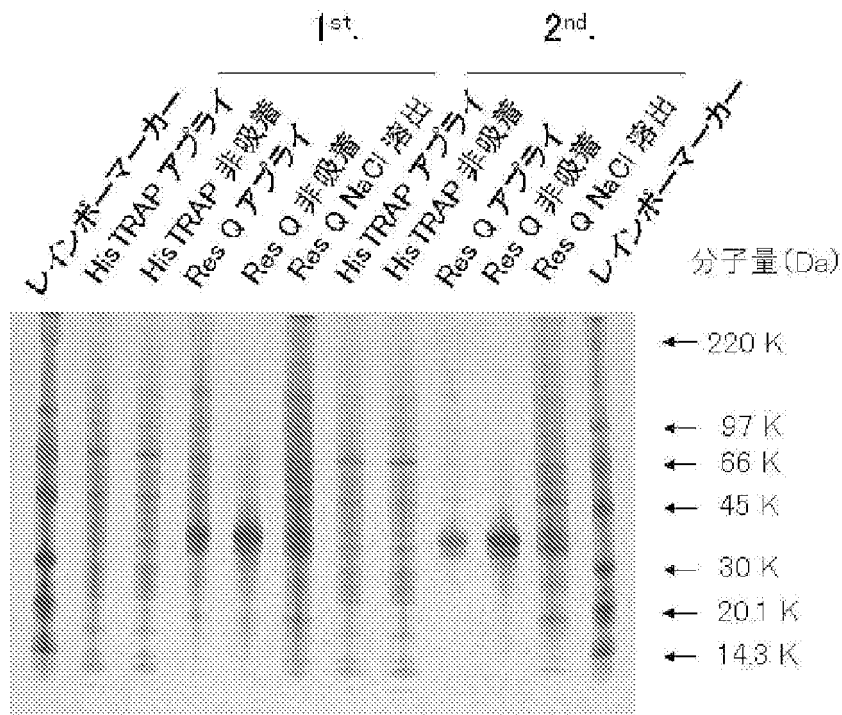
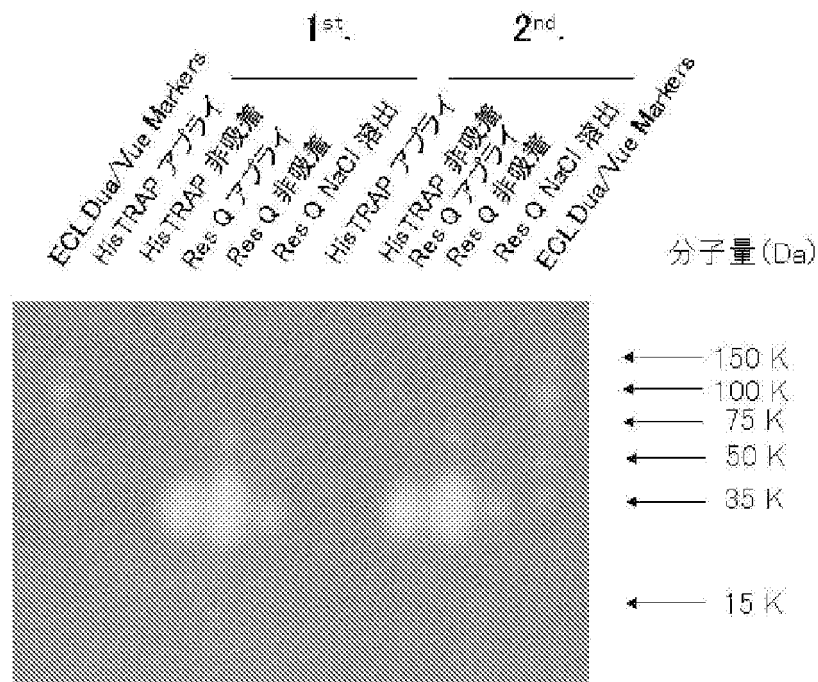


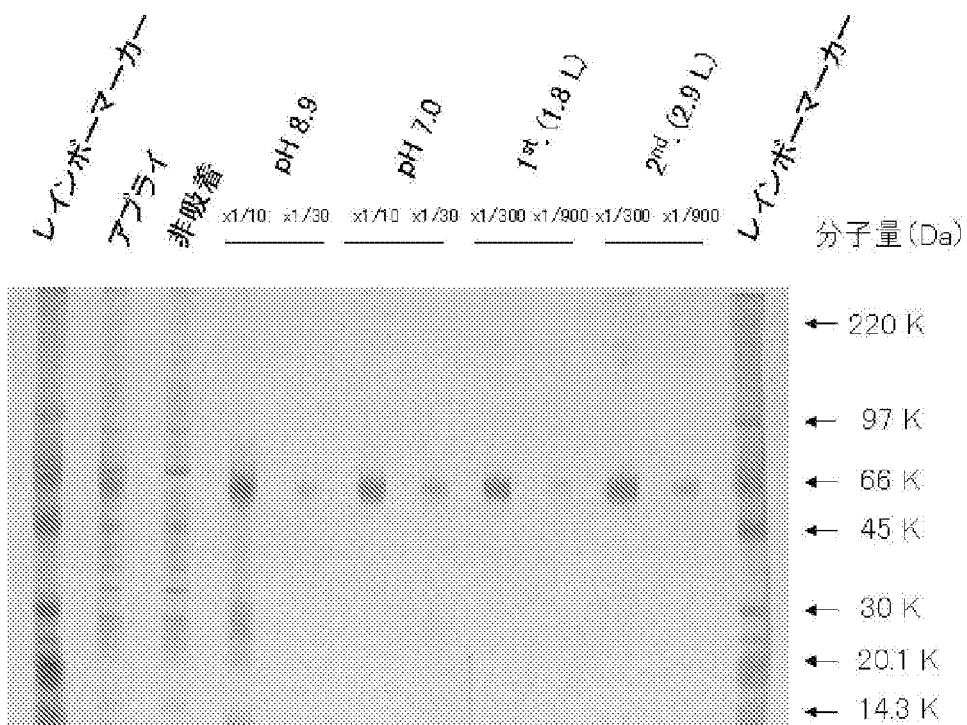
[図1]



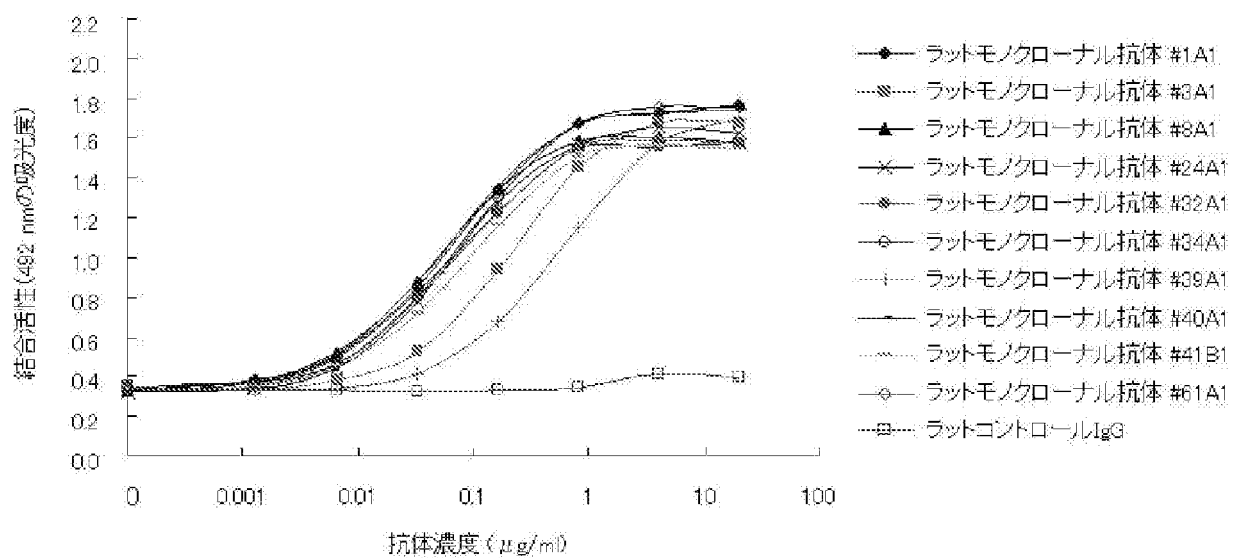
[図2]



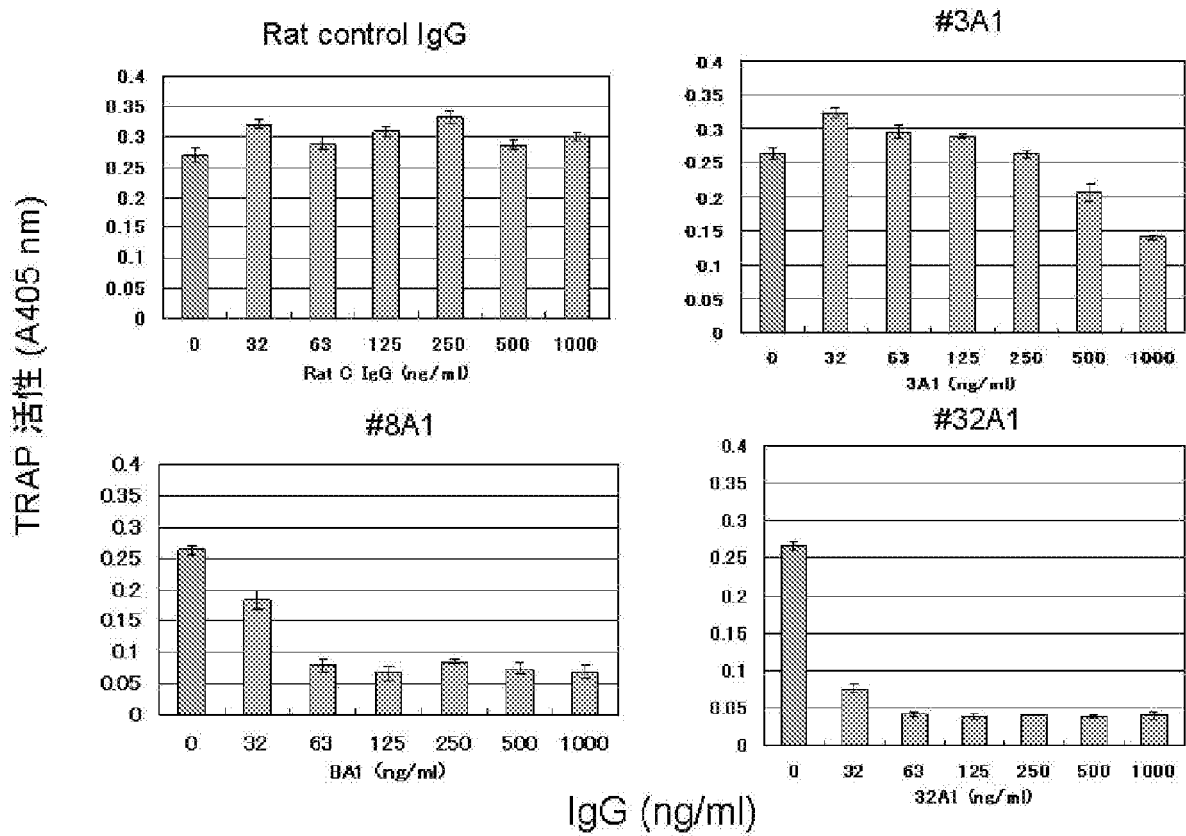
[図3]



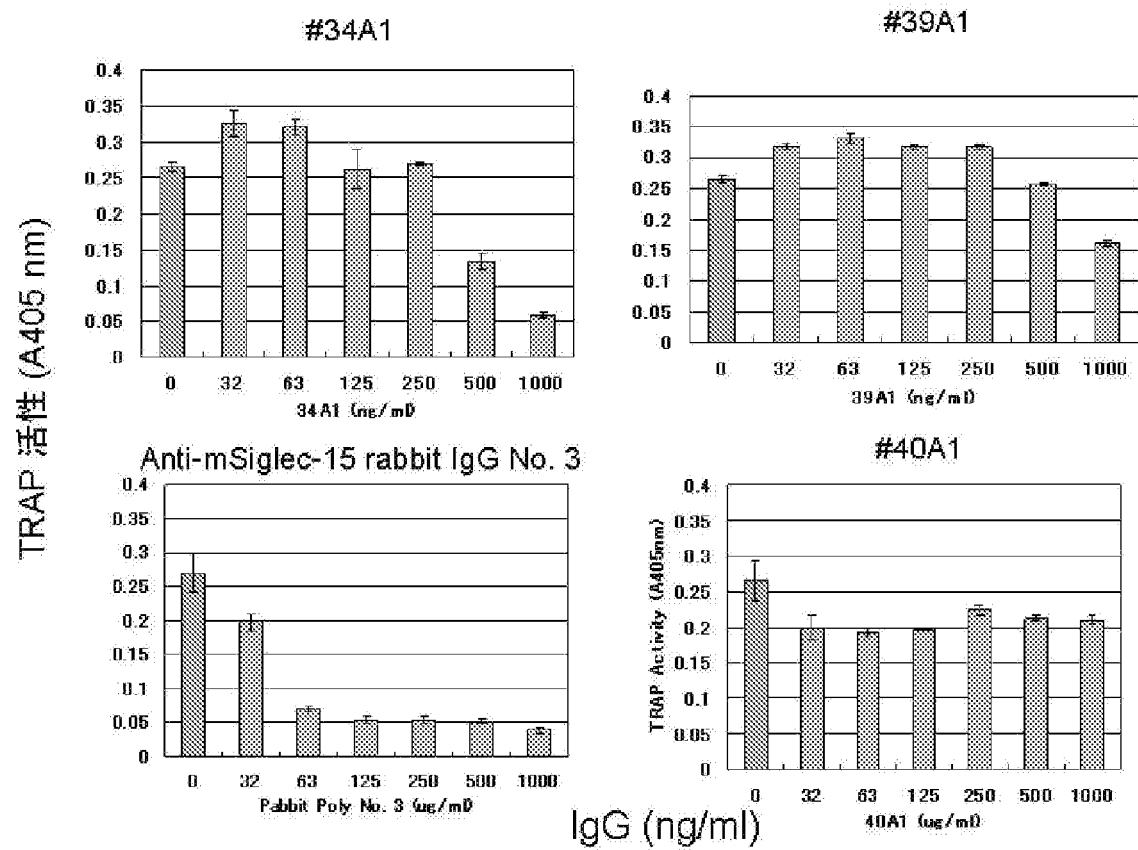
[図4]



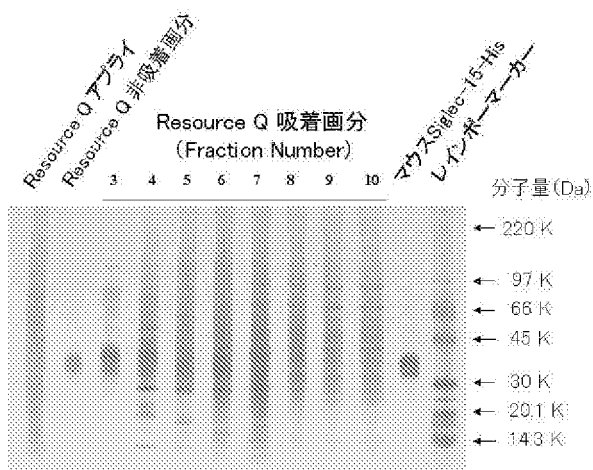
[図5]



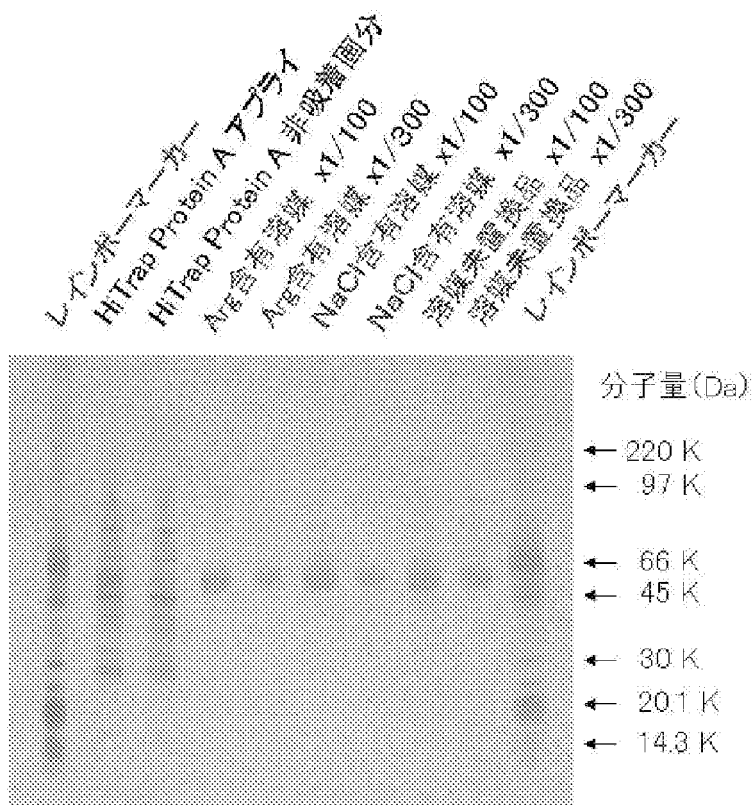
[図6]



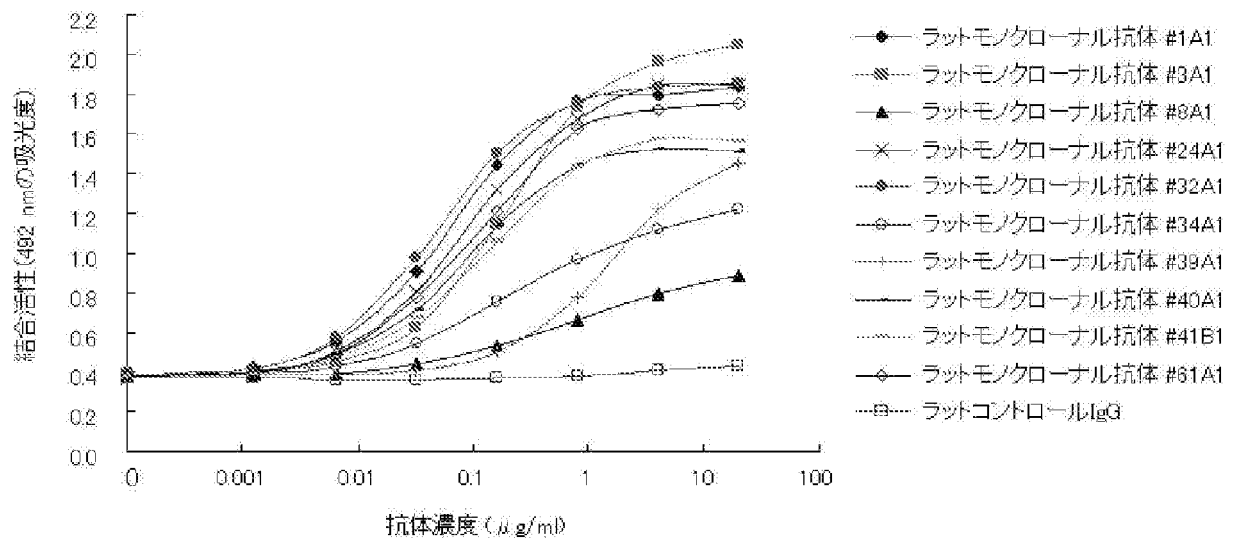
[図7]



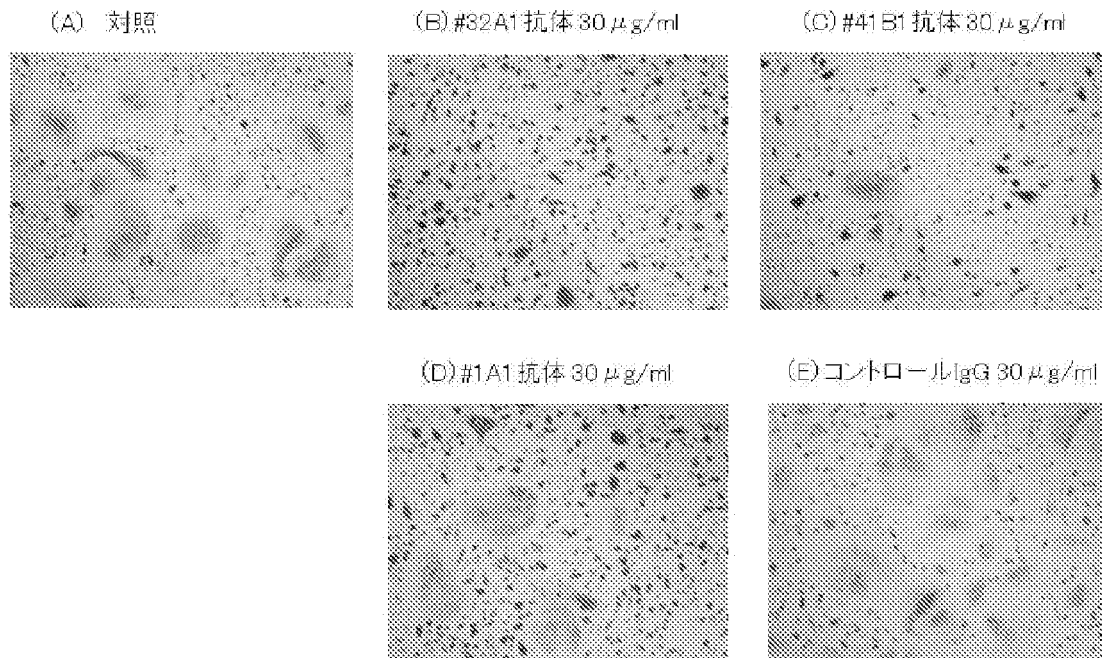
[図8]



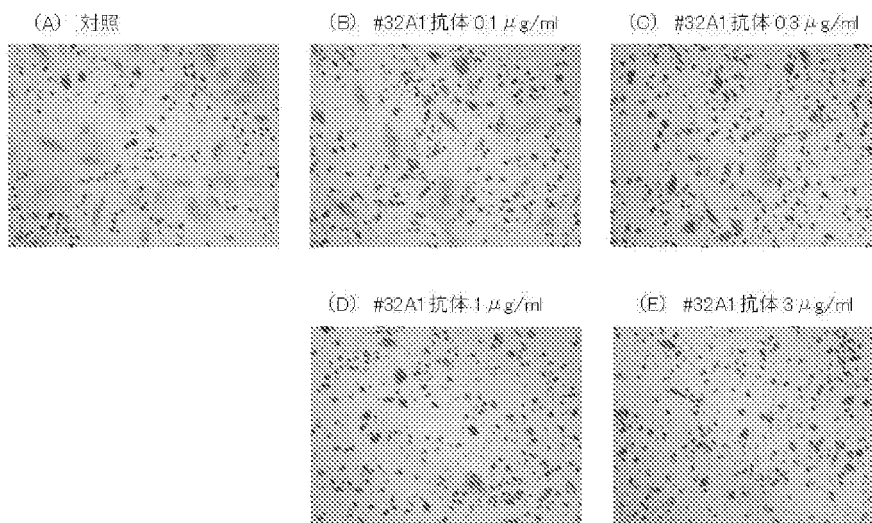
[図9]



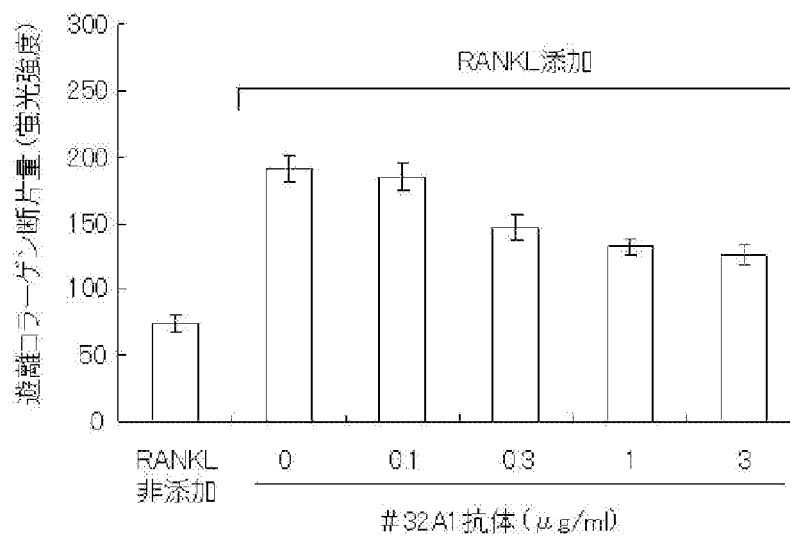
[図10]



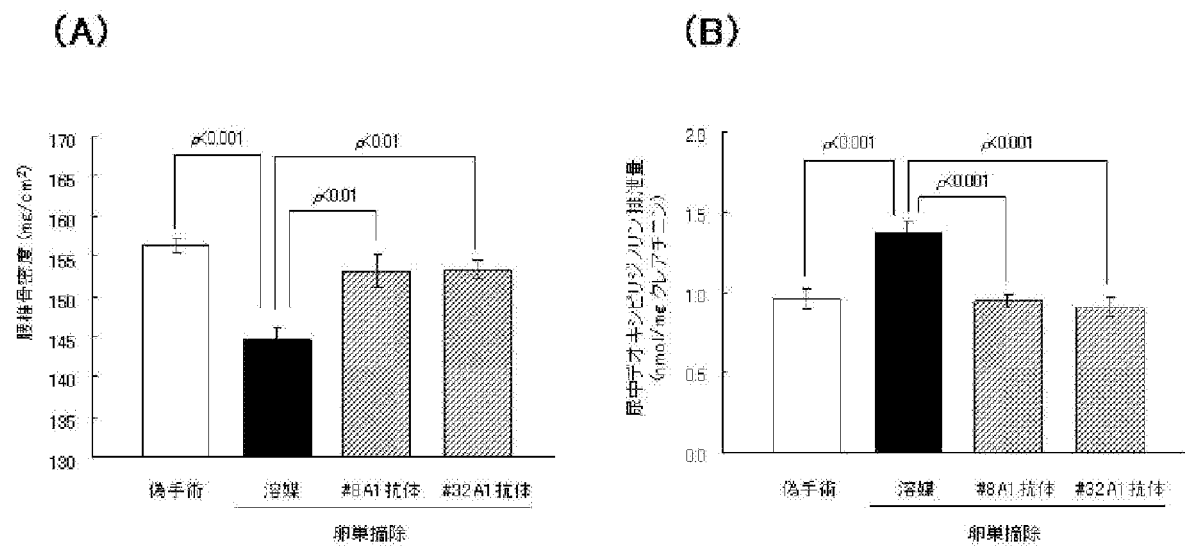
[図11]



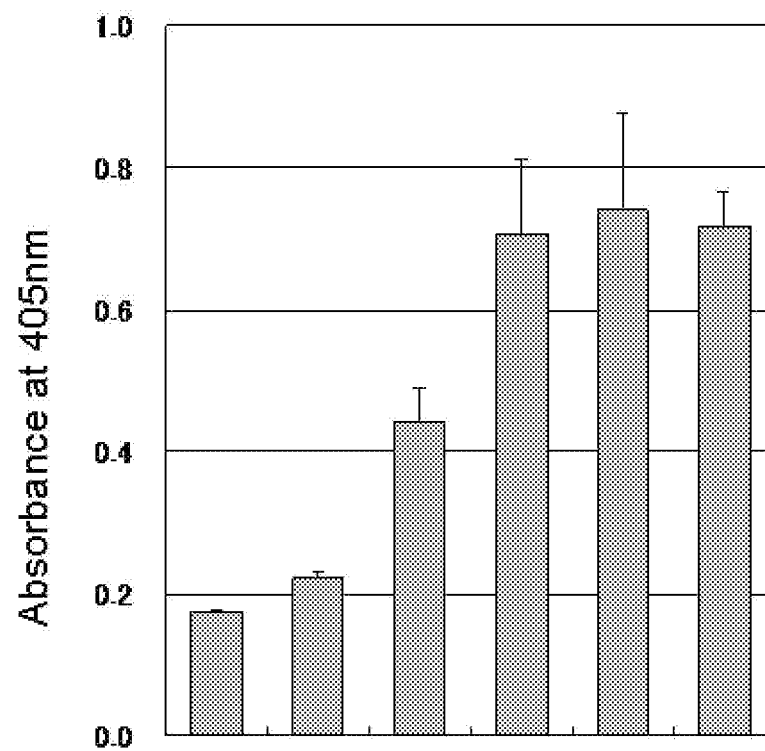
[図12]



[図13]

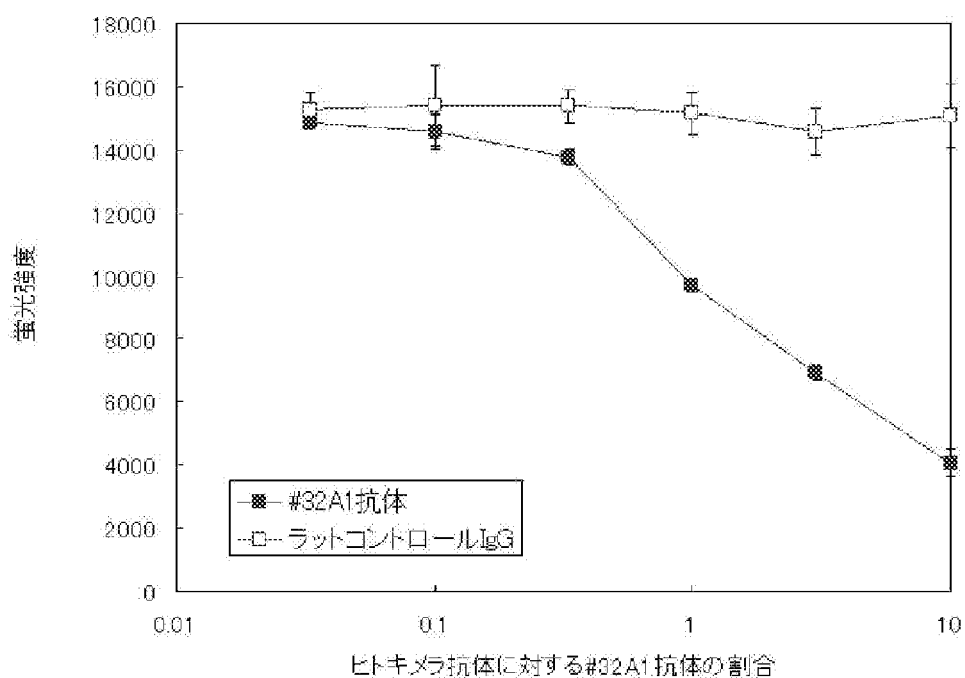


[図14]

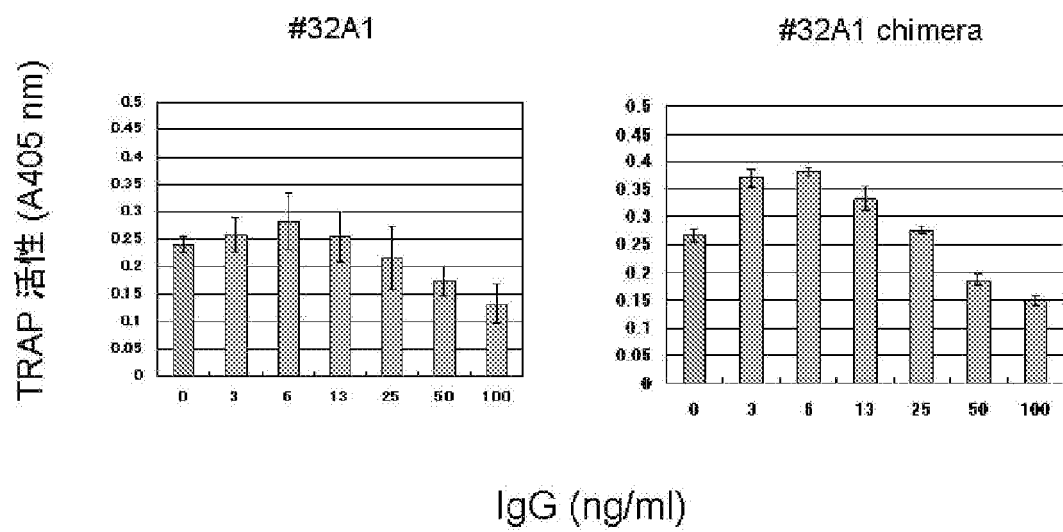


ラット#32A1モノクローナル抗体 1 1 1 1 1 1
 ヒトSiglec-15 V-setドメイン 10 2 0.4 0.08 0.016 0 単位: μg/ml

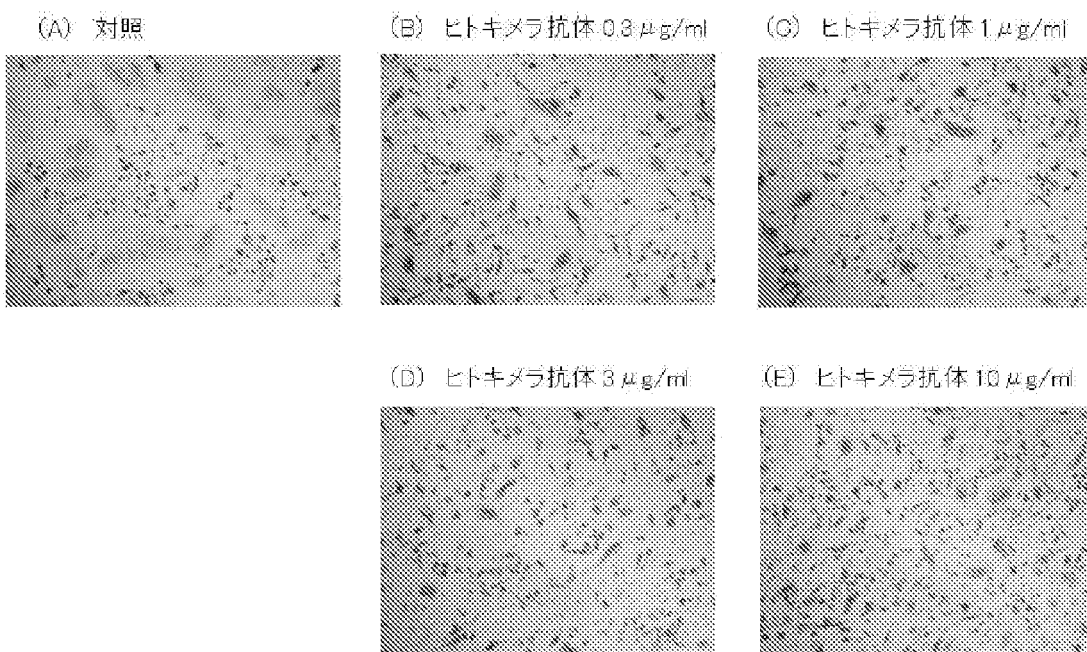
[図15]



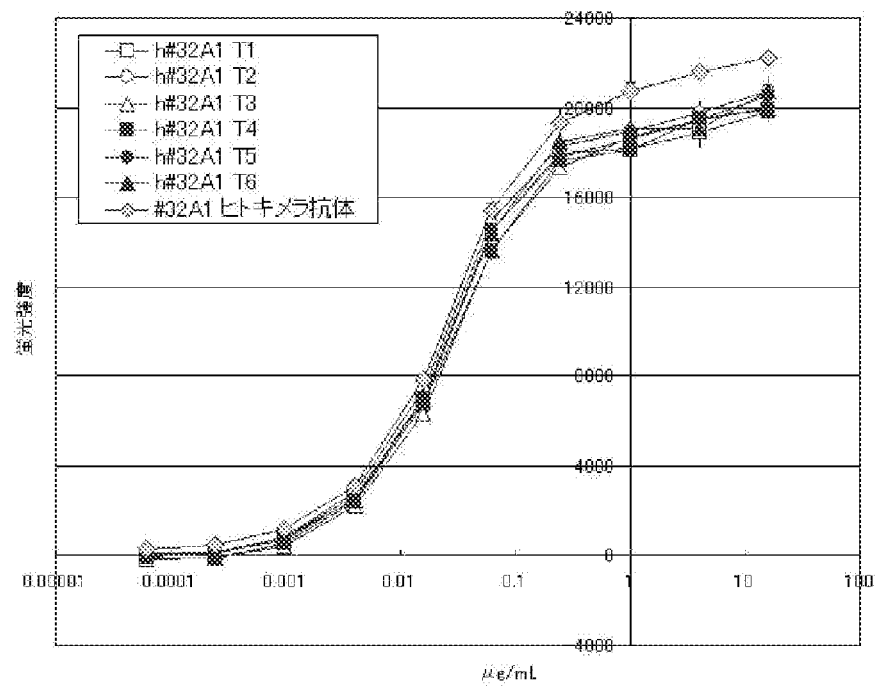
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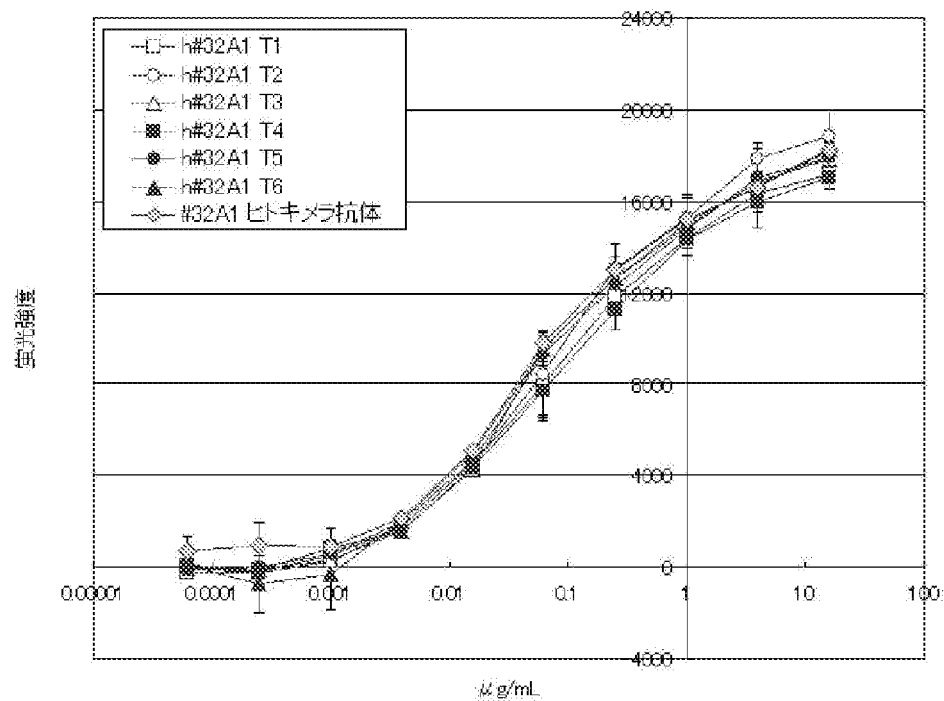
[図17]



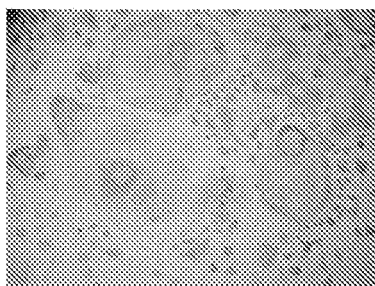
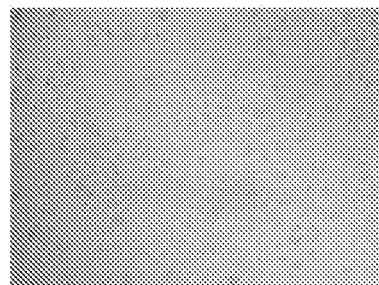
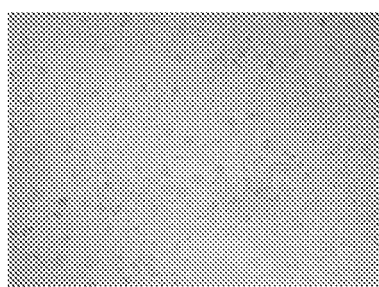
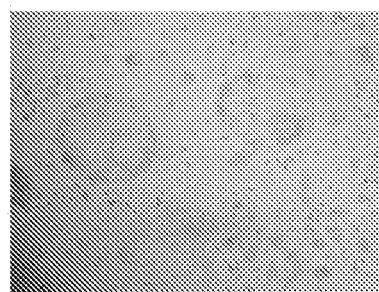
[図18]



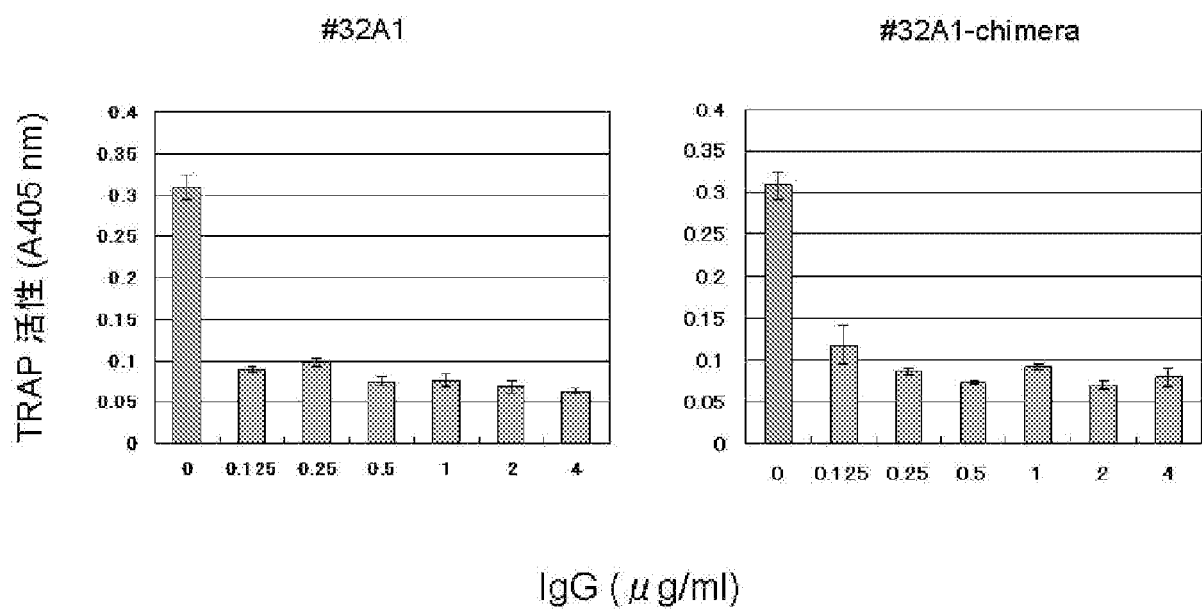
[図19]



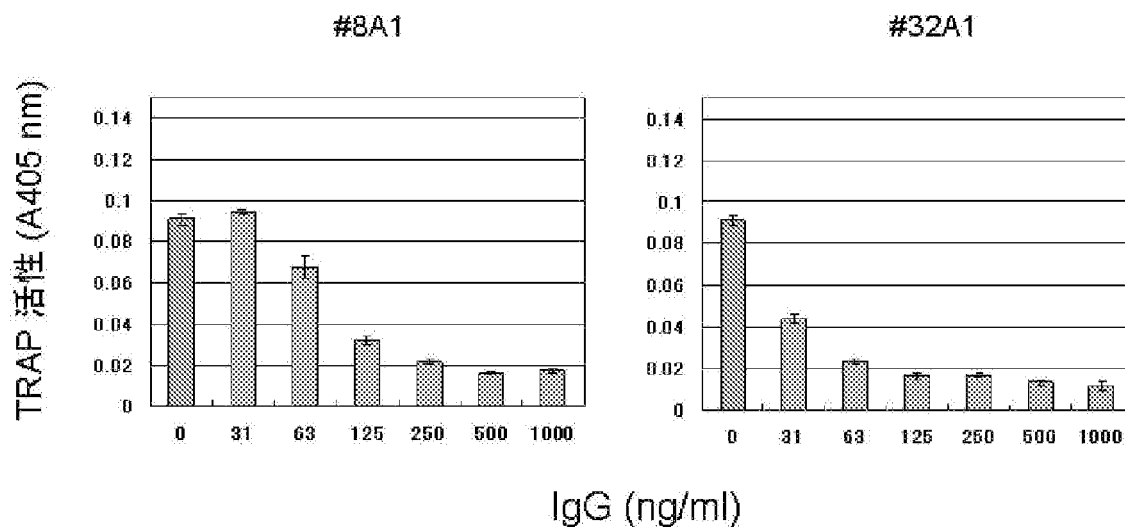
[図20]

(A) 对照: 30 ng/ml TNF α (B) TNF α + 1 μ g/ml #32A1(C) TNF α + 1 μ g/ml #32A1 chimera(D) TNF α + 100 ng/ml OCIF/OPG

[図21]



[図22]



[図23]

配列番号 27 : クローニングしたラット # 32A1 重鎖のヌクレオチド配列 (可変領域 + α)

ATGAAGTTGTGGTTGAGCTGGATATTCTTGTGTTCTTTTCAAAGGTGTGAGGTGTGAGGTGCAAATTTTGGAGACTGG
AGGAGGCTTGGTGAAGCCCGGTGGTTCCCTGAGACTGTCTTGTGCAACGTCTGGATTCAATTTCAATGATTATTTTCATGA
ACTGGGTCCGTCAGGCTCCAGAAAAGGGGCTAGAGTGGGTGCTCAAATAAGGAACAAAATTTATACTTATGCCACATTT
TATGCGGAGTCTTTTGAAGGCAGAGTCACAATCTCAGGAGACGATTCCGAAAGCAGTGTCTACCTGCAAGTGAGCAGTTT
AAGAGCTGAAGACACTGCCATTTATTACTGTACAAGATCCCTAACTGGGGGAGACTACTTTGATTACTGGGGCCAAGGAG
TCATGGTCACAGTCTCCTTAGCTGAAACAACAGCCCCATCTGTCTATCCACTGGCTCCTGGAAGTCTCTCAAAAGTAAC
TCCATGGTGACCCTGGGATGC

シグナル配列 (1-57)、可変領域 (58-420)、定常領域の部分配列 (421-501)

配列番号 28 : クローニングしたラット # 32A1 重鎖がコードするアミノ酸配列 (可変領域 + α)

MKLWLSWIFLVLFKGYRCEVQILETGGLVKPGSLRLSCATSGFNFNDFMNVWRQAPKLEWVAQIRNKIYTYATF
YAESLEGRVTISRDDSESSVYLQVSSLRAEDTAIYYCTRSLTGGDYFDYWGQGVMTVSLAETTAPSVYPLAPGTALKSN
SMVTLGC

シグナル配列 (1-19)、可変領域 (20-140)、定常領域の部分配列 (141-167)

[図24]

配列番号 29 : クローニングしたラット # 3 2 A 1 軽鎖のヌクレオチド配列 (可変領域 + α)

ATGGAGACAGACAGACTCCTGCTATGGGCACTGCTGCTCTGGGTTCCAGGCTCCACTGGTGACATTGTCTTGACCCAGTC
TCCTGCTTTGGCTGTGTCTCTAGGGCAGAGGGCCACAATCTCCTGTAGGGCCAGCCAAAGTGTCACCTATTTCTGGATATA
GTTTTATACACTGGTACCAACAGAAACCAGGACAGCAACCCAGACTCCTCATCTATCGTGCATCCAACCTAGCCTCTGGG
ATCCCGGCCAGGTTCACTGGCAGTGGGTCTGGGACAGACTTCACCCCTACCATCAATCCTGTGCAGGCTGATGATATTGC
AACCTATTTCTGTCAGCAGAGTAGGAAATCTCCGTGGACGTTGCTGGAGGCACCAAGCTGGAATTGAGACGGGCTGATG
CTGCACCAACTGTATCT

シグナル配列 (1-60)、可変領域 (61-396)、定常領域の部分配列 (397-417)

配列番号 30 : クローニングしたラット # 3 2 A 1 軽鎖がコードするアミノ酸配列 (可変領域 + α)

METDRLLWALLWVPGSTGDIVLTQSPALAVSLGQRATISCRASQSVTISGYSFIHWYQQKPGQPRLLIYRASNLASG
IPARFSGSGTDFLTINPVQADDIATYFCQQSRKSPWTFAGGTKLELRRADAAPTYS

シグナル配列 (1-20)、可変領域 (21-132)、定常領域の部分配列 (133-139)

[図25]

配列番号 40 : # 3 2 A 1 ヒトキメラ抗体重鎖のヌクレオチド配列

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTGCTGAGCGAGGTGCAAATTTGGGAGACTGG
AGGAGGCTTGGTGAAGCCCGGTGGTTCCCTGAGACTGTCTGTGCAACGTCTGGATTCAATTTCAATGATTATTTTCATGA
ACTGGGTCGTCAGGCTCCAGAAAAGGGGCTAGAGTGGGTGCTCAAATAAGGAACAAAATTTATACTTATGCCACATTT
TATGCGGAGTCTTTGGAAGGCAGAGTCACAATCTCAGGAGACGATCCGAAAGCAGTGTCTACCTGCAAGTGAGCAGTTT
AAGAGCTGAAGACACTGCCATTTATTACTGTACAAGATCCCTAACTGGGGGAGACTACTTTGATTACTGGGGCCAAGGAG
TCATGGTCACAGTCAGCTCAGCCTCCACCAAGGGCCCAAGCGTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGC
GGCAGCGCCGCTGGGCTGCCGTGGTCAAGGACTACTTCCCCGAACCCGTGACCGTGAGCTGGAAGTCAAGGCGCCCTGAC
CAGCGGCGTGACACCTTCCCCGTGTCTGTCAGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCA
GCAGCTTGGGCACCCAGACTACATCTGCAACGTGAATCACAAGCCAGCAACACCAAGGTGGACAAGAGAGTTGAGCCC
AAATCTTGTGACAAAACCTCACACATGCCACCCCTGCCAGCACCTGAACTCCTGGGGGACCCTCAGTCTTCCTCTTCCC
CCCAAAACCCAAGGACACCCCTCATGATCTCCCGGACCCCTGAGGTACATGCGTGGTGGTGGACGTGAGCCACGAAGACC
CTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAAC
AGCACGTACCGGGTGGTCAGCGTCTCACCCTGCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGAAGGTCTC
CAACAAAGCCCTCCCAGCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGCCAGCCCCGGGAACCACAGGTGTACACCC
TGCCCCCATCCCGGAGGAGATGACCAAGAACCAGGTGAGCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATC
GCCGTGGAGTGGGAGAGCAATGGCCAGCCGAGAACAACTACAAGACCACCCCTCCCGTGTGGAAGTCCGACGGCTCCTT
CTTCTCTACAGCAAGCTCACCCTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAGG
CTCTGCACAACCACTACACCCAGAAGAGCCTCTCCTGTCTCCCGGCAAATGA

シグナル配列(1-57)、可変領域(58-420)、定常領域(421-1413 終止コドンを含む)

配列番号 41 : # 3 2 A 1 ヒトキメラ抗体重鎖のアミノ酸配列

MKHLWFFLLVAAPRWVLSVQILETGGGLVKPGSLRLSCATSGFNENDYFMNWVRQAPEKGLEWVAQIRNKIYTYATF
YAESLEGRVTISRDDSESSVYLQVSSLRAEDTAIYYCTRSLTGGDYFDYWQQGYMVTVSSASTKGPSVFLAPSSKSTSG
GTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRV
KSCDKHTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDI
AVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFPSCSYMHEALHNHYTQKSLSLSPGK

シグナル配列(1-19)、可変領域(20-140)、定常領域(141-470)

[図26]

配列番号 4 2 : # 3 2 A 1 ヒトキメラ抗体軽鎖のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGACATTGTCTTGACCCAGTC
TCCTGCTTTGGCTGTGTCTCTAGGGCAGAGGGCCACAATCTCCTGTAGGGCCAGCCAAAGTGTCATATTTCTGGATATA
GTTTTATACACTGGTACCAACAGAAACCAGGACAGCAACCCAGACTCCTCATCTATCGTGCATCCAACCTAGCCTCTGGG
ATCCCGGCCAGGTTCACTGGCAGTGGGTCTGGGACAGACTTCACCCCTCACCATCAATCCTGTGCAGGCTGATGATATTGC
AACCTATTTCTGTTCAGCAGAGTAGGAAATCTCCGTGGACGTTCCGTGGAGGCACCAAGCTGGAATTGAGACGTACGGTGG
CCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGAAGTCCGGCACCGCCTCCGTGGTGTGCCTGCTGAAT
AACTTCTACCCAGAGAGGCCAAGGTGCAGTGGAAGGTGGACAACGCCCTGCAGTCCGGGAACCTCCAGGAGAGCGTGAC
CGAGCAGGACAGCAAGGACAGCACCTACAGCCTGAGCAGCACCCTGACCCTGAGCAAAGCCGACTACGAGAAGCACAAGG
TGTACGCCTGCCAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAGGGGGAGTGTTAG

シグナル配列(1-60)、可変領域(61-396)、定常領域(397-714 終止コドンを含む)

配列番号 4 3 : # 3 2 A 1 ヒトキメラ抗体軽鎖のアミノ酸配列

MVLQTQVFISLLLWISGAYGDIVLTQSPALAVSLGQRATISCRASQSVTISGYSF IHWYQQKPGQQPRLIYRASNLASG
IPARFSGSGSGTDFTLTINPVQADDIATYFCQQSRKSPWTFAGGTKLELRRTVAAPSVFIFPPSDEQLKSGTASVVCLLN
NFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

シグナル配列(1-20)、可変領域(21-132)、定常領域(133-237)

[図27]

配列番号 50 : h#32A1-T1H のヌクレオチド配列

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAGCGAGGTGC
AACTGGTGGAGAGCGGCGGCGGACTTGTGCAACCTGGCGGCTCCCTGAGACTTAGCTGTGCCGC
CTCCGGCTTCAACTTCAACGACTACTTCATGAACTGGGTGAGACAAGCCCCCTGGCAAGGGCCTG
GAGTGGGTGGCCCAAATCAGAAACAAGATCTACACCTACGCCACCTTCTACGCCGAGAGCCTTG
AGGGCAGATTACCATCTCCAGAGACAACGCCAAGAAGAGCCTGTACCTTCAAATGAACTCCCT
GAGAGCCGAGGACACCGCCGTGTACTACTGTGCCAGAAGCCTTACCGGCGGCGACTACTTCGAC
TACTGGGGCCAAGGCACCCTGGTGACCGTGAGCTCAGCCTCCACCAAGGGCCCAAGCGTCTTCC
CCCTGGCACCCCTCCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTCAAGGA
CTACTTCCCCGAACCCGTGACCGTGAGCTGGAATCAGGCGCCCTGACCAGCGGCGTGACACCC
TTCCCCGCTGTCTCGAGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCA
GCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGA
CAAGAGAGTTGAGCCCAAATCTTGTGACAAAATCACACATGCCACCCCTGCCAGCACCTGAA
CTCCTGGGGGGACCCCTCAGTCTTCTCTTCCCCCAAACCCCAAGGACACCCCTCATGATCTCCC
GGACCCCTGAGGTACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAA
CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAAC
AGCACGTACCGGTGGTTCAGCGTCTCACCCTGCTGACCAGGACTGGCTGAATGGCAAGGAGT
ACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAGCCAA
AGGCCAGCCCCGGGAACCACAGGTGTACACCCTGCCCCCATCCCGGGAGGAGATGACCAAGAAC
CAGGTACGCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGA
GCAATGGCCAGCCCGAGAACAACTACAAGACCACCCCTCCCGTGCTGGACTCCGACGGCTCCTT
CTTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCA
AA

シグナル配列 (1-57)、可変領域 (58-420)、定常領域 (421-1410)

配列番号 51 : h#32A1-T1H のアミノ酸配列

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVQPGGSLRLSCAASGFNFNDYFMNWVRQAPGKGL
EWVAQIRNKIYTYATFYAESLEGRFTISRDNKNSLYLQMNSLRAEDTAVYYCARSLTGDDYFD
YWGQGTLLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
FPAVLQSSGLYSLSSVTVPSSSLGTQTYICNVNHKPSNTKVDKRVPEPKSCDKTHTCPPCPAPE
LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN
QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFC
SVMHEALHNHYTQKSLSLSPGK

シグナル配列 (1-19)、可変領域 (20-140)、定常領域 (141-470)

[図28]

配列番号 5 2 : h#32A1-T2H のヌクレオチド配列

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAGCGAGGTGC
 AACTGGTGGAGAGCGGCGGCGGACTGGTGCAACCTGGCGGCTCCCTGAGACTGAGCTGTGCCGC
 CTCCGGCTTCAACTTCAACGACTACTTCATGAACTGGGTGAGACAAGCCCCTGAGAAGGGCCTG
 GAGTGGGTGGCCCAAATCAGAAACAAGATCTACACCTACGCCACCTTCTACGCCGAGAGCCTGG
 AGGGCAGAGTGACCATCTCCAGAGACAACGCCAAGAACAGCCTGTACCTGCAAATGTCTCCCT
 GAGAGCCGAGGACACCGCCGTGTACTACTGTGCCAGAAGCCTGACCGGCGGCGACTACTTCGAC
 TACTGGGGCCAAGGCACCCTGGTGACCGTGAGCTCAGCCTCCACCAAGGGCCCAAGCGTCTTCC
 CCCTGGCACCCCTCCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTCAAGGA
 CTACTTCCCCGAACCCGTGACCGTGAGCTGGAATCAGGCGCCCTGACCAGCGGCGTGACACCC
 TTCCCCGCTGTCTGCAGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCA
 GCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGA
 CAAGAGAGTTGAGCCCAAATCTTGTGACAAACTCACACATGCCACCCCTGCCCAGCACCTGAA
 CTCCTGGGGGGACCCCTCAGTCTTCTCTTCCCCC AAAACCCAAGGACACCCTCATGATCTCCC
 GGACCCCTGAGGTACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAA
 CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAAC
 AGCACGTACCGGGTGGTCAGCGTCTCACCCTGCTGCACCAGGACTGGCTGAATGGCAAGGAGT
 ACAAGTGCAAGGTCTCCAACAAAGCCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAA
 AGGCCAGCCCCGGGAACCACAGGTGTACACCCTGCCCCCATCCCGGGAGGAGATGACCAAGAAC
 CAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGA
 GCAATGGCCAGCCCGAGAACAATAACAAGACCACCCCTCCCGTGCTGGACTCCGACGGCTCCTT
 CTTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
 TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCA
 AA

シグナル配列 (1-57)、可変領域 (58-420)、定常領域 (421-1410)

配列番号 5 3 : h#32A1-T2H のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSEVQLVESGGGLVQPGLSLRLSCAASGFNFNDYFMNWVRQAPEKGL
 EWVAQIRNKIYTYATFYAESLEGRVTISRDNAKNSLYLQMSSLRAEDTAVYYCARSLTGGDYFD
 YWGQGLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
 FPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPE
 LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN
 QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFC
 SVMHEALHNHYTQKSLSLSPGK

シグナル配列 (1-19)、可変領域 (20-140)、定常領域 (141-470)

[図29]

配列番号 5 4 : h#32A1-T3H のヌクレオチド配列

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAGCGAGGTGC
 AGATCGTGGAGAGCGGCGGCGGACTTGTGCAGCCTGGCGGCTCCCTGAGACTTAGCTGTGCCAC
 CTCCGGCTTCAACTTCAACGACTACTTCATGAACTGGGTGAGACAGGCCCTGAGAAGGGCCTG
 GAGTGGGTGGCCCAGATCAGAAACAAGATCTACACCTACGCCACCTTCTACGCCGAGAGCCTTG
 AGGGCAGAGTGACCATCTCCAGAGACGACAGCGAGTCCAGCGTGACCTTCAGATGTCCAGCCT
 GAGAGCCGAGGACACCGCCGTGTACTACTGTACCAGAAGCCTTACCGGCGGCGACTACTTCGAC
 TACTGGGGCCAGGGCACCCTGGTGACCGTGAGCTCAGCCTCCACCAAGGGCCCAAGCGTCTTCC
 CCCTGGCACCCCTCCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTCAAGGA
 CTACTTCCCCGAACCCGTGACCGTGAGCTGGAACCTCAGGCGCCCTGACCAGCGGCGTGCACACC
 TTCCCGCTGTCTGCAGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCA
 GCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGA
 CAAGAGAGTTGAGCCCAAATCTTGTGACAAACTCACACATGCCACCCCTGCCCAGCACCTGAA
 CTCCTGGGGGGACCCTCAGTCTTCCTCTTCCCCCAAAACCCAAGGACACCCTCATGATCTCCC
 GGACCCCTGAGGTACATGCGTGGTGGTGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAA
 CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAAC
 AGCACGTACCGGGTGGTCAGCGTCTCACCCTGTCACCAGGACTGGCTGAATGGCAAGGAGT
 ACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCATCGAGAAAACCATCTCCAAGCCAA
 AGGCCAGCCCCGGGAACACAGGTGTACACCCTGCCCCATCCCGGGAGGAGATGACCAAGAAC
 CAGGTACAGCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGA
 GCAATGGCCAGCCCGAGAACAACCTACAAGACCACCCTCCCGTGCTGGACTCCGACGGCTCCTT
 CTTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
 TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCA
 AA

シグナル配列 (1-57)、可変領域 (58-420)、定常領域 (421-1410)

配列番号 5 5 : h#32A1-T3H のアミノ酸配列

MKHLWFFLLLVAAAPRWVLSEVQIVESGGGLVQPGGSLRLSCATSGFNFNDYFMNWVRQAPEKGL
 EWVAQIRNKIYTYATFYAESLEGRVTISRDDSESSVYLQMSLRAEDTAVYYCTRSLTGGDYFD
 YWGQGLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
 FPAVLQSSGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPE
 LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN
 QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
 SVMHEALHNHYTQKSLSLSPGK

シグナル配列 (1-19)、可変領域 (20-140)、定常領域 (141-470)

[図30]

配列番号 5 6 : h#32A1-T5H のヌクレオチド配列

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAGCGAGGTGC
 AGGTGGTGGAGAGCGGCGGCGGACTTGTGCAGCCTGGCGGCTCCCTGAGACTTAGCTGTGCCAC
 CTCCGGCTTCAACTTCAACGACTACTTCATGAACTGGGTGAGACAGGCCCCCTGGCAAGGGCCTG
 GAGTGGGTGGCCCAGATCAGAAACAAGATCTACACCTACGCCACCTTCTACGCCGAGAGCCTTG
 AGGGCAGATTACCATCTCCAGAGACAACAGCAAGTCCACCGTGTACCTTCAGATGAACTCCCT
 GAGAGCCGAGGACACCGCCGTGTACTACTGTACCAGAAGCCTTACCGGCGGCGACTACTTCGAC
 TACTGGGGCCAGGGCACCCCTGGTGACCGTGAGCTCAGCCTCCACCAAGGGCCCAAGCGTCTTCC
 CCGTGGCACCCCTCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTCAAGGA
 CTAATTCCCCGAACCCGTGACCGTGAGCTGGAATCAGGCGCCCTGACCAGCGGCGTGACACCC
 TTCCCCGCTGTCTCAGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCA
 GCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGA
 CAAGAGAGTTGAGCCCCAAATCTTGTGACAAAACCTCACACATGCCACCCCTGCCCAGCACCTGAA
 CTCTGGGGGGACCCCTCAGTCTTCCTCTTCCCCCAAAACCCAAGGACACCCTCATGATCTCCC
 GGACCCCTGAGGTACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAA
 CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAAC
 AGCACGTACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAGT
 ACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAGCCAA
 AGGCCAGCCCCGGGAACACAGGTGTACACCCCTGCCCCCATCCCGGGAGGAGATGACCAAGAAC
 CAGGTACGCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGA
 GCAATGGCCAGCCCCGAGAACTACAAGACCACCCCTCCCGTGCTGGACTCCGACGGCTCCTT
 CTTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
 TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCA
 AA

シグナル配列 (1-57)、可変領域 (58-420)、定常領域 (421-1410)

配列番号 5 7 : h#32A1-T5H のアミノ酸配列

MKHLWFFLLLVAAPRWVLSEVQVVESGGGLVQPGGSLRLSCATSGFNFNDYFMNWVRQAPGKGL
 EWVAQIRNKIYTYATFYAESLEGFTISRDNKSTVYLMNSLRAEDTAVYYCTRSLTGGDYFD
 YWGQGLTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
 FPAVLQSSGLYSLSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPE
 LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN
 QVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFC
 SVMHEALHNHYTQKSLSLSPGK

シグナル配列 (1-19)、可変領域 (20-140)、定常領域 (141-470)

[図31]

配列番号 58 : h#32A1-T6H のヌクレオチド配列

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAGCGAGGTGC
 AGGTGGTGGAGAGCGGCGGCGGACTTGTGCAGCCTGGCGGCTCCCTGAGACTTAGCTGTGCCAC
 CTCCGGCTTCAACTTCAACGACTACTTCATGAAC TGGGTGAGACAGGCCCCCTGAGAAGGGCCTG
 GAGTGGGTGGCCCAGATCAGAAACAAGATCTACACCTACGCCACCTTCTACGCCGAGAGCCTTG
 AGGGCAGAGTGACCATCTCCAGAGACAACAGCAAGTCCACCGTGTACCTTCAGATGTCCAGCCT
 TAGAGCCGAGGACACCGCCGTGTACTACTGTACCAGAAGCCTTACCGGCGGCGACTACTTCGAC
 TACTGGGGGCCAGGGCACCCCTTGTGACAGTGAGCTCAGCCTCCACCAAGGGCCCAAGCGTCTTCC
 CCCTGGCACCCCTCCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTCAAGGA
 CTA CT TCCCCGAACCCGTGACCGTGAGCTGGA ACTCAGGCGCCCTGACCAGCGGCGTGACACCC
 TTCCCCGCTGTCTGCAGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCA
 GCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGA
 CAAGAGAGTTGAGCCCCAAATCTTGTGACAAA ACTCACACATGCCACCCCTGCCCAGCACCTGAA
 CTCCTGGGGGGACCCCTCAGTCTTCTCTTCCCCC AAAACCCAAGGACACCCCTCATGATCTCCC
 GGACCCCTGAGGTACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAA
 CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAAC
 AGCACGTACCGGGTGGTCAGCGTCCCTCACCGTCCCTGCACCAGGACTGGCTGAATGGCAAGGAGT
 ACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAA
 AGGCCAGCCCCGGGAACCACAGGTGTACACCCTGCCCCCATCCCGGGAGGAGATGACCAAGAAC
 CAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGA
 GCAATGGCCAGCCCCGAGAACAAC TACAAGACCACCCCTCCCGTGCTGGACTCCGACGGCTCCTT
 CTTCCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
 TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCA
 AA

シグナル配列 (1-57)、可変領域 (58-420)、定常領域 (421-1410)

配列番号 59 : h#32A1-T6H のアミノ酸配列

MKHLWFFLLLVAA PRWVLSEVQVVESGGGLVQPGGSLRLSCATSGFNFNDYFMNWVRQAPEKGL
 EWVAQIRNKIYTYATFYAESLEGRVTISRDNKSSTVYLMSSSLRAEDTAVYYCTRSLTGGDYFD
 YWGQGLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
 FPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPE
 LLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN
 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKN
 QVSLTCLVKGFPYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
 SVMHEALHNHYTQKSLSLSPGK

シグナル配列 (1-19)、可変領域 (20-140)、定常領域 (141-470)

[図32]

配列番号 6 0 : h#32A1-T1L のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGACA
TCGTGATGACCCAGAGCCCTGACTCCCTTGCCGTGTCCCTGGGCGAGAGAGCCACCATCAACTG
TAGAGCCTCCCAGAGCGTGACCATCTCCGGCTACAGCTTCATCCACTGGTACCAGCAGAAGCCT
GGCCAGCCTCCTAAGCTTCTGATCTACAGAGCCTCCAACCTTGCCAGCGGCGTGCCTGCCAGAT
TCTCCGGCAGCGGCTCCGGCACCGACTTCACCCCTGACCATCAGCTCCCTTCAGGCCGAGGACGT
GGCCGTGTACTACTGTCAGCAGAGCAGAAAGTCCCCCTTGGACCTTCGGCGGCGGCACCAAGGTG
GAGATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGA
AGTCCGGCACCGCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCAGAGAGGCCAAGGTGCA
GTGGAAGGTGGACAACGCCCTGCAGTCCGGGAACCTCCAGGAGAGCGTGACCGAGCAGGACAGC
AAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAAGCCGACTACGAGAAGCACA
AGGTGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAG
GGGGGAGTGT

シグナル配列 (1-60)、可変領域 (61-399)、定常領域 (400-714)

配列番号 6 1 : h#32A1-T1L のアミノ酸配列

MVLQTQVFISLLLLWISGAYGDIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKP
GQPPKLLIYRASNLASGVPARFSGSGSDFTLTFISSLQAEDVAVYYCQQSRKSPWTFGGGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYSLSSLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-133)、定常領域 (134-238)

[図33]

配列番号 6 2 : h#32A1-T2L のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGACA
TCGTGATGACCCAGAGCCCTGACTCCCTTGCCGTGTCCCTGGGCGAGAGAGCCACCATCAGCTG
TAGAGCCTCCCAGAGCGTGACCATCTCCGGCTACAGCTTCATCCACTGGTACCAGCAGAAGCCT
GGCCAGCCTCCTAGACTTCTGATCTACAGAGCCTCCAACCTTGCCAGCGGGCGTGCCTGCCAGAT
TCTCCGGCAGCGGCTCCGGCACCGACTTCACCCTGACCATCAGCTCCCTTCAGGCCGAGGACGT
GGCCGTGTACTTCTGTCAGCAGAGCAGAAAGTCCCCTTGGACCTTCGCCGGCGGCACCAAGGTG
GAGATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGA
AGTCCGGCACCGCCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCAGAGAGGCCAAGGTGCA
GTGGAAGGTGGACAACGCCCTGCAGTCCGGGAATCCCAGGAGAGCGTGACCGAGCAGGACAGC
AAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAAGCCGACTACGAGAAGCACA
AGGTGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAG
GGGGGAGTGT

シグナル配列 (1-60)、可変領域 (61-399)、定常領域 (400-714)

配列番号 6 3 : h#32A1-T2L のアミノ酸配列

MVLQTQVFISLLLWISGAYGDIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKP
GQPPRLLIYRASNLASGVPARFSGSGSGTDFTLTISSLQAEDVAVYFCQQSRKSPWTFAGGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYLSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-133)、定常領域 (134-238)

[図34]

配列番号 6 4 : h#32A1-T3L のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGACA
TCGTGCTTACCCAGAGCCCTGACTCCCTTGCCGTGTCCCTGGGCGAGAGAGCCACCATCAGCTG
TAGAGCCTCCCAGAGCGTGACCATCTCCGGCTACAGCTTCATCCACTGGTACCAGCAGAAGCCT
GGCCAGCAGCCTAGACTTCTGATCTACAGAGCCTCCAACCTTGCCAGCGGCATCCCTGCCAGAT
TCTCCGGCAGCGGCTCCGGCACCGACTTCACCCTGACCATCAGCTCCCTTCAGGCCGAGGACGT
GGCCACCTACTTCTGTCAGCAGAGCAGAAAGTCCCCTTGGACCTTCGCCGGCGGCACCAAGGTG
GAGATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGA
AGTCCGGCACCGCCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCAGAGAGGCCAAGGTGCA
GTGGAAGGTGGACAACGCCCTGCAGTCCGGGAACCTCCAGGAGAGCGTGACCGAGCAGGACAGC
AAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAAGCCGACTACGAGAAGCACA
AGGTGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAG
GGGGGAGTGT

シグナル配列 (1-60)、可変領域 (61-399)、定常領域 (400-714)

配列番号 6 5 : h#32A1-T3L のアミノ酸配列

MVLQTQVFISLLLLWISGAYGDIVLTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKP
GQQPRLLIYRASNLASGIPARFSGSGSTDFLTITSSLQAEDVATYFCQQSRKSPWTFAGGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYSLSSLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-133)、定常領域 (134-238)

[図35]

配列番号 6 6 : h#32A1-T4L のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGACA
TCGTGCTTACCCAGAGCCCTGCCCTTGCCGTGTCCCTGGGCGAGAGAGCCACCATCAGCTGTAG
AGCCTCCCAGAGCGTGACCATCTCCGGCTACAGCTTCATCCACTGGTACCAGCAGAAGCCTGGC
CAGCAGCCTAGACTTCTGATCTACAGAGCCTCCAACCTTGCCAGCGGCATCCCTGCCAGATTCT
CCGGCAGCGGCTCCGGCACCGACTTCACCTGACCATCAGCTCCCTTCAGGCCGAGGACGTGGC
CACCTACTTCTGTCTCAGCAGAGCAGAAAGTCCCCCTTGGACCTTCGCCGGCGGCACCAAGCTGGAG
ATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGAAGT
CCGGCACCGCCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCCAGAGAGGCCAAGGTGCAGTG
GAAGGTGGACAACGCCCTGCAGTCCGGGAACCTCCAGGAGAGCGTGACCGAGCAGGACAGCAAG
GACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAAGCCGACTACGAGAAGCACAAGG
TGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAGGGG
GGAGTGT

シグナル配列 (1-60)、可変領域 (61-396)、定常領域 (400-711)

配列番号 6 7 : h#32A1-T4L のアミノ酸配列

MVLQTQVFISLLLWISGAYGDIVLTQSPALAVSLGERATISCRASQSVTISGYSFHWHYQQKPG
QQPRLLIYRASNLASGIPARFSGSGSDFTLTISLQAEDVATYFCQQSRKSPWTFAGGTKLE
IKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSK
DSTYLSSTLTLSKADYEEKHKVYACEVTHQGLSSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-132)、定常領域 (133-237)

[図36]

配列番号 68 : h#32A1-T5L のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGACA
TCGTGCTTACCCAGAGCCCTGACTCCCTTGCCGTGTCCCTGGGCGAGAGAGCCACCATCAACTG
TAGAGCCTCCCAGAGCGTGACCATCTCCGGCTACAGCTTCATCCACTGGTACCAGCAGAAGCCT
GGCCAGCCTCCTAAGCTTCTGATCTACAGAGCCTCCAACCTTGCCAGCGGCATCCCTGCCAGAT
TCTCCGGCAGCGGCTCCGGCACCGACTTCACCCTGACCATCAGCTCCCTTCAGGCCGAGGACGT
GGCCACCTACTACTGTGTCAGCAGAGCAGAAAGTCCCCCTTGGACCTTCGGCCAGGGCACCAAGGTG
GAGATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGA
AGTCCGGCACCGCCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCAGAGAGGCCAAGGTGCA
GTGGAAGGTGGACAACGCCCTGCAGTCCGGGAACCTCCAGGAGAGCGTGACCGAGCAGGACAGC
AAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAAGCCGACTACGAGAAGCACA
AGGTGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAG
GGGGGAGTGT

シグナル配列 (1-60)、可変領域 (61-399)、定常領域 (400-714)

配列番号 69 : h#32A1-T5L のアミノ酸配列

MVLQTQVFISLLLWISGAYGDIVLTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKP
GQPPKLLIYRASNLASGIPARFSGSGSDFTLTISLQAEDVATYYCQQSRKSPWTFGQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYLSLSSTLTLSKADYEKHKVYACEVTHQGLSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-133)、定常領域 (134-238)

[図37]

配列番号 7 0 : h#32A1-T6L のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGACA
TCGTGCTTACCCAGAGCCCTGACTCCCTTGCCGTGTCCCTGGGCGAGAGAGCCACCATCAGCTG
TAGAGCCTCCCAGAGCGTGACCATCTCCGGCTACAGCTTCATCCACTGGTACCAGCAGAAGCCT
GGCCAGCCTCCTAGACTGCTGATCTACAGAGCCTCCAACCTTGCCAGCGGCATCCCTGCCAGAT
TCTCCGGCAGCGGCTCCGGCACCGACTTCACCCTGACCATCAGCTCCCTTCAGGCCGAGGACGT
GGCCACCTACTTCTGTCAGCAGAGCAGAAAAGTCCCCTTGGACCTTCGCCGGCGGCACCAAGGTG
GAGATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCTCCGACGAGCAGCTGA
AGTCCGGCACCGCCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCAGAGAGGCCAAGGTGCA
GTGGAAGGTGGACAACGCCCTGCAGTCCGGGAAGTCCCAGGAGAGCGTGACCGAGCAGGACAGC
AAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAAGCCGACTACGAGAAGCACA
AGGTGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAG
GGGGGAGTGT

シグナル配列 (1-60)、可変領域 (61-399)、定常領域 (400-714)

配列番号 7 1 : h#32A1-T6L のアミノ酸配列

MVLQTQVFISLLLWISGAYGDIVLTQSPDSLAVSLGERATISCRASQSVTISGYFSFIHWYQQKP
GQPPRLLIYRASNLASGIPARFSGSGGTDFTLTIFSSLQAEDVATYFCQQSRKSPWTFAGGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-133)、定常領域 (134-238)

[図38]

配列番号72 : h # 3 2 A 1 - T 7 H のアミノ酸配列

EVQLVESGGGLVQPGGSLRLSCAASGFnFNdYfMnWVRQAPeKGLewVAQIRnKIYTYATfYAE
SLEGRFTISRDNakNSLYLQmNSLRAEDTAVYYCARSLTGGDYFDYWGQGTLVTVSSASTKGPS
VFPLAPSSKSTSGGTAAAGCLVKDYfPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTV
PSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLM
ISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNG
KEYKCKVSNKALPAPIEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVfSCSVmHEALHNHYTQKSLSLS
PGK

可変領域 (1-121)、定常領域 (122-451)

配列番号 : 73 h # 3 2 A 1 - T 8 H のアミノ酸配列

EVQLVESGGGLVQPGGSLRLSCAASGFnFNdYfMnWVRQAPGKGLewVAQIRnKIYTYATfYAE
SLEGRVTISRDNakNSLYLQmNSLRAEDTAVYYCARSLTGGDYFDYWGQGTLVTVSSASTKGPS
VFPLAPSSKSTSGGTAAAGCLVKDYfPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTV
PSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLM
ISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNG
KEYKCKVSNKALPAPIEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVfSCSVmHEALHNHYTQKSLSLS
PGK

可変領域 (1-121)、定常領域 (122-451)

配列番号74 : h # 3 2 A 1 - T 9 H のアミノ酸配列

EVQLVESGGGLVQPGGSLRLSCAASGFnFNdYfMnWVRQAPGKGLewVAQIRnKIYTYATfYAE
SLEGRFTISRDNakNSLYLQmSSLRAEDTAVYYCARSLTGGDYFDYWGQGTLVTVSSASTKGPS
VFPLAPSSKSTSGGTAAAGCLVKDYfPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTV
PSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLM
ISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNG
KEYKCKVSNKALPAPIEKTIKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVfSCSVmHEALHNHYTQKSLSLS
PGK

可変領域 (1-121)、定常領域 (122-451)

[図39]

配列番号75 : h # 3 2 A 1 - T 1 0 H のアミノ酸配列

EVQLVESGGGLVQPGGSLRLSCAASGFNFDYFMNWVRQAPEKGLEWVAQIRNKIYTYATFYAE
SLEGRVTISRDNANKNSLYLQMNSLRAEDTAVYYCARSLTGGDYFDYWGQGTLLTVTVSSASTKGPS
VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTV
PSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLM
ISRTPETCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNG
KEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSQVMHEALHNHYTQKSLSLS
PGK

可変領域 (1 - 1 2 1)、定常領域 (1 2 2 - 4 5 1)

配列番号76 : h # 3 2 A 1 - T 1 1 H のアミノ酸配列

EVQLVESGGGLVQPGGSLRLSCAASGFNFDYFMNWVRQAPEKGLEWVAQIRNKIYTYATFYAE
SLEGRFTISRDNANKNSLYLQMSSLRAEDTAVYYCARSLTGGDYFDYWGQGTLLTVTVSSASTKGPS
VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTV
PSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLM
ISRTPETCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNG
KEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSQVMHEALHNHYTQKSLSLS
PGK

可変領域 (1 - 1 2 1)、定常領域 (1 2 2 - 4 5 1)

配列番号77 : h # 3 2 A 1 - T 1 2 H のアミノ酸配列

EVQLVESGGGLVQPGGSLRLSCAASGFNFDYFMNWVRQAPGKGLEWVAQIRNKIYTYATFYAE
SLEGRVTISRDNANKNSLYLQMSSLRAEDTAVYYCARSLTGGDYFDYWGQGTLLTVTVSSASTKGPS
VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVTV
PSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLM
ISRTPETCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNG
KEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSQVMHEALHNHYTQKSLSLS
PGK

可変領域 (1 - 1 2 1)、定常領域 (1 2 2 - 4 5 1)

[図40]

配列番号78 : h # 3 2 A 1 - T 7 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKPGQPPKLLIYRASNLASGVPA
RFGSGSGTDFTLTISSLQAEDVAVYYCQQRKSPWTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号79 : h # 3 2 A 1 - T 8 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKPGQPPRLLIYRASNLASGVPA
RFGSGSGTDFTLTISSLQAEDVAVYYCQQRKSPWTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号80 : h # 3 2 A 1 - T 9 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKPGQPPKLLIYRASNLASGVPA
RFGSGSGTDFTLTISSLQAEDVAVYFCQQRKSPWTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号81 : h # 3 2 A 1 - T 1 0 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKPGQPPKLLIYRASNLASGVPA
RFGSGSGTDFTLTISSLQAEDVAVYYCQQRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号82 : h # 3 2 A 1 - T 1 1 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKPGQPPRLLIYRASNLASGVPA
RFGSGSGTDFTLTISSLQAEDVAVYYCQQRKSPWTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDYSLSSLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

[図41]

配列番号83 : h # 3 2 A 1 - T 1 2 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKPGQPPKLLIYRASNLASGVPA
RFGSGSGTDFTLTISLQAEDVAVYFCQQSRKSPWTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218)

配列番号84 : h # 3 2 A 1 - T 1 3 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKPGQPPKLLIYRASNLASGVPA
RFGSGSGTDFTLTISLQAEDVAVYYCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218)

配列番号85 : h # 3 2 A 1 - T 1 4 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKPGQPPRLLIYRASNLASGVPA
RFGSGSGTDFTLTISLQAEDVAVYFCQQSRKSPWTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218)

配列番号86 : h # 3 2 A 1 - T 1 5 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKPGQPPRLLIYRASNLASGVPA
RFGSGSGTDFTLTISLQAEDVAVYYCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218)

配列番号87 : h # 3 2 A 1 - T 1 6 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKPGQPPKLLIYRASNLASGVPA
RFGSGSGTDFTLTISLQAEDVAVYFCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218)

[図42]

配列番号88 : h # 3 2 A 1 - T 1 7 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKPGQPPRLLIYRASNLASGVPA
RFSGSGSGTDFTLTISSLQAEDVAVYFCQQSRKSPWTFGGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号89 : h # 3 2 A 1 - T 1 8 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKPGQPPRLLIYRASNLASGVPA
RFSGSGSGTDFTLTISSLQAEDVAVYYCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号90 : h # 3 2 A 1 - T 1 9 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATISCRASQSVTISGYSFHWHYQQKPGQPPKLLIYRASNLASGVPA
RFSGSGSGTDFTLTISSLQAEDVAVYFCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号91 : h # 3 2 A 1 - T 2 0 L のアミノ酸配列

DIVMTQSPDSLAVSLGERATINCRASQSVTISGYSFHWHYQQKPGQPPRLLIYRASNLASGVPA
RFSGSGSGTDFTLTISSLQAEDVAVYFCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

配列番号92 : h # 3 2 A 1 - T 2 1 L のアミノ酸配列

EILMTQSPATLSLSPGERATLSCRASQSVTISGYSFHWHYQQKPGQAPRLLIYRASNLASGIPA
RFSGSGSGTDFTLTISLLEPEDFALYYCQQSRKSPWTFGQGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSSTYLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 1 1 3)、定常領域 (1 1 4 - 2 1 8)

[図43]

配列番号93 : h # 3 2 A 1 - T 2 2 L のアミノ酸配列

EILMTQSPATLSLSPGERATLSCRASQSVTISGYSFHWHYQQKPGQAPRLLIYRASNLASGIPA
RFSGSGSGTDFTLTISSLEPEDFALYFCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYLSLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218)

配列番号94 : h # 3 2 A 1 - T 2 3 L のアミノ酸配列

EILLTQSPATLSLSPGERATLSCRASQSVTISGYSFHWHYQQKPGQAPRLLIYRASNLASGIPA
RFSGSGSGTDFTLTISSLEPEDFALYYCQQSRKSPWTFGQGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYLSLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218)

配列番号95 : h # 3 2 A 1 - T 2 4 L のアミノ酸配列

EILLTQSPATLSLSPGERATLSCRASQSVTISGYSFHWHYQQKPGQAPRLLIYRASNLASGIPA
RFSGSGSGTDFTLTISSLEPEDFALYYCQQSRKSPWTFGQGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYLSLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

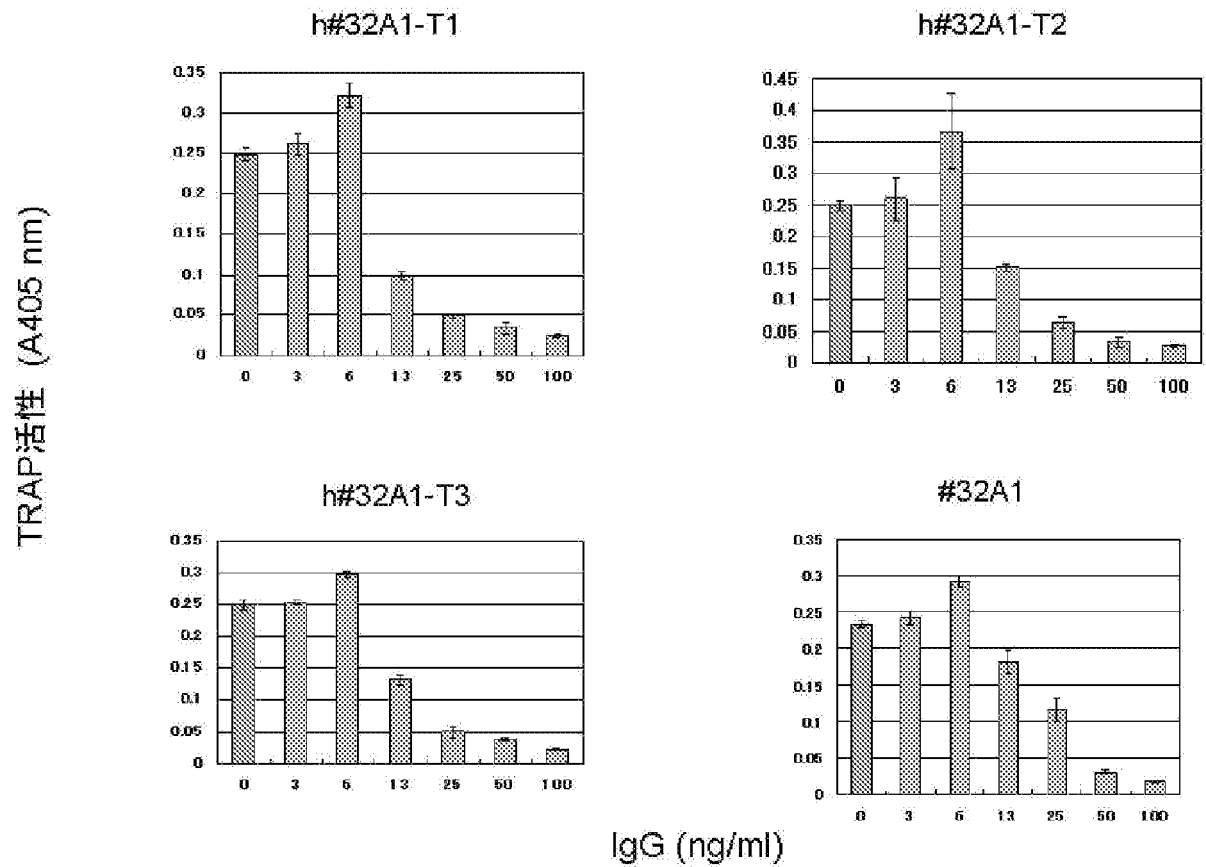
可変領域 (1 - 113)、定常領域 (114 - 218)

配列番号96 : h # 3 2 A 1 - T 2 5 L のアミノ酸配列

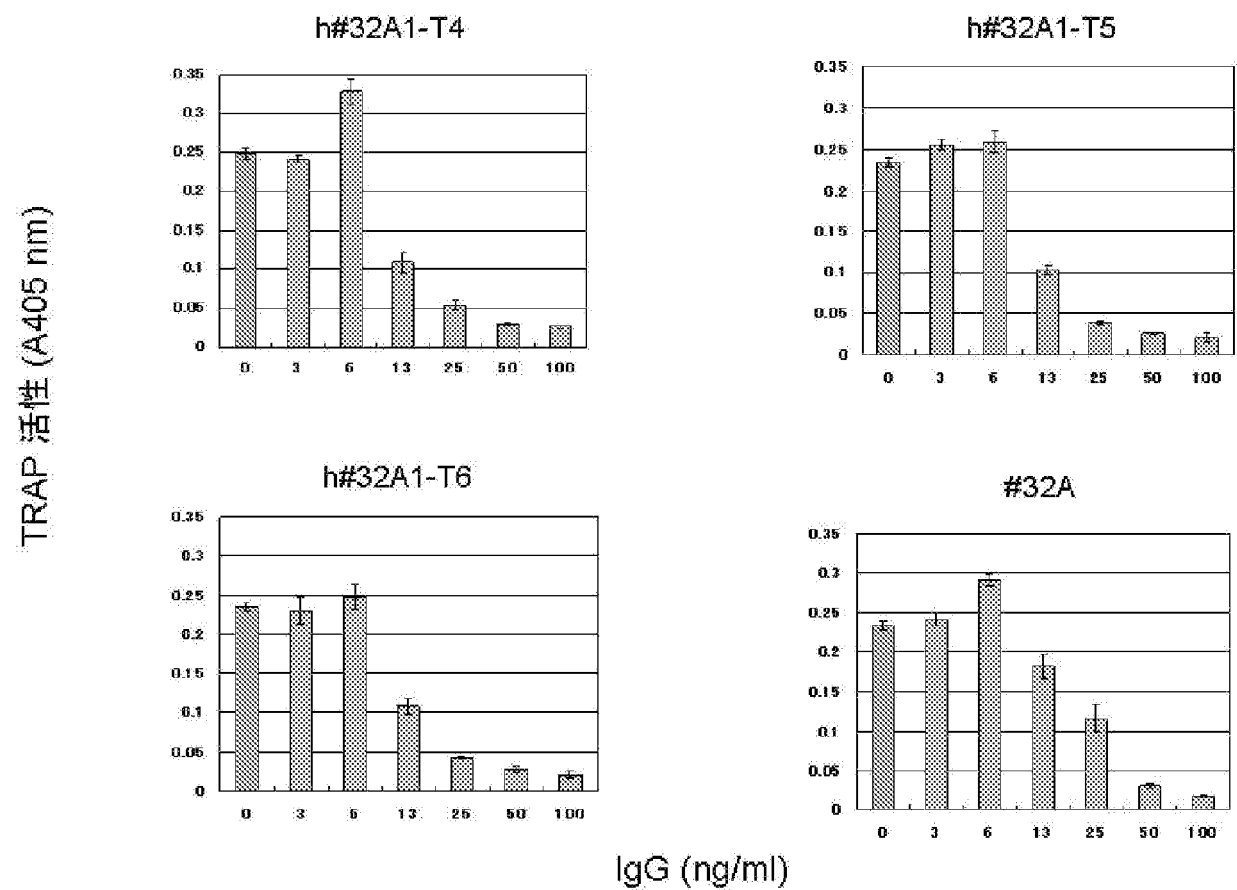
DILLTQSPATLSLSPGERATLSCRASQSVTISGYSFHWHYQQKPGQQPRLLIYRASNLASGIPA
RFSGSGSGTDFTLTISSLEPEDFATYFCQQSRKSPWTFAGGTKVEIKRTVAAPSVFIFPPSDEQ
LKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYLSLSSTLTLSKADYEK
HKVYACEVTHQGLSSPVTKSFNRGEC

可変領域 (1 - 113)、定常領域 (114 - 218).

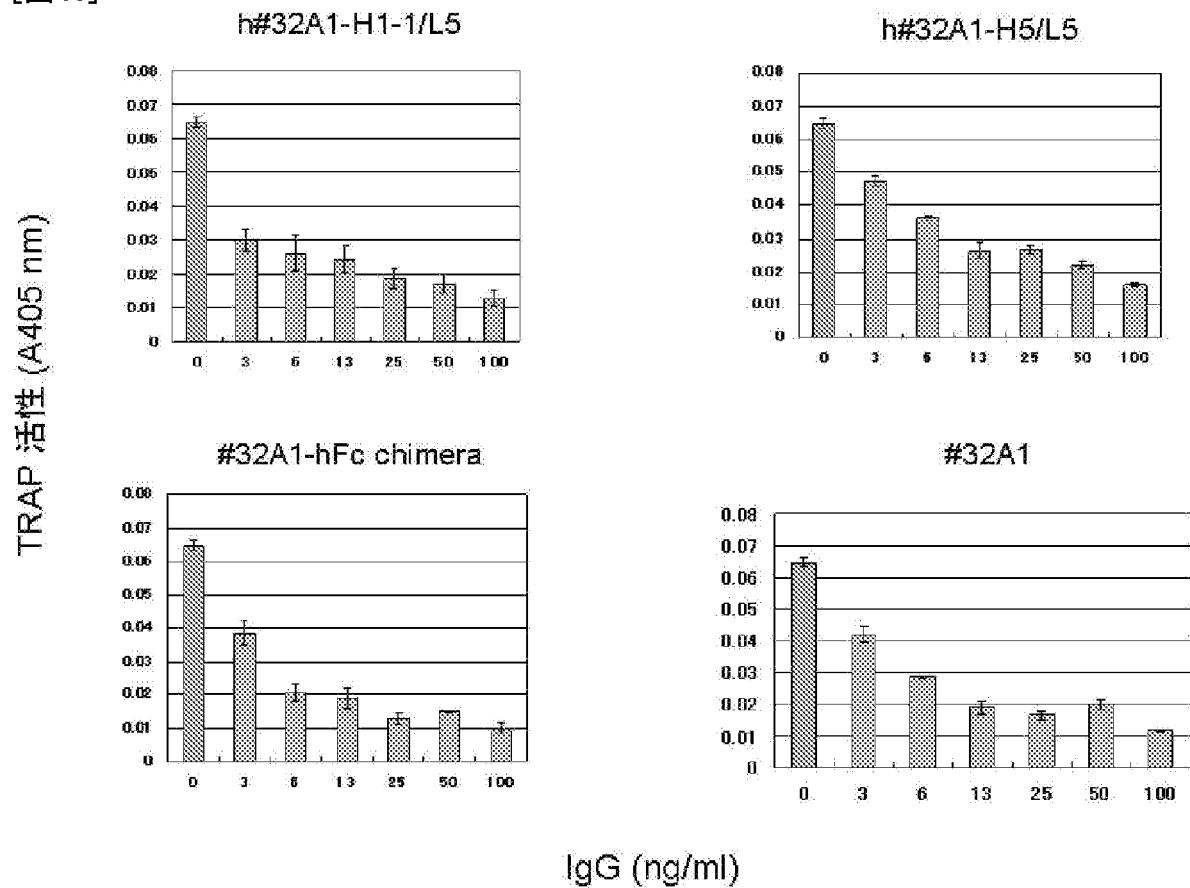
[図44]



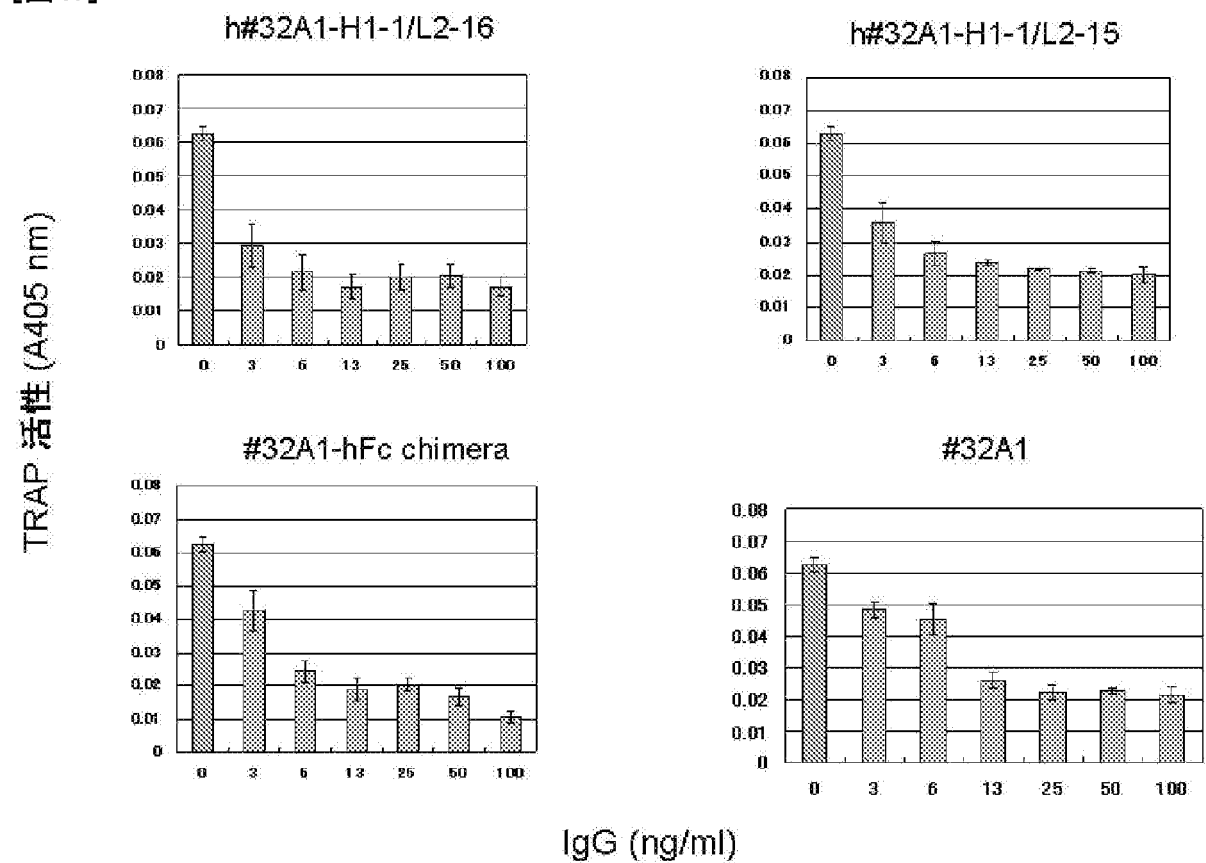
[図45]



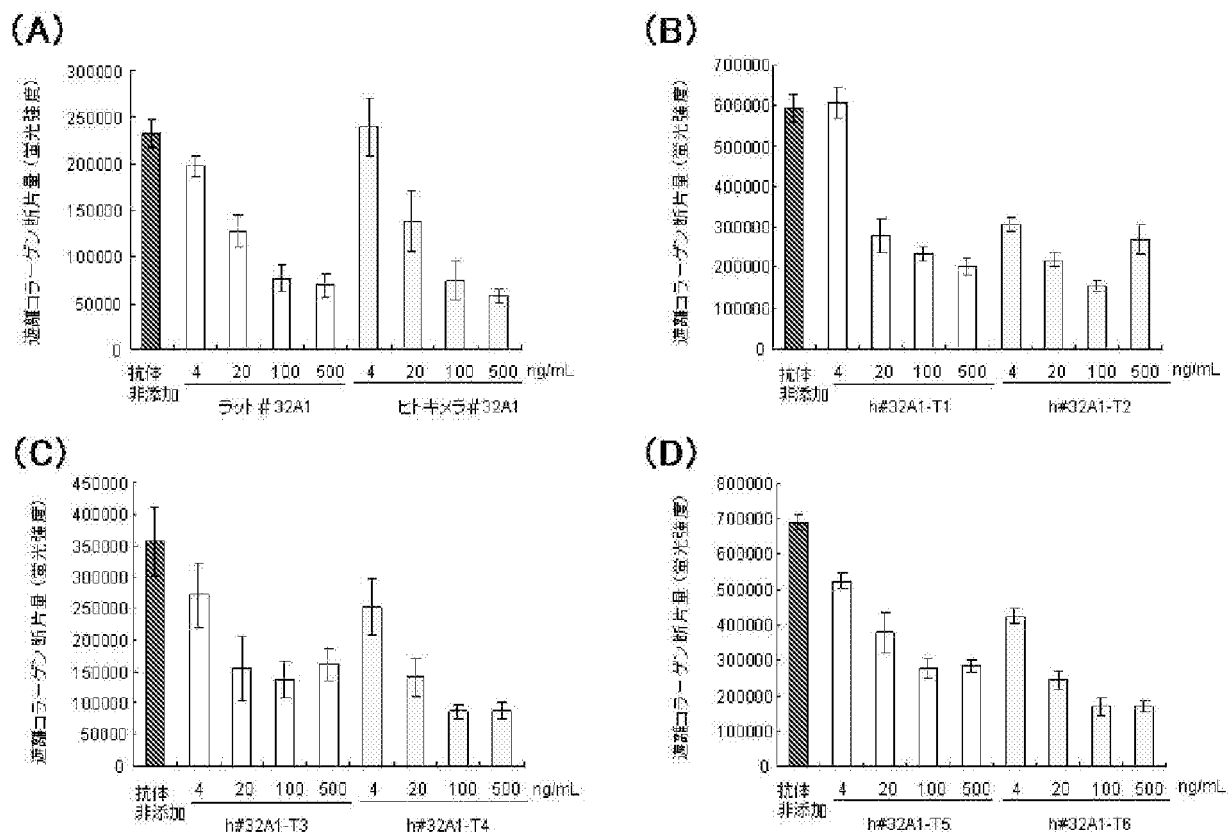
[図46]



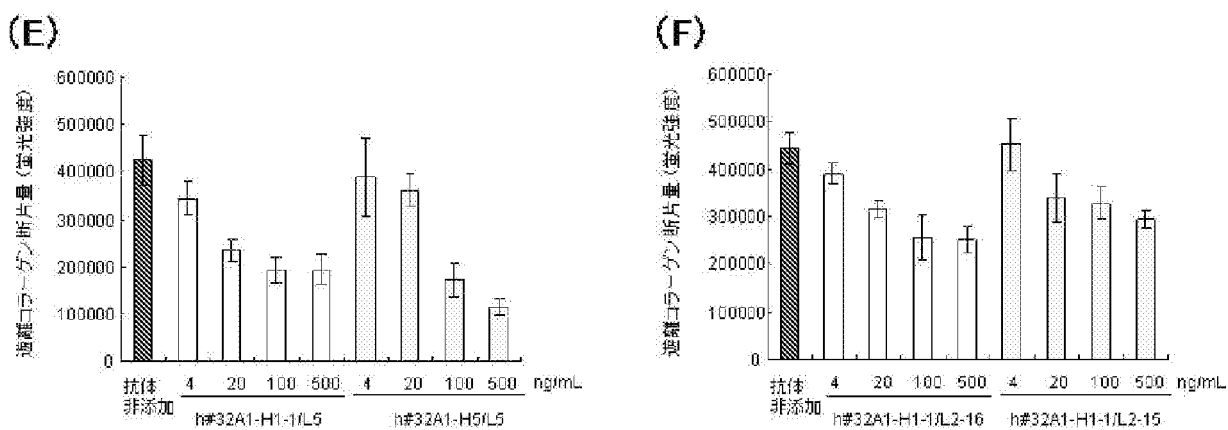
[図47]



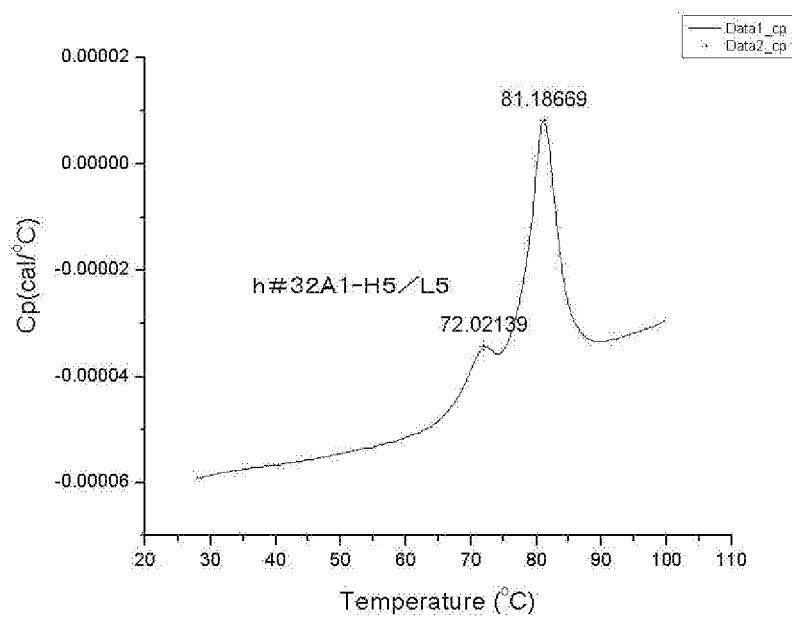
[図48]



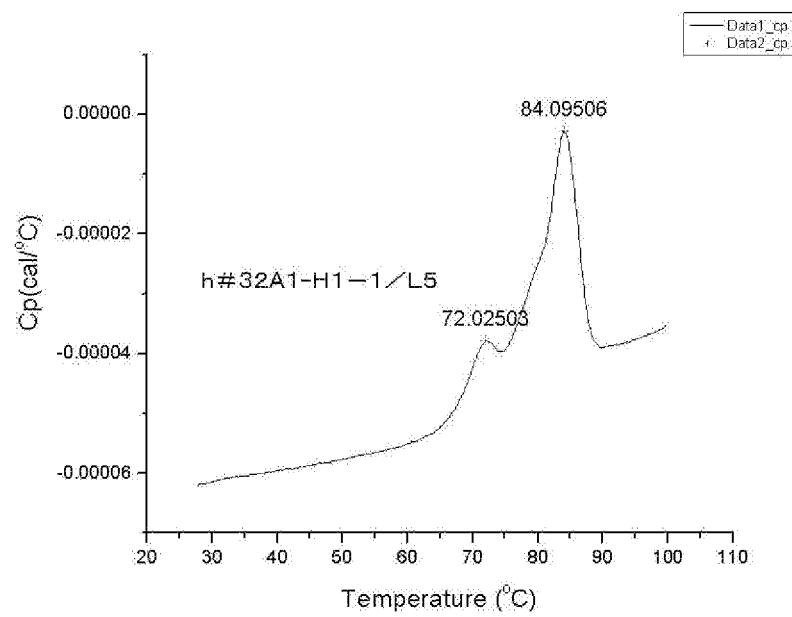
[図49]



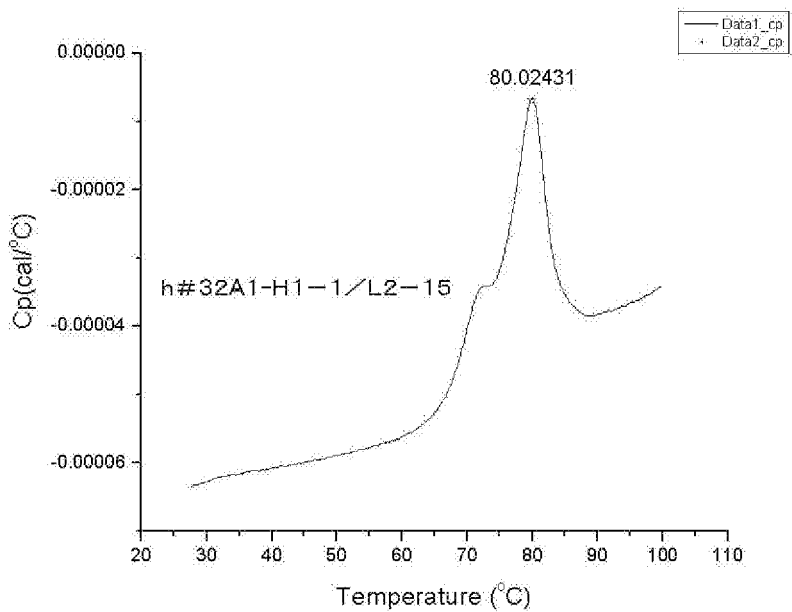
[図50]



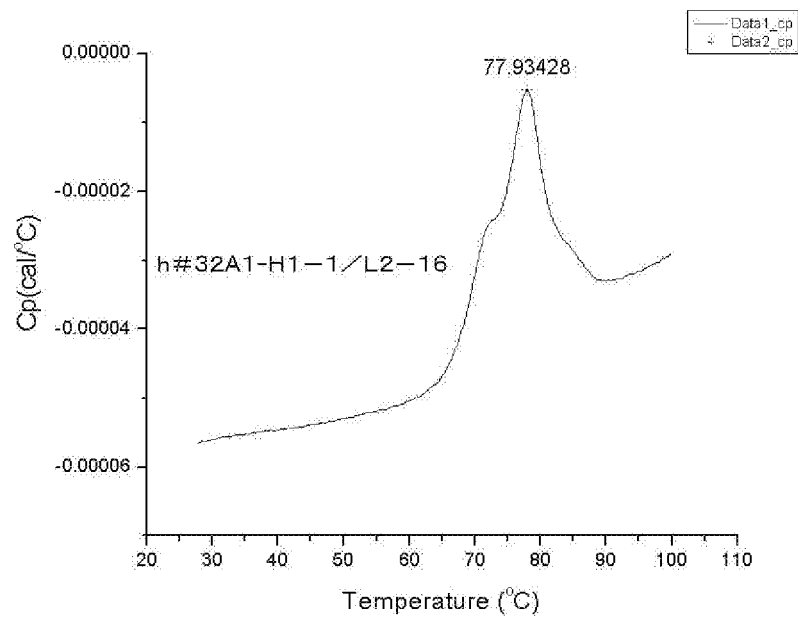
[図51]



[図52]



[図53]



[図54]

配列番号 98 : h#32A1-H1-1 のヌクレオチド配列

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAGCGAAGTCC
 AGCTTGTGGAAAGCGGAGGGGGACTCGTTCAGCCAGGAGGCTCTCTGCGCCTGTCATGCGCTGC
 CAGCGGATTTAATTTCAATGATTATTTTATGAAGTGGGTGAGGCAGGCTCCGGGAAAAGGGCTG
 GAATGGGTGCGCCAGATCAGAAACAAGATCTATACTTACGCTACATTCTACGCCGCATCTGTAA
 AGGGGAGGTTTACAATTAGTCGCGACAATGCAAAAAATAGTCTGTATCTCCAAATGAAGTCCCT
 CCGCGCAGAGGATACTGCTGTCTACTACTGCGCCAGGTCCTTGACTGGCGGCGACTATTTTGAT
 TACTGGGGACAGGGCACCCCTGGTGACGGTGAGCTCAGCCAGCACCAAGGGCCCTTCCGTGTTCC
 CTCTGGCCCCCTTGTTAGCCGTTCCACCAGCGAGTCCACCGCGCCCTTGCGTGTCTGGTGAAGGA
 CTACTTCCCTGAGCCTGTGACCGTGAGCTGGAACTCCGGAGCCCTTACCAGCGGCGTGCACACC
 TTCCCTGCCGTGCTGCAGTCCAGCGGCCCTTTACTCCCTGAGCTCCGTGGTGACCGTGCCTAGCT
 CCAACTTCGGCACCCAAACCTACACCTGTAACGTGGACCACAAGCCTAGCAACACCAAGGTGGA
 CAAGACCGTGGAGCGTAAGTGTGTGTGGAGTGTCCCTCCTTGTCTGCCCCCTCCTGTGGCCGGA
 CCTTCCGTGTTCCCTTTCCCTCCTAAGCCTAAGGACACCCTGATGATCAGCCGTACCCCTGAGG
 TGACCTGTGTGGTGGTGGACGTGTCCACGAGGACCCTGAGGTGCAGTTCAACTGGTACGTGGA
 CGGCGTGGAGGTGCACAACGCCAAGACCAAGCCTCGTGAGGAGCAATTCAACAGCACCTTCCGT
 GTGGTGTCCGTGCTTACCGTGGTGCACCAAGACTGGCTGAACGGCAAGGAGTACAAGTGTAAAG
 TGAGCAACAAGGGACTTCCTGCCCCATCGAGAAGACCATCTCCAAGACCAAGGGCCAACCTCG
 TGAGCCTCAAGTGTACACCCTTCCTCCTAGCCGTGAGGAGATGACCAAGAACCAAGTGTCCCTT
 ACCTGTCTGGTGAAGGGCTTCTACCCCTAGCGACATCGCCGTGGAGTGGGAGTCCAACGGACAAC
 CTGAGAACAACCTACAAGACCACCCCTCCTATGCTTGACAGCGACGGCTCCTTCTTCTGTACAG
 CAAGCTGACCGTGGACAAGTCCCGTTGGCAACAAGGCAACGTGTTTACGCTGTTCCGTGATGCAC
 GAGGCCCTGCACAACCACTACACCCAAAAGAGCCTTTCCCTGAGCCCTGGAAAG

シグナル配列 (1-57)、可変領域 (58-420)、定常領域 (421-1398)

配列番号 99 : h#32A1-H1-1 のアミノ酸配列

MKHLWFFLLLVAAPRWVLSEVQLVESGGGLVQPGGSLRLSCAASGFNFDYFMNWVRQAPGKGL
 EWVAQIRNKIYTYATFYAASVKGRFTISRDNKNSLYLQMNSLRAEDTAVYYCARSLTGDDYFD
 YWGQGTLLTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
 FPAVLQSSGLYSLSSVVTVPSSNFGTQTYTCNVDPKPSNTKVDKTVERKCCVECPGPCAPPVAG
 PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFR
 VVSVLTVVHQDNLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSL
 TCLVKGFYPSDIAVEWESNGQPENNYKTTTPMLDSGSSFFLYSKLTVDKSRWQQGNVFSQSVMH
 EALHNHYTQKSLSLSPGK

シグナル配列 (1-19)、可変領域 (20-140)、定常領域 (141-466)

[図55]

配列番号 1 0 0 : h#32A1-H5 のヌクレオチド配列

ATGAAACACCTGTGGTTCCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAGCGAGGTGC
 AGGTGGTGGAGAGCGGCGGCGGACTTGTGCAGCCTGGCGGCTCCCTGAGACTTAGCTGTGCCAC
 CTCCGGCTTCAACTTCAACGACTACTTCATGAAGTGGGTGAGACAGGCCCTGGCAAGGGCCTG
 GAGTGGGTGGCCCAGATCAGAAACAAGATCTACACCTACGCCACCTTCTACGCCGAGAGCCTTG
 AGGGCAGATTCAACATCTCCAGAGACAACAGCAAGTCCACCGTGTACCTTCAGATGAAGTCCCT
 GAGAGCCGAGGACACCGCCGTGTACTACTGTACCAGAAGCCTTACCGGCGGCGACTACTTCGAC
 TACTGGGGCCAGGGCACCTGGTGACCGTGAGCTCAGCCAGCACCAAGGGCCCTTCCGTGTTCC
 CTCTGGCCCCCTTGTAGCCGTTCCACCAGCGAGTCCACCGCCGCCCTTGGCTGTCTGGTGAAGGA
 CTACTTCCCTGAGCCTGTGACCGTGAGCTGGAAGTCCGGAGCCCTTACCAGCGGCGTGCACACC
 TTCCCTGCCGTGCTGCAGTCCAGCGGCCTTTACTCCCTGAGCTCCGTGGTGACCGTGCCTAGCT
 CCAACTTCGGCACCCAAACCTACACCTGTAAAGTGGACCACAAGCCTAGCAACACCAAGGTGGA
 CAAGACCGTGGAGCGTAAGTGTGTGTGGAGTGTCTCTCTGTCCTGCCCCCTCCTGTGGCCGGA
 CCTTCCGTGTTCCCTTTTCCCTCCTAAGCCTAAGGACACCCCTGATGATCAGCCGTACCCCTGAGG
 TGACCTGTGTGGTGGTGGACGTGTCCACGAGGACCCTGAGGTGCAGTTCAACTGGTACGTGGA
 CGGCGTGGAGGTGCACAACGCCAAGACCAAGCCTCGTGAGGAGCAATTCAACAGCACCTTCCGT
 GTGGTGTCCGTGCTTACCGTGGTGCACCAAGACTGGCTGAACGGCAAGGAGTACAAGTGTAAAG
 TGAGCAACAAGGGACTTCTGCCCCCTATCGAGAAGACCATCTCCAAGACCAAGGGCCAACCTCG
 TGAGCCTCAAGTGTACACCCTTCTCCTAGCCGTGAGGAGATGACCAAGAACCAAGTGTCCCTT
 ACCTGTCTGGTGAAGGGCTTCTACCCTAGCGACATCGCCGTGGAGTGGGAGTCCAACGGACAAC
 CTGAGAACAACCTACAAGACCACCCCTCCTATGCTTGACAGCGACGGCTCCTTCTTCTGTACAG
 CAAGCTGACCGTGGACAAGTCCCGTTGGCAACAAGGCAACGTGTTTCCGTGATGCAC
 GAGGCCCTGCACAACCACTACACCCAAAAGAGCCTTTCCCTGAGCCCTGGAAAG

シグナル配列 (1-57)、可変領域 (58-420)、定常領域 (421-1398)

配列番号 1 0 1 : h#32A1-H5 のアミノ酸配列

MKHLWFFLLLVAAPRWVLSEVQVVESGGGLVQPGGSLRLSCATSGFNFNDYFMNWVRQAPGKGL
 EWVAQIRNKIYTYATFYAESLEGRFTISRDNKSTVYLOMNSLRAEDTAVYYCTRSLTGGDYFD
 YWGQGLTVTVSSASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHT
 FPAVLQSSGLYSLSSVTVTPSSNFGTQTYTCNVDHKPSNTKVDKTVVERKCCVECPPCPAPPVAG
 PSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFR
 VVSVLTVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSL
 TCLVKGFYPSDIAVEWESNGQPENNYKTTTPMLDSDGSFFLYSKLTVDKSRWQQGNVFSQVSMH
 EALHNHYTQKSLSLSPGK

シグナル配列 (1-19)、可変領域 (20-140)、定常領域 (141-466)

[図56]

配列番号 1 0 2 : h#32A1-L2-15 のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGAAA
TTCTGATGACGCAGAGTCCTGCAACTCTTAGTCTGTACCTGGCGAGAGAGCCACACTCAGCTG
CCGAGCGTCCCAGTCCGTGACCATTAGCGGCTATTCTTTTATTCATTGGTATCAGCAAAAGCCT
GGACAGGCGCCAAGGCTGCTCATTTACAGAGCAAGCAACCTTGCCTCTGGCATTCCAGCAAGAT
TCAGCGGGAGCGGATCAGGGACAGATTTACCTTGACCATCTCCTCCCTGGAGCCGGAGGATTT
CGCGTTGTATTATTGTCTAGCAATCTAGGAAGAGTCCATGGACATTTGGCCAGGGCACCAAAGTG
GAGATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGA
AGTCCGGCACCGCCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCAGAGAGGCCAAGGTGCA
GTGGAAGGTGGACAACGCCCTGCAGTCCGGGAACCTCCAGGAGAGCGTGACCGAGCAGGACAGC
AAGGACAGCACCTACAGCCTGAGCAGCACCTGACCCTGAGCAAAGCCGACTACGAGAAGCACA
AGGTGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAG
GGGGGAGTGT

シグナル配列 (1-60)、可変領域 (61-399)、定常領域 (400-714)

配列番号 1 0 3 : h#32A1-L2-15 のアミノ酸配列

MVLQTQVFISLLWISGAYGEILMTQSPATLSLSPGERATLSCRASQSVTISGYFSFIHWYQQKP
GQAPRLLIYRASNLASGIPARFSGSGSDFTLTISSELEPEDFALYYCQQRKSPWTFGQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYSLSSLTFLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-133)、定常領域 (134-238)

[図57]

配列番号 1 0 4 : h#32A1-L2-16 のヌクレオチド配列

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCATATGGCGAAA
TCCTGATGACACAGAGTCCTGCGACCCTCTCCCTCTCACCAGGCGAGAGGGCCACCCGTCTTG
TAGAGCCAGCCAGTCAGTCACTATTAGTGGATACTCATTTATCCATTGGTATCAACAGAAACCA
GGACAGGCGCCTCGGCTTCTGATCTACCGCGCCTCAAACCTTGCCCTCTGGCATCCCCGCGAGGT
TCTCTGGCTCTGGCAGCGGTACCGATTTTACACTGACTATCTCAAGCCTCGAACCTGAAGACTT
CGCACTGTACTTTTGCCAGCAGAGCAGGAAGTCCCCCTGGACTTTTGCACAGGGAACCAAAGTC
GAAATCAAGCGTACGGTGGCCGCCCCCTCCGTGTTTCATCTTCCCCCCTCCGACGAGCAGCTGA
AGTCCGGCACCGCCTCCGTGGTGTGCCTGCTGAATAACTTCTACCCAGAGAGGCCAAGGTGCA
GTGGAAGGTGGACAACGCCCTGCAGTCCGGGAACCTCCAGGAGAGCGTGACCGAGCAGGACAGC
AAGGACAGCACCTACAGCCTGAGCAGCACCCCTGACCCTGAGCAAAGCCGACTACGAGAAGCACA
AGGTGTACGCCTGCGAGGTGACCCACCAGGGCCTGAGCTCCCCCGTCACCAAGAGCTTCAACAG
GGGGGAGTGT

シグナル配列 (1-60)、可変領域 (61-399)、定常領域 (400-714)

配列番号 1 0 5 : h#32A1-L2-16 のアミノ酸配列

MVLQTQVFISLLWISGAYGEILMTQSPATLSLSPGERATLSCRASQSVTISGYFSFIHWYQQKP
GQAPRLLIYRASNLASGIPARFSGSGSGTDFTLTISSELEPEDFALYFCQQSRKSPWTFQAQGTKV
EIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDS
KDSTYLSSTLTLSKADYEKHKVYACEVTHQGLSPVTKSFNRGEC

シグナル配列 (1-20)、可変領域 (21-133)、定常領域 (134-238)