

SEQUENCES

SEQUENCE LISTING

4R-H-3

SEQ ID NO: 3

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GCGGCCCTCG AGCACGACAA AGCCTACGAC CGGCAGCTCG ACAGCGGAGA CAACCCGTAC CTCAAGTACA
ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTAAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
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TTCCTTCATC ACACAGTACT CCACGGGACA GGTCAGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAC
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4R-H-3

SEQ ID NO: 4

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MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAERHKD DSRGLVLPGY KYLGPFNGLD KGEPVNEADA
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GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTGDAD SVPDPQPLGQ PPAAPSGLGT NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDNRFHCH FSPRDWQR LI NNNWGFPRKR LNFKLFNIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL
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SEQUENCES

HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHAARQ	AATADVNTQG	VLPGMVWQDR	DVYLQGPiWA
KIPHTDGHFH	PSPLMGGFGL	KHPPPQILIK	NTPVPANPST	TFSAAKFASF	ITQYSTGQVS	VEIEWELQKE
NSKRWNPEIQ	YTSNYNKSIN	VDFTVDTNGV	YSEPRPIGTR	YLTRNL		

4R-H-4

SEQ ID NO: 5

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GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
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AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
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TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
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GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCTCCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCTTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
AACGAAGAGG	AAATCAGGgC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
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ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-H-4

SEQ ID NO: 6

MAADGYLPDW	LEDTLSEGIR	QWVKLKPGRP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNPGD	KGEPVNEADA
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SEQUENCES

GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
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YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNDNSEY	SWGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRATNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHAARQ	AATADVNTQG	VLPGMVWQDR	DVYLQGPiWA
KIPHTDGHFH	PSPLMGGFGL	KHPPPQILIK	NTPVPANPST	TFSAAKFASF	ITQYSTGQVS	VEIEWELQKE
NSKRWNPEIQ	YTSNYNKSIN	VDFTVDTNGV	YSEPRPIGTR	YLTRNL		

4R-H-5

SEQ ID NO: 7

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AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
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GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
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AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
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CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
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GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCTCCCGC	CGTTCCCGAGC	AGACGTCTTC	ATGGTGCCAC
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CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CaGCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
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CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
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AGAGAGGCAA	CCTAGCAaag	gatcagacaa	aaagcaccGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
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AGCAAACGCT	GGAATCCCCG	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-H-5

SEQUENCES

SEQ ID NO: 8

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 PYVLGSAHQG CLPPFPADV F MVPQYGYLTL NNGSQAVGRS SFYCLEYFPS QMLRTGNSFT FSYTFEDVPF
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4R-H-9

SEQ ID NO: 9

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SEQUENCES

AGCAAACGCT GGAATCCCGA AATTCAGTAC ACTTCCAAC ACAACAAGTC TGTTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCCATTGG CACCAGATAC CTGACTCGTA ATCTGTAA

4R-H-9

SEQ ID NO: 10

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PYVLGSAHQG CLPPFPADV F MVPQYGYLTL NNGSQAVGRS SFYCLEYFPS QMLRTGNNFT FSYTFEDVPF
HSSYAHSQSL DRLMNPLIDQ YLYYLSRTNT PSGTTTQSRL QFSQAGASDI RDQSRNWLPG PCYRQQRVSK
TPADNNNSEY SWTGATKYHL NGRDSL VNPG PAMASHKDDE EKFFPQSGVL IFGKQGSEKT NVDIEKVMIT
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IPHTDGHFHP SPLMGGFGLK HPPPIILIKN TPVPANPSTT FSAAKFASFI TQYSTGQVSV EIEWELQKEN
SKRWNPEVQY TSNYNKSINV DFTVDTNGVY SEPRPIGTRY LTRNL*

4R-H-10

SEQ ID NO: 11

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ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTAAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTAA GACGGCTCCG
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GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
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CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCCTCCCGC CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTCACCTG AACaACGGGA GTCAGGCAGT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAACTTTACC TTCAGCTACA CTTTTGAGGA CGTTCCCTTTC
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ACATaTGCGG ATAACAACAA CAGTGAATAC TCGTGGA CTG GAGCTACCAA GTACCACCTC AATGGCAGAG
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GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAatc tccGACcagA CAAAAcacGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC

SEQUENCES

ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGC GG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-H-10

SEQ ID NO: 12

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADA EF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV F	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNP LIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TYADNNNSEY	SWTGATKYHL	NGRDSL VNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATADVNTQGV	LPGMWQDRD	VYLQGP IWAK
IPHTDGHFHP	SPLMGGFGLK	HPP PQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNP EIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-H-12

SEQ ID NO: 13

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGAGGCGC	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGT TAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGA ACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACA ACT
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCCTCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTCG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG

SEQUENCES

ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAaAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-H-12

SEQ ID NO: 14

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAGRHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHQSLS	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLP	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNP	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAN	QDYTKTARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-H-15

SEQ ID NO: 15

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGCTGT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCGAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCGAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCTTTTC

SEQUENCES

CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-H-15

SEQ ID NO: 16

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWIWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPFIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-H-16

SEQ ID NO: 17

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCAACA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGTTTGAGG	AACCTGTTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCGAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA

SEQUENCES

CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CaGCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCCTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGC GG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCACTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-H-16

SEQ ID NO: 18

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADA EF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV F	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSL VNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIARQA	ATADVNTQGV	LPGMWQDRD	VYLQGP IWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-H-17

SEQ ID NO: 19

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGT TAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT

SEQUENCES

GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAACCT
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CagCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-H-17

SEQ ID NO: 20

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIARQA	ATADVNTQGV	LPGMWVQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-SD-2

SEQ ID NO: 21

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGCTGT
TCCTGGGTAC	AAGTACCTCG	GACCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTTAA	GACGGCTCCG

SEQUENCES

GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCgG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAgCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCCTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTCTCT	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-SD-2

SEQ ID NO: 22

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNDADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGGGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDFNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLP	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIAARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPFIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-SD-3

SEQ ID NO: 23

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT

SEQUENCES

TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTATA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAAACAAAT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTCG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CagCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAAG
ATTCCACACA	CGGACGGACA	TTTTTACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-SD-3

SEQ ID NO: 24

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNP	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIARQA	ATADVNTQGV	LPGMWVQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-SD-10

SEQUENCES

SEQ ID NO: 25

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ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA
AGCTCAAACC TGGCCACCA CCACCAAAGC CCGCAGAGCG GCATAAGGAC GACAGCAGGG GTCTTGCTGT
TCCTGGGTAC AAGTACCTCG GACCCCTTCAA CGGACTCGAC AAGGGAGAGC CGGTCAACGA GGCAGACGCC
GCGGCCCTCG AGCACGACAA AGCCTACGAC CGGCAGCTCG ACAGCGGAGA CAACCCGTAC CTCAAGTACA
ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTAAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTAA GACGGCTCCG
GGAAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGAACCGGA AAGGCGGGCC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGTACCTG ACCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAgCT AATACGATGG CTACAGGCAG TGGCGACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACAAC
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCTCCCGC CGTTCCCGAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTCACCTG AACaACGGGA GTCAGGCAGT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAgCTTTACC TTCAGCTACA CTTTGTAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACATCTGCGG ATAACAACAA CAGTGAATAC TCGTGGACTG GAGCTACCAA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAAA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAatc tccGACcagA CAAAACacGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTACGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAAC
AGCAAACGCT GGAATCCCGA AATTCAGTAC ACTTCCAAC ACAACAAGTC TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCATTGG CACCAGATAC CTGACTCGTA ATCTGTAA

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4R-SD-10

SEQ ID NO: 26

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MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAERHKD DSRGLVLPGY KYLGPFNGLD KGEPVNEADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLKEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTGDAD SVPDPQPLGQ PPAAPSGLGA NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDNRFHCH FSPRDWQRLI NNNWGFPRPKR LNFKLFNIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL
PYVLGSAHQG CLPPFPADV MVPQYGYLTL NNGSQAVGRS SFYCLEYFPS QMLRTGNSFT FSYTFEDVPF
HSSYAHSQSL DRLMNPIDQ YLYYLSRTNT PSGTTTQSRL QFSQAGASDI RDQSRNWLPG PCYRQQRVSK
TSADNNNSEY SWTGATKYHL NGRDSLVPNG PAMASHKDDE EKFFPQSGVL IFGKQGSEKT NVDIEKVMIT
DEEEIRTTNP VATEQYGSVS TNLQRGNLAI SDQTKHARQA ATADVNTQGV LPGMWQDRD VYLQGPWAK

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SEQUENCES

IPHTDGHFHP SPLMGGFGLK HPPPQILIKN TPVPANPSTT FSAAKFASFI TQYSTGQVSV EIEWELQKEN
SKRWNPEIQY TSNYNKSINV DFTVDTNGVY SEPRPIGTRY LTRNL*

4R-SD-11

SEQ ID NO: 27

ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA
AGCTCAAACC TGGCCACCA CCACCAAAGC CCGCAGgGCG GCATAAGGAC GACAGCAGGG GTCTTGTGCT
TCCTGGGTAC AAGTACCTCG GACCTTCAA CGGACTCGAC AAGGGAGAGC CGGTCAACGA GGCAGACGCC
GCGGCCCTCG AGCACGACAA AGCCTACGAC CGGCAGCTCG ACAGCGGAGA CAACCCGTAC CTCAAGTACA
ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTAAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTTAA GACGGCTCCG
GGAAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGAACCGGA AAGGCGGGCC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGaACCTG ACCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAACT AATACGATGG CTACAGGCAG TGGCGCACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACAACT
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCTCCCCG CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTCACCTG AACaACGGGA GTCAGGCAGT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAACTTTACC TTCAGCTACA CTTTTGAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACAcCTGCGG ATAACAACAA CAGTGAATAC TCGTGGA CTG GAGCTACCA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAAA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAaAC CAAGACTACA CAAAAACTGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTCAGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAC
AGCAAACGCT GGAATCCCCG AATTCAGTAC ACTTCCAAC ACAACAAGTC TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCATTTGG CACCAGATAC CTGACTCGTA ATCTGTAA

4R-SD-11

SEQ ID NO: 28

MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAGRHKD DSRGLVLPGY KYLGPFNGLD KGEPVNEADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLKEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTGDAD SEPDPQPLGQ PPAAPSGLGT NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDFNRFHCH FSPRDWQRLI NNNWGFRPKR LNFKLFNIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL

SEQUENCES

PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TPADNNNSEY	SWTGATKYHL	NGRDSLNVNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAN	QDYTKTARQA	ATADVNTQGV	LPGMVWQDRD	VYLQGPiWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-SD-12

SEQ ID NO: 29

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCagGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCC	ACCTACAACA	ACCACCTCTA
CAAAACAAAT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCCTCCCG	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACgACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCTTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAa	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCTTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-SD-12

SEQ ID NO: 30

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
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SEQUENCES

AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPRPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NDGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATANVNTQGV	LPGMWVQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-SD-15

SEQ ID NO: 31

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGCTGT
TCCTGGGTAC	AAGTACCTCG	GACCCCTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTCTTGA	ACCTCTGGG	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGcTGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	aCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCGAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCTTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCTTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCTTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCTCTAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAgac	caaGACTacA	CAAAAactGC	TAGGCAAGCA	GGACAGAGAT	GTGTACCTTC
AGGGGCCCAT	CTGGGCAAAG	ATTCCACACA	CGGACGGACA	TTTTCAACCC	TCTCCCCTCA	TGGGTGGATT
CGGACTTAAA	CACCTCCTC	CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC
TTCAGTGCGG	CAAAAGTTTG	TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT
GGGAGCTGCA	GAAGGAAAAAC	AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC
TATTAATGTG	GACTTTACTG	TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC
CTGACTCGTA	ATCTGTAA					

SEQUENCES

4R-SD-15

SEQ ID NO: 32

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWLGDRI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDYNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLP	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAD	QDYTKTARQA	ATADVNTQGV	LPGMVWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-SD-16

SEQ ID NO: 33

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGAGGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGAACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACAACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAGCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTACCCCC	TCTCCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC

SEQUENCES

TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-SD-16

SEQ ID NO: 34

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEAEA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SEPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDFNRHFCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPP
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLP	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPIILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

4R-SD-17

SEQ ID NO: 35

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGCTGT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGaACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCCTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACtACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC

SEQUENCES

AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

4R-SD-17

SEQ ID NO: 36

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SEPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNYNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPPQILIKN	TPVPANPSTT	FSAAKFASF	TQYSTGQVSV	EIEWELQKEN
SKRWNPFIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind1

SEQ ID NO: 37

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGCTGT
TCCTGGGTAC	AAGTACCTCG	GACCCCTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGcCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAaTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG

SEQUENCES

ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcag	cctGACgccA	CAAAAAaacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGC GG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind1

SEQ ID NO: 38

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNAADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADA EF	QERLKEDTSF	GGNLGRAAFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SIPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDENRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV F	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSL VNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAQ	PDATKNARQA	ATADVNTQGV	LPGMWQDRD	VYLQGP I WAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNP EI QY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind2

SEQ ID NO: 39

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGtGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTTgA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCgG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACA ACT
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA

SEQUENCES

CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind2

SEQ ID NO: 40

MAADGYLPDW	LVDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNAADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVETAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGGGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADVF	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIAQQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWIWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPETQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind3

SEQ ID NO: 41

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCCTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTCTTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCGAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC

SEQUENCES

GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCCCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGgGAGGCAA	CCTAGCAaAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTctGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCACTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind3

SEQ ID NO: 42

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNAADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDENRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADVF	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQGGNLAN	QDYTKTARQA	ATADVNTQGV	LPGMVWQDRD	VYLQGPWIWAK
IPHTDGHFHP	SPLMGFGFLK	HPPPQILIKN	TPVPANPSTT	FCAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind6

SEQ ID NO: 43

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAAC	AATACGATGG	CTACAGGCAG	TGGCGCACCA

SEQUENCES

ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACgACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAGAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTTACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind6

SEQ ID NO: 44

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADVF	MVPQYGYLTL	NDGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNP	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAD	QDYTKTARQA	ATADVNTQGV	LPGMWVQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSF	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind8

SEQ ID NO: 45

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC

SEQUENCES

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AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTAA GACGGCTCCG
GGAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGAACCGGA AAGGCGGGCC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGTACCTG ACCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAACT AATACGATGG CTACAGGCAG TGGCGACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACAAC
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCCTCCCGC CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTCACCTTG AACaACGGGA GTCAGGCACT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAACTTTACC TTCAGCTACA CTTTGTAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGAA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACATCTGCGG ATAACAACAA CAGTGAATAC TCGTGGACTG GAGCTACCAA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAAACA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAaAC CAAGACTACA CAAAACTGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTCAGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAAC
AGCAAACGCT GGAATCCCGA AATTCAGTAC ACTTCCAAC ACAACAAGTC TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCCATTGG CACCAGATAC CTGACTCGTA ATCTGTAA

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5R-Hind8

SEQ ID NO: 46

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MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAERHKD DSRGLVLPGY KYLGPFNGLD KGEPVNAADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLKEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTGDAD SVPDPQLGQ PPAAPSGLGT NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDENRFHCH FSPRDWQRLI NNNWGFPRPKR LNFKLFIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL
PYVLGSAHQG CLPPFPADV F MVPQYGYLTL NNGSQAVGRS SFYCLEYFPS QMLRTGNNFT FSYTFEDVPF
HSSYAHSQSL DRLMNPLIDQ YLYYLSRTNT PSGTTTQSRL QFSQAGASDI RDQSRNWLPG PCYRQQRVSK
TSADNNNSEY SWTGATKYHL NGRDSL VNPG PAMASHKDDE EKFFPQSGVL IFGKQGSEKT NVDIEKVMIT
DEEEIRTTNP VATEQYGSVS TNLQRGNLAN QDYTKTARQA ATADVNTQGV LPGMVWQDRD VYLQGPWAK
IPHTDGHFHP SPLMGGFGLK HPPPQILIKN TPVPANPSTT FSAKFASFI TQYSTGQVSV EIEWELQKEN
SKRWNPFIQY TSNYNKSINV DFTVDTNGVY SEPRPIGTRY LTRNL*

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5R-Hind10

SEQ ID NO: 47

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ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA

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SEQUENCES

AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGgGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCTCCCGC	CGTTCCCGAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CagCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGA	CCACCACGCA	GTCAAGGCTT	CAGTTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAAGT	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAGAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTTACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind10

SEQ ID NO: 48

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAGRHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLP	PCYRQQRVSK
TSADNNNSEY	SWGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAD	QDYTKTARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

SEQUENCES

5R-Hind11

SEQ ID NO: 49

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ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA
AGCTCAAACC TGGCCCACCA CCACCAAAGC CCGCAGgGCG GCATAAGGAC GACAGCAGGG GTCTTGTGCT
TCCTGGGTAC AAGTACCTCG GACCCTTCAA CGGACTCGAC AAGGGAGAGC CGGTCAACGA GGCAGACGCC
GCGGCCCTCG AGCACGACAA AGCCTACGAC CGGCAGCTCG ACAGCGGAGA CAACCCGTAC CTCAAGTACA
ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTAAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTAA GACGGCTCCG
GGAAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGAACCGGA AAGGCGGGCC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGTACCTG ACCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAACT AATACGATGG CTACAGGCAG TGGCGCACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACT
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAAGCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCTCCCCGC CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTACCCCTG AACaACGGGA GTCAGGCAGT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAgCTTTACC TTCAGCTACA CTTTGTAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGAA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACATCTGCGG ATAACAACAA CAGTGAATAC TCGTGGACTG GAGCTACCAA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAACA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAaAC CAAGACTACA CAAAACTGC TAGGCAAGCA GCTACGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTACGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAAC
AGCAAACGCT GGAATCCCGA AATTCAGTAC ACTTCCAAC ACAACAAGTC TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCATTGG CACCAGATAC CTGACTCGTA ATCTGTAA

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5R-Hind11

SEQ ID NO: 50

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MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAGRHKD DSRGLVLPGY KYLGPFNGLD KGEPVNEADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLKEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTDAD SVPDPQPLGQ PPAAPSGLGT NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRV I TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDNRFHCH FSPRDWQRLI NNNWGFPRPKR LNFKLFNIQV KEVTQNDGTT TIANKLTSTV QVFTDSEYQL
PYVLGSAHQG CLPPFPADV F MVPQYGYLTL NNGSQAVGRS SFYCLEYFPS QMLRTGNSFT FSYTFEDVPF
HSSYAHSQSL DRLMNPIDQ YLYYLSRTNT PSGTTTQSRL QFSQAGASDI RDQSRNWLPG PCYRQQRVSK
TSADNNNSEY SWTGATKYHL NGRDSL VNPG PAMASHKDDE EKFFPQSGVL IFGKQGSEKT NVDIEKVMIT
DEEEIRTTNP VATEQYGSVS TNLQRGNLAN QDYTKTARQA ATADVNTQGV LPGMWQDRD VYLQGP I WAK

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SEQUENCES

IPHTDGHFHP SPLMGGFGLK HPPPQILIKN TPVPANPSTT FSAAKFASFI TQYSTGQVSV EIEWELQKEN
SKRWNPEIQY TSNYNKSINV DFTVDTNGVY SEPRPIGTRY LTRNL*

5R-Hind12

SEQ ID NO: 51

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ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA
AGCTCAAACC TGGCCCACCA CCACCAAAGC CCGCAGAGCG GCATAAGGAC GACAGCAGGG GTCTTGCTGT
TCCTGGGTAC AAGTACCTCG GACCCCTCAA CGGACTCGAC AAGGGAGAGC CGGTCAACGA GGCAGACGCC
GCGGCCCTCG AGCACGACAA AGCCTACGAC CGGCAGCTCG ACAGCGGAGA CAACCCGTAC CTCAAGTACA
ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTAAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTTAA GACGGCTCCG
GGAAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGAACCGGA AAGGCGGGCC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGTACCTG ACCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAACT AATACGATGG CTACAGGCAG TGGCGCACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACAACT
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCTCCCGC CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTCACCTTG AACaACGGGA GTCAGGCAGT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CagCTTTACC TTCAGCTACA CTTTTGAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACATCTGCGG ATAACAACAA CAGTGAATAC TCGTGGA CTG GAGCTACCAA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAAACA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAcAC gacatcacca agaataattGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTCAGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAC
AGCAAACGCT GGAATCCCCG AATTCAGTAC ACTTCCAAC ACAACAAGTC TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCATTTGG CACCAGATAC CTGACTCGTA ATCTGTAA
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5R-Hind12

SEQ ID NO: 52

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MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAERHKD DSRGLVLPGY KYLGPFNGLD KGEPVNEADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLKEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTGDAD SVPDPQPLGQ PPAAPSGLGT NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDFNRFHCH FSPRDWQRLI NNNWGFRPKR LNFKLFNIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL
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SEQUENCES

PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIARQA	ATADVNTQGV	LPGMVWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPFIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind14

SEQ ID NO: 53

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCAACA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCC	ACCTACAACA	ACCACCTCTA
CAAAACAAAT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCCTCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAaCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCTTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCTTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind14

SEQ ID NO: 54

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
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SEQUENCES

AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSNYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATADVNTQGV	LPGMWVQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPIILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind15

SEQ ID NO: 55

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
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TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACg	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCGAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCACTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

SEQUENCES

5R-Hind15

SEQ ID NO: 56

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTDGAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADDNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDFNRHFCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLP	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATADVNTQGV	LPGMVWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind16

SEQ ID NO: 57

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CagCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTACCCCC	TCTCCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC

SEQUENCES

TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind16

SEQ ID NO: 58

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADA EF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV F	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPP
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSL VNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIA RQA	ATADVNTQGV	LPGMWQDRD	VYLQGP I WAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind17

SEQ ID NO: 59

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGT TAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCACCAC	GTGACTGGCA	AAGACTCATC	AACAACA ACT
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAgCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCTTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTCTCT	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC

SEQUENCES

AGAGAGGCAA	CCTAGCAGAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind17

SEQ ID NO: 60

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNAADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAD	QDYTKTARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVS	EIEWELQKEN
SKRWNPFIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind18

SEQ ID NO: 61

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCCTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG

SEQUENCES

ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTCTCT	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAatc	tccGACcagA	CAAAAcacGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGC GG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind18

SEQ ID NO: 62

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADA EF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDENRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV F	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSL VNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAI	SDQTKHARQA	ATADVNTQGV	LPGMWQDRD	VYLQGP I WAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNP EI QY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind19

SEQ ID NO: 63

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCACCA	CCACCAAAGC	CCGCAGAGCG	GCTTAAGGAC	GACAGCAGGG	GTCTTG TGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGT TAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGc	cCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCgG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTG GGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCACCAC	GTGACTGGCA	AAGACTCATC	AACAACA ACT
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA

SEQUENCES

CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CagCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAcAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind19

SEQ ID NO: 64

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERLKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNAADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVAHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGGGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADVF	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIAQQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWIWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPETQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind22

SEQ ID NO: 65

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCACCA	CCACCAAAGC	CCGCAGgGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCGAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAAC	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAgA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC

SEQUENCES

GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCCTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACA _c CTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAG	CCTAGCAaAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGC GG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCCG	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind22

SEQ ID NO: 66

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAGRHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADA EF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGDWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDENRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV F	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TPADNNNSEY	SWTGATKYHL	NGRDSL VNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGSLAN	QDYTKTARQA	ATADVNTQGV	LPGMVWQDRD	VYLQGP IWAK
IPHTDGHFHP	SPLMGFGFLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Hind23

SEQ ID NO: 67

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGgGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGT TAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA

SEQUENCES

ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCTCCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CagCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCacAC	gacatcacca	agaatattGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTTACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Hind23

SEQ ID NO: 68

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAGRHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNAADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADVF	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLNVNP	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAH	DITKNIARQA	ATADVNTQGV	LPGMWVQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Ce1

SEQ ID NO: 69

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GgCAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTgAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC

SEQUENCES

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AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTAA GACGGCTCCG
GGAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGAACCGGA AAGGCGGACC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGTACCTG ACCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAACT AATACGATGG CTACAGGCAG TGGCGCACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACAAC
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCCTCCCGC CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTCACCTG AACaACGGGA GTCAGGCACT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAACTTTACC TTCAGCTACA CTTTGTAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGAA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACAaCTGCGG ATAACAACAA CAGTGAATAC TCGTGGACTG GAGCTACCAA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAAACA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAaAC CAAGACTACA CAAAACTGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTCAGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAAC
AGCAAACGCT GGAATCCCGA AATTCAGTAC ACTTCCAAC ACAACAAGTC TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCATTGG CACCAGATAC CTGACTCGTA ATCTGTAA

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5R-Ce1

SEQ ID NO: 70

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MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAERHKD GSRGLVLPGY KYLGPFNGLD KGEPVNAADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLEEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KADQQPARKR LNFGQTGDAD SVPDPQPLGQ PPAAPSGLGT NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDENRFHCH FSPRDWQRLI NNNWGFPRPKR LNFKLFIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL
PYVLGSAHQG CLPPFPADV F MVPQYGYLTL NNGSQAVGRS SFYCLEYFPS QMLRTGNNFT FSYTFEDVPF
HSSYAHSQSL DRLMNPLIDQ YLYYLSRTNT PSGTTTQSRL QFSQAGASDI RDQSRNWLPG PCYRQQRVSK
TPADNNNSEY SWTGATKYHL NGRDSL VNPG PAMASHKDDE EKFFPQSGVL IFGKQGSEKT NVDIEKVMIT
DEEEIRTTNP VATEQYGSVS TNLQRGNLAN QDYTKTARQA ATADVNTQGV LPGMVWQDRD VYLQGP I WAK
IPHTDGHFHP SPLMGGFGLK HPPPPQILIKN TPVPANPSTT FSAKFASFI TQYSTGQVSV EIEWELQKEN
SKRWNP EI QY TSNYNKSINV DFTVDTNGVY SEPRPIGTRY LTRNL *

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5R-Ce5

SEQ ID NO: 71

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ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA

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SEQUENCES

AGCTCAAACC	TGGCCCAACCA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCTTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGA	GGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTATA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCAG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGAAA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCCC	ACCTACAACA	ACCACCTCTA
CAAACAAATT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTTACCAC	GTGACTGGCA	AAGACTCATC	AACAACAACCT
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCTCCCGC	CGTTCCCGAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTCG	AACaACGGGA	GTCAGGCAGT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CAACTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTTCTC	AGGCCCGGAGC
GAGTGACATT	CGGGACCACT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACATCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAAGTTT	TTCCTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGgC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAGAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAG
ATTCCACACA	CGGACGGACA	TTTTTACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCCTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Ce5

SEQ ID NO: 72

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNEADA
AALEHDKAYD	RQLDSGDNPY	LKYNHADAEF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGSGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDNRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLP	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRATNP	VATEQYGSVS	TNLQRGNLAD	QDYTKTARQA	ATADVNTQGV	LPGMWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

SEQUENCES

5R-Ce6

SEQ ID NO: 73

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ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA
AGCTCAAACC TGGCgCACCA CCACCAAAGC CCGCAGAGCG GCATAAGGAC GACAGCAGGG GTCTTGTGCT
TCCTGGGTAC AAGTACCTCG GACCCTTCAA CGGACTCGAC AAGGGAGAGC CGGTCAACGc cGCAGACGCC
GCGGCCCTCG AGCACGACAA AGCCTACGAC CGGCAGCTCG ACAGCGGAGA CAACCCGTAC CTCAAGTACA
ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTgAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTAA GACGGCTCCG
GGAAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGGAAACCGGA AAGGCGGGCC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGTACCTG ACCCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAACT AATACGATGG CTACAGGCgG TGGCGCACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACAAC
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCCCTCCCGC CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTACCCCTG AACaACGGGA GTCAGGCAGT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAACTTTACC TTCAGCTACA CTTTGTAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGAA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACATCTGCGG ATAACAACAA CAGTGAATAC TCGTGGAAGT GAGCTACCAA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAACA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAcag cctGACgccA CAAAAaacGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTGAGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAAC
AGCAAACGCT GGAATCCCGA AATTGAGTAC ACTTCCAAC AACAACAAGT TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCATTGG CACCAGATAC CTGACTCGTA ATCTGTAA

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5R-Ce6

SEQ ID NO: 74

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MAADGYLPDW LEDTLSEGIR QWWKLKPGAP PPKPAERHKD DSRGLVLPGY KYLGPFNGLD KGEPVNAADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLEEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTGDAD SVPDPQPLGQ PPAAPSGLGT NTMATGGGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDNRFHCH FSPRDWQRLI NNNWGFPRPKR LNFKLFNIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL
PYVLGSAHQG CLPPFPADV F MVPQYGYLTL NNGSQAVGRS SFYCLEYFPS QMLRTGNNFT FSYTFEDVPF
HSSYAHSQSL DRLMNPIDQ YLYYLSRTNT PSGTTTQSRL QFSQAGASDI RDQSRNWLPG PCYRQQRVSK
TSADNNNSEY SWTGATKYHL NGRDSLVPNG PAMASHKDDE EKFFPQSGVL IFGKQGSEKT NVDIEKVMIT
DEEEIRTTNP VATEQYGSVS TNLQRGNLAQ PDATKNARQA ATADVNTQGV LPGMWQDRD VYLQGPiWAK

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SEQUENCES

IPHTDGHFHP SPLMGGFGLK HPPPQILIKN TPVPANPSTT FSAAKFASFI TQYSTGQVSV EIEWELQKEN
SKRWNPEIQY TSNYNKSINV DFTVDTNGVY SEPRPIGTRY LTRNL*

5R-Ce8

SEQ ID NO: 75

ATGGCTGCCG ATGGTTATCT TCCAGATTGG CTCGAGGACA CTCTCTCTGA AGGAATAAGA CAGTGGTGGA
AGCTCAAACC TGGCCCACCA CCACCAAAGC CCGCAGAGCG GCATAAGGAC GACAGCAGGG GTCTTGTGCT
TCCTGGGTAC AAGTACCTCG GACCCTTCAA CGGACTCGAC AAGGGAGAGC CGGTCAACGA GGCAGACGCC
GCGGCCCTCG AGCACGACAA AGCCTACGAC CGGCAGCTCG ACAGCGGAGA CAACCCGTAC CTCAAGTACA
ACCACGCCGA CGCGGAGTTT CAGGAGCGCC TTAAAGAAGA TACGTCTTTT GGGGGCAACC TCGGACGAGC
AGTCTTCCAG GCGAAAAAGA GGGTTCTTGA ACCTCTGGGC CTGGTTGAGG AACCTGTTAA GACGGCTCCG
GGAAAAAAGA GGCCGGTAGA GCACTCTCCT GTGGAGCCAG ACTCCTCCTC GGGAACCGGA AAGGCGGGCC
AGCAGCCTGC AAGAAAAAGA TTGAATTTTG GTCAGACTGG AGACGCAGAC TCAGTACCTG ACCCCAGCC
TCTCGGACAG CCACCAGCAG CCCCCTCTGG TCTGGGAACT AATACGATGG CTACAGGCAG TGGCGCACCA
ATGGCAGACA ATAACGAGGG CGCCGACGGA GTGGGTAATT CCTCGGGAAA TTGGCATTGC GATTCCACAT
GGATGGGCGA CAGAGTCATC ACCACCAGCA CCCGAACCTG GGCCCTGCCC ACCTACAACA ACCACCTCTA
CAAACAAATT TCCAGCCAAT CAGGAGCCTC GAACGACAAT CACTACTTTG GCTACAGCAC CCCTTGGGGG
TATTTTGACT TCAACAGATT CCACTGCCAC TTTTCACCAC GTGACTGGCA AAGACTCATC AACAACAACT
GGGGATTCCG ACCCAAGAGA CTCAACTTCA AGCTCTTTAA CATTCAAGTC AAAGAGGTCA CGCAGAATGA
CGGTACGACG ACGATTGCCA ATAACCTTAC CAGCACGGTT CAGGTGTTTA CTGACTCGGA GTACCAGCTC
CCGTACGTCC TCGGCTCGGC GCATCAAGGA TGCTCCCCGC CGTTCCCAGC AGACGTCTTC ATGGTGCCAC
AGTATGGATA CCTCACCTG AACaACGGGA GTCAGGCAGT AGGACGCTCT TCATTTTACT GCCTGGAGTA
CTTTCCTTCT CAGATGCTGC GTACCGGAAA CAACTTTACC TTCAGCTACA CTTTTGAGGA CGTTCCTTTC
CACAGCAGCT ACGCTCACAG CCAGAGTCTG GACCGTCTCA TGAATCCTCT CATCGACCAG TACCTGTATT
ACTTGAGCAG AACAAACACT CCAAGTGGAA CCACCACGCA GTCAAGGCTT CAGTTTTCTC AGGCCGGAGC
GAGTGACATT CGGGACCACT CTAGGAACTG GCTTCCTGGA CCCTGTTACC GCCAGCAGCG AGTATCAAAG
ACATCTGCGG ATAACAACAA CAGTGAATAC TCGTGGAAGT GAGCTACCAA GTACCACCTC AATGGCAGAG
ACTCTCTGGT GAATCCGGGC CCGGCCATGG CAAGCCACAA GGACGATGAA GAAAAGTTTT TTCCTCAGAG
CGGGGTTCTC ATCTTTGGGA AGCAAGGCTC AGAGAAAAACA AATGTGGACA TTGAAAAGGT CATGATTACA
GACGAAGAGG AAATCAGGAC AACCAATCCC GTGGCTACGG AGCAGTATGG TTCTGTATCT ACCAACCTCC
AGAGAGGCAA CCTAGCAaag gatcagacaa aaagcaccGC TAGGCAAGCA GCTACCGCAG ATGTCAACAC
ACAAGGCGTT CTTCCAGGCA TGGTCTGGCA GGACAGAGAT GTGTACCTTC AGGGGCCCAT CTGGGCAAAG
ATTCCACACA CGGACGGACA TTTTCACCCC TCTCCCCTCA TGGGTGGATT CGGACTTAAA CACCCTCCTC
CCCAGATTCT CATCAAGAAC ACCCCGGTAC CTGCGAATCC TTCGACCACC TTCAGTGCGG CAAAGTTTGC
TTCCTTCATC ACACAGTACT CCACGGGACA GGTCAGCGTG GAGATCGAGT GGGAGCTGCA GAAGGAAAAC
AGCAAACGCT GGAATCCCGA AATTCAGTAC ACTTCCAAC AACAACAAGTC TATTAATGTG GACTTTACTG
TGGACACTAA TGGCGTGTAT TCAGAGCCTC GCCCATTGG CACCAGATAC CTGACTCGTA ATCTGTAA

5R-Ce8

SEQ ID NO: 76

MAADGYLPDW LEDTLSEGIR QWWKLKPGPP PPKPAERHKD DSRGLVLPGY KYLGPFNGLD KGEPVNEADA
AALEHDKAYD RQLDSGDNPY LKYNHADA EF QERLKEDTSF GGNLGRAVFQ AKKRVLEPLG LVEEPVKTAP
GKKRPVEHSP VEPDSSSGTG KAGQQPARKR LNFGQTGDAD SVPDPQPLGQ PPAAPSGLGT NTMATGSGAP
MADNNEGADG VGNSSGNWHC DSTWMGDRVI TTSTRTWALP TYNNHLYKQI SSQSGASNDN HYFGYSTPWG
YFDFNRFHCH FSPRDWQRLI NNNWGFRPKR LNFKLFNIQV KEVTQNDGTT TIANNLTSTV QVFTDSEYQL

SEQUENCES

PYVLGSAHQG	CLPPFPADV	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNNFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TSADNNNSEY	SWTGATKYHL	NGRDSLVPNG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAK	DQTKSTARQA	ATADVNTQGV	LPGMVWQDRD	VYLQGPWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPFIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		

5R-Ce9

SEQ ID NO: 77

ATGGCTGCCG	ATGGTTATCT	TCCAGATTGG	CTCGAGGACA	CTCTCTCTGA	AGGAATAAGA	CAGTGGTGGA
AGCTCAAACC	TGGCCCAACA	CCACCAAAGC	CCGCAGAGCG	GCATAAGGAC	GACAGCAGGG	GTCTTGTGCT
TCCTGGGTAC	AAGTACCTCG	GACCCCTCAA	CGGACTCGAC	AAGGGAGAGC	CGGTCAACGc	cGCAGACGCC
GCGGCCCTCG	AGCACGACAA	AGCCTACGAC	CGGCAGCTCG	ACAGCGGAGA	CAACCCGTAC	CTCAAGTACA
ACCACGCCGA	CGCGGAGTTT	CAGGAGCGCC	TTAAAGAAGA	TACGTCTTTT	GGGGGCAACC	TCGGACGAGC
AGTCTTCCAG	GCGAAAAAGA	GGGTTCTTGA	ACCTCTGGGC	CTGGTTGAGG	AACCTGTAA	GACGGCTCCG
GGAAAAAAGA	GGCCGGTAGA	GCACTCTCCT	GTGGAGCCAG	ACTCTCCTC	GGGAACCGGA	AAGGCGGGCC
AGCAGCCTGC	AAGAAAAAGA	TTGAATTTTG	GTCAGACTGG	AGACGCAGAC	TCAGTACCTG	ACCCCCAGCC
TCTCGGACAG	CCACCAGCAG	CCCCCTCTGG	TCTGGGAACT	AATACGATGG	CTACAGGCgG	TGGCGCACCA
ATGGCAGACA	ATAACGAGGG	CGCCGACGGA	GTGGGTAATT	CCTCGGGA	TTGGCATTGC	GATTCCACAT
GGATGGGCGA	CAGAGTCATC	ACCACCAGCA	CCCGAACCTG	GGCCCTGCC	ACCTACAACA	ACCACCTCTA
CAAAACAAAT	TCCAGCCAAT	CAGGAGCCTC	GAACGACAAT	CACTACTTTG	GCTACAGCAC	CCCTTGGGGG
TATTTTGACT	TCAACAGATT	CCACTGCCAC	TTTTCAACCAC	GTGACTGGCA	AAGACTCATC	AACAACAAC
GGGGATTCCG	ACCCAAGAGA	CTCAACTTCA	AGCTCTTTAA	CATTCAAGTC	AAAGAGGTCA	CGCAGAATGA
CGGTACGACG	ACGATTGCCA	ATAACCTTAC	CAGCACGGTT	CAGGTGTTTA	CTGACTCGGA	GTACCAGCTC
CCGTACGTCC	TCGGCTCGGC	GCATCAAGGA	TGCCCTCCGC	CGTTCCCAGC	AGACGTCTTC	ATGGTGCCAC
AGTATGGATA	CCTCACCTG	AACaACGGGA	GTCAGGCACT	AGGACGCTCT	TCATTTTACT	GCCTGGAGTA
CTTTCCTTCT	CAGATGCTGC	GTACCGGAAA	CagCTTTACC	TTCAGCTACA	CTTTTGAGGA	CGTTCCTTTC
CACAGCAGCT	ACGCTCACAG	CCAGAGTCTG	GACCGTCTCA	TGAATCCTCT	CATCGACCAG	TACCTGTATT
ACTTGAGCAG	AACAAACACT	CCAAGTGGAA	CCACCACGCA	GTCAAGGCTT	CAGTTTTCTC	AGGCCGGAGC
GAGTGACATT	CGGGACCAGT	CTAGGAACTG	GCTTCCTGGA	CCCTGTTACC	GCCAGCAGCG	AGTATCAAAG
ACAcCTGCGG	ATAACAACAA	CAGTGAATAC	TCGTGGACTG	GAGCTACCAA	GTACCACCTC	AATGGCAGAG
ACTCTCTGGT	GAATCCGGGC	CCGGCCATGG	CAAGCCACAA	GGACGATGAA	GAAAAGTTTT	TTCTTCAGAG
CGGGGTTCTC	ATCTTTGGGA	AGCAAGGCTC	AGAGAAAAACA	AATGTGGACA	TTGAAAAGGT	CATGATTACA
GACGAAGAGG	AAATCAGGAC	AACCAATCCC	GTGGCTACGG	AGCAGTATGG	TTCTGTATCT	ACCAACCTCC
AGAGAGGCAA	CCTAGCAaAC	CAAGACTACA	CAAAAACTGC	TAGGCAAGCA	GCTACCGCAG	ATGTCAACAC
ACAAGGCGTT	CTTCCAGGCA	TGGTCTGGCA	GGACAGAGAT	GTGTACCTTC	AGGGGCCCCAT	CTGGGCAAAAG
ATTCCACACA	CGGACGGACA	TTTTCACCCC	TCTCCCCTCA	TGGGTGGATT	CGGACTTAAA	CACCCCTCCTC
CCCAGATTCT	CATCAAGAAC	ACCCCGGTAC	CTGCGAATCC	TTCGACCACC	TTCAGTGCGG	CAAAGTTTGC
TTCTTTCATC	ACACAGTACT	CCACGGGACA	GGTCAGCGTG	GAGATCGAGT	GGGAGCTGCA	GAAGGAAAAAC
AGCAAACGCT	GGAATCCCGA	AATTCAGTAC	ACTTCCAAC	ACAACAAGTC	TATTAATGTG	GACTTTACTG
TGGACACTAA	TGGCGTGTAT	TCAGAGCCTC	GCCCCATTGG	CACCAGATAC	CTGACTCGTA	ATCTGTAA

5R-Ce9

SEQ ID NO: 78

MAADGYLPDW	LEDTLSEGIR	QWWKLKPGPP	PPKPAERHKD	DSRGLVLPGY	KYLGPFNGLD	KGEPVNAADA
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SEQUENCES

AALEHDKAYD	RQLDSGDNPY	LKYNHADA EF	QERLKEDTSF	GGNLGRAVFQ	AKKRVLEPLG	LVEEPVKTAP
GKKRPVEHSP	VEPDSSSGTG	KAGQQPARKR	LNFGQTGDAD	SVPDPQPLGQ	PPAAPSGLGT	NTMATGGGAP
MADNNEGADG	VGNSSGNWHC	DSTWMGDRVI	TTSTRTWALP	TYNNHLYKQI	SSQSGASNDN	HYFGYSTPWG
YFDENRFHCH	FSPRDWQRLI	NNNWGFRPKR	LNFKLFNIQV	KEVTQNDGTT	TIANNLTSTV	QVFTDSEYQL
PYVLGSAHQG	CLPPFPADV F	MVPQYGYLTL	NNGSQAVGRS	SFYCLEYFPS	QMLRTGNSFT	FSYTFEDVPF
HSSYAHSQSL	DRLMNPLIDQ	YLYYLSRTNT	PSGTTTQSRL	QFSQAGASDI	RDQSRNWLPG	PCYRQQRVSK
TPADNNNSEY	SWGATKYHL	NGRDSL VNPG	PAMASHKDDE	EKFFPQSGVL	IFGKQGSEKT	NVDIEKVMIT
DEEEIRTTNP	VATEQYGSVS	TNLQRGNLAN	QDYTKTARQA	ATADVNTQGV	LPGMWVQDRD	VYLQGP IWAK
IPHTDGHFHP	SPLMGGFGLK	HPPPQILIKN	TPVPANPSTT	FSAAKFASFI	TQYSTGQVSV	EIEWELQKEN
SKRWNPEIQY	TSNYNKSINV	DFTVDTNGVY	SEPRPIGTRY	LTRNL*		