

1 : TTCAAATGATGAACAGATGCATCTCAAGTCAGCACTAGACCATCTTCTAAAATAGGAAGAT : 62  
63 : CTATGGAAGCAACACTCCCAAATGCAGTGGCTTCAAATGGGGATTGCAATACGAAGTTTAT : 124  
125 : CCATGTTTGGGCAAGTAACAGGAAAAAAGAATACTATCACTGAACTCTAGCAAGGCGATCA : 186  
187 : GAAGATTATCGAATAGCAGCAAATCCAATCCACATTCTACAACCTTTTTTCTACCCTACTAG : 248  
249 : GCTCGACTGAGGAATGACTCATCCAAGCTGATTAGAAGATTCTTTATCCAGAAGGACCTCTG : 310  
311 : GATCTTGCTGACATTGAGTATCCATTTATGGAGAAAGAAATCCATGATACAGTGTATGACTT : 372  
373 : GGCTTTGGAAAAGTCA~~CCCGG~~ATGATATTTCCATTCTCCTTCTATATGCACCTTCTAGTGT : 434  
435 : ATCATCAAACATGACCTGATGAACCTACTGTAAAATCAGCTAATGTAGACCATCTGAACTAC : 496  
497 : TTGTTTCATCACCTTATCCAAAAAATAATGGTGTGTATTGAGTTAGAGACTTCAGGCCAA : 558  
559 : TAAGCCTGATTAATGGAGTAATAAAAAATTTCAA~~AACTCTATCGAAA~~AGGCTCTCACAG : 620  
621 : AAAATGAATTTGTTAATTTTATCCACAGAGCTTGCTTTCAACAAAGGAAGAAATATCTCTGA : 682  
683 : ATATTTTGTAATGACTATGGAACTATACACTTCTGCAAAGCTGAAGTACACAAGGATCTCA : 744  
745 : ATTATAAAGTCGACTTCGAGAAAGCTTTTGACAATGTGGATTGGAGCTTTCTATTGAAATTG : 806  
807 : CTATCCAGCACGGGGCTTTGATTCGAGGTGGTGTCAATGGATAGAATATCTGATTTATACAG : 868  
869 : CTAATTTCTCAGTCCTTATTAATGGTGATAAAGGTAAACTTTTTAAATTGAGGAAAGATCTC : 930  
931 : AGGCAAGGAGATCCTCTATTCGCTTAGCTCTTTCTCTTAGTTGTTGATATAGAATGATCAAG : 992  
993 : GGAGCAAGTAGGTTCAATCTTTTTGTTGGAATTGGATCATATAATATCATGGGATAACTTCA : 1054  
1055 : AAGCTTTTAGTTCACTGATGACACACTTATATTTGCGAGATATGATCTAAAATACATCAAAA : 1116  
1117 : CTCTTAAATTTTACTCTATAGTTATGAGCTACTGATGGGTCTCAAATTAACCTTTGAAAAA : 1178  
1179 : TTCCAATTTTTGGCTTGAGAATTGCAAAGATGTCA~~GTA~~CAGCAAGTTGCATCTATCCTAGA : 1240  
1241 : AAGCAAGGTGGCTACATTTTCCATTACTTATTTGGGTCTCCCACTCCATCATTCTAACTGA : 1302  
1303 : GGAAACTTATTGGAATCCACTCCTTGAGAAGGTTGAGAAGAAATTGATCGGGTAGAAAGGT : 1364  
1365 : AAACCTCTTAACCTCTAGGGTAGGCTTATACTAATAATGCAGTGCTTACAGGGATCCCACT : 1426  
1427 : ACTCTGGAGGGATACATTCCTTCTCCCTCAATTCATTATCAAATAAATTGATAAAATCCATC : 1488  
1489 : GATCATTCAATTTGGAGAGGAAACGAGGAGTATAACTAAGGGCACTCTAGAATATGTTGGTGC : 1550  
1551 : AATATTTGTCGATCAAAAAAATTTGGAGGACTGGGGGTTTCTCAATCTAAAAATTTTCAATA : 1612  
1613 : CAATTCTTCTTTGTAATGGTGGTGGAAAGCTCTACTCTAATGCTGGTGACCCGTTGGTGTAGT : 1674  
1675 : TTTATTGCCACTATCCACCAACTTCACACTAGAGATCTAAAGGTATACACAAATCAACCTC : 1736  
1737 : TTCATTTTGGAAATGGTTTACAGCACACATGAAATATTTCTACTCCTAATCCACTTTCAAGTT : 1798  
1799 : AGCAACTAGTATTATTTTGGAAAGATAGTTGGTTACATAATCATCCACTGAAGGATCGATTT : 1860  
1861 : CCTCACCTTTACACAATAGCATTGAAGTGCAACAACACTCAGTGGCAAAGGTATTAAGCAATCT : 1922  
1923 : ACTTGATAATAGCTCTTTTAGTACTCCTCTTCTCAAAGATACCAAGAAGATTTTTCAGAGTC : 1984  
1985 : TATAGGAAAGCATTGAACAAATTACATTAACGGAACGACCTGATACTATAACAATGGAAATGG : 2046  
2047 : TTTAGTAGCAATATTTTTTTGGCATGAAGGATCTACTATTTTCTGCAAGATGGAGGAGTTTG : 2108  
2109 : GCCTCTACTGAGTAATATTATATAAAAACTCCTAATACCAAAGAAAGCCAAGTTATTTGCTT : 2170  
2171 : GGCTAAGTGCTCACAACAAAATCCCAATGAAAGCTAATCTTCTTAATAGAGGAATAATTGGA : 2232  
2233 : ACTGATTACTGTACACTTTGCGATGACTTATCAGAAACTAATGATCATCTAATGCTCATCTA : 2294  
2295 : TACTTTTTCAAAGCAATTTGGAATCAAGTACTTTTCAGACCTGCAATTGTCGAAACTTTTAT : 2356  
2357 : GCATGCTTAACACCCTATGGGATACTTGGAGACTCATCAATATGCAACACGATAGAAGACCT : 2418  
2419 : AAACCTAGCTGCTCTATTTCGTAATTGGTCAATGGTGTCTTTGGAAGGAAAGAAATAAAGATT : 2480  
2481 : ATTCGACTTCTATACTTTTTATCCACGATCGATTGCTGAAACTGTGTCACTTTTTCTTTCTT : 2542  
2543 : GGGCATCACACCTAACAACGGAGCAACTAAAGATGTTAGCTCCTGTTTCGAGAAGTTCTCTTA : 2604  
2605 : TCTAAGAATGAAAACACACAATCTTTAGTGAGAATTACAGATGCTAACAGGCGCAGATGAAT : 2666  
2667 : GTTTTATGAGCATTTTTTATAGCTGCAGCTTATATGTGATCTATGGTGCAAGGAGTTAATTAT : 2728  
2729 : AACCATGGATATTAGTTAGGTTGACTATCAGAAATCATCTCCAATACATTCTATGTAACCAC : 2790  
2791 : TGATCAATTCATGTTCAACTAGATAGGAACCTGCCTATATACAGGTATGTCCCTGATGTAA : 2852  
2853 : CTATAGTATACTATTATTCATAAATAAATAACGAAGTTTTACCTTCTTCTCATAAAAAA : 2914  
2915 : AGTATCTTCATGTCATCTATATGTCATGCATCTCCTTTGCTACTTCTTTTATTTACTTCTT : 2976  
2977 : AAACCTGGTTCTACCATATATTATCAGCCCCTTTTAAATTTGCTTTTGGATATTGCATATTC : 3038  
3039 : CACTCTTCAATCACCTCATGCCAAGCAAACATTTTATTCACACTTGAAAACCAATATAAGAA : 3100  
3101 : TACCAAAGAATTTTCCATGAAATTTAGAACTTTGGTTTTACTCCTTTCTCCATCATTCA : 3162  
3163 : AAAAGGTTCAAATGATGA : 3181

**Supplementary Figure 1. Annotated *Karma* element DNA sequence.** The 13 bp direct repeats defining the boundaries of the *Karma* element are highlighted gray. The splice site (GAACAG<sup>^</sup>ATGC, where <sup>^</sup> precedes the splice acceptor site) is in green font. The *Karma* sequence included in the *kDEF1* transcript is italicized and in bold font. The region of homology to rice *Karma* (Genbank accession AB081316.2) is in red font. The *Bbv* I, *Rsa* I and *Scr* FI restriction sites used for quantitative PCR DNA methylation assays are highlighted in yellow, blue and green, respectively. CHG sites are underlined.