

## Supplementary Data

**Table S1:** Primers used for amplification of genes in the study.

| Primers                                  | Direction | Sequences                                |
|------------------------------------------|-----------|------------------------------------------|
| LsOSC1 for yeast and tobacco expression  | Forward   | 5'-ATG TGG AAG CTC AAA ATA G-3'          |
|                                          | Reverse   | 5'-GGA GTT TAG TTT TCT TGT TT-3'         |
| LsSTAT1 for yeast and tobacco expression | Forward   | 5'- CGT GCT TAT AGA ATT ATC GAT TT-3'    |
|                                          | Reverse   | 5'- ATA AAT GTG TGT TCT CTT TTC AT-3'    |
| XM023877741.                             | Forward   | 5`- CGG TCC TAC CTC TTT CTT CGT A-3`     |
|                                          | Reverse   | 5`- TCG TCG GAT TTT CCA TCT TGA G-3`     |
| XM023886997.1                            | Forward   | 5`- TCA AAC TGC TGT TGT ATG CGT-3`       |
|                                          | Reverse   | 5`- AGA TTT TCC TTC TGA TCG GCG-3`       |
| XM023884745.1                            | Forward   | 5`- TTC AAC ATC GGT GAT GGA AAT GG-3`    |
|                                          | Reverse   | 5`- TTG TTC TCG AAA CCT TTC AAC TTG T-3` |
| XM023879520.1                            | Forward   | 5`- CCG CTG TTT TCA CGA CGT TT-3`        |
|                                          | Reverse   | 5`- GGG GCT TAA ACT GAC GAC CA-3`        |
| XM023879494.1                            | Forward   | 5`- CCG CTG TTT TCA CGA CGT TT-3`        |
|                                          | Reverse   | 5`- GGG GCT TAA ACT GAC GAC CA-3`        |
| XM023872407.1                            | Forward   | 5`- TTT GGC TTT CGT GTT GGC AA-3`        |
|                                          | Reverse   | 5`- TAC TGG CGT AGT TCG TAC CAC-3`       |
| XM023887114.1                            | Forward   | 5`- AAA TAG GAC CCC TTT CCG CC-3`        |
|                                          | Reverse   | 5`- CCA AGC GAT CAT GGG GTG TA-3`        |
| XM023885793.1                            | Forward   | 5`- TTG AGC TCG TTC TCG CGA T-3`         |
|                                          | Reverse   | 5`- TAC ACA GTA GGC CGG AGG AT-3`        |
| XM023888915.1                            | Forward   | 5`- CAA GGC CCA CTT TAT CCC TCT-3`       |
|                                          | Reverse   | 5`- ACT AGT GCA CAG TAG ATG CCT-3`       |
| XM023885785.1                            | Forward   | 5`- TCC GAT CAT AAA TGG GCC CC-3`        |
|                                          | Reverse   | 5`- ACC AGC CAG ATT GCT CTT GA-3`        |
| $\beta$ -Actin                           | Forward   | 5'- CGG AAT TGT CAG CAA CTG GG -3'       |
|                                          | Reverse   | 5'- CTT CAG TGA GAA GAA CAG GGT GT-3'    |