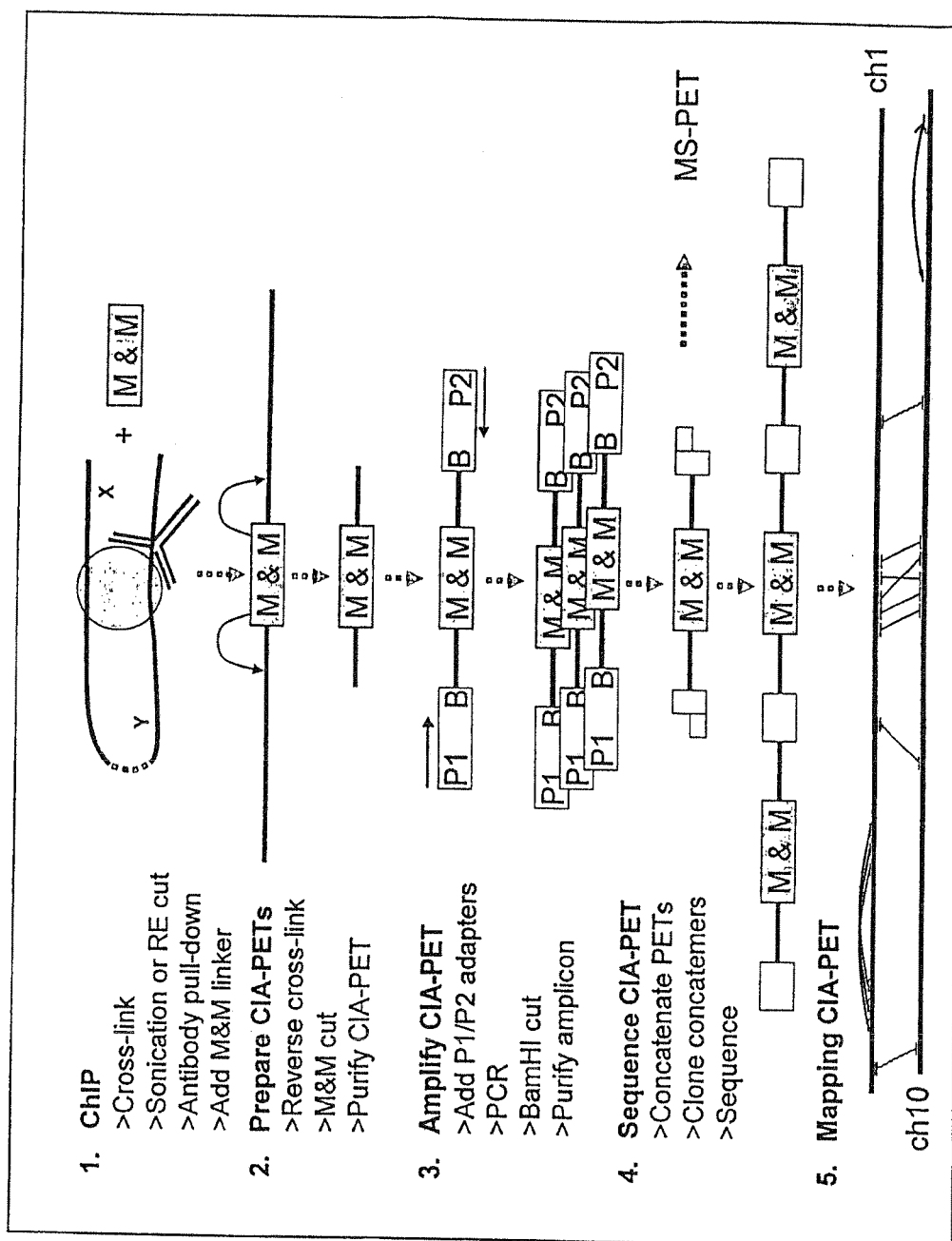


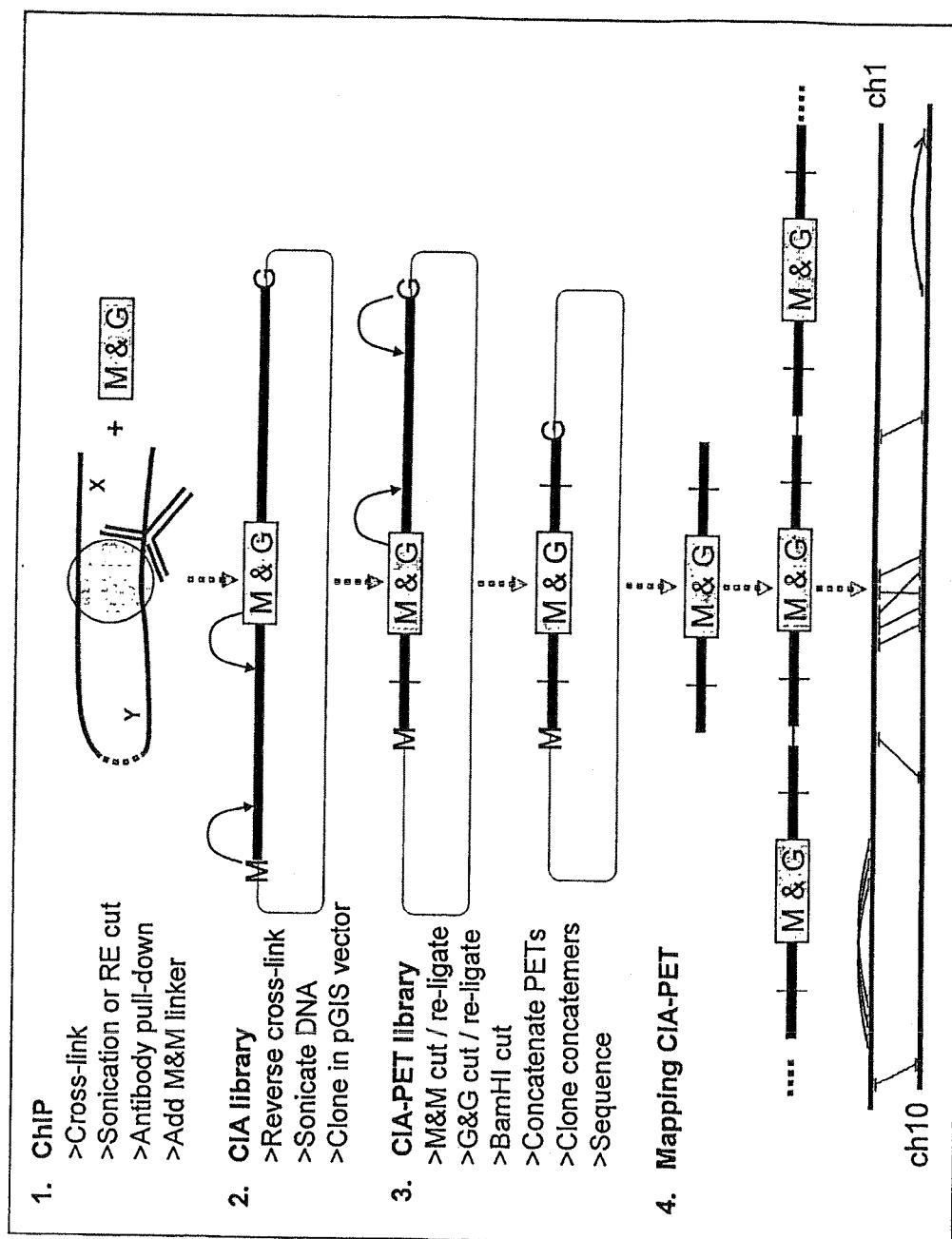
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FIGURE 1



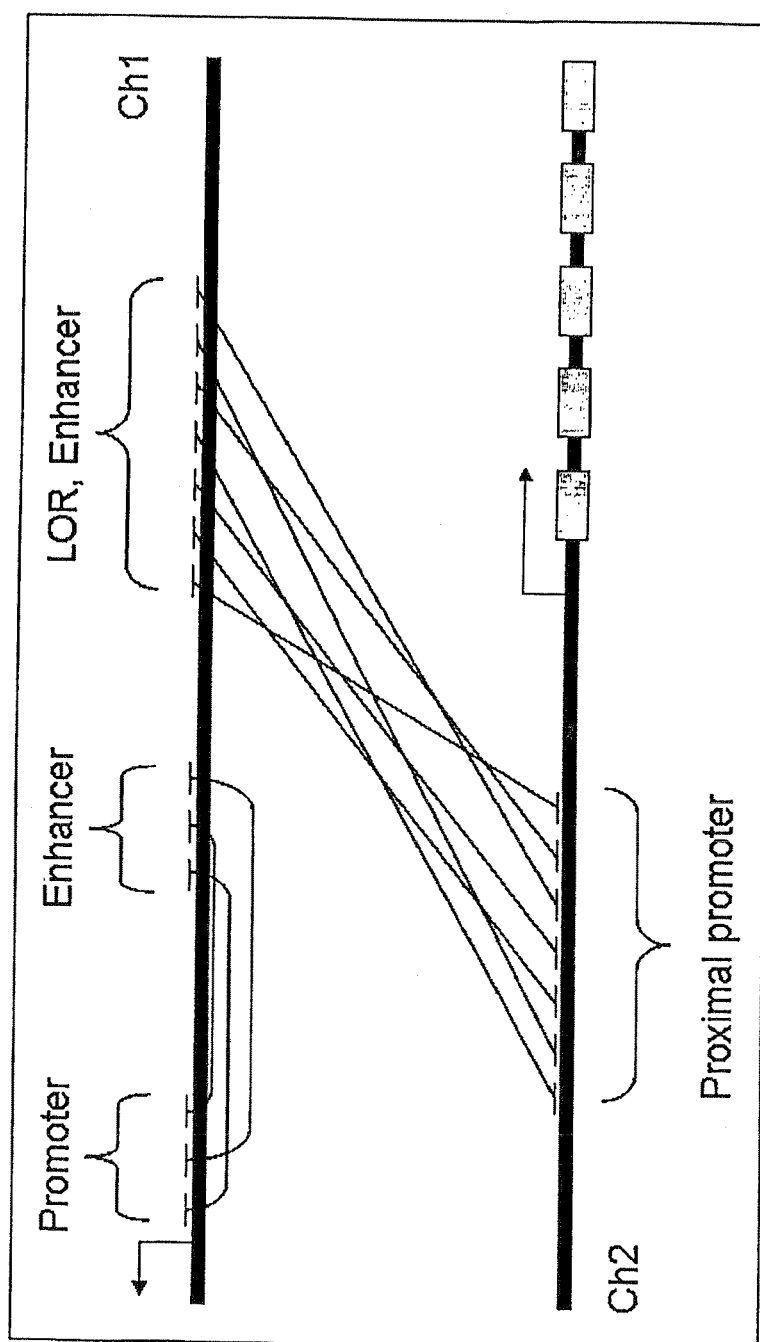
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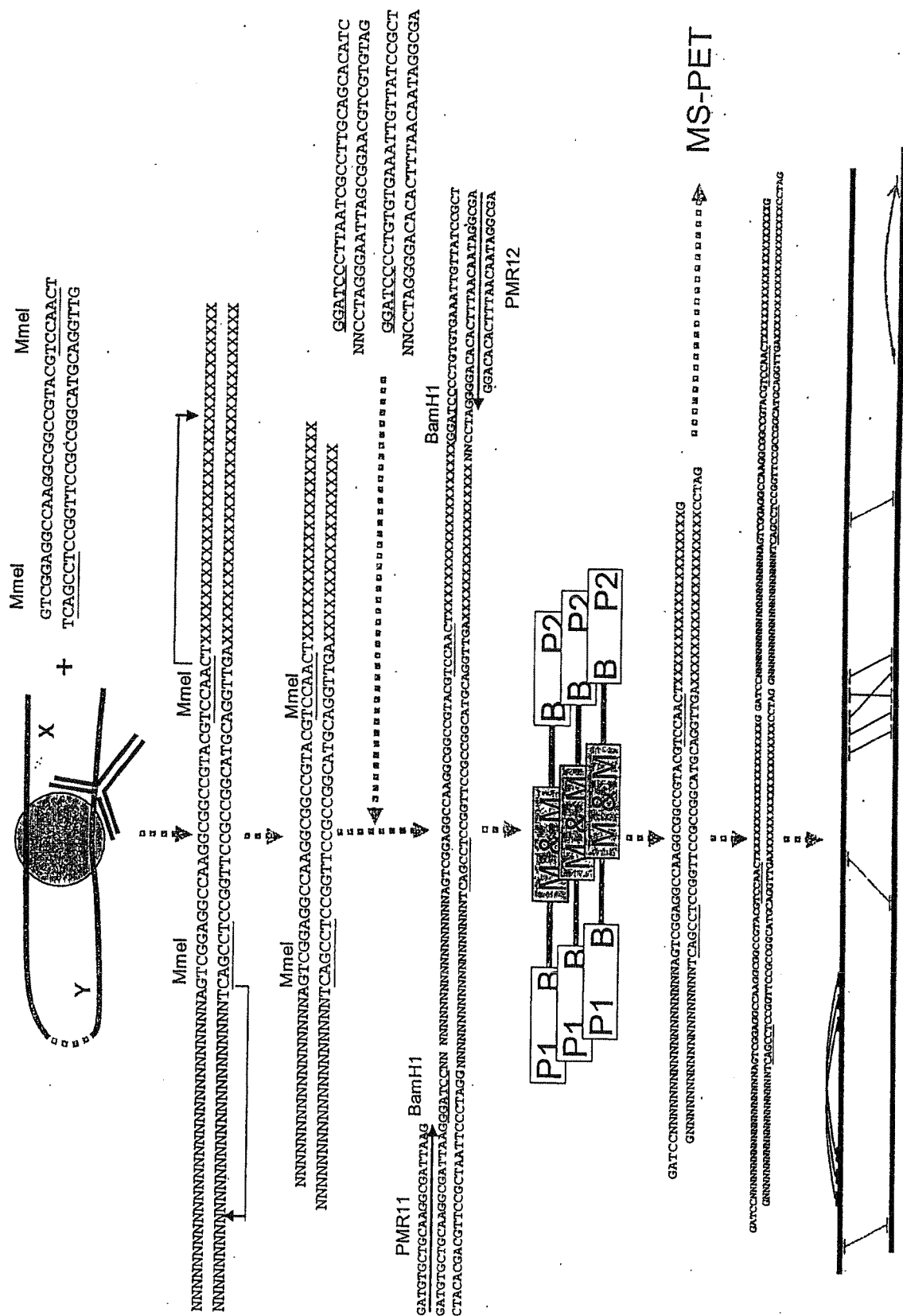
FIGURE 2



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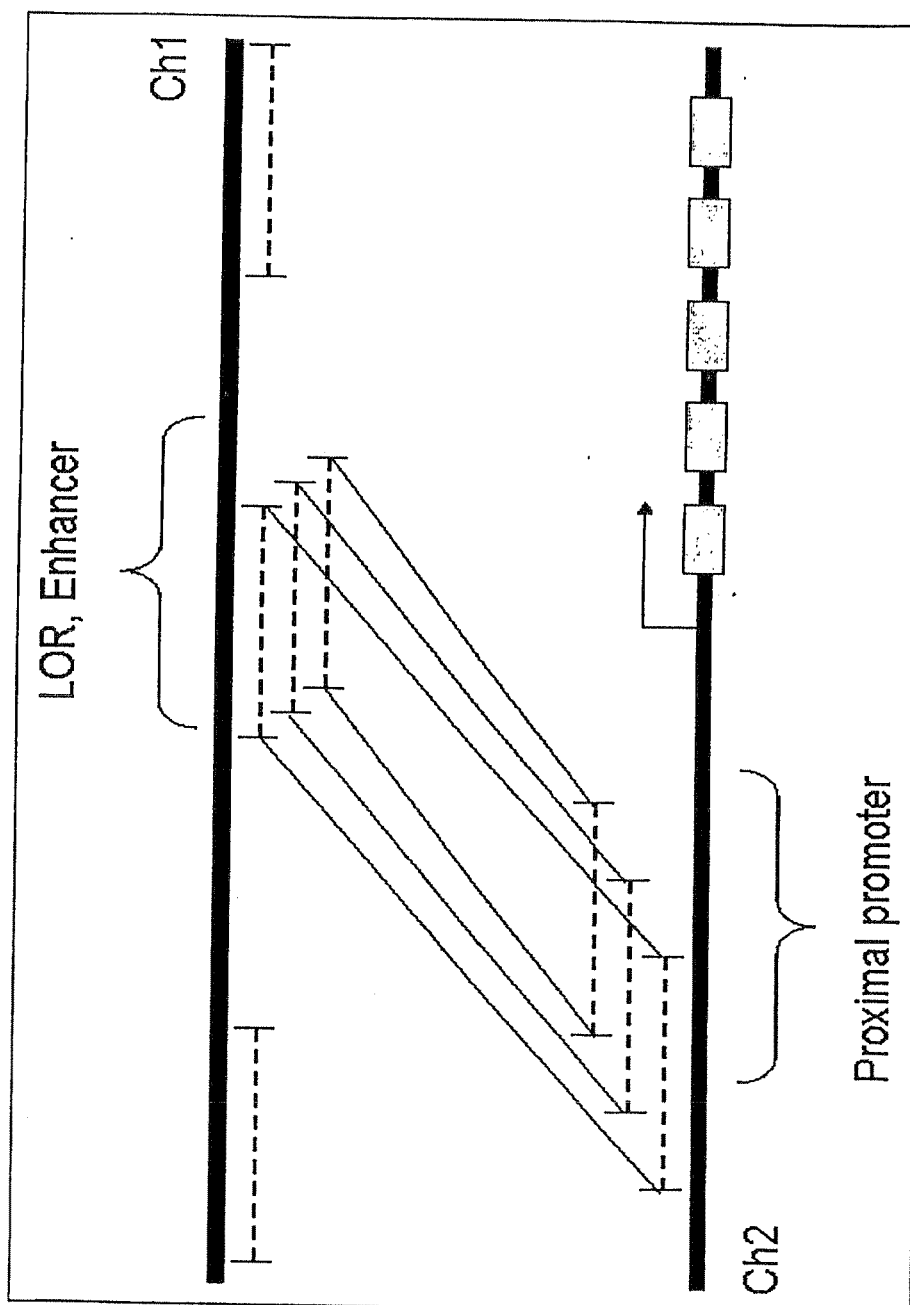
FIGURE 3

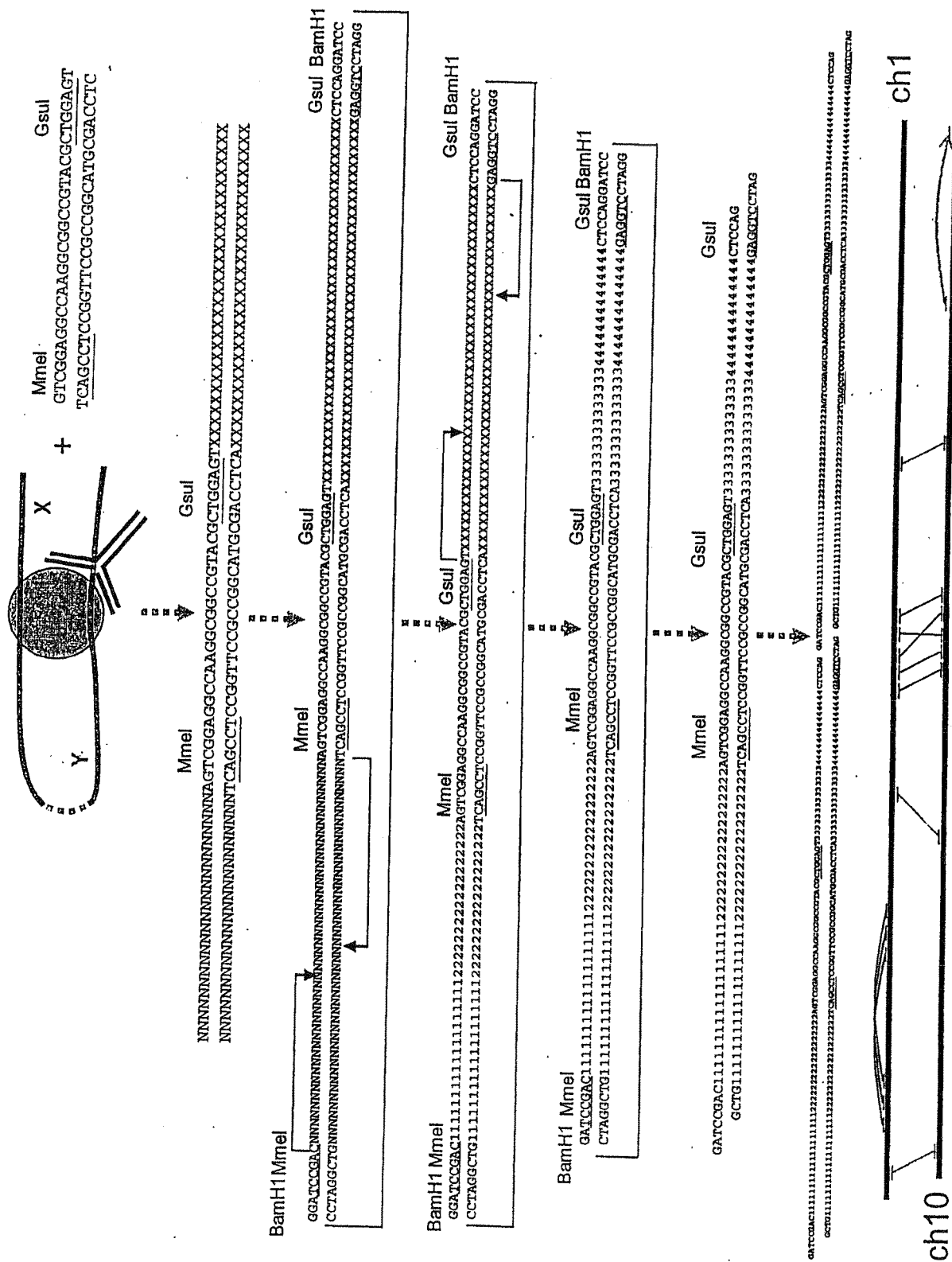




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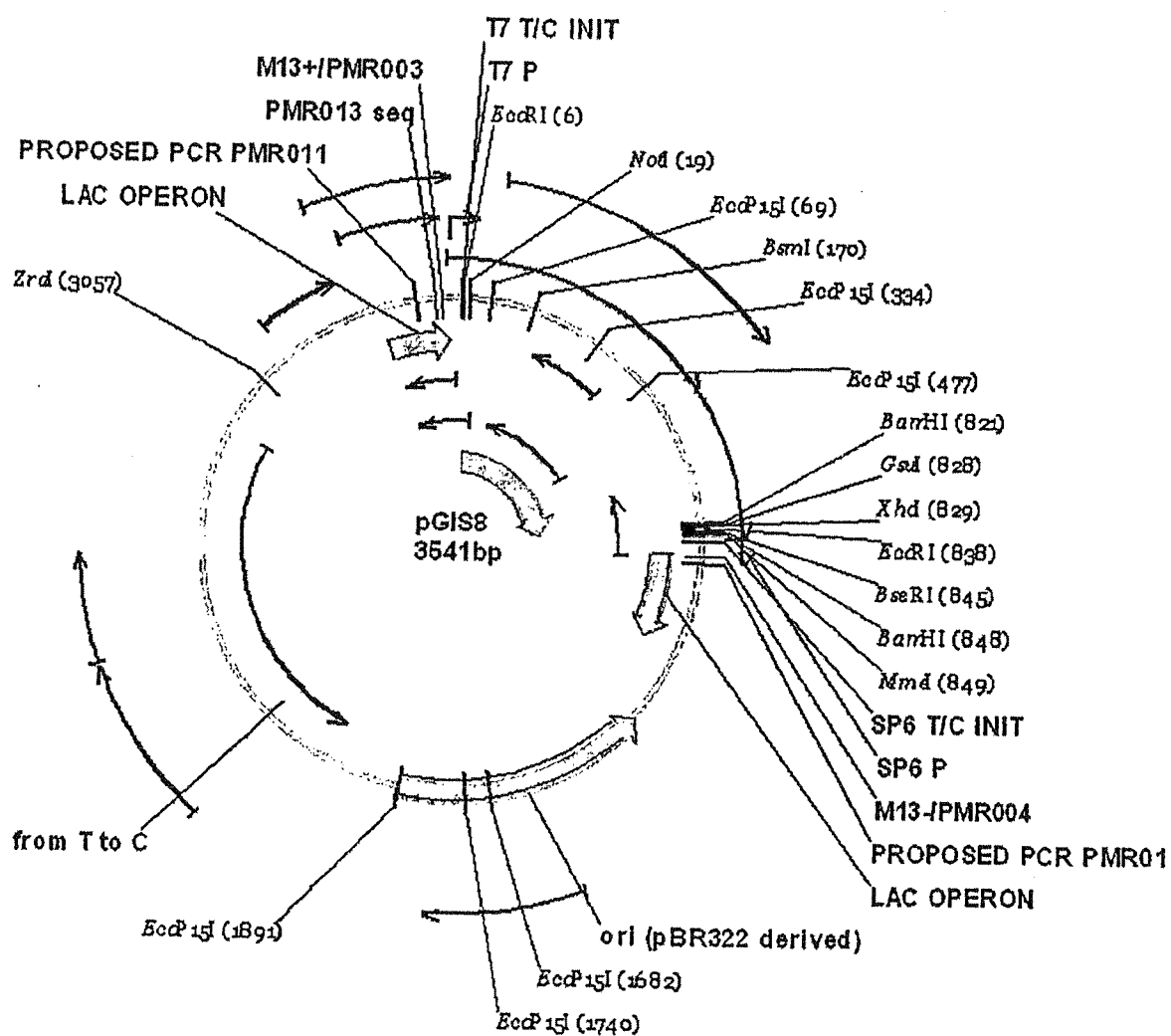
FIGURE 5



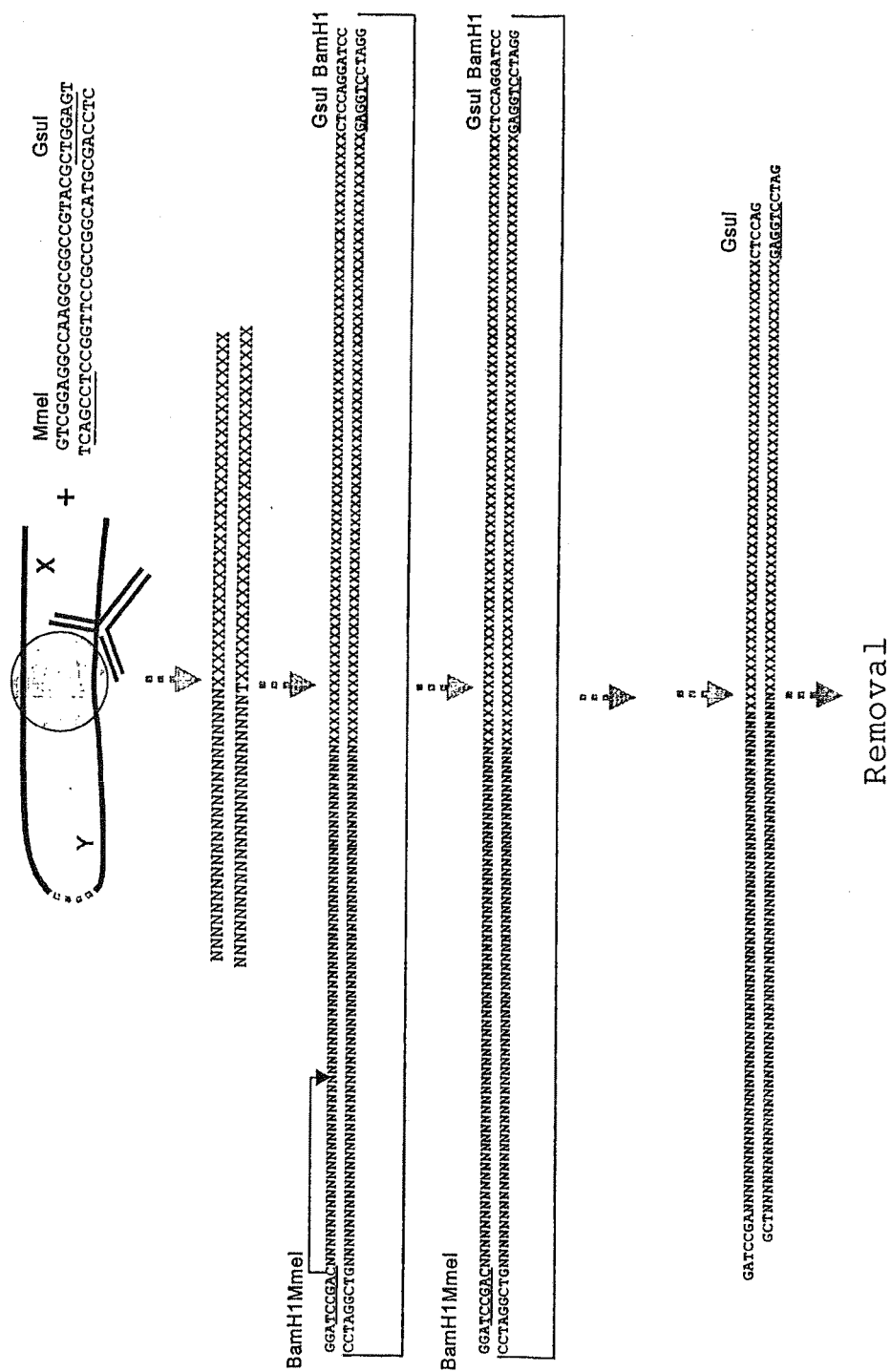


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FIGURE 7

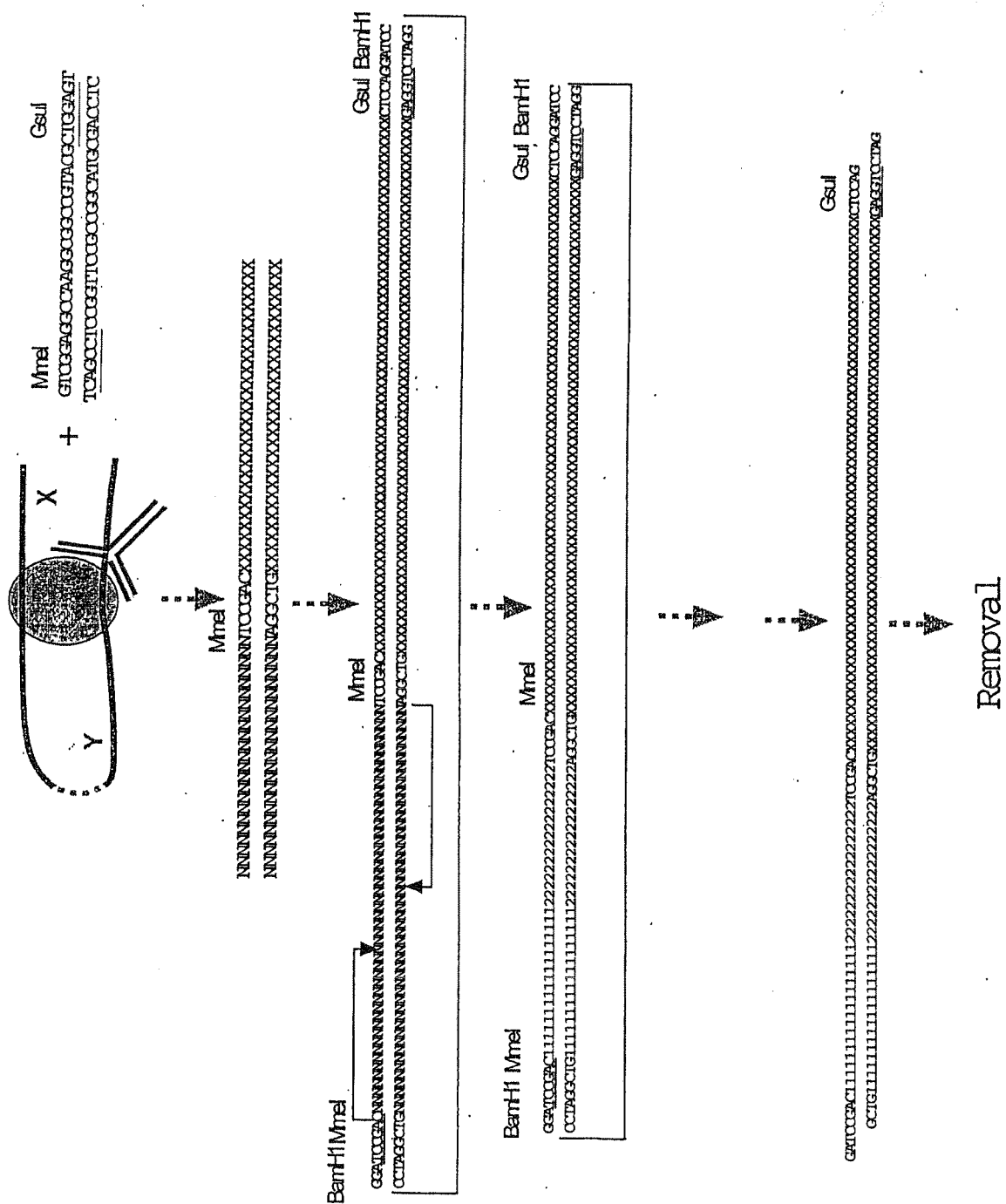


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FIGURE 8



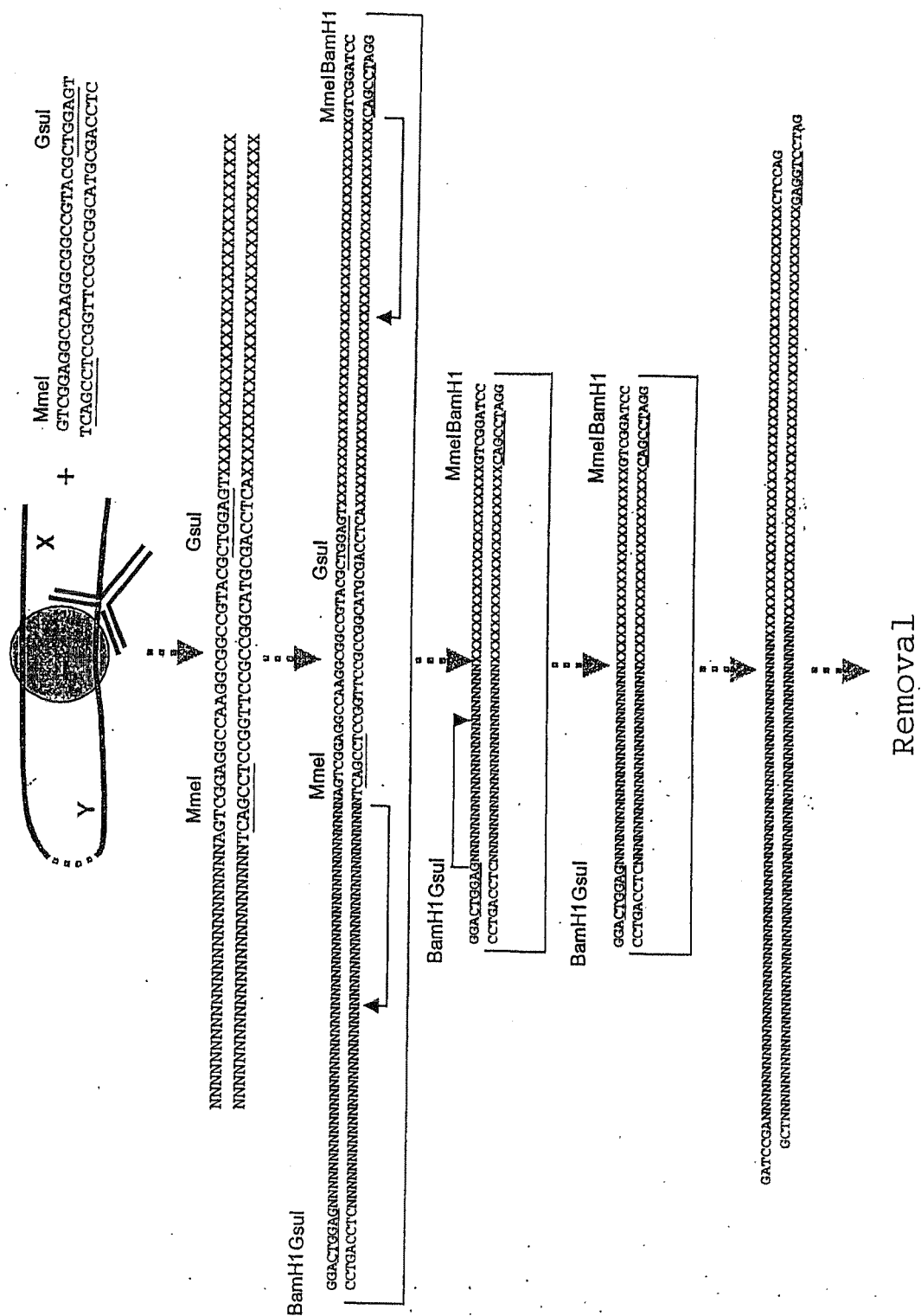
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FIGURE 9



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FIGURE 10



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FIGURE 11

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1  GGGCGAATTC GATATCGCGG CCGCGCTGG ATAAAGTCAG CAGCTTCAC GCCAGCTTCA CACAAAAGT GACTAGCGT AGCGCGCGG CGGTGCAGGA
   CCGGCTTAG CTATAGCGC GCGCGGACC TATTTCAGT GTGGAAGTG CGGTGGAAGT GTGTTTTC CTGACTGCCA TCGCCGCGCC GCCACGTCTCT
   -----
      BsmI
      -----
101 AGGTCAGGCG GATCTGTGGG TGAACGTCC AACTTATTC AACTGGCATA TGACACACCC TGATGAAGC ATTCTGTTT CTACAGGTAA AACACTGTGG
   TCCAGTCCCG CTAGACACCC ACTTGCAGG TTGAATAAG TTGACCGTAT ACTGTGTGG ACTACTTTCG TAGACCAA GACTGCCAAT TTGTGACACC
   -----
201 TTCTATAACC CGTTCTGTTA GCAAGCTAG GCAACTGGC TGAAGATGC CACCGGTAAT AGCCGTTTA TGTGATTCG CGCAACCCAG TCCAGCGACT
   AAGATATTGG GCAGCACT CGTTGATGC CGTTGACCG ACTTCTAG GTGGCACTA TCGGCAAT AGCACTAAG GCGGTTGTC AGTCTGTGA
   -----
      EcoP15I
      -----
301 GGAGCAGTA CAATATCAA CAGATGGG ATGACTTTGT CTTAGCGCG AAGCCAGCA ATGCCAATCT GAAGCAGTTC ACCATTACG TGGGAGTGA
   CCGTGTCTAT GTTATAGTTT GTCTTACCG TACTGAACA GCACTGCGC TTTCGGTCTG TACCGTGA CTTCGTCAG TGGTAAATTC ACCCTGCACT
   -----
      EcoP15I
      -----
401 TGGCACATC CATCAGTTA GCGCGGTGGA GCAAGCGAT CAGCGCAGCA GTTATCACT GAATCCAG CAATATGGG CTGTGATTC AGCGAATTT
   ACGTGTAG GTAGTCAAT CCGGCCACT CGTCTGCTA GTCCGTCT CAATAGTGA CTTAGGTC GTTTACCC GACACCTACG TCGCTTTAA
   -----
501 ACCTTCACC CCGCGAAG CGTCACGTA GATGTCAC GATAGTAG GCACTGAGT GAGCAATCTG TCGCTGAT TTTCGGATA TACTTTCAA
   TGAAGTGG GCGGCTTC CAGTGCCAT CTACTAGT CATTCATC CTGTGACT CACTGATG AGGAGCTAA AAAGCCTATT ATGAAGAATT
   -----
601 CCTCTGGCG CGGTATGCG GCAGAAAT TTAGCAGT ATATCGCCA GCACATTG CTGGTGGCG GGAAGCGGT GCGCGCGCT ATGGAAGCG
   GGAGACCG GGCATACG CGGTCTTTA ATCTGTGTA TATAGCGGT CGTTGTAAC GACCGAGCC CCTTCGCCA CCGCGCGGA TAGCTTCGG

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FIGURE 11 continued

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701  GGCATTACCA TTCTATGATC CTCGTGGGGC GCGCGGGTAC CGCCARACA ACTCTCGCTG AAGTATTC CGCTATGG AACGCTGATG TGGACGAT
    CCGTAAATGT AAGATACATAG GAGACCCCG GCGGCCCATG GCGTTTGT TGAAGCGAC TTCACATAAG GCGATACG TTGCGACTAC ACCTTGCA
    -----
    MseI      BseRI
    -----
801  TTCTGCCGTA AGTCGAATG GATCCGACTC GAGGATGAAT TCTCCAGGAT CCTCTCTG AGTATTTCTAT AGTGTCACT AAATAGCTTG GCGTAATCAT
    AAGACGGCAT TCAGCTTAAC CTAGGCTGAG CTCCTACTTA AGAGTTCCTA GCGAGGAC TCATAAGATA TCACAGTGA TTATTCGAC GCGATTAGTA
    -----
901  GGTATAGCT GTTCTCTGTG TGAATTTGT ATCCGCTCAC AATCCACAC AACATACGAG CCGAAGCAT AAGTGTAA GCCTGGGGTG CCTATGAT
    CCAGTATCGA CAAGGACAC ACTTTAACA TAGCGGAGTG TTAAGTGTG TTGTATGCTC GGCCTTCGTA TTCACATTT CGGACCCAC GGNATCTCA
    -----
1001 GAGCTAATC ACATTAATG CTTGCGCTC ACTGCCGCT TTCCAGTCCG GAACCTGTG GTCCAGCTG CATTAATGAA TCGGCCAAGC CGCGGGGAGA
    CTCGATTGAG TGTAAATTAAC GCACGCGAG TGAACGGCGA AAGGTACGC CTTTGGACAG CAGGTGACG GTAATTAATT AGCGGTGTC GCGCCCTCT
    GCGGTTTGC GTATTGGGGC CTCCTCCGCT TCCTCGCTCA CTGACTCGCT GCGCTCGTTC GTTGGCTGTC GCGAGCGGT ATCAGCTCAC TCAAGGCGG
    CCGCCAAAG CATACCCGC GAGAGGCGA AGGAGCGAGT GACTACGGA CACGAGCGAG CAAGCGGACG CCGCTCGCCA TAGTCGAGTG AGTTTCCGCC
    TAATACGGT ATCCACAGAA TCAGGGGATA ACGCAGGAAA GAACATGTGA GCATAAGGCC AGCAAGCGT AAGAGGCGG CGTTGCTGGC
    AATATGCCAA TAGGTGCTT AGTCCCTAT TCGCTCCTTT CTGTACACT CGTTTCCGG TCGTTTCCG GTCCCTGGCA TTTTTCGGC GCAACGACCG
    GTTTTCGAT AGGCTCCGC CCCCTGAGA GCATCACAA AATCGAGCT CAAGTCAGAG GTGCGAAGC CCGACAGAC TATTAAGATA CCAGCGGTTT
    CAARAAGCTA TCCGAGGCGG GGGACTGCT GGTAGTGT TTAGTGGGA GTTCAGTCTC CACGCTTTG GCGTGTCTG ATATTTCTAT GTTCCGAAA
    CCCCCTGAA GCTCCCTCGT GCGCTCTCT CTACGACCC TCGCGCTTAC GGNATACGT TCOCCTTTC TCCCTCGG AAGCTGSCG CTTTCTATA
    GGGGACCTT CGAGGGAGCA CCGGCTGGG ACGGCGAATG GCCTATGAC AGGCGAAG AGGAGGCC TTCCACCGC GAAAGATAT
    -----
1501 GCTCAGCTG TAGGTATCTC AGTTGGTGT AGTCTGTTTC CTCGAAAGCT GGCCTGTGTC ACRAACCCCG CGTTCAGGCC GACGCTGGG CCTTATCGG
    CGAGTGGAC ATCCATAGAG TCAGGCCACA TCCAGCAGC GAGGTTGAC CCGACACAG TGTCTGGGG GCAAGTCGG CTGCGCAGC GGNATAGGCC
    -----
    EcoP15I
    -----
1601 TAACTATCGT CTTGAGACCA ACCCGTAAAG ACAGACTTA TCGCCACTGG CAGCAGCCAC TGTAAACAGG ATTAGCAGAG CGAGGTATGT AGCGGTGCT
    ATTGATAGCA GAATCTGGT TGGGCCATTC TGTGCTGAAT AGCGGTGACC GTCTGCTGTG ACCATTGCTC TAATGCTCTC GCTCCATACA TCCGCCACGA
    -----
    EcoP15I
    -----
1701 ACAGAGTTCT TGAAGTGTG GCCTAACTAC GGCTACACTA GAAGGACAT ATTTGGTATC TCGGCTCTGC TGAAGCCAGT TACCTTCGGA AAAAGAGTTG
    TGTCTAAGA ACTCACAC CCGATTGATG CCGATGTGAT CTTCTGTGTA TAAACCATAG ACGGACAGC ACTTCGCTCA ATGGAAGCCT TTTTCTCAC
    -----
    EcoP15I
    -----
1801 GTAGCTCTTG ATCCGGCAA CAACACACCG CTGTAGCGG TGGTTTTTTT GTTTGCAAGC AGCAGATTAC GCGCAGAAA AAGGATCTC AAGAGATCC
    CATCGAGAC TGGCCGTTT GTTTGGTGGC GACCATGCC ACCAAAAA CAAAGCTTCG TCGCTAATG CCGCTCTTTT TTTCCTAGAG TTCTCTAGG
    TTTGATCTTT TCTAGGGGGT CTGACGCTCA GTGAACGAA AACTCAGTT AAGGATTT GTTCATGAGA TTATCAAAA GGATCTTAC CTAGATCCCT
    AACTAGAA AGATGCCCA GACTCGAGT CACTGCTT TTGAGTCAA TTCCCTAAA CAGTACTCT AATAGTTTTT CCTAGAGTG GATCTAGGAA
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    -----
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FIGURE 11 continued

2101 TCTGTCTATT TCCTTCATCC ATAGTTGGCT GACTCCCGT CGTGTAGATA ACTAGTATC GGGAGGGCTT ACATCTGGC CCAGTCTG CAATGATACC
 AGACAGATAA AGCAAGTAGG TATCAGCGA CTGAGGGCA GCATCTAT TGATGCTATG CCTCCGAA TGTAGACCG GGTTCAGAC GTTACTATGG

 2201 GCGAGACCCA CGCTCACCG CTCGGATT ATCAGCATATA AACAGCCAG CCGAGGCG CGAGCGCAGA AGTGTCTCTG CACTTTATC CGCTTCATC
 CGCTCTGGT GCGAGTGGC GAGCCTAAA TAGTCTTAT TTGTCGGT GGCCTCCG GCTCGGTCT TCACAGGAC GTTGAATAG GCGAGGTAG

 2301 CAGTCTATTA ATTGTGCG GGAAGTGA GTAGTAGTT GCGAGTAA TAGTTGGC AAGTTTGG AGCTTGTG AGCATCTG GTCTAGCT
 GTCAGATAT TACACGGC CCTTCGATCT CATCTCAA CGGTCAAT ATCAAGCG TTGCAACAC GGTACGATG TCCGTAGCAC CACAGTCCGA

 2401 CGTGGTTGG TAGGCTCA TTACGTCG GTTCCCAAG ATCAAGCGA GTTACATGAT CCCCATGTT GTGCAAAA GGGTGTAGT CTTCTGGTCC
 GCAGCAACC ATACCGAGT AGTCTGAGC CAGGGTGC TAGTCTGCT CAATGACTA GGGGTACAA CAGTTTTT CCGCAATCGA GGAAGCCAGG

 2501 TCCGATCGTT GTCAGAGTA AGTGGCGG AGTGTATCA CTCAGGTTA TGGCAGCAT GCATATTTCT CTATCTGCA TGCATCCGT AGATGCTTT
 AGGTAGCAA CAGTCTTCAT TCAACCGCG TCACATAGT GAGTACCAAT ACGTCTGA CGTATTAGA GAATGAGT AGGTAGGCA TTCTAGAAA

 2601 TCTGTGACTG GTGAGTACT ACCCACTCA TTCTGAGAT AGTGTATCG GCGACGAGT TGTCTTGGC CGCGTCAAT AGGGATAT ACCGCGCAC
 AGACATGAC CACTCATGAG TTGTTTCACT AGACTCTTA TCACATACG CGTGTCTCA CCGCAGTTA TCCCTATTA TGGCGGGTG

 2701 ATAGCAGAAC TTAAAGTG CTCATCANTG GAAAGCTTC TTGGGGCGA AACTCTCA GATCTTACC GCTGTGAGA TCCAGTCCA TGTACCCAC
 TATCGTCTTG AATTTTCAC GAGTAGTAC CTTTTCGAG AGCCCGCT TTGAGATT CCTAGATGG CGCACTCT AGTCAAGCT ACATGGGTG

 2801 TCGTGACCC AACTGATCT CAGCATCTTT TACTTTTACC AGCTTTCTG GGTGACAAA AACAGGAG CAAATGCG CAAAAGGG AATAAGGGG
 AGCACGTGG TTGACTAGAA GTGCTAGAA ATCAAGTGG TCGCAAGAC CCACTGTT TTGTCCTCC GTTTTACGG GTTTTTCC TTATTCCCGC

 2901 ACACGGAAAT GTTGAATACT CATACCTTC CTTTTCAAT ATTATGAG CATTTATCAG GGTATTGTC TCATGAGCGG ATACATATT GAATGTATT
 TGTGCCCTTA CACTTATGA GTATGAGAG GAAAAGTTA TAATACTTC GTAAATAGT CCAATAACAG AGTACTCGC TATGTATAAA CTTCATAAA

 3001 AGAAAAATRA ACAATAGGG GTTCCGCGA CATTTCGCG AAGTGGCA CTGAGCTT AAGAAACAT TATTANCAG ACNTTAACT ATAAAAATAG
 TCTTTTATT TCTTTATCC CAAGGCGCT GTAAAGGGC TTTCACGCT GAGTGCAGA TTCTTTGTA ATATAGTAC TGTATGGA TATTTTATC

 3101 GCGTACAG AGGCCCTTC GTCTCGCGG TTCTCGGTAT GAGGTGAAA ACCTGTACA CATGAGTC CCGAGAGCG TCACAGCTG TCTGTAAAGC
 CGCATAGTC TCCGGGAAG CAGAGCGCG AAGCCACTA CTGCCACTT TGGAGACTT GAGCTCGAG GGCCTCTCC AGTGTGAA ACATTCGC

 3201 GATGCCGGA GCAGACAAG CCGTCAGGC GCGTCAGCG GTGTTGGCG GTGTCGGGC TGGTTAACT ATCGGGCAAC AGACAGATT GTACTGAGG
 CTACGGCCT GGTCTGTTC GGCAGTCCG GCGAGTCCG CACACCGCC CACAGCCCG ACCGAATGA TACGCCGTAG TCTGTCTTAA CATGACTCTC

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FIGURE 11 continued

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3301  TGCACCATAT GCGGTGTGAA ATACCGCACA GATGCGTAAG GAGAAATAC CGCATCAGGC GCCATTGCC ATTCAGGCTG CGCACTGTT GCGAGGGCG
    ACCTGGTATA CGCCACACTT TATGGCGTGT CTAGGCATTC CTCTTTATG GCGTAGTCCG CGGTAACGG TAACTCCGAC GCGTTGCAA CCCTCCCGC
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3401  ATCGGTGCGG GCCTCTTCG TATTACGCA GCTGGCGAA GGGGATGTG CTGCAAGCG ATTAAGTGG GTAACGCCAG GGTTCCTCCA GTCACGACGT
    TAGCCAGCC CGGAGAGCG ATAATGCGGT CGACCGCTT CCCCCTACAC GAGTTCCGC TAATCARCC CATTGGGTC CCAAAAGGT CAGTGCTGCA
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3501  TGTAAAACGA CGGCCAGTGA ATTGTAATAC GACTCACTAT A
    ACATTTGCT GCGGTCAC TACATTATG CTGAGTGATA T
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<160> 63

<170> PatentIn version 3.4

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31

<210> 2

<211> 31

<212> DNA

<213> Artificial

<220>

<223> M&M linker antisense strand; 5' end is phosphorylated

<400> 2

gttggacgta cggccgcctt ggcctccgac t

31

<210> 3

<211> 31

<212> DNA

<213> Artificial

<220>

<223> M&G linker sense strand; 5' end is phosphorylated

<400> 3

gtcggaggcc aaggcggccg tacgctggag t

31

<210> 4

<211> 31

<212> DNA

<213> Artificial

<220>

<223> M&G linker antisense strand; 5' end is phosphorylated

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31

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 <223> P1 concatenating adaptor (PMR 011) sense strand; 5' end is phosphorylated

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 <223> n is a, c, g, or t

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 gatgtgctgc aaggcgatta agggatccnn 30

<210> 7
 <211> 29
 <212> DNA
 <213> Artificial

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 ggatcccttg tgtgaaattg ttatccgct 29

<210> 8
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 <213> Artificial

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 <223> P2 concatenating adaptor (PMR 012) antisense strand; 5' end not phosphorylated.

<220>

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<210> 9
 <211> 28
 <212> DNA
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<220>
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<210> 13
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <223> PMR011; 5' end phosphorylated.

<400> 13
 gatgtgctgc aaggcgatta ag 22

<210> 14
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <223> PMR012; 5' end is phosphorylated

<400> 14
 agcggataac aatttcacac agg 23

<210> 15
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 <213> Artificial

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 <223> RecA selection oligonucleotide; biotinylated.

<400> 15
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<210> 16
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 <212> DNA
 <213> Artificial

<220>
 <223> Sense strand of multiple cloning site stuffer for pGIS8 vector.

<400> 16
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<210> 17
 <211> 43
 <212> DNA
 <213> Artificial

<220>
 <223> Antisense strand of multiple cloning site stuffer for pGIS8 vector.

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<210> 18
 <211> 3541
 <212> DNA
 <213> Artificial

<220>
 <223> Sense strand of pGIS8 vector.

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 cacaaaaagt gactgacggt agcggcgagg cggcgcagga aggtcagggc gatctgtggg 120
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 ctgacggtaa aacactgtgg ttctataacc cgctcgttga gcaagctacg gcaacctggc 240
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gtgttgggcg gtgtcggggc tggcttaact atgcggcatc agagcagatt gtactgagag 3300
tgcaccatat gcggtgtgaa ataccgcaca gatgcgtaag gagaaaatac cgcacagggc 3360
gccattcgcc attcaggctg cgcaactgtt gggaagggcg atcgggtcgg gcctcttcgc 3420
tattacgcca gctggcgaaa gggggatgtg ctgcaaggcg attaagttgg gtaacgccag 3480
ggttttccca gtcacgacgt tgtaaaacga cggccagtga attgtaatac gactcactat 3540
a 3541

```

```

<210> 19
<211> 3541
<212> DNA
<213> Artificial

```

```

<220>
<223> Antisense strand of pGIS8 vector.

```

```

<400> 19
tatagtgagt cgtattacaa ttcactggcc gtcgttttac aacgtcgtga ctgggaaaac 60
cctggcggtta cccaacttaa tcgccttgca gcacatcccc ctttcgccag ctggcgtaat 120
agcgaagagg cccgcaccga tcgcccttcc caacagttgc gcagcctgaa tggcgaatgg 180
cgctgatgc ggtattttct ccttacgcat ctgtgcggta tttcacaccg catatggtgc 240
actctcagta caatctgctc tgatgccgca tagttaagcc agccccgaca cccgccaaca 300
cccgtgacg cgccctgacg ggcttgtctg ctcccggcat ccgcttacag acaagctgtg 360
accgtctccg ggagctgcat gtgtcagagg ttttcaccgt catcaccgaa acgcgcgaga 420
cgaaagggcc tcgtgatacg cctatTTTTTA taggttaatg tcatgataat aatggtttct 480
tagacgtcag gtggcacttt tcggggaaat gtgcgcggaa cccctatttg tttatttttc 540
taaatacatt caaatatgta tccgctcatg agacaataac cctgataaat gcttcaataa 600

```

tattgaaaaa ggaagagtat gagtattcaa catttccgtg tcgcccttat tccctttttt	660
gcggcatttt gccttcctgt ttttgctcac ccagaaacgc tggtgaaagt aaaagatgct	720
gaagatcagt tgggtgcacg agtgggttac atcgaactgg atctcaacag cggtaagatc	780
cttgagagtt ttcgccccga agaacgtttt ccaatgatga gcacttttaa agttctgcta	840
tgtggcgcggt tattatcccc tattgacgcc gggcaagagc aactcggtcg ccgcatacac	900
tattctcaga atgacttgggt tgagtactca ccagtcacag aaaagcatct tacggatggc	960
atgacagtaa gagaattatg cagtgtgcc ataaccatga gtgataaacac tgcggccaac	1020
ttactttctga caacgatcgg aggaccgaag gagctaaccg cttttttgca caacatgggg	1080
gatcatgtaa ctgccttga tcgttgggaa ccggagctga atgaagccat accaaacgac	1140
gagcgtgaca ccacgatgcc tgtagcaatg ccaacaacgt tgcgcaaact attaaactggc	1200
gaactactta ctctagcttc ccggcaacaa ttaatagact ggatggaggc ggataaagtt	1260
gcaggaccac ttctgcgtc gcccttccg gctggctgggt ttattgctga taaatccgga	1320
gccggtgagc gtgggtctcg cggtatcatt gcagcactgg gccagatgg taagccctcc	1380
cgtatcgtag ttatctacac gacggggagt caggcaacta tggatgaacg aaatagacag	1440
atcgtcgaga taggtgctc actgattaag cattggtaac tgtcagacca agtttactca	1500
tatatacttt agattgattt aaaacttcat ttttaattta aaaggatcta ggtgaagatc	1560
ctttttgata atctcatgac caaaatccct taacgtgagt tttcgttcca ctgagcgtca	1620
gaccccgtag aaaagatcaa aggatcttct tgagatcctt tttttctgcg cgtaatctgc	1680
tgcttgcaaa caaaaaaacc accgctacca gcggtgggtt gtttgccgga tcaagagcta	1740
ccaactcttt ttccgaaggt aactggcttc agcagagcgc agataccaaa tactgtcctt	1800
ctagtgtagc cgtagttagg ccaccacttc aagaactctg tagcaccgcc tacatactc	1860
gctctgctaa tcctgttacc agtggctgct gccagtggcg ataagtcgtg tcttaccggg	1920
ttggtctcaa gacgatagtt accggataag gcgcagcgggt cgggctgaac ggggggttcg	1980
tgcacacagc ccagcttgga gcgaacgacc tacaccgaac tgagatacct acagcgtgag	2040
ctatgagaaa gcgccacgct tcccgaaggg agaaaggcgg acaggatatcc ggtaagcggc	2100
agggtcggta caggagagcg cacgaggag cttccagggg gaaacgcctg gtatctttat	2160
agtcctgtcg ggtttcgcca cctctgactt gagcgtcgat ttttgtgatg ctcgtcaggg	2220
gggaggagcc tatcgaaaaa cgccagcaac gcggcctttt tacggttcct ggcccttttc	2280
tggccttttg ctcacatggt ctttctgcg ttatcccctg attctgtgga taaccgtatt	2340

```

accgcctttg agtgagctga taccgctcgc cgcagccgaa cgaccgagcg cagcgagtca 2400
gtgagcgagg aagcggaaga gcgcccaata cgcaaaccgc ctctccccgc gcgttggccg 2460
attcattaat gcagctggca cgacaggttt cccgactgga aagcgggcag tgagcgcaac 2520
gcaattaatg tgagttagct cactcattag gcaccccagg ctttacactt tatgcttccg 2580
gctcgtatgt tgtgtggaat tgtgagcgga taacaatttc acacaggaaa cagctatgac 2640
catgattacg ccaagctatt taggtgacac tatagaatac tcagaggagg gatcctggag 2700
aattcatcct cgagtcggat ccaattcgac ttacggcaga aatacgttcc acatcagcgt 2760
tcgcatagcg ggcaatcact tcagcgagag ttgttttgcc ggtaccgggc ggcccccaga 2820
ggatcataga atgtaaatgc ccggcttcga tagcgcgcg cgacggcttc cccgcagcca 2880
gcaaagtgtg ctggccgata tactgtgcta aattttctgg ccgcatacgc gcggccagag 2940
gttgaaaagt attatccgaa aaatcgagcg acagattgct cactcaggtg cctctactta 3000
cgttgatcat ctaccgtgac gccttgccgc ggggtgaagg taaatttcgc tgcattccaca 3060
gccccatttt gctgggattt cagttgataa ctgctgcgct gatcgtcctg ctccaccgcg 3120
ctaaactgat ggattgtgcc atcacgtccc acgttaatgg tgaactgctt cagattgcca 3180
ttgctggctt tcggcgtcag gacaaagtca tcgccattct gtttgatatt gtactgctgc 3240
cagtcgctgg actgggttgc ggcaatcagc ataaacggcg tattaccggg ggcattcttc 3300
agccagggtg ccgtagcttg ctcaacgaac gggttataga accacagtgt tttaccgtca 3360
gaaaccagaa tgctttcatc aggttggtgc atatgccagt tgaataagtt tggacgtttc 3420
accacagat cgccctgacc ttctgcacc gccgcgccgc taccgtcagt cactttttgt 3480
gtgaagctgg cgtggaagct gctgacttta tccaggcgcg gccgcgatat cgaattcgcc 3540
c 3541

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<210> 20

<211> 69

<212> DNA

<213> Artificial

<220>

<223> M&M adaptor PET sense strand.

<220>

<221> misc_feature

<222> (1)..(17)

<223> n is a, c, g, or t

<220>

```

<221> misc_feature
<222> (50)..(69)
<223> n is a, c, g, or t

<400> 20
nnnnnnnnnnnn nnnnnnnnagt cggaggccaa ggcggccgta cgtccaactn nnnnnnnnnnn 60
nnnnnnnnnnnn 69

<210> 21
<211> 69
<212> DNA
<213> Artificial

<220>
<223> M&M adaptor PET antisense strand

<220>
<221> misc_feature
<222> (1)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (51)..(69)
<223> n is a, c, g, or t

<400> 21
nnnnnnnnnnnn nnnnnnnnag ttggacgtac ggcgccttg gcctccgact nnnnnnnnnnn 60
nnnnnnnnnnnn 69

<210> 22
<211> 128
<212> DNA
<213> Artificial

<220>
<223> M&M adaptor PET sense strand with adaptor sequences

<220>
<221> misc_feature
<222> (29)..(47)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (80)..(99)
<223> n is a, c, g, or t

<400> 22
gatgtgctgc aaggcgatta agggatccnn nnnnnnnnnnn nnnnnnnnagt cggaggccaa 60
ggcggccgta cgtccaactn nnnnnnnnnnn nnnnnnnnnng gatccctgt gtgaaattgt 120

```

tatccgct 128

<210> 23
 <211> 128
 <212> DNA
 <213> Artificial

<220>
 <223> M&M adaptor PET antisense strand with adaptor sequences

<220>
 <221> misc_feature
 <222> (30)..(49)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (82)..(100)
 <223> n is a, c, g, or t

<400> 23
 agcggataac aatttcacac aggggatccn nnnnnnnnnn nnnnnnnnna gttggacgta 60
 cggccgcctt ggcctccgac tnnnnnnnnn nnnnnnnnnn ggatccctta atcgcttg 120
 agcacatc 128

<210> 24
 <211> 77
 <212> DNA
 <213> Artificial

<220>
 <223> M&M final PET sense strand after cleavage of adaptor sequences

<220>
 <221> misc_feature
 <222> (6)..(24)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (57)..(76)
 <223> n is a, c, g, or t

<400> 24
 gatccnnnnn nnnnnnnnnn nnnnagtcgg aggccaaggc ggccgtacgt ccaactnnnn 60
 nnnnnnnnnn nnnnnng 77

<210> 25
 <211> 77

<212> DNA
 <213> Artificial

<220>
 <223> M&M final PET antisense strand after cleavage of of adaptor sequences.

<220>
 <221> misc_feature
 <222> (6)..(25)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (58)..(76)
 <223> n is a, c, g, or t

<400> 25
 gatccnnnnnn nnnnnnnnnn nnnnnagttg gacgtacggc cgccttggcc tccgactnnn 60
 nnnnnnnnnn nnnnnng 77

<210> 26
 <211> 85
 <212> DNA
 <213> Artificial

<220>
 <223> M&G adaptor sense strand after sonication

<220>
 <221> misc_feature
 <222> (1)..(23)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (56)..(85)
 <223> n is a, c, g, or t

<400> 26
 nnnnnnnnnn nnnnnnnnnn nnnagtcgga ggccaaggcg gccgtacgct ggagtnnnnn 60
 nnnnnnnnnn nnnnnnnnnn nnnnn 85

<210> 27
 <211> 85
 <212> DNA
 <213> Artificial

<220>
 <223> M&G adaptor antisense strand after sonication

<220>
 <221> misc_feature
 <222> (1)..(30)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (63)..(85)
 <223> n is a, c, g, or t

<400> 27
 nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn actccagcgt acggccgcct tggcctccga 60
 ctnnnnnnnnnn nnnnnnnnnnnn nnnnnn 85

<210> 28
 <211> 140
 <212> DNA
 <213> Artificial

<220>
 <223> M&G adaptor sense strand after cloning into pGIS8 vector, rest of
 vector not shown.

<220>
 <221> misc_feature
 <222> (10)..(54)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (87)..(129)
 <223> n is a, c, g, or t

<400> 28
 ggatccgacn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnagtcgg 60
 aggccaaggc ggccgtacgc tggagtntnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnn 120
 nnnnnnnnnnc tccaggatcc 140

<210> 29
 <211> 140
 <212> DNA
 <213> Artificial

<220>
 <223> M&G adaptor antisense strand after cloning into pGIS8 vector,
 rest of vector not shown.

<220>
 <221> misc_feature
 <222> (12)..(54)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (87)..(131)
 <223> n is a, c, g, or t

<400> 29
 ggatcctgga gnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnactcca 60
 gcgtacggcc gccttggcct ccgactnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 120
 nnnnnnnnnnn ngtcggatcc 140

<210> 30
 <211> 132
 <212> DNA
 <213> Artificial

<220>
 <223> M PET intermediate sense strand

<220>
 <221> misc_feature
 <222> (10)..(46)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (79)..(121)
 <223> n is a, c, g, or t

<400> 30
 ggatccgacn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnagtc ggaggccaag 60
 gcggccgtac gctggagtnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 120
 nctccaggat cc 132

<210> 31
 <211> 132
 <212> DNA
 <213> Artificial

<220>
 <223> M PET intermediate antisense strand

<220>
 <221> misc_feature
 <222> (12)..(64)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (97)..(123)

<223> n is a, c, g, or t

<400> 31

ggatcctgga gnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60

nnnnactcca gcgtacggcc gccttggcct ccgactnnnn nnnnnnnnnnn nnnnnnnnnnn 120

nnngtcggat cc 132

<210> 32

<211> 116

<212> DNA

<213> Artificial

<220>

<223> M&G diPET sense strand

<220>

<221> misc_feature

<222> (9)..(45)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (78)..(105)

<223> n is a, c, g, or t

<400> 32

gatccgacnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnagtcg gaggccaaagg 60

cggccgtacg ctggagtann nnnnnnnnnnn nnnnnnnnnnn nnnnnctcca ggatec 116

<210> 33

<211> 116

<212> DNA

<213> Artificial

<220>

<223> M&G diPET antisense strand

<220>

<221> misc_feature

<222> (12)..(37)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (70)..(108)

<223> n is a, c, g, or t

<400> 33

ggatcctgga gnnnnnnnnnn nnnnnnnnnnn nnnnnnnact ccagegtacg gccgccttgg 60

cctccgactn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnngt cggatc 116

<210> 34
 <211> 111
 <212> DNA
 <213> Artificial

<220>
 <223> Released diPET sense strand with BamH1 sticky ends

<220>
 <221> misc_feature
 <222> (9)..(45)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (78)..(105)
 <223> n is a, c, g, or t

<400> 34
 gatccgacnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnagtcg gaggccaagg 60
 cggccgtacg ctggagtnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnctcca g 111

<210> 35
 <211> 111
 <212> DNA
 <213> Artificial

<220>
 <223> Released diPET antisense strand with BamH1 sticky ends

<220>
 <221> misc_feature
 <222> (11)..(39)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (72)..(107)
 <223> n is a, c, g, or t

<400> 35
 gatcctggag nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnna ctccagcgta cggccgcctt 60
 ggctccgac tnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnngtc g 111

<210> 36
 <211> 91
 <212> DNA
 <213> Artificial

<220>

<223> M&M PET sense strand before Mmel digestion

<220>

<221> misc_feature

<222> (1)..(28)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (61)..(91)

<223> n is a, c, g, or t

<400> 36

nnnnnnnnnnn nnnnnnnnnn nnnnnnnnag tcggaggcca aggcggccgt acgtccaact 60

nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn n 91

<210> 37

<211> 91

<212> DNA

<213> Artificial

<220>

<223> M&M PET antisense sequence before Mmel digestion

<220>

<221> misc_feature

<222> (1)..(31)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (64)..(91)

<223> n is a, c, g, or t

<400> 37

nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nagttggacg tacggccgcc ttggcctcgc 60

actnnnnnnnn nnnnnnnnnn nnnnnnnnnn n 91

<210> 38

<211> 53

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG. 8 sense strand before insertion of M&G linker.

<220>

<221> misc_feature

<222> (1)..(53)

<223> n is a, c, g, or t

<400> 38
 nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnn 53

<210> 39
 <211> 53
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 8 antisense strand before insertion of
 M&G linker

<220>
 <221> misc_feature
 <222> (1)..(30)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (32)..(53)
 <223> n is a, c, g, or t

<400> 39
 nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn tnnnnnnnnnnn nnnnnnnnnnnn nnn 53

<210> 40
 <211> 140
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG.8 sense strand inserted into plasmid (rest
 of plasmid not shown)

<220>
 <221> misc_feature
 <222> (10)..(129)
 <223> n is a, c, g, or t

<400> 40
 ggatccgacn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn 60
 nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn 120
 nnnnnnnnnnc tccaggatcc 140

<210> 41
 <211> 140
 <212> DNA
 <213> Artificial

<220>

<223> Oligonucleotide of FIG.8 antisense strand inserted into plasmid
(rest of plasmid not shown)

<220>

<221> misc_feature

<222> (12)..(131)

<223> n is a, c, g, or t

<400> 41

ggatcctgga gnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60

nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 120

nnnnnnnnnn ngtcggatcc 140

<210> 42

<211> 140

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG.8 sense strand inserted into plasmid (rest
of plasmid not shown) after Mmel cut

<220>

<221> misc_feature

<222> (10)..(129)

<223> n is a, c, g, or t

<400> 42

ggatccgacn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60

nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 120

nnnnnnnnnnc tccaggatcc 140

<210> 43

<211> 140

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG.8 antisense strand inserted into plasmid
(rest of plasmid not shown) after Mmel cut

<220>

<221> misc_feature

<222> (12)..(131)

<223> n is a, c, g, or t

<400> 43

ggatcctgga gnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60

nnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn 120

nnnnnnnnnnn ngtcggatcc 140

<210> 44
 <211> 112
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 8 sense strand without M&G linker
 inserted removed by electrophesis

<220>
 <221> misc_feature
 <222> (8)..(106)
 <223> n is a, c, g, or t

<400> 44
 gatccgannn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn 60

nnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnctcc ag 112

<210> 45
 <211> 112
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 8 antisense strand without M&G linker
 inserted removed by electrophesis

<220>
 <221> misc_feature
 <222> (11)..(109)
 <223> n is a, c, g, or t

<400> 45
 gatcctggag nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn 60

nnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnt cg 112

<210> 46
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 9 sense strand before insertion of M&G
 linker

<220>

<221> misc_feature
 <222> (1)..(23)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (30)..(59)
 <223> n is a, c, g, or t

<400> 46
 nnnnnnnnnnnn nnnnnnnnnnnn nnntccgach nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn 59

<210> 47
 <211> 59
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 9 sense strand before insertion of M&G linker

<220>
 <221> misc_feature
 <222> (1)..(30)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (37)..(59)
 <223> n is a, c, g, or t

<400> 47
 nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn gtcggannnn nnnnnnnnnnnn nnnnnnnnnnnn 59

<210> 48
 <211> 140
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 9 sense strand with part of M&G linker inserted (rest of plasmid not shown)

<220>
 <221> misc_feature
 <222> (10)..(58)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (65)..(129)
 <223> n is a, c, g, or t

<400> 48

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ggatccgacn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnntc      60
cgacnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn    120
nnnnnnnnnc tccaggatcc                                         140

```

```

<210> 49
<211> 140
<212> DNA
<213> Artificial

```

```

<220>
<223> Oligonucleotide of FIG. 9 antisense strand with part of M&G
      linker inserted (rest of plasmid not shown)

```

```

<220>
<221> misc_feature
<222> (12)..(76)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (83)..(131)
<223> n is a, c, g, or t

```

```

<400> 49
ggatcctgga gnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn      60
nnnnnnnnnn nnnnnngtcg gannnnnnnn nnnnnnnnnn nnnnnnnnnn    120
nnnnnnnnnn ngtcggatcc                                         140

```

```

<210> 50
<211> 126
<212> DNA
<213> Artificial

```

```

<220>
<223> Oligonucleotide of FIG. 9 sense strand with partial M&G linker
      inserted after restriction enzyme digestion (rest of plasmid not
      shown)

```

```

<220>
<221> misc_feature
<222> (10)..(44)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (51)..(115)
<223> n is a, c, g, or t

```

```

<400> 50
ggatccgacn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnntccgac nnnnnnnnnn  60

```

nnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnctcca 120

ggatcc 126

<210> 51

<211> 126

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG. 9 antisense strand with partial M&G linker inserted after restriction enzyme digestion (rest of plasmid not shown)

<220>

<221> misc_feature

<222> (12)..(76)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (83)..(117)

<223> n is a, c, g, or t

<400> 51

ggatcctgga gnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn 60

nnnnnnnnnnn nnnnnngtcg gnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnngtc 120

ggatcc 126

<210> 52

<211> 120

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG. 9 sense strand excised from plasmid and removed by electrophoresis as it is too long

<220>

<221> misc_feature

<222> (9)..(43)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (50)..(114)

<223> n is a, c, g, or t

<400> 52

gatccgacnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnntccgacn nnnnnnnnnnnn 60

nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnctccag 120

<210> 53
 <211> 120
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 9 antisense strand excised from plasmid
 and removed by electrophoresis as it is too long

<220>
 <221> misc_feature
 <222> (11)..(75)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (82)..(116)
 <223> n is a, c, g, or t

<400> 53
 gatcctggag nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 60

nnnnnnnnnn nnnnngtcgg annnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnngtcg 120

<210> 54
 <211> 85
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide of FIG. 10 sense strand with M&G linker inserted
 in the opposite orientation

<220>
 <221> misc_feature
 <222> (1)..(23)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (56)..(85)
 <223> n is a, c, g, or t

<400> 54
 nnnnnnnnnn nnnnnnnnnn nnnagtcgga ggccaaggcg gccgtacgct ggagtnnnnn 60

nnnnnnnnnn nnnnnnnnnn nnnnn 85

<210> 55
 <211> 85
 <212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG. 10 antisense strand with M&G linker inserted in the opposite orientation

<220>

<221> misc_feature

<222> (1)..(30)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (63)..(85)

<223> n is a, c, g, or t

<400> 55

nnnnnnnnnnn nnnnnnnnnn nnnnnnnnnn actccagcgt acggccgcct tggcctccga 60

ctnnnnnnnnn nnnnnnnnnn nnnnnn 85

<210> 56

<211> 148

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG. 10 sense strand inserted into plasmid (rest of plasmid not shown)

<220>

<221> misc_feature

<222> (10)..(54)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (87)..(139)

<223> n is a, c, g, or t

<400> 56

ggactggagn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnagtcgg 60

aggccaaggc ggccgtacgc tggagttnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 120

nnnnnnnnnnn nnnnnnnnnng tcggatcc 148

<210> 57

<211> 148

<212> DNA

<213> Artificial

<220>

<223> Oligonucleotide of FIG. 10 antisense strand inserted into plasmid

(rest of plasmid not shown)

```

<220>
<221> misc_feature
<222> (10)..(62)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (95)..(139)
<223> n is a, c, g, or t

<400> 57
ggatccgacn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60
nnactccagc gtacggccgc cttggcctcc gactnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 120
nnnnnnnnnnn nnnnnnnnnnc tccagtc 148

<210> 58
<211> 62
<212> DNA
<213> Artificial

<220>
<223> Intermediate oligonucleotide 1 sense strand of FIG. 10

<220>
<221> misc_feature
<222> (10)..(53)
<223> n is a, c, g, or t

<400> 58
ggactggagn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnngtcggat 60
cc 62

<210> 59
<211> 62
<212> DNA
<213> Artificial

<220>
<223> Intermediate oligonucleotide 1 antisense strand of FIG. 10

<220>
<221> misc_feature
<222> (10)..(53)
<223> n is a, c, g, or t

<400> 59
ggatccgacn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnctccagt 60

```

cc

62

<210> 60
 <211> 62
 <212> DNA
 <213> Artificial

<220>
 <223> Intermediate oligonucleotide 2 sense strand of FIG. 10

<220>
 <221> misc_feature
 <222> (10)..(53)
 <223> n is a, c, g, or t

<400> 60
 ggactggagn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnngtcggat 60

cc

62

<210> 61
 <211> 62
 <212> DNA
 <213> Artificial

<220>
 <223> Intermediate oligonucleotide 2 antisense strand of FIG. 10

<220>
 <221> misc_feature
 <222> (10)..(53)
 <223> n is a, c, g, or t

<400> 61
 ggatccgacn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnectccagt 60

cc

62

<210> 62
 <211> 114
 <212> DNA
 <213> Artificial

<220>
 <223> Oligonucleotide sense strand generated by incorrect insertion of
 M&G linker removed by electrophoresis

<220>
 <221> misc_feature
 <222> (8)..(108)
 <223> n is a, c, g, or t

```
<400>   62  
gatccgannnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn          60  
  
nnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnnnn nnnnnnnnnct ccag      114
```

```
<210> 63
<211> 114
<212> DNA
<213> Artificial
```

```
<220>
<223> Oligonucleotide antisense strand generated by incorrect insertion
of M&G linker removed by electrophoresis
```

```
<220>
<221> misc_feature
<222> (11)..(111)
<223> n is a, c, g, or t
```

```
<400> 63
gatcctggag nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 60
nnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn ntcg 114
```