Fig. 1

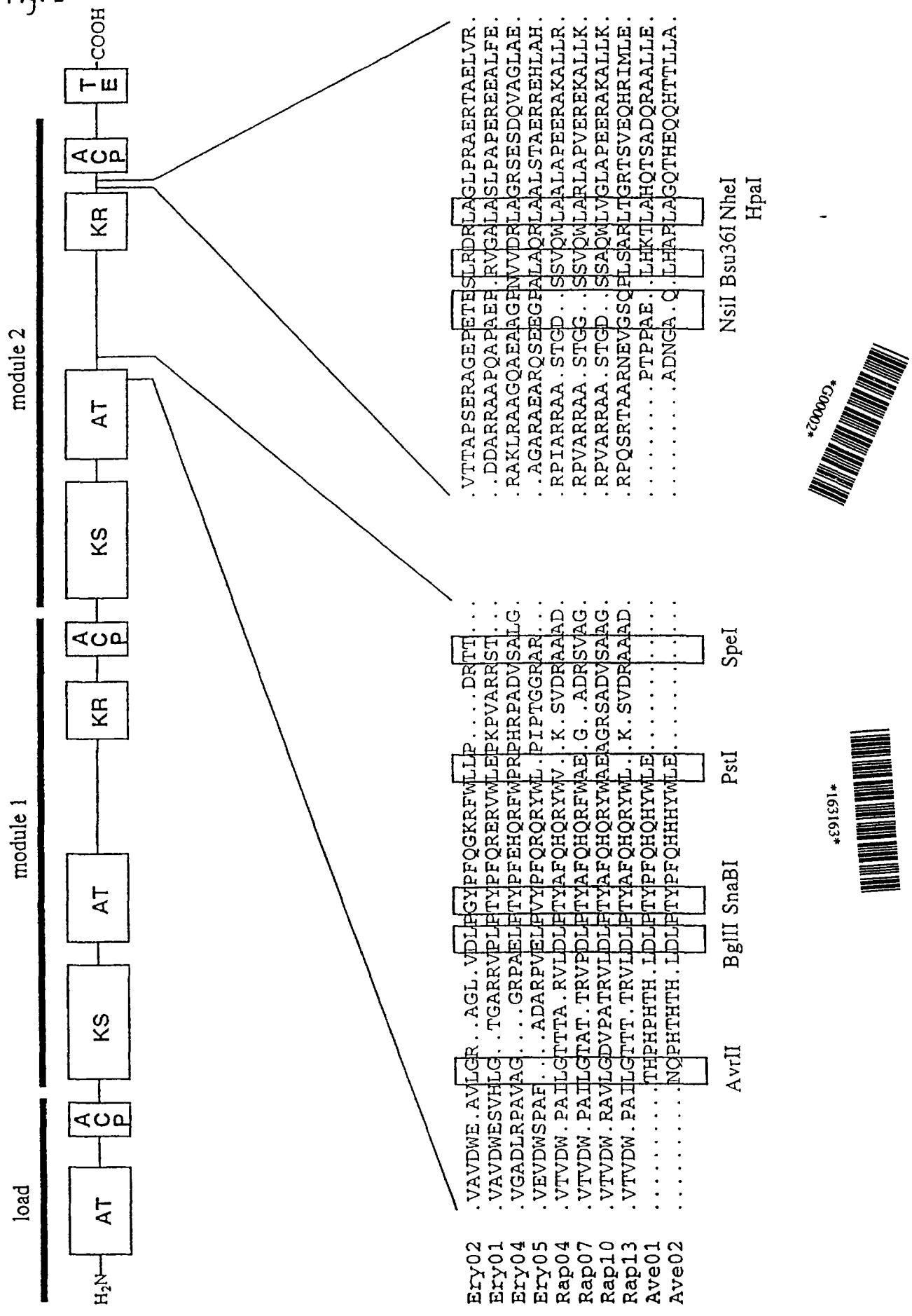

load
module 1
module 2
H2N
AT
ACP
KS
AT
KR
ACP
KS
AT
KR
ACP
TE
COOH
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Ery01 .VAVDWESVHLG..TGARRVPLFTYPFQRERVWLEPKPVARRST...
Ery04 .VGADLRPAVAG....GRPAELFTYPFEHQRFWPRPHRPADVSALG.
Ery05 .VEVDWSPAF.....ADARPVELFTYPFQRQRYWL..PIPTGGRAR...
Rap04 .VTVDW.PAILGTTTA.RVLDLFTYAFQHQRYWV..K.SVDRAAAD.
Rap07 .VTVDW.PAILGTAT.TRVPDLFTYAFQHQRFWAE.G..ADRSVAG.
Rap10 .VTVDW.RAVLGDVPATRVLDLFTYAFQHQRYWAEAGRSADVSAAG.
Rap13 .VTVDW.PAILGTTT.TRVLDLFTYAFQHQRYWL..K.SVDRAAAD.
Ave01 ..........THPHPHTH.LDLFTYPFQHQHYWLE..........
Ave02 ..........NQPHTHTH.LDLFTYPFQHHHYWLE..........
AvrII BglII SnaBI PstI SpeI
.VTTAPSERAGEPETESLRDRLAGLPRAERTAELVR.
..DDARRAAPQAPAEERVGALASLPAPEREEALFE.
.RAKLRAAGQAEAAGRMVVDRLAGRSESDQVAGLAE.
..AGARAEARQSEEGPALAQRLAALSTAERREHLAH.
.RPIARRAA.STGD..SSVQWLAALAPEERAKALLR.
.RPVARRAA.STGG..SSVQWLARLAPVEREKALLK.
.RPVARRAA.STGD..SSAQWLVGLAPEERAKALLK.
.RPQSRTAARNEVGSQPLSARLTGRTSVEQHRIMLE.
..........PTPPAE..LHKTLAHQTSADQRAALLE.
..........ADNGA.Q.LHAPLAGQTHEQQHTTLLA.
NsiI Bsu36I NheI
HpaI

Fig. 2

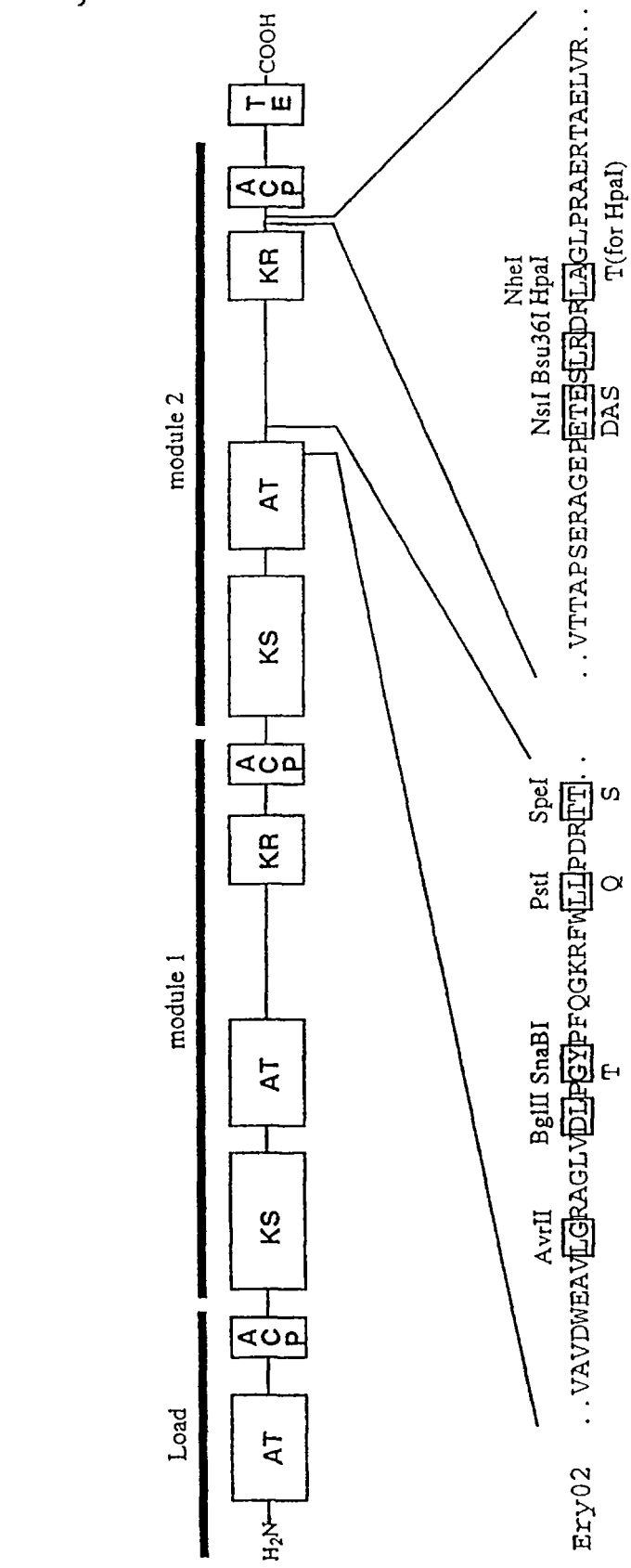

Load
module 1
module 2
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ACP
KS
AT
KR
ACP
KS
AT
KR
ACP
TE
COOH
H2N
Ery02
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..VTTAPSERAGEPETESLRDRLAGLPRAERTAELVR..
AvrII
BglII SnaBI
PstI
SpeI
NheI
NsiI Bsu36I HpaI
T
Q
S
DAS
T(for HpaI)

Fig. 3

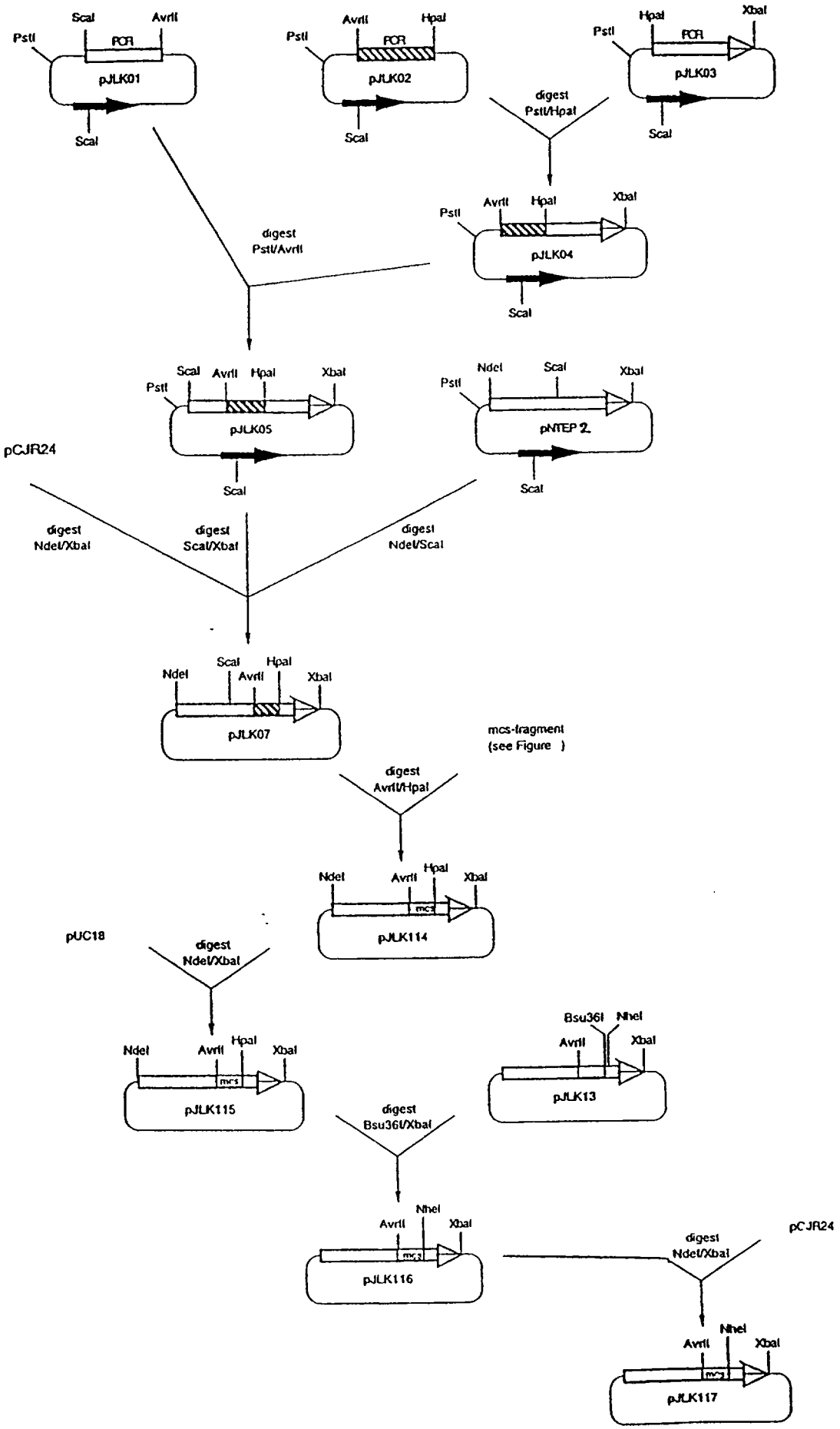

ScaI
AvrII
PstI
PCR
pJLK01
ScaI
AvrII
HpaI
PstI
PCR
pJLK02
ScaI
HpaI
XbaI
PstI
PCR
pJLK03
ScaI
digest
PstI/HpaI
digest
PstI/AvrII
AvrII
HpaI
XbaI
PstI
pJLK04
ScaI
ScaI
AvrII
HpaI
XbaI
PstI
pJLK05
ScaI
NdeI
ScaI
XbaI
PstI
pNTEP 2
ScaI
pCJR24
digest
NdeI/XbaI
digest
ScaI/XbaI
digest
NdeI/ScaI
NdeI
ScaI
AvrII
HpaI
XbaI
pJLK07
mcs-fragment
(see Figure)
digest
AvrII/HpaI
NdeI
AvrII
HpaI
XbaI
mcs
pJLK114
pUC18
digest
NdeI/XbaI
NdeI
AvrII
HpaI
XbaI
mcs
pJLK115
Bsu36I
NheI
AvrII
XbaI
pJLK13
digest
Bsu36I/XbaI
NheI
AvrII
XbaI
mcs
pJLK116
pCJR24
digest
NdeI/XbaI
NheI
AvrII
XbaI
mcs
pJLK117

Fig.4

forward (Plf):

5'-CTA GGC CGG GCC GGA CTG GTA GAT CTG CCT ACG TAT CCT TTC CAG
GGC AAG CGG TTC TGG CTG CAG CCG GAC CGC ACT AGT CCT CGT GAC GAG
GGA GAT GCA TCG AGC CTG AGG GAC CGG TT-3'

backward (Plb):

5'-AAC CGG TCC CTC AGG CTC GAT GCA TCT CCC TCG TCA CGA GGA CTA GTG
CGG TCC GGC TGC AGC CAG AAC CGC TTG CCC TGG AAA GGA TAC GTA
GGC AGA TCT ACC AGT CCG GCC CGG C-3'

oligos annealed:

```
CTAGGCCGGGCCGGACTGGTAGATCTGCCTACGTATCCTTTCCAGGGCAAGCGGTTCTGGCTGCAG...
    CGGCCCGGCCTGACCATCTAGACGGATGCATAGGAAAGGTCCCGTTCGCCAAGACCGACGTC...
-----                -------   -------                              -------
AvrII                BglII     SnaBI                                PstI

...CCGGACCGCACTAGTCCTCGTGACGAGGGAGATGCATCGAGCCTGAGGGACCGGTT
...GGCCTGGCGTGATCAGGAGCACTGCTCCCTCTACGTAGCTCGGACTCCCTGGCCAA
          ------                 -------   --------    ---
          SpeI                   NsiI      Bsu36I      HpaI
```

Fig. 5a

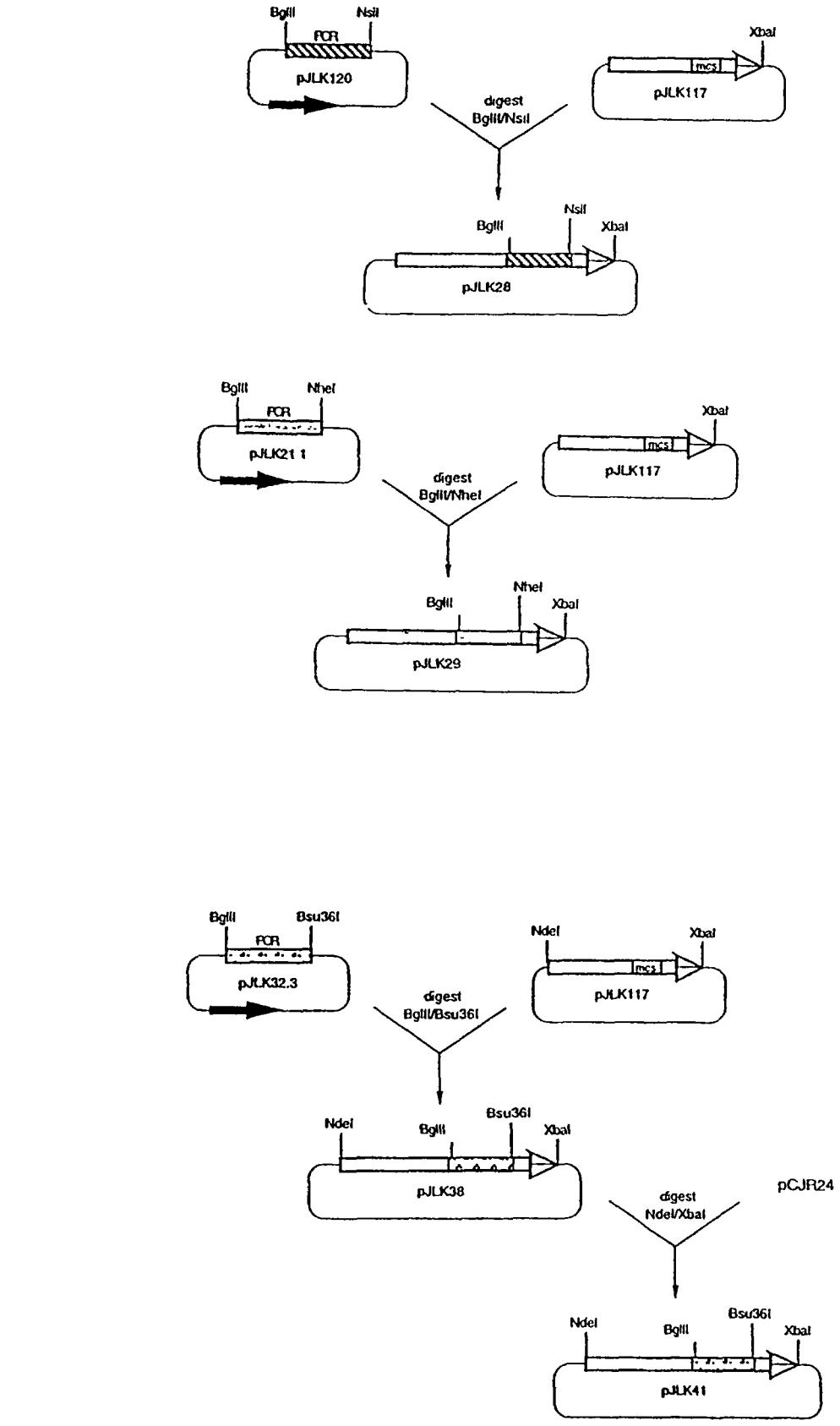
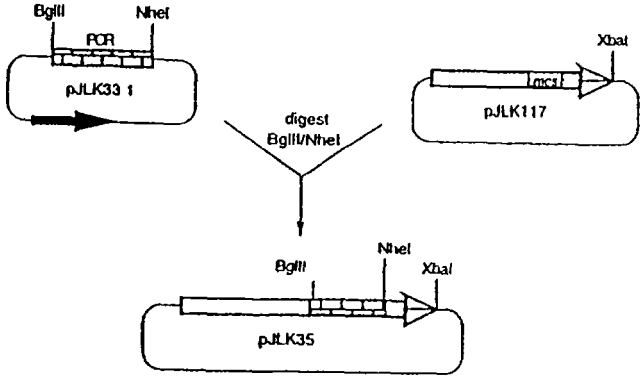

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pJLK120
digest
BglII/NsiI
XbaI
mcs
pJLK117
NsiI
BglII
XbaI
pJLK28
BglII
NheI
PCR
pJLK21 1
digest
BglII/NheI
XbaI
mcs
pJLK117
NheI
BglII
XbaI
pJLK29
BglII
Bsu36I
PCR
pJLK32.3
digest
BglII/Bsu36I
NdeI
XbaI
mcs
pJLK117
NdeI
BglII
Bsu36I
XbaI
pJLK38
pCJR24
digest
NdeI/XbaI
NdeI
BglII
Bsu36I
XbaI
pJLK41

Fig. 5b


BglII
NheI
PCR
pJLK33 1
digest
BglII/NheI
XbaI
mcs
pJLK117
BglII
NheI
XbaI
pJLK35

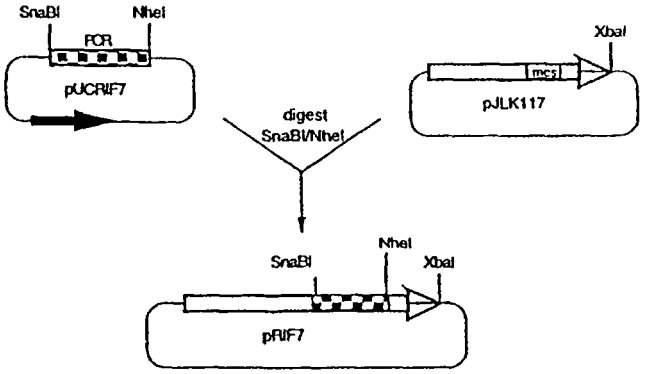

SnaBI
NheI
PCR
pUCRIF7
digest
SnaBI/NheI
XbaI
mcs
pJLK117
SnaBI
NheI
XbaI
pRIF7

Fig. 6

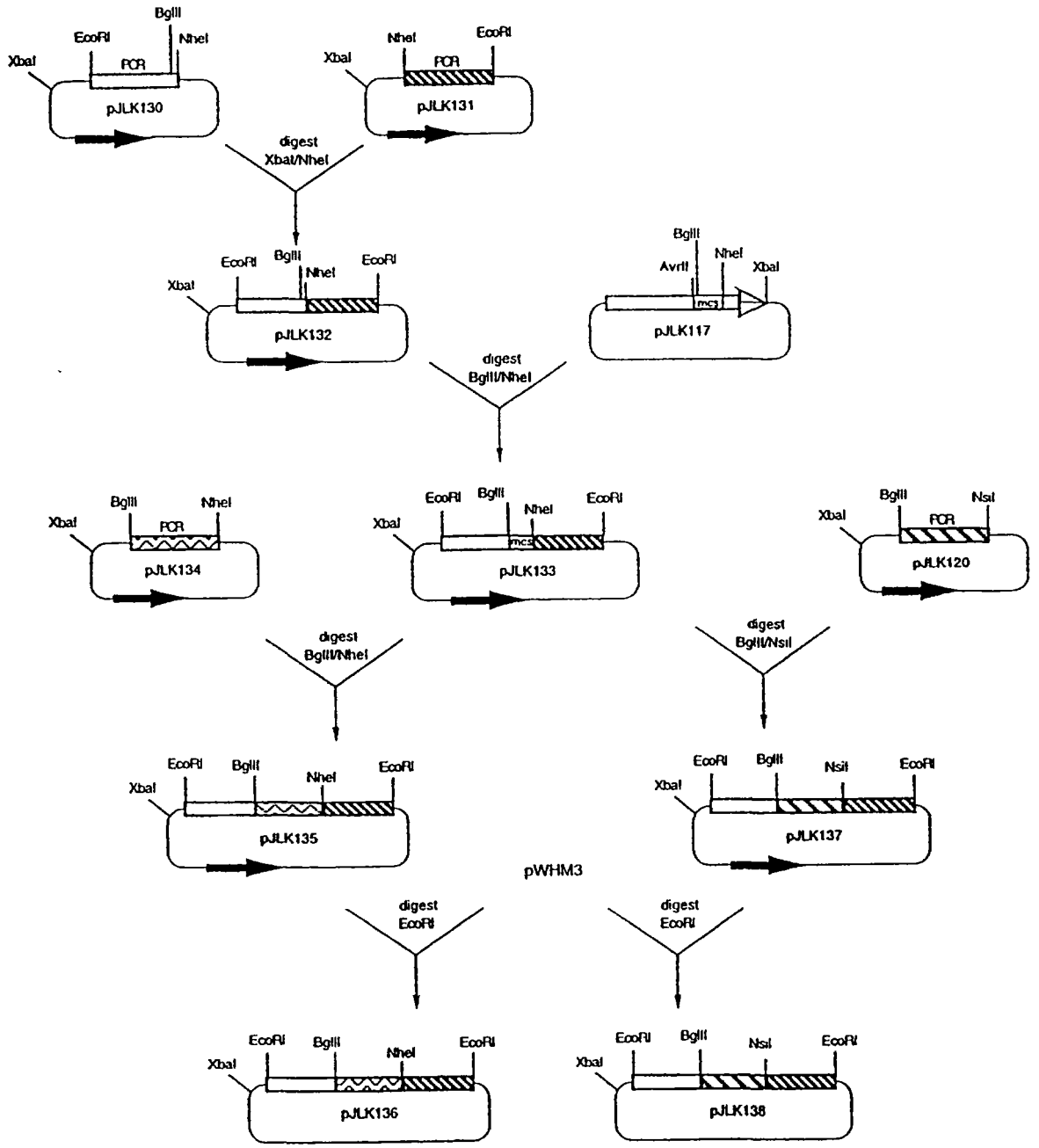

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EcoRI
NheI
XbaI
PCR
pJLK130
pJLK131
digest
XbaI/NheI
pJLK132
AvrII
mcs
pJLK117
digest
BglII/NheI
pJLK134
pJLK133
pJLK120
NsiI
digest
BglII/NheI
digest
BglII/NsiI
pJLK135
pJLK137
pWHM3
digest
EcoRI
pJLK136
pJLK138

Fig. 7a

```
   1  CCCGGGCGAT CTCCCGGATC ACCTGTGCGG GGCTGGGCAT GTGCAGGAGA
  51  CACTCCAGGG CCCACGCCGC GTCGAAGGAC CCGTCGGGAA ACGGCAGTTC
 101  CATCGCGTCG GCACGGGTGA ACACGACCCG GTCCGCCACG TGCGACTGCT
 151  TCGCGAGAGC GGTCGCCAGC CCGACCTGAA CCTCGCTCAC CGTCACGCCG
 201  ACGACATCGA CGGGCGCGCT CAGGGCGAGC CGCACCGCCG GCTTTCCGGA
 251  ACCGCAGCCG ACGTCCAGGA CCCGGCGGCC CGTGATGCCT CTCAGCTTGC
 301  CGATGAGGAG ATCGGTGAGC CGGTCGGCGG CCTTGCCCGG TGAACTGCCG
 351  TCCCCCGGCT GCGGCCAGTA TCCGAGGTGG GTGTTCCCAC CCAGCGCACG
 401  ATTCATGAGG TCGGTCAAAC GGTCGTAGTA GTCCCCCACT TCCAGGGAAG
 451  AGGGCGGGGT CTGCTCCGGG ACGGCCATCA TGGTCGGGAA CCTCCGCAAT
 501  CCGGGCCGGG CGGCCCAGCT GTCGTGGCGA TCTACTCCAG GAAACGTCGA
 551  CCTTTTTCTG CCACTTGTCC GAGCTATGCA GACACCCCGA TCCCCTAAGA
 601  AATGAACACC CTTGGGAACG GCACAGCCCA GGGGTGGATA GGGGTATTCG
 651  CCGCCGCCGC GCCGTCATTA GCTTTGAAGA GTTGAAGACG TTCAAGACAT
 701  TGATGCCCGG CCGTCAGCGG ATTTCTCGCG CTCCTTTCAT TCTTCGACGC
 751  TGCATTGCAG CTCTCATCAT GTCCGCACGG CCGCCGAGCA TTGCCTAGCG
 801  GTGAGGACAC AGCTCAGGTG CAGAGGATGG ACGGCGGGGA AGAACCCCGC
 851  CCTGCGGCAG GGGAGGTCCT CGGAGTGGCC GACGAGGCGG ACGGCGGCGT
 901  CGTCTTCGTT TTTCCCGGGC AGGGCCCGCA ATGGCCGGGC ATGGGAAGGG
 951  AACTTCTCGA CGCTTCCGAC GTCTTCCGGG AGAGCGTCCG CGCCTGCGAA
1001  GCCGCGTTCG CGCCCTACGT CGACTGGTCG GTGGAGCAGG TGTTGCGGGA
1051  CTCGCCGGAC GCTCCCGGGC TGGACCGGGT GGACGTCGTC CAGCCGACCC
1101  TGTTCGCCGT CATGATCTCC CTGGCCGCCC TCTGGCGCTC GCAAGGGGTC
1151  GAGCCGTGCG CGGTGCTGGG ACACAGCCTG GGCGAGATCG CGGCAGCCCA
1201  CGTCTCGGGA GGCCTGTCCC TGGCCGACGC CGCACGCGTG GTGACGCTTT
1251  GGAGCCAGGC ACAGACCACC CTTGCCGGGA CCGGCGCGCT CGTCTCCGTC
1301  GCCGCCACGC CGGATGAGCT CCTGCCCCGA ATCGCTCCGT GGACCGAGGA
1351  CAACCCGGCG CGGCTCGCCG TCGCAGCCGT CAACGGACCC CGGAGCACAG
1401  TCGTTTCCGG TGCCCGCGAG GCCGTCGCGG ACCTGGTGGC CGACCTCACC
1451  GCCGCGCAGG TGCGCACGCG CATGATCCCG GTGGACGTTC CCGCCCACTC
1501  CCCCCTGATG TACGCCATCG AGGAACGGGT CGTCAGCGGC CTGCTGCCCA
1551  TCACCCCACG CCCCTCCCGC ATCCCCTTCC ACTCCTCGGT GACCGGCGGC
1601  CGCCTCGACA CCCGCGAGCT AGACGCGGCG TACTGGTACC GCAACATGTC
1651  GAGCACGGTC CGGTTCGAGC CCGCCGCCCG GCTGCTTCTG CAGCAGGGGC
1701  CCAAGACGTT CGTCGAGATG AGCCCGCACC CGGTGCTGAC CATGGGCCTC
1751  CAGGAGCTCG CCGCGGACCT GGGCGACACC ACCGGCACCG CCGACACCGT
1801  GATCATGGGC ACGCTGCGCC GCGGCCAGGG CACCCTGGAC CACTTCCTGA
1851  CGTCTCTCGC CCAACTACGG GGGCATGGTG AGACGTCGGC GACCACCGTC
1901  CTCTCGGCAC GCCTGACCGC GCTGTCCCCC ACGCAGCAGC AGTCGCTGCT
1951  CCTGGACCTG GTGCGCGCCC ACACCATGGC GGTGCTGAAC GACGACGGAA
2001  ACGAGCGCAC CGCGTCGGAT GCCGGCCCAT CGGCGAGTTT CGCCCACCTC
2051  GGCTTCGACT CCGTCATGGG TGTCGAACTG CGCAACCGCC TCAGCAAGGC
2101  CACGGGCCTG CGGTTGCCCG TGACGCTCAT CTTCGACCAC ACCACGCCGG
2151  CCGCGGTCGC CGCGCGCCTT CGGACCGCGG CGCTCGGCCA CCTCGACGAG
2201  GACACCGCGC CCGTACCGGA CTCACCCAGC GGCCACGGAG GCACGGCAGC
2251  GGCGGACGAC CCGATCGCCA TCATCGGCAT GGCATGCCGT TTCCCGGGCG
```

Fig. 7b

```
2301  GAGTCCGGTC CCCGAAGGAC CTGTGGGAGC TGCCCGCCTC GGGCGGAGAC
2351  GCCATCGGGC CGTTCCCCAC CGACCGCGGA TGGCCCACGG AACAGCGTCA
2401  CGCCCAGGAC CCCACGCAGC CCGGCACGTT CTATCCGCAG GGAGGCGGGT
2451  TCCTTCACGA CGCGGCGCAC TTCGACGCCG GCTTCTTCGG AATCAGTCCA
2501  CGTGAGGCAC TGGCGATGGA TCCGCAGCAG CGGCTGCTGC TGGAGACGTC
2551  CTGGGAGGCG TTCGAGCGGG CGGGAATCGA TCCGCTGTCG GTACGCGGGT
2601  CCCGTACGGG CGTCTTCGCG GGCGCCCTCT CCTTCGACTA CGGCCCGCGT
2651  ATGGACACCG CGTCGTCGGA GGGCGCCGCG GACGTGGAGG GCCACATCCT
2701  CACCGGTACC ACGGGCAGCG TCCTGTCGGG CCGTATCGCC TACAGCTTCG
2751  GGCTGGAAGG GCCGGCGATC ACCGTGGACA CGGGGTGCTC GGCATCGCTC
2801  GTGACGCTGC ATCTGGCGTG CCAGTCGCTG CGGTCGGGTG AGTGCACGCT
2851  CGCGCTGGCC GGCGGCGTCT CGGTCATGTC CACCCTCGGC ATGTTCATCG
2901  AGTTCTCCCG GCAGCGCGGG CTGTCGGTGG ACGGCAGGTG CAAGGCGTAC
2951  TCGGCTGCAG CCGACGGCAC CGGCTGGGGC GAGGGCGTCG GGATGCTGTT
3001  GGTGGAGCGG TTGTCGGATG CGGTGCGGCT GGGGCATCGG GTGCTGGCGG
3051  TGGTACGCGG CAGTGCGGTC AACCAGGACG GTGCGTCGAA TGGGCTGACG
3101  GCGCCGAACG GTCCGGCTCA GGAGCGGGTG ATCCGGCAGG CGTTGGCGAA
3151  CGCGGGGTTG TCCGTGGCGG ATGTGGATGT GGTGGAGGGG CACGGGACGG
3201  GCACGACGCT GGGTGATCCG ATCGAGGCAC AGGCGTTGCT CGCCACGTAC
3251  GGGCAGCGGG CCGGTGACAG GCCGCTGTGG CTGGGGTCTC TGAAGTCCAA
3301  CATCGGGCAC ACCATGGCTG CCGCGGGTGT GGGTGGGGTC ATCAAGATGG
3351  TGATGGCGTT GCGGGAGGGG GTGTTGCCGC GGACGTTGCA TGTGGATGAG
3401  CCGTCGCCGC AGGTGGACTG GTCCGCGGGG GCGGTGCGGC TGCTGACGGA
3451  GGCGGTGCCG TGGCCGGGGG ACGCGGCAGG GCGGTTGCGG CGGGCGGGAG
3501  TGTCGTCGTT CGGGATCGGC GGCACGAATG CGCATGTGAT TTTGGAGGAG
3551  GCGCCGGCGG CGGGGGGCTG TGTTGCCGGG GGTGGGGTGT TGGAGGGTGC
3601  TCCGGGTCTT GCCATTTCGG TGGCTGAGTC GGTGGCCGCT CCAGTGGCTG
3651  TGTCTGCGCC GGTGGCTGAG TCGGTGCCGG TGCCGGTGCC GGTGCCGGTT
3701  CCTGTGCCGG TGTCGGCTAG GTCTGAGGCT GGGTTGCGGG CGCAGGCGGA
3751  GGCGTTGCGT CAGTACGTGG CAGTCCGGCC GGACGTTTCG CTTGCCGATG
3801  TGGGTGCGGG TCTGGCCTGT GGGCGGGCTG TGCTGGAGCA TCGTGCGGTC
3851  GTCCTGGCCG CGGACCGTGA GGAGCTGGTG CAAGGGTTGG GGGCGCTGGC
3901  GGCGGGTGAG CCGGATCGGC GGGTGACCAC GGGTCATGCG CCGGGTGGTG
3951  ACCGGGGCGG TGTCGTCTTC GTGTTTCCCG GACAGGGTGG GCAGTGGGCC
4001  GGGATGGGTG TGCGTCTGCT CGCCTCCTCT CCGGTGTTCG CCCGGCGGAT
4051  GCAGGCGTGC GAGGAGGCTC TGGCGCCGTG GGTGGACTGG TCTGTGGTGG
4101  ACATCCTGCG CCGGGACGCG GGGGATGCGG TGTGGGAGCG GGCCGATGTG
4151  GTCCAGCCTG TGCTGTTCAG CGTCATGGTG TCTTTGGCTG CTCTGTGGCG
4201  TTCCTACGGT ATCGAACCCG ACGCGGTCCT TGGCCATTCC CAGGGCGAGA
4251  TCGCGGCCGC GCATGTGTGT GGGGCGCTGA GCCTGAAGGA CGCGGCGAAG
4301  ACTGTTGCGC TGCGCAGCCG GGCGCTGGCC GCTGTGCGGG GCCGGGGCGG
4351  CATGGCCTCA GTGCCGCTGC CTGCCCAGGA GGTGGAGCAG CTCATTGGTG
4401  AGCGGTGGGC GGGGCGGTTG TGGGTGGCGG CGGTCAACGG CCCCCGCTCC
4451  ACCGCCGTCT CGGGGGATGC CGAGGCGGTG GACGAGGTGC TGGCGTACTG
4501  TGCCGGCACC GGGGTGCGGG CCCGGCGGAT CCCGGTCGAC TATGCCTCGC
4551  ACTGCCCCCA TGTGCAGCCC CTGCGGGAGG AGTTGCTGGA GCTGCTGGGG
```

Fig. 7c

```
4601  GACATCAGCC CGCAGCCGTC CGGCGTGCCG TTCTTCTCCA CGGTGGAGGG
4651  CACCTGGCTG GACACCACAA CCCTGGACGC CGCCTACTGG TACCGCAACC
4701  TGCACCAGCC GGTCCGTTTC AGCGATGCCG TCCAGGCCCT GGCGGATGAC
4751  GGACACCGCG TCTTCGTCGA AGTCAGCCCC CACCCCACCC TCGTCCCCGC
4801  CATCGAAGAC ACCACCGAAG ACACCGCCGA AGACGTCACC GCGATCGGCA
4851  GCCTCCGCCG CGGCGACAAC GACACCCGCC GCTTCCTCAC CGCCCTCGCC
4901  CACACCCATA CCACCGGCAT CGGCACACCC ACCACCTGGC ACCACCACTA
4951  CACCCACCAC CACACCCACC CCCACCCCCA CACGCACCTC GACCTGCCCA
5001  CCTACCCCTT CCAACACCAG CACTACTGGC TCGAGAGCTC ACAGCCGGGT
5051  GCCGGATCCG GTTCGGGTGC CGGTGCCGGT TCGGGTGCCG GTTCCGGGCG
5101  GGCAGGGACT GCGGGCGGGA CGGCAGAGGT GGAGTCGCGG TTCTGGGACG
5151  CGGTGGCCCG CCAGGACCTG GAAACGGTCG CGACCACACT CGCCGTGCCC
5201  CCCTCCGCCG GCCTGGACAC GGTGGTGCCC GCACTCTCCG CCTGGCACCG
5251  CCACCAACAC GACCAAGCCC GCATCAACAC CTGGACCTAC CAGGAAACCT
5301  GGAAACCCCT CACCCTCCCC ACCACCCACC AACCCCACCA AACCTGGCTC
5351  ATCGCCATCC CCGAAACCCA GACCCACCAC CCCCACATCA CCAACATCCT
5401  CACCAACCTC CACCACCACG GCATCACCCC CATCCCCCTC ACCCTCAACC
5451  ACACCCACAC CAACCCCCAA CACCTCCACC ACACCCTCCA CCACACCCGA
5501  CAACAAGCCC AAAACCACAC CACCGGAGCC ATCACCGGCC TGCTCTCCCT
5551  CCTCGCCCTC GACGAAACAC CCCACCCCCA CCACCCCCAC ACACCCACCG
5601  GCACCCTCCT CAACCTCACC CTCACCCAAA CCCACACCCA AACCCACCCA
5651  CCAACCCCCC TCTGGTACGC CACCACCAAC GCCACCACCA CCCACCCCAA
5701  CGACCCCCTC ACACACCCCA CCCAAGCCCA AACCTGGGGA CTCGCCCGCA
5751  CCACCCTCCT CGAACACCCC ACCCACACCG CCGGAATCAT CGACCTCCCC
5801  ACCACCCCCA CCCCCCACAC CCTCCACCAC CTCACCCAAA CCCTCACCCA
5851  ACCCCACCAC CAAACCCAAC TCGCCATCCG CACCACCGGC ACCCACACCC
5901  GCCGCCTCAC CCCCACCACC CTCACCCCCA CACACCAACC ACCCACCCCC
5951  ACCCCCCACG GAACCACCCT CATCACCGGC GGAACCGGCG CCCTCGCCAC
6001  CCACCTCACC CACCACCTCA CCACCCACCA ACCCACCCAA CACCTCCTCC
6051  TCACCAGCCG AACCGGCCCC CACACCCCCC ACGCACAACA CCTCACCACC
6101  CAACTCCAAC AAAAAGGCAT CCACCTCACC ATCACCACCT GCGACACCAG
6151  CAACCCAGAC CAACTCCAAC ATCTCCTCAA CACCATCCCC CCACAACACC
6201  CCCTCACCAC CGTCATCCAC ACCGCAGGCA TCCTCGACGA CGCCACCCTC
6251  ACCAACCTCA CCCCCACCCA ACTCAACAAC GTCCTCCGCG CCAAAGCCCA
6301  CAGCGCCCAC CTCCTCCACC AACTCACCCA ACACACCCCC CTCACCGCCT
6351  TCGTCCTCTA CTCCTCCGCC GCCGCCACCT TCGGCGCACC CGGCCAAGCC
6401  AACTACGCCG CAGCCAACGC CTACCTCGAC GCCCTCGCCC ACCACCGCCA
6451  CACCCACCAC CTCCCCGCCA CCAGCATCGC CTGGGGCACC TGGCAAGGAA
6501  ACGGACTCGC TGATTCGGAC AAGGCCCGCG CATATCTCGA CCGCCGCGGG
6551  TTTCGACCCA TGTCACCCGA GTTGGCCACG GCAGCGGTCA CGCAGGCGAT
6601  CGCGGACACC GAACGGCCGT ATGTCGTCAT CGCCGACATC GACTGGAGCA
6651  AGATCGAACA CACCTCTCAG ACCAGCGACC TGGTGAGCGC GGCCCGGGAA
6701  AGGGAGCCAG CTGTCCAGCG CCCCACTCCA CCGGCGGAGT TGCACAAAAC
6751  GCTGGCCCAT CAGACGTCGG CCGACCAACG GGCCGCATTG CTCGAGCTCG
6801  TACGAGACCA TGTGGCGGCA GTGCTCCGGC ACGCGGACCC GAAAGCCATC
6851  GCGCCCGACC AGTCGTTCCG TGCACTCGGC TTCGATTCAC TCACGGCCGT
```

Fig. 7d

```
6901  CGAGTTCCGA AACCTGCTGA TCAAGGCAAC AGGACTCCGC CTTCCTGTCT
6951  CGCTGGTCTT CGACCACCCG ACCCCTGCCA AACTCGCCGT ACACCTGCAG
7001  AACCAACTGC GGGGCACAGC AGCGGAGTCG GCTCCTTCAG CGGCAGCCGT
7051  TACCGCCGAG GCTTCTGTCA CCGAGCCGAT CGCCATCGTT GGCATGGCCT
7101  GTCGTTTCCC CGGCGGAGTG ACCTCGGCGG ACGACTTCTG GGATCTGATC
7151  TCCTCCGAGC AGGACGCGAT CGGCGGATTC CCCACCGACC GCGGCTGGGA
7201  CCTGGACACG CTCTACGACC CCGACCCCGA CCACCCCGGC ACCTGCTACA
7251  CCCGAAACGG CGGATTCCTC TACGACGCAG GCCACTTCGA CGCCGAATTC
7301  TTCGGCATCA GCCCCCGCGA AGCCCTCGCC ATGGACCCCC AGCAACGACT
7351  CCTCCTCGAA ACCGCCTGGG AAACCATCGA ACACGCCGGC ATCAACCCCC
7401  ACACCCTCCA CGGCACCCCC ACCGGAGTCT TCACCGGCAC CAACGGACAG
7451  GACTACGCAC TTCGCGTGCA CAACGCGGGC CAGTCAACCG ATGGTTTCGC
7501  ACTGACCGGA ACCGCCGGCA GCGTCATCTC CGGTCGTATC TCGTACACGT
7551  TTGGTTTTGA GGGTCCTGCG GTGTCGGTGG ACACGGCTTG TTCCTCGTCG
7601  TTGGTGGCTT TGCATCTGGC CTGTCAGGCG TTGCGTGCGG GTGAGTGCTC
7651  GATGGCGCTT GCCGGGGGTG TGACGGTGAT GTCGTCTCCG GGTGCCTTCG
7701  TGGAGTTTTC GCGGCAGCGG GGTCTGGCCG CGGACGGGCA TTGCAAGGCG
7751  TTCTCGGCGG CGGCGGACGG GACCGGCTGG GGTGAGGGTG TGGGGATGCT
7801  GCTGGTGGAG CGGCTCTCCG ACGCCCATCG CAACGGTCAC CGTGTCCTGG
7851  CCGTGGTGCG TGGCAGTGCG GTCAACCAGG ACGGTGCGAG CAACGGTCTG
7901  ACCGCGCCCA ACGGGCCGTC CCAGCAGCGT GTCATCCGCC AGGCCCTCGC
7951  CAACGCCGGC TTGTCGGCCG GTGATGTCGA CGCGGTGGAG GCCCACGGCA
8001  CCGGCACCAC TTTGGGCGAC CCGATCGAGG CCCAGGCCCT CCTCGCGACC
8051  TACGGACAGG ACCGTGCCGG CGAGGGGCCG CTGTGGCTGG GCTCGGTCAA
8101  GTCCAATGTC GGTCACACAC AGGCTGCCGC GGGCGTCGCC GGGGTGATCA
8151  AGATGGTGAT GGCGCTGCGG CATGGTCTGC TGCCGCGGAC GTTGCATGTG
8201  GATGAGCCGT CGCCGCATGT GGACTGGTCC GCGGGTGCGG TGCAGCTGCT
8251  GACGGAGACG GTGCCCTGGC CCGGCGGGGA GGGGCGGCTA CGGCGGGCAG
8301  GAGTGTCATC ATTCGGCGTC AGCGGCACCA ACGCCCACGT CATCCTCGAA
8351  GAAGCACCCG CCGACGACGT TCCGGGGGGA CCACCCGCCG GCGAGGGTGA
8401  CGCGGGCAGC GACGATGAGG CTGCTGCCGG CAGTCCTGGG GTGTGGCCGT
8451  GGCTGGTGTC GGCCAAGTCG CAGCCGGCCC TGCGCGCCCA GGCCCAGGCC
8501  CTGCACGCCC ACCTCACCGA CCACCCCGGC CTCGACCTCG CGGATGTCGG
8551  ATACACCCTC GCCCACGCCC GCGCCGTGTT CGACCACCGC GCCACCCTCA
8601  TCGCCGCGGA CCGCGACACG TTCCTGCAAG CACTCCAGGC ACTCGCCGCA
8651  GGCGAGCCCC ACCCCGCCGT CATCCACAGC AGCGCCCCGG GCGGGACCGG
8701  GACCGGGGAG GCCGCAGGAA AGACCGCATT CATCTGCTCC GGACAGGGCA
8751  CCCAACGCCC CGGCATGGCC CACGGCCTCT ACCACACCCA CCCCGTCTTC
8801  GCCGCCGCAC TCAACGACAT CTGCACCCAC CTCGACCCCC ACCTCGACCA
8851  CCCCCTCCTC CCCCTCCTCA CCCAAAACGA CAACGACAAC GAGGACGCGG
8901  CCGCACTGCT CCAGCAGACC CGCTACGCCC AGCCCGCCCT CTTCGCCTTC
8951  CAGGTCGCCC TCCACCGCCT CCTCACCGAC GGCTACCACA TCACCCCCCA
9001  CTACTACGCC GGACACTCCC TCGGCGAAAT CACCGCCGCC CACCTCGCCG
9051  GCATCCTCAC CCTCACCGAC GCCACCACCC TCATCACCCA ACGCGCCACC
9101  CTCATGCAAA CCATGCCCCC CGGCACCATG ACCACCCTCC ACACCACCCC
9151  CCACCACATC ACCCACCACC TCACCGCCCA CGAAAACGAC CTCGCCATCG
```

Fig. 7e

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 9201  CCGCCATCAA CACCCCCACC TCCCTCGTCA TCAGCGGCAC CCCCCACACC
 9251  GTCCAACACA TCACCACCCT CTGCCAACAA CAAGGCATCA AAACCAAAAC
 9301  CCTCCCCACC AACCACGCCT TCCACTCCCC CCACACCAAC CCCATCCTCA
 9351  ACCAACTCCA CCAGCACACC CAAACCCTCA CCTACCACCC ACCCCACACC
 9401  CCCCTCATCA CCGACAACAC CCCACCCGAC CAACTCCTCA CCCCCCACTA
 9451  CTGGACCCAA CAAGCCCGCA ACACCGTCGA CTACGCCACC ACCACCCAAA
 9501  CCCTCCACCA ACACGGCGTC ACCACCTACA TCGATCTCGG ACCCGACAAC
 9551  ACCCTCACCA CCCTCACCCA CCACAACCTC CCCAACACCC CCACCACCAC
 9601  CCTCACCCTC ACCCACCCCC ACCACCACCC CCAAACCCAC CTCCTCACCA
 9651  ACCTCGCCAA AACCACCACC ACCTGGCACC CCCACCACTA CACCCACCAC
 9701  CACAACCAAC CCCACACCCA CACCCACCTC GACCTCCCCA CCTACCCCTT
 9751  CCAACACCAC CACTACTGGC TCGAAAGCAC ACAGCCCGGT GCCGGCAACG
 9801  TGTCAGCAGC CGGACTCGAC CCCACCGAAC ACCCCCTACT CGGCGCCACA
 9851  TTGGAACTGG CGACTGACGG TGGAGCGCTT CTTGCAGGGC GCTTGTCTTT
 9901  GAGGTCGCAT CCGTGGCTGG CTGACCATGC CGTCGGCGGC ACGGTGCTGC
 9951  TGTCGGGCGC CACCTTCCTC GAACTCGCCC TTCATGCGGG CACATACGTG
10001  GGCTGCGACC GAGTGGATGA GCTGACGCTG CATGCGCCGC TGGTGGTTCC
10051  TGTGGATGGG GGTGTGAGTG TGCAGGTTGG GGTTGCGGCT GCGGATGGGG
10101  AGGGGCGGCG TTTGGTGAGT GTGTATGCGC GGGGTGGGAG TGCTTGTGGT
10151  GGGGGTGGTG CGTCGGGTGG GGTGTGGACG TGTCATGCCT CGGGGGTGCT
10201  GGTTGAGGCT GCTGCTGGTG GTGTGGTGGT GGATGGTCTG GCGGGGGTGT
10251  GGCCGCCGCG GGGTGCGGTG GCGGTGGATG TCGATGGTGT CCGTGACCGT
10301  TTGGCTGGGG CTGGTTGTGT TTTGGGGCCG GTGTTTTCGG GGCTGCGTGC
10351  GGTGTGGCGT GATGGGGGGG ATTTGCTGGC TGAGGTGTGT CTGCCGGAGG
10401  AGGCGTGGGG TGATGCGGCT GGTTTTGGGC TGCATCCGGC GTTGCTGGAT
10451  GGTGTGGTCC AGCCGTTGTC GGTGTTGCTT CCGGGTGGGA CGGGGTTTGG
10501  GGAGGGGGCG GGGTTCGGGG AGGGTGTTCG GGTGCCGGCT GTGTGGGGTG
10551  GTGTGTCGCT TCACCGGGCG GGTGTGACCG GTGTGCGGGT GCGTGTGTCG
10601  GCTGTCGGGC GGGGCGGCGG GCGTGAGGCG GTGTCGGTCG TGGTCGGGGA
10651  TGAGGCGGGT GTGCCGGTGG CGTCGGTCGA TCGTCTTGAG TTGCGGCCTG
10701  TGGATATGGG TCAGTTGCGT GCTGTCTCGG TTTCGGCGGG GCGGCGGGGT
10751  TCGCTGTATG CGGTGCAGTG GGCTGAGGTG GGTCCTGTGC CGGTGTGTGG
10801  GCAGGCGTGG GCGTGGCACG AGGACGTGGG TGAGAGCGGT GGTGGGCCTG
10851  TGCCGGGGGT GGTGGTGTTG CGGTGCCCGG ATGCCGGTGC CGGTGGCGGT
10901  GGCGGTGGCG GTGGTGGCGG TGGTGTGGGT GAGGTTGTTG GTGGGGTGTT
10951  GGGTGTGGTG CAGGGGTGGC TGGGGCTGGA GCGGTTTGCG GGTTCGCGGC
11001  TGGTGGTGGT GACCCGGGGT GCGGTGGTGG CCGGCCCGGA GGACGGCCCG
11051  GTGGATGTGG TGGGTGCGTC GGTGTGGGGG CTGGTGCGTT CGGCGCAGGC
11101  TGAGCATCCG GACCGGTTTG TCCTCCTCGA CCTCGACACC GACACCGGCA
11151  CCGACCTCGA CACCGGTGCT GGTGCTGGTT GGGGCGTGGA TGGTGGGCGT
11201  GTGGCGGCGG TGGTGGCGTG TGGTGAGCCG CAGTTGGCGG TGCGTGGGGA
11251  GCGGTTGCTG GCCGCACGCC TGACACGACT TGAGTCATCC GGTGATGTTC
11301  CAGCCCAGCG GTCCGGTGAC ACACGAGCCC GGCGGTCCGA CGTGCCTGCC
11351  CAGCGCTCCG GTGGCGTGCC TGCTCGGCGG TCGGTTGATG TATCGGGTCG
11401  GGAGGTGTTG CCGTGGTTGT CGGGTGGGTC GGTGTTGGTG ACGGGTGGGA
11451  CGGGTGTGCT GGGTGCGGCG GTGGCGCGGC ATCTGGCTGG TGTGTGTGGG
```

Fig. 7f

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11501  GTGCGGGATC TGCTGTTGGT GAGCCGGCGT GGTCCGGATG CTCCGGGTGC
11551  GGAGGGTCTG CGGGCGGAGC TGGCCGCGTT GGGGGCGGAG GTGCGGATTG
11601  TTGCGTGTGA TGTGGGGGAG CGGCGGGAGG TGGTCCGGCT GCTGGAGGGT
11651  GTTCCTGCCG GGTGTCCGCT GACGGGTGTC GTGCATGCGG CTGGTGTGCT
11701  GGACGATGCG ACGATCGCCT CTCTCACGCC CGAGCGGCTG GGCACGGTGT
11751  TCGCGGCCAA GGTGGATGCC GCTCTTTTGC TGGATGAGCT GACGCGGGGT
11801  ATGGAGCTGT CGGCGTTCGT GCTGTTCTCC TCGGCCGCGG GGATCCTGGG
11851  GTCGGCCGGG CAGGGCAACT ACGCCGCGGC CAATGCCGCT CTGGACGCGC
11901  TGGCGTACCG GCGGCGGGCG GCGGGTCTGC CGGGGGTGTC GCTGGCGTGG
11951  GGGCTGTGGG AAGAGGCCAG CGGGATGACC GGGCACCTGG CCGGCACCGA
12001  CCACCGGCGC ATCATCCGTT CCGGTCTGCA TCCCATGTCG ACCCCGGACG
12051  CACTGGCCCT CTTCGATGCG GCCCTGGCTC TGGACCGGCC GGTCCTGCTG
12101  CCCGCCGACC TGCGTCCCGC CCCGCCCCTG CCGCCCCTGC TGCAGGACCT
12151  CCTGCCCGCC ACCCGCCGCC GCACCACCCG CACCACCACT ACCGGTGGTG
12201  CGGACAACGG CGCCCAGCTG CACGCCCGGC TGGCCGGCCA GACACACGAA
12251  CAACAGCACA CCACCCTCCT CGCCCTGGTC CGCTCCCACA TCGCCACCGT
12301  CCTGGGCCAC ACCACCCCCG ACACCATCCC CCCCGACCGC GCGTTCCGCG
12351  ACCTCGGCTT CGACTCCCTC ACCGCCGTCG A
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