

Supporting information

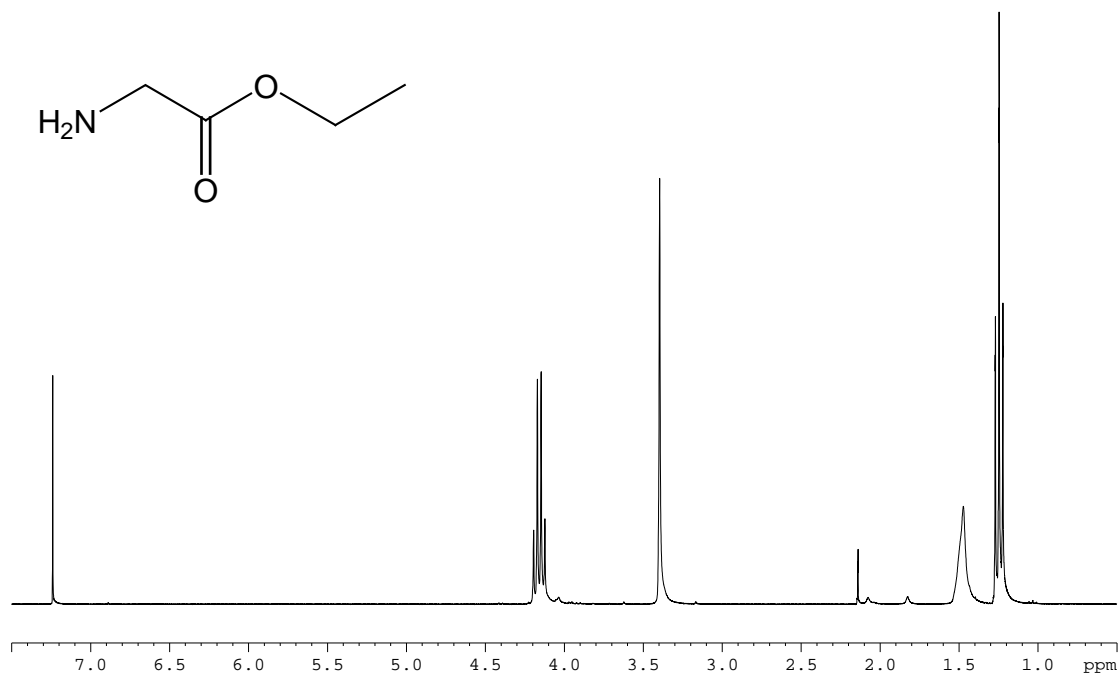
Table 1. Retention time (minutes) of the products: GC analysis

Product	Retention time (minutes)
2a	11.84
2b	3.64
3b	11.01, 11.15
4a	17.04
5a	8.7

Gas chromatographic analysis was performed on a HP-5890 GC equipped with a HP-5 capillary column and FID detector: initial (3 min) and final temperatures of 80 and 200 °C respectively, heating rate of 10 °C min⁻¹, at 7 psi.

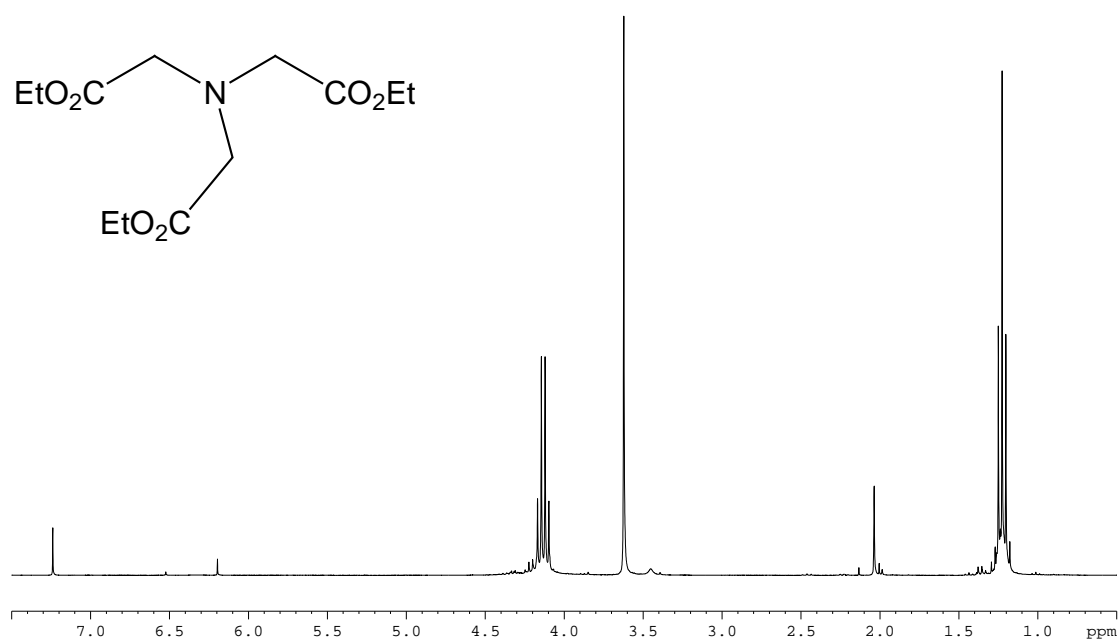
¹H NMR spectra of the products:

Glycine ethyl ester 2a:



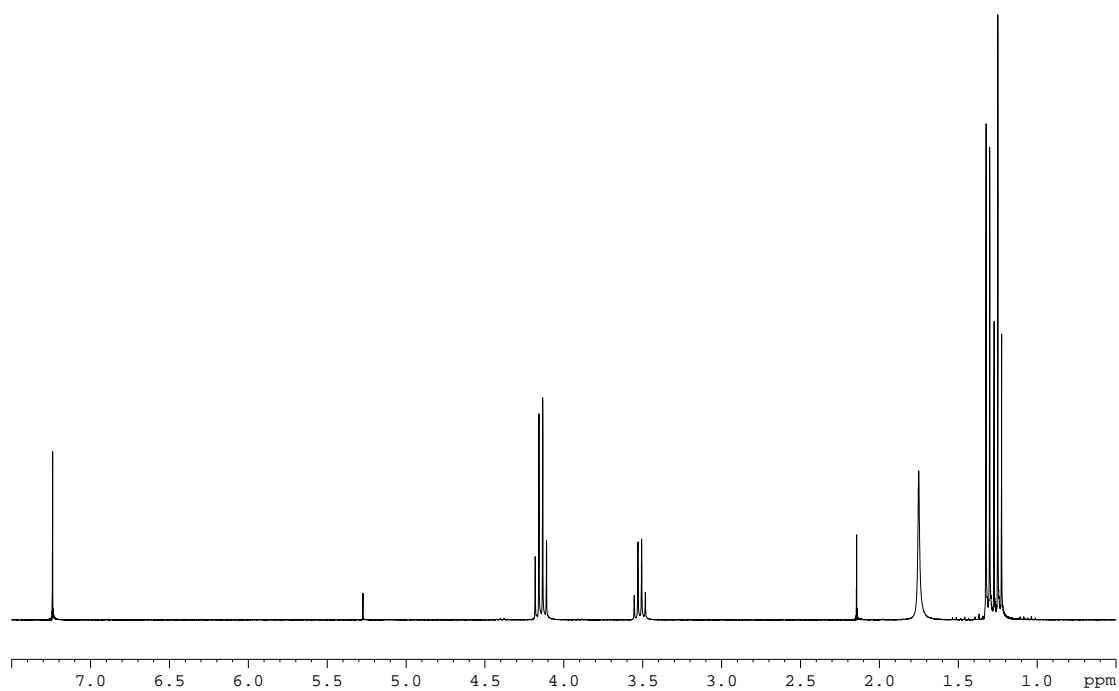
4.12 (q, 2H, $J=7.2$ Hz), 3.35 (s, 2H), 1.20 (t, 3H, $J=7.2$ Hz)

Triethyl nitrilotriacetate **4a**:



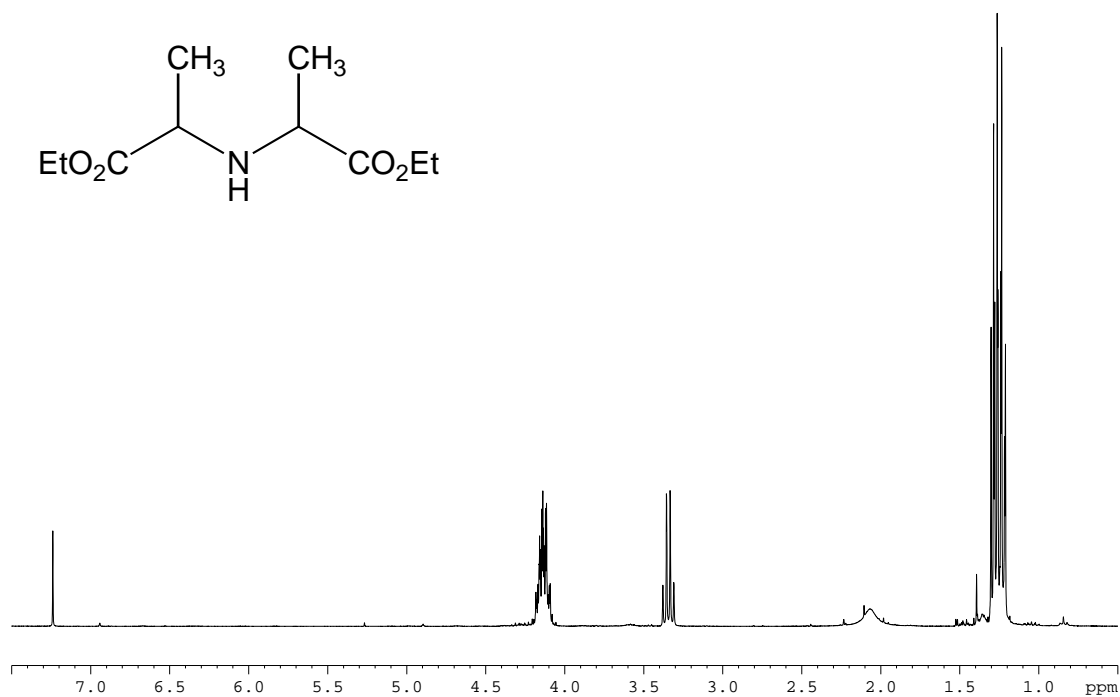
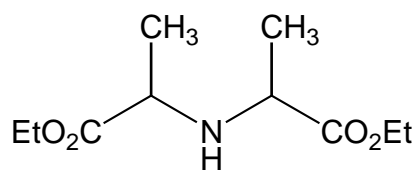
4.06 (q, 2H, $J=7.2$ Hz), 3.55 (s, 2H), 1.15 (t, 3H, $J=7.2$ Hz)

Alanine ethyl ester **2b**:



4.13 (q, 2H, $J=7.2$ Hz), 3.52 (q, 1H, $J=7.2$ Hz), 1.31 (d, 3H, $J=7.2$ Hz), 1.25 (t, 3H, $J=7.2$ Hz)

Diethyl 2,2'-iminodipropionate **3b**:



4.12-4.16 (m, 4H), 3.34 (q, 2H), 1.2-1.3 (m, 12H)