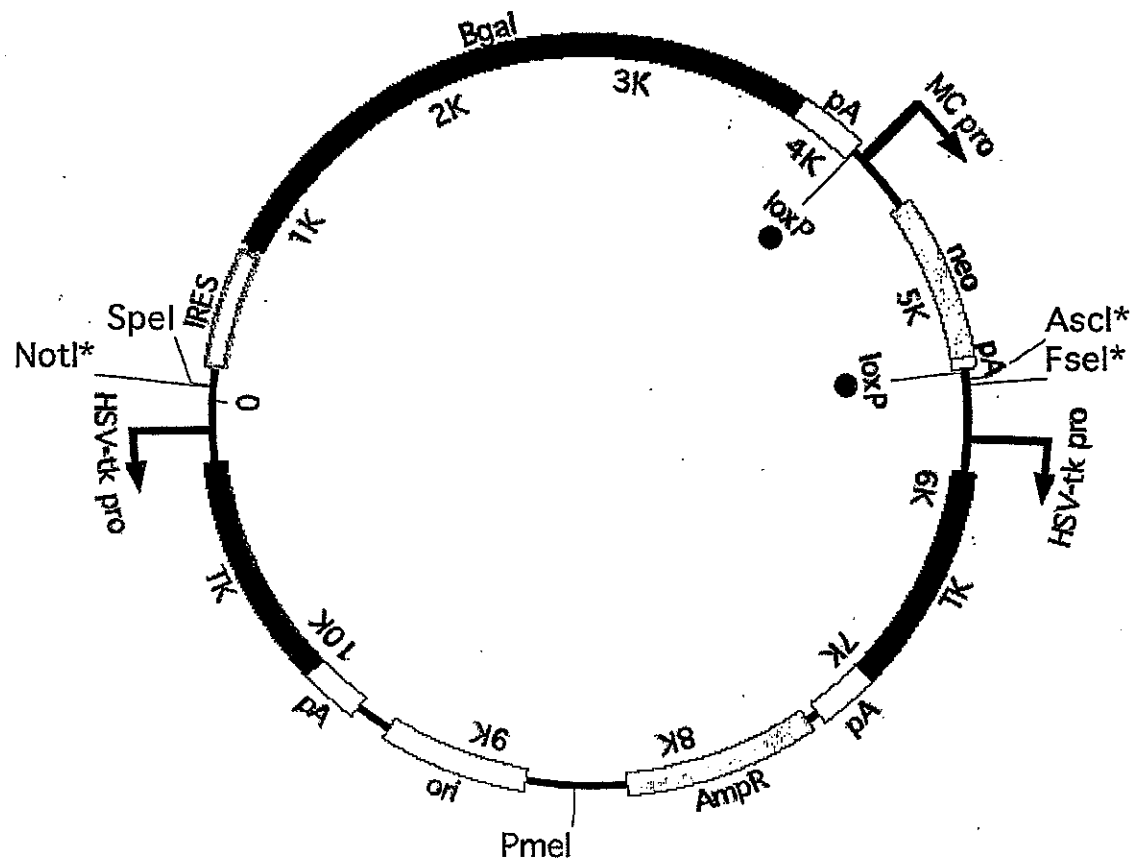


1/8

Figure 1



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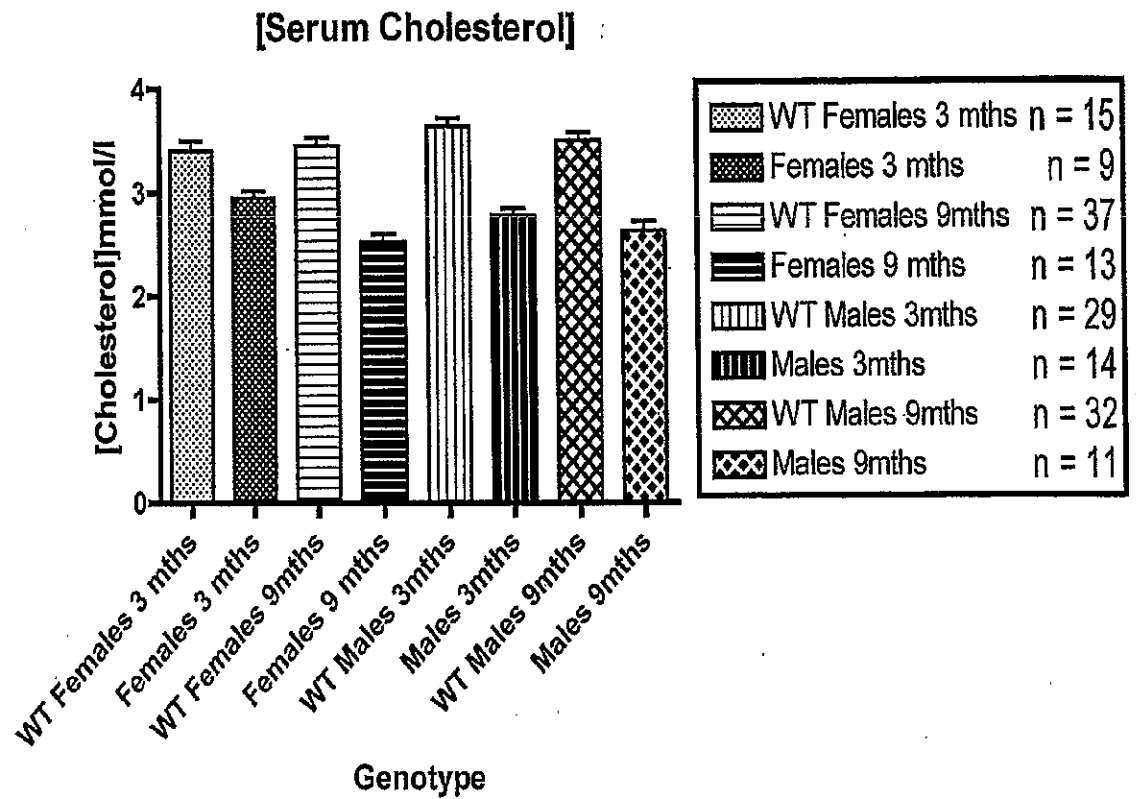
Figure 2

Figure 3 (Seq ID No.7)

Sequence Range: 1 to 7321

5' prF  
 |  
 |  
 CCCCCTCACTGGACAAACTCAGGCATCCCTCGCAGGCGCAGAAATATAGCTCTGTGGAGACCACCAGACGATTCTCCCCAGCCTCCCACTGGTTTATGA  
 GGGGCAGTGACCTGTTTGAGTCCGTAGGGGACCGTCCGCTCTTATATCGAGACACCTCTGGTGGTCTGCTAAAGAGGGGTCGGAGGGTGACCAAACTACT  
 100  
 200  
 TCCAGTTTCTCAGGAAGGAAATTACCAAGTGGCTGGCTAACTGGAAGACAGCCTAGCCAGGTGAGAGGGTGGAAACCAATCAGTGCTCACTGGCTA  
 AGGTCAAAGAGTCTTCTCTTAATGGTCTACCGGACCGATTGACCTTCTGTGCGGATCGGGTCCAGTCTCCACCTTTGGTTTATGTCACGAGTGACCGAT  
 15  
 <5' prR  
 |  
 |  
 CAGGAAGTCCATCTTCTCCAGCCGCAAGGGGAACAGGAAGAAATGTCAGGAGACAGGAACCTGGGAAGCCTGTGAGTACATCCACCCACATGCTA  
 GTCTTTCAGGTAGAAGAGTCCGCGTTCCCTTGTCTTCTTCTACGTCCCTCTGTCTTGGGACCTTCCGACACTCATGTAGGTGTGGGTGTACGAT  
 20  
 >5' armF  
 |  
 |  
 TGGGGCCAGCCTCCCCAATTCCTTCTGTGGGTAGGGAGAACAGTGTAGCTGAGACCGCTGGACTCGCTGGGATACTACTGTTAGGTGCCACAGCCTCA  
 ACCCCCGGTGGAGGGGTAAAGGAAGACACCCATCCCTTGTCTCAATCGACTCTGGCGACCTGAGCGACCTATGATGACAACTCCACGGGTGTCCGAGT  
 25  
 300  
 ACAGGGGAAACCCCACTGGAGGGTACCCCAAGTGGAACTGACTGGAAITGAGGGTCCCCAAGGCCAGAGCTCTACAGCCAAGCAGAGACTTGCTATGGTTC  
 TGTCCCTTGGGGTACCTCCCATGGGTTCACTTTGACTGACCTAACTCCAGGGGTTCGGGTCTCGAGATGTCGGTTCGCTCTGAAACGATACCAAG  
 35  
 400  
 TGGGGCTCGCTGCTGCTCCAGCTGTCTATTAGGCCACCCCCAACCGTTCCTCCCAAGCTGACGCCACACCTTAAGGTGGGCCACAGGACATTCCTCA  
 ACCCGGAGCGGACGACGAGGGTCGACAGTAATCCGTTGGGGTTGGCAAGGAGGGGTTCGACGTCGGGTGTGGAATTCCACCGGTGTCTCTGTAAGGGT  
 40  
 500  
 GGGCAGAGAAGCTGGGACGGATGCTCTAGTACAGTGTACAGCTATGCCTCTGACGTGGTTGGTGCAGCCTACAAAGCCGCTCTGCTCTTGGGCTCTCC  
 CCGCTCTCTTCGACCTTGCCTACGAGATCACTGTACAGTCTGGATACGGAGACTGCACCAACACGTCGGATGTTTCGGCGAGACGAGAACCCGAGAGG  
 45  
 600  
 CCGCTGTGCTCTGGGAGGGGATCTCCAAGAGCAACACCATAGCAAGCCTTGAAGAATATCACTTCTACAAAGTAATGATAGCAAGTATGATTCTGC  
 GCGACACGAGACCCCTCCCGTAGAGGTCTCGTTGTGGTATCGTTCGGAACCTTCTATAGTGAAGATGTTTCATTTACTATTCGTTCTATAGTAAGAGG  
 50  
 700  
 CTTTTTATTTTTTATCTGAAATAAAAGTTCTGATGAGTAAGAAAGTTTGAACAGCAGTTACCCGCTAGCTGCTAGACAAAGCTTATCAGGTGTTCCA  
 GAAAAATAAAAAATAGACTTTATTTTCAAGACTACTCATCTTTCAAACCTTGTCTCAATGGCGATCGACGATCTGTTCGAATAGTCCAAAGGT  
 55  
 800  
 CACTCACAGGCTGGCGAGAAGCACTCTGAGGTACATGTAGCCTGGATAAACAGCAGCAGCAGCTCTCAGACCCAGGCCATGGCAGGCAGCAGATGAAC  
 GTGAGTGTCCGACCGCTCTCTGTGGAGACTCCATGTACATCGGACCTATTGTGCTGTCTGTGTCGAGAGTCTGGGTCCGGTACCGTCCGTGCTGACTTG  
 60  
 900  
 ATGGAGGGAAATTCTACCCAGACAGACTACGTGTGTCCACATGACGCTTTCCCTTAAAGCCAGCTGCTCGCCAGTGCAGGGCCCTGAGCCCTACCTCCT  
 TACCTCCCTTAAGATGGGTCTGTCTGTGATGCAACAAGGTGTACTGCGAAAGGGATTTCGGGTGACGAGCGGGTACGCCCCGGGACTCGGGATGGAGGA  
 1000  
 1100  
 GCCCCACTTCTCACTGCAGGCCATTAGCAGTCCGGGACGTGCCGTGCCACCAAGCTGCATGGGGGTGATGGAGGGCAAGCAGTCTGCCAGGCCACAG  
 CGGGGTGAAGAGTGACGTCGGTAACTGTGACGCCCGTGCAGGCAACGGGTGGTCCGACGTACCCCAAGTACCTCCGTTCTGTACGAGACGCTCCGGTGTCT  
 1200  
 1300  
 CACTGTTGCCAAGTAGTAGCTCTCCCTGTTCTTGTGGCCCCAGACGGGTACATGCACGCACATCTGGAATGCAGTGTGGGAGGCTTTGGACCCCTT  
 GTGACAAACGGTTTCATCATCGAGAGGGGACAAGAAACACCGGGGTCTGCCAGGTGTACGTGCGGTGTAGACCTTTACGTGCACACCTCCGAAACCTGGGGG

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60

65

3000

3100

3200

10

3300

15

**3400**

20

3500

25

3700

30

3800

35

3900

40

4000

45

4100

4200

50

430

55

&lt;5' axmR

440

60

M W S C G P L N S T A W A E E P L C R N L R L G L W V L S L>

EX2

65

6/8

>7tm  
|  
|

4500  
GCTCTACCTGGGGGCGAGGGTCCCTGTGAGCTTAGGCTATAATGCTCTTCTGGTGTGGCCAACTGGCCAGCAAGAACCACCATGACCATGCCGACGTG  
CGAGATGGACCCCCCTCCCGAGGACACTCGAATCCGATATTACGAGAAGACCACGACCGGTGGACCCGGTCTGTTGGTACTGGTACGGGCTGCAC  
L Y L G A G V P V S L G Y N A L L V L A N L A S K N T M T M P D V>

EX2

4600  
TACTTCGTGAACATGGCCGTGGCGGGGCTGGTGTCTCAGGCACCTGGCACCTGCTACCTGTGGGCCCTGCCACTCCAGGTGGGCCCTGTGGAGCTCA  
ATGAAGCACTGTACCGGCACCGCCCCGACACAGTGCCTGACCGTGGACGCTGGACAACCCGGGACGGGTGAGTCCACCCGGGACACTCGGAGT  
Y F V N M A V A G L V L T A L A P A Y L L G P A H S R W A L W S L>

EX2

4700  
GCAGTGAGGCCCATGTGACACTGCTCATCTGTCAACGTGGCTTCCCTGGTGGACCATGTACTCCACTGCACTGCTGAGCCTTGACTACTACATCGAGCG  
CGTCACTCCGGGTACACTGTGACGAGTAGGACAAGTTGCACCGAAGGGACCACTGGTACATGAGGTGACGTGACGACTCGGAACCTGATGATGTAGCTCGC  
S S E A H V T L L I L F N V A S L V T M Y S T A L L S L D Y Y I E R>

EX2

4800  
TGCCCTGCCACGCACTACATGGCCAGTGTGTACAAACCCCGGACGTTGTGTGGCTTGGTCTGGGGAGGGGCGGTGCTCACCAGCTTCTCCTCCCTGCTC  
ACGGGACGGTGGTGGATGTACCGGTACACATGTTGTGGGCCGTGCACACACCGAAGCAGACCCCTCCCGCCACGAGTGGTGAAGAGGAGGGACGAG  
A L P R T Y M A S V Y N T R H V C G F V W G G A V L T S F S S L L>

EX2

4900  
TTCTACATCTGCACTACGTTCTTAGAATCGCTGAGTGTGCCCGGATGCAGAACCGGAGGACCGGATGCTATCCTTGTGCTCATCGGCTACGTGG  
AAGATGTAGACGTGACGACAGATCTTAGCGACTCACACGGGCTACGCTTGTGCTCCGTCGGCTACGATAGGAACACGAGTAGCCGATGCACC  
F Y I C S H V S S R I A E C A R M Q N T E A A D A I L V L I G Y V>

EX2

>hetF  
|  
|

5000  
TGCCAGGTCTGGCTGTGTGTATGCCCTGGCACTCATCTCGAATCGGGGAAGGAAGACACACCCCTGGACAGGACACAGCAGGCTGGACCCCTCGGT  
ACGGTCCAGACCGACACAACATACGGGACCGTGAAGTAGAGCTCTTAGCCCTTCTTCTGTGTGGGGACCTGGTCTGTGGTCTCGGACCTGGGGAGCCA  
V P G L A V L Y A L A L I S R I G K E D T P L D Q D T S R L D P S V>

EX2

5100  
GCACAGGCTGCTGGTGGCCACCGTGTGCACTCAGTTTGGCCCTCTGGACACCTTACTACTTGAGCCTGGGGCACACAGTGTGACGTACGCGGGGAGGACC  
CGTGTCCGACGACCCCGGTGGCACAGTGAAGTCAACCGGAGACCTTGGAAATGATGAACCTCGGACCCCGTGTGTACGACTGCAGTGCCTCCCTCTGG  
H R L L V A T V C T Q F G L W T P Y Y L S L G H T V L T S R G R T>

EX2

>3' armF  
|  
|

5200  
GTGGAGGGGCATTATCTGGGCATCCTACAGGTGCTAAGGACCTGGCCAAAGTTCTGGCCCTTCTCAAGCAGTTCTGTGACACCACTGCTCTACCGTTACA  
CACCTCCCGTAATAGACCCGTAGGATGTCCAACGATTCTTGGACCGGTTCAAGGACCGGAAGAGTTCTGTCAAGACACTGTGGTGAAGAGATGGCAATGT  
V E G H Y L G I L Q V A K D L A K F L A F S S S S V T P L L Y R Y>

EX2

<hetR  
|  
|

5300

7/8

TCACAAAGCCTTCCCGGCAAGCTCCGGCGGCTGATGAAGAAGATGCACCTGCGGGGCCGCCCACTGCTCCCCGACCCCTCGGGGATACAGCAGGTGAT  
AGTTGTTCGGAGGGGCCGTTTCGAGGCCGCCGACTACTTCTTCTACGTGACGCCCGCGGGTGACGAGGGGGCTGGGAGCCCTATGTCTCCACTA  
I N K A F P G K L R R L M K K M H C G R R H C S P D P S G I Q Q V M>

5 EX2

5400  
GGCACAGGCGTAGCTAACCCCTCCCTGGGCTGACCACGAGGAACACTAAACTCAACTGGACACATAGCACTTTGTTCCTCCAGGCACATGGAGCTCCAGC  
CCGTGTCGGCATCGATTGGGAGGGACCCGACTGGTGTCTCTTGTGATTTTGTGATTTGACCTGTGTATCGTGAACAAGGGTCCGTGTACCTCAAGGTCCG  
A Q A \*>

10 EX2

5500  
CCAGGAGACACGCTGAAGCCAGAGATGCACAGCGGGGCTTTCTCTTGATGTTTCTGTTTTCCTTAAAGGCCAACCTTGGTCTTATGCTGCATGGTG  
GGTCTCTGTGCGACTTCGGTCTCTACGTGTCCGCCGTAAAGAGAACTACAAAGGACAAAGGGGATTTCCGGTTGGAACAGAAATACAGCTACAC

15 EX2

5600  
GAAAGCAGAGGTGCCCTGTGTGAACAGGCTGCTTCTGACTAACCTTCCACCTTCTCCCTCAAGGTGTGTGCTTCTCCAGGGACATCTCAAGGTCC  
CTTTCGTCTCCACGAGACACACTTGTCCGACGAGACTGATTGGAAGGGTGGAGAGGGAGTTCCACACACGGAAGAGGGTCCCTGTAGAAGTTCCAGG

20 EX2

5700  
ATGTCCTCACAAGCAGGCTGACCTTCGGCTCCCTGGTATTTGGGCTTCTAAATGAAGCGATGAAATCTAAAGCCAGTATTTATCTTCATTTGACAT  
TACAGGAGTGTTCGTCCGACTGGAAGCCGGAGGGACCATAAACCCGAAAGATTACTTCGCTACTTTAGATTTCGGTCAATAATATGAAGTATAACTGTA

25 EX2

5800  
GATACTGTATTCCTTATTTATTTTAAAAATAGAAGTGTAGAAAGATACCTAGTATTAAGAAGAGGCACCTTCAGGGGAATGTGGCTGTGCTG  
CTATGAACCTAAGAGGATAATAATAAAAAATTTTATCTTCACAACTCTTCTATGGATCATAATCTTCTTCGGTGAAGTCCCTTACACCGACACGAC

30

5900  
ATACCAGTGTAGAGCTTGAGGACAGGACAGTGGGCTGTGAGGCTGACAGCTACACAGCCATTGCTGACAGTGACAGCTATGAGACCTGGCCCTC  
TATGGTCACAATCTCGAATCTCTGTCTGTCAACCCGACAGTCCGGACGTCGTGATGTGTCGGTAACGACTGTCTACTGTGATACCTCTGTGACCGGGAG

35

6000  
TCCCTACTGAGAGAGGATCTTCCAGTGCTTCAACATATGCATATACATAAATGGAAAAAAGAAGTGTGTTCTCTTAGTGCCAAAGGCCCTCTGGAG  
AGGAGATGACTCTCTCTAGAAAGGTACGAAGTGTATACGTATATGTATTTACCTTTTCTTCTCACACAAGAGAAATCAGGTTTCCGGAAGACCTC

40

6100  
ACCTGGATATGGTAGAGGTTAGCCAGGCATAGAAGGAAAGGCAGGATGGTATGAGACCAGGCTCCAAGATGACCAGGACTGCTATCAGGGAAGGG  
TGGACCTATACCATCTCCCAATCGGTCCGTATCTTCTTTTCCGTCTTACCATACTCTGGTGGCAGGTTCTACTGGTCCCTGACCGTAGTCCCTTTCC

45

6200  
CCCTGCTTGGCCAGTTTCACACAGCTGTGGGTGECACATGAGGAGGCTCACCTCCACAGGTGCTGGATCCAGGCTCACCCAGTGTCTGGGGTCT  
GGGACGAACCGGTCAAAGTGTGTGACACCCAGGTGTACTCTCCGAGTGGAGGGTGTCCACGACCTAGGTCCGGAGTGGGTGACGAAGACCCACGA

50

6300  
TTTACCATCTCTATGTTGTAATTAATCTACTCTAATGTGGCATGAAAGAATTCCACACCCGAATTTCTCTGGCTACATGGCAAGCCACAGTCC  
AAATGGTAGGATCAAACCATTAATAGATGAGATTACACCCGTACTTTCTTAAGGGTGGTGGCTTAAGAGAGCCGATGTACCGTTCGGGTGTTCAGG

55

6400  
CTGCCCCAGTTCTAAAGCTCTCCATGTGACCATCTCACCCCTGTCTCTACAGAAGCGGGTGTGTGACCCACATTCAGTGGCTTCTTGCAATGGCCCCA  
GACGGGGTCAAGATTTCGAGAGGTACACTGTGTAGAGTGGGGACAGAGATGTCTTCCGCCACACACTGGGTGTAAGTACCCGAAGAAGTACCGGGT

60

6500  
CAGCTGCTCTGGCTGTCTGGGAACCTGCTGCTGTGAGTCAGTAACCTTAGTGTATCTATTTCTATGCAAACTCCATCTCCATGGACGGTGAAGGCTCCAG  
GTGACACAGGACGACAGACCTTACGACGAGACTCAGTCATTGAAATCACAAATAGATAAGATACGTTTGAAGTAGAGGTACCTGCCACTGCCGAGGTC

65

6600  
TTAATCTGCTTTAAGGAGAAACACGAGGCCCGAGCCCTAGCTGTGACCTACTGGGCTGCTCTGTGGGTCTCAGTTCATGAATAAACAAAGGGTGGG  
AATTAGACCGAATTCCTCTTGTGCTCGGGCGTCGGGATCGACACTGGATGACCCGTACGAGACACCCAGAGTCAAGTACTTATTTGGTTTCCCGACCC

6700

8/8

TTAGACAGGCATCTTCAGAGTTGCTTACGGCTGTAGAATTTTGTGTTGAGGACTTTAAATTGGCAAACCTGACTTTCCCTACCCCCGCCCCAGGTGCACA  
AATCTGTCCGTAGAGTCTCAACGAATGCCGACATCTTAAACAAAACTCCTGAAATTTAACCGTTTGGACTGAAAGGGATGGGGGCGGGGTCCACGTGT

5 6800  
GCTGAGTGAAGGCTCTGAAAAGCTAATGGCTTCCAGGCTTCCACCCCTGATAGCCACAATGAACACCTTAACGCTTGCTGAGGAAACAAGAACCTCACC  
CGACTCACCTCCGAGACTTTTCGATPACCGAAGGTCGGAAGGTTGGACTATCGGTGTACTTGTGGAATTCGGAACGACTCCTTTGTCTTGGGAGTGG

10 6900  
ATGAAGGTTCTAGCTAGACCTGGCTCAGGCCACGGTAATCTCTATGAGAGCAAGCCAGGGACCAAGGTCAATCAAAACAAAGGCAACCTATGCT  
TACTTCAAGATCGATCTGGACCGGACGTCGCGTCCATTAAGAGGATACTCTCGTTTGGGTCCCTGGTCCAGTGTACTTGTCTTCCGTGGATACGA

15 <3' armR  
|  
7000  
CTGGGGTCTATAGAGGAACAGGCTTCAGGTGGGCAGGCTGTTTGTGATGTTGGCGCCCCAGTTTAAAGTCTTTGCCCTGGGGACCGTTTATACCAC  
GACCCCAAGTATCTCTTTGTCCGAAGTCCACCCGTCCCGACAAACACTACAACCGCGGGTCAAATTTGTGAGAAACGGGACCCCTGGCAAAATATGGTG

20 <3' scr  
| >3' prF  
|  
7100  
TTACTCCAGGCAGAGGTCCAGAGAGGGGCAGACCCCAAGTCCCAAGTGGGTGTTACGCCCTAGAACCCTCCACCCAGTCACCCCAAGCATGATAGAG  
AATGAGTCCGTCTCCAGGTCTCTCCCGTCTGGGGTCCAGGTTCACCCCAACATGCGGGATCTTGGGAGTGGGGTCACTGGGGTTCGTACTATCTC

25 7200  
AGAGGCCCAACCATGTTCTCTTTGTTGCACTTTTTCAGTCACATTAGGTACAAACTGGCGAGGTCTAGGGGACCCCTTGAGGGGTTGGAAGCCAGGACCA  
TCTCCGGGTTGGTACAGGAACAAACGTGAAAAAGTCAGTGTAAATCCATGTTTGACCGCTCCAAGATCCCTGGGAACCTCCCAACCTTCGGTCTGCT

30 7300  
GGAATGTGTGACTGCCATCAATTGTATAGCCAACTACTGCCCTACCTGGGTCTTCTTGTGGAGCCGCAATGGCCAGGGTAGTGGCCATCTGCAGTGCTG  
CCTTACACACTGACGGTAGTTAACATATCGGTTAGTGACGGATGGACCCAGAAGGAACACCTCGCGGTGTACCGGTCCCATCACCGGTAGAGCTACGAC

35 <3' prR  
|  
ACCCCTTGTCTGTAGAGACC  
TGGGGAACGACATCTCTGGG