

# Supplementary Materials: Kinetics of the Solution-Mediated Polymorphic Transformation of the Novel L-Carnitine Orotate Polymorph, form-II

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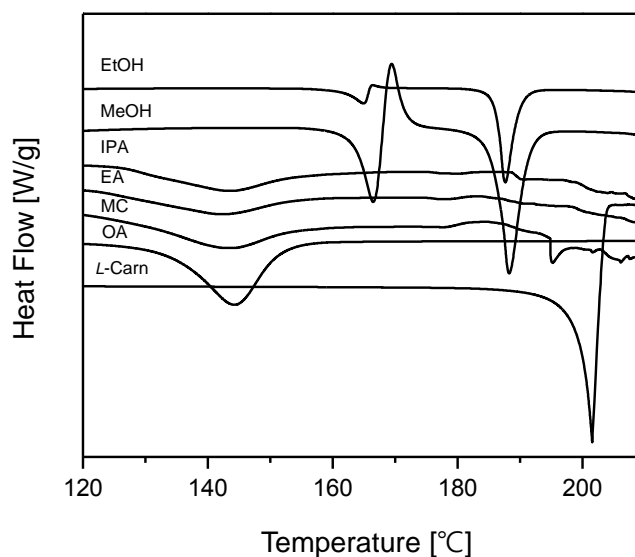


Figure S1. DSC curves of CO crystals obtained under the solvent change condition.

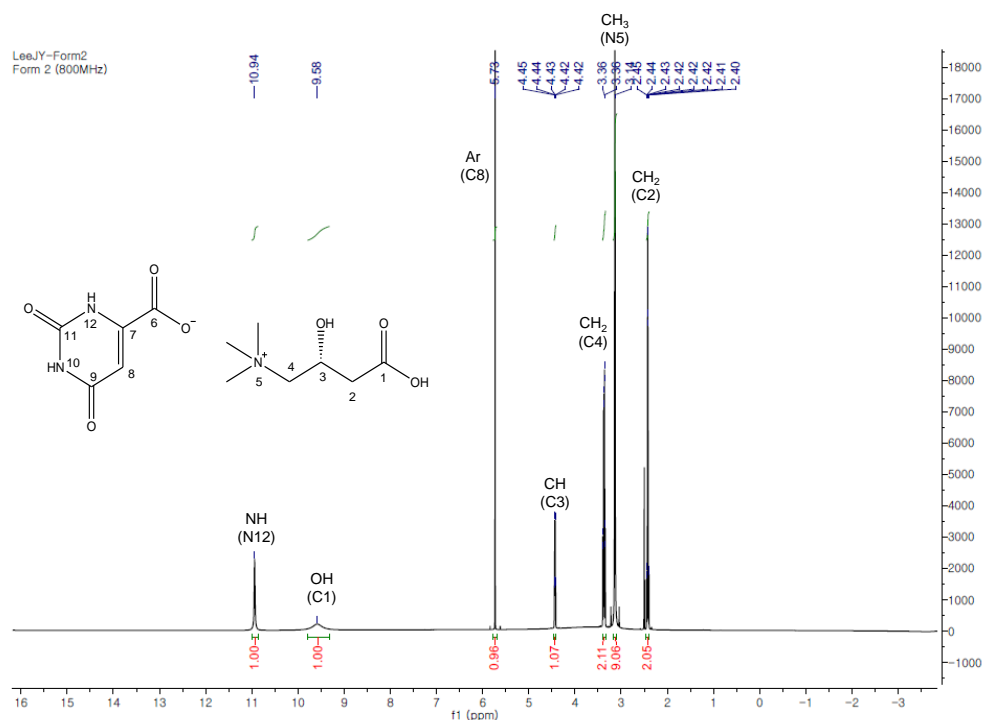
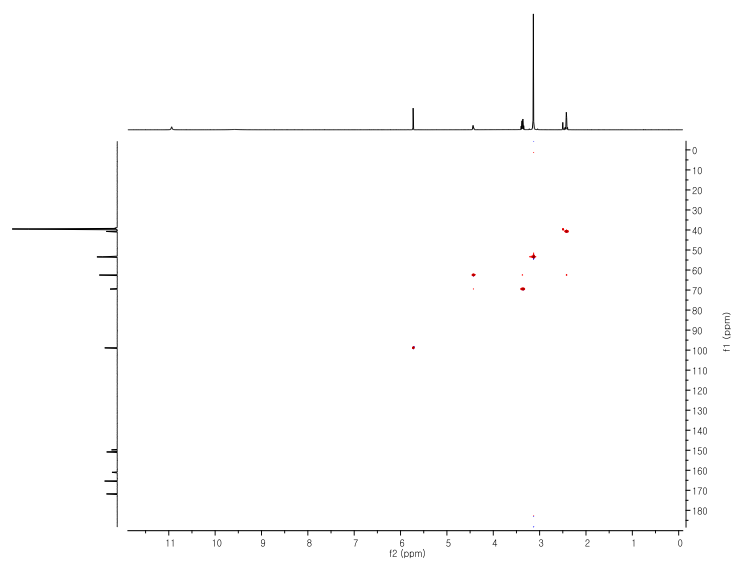
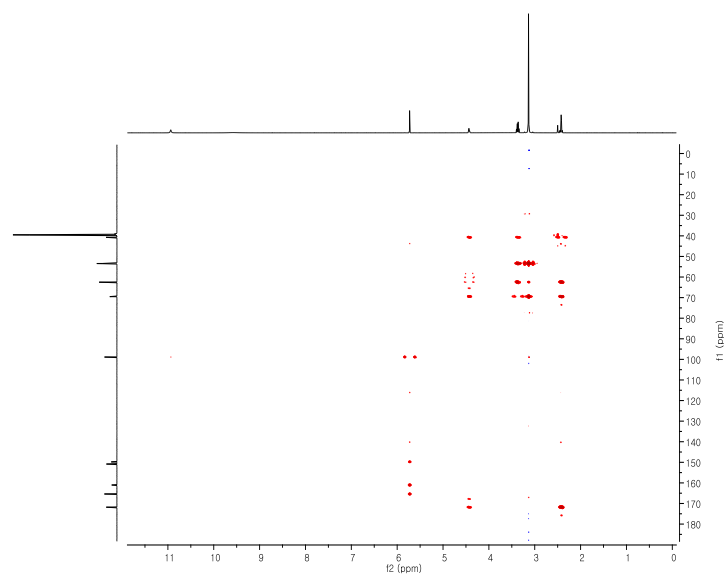


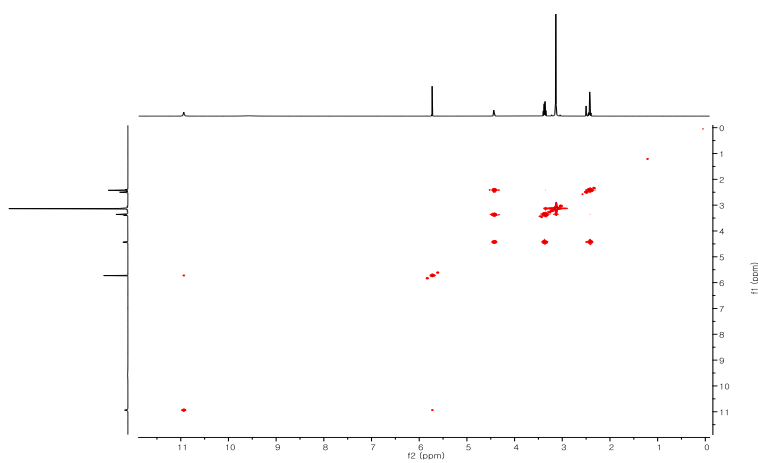
Figure S2. Integrated solution-state  $^1\text{H-NMR}$  spectrum of CO crystals ( $\text{DMSO-d}_6$ ).



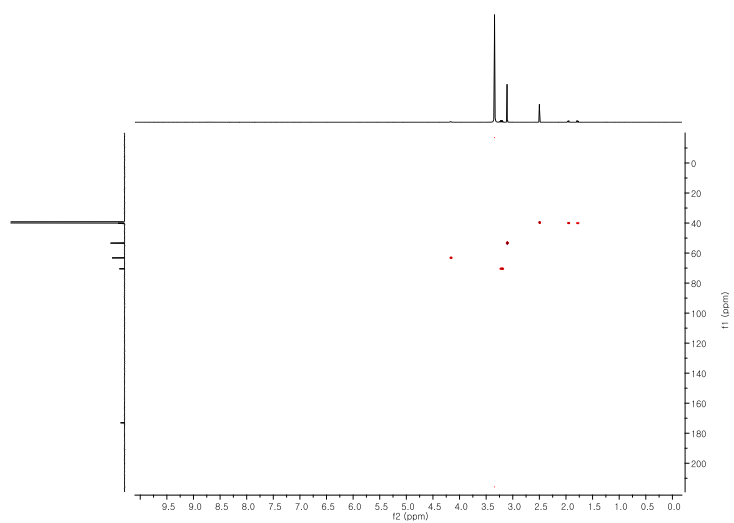
**Figure S3.** CO solution-state 2D-NMR HSQC (DMSO-d<sub>6</sub>).



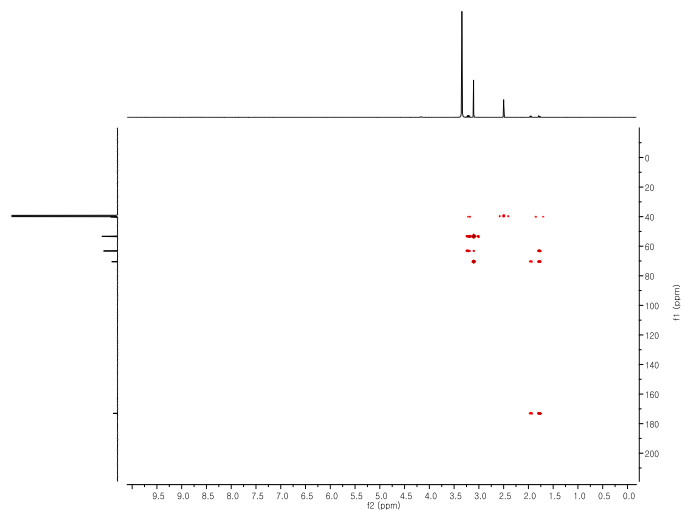
**Figure S4.** CO solution-state 2D-NMR HMBC spectrum (DMSO-d<sub>6</sub>).



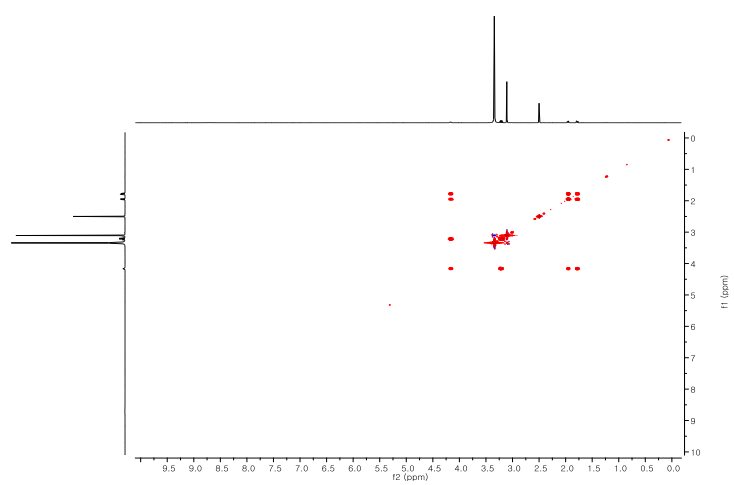
**Figure S5.** CO solution-state 2D-NMR COSY spectrum (DMSO-d<sub>6</sub>).



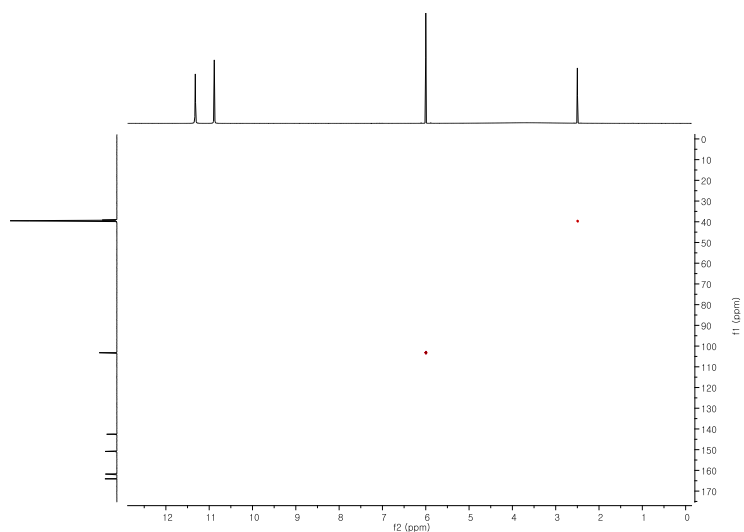
**Figure S6.** *L*-carnitine's solution-state 2D-NMR HSQC spectrum (DMSO- $d_6$ ).



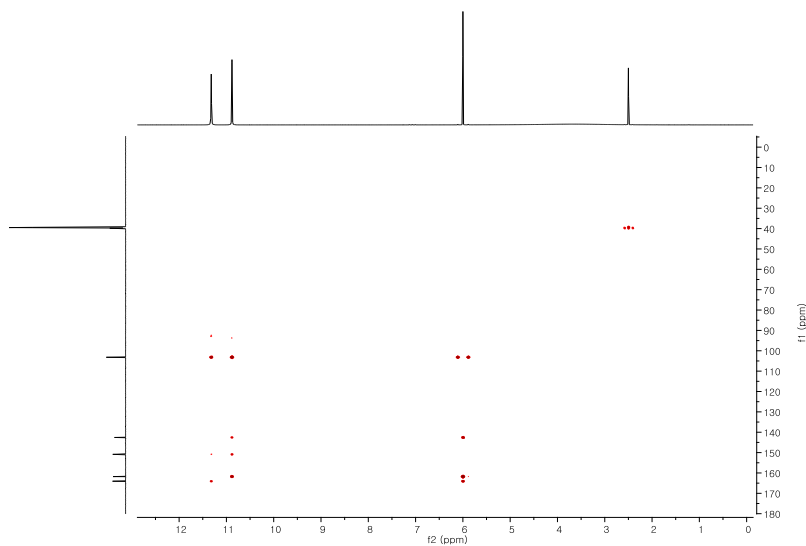
**Figure S7.** *L*-carnitine's solution-state 2D-NMR HMBC (DMSO- $d_6$ ).



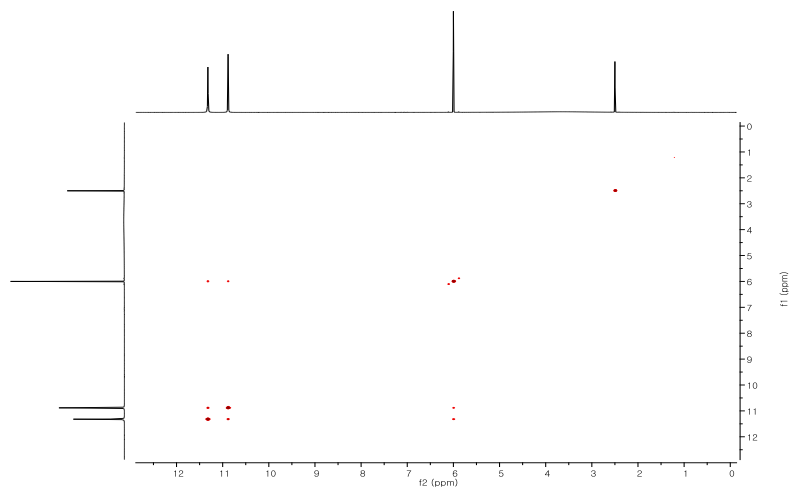
**Figure S8.** *L*-carnitine's solution-state 2D-NMR COSY spectrum (DMSO- $d_6$ ).



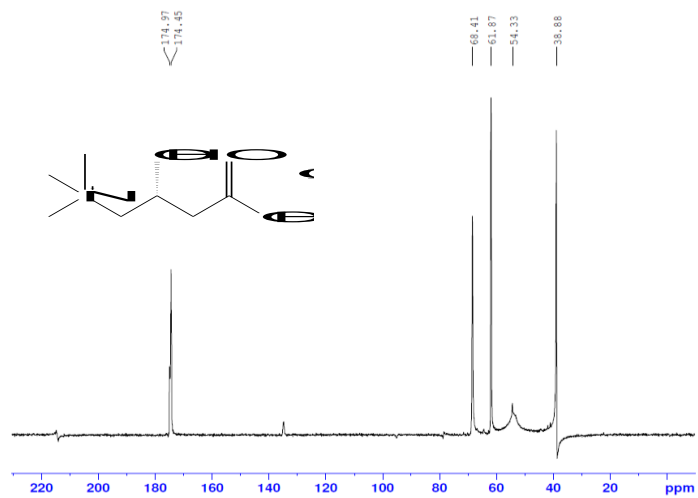
**Figure S9.** Solution-state 2D-NMR HSQC spectrum of Orotic acid (DMSO-d<sub>6</sub>).



**Figure S10.** Orotic acid's solution-state 2D-NMR HMBC spectrum (DMSO-d<sub>6</sub>).



**Figure S11.** Orotic acid's solution-state 2D-NMR COSY spectrum (DMSO-d<sub>6</sub>).



**Figure S12.** L-Carnitine HCl's solid-state CP/MAS <sup>13</sup>C-NMR spectrum.