



Supplementary figure 14. *Gastrodia elata* is utilized in depicting various phenotypes within the chlorophyll biosynthesis pathway, with each phenotype represented by distinct colors and consisting of three biological replicates. The heatmap located on the right side of the pathway illustrates the expression values of corresponding genes. Gene identifiers within the genome are situated on the right side of the heatmap, while the corresponding enzymes in the pathway are shown to the left of their respective arrows. Enzymes encompassed in the pathway include glutamyl-tRNA (*HEMA*), glutamate-1-semialdehyde (*GSA*), 5-aminolevulinic acid dehydratase 1 (*HEMB*), hydroxymethylbilane synthase (*HEMC*), uroporphyrinogen-III synthase (*HEMD*), coproporphyrinogen III oxidase (*HEMF*), protoporphyrinogen oxidase (*HEMG*), Mg chelatase subunit D (*CHLD*), magnesium-protoporphyrin IX methyltransferase (*CHLM*), 3,8-divinyl protochlorophyllide a 8-vinyl reductase (*DVR*), protochlorophyllide oxidoreductase (*POR*), chlorophyll synthase ChLG (*CHLG*), and chlorophyllide a oxygenase (*CAO*).