

Supplemental Figure

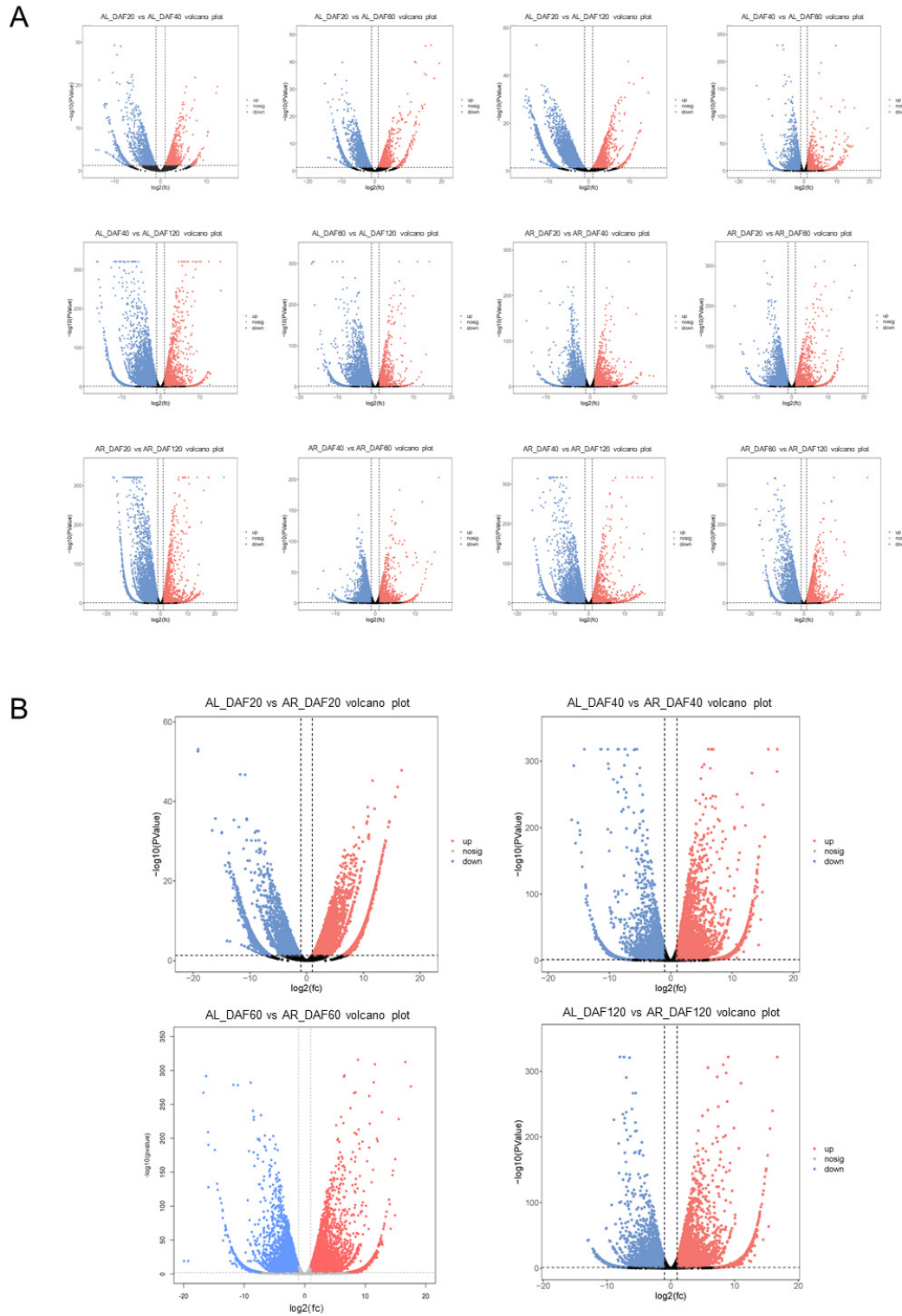


Figure S1 Volcano plots depicting differentially expressed genes. (A) Volcano plots of DEGs of the same kiwifruit species at different developmental stages. (B) Volcano plots of DEGs in different kiwifruit species at the same developmental stage. In each plot, the X-axis shows the log base 2-fold change, and the Y-axis indicates the adjusted p values for differences in expression. Red dots, blue dots and grey dots equate to upregulated, downregulated and nonsignificant, respectively.

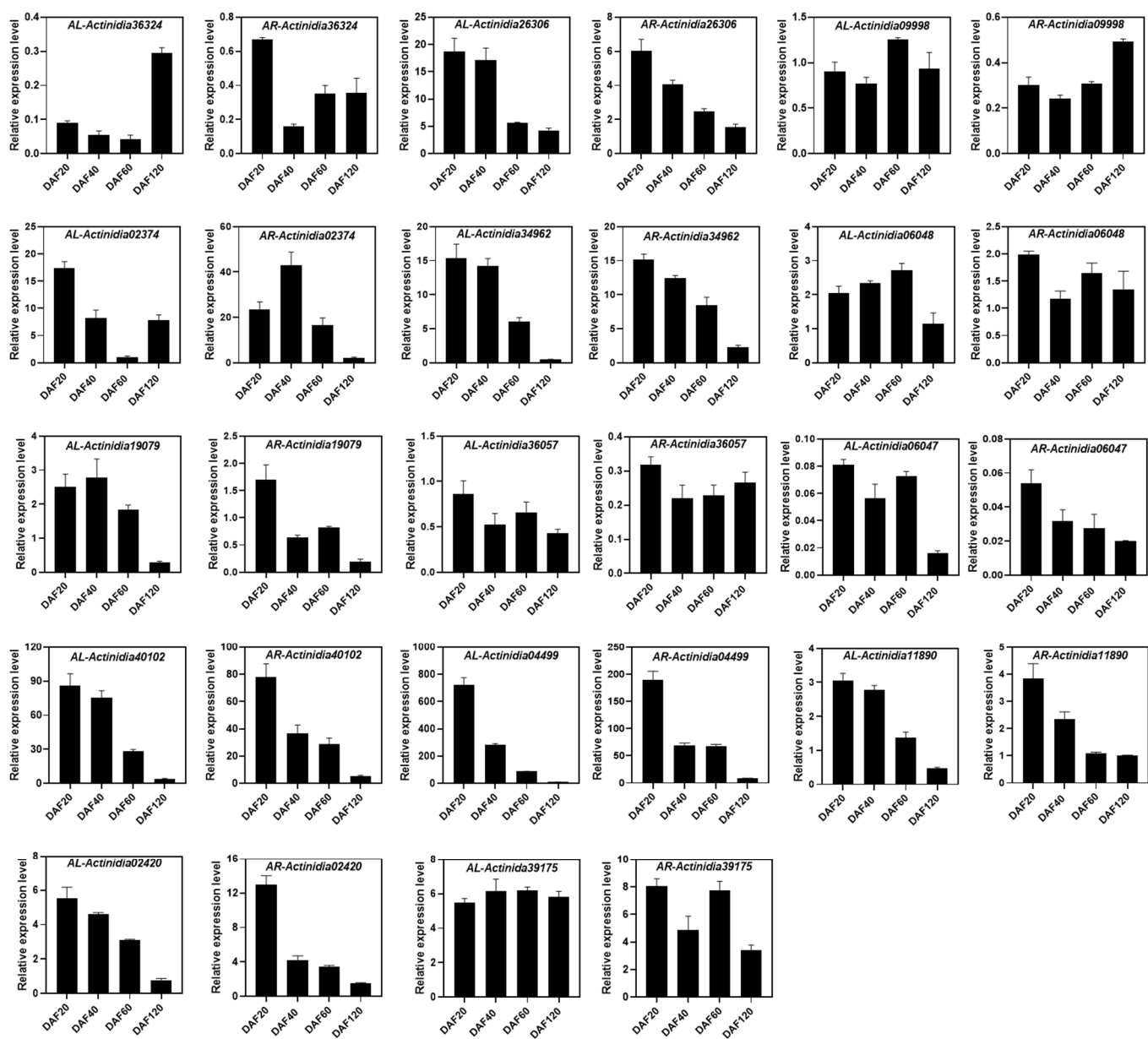
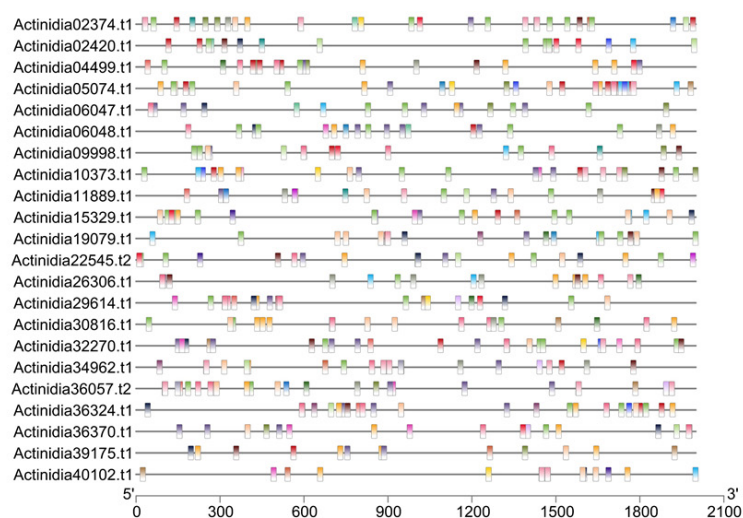


Figure S2 The expression level of genes of L-galactose pathway determinate by Real-time quantitative PCR during different developmental stages of *A. latifolia* and *A. rufa*.

A



- part of a light responsive element
- cis-acting regulatory element related to meristem expression
- cis-acting regulatory element involved in light responsiveness
- MYB binding site involved in drought-inducibility
- part of a module for light response
- cis-acting element involved in cell cycle regulation
- MYB binding site involved in light responsiveness
- cis-acting regulatory element essential for the anaerobic induction
- part of a conserved DNA module involved in light responsiveness
- cis-acting regulatory element involved in the MeJA-responsiveness
- cis-acting element involved in low-temperature responsiveness
- cis-regulatory element involved in endosperm expression
- cis-acting regulatory element involved in circadian control
- cis-acting element involved in the abscisic acid responsiveness
- MYB binding site involved in flavonoid biosynthetic genes regulation
- light responsive element
- gibberellin-responsive element
- MYBHv1 binding site
- cis-acting element involved in salicylic acid responsiveness
- cis-acting element involved in defense and stress responsiveness
- auxin-responsive element
- enhancer-like element involved in anoxic specific inducibility
- cis-acting element involved in gibberellin-responsiveness
- cis-acting regulatory element involved in zein metabolism regulation
- element involved in differentiation of the palisade mesophyll cells
- part of a light responsive module
- part of an auxin-responsive element
- wound-responsive element
- cis-acting regulatory element involved in seed-specific regulation
- binding site of AT-rich DNA binding protein (ATBP-1)
- cis-acting regulatory element involved in auxin responsiveness
- cis-acting element involved in light responsiveness

B

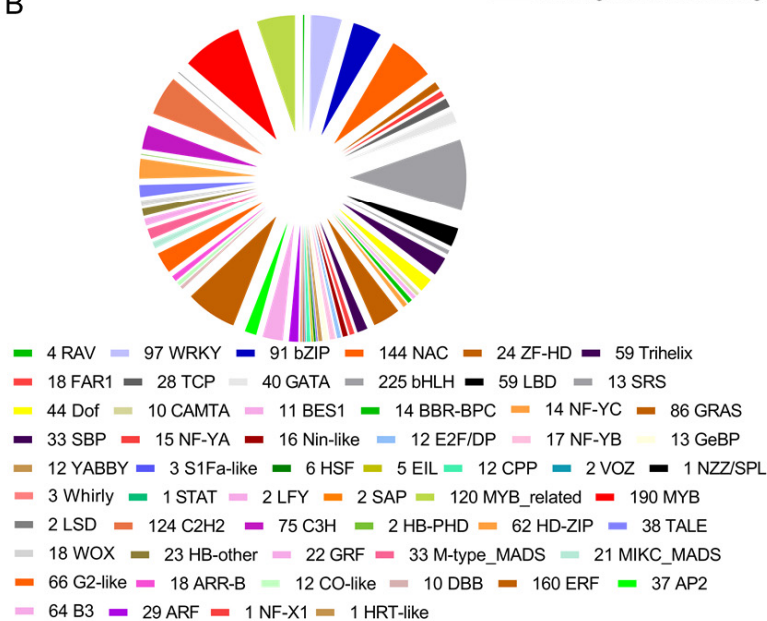


Figure S3. Prediction of cis-acting elements (A) of related gene promoters and related transcription factors (B) in the L-galactose pathway.

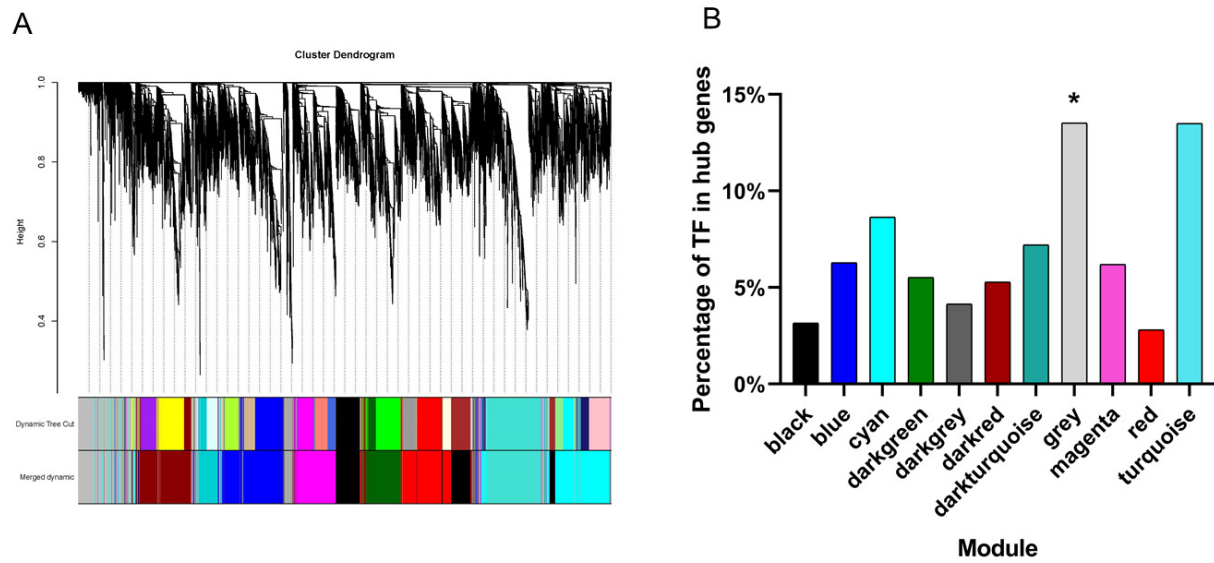


Figure S4 Coexpression network during kiwifruit development. **(A)** Weighted gene coexpression network analysis (WGCNA) analysis of RNA sequencing (RNA-seq) data from different stages of kiwifruit development. **(B)** The abundance of transcription factors of hub genes in different modules was analysed.

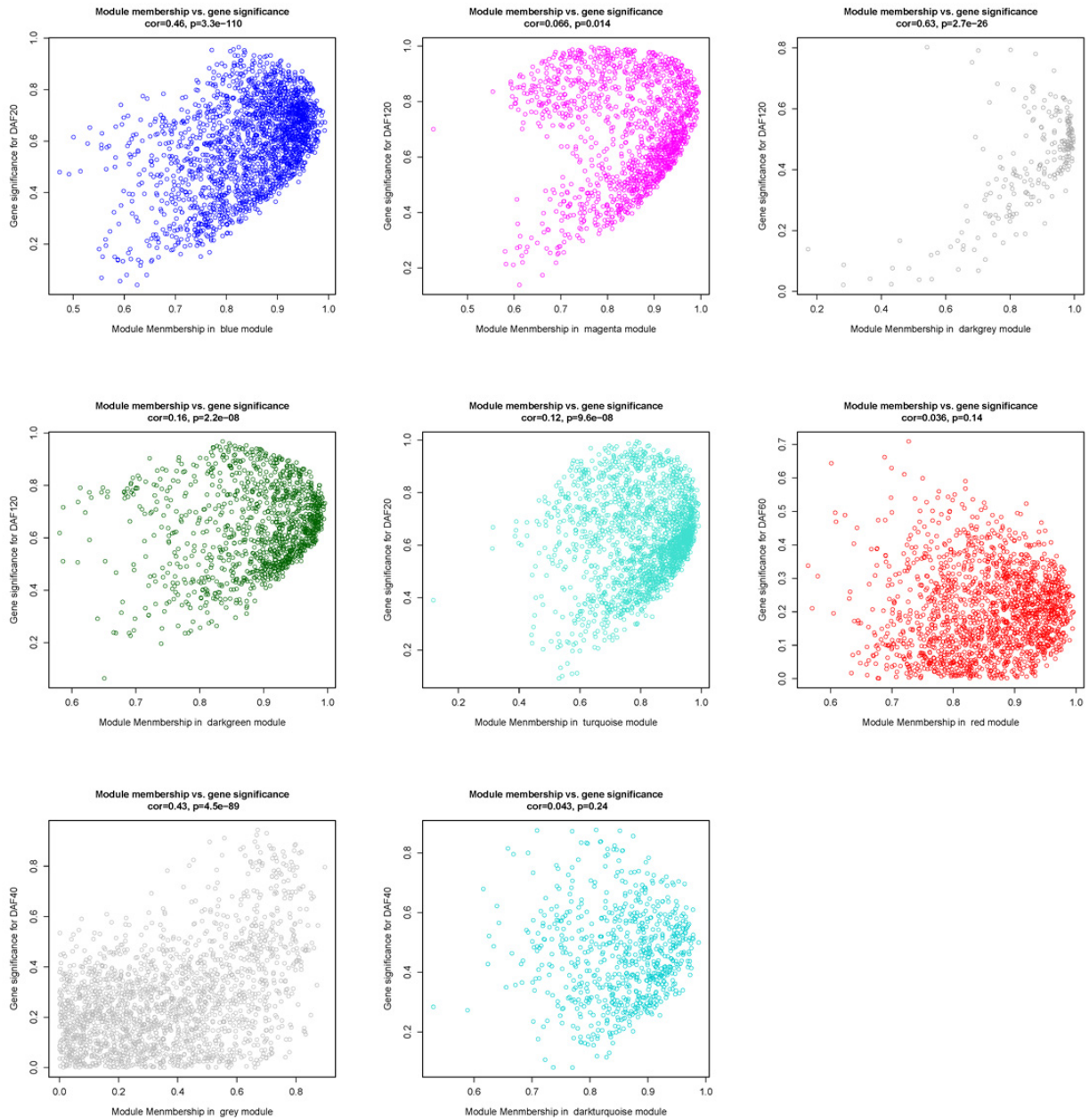


Figure S5 The significance of genes in each module at different developmental stages and the correlations of genes in each module were analysed.

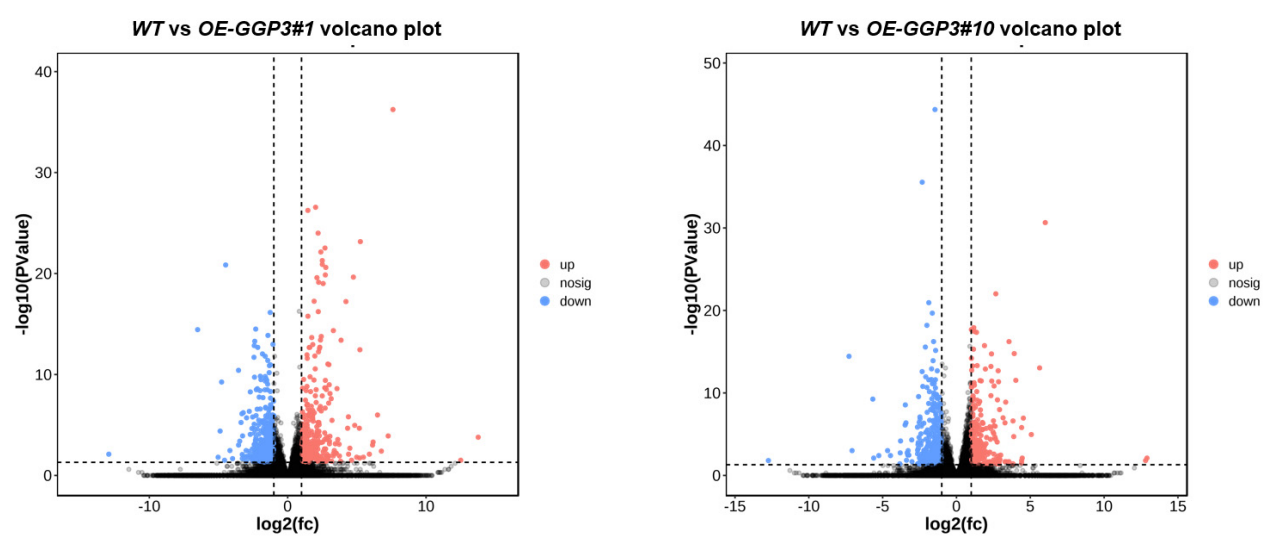


Figure S6 Volcano plots depicting differentially expressed genes between wild-type (WT) and AcGGP3-overexpressing transgenic lines.