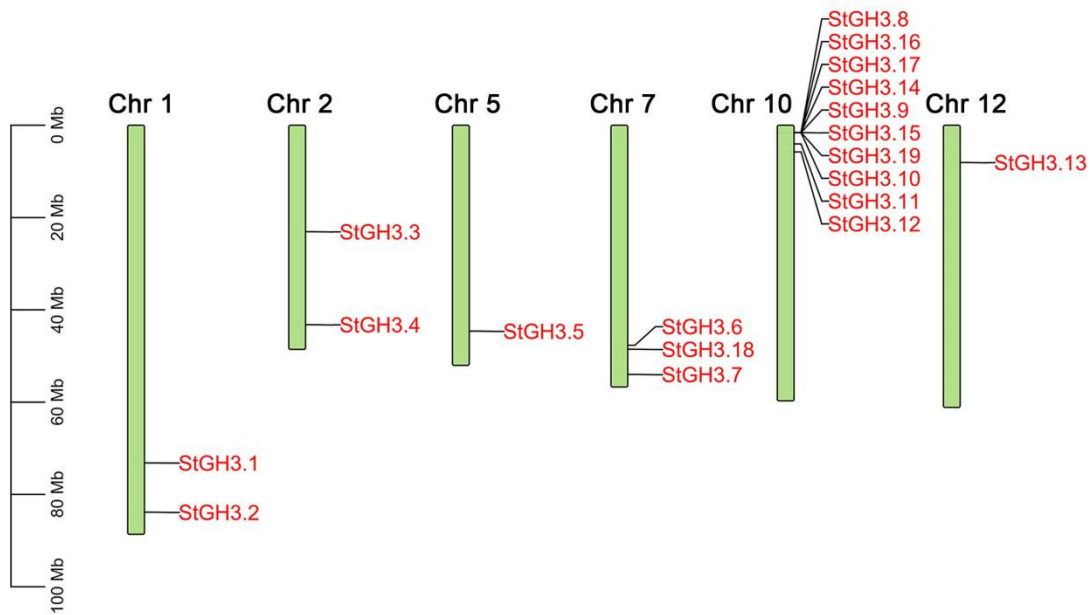
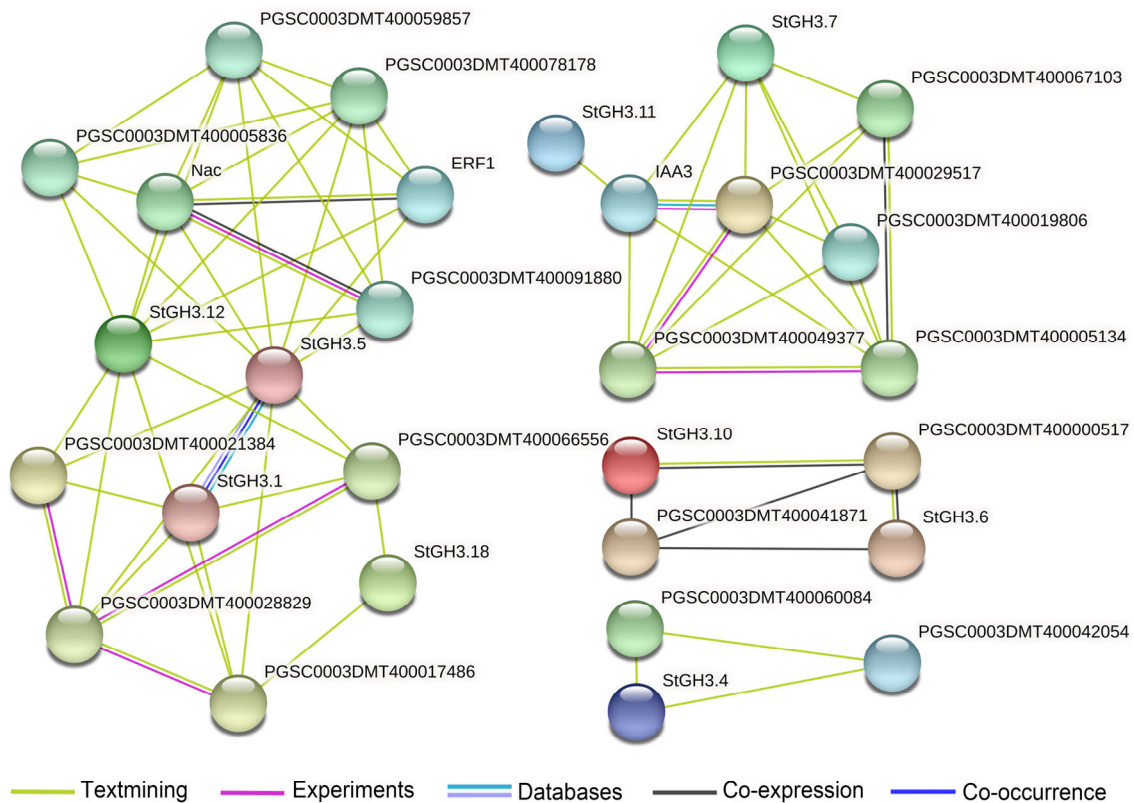


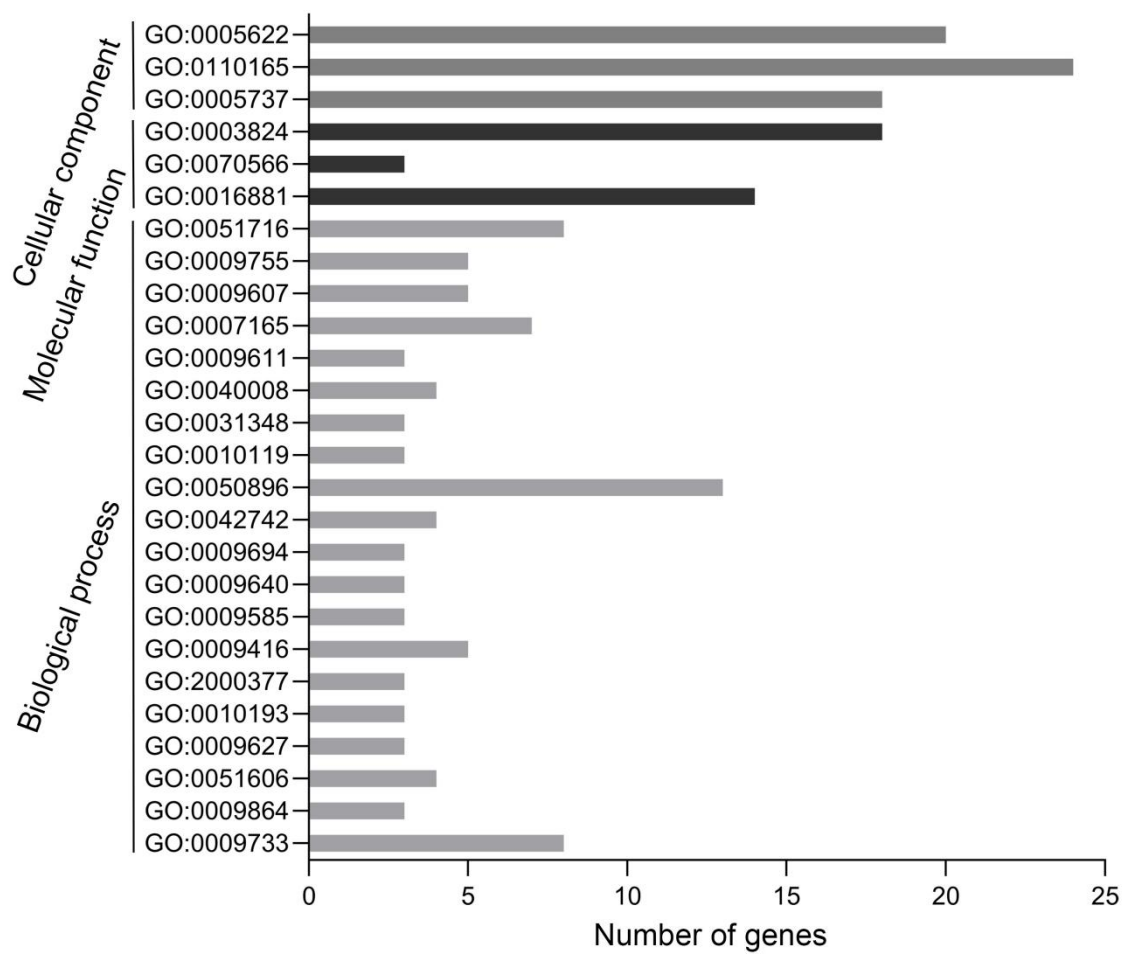
**Figure S1.** Sequence logo of the GH3 proteins motifs. The height of each amino acid represents the relative frequency of the amino acid at that position



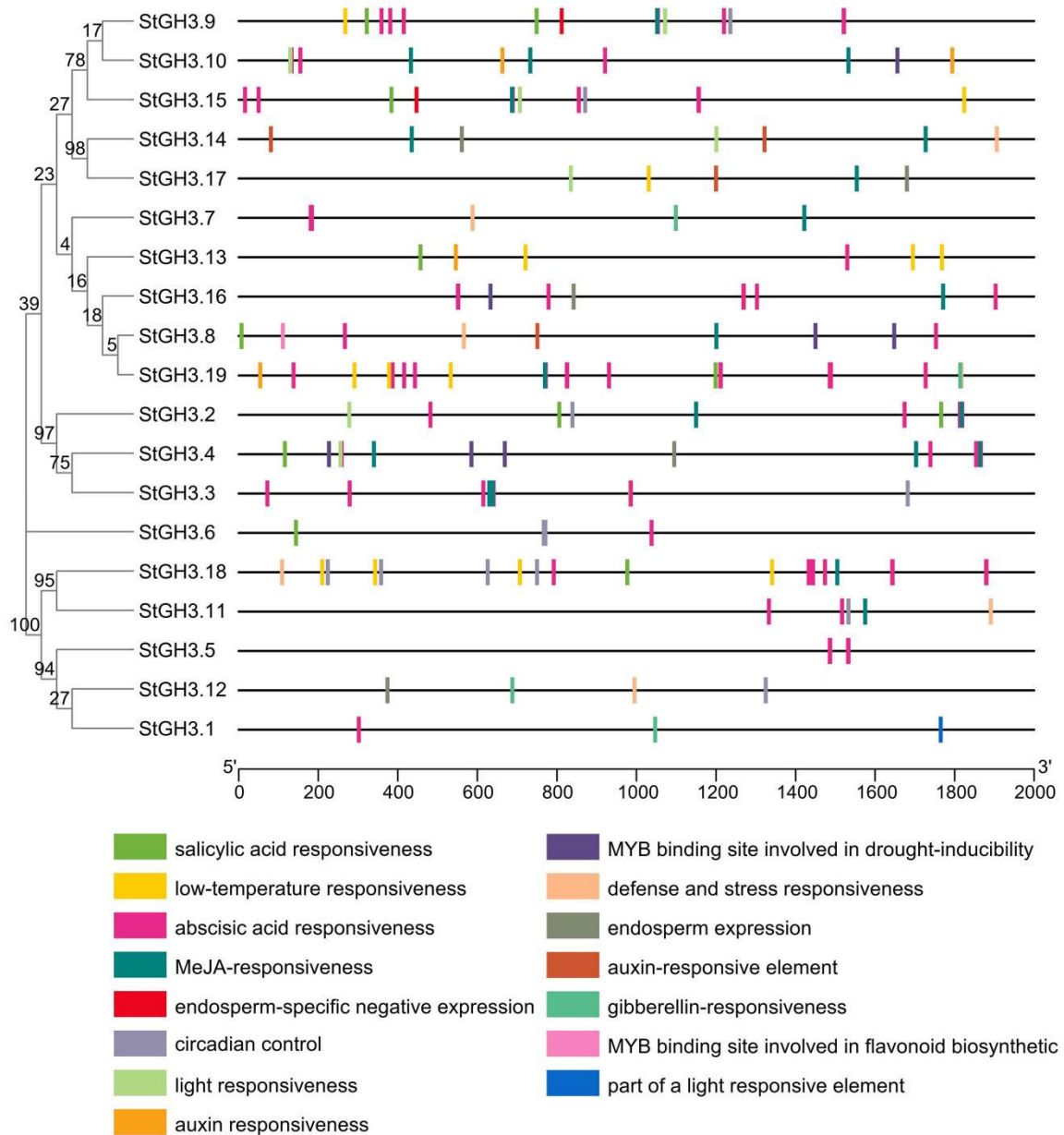
**Figure S2.** Schematic diagram of chromosome distribution of *StGH3* gene. The chromosome number is displayed on the left side of each chromosome.



**Figure S3.** Functional interaction network analysis of *StGH3* cascade proteins. Each sphere represents a protein. Different colored lines indicated the way in which the interaction between two proteins connected by lines was verified.



**Figure S4.** GO analysis of *StGH3s* gene. The horizontal axis represents the number of genes involved in each physiological process, and the vertical axis represents different physiological processes.



**Figure S5.** Analysis of 19 *cis*-acting elements in the *StGH3s* promoter region. The same *cis*-elements were displayed in the same color. The black line represents the promoter length of the *StGH3s* gene. The boxes with different colors below represent the functions of each *cis*-acting element.