

Table S1 PCR primers used in this study.

| Primer name | Primer sequence* | Use |
|-------------|-------------------------------------|---|
| ZmSCE1a-QF | 5'-CCGCACGGTTTCGTCGCA-3' | qPCR for <i>ZmSCE1a</i> expression |
| ZmSCE1a-QR | 5'-CGAAAGACAGACTGTTCCAGAAGGATAG-3' | |
| ZmSCE1b-QF | 5'-GGCAAGCAAGGGACTGAC-3' | qPCR for <i>ZmSCE1b</i> expression |
| ZmSCE1b-QR | 5'-GCTGGTCTCCAACCACTG-3' | |
| ZmSCE1c-QF | 5'-TGTTAAGCAGATTCTAGTTGGAATACAA-3' | qPCR for <i>ZmSCE1c</i> expression |
| ZmSCE1c-QR | 5'-GAACACGTCGCTTATATTCTGTT-3' | |
| ZmSCE1d-QF | 5'-CAGGAACACGTCGCTTATATTCTGC-3' | qPCR for <i>ZmSCE1d</i> expression |
| ZmSCE1d-QR | 5'-TCTGCCTCTCAATTCTGAAC-3' | |
| AtRD22-QF | 5'-ATGGCGATTTCGCTTCTCTGATC-3' | qPCR for <i>AtRD22</i> expression |
| AtRD22-QR | 5'-ACTCCGCCTTACCTACTTGGACG-3' | |
| AtKIN1-QF | 5'-ATGTCAGAGACCAACAAGAATGCC-3' | qPCR for <i>AtKIN1</i> expression |
| AtKIN1-QR | 5'-CTACTTGTTTCAGGCCGGTCTTG-3' | |
| AtRAB18-QF | 5'-ATGGCGTCTTACCAGAACCCTCCA-3' | qPCR for <i>AtRAB18</i> expression |
| AtRAB18-QR | 5'-ACCACCACTTTCCTTGTGGAGTTG-3' | |
| AtADH1-QF | 5'-ATGTCTACCACCGGACAGATT-3' | qPCR for <i>AtADH1</i> expression |
| AtADH1-QR | 5'-CGAGTGGCAATGACGCACTC-3' | |
| AtCOR15-QF | 5'-CTTCTTTCCACAGCGGAGCCA-3' | qPCR for <i>AtCOR15</i> expression |
| AtCOR15-QR | 5'-GATGTTGCCGTACCTTTAGCG-3' | |
| AtP5CS1-QF | 5'-TCGTGGTCCAGTCGGGGTCG-3' | qPCR for <i>AtP5CS1</i> expression |
| AtP5CS1-QR | 5'-TGGGAATGCCTGATGGGTGTA-3' | |
| ZmSCE1d-F2 | 5'-AGGAATTCATGTCTGGAGGGATCGCG-3' | Construction of <i>ZmSCE1d</i> over-expression vector |
| ZmSCE1d-R2 | 5'-ACAAGCTTTCAGACCAGAGCAGGATATTG-3' | |
| ZmDREB2A-QF | TGCAGCCCGGAAGGAAG | qPCR for <i>ZmDREB2A</i> expression |
| ZmDREB2A-QR | TTGAGTATTGTCAGGCCCCC | |
| AtActin2-F | 5'-TTGTGCTGGATT CTGGTGATGG-3' | qPCR for <i>AtActin2</i> expression |
| AtActin2-R | 5'-CCGCTCTGCTGTTGTGGTG-3' | |

*The underlined nucleotides constitute *EcoRI* (GAATTC) and *HindIII* (AAGCTT) restriction enzyme digestion sites.