

Sanger sequencing result of the retroposed locus, *CG5020_r*.

On the basis of the location information of *CG5020_r* revealed by mate-pair sequencing data, we used the following primers to do PCR and sequence the whole retroposed locus.

P1_L “TTTGGGCTTTGTCTATCCGCAC”;

P1_R “TAACCCTTCACCTCCCCCTTCG”.

Supposedly, driven by the 5' regulatory context of the LTR retrotransposon, this chimeric locus is transcribed as a long transcript just like the canonical LTR retrotransposon. In order to test this possibility, we designed two sets of primers to RT-PCR the whole locus with the corresponding products overlapping each other while avoiding amplifying the corresponding LTR elements. The exact primers are as follows:

P2_L “GCAACATGATTGTCGGAAATCCA”;

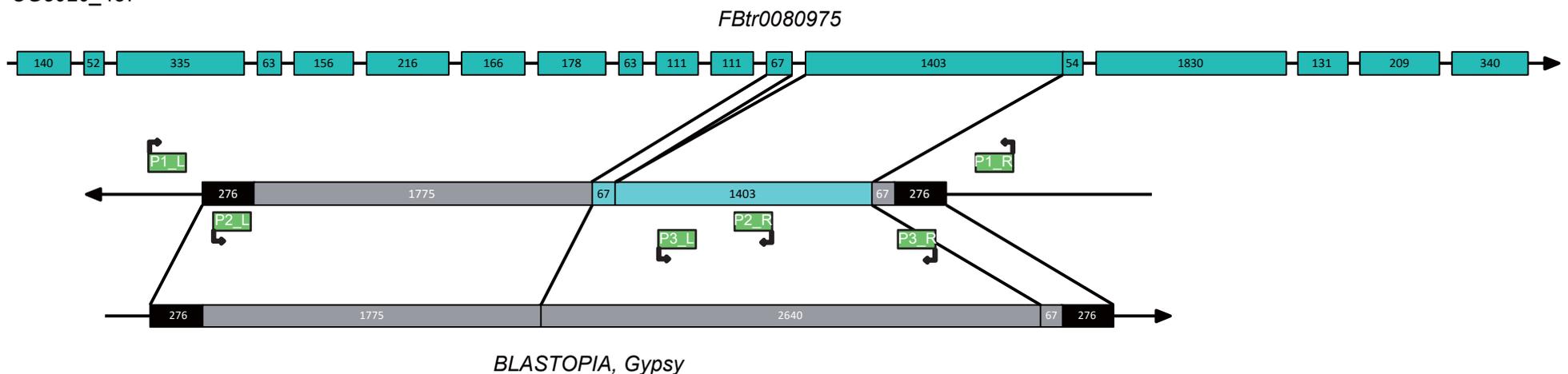
P2_R “TCAAGTTCGTTTTGTTTTAAAGCCA”;

P3_L “CTGAGTTCACCCGAAAAGTAGC”;

P3_R “CGATGACTGATTGTCGATAACTTC”.

The position of all these three sets of primers relative to the retroposed locus is shown below.
The figure convention follows Supplemental Dataset 1.

CG5020_437



We aligned the *de novo* assembled fragment together with flanking regions predicted based on consensus *BLASTOPIA* sequence, DNA sequence and two RNA sequences and show that these sequences are consistent with each other. In other words, the theoretical model in Fig. 4 holds and the chimeric retroposed locus is transcribed as a standard LTR retrotransposon.

The alignment is color-coded as follows:

5' and 3' LTR retrotransposon repeat zone

Coding region of LTR retrotransposon *BLASTOPIA*

Microsimilarity shared by LTR retrotransposon and retrocopy

Retrocopy

Assembled sequence

Primer

```

>CG5020_predicted&assembled -----TGTAACAT-
>CG5020_sequenced_DNA      TTGTA AATTCTTTTGTTAATTTGTAGAAACAGAGACATACATGTAACATG
>CG5020_sequenced_RNA_1    -----
>CG5020_sequenced_RNA_2    -----
                                     *****

>CG5020_predicted&assembled GAGTAAGGCTGAAGGCTGGCAACAACCCGTTGGCAGCGCTGTTGAGCAG
>CG5020_sequenced_DNA      GAGTAAGGCTGAAGGCTGGCAACAACCCGTTGGCAGCGCTGTTGAGCAG
>CG5020_sequenced_RNA_1    -----
>CG5020_sequenced_RNA_2    -----
                                     *****

>CG5020_predicted&assembled CAACATGATTGTGCGAAATCCAAGTTATCGACAATCAGTCATCGAAGG-A
>CG5020_sequenced_DNA      CAACATGATTGTGCGAAATCGAAGTTATCGACAATCAGTCATCGAAGGAA
>CG5020_sequenced_RNA_1    -----TCAGTCATCGA-GG-A
>CG5020_sequenced_RNA_2    -----
                                     *****

>CG5020_predicted&assembled CGATCGC-AGGCAGCAGTAGAGGCGAGTGGAAGTCAGCGTTGCAGTCAGT
>CG5020_sequenced_DNA      CGATCGCAAGGCAGCAGTGGAGTCGAGTGGAAGTCAGCGTTGCAGTCAGT
>CG5020_sequenced_RNA_1    CGATCGCAAGGCAGCAGTGGAGTCGAGTGGAAGTCAGCGTTGCAGTCAGT
>CG5020_sequenced_RNA_2    -----
                                     *****

>CG5020_predicted&assembled CGAGTTCTCAGCAGCAGTCGTTCCGTCACAACTAAGAATACTTTATA
>CG5020_sequenced_DNA      CGAGTTCTCAGCAGCAGTCGTTCCGTCACAACTAAG-AATACTTCATA
>CG5020_sequenced_RNA_1    CGAGTTCTCAGCAGCAGTCGTTCCGTCACAACTAAG-AATACTTCATA
>CG5020_sequenced_RNA_2    -----
                                     *****

```

>CG5020_predi cted&assembl ed TAATTACCGCATTTAGAATTAACCTAATAATTAATTAATAATAAACAAT
>CG5020_sequenced_DNA TAATTACCGCATTTAGAATTAACCTAATAATTAATTAATAATAAACAAT
>CG5020_sequenced_RNA_1 TAATTACCGCATTTAGAATTAACCTAATAATTAATTAATAATAAACAAT
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed AATAATAACAATCTTACATGGGGCTCGTCCAGTCCTAAATCGGTTATA
>CG5020_sequenced_DNA AATAATAACAATCTTACATGGGGCTCGTCCAGTCCTAAATCGGTTATA
>CG5020_sequenced_RNA_1 AATAATAACAATCTTACATGGGGCTCGTCCAGTCCTAAATCGGTTATA
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed TGAAGGTGCAGTTGTTTAAAGAAAAAGACATTGTTGTGTGCGTGGGTAT
>CG5020_sequenced_DNA TGAAGGTGCAGTTGTTTAAAGAAAAAGACATTGTTGTGTGCGTGGGTAT
>CG5020_sequenced_RNA_1 TGAAGGTGCAGTTGTTTAAAGAAAAAGACATTGTTGTGTGCGTGGGTAT
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed AGTCTTTAAACGTGTGAAAGTTGTGGCTATATCTATTGCATTTAAAGTT
>CG5020_sequenced_DNA AGTCTTTAAAA- GTTGTAAAGTTGTGGCTATATCTATTGCATTTAAAGTT
>CG5020_sequenced_RNA_1 AGTCTTTAAAA- GTTGTAAAGTTGTGGCTATATCTATTGCATTTAAAGTT
>CG5020_sequenced_RNA_2 -----

***** *****

>CG5020_predi cted&assembl ed GGAAAAATCAGTTGTACAGATTTTGTGTTGAACACAAGTCGGTAAAAATCGC
>CG5020_sequenced_DNA GGAAAAATCAGTTGTACAGATTTTGTGTTGAACACAAGTCGGTAAAAATCGC
>CG5020_sequenced_RNA_1 GGAAAAATCAGTTGTACAGATTTTGTGTTGAACACAAGTCGGTAAAAATCGC
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed GGAAAGCTGCTAGAGAGAACTGATAAAGTTGAAATTGTCGTGTGCGTGGAA
>CG5020_sequenced_DNA GGAAAGCTGCTAGAGAGAACTGATAAAGTTGAAATTGTCGTGTGCGTGGAA
>CG5020_sequenced_RNA_1 GGAAAGCTGCTAGAGAGAACTGATAAAGTTGAAATTGTCGTGTGCGTGGAA
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed TTTAGTCTTTAAAGTTGTAAAGTTATGGCTACGTCTACTGCATTGAAAGT
>CG5020_sequenced_DNA TTTAGTCTTTAAAGTTGTAAAGTTATGGCTACGTCTACTGCATTGAAAGT
>CG5020_sequenced_RNA_1 TTTAGTCTTTAAAGTTGTAAAGTTATGGCTACGTCTACTGCATTGAAAGT
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed TGAAAAATCGATTGAACTCATACTCAAGTCGTTTTGCTGTTGTGG
>CG5020_sequenced_DNA TGAAAAATCGATTGAACTCATACTCAAGTCGTTTTGCTGTTGTGG

```

>CG5020_sequenced_RNA_1      TGAAAAAATCGATTGAACTCATACAGACTCAAGTCGTTTGTCTGTGTGG
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed AATTTAAAACAATTAAATTGCAAAGGTGGTCAAATTCGTTTCTAACGAAA
>CG5020_sequenced_DNA        AATTTAAAACAATTAAATTGCAAAGGTGGTCAAATTCGTTTCTAACGAAA
>CG5020_sequenced_RNA_1      AATTTAAAACAATTAAATTGCAAAGGTGGTCAAATTCGTTTCTAACGAAA
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed ATCAAAAATTTGTCTTTTAACCGGTGGCGCCGTCTGCAAAATCGACTACCG
>CG5020_sequenced_DNA        ATCAAAAATTTGTCTTTTAACCGGTGGCGCCGTCTGCAAAATCGACTACCG
>CG5020_sequenced_RNA_1      ATCAAAAATTTGTCTTTTAACCGGTGGCGCCGTCTGCAAAATCGACTACCG
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed TCGCGCCGTTAGAACATTGTCGTTGTTTGTCTGGTGTAGTGCCTTGTCCG
>CG5020_sequenced_DNA        TCGCGCCGTTAGAACATTGACGTTGTTTGTCTGGT- TTAGTGCCTTGTCCG
>CG5020_sequenced_RNA_1      TCGCGCCGTTAGAACATTGTCGTTGTTTGTCTGGTGTAGTGCCTTGTCCG
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed GGAATGTTACACGTACACCACCTACAAATAAAAAAATTAAACCCGACCA
>CG5020_sequenced_DNA        GGAATGTTACACGTACACCACCTACAAATAAAAAAC- TAACCCGACC-
>CG5020_sequenced_RNA_1      GGAATGTTACACGTACACCACCTACAAATAAAAAAATTAAACCCGACCA
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed AATACAAGCAATTCTAGAGAACGAAAGCGAGGACGAAAGCAGAAAAGAAA
>CG5020_sequenced_DNA        AATACAAGCAATTCTAGAGAACGAAAGCGAGGACGAAAGCATAAAAAGAAT
>CG5020_sequenced_RNA_1      AATACAAGCAATTCTAGAGAACGAAAGCGAGGACGAAAGCAGAAAAGAAA
>CG5020_sequenced_RNA_2      -----
                                * *****

>CG5020_predi cted&assembl ed AAATGAACGAAGAAGATCAAAAGTTGGCGCCTGTAGGAGAAGCAGAGGCA
>CG5020_sequenced_DNA        AAATGAACGAATATGATCACAAGTTGGCGCCTGTATGATAAGCCGAGGTA
>CG5020_sequenced_RNA_1      AAATGAACGAAGAAGATCAAAAGTTGGCGCCTGTAGGAGAAGCAGAGGCA
>CG5020_sequenced_RNA_2      -----
                                ***** * *****

>CG5020_predi cted&assembl ed AAGAAGCAGAATAAAGACGCTAGTGCTAAAGTCGAAGAGAAATTTGAACA
>CG5020_sequenced_DNA        AAGAAGCAGAATAAAGACGCTAGT- TTACAAGCGAAGAG- AATTTGAAC-
>CG5020_sequenced_RNA_1      AAGAAGCAGAATAAAGACGCTAGTGCTAAAGTCGAAGAGAAATTTGAACA
>CG5020_sequenced_RNA_2      -----

```

***** ** * *****

>CG5020_predi cted&assembl ed AATGATGAATACTCTAACCCAGAGCATGTTGGCAAAATCTAAACAAGAGG
>CG5020_sequenced_DNA AATGATGAATACTCTAACCC- GAGCTTGTGGC- AAATCT- AACCAAGAGG
>CG5020_sequenced_RNA_1 AATGATGAATACTCTAACCCAGAGCATGTTGGCAAAATCTAAACAAGAGG
>CG5020_sequenced_RNA_2 -----

***** ** * *****

>CG5020_predi cted&assembl ed GGCAAGTAATTATCGCTGCAGAAAAATTGAAAAAGTTGTAAGTGACTGT
>CG5020_sequenced_DNA GTCATGC- ATTATCGCTGCAGAAAA- TTGAAAAAGTCGAAGCGACTGG
>CG5020_sequenced_RNA_1 GGCAAGTAATTATCGCTGCAGAAAAATTGAAAAAGTTGTAAGTGACTGT
>CG5020_sequenced_RNA_2 -----

* * * *****

>CG5020_predi cted&assembl ed GATGGCAAATCAATTCCTATTAATAAAATGGTTTGAATTTTGGAGAAAA
>CG5020_sequenced_DNA GA- AGCAATTC- - TCCTCTTAATACTGCCTTGAAC TTTGTAATA
>CG5020_sequenced_RNA_1 GATGGCAAATCAATTCCTATTAATAAAATGGTTTGAATTTTGGAGAAAA
>CG5020_sequenced_RNA_2 -----

** **** * *****

>CG5020_predi cted&assembl ed T- GCCGAGGCATATGAAC TTTGAGAGAAACAAAAATATGTTCAAGCCAGA
>CG5020_sequenced_DNA TGGCCTAGGCCTATGATACTCTGGC- -----
>CG5020_sequenced_RNA_1 T- GCCGAGGCATATGAAC TTTGAGAGAAACAAAAATATGTTCAAGCCAGA
>CG5020_sequenced_RNA_2 -----

* * * * * *****

>CG5020_predi cted&assembl ed AGTAAGATGATTGGATCAGCAGAACTTTTCTTAGAATCTGAATGTGTCAG
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 AGTAAGATGATTGGATCAGCAGAACTTTTCTTAGAATCTGAATGTGTCAG
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed TGGATACACTGAACTCAAAGAGTTACTAATTGAAGAATTTTCAGGCAGCT
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 TGGATACACTGAACTCAAAGAGTTACTAATTGAAGAATTTTCAGGCAGCT
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed ATAATAGCGCCGTTATTCACAAAAAGTTGCAAGACAGGAAGAAGAAGAGG
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 ATAATAGCGCCGTTATTCACAAAAAGTTGCAAGACAGGAAGAAGAAGAGG
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **GAGGAAACTCTACAGACTATTTGTTACAAATGAAGAAAATAGCAGCCTT**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 **GAGGAAACTCTACAGACTATTTGTTACAAATGAAGAAAATAGCAGCCTT**
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **AGGTGAAGTTGAAACAGTTGCTTTGATAACTCATATCGTAAACGGCCTCG**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 **AGGTGAAGTTGAAACAGTTGCTTTGATAACTCATATCGTAAACGGCCTCG**
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **ACATTA AAAAGGAGTATAAGGGTGCTATGCTCCGTTGTAAAAC TCTTAAG**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 **ACATTA AAAAGGAGTATAAGGGTGCTATGCTCCGTTGTAAAAC TCTTAAG**
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **GAATTAAGCAAGAATTCGAAATCTACGAGAGTCTGAATATTGTTGACAA**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 **GAATTAAGCAAGAATTCGAAATCTACGAGAGTCTGAATATTGTTGACAA**
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **GCCGAATATTCAACCAAAAACCAAAGCAAATTACACAAGGTGTAAAAGCAG**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 **GCCGAATATTCAACCAAAAACCAAAGCAAATTACACAAGGTGTAAAAGCAG**
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **ATCACTGCTTCAACTGTGGTTCGAGGGAACACAAACGAAAGGATTGTACA**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 **ATCACTGCTTCAACTGTGGTTCGAGGGAACACAAACGAAAGGATTGTACA**
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **CTTCCTACCAAATGTTTCAGCTGTAATCAAGAGGGCCATATCTCAAGCAA**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 **CTTCCTACCAAATGTTTCAGCTGTAATCAAGAGGGCCATATCTCAAGCAA**
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **GTGTCCGAAAAAGTAAACAGCATGCCATTACGTTGATAGTGCACGAA**
>CG5020_sequenced_DNA -----

```

>CG5020_sequenced_RNA_1      GTGTCCGAAAAAGTAAACAGCATGCCATTACGTTGATAGTGCACGAA
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed  CAAAGCCAGTAATCATAAATGGGATTATCATCAACTGTCTGGTGGACACA
>CG5020_sequenced_DNA        -----
>CG5020_sequenced_RNA_1      CAAAGCCAGTAATCATAAATGGGATTATCATCAACTGTCTGGTGGACACA
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed  GGATCAGATGTGACCATAATTAAGAAGCTATATTCAAGAAGATGAAAGA
>CG5020_sequenced_DNA        -----
>CG5020_sequenced_RNA_1      GGATCAGATGTGACCATAATTAAGAAGCTATATTCAAGAAGATGAAAGA
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed  TGTTGATTAAACCGCACTGCAACAGTATTGCGAGGTTTGGGAAATGCCT
>CG5020_sequenced_DNA        -----
>CG5020_sequenced_RNA_1      TGTTGATTAAACCGCACTGCAACAGTATTGCGAGGTTTGGGAAATGCCT
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed  CAACACAGCCGATTGGATGCTTCAGAGCATTAAATCAAGACCGACCAGGTG
>CG5020_sequenced_DNA        -----
>CG5020_sequenced_RNA_1      CAACACAGCCGATTGGATGCTTCAGAGCATTAAATCAAGACCGACCAGGTG
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed  GAAGCAAGCCACAACGTTTTTAGTCGTCCACGATTCTAAATTCAGTTGCC
>CG5020_sequenced_DNA        -----
>CG5020_sequenced_RNA_1      GAAGCAAGCCACAACGT- TTTAGTCGTCCACGATTCTAAATTCAGTTGCC
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed  ATGGAATAGTGGGACACGATTTTTATCAGCAAGTTTCGTCTTATCTGTAG
>CG5020_sequenced_DNA        -----
>CG5020_sequenced_RNA_1      ATGGAATAGTGGGACACGA- TTTTATCAGCAAGTTTCGTCTTATCTGTAG
>CG5020_sequenced_RNA_2      -----
                                *****

>CG5020_predi cted&assembl ed  TGCAGAAGGCTATACTTTTCTTGACCTGGAAGCAGATAAAAAACAAGCGG
>CG5020_sequenced_DNA        -----
>CG5020_sequenced_RNA_1      TGCAGAAGGCTATACTTTTCTTGACCTGGAAGCAGATAAAAAACAAGCGG
>CG5020_sequenced_RNA_2      -----

```

>CG5020_predicted&assembled CTCAGTACAGGTTTACAAGGAAAAATCCATGATCTGGAGTCAAAAATC
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 CTCAGTACAGGTTTACAAGGAAAAATCCATGATCTGGAGTCAAAAATC
>CG5020_sequenced_RNA_2 -----

>CG5020_predicted&assembled ACAAAAGTGGTGTCCGCCACGCCAAGCCTACAAAGTATACTACCGCCCGA
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 ACAAAAGTGGTGTCCGCCACGCCAAGCCTACAAAGTATACTACCGCCCGA
>CG5020_sequenced_RNA_2 -----

>CG5020_predicted&assembled TCTACCTTCAGACGATGGTGCTTGCAGGAGGAAATTGCCAGCTGCAGG
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 TCTACCTTCAGACGATGGTGCTTGCAGGAGGAAATTGCCAGCTGCAGG
>CG5020_sequenced_RNA_2 -----

>CG5020_predicted&assembled AAAAGATGACCATTTCAGCAGAAGGAGGTTGAATCTCGGATTGCCGAACAG
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 AAAAGATGACCATTTCAGCAGAAGGAGGTTGAATCTCGGATTGCCGAACAG
>CG5020_sequenced_RNA_2 -----

>CG5020_predicted&assembled CTGGAGGAGGAGCAGCGATTGAGGGAAAATGTGAAGTACCTTAATGAGCA
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 CTGGAGGAGGAGCAGCGATTGAGGGAAAATGTGAAGTACCTTAATGAGCA
>CG5020_sequenced_RNA_2 -----

>CG5020_predicted&assembled AATCGCCACTCTACAGTCCGAGTTGGTGTCCAAAGATGAGGCCCTGGAGA
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 AATCGCCACTCTACAGTCCGAGTTGGTGTCCAAAGATGAGGCCCTGGAGA
>CG5020_sequenced_RNA_2 -----

>CG5020_predicted&assembled AATTCTCCCTCTCGGAATGTGGCATCGAGAATCTCCGAAGGGAACCTCGCA
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 AATTCTCCCTCTCGGAATGTGGCATCGAGAATCTCCGAAGGGAACCTCGCA
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **CTTCTCAAGGAGGAGAACGAAAAGCAAGCTCAGGAGGCTCAGGCTGAGTT**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 CTTCTCAAGGAGGAGAACGAAAAGCAAGCTCAGGAGGCTCAGGCTGAGTT
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed **CACCCGAAAAC TAGCCGAAAAATCCGTAGAGGTGTTAAGATTAAGCTCTG**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 CACCCGAAAAC TAGCCGAAAAATCCGTAGAGGTGTTAAGATTAAGCTCTG
>CG5020_sequenced_RNA_2 ----- GTAGAGGTGTT- AGATT- AGCTCTG

***** *****

>CG5020_predi cted&assembl ed **AATTGCAAAACTTGAAGGCAACATCCGATTCCCTGAAAAGCGAAAGGGTT**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 AATTGCAAAACTTGAAGGCAACATCCGATTCCCTGAAAAGCGAAAGGGTT
>CG5020_sequenced_RNA_2 - AATTGCAAAACTTGAAGGCAACATCCGATTCCCTGAAAAGCGAAAGGGTT

>CG5020_predi cted&assembl ed **AACAA- TCCGACGAATGTGAAATTCTTCAAACCGAGTACCGAATGCGG- A**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 AACAAATCCGACGAATGTGAAATTCTTCAAACCGAAGTCCGAATGCGGGA
>CG5020_sequenced_RNA_2 AACAAATCCGACGAATGTGAAATTCTTCAAACCGAAGTCCGAATGCGGGA

***** ***** *

>CG5020_predi cted&assembl ed **TGAGCAAATTAGAGAGCTAAACCAACAAC TCGATGAGGTTACCACACAAC**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 TGAGCAAATTAGAGAGCTAAACCAACAAC TCGATGAGGTTACCACACAAC
>CG5020_sequenced_RNA_2 TGAGCAAATTAGAGAGCTAAACCAACAAC TCGATGAGGTTACCACACAAC

>CG5020_predi cted&assembl ed **TAAATGTACAAAAAGCGGATAGTTCTGCTCTGGATGATATGCTTCGATTG**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 TAAATGTACAAAAAGCGGATAGTTCTGCTCTGGATGATATGCTTCGATTG
>CG5020_sequenced_RNA_2 TAAATGTACAAAAAGCGGATAGTTCTGCTCTGGATGATATGCTTCGATTG

>CG5020_predi cted&assembl ed **CAAAGGAGGGTACTGAAGAAAAATCTACTCTTTTAGAGAAAACCGAAAA**
>CG5020_sequenced_DNA -----
>CG5020_sequenced_RNA_1 CAAAGGAGGGTACTGAAGAAAAATCTACTCTTTTAGAGAAAACCGAAAA
>CG5020_sequenced_RNA_2 CAAAGGAGGGTACTGAAGAAAAATCTACTCTTTTAGAGAAAACCGAAAA

>CG5020_predi cted&assembl ed **GGAGCTAGTTCAAATCAAAGAACAAGCTGCGAAAAC TCTACAGGATAAGG**
>CG5020_sequenced_DNA -----

>CG5020_predi cted&assembl ed GAAAAGGAGCAGGAGCTCCAGCAGCTCCAAAGCAAGTCAGCTGAATCGGA
>CG5020_sequenced_DNA GAAAAGGAGCAGGAGCTCCAGCAGCTCCAAAGCAAGTCAGCTGAATCGGA
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 GAAAAGGAGCAGGAGCTCCAGCAGCTCCAAAGCAAGTCAGCTGAATCGGA

>CG5020_predi cted&assembl ed AAGTGCTTTAAAGGTCGTACAAGTACAAC TAGAGCAACTCCAGCAACAGG
>CG5020_sequenced_DNA AAGTGCTTTAAAGGTCGTACAAGTACAAC TAGAGCAACTCCAGCAACAGG
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 AAGTGCTTTAAAGGTCGTACAAGTACAAC TAGAGCAACTCCAGCAACAGG

>CG5020_predi cted&assembl ed CTGCCGCATCTGGAGAAGAGGGATCCAAA ACTGTGGCCAAATTGCACGAT
>CG5020_sequenced_DNA CTGCCGCATCTGGAGAAGAGGGATCCAAA ACTGTGGCCAAATTGCACGAT
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 CTGCCGCATCTGGAGAAGAGGGATCCAAA ACTGTGGCCAAATTGCACGAT

>CG5020_predi cted&assembl ed GAGATTAGTCAGCTTAAGTCCAAGCGGAAGAA ACTCAGTCCGAGTTAAA
>CG5020_sequenced_DNA GAGATTAGTCAGCTTAAGTCCAAGCGGAAGAA ACTCAGTCCGAGTTAAA
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 GAGATTAGTCAGCTTAAGTCCAAGCGGAAGAA ACTCAGTCCGAGTTAAA

>CG5020_predi cted&assembl ed ATCCACCCAATCGAACTTGAAGCCAAAAGCAAACA ATTGGAAGCAGCAA
>CG5020_sequenced_DNA ATCCACCCAATCGAACTTGAAGCCAAAAGCAAACA ATTGGAAGCAGCAA
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 ATCCACCCAATCGAACTTGAAGCCAAAAGCAAACA ATTGGAAGCAGCAA

>CG5020_predi cted&assembl ed ATGGCAGCCTAGAAGAGGAAGCCAAGAAGTCAGGCCAACTGCAGGAACAG
>CG5020_sequenced_DNA ATGGCAGCCTAGAAGAGGAAGCCAAGAAGTCAGGCCAACTGCAGGAACAG
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 ATGGCAGCCTAGAAGAGGAAGCCAAGAAGTCAGGCCAACTGCAGGAACAG

>CG5020_predi cted&assembl ed ATTACCAA ACTTAAATCTGAAGTGGAGGAGACGCAGGCAGCTCTCAGTTC
>CG5020_sequenced_DNA ATTACCAA ACTTAAATCTGAAGTGGAGGAGACGCAGGCAGCTCTCAGTTC
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 ATTACCAA ACTTAAATCTGAAGTGGAGGAGACGCAGGCAGCTCTCAGTTC

>CG5020_predi cted&assembl ed ATATCATACGGATGTGGAAGTACATAGCCGAAAATGCAGACCTATTGTCA
>CG5020_sequenced_DNA ATATCATACGGATGTGGAAGTACATAGCCGAAAATGCAGACCTATTGTCA
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 ATATCATACGGATGTGGAAGTACATAGCCGAAAATGCAGACCTATTGTCA

>CG5020_predi cted&assembl ed TCCGGGTCGGATGATGATGATCAGGAGGCCGAATGTAACATGGAGTAAG
>CG5020_sequenced_DNA TCCGGGTCGGATGATGATGATCAGGAGGCCGAATGTAACATGGAGTAAG
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 TCCGGGTCGGATGATGATGATCAGGAGGCCGAATGTAACATGGAGTAAG

>CG5020_predi cted&assembl ed GCTGAAGGCTGGCAACAACCCGGTTGGCAGCGCTGTTGAGCAGCAACATG
>CG5020_sequenced_DNA GCTGAAGGCTGGCAACAACCCGGTTGGCAGCGCTGTTGAGCAGCAACATG
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 GCTGAAGGCTGGCAACAACCCGGTTGGCAGCGCTG- TGAGCAGCAACATG

>CG5020_predi cted&assembl ed ATTGTCGGAAATCGAAGTTATCGACAATCAGTCATCGAAGGAACGATCGC
>CG5020_sequenced_DNA ATTGTCGGAAATCGAAGTTATCGACAATCAGTCATCGAAGGAACGATCGC
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 AT-----

>CG5020_predi cted&assembl ed AAGGCAGCAGTGGAGTCGAGTGGAAAGTCAGCGTTGCAGTCAGTCGAGTTC
>CG5020_sequenced_DNA AAGGCAGCAGTGGAGTCGAGTGGAAAGTCAGCGTTGCAGTCAGTCGAGTTC
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed TCAGCAGCAGTCGTTCCGGTCACAACTAAGAATACTTTATATAATTACCG
>CG5020_sequenced_DNA TCAGCAGCAGTCGTTCCGGTCACAACTAAGAATACTTCATATAATTACCG
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed CATTAGAATTAATACTAATAATTAATAATAATAATAATAATAATAATAATA
>CG5020_sequenced_DNA CATTAGAATTAATACTAATAATTAATAATAATAATAATAATAATAATAATA
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed CAATCTTACA-----
>CG5020_sequenced_DNA CAATCTTACATACAAAACACGCCGGCTAATAGATGCACGCCACGATCC

>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed -----
>CG5020_sequenced_DNA TCAGGGGCATTTATGATGATGATGATGATCGGATCGCAAACGAGTTTTGC
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed -----
>CG5020_sequenced_DNA CATAAAAATAAAGATGATTTTGGCCAGATCACTGTCAGCAACTAAACGCA
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 -----

>CG5020_predi cted&assembl ed -----
>CG5020_sequenced_DNA ATAGCGGTAGTCCCC
>CG5020_sequenced_RNA_1 -----
>CG5020_sequenced_RNA_2 -----