

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: List of differentially expressed genes (DEGs) in SIMBP3-KO locular tissue vs WT locular gel at 10-DPA stage identified by RNA-seq.

File Name: Supplementary Data 2

Description: List of differentially expressed genes (DEGs) of SIMBP3-OX fruit vs WT fruit at 10-DPA stage by RNA-seq.

File Name: Supplementary Data 3

Description: List of 524 DEGs associated with transcription factor genes in SIMBP3-KO locular tissue at 10-DPA stage.

File Name: Supplementary Data 4

Description: List of total peaks (2363) enriched by ChIP-seq in SIMBP3-GFP fruit at 10-DPA stage.

File Name: Supplementary Data 5

Description: List of 1081 genes defined by ChIP-seq as putative targets of SIMBP3.

File Name: Supplementary Data 6

Description: List of 450 genes defined by ChIP-seq as putative direct targets of SIMBP3 and identified as DEGs by RNA-seq.

File Name: Supplementary Data 7

Description: Cell wall-related DEGs being putative targets of SIMBP3.

File Name: Supplementary Data 8

Description: Transcription factor genes being putative targets of SIMBP3.

File Name: Supplementary Data 9

Description: List of differentially expressed genes (114 GEGs) related to cell cycle and cell division in SIMBP3-KO locular tissue at 10 DPA stage as defined by RNAseq.

File Name: Supplementary Data 10

Description: List of 20 cell cycle and cell division related genes differentially expressed in SIMBP3-KO locular tissue was cross-referenced with putative SIMBP3 targets as defined by ChIP-seq analysis.

File Name: Supplementary Data 11

Description: Primers used in this study.