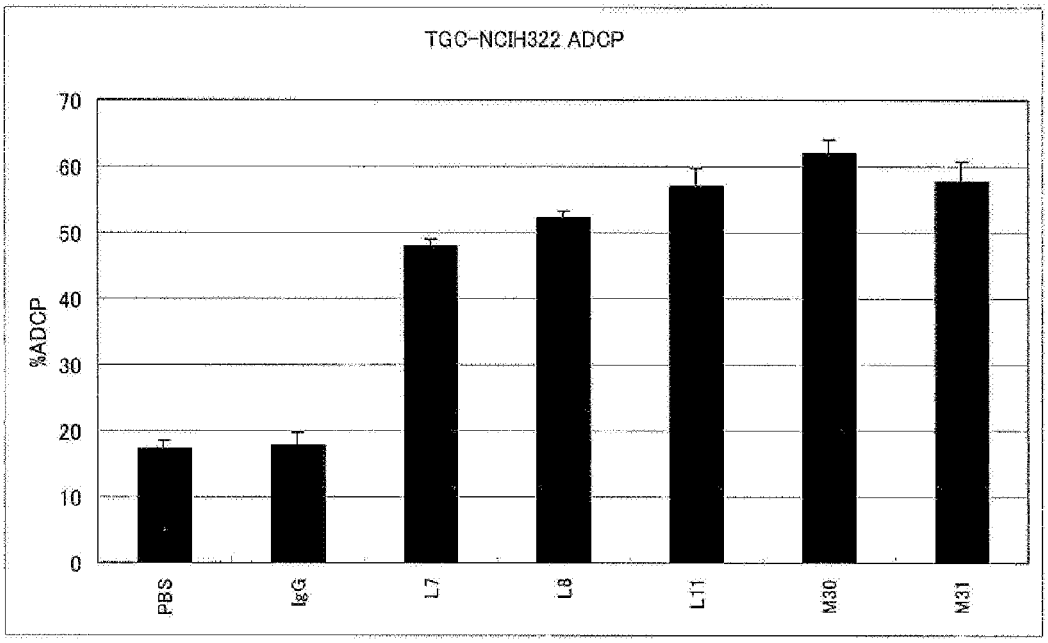
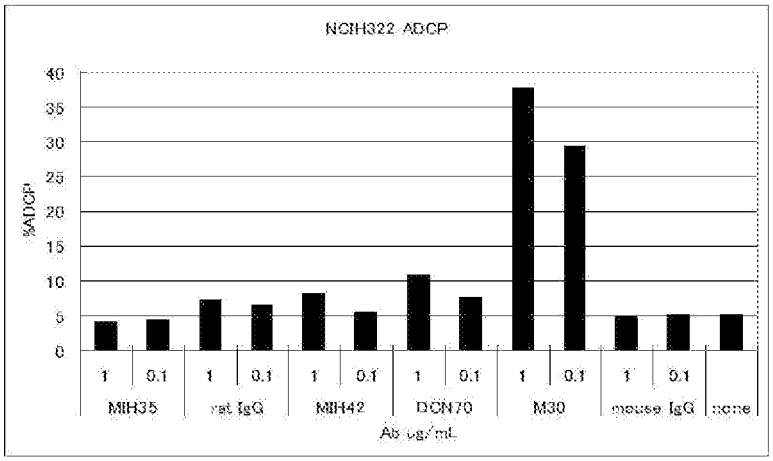
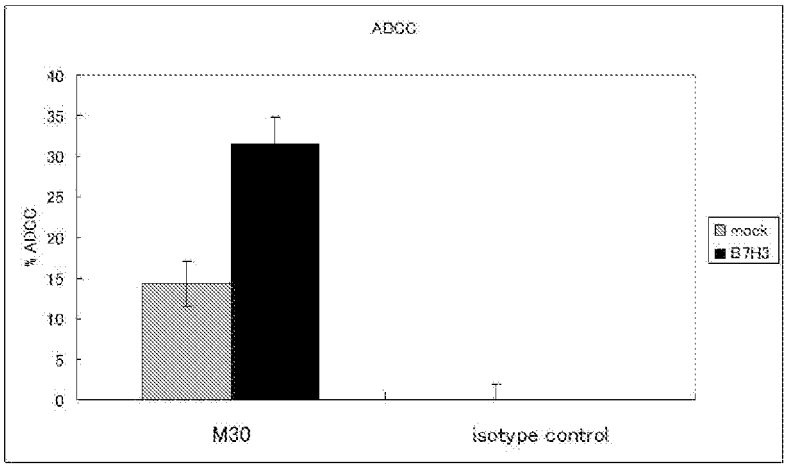
[図1]


TGC-NCIH322 ADCP
%ADCP
70
60
50
40
30
20
10
0
PBS
IgG
L7
L8
L11
M30
M31

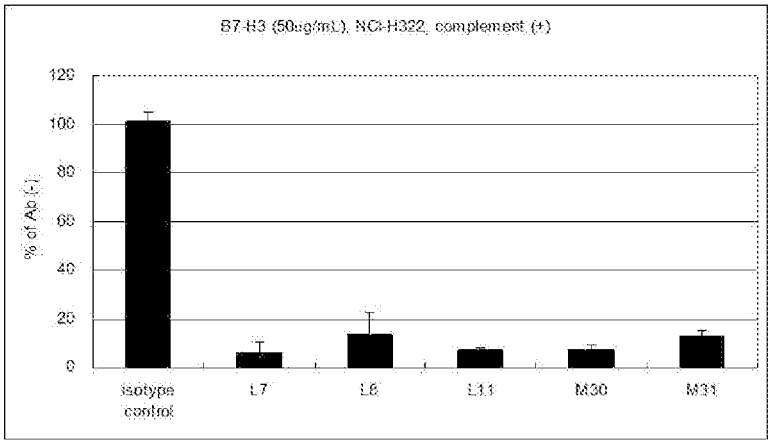
[図2]


NCIH322 ADCP
%ADCP
40
35
30
25
20
15
10
5
0
1
0.1
MIH35
rat IgG
MIH42
DCN70
M30
mouse IgG
none
Ab ug/mL

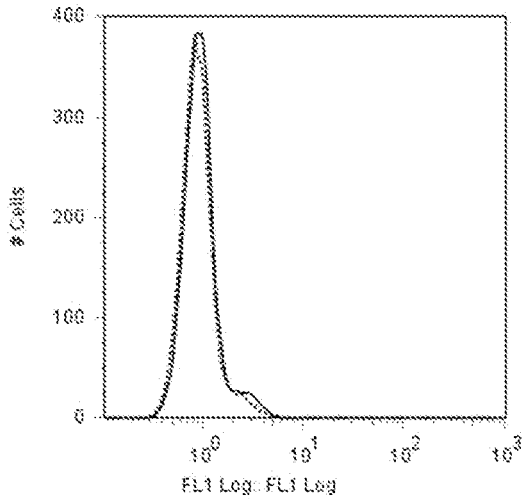
[図3]


ADCC
% ADCC
40
35
30
25
20
15
10
5
0
mock
B7H3
M30
isotype control

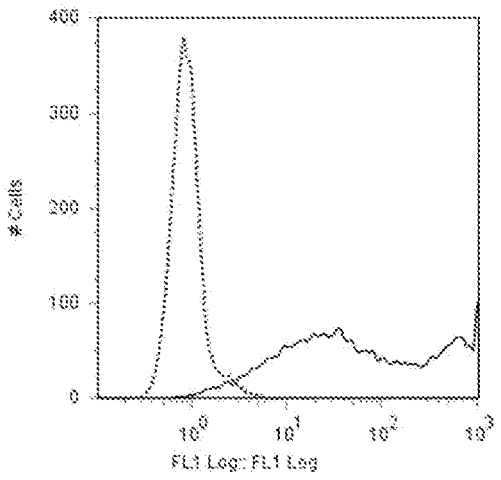
[図4]


B7-H3 (50ug/mL), NCI-H322, complement (+)
% of Ab (-)
120
100
80
60
40
20
0
isotype control
L7
L8
L11
M30
M31

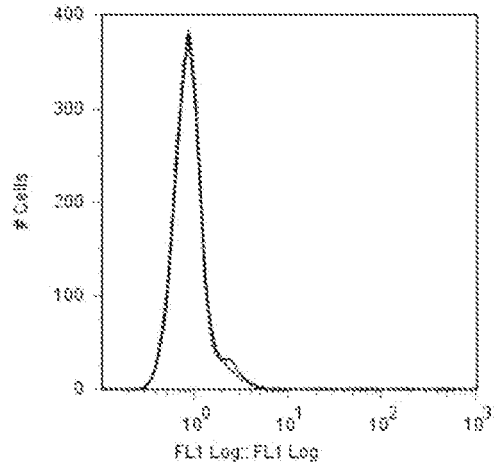
[図5-1]


Cells
400
300
200
100
0
FL1 Log: FL1 Log

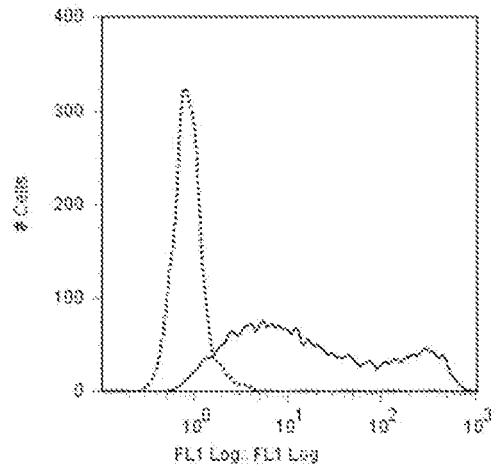
[図5-2]


Cells
400
300
200
100
0
FL1 Log: FL1 Log

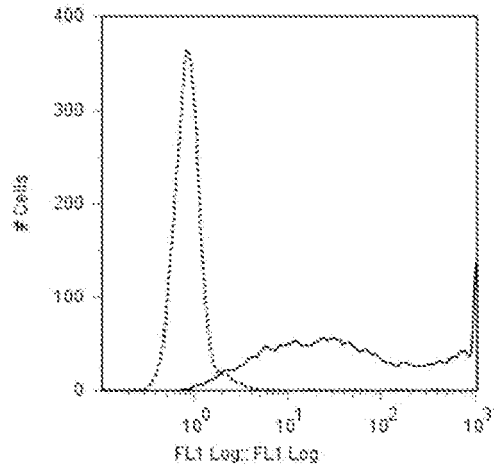
[図5-3]


400
300
200
100
0
Cells
10^0
10^1
10^2
10^3
FL1 Log:: FL1 Log

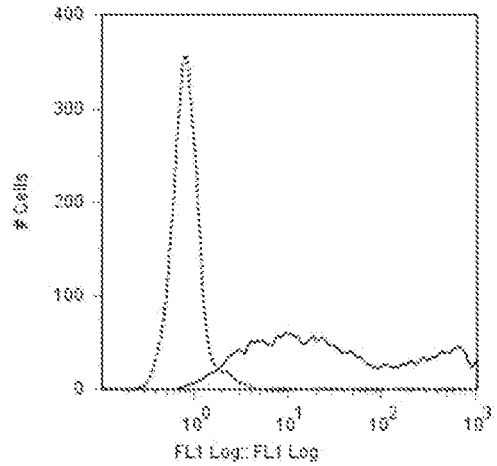
[図5-4]


400
300
200
100
0
Cells
10^0
10^1
10^2
10^3
FL1 Log:: FL1 Log

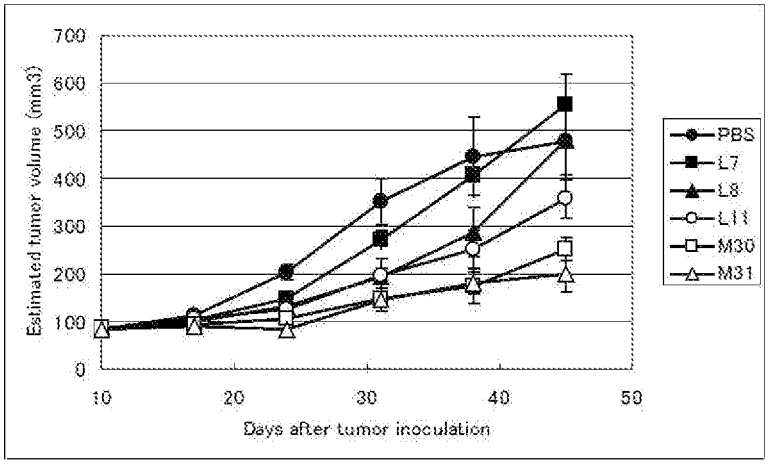
[図5-5]


400
300
200
100
0
Cells
10^0
10^1
10^2
10^3
FL1 Log:: FL1 Log

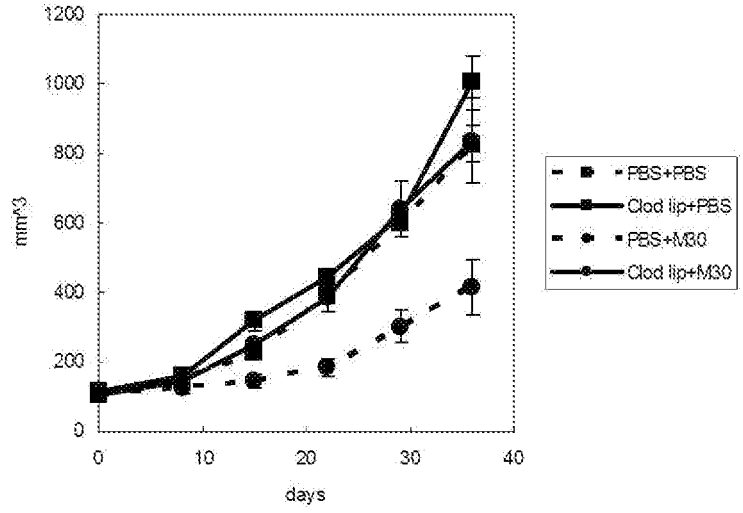
[図5-6]


400
300
200
100
0
Cells
10^0
10^1
10^2
10^3
FL1 Log:: FL1 Log

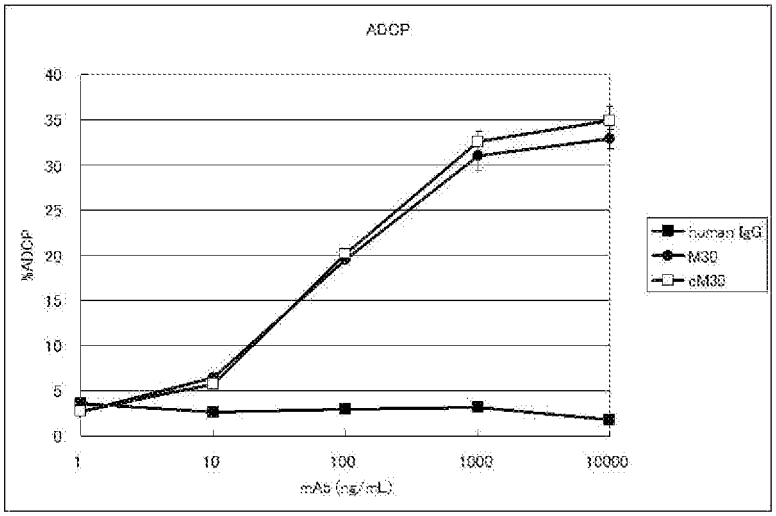
[図6]


700
600
500
400
300
200
100
0
Estimated tumor volume (mm3)
10
20
30
40
50
Days after tumor inoculation
PBS
L7
L8
L11
M30
M31

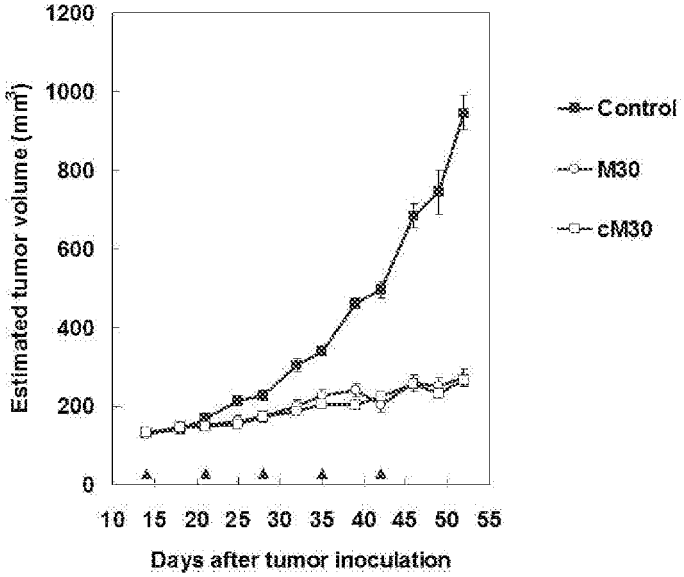
[図7]


1200
1000
800
600
400
200
0
mm^3
0
10
20
30
40
days
PBS+PBS
Clod lip+PBS
PBS+M30
Clod lip+M30

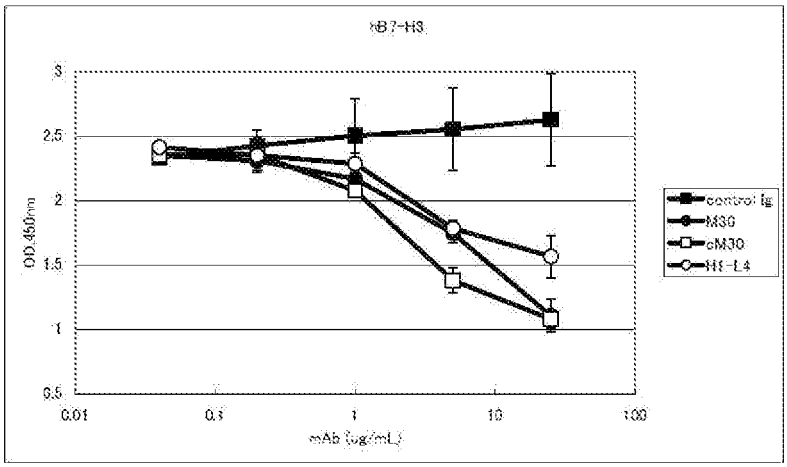
[図8]


ADCP
%ADCP
mAb (ng/mL)
human IgG
M30
cM30

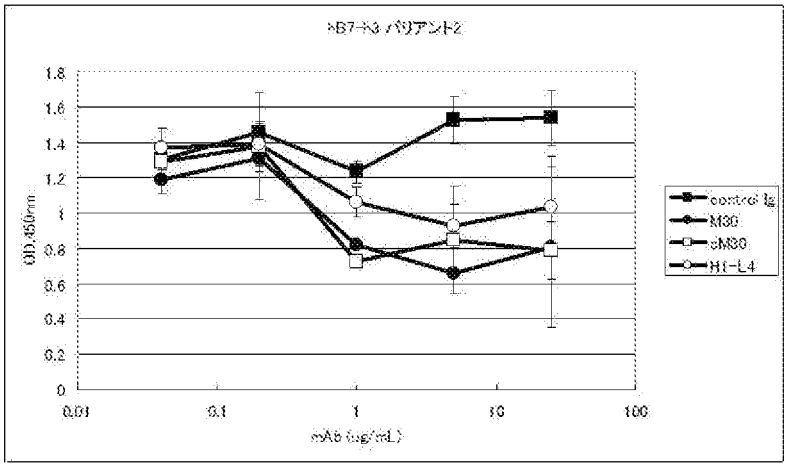
[図9]


Estimated tumor volume (mm3)
Days after tumor inoculation
Control
M30
cM30

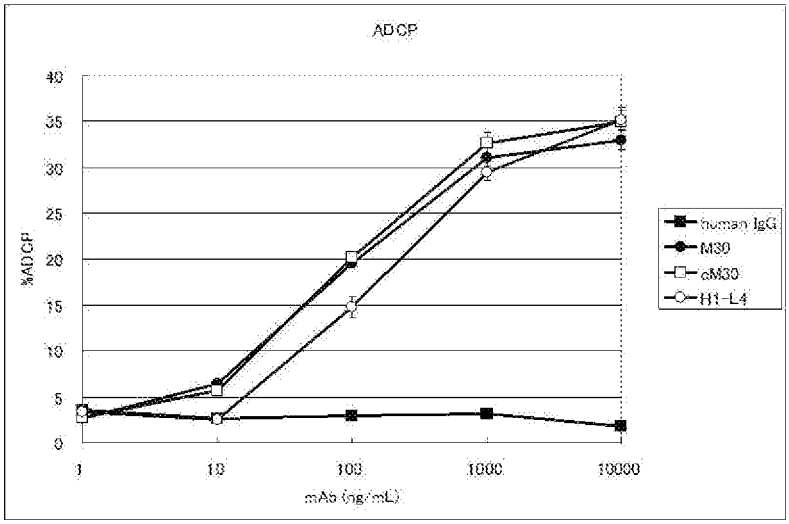
[図10-1]


hB7-H3
OD 450nm
mAb (ug/mL)
control Ig
M30
cM30
H1-L4

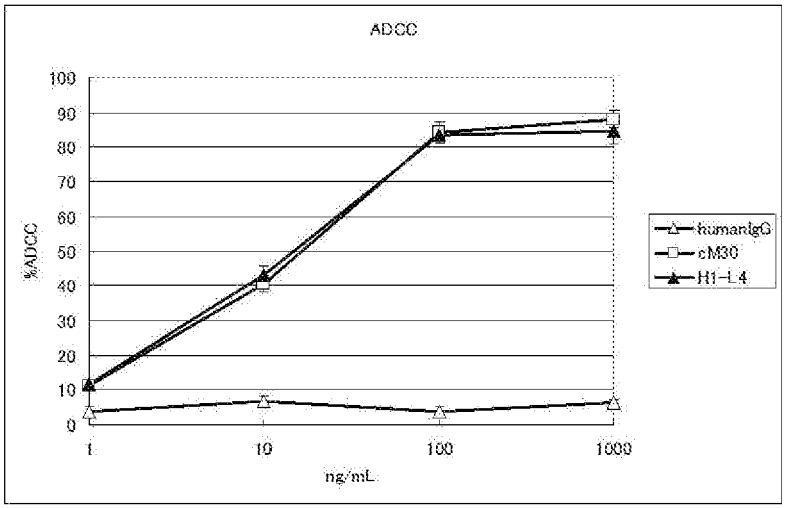
[図10-2]


1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0.01
0.1
1
10
100
control Ig
M30
cM30
H1-L4

[図11]


ADCP
%ADCP
40
35
30
25
20
15
10
5
0
1
10
100
1000
10000
human IgG
M30
cM30
H1-L4

[図12]


ADCC
%ADCC
100
90
80
70
60
50
40
30
20
10
0
1
10
100
1000
ng/mL
humanIgG
cM30
H1-L4

[図13-1]

B7－H3バリアント1のヌクレオチド配列（配列番号5）

atgctgcgtcggcggggcagccctggcatgggtgtgcatgtgggt
gcagccctgggagcactgtggttctgcctcacaggagccctggag
gtccaggtccctgaagacccagtggtggcactggtgggcaccgat
gccaccctgtgctgctccttctcccctgagcctggcttcagcctg
gcacagctcaaacctcatctggcagctgacagataccaaacagctg
gtgcacagctttgctgagggccaggaccagggcagcgcctatgcc
aaccgcacggccctcttcccggacctgctggcacagggcaacgca
tccctgaggctgcagcgcgtgcgtgtggcggacgagggcagcttc
acctgcttcgtgagcatccgggatttcggcagcgctgccgtcagc
ctgcaggtggccgctccctactcgaagcccagcatgaccctggag
cccaacaaggacctgcggccaggggacacggtgaccatcacgtgc
tccagctaccagggctaccctgaggctgaggtgttctggcaggat
gggcagggtgtgcccctgactggcaacgtgaccacgtcgcagatg
gccaacgagcagggcttgtttgatgtgcacagcatcctgcgggtg
gtgctgggtgcaaatggcacctacagctgcctggtgcgcaaccccc
gtgctgcagcaggatgcgcacagctctgtcaccatcacacccccag
agaagccccacaggagccgtggaggtccaggtccctgaggacccg
gtggtggccctagtgggcaccgatgccaccctgcgctgctccttc
tccccgagcctggcttcagcctggcacagctcaacctcatctgg
cagctgacagacaccaaacagctggtgcacagtttcaccgaaggc
cgggaccagggcagcgcctatgccaaccgcacggccctcttcccg
gacctgctggcacaaggcaatgcatccctgaggctgcagcgcgtg
cgtgtggcggacgagggcagcttcacctgcttcgtgagcatccgg
gatttcggcagcgctgccgtcagcctgcaggtggccgctccctac
tcgaagcccagcatgaccctggagcccaacaaggacctgcggcca
ggggacacggtgaccatcacgtgctccagctaccggggctaccct
gaggctgaggtgttctggcaggatgggcagggtgtgccccctgact
ggcaacgtgaccacgtcgcagatggccaacgagcagggcttgttt
gatgtgcacagcgtcctgcgggtggtgctgggtgcgaatggcacc
tacagctgccctggtgcgcaaccccgtgctgcagcaggatgcgcac
ggctctgtcaccatcacagggcagcctatgacattccccccagag
gccctgtgggtgaccgtggggctgtctgtctgtctcattgcactg
ctggtggccctggctttcgtgtgctggagaaagatcaaacagagc
tgtgaggaggagaatgcaggagctgaggaccaggatggggaggga
gaaggctccaagacagccctgcagcctctgaaacactctgacagc
aaagaagatgatggacaagaaatagcctgagcggccgccactgtg
ctggatatctgcagaattccaccacactggactagtggatccgag
ctcggtaccaagcttaagtttaaaccgctgatcagcctcgactgt
gccttctagttgccagccatctgttgtttgcccctcccccgtgcc
ttccttgaccctggaaggtgccactcccactgtcctttcctaata
aaatgaggaaattgc

[図13-2]

B7－H3バリアント1のアミノ酸配列（配列番号6）

MLRRRGSPGMGVHVGAALGALWFCLTGALEVQVPEDPVVALVGTD
ATLCCSFSPEPGFSLAQLNLIWQLTDTKQLVHSFAEGQDQGSAYA
NRTALFPDLLAQGNASLRLQRVRVADEGSFTCFVSIRDFGSAAVS
LQVAAPYSKPSMTLEPNKDLRPGDTVTITCSSYQGYPEAEVFWQD
GQGVPLTGNVTTSQMANEQGLFDVHSILRVVLGANGTYSCLVRNP
VLQQDAHSSVTITPQRSPTGAVEVQVPEDPVVALVGTDATLRCSF
SPEPGFSLAQLNLIWQLTDTKQLVHSFTEGRDQGSAYANRTALFP
DLLAQGNASLRLQRVRVADEGSFTCFVSIRDFGSAAVSLQVAAPY
SKPSMTLEPNKDLRPGDTVTITCSSYRGYPEAEVFWQDGQGVPLT
GNVTTSQMANEQGLFDVHSVLRVVLGANGTYSCLVRNPVLQQDAH
GSVTITGQPMTFPPEALWVTVGLSVCLIALLVALAFVCWRKIKQS
CEEENAGAEDQDGEGEGSKTALQPLKHSDSKEDDGQEIA

[図14-1]

B7－H3バリアント2のヌクレオチド配列（配列番号9）

atgctgcgtcggcggggcagccctggcatgggtgtgcatgtgggt
gcagccctgggagcactgtggttctgcctcacaggagccctggag
gtccaggtccctgaagacccagtggtggcactggtgggcaccgat
gccaccctgtgctgctccttctccccctgagcctggcttcagcctg
gcacagctcaacctcatctggcagctgacagataccaaaacagctg
gtgcacagctttgctgagggccaggaccagggcagcgcctatgcc
aaccgcacggccctcttccccggacctgctggcacagggcaacgca
tccctgaggctgcagcgcgtgcgtgtggcggacgagggcagcttc
acctgcttcgtgagcatccgggatttcggcagcgctgccgtcagc
ctgcaggtggccgctccctactcgaagccccagcatgaccctggag
cccaacaaggacctgcggccaggggacacggtgaccatcacgtgc
tccagctaccggggctaccctgaggctgaggtgttctggcaggat
gggcagggtgtgccccctgactggcaacgtgaccacgtcgcagatg
gccaacgagcagggcttgtttgatgtgcacagcgtcctgcgggtg
gtgctgggtgcgaatggcacctacagctgcctggtgcgcaaccccc
gtgctgcagcaggatgcgcacggctctgtcaccatcacagggcag
cctatgacattcccccccagaggccctgtgggtgaccgtggggctg
tctgtctgtctcattgcactgctggtggccctggctttcgtgtgc
tggagaaagatcaaacagagctgtgaggaggagaatgcaggagct
gaggaccaggatggggagggagaaggctccaagacagccctgcag
cctctgaaacactctgacagcaaagaagatgatggacaagaaata
gcc

[図14-2]

B7－H3バリアント2のアミノ酸配列（配列番号10）

MLRRRGSPGMGVHVGAALGALWFCLTGALEVQVPEDPVVALVGTD
ATLCCSFSPEPGFSLAQLNLIWQLTDTKQLVHSFAEGQDQGSAYA
NRTALFPDLLAQGNASLRLQRVRVADEGSFTCFVSIRDFGSAAVS
LQVAAPYSKPSMTLEPNKDLRPGDTVTITCSSYRGYPEAEVFWQD
GQGVPLTGNVTTSQMANEQGLFDVHSVLRVVLGANGTYSCLVRNP
VLQQDAHGSVTITGQPMTFPPEALWVTVGLSVCLIALLVALAFVC
WRKIKQSCEEENAGAEDQDGEGEGSKTALQPLKHSDSKEDDGQEI
A

[図15-1]

Ｂ７－Ｈ３　ＩｇＶ１のヌクレオチド配列（配列番号２０）

GGAGCCCTGGAGGTCCAGGTCCCTGAAGACCCAGTGGTGGCACTG
GTGGGCACCGATGCCACCCTGTGCTGCTCCTTCTCCCCTGAGCCT
GGCTTCAGCCTGGCACAGCTCAACCTCATCTGGCAGCTGACAGAT
ACCAAACAGCTGGTGCACAGCTTTGCTGAGGGCCAGGACCAGGGC
AGCGCCTATGCCAACCGCACGGCCCTCTTCCCGGACCTGCTGGCA
CAGGGCAACGCATCCCTGAGGCTGCAGCGCGTGCGTGTGGCGGAC
GAGGGCAGCTTCACCTGCTTCGTGAGCATCCGGGATTTCGGCAGC
GCTGCCGTCAGCCTGCAGGTGGCCGGGCAGCCTATGACATTCCCC
CCAGAGGCCCTGTGGGTGACCGTGGGGCTGTCTGTCTGTCTCATT
GCACTGCTGGTGGCCCTGGCTTTCGTGTGCTGGAGAAAGATCAAA
CAGAGCTGTGAGGAGGAGAATGCAGGAGCTGAGGACCAGGATGGG
GAGGGAGAAGGCTCCAAGACAGCCCTGCAGCCTCTGAAACACTCT
GACAGCAAAGAAGATGATGGACAAGAAATAGCCTGA

[図15-2]

Ｂ７－Ｈ３　ＩｇＶ１のアミノ酸配列（配列番号２１）

GALEVQVPEDPVVALVGTDATLCCSFSPEPGFSLAQLNLIWQLTD
TKQLVHSFAEGQDQGSAYANRTALFPDLLAQGNASLRLQRVRVAD
EGSFTCFVSIRDFGSAAVSLQVAGQPMTFPPEALWVTVGLSVCLI
ALLVALAFVCWRKIKQSCEEENAGAEDQDGEGEGSKTALQPLKHS
DSKEDDGQEIA

[図16-1]

Ｂ７－Ｈ３　ＩｇＣ１のヌクレオチド配列（配列番号２２）

GCTCCCTACTCGAAGCCCAGCATGACCCTGGAGCCCAACAAGGAC
CTGCGGCCAGGGGACACGGTGACCATCACGTGCTCCAGCTACCAG
GGCTACCCTGAGGCTGAGGTGTTCTGGCAGGATGGGCAGGGTGTG
CCCCTGACTGGCAACGTGACCACGTCGCAGATGGCCAACGAGCAG
GGCTTGTTTGATGTGCACAGCATCCTGCGGGTGGTGCTGGGTGCA
AATGGCACCTACAGCTGCCTGGTGCGCAACCCCGTGCTGCAGCAG
GATGCGCACAGCTCTGTCACCATCACACCCCAGAGAAGCCCCACA
GGGCAGCCTATGACATTCCCCCCAGAGGCCCTGTGGGTGACCGTG
GGGCTGTCTGTCTGTCTCATTGCACTGCTGGTGGCCCTGGCTTTC
GTGTGCTGGAGAAAGATCAAACAGAGCTGTGAGGAGGAGAATGCA
GGAGCTGAGGACCAGGATGGGGAGGGAGAAGGCTCCAAGACAGCC
CTGCAGCCTCTGAAACACTCTGACAGCAAAGAAGATGATGGACAA
GAAATAGCCTGA

[図16-2]

Ｂ７－Ｈ３　ＩｇＣ１のアミノ酸配列（配列番号２３）

APYSKPSMTLEPNKDLRPGDTVTITCSSYQGYPEAEVFWQDGQGV
PLTGNVTTSQMANEQGLFDVHSILRVVLGANGTYSCLVRNPVLQQ
DAHSSVTITPQRSPTGQPMTFPPEALWVTVGLSVCLIALLVALAF
VCWRKIKQSCEEENAGAEDQDGEGEGSKTALQPLKHSDSKEDDGQ
EIA

[図17-1]

Ｂ７－Ｈ３　ＩｇＶ２のヌクレオチド配列（配列番号２４）

GGAGCCGTGGAGGTCCAGGTCCCTGAGGACCCGGTGGTGGCCCTA
GTGGGCACCGATGCCACCCTGCGCTGCTCCTTCTCCCCCGAGCCT
GGCTTCAGCCTGGCACAGCTCAACCTCATCTGGCAGCTGACAGAC
ACCAAACAGCTGGTGCACAGTTTCACCGAAGGCCGGGACCAGGGC
AGCGCCTATGCCAACCGCACGGCCCTCTTCCCGGACCTGCTGGCA
CAAGGCAATGCATCCCTGAGGCTGCAGCGCGTGCGTGTGGCGGAC
GAGGGCAGCTTCACCTGCTTCGTGAGCATCCGGGATTTCGGCAGC
GCTGCCGTCAGCCTGCAGGTGGCCGGGCAGCCTATGACATTCCCC
CCAGAGGCCCTGTGGGTGACCGTGGGGCTGTCTGTCTGTCTCATT
GCACTGCTGGTGGCCCTGGCTTTCGTGTGCTGGAGAAAGATCAAA
CAGAGCTGTGAGGAGGAGAATGCAGGAGCTGAGGACCAGGATGGG
GAGCGAGAAGGCTCCAAGACAGCCCTGCAGCCTCTGAAACACTCT
GACAGCAAAGAAGATGATGGACAAGAAATAGCCTGA

[図17-2]

Ｂ７－Ｈ３　ＩｇＶ２のアミノ酸配列（配列番号２５）

GAVEVQVPEDPVVALVGTDATLRCSFSPEPGFSLAQLNLIWQLTD
TKQLVHSFTEGRDQGSAYANRTALFPDLLAQGNASLRLQRVRVAD
EGSFTCFVSIRDFGSAAVSLQVAGQPMTFPPEALWVTVGLSVCLI
ALLVALAFVCWRKIKQSCEEENAGAEDQDGEGEGSKTALQPLKHS
DSKEDDGQEIA

[図18-1]

Ｂ７－Ｈ３　ＩｇＣ２のヌクレオチド配列（配列番号２６）

GCTCCCTACTCGAAGCCCAGCATGACCCTGGAGCCCAACAAGGAC
CTGCGGCCAGGGGACACGGTGACCATCACGTGCTCCAGCTACCGG
GGCTACCCTGAGGCTGAGGTGTTCTGGCAGGATGGGCAGGGTGTG
CCCCTGACTGGCAACGTGACCACGTCGCAGATGGCCAACGAGCAG
GGCTTGTTTGATGTGCACAGCGTCCTGCGGGTGGTGCTGGGTGCG
AATGGCACCTACAGCTGCCTGGTGCGCAACCCCCGTGCTGCAGCAG
GATGCGCACGGCTCTGTCACCATCACAGGGCAGCCTATGACATTC
CCCCCAGAGGCCCTGTGGGTGACCGTGGGGCTGTCTGTCTGTCTC
ATTGCACTGCTGGTGGCCCTGGCTTTCGTGTGCTGGAGAAAGATC
AAACAGAGCTGTGAGGAGGAGAATGCAGGAGCTGAGGACCAGGAT
GGGGAGGGAGAAGGCTCCAAGACAGCCCTGCAGCCTCTGAAACAC
TCTGACAGCAAAGAAGATGATGGACAAGAAATAGCCTGA

[図18-2]

Ｂ７－Ｈ３　ＩｇＣ２のアミノ酸配列（配列番号２７）

APYSKPSMTLEPNKDLRPGDTVTITCSSYRGYPEAEVFWQDGQGV
PLTGNVTTSQMANEQGLFDVHSVLRVVLGANGTYSCLVRNPVLQQ
DAHGSVTITGQPMTFPPEALWVTVGLSVCLIALLVALAFVCWRKI
KQSCEEENAGAEDQDGEGEGSKTALQPLKHSDSKEDDGQEIA

[図19-1]

Ｂ７－Ｈ３　ＩｇＣ１－Ｖ２－Ｃ２のヌクレオチド配列（配列番号２８）

GCTCCCTACTCGAAGCCCAGCATGACCCTGGAGCCCAACAAGGAC
CTGCGGCCAGGGGACACGGTGACCATCACGTGCTCCAGCTACCAG
GGCTACCCTGAGGCTGAGGTGTTCTGGCAGGATGGGCAGGGTGTG
CCCCTGACTGGCAACGTGACCACGTCGCAGATGGCCAACGAGCAG
GGCTTGTTTGATGTGCACAGCATCCTGCGGGTGGTGCTGGGTGCA
AATGGCACCTACAGCTGCCTGGTGCGCAACCCCGTGCTGCAGCAG
GATGCGCACAGCTCTGTCACCATCACACCCCAGAGAAGCCCCACA
GGAGCCGTGGAGGTCCAGGTCCCTGAGGACCCGGTGGTGGCCCTA
GTGGGCACCGATGCCACCCTGCGCTGCTCCTTCTCCCCCGAGCCT
GGCTTCAGCCTGGCACAGCTCAACCTCATCTGGCAGCTGACAGAC
ACCAAACAGCTGGTGCACAGTTTCACCGAAGGCCGGGACCAGGGC
AGCGCCTATGCCAACCGCACGGCCCTCTTCCCGGACCTGCTGGCA
CAAGGCAATGCATCCCTGAGGCTGCAGCGCGTGCGTGTGGCGGAC
GAGGGCAGCTTCACCTGCTTCGTGAGCATCCGGGATTTCGGCAGC
GCTGCCGTCAGCCTGCAGGTGGCCGCTCCCTACTCGAAGCCCAGC
ATGACCCTGGAGCCCAACAAGGACCTGCGGCCAGGGGACACGGTG
ACCATCACGTGCTCCAGCTACCGGGGCTACCCTGAGGCTGAGGTG
TTCTGGCAGGATGGGCAGGGTGTGCCCCTGACTGGCAACGTGACC
ACGTCGCAGATGGCCAACGAGCAGGGCTTGTTTGATGTGCACAGC
GTCCTGCGGGTGGTGCTGGGTGCGAATGGCACCTACAGCTGCCTG
GTGCGCAACCCCCGTGCTGCAGCAGGATGCGCACGGCTCTGTCACC
ATCACAGGGCAGCCTATGACATTCCCCCCAGAGGCCCTGTGGGTG
ACCGTGGGGCTGTCTGTCTGTCTCATTGCACTGCTGGTGGCCCTG
GCTTTCGTGTGCTGGAGAAAGATCAAACAGAGCTGTGAGGAGGAG
AATGCAGGAGCTGAGGACCAGGATGGGGAGGGAGAAGGCTCCAAG
ACAGCCCTGCAGCCTCTGAAACACTCTGACAGCAAAGAAGATGAT
GGACAAGAAATAGCCTGA

[図19-2]

Ｂ７－Ｈ３　ＩｇＣ１－Ｖ２－Ｃ２のアミノ酸配列（配列番号２９）

APYSKPSMTLEPNKDLRPGDTVTITCSSYQGYPEAEVFWQDGQGV
PLTGNVTTSQMANEQGLFDVHSILRVVLGANGTYSCLVRNPVLQQ
DAHSSVTITPQRSPTGAVEVQVPEDPVVALVGTDATLRCSFSPEP
GFSLAQLNLIWQLTDTKQLVHSFTEGRDQGSAYANRTALFPDLLA
QGNASLRLQRVRVADEGSFTCFVSIRDFGSAAVSLQVAAPYSKPS
MTLEPNKDLRPGDTVTITCSSYRGYPEAEVFWQDGQGVPLTGNVT
TSQMANEQGLFDVHSVLRVVLGANGTYSCLVRNPVLQQDAHGSVT
ITGQPMTFPPEALWVTVGLSVCLIALLVALAFVCWRKIKQSCEEE
NAGAEDQDGEGEGSKTALQPLKHSDSKEDDGQEIA

[図20-1]

Ｂ７－Ｈ３　ＩｇＶ２－Ｃ２のヌクレオチド配列（配列番号３０）

GGAGCCGTGGAGGTCCAGGTCCCTGAGGACCCCGGTGGTGGCCCTA
GTGGGCACCGATGCCACCCTGCGCTGCTCCTTCTCCCCCCGAGCCT
GGCTTCAGCCTGGCACAGCTCAACCTCATCTGGCAGCTGACAGAC
ACCAAACAGCTGGTGCACAGTTTCACCGAAGGCCGGGACCAGGGC
AGCGCCTATGCCAACCGCACGGCCCTCTTCCCCGGACCTGCTGGCA
CAAGGCAATGCATCCCTGAGGCTGCAGCGCGTGCGTGTGGCGGAC
GAGGGCAGCTTCACCTGCTTCGTGAGCATCCGGGATTTCGGCAGC
GCTGCCGTCAGCCTGCAGGTGGCCGCTCCCTACTCGAAGCCCAGC
ATGACCCTGGAGCCCAACAAGGACCTGCGGCCAGGGGACACGGTG
ACCATCACGTGCTCCAGCTACCGGGGCTACCCTGAGGCTGAGGTG
TTCTGGCAGGATGGGCAGGGTGTGCCCCTGACTGGCAACGTGACC
ACGTCGCAGATGGCCAACGAGCAGGGCTTGTTTGATGTGCACAGC
GTCCTGCGGGTGGTGCTGGGTGCGAATGGCACCTACAGCTGCCTG
GTGCGCAACCCCCGTGCTGCAGCAGGATGCGCACGGCTCTGTCACC
ATCACAGGGCAGCCTATGACATTCCCCCCCAGAGGCCCTGTGGGTG
ACCGTGGGGCTGTCTGTCTGTCTCATTGCACTGCTGGTGGCCCTG
GCTTTCGTGTGCTGGAGAAAGATCAAACAGAGCTGTGAGGAGGAG
AATGCAGGAGCTGAGGACCAGGATGGGGAGGGAGAAGGCTCCAAG
ACAGCCCTGCAGCCTCTGAAACACTCTGACAGCAAAGAAGATGAT
GGACAAGAAATAGCCTGA

[図20-2]

Ｂ７－Ｈ３　ＩｇＶ２－Ｃ２のアミノ酸配列（配列番号３１）

GAVEVQVPEDPVVALVGTDATLRCSFSPEPGFSLAQLNLIWQLTD
TKQLVHSFTEGRDQGSAYANRTALFPDLLAQGNASLRLQRVRVAD
EGSFTCFVSIRDFGSAAVSLQVAAPYSKPSMTLEPNKDLRPGDTV
TITCSSYRGYPEAEVFWQDGQGVPLTGNVTTSQMANEQGLFDVHS
VLRVVLGANGTYSCLVRNPVLQQDAHGSVTITGQPMTFPPEALWV
TVGLSVCLIALLVALAFVCWRKIKQSCEEENAGAEDQDGEGEGSK
TALQPLKHSDSKEDDGQEIA

[図21-1]

M30抗体重鎖のヌクレオチド配列（配列番号50）

atggaatggagttggatatttctctttctcctgtcaggaactgca
ggtgtccactctgaggtccagctgcagcagtctggacctgagctg
gtaaagcctggggcttcagtgaagatgtcctgcaaggcttctgga
tacacattcactaactatgttatgcactgggtgaagcagaagcct
gggcagggccttgagtggattggatatattaatccttacaatgat
gatgttaagtacaatgagaagttcaaaggcaaggccacacagact
tcagacaaatcctccagcacagcctacatggagctcagcagcctg
acctctgaggactctgcggtctattactgtgcaagatgggggtac
tacggtagtcccttatactactttgactactggggccaaggcacc
actctcacagtctcctcagccaaaacaacagccccatcggtctat
ccactggccccctgtgtgtggagatacaactggctcctcggtgact
ctaggatgcctggtcaagggttatttccctgagccagtgaccttg
acctggaactctggatccctgtccagtggtgtgcacaccttcccca
gctgtcctgcagtctgacctctacaccctcagcagctcagtgact
gtaacctcgagcacctggccccagccagtccatcacctgcaatgtg
gcccaccccggcaagcagcaccaaggtggacaagaaaattgagccc
agagggcccacaatcaagccctgtcctccatgcaaatgcccagca
cctaacctcttgggtggaccatccgtcttcatcttccctccaaag
atcaaggatgtactcatgatctccctgagccccatagtcacatgt
gtggtggtggatgtgagcgaggatgacccagatgtccagatcagc
tggtttgtgaacaacgtggaagtacacacagctcagacacaaacc
catagaggaggattacaacagtactctccgggtggtcagtgccctc
cccatccagcaccaggactggatgagtggcaaggagttcaaatgc
aaggtcaacaacaaagacctcccagcgcccatcgagagaaccatc
tcaaaacccaaagggtcagtaagagctccacaggtatatgtcttg
cctccaccagaagaagagatgactaagaaacaggtcactctgacc
tgcatggtcacagacttcatgcctgaagacatttacgtggagtgg
accaacaacgggaaaacagagctaaactacaagaacactgaacca
gtcctggactctgatggttcttacttcatgtacagcaagctgaga
gtggaaaagaagaactgggtggaaagaaatagctactcctgttca
gtggtccacgagggtctgcacaatcaccacacgactaagagcttc
tcccggactccgggtaaa

[図21-2]

M30抗体重鎖のアミノ酸配列（配列番号51）

MEWSWIFLFLLSGTAGVHSEVQLQQSGPELVKPGASVKMSCKASG
YTFTNYVMHWVKQKPGQGLEWIGYINPYNDDVKYNEKFKGKATQT
SDKSSSTAYMELSSLTSEDSAVYYCARWGYYGSPLYYFDYWGQGT
TLTVSSAKTTAPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTL
TWNSGSLSSGVHTFPAVLQSDLYTLSSSVTVTSSTWPSQSITCNV
AHPASSTKVDKKIEPRGPTIKPCPPCKCPAPNLLGGPSVFIFPPK
IKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQT
HREDYNSTLRVVSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTI
SKPKGSVRAPQVYVLPPPEEEMTKKQVTLTCMVTDFMPEDIYVEW
TNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWVERNSYSCS
VVHEGLHNHHTTKSFSRTPGK

[図22-1]

M３０抗体軽鎖のヌクレオチド配列（配列番号５２）

atggattttctggtgcagattttcagcttcctgctaatcagtgct
tcagtcataatgtccagaggacaaattgttctctccccagtctcca
acaatcctgtctgcatctccaggggagaaggtcacaatgacttgc
agggccagctcaagactaatttacatgcattggtatcagcagaag
ccaggatcctccccccaaaaccctggatttatgccacatccaacctg
gcttctggagtccctgctcgcttcagtggcagtgggtctgggacc
tcttactctctcacaatcagcagagtggaggctgaagatgctgcc
acttattactgccagcagtggaatagtaacccacccacgttcggt
actgggaccaagctggagctgaaacgggctgatgctgcaccaact
gtatccatcttcccaccatccagtgagcagttaacatctggaggt
gcctcagtcgtgtgcttcttgaacaacttctaccccaaagacatc
aatgtcaagtggaagattgatggcagtgaacgacaaaatggcgtc
ctgaacagttggactgatcaggacagcaaagacagcacctacagc
atgagcagcaccctcacgttgaccaaggacgagtatgaacgacat
aacagctatacctgtgaggccactcacaagacatcaacttcaccc
attgtcaagagcttcaacaggaatgagtgt

[図22-2]

M３０抗体軽鎖のアミノ酸配列（配列番号５３）

MDFLVQIFSFLLISASVIMSRGQIVLSQSPTILSASPGEKVTMTC
RASSRLIYMHWYQQKPGSSPKPWIYATSNLASGVPARFSGSGSGT
SYSLTISRVEAEDAATYYCQQWNSNPPTFGTGTKLELKRADAAPT
VSIFPPSSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQNGV
LNSWTDQDSKDSTYSMSSTLTLTKDEYERHNSYTCEATHKTSTSP
IVKSFNRNEC

[図23]

ヒトκ鎖分泌シグナル、ヒトκ鎖定常領域及びヒトｐｏｌｙＡ付加シグナルをコードするＤＮＡ配列（配列番号５６）

ggtaccacccaagctggctaggtaagcttgctagcgccaccatgg
tgctgcagacccaggtgttcatctccctgctgctgtggatctccg
gcgcatatggcgatatcgtgatgattaaacgtacggtggccgccc
cctccgtgttcatcttcccccccctccgacgagcagctgaagtccg
gcaccgcctccgtggtgtgcctgctgaataacttctaccccagag
aggccaaggtgcagtggaaggtggacaacgccctgcagtccgggga
actcccaggagagcgtgaccgagcaggacagcaaggacagcacct
acagcctgagcagcaccctgaccctgagcaaagccgactacgaga
agcacaaggtgtacgcctgcgaggtgacccaccagggcctgagct
ccccccgtcaccaagagcttcaacaggggggggagtgttagggggcccg
tttaaacgggtggcatccctgtgacccctccccagtgcctctcct
ggccctggaagttgccactccagtgcccaccagccttgtcctaat
aaaattaagttgcatcattttgtctgactaggtgtccttctataa
tattatggggtggaggggggtggtatggagcaaggggcaagttgg
gaagacaacctgtagggcctgcggggtctattgggaaccaagctg
gagtgcagtggcacaatcttggctcactgcaatctccgcctcctg
ggttcaagcgattctcctgcctcagcctcccgagttgttgggatt
ccaggcatgcatgaccaggctcacctaattttttgtttttttggta
gagacggggtttcaccatattggccaggctggtctccaactccta
atctcaggtgatctacccaccttggcctcccaaattgctgggatt
acaggcgtgaaccactgctcccacgcgcccctgtagcggcgcattaa
gcgcggcgggtgtggtggttacgcgcagcgtgaccgctacacttg
ccagcgccctagcgcccgctcctttcgctttcttcccttcctttc
tcgccacgttcgccggctttccccgtcaagctctaaatcgggggc
tcccttttagggttccgatttagtgctttacggcacctcgaccccca
aaaaacttgattagggtgatggttcacgtagtgggccatcgccct
gatagacggttttcgccctttgacgttggagtccacgttcttta
atagtggactcttgttccaaactggaacaacactcaaccctatct
cggtctattcttttgatttataagggattttgccgatttcggcct
attggttaaaaaatgagctgatttaacaaaaatttaacgcgaatt
aattctgtggaatgtgtgtcagttagggtgtggaaagtccccagg
ctccccagcaggcagaagtatgcaaagcatgcatctcaattagtc
agcaaccaggtgtggaaagtccccaggctccccagcaggcagaag
tatgcaaagcatgcatctcaattagtcagcaaccatagtcccgcc
cctaactccgcccatcccgcccctaactccgcccagttccgccca
ttctccgccccatggctgactaatttttttatttatgcagaggc
cgaggccgcctctgcctctgagctattccagaagtagtgaggagg
ctttttttggaggcctaggcttttgcaaaaagctcccgggg

[図24]

ヒトＩｇＧ１シグナル配列及び定常領域のアミノ酸をコードするＤＮＡ配列を含むＤＮＡ断片（配列番号５７）

tgctagcgccaccatgaaacacctgtggttcttcctcctgctggt
ggcagctcccagatgggtgctgagccaggtgcaattgtgcaggcg
gttagctcagcctccaccaagggcccaagcgtcttccccctggca
ccctcctccaagagcacctctggcggcacagccgccctgggctgc
ctggtcaaggactacttccccgaaccccgtgaccgtgagctggaac
tcaggcgccctgaccagcggcgtgcacaccttccccgctgtcctg
cagtcctcaggactctactccctcagcagcgtggtgaccgtgccc
tccagcagcttgggcacccagacctacatctgcaacgtgaatcac
aagcccagcaacaccaaggtggacaagagagttgagcccaaatct
tgtgacaaaactcacacatgcccaccctgcccagcacctgaactc
ctgggggggaccctcagtcttcctcttccccccaaaacccaaggac
accctcatgatctcccggacccctgaggtcacatgcgtggtggtg
gacgtgagccacgaagaccctgaggtcaagttcaactggtacgtg
gacggcgtggaggtgcataatgccaagacaaagccccgggaggag
cagtacaacagcacgtaccgggtggtcagcgtcctcaccgtcctg
caccaggactggctgaatggcaaggagtacaagtgcaaggtctcc
aacaaagccctcccagcccccatcgagaaaaccatctccaaagcc
aaaggccagccccgggaacccacaggtgtacaccctgcccccatcc
cgggaggagatgaccaagaaccaggtcagcctgacctgcctggtc
aaaggcttctatcccagcgacatcgccgtggagtgggagagcaat
ggccagccccgagaacaactacaagaccacccctcccgtgctggac
tccgacggctccttcttcctctacagcaagctcaccgtggacaag
agcaggtggcagcagggcaacgtcttctcatgctccgtgatgcat
gaggctctgcacaaccactacacccagaagagcctctccctgtct
cccggcaaatgagatatcgggcccgtttaaacgggtggca

[図25-1]

Ｍ３０抗体キメラタイプ軽鎖のヌクレオチド配列（配列番号５８）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggccaaattgttctctcccagtctccaacaatc
ctgtctgcatctccaggggagaaggtcacaatgacttgcagggcc
agctcaagactaatttacatgcattggtatcagcagaagccagga
tcctcccccaaaccctggatttatgccacatccaacctggcttct
ggagtccctgctcgcttcagtggcagtgggtctgggacctcttac
tctctcacaatcagcagagtggaggctgaagatgctgccacttat
tactgccagcagtggaatagtaacccacccacgttcggtactggg
accaagctggagctgaaacgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggcccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図25-2]

M３０抗体キメラタイプ軽鎖のアミノ酸配列（配列番号５９）

MVLQTQVFISLLLWISGAYGQIVLSQSPTILSASPGEKVTMTCRA
SSRLIYMHWYQQKPGSSPKPWIYATSNLASGVPARFSGSGSGTSY
SLTISRVEAEDAATYYCQQWNSNPPTFGTGTKLELKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図26-1]

M３０抗体キメラタイプ重鎖のヌクレオチド配列（配列番号６２）

atgaaacacctgtggttcttcctcctgctggtggcagctcccaga
tgggtgctgagcgaggtccagctgcagcagtctggacctgagctg
gtaaagcctggggcttcagtgaagatgtcctgcaaggcttctgga
tacacattcactaactatgttatgcactgggtgaagcagaagcct
gggcagggccttgagtggattggatatattaatccttacaatgat
gatgttaagtacaatgagaagttcaaaggcaaggccacacagact
tcagacaaatcctccagcacagcctacatggaactcagcagcctg
acctctgaggactctgcggtctattactgtgcaagatgggggtac
tacggtagtccctatactactttgactactggggccaaggcacc
actctcacagtcagctcagcctccaccaagggcccaagcgtcttc
cccctggcaccctcctccaagagcacctctggcggcacagccgcc
ctgggctgcctggtcaaggactacttccccgaaccccgtgaccgtg
agctggaactcaggcgccctgaccagcggcgtgcacaccttcccc
gctgtcctgcagtcctcaggactctactccctcagcagcgtggtg
accgtgccctccagcagcttgggcacccagacctacatctgcaac
gtgaatcacaagcccagcaacaccaaggtggacaagagagttgag
cccaaatcttgtgacaaaactcacacatgcccaccctgcccagca
cctgaactcctgggggggaccctcagtcttcctcttccccccaaaa
cccaaggacaccctcatgatctcccggaccccctgaggtcacatgc
gtggtggtggacgtgagccacgaagaccctgaggtcaagttcaac
tggtacgtggacggcgtggaggtgcataatgccaagacaaagccc
cgggaggagcagtacaacagcacgtaccgggtggtcagcgtcctc
accgtcctgcaccaggactggctgaatggcaaggagtacaagtgc
aaggtctccaacaaagccctcccagcccccatcgagaaaaccatc
tccaaagccaaaggccagccccgggaaccacaggtgtacaccctg
ccccatcccgggaggagatgaccaagaaccaggtcagcctgacc
tgcctggtcaaaggcttctatcccagcgacatcgccgtggagtgg
gagagcaatggccagccccgagaacaactacaagaccacccctccc
gtgctggactccgacggctccttcttcctctacagcaagctcacc
gtggacaagagcaggtggcagcaggggcaacgtcttctcatgctcc
gtgatgcatgaggctctgcacaaccactacacccagaagagcctc
tccctgtctccccggcaaa

[図26-2]

M３０抗体キメラタイプ重鎖のアミノ酸配列（配列番号６３）

MKHLWFFLLLVAAPRWVLSEVQLQQSGPELVKPGASVKMSCKASG
YTFTNYVMHWVKQKPGQGLEWIGYINPYNDDVKYNEKFKGKATQT
SDKSSSTAYMELSSLTSEDSAVYYCARWGYYGSPLYYFDYWGQGT
TLTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTV
SWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICN
VNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPK
PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP
REEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI
SKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCS
VMHEALHNHYTQKSLSLSPGK

[図27-1]

M３０－Ｌ１タイプ軽鎖のヌクレオチド配列（配列番号７０）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggcgagatcgtgctgacccagagccccgccacc
ctgtctctgagccctggcgagagagccaccctgagctgcagagcc
agcagccgcctgatctacatgcactggtatcagcagaagccccggc
caggccccccagactgctgatctacgccaccagcaacctggccagc
ggcatccccgccagatttctggcagcggcagcggcaccgacttc
accctgaccatctctcggctggaaccccgaggacttcgccgtgtac
tactgccagcagtggaacagcaaccccccccacctttcggccagggc
accaaggtcgaaatcaagcgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図27-2]

M３０－Ｌ１タイプ軽鎖のアミノ酸配列（配列番号７１）

MVLQTQVFISLLLWISGAYGEIVLTQSPATLSLSPGERATLSCRA
SSRLIYMHWYQQKPGQAPRLLIYATSNLASGIPARFSGSGSGTDF
TLTISRLEPEDFAVYYCQQWNSNPPTFGQGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図28-1]

M30－L2タイプ軽鎖のヌクレオチド配列（配列番号72）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggcgagatcgtgctgacccagagccccgccacc
ctgtctctgagccctggcgagagagccaccctgagctgcagagcc
agcagcaggctgatctacatgcactggtatcagcagaagccccggc
caggccccagactgtggatctacgccaccagcaacctggccagc
ggcatccccgccagattttctggcagcggcagcggcaccgactac
accctgaccatcagccgcctggaaccccgaggacttcgccgtgtac
tactgccagcagtggaacagcaaccccccccacctt cggccagggc
accaaggtcgaaatcaagcgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図28-2]

M30－L2タイプ軽鎖のアミノ酸配列（配列番号73）

MVLQTQVFISLLLWISGAYGEIVLTQSPATLSLSPGERATLSCRA
SSRLIYMHWYQQKPGQAPRLWIYATSNLASGIPARFSGSGSGTDY
TLTISRLEPEDFAVYYCQQWNSNPPTFGQGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図29-1]

M30－L3タイプ軽鎖のヌクレオチド配列（配列番号74）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggccagatcgtgctgtcccagagccccgccacc
ctgtctctgagccctggcgagagagccaccctgacctgcagagcc
agcagcaggctgatctacatgcactggtatcagcagaagccccggc
agcgccccccaagctgtggatctacgccaccagcaacctggccagc
ggcatccccgccagattttctggcagcggcagcggcaccagctac
accctgaccatctccccgcctggaaccccgaggacttcgccgtgtac
tactgccagcagtggaacagcaaccccccccacctt cggccagggc
accaaggtcgaaatcaagcgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図29-2]

M30－L3タイプ軽鎖のアミノ酸配列（配列番号75）

MVLQTQVFISLLLWISGAYGQIVLSQSPATLSLSPGERATLTCRA
SSRLIYMHWYQQKPGSAPKLWIYATSNLASGIPARFSGSGSGTSY
TLTISRLEPEDFAVYYCQQWNSNPPTFGQGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図30-1]

M30－L4タイプ軽鎖のヌクレオチド配列（配列番号76）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggcgagatcgtgctgacccagagccccgccacc
ctgtctctgagccctggcgagagagccaccctgagctgcagagcc
agcagccgcctgatctacatgcactggtatcagcagaagccccggc
caggcccccagacctctgatctacgccaccagcaacctggccagc
ggcatccccgccagatttctggcagcggcagcggcaccgacttc
accctgaccatcagcagcctggaaccccgaggacttcgccgtgtac
tactgccagcagtggaacagcaaccccccccacctttcggccagggc
accaaggtcgaaatcaagcgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図30-2]

M30－L4タイプ軽鎖のアミノ酸配列（配列番号77）

MVLQTQVFISLLLWISGAYGEIVLTQSPATLSLSPGERATLSCRA
SSRLIYMHWYQQKPGQAPRPLIYATSNLASGIPARFSGSGSGTDF
TLTISSLEPEDFAVYYCQQWNSNPPTFGQGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図31-1]

M30－L5タイプ軽鎖のヌクレオチド配列（配列番号78）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggccagatcgtgctgtcccagagccccgccacc
ctgtctctgagccctggcgagagagccaccctgacctgcagagcc
agcagcaggctgatctacatgcactggtatcagcagaagccccggc
agcgccccccaagccttggatctacgccaccagcaacctggccagc
ggcatccccgccagatttctggcagcggcagcggcaccagctac
accctgaccatctcccgcctggaacccgaggacttcgccgtgtac
tactgccagcagtggaacagcaaccccccccacctttcggccagggc
accaaggtcgaaatcaagcgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図31-2]

M30－L5タイプ軽鎖のアミノ酸配列（配列番号79）

MVLQTQVFISLLLWISGAYGQIVLSQSPATLSLSPGERATLTCRA
SSRLIYMHWYQQKPGSAPKPWIYATSNLASGIPARFSGSGSGTSY
TLTISRLEPEDFAVYYCQQWNSNPPTFGQGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図32-1]

M30－L6タイプ軽鎖のヌクレオチド配列（配列番号80）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggcgagatcgtgctgacccagagccccgccacc
ctgtctctgagccctggcgagagagccaccctgagctgcagagcc
agcagccgcctgatctacatgcactggtatcagcagaagccccggc
caggccccccagacctctgatctacgccaccagcaacctggccagc
ggcatccccgccagattttctggcagcggcagcggcaccgacttc
accctgaccatcagccgcctggaacccgaggacttcgccgtgtac
tactgccagcagtggaacagcaacccccccccacctttcggccagggc
accaaggtcgaaatcaagcgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図32-2]

M30－L6タイプ軽鎖のアミノ酸配列（配列番号81）

MVLQTQVFISLLLWISGAYGEIVLTQSPATLSLSPGERATLSCRA
SSRLIYMHWYQQKPGQAPRPLIYATSNLASGIPARFSGSGSGTDF
TLTISRLEPEDFAVYYCQQWNSNPPTFGQGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図33-1]

M30－L7タイプ軽鎖のヌクレオチド配列（配列番号82）

atggtgctgcagacccaggtgttcatctccctgctgctgtggatc
tccggcgcatatggcgagatcgtgctgacccagagccccgccacc
ctgtctctgagccctggcgagagagccaccctgagctgcagagcc
agcagccgcctgatctacatgcactggtatcagcagaagccccggc
caggccccccagacctctgatctacgccaccagcaacctggccagc
ggcatccccgccagattttctggcagcggcagcggcaccgactac
accctgaccatcagccgcctggaacccgaggacttcgccgtgtac
tactgccagcagtggaacagcaacccccccccacctttcggccagggc
accaaggtcgaaatcaagcgtacggtggccgcccccctccgtgttc
atcttcccccccctccgacgagcagctgaagtccggcaccgcctcc
gtggtgtgcctgctgaataacttctaccccagagaggccaaggtg
cagtggaaggtggacaacgccctgcagtccgggaactcccaggag
agcgtgaccgagcaggacagcaaggacagcacctacagcctgagc
agcaccctgaccctgagcaaagccgactacgagaagcacaaggtg
tacgcctgcgaggtgacccaccagggcctgagctcccccgtcacc
aagagcttcaacaggggggagtgt

[図33-2]

M30－L7タイプ軽鎖のアミノ酸配列（配列番号83）

MVLQTQVFISLLLWISGAYGEIVLTQSPATLSLSPGERATLSCRA
SSRLIYMHWYQQKPGQAPRPLIYATSNLASGIPARFSGSGSGTDY
TLTISRLEPEDFAVYYCQQWNSNPPTFGQGTKVEIKRTVAAPSVF
IFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQE
SVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVT
KSFNRGEC

[図34-1]

M30－H1タイプ重鎖のヌクレオチド配列（配列番号84）

atgaaacacctgtggttcttcctcctgctggtggcagctcccaga
tgggtgctgagccaggtgcagctggtgcagtctggcgccgaagtg
aagaaacccggcagcagcgtgaaggtgtcctgcaaggccagcggc
tacaccttcaccaactacgtgatgcactgggtgcgccaggcccct
gggcagggactggaatggatgggctacatcaaccctacaacgac
gacgtgaagtacaacgagaagttcaagggcagagtgaccatcacc
gccgacgagagcaccagcaccgcctacatggaactgagcagcctg
cggagcgaggacaccgccgtgtactactgcgccagatggggctac
tacggcagccccctgtactacttcgactactggggccagggcacc
ctggtgacagtcagctcagcctccaccaagggcccaagcgtcttc
ccccctggcaccctcctccaagagcacctctggcggcacagccgcc
ctgggctgcctggtcaaggactacttccccgaaccccgtgaccgtg
agctggaactcaggcgccctgaccagcggcgtgcacaccttcccc
gctgtcctgcagtcctcaggactctactccctcagcagcgtggtg
accgtgccctccagcagcttgggcacccagacctacatctgcaac
gtgaatcacaagcccagcaacaccaaggtggacaagagagttgag
cccaaatcttgtgacaaaactcacacatgcccaccctgcccagca
cctgaactcctgggggggaccctcagtcttcctcttcccccccaaaa
cccaaggacaccctcatgatctcccggacccctgaggtcacatgc
gtggtggtggacgtgagccacgaagaccctgaggtcaagttcaac
tggtacgtggacggcgtggaggtgcataatgccaagacaaagccc
cgggaggagcagtacaacagcacgtaccgggtggtcagcgtcctc
accgtcctgcaccaggactggctgaatggcaaggagtacaagtgc
aaggtctccaacaaagccctcccagccccccatcgagaaaaccatc
tccaaagccaaaggccagccccgggaaccacaggtgtacaccctg
ccccccatcccgggaggagatgaccaagaaccaggtcagcctgacc
tgcctggtcaaaggcttctatcccagcgacatcgccgtggagtgg
gagagcaatggccagcccgagaacaactacaagaccacccctccc
gtgctggactccgacggctccttcttcctctacagcaagctcacc
gtggacaagagcaggtggcagcagggcaacgtcttctcatgctcc
gtgatgcatgaggctctgcacaaccactacacccagaagagcctc
tccctgtctccccggcaaa

[図34-2]

M30－H1タイプ重鎖のアミノ酸配列（配列番号85）

MKHLWFFLLLVAAPRWVLSQVQLVQSGAEVKKPGSSVKVSCKASG
YTFTNYVMHWVRQAPGQGLEWMGYINPYNDDVKYNEKFKGRVTIT
ADESTSTAYMELSSLRSEDTAVYYCARWGYYGSPLYYFDYWGQGT
LVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTV
SWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICN
VNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPK
PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP
REEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI
SKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCS
VMHEALHNHYTQKSLSLSPGK

[図35-1]

M30－H2タイプ重鎖のヌクレオチド配列（配列番号86）

atgaaacacctgtggttcttcctcctgctggtggcagctcccaga
tgggtgctgagccaggtgcagctggtgcagtctggcgcccgaagtg
aagaaacccggcagcagcgtgaaggtgtcctgcaaggccagcggc
tacaccttcaccaactacgtgatgcactgggtgcgccaggcccct
gggcagggactggaatggatcggctacatcaaccccctacaacgac
gacgtgaagtacaacgagaagttcaagggcagagtgaccatcacc
gccgacgagagcaccagcaccgcctacatggaactgagcagcctg
cggagcgaggacaccgccgtgtactactgcgccagatggggctac
tacggcagccccctgtactacttcgactactggggccagggcacc
ctggtgacagtcagctcagcctccaccaagggcccaagcgtcttc
ccccctggcaccctcctccaagagcacctctggcggcacagccgcc
ctgggctgcctggtcaaggactacttccccgaaccccgtgaccgtg
agctggaactcaggcgccctgaccagcggcgtgcacaccttcccc
gctgtcctgcagtcctcaggactctactccctcagcagcgtggtg
accgtgccctccagcagcttgggcacccagacctacatctgcaac
gtgaatcacaagcccagcaacaccaaggtggacaagagagttgag
cccaaatcttgtgacaaaactcacacatgcccaccctgcccagca
cctgaactcctgggggggaccctcagtcttcctcttcccccccaaaa
cccaaggacaccctcatgatctcccggaccccctgaggtcacatgc
gtggtggtggacgtgagccacgaagaccctgaggtcaagttcaac
tggtacgtggacggcgtggaggtgcataatgccaagacaaagccc
cgggaggagcagtacaacagcacgtaccgggtggtcagcgtcctc
accgtcctgcaccaggactggctgaatggcaaggagtacaagtgc
aaggtctccaacaaagccctcccagccccccatcgagaaaaccatc
tccaaagccaaaggccagccccgggaaccacaggtgtacaccctg
cccccatcccgggaggagatgaccaagaaccaggtcagcctgacc
tgcctggtcaaaggcttctatcccagcgacatcgccgtggagtgg
gagagcaatggccagcccgagaacaactacaagaccacccctccc
gtgctggactccgacggctccttcttcctctacagcaagctcacc
gtggacaagagcaggtggcagcagggcaacgtcttctcatgctcc
gtgatgcatgaggctctgcacaaccactacacccagaagagcctc
tccctgtctccccggcaaa

[図35-2]

M30－H2タイプ重鎖のアミノ酸配列（配列番号87）

MKHLWFFLLLVAAPRWVLSQVQLVQSGAEVKKPGSSVKVSCKASG
YTFTNYVMHWVRQAPGQGLEWIGYINPYNDDVKYNEKFKGRVTIT
ADESTSTAYMELSSLRSEDTAVYYCARWGYYGSPLYYFDYWGQGT
LVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTV
SWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICN
VNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPK
PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP
REEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI
SKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCS
VMHEALHNHYTQKSLSLSPGK

[図36-1]

M30－H3タイプ重鎖のヌクレオチド配列（配列番号88）

atgaaacacctgtggttcttcctcctgctggtggcagctcccaga
tgggtgctgagcgaggtgcagctggtgcagtctggcgccgaagtg
aagaaacccggcagcagcgtgaaggtgtcctgcaaggccagcggc
tacaccttcaccaactacgtgatgcactgggtgaaacaggcccct
gggcagggcctggaatggatcggctacatcaaccccctacaacgac
gacgtgaagtacaacgagaagttcaagggcaaggccaccatcacc
gccgacgagagcaccagcaccgcctacatggaactgagcagcctg
cggagcgaggacaccgccgtgtactactgcgccagatggggctac
tacggcagccccctgtactacttcgactactggggccagggcacc
ctggtgacagtcagctcagcctccaccaagggcccaagcgtcttc
cccctggcaccctcctccaagagcacctctggcggcacagccgcc
ctgggctgcctggtcaaggactacttccccgaaccccgtgaccgtg
agctggaactcaggcgccctgaccagcggcgtgcacaccttcccc
gctgtcctgcagtcctcaggactctactccctcagcagcgtggtg
accgtgccctccagcagcttgggcacccagacctacatctgcaac
gtgaatcacaagcccagcaacaccaaggtggacaagagagttgag
cccaaatcttgtgacaaaactcacacatgcccaccctgcccagca
cctgaactcctgggggggaccctcagtcttcctcttcccccccaaaa
cccaaggacaccctcatgatctcccggacccctgaggtcacatgc
gtggtggtggacgtgagccacgaagaccctgaggtcaagttcaac
tggtacgtggacggcgtggaggtgcataatgccaagacaaagccc
cgggaggagcagtacaacagcacgtaccgggtggtcagcgtcctc
accgtcctgcaccaggactggctgaatggcaaggagtacaagtgc
aaggtctccaacaaagccctcccagcccccatcgagaaaaccatc
tccaaagccaaaggccagccccgggaaccacaggtgtacaccctg
cccccatcccgggaggagatgaccaagaaccaggtcagcctgacc
tgcctggtcaaaggcttctatcccagcgacatcgccgtggagtgg
gagagcaatggccagccccgagaacaactacaagaccacccctccc
gtgctggactccgacggctccttcttcctctacagcaagctcacc
gtggacaagagcaggtggcagcagggcaacgtcttctcatgctcc
gtgatgcatgaggctctgcacaaccactacacccagaagagcctc
tccctgtctccccggcaaa

[図36-2]

M30－H3タイプ重鎖のアミノ酸配列（配列番号89）

MKHLWFFLLLVAAPRWVLSEVQLVQSGAEVKKPGSSVKVSCKASG
YTFTNYVMHWVKQAPGQGLEWIGYINPYNDDVKYNEKFKGKATIT
ADESTSTAYMELSSLRSEDTAVYYCARWGYYGSPLYYFDYWGQGT
LVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTV
SWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICN
VNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPK
PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP
REEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI
SKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCS
VMHEALHNHYTQKSLSLSPGK

[図37-1]

M30－H4タイプ重鎖のヌクレオチド配列（配列番号90）

atgaaacacctgtggttcttcctcctgctggtggcagctcccaga
tgggtgctgagcgaggtgcagctggtgcagtctggcgcccgaagtg
aagaaacccggcagcagcgtgaaggtgtcctgcaaggccagcggc
tacaccttcaccaactacgtgatgcactgggtcaagcaggccccct
gggcagggcctggaatggatcggctacatcaaccctacaacgac
gacgtgaagtacaacgagaagttcaagggcaaggccacccagacc
agcgacaagagcaccagcaccgcctacatggaactgagcagcctg
cggagcgaggacaccgccgtgtactactgcgccagatggggctac
tacggcagccccctgtactacttcgactactggggccagggcacc
ctggtcaccgtcagctcagcctccaccaagggcccaagcgtcttc
ccccctggcaccctcctccaagagcacctctggcggcacagccgcc
ctgggctgcctggtcaaggactacttccccgaaccccgtgaccgtg
agctggaactcaggcgccctgaccagcggcgtgcacaccttcccc
gctgtcctgcagtcctcaggactctactccctcagcagcgtggtg
accgtgccctccagcagcttgggcacccagacctacatctgcaac
gtgaatcacaagcccagcaacaccaaggtggacaagagagttgag
cccaaatcttgtgacaaaactcacacatgcccaccctgcccagca
cctgaactcctgggggggaccctcagtcttcctcttcccccccaaaa
cccaaggacaccctcatgatctcccggaccccctgaggtcacatgc
gtggtggtggacgtgagccacgaagaccctgaggtcaagttcaac
tggtacgtggacggcgtggaggtgcataatgccaagacaaagccc
cgggaggagcagtacaacagcacgtaccgggtggtcagcgtcctc
accgtcctgcaccaggactggctgaatggcaaggagtacaagtgc
aaggtctccaacaaagccctcccagccccccatcgagaaaaccatc
tccaaagccaaaggccagccccgggaaccacaggtgtacaccctg
cccccatcccgggaggagatgaccaagaaccaggtcagcctgacc
tgcctggtcaaaggcttctatcccagcgacatcgccgtggagtgg
gagagcaatggccagcccgagaacaactacaagaccacccctccc
gtgctggactccgacggctccttcttcctctacagcaagctcacc
gtggacaagagcaggtggcagcagggcaacgtcttctcatgctcc
gtgatgcatgaggctctgcacaaccactacacccagaagagcctc
tccctgtctccccggcaaa

[図37-2]

M３０－Ｈ４タイプ重鎖のアミノ酸配列（配列番号９１）

MKHLWFFLLLVAAPRWVLSEVQLVQSGAEVKKPGSSVKVSCKASG
YTFTNYVMHWVKQAPGQGLEWIGYINPYNDDVKYNEKFKGKATQT
SDKSTSTAYMELSSLRSEDTAVYYCARWGYYGSPLYYFDYWGQGT
LVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTV
SWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICN
VNHKPSNTKVDKRVEPKSCDKTHTCPPCPAPELLGGPSVFLFPPK
PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKP
REEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI
SKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCS
VMHEALHNHYTQKSLSLSPGK

[図38]

