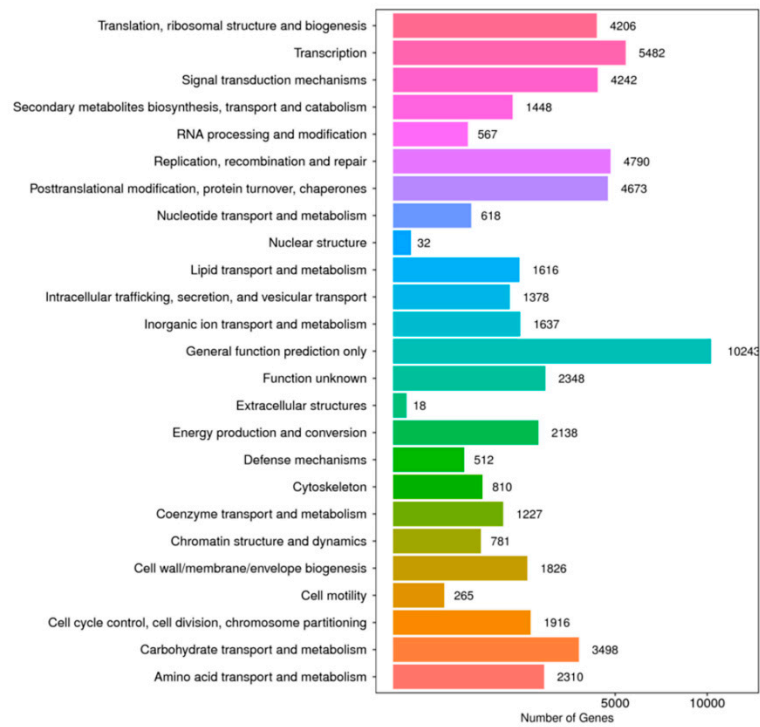
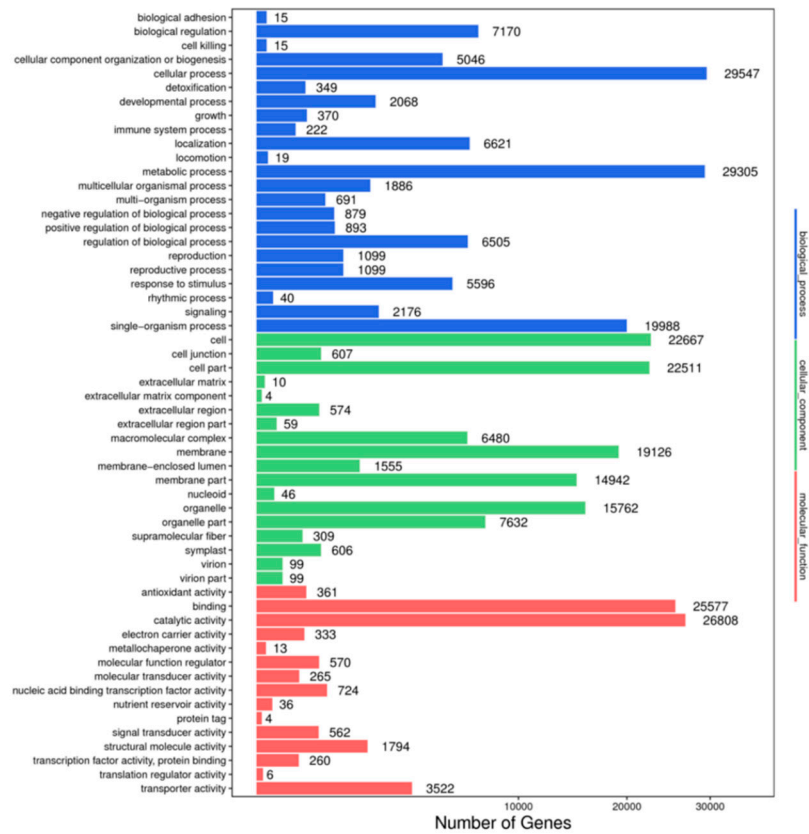


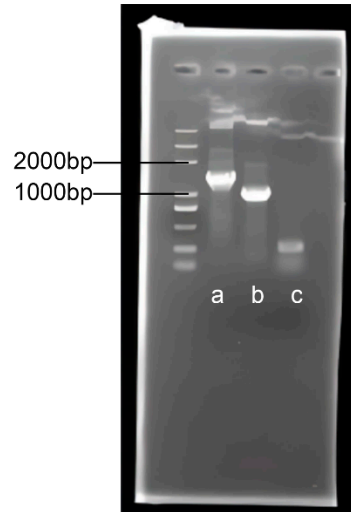
**Figure S1:** Summary of genes annotated to NR, KEGG, COG and SwissProt



**Figure S2:** Summary of Clusters of Orthologous Groups of proteins (COG) annotation for all Unigenes

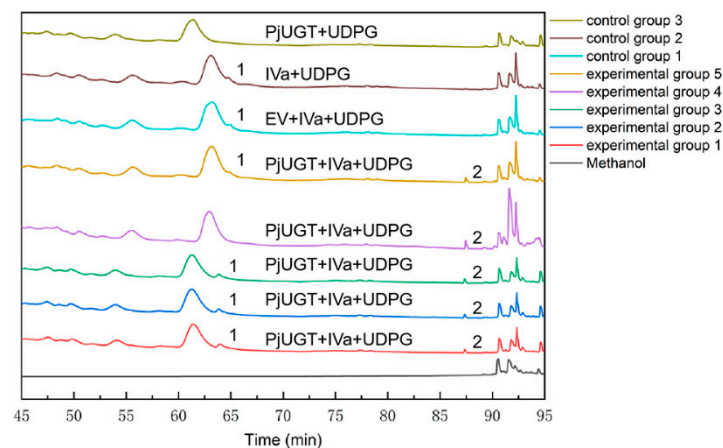


**Figure S3:** Summary of Gene Ontology (GO) annotation for all Unigenes

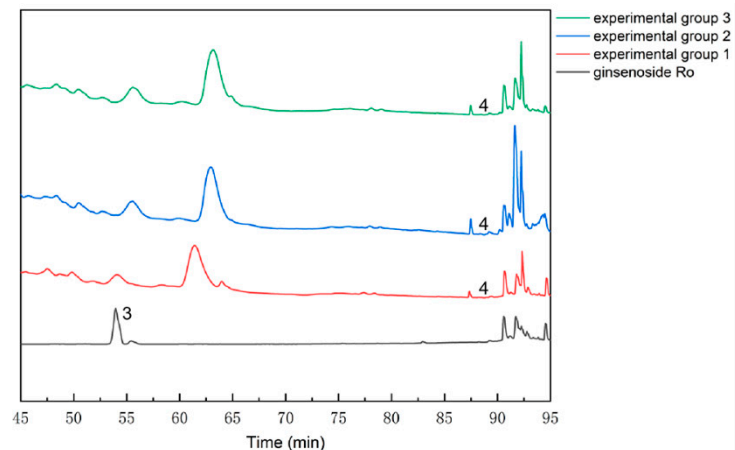


**Figure S4:** 1% agarose gel electrophoresis results. (a) UGT9; (b) UGT28; (c) UGT6

(A)



(B)



**Figure S5:** HPLC chromatograms of enzymatic reaction products and comparison with ginsenoside Ro standard. (A) HPLC analysis of the products from five parallel enzymatic activity assays of recombinant *PjUGT*: (1) peak of chikusetsusaponin IVa; (2) peak of new product. (B) Comparative HPLC chromatogram of the enzymatic reaction product and the ginsenoside Ro standard: (3) peak of ginsenoside Ro; (4) peak of new product.