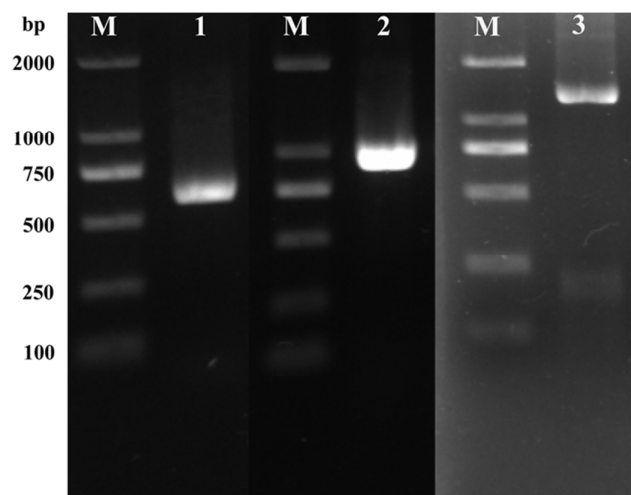


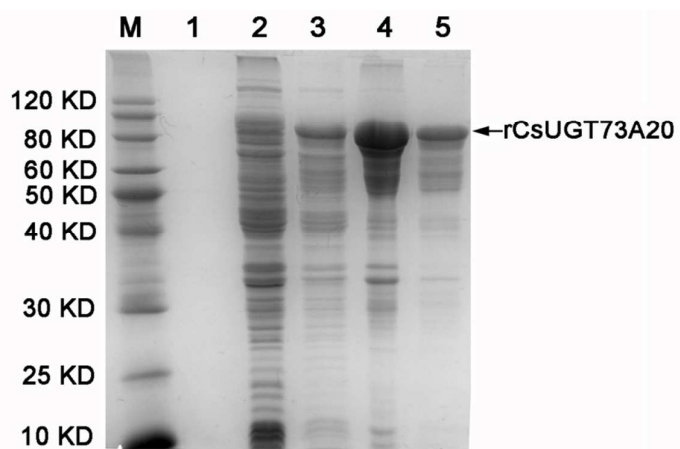
**Fig. S1 Race and high-fidelity PCR products electrophoresis diagram.**

Lane M, DNA mark; Lane 1-3, 3'Race, 5'Race and ORF of CsUGT73A20.



**Fig. S2 SDS-PAGE of recombinant CsUGT73A20 protein purification fractions.**

Lane M, protein maker; Lane 1-5, proteins from the supernatant of not induced *E. coil* cells, proteins from the precipitate of not induced *E. coil* cells, proteins from the supernatant of induced *E. coil* cells, protein from the precipitate of induced *E. coil* cells, and purified recombinant protein, respectively.



**Figure 3S, Analysis of the control of recombinant CsUGT73A20 enzymatic reaction products.** A-H, indicated the HPLC chromatogram of the enzymatic reaction with substrates including naringenin (N), apigenin (A), kaempferol (K), quercetin (Q), myricetin (M), kaempferide (KC), kaempferol 3-*O*-glucoside (K3G), kaempferol 7-*O*-glucoside (K7G), when UDP-galactose was used as the sugar donor. I and J indicated the HPLC chromatogram of the enzymatic reaction with substrates cyaniding (Cya) and epicatechin (EC) when UDP-glucose or UDP-galactose was used as the sugar donor. K indicated the HPLC chromatogram of substrate K in *E. coli* protein control.

