|  |  |
| --- | --- |
| **Primer** | **Sequence (5’ to 3’)** |
| *Orca2\_F* | GAAATTCGCTGCGGAAATCAGGGA |
| *Orca2\_R* | AGATGACACGATGAAGATCGGCGT |
| *Orca3\_F* | TGTCAGGAGGATTCTGTTGTGGGA  |
| *Orca3\_R* | CGCATATTAAACGCGGCTGCATCA  |
| *Zct1\_F* | AATCTTTAGCGGTGACGAAGCCGA  |
| *Zct1\_R* | CGTTGTCCTCAGGCGTCAAATTCA  |
| *Zct2\_F* | TTTCCATCGTTTCAAGCTCTCGGC |
| *Zct2\_R* | ATTACCGGACGCCGAATCACTCAT |
| *Zct3\_F* | CAGCAACAACAACCCACCGAAGAA |
| *Zct3\_R* | TTGCCTTATGTCCTCCGAGTGCTT |
| *Tdc\_F* | ACCTACGACCGTCGAAACGGATTT |
| *Tdc\_R* | AAACTCGGGACATATACAGGCGCT |
| *Str\_F* | GCTAGAAGGGCCAAAGAA |
| *Str\_R* | GGTGGTGGAAGTGGTATAA |
| *G10h\_F* | TAGCAGGGACGGACACAACATCAA |
| *G10h\_R* | TCACGTCCAATTGCCCAAGCATTC |

S4 Table: Primer sequences used for qPCR analysis of *C. roseus* transcription factor and TIA biosynthetic genes. *Orca* and *Zct* primers were previously described in [8]. *Tdc* and *G10h* primers were previously described in [9]. *Str* primers are newly designed.

8. Goklany S, Rizvi NF, Loring RH, Cram EJ, Lee-Parsons CWT (2013) Jasmonate-dependent alkaloid biosynthesis in *Catharanthus roseus* hairy root cultures is correlated with the relative expression of *Orca* and *Zct* transcription factors. Biotechnology Progress 29: 1367-1376.

9. Goklany S, Loring RH, Glick J, Lee-Parsons CWT (2009) Assessing the limitations to terpenoid indole alkaloid biosynthesis in *Catharanthus roseus* hairy root cultures through gene expression profiling and precursor feeding. Biotechnology Progress 25: 1289 - 1296.