Supplementary Materials

For

Discovery of a Naturally Occuring Broad-spectrum Inhibitor against Gut

Bacterial β-glucuronidases from *Ginkgo biloba*

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Fig. S1. The standard curve of the product (*p*-nitrophenol) after reaction of GUS with the substrate (PNPG), the equation was Y = 2.920*X + 0.05013; X means concentrations of *p*-nitrophenol; Y means absorbance, $R^2 = 0.9938$.



Fig S2. The standard curve of Michaelis-Menten after reaction of *Cp*GUS (A, D), *Spas*GUS (B, E) and *Ec*GUS (C, F) with the substrate (PNPG), X means concentrations of PNPG; Y means the velocity of the reaction.



Fig. S3. Time-dependent inhibition assays of amentflavone (A, B, C), bilobetin (D, E) on three bacteria GUSs. All data were shown as mean \pm SD.



Fig. S4. A stereo view of the crystal structure (**left**) and the 2D interactions (**right**) between bilobetin combined with *Cp*GUS (A, D, PDB ID: 4JKM), *Spas*GUS (B, E), *Ec*GUS(C, F).