

# **Metabolic Transformation of Gentiopicrin, a Liver Protective Active Ingredient, Based on Intestinal Bacteria**

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**Raw spectra:**

**Figure captions:**

**Figure S1** HPLC chromatogram of gentiopicrin incubated for 0 min. (A) HPLC chromatogram of gentiopicrin incubated for 30 min. (B) HPLC chromatogram of gentiopicrin incubated for 30 min. (C).

**Figure S2** HPLC chromatogram of gentiopicrin incubated for 90 min. (A) HPLC chromatogram of gentiopicrin incubated for 120 min. (B) HPLC chromatogram of gentiopicrin incubated for 180 min. (C).

**Figure S3** The  $^1\text{H}$ -NMR spectrum of G-M1 and G-M2.

**Figure S4** The  $^{13}\text{C}$ -NMR spectrum of G-M1 and G-M2.

**Figure S5** The  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of G-M1 and G-M2.

**Figure S6** The HSQC spectrum of G-M1 and G-M2.

**Figure S7** The HMBC spectrum of G-M1 and G-M2.

**Figure S8** HPLC chromatogram of gentiopicrin treated immediately after incubation for 1 h. (A). HPLC chromatogram of gentiopicrin incubation solution after concentration. (B).

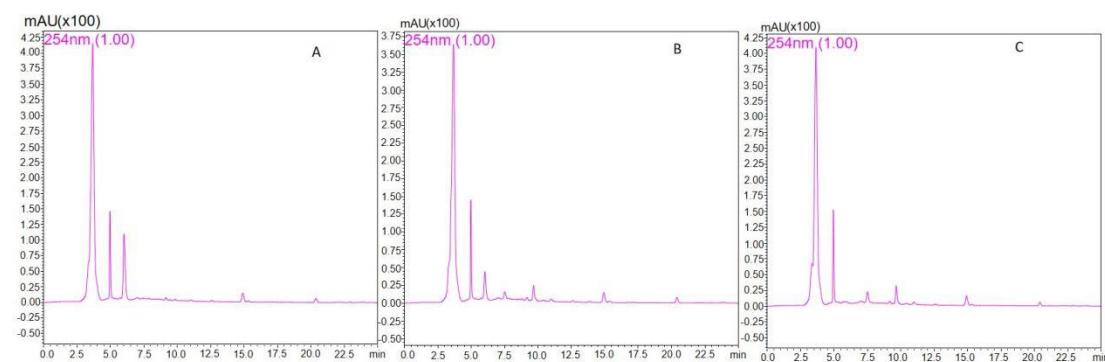


Figure S1 HPLC chromatogram of gentiopicrin incubated for 0 min. (A) HPLC chromatogram of gentiopicrin incubated for 30 min. (B) HPLC chromatogram of gentiopicrin incubated for 30 min. (C).

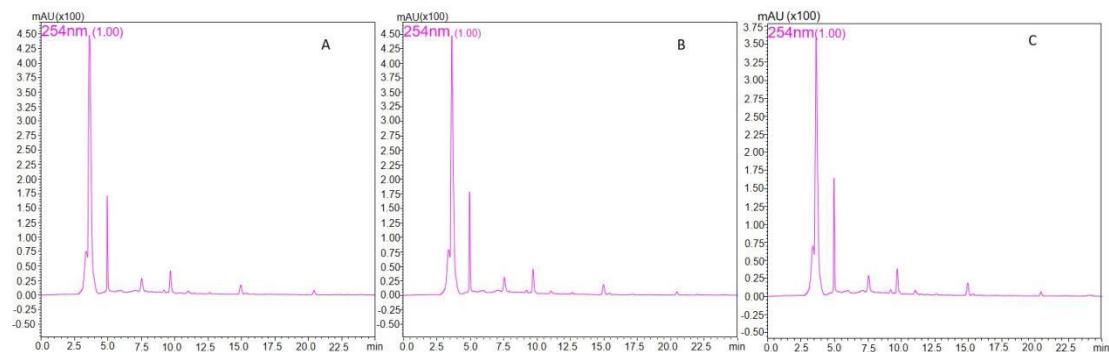


Figure S2 HPLC chromatogram of gentiopicrin incubated for 90 min. (A) HPLC chromatogram of gentiopicrin incubated for 120 min. (B) HPLC chromatogram of gentiopicrin incubated for 180 min. (C).

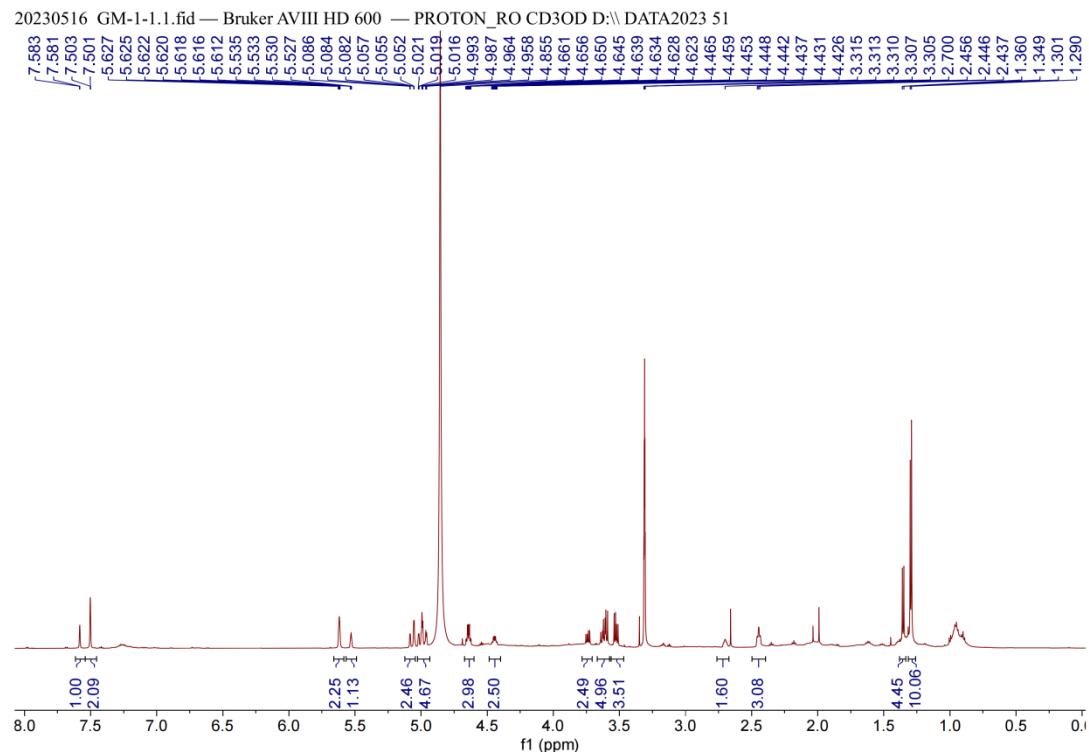


Figure S3 The  $^1\text{H}$ -NMR spectrum of G-M1 and G-M2.

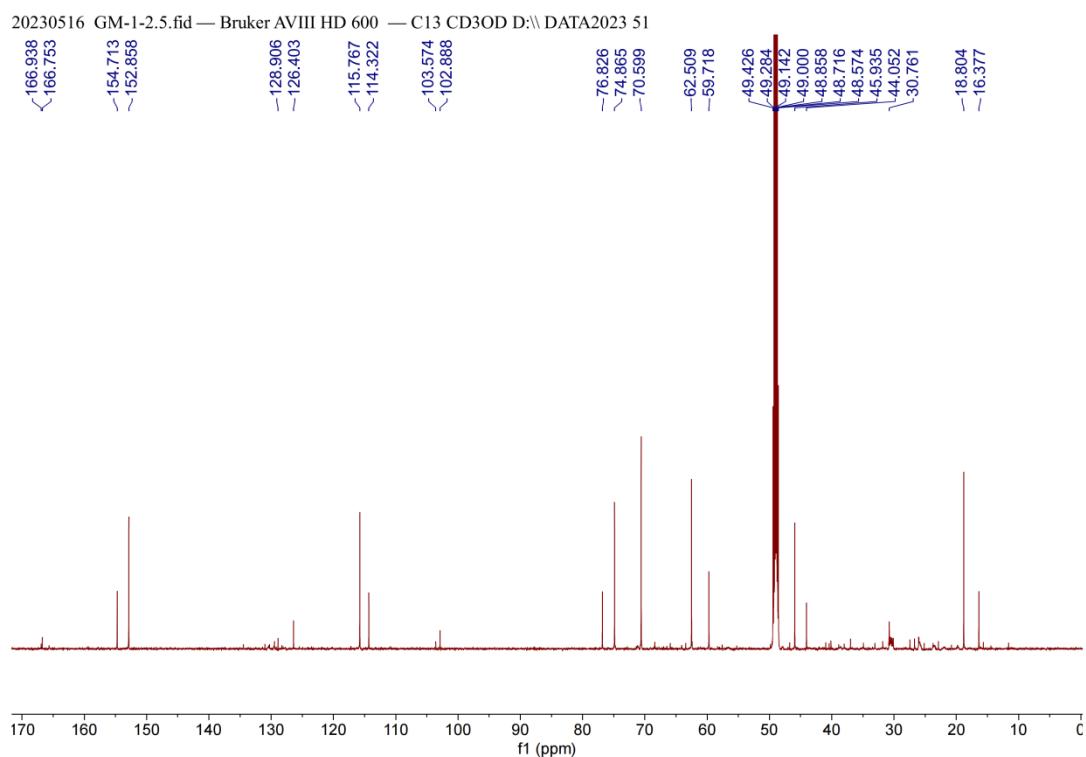


Figure S4 The  $^{13}\text{C}$ -NMR spectrum of G-M1 and G-M2.

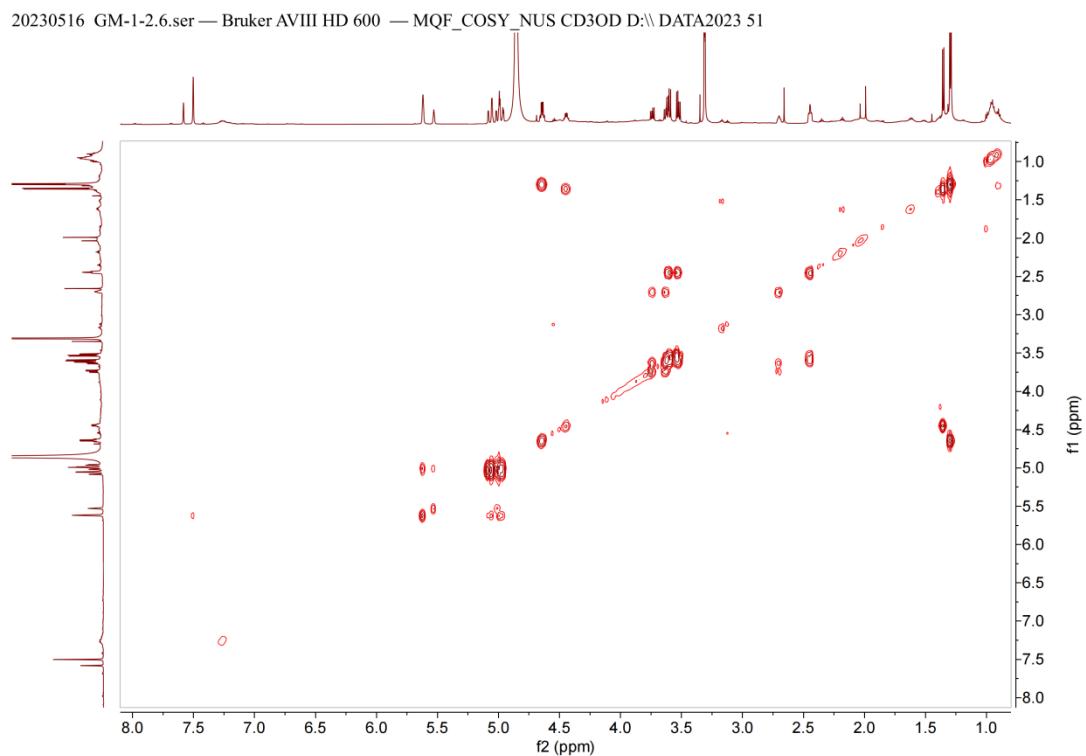


Figure S5 The  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of G-M1 and G-M2.

20230516 GM-1-2.7.ser — Bruker AVIII HD 600 — {HSQC\_NUS (phase sensitive)} CD3OD D:\DATA2023\51

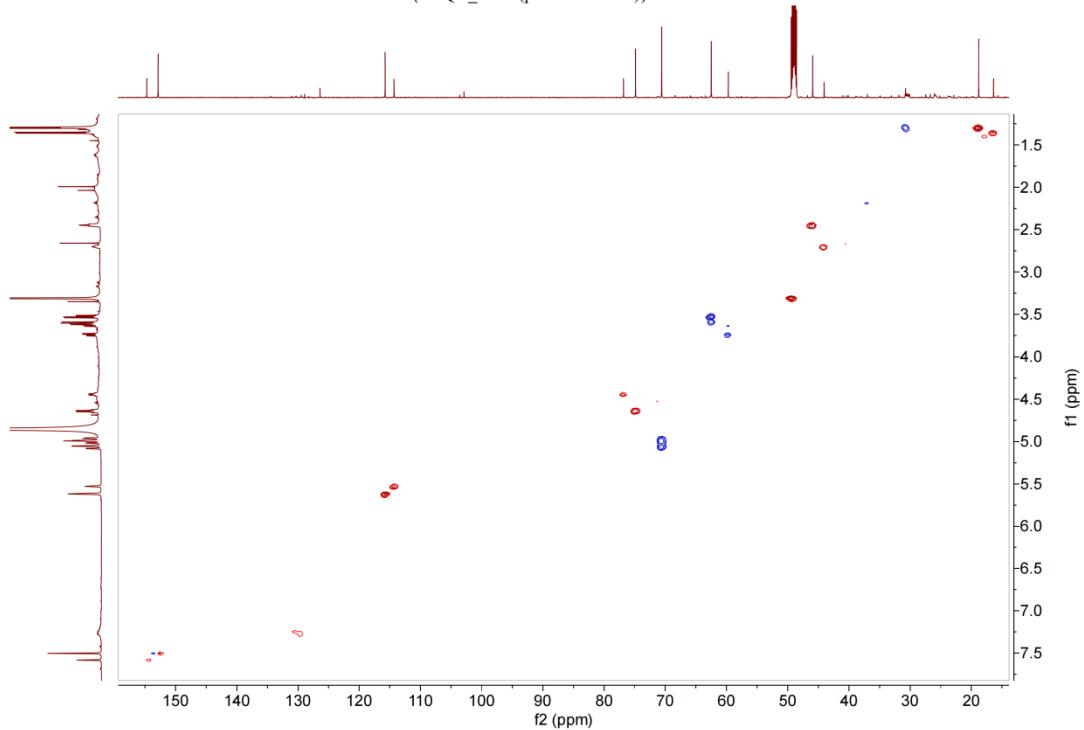


Figure S6 The HSQC spectrum of G-M1 and G-M2.

20230516 GM-1-2.8.ser — Bruker AVIII HD 600 — HMBC\_2ndqf\_NUS CD3OD D:\DATA2023\51

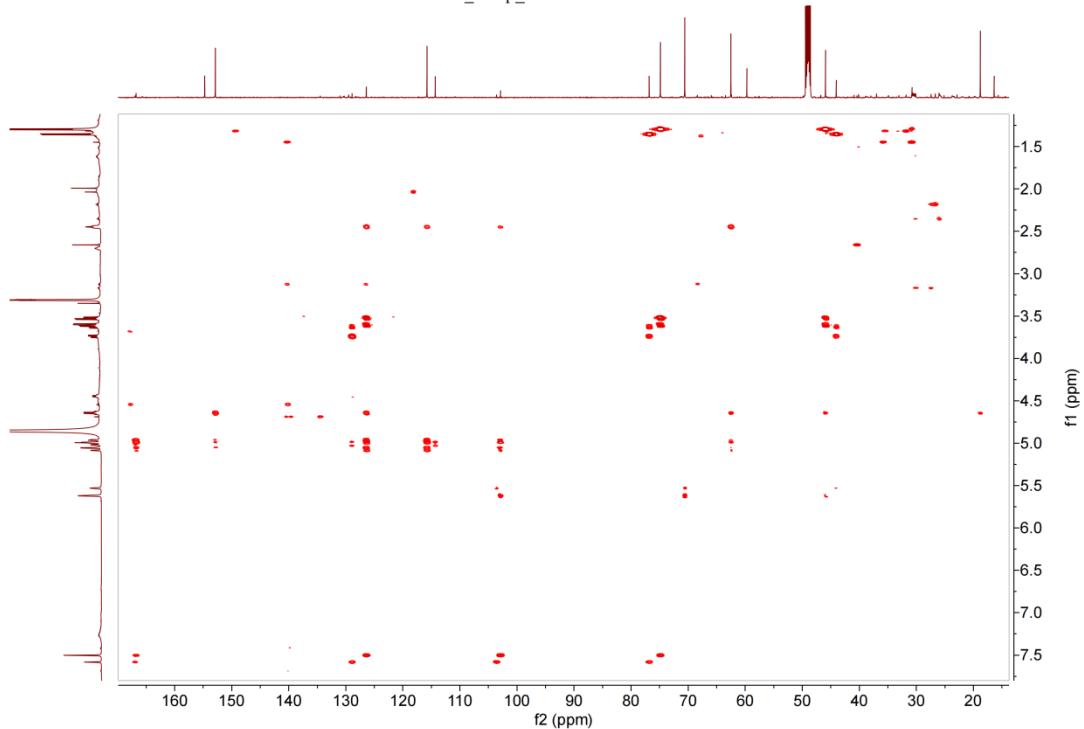
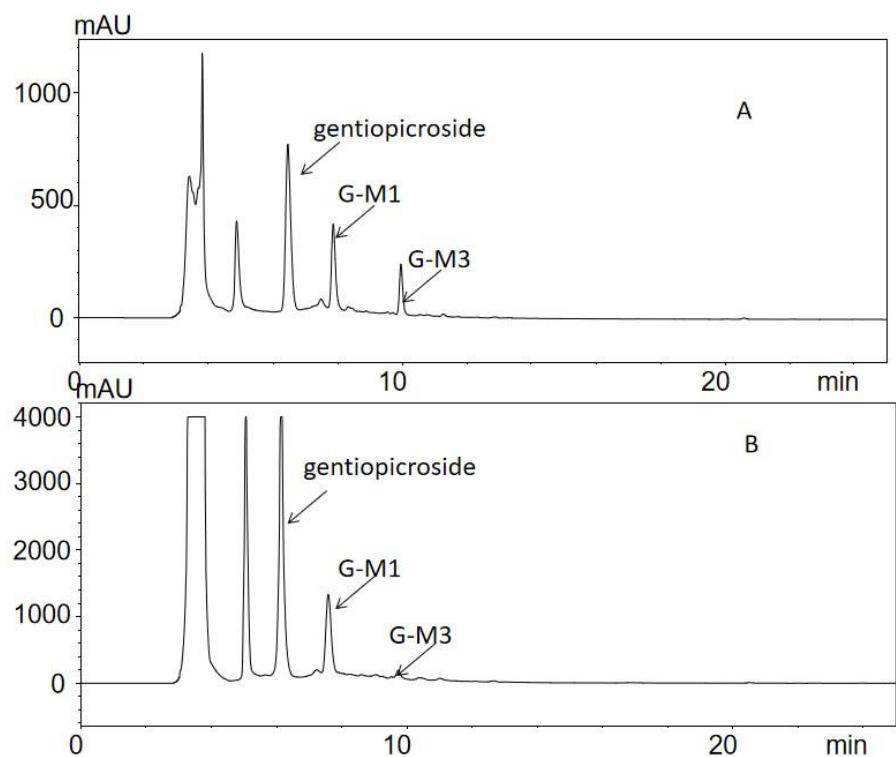


Figure S7 The HMBC spectrum of G-M1 and G-M2.



**Figure S8** HPLC chromatogram of gentiopicrin treated immediately after incubation for 1 h. (A). HPLC chromatogram of gentiopicrin incubation solution after concentration. (B).