Supplementary Materials

**Table S1.** Unigenes and seguence of 10 primer pairs for qPCR analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| **Unigene ID** | **Forward Primer(5’–3’)** | **Reverse Primer(5’–3’)** | **Amplicon(bp)** |
| >Unigene66368\_All | GAAATCCTTCCACCCTGAA | AACCAACTCCCTAAGACGT | 184 |
| >Unigene12460\_All | TTACCCGACTAATACCTGATG | CTAAAGGGAACACGCAAA | 100 |
| >Unigene51456\_All | CAATCGCACTTGCTACTCG | CATCTCCACCACTTGACCC | 147 |
| >Unigene40270\_All | TGACGCTTATCAGAGGAA | GAGACCAAACGGCACTA | 149 |
| >Unigene31283\_All | GGATTCTGGCAGGTAAG | GAGACCAAACGGCACTA | 99 |
| >CL2750.Contig1\_All | CAAGGTCCTAGCATCCG | CAAGTCCACAAGGCTCATA | 112 |
| >CL12336.Contig8\_All | TTGCAGTAACCTCCATTGATA | GGCAGTGTAGGCAGAAACA | 233 |
| >CL12336.Contig40\_All | CTGGAAGTGAAACGGAATG | CTGCTTCTAATCGCTCTATCC | 157 |
| >CL2750.Contig2\_All | TGTATGAGCCTTGTGGACTT | CCAATGCACGGTTTAGAG | 192 |
| >CL12336.Contig5\_All | CCAAGCCCTGGATGAAA | GGCAGTGTAGGCAGAAACA | 124 |
| 18S(REF) | CAACCATAAACGATGCCGA | AGCCTTGCGACCATACTCC |  |

Note: The red letters indicate upregulated genes, and the green letters indicate downregulated genes.

**Table S2.** Statistical analysis of transcriptome sequencing of *Castanea mollissima* BL.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Samples** | **Total Raw Reads (Mb)** | **Total Clean Reads (Mb)** | **Q30 Percentage (%)** | **Total Number** | **N50 (bp)** | **Mean (nt)** |
| I-YF1-1 | 51.21 | 49.70 | 93.97% | 72,222 | 1,586 | 792 |
| I-YF1-2 | 50.67 | 49.15 | 93.79% | 65,220 | 1,692 | 848 |
| I-YF1-3 | 48.62 | 46.75 | 93.98% | 66,875 | 1,508 | 738 |
| I-YRZ-1 | 47.82 | 46.36 | 94.15% | 78,398 | 1,568 | 770 |
| I-YRZ-2 | 48.88 | 47.43 | 93.93% | 76,476 | 1,525 | 752 |
| I-YRZ-3 | 50.43 | 48.99 | 93.93% | 77,196 | 1,546 | 755 |
| II-YF1-1 | 47.91 | 46.36 | 94.32% | 84,244 | 1,626 | 791 |
| II-YF1-2 | 49.70 | 48.25 | 94.44% | 75,758 | 1,516 | 744 |
| II-YF1-3 | 48.15 | 46.90 | 94.28% | 70,129 | 1,524 | 743 |
| II-YRZ-1 | 44.82 | 43.51 | 94.07% | 71,588 | 1,598 | 782 |
| II-YRZ-2 | 49.31 | 47.87 | 94.19% | 76,82 6 | 1,569 | 764 |
| II-YRZ-3 | 50.64 | 49.16 | 94.25% | 78,768 | 1,610 | 778 |
| III-YF1-1 | 48.40 | 46.43 | 92.92% | 73,249 | 1,525 | 728 |
| III-YF1-2 | 49.88 | 47.87 | 93.80% | 67,921 | 1,430 | 706 |
| III-YF1-3 | 51.68 | 49.60 | 93.76% | 56,725 | 1,404 | 705 |
| III-YRZ-1 | 48.84 | 46.98 | 93.59% | 89,528 | 1,583 | 743 |
| III-YRZ-2 | 51.72 | 49.66 | 93.33% | 93,487 | 1,525 | 710 |
| III-YRZ-3 | 48.51 | 46.71 | 93.73% | 81,476 | 1,623 | 784 |
| All | - | - | - | 18,1998 | 2,555 | 1,604 |

Note: I, II and III represent the three sampling periods (July 20, August 01, and August 13, 2017, respectively).