Electronic Supplementary Material (ESI) for Green Chemistry.

Supporting Information

Zwitterionic organocatalysis for ring-opening polymerization of cyclic esters

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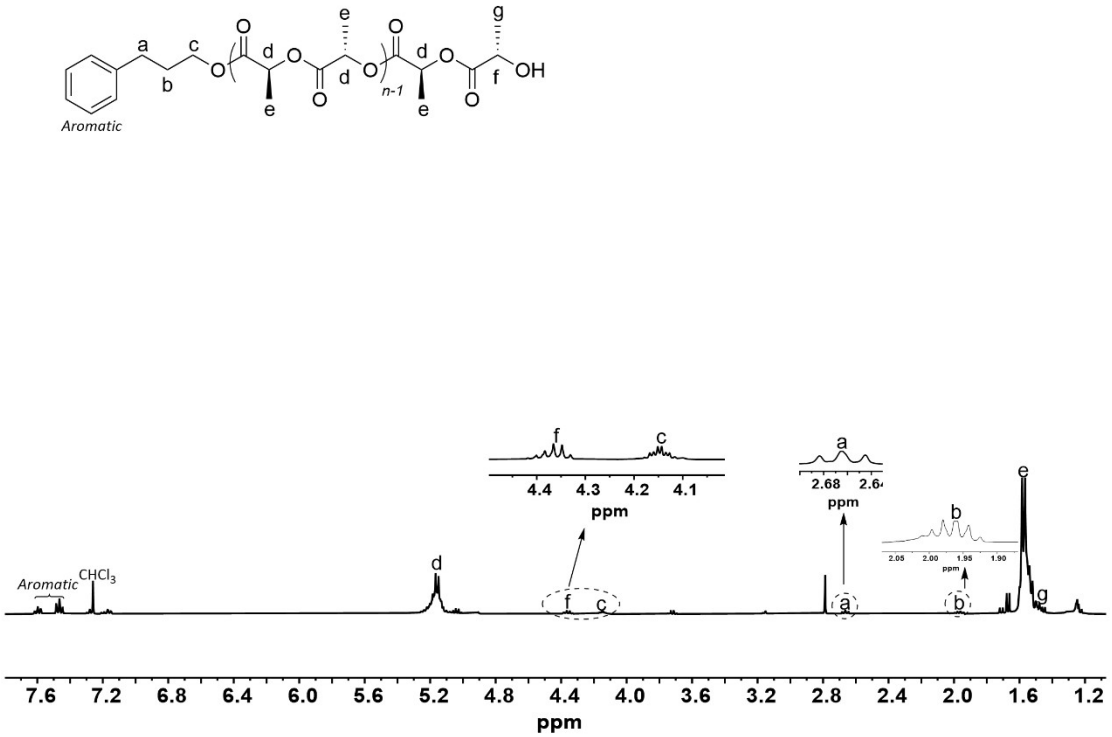

Figure S1. ^{1}H NMR spectrum of PLLA.

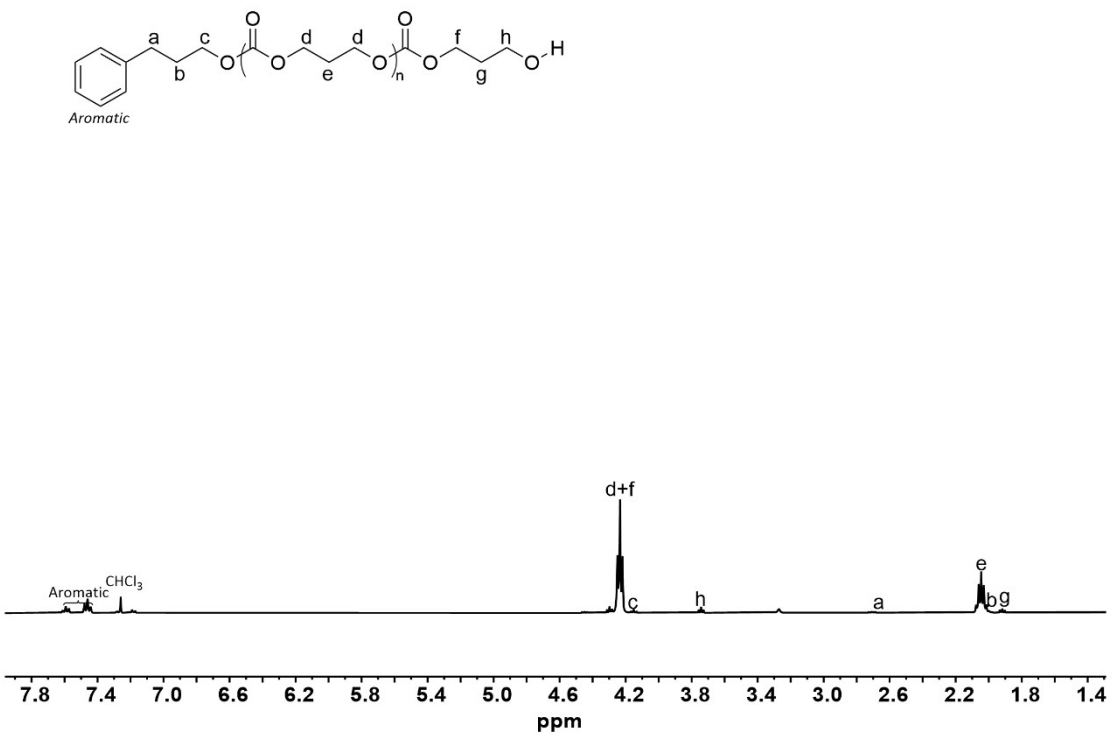

Figure S2. ^{1}H NMR spectrum of PTMC.

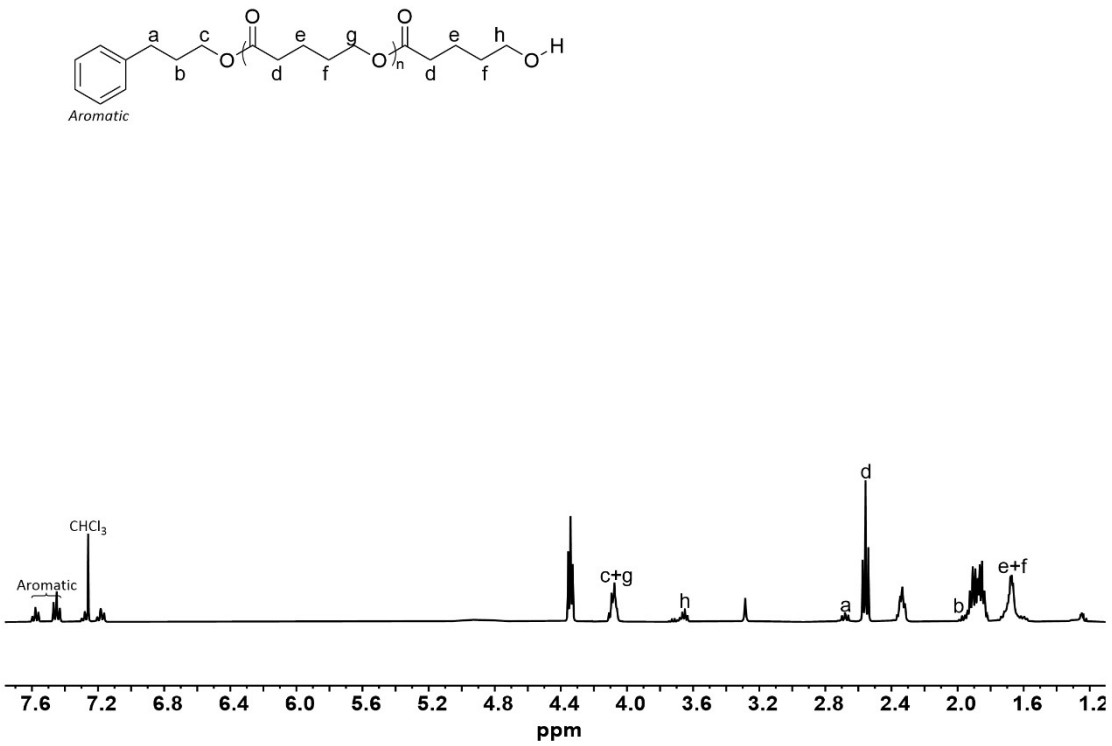

Figure S3. ^{1}H NMR spectrum of PVL.

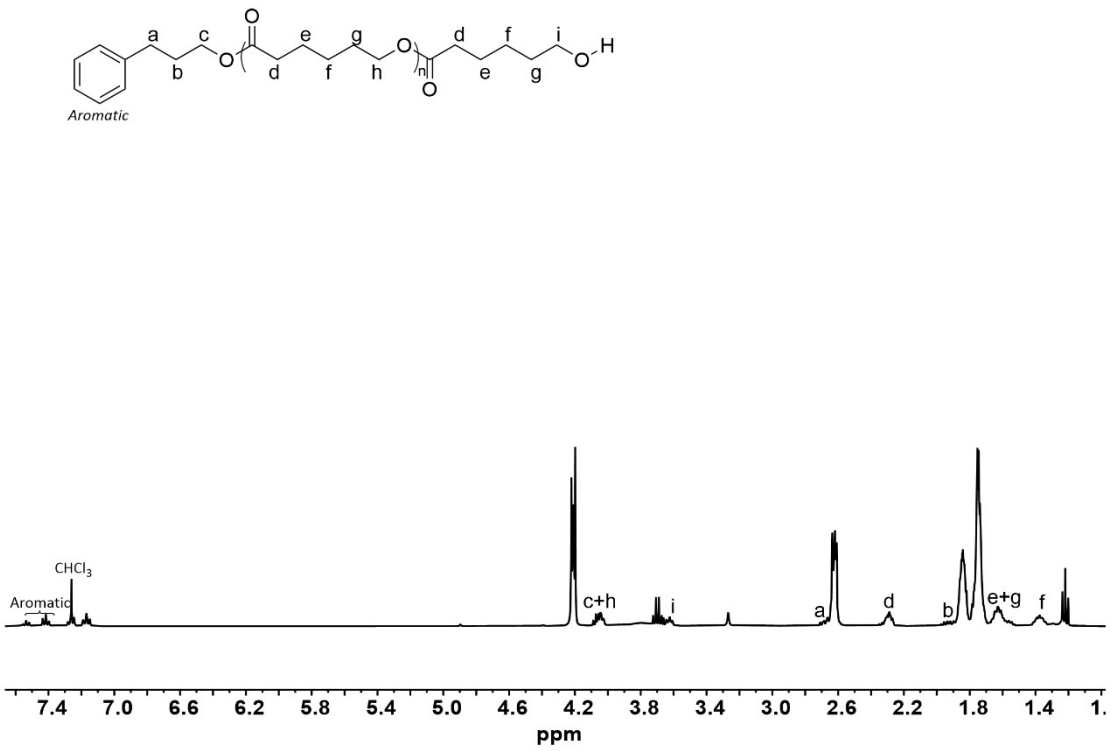

Figure S4. ^{1}H NMR spectrum of PCL.

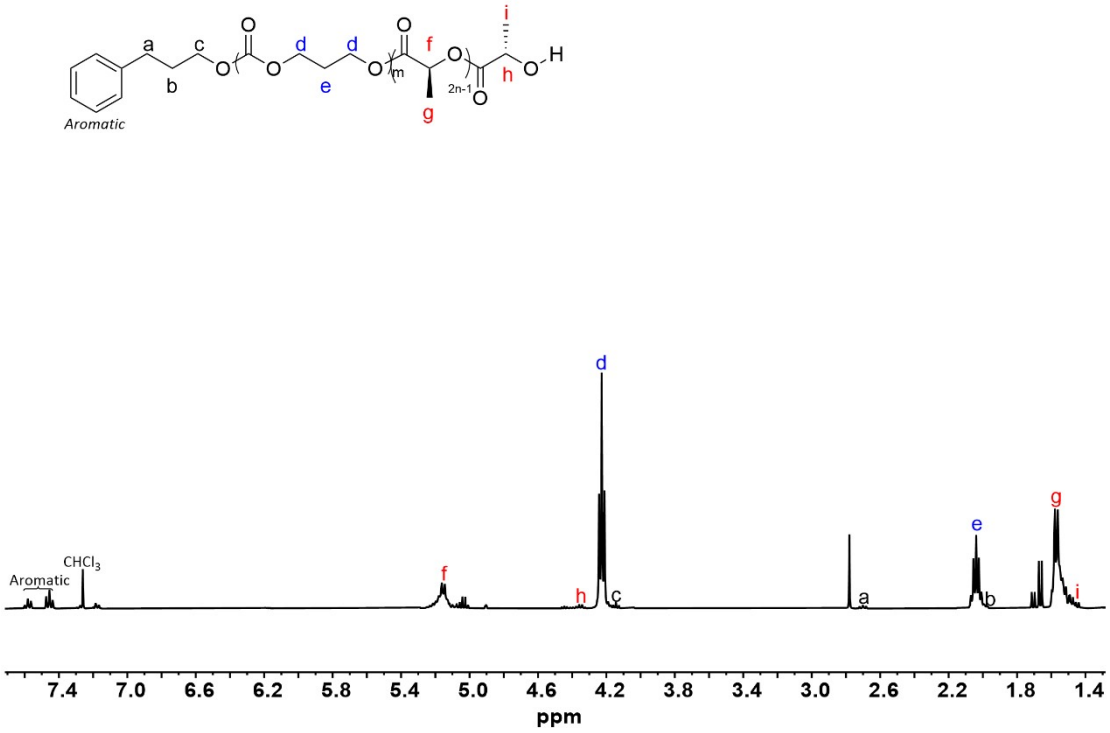

Figure S5. ^{1}H NMR spectrum of PTMC-*b*-PLLA.

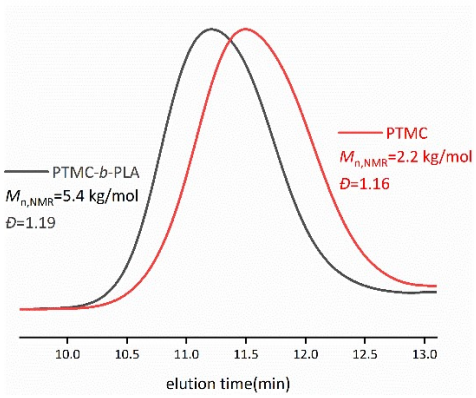

Figure S6. SEC traces of PTMC and PTMC-*b*-PLLA.

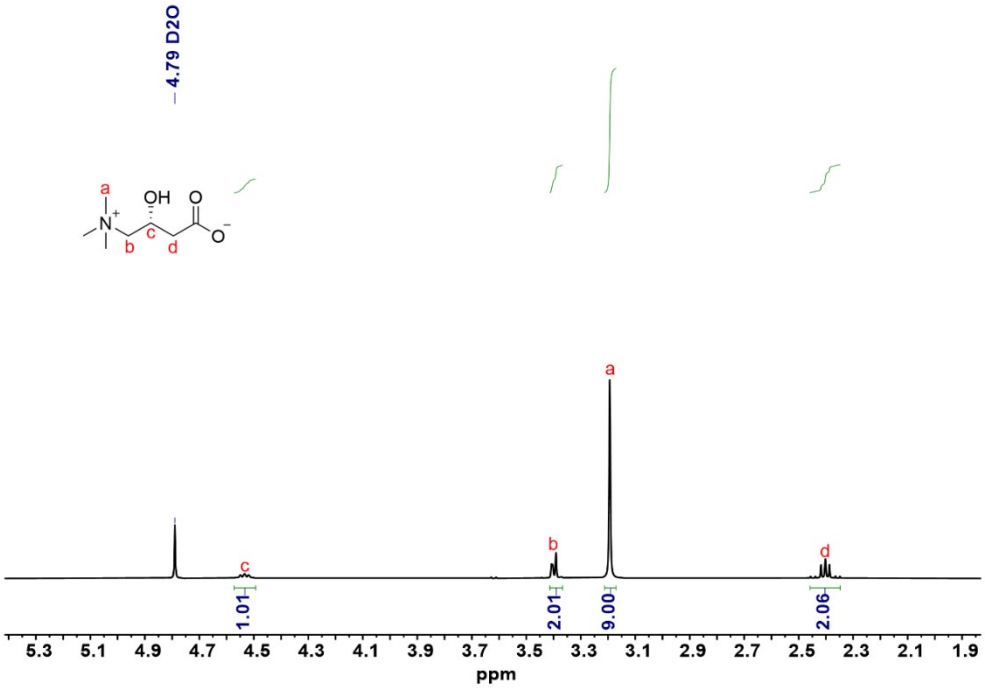

Figure S7. ^{1}H NMR spectrum of L-carnitine. ^{1}H NMR (400 MHz, Deuterium Oxide) δ 4.57 – 4.49 (m, 1H), 3.41 – 3.37 (m, 2H), 3.19 (s, 9H), 2.46 – 2.35 (m, 2H).

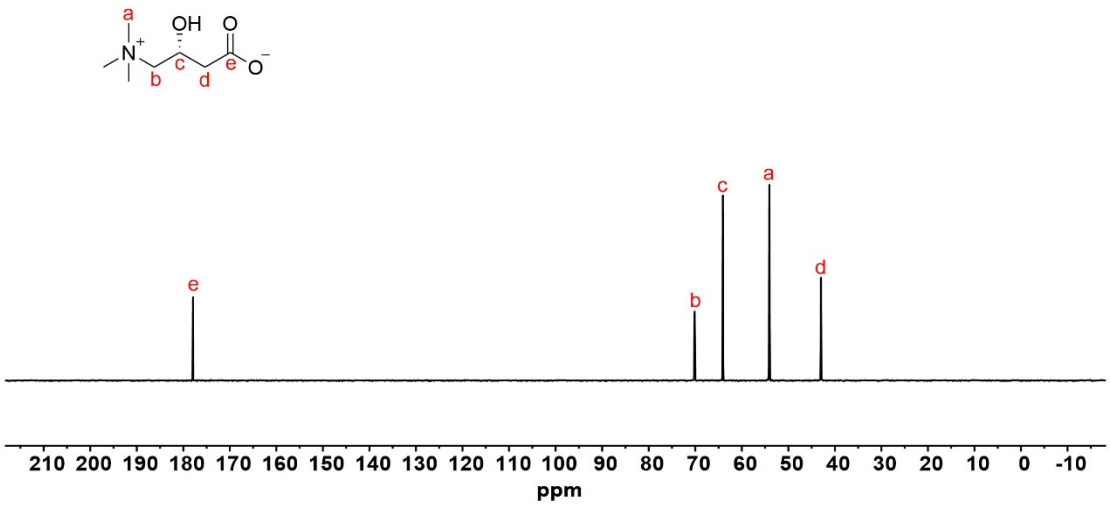

Figure S8. ^{13}C NMR spectrum of L-carnitine.

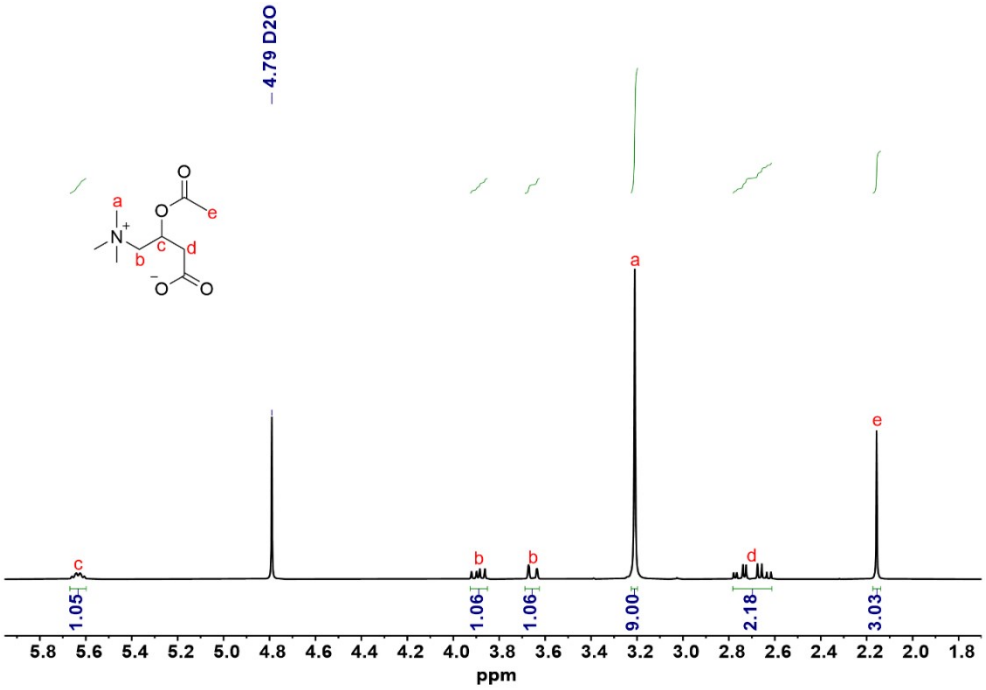

Figure S9. ^{1}H NMR spectrum of acetyl-carnitine. ^{1}H NMR (400 MHz, Deuterium Oxide) δ 5.67 – 5.60 (m, 1H), 3.89 (dd, *J* = 14.5, 8.8 Hz, 1H), 3.65 (dd, *J* = 14.5, 1.4 Hz, 1H), 3.21 (s, 9H), 2.78 – 2.61 (m, 2H), 2.16 (s, 3H).

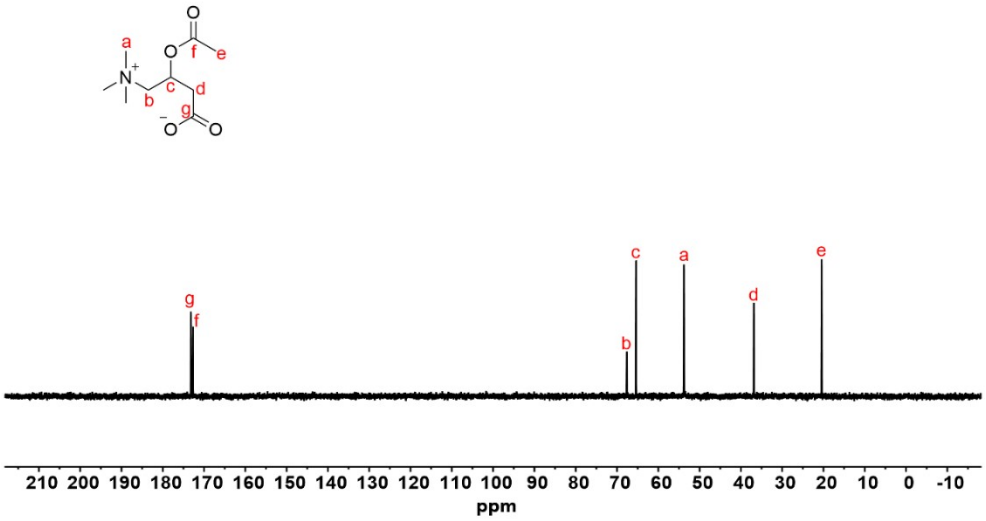

Figure S10. ^{13}C NMR spectrum of acetyl-carnitine.

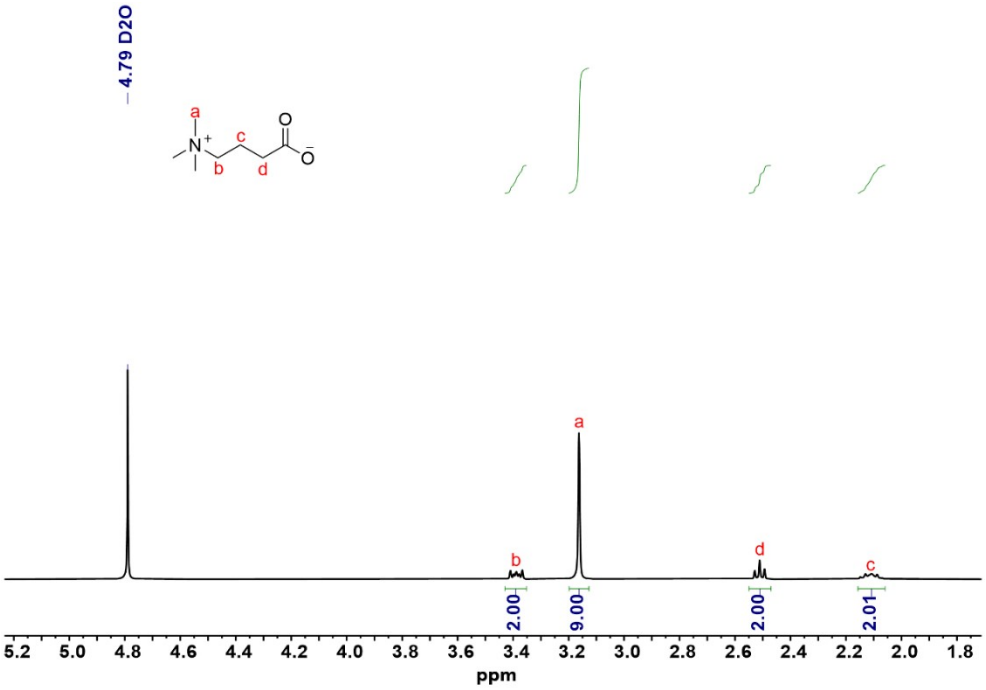

Figure S11. ^{1}H NMR spectrum of gamma-butyrobetaine. ^{1}H NMR (400 MHz, Deuterium Oxide) δ 3.43 – 3.35 (m, 2H), 3.16 (s, 9H), 2.51 (t, *J* = 7.0 Hz, 2H), 2.16 – 2.06 (m, 2H).

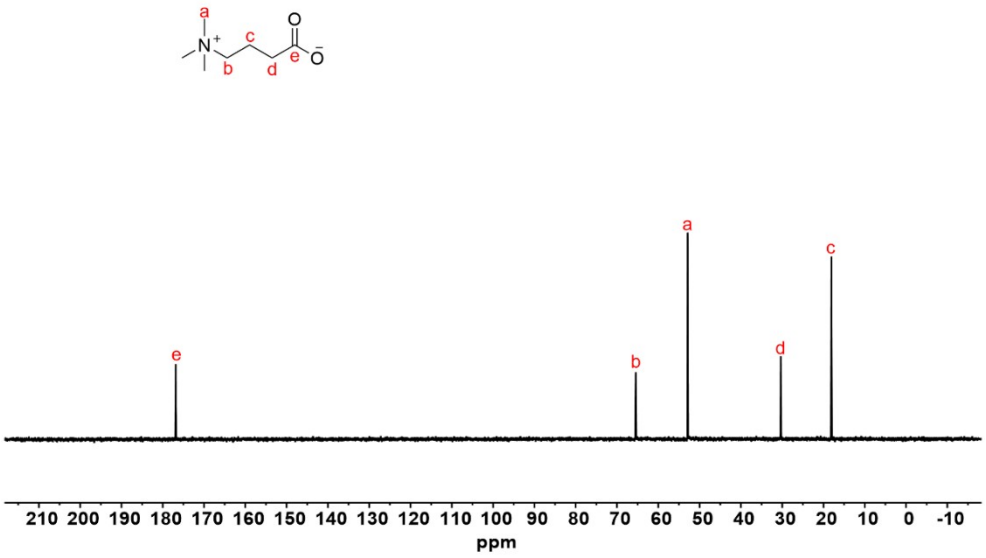

Figure S12. ^{13}C NMR spectrum of gamma-butyrobetaine.

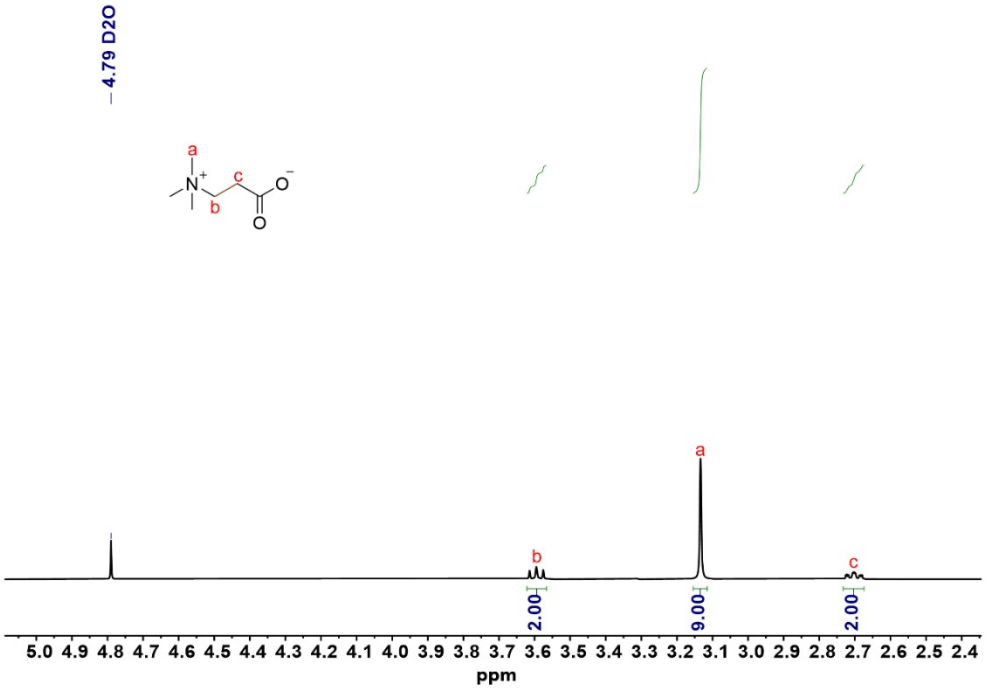

Figure S13. ^{1}H NMR spectrum of beta-alanine betaine. ^{1}H NMR (400 MHz, Deuterium Oxide) δ 3.59 (dd, *J* = 8.2, 7.1 Hz, 2H), 3.13 (d, *J* = 0.9 Hz, 9H), 2.73 – 2.67 (m, 2H).

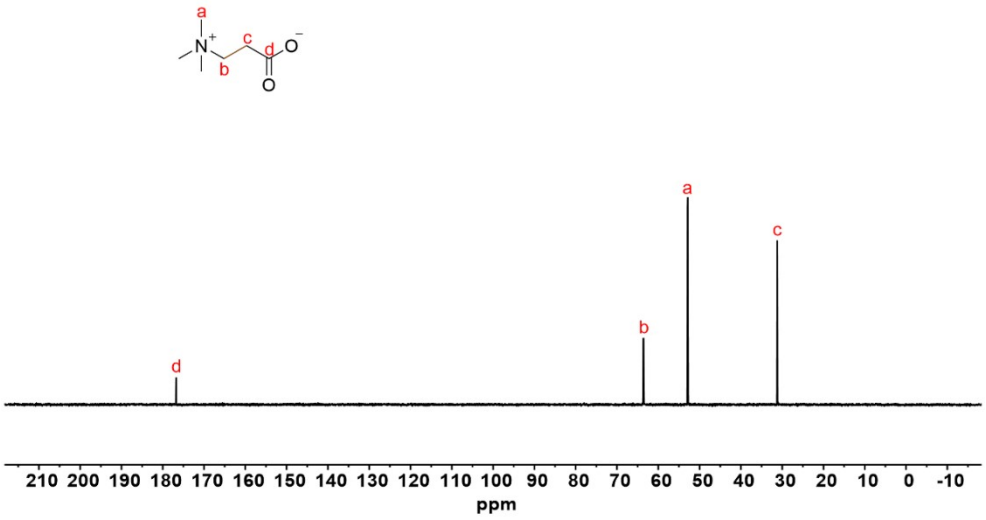

Figure S14. ^{13}C NMR spectrum of beta-alanine betaine.