FIG. 1

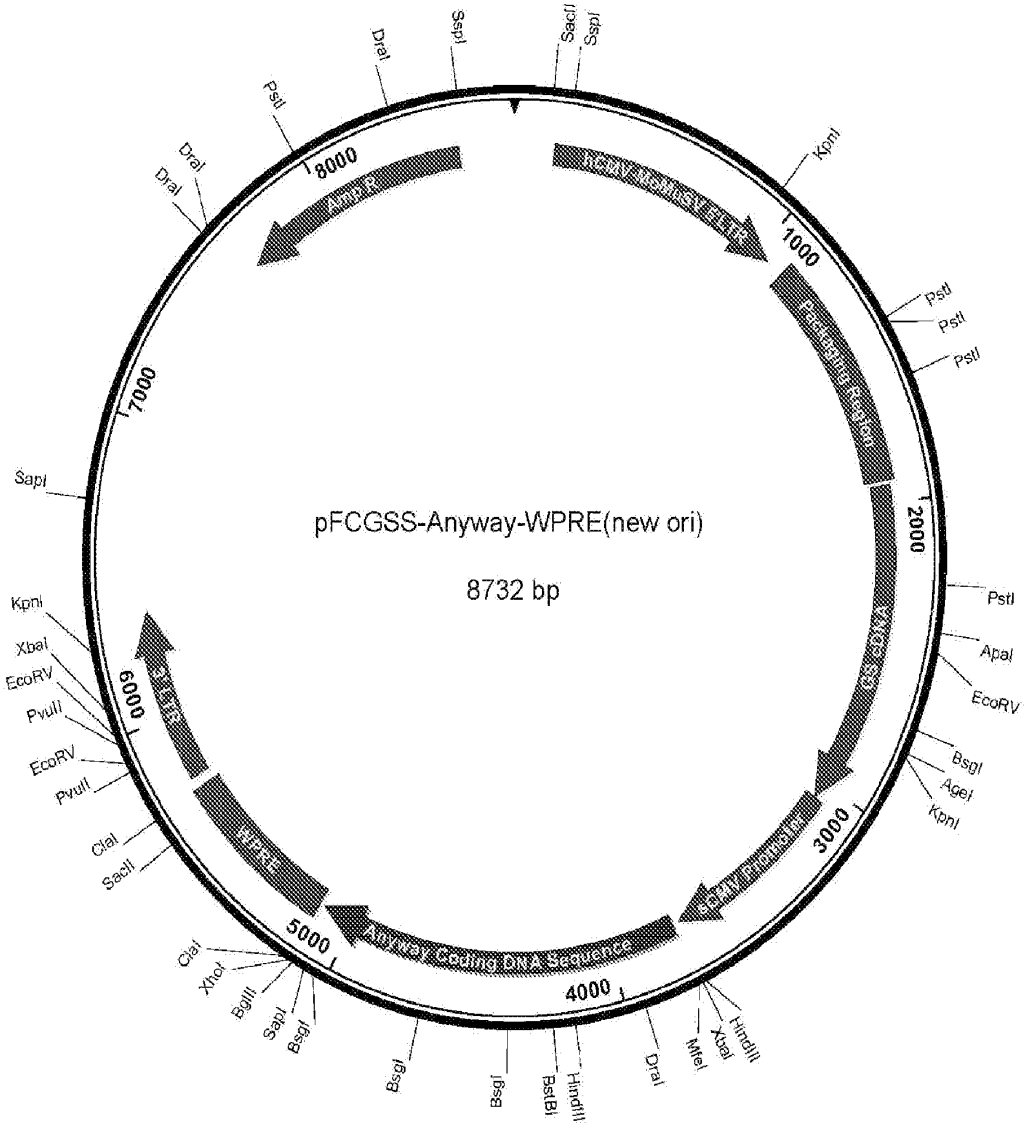

pFCGSS-Anyway-WPRE(new ori)
8732 bp
1000
2000
3000
4000
5000
6000
7000
8000
Anyway Coding DNA Sequence
WPRE
Ampr
Kpni
PstI
ApaI
EcoRV
BsgI
AgeI
HindIII
XbaI
MfeI
DraI
BstBI
BsgI
BsgI
SapI
BglII
XhoI
ClaI
SacII
PvuII
EcoRV
XbaI
Kpni
SapI
DraI
DraI
PstI
SspI
SacI
SspI
Kpni
PstI
PstI
PstI

FIG. 2

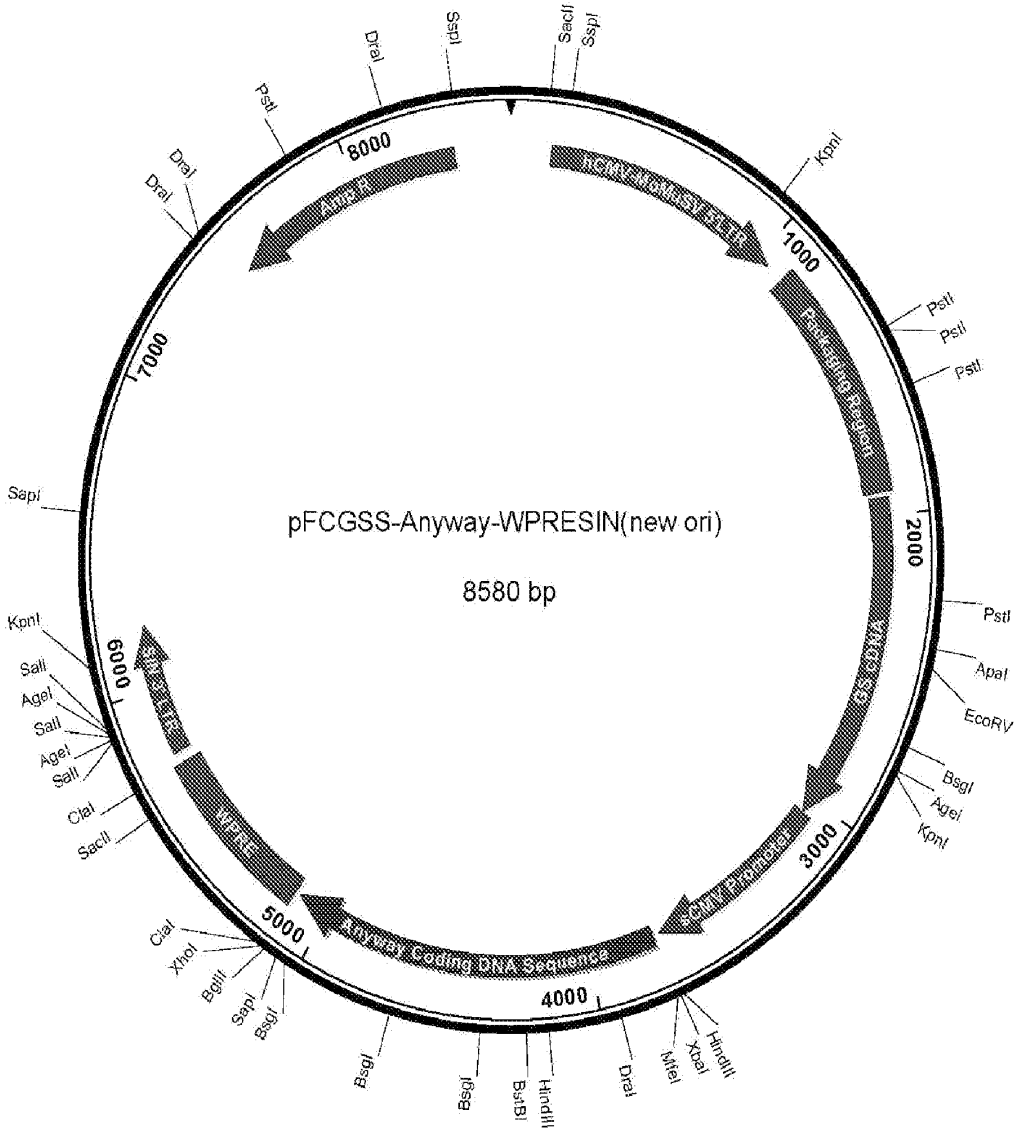

pFCGSS-Anyway-WPRESIN(new ori)
8580 bp
1000
2000
3000
4000
5000
6000
7000
8000
Kpnl
Pstl
Pstl
Pstl
Pstl
ApaI
EcoRV
BsgI
AgeI
KpnI
BsgI
BsgI
BstBI
HindIII
DraI
MfeI
XbaI
HindIII
BsgI
SapI
BsgI
BglII
XhoI
ClaI
SacII
ClaI
SalI
AgeI
SalI
AgeI
SalI
KpnI
SapI
DraI
DraI
PstI
DraI
SspI
SacII
SspI

FIG. 3

```
LOCUS       CT041-LTR-LTR-se        6217 bp    DNA     linear       05-

FEATURES             Location/Qualifiers
     misc_feature    1..893
                     /note="hCMV-MoMuSV 5'LTR"
     misc_feature    963..1772
                     /note="Packaging Region"
     misc_feature    1789..2910
                     /note="GS cDNA"
     misc_feature    2912..3584
                     /note="sCMV Promoter"
     misc_feature    3667..4281
                     /note="Re-coded based on human KDR mRNA"
     misc_feature    3610..4965
                     /note="Anyway Coding DNA Sequence"
     misc_feature    4984..5584
                     /note="WPRE"
     misc_feature    5624..6217
                     /note="3' LTR"
     source          1..6217
                     /dnas_title="CT041-LTR-LTR-seq"


ORIGIN
        1 GTCCGGCCAT TAGCCATATT ATTCATTGGT TATATAGCAT AAATCAATAT TGGCTATTGG
       61 CCATTGCATA CGTTGTATCC ATATCATAAT ATGTACATTT ATATTGGCTC ATGTCCAACA
      121 TTACCGCCAT GTTGACATTG ATTATTGACT AGTTATTAAT AGTAATCAAT TACGGGGTCA
      181 TTAGTTCATA GCCCATATAT GGAGTTCCGC GTTACATAAC TTACGGTAAA TGGCCCGCCT
      241 GGCTGACCGC CCAACGACCC CCGCCCATTG ACGTCAATAA TGACGTATGT TCCCATAGTA
      301 ACGCCAATAG GGACTTTCCA TTGACGTCAA TGGGTGGAGT ATTTACGGTA AACTGCCCAC
      361 TTGGCAGTAC ATCAAGTGTA TCATATGCCA AGTACGCCCC CTATTGACGT CAATGACGGT
      421 AAATGGCCCG CCTGGCATTA TGCCCAGTAC ATGACCTTAT GGGACTTTCC TACTTGGCAG
      481 TACATCTACG TATTAGTCAT CGCTATTACC ATGGTGATGC GGTTTTGGCA GTACATCAAT
      541 GGGCGTGGAT AGCGGTTTGA CTCACGGGGA TTTCCAAGTC TCCACCCCAT TGACGTCAAT
      601 GGGAGTTTGT TTTGGCACCA AAATCAACGG GACTTTCCAA AATGTCGTAA CAACTCCGCC
      661 CCATTGACGC AAATGGGCGG TAGGCGTGTA CGGTGGGAGG TCTATATAAG CAGAGCTCAA
      721 TAAAAGAGCC CACAACCCCT CACTCGGCGC GCCAGTCTTC CGATAGACTG CGTCGCCCGG
      781 GTACCCGTAT TCCCAATAAA GCCTCTTGCT GTTTGCATCC GAATCGTGGT CTCGCTGTTC
      841 CTTGGGAGGG TCTCCTCTGA GTGATTGACT ACCCACGACG GGGGTCTTTC ATTTGGGGGC
      901 TCGTCCGGGA TTTGGAGACC CCTGCCCAGG GACCACCGAC CCACCACCGG GAGGTAAGCT
      961 GGCCAGCAAC TTATCTGTGT CTGTCCGATT GTCTAGTGTC TATGTTTGAT GTTATGCGCC
     1021 TGCGTCTGTA CTAGTTAGCT AACTAGCTCT GTATCTGGCG GACCCGTGGT GGAACTGACG
     1081 AGTTCTGAAC ACCCGGCCGC AACCCTGGGA GACGTCCCAG GGACTTTGGG GGCCGTTTTT
     1141 GTGGCCCGAC CTGAGGAAGG GAGTCGATGT GGAATCCGAC CCCGTCAGGA TATGTGGTTC
     1201 TGGTAGGAGA CGAGAACCTA AAACAGTTCC CGCCTCCGTC TGAATTTTTG CTTTCGGTTT
     1261 GGAACCGAAG CCGCGCGTCT TGTCTGCTGC AGCGCTGCAG CATCGTTCTG TGTTGTCTCT
     1321 GTCTGACTGT GTTTCTGTAT TTGTCTGAAA ATTAGGGCCA GACTGTTACC ACTCCCTTAA
     1381 GTTTGACCTT AGGTCACTGG AAAGATGTCG AGCGGATCGC TCACAACCAG TCGGTAGATG
     1441 TCAAGAAGAG ACGTTGGGTT ACCTTCTGCT CTGCAGAATG GCCAACCTTT AACGTCGGAT
     1501 GGCCGCGAGA CGGCACCTTT AACCGAGACC TCATCACCCA GGTTAAGATC AAGGTCTTTT
     1561 CACCTGGCCC GCATGGACAC CCAGACCAGG TCCCCTACAT CGTGACCTGG GAAGCCTTGG
     1621 CTTTTGACCC CCCTCCCTGG GTCAAGCCCT TTGTACACCC TAAGCCTCCG CCTCCTCTTC
     1681 CTCCATCCGC CCCGTCTCTC CCCCTTGAAC CTCCTCGTTC GACCCCGCCT CGATCCTCCC
     1741 TTTATCCAGC CCTCACTCCT TCTCTAGGCG CCGGAATTGC CTTCCACCAT GGCCACCTCA
     1801 GCAAGTTCCC ACTTGAACAA AAACATCAAG CAAATGTACT TGTGCCTGCC CCAGGGTGAG
     1861 AAAGTCCAAG CCATGTATAT CTGGGTTGAT GGTACTGGAG AAGGACTGCG CTGCAAAACC
     1921 CGCACCCTGG ACTGTGAGCC CAAGTGTGTA GAAGAGTTAC CTGAGTGGAA TTTTGATGGC
     1981 TCTAGTACCT TTCAGTCTGA GGGCTCCAAC AGTGACATGT ATCTCAGCCC TGTTGCCATG
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FIG. 3 (cont'd)

```
2041 TTTCGGGACC CCTTCCGCAG AGATCCCAAC AAGCTGGTGT TCTGTGAAGT TTTCAAGTAC
2101 AACCGGAAGC CTGCAGAGAC CAATTTAAGG CACTCGTGTA AACGGATAAT GGACATGGTG
2161 AGCAACCAGC ACCCCTGGTT TGGAATGGAA CAGGAGTATA CTCTGATGGG AACAGATGGG
2221 CACCCTTTTG GTTGGCCTTC CAATGGCTTT CCTGGGCCCC AAGGTCCGTA TTACTGTGGT
2281 GTGGGCGCAG ACAAAGCCTA TGGCAGGGAT ATCGTGGAGG CTCACTACCG CGCCTGCTTG
2341 TATGCTGGGG TCAAGATTAC AGGAACAAAT GCTGAGGTCA TGCCTGCCCA GTGGGAGTTC
2401 CAAATAGGAC CCTGTGAAGG AATCCGCATG GGAGATCATC TCTGGGTGGC CCGTTTCATC
2461 TTGCATCGAG TATGTGAAGA CTTTGGGGTA ATAGCAACCT TTGACCCCAA GCCCATTCCT
2521 GGGAACTGGA ATGGTGCAGG CTGCCATACC AACTTTAGCA CCAAGGCCAT GCGGGAGGAG
2581 AATGGTCTGA AGCACATCGA GGAGGCCATC GAGAAACTAA GCAAGCGGCA CCGGTACCAC
2641 ATTCGAGCCT ACGATCCCAA GGGGGGCCTG GACAATGCCC GTCGTCTGAC TGGGTTCCAC
2701 GAAACGTCCA ACATCAACGA CTTTTCTGCT GGTGTCGCCA ATCGCAGTGC CAGCATCCGC
2761 ATTCCCCGGA CTGTCGGCCA GGAGAAGAAA GGTTACTTTG AAGACCGCCG CCCCTCTGCC
2821 AACTGTGACC CCTTTGCAGT GACAGAAGCC ATCGTCCGCA CATGCCTTCT CAATGAGACT
2881 GGCGACGAGC CCTTCCAATA CAAAAACTAA AGATCCCTAT GGCTATTGGC CAGGTTCAAT
2941 ACTATGTATT GGCCCTATGC CATATAGTAT TCCATATATG GGTTTTCCTA TTGACGTAGA
3001 TAGCCCCTCC CAATGGGCGG TCCCATATAC CATATATGGG GCTTCCTAAT ACCGCCCATA
3061 GCCACTCCCC CATTGACGTC AATGGTCTCT ATATATGGTC TTTCCTATTG ACGTCATATG
3121 GGCGGTCCTA TTGACGTATA TGGCGCCTCC CCCATTGACG TCAATTACGG TAAATGGCCC
3181 GCCTGGCTCA ATGCCCATTG ACGTCAATAG GACCACCCAC CATTGACGTC AATGGGATGG
3241 CTCATTGCCC ATTCATATCC GTTCTCACGC CCCCTATTGA CGTCAATGAC GGTAAATGGC
3301 CCACTTGGCA GTACATCAAT ATCTATTAAT AGTAACTTGG CAAGTACATT ACTATTGGAA
3361 GTACGCCAGG GTACATTGGC AGTACTCCCA TTGACGTCAA TGGCGGTAAA TGGCCCGCGA
3421 TGGCTGCCAA GTACATCCCC ATTGACGTCA ATGGGGAGGG GCAATGACGC AAATGGGCGT
3481 TCCATTGACG TAAATGGGCG GTAGGCGTGC CTAATGGGAG GTCTATATAA GCAATGCTCG
3541 TTTAGGGAAC CGCCATTCTG CCTGGGGACG TCGGAGGAGC TCGAAAGCTT CTAGACAATT
3601 GCCGCCACCA TGATGTCCTT TGTCTCTCTG CTCCTGGTTG GCATCCTATT CCATGCCACC
3661 CAGGCCAGTG ATACAGGTAG ACCTTTCGTA GAGATGTACA GTGAAATCCC CGAAATTATA
3721 CACATGACTG AAGGAAGGGA GCTCGTCATT CCCTGCCGGG TTACGTCACC TAACATCACT
3781 GTTACTTTAA AAAAGTTTCC ACTTGACACT TTGATCCCTG ATGGAAAACG CATAATCTGG
3841 GACAGTAGAA AGGGCTTCAT CATATCAAAT GCAACGTACA AAGAAATAGG GCTTCTGACC
3901 TGTGAAGCAA CAGTCAATGG GCATTTGTAT AAGACAAACT ATCTCACACA TCGACAAACC
3961 AATACAATCA TAGATGTCGT TCTGAGTCCG TCTCATGGAA TTGAACTATC TGTTGGAGAA
4021 AAGCTTGTCT TAAATTGTAC AGCAAGAACT GAACTAAATG TGGGGATTGA CTTCAACTGG
4081 GAATACCCTT CTTCGAAGCA TCAGCATAAG AAACTTGTAA ACCGAGACCT AAAAACCCAG
4141 TCTGGGAGTG AGATGAAGAA GTTTTTGAGC ACCTTAACTA TAGATGGTGT AACCCGGAGT
4201 GACCAAGGAT TGTACACCTG TGCAGCATCC AGTGGGCTGA TGACCAAGAA AAACAGCACA
4261 TTTGTCAGGG TCCATGAAAA AGACAAAACT CACACATGCC CACCGTGCCC AGCACCTGAA
4321 CTCCTGGGGG GACCCTCAGT CTTCCTCTTC CCCCCAAAAC CCAAGGACAC CCTCATGATC
4381 TCCCGGACCC CTGAGGTCAC ATGCGTGGTG GTGGACGTGA GCCACGAAGA CCCTGAGGTC
4441 AAGTTCAACT GGTACGTGGA CGGCGTGGAG GTGCATAATG CCAAGACAAA GCCACGGGAG
4501 GAGCAGTACA ACAGCACATA TCGTGTGGTC AGCGTCCTCA CCGTCCTGCA CCAGGACTGG
4561 CTGAATGGCA AGGAGTACAA GTGCAAGGTC TCCAACAAAG CCCTCCCAGC CCCCATCGAG
4621 AAAACCATCT CCAAAGCCAA AGGGCAGCCC CGAGAACCAC AGGTGTACAC CCTGCCCCCA
4681 TCCCGGGATG AGCTGACCAA GAACCAGGTC AGCCTGACCT GCCTGGTCAA AGGCTTCTAT
4741 CCCAGCGACA TCGCCGTGGA GTGGGAGAGC AATGGGCAGC CGGAGAACAA CTACAAGACC
4801 ACGCCTCCCG TGCTGGACTC CGACGGCTCC TTCTTCCTCT ACAGCAAGCT CACCGTGGAC
4861 AAGAGCAGGT GGCAGCAGGG GAACGTCTTC TCATGCTCCG TGATGCATGA GGCTCTGCAC
4921 AACCACTACA CGCAGAAGAG CCTCTCCCTG TCTCCCGGGA AATGATGAGA TCTCGAGTTC
4981 GACATCGATA ATCAACCTCT GGATTACAAA ATTTGTGAAA GATTGACTGG TATTCTTAAC
5041 TATGTTGCTC CTTTTACGCT ATGTGGATAC GCTGCTTTAA TGCCTTTGTA TCATGCTATT
5101 GCTTCCCGTA TGGCTTTCAT TTTCTCCTCC TTGTATAAAT CCTGGTTGCT GTCTCTTTAT
5161 GAGGAGTTGT GGCCCGTTGT CAGGCAACGT GGCGTGGTGT GCACTGTGTT TGCTGACGCA
5221 ACCCCCACTG GTTGGGGCAT TGCCACCACC TGTCAGCTCC TTTCCGGGAC TTTCGCTTTC
5281 CCCCTCCCTA TTGCCACGGC GGAACTCATC GCCGCCTGCC TTGCCCGCTG CTGGACAGGG
5341 GCTCGGCTGT TGGGCACTGA CAATTCCGTG GTGTTGTCGG GGAAATCATC GTCCTTTCCT
5401 TGGCTGCTCG CCTGTGTTGC CACCTGGATT CTGCGCGGGA CGTCCTTCTG CTACGTCCCT
5461 TCGGCCCTCA ATCCAGCGGA CCTTCCTTCC CGCGGCCTGC TGCCGGCTCT GCGGCCTCTT
```

FIG. 3 (cont'd)

```
5521 CCGCGTCTTC GCCTTCGCCC TCAGACGAGT CGGATCTCCC TTTGGGCCGC CTCCCCGCAT
5581 CGATAAAATA AAAGATTTTA TTTAGTCTCC AGAAAAAGGG GGGAATGAAA GACCCCACCT
5641 GTAGGTTTGG CAAGCTAGCT TAAGTAACGC CATTTTGCAA GGCATGGAAA AATACATAAC
5701 TGAGAATAGA GAAGTTCAGA TCAAGGTCAG GAACAGATGG AACAGCTGAA TATGGGCCAA
5761 ACAGGATATC TGTGGTAAGC AGTTCCTGCC CCGGCTCAGG GCCAAGAACA GATGGAACAG
5821 CTGAATATGG GCCAAACAGG ATATCTGTGG TAAGCAGTTC CTGCCCCGGC TCAGGGCCAA
5881 GAACAGATGG TCCCCAGATG CGGTCCAGCC CTCAGCAGTT TCTAGAGAAC CATCAGATGT
5941 TTCCAGGGTG CCCCAAGGAC CTGAAATGAC CCTGTGCCTT ATTTGAACTA ACCAATCAGT
6001 TCGCTTCTCG CTTCTGTTCG CGCGCTTCTG CTCCCCGAGC TCAATAAAAG AGCCCACAAC
6061 CCCTCACTCG GGGCGCCAGT CCTCCGATTG ACTGAGTCGC CCGGGTACCC GTGTATCCAA
6121 TAAACCCTCT TGCAGTTGCA TCCGACTTGT GGTCTCGCTG TTCCTTGGGA GGGTCTCCTC
6181 TGAGTGATTG ACTACCCGTC AGCGGGGGTC TTTCATT
```

FIG. 4

```
LOCUS       CT051-LTR-LTR-se        6065 bp    DNA     linear       05-

FEATURES             Location/Qualifiers
     misc_feature    1..893
                     /note="hCMV-MoMuSV 5'LTR"
     misc_feature    963..1772
                     /note="Packaging Region"
     misc_feature    1789..2910
                     /note="GS cDNA"
     misc_feature    2912..3584
                     /note="sCMV Promoter"
     misc_feature    3667..4281
                     /note="Re-coded based on human KDR mRNA"
     misc_feature    3610..4965
                     /note="Anyway Coding DNA Sequence"
     misc_feature    4984..5584
                     /note="WPRE"
     misc_feature    5624..6065
                     /note="SIN 3' LTR"
     source          1..6065
                     /dnas_title="CT051-LTR-LTR-seq"


ORIGIN
        1 GTCCGGCCAT TAGCCATATT ATTCATTGGT TATATAGCAT AAATCAATAT TGGCTATTGG
       61 CCATTGCATA CGTTGTATCC ATATCATAAT ATGTACATTT ATATTGGCTC ATGTCCAACA
      121 TTACCGCCAT GTTGACATTG ATTATTGACT AGTTATTAAT AGTAATCAAT TACGGGGTCA
      181 TTAGTTCATA GCCCATATAT GGAGTTCCGC GTTACATAAC TTACGGTAAA TGGCCCGCCT
      241 GGCTGACCGC CCAACGACCC CCGCCCATTG ACGTCAATAA TGACGTATGT TCCCATAGTA
      301 ACGCCAATAG GGACTTTCCA TTGACGTCAA TGGGTGGAGT ATTTACGGTA AACTGCCCAC
      361 TTGGCAGTAC ATCAAGTGTA TCATATGCCA AGTACGCCCC CTATTGACGT CAATGACGGT
      421 AAATGGCCCG CCTGGCATTA TGCCCAGTAC ATGACCTTAT GGGACTTTCC TACTTGGCAG
      481 TACATCTACG TATTAGTCAT CGCTATTACC ATGGTGATGC GGTTTTGGCA GTACATCAAT
      541 GGGCGTGGAT AGCGGTTTGA CTCACGGGGA TTTCCAAGTC TCCACCCCAT TGACGTCAAT
      601 GGGAGTTTGT TTTGGCACCA AAATCAACGG GACTTTCCAA AATGTCGTAA CAACTCCGCC
      661 CCATTGACGC AAATGGGCGG TAGGCGTGTA CGGTGGGAGG TCTATATAAG CAGAGCTCAA
      721 TAAAAGAGCC CACAACCCCT CACTCGGCGC GCCAGTCTTC CGATAGACTG CGTCGCCCGG
      781 GTACCCGTAT TCCCAATAAA GCCTCTTGCT GTTTGCATCC GAATCGTGGT CTCGCTGTTC
      841 CTTGGGAGGG TCTCCTCTGA GTGATTGACT ACCCACGACG GGGGTCTTTC ATTTGGGGGC
      901 TCGTCCGGGA TTTGGAGACC CCTGCCCAGG GACCACCGAC CCACCACCGG GAGGTAAGCT
      961 GGCCAGCAAC TTATCTGTGT CTGTCCGATT GTCTAGTGTC TATGTTTGAT GTTATGCGCC
     1021 TGCGTCTGTA CTAGTTAGCT AACTAGCTCT GTATCTGGCG GACCCGTGGT GGAACTGACG
     1081 AGTTCTGAAC ACCCGGCCGC AACCCTGGGA GACGTCCCAG GGACTTTGGG GGCCGTTTTT
     1141 GTGGCCCGAC CTGAGGAAGG GAGTCGATGT GGAATCCGAC CCCGTCAGGA TATGTGGTTC
     1201 TGGTAGGAGA CGAGAACCTA AAACAGTTCC CGCCTCCGTC TGAATTTTTG CTTTCGGTTT
     1261 GGAACCGAAG CCGCGCGTCT TGTCTGCTGC AGCGCTGCAG CATCGTTCTG TGTTGTCTCT
     1321 GTCTGACTGT GTTTCTGTAT TTGTCTGAAA ATTAGGGCCA GACTGTTACC ACTCCCTTAA
     1381 GTTTGACCTT AGGTCACTGG AAAGATGTCG AGCGGATCGC TCACAACCAG TCGGTAGATG
     1441 TCAAGAAGAG ACGTTGGGTT ACCTTCTGCT CTGCAGAATG GCCAACCTTT AACGTCGGAT
     1501 GGCCGCGAGA CGGCACCTTT AACCGAGACC TCATCACCCA GGTTAAGATC AAGGTCTTTT
     1561 CACCTGGCCC GCATGGACAC CCAGACCAGG TCCCCTACAT CGTGACCTGG GAAGCCTTGG
     1621 CTTTTGACCC CCCTCCCTGG GTCAAGCCCT TTGTACACCC TAAGCCTCCG CCTCCTCTTC
     1681 CTCCATCCGC CCCGTCTCTC CCCCTTGAAC CTCCTCGTTC GACCCCGCCT CGATCCTCCC
     1741 TTTATCCAGC CCTCACTCCT TCTCTAGGCG CCGGAATTGC CTTCCACCAT GGCCACCTCA
     1801 GCAAGTTCCC ACTTGAACAA AAACATCAAG CAAATGTACT TGTGCCTGCC CCAGGGTGAG
     1861 AAAGTCCAAG CCATGTATAT CTGGGTTGAT GGTACTGGAG AAGGACTGCG CTGCAAAACC
     1921 CGCACCCTGG ACTGTGAGCC CAAGTGTGTA GAAGAGTTAC CTGAGTGGAA TTTTGATGGC
     1981 TCTAGTACCT TTCAGTCTGA GGGCTCCAAC AGTGACATGT ATCTCAGCCC TGTTGCCATG
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FIG. 4 (cont'd)

```
2041 TTTCGGGACC CCTTCCGCAG AGATCCCAAC AAGCTGGTGT TCTGTGAAGT TTTCAAGTAC
2101 AACCGGAAGC CTGCAGAGAC CAATTTAAGG CACTCGTGTA AACGGATAAT GGACATGGTG
2161 AGCAACCAGC ACCCCTGGTT TGGAATGGAA CAGGAGTATA CTCTGATGGG AACAGATGGG
2221 CACCCTTTTG GTTGGCCTTC CAATGGCTTT CCTGGGCCCC AAGGTCCGTA TTACTGTGGT
2281 GTGGGCGCAG ACAAAGCCTA TGGCAGGGAT ATCGTGGAGG CTCACTACCG CGCCTGCTTG
2341 TATGCTGGGG TCAAGATTAC AGGAACAAAT GCTGAGGTCA TGCCTGCCCA GTGGGAGTTC
2401 CAAATAGGAC CCTGTGAAGG AATCCGCATG GGAGATCATC TCTGGGTGGC CCGTTTCATC
2461 TTGCATCGAG TATGTGAAGA CTTTGGGGTA ATAGCAACCT TTGACCCCAA GCCCATTCCT
2521 GGGAACTGGA ATGGTGCAGG CTGCCATACC AACTTTAGCA CCAAGGCCAT GCGGGAGGAG
2581 AATGGTCTGA AGCACATCGA GGAGGCCATC GAGAAACTAA GCAAGCGGCA CCGGTACCAC
2641 ATTCGAGCCT ACGATCCCAA GGGGGGCCTG GACAATGCCC GTCGTCTGAC TGGGTTCCAC
2701 GAAACGTCCA ACATCAACGA CTTTTCTGCT GGTGTCGCCA ATCGCAGTGC CAGCATCCGC
2761 ATTCCCCGGA CTGTCGGCCA GGAGAAGAAA GGTTACTTTG AAGACCGCCG CCCCTCTGCC
2821 AACTGTGACC CCTTTGCAGT GACAGAAGCC ATCGTCCGCA CATGCCTTCT CAATGAGACT
2881 GGCGACGAGC CCTTCCAATA CAAAAACTAA AGATCCCTAT GGCTATTGGC CAGGTTCAAT
2941 ACTATGTATT GGCCCTATGC CATATAGTAT TCCATATATG GGTTTTCCTA TTGACGTAGA
3001 TAGCCCCTCC CAATGGGCGG TCCCATATAC CATATATGGG GCTTCCTAAT ACCGCCCATA
3061 GCCACTCCCC CATTGACGTC AATGGTCTCT ATATATGGTC TTTCCTATTG ACGTCATATG
3121 GGCGGTCCTA TTGACGTATA TGGCGCCTCC CCCATTGACG TCAATTACGG TAAATGGCCC
3181 GCCTGGCTCA ATGCCCATTG ACGTCAATAG GACCACCCAC CATTGACGTC AATGGGATGG
3241 CTCATTGCCC ATTCATATCC GTTCTCACGC CCCCTATTGA CGTCAATGAC GGTAAATGGC
3301 CCACTTGGCA GTACATCAAT ATCTATTAAT AGTAACTTGG CAAGTACATT ACTATTGGAA
3361 GTACGCCAGG GTACATTGGC AGTACTCCCA TTGACGTCAA TGGCGGTAAA TGGCCCGCGA
3421 TGGCTGCCAA GTACATCCCC ATTGACGTCA ATGGGGAGGG GCAATGACGC AAATGGGCGT
3481 TCCATTGACG TAAATGGGCG GTAGGCGTGC CTAATGGGAG GTCTATATAA GCAATGCTCG
3541 TTTAGGGAAC CGCCATTCTG CCTGGGGACG TCGGAGGAGC TCGAAAGCTT CTAGACAATT
3601 GCCGCCACCA TGATGTCCTT TGTCTCTCTG CTCCTGGTTG GCATCCTATT CCATGCCACC
3661 CAGGCCAGTG ATACAGGTAG ACCTTTCGTA GAGATGTACA GTGAAATCCC CGAAATTATA
3721 CACATGACTG AAGGAAGGGA GCTCGTCATT CCCTGCCGGG TTACGTCACC TAACATCACT
3781 GTTACTTTAA AAAAGTTTCC ACTTGACACT TTGATCCCTG ATGGAAAACG CATAATCTGG
3841 GACAGTAGAA AGGGCTTCAT CATATCAAAT GCAACGTACA AAGAAATAGG GCTTCTGACC
3901 TGTGAAGCAA CAGTCAATGG GCATTTGTAT AAGACAAACT ATCTCACACA TCGACAAACC
3961 AATACAATCA TAGATGTCGT TCTGAGTCCG TCTCATGGAA TTGAACTATC TGTTGGAGAA
4021 AAGCTTGTCT TAAATTGTAC AGCAAGAACT GAACTAAATG TGGGGATTGA CTTCAACTGG
4081 GAATACCCTT CTTCGAAGCA TCAGCATAAG AAACTTGTAA ACCGAGACCT AAAAACCCAG
4141 TCTGGGAGTG AGATGAAGAA GTTTTTGAGC ACCTTAACTA TAGATGGTGT AACCCGGAGT
4201 GACCAAGGAT TGTACACCTG TGCAGCATCC AGTGGGCTGA TGACCAAGAA AAACAGCACA
4261 TTTGTCAGGG TCCATGAAAA AGACAAAACT CACACATGCC CACCGTGCCC AGCACCTGAA
4321 CTCCTGGGGG GACCCTCAGT CTTCCTCTTC CCCCCAAAAC CCAAGGACAC CCTCATGATC
4381 TCCCGGACCC CTGAGGTCAC ATGCGTGGTG GTGGACGTGA GCCACGAAGA CCCTGAGGTC
4441 AAGTTCAACT GGTACGTGGA CGGCGTGGAG GTGCATAATG CCAAGACAAA GCCACGGGAG
4501 GAGCAGTACA ACAGCACATA TCGTGTGGTC AGCGTCCTCA CCGTCCTGCA CCAGGACTGG
4561 CTGAATGGCA AGGAGTACAA GTGCAAGGTC TCCAACAAAG CCCTCCCAGC CCCCATCGAG
4621 AAAACCATCT CCAAAGCCAA AGGGCAGCCC CGAGAACCAC AGGTGTACAC CCTGCCCCCA
4681 TCCCGGGATG AGCTGACCAA GAACCAGGTC AGCCTGACCT GCCTGGTCAA AGGCTTCTAT
4741 CCCAGCGACA TCGCCGTGGA GTGGGAGAGC AATGGGCAGC CGGAGAACAA CTACAAGACC
4801 ACGCCTCCCG TGCTGGACTC CGACGGCTCC TTCTTCCTCT ACAGCAAGCT CACCGTGGAC
4861 AAGAGCAGGT GGCAGCAGGG GAACGTCTTC TCATGCTCCG TGATGCATGA GGCTCTGCAC
4921 AACCACTACA CGCAGAAGAG CCTCTCCCTG TCTCCCGGGA AATGATGAGA TCTCGAGTTC
4981 GACATCGATA ATCAACCTCT GGATTACAAA ATTTGTGAAA GATTGACTGG TATTCTTAAC
5041 TATGTTGCTC CTTTTACGCT ATGTGGATAC GCTGCTTTAA TGCCTTTGTA TCATGCTATT
5101 GCTTCCCGTA TGGCTTTCAT TTTCTCCTCC TTGTATAAAT CCTGGTTGCT GTCTCTTTAT
5161 GAGGAGTTGT GGCCCGTTGT CAGGCAACGT GGCGTGGTGT GCACTGTGTT TGCTGACGCA
5221 ACCCCCACTG GTTGGGGCAT TGCCACCACC TGTCAGCTCC TTTCCGGGAC TTTCGCTTTC
5281 CCCCTCCCTA TTGCCACGGC GGAACTCATC GCCGCCTGCC TTGCCCGCTG CTGGACAGGG
5341 GCTCGGCTGT TGGGCACTGA CAATTCCGTG GTGTTGTCGG GGAAATCATC GTCCTTTCCT
5401 TGGCTGCTCG CCTGTGTTGC CACCTGGATT CTGCGCGGGA CGTCCTTCTG CTACGTCCCT
5461 TCGGCCCTCA ATCCAGCGGA CCTTCCTTCC CGCGGCCTGC TGCCGGCTCT GCGGCCTCTT
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FIG. 4 (cont'd)

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5521 CCGCGTCTTC GCCTTCGCCC TCAGACGAGT CGGATCTCCC TTTGGGCCGC CTCCCCGCAT
5581 CGATAAAATA AAAGATTTTA TTTAGTCTCC AGAAAAAGGG GGGAATGAAA GACCCCACCT
5641 GTAGGTTTGG CAAGCTAGCT TAAGTAACGC CATTTTGCAA GGCATGGAAA AATACATAAC
5701 TGAGAATAGA GAAGTTCAGA TCAAGGTCAG GAACAGATGG AACAGGGTCG ACCGGTCGAC
5761 CGGTCGACCC TAGAGAACCA TCAGATGTTT CCAGGGTGCC CCAAGGACCT GAAATGACCC
5821 TGTGCCTTAT TTGAACTAAC CAATCAGTTC GCTTCTCGCT TCTGTTCGCG CGCTTCTGCT
5881 CCCCGAGCTC AATAAAAGAG CCCACAACCC CTCACTCGGG GCGCCAGTCC TCCGATTGAC
5941 TGAGTCGCCC GGGTACCCGT GTATCCAATA AACCCTCTTG CAGTTGCATC CGACTTGTGG
6001 TCTCGCTGTT CCTTGGGAGG GTCTCCTCTG AGTGATTGAC TACCCGTCAG CGGGGGTCTT
6061 TCATT
```

FIG. 5

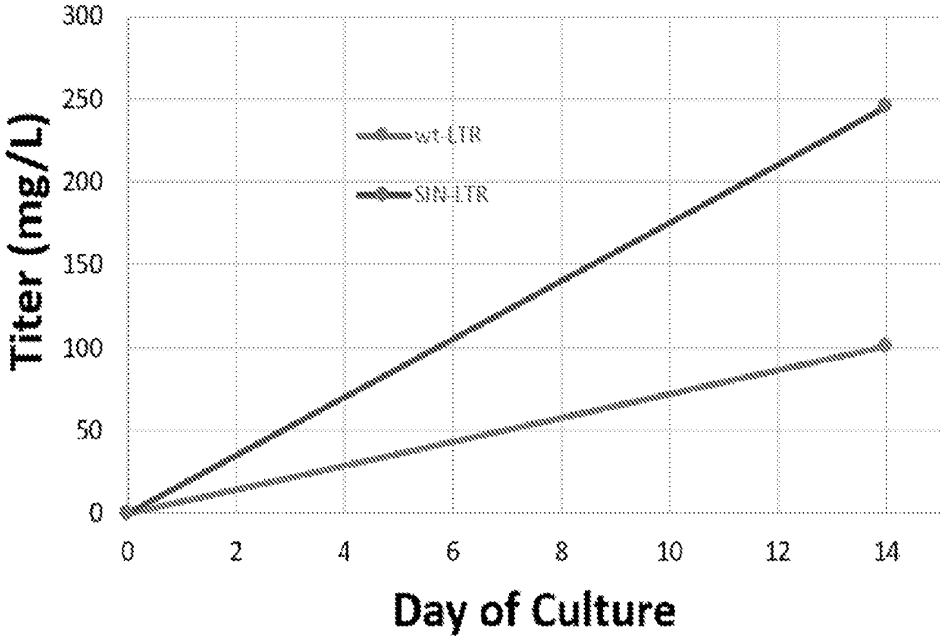

300
250
200
150
100
50
0
Titer (mg/L)
wt-LTR
SIN-LTR
0
2
4
6
8
10
12
14
Day of Culture

FIG. 6

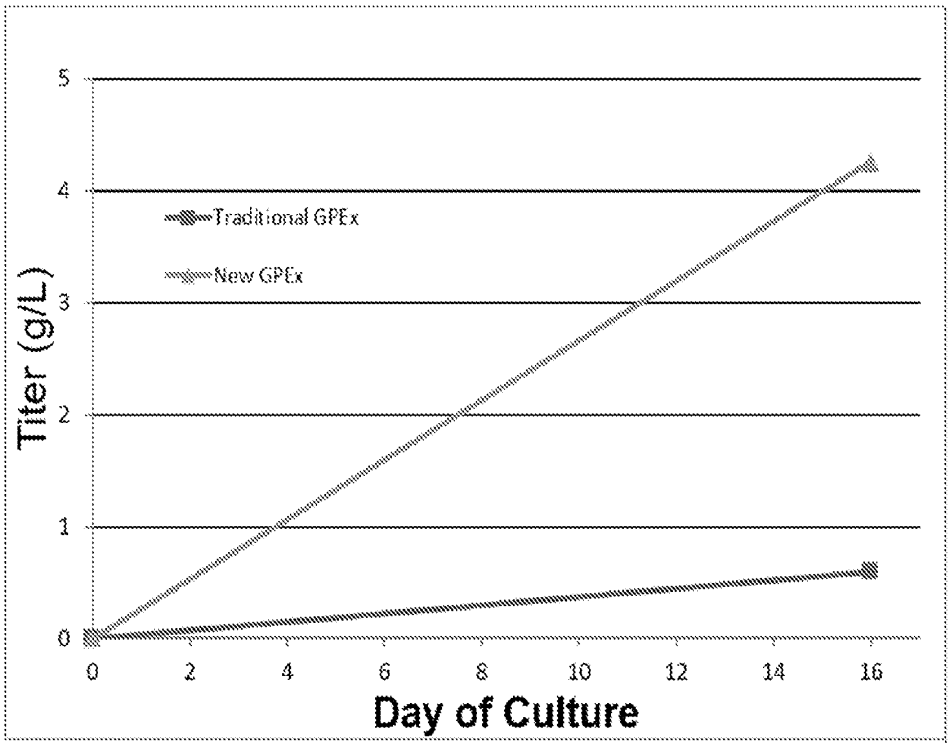

Titer (g/L)
5
4
3
2
1
0
Traditional GPEx
New GPEx
0
2
4
6
8
10
12
14
16
Day of Culture

FIG. 7

AATGAAA GACCCCACCT GTAGGTTTGG CAAGCTAGCT TAAGTAACGC CATTTTGCAA GGCATGGAAA
AATACATAAC TGAGAATAGA GAAGTTCAGA TCAAGGTCAG GAACAGATGG AACAGGGTCG
ACCGGTCGAC CGGTCGACCC TAGAGAACCA TCAGATGTTT CCAGGGTGCC CCAAGGACCT
GAAATGACCC TGTGCCTTAT TTGAACTAAC CAATCAGTTC GCTTCTCGCT TCTGTTCGCG
CGCTTCTGCT CCCCGAGCTC AATAAAAGAG CCCACAACCC CTCACTCGGG GCGCCAGTCC
TCCGATTGAC TGAGTCGCCC GGGTACCCGT GTATCCAATA AACCCTCTTG CAGTTGCATC
CGACTTGTGG TCTCGCTGTT CCTTGGGAGG GTCTCCTCTG AGTGATTGAC TACCCGTCAG
CGGGGGTCTT TCATT

FIG. 8

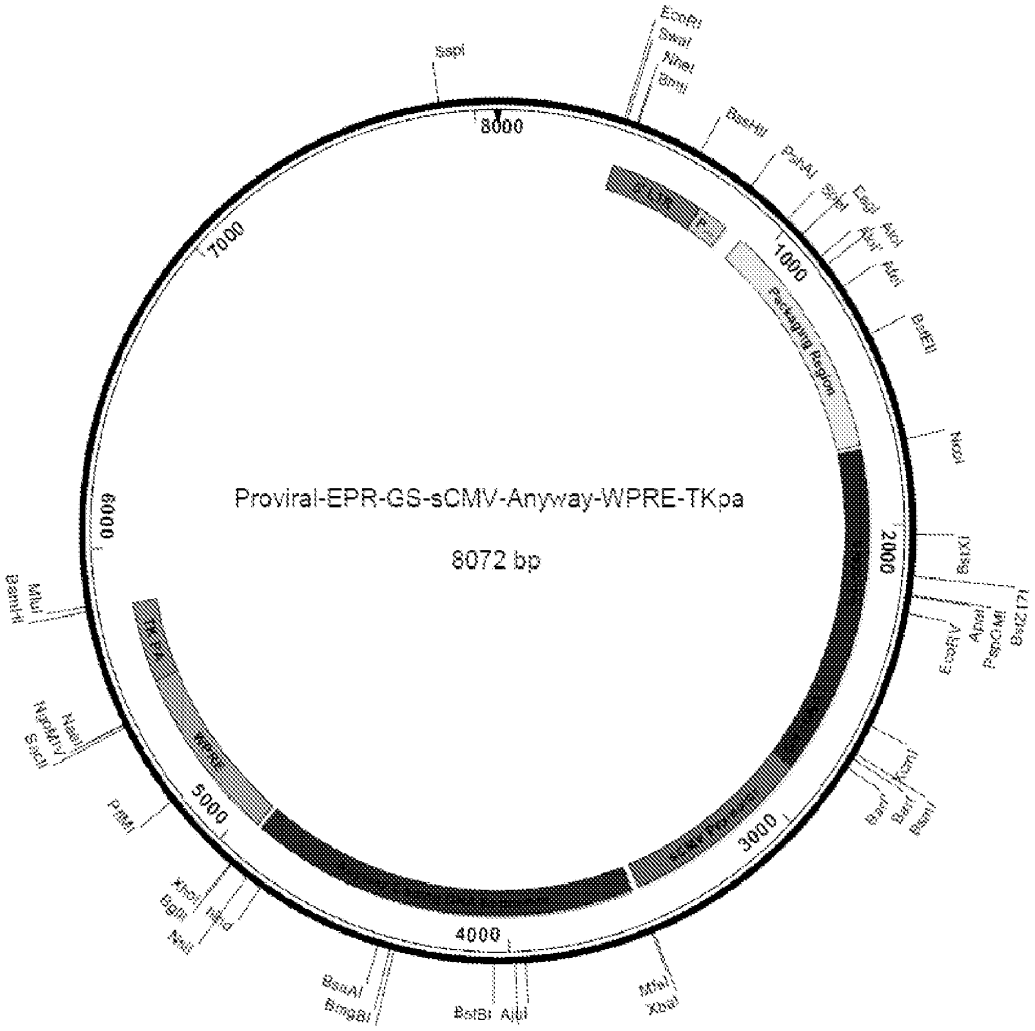

Proviral-EPR-GS-sCMV-Anyway-WPRE-TKpa
8072 bp
1000
2000
3000
4000
5000
6000
7000
8000
Packaging Region
WPRE
TK pA
SspI
EcoRI
SacII
XhoI
SmaI
BssHII
PstAI
SphI
EagI
AscI
AflII
BsaBI
NcoI
BstXI
EcoRV
ApaI
PspOMI
BsiCI (2)
BanI
BsrI
BsmI
PmlI
XbaI
BsaAI
BmgBI
BstBI
AgeI
MfeI
XbaI
PmlI
XhoI
EgIII
NotI
HpaI
HaeII
NspHI V
SnaBI
BsmBI
MluI

FIG. 9 (SEQ ID NO:4)

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1 TCGCGCGTTT CGGTGATGAC GGTGAAAACC TCTGACACAT GCAGCTCCCG GAGACGGTCA
61 CAGCTTGTCT GTAAGCGGAT GCCGGGAGCA GACAAGCCCG TCAGGGCGCG TCAGCGGGTG
121 TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA GCAGATTGTA CTGAGAGTGC
181 ACCATATGCG GTGTGAAATA CCGCACAGAT GCGTAAGGAG AAAATACCGC ATCAGGCGCC
241 ATTCGCCATT CAGGCTGCGC AACTGTTGGG AAGGGCGATC GGTGCGGGCC TCTTCGCTAT
301 TACGCCAGCT GGCGAAAGGG GGATGTGCTG CAAGGCGATT AAGTTGGGTA ACGCCAGGGT
361 TTTCCCAGTC ACGACGTTGT AAAACGACGG CCAGTGAATT CATTTAAATG AAAGACCCCA
421 CCTGTAGGTT TGGCAAGCTA GCTTAAGTAA CGCCATTTTG CAAGGCATGG AAAAATACAT
481 AACTGAGAAT AGAAAAGTTC AGATCAAGGT CAGGAACAGA TGGAACAGGG TCGACCGGTC
541 GACCGGTCGA CCCTAGAGAA CCATCAGATG TTTCCAGGGT GCCCCAAGGA CCTGAAATGA
601 CCCTGTGCCT TATTTGAACT AACCAATCAG TTCGCTTCTC GCTTCTGTTC GCGCGCTTCT
661 GCTCCCCGAG CTCAATAAAA GAGCCCACAA CCCCTCACTC GGGGCGCCAG TCTTCCGATA
721 GACTGCGTCG CCCGGGTACC CGTATTCCCA ATAAAGCCTC TTGCTGTTTG CATCCGAATC
781 GTGGTCTCGC TGTTCCTTGG GAGGGTCTCC TCTGAGTGAT TGACTACCCA CGACGGGGGT
841 CTTTCATTTG GGGGCTCGTC CGGGATTTGG AGACCCCTGC CCAGGGACCA CCGACCCACC
901 ACCGGGAGGT AAGCTGGCCA GCAACTTATC TGTGTCTGTC CGATTGTCTA GTGTCTATGT
961 TTGATGTTAT GCGCCTGCGT CTGTACTAGT TAGCTAACTA GCTCTGTATC TGGCGGACCC
1021 GTGGTGGAAC TGACGAGTTC TGAACACCCG GCCGCAACCC TGGGAGACGT CCCAGGGACT
1081 TTGGGGGCCG TTTTTGTGGC CCGACCTGAG GAAGGGAGTC GATGTGGAAT CCGACCCCGT
1141 CAGGATATGT GGTTCTGGTA GGAGACGAGA ACCTAAAACA GTTCCCGCCT CCGTCTGAAT
1201 TTTTGCTTTC GGTTTGGAAC CGAAGCCGCG CGTCTTGTCT GCTGCAGCGC TGCAGCATCG
1261 TTCTGTGTTG TCTCTGTCTG ACTGTGTTTC TGTATTTGTC TGAAAATTAG GGCCAGACTG
1321 TTACCACTCC CTTAAGTTTG ACCTTAGGTC ACTGGAAAGA TGTCGAGCGG ATCGCTCACA
1381 ACCAGTCGGT AGATGTCAAG AAGAGACGTT GGGTTACCTT CTGCTCTGCA GAATGGCCAA
1441 CCTTTAACGT CGGATGGCCG CGAGACGGCA CCTTTAACCG AGACCTCATC ACCCAGGTTA
1501 AGATCAAGGT CTTTTCACCT GGCCCGCATG GACACCCAGA CCAGGTCCCC TACATCGTGA
1561 CCTGGGAAGC CTTGGCTTTT GACCCCCCTC CCTGGGTCAA GCCCTTTGTA CACCCTAAGC
1621 CTCCGCCTCC TCTTCCTCCA TCCGCCCCGT CTCTCCCCCT TGAACCTCCT CGTTCGACCC
1681 CGCCTCGATC CTCCCTTTAT CCAGCCCTCA CTCCTTCTCT AGGCGCCGGA ATTGCCTTCC
1741 ACCATGGCCA CCTCAGCAAG TTCCCACTTG AACAAAAACA TCAAGCAAAT GTACTTGTGC
1801 CTGCCCCAGG GTGAGAAAGT CCAAGCCATG TATATCTGGG TTGATGGTAC TGGAGAAGGA
1861 CTGCGCTGCA AAACCCGCAC CCTGGACTGT GAGCCCAAGT GTGTAGAAGA GTTACCTGAG
1921 TGGAATTTTG ATGGCTCTAG TACCTTTCAG TCTGAGGGCT CCAACAGTGA CATGTATCTC
1981 AGCCCTGTTG CCATGTTTCG GGACCCCTTC CGCAGAGATC CCAACAAGCT GGTGTTCTGT
2041 GAAGTTTTCA AGTACAACCG GAAGCCTGCA GAGACCAATT TAAGGCACTC GTGTAAACGG
2101 ATAATGGACA TGGTGAGCAA CCAGCACCCC TGGTTTGGAA TGGAACAGGA GTATACTCTG
2161 ATGGGAACAG ATGGGCACCC TTTTGGTTGG CCTTCCAATG GCTTTCCTGG GCCCCAAGGT
2221 CCGTATTACT GTGGTGTGGG CGCAGACAAA GCCTATGGCA GGGATATCGT GGAGGCTCAC
2281 TACCGCGCCT GCTTGTATGC TGGGGTCAAG ATTACAGGAA CAAATGCTGA GGTCATGCCT
2341 GCCCAGTGGG AGTTCCAAAT AGGACCCTGT GAAGGAATCC GCATGGGAGA TCATCTCTGG
2401 GTGGCCCGTT TCATCTTGCA TCGAGTATGT GAAGACTTTG GGGTAATAGC AACCTTTGAC
2461 CCCAAGCCCA TTCCTGGGAA CTGGAATGGT GCAGGCTGCC ATACCAACTT TAGCACCAAG
2521 GCCATGCGGG AGGAGAATGG TCTGAAGCAC ATCGAGGAGG CCATCGAGAA ACTAAGCAAG
2581 CGGCACCGGT ACCACATTCG AGCCTACGAT CCCAAGGGGG GCCTGGACAA TGCCCGTCGT
2641 CTGACTGGGT TCCACGAAAC GTCCAACATC AACGACTTTT CTGCTGGTGT CGCCAATCGC
2701 AGTGCCAGCA TCCGCATTCC CCGGACTGTC GGCCAGGAGA AGAAAGGTTA CTTTGAAGAC
2761 CGCCGCCCCT CTGCCAACTG TGACCCCTTT GCAGTGACAG AAGCCATCGT CCGCACATGC
2821 CTTCTCAATG AGACTGGCGA CGAGCCCTTC CAATACAAAA ACTAAAGATC CCTATGGCTA
2881 TTGGCCAGGT TCAATACTAT GTATTGGCCC TATGCCATAT AGTATTCCAT ATATGGGTTT
2941 TCCTATTGAC GTAGATAGCC CCTCCCAATG GGCGGTCCCA TATACCATAT ATGGGGCTTC
3001 CTAATACCGC CCATAGCCAC TCCCCCATTG ACGTCAATGG TCTCTATATA TGGTCTTTCC
3061 TATTGACGTC ATATGGGCGG TCCTATTGAC GTATATGGCG CCTCCCCCAT TGACGTCAAT
3121 TACGGTAAAT GGCCCGCCTG GCTCAATGCC CATTGACGTC AATAGGACCA CCCACCATTG
3181 ACGTCAATGG GATGGCTCAT TGCCCATTCA TATCCGTTCT CACGCCCCCT ATTGACGTCA
3241 ATGACGGTAA ATGGCCCACT TGGCAGTACA TCAATATCTA TTAATAGTAA CTTGGCAAGT
3301 ACATTACTAT TGGAAGTACG CCAGGGTACA TTGGCAGTAC TCCCATTGAC GTCAATGGCG
3361 GTAAATGGCC CGCGATGGCT GCCAAGTACA TCCCCATTGA CGTCAATGGG GAGGGGCAAT
3421 GACGCAAATG GGCGTTCCAT TGACGTAAAT GGGCGGTAGG CGTGCCTAAT GGGAGGTCTA
3481 TATAAGCAAT GCTCGTTTAG GGAACCGCCA TTCTGCCTGG GGACGTCGGA GGAGCTCGAA
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FIG. 9 (SEQ ID NO:4) cont'

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3541 AGCTTCTAGA CAATTGCCGC CACCATGATG TCCTTTGTCT CTCTGCTCCT GGTTGGCATC
3601 CTATTCCATG CCACCCAGGC CAGTGATACA GGTAGACCTT TCGTAGAGAT GTACAGTGAA
3661 ATCCCCGAAA TTATACACAT GACTGAAGGA AGGGAGCTCG TCATTCCCTG CCGGGTTACG
3721 TCACCTAACA TCACTGTTAC TTTAAAAAAG TTTCCACTTG ACACTTTGAT CCCTGATGGA
3781 AAACGCATAA TCTGGGACAG TAGAAAGGGC TTCATCATAT CAAATGCAAC GTACAAAGAA
3841 ATAGGGCTTC TGACCTGTGA AGCAACAGTC AATGGGCATT TGTATAAGAC AAACTATCTC
3901 ACACATCGAC AAACCAATAC AATCATAGAT GTCGTTCTGA GTCCGTCTCA TGGAATTGAA
3961 CTATCTGTTG GAGAAAAGCT TGTCTTAAAT TGTACAGCAA GAACTGAACT AAATGTGGGG
4021 ATTGACTTCA ACTGGGAATA CCCTTCTTCG AAGCATCAGC ATAAGAAACT TGTAAACCGA
4081 GACCTAAAAA CCCAGTCTGG GAGTGAGATG AAGAAGTTTT TGAGCACCTT AACTATAGAT
4141 GGTGTAACCC GGAGTGACCA AGGATTGTAC ACCTGTGCAG CATCCAGTGG GCTGATGACC
4201 AAGAAAAACA GCACATTTGT CAGGGTCCAT GAAAAAGACA AAACTCACAC ATGCCCACCG
4261 TGCCCAGCAC CTGAACTCCT GGGGGGACCC TCAGTCTTCC TCTTCCCCCC AAAACCCAAG
4321 GACACCCTCA TGATCTCCCG GACCCCTGAG GTCACATGCG TGGTGGTGGA CGTGAGCCAC
4381 GAAGACCCTG AGGTCAAGTT CAACTGGTAC GTGGACGGCG TGGAGGTGCA TAATGCCAAG
4441 ACAAAGCCAC GGGAGGAGCA GTACAACAGC ACATATCGTG TGGTCAGCGT CCTCACCGTC
4501 CTGCACCAGG ACTGGCTGAA TGGCAAGGAG TACAAGTGCA AGGTCTCCAA CAAAGCCCTC
4561 CCAGCCCCCA TCGAGAAAAC CATCTCCAAA GCCAAAGGGC AGCCCCGAGA ACCACAGGTG
4621 TACACCCTGC CCCCATCCCG GGATGAGCTG ACCAAGAACC AGGTCAGCCT GACCTGCCTG
4681 GTCAAAGGCT TCTATCCCAG CGACATCGCC GTGGAGTGGG AGAGCAATGG GCAGCCGGAG
4741 AACAACTACA AGACCACGCC TCCCGTGCTG GACTCCGACG GCTCCTTCTT CCTCTACAGC
4801 AAGCTCACCG TGGACAAGAG CAGGTGGCAG CAGGGGAACG TCTTCTCATG CTCCGTGATG
4861 CATGAGGCTC TGCACAACCA CTACACGCAG AAGAGCCTCT CCCTGTCTCC CGGGAAATGA
4921 TGAGATCTCG AGTTCGACAT CGATAATCAA CCTCTGGATT ACAAAATTTG TGAAAGATTG
4981 ACTGGTATTC TTAACTATGT TGCTCCTTTT ACGCTATGTG GATACGCTGC TTTAATGCCT
5041 TTGTATCATG CTATTGCTTC CCGTATGGCT TTCATTTTCT CCTCCTTGTA TAAATCCTGG
5101 TTGCTGTCTC TTTATGAGGA GTTGTGGCCC GTTGTCAGGC AACGTGGCGT GGTGTGCACT
5161 GTGTTTGCTG ACGCAACCCC CACTGGTTGG GGCATTGCCA CCACCTGTCA GCTCCTTTCC
5221 GGGACTTTCG CTTTCCCCCT CCCTATTGCC ACGGCGGAAC TCATCGCCGC CTGCCTTGCC
5281 CGCTGCTGGA CAGGGGCTCG GCTGTTGGGC ACTGACAATT CCGTGGTGTT GTCGGGGAAA
5341 TCATCGTCCT TTCCTTGGCT GCTCGCCTGT GTTGCCACCT GGATTCTGCG CGGGACGTCC
5401 TTCTGCTACG TCCCTTCGGC CCTCAATCCA GCGGACCTTC CTTCCCGCGG CCTGCTGCCG
5461 GCTCTGCGGC CTCTTCCGCG TCTTCGCCTT CGCCCTCAGA CGAGTCGGAT CTCCCTTTGG
5521 GCCGCCTCCC CGCATCGATG GGGGAGGCTA ACTGAAACAC GGAAGGAGAC AATACCGGAA
5581 GGAACCCGCG CTATGACGGC AATAAAAAGA CAGAATAAAA CGCACGGGTG TTGGGTCGTT
5641 TGTTCATAAA CGCGGGGTTC GGTCCCAGGG CTGGCACTCT GTCGATACCC CACCGAGACC
5701 CCATTGGGGC CAATACGCCC GCGTTTCTTC CTTTTCCCCA CCCCACCCCC CAAGTTCGGG
5761 TGAAGGCCCA GGGCTCGCAG CCAACGTCGG GGCGGCAGGC CCTGCCATAG CGGATCCTTT
5821 CCACTGTACG CGTAGCTTGG CGTAATCATG GTCATAGCTG TTTCCTGTGT GAAATTGTTA
5881 TCCGCTCACA ATTCCACACA ACATACGAGC CGGAAGCATA AAGTGTAAAG CCTGGGGTGC
5941 CTAATGAGTG AGCTAACTCA CATTAATTGC GTTGCGCTCA CTGCCCGCTT TCCAGTCGGG
6001 AAACCTGTCG TGCCAGCTGC ATTAATGAAT CGGCCAACGC GCGGGGAGAG GCGGTTTGCG
6061 TATTGGGCGC TCTTCCGCTT CCTCGCTCAC TGACTCGCTG CGCTCGGTCG TTCGGCTGCG
6121 GCGAGCGGTA TCAGCTCACT CAAAGGCGGT AATACGGTTA TCCACAGAAT CAGGGGATAA
6181 CGCAGGAAAG AACATGTGAG CAAAAGGCCA GCAAAAGGCC AGGAACCGTA AAAAGGCCGC
6241 GTTGCTGGCG TTTTTCCATA GGCTCCGCCC CCCTGACGAG CATCACAAAA ATCGACGCTC
6301 AAGTCAGAGG TGGCGAAACC CGACAGGACT ATAAAGATAC CAGGCGTTTC CCCCTGGAAG
6361 CTCCCTCGTG CGCTCTCCTG TTCCGACCCT GCCGCTTACC GGATACCTGT CCGCCTTTCT
6421 CCCTTCGGGA AGCGTGGCGC TTTCTCATAG CTCACGCTGT AGGTATCTCA GTTCGGTGTA
6481 GGTCGTTCGC TCCAAGCTGG GCTGTGTGCA CGAACCCCCC GTTCAGCCCG ACCGCTGCGC
6541 CTTATCCGGT AACTATCGTC TTGAGTCCAA CCCGGTAAGA CACGACTTAT CGCCACTGGC
6601 AGCAGCCACT GGTAACAGGA TTAGCAGAGC GAGGTATGTA GGCGGTGCTA CAGAGTTCTT
6661 GAAGTGGTGG CCTAACTACG GCTACACTAG AAGAACAGTA TTTGGTATCT GCGCTCTGCT
6721 GAAGCCAGTT ACCTTCGGAA AAAGAGTTGG TAGCTCTTGA TCCGGCAAAC AAACCACCGC
6781 TGGTAGCGGT GGTTTTTTTG TTTGCAAGCA GCAGATTACG CGCAGAAAAA AAGGATCTCA
6841 AGAAGATCCT TTGATCTTTT CTACGGGGTC TGACGCTCAG TGGAACGAAA ACTCACGTTA
6901 AGGGATTTTG GTCATGAGAT TATCAAAAAG GATCTTCACC TAGATCCTTT TAAATTAAAA
6961 ATGAAGTTTT AAATCAATCT AAAGTATATA TGAGTAAACT TGGTCTGACA GTTACCAATG
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FIG. 9 (SEQ ID NO:4) cont'

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7021 CTTAATCAGT GAGGCACCTA TCTCAGCGAT CTGTCTATTT CGTTCATCCA TAGTTGCCTG
7081 ACTCCCCGTC GTGTAGATAA CTACGATACG GGAGGGCTTA CCATCTGGCC CCAGTGCTGC
7141 AATGATACCG CGAGACCCAC GCTCACCGGC TCCAGATTTA TCAGCAATAA ACCAGCCAGC
7201 CGGAAGGGCC GAGCGCAGAA GTGGTCCTGC AACTTTATCC GCCTCCATCC AGTCTATTAA
7261 TTGTTGCCGG GAAGCTAGAG TAAGTAGTTC GCCAGTTAAT AGTTTGCGCA ACGTTGTTGC
7321 CATTGCTACA GGCATCGTGG TGTCACGCTC GTCGTTTGGT ATGGCTTCAT TCAGCTCCGG
7381 TTCCCAACGA TCAAGGCGAG TTACATGATC CCCCATGTTG TGCAAAAAAG CGGTTAGCTC
7441 CTTCGGTCCT CCGATCGTTG TCAGAAGTAA GTTGGCCGCA GTGTTATCAC TCATGGTTAT
7501 GGCAGCACTG CATAATTCTC TTACTGTCAT GCCATCCGTA AGATGCTTTT CTGTGACTGG
7561 TGAGTACTCA ACCAAGTCAT TCTGAGAATA GTGTATGCGG CGACCGAGTT GCTCTTGCCC
7621 GGCGTCAATA CGGGATAATA CCGCGCCACA TAGCAGAACT TTAAAAGTGC TCATCATTGG
7681 AAAACGTTCT TCGGGGCGAA AACTCTCAAG GATCTTACCG CTGTTGAGAT CCAGTTCGAT
7741 GTAACCCACT CGTGCACCCA ACTGATCTTC AGCATCTTTT ACTTTCACCA GCGTTTCTGG
7801 GTGAGCAAAA ACAGGAAGGC AAAATGCCGC AAAAAAGGGA ATAAGGGCGA CACGGAAATG
7861 TTGAATACTC ATACTCTTCC TTTTTCAATA TTATTGAAGC ATTTATCAGG GTTATTGTCT
7921 CATGAGCGGA TACATATTTG AATGTATTTA GAAAAATAAA CAAATAGGGG TTCCGCGCAC
7981 ATTTCCCCGA AAAGTGCCAC CTGACGTCTA AGAAACCATT ATTATCATGA CATTAACCTA
8041 TAAAAATAGG CGTATCACGA GGCCCTTTCG TC
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