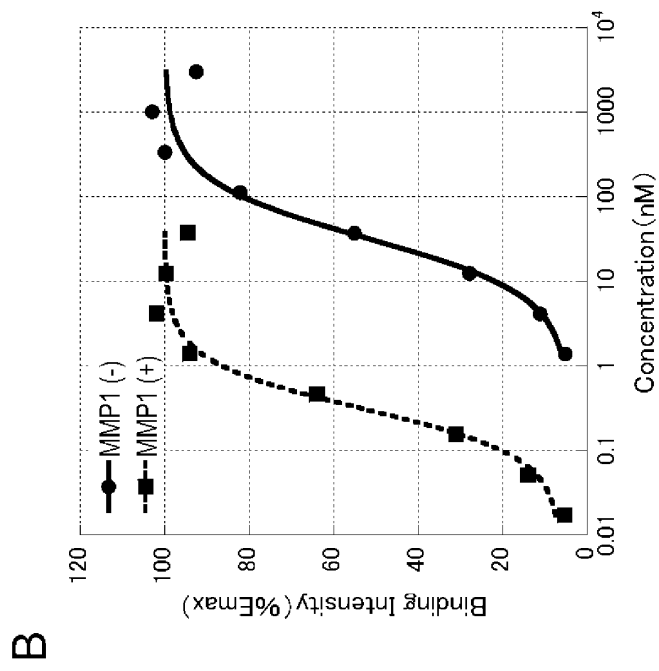
[図4-1]



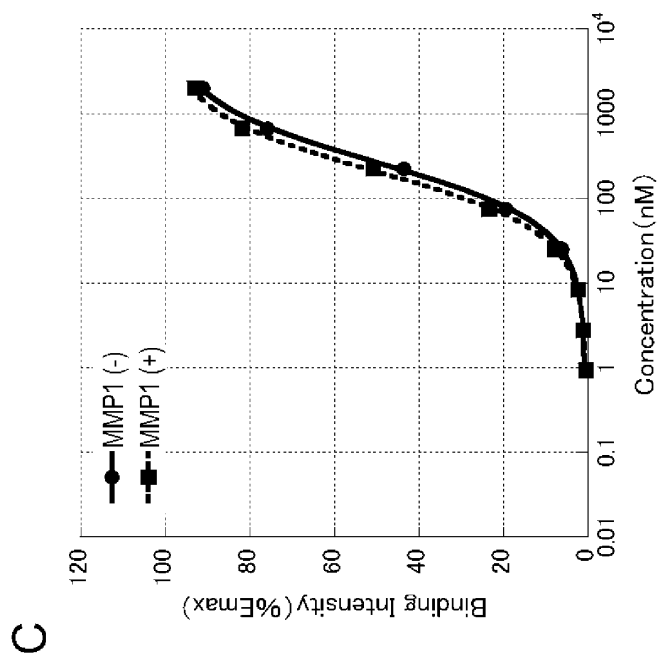
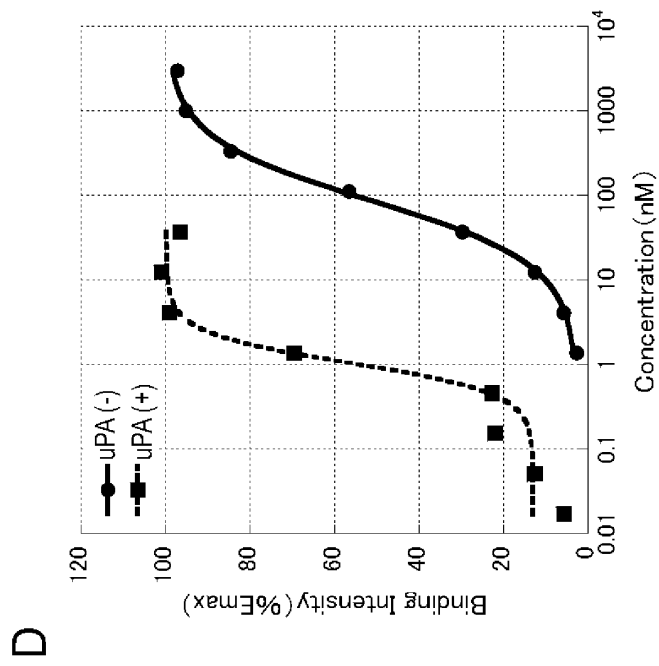
[図4-2]



[図5-1]

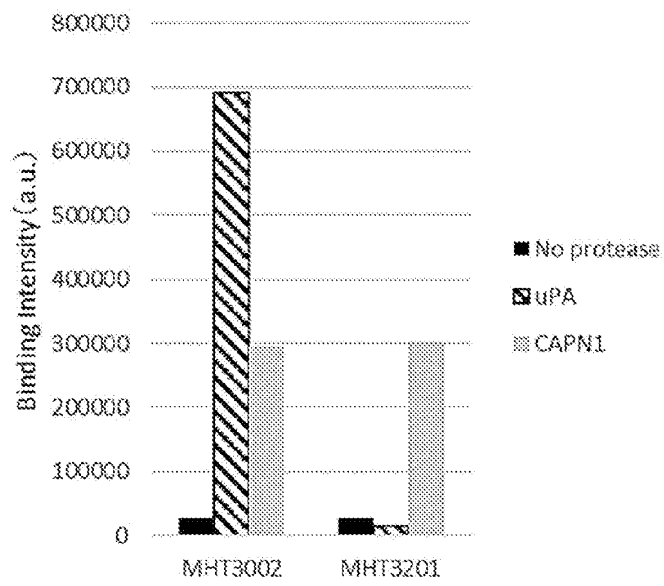


[図5-2]

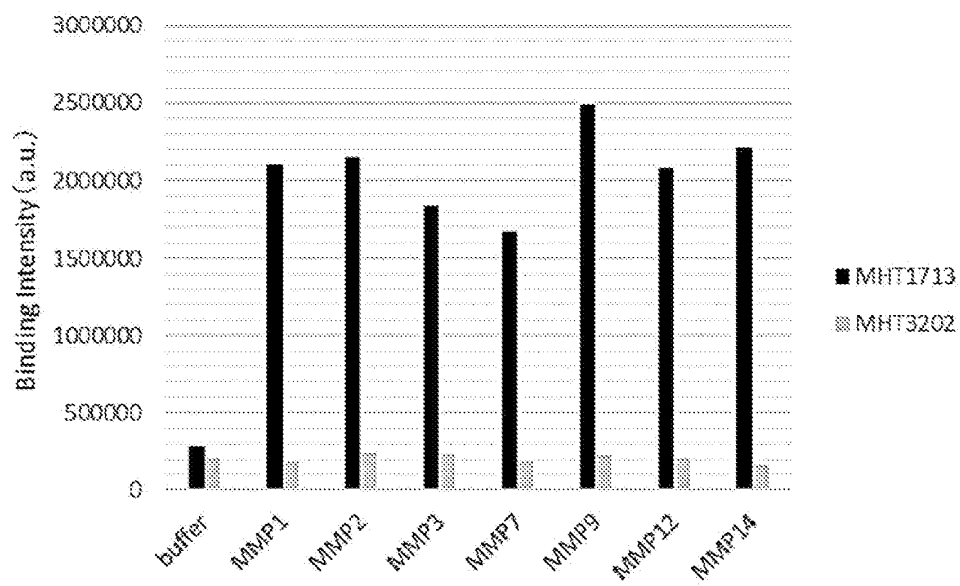


[図6]

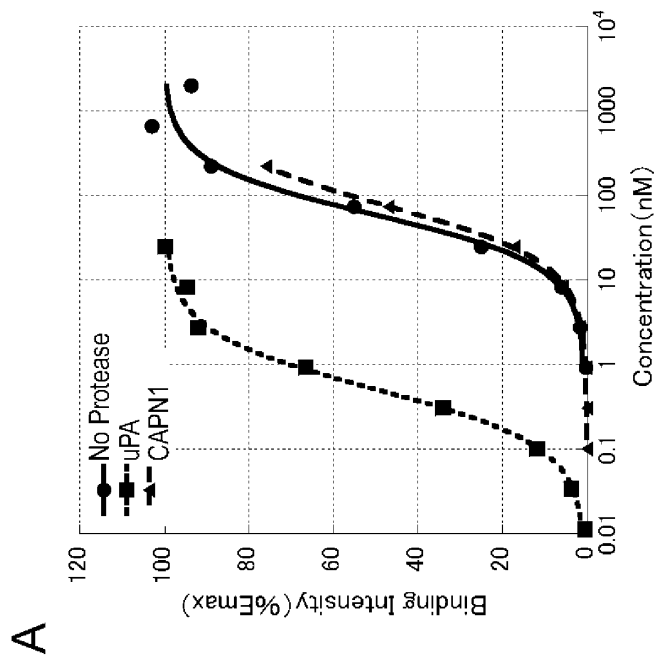
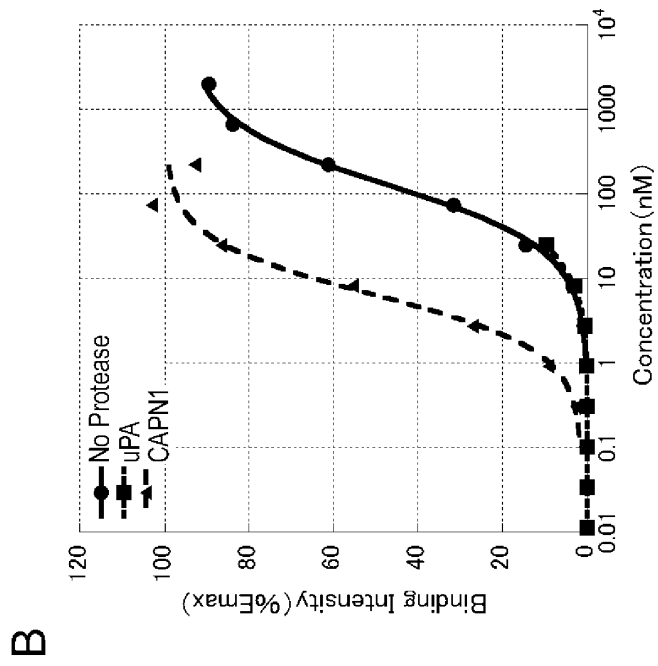
A



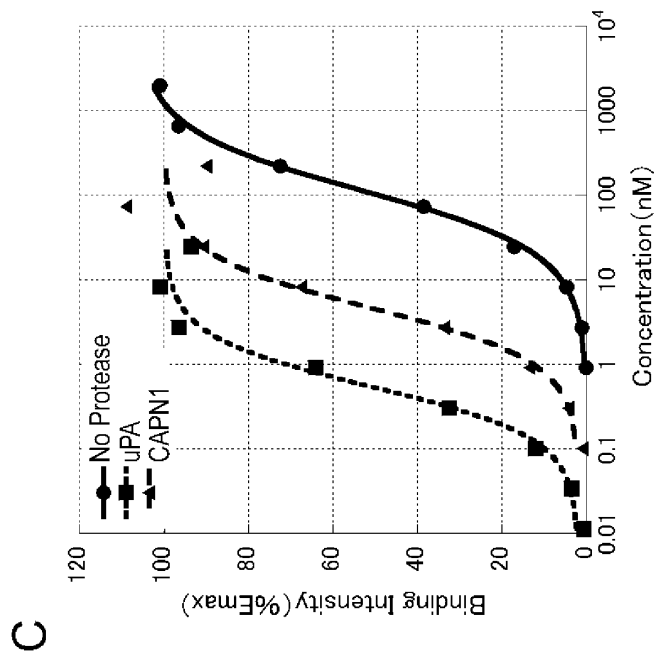
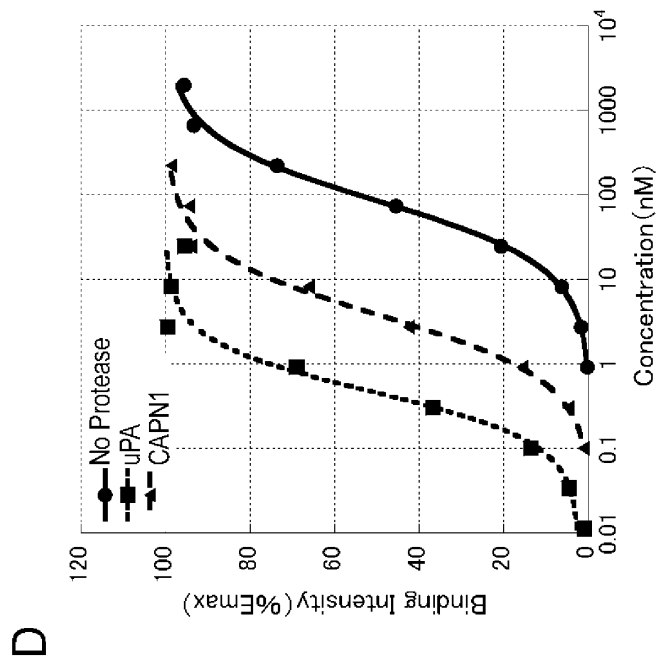
B



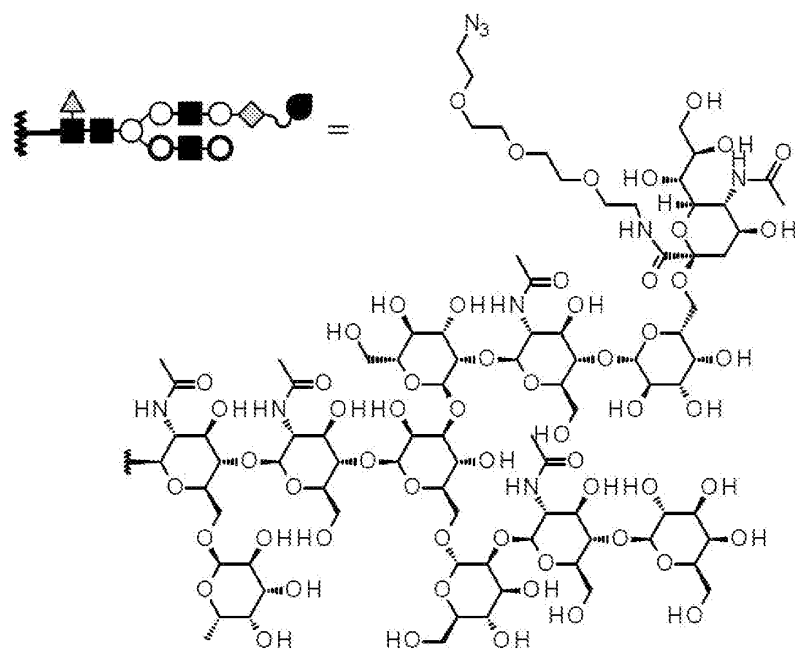
[図7-1]



[図7-2]



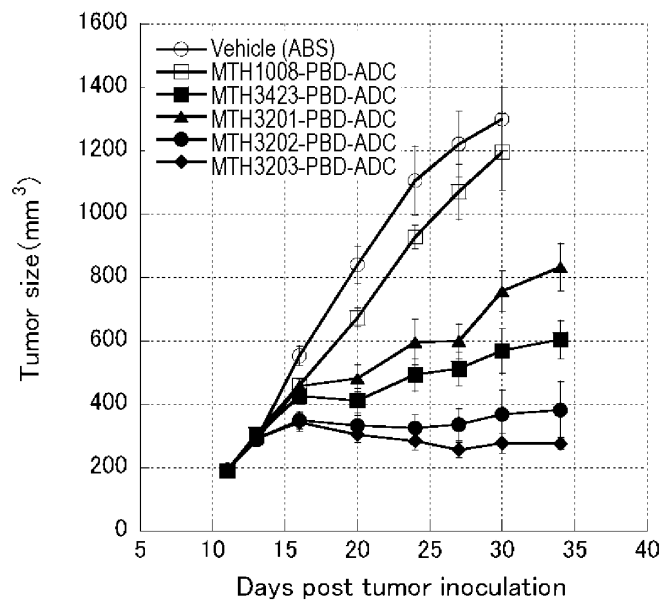
[図8]



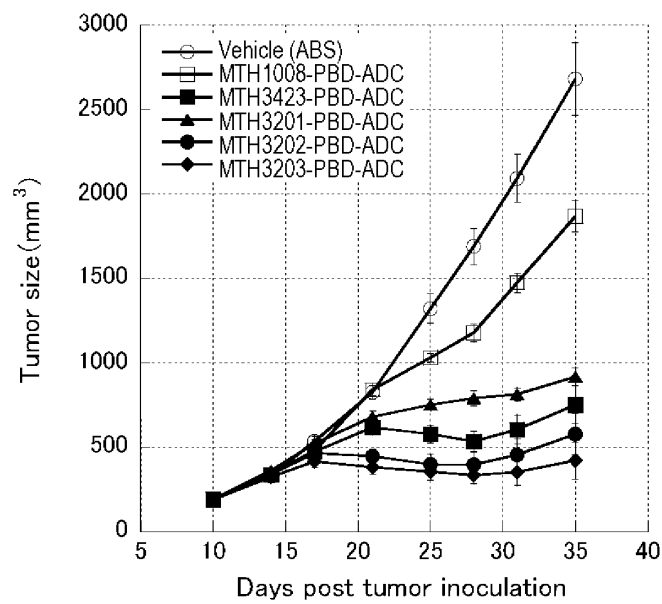
N297糖鎖構造式

[図9]

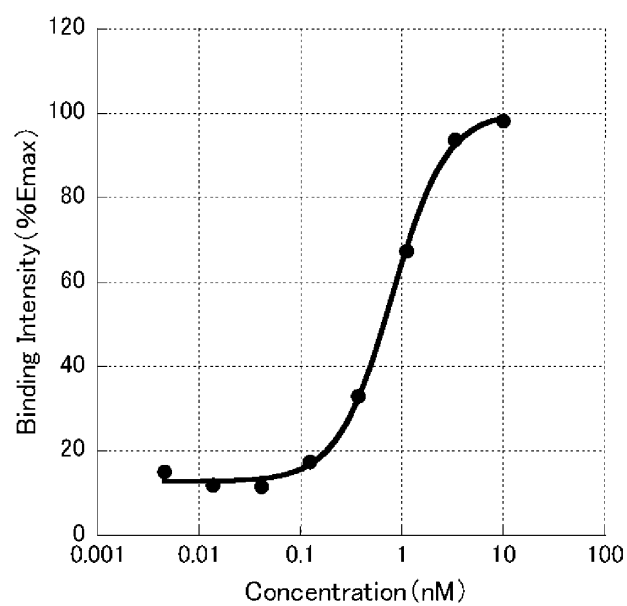
A



B



[図10]



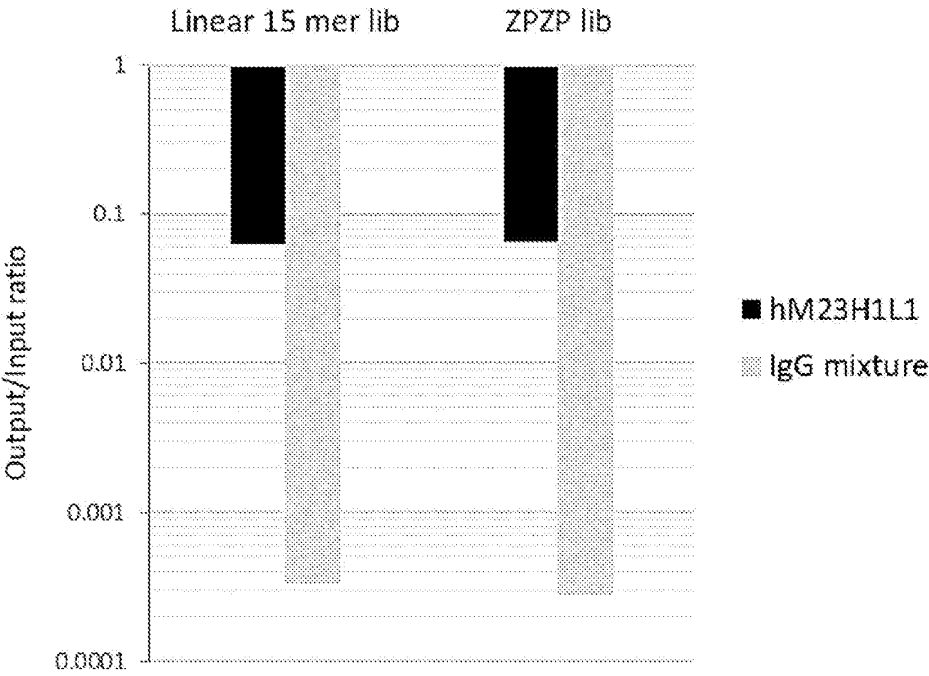
[図11]

A

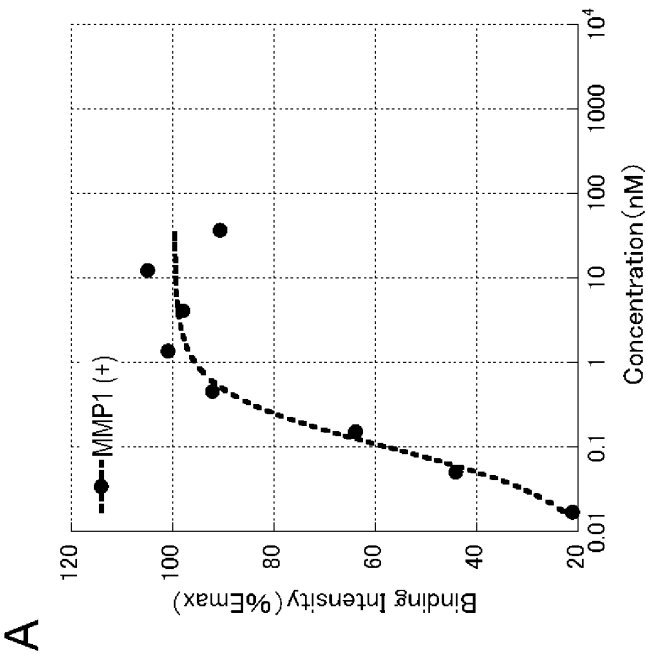
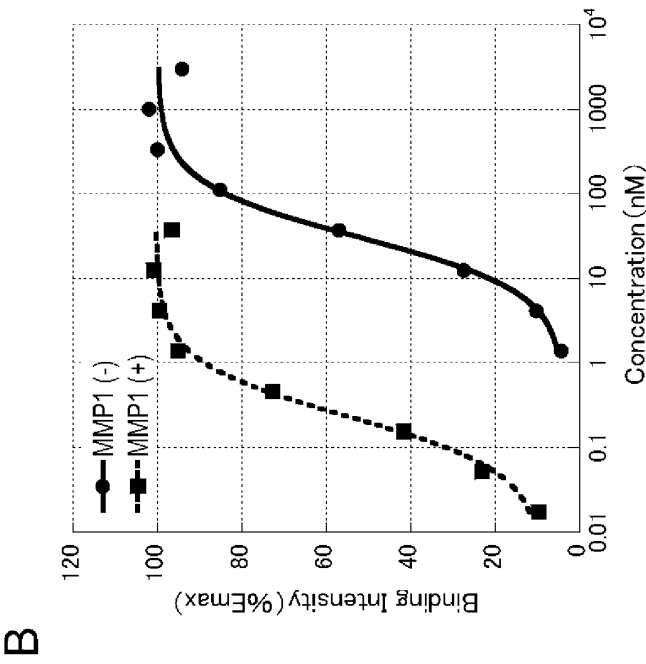
Linear 15 mer lib	ZPZP lib
N-XXXXXXXXXXXXXXXXXX-C	N-XXXXXXZPZPXXXXXS-C

X:20 amino acids based on NNS codon
Z:6 amino acids (H, Y, W, R, Q, C) based on YRK codon

B

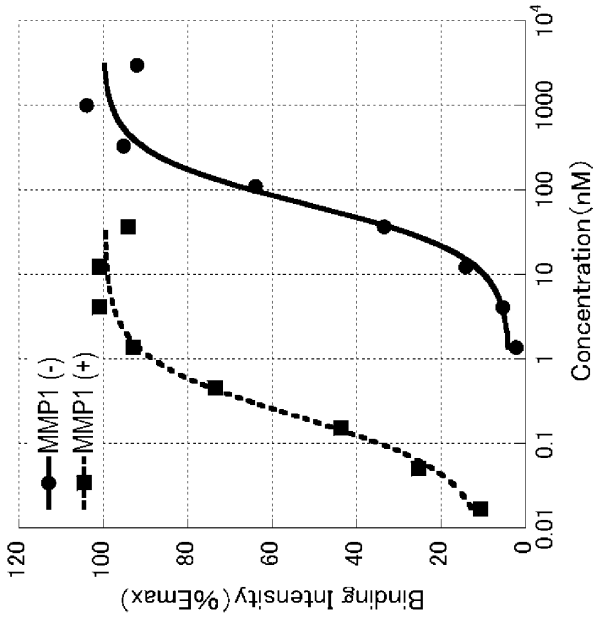


[図12-1]

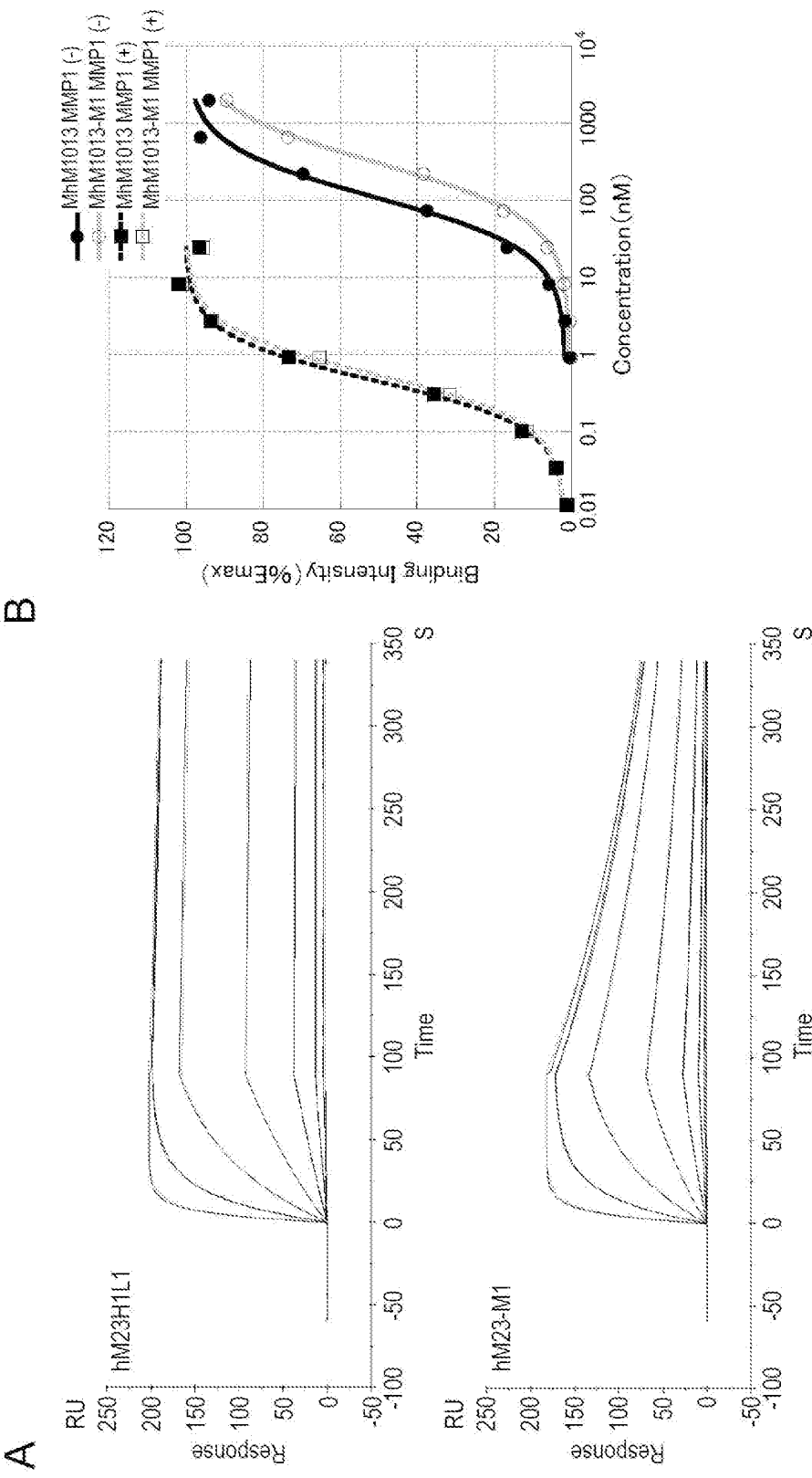


[図12-2]

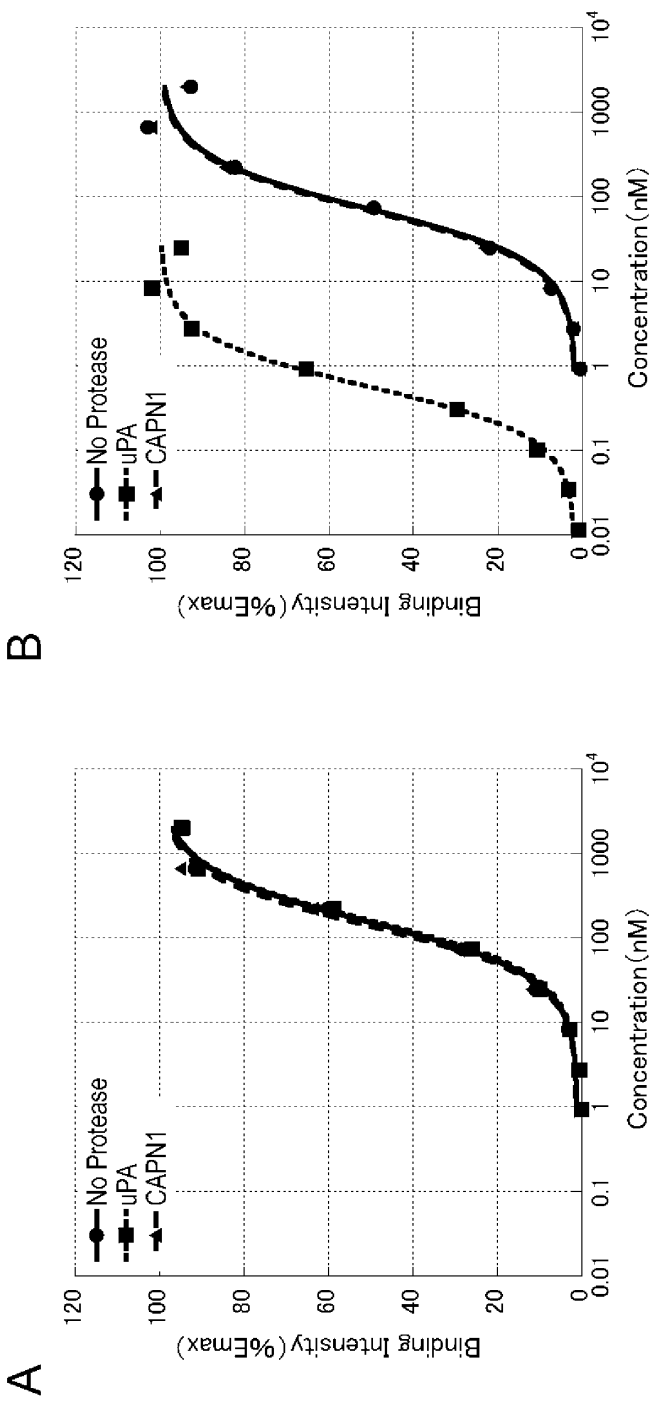
C



[図13]

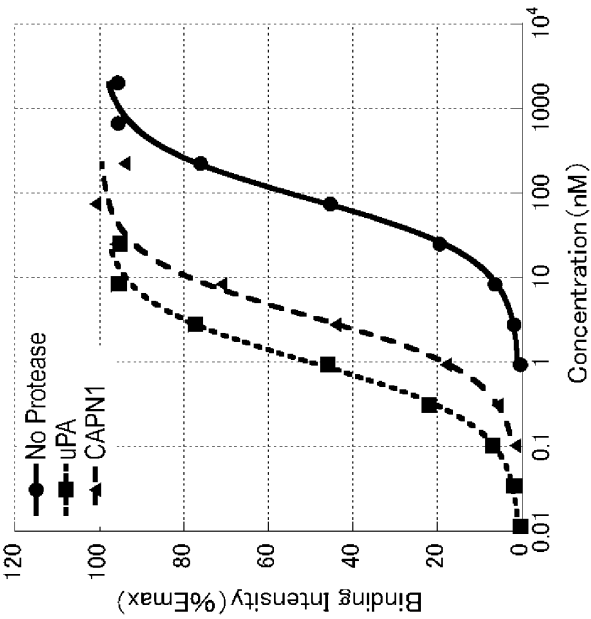


[図14-1]

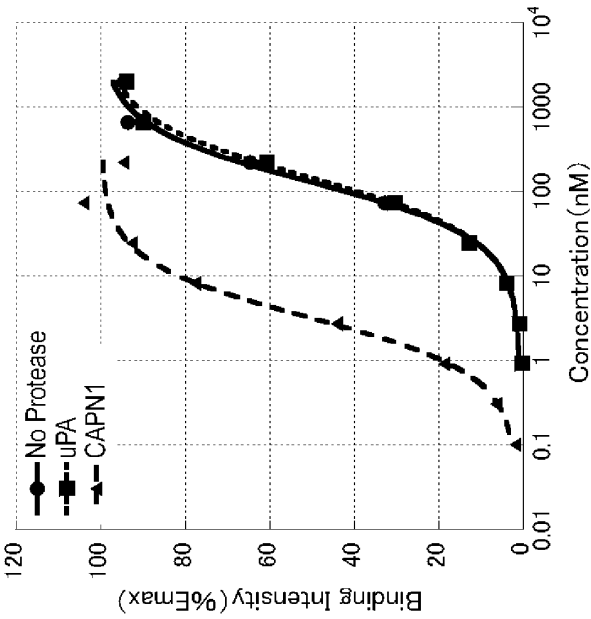


[図14-2]

D

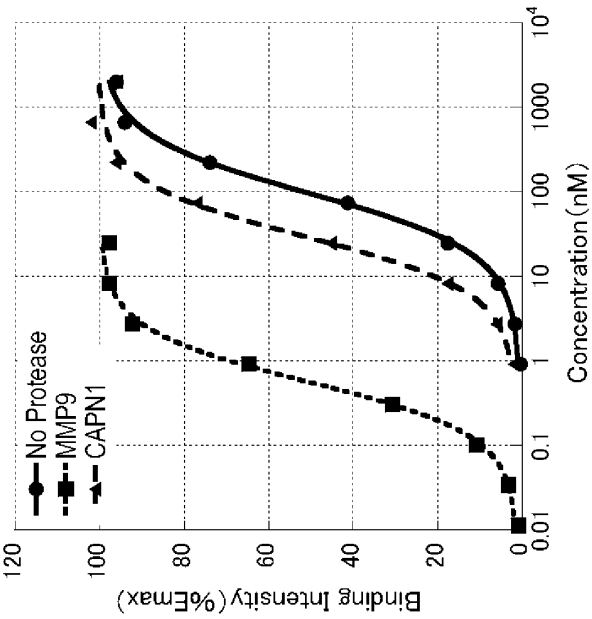


C

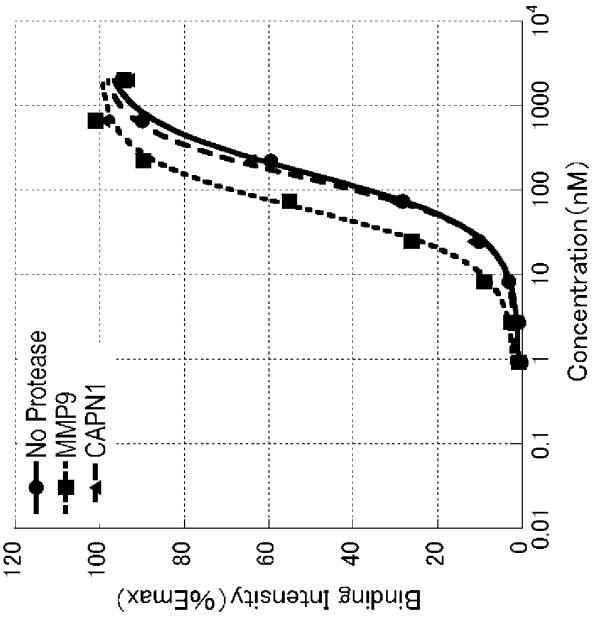


[図14-3]

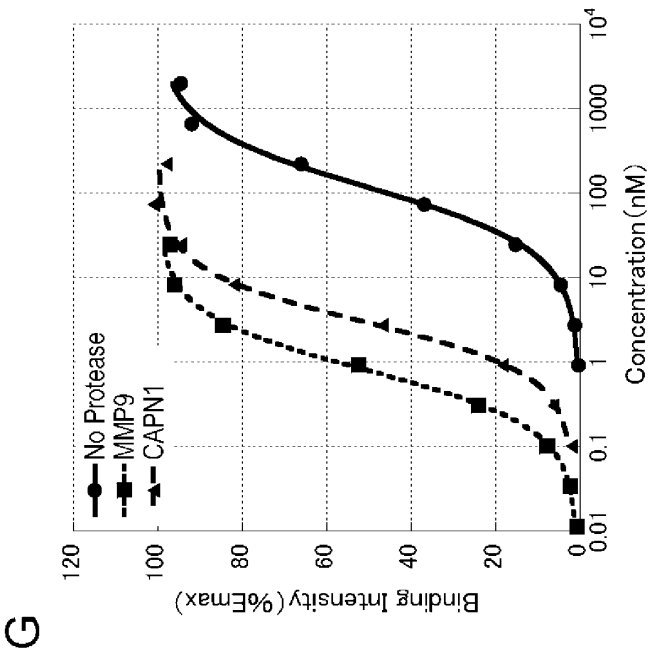
F



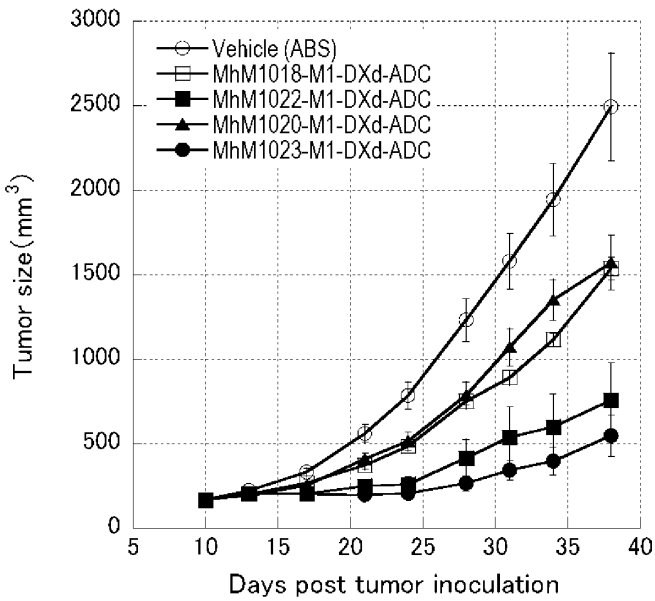
E



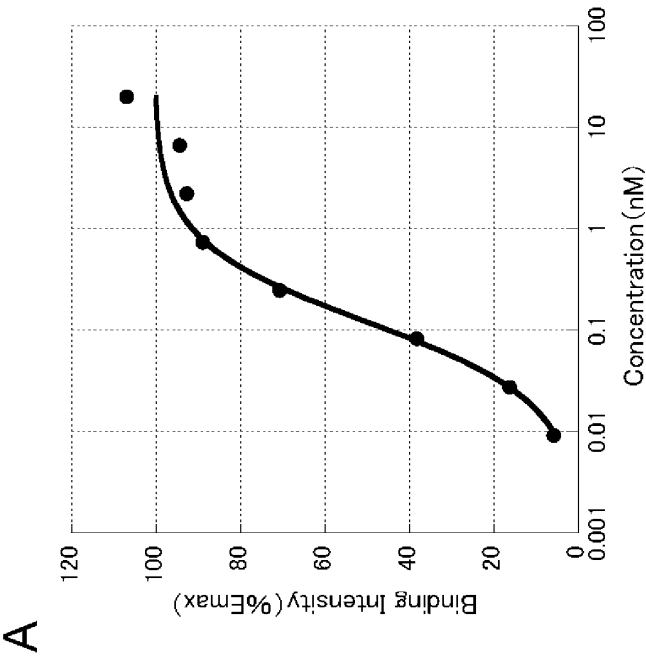
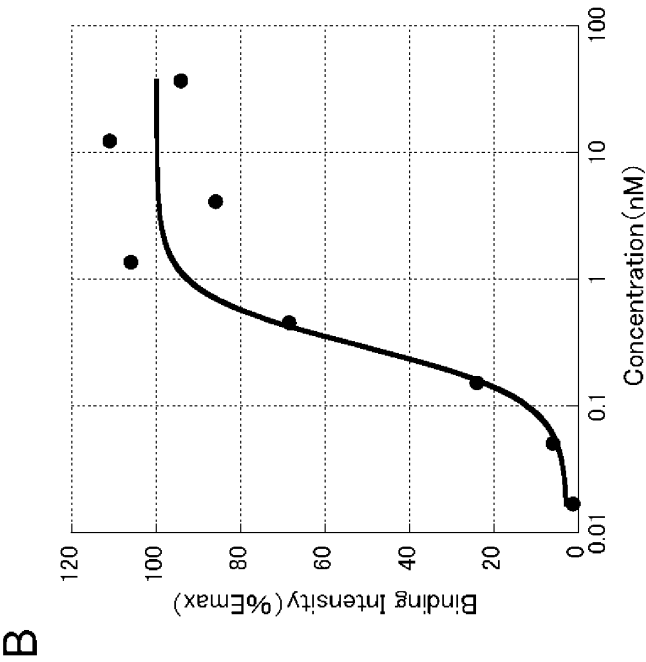
[図14-4]



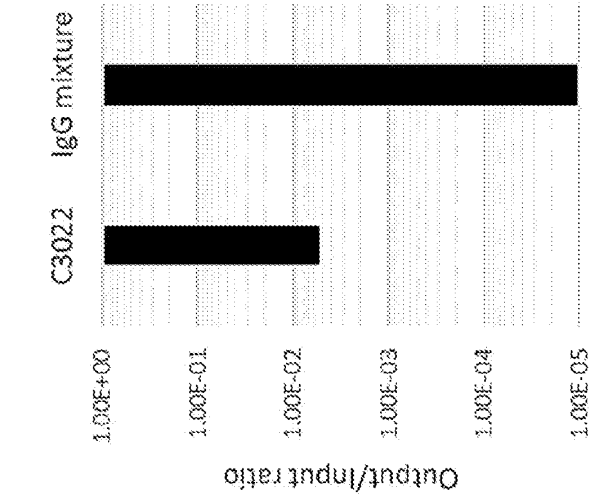
[図15]



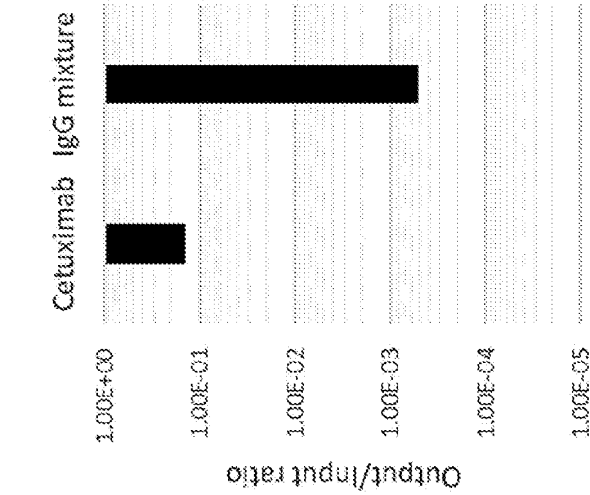
[図16]



[図17]

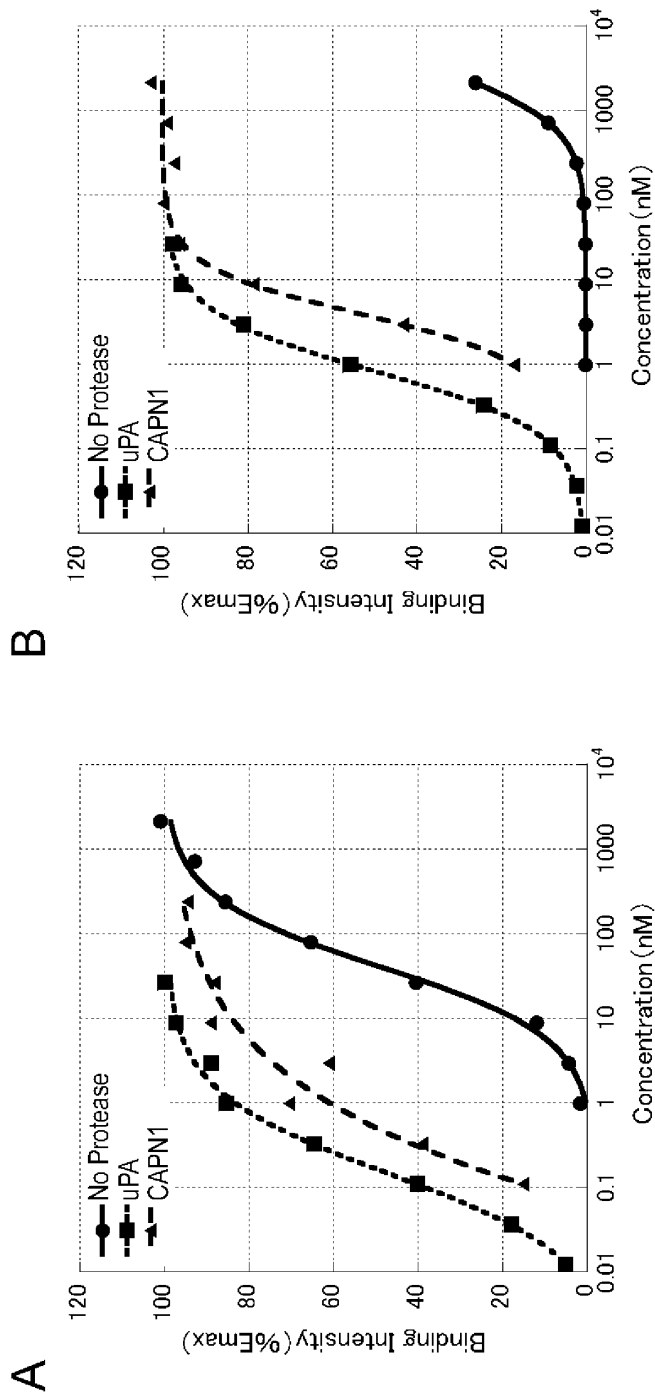


B



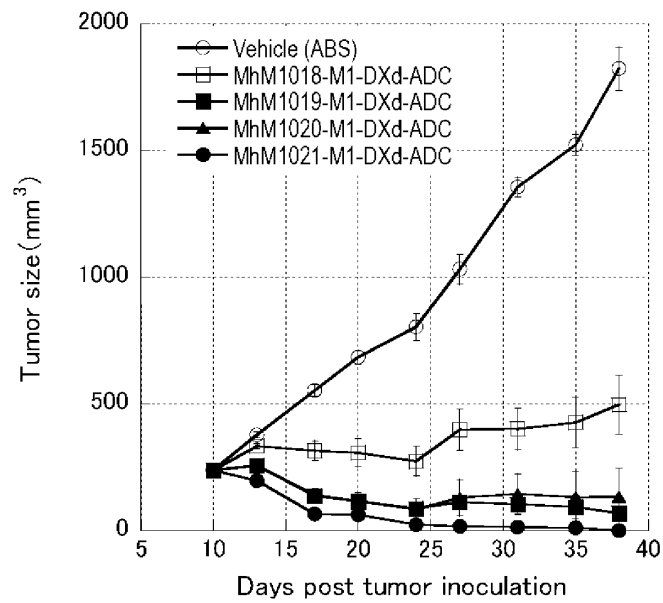
A

[図18]

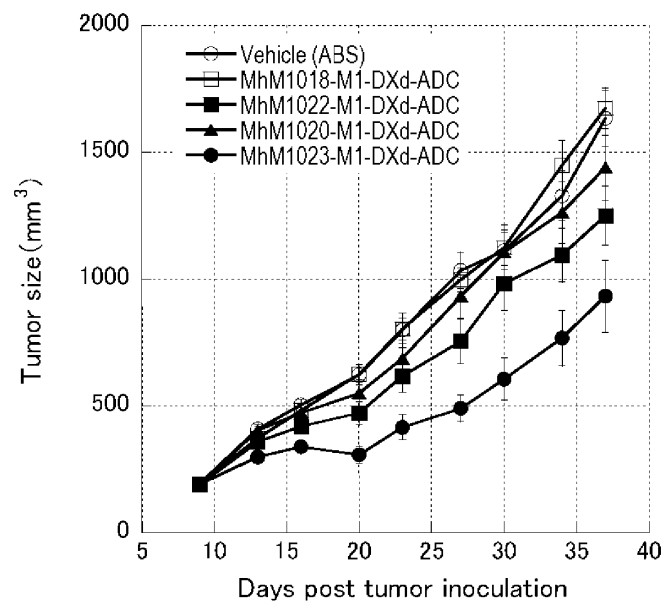


[図19]

A

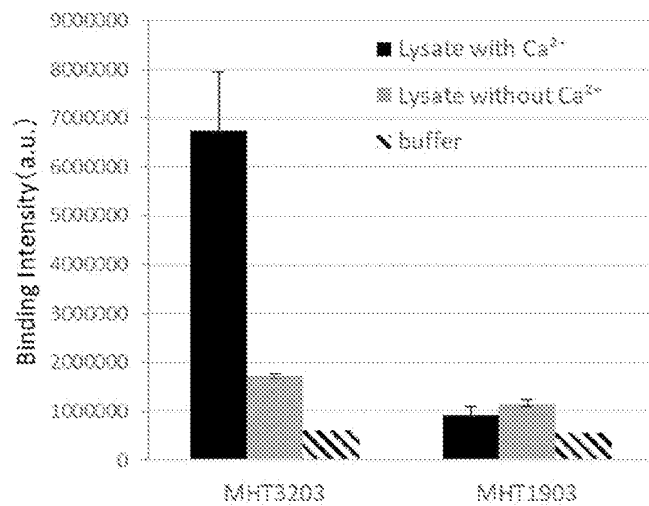


B

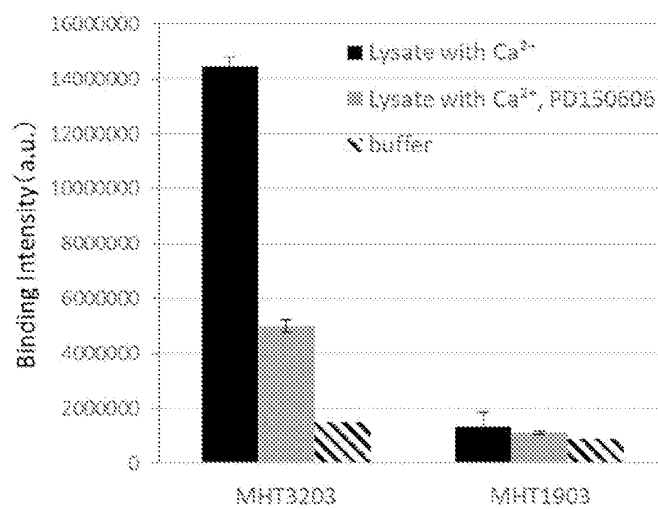


[図20]

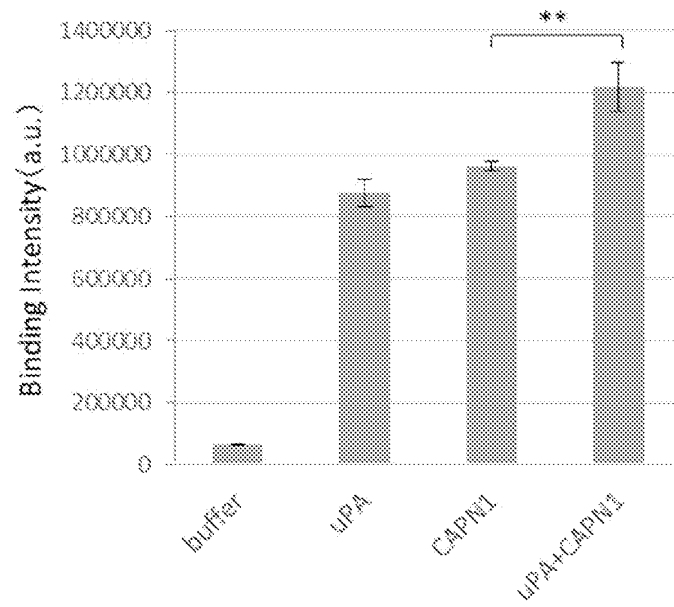
A



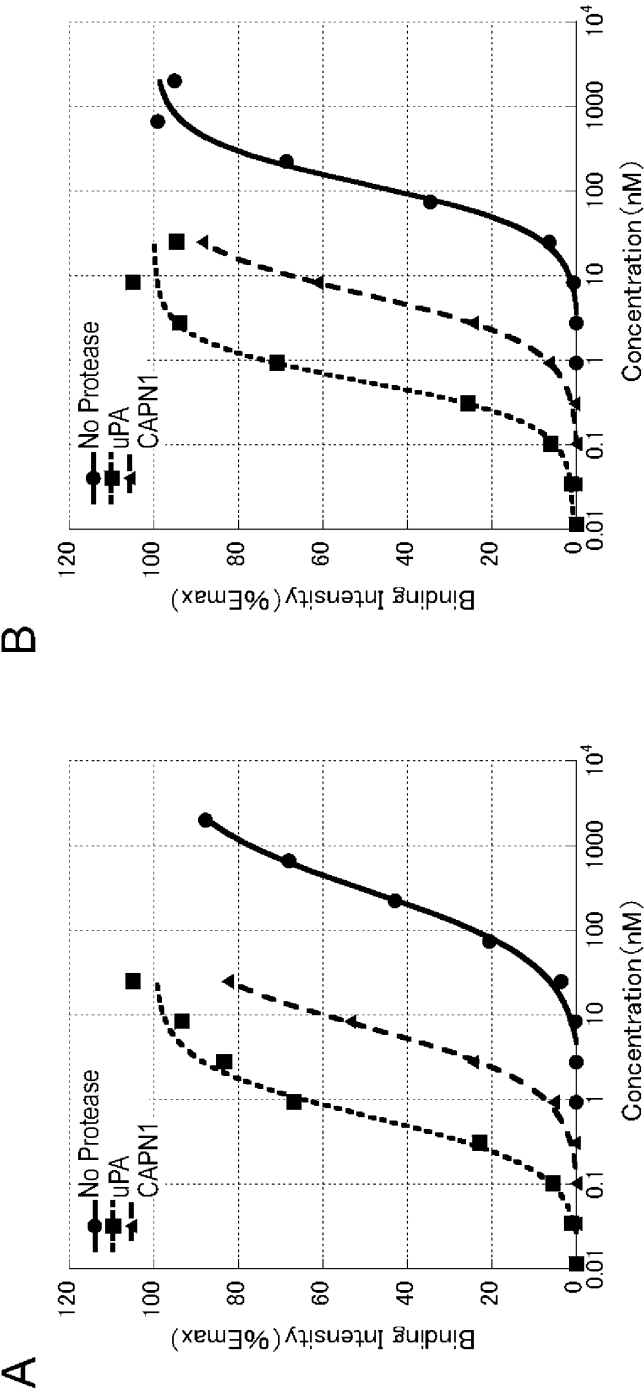
B



[図21]

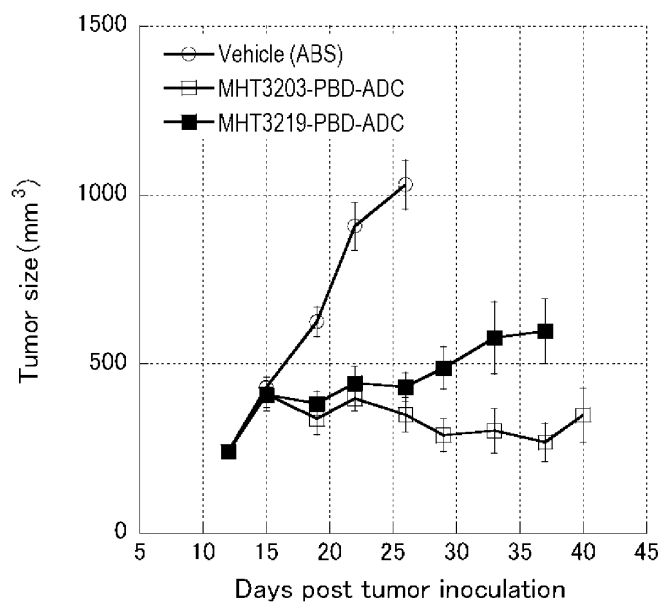


[図22]

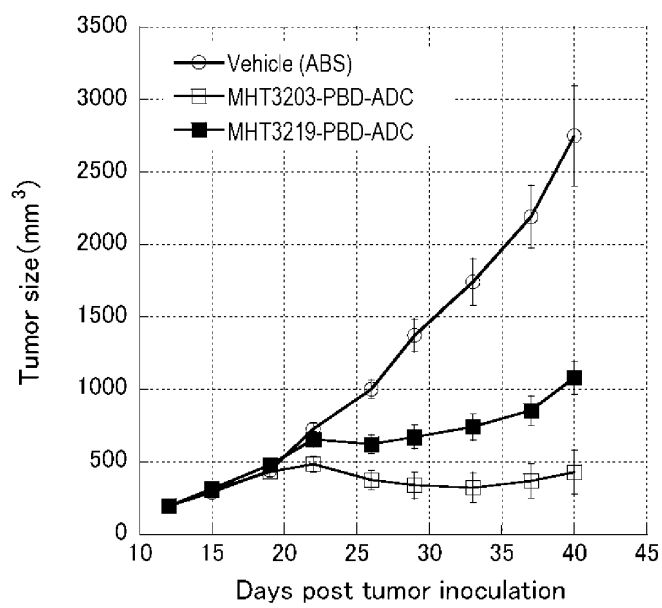


[図23]

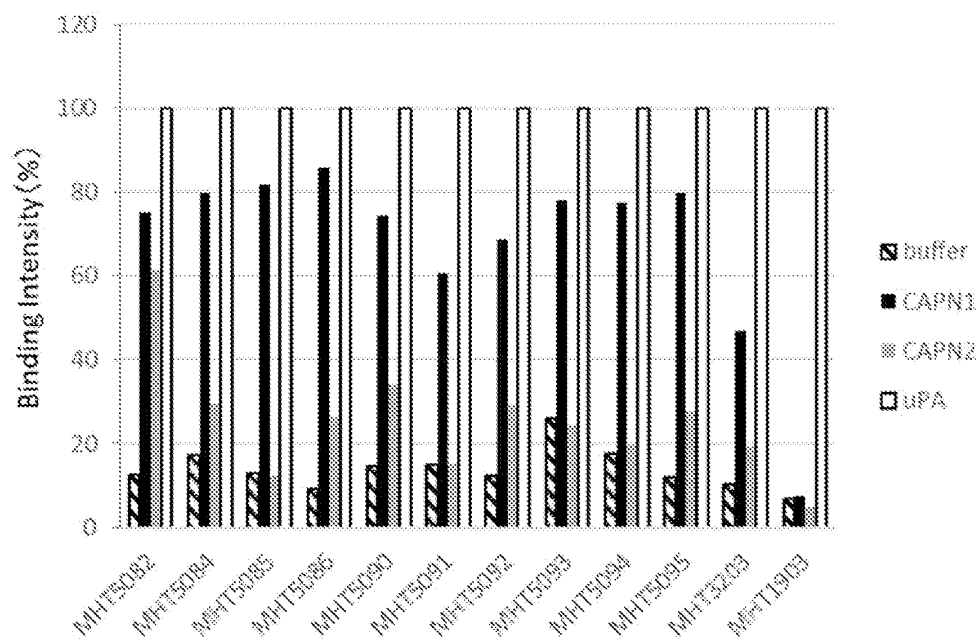
A



B

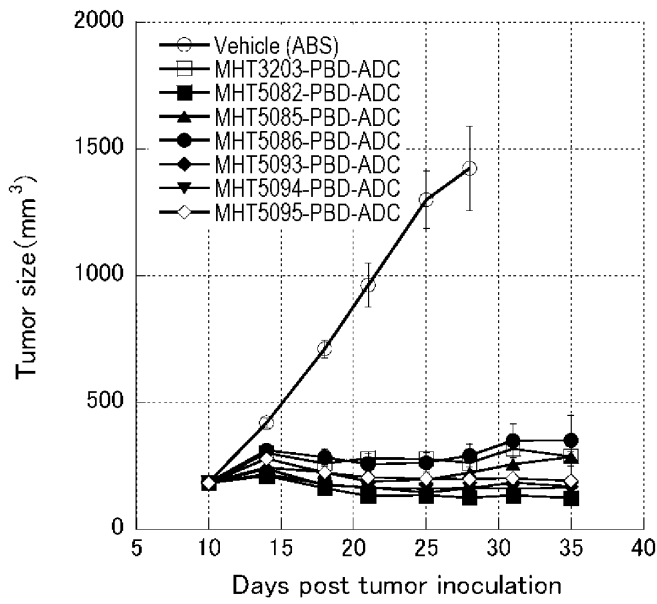


[図24]

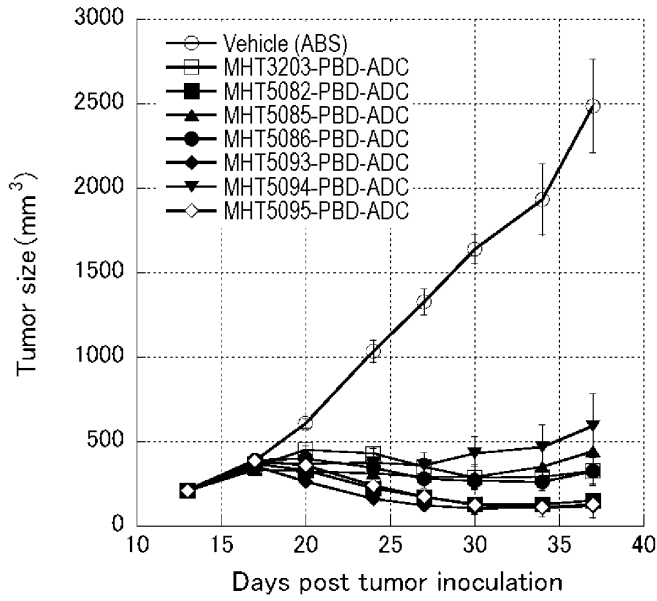


[図25]

A



B



[図26]

HT1-11 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSQVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWV
 RQAPGQGLEWMGWINTHSGVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAV
 YYCARSGFGSSYWFYFDVWGQGTLLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCL
 VKDYFPEPVTISWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICN
 VNHKPSNTKVDKRVKPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTF
 EVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDW
 LNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLV
 KGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFC
 SVMHEALHNHYTQKSLSLSPGK

(配列番号1) シグナル配列 (1-19)、抗体重鎖配列 (20-470)

[図27]

HT1-11 L鎖全長のアミノ酸配列

MVLQQTQVFISLLWISGAYGDIQMTQSPSSLSASVGDRVTITCKASQDVSTAVAWY
 QQKPGKAPKLLIYSASYRYTGVPSTRFSGSGSGTDFTLTISLQPEDFAVYYCQQHY
 ITPLTFGQGTKEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQW
 KVDNALQSGNSQESVTEQDSKSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSP
 VTKSFNRGEC

(配列番号2) シグナル配列 (1-20)、抗体軽鎖配列 (21-234)

[図28]

MHT1001全長のアミノ酸配列

MKYLLPTAAAGLLLLAAQPAMAAMGYLALKHPWPGLAENSGSGGGGSVLVPMAMMA
 SGGSDVNSQVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVRQAPGQGLEWM
 GWINTHSGVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSGFGSS
 YWFYFDVWGQGTLLTVSSGGGGSGGGSGGGSDIQMTQSPSSLSASVGDRVTITCK
 ASQDVSTAVAWYQQKPGKAPKLLIYSASYRYTGVPSTRFSGSGSGTDFTLTISLQP
 EDFAVYYCQQHYITPLTFGQGTKEIKRGAPSGDYKDDDDKGAAAHHHHHH

(配列番号3) シグナル配列 (1-23)、ミモトープペプチド (24-40)、MMP切断リン
 カー (41-60)、HT1-11-scFv-HL (65-308)、FLAG-Hisタグ (309-331)

[図29]

MHT1002全長のアミノ酸配列

MKYLLPTAAAGLLLLAAQPAMAAMGYLALKHPWPGLAENSGSGGGGSVLVPMAMMA
 SGGSDVNSDIQMTQSPSSLSASVGDRVTITCKASQDVSTAVAWYQQKPGKAPKLLI
 YSASYRYTGVPSTRFSGSGSGTDFTLTISLQPEDFAVYYCQQHYITPLTFGQGTKE
 EIKRGGGGSGGGSGGGSGVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWV
 RQAPGQGLEWMGWINTHSGVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAV
 YYCARSGFGSSYWFYFDVWGQGTLLTVSSGAPSGDYKDDDDKGAAAHHHHHH

(配列番号4) シグナル配列 (1-23)、ミモトープペプチド (24-40)、MMP切断リン
 カー (41-60)、HT1-11-scFv-LH (65-308)、FLAG-Hisタグ (309-331)

[図30]

HT1-11-scFv-HL全長のアミノ酸配列

MKYLLPTAAAGLLLLLAAQPAMAADVNSQVQLVQSGAEVKKPGASVKVSCKASGYTF
 TTAGMQWVRQAPGQGLEWMGWINTHSGVPKYAEDFKGRVTISADTSTSTAYLQLSS
 LKSEDTAVYYCARSFGSSYWFVDVWGQGTILVTVSSGGGGSGGGGSGGGGSDIQMT
 QSPSSLSASVGDRVTITCKASQDVSTAVAWYQQKPGKAPKLLIYSASYRYTGVP
 SRFSGSGSGTDFTLTISLQPEDFAVYYCQQHYITPLTFGQGTKLEIKRGAPSGDYKD
 DDDKGAHAHHHHHH

(配列番号5) シグナル配列 (1-23)、HT1-11-scFv-HL (28-271)、FLAG-
 Hisタグ (272-294)

[図31]

HT1-11-scFv-LH全長のアミノ酸配列

MKYLLPTAAAGLLLLLAAQPAMAADVNSDIQMTQSPSSLSASVGDRVTITCKASQDV
 STAVAWYQQKPGKAPKLLIYSASYRYTGVP
 SRFSFGSGSGTDFTLTISLQPEDFAV
 YYCQQHYITPLTFGQGTKLEIKRGGGGSGGGGSGGGGSQVQLVQSGAEVKKPGASV
 KVSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGVPKYAEDFKGRVTISADT
 STSTAYLQLSSLKSEDTAVYYCARSFGSSYWFVDVWGQGTILVTVSSGAPSGDYKD
 DDDKGAHAHHHHHH

(配列番号6) シグナル配列 (1-23)、HT1-11-scFv-LH (28-271)、FLAG-
 Hisタグ (272-294)

[図32]

MHT1007 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAENSGSGGGGSLVPMAMMASGGSQ
 VQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
 PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFVDVWGQ
 GTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
 GVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSCD
 KTHCTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
 YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
 KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
 NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVSCFVSVMHEALHNHYTQKSLSLSP
 GK

(配列番号7) シグナル配列 (1-19)、ミトースペプチド (20-35)、MMP切断リン
 カー (36-55)、抗体重鎖配列 (56-506)

[図33]

MHT1008 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAENSGSGGGSGGGSGGGSGGSQ
 VQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
 PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVWGQ
 GTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
 GVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSCD
 KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
 YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
 KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
 NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSFSVMHEALHNHYTQKSLSLSP
 GK

(配列番号8) シグナル配列 (1-19)、ミトープペプチド (20-35)、非切断リン
 カー (36-55)、抗体重鎖配列 (56-506)

[図34]

MHT1009 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAENSGSGGGSGGSGRSANAILEGGSQ
 VQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
 PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVWGQ
 GTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
 GVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSCD
 KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
 YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
 KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
 NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSFSVMHEALHNHYTQKSLSLSP
 GK

(配列番号9) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA切断リン
 カー (36-55)、抗体重鎖配列 (56-506)

[図35]

MHT3002 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGSGGGSGPLFAARGGSQ
 VQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
 PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVWGQ
 GTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
 GVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSCD
 KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
 YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
 KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
 NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSFSVMHEALHNHYTQKSLSLSP
 GK

(配列番号10) シグナル配列 (1-19)、ミトープペプチド (20-35)、CAPN切断リ
 ンカー (36-55) うちCAPN基質 (47-52)、抗体重鎖配列 (56-506)

[図36]

human CAPN1全長のアミノ酸配列

SEEIITPVYCTGVSAQVQKQRARELGLGRHENA IKYLGQDYEQLRVRCIQSGTLFR
 DEAFPPVPQSLGYKDLGPNSSKTYGIKWKRPTELLSNPQFIVDGATRTRD ICQGALG
 DCWLLAAIASLTLLNDTLLHRVVPHGQSFQNGYAGIFHFQLWQFGEWVDVVDDLLP
 IKDGKLVFVHSAEGNEFWSALLEKAYAKVNGSYEALSGGSTSEGFEDFTGGVTEWY
 ELRKAPSDLYQIILKALERGSLLGCSIDISSVLDMEAITFKKLVKGHAYSVTGAKQ
 VNYRGQVVSLIRMRNPWGEVEWTGAWSDDSSSEWNNVDPYERDQLRVKMEDGEFWMS
 FRDFMREETRLEICNLTPDALKSRTIRKWNTTLYEGTWRRGSTAGGCRNYPATFWV
 NPQFKIRLDETDPPDDYGDRESGCSFVLALMQKHRRRERRFRDMETIGFAVYEV
 PELVGQPAVHLKRDFFLANASRARSEQFINLREVSTRFRLPPGEYVVVPSTFEPNK
 EGDFVLRFSEKSAGTVELDDQIQANLPDEQVLSEEEIDENFKALFRQLAGEDMEI
 SVKELRTILNRIISKHKDLRTKGFSLSCRSMVNLMDRDGNGKLGLEVFENILWNRI
 RNYLSIFRKFDLDKSGSMSAYEMRMAIESAGFKLNKKLYELIITRYSEPD LAVDFD
 NEVCCLVRLETMFRFFKTLDTDLGCVTFDLFKWLQLTMFA

(配列番号11) CAPN配列 (1-713) 開始メチオニンは除去されている

[図37]

新規CAPN基質のアミノ酸配列

PLFAAP

(配列番号12) uPAで切断されないCAPN基質

[図38]

MHT3201 H鎖全長のアミノ酸配列

MKHLWFFLLLVAA PRWVLSGYLALKHPWPGLAEGSGGGGSGGGGSGPLFAAPGGSQ
 VQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
 PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSGFGSSYWFYFDVWGQ
 GTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
 GVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCD
 KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
 YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
 KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
 NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHNHYTQKSLSLSP
 GK

(配列番号13) シグナル配列 (1-19)、ミモトープペプチド (20-35)、CAPN切断リ
ンカー (36-55)、抗体重鎖配列 (56-506)

[図39]

MHT3202 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSAGGPLFAAPGGSQ
 VQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
 PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSGFGSSYWFVDVWGQ
 GTLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
 GVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCD
 KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
 YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
 KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
 NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSLSP
 GK

(配列番号14) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
 切断リンカー (36-55)、抗体重鎖配列 (56-506)

[図40]

MHT1713 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSAGGPLGLWAGGSQ
 VQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHSGV
 PKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSGFGSSYWFVDVWGQ
 GTLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTS
 GVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCD
 KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW
 YVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
 KTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
 NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSLSP
 GK

(配列番号15) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+MMP切
 断リンカー (36-55)、抗体重鎖配列 (56-506)

[図41]

MHT3423 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSAGGGGGSGGGGSG
 GGGSGGGGSQVQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEW
 MGWINTHSGVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSGFGS
 SYWFVDVWGQGTLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVT
 VSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKV
 DKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
 HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV
 SNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAV
 EWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNH
 YTQKSLSLSPGK

(配列番号16) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA切断リン
 カー (36-65)、抗体重鎖配列 (66-516)

[図42]

MHT3203 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGPLFAAPGG
 SQVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
 GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGFGSSYWFVDVW
 GQGTLLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
 TSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVPEKS
 CDKTHHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKF
 NWWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
 IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
 ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSL
 SPGK

(配列番号17) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図43]

hM23H1L1 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSQVQLVQSGAEVKKPGASVKVSCKASGYAFSNYLIEWV
 RQAPGQGLEWMGVINPGSGVTNYNEKFKGRVTITADTSTSTAYMELSSLRSEDTAV
 YYCARAEAWFAYWGQGTLLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYF
 PEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKP
 SNTKVDKRVPEKSCDKTHHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVDVSHEDPEVKFNWWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号18) シグナル配列 (1-19)、抗体重鎖配列 (20-465)

[図44]

hM23H1L1 L鎖全長のアミノ酸配列

MVLQTQVFISLLLLWISGAYGDIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQK
 NYLAWYQQKPGQPPKLLIYWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVY
 YCQRYYGYPWTFGQGTKVEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPR
 EAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSLSSTLTLSKADYEKHKVYACEVTH
 QGLSSPVTKSFNRGEC

(配列番号19) シグナル配列 (1-20)、抗体軽鎖配列 (21-240)

[図45]

MhM1008 L鎖全長のアミノ酸配列

MVLQTQVFISLLLLWISGAYGGENMWNLDLVLPLGILSGGGGGSVLVPMAMMASGGS
 DIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLIYW
 ASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCQRYYGYPWTFGQGTKVEI
 KRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQES
 VTEQDSKDSSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

(配列番号20) シグナル配列 (1-20)、ミトープペプチド (21-36)、MMP切断リン
 カー (37-56)、抗体軽鎖配列 (57-276)

[図46]

MhM1013 L鎖全長のアミノ酸配列

MVLQTQVFISLLLWISGAYGGNFYHQYPWPLEILGSGSGGGGSLVPMAMMASGGS
 DIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLIYW
 ASTRESGVPDRFSGSGSGTDFTLTISLQAEDVAVYYCQRYYGYPWTFGQGTKVEI
 KRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQES
 VTEQDSKDSSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
 (配列番号21) シグナル配列 (1-20)、ミトープペプチド (21-36)、MMP切断リン
 カー (37-56)、抗体軽鎖配列 (57-276)

[図47]

hM23-M1 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSQVQLVQSGAEVKKPGASVKVSCKASGAAFSNYLIIEWV
 RQAPGQGLEWMGVINPGSGVTNYNEKFKGRVTITADTSTSTAYMELSSLRSEDVAV
 YYCARAEAWFAYWGQGTLLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYF
 PEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKP
 SNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHE
 ALHNHYTQKSLSLSPGK
 (配列番号22) シグナル配列 (1-19)、抗体重鎖配列 (20-465)

[図48]

hM23-M1 L鎖全長のアミノ酸配列

MVLQTQVFISLLLWISGAYGDIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQK
 NYLAWYQQKPGQPPKLLIYWASTRESGVPDRFSGSGSGTDFTLTISLQAEDVAVY
 YCQRYYGYPWTFGQGTKVEIKRAVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYP
 EAKVQWKVDNALQSGNSQESVTEQDSKDSSTYSLSSTLTLSKADYEKHKVYACEVTH
 QGLSSPVTKSFNRGEC
 (配列番号23) シグナル配列 (1-20)、抗体軽鎖配列 (21-240)

[図49]

MhM1018-M1 L鎖全長のアミノ酸配列

MVLQTQVFISLLLWISGAYGGNFYHQYPWPLEILGSGSGGGGSGGGGSGGGGSGGS
 DIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLIYW
 ASTRESGVPDRFSGSGSGTDFTLTISLQAEDVAVYYCQRYYGYPWTFGQGTKVEI
 KRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQES
 VTEQDSKDSSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
 (配列番号24) シグナル配列 (1-20)、ミトープペプチド (21-36)、非切断リン
 カー (37-56)、抗体軽鎖配列 (57-276)

[図50]

MhM1019-M1 L鎖全長のアミノ酸配列

MVLQTQVFISLLWISGAYGGNFYHQYPWPLEILGSGGGGSGRSANAGGSGGGGSG
GSDIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLI
YWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCQRYYGYPWTFGQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQ
ESVTEQDSKDSSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
(配列番号25) シグナル配列 (1-20)、ミトープペプチド (21-36)、uPA切断リン
カー (37-58)、抗体軽鎖配列 (59-278)

[図51]

MhM1020-M1 L鎖全長のアミノ酸配列

MVLQTQVFISLLWISGAYGGNFYHQYPWPLEILGSGGGGSGGGGSGGGGPLEAAPG
GSDIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLI
YWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCQRYYGYPWTFGQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQ
ESVTEQDSKDSSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
(配列番号26) シグナル配列 (1-20)、ミトープペプチド (21-36)、CAPN切断リ
ンカー (37-58)、抗体軽鎖配列 (59-278)

[図52]

MhM1021-M1 L鎖全長のアミノ酸配列

MVLQTQVFISLLWISGAYGGNFYHQYPWPLEILGSGGGGSGRSANAGGPLEAAPG
GSDIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLI
YWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCQRYYGYPWTFGQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQ
ESVTEQDSKDSSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
(配列番号27) シグナル配列 (1-20)、ミトープペプチド (21-36)、uPA+CAPN
切断リンカー (37-58)、抗体軽鎖配列 (59-278)

[図53]

MhM1022-M1 L鎖全長のアミノ酸配列

MVLQTQVFISLLWISGAYGGNFYHQYPWPLEILGSGGGGSPLGLAGGGSGGGGSG
GSDIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLI
YWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCQRYYGYPWTFGQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQ
ESVTEQDSKDSSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
(配列番号28) シグナル配列 (1-20)、ミトープペプチド (21-36)、MMP切断リン
カー (37-58)、抗体軽鎖配列 (59-278)

[図54]

MhM1023-M1 L鎖全長のアミノ酸配列

MVLQTQVFISLLWISGAYGGNFYHQYPWPLEILGSGGGGSPLGLAGGGPLEAAPG
GSDIVMTQSPDSLAVSLGERATINCKSSQSLLYSSNQKNYLAWYQQKPGQPPKLLI
YWASTRESGVPDRFSGSGSGTDFTLTISSLQAEDVAVYYCQRYYGYPWTFGQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQ
ESVTEQDSKDSSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
(配列番号29) シグナル配列 (1-20)、ミトープペプチド (21-36)、MMP+CAPN
切断リンカー (37-58)、抗体軽鎖配列 (59-278)

[図55]

Cetuximab H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSQVQLKQSGPGLVQPSSQLSITCTVSGFSLTNYGVHWV
 RQSPGKGLEWLGVISGGNTDYNTPTTSRLSINKDNSKSQVFFKMNSLQSNDAIY
 YCARALTYDYEFAYWGQGLVTVSAASTKGPSVFPLAPSSKSTSGGTAALGCLVK
 DYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVN
 HKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEV
 TCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLN
 GKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKG
 FYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSCV
 MHEALHNHYTQKSLSLSPGK

(配列番号30) シグナル配列 (1-19)、抗体重鎖配列 (20-468)

[図56]

Cetuximab L鎖全長のアミノ酸配列

MVLQTQVFISLLLWISGAYGDILLTQSPVILSVSPGERVSFSCRASQSIGTNIHWY
 QQRTNGSPRLLIKYASESISGIPSRFSGSGSGTDFTLSINSVESEDIADYYCQQNN
 NWPTTFGAGTKLELKRITVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQW
 KVDNALQSGNSQESVTEQDSKDSSTLSSTLTLSKADYEKHKVYACEVTHQGLSSP
 VTKSFNRGEC

(配列番号31) シグナル配列 (1-20)、抗体軽鎖配列 (21-234)

[図57]

C3022 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSQVQLVQSGAEVKKPGASVKVSCKASGYTFTGYMHVW
 RQAPGQGLEWMGRINPNSSGGTNYAQKFQGRVTMTRDTSISTAYMELSGLRSDDAV
 YYCASGSRVHPWGQGLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFP
 EPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHNKPS
 NTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCV
 VDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEY
 KCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPS
 DIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSCVMHEA
 LHNHYTQKSLSLSPGK

(配列番号32) シグナル配列 (1-19)、抗体重鎖配列 (20-464)

[図58]

C3022 L鎖全長のアミノ酸配列

MVLQTQVFISLLLWISGAYGQPVLTQPPSASGTPGQRTVISCSSGSRSNIGGNIVSW
 YQQFPGTAPRLITYADNQRPSGVPDRFSGSKSGTSASLAISGLQSEDEADYYCAAW
 DDSLNGVVFEGGKTLTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAV
 TVAWKADSSPVKAGVETTTTPSKQSNKNKYAASSYLSTPEQWKSHRSYSCQVTHEGS
 TVEKTVAPTECS

(配列番号33) シグナル配列 (1-20)、抗体軽鎖配列 (21-236)

[図59]

MCE-2105 L鎖全長のアミノ酸配列

MVLQTQVFISLLLWISGAYGMGLMHMEKSRSWYLSRQGGGGSGRSANAGGPLFAAP
 GGSDILLTQSPVILSVSPGERVSEFSCRASQSIGTNIHWYQQRTNGSPRLLIKYASE
 SISGIPSRFSGSGSGTDFTLINSVESEDIADYYCQQNNNWPTTFGAGTKLELKRT
 VAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTE
 QDSKDSSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC
 (配列番号34) シグナル配列 (1-20)、ミトトープペプチド (22-37)、uPA+CAPN
 切断リンカー (38-59)、抗体軽鎖配列 (60-273)

[図60]

MC3-9003 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWLSGETMSVFTRDYFTETPGGGGSGRSANAGGPLFAAPGG
 SQVQLVQSGAEVKKPGASVKVSCKASGYTFTGYIMHWVRQAPGQGLEWMGRINPNS
 GGTNYAQKFQGRVTMTRDTSISTAYMELSGLRSDDTAVYYCASGSVRHPWGQGTLV
 TVSSASTKGPSVFPLAPSSKSTSGGTAAALGCLVKDYFPEPVTVSWNSGALTSGVHT
 FPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSCDKTHT
 CPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDG
 VEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIS
 KAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKT
 TPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSLSPGK
 (配列番号35) シグナル配列 (1-19)、ミトトープペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-502)

[図61]

ヒトuPAが認識し、その基質となるアミノ酸配列

SGRSANAILE (配列番号36)

SGRSANA (配列番号37)

SGRSA (配列番号38)

ヒトMMP1が認識し、その基質となるアミノ酸配列

VLVPMAMMAS (配列番号39)

PLGLWA (配列番号40)

ヒトMMP9が認識し、その基質となるアミノ酸配列

PLGLAG (配列番号41)

[図62]

MHT1903 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGSGGGGSGG
SQVQLVQSGAEVKKPGASVKVSCASGYTFETTAGMQWVRQAPGGGLEWMGWINTHS
GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFVDVW
GQGTLLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
TSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
NWKVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
IEKTI SKAKGQPREPQVYITLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMEALHNHYTQKSLSL
SPGK

(配列番号42) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA切断リ
ンカー (36-57)、抗体重鎖配列 (58-508)

[図63]

MHT3219 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGGLFAAPGGSGRSANAGG
SQVQLVQSGAEVKKPGASVKVSCASGYTFETTAGMQWVRQAPGGGLEWMGWINTHS
GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFVDVW
GQGTLLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
TSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
NWKVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
IEKTI SKAKGQPREPQVYITLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMEALHNHYTQKSLSL
SPGK

(配列番号43) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図64]

新規CAPN基質のアミノ酸配列

FVFAMR (配列番号44)

FLEMVR (配列番号45)

FLETMW (配列番号46)

LVFAVP (配列番号47)

FVEAWR (配列番号48)

FLEARM (配列番号49)

LLFSGR (配列番号50)

LLFGMR (配列番号51)

LFALRW (配列番号52)

LLEASW (配列番号53)

[図65]

MHT5082 H鎖全長のアミノ酸配列

MKHLWFFLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGFVFAMRGG
SQVQLVQSGAEVKKPGASVKVSCKASGYTFITAGMQWVRQAPGGLEWMGWINTHS
GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVW
GQGTLLVTVSSASTKGPSVFPLAPSSKSTSGGTAAALGCLVKDYFPEPVTVSWNSGAL
TSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKEF
NWWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMHEALHNHYTQKSLSL
SPGK

(配列番号54) シグナル配列 (1-19)、ミトローブペプチド (20-35)、uPA+CAPN
切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図66]

MHT5084 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGFLFMVRGG
SQVQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSGSSYWFYFDVW
GQGTLTVTSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
TSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
NWKYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSL
SPGK

(配列番号55) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図67]

MHT5085 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGFLFTMWGG
SQVQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSGSSYWFYFDVW
GQGTLTVTSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
TSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
NWKYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSL
SPGK

(配列番号56) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図68]

MHT5086 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGLVFAVPGG
SQVQLVQSGAEVKKPGASVKVSKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSGSSYWFYFDVW
GQGTLTVTSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
TSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
NWKYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSL
SPGK

(配列番号57) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図69]

MHT5090 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGFVFAWRGG
 SQVQLVQSGAEVKKPGASVKVSCASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
 GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVW
 GQGTLLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
 TSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
 CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
 IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
 ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVMHEALHNHYTQKSLSL
 SPGK

(配列番号58) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図70]

MHT5091 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGFLFARMGG
 SQVQLVQSGAEVKKPGASVKVSCASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
 GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVW
 GQGTLLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
 TSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
 CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
 IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
 ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVMHEALHNHYTQKSLSL
 SPGK

(配列番号59) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図71]

MHT5092 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGLLFSGRGG
 SQVQLVQSGAEVKKPGASVKVSCASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
 GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVW
 GQGTLLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
 TSGVHTFPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
 CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
 NWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
 IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
 ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVMHEALHNHYTQKSLSL
 SPGK

(配列番号60) シグナル配列 (1-19)、ミトープペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図72]

MHT5093 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGLLFGMRRGG
 SQVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
 GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVW
 GQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
 TSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
 CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
 NQYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
 IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
 ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSL
 SPGK

(配列番号61) シグナル配列 (1-19)、ミトースペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図73]

MHT5094 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGLFALRWGG
 SQVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
 GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVW
 GQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
 TSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
 CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
 NQYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
 IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
 ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSL
 SPGK

(配列番号62) シグナル配列 (1-19)、ミトースペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図74]

MHT5095 H鎖全長のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSGYLALKHPWPGLAEGSGGGGSGRSANAGGLLFASWGG
 SQVQLVQSGAEVKKPGASVKVSCKASGYTFTTAGMQWVRQAPGQGLEWMGWINTHS
 GVPKYAEDFKGRVTISADTSTSTAYLQLSSLKSEDTAVYYCARSFGSSYWFYFDVW
 GQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGAL
 TSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKS
 CDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKF
 NQYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAP
 IEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQP
 ENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSL
 SPGK

(配列番号63) シグナル配列 (1-19)、ミトースペプチド (20-35)、uPA+CAPN
 切断リンカー (36-57)、抗体重鎖配列 (58-508)

[図75]

MMPリンカーのアミノ酸配列

GSGGGSGGGSPGLWAGGS

(配列番号64) 配列番号40記載のMMP基質 (12-17)