

New Phytologist Supporting Information

Article title: **The BIG protein distinguishes the process of CO₂-induced stomatal closure from the inhibition of stomatal opening by CO₂.**

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The following Supporting Information is available for this article:

Notes S1: Determination of the intron-exon structure of *BIG* by DNA sequencing

1. Summary

We managed by using 21 sets of primer pair together with each empirically optimized PCR condition to amplify and sequence through the cDNA of *BIG* (*At3g02260*) gene. Our result revealed that the actual length of the ORF of *BIG* is 15,234bp, which is 63bp shorter than the one predicted by Kanyuka *et al.* (2003). It is because a 30bp (GTACTGACTTGACACTGAATCAAGGTTTAG) of the sequence of intron 1, a 21 bp (GTAATGTTTCTACCAAATTCA) of intron 5 and a 12bp (GTGTGTTCTTGT) of intron 7 were interpreted as part of their respective neighboring exons by TAIR. Therefore the ORF of *BIG* gene is 15,234bp long encoding a putative peptide of 5,077 amino acids same to the length predicted by Gil *et al.* (2001).

2. The intron-exon structure of *BIG* shown by the sequence alignment using CLUSTAL 2.1

BIG-GENOME is to refer to the genomic sequence of *BIG* gene downloaded from TAIR website;

BIG-ORF is the actual ORF of *BIG* determined by DNA sequencing;

BIG-TAIR is the ORF of *BIG* annotated by TAIR.

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BIG-GENOME      ATGGCAGATGACTTGGCGAATCTCTGCCGATTCTCTTCGACGACACCGCCTTCCCTCT
BIG-ORF         ATGGCAGATGACTTGGCGAATCTCTGCCGATTCTCTTCGACGACACCGCCTTCCCTCT
BIG-TAIR        ATGGCAGATGACTTGGCGAATCTCTGCCGATTCTCTTCGACGACACCGCCTTCCCTCT
*****
BIG-GENOME      TTGTCGTCTTCGGCATCTTCAGATCTCTTTTCTCGCCGTTTACGCTCCGATGATTTCGATC
BIG-ORF         TTGTCGTCTTCGGCATCTTCAGATCTCTTTTCTCGCCGTTTACGCTCCGATGATTTCGATC
BIG-TAIR        TTGTCGTCTTCGGCATCTTCAGATCTCTTTTCTCGCCGTTTACGCTCCGATGATTTCGATC
*****
BIG-GENOME      AAGCGCGGTCTCCGTTCTTTCTATCTCCTCCTTCGCTGGGGTGTGCTCCGATCGGCGGA
BIG-ORF         AAGCGCGGTCTCCGTTCTTTCTATCTCCTCCTTCGCTGGGGTGTGCTCCGATCGGCGGA
BIG-TAIR        AAGCGCGGTCTCCGTTCTTTCTATCTCCTCCTTCGCTGGGGTGTGCTCCGATCGGCGGA
*****
BIG-GENOME      GACGATGCTGATTCTCTGGCAAGCTACGCTTTGAGACATGGTCCGATTTCGAGCTTCAA
BIG-ORF         GACGATGCTGATTCTCTGGCAAGCTACGCTTTGAGACATGGTCCGATTTCGAGCTTCAA
BIG-TAIR        GACGATGCTGATTCTCTGGCAAGCTACGCTTTGAGACATGGTCCGATTTCGAGCTTCAA
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|------------|--|
| BIG-GENOME | GCTCTTGTTTCGATATCTCAGGCGATCCTTCTACTATCTCGATCTCTATTAG GTACTGAC |
| BIG-ORF | GCTCTTGTTTCGATATCTCAGGCGATCCTTCTACTATCTCGATCTCTATTAG----- |
| BIG-TAIR | GCTCTTGTTTCGATATCTCAGGCGATCCTTCTACTATCTCGATCTCTATTAG GTACTGAC ***** |
| BIG-GENOME | TTGACTGAATCAAGGTTAG GTCGGTATCAATTAGCTGCCATTCTAGTTCGTCTT |
| BIG-ORF | ----- |
| BIG-TAIR | TTGACTGAATCAAGGTTAG ----- |
| BIG-GENOME | CCACTTCTGAGCTTTGGCATCTGCTTTTTTTGTTGCTATCCTAGATGAGTACTAGTTA |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | TTTCCATCTGAACAGTGATGATCTCGAATCATTTCCTTACTGTTTTTTTTTTTGGT |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | GTATCTTAGTGGACCAACTCGAACCAATCGTTTTGGGTGTCATCCAGGAGGTGATGGAAT |
| BIG-ORF | -----TGGACCAACTCGAACCAATCGTTTTGGGTGTCATCCAGGAGGTGATGGAAT |
| BIG-TAIR | -----TGGACCAACTCGAACCAATCGTTTTGGGTGTCATCCAGGAGGTGATGGAAT ***** |
| BIG-GENOME | TCTCTCTCAGCTTCTGGAGAAGTCAAGTTTGTAGACAAAATGATCTCAAAATGGAGGTTT |
| BIG-ORF | TCTCTCTCAGCTTCTGGAGAAGTCAAGTTTGTAGACAAAATGATCTCAAAATGGAG---- |
| BIG-TAIR | TCTCTCTCAGCTTCTGGAGAAGTCAAGTTTGTAGACAAAATGATCTCAAAATGGAG---- ***** |
| BIG-GENOME | GTTCTTTATTATTAATTGTGATAGAGATTCAGTAGGGAAGTCTTAAATGTTGGTCTTAT |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | TTTGGTACACTGGGTAACTAGGTAATCTGCTTGAGGTCCTTTTGGAGCATAGACATAT |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | CTTCTAGAGAATTTGTTTTTATTTGTGTTGTTTTTCGATGATTAGACGTTTGAACCTCGT |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | TTTATAAGACTTTATCAGGTTTTTGACTAGTGGTCAGGTTTCATTGTTGCGCCATAG |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | AATTTTGCACATATGCTAACCAGCATGTTTTTCGTTTTACCTTTTCCATGAGGGTTATAG |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |

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BIG-GENOME      TATGGTTACGGTCTACTTCCATTAGTAACTCTTTGTCTATCACCAAAACATTTGTGGACT
BIG-ORF         -----
BIG-TAIR        -----

BIG-GENOME      ACTGACTTGGTTTCTTACTCTGTTTCTATCAAGTTGACTGCATTAGTAATATCTCCAAA
BIG-ORF         -----
BIG-TAIR        -----

BIG-GENOME      TGCTTGCTTGAATCAGATCAACATGGAAATACTTTTGGAAATTGCTTCTTTTGTGGAAG
BIG-ORF         -----ATCAACATGGAAATACTTTTGGAAATTGCTTCTTTTGTGGAAG
BIG-TAIR        -----ATCAACATGGAAATACTTTTGGAAATTGCTTCTTTTGTGGAAG
                *****

BIG-GENOME      TGAGAAGCAATATGATATATTACCAGATTTCTCTCCCGTGAAGTTGCAGAAGTGTGGCC
BIG-ORF         TGAGAAGCAATATGATATATTACCAGATTTCTCTCCCGTGAAGTTGCAGAAGTGTGGCC
BIG-TAIR        TGAGAAGCAATATGATATATTACCAGATTTCTCTCCCGTGAAGTTGCAGAAGTGTGGCC
                *****

BIG-GENOME      AGCTTTTCTGGCGAGCATGATAATATGGACGCACAGAGCCTTGTGAAATGTACTTTTCA
BIG-ORF         AGCTTTTCTGGCGAGCATGATAATATGGACGCACAGAGCCTTGTGAAATGTACTTTTCA
BIG-TAIR        AGCTTTTCTGGCGAGCATGATAATATGGACGCACAGAGCCTTGTGAAATGTACTTTTCA
                *****

BIG-GENOME      AGGTATTGTTTCTACCCATCCACTCAGCAATATGTTTCTTACTTCAAATTTATTTGATG
BIG-ORF         AG-----
BIG-TAIR        AG-----
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BIG-GENOME      ACCCTTACATCTTTTGACATCTCAAGCAGGGGCGAGTGCTCAAATGAAGAGAAGCCAGT
BIG-ORF         -----GGGCAGATGCTCAAATGAAGAGAAGCCAGT
BIG-TAIR        -----GGGCAGATGCTCAAATGAAGAGAAGCCAGT
                *****

BIG-GENOME      TGACCGGCTTCTTATTACACTGATGTCTGAATGCATTGAATCTGATGTCCAGGCGCAGTC
BIG-ORF         TGACCGGCTTCTTATTACACTGATGTCTGAATGCATTGAATCTGATGTCCAGGCGCAGTC
BIG-TAIR        TGACCGGCTTCTTATTACACTGATGTCTGAATGCATTGAATCTGATGTCCAGGCGCAGTC
                *****

BIG-GENOME      AGTAGTAAAGTCCCCTTTTCAACAAGACTGTGGAGACCTGAATCCCTTTACTCGACACCT
BIG-ORF         AGTAGTAAAGTCCCCTTTTCAACAAGACTGTGGAGACCTGAATCCCTTTACTCGACACCT
BIG-TAIR        AGTAGTAAAGTCCCCTTTTCAACAAGACTGTGGAGACCTGAATCCCTTTACTCGACACCT
                *****

BIG-GENOME      GGCAGTTGTTACCTTCGCTGTGTTTGTGCGCTGATTATGGTCTGCAAAGAGCTTGTTC
BIG-ORF         GGCAGTTGTTACCTTCGCTGTGTTTGTGCGCTGATTATGGTCTGCAAAGAGCTTGTTC
BIG-TAIR        GGCAGTTGTTACCTTCGCTGTGTTTGTGCGCTGATTATGGTCTGCAAAGAGCTTGTTC
                *****

BIG-GENOME      ATTGCCAAATATGTTGGATGAGAAGACGGTTGATCAAGCTGCCTTGATAAATTGTCGTT
BIG-ORF         ATTGCCAAATATGTTGGATGAGAAGACGGTTGATCAAGCTGCCTTGATAAATTGTCGTT
BIG-TAIR        ATTGCCAAATATGTTGGATGAGAAGACGGTTGATCAAGCTGCCTTGATAAATTGTCGTT
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BIG-GENOME CTGCTTAAGAATTTTGAAGCTGCTTGGGAGTCTTTCAAAAGATGTTCAAAGTATAGAAAA
BIG-ORF CTGCTTAAGAATTTTGAAGCTGCTTGGGAGTCTTTCAAAAGATGTTCAAAGTATAGAAAA
BIG-TAIR CTGCTTAAGAATTTTGAAGCTGCTTGGGAGTCTTTCAAAAGATGTTCAAAGTATAGAAAA

BIG-GENOME CGACGGCTCATTGTTACAAGCAGTAGCTTCATTTACAGATGCTTTTCCTAAGCTGTTTAG
BIG-ORF CGACGGCTCATTGTTACAAGCAGTAGCTTCATTTACAGATGCTTTTCCTAAGCTGTTTAG
BIG-TAIR CGACGGCTCATTGTTACAAGCAGTAGCTTCATTTACAGATGCTTTTCCTAAGCTGTTTAG

BIG-GENOME GGTTTTCTTTGAATTCACTAACCACACTGCTACAGAGGTAATATTGAGAGTCTTCTCT
BIG-ORF GGTTTTCTTTGAATTCACTAACCACACTGCTACAGAGGTAATATTGAGAGTCTTCTCT
BIG-TAIR GGTTTTCTTTGAATTCACTAACCACACTGCTACAGAGGTAATATTGAGAGTCTTCTCT

BIG-GENOME TGCCTAGTGGAGGGATTCTTAATCTCGTCCAACCTCATTTTGGCAAGAGCAGTGT
BIG-ORF TGCCTAGTGGAGGGATTCTTAATCTCGTCCAACCTCATTTTGGCAAGAGCAGTGT
BIG-TAIR TGCCTAGTGGAGGGATTCTTAATCTCGTCCAACCTCATTTTGGCAAGAGCAGTGT

BIG-GENOME TCAGAAATGCCAGCATGTGTGGCAGCTTCTATTGTCAGCAATCTAGATTCCTCAGTGTG
BIG-ORF TCAGAAATGCCAGCATGTGTGGCAGCTTCTATTGTCAGCAATCTAGATTCCTCAGTGTG
BIG-TAIR TCAGAAATGCCAGCATGTGTGGCAGCTTCTATTGTCAGCAATCTAGATTCCTCAGTGTG

BIG-GENOME GAGATATGATGGGTCCTTGTAAATTTGACACCTCCACTTGCTTACTCCCTCGGTCTGT
BIG-ORF GAGATATGATGGGTCCTTGTAAATTTGACACCTCCACTTGCTTACTCCCTCGGTCTGT
BIG-TAIR GAGATATGATGGGTCCTTGTAAATTTGACACCTCCACTTGCTTACTCCCTCGGTCTGT

BIG-GENOME CATCTACACATTGAAACTCATTCAAGATCTCAAGAGACAACCATACCATATCCATGATCT
BIG-ORF CATCTACACATTGAAACTCATTCAAGATCTCAAGAGACAACCATACCATATCCATGATCT
BIG-TAIR CATCTACACATTGAAACTCATTCAAGATCTCAAGAGACAACCATACCATATCCATGATCT

BIG-GENOME GAGGGTTTTAGAGTCTGAAGTTACCTATGAAGATGTCAGTCCACTGTTGATTCTGTTA
BIG-ORF GAGGGTTTTAGAGTCTGAAGTTACCTATGAAGATGTCAGTCCACTGTTGATTCTGTTA
BIG-TAIR GAGGGTTTTAGAGTCTGAAGTTACCTATGAAGATGTCAGTCCACTGTTGATTCTGTTA

BIG-GENOME TTTCCATCTGCGCCAGGAAAAGATCCCGTTGCTCAAGTGCTTCACGGTCGAGGATATAAT
BIG-ORF TTTCCATCTGCGCCAGGAAAAGATCCCGTTGCTCAAGTGCTTCACGGTCGAGGATATAAT
BIG-TAIR TTTCCATCTGCGCCAGGAAAAGATCCCGTTGCTCAAGTGCTTCACGGTCGAGGATATAAT

BIG-GENOME GAGAGTGATATTTCCCTCATCAAGTCAATGGATGGATAACTTCTCCATCTGTTTATTT
BIG-ORF GAGAGTGATATTTCCCTCATCAAGTCAATGGATGGATAACTTCTCCATCTGTTTATTT
BIG-TAIR GAGAGTGATATTTCCCTCATCAAGTCAATGGATGGATAACTTCTCCATCTGTTTATTT

BIG-GENOME CCTCCATCGCGAAGGTGTAATAATTACGACCAAAAAGTGGAGAGGACGTATTCCAGTTAAG
BIG-ORF CCTCCATCGCGAAGGTGTAATAATTACGACCAAAAAGTGGAGAGGACGTATTCCAGTTAAG
BIG-TAIR CCTCCATCGCGAAGGTGTAATAATTACGACCAAAAAGTGGAGAGGACGTATTCCAGTTAAG

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BIG-GENOME ATCCAACAGTTTGCAGAAGTTGAAAGCCAAATTTCTCATGACGATGAAGCCCTGTTTGG
BIG-ORF ATCCAACAGTTTGCAGAAGTTGAAAGCCAAATTTCTCATGACGATGAAGCCCTGTTTGG
BIG-TAIR ATCCAACAGTTTGCAGAAGTTGAAAGCCAAATTTCTCATGACGATGAAGCCCTGTTTGG
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BIG-GENOME AAAC TTATTTCTGAGGGTAGTCGTTCTCTCTGTTCCATAGAACCAAATGATCAACCACC
BIG-ORF AAAC TTATTTCTGAGGGTAGTCGTTCTCTCTGTTCCATAGAACCAAATGATCAACCACC
BIG-TAIR AAAC TTATTTCTGAGGGTAGTCGTTCTCTCTGTTCCATAGAACCAAATGATCAACCACC
*****
BIG-GENOME TGT TTTCTGTCAGCAGCAATTTACTATTGCAAGCTGCTAAGGAAGCTGTTGAATTTTCTTAG
BIG-ORF TGT TTTCTGTCAGCAGCAATTTACTATTGCAAGCTGCTAAGGAAGCTGTTGAATTTTCTTAG
BIG-TAIR TGT TTTCTGTCAGCAGCAATTTACTATTGCAAGCTGCTAAGGAAGCTGTTGAATTTTCTTAG
*****
BIG-GENOME AGCATGCATTCTTTGTCAAGAATGGGTTCTAGTATATATGAAGATGGATGTA AAAAGCT
BIG-ORF AGCATGCATTCTTTGTCAAGAATGGGTTCTAGTATATATGAAGATGGATGTA AAAAGCT
BIG-TAIR AGCATGCATTCTTTGTCAAGAATGGGTTCTAGTATATATGAAGATGGATGTA AAAAGCT
*****
BIG-GENOME TGACACTGGTCACATTGATATCCTGCTCAATATAGTAGGCTGTAGTATTGAAGACAAGGC
BIG-ORF TGACACTGGTCACATTGATATCCTGCTCAATATAGTAGGCTGTAGTATTGAAGACAAGGC
BIG-TAIR TGACACTGGTCACATTGATATCCTGCTCAATATAGTAGGCTGTAGTATTGAAGACAAGGC
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BIG-GENOME TTCTGATGGTGGTTGCATGCTCCAAGATGAGGGAAGACCTGGACATGTTGCTTTTGAGCT
BIG-ORF TTCTGATGGTGGTTGCATGCTCCAAGATGAGGGAAGACCTGGACATGTTGCTTTTGAGCT
BIG-TAIR TTCTGATGGTGGTTGCATGCTCCAAGATGAGGGAAGACCTGGACATGTTGCTTTTGAGCT
*****
BIG-GENOME GTTACTCAATCTCTTGAGAAGTCGTGCTCTGCTGATTTTCTAGAGTCTACCTTTTCA
BIG-ORF GTTACTCAATCTCTTGAGAAGTCGTGCTCTGCTGATTTTCTAGAGTCTACCTTTTCA
BIG-TAIR GTTACTCAATCTCTTGAGAAGTCGTGCTCTGCTGATTTTCTAGAGTCTACCTTTTCA
*****
BIG-GENOME GCAAATCTTGTTGTTGAAAATAGTGACTTCAACTATAATGATAAGACTCTGGCACTGTT
BIG-ORF GCAAATCTTGTTGTTGAAAATAGTGACTTCAACTATAATGATAAGACTCTGGCACTGTT
BIG-TAIR GCAAATCTTGTTGTTGAAAATAGTGACTTCAACTATAATGATAAGACTCTGGCACTGTT
*****
BIG-GENOME GGCTCACACTCTTCTATGTAGGCCGGGCTTGGCTGGGGCACAGTTGAGAGCCAAAATTTA
BIG-ORF GGCTCACACTCTTCTATGTAGGCCGGGCTTGGCTGGGGCACAGTTGAGAGCCAAAATTTA
BIG-TAIR GGCTCACACTCTTCTATGTAGGCCGGGCTTGGCTGGGGCACAGTTGAGAGCCAAAATTTA
*****
BIG-GENOME TGATGGTTTCGTTAGTTTTGTTACCGAGAGAGCAAGAGGTATATGTGCTGAAGCTTTGAG
BIG-ORF TGATGGTTTCGTTAGTTTTGTTACCGAGAGAGCAAGAGGTATATGTGCTGAAGCTTTGAG
BIG-TAIR TGATGGTTTCGTTAGTTTTGTTACCGAGAGAGCAAGAGGTATATGTGCTGAAGCTTTGAG
*****
BIG-GENOME TCTCAAGGAGTTGACTGCTTGCTTCTCTGCTTCCATATTGAGATTCTTCTTATGGC
BIG-ORF TCTCAAGGAGTTGACTGCTTGCTTCTCTGCTTCCATATTGAGATTCTTCTTATGGC
BIG-TAIR TCTCAAGGAGTTGACTGCTTGCTTCTCTGCTTCCATATTGAGATTCTTCTTATGGC
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BIG-GENOME TTTCCATTTATCAAATGAAGCTGAGAAGGCAAAATTCCAAATCTCATTGCTTCATGTCT
BIG-ORF TTTCCATTTATCAAATGAAGCTGAGAAGGCAAAATTCCAAATCTCATTGCTTCATGTCT
BIG-TAIR TTTCCATTTATCAAATGAAGCTGAGAAGGCAAAATTCCAAATCTCATTGCTTCATGTCT
*****
BIG-GENOME GCATAAAGTTGATACCCCGCAGGAATATGTGATGGTCTCAGCTGCCTCTTGGGCAAT
BIG-ORF GCATAAAGTTGATACCCCGCAGGAATATGTGATGGTCTCAGCTGCCTCTTGGGCAAT
BIG-TAIR GCATAAAGTTGATACCCCGCAGGAATATGTGATGGTCTCAGCTGCCTCTTGGGCAAT
*****
BIG-GENOME GCTGATATCTAGGTTGTTAGTGCTGTTGCACCATATGTTGTTACATCCAAACACATGCC
BIG-ORF GCTGATATCTAGGTTGTTAGTGCTGTTGCACCATATGTTGTTACATCCAAACACATGCC
BIG-TAIR GCTGATATCTAGGTTGTTAGTGCTGTTGCACCATATGTTGTTACATCCAAACACATGCC
*****
BIG-GENOME AACATCATTAAATGCTAGATCTAAGGCTAAACTGAGGGAAGTTCGTAGCTGTGGTAGTAA
BIG-ORF AACATCATTAAATGCTAGATCTAAGGCTAAACTGAGGGAAGTTCGTAGCTGTGGTAGTAA
BIG-TAIR AACATCATTAAATGCTAGATCTAAGGCTAAACTGAGGGAAGTTCGTAGCTGTGGTAGTAA
*****
BIG-GENOME TTTACATGTAAGTGTGGTATCATTATCTTCGTGGGCGTCTCTGTAGCAAGGGGAT
BIG-ORF TTTACATGTAAGTGTGGTATCATTATCTTCGTGGGCGTCTCTGTAGCAAGGGGAT
BIG-TAIR TTTACATGTAAGTGTGGTATCATTATCTTCGTGGGCGTCTCTGTAGCAAGGGGAT
*****
BIG-GENOME AACTGATTCATGGGCTGAGGATGAGTCAGTCAGCCATCTAATGAGTCAAATGATTGACTT
BIG-ORF AACTGATTCATGGGCTGAGGATGAGTCAGTCAGCCATCTAATGAGTCAAATGATTGACTT
BIG-TAIR AACTGATTCATGGGCTGAGGATGAGTCAGTCAGCCATCTAATGAGTCAAATGATTGACTT
*****
BIG-GENOME TTCCCCTCATCCTCTACATTTCAGAAATGATGTGCTACTGCCAAAACCTTAAACTGGA
BIG-ORF TTCCCCTCATCCTCTACATTTCAGAAATGATGTGCTACTGCCAAAACCTTAAACTGGA
BIG-TAIR TTCCCCTCATCCTCTACATTTCAGAAATGATGTGCTACTGCCAAAACCTTAAACTGGA
*****
BIG-GENOME TTATGGAGATTTATCTGCGAGTTTGTCGGGTTTGGGGCTGTGGAAGGGGAAAAAGGC
BIG-ORF TTATGGAGATTTATCTGCGAGTTTGTCGGGTTTGGGGCTGTGGAAGGGGAAAAAGGC
BIG-TAIR TTATGGAGATTTATCTGCGAGTTTGTCGGGTTTGGGGCTGTGGAAGGGGAAAAAGGC
*****
BIG-GENOME AGGAAAAGTGAAGACCTGCTAGTGAAAGATACATTTTCATGCTTCTTCAGATATTGC
BIG-ORF AGGAAAAGTGAAGACCTGCTAGTGAAAGATACATTTTCATGCTTCTTCAGATATTGC
BIG-TAIR AGGAAAAGTGAAGACCTGCTAGTGAAAGATACATTTTCATGCTTCTTCAGATATTGC
*****
BIG-GENOME TCGTATTAACCTGTGCATTGGATAGCCAGCCTCTTTGCATGTTAATTACCAGAATGTGGA
BIG-ORF TCGTATTAACCTGTGCATTGGATAGCCAGCCTCTTTGCATGTTAATTACCAGAATGTGGA
BIG-TAIR TCGTATTAACCTGTGCATTGGATAGCCAGCCTCTTTGCATGTTAATTACCAGAATGTGGA
*****
BIG-GENOME CATATCTAACTCTGTGGATCTCATCAGCACCAGTCATTGCTTGTAGGCGACATCAATGT
BIG-ORF CATATCTAACTCTGTGGATCTCATCAGCACCAGTCATTGCTTGTAGGCGACATCAATGT
BIG-TAIR CATATCTAACTCTGTGGATCTCATCAGCACCAGTCATTGCTTGTAGGCGACATCAATGT
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BIG-GENOME      TGTTGGTAGAAATATCGAGTTGAGAAACATTCTGATCGGTGTTTAAATCAGCTCCAGGC
BIG-ORF         TGTTGGTAGAAATATCGAGTTGAGAAACATTCTGATCGGTGTTTAAATCAGCTCCAGGC
BIG-TAIR        TGTTGGTAGAAATATCGAGTTGAGAAACATTCTGATCGGTGTTTAAATCAGCTCCAGGC
*****
BIG-GENOME      AGCACCTGAGCAGGTGGTTGAGGATTGGGTTGGGATTATATTCGCGAAGGAGCTTGGCT
BIG-ORF         AGCACCTGAGCAGGTGGTTGAGGATTGGGTTGGGATTATATTCGCGAAGGAGCTTGGCT
BIG-TAIR        AGCACCTGAGCAGGTGGTTGAGGATTGGGTTGGGATTATATTCGCGAAGGAGCTTGGCT
*****
BIG-GENOME      CTCTCTTCTGTTGACTTTCTTGATGGTGGCGTCTGGGATTATTGCAACAAAAATTCATG
BIG-ORF         CTCTCTTCTGTTGACTTTCTTGATGGTGGCGTCTGGGATTATTGCAACAAAAATTCATG
BIG-TAIR        CTCTCTTCTGTTGACTTTCTTGATGGTGGCGTCTGGGATTATTGCAACAAAAATTCATG
*****
BIG-GENOME      TTCAGAAATCGATCCCTTCTGGAAGGAGTGCACATCTGTTGACGCCAAGTATGTTGCTGC
BIG-ORF         TTCAGAAATCGATCCCTTCTGGAAGGAGTGCACATCTGTTGACGCCAAGTATGTTGCTGC
BIG-TAIR        TTCAGAAATCGATCCCTTCTGGAAGGAGTGCACATCTGTTGACGCCAAGTATGTTGCTGC
*****
BIG-GENOME      AGCAGAAGGGGTAGTCTCTTACTTGATGAAGACTGGTGATATTGCAGAATTGCTGAGAAT
BIG-ORF         AGCAGAAGGGGTAGTCTCTTACTTGATGAAGACTGGTGATATTGCAGAATTGCTGAGAAT
BIG-TAIR        AGCAGAAGGGGTAGTCTCTTACTTGATGAAGACTGGTGATATTGCAGAATTGCTGAGAAT
*****
BIG-GENOME      GCTTTCATCATTGGTTGGCAAATATTTACGAGTGATAAGAAAGCTTTCCTTGCAACTTT
BIG-ORF         GCTTTCATCATTGGTTGGCAAATATTTACGAGTGATAAGAAAGCTTTCCTTGCAACTTT
BIG-TAIR        GCTTTCATCATTGGTTGGCAAATATTTACGAGTGATAAGAAAGCTTTCCTTGCAACTTT
*****
BIG-GENOME      CAGCGATTGGAATCATCACGGTCATAGTTCGCCTTCTCTGCTACTTCTCAAGCATACTCA
BIG-ORF         CAGCGATTGGAATCATCACGGTCATAGTTCGCCTTCTCTGCTACTTCTCAAGCATACTCA
BIG-TAIR        CAGCGATTGGAATCATCACGGTCATAGTTCGCCTTCTCTGCTACTTCTCAAGCATACTCA
*****
BIG-GENOME      ATTTGGTAAAAGTCTCCAAGGTGAATATGCGAAGATTGGTGACAATTCTCTCCATCTTCA
BIG-ORF         ATTTGGTAAAAGTCTCCAAGGTGAATATGCGAAGATTGGTGACAATTCTCTCCATCTTCA
BIG-TAIR        ATTTGGTAAAAGTCTCCAAGGTGAATATGCGAAGATTGGTGACAATTCTCTCCATCTTCA
*****
BIG-GENOME      ATGCATCTTTTATCTGTCAAAACTGGATTCCCTGGGAGATGGAAGAGGTTCCGGTGTTTT
BIG-ORF         ATGCATCTTTTATCTGTCAAAACTGGATTCCCTGGGAGATGGAAGAGGTTCCGGTGTTTT
BIG-TAIR        ATGCATCTTTTATCTGTCAAAACTGGATTCCCTGGGAGATGGAAGAGGTTCCGGTGTTTT
*****
BIG-GENOME      ATGGAAGTGTTTTGGGAATTTATGGTACATGGGTTCCCACTAGTCTTCAAACCTCTAG
BIG-ORF         ATGGAAGTGTTTTGGGAATTTATGGTACATGGGTTCCCACTAGTCTTCAAACCTCTAG
BIG-TAIR        ATGGAAGTGTTTTGGGAATTTATGGTACATGGGTTCCCACTAGTCTTCAAACCTCTAG
*****
BIG-GENOME      TGCGATTCTTCTTCATGTATTCTAAGCATAAAGATGCATTGTGCTGACAATAAATGGCTT
BIG-ORF         TGCGATTCTTCTTCATGTATTCTAAGCATAAAGATGCATTGTGCTGACAATAAATGGCTT
BIG-TAIR        TGCGATTCTTCTTCATGTATTCTAAGCATAAAGATGCATTGTGCTGACAATAAATGGCTT
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BIG-GENOME ACTCAAAGTGGGTAACCTAAGGAGAAGTTGGGGTAGATACTAGTGTACTTCATCAGCT
BIG-ORF ACTCAAAGTGGGTAACCTAAGGAGAAGTTGGGGTAGATACTAGTGTACTTCATCAGCT
BIG-TAIR ACTCAAAGTGGGTAACCTAAGGAGAAGTTGGGGTAGATACTAGTGTACTTCATCAGCT
*****
BIG-GENOME ACTTGATTCTATCATGATTATTAAGTTTGACCAGGTATTCGAAAGCTTTCATGGGAAATG
BIG-ORF ACTTGATTCTATCATGATTATTAAGTTTGACCAGGTATTCGAAAGCTTTCATGGGAAATG
BIG-TAIR ACTTGATTCTATCATGATTATTAAGTTTGACCAGGTATTCGAAAGCTTTCATGGGAAATG
*****
BIG-GENOME TGAGGAGATCCATCAAAATATATGTGCCGTGTGCAGCTTCCAGATTGACTGAGTTGTT
BIG-ORF TGAGGAGATCCATCAAAATATATGTGCCGTGTGCAGCTTCCAGATTGACTGAGTTGTT
BIG-TAIR TGAGGAGATCCATCAAAATATATGTGCCGTGTGCAGCTTCCAGATTGACTGAGTTGTT
*****
BIG-GENOME TCTGATGAAAGACATGGAGGGTTTGTAAAGAGATATCAGTGCTGAGCAGATAGATAGAAG
BIG-ORF TCTGATGAAAGACATGGAGGGTTTGTAAAGAGATATCAGTGCTGAGCAGATAGATAGAAG
BIG-TAIR TCTGATGAAAGACATGGAGGGTTTGTAAAGAGATATCAGTGCTGAGCAGATAGATAGAAG
*****
BIG-GENOME CCAAGTGCTTGAAGGGGTGATCACCAAGATTGTAGATGTTATGGACAGTCTAAGCAAGGA
BIG-ORF CCAAGTGCTTGAAGGGGTGATCACCAAGATTGTAGATGTTATGGACAGTCTAAGCAAGGA
BIG-TAIR CCAAGTGCTTGAAGGGGTGATCACCAAGATTGTAGATGTTATGGACAGTCTAAGCAAGGA
*****
BIG-GENOME TTCTTCGAAATCTGATATTTCAAATTTTATCTTGGGTAGATGCAGTCTCTGAGCATACT
BIG-ORF TTCTTCGAAATCTGATATTTCAAATTTTATCTTGGGTAGATGCAGTCTCTGAGCATACT
BIG-TAIR TTCTTCGAAATCTGATATTTCAAATTTTATCTTGGGTAGATGCAGTCTCTGAGCATACT
*****
BIG-GENOME CAGGGAATTTTATGAGTTGCAACGTGGAGATCTGCTGTGTTTATTGACTATTGGACTA
BIG-ORF CAGGGAATTTTATGAGTTGCAACGTGGAGATCTGCTGTGTTTATTGACTATTGGACTA
BIG-TAIR CAGGGAATTTTATGAGTTGCAACGTGGAGATCTGCTGTGTTTATTGACTATTGGACTA
*****
BIG-GENOME CTGTTCCCTTGAACCCAGTAAACATAAAAAGTACTTAACTTCCTTGTGACCTTTTGTCTGT
BIG-ORF CTGTTCCCTTGAACCCAGTAAACATAAAAAGTACTTAACTTCCTTGTGACCTTTTGTCTGT
BIG-TAIR CTGTTCCCTTGAACCCAGTAAACATAAAAAGTACTTAACTTCCTTGTGACCTTTTGTCTGT
*****
BIG-GENOME GGCTCAATCCCCTGATCTCCGGAGAAGAGTACAACAAAAATTTATTGACATGGATTGAT
BIG-ORF GGCTCAATCCCCTGATCTCCGGAGAAGAGTACAACAAAAATTTATTGACATGGATTGAT
BIG-TAIR GGCTCAATCCCCTGATCTCCGGAGAAGAGTACAACAAAAATTTATTGACATGGATTGAT
*****
BIG-GENOME ATCTTTGTCTGGGTGGCTGGAGAGAAGACTGTTGGGTCCTTCGTTGAAGAAATAGATGG
BIG-ORF ATCTTTGTCTGGGTGGCTGGAGAGAAGACTGTTGGGTCCTTCGTTGAAGAAATAGATGG
BIG-TAIR ATCTTTGTCTGGGTGGCTGGAGAGAAGACTGTTGGGTCCTTCGTTGAAGAAATAGATGG
*****
BIG-GENOME GAAAAAGACTGCAAAAGGAAATCTCTTCCTTTCAGAGAGGCAGCAATGAATTTTATTAA
BIG-ORF GAAAAAGACTGCAAAAGGAAATCTCTTCCTTTCAGAGAGGCAGCAATGAATTTTATTAA
BIG-TAIR GAAAAAGACTGCAAAAGGAAATCTCTTCCTTTCAGAGAGGCAGCAATGAATTTTATTAA
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BIG-GENOME      TTGCTTGTGTCATCTACTAACGACCTACAGACCAGAGAGTTACAGAATCATTATTTCGA
BIG-ORF         TTGCTTGTGTCATCTACTAACGACCTACAGACCAGAGAGTTACAGAATCATTATTTCGA
BIG-TAIR        TTGCTTGTGTCATCTACTAACGACCTACAGACCAGAGAGTTACAGAATCATTATTTCGA
*****
BIG-GENOME      GGCCTTGTGATCTCCCTCGATACCGCGTTTCTCTCATTGATATCCATATGCTATGTC
BIG-ORF         GGCCTTGTGATCTCCCTCGATACCGCGTTTCTCTCATTGATATCCATATGCTATGTC
BIG-TAIR        GGCCTTGTGATCTCCCTCGATACCGCGTTTCTCTCATTGATATCCATATGCTATGTC
*****
BIG-GENOME      ATATTTTCATTTTGTCTTCAACTTGCAAGGAAGACAACCTGATGAAGATGGTTTAAA
BIG-ORF         ATATTTTCATTTTGTCTTCAACTTGCAAGGAAGACAACCTGATGAAGATGGTTTAAA
BIG-TAIR        ATATTTTCATTTTGTCTTCAACTTGCAAGGAAGACAACCTGATGAAGATGGTTTAAA
*****
BIG-GENOME      GAGAACCATAATGCTGATGGAGAAGCTTGCTGCCGAGGAGAAGTTGCTTCTGGTTGAA
BIG-ORF         GAGAACCATAATGCTGATGGAGAAGCTTGCTGCCGAGGAGAAGTTGCTTCTGGTTGAA
BIG-TAIR        GAGAACCATAATGCTGATGGAGAAGCTTGCTGCCGAGGAGAAGTTGCTTCTGGTTGAA
*****
BIG-GENOME      GTTTATTTTGGTGTGATAGGCACCTTGTGAGCAACCGTTCTCCAAGTCATGGAGAGAG
BIG-ORF         GTTTATTTTGGTGTGATAGGCACCTTGTGAGCAACCGTTCTCCAAGTCATGGAGAGAG
BIG-TAIR        GTTTATTTTGGTGTGATAGGCACCTTGTGAGCAACCGTTCTCCAAGTCATGGAGAGAG
*****
BIG-GENOME      TTTGTGTGAAAGTCCTTGGAAGCTATAAGAATACTGCAACAGGTCCTTGGTCCAAA
BIG-ORF         TTTGTGTGAAAGTCCTTGGAAGCTATAAGAATACTGCAACAGGTCCTTGGTCCAAA
BIG-TAIR        TTTGTGTGAAAGTCCTTGGAAGCTATAAGAATACTGCAACAGGTCCTTGGTCCAAA
*****
BIG-GENOME      ACTTTCAGGAACAACGAAAAATCTGATACATTGGCTCTCCCGTGGATCAGGAAGGAAG
BIG-ORF         ACTTTCAGGAACAACGAAAAATCTGATACATTGGCTCTCCCGTGGATCAGGAAGGAAG
BIG-TAIR        ACTTTCAGGAACAACGAAAAATCTGATACATTGGCTCTCCCGTGGATCAGGAAGGAAG
*****
BIG-GENOME      CTCAATATCACTTGAATGCGATGTCACCTCTGTTGATGAAGATGAAGATGATGGAACATC
BIG-ORF         CTCAATATCACTTGAATGCGATGTCACCTCTGTTGATGAAGATGAAGATGATGGAACATC
BIG-TAIR        CTCAATATCACTTGAATGCGATGTCACCTCTGTTGATGAAGATGAAGATGATGGAACATC
*****
BIG-GENOME      TGATGGTGAAGTGCCAGCTTAGACAAGGAAGATGAAGAAGATGCCAACAGTGAGAGGTA
BIG-ORF         TGATGGTGAAGTGCCAGCTTAGACAAGGAAGATGAAGAAGATGCCAACAGTGAGAGGTA
BIG-TAIR        TGATGGTGAAGTGCCAGCTTAGACAAGGAAGATGAAGAAGATGCCAACAGTGAGAGGTA
*****
BIG-GENOME      CCTTGCCCTAAAAGTCTGCACCTTTACGTCCAGTGGCAGTAATTCATGGAACAACACTG
BIG-ORF         CCTTGCCCTAAAAGTCTGCACCTTTACGTCCAGTGGCAGTAATTCATGGAACAACACTG
BIG-TAIR        CCTTGCCCTAAAAGTCTGCACCTTTACGTCCAGTGGCAGTAATTCATGGAACAACACTG
*****
BIG-GENOME      GTATTTTGTACACTTGTGACCTTACTGTGCCAAAGGTTGCTGTTCTGTTGCGCGAA
BIG-ORF         GTATTTTGTACACTTGTGACCTTACTGTGCCAAAGGTTGCTGTTCTGTTGCGCGAA
BIG-TAIR        GTATTTTGTACACTTGTGACCTTACTGTGCCAAAGGTTGCTGTTCTGTTGCGCGAA

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BIG-GENOME AGTTTGCCACCGGGGCACCGTGTGTCTATTACAGATCGAGTCGGTTTTTCTGTGACTG
BIG-ORF AGTTTGCCACCGGGGCACCGTGTGTCTATTACAGATCGAGTCGGTTTTTCTGTGACTG
BIG-TAIR AGTTTGCCACCGGGGCACCGTGTGTCTATTACAGATCGAGTCGGTTTTTCTGTGACTG
*****
BIG-GENOME TGGAGCTGGAGGTGTAGGGGAAGCAGCTGCCAGTGCCTGAAGCCACGAAATATAATGG
BIG-ORF TGGAGCTGGAGGTGTAGGGGAAGCAGCTGCCAGTGCCTGAAGCCACGAAATATAATGG
BIG-TAIR TGGAGCTGGAGGTGTAGGGGAAGCAGCTGCCAGTGCCTGAAGCCACGAAATATAATGG
*****
BIG-GENOME AAATGGAAGTGCTCCAGCTCGTGGTACAAATAATTCCAATCGTTTTTACCCTTGTCTGA
BIG-ORF AAATGGAAGTGCTCCAGCTCGTGGTACAAATAATTCCAATCGTTTTTACCCTTGTCTGA
BIG-TAIR AAATGGAAGTGCTCCAGCTCGTGGTACAAATAATTCCAATCGTTTTTACCCTTGTCTGA
*****
BIG-GENOME GGATGCAGATCAGCTTGGAGAAAGCGATTCCGGATGTGGAAGAAGATGGTTTCGGGGAGGA
BIG-ORF GGATGCAGATCAGCTTGGAGAAAGCGATTCCGGATGTGGAAGAAGATGGTTTCGGGGAGGA
BIG-TAIR GGATGCAGATCAGCTTGGAGAAAGCGATTCCGGATGTGGAAGAAGATGGTTTCGGGGAGGA
*****
BIG-GENOME AAATCACGTTGTCTTATATATCCCTAAAGAACTCAATATAAGATGTCACTGCTACTCGA
BIG-ORF AAATCACGTTGTCTTATATATCCCTAAAGAACTCAATATAAGATGTCACTGCTACTCGA
BIG-TAIR AAATCACGTTGTCTTATATATCCCTAAAGAACTCAATATAAGATGTCACTGCTACTCGA
*****
BIG-GENOME AGAGCTCGGGATAGAGGACCGAGTACTGGAGCTTTTCTCATCTTACTTCCGCTATCAC
BIG-ORF AGAGCTCGGGATAGAGGACCGAGTACTGGAGCTTTTCTCATCTTACTTCCGCTATCAC
BIG-TAIR AGAGCTCGGGATAGAGGACCGAGTACTGGAGCTTTTCTCATCTTACTTCCGCTATCAC
*****
BIG-GENOME TAGCAAAGAGACTCTGGCCTGTCGAAAGAGAAGCAGGTCAATCTCGGAAAGACAAAGT
BIG-ORF TAGCAAAGAGACTCTGGCCTGTCGAAAGAGAAGCAGGTCAATCTCGGAAAGACAAAGT
BIG-TAIR TAGCAAAGAGACTCTGGCCTGTCGAAAGAGAAGCAGGTCAATCTCGGAAAGACAAAGT
*****
BIG-GENOME TCTTTCATTGACACGGATCTTTGACAGCTGAAAAAAGCATATAAAAAGTGGGTCATTGGA
BIG-ORF TCTTTCATTGACACGGATCTTTGACAGCTGAAAAAAGCATATAAAAAGTGGGTCATTGGA
BIG-TAIR TCTTTCATTGACACGGATCTTTGACAGCTGAAAAAAGCATATAAAAAGTGGGTCATTGGA
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BIG-GENOME CTTAAAAATAAAGGCTGATTATACTAATTCAAAGGACCTTAAATCTCTTTTAGCCAATGG
BIG-ORF CTTAAAAATAAAGGCTGATTATACTAATTCAAAGGACCTTAAATCTCTTTTAGCCAATGG
BIG-TAIR CTTAAAAATAAAGGCTGATTATACTAATTCAAAGGACCTTAAATCTCTTTTAGCCAATGG
*****
BIG-GENOME TTCCCTTGTCAAGTCTCCTGAGTGTAGTGTTCGGGGTCGCCTTGCAAGTTGGAGAAGG
BIG-ORF TTCCCTTGTCAAGTCTCCTGAGTGTAGTGTTCGGGGTCGCCTTGCAAGTTGGAGAAGG
BIG-TAIR TTCCCTTGTCAAGTCTCCTGAGTGTAGTGTTCGGGGTCGCCTTGCAAGTTGGAGAAGG
*****
BIG-GENOME TGATAAAGTTGCTATATTTGATGTTGGACAGCTAATAGGACAAGCCACAATTGCACCCAT
BIG-ORF TGATAAAGTTGCTATATTTGATGTTGGACAGCTAATAGGACAAGCCACAATTGCACCCAT
BIG-TAIR TGATAAAGTTGCTATATTTGATGTTGGACAGCTAATAGGACAAGCCACAATTGCACCCAT

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BIG-GENOME AAATGCAGACAAGGCCAACGTTAAACCACTTCAAGGAATATTGTTGTTTGGAGATTGT
BIG-ORF AAATGCAGACAAGGCCAACGTTAAACCACTTCAAGGAATATTGTTGTTTGGAGATTGT
BIG-TAIR AAATGCAGACAAGGCCAACGTTAAACCACTTCAAGGAATATTGTTGTTTGGAGATTGT
*****
BIG-GENOME GCATCTTTCATTCAACCCAGTTGTGGAGAATTATCTTGCTGTCGACAGCCTTGAAGATTG
BIG-ORF GCATCTTTCATTCAACCCAGTTGTGGAGAATTATCTTGCTGTCGACAGCCTTGAAGATTG
BIG-TAIR GCATCTTTCATTCAACCCAGTTGTGGAGAATTATCTTGCTGTCGACAGCCTTGAAGATTG
*****
BIG-GENOME CCAGATACTTACTTTGAATCATCGAGGTGAAGTCATCGACAGGCTTGTGTTGAGCTTGC
BIG-ORF CCAGATACTTACTTTGAATCATCGAGGTGAAGTCATCGACAGGCTTGTGTTGAGCTTGC
BIG-TAIR CCAGATACTTACTTTGAATCATCGAGGTGAAGTCATCGACAGGCTTGTGTTGAGCTTGC
*****
BIG-GENOME CCTGCAAGGTGCATTATCAGGCGTATAGACTGGGTTCTGGTTCACAGGTTCAAGTTAAT
BIG-ORF CCTGCAAGGTGCATTATCAGGCGTATAGACTGGGTTCTGGTTCACAGGTTCAAGTTAAT
BIG-TAIR CCTGCAAGGTGCATTATCAGGCGTATAGACTGGGTTCTGGTTCACAGGTTCAAGTTAAT
*****
BIG-GENOME GGTGCTTACGAACAAATTCGTGAAGTTTATGATCTATCCCAGGATAGCATCAGTCCAAC
BIG-ORF GGTGCTTACGAACAAATTCGTGAAGTTTATGATCTATCCCAGGATAGCATCAGTCCAAC
BIG-TAIR GGTGCTTACGAACAAATTCGTGAAGTTTATGATCTATCCCAGGATAGCATCAGTCCAAC
*****
BIG-GENOME ACAGTACTTCACTTTGCCAAACGACATGATTGTGGATGCTACTCTTTTGTGCTTCTCG
BIG-ORF ACAGTACTTCACTTTGCCAAACGACATGATTGTGGATGCTACTCTTTTGTGCTTCTCG
BIG-TAIR ACAGTACTTCACTTTGCCAAACGACATGATTGTGGATGCTACTCTTTTGTGCTTCTCG
*****
BIG-GENOME TGGGAGGGTTTTCTTCTTGTCTTTCAGAACAAAGGGAATTGTATAGGTTGAACTATC
BIG-ORF TGGGAGGGTTTTCTTCTTGTCTTTCAGAACAAAGGGAATTGTATAGGTTGAACTATC
BIG-TAIR TGGGAGGGTTTTCTTCTTGTCTTTCAGAACAAAGGGAATTGTATAGGTTGAACTATC
*****
BIG-GENOME TTGGGGCGGCAATGCAGGCGCAACACCGCTTAAGGAAATCGTTCAGATTATGGGAAAGGA
BIG-ORF TTGGGGCGGCAATGCAGGCGCAACACCGCTTAAGGAAATCGTTCAGATTATGGGAAAGGA
BIG-TAIR TTGGGGCGGCAATGCAGGCGCAACACCGCTTAAGGAAATCGTTCAGATTATGGGAAAGGA
*****
BIG-GENOME TGTTACGGGAAAGGGTTCATCTGTCTATTTCTCTCCAACATATCGACTGCTTTTCATATC
BIG-ORF TGTTACGGGAAAGGGTTCATCTGTCTATTTCTCTCCAACATATCGACTGCTTTTCATATC
BIG-TAIR TGTTACGGGAAAGGGTTCATCTGTCTATTTCTCTCCAACATATCGACTGCTTTTCATATC
*****
BIG-GENOME CTATCATGATGGAAGTCTTTTATGGGTCGACTCAGCTCAGATGCAACATCCTTAACTGA
BIG-ORF CTATCATGATGGAAGTCTTTTATGGGTCGACTCAGCTCAGATGCAACATCCTTAACTGA
BIG-TAIR CTATCATGATGGAAGTCTTTTATGGGTCGACTCAGCTCAGATGCAACATCCTTAACTGA
*****
BIG-GENOME TACATCTGGCATGTTTGGGAAGAATCAGATTGTAACAAAAGGGTGGCTGGATTGCATCG
BIG-ORF TACATCTGGCATGTTTGGGAAGAATCAGATTGTAACAAAAGGGTGGCTGGATTGCATCG
BIG-TAIR TACATCTGGCATGTTTGGGAAGAATCAGATTGTAACAAAAGGGTGGCTGGATTGCATCG

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*****
BIG-GENOME      TTGAAAAGAGTTGTTGGCTGGCAGTGGATTATTTATTGCTTCTCCAGCGTGAAGTCAAA
BIG-ORF         TTGAAAAGAGTTGTTGGCTGGCAGTGGATTATTTATTGCTTCTCCAGCGTGAAGTCAAA
BIG-TAIR        TTGAAAAGAGTTGTTGGCTGGCAGTGGATTATTTATTGCTTCTCCAGCGTGAAGTCAAA
*****
BIG-GENOME      TGCTGTCTTAGCTGTGTCCTTGAGGGGCGATGGGGTATGTGCACAGAATCTCCGTCATCC
BIG-ORF         TGCTGTCTTAGCTGTGTCCTTGAGGGGCGATGGGGTATGTGCACAGAATCTCCGTCATCC
BIG-TAIR        TGCTGTCTTAGCTGTGTCCTTGAGGGGCGATGGGGTATGTGCACAGAATCTCCGTCATCC
*****
BIG-GENOME      GACAGGATCATCTCCCTATGGTTGGAATAACCGCATACAAACCTTGTCAAAAGACAA
BIG-ORF         GACAGGATCATCTCCCTATGGTTGGAATAACCGCATACAAACCTTGTCAAAAGACAA
BIG-TAIR        GACAGGATCATCTCCCTATGGTTGGAATAACCGCATACAAACCTTGTCAAAAGACAA
*****
BIG-GENOME      TGTTCACTGTCTAGTTCTGCATGATGATGCCAGCCTTCAGATTTATTCTCATGTTCTGAT
BIG-ORF         TGTTCACTGTCTAGTTCTGCATGATGATGCCAGCCTTCAGATTTATTCTCATGTTCTGAT
BIG-TAIR        TGTTCACTGTCTAGTTCTGCATGATGATGCCAGCCTTCAGATTTATTCTCATGTTCTGAT
*****
BIG-GENOME      TGGAGTTGATACTGACTCAAATTCACAGCTGAAAAAGTTAAAAAGTTGGGTTCTAAGAT
BIG-ORF         TGGAGTTGATACTGACTCAAATTCACAGCTGAAAAAGTTAAAAAGTTGGGTTCTAAGAT
BIG-TAIR        TGGAGTTGATACTGACTCAAATTCACAGCTGAAAAAGTTAAAAAGTTGGGTTCTAAGAT
*****
BIG-GENOME      ACTTAACAACAAAACCTATGCTGGTCAAAGCCAGAGTTCCCTGGATTCTTTGAGAG
BIG-ORF         ACTTAACAACAAAACCTATGCTGGTCAAAGCCAGAGTTCCCTGGATTCTTTGAGAG
BIG-TAIR        ACTTAACAACAAAACCTATGCTGGTCAAAGCCAGAGTTCCCTGGATTCTTTGAGAG
*****
BIG-GENOME      GGCATTTTGCATTACAGCAGATGTGAGACTTGGTAGTGATGCTATTAGAAATGGTGATTC
BIG-ORF         GGCATTTTGCATTACAGCAGATGTGAGACTTGGTAGTGATGCTATTAGAAATGGTGATTC
BIG-TAIR        GGCATTTTGCATTACAGCAGATGTGAGACTTGGTAGTGATGCTATTAGAAATGGTGATTC
*****
BIG-GENOME      CGAGGGAGCAAAACAGAGCTTGGCATCTGAGGATGGCTTTATTGAGAGCCCAGTCCCGT
BIG-ORF         CGAGGGAGCAAAACAGAGCTTGGCATCTGAGGATGGCTTTATTGAGAGCCCAGTCCCGT
BIG-TAIR        CGAGGGAGCAAAACAGAGCTTGGCATCTGAGGATGGCTTTATTGAGAGCCCAGTCCCGT
*****
BIG-GENOME      GGGCTTCAAGTATGGTTGGAATTCTGAGTAATTTTCTTGATAAGTTTATCTGCATAC
BIG-ORF         GGGCTTCAAG-----
BIG-TAIR        GGGCTTCAAG-----
*****
BIG-GENOME      TATGCTTGGTTATTAGTTTAGTACTCTGAAGAGATTTTGTCCGCCAATTATGAGTATA
BIG-ORF         -----
BIG-TAIR        -----
*****
BIG-GENOME      TGGGTTGCTTGTCTCCAGTTATCTAACCTCCTTCTCTTTTCAGATATCTGTCTCCAATC
BIG-ORF         -----ATATCTGTCTCCAATC
BIG-TAIR        -----ATATCTGTCTCCAATC

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*****
BIG-GENOME   CAAACCCCTGACATTGTTATGGTTGGCATCCGGATGCATGTGGGTACTACATCAGCAAGCT
BIG-ORF      CAAACCCCTGACATTGTTATGGTTGGCATCCGGATGCATGTGGGTACTACATCAGCAAGCT
BIG-TAIR     CAAACCCCTGACATTGTTATGGTTGGCATCCGGATGCATGTGGGTACTACATCAGCAAGCT
*****

BIG-GENOME   CTATACCTTCAGAAGTGACCATTTCCAGAGATCGATTAAGATGGATGAGGGCATGAGGT
BIG-ORF      CTATACCTTCAGAAGTGACCATTTCCAGAGATCGATTAAGATGGATGAGGGCATGAGGT
BIG-TAIR     CTATACCTTCAGAAGTGACCATTTCCAGAGATCGATTAAGATGGATGAGGGCATGAGGT
*****

BIG-GENOME   GCTGGTATGACATCCCATTACTGTGGCTGAGTCACTTCTAGCTGATGAAGATGTTGTAA
BIG-ORF      GCTGGTATGACATCCCATTACTGTGGCTGAGTCACTTCTAGCTGATGAAGATGTTGTAA
BIG-TAIR     GCTGGTATGACATCCCATTACTGTGGCTGAGTCACTTCTAGCTGATGAAGATGTTGTAA
*****

BIG-GENOME   TCTCTGTGGGGCCGACTACTAGTGGGACTGCACTGCCCAGAATAGACTCGCTTGAAGTAT
BIG-ORF      TCTCTGTGGGGCCGACTACTAGTGGGACTGCACTGCCCAGAATAGACTCGCTTGAAGTAT
BIG-TAIR     TCTCTGTGGGGCCGACTACTAGTGGGACTGCACTGCCCAGAATAGACTCGCTTGAAGTAT
*****

BIG-GENOME   ATGGTCGAGCTAAAGATGAATTTGGCTGGAAAGAAAAAATGGATGCTGTGCTAGATATGG
BIG-ORF      ATGGTCGAGCTAAAGATGAATTTGGCTGGAAAGAAAAAATGGATGCTGTGCTAGATATGG
BIG-TAIR     ATGGTCGAGCTAAAGATGAATTTGGCTGGAAAGAAAAAATGGATGCTGTGCTAGATATGG
*****

BIG-GENOME   AAGCTCGTGTGCTTGGTCATGGTTTGCTTCTCCAGGCTCTAGTAAAAAGAGAGCGTTGG
BIG-ORF      AAGCTCGTGTGCTTGGTCATGGTTTGCTTCTCCAGGCTCTAGTAAAAAGAGAGCGTTGG
BIG-TAIR     AAGCTCGTGTGCTTGGTCATGGTTTGCTTCTCCAGGCTCTAGTAAAAAGAGAGCGTTGG
*****

BIG-GENOME   CACAGTCTGCTTCAATGGAAGACAAGTTATCGCTGATGGTCTTAAGCTCCTATCAATCT
BIG-ORF      CACAGTCTGCTTCAATGGAAGACAAGTTATCGCTGATGGTCTTAAGCTCCTATCAATCT
BIG-TAIR     CACAGTCTGCTTCAATGGAAGACAAGTTATCGCTGATGGTCTTAAGCTCCTATCAATCT
*****

BIG-GENOME   ATTATTCAGTTTGTAGGCCACGGCAAGAAGTAGTGCTTAGCGAACTCAAATGCAAACAGC
BIG-ORF      ATTATTCAGTTTGTAGGCCACGGCAAGAAGTAGTGCTTAGCGAACTCAAATGCAAACAGC
BIG-TAIR     ATTATTCAGTTTGTAGGCCACGGCAAGAAGTAGTGCTTAGCGAACTCAAATGCAAACAGC
*****

BIG-GENOME   TACTAGAGACGATTTTCGAAAAGTGATAGGGAACCCTATTACAAACGACAGCTTGCCGTG
BIG-ORF      TACTAGAGACGATTTTCGAAAAGTGATAGGGAACCCTATTACAAACGACAGCTTGCCGTG
BIG-TAIR     TACTAGAGACGATTTTCGAAAAGTGATAGGGAACCCTATTACAAACGACAGCTTGCCGTG
*****

BIG-GENOME   TTTTGCAGTCTGTCTTTCCAAGAAAGGAGATATACTACCAGGTAATGTTTCTACCAAATT
BIG-ORF      TTTTGCAGTCTGTCTTTCCAAGAAAGGAGATATACTACCAG-----
BIG-TAIR     TTTTGCAGTCTGTCTTTCCAAGAAAGGAGATATACTACCAGGTAATGTTTCTACCAAATT
*****

BIG-GENOME   CAGTCTTGCATGTTCAAGTAGATATTTCCGGGCGCAGATATCTTTAAATTTGTATGTTGT
BIG-ORF      -----

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BIG-TAIR CAG-----

BIG-GENOME CTTTGGCATTGATTATATCTGTTGCTATAGGTCAAAGACACCATGCGACTCCTTGGAGTG

BIG-ORF -----GTCAAAGACACCATGCGACTCCTTGGAGTG

BIG-TAIR -----TCAAAGACACCATGCGACTCCTTGGAGTG

BIG-GENOME GTCAAGGTGACCTCCATTCTTTCTTCGAGGTTGGGATTTGGGTACTGGAGGTTTCGATT

BIG-ORF GTCAAGGTGACCTCCATTCTTTCTTCGAGGTTGGGATTTGGGTACTGGAGGTTTCGATT

BIG-TAIR GTCAAGGTGACCTCCATTCTTTCTTCGAGGTTGGGATTTGGGTACTGGAGGTTTCGATT

BIG-GENOME GTTGAAGAGTTCAATGCTCAGATGCGGGCGGTCTAAAGTAGCTTGACCCGTAATCA

BIG-ORF GTTGAAGAGTTCAATGCTCAGATGCGGGCGGTCTAAAGTAGCTTGACCCGTAATCA

BIG-TAIR GTTGAAGAGTTCAATGCTCAGATGCGGGCGGTCTAAAGTAGCTTGACCCGTAATCA

BIG-GENOME AATTTCCTCCGCTTTCTGGAGATGAATGGTATATGCTGTTTCAGTTATTATCTACAGTGT

BIG-ORF AATTTCCTCCGCTTTCTGGAGATGAATG-----

BIG-TAIR AATTTCCTCCGCTTTCTGGAGATGAATG-----

BIG-GENOME GTCTATTTGCATGTGTAGTCAAATTCAAACACAATTTGTTTATTATCCTTGTATTAT

BIG-ORF -----

BIG-TAIR -----

BIG-GENOME GTAATAGGAGCGGCTGTTTGTACATAAAATAATCTTCCTTTCATATAGTTTGTATTAT

BIG-ORF -----

BIG-TAIR -----

BIG-GENOME ATGAGATATGTTGTTATGTAGGCTCTGAAGTGGTTGATAATCTGATGCAAGTGCTATGG

BIG-ORF -----GCTCTGAAGTGGTTGATAATCTGATGCAAGTGCTATGG

BIG-TAIR -----GCTCTGAAGTGGTTGATAATCTGATGCAAGTGCTATGG

BIG-GENOME GGAATTTTGGAGTCAGAGCCACTCGACACACCTACTATGAACAATGTCGTGATGTCCTCC

BIG-ORF GGAATTTTGGAGTCAGAGCCACTCGACACACCTACTATGAACAATGTCGTGATGTCCTCC

BIG-TAIR GGAATTTTGGAGTCAGAGCCACTCGACACACCTACTATGAACAATGTCGTGATGTCCTCC

BIG-GENOME GTTGAACATAATCTATAGCTATGCAGAGTGTGGCATCTCAAGGAAAGGATACAGGGTT

BIG-ORF GTTGAACATAATCTATAGCTATGCAGAGTGTGGCATCTCAAGGAAAGGATACAGGGTT

BIG-TAIR GTTGAACATAATCTATAGCTATGCAGAGTGTGGCATCTCAAGGAAAGGATACAGGGTT

BIG-GENOME CATTCTGTAGCTCCTGCAGTTCAGTTACTGAAAGCACTTATGTTGTTCCCAATGAGTCT

BIG-ORF CATTCTGTAGCTCCTGCAGTTCAGTTACTGAAAGCACTTATGTTGTTCCCAATGAGTCT

BIG-TAIR CATTCTGTAGCTCCTGCAGTTCAGTTACTGAAAGCACTTATGTTGTTCCCAATGAGTCT

BIG-GENOME GTGCAAACATCCAGCAGGTGTCTTGTGTATGTTTTTATACTCTGCTCTCTTAGATA

BIG-ORF GTGCAAACATCCAGCAG-----

BIG-TAIR GTGCAACATCCAGCAGGTGTGTTCTTGT-----

 BIG-GENOME TGTACTAGTCTTCTAACTCAGTTTCTTTACAGCCTAGCTATATCATCAAGGTTACTTCAG
 BIG-ORF -----CCTAGCTATATCATCAAGGTTACTTCAG
 BIG-TAIR -----CCTAGCTATATCATCAAGGTTACTTCAG

 BIG-GENOME GTTCCTTTCCCAAAGCAAACAATGTTGACAACAGATGATTTGGTTGACAATGTTACAAC
 BIG-ORF GTTCCTTTCCCAAAGCAAACAATGTTGACAACAGATGATTTGGTTGACAATGTTACAAC
 BIG-TAIR GTTCCTTTCCCAAAGCAAACAATGTTGACAACAGATGATTTGGTTGACAATGTTACAAC

 BIG-GENOME CCTTCGGTGCCTATCAGAACAGCTGGTGGAAATACACATGTCATGATTGAGGAGGACTCT
 BIG-ORF CCTTCGGTGCCTATCAGAACAGCTGGTGGAAATACACATGTCATGATTGAGGAGGACTCT
 BIG-TAIR CCTTCGGTGCCTATCAGAACAGCTGGTGGAAATACACATGTCATGATTGAGGAGGACTCT

 BIG-GENOME ATAACCTCATCTGTTCAATACTGCTGTGATGGCTGCTCCACCGTCCCTATACTGAGAAGA
 BIG-ORF ATAACCTCATCTGTTCAATACTGCTGTGATGGCTGCTCCACCGTCCCTATACTGAGAAGA
 BIG-TAIR ATAACCTCATCTGTTCAATACTGCTGTGATGGCTGCTCCACCGTCCCTATACTGAGAAGA

 BIG-GENOME AGGTGGCACTGCACTGTTTGTCCAGATTTTGATCTATGTGAGGCATGCTATGAAGTGTA
 BIG-ORF AGGTGGCACTGCACTGTTTGTCCAGATTTTGATCTATGTGAGGCATGCTATGAAGTGTA
 BIG-TAIR AGGTGGCACTGCACTGTTTGTCCAGATTTTGATCTATGTGAGGCATGCTATGAAGTGTA

 BIG-GENOME GATGCAGATCGTCTACCACCACCACACTCGAGATCATCCTATGACAGCAATCCAATA
 BIG-ORF GATGCAGATCGTCTACCACCACCACACTCGAGATCATCCTATGACAGCAATCCAATA
 BIG-TAIR GATGCAGATCGTCTACCACCACCACACTCGAGATCATCCTATGACAGCAATCCAATA

 BIG-GENOME GAAGTGAATCACTTGGTGCAGACCAATGAGATTCAGTTCTCTGCGGATGAAGTAGGT
 BIG-ORF GAAGTGAATCACTTGGTGCAGACCAATGAGATTCAGTTCTCTGCGGATGAAGTAGGT
 BIG-TAIR GAAGTGAATCACTTGGTGCAGACCAATGAGATTCAGTTCTCTGCGGATGAAGTAGGT

 BIG-GENOME ATTTCAAATATGTTGCCGGTGGTAACCAGTAGCATTCCACAAGCTTCAACTCCCTCCATC
 BIG-ORF ATTTCAAATATGTTGCCGGTGGTAACCAGTAGCATTCCACAAGCTTCAACTCCCTCCATC
 BIG-TAIR ATTTCAAATATGTTGCCGGTGGTAACCAGTAGCATTCCACAAGCTTCAACTCCCTCCATC

 BIG-GENOME CATGTCTTGGAACCTGGTGAATCTGCTGAGTTCTCTGCCTCACTGACCGATCCTATTCT
 BIG-ORF CATGTCTTGGAACCTGGTGAATCTGCTGAGTTCTCTGCCTCACTGACCGATCCTATTCT
 BIG-TAIR CATGTCTTGGAACCTGGTGAATCTGCTGAGTTCTCTGCCTCACTGACCGATCCTATTCT

 BIG-GENOME ATCTCAGCGTCAAAGCGTGCCGTAATTTGATTCTCTGAGTTCTCCAAGAGTTG
 BIG-ORF ATCTCAGCGTCAAAGCGTGCCGTAATTTGATTCTCTGAGTTCTCCAAGAGTTG
 BIG-TAIR ATCTCAGCGTCAAAGCGTGCCGTAATTTGATTCTCTGAGTTCTCCAAGAGTTG

 BIG-GENOME AGTGGATGGATGGAACAGTATCCGGTGTCAAGCTATTCTGTGATGCAATTGTTCTAC
 BIG-ORF AGTGGATGGATGGAACAGTATCCGGTGTCAAGCTATTCTGTGATGCAATTGTTCTAC

BIG-TAIR AGTGGATGGATGGAACAGTATCCGGTGTTC AAGCTATTCCTGTGATGCAATTGTTCTAC

BIG-GENOME AGATTATCATCTGCCATTGGTGGAGCCTTATGGATAGCTCAAAGCCC GAAGAAATAAGC
BIG-ORF AGATTATCATCTGCCATTGGTGGAGCCTTATGGATAGCTCAAAGCCC GAAGAAATAAGC
BIG-TAIR AGATTATCATCTGCCATTGGTGGAGCCTTATGGATAGCTCAAAGCCC GAAGAAATAAGC

BIG-GENOME TTGGATAAGTTAATTAATTAATGGCTTTTGGGTGAAATCAATCTCAGCAAGCCGTTGCTGCT
BIG-ORF TTGGATAAGTTAATTAATTAATGGCTTTTGGGTGAAATCAATCTCAGCAAGCCGTTGCTGCT
BIG-TAIR TTGGATAAGTTAATTAATTAATGGCTTTTGGGTGAAATCAATCTCAGCAAGCCGTTGCTGCT

BIG-GENOME TCAACTCGCTCTTCCTTAGGGGAAATTGTGATTCTTGTTATGTTTTTCACCTTGATG
BIG-ORF TCAACTCGCTCTTCCTTAGGGGAAATTGTGATTCTTGTTATGTTTTTCACCTTGATG
BIG-TAIR TCAACTCGCTCTTCCTTAGGGGAAATTGTGATTCTTGTTATGTTTTTCACCTTGATG

BIG-GENOME CTTCGGAGTTGGCACCAGCCTGGTAGTGATGGTAGTAGCTCAAATTAGGTGGAAGTACA
BIG-ORF CTTCGGAGTTGGCACCAGCCTGGTAGTGATGGTAGTAGCTCAAATTAGGTGGAAGTACA
BIG-TAIR CTTCGGAGTTGGCACCAGCCTGGTAGTGATGGTAGTAGCTCAAATTAGGTGGAAGTACA

BIG-GENOME GATGTACATGACCGGAGGATTGTCCAGAGCTCCACTGTAGTAGCTACTCAGTCTTCTTTA
BIG-ORF GATGTACATGACCGGAGGATTGTCCAGAGCTCCACTGTAGTAGCTACTCAGTCTTCTTTA
BIG-TAIR GATGTACATGACCGGAGGATTGTCCAGAGCTCCACTGTAGTAGCTACTCAGTCTTCTTTA

BIG-GENOME CATGTTCAAGAGAGAGATGACTTTGCATCTCAGCTAGTTCGTGCGTGCAGTTGCCTCAGG
BIG-ORF CATGTTCAAGAGAGAGATGACTTTGCATCTCAGCTAGTTCGTGCGTGCAGTTGCCTCAGG
BIG-TAIR CATGTTCAAGAGAGAGATGACTTTGCATCTCAGCTAGTTCGTGCGTGCAGTTGCCTCAGG

BIG-GENOME AACCAAGAGTTTGTTAATTATCTGATGAACATACTTCAACAGCTAGTGCATGTTTTTAAG
BIG-ORF AACCAAGAGTTTGTTAATTATCTGATGAACATACTTCAACAGCTAGTGCATGTTTTTAAG
BIG-TAIR AACCAAGAGTTTGTTAATTATCTGATGAACATACTTCAACAGCTAGTGCATGTTTTTAAG

BIG-GENOME TCACGTGCTGCCAATGTTGAAGCTCGTGGATCAAGCTCTGGTTCTGGTTGTGGAGCCATG
BIG-ORF TCACGTGCTGCCAATGTTGAAGCTCGTGGATCAAGCTCTGGTTCTGGTTGTGGAGCCATG
BIG-TAIR TCACGTGCTGCCAATGTTGAAGCTCGTGGATCAAGCTCTGGTTCTGGTTGTGGAGCCATG

BIG-GENOME CTCACAGTCAGAAGAGATTTACCTGCGGGTAACTATTCTCCCTCTTTTCGGATTCATAT
BIG-ORF CTCACAGTCAGAAGAGATTTACCTGCGGGTAACTATTCTCCCTCTTTTCGGATTCATAT
BIG-TAIR CTCACAGTCAGAAGAGATTTACCTGCGGGTAACTATTCTCCCTCTTTTCGGATTCATAT

BIG-GENOME GCAAAGCCCATAGAGCAGATATTTTGTGGACTATCACAGGCTGCTACTTGAGAATGTG
BIG-ORF GCAAAGCCCATAGAGCAGATATTTTGTGGACTATCACAGGCTGCTACTTGAGAATGTG
BIG-TAIR GCAAAGCCCATAGAGCAGATATTTTGTGGACTATCACAGGCTGCTACTTGAGAATGTG

BIG-GENOME TTTTCGCTTAGTATATACCTTAGTTAGACCTGAAAAACAAGAGAAAATGGGGAAAAAGGAA
BIG-ORF TTTTCGCTTAGTATATACCTTAGTTAGACCTGAAAAACAAGAGAAAATGGGGAAAAAGGAA

BIG-TAIR TTTGCTTAGTATATACCTTAGTTAGACCTGAAAAACAAGAGAAAATGGGGGAAAAGGAA

BIG-GENOME AAGGTATACAGGAATGCTTCTTCTAAAGATTTAAAGCTGGACGGTTCCAGGATGTTCTA
BIG-ORF AAGGTATACAGGAATGCTTCTTCTAAAGATTTAAAGCTGGACGGTTCCAGGATGTTCTA
BIG-TAIR AAGGTATACAGGAATGCTTCTTCTAAAGATTTAAAGCTGGACGGTTCCAGGATGTTCTA

BIG-GENOME TGCAGCTATATAAATAACCCTCATACGGCTTTTGTAGGAGATATGCTAGAAGGCTGTT
BIG-ORF TGCAGCTATATAAATAACCCTCATACGGCTTTTGTAGGAGATATGCTAGAAGGCTGTT
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BIG-GENOME TTGCATCTTTGCGGAAGCAAACTCAATACTACAGTGCAGAGATTCATGGCAGTTTCC
BIG-ORF TTGCATCTTTGCGGAAGCAAACTCAATACTACAGTGCAGAGATTCATGGCAGTTTCC
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BIG-GENOME AATGAAGTAAAAACCTATACAAGCATGTTGAAAAGTCTGGTGGTTTGAAAACAATGTT
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BIG-ORF CTGAATGGTGTATTCCATTTTGGCGAAGAGTCTGTAATCCAGACACTTAACTCCTCAAT
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BIG-TAIR GGTGAAGATGGGCATGATTCCGGTTTGAAAAAATTATATGTGGATATGGAAGGGTGGTC

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BIG-ORF GATATCTTCAGTGCCAATTGCGGAGATCTCTTGAGGCAGTTATTGATTCTTTCTGCTG

BIG-TAIR GATATCTTCAGTGCCAATTGCGGAGATCTCTTGAGGCAGTTATTGATTTCTTTCTGCTG

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BIG-GENOME CTGCCAGCATATGGTCAGAATATTGTTGAGTACACAGAACTTGTCCTTGTGCTTGAC
BIG-ORF CTGCCAGCATATGGTCAGAATATTGTTGAGTACACAGAACTTGTCCTTGTGCTTGAC
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BIG-GENOME AGCATTGGTGAAACTGAAATGGATTTCGAGCACAAGGACTGTCCAGCAAATGATGGCA
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BIG-TAIR GCCCGTGCTCAAGCTAGAGCAGCTCTTCTACTTTCTCGGAGGGTGATCTGAGTGCAGTG

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BIG-GENOME ACTGATGAATTCTGGGAGTCAAGACTGCGCCTTGTTTTTCAGCTACTATTTTCATCCATT
BIG-ORF ACTGATGAATTCTGGGAGTCAAGACTGCGCCTTGTTTTTCAGCTACTATTTTCATCCATT
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BIG-GENOME AAATGGGTGCTAAACATCCTGCTATATCAGAGCACATAATTCTTCCTTGCCCTAAGATT
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 BIG-TAIR AGTTATTTGGAATGGGAGAAAGGGGCATCATATCTCGACTTTGTGAGGAGGCAATACAAA

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 BIG-TAIR GCCTCTCAGTCAATTAGAGGTGCGAGCCAAAAGTCTAGAACCCACAGATCAGATTCTTG

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 BIG-ORF GCACCTAAATATACACTTAGGTGGAAGCGACGGTCTAGCAGGACATCTAAAGGTGGTTA
 BIG-TAIR GCACCTAAATATACACTTAGGTGGAAGCGACGGTCTAGCAGGACATCTAAAGGTGGTTA

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 BIG-TAIR AGCGCAGAATACTTTGAGCTACTCTTCAAAATGATTGAGACACAAGATGCACTTCTTTTC

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 BIG-ORF TTAAGTGTCCGGGGTTGTCTGACAACAATCTGTAATTTGATCTCCAAGAGGTGGGAAAC
 BIG-TAIR TTAAGTGTCCGGGGTTGTCTGACAACAATCTGTAATTTGATCTCCAAGAGGTGGGAAAC

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 BIG-TAIR ATTGAATCTCTAGAAAGGAGTCTTCAGATTGACATTTACAGGGATTACCCTCCACAAG

BIG-GENOME CTCTTAGAACTCCTTGAAAAGTTCTTAGAGGTCCAAATATTCGTTCCAGGTAATTTCT
 BIG-ORF CTCTTAGAACTCCTTGAAAAGTTCTTAGAGGTCCAAATATTCGTTCCAG-----
 BIG-TAIR CTCTTAGAACTCCTTGAAAAGTTCTTAGAGGTCCAAATATTCGTTCCAG-----

BIG-GENOME CATCATAAATCTATTGATCTGCCATTGACTTCTCATACCTGTCTAATGTTTGGAGTGT
 BIG-ORF -----

| | |
|------------|---|
| BIG-TAIR | ----- |
| BIG-GENOME | GGCAGATTCATGAGAGACAATTTACTGTCTCATGTTCTGGAGGCCCTCATTGTAATTCGT |
| BIG-ORF | ----ATTCATGAGAGACAATTTACTGTCTCATGTTCTGGAGGCCCTCATTGTAATTCGT |
| BIG-TAIR | ----ATTCATGAGAGACAATTTACTGTCTCATGTTCTGGAGGCCCTCATTGTAATTCGT ***** |
| BIG-GENOME | GGCTTGATAGTGCAAAAGACAAAGCTTATAAATGATTGCAACAGACGCCTAAAAGATCTT |
| BIG-ORF | GGCTTGATAGTGCAAAAGACAAAGCTTATAAATGATTGCAACAGACGCCTAAAAGATCTT |
| BIG-TAIR | GGCTTGATAGTGCAAAAGACAAAGCTTATAAATGATTGCAACAGACGCCTAAAAGATCTT ***** |
| BIG-GENOME | CTTGACGGACTTCTGCTTGAAGCAGTAAAATAAACGTCAATTTATCCGTGCCTGTGTT |
| BIG-ORF | CTTGACGGACTTCTGCTTGAAGCAGTAAAATAAACGTCAATTTATCCGTGCCTGTGTT |
| BIG-TAIR | CTTGACGGACTTCTGCTTGAAGCAGTAAAATAAACGTCAATTTATCCGTGCCTGTGTT ***** |
| BIG-GENOME | TCTGGACTGCAAACCCATGCAGAGGAGAACAAGGACGTACCTGTTTGGTAAGAAGAATT |
| BIG-ORF | TCTGGACTGCAAACCCATGCAGAGGAGAACAAGGACGTACCTGTTG----- |
| BIG-TAIR | TCTGGACTGCAAACCCATGCAGAGGAGAACAAGGACGTACCTGTTG----- ***** |
| BIG-GENOME | ATCATACTGACCACTGTATCATCTTCAAATATATGATTCTTTATTACTTTACAGTCTCT |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | GGGGATCTTCTATCTCTTTTTAGACTTCTGGATGAAAATATTATATACACTTAGTTTG |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | AGTATTAGGAGTATTTGAACAGTCTATATATAGCTGATATCCTTCCTAACTTTATATCC |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | TAGATTCAGTTGACATATATCCTTGACTTGTTTGTGATTCATTCAATTGCATATGCAG |
| BIG-ORF | ----- |
| BIG-TAIR | ----- |
| BIG-GENOME | TTTATTCTTGAGCAACTTTGTAATCTGATCTGCCGTCAAACCTGAGGCTGTGTATATG |
| BIG-ORF | TTTATTCTTGAGCAACTTTGTAATCTGATCTGCCGTCAAACCTGAGGCTGTGTATATG |
| BIG-TAIR | TTTATTCTTGAGCAACTTTGTAATCTGATCTGCCGTCAAACCTGAGGCTGTGTATATG ***** |
| BIG-GENOME | CTGATCTTGAACAAATCACACAGCAAGAGGAGTTATCCGGGATCAATGACAAAAAAT |
| BIG-ORF | CTGATCTTGAACAAATCACACAGCAAGAGGAGTTATCCGGGATCAATGACAAAAAAT |
| BIG-TAIR | CTGATCTTGAACAAATCACACAGCAAGAGGAGTTATCCGGGATCAATGACAAAAAAT ***** |
| BIG-GENOME | CCATATTCGAGTGTGAGATTGGCCCACTGATGCGGGATGTGAAAAACAAGATTTGTCAG |
| BIG-ORF | CCATATTCGAGTGTGAGATTGGCCCACTGATGCGGGATGTGAAAAACAAGATTTGTCAG |

BIG-TAIR CCATATTCGAGTGCTGAGATTGGCCCACTGATGCGGGATGTGAAAAACAAGATTGTCTAG

 BIG-GENOME CAGTTGGACCTGCTAGGTCTACTGGAAGATGACTATGGCATGGAGTTGCTTGTAGCAGGA
 BIG-ORF CAGTTGGACCTGCTAGGTCTACTGGAAGATGACTATGGCATGGAGTTGCTTGTAGCAGGA
 BIG-TAIR CAGTTGGACCTGCTAGGTCTACTGGAAGATGACTATGGCATGGAGTTGCTTGTAGCAGGA

 BIG-GENOME AACATCATTCTACTAGACCTGAGCATAGCTCAAGTTTATGAGCTAGTTTGAAGAAATCA
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 BIG-TAIR AACATCATTCTACTAGACCTGAGCATAGCTCAAGTTTATGAGCTAGTTTGAAGAAATCA

 BIG-GENOME AATCAGTCTTCTACTTCACTGACCAACTCCGCACTGTTAGCTTCAAATGCAGCTCCCAGC
 BIG-ORF AATCAGTCTTCTACTTCACTGACCAACTCCGCACTGTTAGCTTCAAATGCAGCTCCCAGC
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 BIG-GENOME AGGGATTGCCCTCCCATGACGGTGACATACAGACTTCAGGTTGTGACGCTTTCTAGTG
 BIG-ORF AGGGATTGCCCTCCCATGACGGTGACATACAGACTTCAG-----
 BIG-TAIR AGGGATTGCCCTCCCATGACGGTGACATACAGACTTCAG-----

 BIG-GENOME AAGTACTAGGCCAAAGATGGGTTTTGCTCGCCTTACTTATTGTTTTGATAAAAGCGGC
 BIG-ORF -----
 BIG-TAIR -----

 BIG-GENOME AAATTCATACAATATTGTGTGGTTAAAAATTTGGCAGGGTTAGATGGTGAAGCTACTGA
 BIG-ORF -----GGTTAGATGGTGAAGCTACTGA
 BIG-TAIR -----GGTTAGATGGTGAAGCTACTGA

 BIG-GENOME GCCTATGATCAAGGAATTGGAAGAAGATAGAGAAGAATCACAAGATCCAGAGATTGAGTT
 BIG-ORF GCCTATGATCAAGGAATTGGAAGAAGATAGAGAAGAATCACAAGATCCAGAGATTGAGTT
 BIG-TAIR GCCTATGATCAAGGAATTGGAAGAAGATAGAGAAGAATCACAAGATCCAGAGATTGAGTT

 BIG-GENOME TGCAATAGCAGGTGCAGTTCGAGAATATGGTGGTCTGGAAATTTACTTGATATGATCAA
 BIG-ORF TGCAATAGCAGGTGCAGTTCGAGAATATGGTGGTCTGGAAATTTACTTGATATGATCAA
 BIG-TAIR TGCAATAGCAGGTGCAGTTCGAGAATATGGTGGTCTGGAAATTTACTTGATATGATCAA

 BIG-GENOME GGTAAGGATCTTAAACTATCAATGGGAAACTGAGATTCTCTCCTAGGCTCTTAGGCACTT
 BIG-ORF G-----
 BIG-TAIR G-----
 *
 BIG-GENOME TTCGATACATTGAAGGAGCGTAAAAGAAGAATAATTATAATACCAAAGTAGCTTATTA
 BIG-ORF -----
 BIG-TAIR -----

 BIG-GENOME ACATGTAATGTATTCCCTATGCAGAGTTTACAAGATGACTTCAAATCCAACCAAGAAGAGA
 BIG-ORF -----AGTTTACAAGATGACTTCAAATCCAACCAAGAAGAGA

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BIG-TAIR      -----AGTTTACAAGATGACTTCAAATCCAACCAAGAAGAGA
                *****
BIG-GENOME    TGGTTGCAGTTC TTGATCTCTAAACCATTGCTGCAAGATTAGAGAGAACAGGCGAGCTC
BIG-ORF       TGGTTGCAGTTC TTGATCTCTAAACCATTGCTGCAAGATTAGAGAGAACAGGCGAGCTC
BIG-TAIR      TGGTTGCAGTTC TTGATCTCTAAACCATTGCTGCAAGATTAGAGAGAACAGGCGAGCTC
                *****
BIG-GENOME    TACTCAGGCTAGGGGCTTAAAGCTTACTTCTTGAAACAGCTAGGAGGGCATTCTGTGG
BIG-ORF       TACTCAGGCTAGGGGCTTAAAGCTTACTTCTTGAAACAGCTAGGAGGGCATTCTGTGG
BIG-TAIR      TACTCAGGCTAGGGGCTTAAAGCTTACTTCTTGAAACAGCTAGGAGGGCATTCTGTGG
                *****
BIG-GENOME    ATGCTATGGAGCCAGCTGAAGGCATACTCTAATTGTCGAGAGTTTGACGCTTGAAGCAA
BIG-ORF       ATGCTATGGAGCCAGCTGAAGGCATACTCTAATTGTCGAGAGTTTGACGCTTGAAGCAA
BIG-TAIR      ATGCTATGGAGCCAGCTGAAGGCATACTCTAATTGTCGAGAGTTTGACGCTTGAAGCAA
                *****
BIG-GENOME    ATGAAAGTGACAGCATCAGTGCCGCACAAAGTGCTTTGACTGTCAGTAACGAGGAACTG
BIG-ORF       ATGAAAGTGACAGCATCAGTGCCGCACAAAGTGCTTTGACTGTCAGTAACGAGGAACTG
BIG-TAIR      ATGAAAGTGACAGCATCAGTGCCGCACAAAGTGCTTTGACTGTCAGTAACGAGGAACTG
                *****
BIG-GENOME    GAACTTGGGAACAGGCCAAAAAATAGTGCTTATGTTCTTAGAAAGGCTAAGCCATCCTT
BIG-ORF       GAACTTGGGAACAGGCCAAAAAATAGTGCTTATGTTCTTAGAAAGGCTAAGCCATCCTT
BIG-TAIR      GAACTTGGGAACAGGCCAAAAAATAGTGCTTATGTTCTTAGAAAGGCTAAGCCATCCTT
                *****
BIG-GENOME    CAGGGCTTAAAAAGTCAAACAAACAGCAAAGGAACACGGAGATGGTTGCTAGAATCTTAC
BIG-ORF       CAGGGCTTAAAAAGTCAAACAAACAGCAAAGGAACACGGAGATGGTTGCTAGAATCTTAC
BIG-TAIR      CAGGGCTTAAAAAGTCAAACAAACAGCAAAGGAACACGGAGATGGTTGCTAGAATCTTAC
                *****
BIG-GENOME    CTTACTTAACATACGGTGAGCCTGCAGCGATGGAAGCACTCATAGAGCATTTAGCCCTT
BIG-ORF       CTTACTTAACATACGGTGAGCCTGCAGCGATGGAAGCACTCATAGAGCATTTAGCCCTT
BIG-TAIR      CTTACTTAACATACGGTGAGCCTGCAGCGATGGAAGCACTCATAGAGCATTTAGCCCTT
                *****
BIG-GENOME    ACCTGCAAACTGGTCTGAATTTGATCAGCTTCAGCAACGTCATGAGGAGACCCCAAGG
BIG-ORF       ACCTGCAAACTGGTCTGAATTTGATCAGCTTCAGCAACGTCATGAGGAGACCCCAAGG
BIG-TAIR      ACCTGCAAACTGGTCTGAATTTGATCAGCTTCAGCAACGTCATGAGGAGACCCCAAGG
                *****
BIG-GENOME    ATGACAGCATTGCTCAGCAAGCGGCGAAGCAGAGGTTACTGTGGAGAATTTGTAAGAG
BIG-ORF       ATGACAGCATTGCTCAGCAAGCGGCGAAGCAGAGGTTACTGTGGAGAATTTGTAAGAG
BIG-TAIR      ATGACAGCATTGCTCAGCAAGCGGCGAAGCAGAGGTTACTGTGGAGAATTTGTAAGAG
                *****
BIG-GENOME    TGTGAGAATCTCTCAAGACAAGTTCATGTGGAGAGAGGTTAAAAGACATAGTTTGAGA
BIG-ORF       TGTGAGAATCTCTCAAGACAAGTTCATGTGGAGAGAGGTTAAAAGACATAGTTTGAGA
BIG-TAIR      TGTGAGAATCTCTCAAGACAAGTTCATGTGGAGAGAGGTTAAAAGACATAGTTTGAGA
                *****
BIG-GENOME    ATGGTATCATAGCTGTGCTGTCAAACACATAAAGGAAATTTTGCAATCACGGGACAGA
BIG-ORF       ATGGTATCATAGCTGTGCTGTCAAACACATAAAGGAAATTTTGCAATCACGGGACAGA

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BIG-TAIR ATGGTATCATAGCTGTGCTGCTCAAACACATAAAGGAAATTTTGAATCACGGGACAGA

 BIG-GENOME CTGGTTCAAATCTAGCAAGGAATGGCTTTGGCTCTTAAACTCCGTCAGTGCCTCTTA
 BIG-ORF CTGGTTCAAATCTAGCAAGGAATGGCTTTGGCTCTTAAACTCCGTCAGTGCCTCTTA
 BIG-TAIR CTGGTTCAAATCTAGCAAGGAATGGCTTTGGCTCTTAAACTCCGTCAGTGCCTCTTA

 BIG-GENOME TTTTGTCAATGCTAAGAGGATTGTCGATGGGTCATTTGCCTACCCAAACATGCATAGACG
 BIG-ORF TTTTGTCAATGCTAAGAGGATTGTCGATGGGTCATTTGCCTACCCAAACATGCATAGACG
 BIG-TAIR TTTTGTCAATGCTAAGAGGATTGTCGATGGGTCATTTGCCTACCCAAACATGCATAGACG

 BIG-GENOME AGGGAGGAATTTTAACCCCTACTTCATGCCTTAGAAGGAGTCTCTGGAGAAAACGACATCG
 BIG-ORF AGGGAGGAATTTTAACCCCTACTTCATGCCTTAGAAGGAGTCTCTGGAGAAAACGACATCG
 BIG-TAIR AGGGAGGAATTTTAACCCCTACTTCATGCCTTAGAAGGAGTCTCTGGAGAAAACGACATCG

 BIG-GENOME GTGCAAGGGCTGAAAATTTGCTAGATACACTTGCCGATAAAGAAGGAAAAGGAGATGGAT
 BIG-ORF GTGCAAGGGCTGAAAATTTGCTAGATACACTTGCCGATAAAGAAGGAAAAGGAGATGGAT
 BIG-TAIR GTGCAAGGGCTGAAAATTTGCTAGATACACTTGCCGATAAAGAAGGAAAAGGAGATGGAT

 BIG-GENOME TTCTTGAGAGAAAAGTCCGTGCATTACGAGATGCCACCAAAGATGAAATGAGACGCCGTG
 BIG-ORF TTCTTGAGAGAAAAGTCCGTGCATTACGAGATGCCACCAAAGATGAAATGAGACGCCGTG
 BIG-TAIR TTCTTGAGAGAAAAGTCCGTGCATTACGAGATGCCACCAAAGATGAAATGAGACGCCGTG

 BIG-GENOME CATTAAGAAAGAGAGAGGAGCTCCTGCAGGTAATAATAATGATTCTCTCAAGGAA
 BIG-ORF CATTAAGAAAGAGAGAGGAGCTCCTGCAG-----
 BIG-TAIR CATTAAGAAAGAGAGAGGAGCTCCTGCAG-----

 BIG-GENOME ACTAAATGTGTAATTTGGTCTTGTGACAATATTTACCAAGTTTCTCTTTGAAACAGGGA
 BIG-ORF -----GGA
 BIG-TAIR -----GGA

 BIG-GENOME CTTGGAATGCGTCAAGAGCTATCTTCTGATGGTGGTAAAAGGATTGTGGTTTCTCAACCA
 BIG-ORF CTTGGAATGCGTCAAGAGCTATCTTCTGATGGTGGTAAAAGGATTGTGGTTTCTCAACCA
 BIG-TAIR CTTGGAATGCGTCAAGAGCTATCTTCTGATGGTGGTAAAAGGATTGTGGTTTCTCAACCA

 BIG-GENOME ATTCTTGAAGGTTTTGAGGATGTAGAGGAAGAAGAAGATGGATTGGCTTGCATGGTGTGT
 BIG-ORF ATTCTTGAAGGTTTTGAGGATGTAGAGGAAGAAGAAGATGGATTGGCTTGCATGGTGTGT
 BIG-TAIR ATTCTTGAAGGTTTTGAGGATGTAGAGGAAGAAGAAGATGGATTGGCTTGCATGGTGTGT

 BIG-GENOME AGAGAAGGCTACAAGCTCAGACCTTCTGATTTATTAGGAGTCTACTTTACAGCAAACGG
 BIG-ORF AGAGAAGGCTACAAGCTCAGACCTTCTGATTTATTAGGAGTCTACTTTACAGCAAACGG
 BIG-TAIR AGAGAAGGCTACAAGCTCAGACCTTCTGATTTATTAGGAGTCTACTTTACAGCAAACGG

 BIG-GENOME GTGAATCTCGGTGTTGGCAATTCTGGAAGCGCACGTGGTGAATGCGTTTACACTACAGTG
 BIG-ORF GTGAATCTCGGTGTTGGCAATTCTGGAAGCGCACGTGGTGAATGCGTTTACACTACAGTG

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BIG-TAIR      GTGAATCTCGGTGTTGGCAATTCTGGAAGCGCACGTGGTGAATGCGTTTACACTACAGTG
                *****
BIG-GENOME    AGCTACTTCAACATAATTCATTTTCAATGTCATCAAGAGGCAAAAAGAGCCGACGCTGCT
BIG-ORF       AGCTACTTCAACATAATTCATTTTCAATGTCATCAAGAGGCAAAAAGAGCCGACGCTGCT
BIG-TAIR      AGCTACTTCAACATAATTCATTTTCAATGTCATCAAGAGGCAAAAAGAGCCGACGCTGCT
                *****
BIG-GENOME    CTTAAAAATCCGAAGAAGAATGGGAAGGAGCTATGTTGCGTAACAATGAATCTCTTTGC
BIG-ORF       CTTAAAAATCCGAAGAAGAATGGGAAGGAGCTATGTTGCGTAACAATGAATCTCTTTGC
BIG-TAIR      CTTAAAAATCCGAAGAAGAATGGGAAGGAGCTATGTTGCGTAACAATGAATCTCTTTGC
                *****
BIG-GENOME    AACTCTCTCTCCCTGTCAAGGGTCCCTCAGTCCCTTAGCACAGTATCTTCGTTACGTT
BIG-ORF       AACTCTCTCTCCCTGTCAAGGGTCCCTCAGTCCCTTAGCACAGTATCTTCGTTACGTT
BIG-TAIR      AACTCTCTCTCCCTGTCAAGGGTCCCTCAGTCCCTTAGCACAGTATCTTCGTTACGTT
                *****
BIG-GENOME    GACCAGTACTGGGATAATCTCAATGCTCTTGGTCGAGCCGACGGAAGCAGACTCCGTCTA
BIG-ORF       GACCAGTACTGGGATAATCTCAATGCTCTTGGTCGAGCCGACGGAAGCAGACTCCGTCTA
BIG-TAIR      GACCAGTACTGGGATAATCTCAATGCTCTTGGTCGAGCCGACGGAAGCAGACTCCGTCTA
                *****
BIG-GENOME    TTGACGTACGACATTGTCCTGGTAAGTAAAAATTGGTCTGAAACTTACTAGGTGTTGG
BIG-ORF       TTGACGTACGACATTGTCCTG-----
BIG-TAIR      TTGACGTACGACATTGTCCTG-----
                *****
BIG-GENOME    CCTTCGGTTCAATGGCAGTTGGTAAAAAGTGTCAATTCGGTTTGGTTTAAACTTGAT
BIG-ORF       -----
BIG-TAIR      -----

BIG-GENOME    CGGGACTTGATTCCAACAGCTAATCAAGTGGCTCTGTGATTTTCGTTTCGGATTACCA
BIG-ORF       -----
BIG-TAIR      -----

BIG-GENOME    AGTGATTCACTGACAACFTTTGTTTCATCTGTAGATGCTGGCTCGGTTTGCAACAGGAGC
BIG-ORF       -----ATGCTGGCTCGGTTTGCAACAGGAGC
BIG-TAIR      -----ATGCTGGCTCGGTTTGCAACAGGAGC
                *****
BIG-GENOME    TTCTTTTAGCGCGGATTGCCGAGGTGGAGGAAGAGATAGCAATCCCGTTTCTTGCCTTT
BIG-ORF       TTCTTTTAGCGCGGATTGCCGAGGTGGAGGAAGAGATAGCAATCCCGTTTCTTGCCTTT
BIG-TAIR      TTCTTTTAGCGCGGATTGCCGAGGTGGAGGAAGAGATAGCAATCCCGTTTCTTGCCTTT
                *****
BIG-GENOME    CATGTTCCAATGGCCGTCATCTTCTCGACCAAGGAGGCCCGTGCAACGCACAAACAT
BIG-ORF       CATGTTCCAATGGCCGTCATCTTCTCGACCAAGGAGGCCCGTGCAACGCACAAACAT
BIG-TAIR      CATGTTCCAATGGCCGTCATCTTCTCGACCAAGGAGGCCCGTGCAACGCACAAACAT
                *****
BIG-GENOME    GGCTAGATCTGTTTCATCGTACATTTTCATCATCATCGACATCTACAGCAACAGCGCCATC
BIG-ORF       GGCTAGATCTGTTTCATCGTACATTTTCATCATCATCGACATCTACAGCAACAGCGCCATC

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BIG-TAIR GGCTAGATCTGTTTCATCGTACATTTTCATCATCATCGACATCTACAGCAACAGGCCATC

BIG-GENOME CTCGGACTCGCGACCTTTAACTCCTGGATCCCAGCTATCATCAACTGGAACAGAGGAAAC
 BIG-ORF CTCGGACTCGCGACCTTTAACTCCTGGATCCCAGCTATCATCAACTGGAACAGAGGAAAC
 BIG-TAIR CTCGGACTCGCGACCTTTAACTCCTGGATCCCAGCTATCATCAACTGGAACAGAGGAAAC

BIG-GENOME GGTTCAGTTCATGATGGTAAACTCGCTTCTATCAGAATCATATGAATCATGGCTCCAACA
 BIG-ORF GGTTCAGTTCATGATGGTAAACTCGCTTCTATCAGAATCATATGAATCATGGCTCCAACA
 BIG-TAIR GGTTCAGTTCATGATGGTAAACTCGCTTCTATCAGAATCATATGAATCATGGCTCCAACA

BIG-GENOME CCGTAGGTCTTTCTCCAGCGGGGATTACCATACTTTCATGCAACACGCTCACGGTCG
 BIG-ORF CCGTAGGTCTTTCTCCAGCGGGGATTACCATACTTTCATGCAACACGCTCACGGTCG
 BIG-TAIR CCGTAGGTCTTTCTCCAGCGGGGATTACCATACTTTCATGCAACACGCTCACGGTCG

BIG-GENOME GGTAGTCTTCGCGCTGCAGAACAACCAGTTCAGGAGGCAAAACCAAGACGAGAAAC
 BIG-ORF GGTAGTCTTCGCGCTGCAGAACAACCAGTTCAGGAGGCAAAACCAAGACGAGAAAC
 BIG-TAIR GGTAGTCTTCGCGCTGCAGAACAACCAGTTCAGGAGGCAAAACCAAGACGAGAAAC

BIG-GENOME CTTAACCGCGATGAACTTCTCTATCGTCAAACCAATGCTGGTCTACACCGGTATGAT
 BIG-ORF CTTAACCGCGATGAACTTCTCTATCGTCAAACCAATGCTGGTCTACACCGGTATGAT
 BIG-TAIR CTTAACCGCGATGAACTTCTCTATCGTCAAACCAATGCTGGTCTACACCGGTATGAT

BIG-GENOME CGAACAGCTTCAACAGTTGTTCAAACCAAGAAACCGGTCCACATCGAACCAATCAAGAA
 BIG-ORF CGAACAGCTTCAACAGTTGTTCAAACCAAGAAACCGGTCCACATCGAACCAATCAAGAA
 BIG-TAIR CGAACAGCTTCAACAGTTGTTCAAACCAAGAAACCGGTCCACATCGAACCAATCAAGAA

BIG-GENOME AGAAGGTACATCAAGTGGAGTAGAGCTTGAGCCATGGGAGATTGTAATGAAAGAGAAGCT
 BIG-ORF AGAAGGTACATCAAGTGGAGTAGAGCTTGAGCCATGGGAGATTGTAATGAAAGAGAAGCT
 BIG-TAIR AGAAGGTACATCAAGTGGAGTAGAGCTTGAGCCATGGGAGATTGTAATGAAAGAGAAGCT

BIG-GENOME GCTGAATGTGAAAGAAATGATTGGTTTCTCCAAGGAATTGATCTCGTGGCTCGACGAAAT
 BIG-ORF GCTGAATGTGAAAGAAATGATTGGTTTCTCCAAGGAATTGATCTCGTGGCTCGACGAAAT
 BIG-TAIR GCTGAATGTGAAAGAAATGATTGGTTTCTCCAAGGAATTGATCTCGTGGCTCGACGAAAT

BIG-GENOME CAACTCTGCAACTGATCTACAAGAAGCATTGATATTGTCGGCGTTTGGCTGATGTTTT
 BIG-ORF CAACTCTGCAACTGATCTACAAGAAGCATTGATATTGTCGGCGTTTGGCTGATGTTTT
 BIG-TAIR CAACTCTGCAACTGATCTACAAGAAGCATTGATATTGTCGGCGTTTGGCTGATGTTTT

BIG-GENOME GTCTGAAGGAGTTACACAGTGTGATCAGTTTGTGAGATCGGCGATCGATAAAGAT**TGA**
 BIG-ORF GTCTGAAGGAGTTACACAGTGTGATCAGTTTGTGAGATCGGCGATCGATAAAGAT**TGA**
 BIG-TAIR GTCTGAAGGAGTTACACAGTGTGATCAGTTTGTGAGATCGGCGATCGATAAAGAT**TGA**

3. Primer pairs used to amplify and sequence through the cDNA of *BIG* gene

Primer S1F: 5'-GGAACATCGTCTTCTCCACAG-3'
Primer S1R: 5'-TTTGAGCATCTGCCCCCTTG-3'
Primer S2F: 5'-TTTCTCGCCGTTTACGCTCC-3'
Primer S2R: 5'-TCTGAAAAAACTGCTCTTGCC-3'
Primer S3F: 5'-AACCACACTGCTACAGAGGG-3'
Primer S3R: 5'-GAAAATCAGACAGAGCACGAC-3'
Primer S4F: 5'-GTAGTATTGAAGACAAGGCT-3'
Primer S4R: 5'-ATGACTGGTGCTGATGAG-3'
Primer S5F: 5'-CCCCTCATCCTCCTACATTC-3'
Primer S5R: 5'-AGTATCTACCCCAAACCTTCTCC-3'
Primer S6F: 5'-CTGTCAAACTGGATTCCCTG-3'
Primer S6R: 5'-CATTGCTGCCTCTCTGAAAG-3'
Primer S7F: 5'-TGCAGTCTCTGAGCATACC-3'
Primer S7R: 5'-TCCACAGTCACAGAAAAACC-3'
Primer S8F: 5'-CTTGTGACCTTACTGTGTCC-3'
Primer S8R: 5'-CTTTCCCGTAACATCCTTTCC-3'
Primer S9F: 5'-GCTACTCTTTTTGTTGCTTCTC-3'
Primer S9R: 5'-CATCCATTTTTCTTTCCAGCC-3'
Primer S10F: 5'-TCTCCAATCCAAACCCTGAC-3'
Primer S10R: 5'-TGAACCCCTGTATCCTTTCC-3'
Primer S11F: 5'-CCGTAAATCAAATTTCTCCGTC-3'
Primer S11R: 5'-TCCATCCATCCACTCAACTC-3'
Primer S12F: 5'-AGCTTCAACTCCCTCCATC-3'
Primer S12R: 5'-CTTTTCCTTTTCCCCATTTTC-3'
Primer S13F: 5'-GCAAAAGCCCATAGAGCAG-3'
Primer S13R: 5'-TCAAGCAACAAGGAGACAAG-3'
Primer S14F: 5'-AAATGGGGGAAAAGGAAAAGG-3'
Primer S14R: 5'-CGGGAGTTTGGATGATTGG-3'
Primer S15F: 5'-CGAACTCATTGCCAATCATCC-3'
Primer S15R: 5'-TCATCAAACTCTACGAAGCC-3'
Primer S16F: 5'-ATTTCGAGCACAAGGACAC-3'
Primer S16R: 5'-TCCGACCTGATAGATTGAGAAC-3'
Primer S17F: 5'-TTGGAATGGGAGAAAGGGG-3'
Primer S17R: 5'-CGGGCAGATCAGATTACAAAG-3'

Primer S18F: 5'-TTTATCCGTGCCTGTGTTTC-3'

Primer S18R: 5'-GTGTTCCCTTTGCTGTTTGTGTTG-3'

Primer S19F: 5'-AAGTGACAGCATCAGTGCC-3'

Primer S19R: 5'-CTTCCTCTACATCCTCAAAACC-3'

Primer S20F: 5'-CCAAAGATGAAATGAGACGCC-3'

Primer S20R: 5'-TTGAAGCTGTTTCGATCATAACC-3'

Primer S21F: 5'-CATCAACTGGAACAGAGGAAAC-3'

Primer S21R: 5'-CGGTGGCTCAATAAACCAAAC-3'

4. The confirmed cDNA of *BIG* gene by PCR and DNA sequencing

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ggaacatcgtccttctccacagagtcctctttcaccgcctttgattctttacttataaacccttaccttcctcctcc  
ttttgtatatacctatttctctagaaaccttttccctcatcgaactcttcttctttcgcctcgccagaaATGGCAG  
ATGACTTGGCGAATCTCTGCCGATTTCTCTTCGACGACACCGCCTTTCCCTCTTTGTCGCTTCGGCATTCTCAGA  
TCTCTTTTCTCGCCGTTTACGCTCCGATGATTGATCAAGCGCGGTCTCCGTTCTTTCTATCTCCTCCTTCGCTGG  
GGTGTGCTCCGATCGGCGGAGACGATGCTGATTCTCTGGCAAGCTACGCTTTGAGACATGGTCCGATTTCGACGC  
TTCAAGCTCTTGTTCGATATCTCAGGCGATCCTTCTACTATCTCGATCTCTATTAGTGGACCAACTCGAACCAAT  
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CTCAAAATGGAGATCAACATGGAAATACTTTTGGAAATGCTTCTTTTGATGGAAGTGAGAAGCAATATGATATAT  
TACCAGATTTCTCTCCCGCTGAAGTTGCAGAACTGTGGCCAGCTTTTTCTGGCGAGCATGATAATATGGACGCACA  
GAGCCTTGTGAAATGTACTTTTCAAGGGGGCAGATGCTCAAATGAAGAGAAGCCAGTTGACCGGCTTCTTATTACA  
CTGATGTCTGAATGCATGAACTGATGTCCAGGCGCAGTCAGTAGTAAAGTCCCCTTTTCAACAAGACTGTGGAG  
ACCTGAATCCCTTTACTCGACACCTGGCAGTTGTTACCTTCGCTGTGTTTGTGCGCTGATTATGGTCTGCAAGA  
GCTTGTCAATTGCCAAATATGTTGGATGAGAAGACGGTTGATCAAGCTGTCTTGATAAAATGTGCTTCTGCTTA  
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TAGCTTCATTTACAGATGCTTTTCTAAGCTGTTTAGGGTTTTCTTTGAATTCACTAACCACACTGCTACAGAGGG  
TAATATTGAGAGTCTTTCTCTTGGCGTAGTGGAGGGATTCTTAATCTCGTCCAACCTCATTTTTGGCAAGAGCAGT  
GTTTTTCAGAATGTCCAGGCATGTGTGGCAGCTTCTATTGTGAGCAATCTAGATTCCTCAGTGTGGAGATATGATG  
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TGAGAGTGATATTTCTTCATCAAGTCAATGGATGGATAACTTCTTCCATCTTGTTTATTTCTCCATCGCGAAGG  
TGTAATAATACGACCAAAAGTGGAGAGGACGTATTCCAGTTAAGATCCAACAGTTTTGCGAGAAGTTGAAAGCCAA  
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ATGATCAACCACCTGTTTCTGTCAGCAGCAATTTACTATTGCAAGCTGCTAAGGAAGTGTGAATTTTCTTAGAGC  
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ATCCTGCTCAATATAGTAGGCTGTAGTATTGAAGACAAGGCTTCTGATGGTGGTTGCATGCTCCAAGATGAGGGAA  
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ACTCTTCTATGTAGGCCGGGCTTGGCTGGGGCACAGTTGAGAGCCAAAATTTATGATGGTTTCGTTAGTTTTGTTA  
CCGAGAGAGCAAGAGGTATATGTGCTGAAGCTTTGAGTCTCAAGGAGTTGACTGCTTGTCTTCTTCTGCTTTCCA  
TATTGAGATTTCTTATGCTTTCCATTTATCAAATGAAGCTGAGAAGGCAAAATTTCTCAAATCTCATTGCTTCA  
TGTCTGCATAAAGTTGATACCCCGGCAGGAATATGTGATGGTCTCAGCTGTCTCTTGGGCAATGCTGATATCTA
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GGTTGTTAGTGCTGTTGCACCATATGTTGTTACATCCAAACACATGCCCAACATCATTAAATGCTAGATCTAAGGTC
TAAACTGAGGGAAGTTCGTAGCTGTGGTAGTAATTTACATGTAAGTGTGGTGATCATTATCTTCGTGGGCGTCT
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TGTTGCTGCAGCAGAAGGGTAGTCTCTTACTTGATGAAGACTGGTGATATGCAGAATTGCTGAGAATGCTTTCA
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ATAGTTCCGCTTCTCTGCTACTTCTCAAGCATACTCAATTTGGTAAAAGTCTCCAAGGTGAATATGCGAAGATTGG
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TTTCATGTATTCTAAGCATAAGATGCATTGTGCTGACAAATAAATGGCTTACTCAAACCTGGGTAACCTAAGGAGAA
GTTTGGGGTAGATACTAGTGTACTTTCATCAGCTACTTGTATCTATCATGATTATTAAGTTTGACCAGGTATTCGAA
AGCTTTCATGGGAAATGTGAGGAGATCCATCAAAATATATGTGCCGTGTTGCAGCTTCCAGATTTGACTGAGTTGT
TTCTGATGAAAGACATGGAGGGGTTTGTAAAGAGATATCAGTGTGAGCAGATAGATAGAAGCCAAGTCTGAAGG
GGTGATCACCAAGATTGTAGATGTTATGGACAGTCTAAGCAAGGATTCTTCGAAATCTGATATTTCAAATTTTAT
CTTGGTGTAGATGCAGTCTCTGAGCATAACCAGGGAATTTATGAGTTGCAACGTGGAGATCTGTCTGTGTTTATTG
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GAGAGGACGAATGAATTTTATTAATTTGCTTGTGTCTACTACTAACGACCTACAGACCAGAGAGTTACAGAATCA
TTTATTCGAGGCCTTGCTGATCTCCCTCGATACCGCGTTTTCTCTCATTGATATCCATATGTCTATGTCATATTTT
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AGCTTGTCTCCGAGGAGAAGTTGCTTCTGTTTTGAAGTTTATTTTTGGTGTGATAGGCACCTTGTGAGCAACCG
TTCTCCAAGTCATGGAGAGAGTTTGTGTGGAAGTCCCTGGCAAGCTATAAGAATACTGCAACAGGTCTTTGGTC
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TTGAATGCGATGTCACTTCTGTTGATGAAGATGAAGATGATGGAACATCTGATGGTGAAGTGGCCAGCTTAGACAA
GGAAGATGAAGAAGATGCCAACAGTGAGAGGTACCTTGCCTCAAAGTCTGCACTTTTACGTCCAGTGGCAGTAAT
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