

Supplementary Table 1s. Sequences of primers used in all experiments

| Primer ID | Primer sequence (5'-3') | Purpose |
|-------------------|--------------------------------------------------------|------------------------------------------------------|
| m005-F | GGATTCAGCAGAACTTAGTAAC | |
| m005-R | AATCAACCTGGATTTGTGTGAGC | |
| m006-F | CCACGTTGTTTTGAGAATTTTCGTT | |
| m006-R | GCATTTTAACGTTCAAATATGCCC | |
| m007-F | CATTTGAACTTATGCCCTGGCCTA | |
| m007-R | TCTCTTGGTTCTCTAAATTTACCG | |
| m009-F | CCTCAGCATGACAATGGAACAGT | |
| m009-R | TAAGTAAGTTGGCTCATTCTGTGC | |
| m015-F | TGGGAATTAGGTATGAAGTTACA | Linkage mapping |
| m015-R | ATCATTAGACCATGGCACTC | |
| m016-F | GAGTTCTTTAACAGAGGATGTTG | |
| m016-R | GAGTTTCAACTCAAGTTGAACAC | |
| m017-F | CTTCTTC GCATCCAAGGTAAT | |
| m017-R | TGATAAGAGGGCAATGACCAA | |
| m018-F | TCA TCAAACACTTTCGCGGAC | |
| m018-R | TGGGCGTATTCTTGTGGCAA | |
| m021-F | TCTATTTTTTTTGGGCATCTTTGCAGCTAGTAAATTTTTCTCTCTCTCCGAATT | |
| m021-R | AAAGCAACTTGACTCTTTTGGTGTACCT | Association analysis |
| m022-F | TATTAAGTTCATGATGTTTCATGTTTCCAATACAGATGAGGCAAAAATA | |
| m022-R | AATAGAGCTCATGCAAAAAGAGGGTA | |
| TAGL1-Pro-F* | TGTAGGGGTCACAAGTCACAACC | Sequence analysis of <i>TAGL1</i> promoter |
| TAGL1-Pro-R* | AGTAATTCCTGATTAATAGGAAAAACCAT | |
| TAGL1-CDS-F* | ATGGTTTTTCTATTAATCAGGAATTACT | Sequence analysis of <i>TAGL1</i> cDNA coding region |
| TAGL1-CDS-R* | TTCTGAAGATGAAGAGCCTTGACC | |
| TAGL1-SNP1-F* | GGTTCTAAACTTGTGGAGTACGAT | |
| TAGL1-SNP1-R* | TTTGGTGTACCTGAAACCCTAATCT | Sequence analysis of SNPs in <i>TAGL1</i> intron |
| TAGL1-SNP2-F* | TAGAGTCCGTTCCAAAAAGGTAAATA | |
| TAGL1-SNP2-R* | CTCAATCTCCTGTCAAGTGATAAGAT | |
| TAGL1-F* | AGCAAATGAACTTGATGCCTGG | |
| TAGL1-R* | GACGAGAGTAATGAGGATTTGGTTC | qRT-PCR of <i>TAGL1</i> |
| <i>SlActin</i> -F | CCTCAGCACATTCCAGCAG | |
| <i>SlActin</i> -R | CCACCAAACCTTCTCCATCCC | |

Asterisk means primers described previously (Liu et al., 2020).