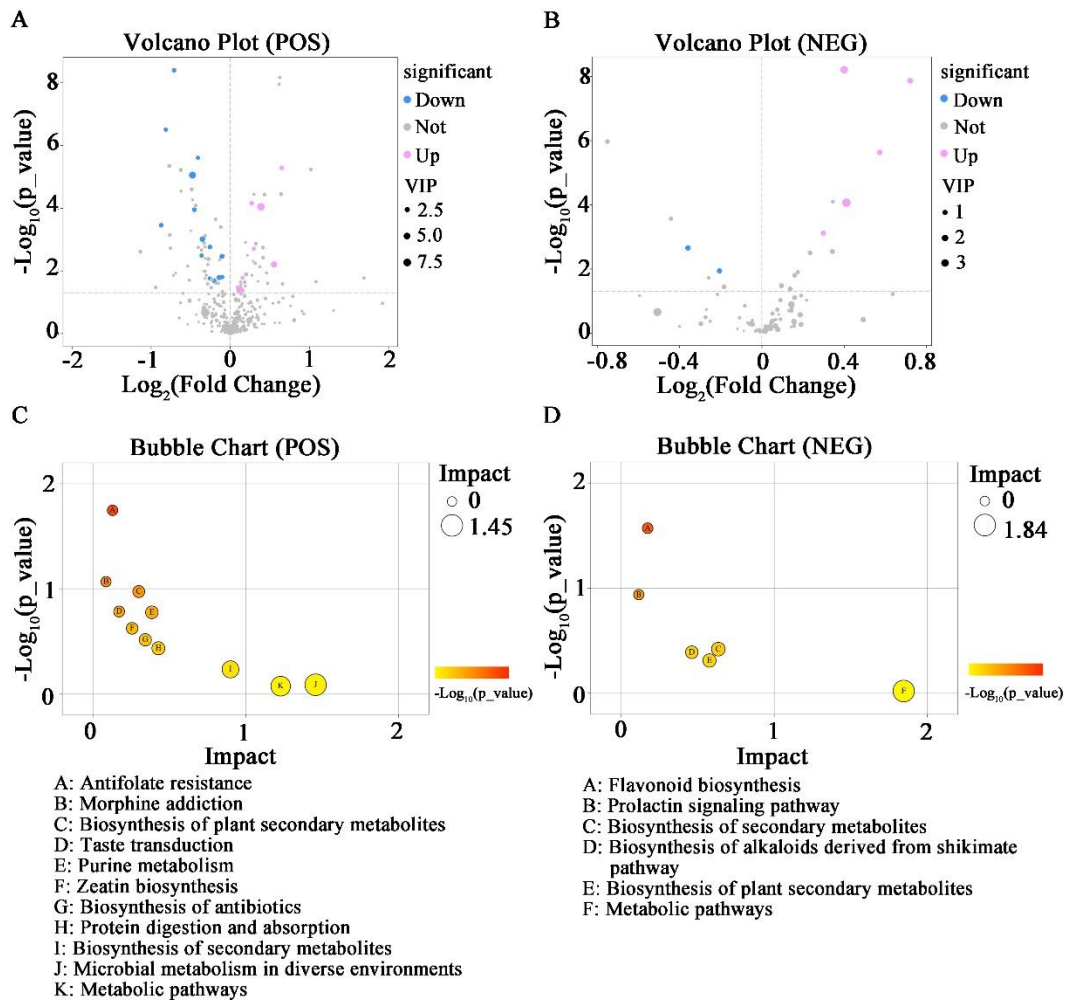**Supplementary Figure 1 Principal component analysis (PCA) and orthogonal projections to latent structures-discriminant analysis (OPLS-DA) of all samples.**

Supplementary Figure 2 Statistical and KEGG-enrichment analyses of different metabolites in strawberry receiving white- and red-light treatments. (A) Statistical analyses of differentially expressed metabolites in positive detection mode. (B) Statistical analyses of differentially expressed metabolites in negative detection mode. (C) KEGG enrichment analyses of the differentially expressed metabolites (POS). (D) KEGG enrichment analyses of the differentially expressed metabolites (NEG).
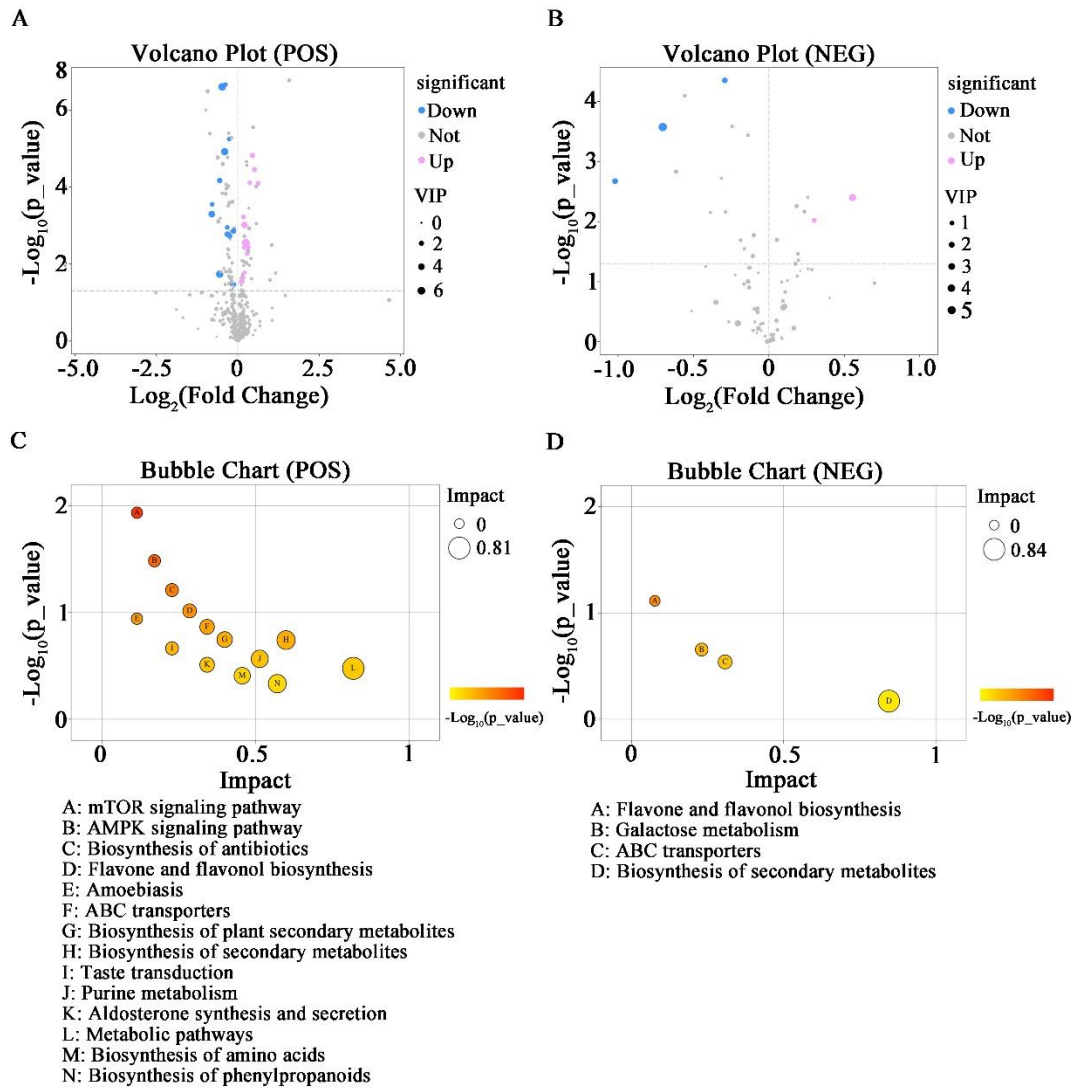
Supplementary Figure 3 Statistical and KEGG-enrichment analyses of different metabolites in strawberry receiving white- and blue-light treatments. (A) Statistical analyses of differentially expressed metabolites in positive detection mode. (B) Statistical analyses of differentially expressed metabolites in negative detection mode. (C) KEGG enrichment analyses of the differentially expressed metabolites (POS). (D) KEGG enrichment analyses of the differentially expressed metabolites (NEG).
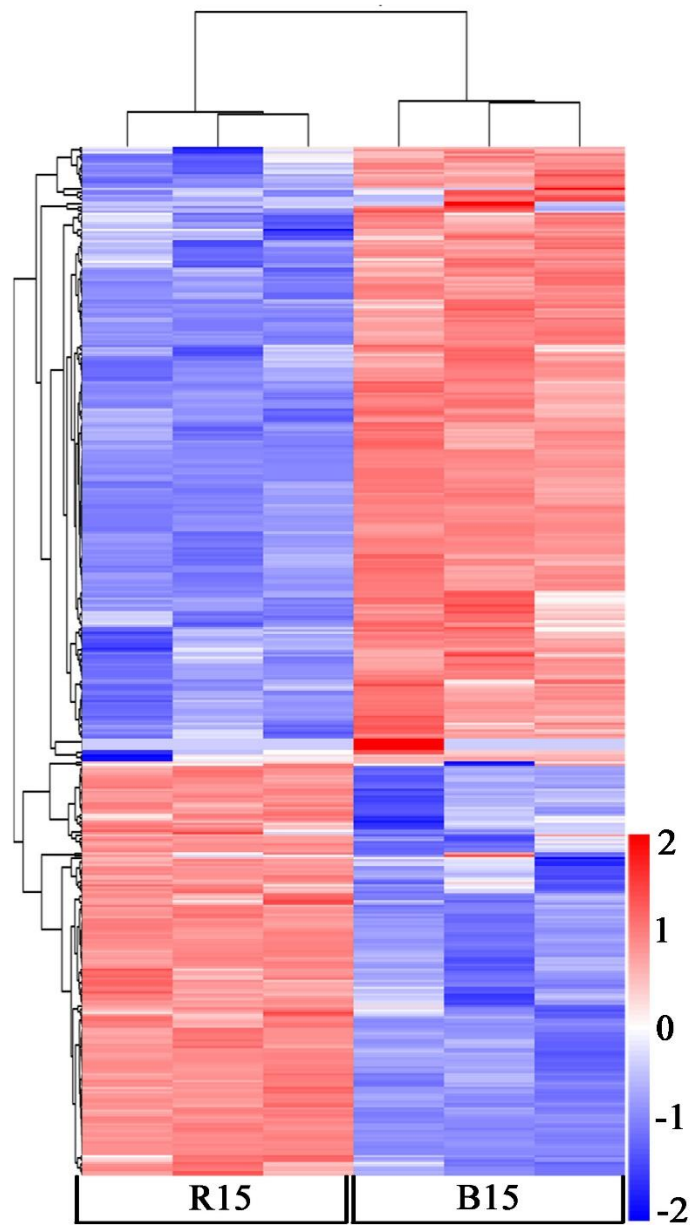
Supplementary Figure 4 Hierarchical cluster-based heat map of differentially expressed genes (DEGs) receiving blue and red light treatment.
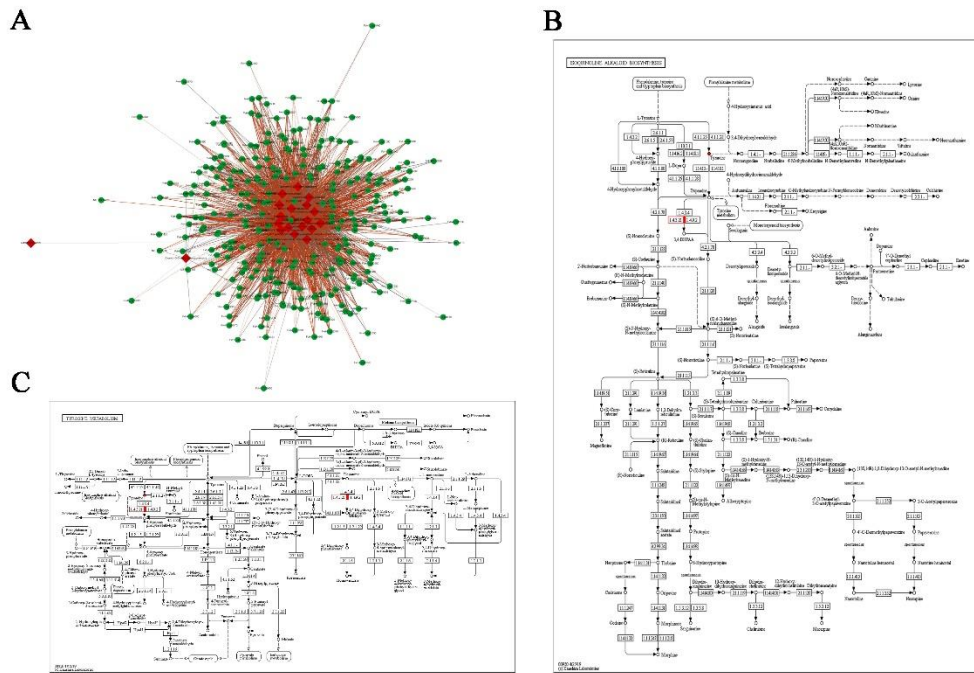
Supplementary Figure 5 The netwok_plot of DEMs (Positive detection mode) and DEGs. The grey line indicates negative correlation, red line indicates positive correlation; ellipse represents DEGs and square represents DEMs. (B) A detailed diagram of isoquinoline alkaloid biosynthesis. (C) A detailed diagram of tyrosine metabolism. Enzymes and metabolites with enhanced expression during the blue-light treatment are shown in red.
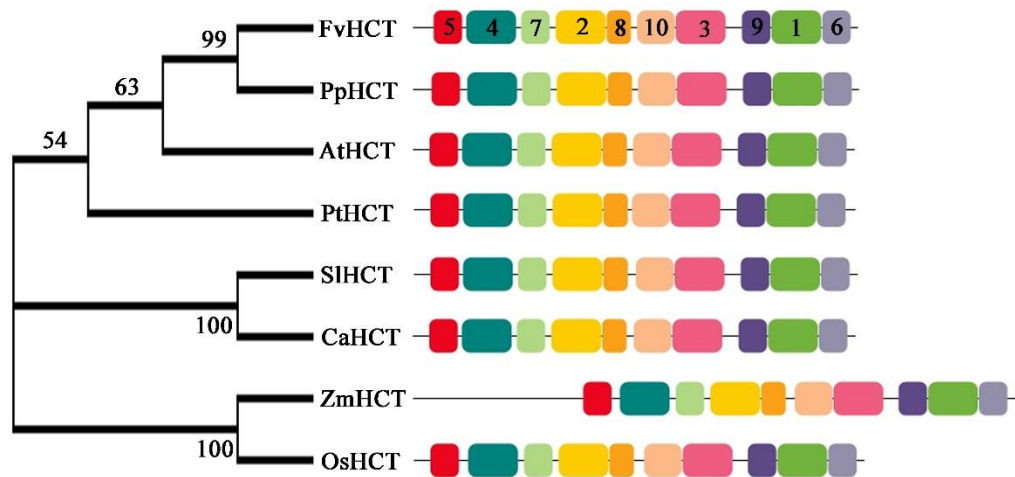
Supplementary Figure 6 Evolutionary analysis of HCT proteins in strawberry.

Phylogenetic and motif analyses of HCT proteins. The phylogenetic tree was constructed using the full-length HCT protein sequences. The protein motifs are denoted by different colored rectangles. To distinguish the different motifs, the10 motifs are indicated by the numbers 1–10.