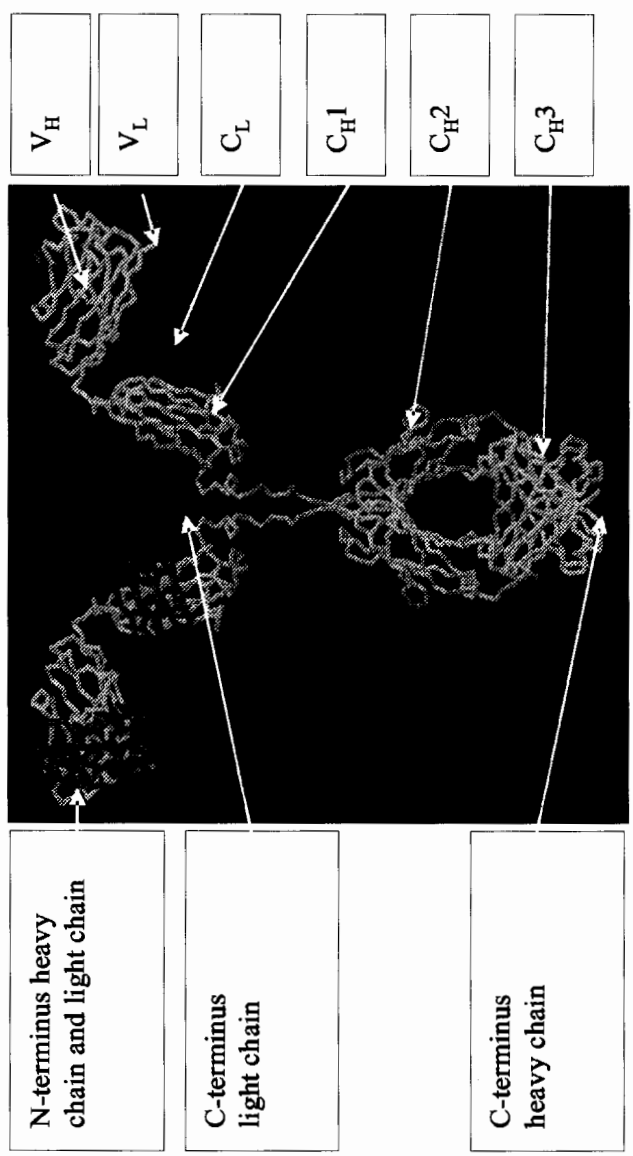

V_H
V_L
C_L
C_H1
C_H2
C_H3
N-terminus heavy chain and light chain
C-terminus light chain
C-terminus heavy chain

Fig. 1a

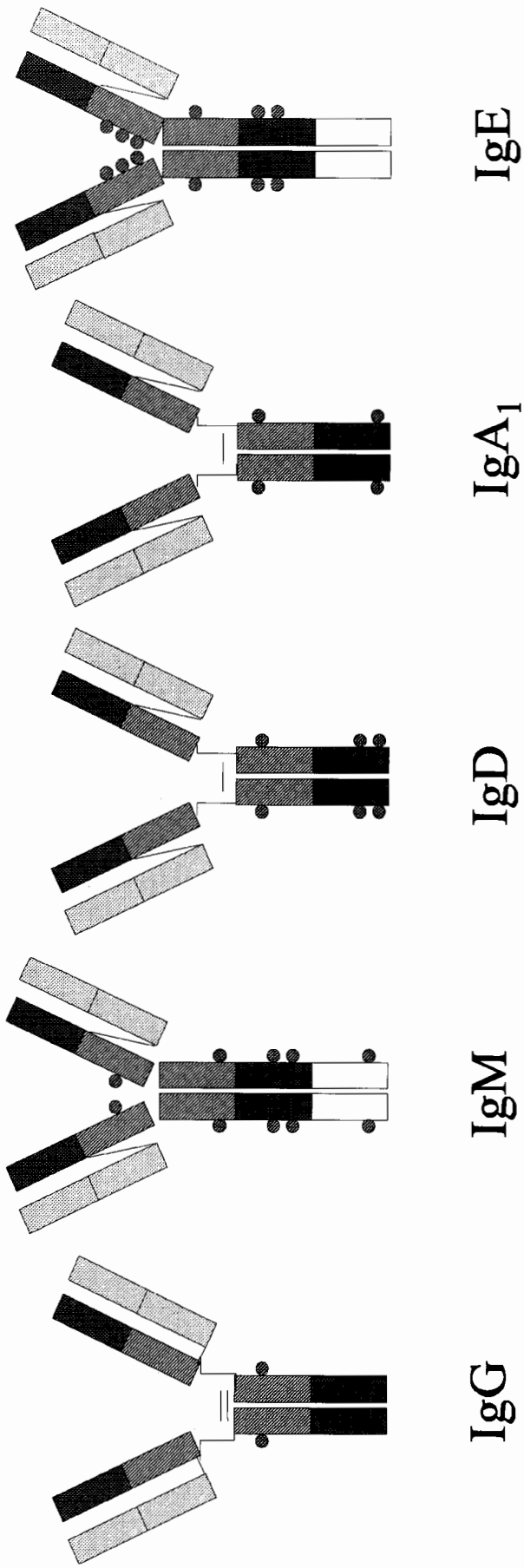


Fig. 1b

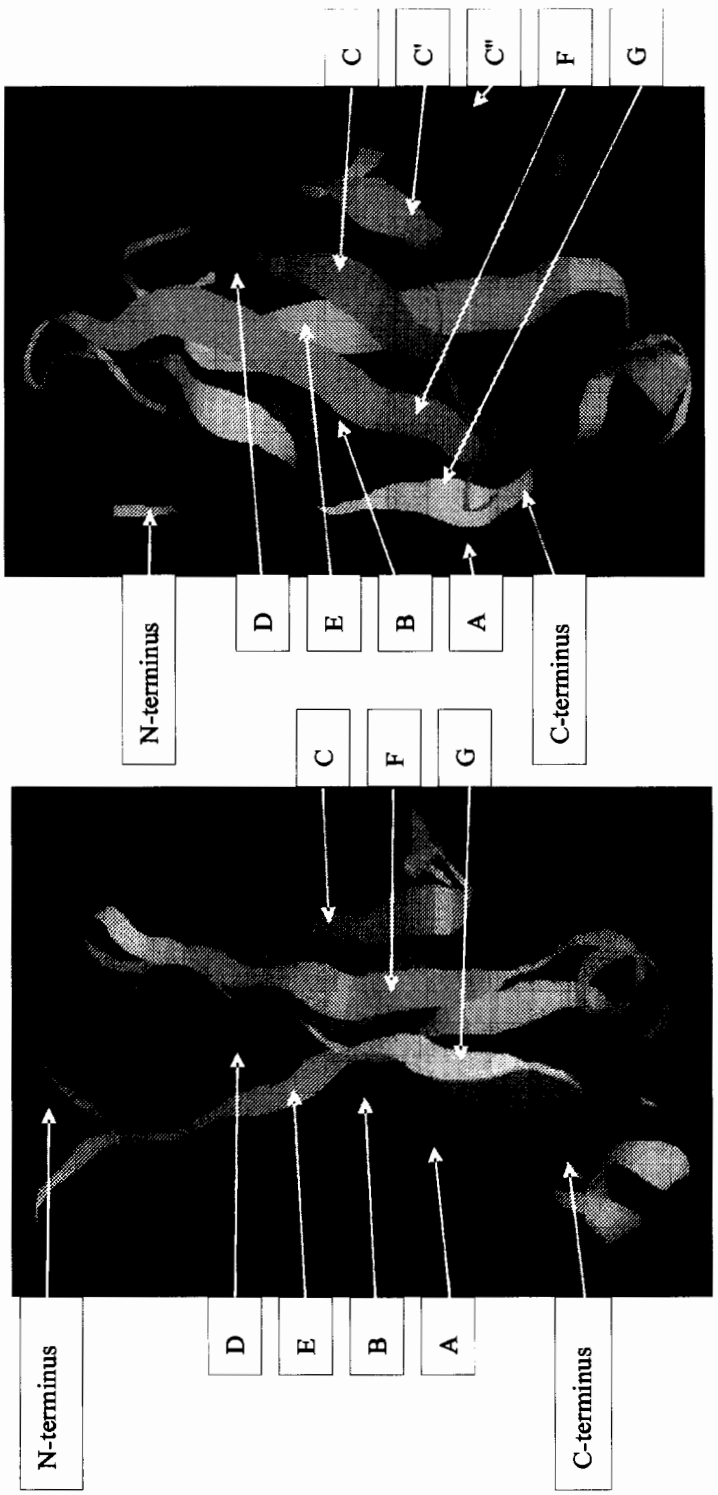

N-terminus
D
E
B
A
C-terminus
C
F
G
C
C'
C''
F
G
N-terminus
D
E
B
A
C-terminus

Fig. 2

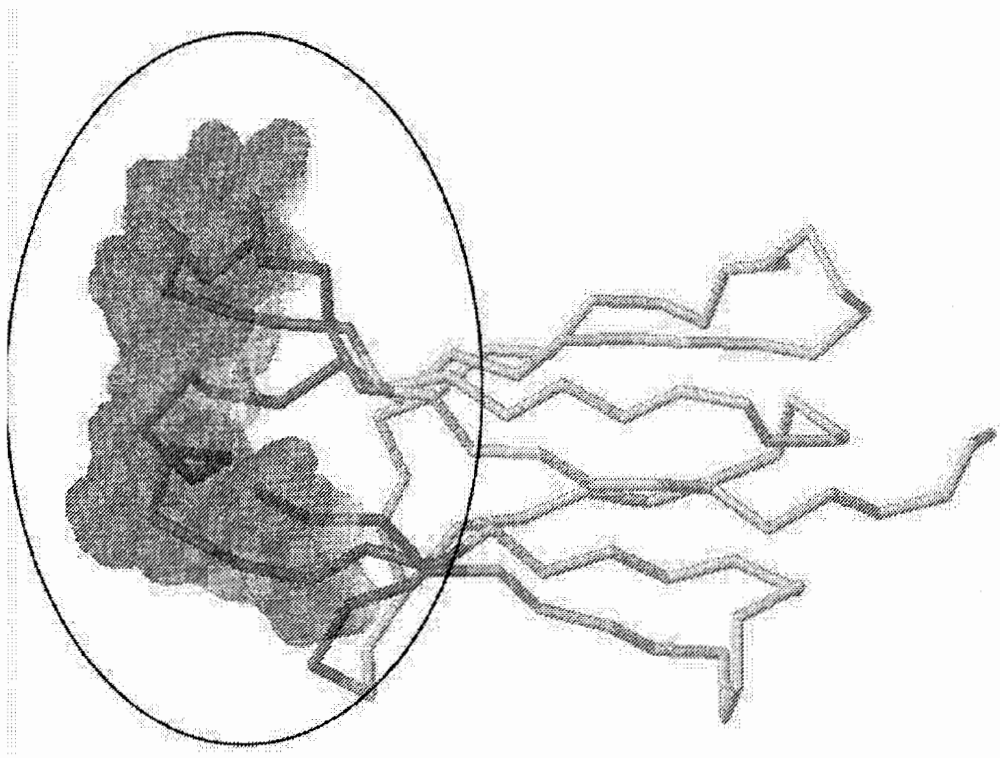


Fig. 3

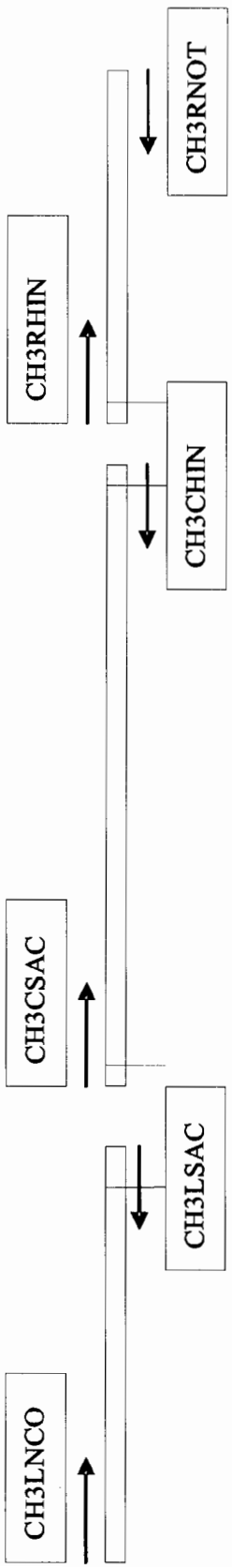
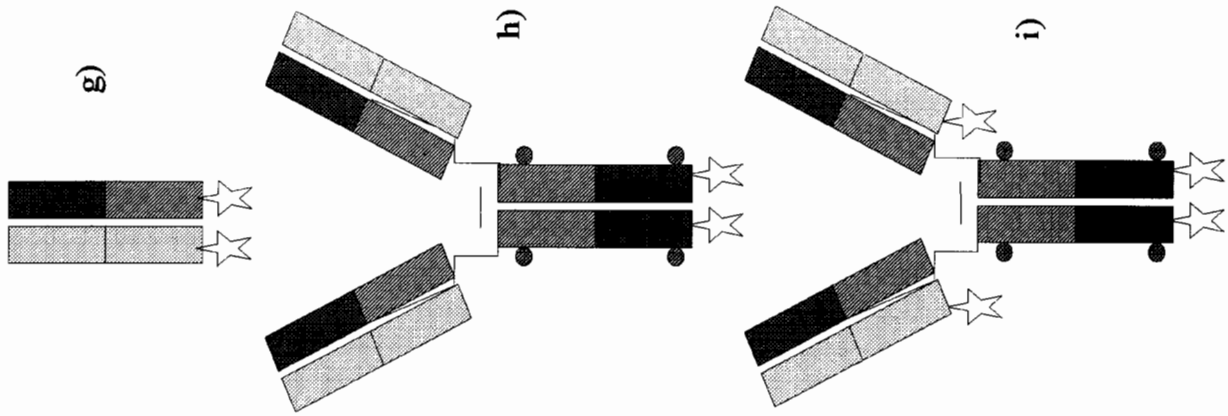


Fig. 4



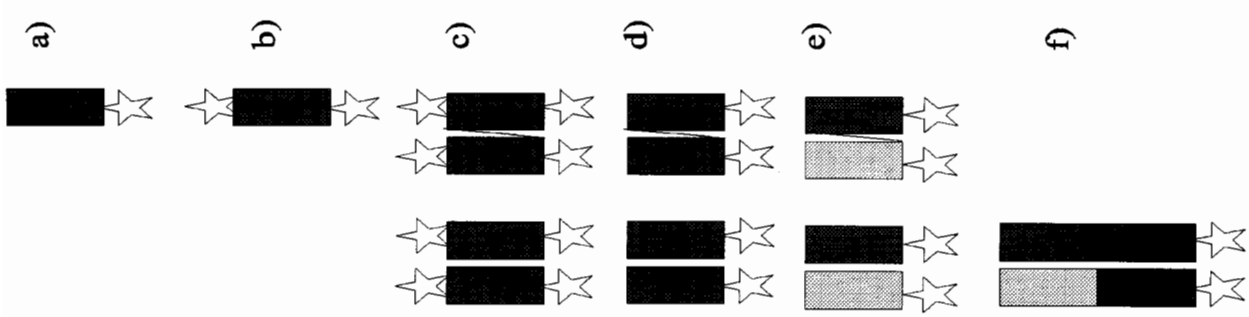


Fig. 5

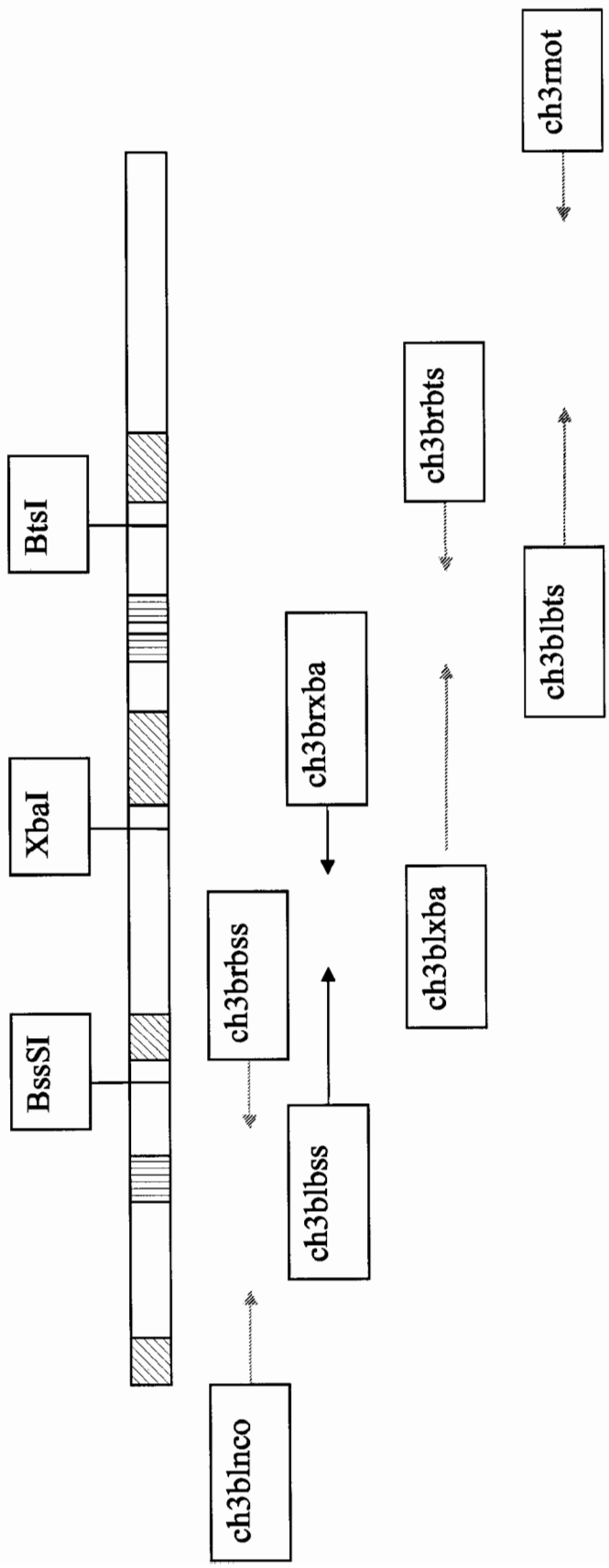

ch3mot
ch3brbts
ch3blbts
ch3brxba
ch3blxba
ch3brbss
ch3blbss
ch3blnco
BtsI
XbaI
BssSI

Fig. 6

```
                                                                                BssS1
+3    R  E  P  Q  V  Y  T  L  P  P  S  R  D  E  L        Q  V  S  L  T  C  L  V  K  G  F
 1  NNSCGAGAAC CACAGGTGTA CACCCTGCCC CCATCCCGTG ACGAGCTCNN SNNSNNSCAA GTCAGCCTGA CCTGCCTSGT GAAAGGCTTC NNSNNSNNSN
    NNSGCTCTTG GTGTCCACAT GTGGGACGGG GGTAGGGCAC TGCTCGAGNN SNNSNNSGTT CAGTCGGACT GGACGGAGCA CTTTCCGAAG NNSNNSNNSN

                                                                  XbaI
+3    I  A  V  E  W  E  S  N  G  Q  P  E  N  N  Y  K  T  T  P  P  V  L  D  S  D  G                    S  F
101 NSATCGCCGT GGAGTGGGAG AGCAATGGGC AGCCGGAGAA CAACTACAAG ACCACGCCTC CCGTCTAGA CTCCGACGGC NNSNNSNNSN NSNNSTCCTT
    NSTAGCGGCA CCTCACCCTC TCGTTACCCG TCGGCCTCTT GTTGATGTTC TGGTGCGGAG GGCAAGATCT GAGGCTGCCG NNSNNSNNSN NSNNSAGGAA

                                                                  BtsI
+3    F  L  Y  S  K  L  T  V           R  W        G  N  V  F  S  C  S  V  M           L  H  N  H  Y  T
201 CTTCCTCTAC AGCAAGCTTA CCGTGNNSNN SNNSAGGTGG NNSNNSGGGA ACGTCTTCTC ATGCNGTGTG ATGNNSNNSN NSCTGCACAA CCACTACACA
    GAAGGAGATG TCGTTCGAAT GGCACNNSNN SNNSTCCACC NNSNNSCCCT TGCAGAAGAG TACGTCACAC TACNNSNNSN NSGACGTGTT GGTGATGTGT

                                                  NotI
+3    Q  K  S  L  S  L  S  P  G  K  A  A  A
301 CAGAAGAGCC TCTCCCTGTC TCCGGGTAAA GCGGCCGCA
    GTCTTCTCGG AGAGGGACAG AGGCCCATTT CGCCGGCGT
```

Fig. 7

SEQ ID No. 1: Amino acid sequence of C_H3 domain of antibody 1oqo.pdb

1 PREPQVYTLPPSRDELTKNQVSLTCLVKGF

31 YPSDIAVEWESNGQPENNYKTTPPVLDSDG

61 SFFLYSKLTVDKSRWQQGNVFSCSVMHEAL

91 HNHYTQKSLSLSPGKAAA

SEQ ID No. 2: Nucleotide sequence of the engineered C_H3 domain of Example 1

1 CCATGGCCCC CCGAGAACCA CAGGTGTACA CCCTGCCCCC ATCCCGGGAT GAGCTCNNSN NSNNSCAGGT

71 CAGCCTGACC TGCCTGGTCA AAGGCTTCTA TCCCAGCGAC ATCGCCGTGG AGTGGGAGAG CAATGGGCAG

141 CCGGAGAACA ACTACAAGAC CACGCCTCCC GTGCTGGACT CCGACGGCTC CTTCTTCCTC TACAGCAAGC

211 TTACCGTGNN SNNSNNSAGG TGGNNSNNSG GGAACGTCTT CTCATGCTCC GTGATGCATG AGGCTCTGCA

281 CAACCACTAC ACACAGAAGA GCCTCTCCCT GTCTCCGGGT AAAGCGGCCG CA

SEQ ID No. 3: Amino acid sequence of the engineered C_H3 domain of Example 1

1 MAPREPQVYTLPPSRDELXXXQVSLTCLVK

31 GFYPSDIAVEWESNGQPENNYKTTPPVLDS

61 DGSFFLYSKLTVXXXRWXXGNVFSCSVMHE

91 ALHNHYTQKSLSLSPGKAAA

SEQ ID No. 4: PCR primer C_H3LNCO

cttgccatgg ccccccgaga accacaggtg tac

SEQ ID No. 5: PCR primer C_H3LSAC

agtcgagctc gtcacgggat gggggcaggg

SEQ ID No. 6: PCR primer C_H3CSAC

gtacgagctc nnsnnsnnsc aagtcagcct gacctgcctg g

SEQ ID No. 7: PCR primer C_H3CHIN

tgccaagctt gctgtagagg aagaaggagc cg

SEQ ID No. 8: PCR primer C_H3RHIN

tgccaagctt accgtgnnsn nsnnsaggtg gnnsnnsggg aacgtcttct catgctccg

SEQ ID No. 9: PCR primer C_H3RNOT

agttgcggcc gctttacccg gagacaggga gag

SEQ ID No. 10: Amino acid sequence of the engineered C_H3+3 domain

1 M A P R E P Q V Y T L P P S R D E L X X X Q V S L T C L V K

31 G F Y P S D I A V E W E S N G Q P E N N Y K T T P P V L D S

61 D G S F F L Y S K L T V X X X X X X R W X X G N V F S C S V

91 M H E A L H N H Y T Q K S L S L S P G K A A A

SEQ ID No. 11: Nucleotide sequence of the engineered C_H3+3 domain

1 ccatggcccc ccgagaacca caggtgtaca ccctgccccc atcccgtgac gagctcnnsn

61 nsnnscaagt cagcctgacc tgcctggtca aaggcttcta tcccagcgac atcgccgtgg

121 agtgggagag caatgggcag ccggagaaca actacaagac cacgcctccc gtgctggact

181 ccgacggctc cttcttcctc tacagcaagc ttaccgtgnn snnsnnsnns nnsnnsaggt

241 ggnnsnnsgg gaacgtcttc tcatgctccg tgatgcatga ggctctgcac aaccactaca

301 cacagaagag cctctccctg tctccgggta aagcggccgc a

SEQ ID No. 12: PCR primer C_H3RHIN3

1 tgccaagctt accgtgnnsn nsnnsnnsnn snnsaggtgg nnsnnsggga acgtcttctc

61 atgctccg

SEQ ID No. 13: Amino acid sequence of the engineered C_H3+5 domain

Fig. 8 continued

1 MAPREPQVYTLPPSRDELXXXQVSLTCLVK

31 GFYPSDIAVEWESNGQPENNYKTTPPVLDS

61 DGSFFLYSKLTVXXXXXXXXXRWXXGNVFSC

91 SVMHEALHNHYTQKSLSLSPGKAAA

SEQ ID No. 14: Nucleotide sequence of the engineered C_H3+5 domain

1 ccatggcccc ccgagaacca caggtgtaca ccctgccccc atcccgtgac gagctcnnsn

61 nsnnscaagt cagcctgacc tgcctggtca aaggcttcta tcccagcgac atcgccgtgg

121 agtgggagag caatgggcag ccggagaaca actacaagac cacgcctccc gtgctggact

181 ccgacggctc cttcttcctc tacagcaagc ttaccgtgnn snnsnnsnns nnsnnsnnsn

241 nsaggtggnn snnsgggaac gtcttctcat gctccgtgat gcatgaggct ctgcacaacc

301 actacacaca gaagagcctc tccctgtctc cgggtaaagc ggccgca

SEQ ID No. 15: PCR primer $C_H3RHIN5$

1 tgccaagctt accgtgnnsn nsnnsnnsnn snnsnnsnns aggtggnnsn nsgggaacgt

61 cttctcatgc tccg

SEQ ID No. 16: Amino acid sequence of anti-EpCAM clone D07

PREPQVYTLPPSRDELGWPQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKL

TVPKRWCVSVRWPPGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 17: Nucleotide sequence of anti-EpCAM clone D07

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGGCTGGCCGCAAGTCA

GCCTAACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG

GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT

ACAGCAAGCTTACCGTGCCCAAGCGGTGGTGCGTGAGCGTCAGGTGGCCCCCGGGGAACGTCTT

CTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTC

CGGGTAAA

SEQ ID No. 18: Amino acid sequence of anti-EpCAM clone C67

PREPQVYTLPPSRDELSVSQVSPTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKL
TVIPFCRMSPRWWIGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 19: Nucleotide sequence of anti-EpCAM clone C67

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCTCGGTGTCGCAAGTCA
GCCCGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCAGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTTACCGTGATCCCCTTCTGCAGGATGAGCCCCAGGTGGTGGATCGGGAACGTCTTC
TCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCC
GGGTAAA

SEQ ID No. 20: Amino acid sequence of anti-Fluorescein clone D64C3

PREPQVYTLPPSRDELEALQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLT
VRRNRWSWGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 21: Nucleotide sequence of anti-Fluorescein clone D64C3

CCTCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGAGGCGCTGCAAGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTTACCGTGCGGCGCAACAGGTGGTCCTGGGGGAACGTCTTCTCATGCTCCGTGATG
CATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 22: Amino acid sequence of anti-Lysozyme clone A68

PREPQVYTLPPSRDELQGSQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKL
TVKSRATRRWVVGNVFSCSVMHEALHNHYTQKNLSLSPGK

SEQ ID No. 23: Nucleotide sequence of anti-Lysozyme clone A68

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCCAGGGGAGCCAAGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT

ACAGCAAGCTTACCGTGAAGTCGCGCGCCACCCGGAGGTGGGTGGTGGGGAACGTCTTTTCTTG
CTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAACCTCTCCCTGTCTCCGGGTA
AA

SEQ ID No. 24: Amino acid sequence of anti-Lysozyme clone B23

PREPQVYTLPPSRDELAIGQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLT
VRSTRDNRWLVGNVFSCSVMHEALHNHYTQKSLSLSPG

SEQ ID No. 25: Nucleotide sequence of anti-Lysozyme clone B23

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGCGATCGGCCAAGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTTACCGTGCGCTCGACGAGGGACAACAGGTGGCTGGTGGGGAACGTCTTCTCATG
CTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTA
AA

SEQ ID No. 26: Amino acid sequence of anti-Lysozyme clone B40

PREPQVYTLPPSRDELSGAQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKL
TVWFRQEGGMRWFAGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 27: Nucleotide sequence of anti-Lysozyme clone B40

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCAGCGGGGCGCAAGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTTACCGTGTGGTTCAGGCAGGAGGGCGGCATGAGGTGGTTCGCGGGGAACGTCTT
CTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTC
CGGGTAAA

SEQ ID No. 28: Amino acid sequence of anti-Lysozyme clone C24

PREPQVYTLPPSRDELVLGQVSPTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYGKL
TVPPRLKGWPRWGWGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 29: Nucleotide sequence of anti-Lysozyme clone C24

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGTCTTGGGGCAAGTCA
GCCCGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACGGCAAGCTTACCGTGCCCCCGCGGTTGAAGGGCTGGCCGAGGTGGGGCTGGGGGAACGTCT
TCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTC
CGGGTAAA

SEQ ID No. 30: Amino acid sequence of anti-Lysozyme clone D46

PREPQVYTLPPSRDELLAYQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLT
VVAGRWTCGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 31: Nucleotide sequence of anti-Lysozyme clone D46

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCCTGGCGTACCAAGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTTACCGTGGTGGCCGGCAGGTGGACGTGCGGGAACGTCTTCTCATGCTCCGTGAT
GCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 32: Amino acid sequence of anti-Lysozyme clone D56

PREPQVYTLPPSRDELCVPQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKL
TVVLKVVQARRWEVGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 33: Nucleotide sequence of anti-Lysozyme clone D56

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCTGCGTCCCGCAAGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT

ACAGCAAGCTTACCGTGGTGCTCAAGGTCGTGCAGGCGCGCAGGTGGGAGGTGGGGAACGTCTT
CTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTC
CGGGTAAA

SEQ ID No. 34: Amino acid sequence of anti-TLR9 clone A23

PREPQVYTLPPSRDELGIAQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLT
VLGRRWTLGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 35: Nucleotide sequence of anti-TLR9 clone A23

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGGGACGAGCTCGGCATCGCGCAAGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAACGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCTTTCTTCCTCT
ACAGCAAGCTTACCGTGTTGGGCCGCAGGTGGACCCTGGGGAACGTCTTCTCATGCTCCGTGATG
CATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 36: Amino acid sequence of anti-TLR9 clone A33

PREPQVYTLPPSRDELGIAQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLT
VLGRRWTLGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 37: Nucleotide sequence of anti-TLR9 clone A33

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGGCATCGCGCAAGTCA
GCTTGACCTGCCTGGTCAAAGGCTTTTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAACGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTTACCGTGTTGGGCCGCAGGTGGACCCTGGGGAACGTCTTCTCATGCTCCGTGATG
CATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 38: Amino acid sequence of anti-TLR9 clone D2

PREPQVYTLPPSRDELLPCQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLT
VFCPRWLGGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 39: Nucleotide sequence of anti-TLR9 clone D2

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCTTGCCCTGCCAAGTCAG
CCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGG
CAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCTTTCTTCCTCTA
CAGCAAGCTTACCGTGTTCTGCCCCAGGTGGCTGGGGGGGAACGTCTTCTCATGCTCCGTGATGC
ATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 40: Amino acid sequence of anti-TLR9 clone D68

PREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLT
VPCMRWWGGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 41: Nucleotide sequence of anti-TLR9 clone D68

CCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTCA
GCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTTACCGTGCCCTGCATGAGGTGGTGGGGCGGGAACGTCTTCTCATGCTCCGTGATG
CATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 42: Amino acid sequence of bispecific CH3 domain, mutated on both sides, binding to lysozyme and to Erythropoietin, clone D72

RREPQVYTLPPSRDELVLGQVSLACLVKGFVVRLIAVEWESNGQPENNYKTTPPVLDSDGRQLADSFF
LYSKLTVPPRLKGWPRWGWGNVFSCSVMFLALHNHYTQKSLSLSPGK

SEQ ID No. 43: Nucleotide sequence of bispecific CH3 domain, mutated on both sides, binding to lysozyme and to Erythropoietin, clone D72

CGGCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGTCTTGGGGCAAGTCA
GCCTGGCCTGCCTCGTGAAAGGCTTCGTGGTCCGGTTGATCGCCGTGGAGTGGGAGAGCAATGG
GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTTCTAGACTCCGACGGCCGGCAGTTGGCG
GACTCCTTCTTCCTCTACAGCAAGCTTACCGTGCCCCCGCGGTTGAAGGGCTGGCCGAGGTGGG
GCTGGGGGAACGTCTTCTCATGCAGTGTGATGTTCCTGGCGCTGCACAACCACTACACACAGAAG
AGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 44: Amino acid sequence of bivalent Fab-like construct, consisting of VH and VL from anti-HIV1-gp41 antibody 3D6 and anti-Lysozyome clone C24 (3D6-VH – C24)

EVQLVESGGGLVQPGRSLRLSCAASGFTFNDYAMHWVRQAPGKGLEWVSGISWDSSSIGYADSVKG
RFTISRDNAKNSLYLQMNSLRAEDMALYYCVKGRDYYDSGGYFTVAFDIWGQGTMVTVSSASTKGPQ
VYTLPPSRDELVLGQVSPTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYGKLTVPPRL
KGWPRWGWGNVFSCSVMHEALHNHYTQKSLSLSPGK

SEQ ID No. 45: Nucleotide sequence of bivalent Fab-like construct, consisting of VH and VL from anti-HIV1-gp41 antibody 3D6 and anti-Lysozyome clone C24 (3D6-VH – C24)

GAAGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGACTCTCCT
GTGCAGCCTCTGGATTCACCTTTAATGATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAG
GGCCTGGAGTGGGTCTCAGGTATAAGTTGGGATAGTAGTAGTATAGGCTATGCGGACTCTGTGAA
GGGCCGATTCACCATCTCCAGAGACAACGCCAAGAACTCCCTGTATCTGCAAATGAACAGTCTGA
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TCACGGTTGCTTTTGATATCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAGCCTCCACCAAG
GGCCCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGTCTTGGGGCAAGTCAGCCCGA
CCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGGCAGCC
GGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCTACGGCA
AGCTTACCGTGCCCCCGCGGTTGAAGGGCTGGCCGAGGTGGGGCTGGGGGAACGTCTTCTCATG
CTCCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTA
AA

SEQ ID No. 46: Amino acid sequence of bivalent Fab-like construct, consisting of VH and VL from anti-HIV1-gp41 antibody 3D6 and anti-Lysozyome clone C24 (3D6-VL – C24)

DIQMTQSPSTLSASVGDRVTITCRASQSISRWLAWYQQKPGKVPKLLIYKASSLESGVPSRFSGSGSGT
EFTLTISSLQPDDFATYYCQQYNSYSFGPGTKVDIKRTVAEPQVYTLPPSRDELVLGQVSPTCLVKGFY
PSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYGKLTVPPRLKGWPRWGWGNVFSCSVMHEALHN
HYTQKSLSLSPGK

SEQ ID No. 47: Nucleotide sequence of bivalent Fab-like construct, consisting of VH and VL from anti-HIV1-gp41 antibody 3D6 and anti-Lysozyome clone C24 (3D6-VL – C24)

GACATCCAGATGACCCAGTCTCCTTCCACCCTGTCTGCATCTGTAGGAGACAGAGTCACCATCACT
TGCCGGGCCAGTCAGAGTATTAGTAGGTGGTTGGCCTGGTATCAGCAGAAACCAGGGAAAGTCCC
TAAGCTCCTGATCTATAAGGCATCTAGTTTAGAAAGTGGGGTCCCATCAAGGTTCAGCGGCAGTGG
ATCTGGGACAGAATTCACTCTCACCATCAGCAGCCTGCAGCCTGATGATTTTGCAACTTATTACTG
CCAACAGTATAATAGTTATTCTTTCGGCCCTGGGACCAAAGTGGATATCAAACGAACTGTGGCTGA
ACCACAGGTGTACACCCTGCCCCCATCCCGTGACGAGCTCGTCTTGGGGCAAGTCAGCCCGACC
TGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGGCAGCCGG
AGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCTACGGCAAG
CTTACCGTGCCCCCGCGGTTGAAGGGCTGGCCGAGGTGGGGCTGGGGGAACGTCTTCTCATGCT
CCGTGATGCATGAGGCTCTGCACAACCACTACACACAGAAGAGCCTCTCCCTGTCTCCGGGTAAA

SEQ ID No. 48: Amino acid sequence of CL Library

1 MKYLLPTAAAGLLLLAAQPAMAVAAPSVFIFPPSXXQXXXXXASVVCLLN

51 NFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLXXXXYE

101 KHKVYACEVTHQGLSSPVTKSFNRGEAAA

SEQ ID No. 49: Nucleotide sequence of CL Library

1 ATGAAATACCTATTGCCTACGGCAGCCGCTGGATTGTTATTACTCGCGGC

51 CCAGCCGGCCATGGCCGTGGCTGCACCATCTGTCTTCATCTTCCCGCCAT

101 CTNNSNNSCAGNNSNNSNNSNNSNNSGCCTCTGTTGTGTGCCTGCTGAAT

151 AACTTCTATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCT

201 CCAATCGGGTAACTCCCAGGAGAGTGTCACAGAGCAGGACAGCAAGGACA

251 GCACCTACAGCCTCAGCAGCACCCTGACGTTGNNSNNSNNSNNSTACGAG

301 AAACACAAAGTCTACGCCTGCGAAGTCACCCATCAGGGCCTGAGCTCGCC

351 CGTCACAAAGAGCTTCAACAGGGGAGAGGCGGCCGCA

SEQ ID No. 50: Amino acid sequence of CL+3 Library

1 MKYLLPTAAAGLLLLAAQPAMAVAAPSVFIFPPSXXQXXXXXASVVCLLN

51 NFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLXXXXXX

101 XYEKHKVYACEVTHQGLSSPVTKSFNRGEAAA

SEQ ID No. 51: Nucleotide sequence of CL+3 Library

1 ATGAAATACCTATTGCCTACGGCAGCCGCTGGATTGTTATTACTCGCGGC

51 CCAGCCGGCCATGGCCGTGGCTGCACCATCTGTCTTCATCTTCCCGCCAT

101 CTNNSNNSCAGNNSNNSNNSNNSNNSGCCTCTGTTGTGTGCCTGCTGAAT

151 AACTTCTATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCT

201 CCAATCGGGTAACTCCCAGGAGAGTGTCACAGAGCAGGACAGCAAGGACA

251 GCACCTACAGCCTCAGCAGCACCCTGACGTTGNNSNNSNNSNNSNNSNNS

301 NNSTACGAGAAACACAAAGTCTACGCCTGCGAAGTCACCCATCAGGGCCT

351 GAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGGCGGCCGCA

SEQ ID No. 52: Amino acid sequence of CL+5 Library

1 MKYLLPTAAAGLLLLAAQPAMAVAAPSVFIFPPSXXQXXXXXASVVCLLN

51 NFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLXXXXXX

101 XXXYEKHKVYACEVTHQGLSSPVTKSFNRGEAAA

SEQ ID No. 53: Nucleotide sequence of CL+5 Library

1 ATGAAATACCTATTGCCTACGGCAGCCGCTGGATTGTTATTACTCGCGGC

51 CCAGCCGGCCATGGCCGTGGCTGCACCATCTGTCTTCATCTTCCCGCCAT

101 CTNNSNNSCAGNNSNNSNNSNNSNNSGCCTCTGTTGTGTGCCTGCTGAAT

151 AACTTCTATCCCAGAGAGGCCAAAGTACAGTGGAAGGTGGATAACGCCCT

Fig. 8 continued

201 CCAATCGGGTAACTCCCAGGAGAGTGTCACAGAGCAGGACAGCAAGGACA

251 GCACCTACAGCCTCAGCAGCACCCTGACGTTGNNSNNSNNSNNSNNSNNS

301 NNSNNSNNSTACGAGAAACACAAAGTCTACGCCTGCGAAGTCACCCATCA

351 GGGCCTGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGGCGGCCG

401 CA

SEQ ID No. 54: Amino acid sequence of CH Library

1 MKYLLPTAAAGLLLLAAQPAMAASTKGPSVFPLAPSSXXXXXXXXALGCL

51 VKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPXXXXXX

101 XTYICNVNHKPSNTKVDKKVEPKSAAA

SEQ ID No. 55: Nucleotide sequence of CH Library

1 ATGAAATACCTATTGCCTACGGCAGCCGCTGGATTGTTATTACTCGCGGC

51 CCAGCCGGCCATGGCCGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTGG

101 CACCCTCCTCCNNSNNSNNSNNSNNSNNSNNSNNSGCCCTGGGCTGCCTG

151 GTCAAGGACTACTTCCCCGAACCGGTGACGGTGTCGTGGAACTCAGGCGC

201 CCTGACCAGCGGCGTGCACACCTTCCCGGCTGTCCTACAGTCCTCAGGAC

251 TCTACTCCCTCAGCAGCGTGGTGACCGTGCCCNNSNNSNNSNNSNNSNNS

301 NNSACCTACATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGA

351 CAAGAAAGTTGAGCCCAAATCTGCGGCCGCA