

Genome-Wide Expression Profiling Analysis of Kiwifruit *GolS* and *RFS* Genes and Identification of *AcRFS4* Function in Raffinose Accumulation

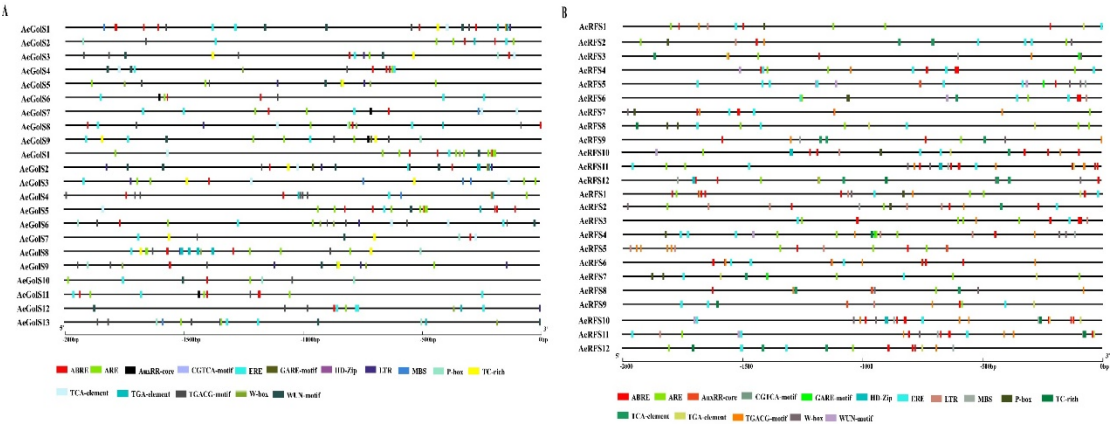
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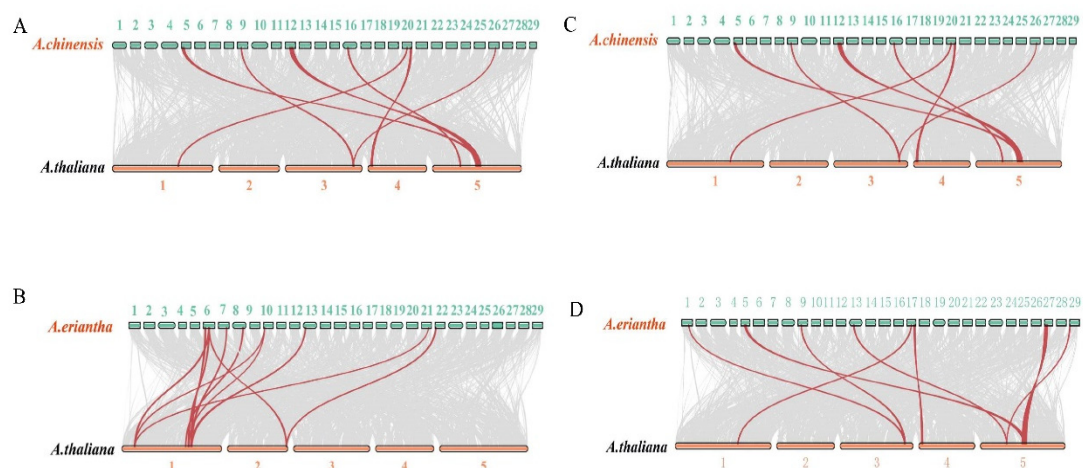
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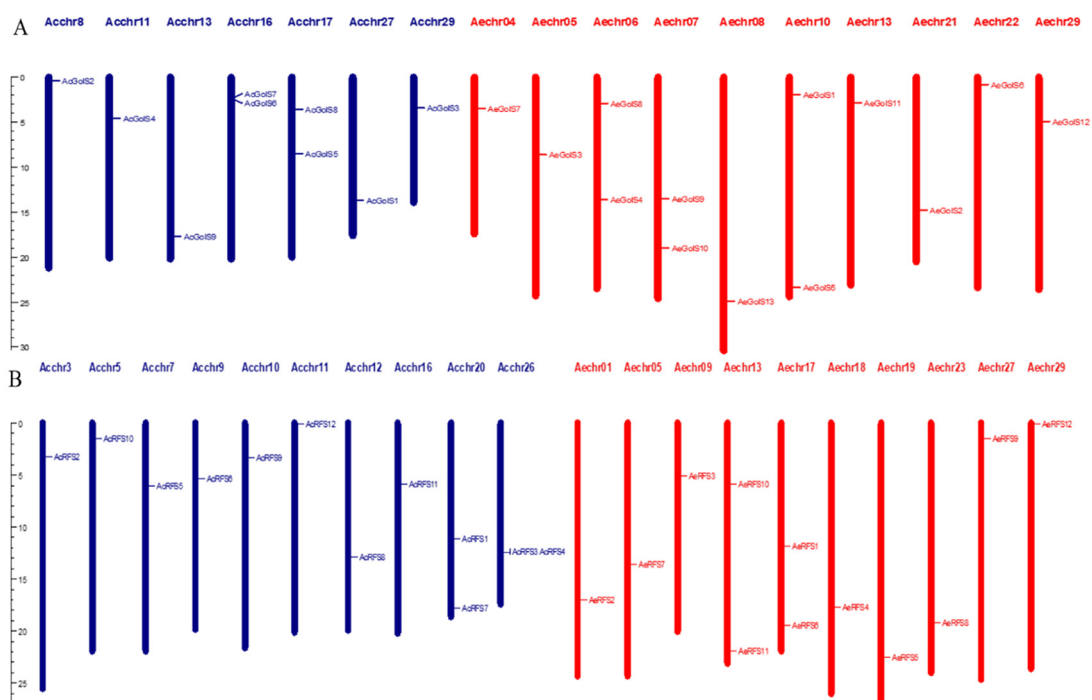
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Supplementary Figure S1. Predicted cis-elements in the promoter regions of *GolS* and *RFS* genes in kiwifruit, which were presented as colored rectangular: ABA responsive element (ABRE), anaerobic responsive element (ARE), auxin responsive element (TGA-element, AuxRR-core), gibberellin responsive element (GARE-motif), ethylene responsive element (ERE, GCC-box), low-temperature-responsive element (LTR), MYB binding site (MBS), defense and stress-responsive element (TC-rich repeats), salicylic acid responsive element (TCA-element), jasmonic acid responsive element (TGACG-motif), wound-responsive element (WUN-motif), endosperm development (P-box), and WRKY binding site (W-box). The numbers on the top indicate the relative positions to the start codon. A Predicted cis-elements in the promoter regions of *GolS* genes in *A. chinensis* and *A. eriantha*; B Predicted cis-elements in the promoter regions of *RFS* genes in *A. chinensis* and *A. eriantha*.



Supplementary Figure S2. Synteny analysis of *GolS* and *RFS* genes between kiwifruit and *A. thaliana*; A Synteny analysis of *AcGolS* genes between *A. chinensis* and *A. thaliana*; B Synteny analysis of *AcRFS* genes between *A. chinensis* and *A. thaliana*; C Synteny analysis of *AeGolS* genes between *A. eriantha* and *A. thaliana*; D Synteny analysis of *AeRFS* genes between *A. eriantha* and *A. thaliana*. The chromosome number is marked upon each chromosome. Gray lines in the background indicate the collinear blocks within kiwifruit and *A. thaliana*, while the red lines highlight the syntenic *GolS* and *RFS* gene pairs.



Supplementary Figure S3. Chromosomal locations of *GolS* and *RFS* genes on kiwifruit. A Chromosomal locations of *GolS* genes in *A. chinensis* and *A. eriantha*; B Chromosomal locations of *RFS* genes in *A. chinensis* and *A. eriantha*; The chromosome number is marked upon each chromosome.