

1 **Supporting Information**

2 **Fig. S1** Characterization of standard ginsenosides in the positive -ion mode.

3 **Fig. S2** Metabolic characterization of PNLS in the positive -ion mode. **(A)** PNLS; **(B)**

4 Blank stool samples and samples collected at 10 h from the control group; **(C)** Blank

5 stool samples and samples collected at 10 h from the pseudo-GF model group.

6 **Fig. S3** Relative abundance of GCK in all samples from control and pseudo-GF model

7 groups. $**p < 0.01$ and $***p < 0.001$ between the control and pseudo-GF model

8 groups

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