

RACE and Sanger sequencing results of the retroposed locus, *CG17604_r*.

The full-length *CG17604_r* is predicted based on the double-switch model in Fig. 4 with the majority of its sequence assembled (shown in Supplemental Dataset 1).

RACE experiment was performed using SMARTer™ RACE cDNA Amplification Kit. We used the following primers to do PCR and sequence the 5' and 3' ends of this retroposed locus:

P1_L “AAGCAGTGGTATCAACGCAGAGTAC”;

P1_R1 “AAAATGTTTGCCGCTTGTTTTTATCTG”;

P1_R2 “CTTGCTGATAAAATCGTGTCCCA”;

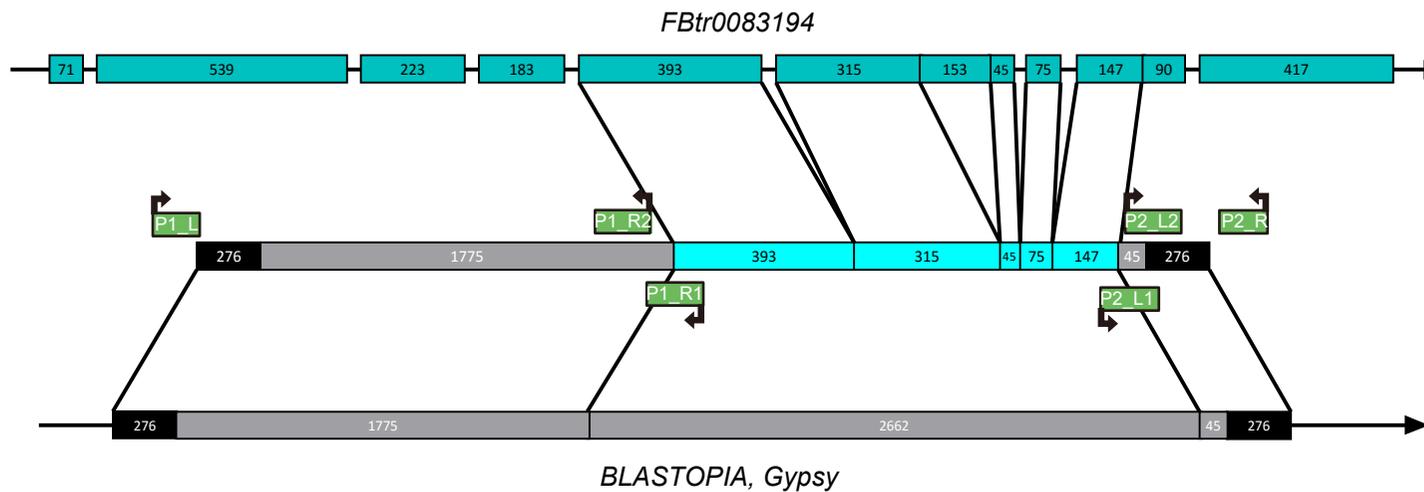
P2_L1 “GGTGCAGCCGAAAATGCAGACCTATTGT”;

P2_L2 “GGGCCGAATGTAACATGGAGTAAGGCTG”;

P2_R “AAGCAGTGGTATCAACGCAGAGT”.

The low quality sequence at the 3' end is due to the sequencing error of poly(A) tail.

CG17604_301



>CG17604_sequenced TGGA AAAATCAGTTGTACAGATTTTGTTTGAACACAAGTCGGTAAAAGTC

>CG17604_predicted&assembled GGGAAAGCTGCTAGAGAGAACTGATAAAGTTGAAATTGTCGTGTCGTGG
>CG17604_sequenced GGGAAAGCTGCTAGAGAGAACTGATAAAGTTGAAATTGTCGTGTCGTGG

>CG17604_predicted&assembled ATTTAGTCTTTAAAGTTGTAAGTTATGGCTACGTCTACTGCATTGAAAG
>CG17604_sequenced ATTTAGTCTTTAAAGTTGTAAGTTATGGCTACGTCTACTGCATTGAAAG

>CG17604_predicted&assembled TTGAAAAAATCGATTGAACTCATA CAGACTCAAGTCGTTTTGCTGTTGTG
>CG17604_sequenced TTGAAAAAATCGATTGAACTCATA CAGACTCAAGTCGTTTTGCTGTTGTG

>CG17604_predicted&assembled GAATTTAAACAATTA AATTGCAAAGGTGGTGA AATTCGTTTCTAACGAA
>CG17604_sequenced GAATTTAAACAATTA AATTGCAAAGGTGGTGA AATTCGTTTCTAACGAA

>CG17604_predicted&assembled AATCAAAATTTGTCTTTTAACCGGTGGCGCCGCTGCAAAATCGACTACC
>CG17604_sequenced AATCAAAATTTGTCTTTTAACCGGTGGCGCCGCTGCAAAATCGACTACC

>CG17604_predicted&assembled GTCGCGCCGTTAGAACATTGTCGTTGTTGCTGGTGTAGTGCCTGTGCG
>CG17604_sequenced GTCGCGCCGTTAGAACATTGTCGTTGTTGCTGGTGTAGTGCCTGTGCG

>CG17604_predicted&assembled CGGAATGTTACACGTACACCACCTACAAATAAAAACTTAACACCGACC
>CG17604_sequenced CGGAATGTTACACGTACACCACCTACAAATAAAAACTTAACACCGACC

>CG17604_predicted&assembled AAATACAAGCAATTCTAGAGAACGAAAGCGAGGACGAAAGCAGAAAAGAA
>CG17604_sequenced AAATACAAGCAATTCTAGAGAACGAAAGCGAGGACGAAAGCAGAAAAGAA

>CG17604_predicted&assembled AAAATGAACGAAGAAGATCAA AAGTTGGCGCCTGTAGGAGAAGCAGAGGC
>CG17604_sequenced AAAATGAACGAAGAAGATCAA AAGTTGGCGCCTGTAGGAGAAGCAGAGGC

>CG17604_predicted&assembled AAAGAAGCAGAATAAAGACGCTAGTGCTAAAGTCGAAGAGAAATTTGAAC
>CG17604_sequenced AAAGAAGCAGAATAAAGACGCTAGTGCTAAAGTCGAAGAGAAATTTGAAC

>CG17604_predicted&assembled AAATGATGAATACTCTAACCCAGAGCATGTTGGCAAATCTAACCAAGAG

>CG17604_sequenced AAATGATGAATACTCTAACCCAGAGCATGTTGGCAAAATCTAAACAAGAG

>CG17604_predicted&assembled GGGCAAGTAATTATCGCTGCAGAAAAATTTGAAAAAGTTGTAAGTGACTG
>CG17604_sequenced GGGCAAGTAATTATCGCTGCAGAAAAATTTGAAAAAGTTGTAAGTGACTG

>CG17604_predicted&assembled TGATGGCAAATCAATTCCTATTAATAAATGGTTTGAAATTTTTGAGAAAA
>CG17604_sequenced TGATGGCAAATCAATTCCTATTAATAAATGGTTTGAAATTTTTGAGAAAA

>CG17604_predicted&assembled ATGCCGAGGCATATGAACTTTCGGAGAAACAAAAATATGTTCAAGCCAGA
>CG17604_sequenced ATGCCGAGGCATATGAACTTTCGGAGAAACAAAAATATGTTCAAGCCAGA

>CG17604_predicted&assembled AGTAAGATGATTGGATCAGCAGAACTTTTCTTAGAATCTGAATGTGTGACG
>CG17604_sequenced AGTAAGATGATTGGATCAGCAGAACTTTTCTTAGAATCTGAATGTGTGACG

>CG17604_predicted&assembled TGGATACACTGAACTCAAAGAGTTACTAATTGAAGAATTTTCAGGCAGCT
>CG17604_sequenced TGGATACACTGAACTCAAAGAGTTACTAATTGAAGAATTTTCAGGCAGCT

>CG17604_predicted&assembled ATAATAGCGCCGTTATTCACAAAAAGTTGCAAGACAGGAAGAAGAAGAGG
>CG17604_sequenced ATAATAGCGCCGTTATTCACAAAAAGTTGCAAGACAGGAAGAAGAAGAGG

>CG17604_predicted&assembled GAGGAACTCTACCGACTATTTGTTACAAATGAAGAAAATAGCAGCCTT
>CG17604_sequenced GAGGAACTCTACCGACTATTTGTTACAAATGAAGAAAATAGCAGCCTT

>CG17604_predicted&assembled AGGTGAAGTTGAAACAGTTGCTTTGATAACTCATATCGTAAACGGCCTCG
>CG17604_sequenced AGGTGAAGTTGAAACAGTTGCTTTGATAACTCATATCGTAAACGGCCTCG

>CG17604_predicted&assembled ACATTA AAAAGGAGTATAAGGGTGCTATGCTCCGTTGTA AAACTCTTAAG
>CG17604_sequenced ACATTA AAAAGGAGTATAAGGGTGCTATGCTCCGTTGTA AAACTCTTAAG

>CG17604_predicted&assembled GAATTA AAGCAAGAATTCGAAATCTACGAGAGTCTGAATATTGTTGACAA
>CG17604_sequenced GAATTA AAGCAAGAATTCGAAATCTACGAGAGTCTGAATATTGTTGACAA

>CG17604_predicted&assembled GCCGAATATTC AACCAAAAACCAAGCAAATTACACAAGGTGTA AAAAGCAG

>CG17604_sequenced GCCGAATATTCAACCAAACCAAAGCAAATTACACAAGGTGTAAAAGCAG

>CG17604_predicted&assembled ATCACTGCTTCAACTGTGGTTCGAGGGAACCAAACGAAAGGATTGTACA
>CG17604_sequenced ATCACTGCTTCAACTGTGGTTCGAGGGAACCAAACGAAAGGATTGTACA

>CG17604_predicted&assembled CTTCTACCAAATGTTTCAGCTGTAATCAAGAGGGCCATATCTCAAGCAA
>CG17604_sequenced CTTCTACCAAATGTTTCAGCTGTAATCAAGAGGGCCATATCTCAAGCAA

>CG17604_predicted&assembled GTGTCCGAAAAAGTAAACAGCATGCGCATTACGTTGATAGTGCACGAA
>CG17604_sequenced GTGTCCGAAAAAGTAAACAGCATGCGCATTACGTTGATAGTGCACGAA
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>CG17604_predicted&assembled CAAAGCCAGTAATCATAAATGGGATTATCATCAACTGTCTGGTGGACACA
>CG17604_sequenced CAAAGCCAGTAATCATAAATGGGATTATCATCAACTGTCTGGTGGACACA

>CG17604_predicted&assembled GGATCAGATGTGACCATAATTAAGAAGCTATATTCAAGAAGATGAAAGA
>CG17604_sequenced GGATCAGATGTGACCATAATTAAGAAGCTATATTCAAGAAGATGAAAGA

>CG17604_predicted&assembled TGTTGATTTAAACCGCACTGCAACAGTATTGCGAGGTTGGGAAATGCCT
>CG17604_sequenced TGTTGATTTAAACCGCACTGCAACAGTATTGCGAGGTTGGGAAATGCCT

>CG17604_predicted&assembled CAACACAGCCGATTGGATGCTTCAGAGCATTAAATCAAGACCGACCAGGTG
>CG17604_sequenced CAACACAGCCGATTGGATGCTTCAGAGCATTAAATCAAGACCGACCAGGTG

>CG17604_predicted&assembled GAAGCAAGCCACAACGTTTTAGTCGTCCACGATTCTAAATTCAGTTGCGA
>CG17604_sequenced GAAGCAAGCCACAACGTTTTAGTCGTCCACGAT-CTAAAT-----
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>CG17604_predicted&assembled TGGAATAGTGGGACACGATTTATCAGCAAGTTTCGTCTTATCTGTAGTG
>CG17604_sequenced -----

>CG17604_predicted&assembled CAGAAGGCTATACTTTTCTTGACCTGGAAGCAGATAAAAAACAAGCGGCA
>CG17604_sequenced -----

>CG17604_predicted&assembled AACATTTTACAATTAAGCAGCGACTTAAATGCAAAGATGCTTGACTGCGC

>CG17604_sequenced -----

>CG17604_predicted&assembled CCAGCTTGAAGATCGCATTGAGCAGCTGCCAATAGAGGCCAACAAAGCTT
>CG17604_sequenced -----

>CG17604_predicted&assembled TGTCGAAACTGCAACGTGATTTAGAAGCCAGTGAATTGCAGTTCGTGGAT
>CG17604_sequenced -----

>CG17604_predicted&assembled CAGCAACGATTGACTGATCAGGCAACGAGGGAACCTCGAACTTGTTGCAA
>CG17604_sequenced -----

>CG17604_predicted&assembled TGAGATAAATACGTTTAAGACTCTTATTGAGGAAAAGGAAAGAACATG
>CG17604_sequenced -----

>CG17604_predicted&assembled TTTCCTAAGTGATGAACTAACTCAAATGACGGAGAGATTGAGCGAGCTC
>CG17604_sequenced -----

>CG17604_predicted&assembled GCTGATATCAACGAAAGTTATCAATGAGTTGACTGAAACAAAATTGAA
>CG17604_sequenced -----

>CG17604_predicted&assembled GCCTCCCAGGAAATAAAAGATCAAGCAGATGCCTACGAGATTGTTGTTG
>CG17604_sequenced -----

>CG17604_predicted&assembled AAGAGTTAAAAGAGAGCTTGAACAAGGCTTCAGTTGATTTTACTCAGCTA
>CG17604_sequenced -----

>CG17604_predicted&assembled AAAAGCAACAGTGAGAAGCTACACAAAGAAACCCTTCTGCAGGTCTCCGA
>CG17604_sequenced -----

>CG17604_predicted&assembled ACTGCAGGAAAAACTTATAGAAATGGTGTCCCATCGCAGCAATCAGGAAG
>CG17604_sequenced -----

>CG17604_predicted&assembled AGCTAATAAAGCGTCTTGGTAATGAAATTCAGAAAAAACTCATAATTTT

>CG17604_sequenced -----

>CG17604_predicted&assembled GAAGAAGAACTCAAAGGCAACAGGAGCAGCTTGCTAATCAAATGCAGAC

>CG17604_sequenced -----

>CG17604_predicted&assembled GAAGGCCACTGAAGTTGAGAGCGAAAATAAGCGAAACGCTGTTGAAATAC

>CG17604_sequenced -----

>CG17604_predicted&assembled AAAAAGTTAAATTTAGCGAGGAATTACAGTCTCAGAAAGATAACCTAATG

>CG17604_sequenced -----

>CG17604_predicted&assembled AAAAAGGTATCCGAATTGGAGCTTGAAATTAAGAAAGGAAACCGAATT

>CG17604_sequenced -----

>CG17604_predicted&assembled GATTGAACTTGAGCGCGAAAAGAACAATGAAATGGCTGTGCTACAATTTA

>CG17604_sequenced -----

>CG17604_predicted&assembled AAATGAATCGAATTAATTGCCTGATCGACCAACCAGTGACCACAATTA

>CG17604_sequenced -----

>CG17604_predicted&assembled CAGTAAAAGATTCCAAAGGCCAACCAAGAACTGAGAGCATTCTACTAA

>CG17604_sequenced -----

>CG17604_predicted&assembled GGTGAGCCGAAAATGCAGACTATTGTTCATCCGGGTCGGATGATGATGA

>CG17604_sequenced -----

>CG17604_predicted&assembled TCAGGAGGGCCGAATGTAACATGGAGTAAGGCTGAAGGCTGGCAACAACC

>CG17604_sequenced -----TTTGAGTGGC-ACA--C

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>CG17604_predicted&assembled CGGTTGGCAGCGCTGTTGAGCAGCAACATGATTGTCGAAATCGAAGTTA

>CG17604_sequenced CGGTTGGCAGCGCTGTTGAGCAGCAACATGATTGTCGAAATCGAAGTTA

>CG17604_predicted&assembled TCGACAATCAGTCATCGAAGGAACGATCGCAAGGCAGCAGTGGAGTCGAG

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>CG17604_sequenced          TCGACAATCAGTCATCGAAGGAACGATCGCAAGGCAGCAGTGGAGTGGA-
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>CG17604_predicted&assembled  TKSWAGTCAGCGTYGCAGTCAGTCGAGTTCTCAGCAGCAGTCGTTCCGGTC
>CG17604_sequenced          ----AGGCAGCGATGCAGTCAGTCAGTCCAGTTCTCAGCAGCAGTCGTTCCGGTC
      ** *****

>CG17604_predicted&assembled  ACAAACTAAGAATACTTTATATAATTACCGCATTTAGAATTAACCTAATA
>CG17604_sequenced          ACAAACTAAGAATACTTTATATAATTACCGCATTTAGAATTAACCTAATA
*****

>CG17604_predicted&assembled  ATTAAATTAATAATAAACAATAATAATAAACAATCTTACA-----
>CG17604_sequenced          ATTAAATTAATAATAAACAATAATAATAAACAATCTTACATACATATGCA
*****

>CG17604_predicted&assembled  -----
>CG17604_sequenced          TATATGTATGTATATATATCCTAACACCGTTTTGGAAGAAAACTCAACG

>CG17604_predicted&assembled  -----
>CG17604_sequenced          GGAACGCAAAAAAAAAAATATTTATTTCCGTGGGGTCCCCCTTTAAAAAA

>CG17604_predicted&assembled  --
>CG17604_sequenced          AC

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