Supplementary Material

Selective synthesis of methyl dithienyl-glycolates

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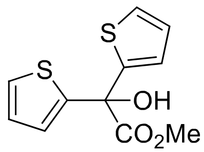
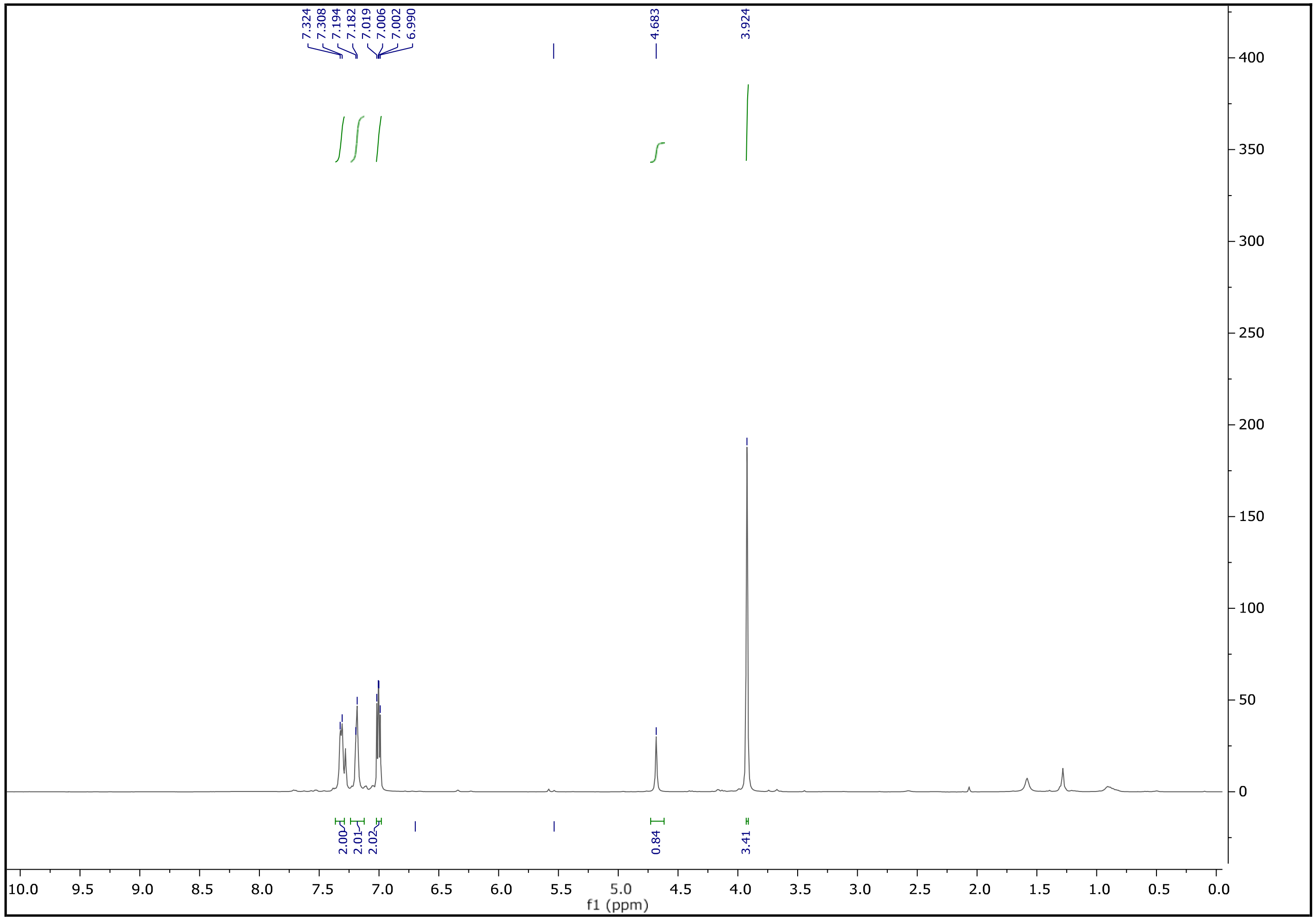
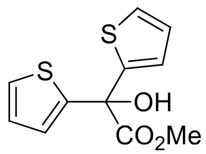
Materials and methods. All available chemicals and solvents were purchased from commercial sources and were used without any further purification. Thin layer chromatography (TLC) was performed using 0.25 mm silica gel precoated plates Si 60-F254 (Merck) visualized by UV-254 light and CAM staining. Purification by flash column chromatography (FCC) was conducted by using silica gel Si 60, 230-400 mesh, 0.040-0.063 mm (Merck). Melting points were determined on a Büchi B450 apparatus and are corrected. ^{1}H and ^{13}C NMR spectra were recorded on a Bruker Fourier 300 (recorded at: 300.13 MHz for ^{1}H; 75.00 MHz for ^{13}C) or Bruker Avance Spectrometer (recorded at:
400.13 MHz for ^{1}H; 100.62 MHz for ^{13}C); chemical shifts are indicated in ppm downfield from TMS,
using the residual proton ($CHCl_3$ = 7.28 ppm; acetone = 2.05 ppm; DMSO = 2.45 ppm) and carbon ($CDCl_3$ = 77.0 ppm; acetone = 207.1 and 30.9 ppm) solvent resonances as internal reference. Coupling constants values *J* are given in Hz.


S
S
OH
CO2Me

1a


7.324
7.308
7.194
7.182
7.019
7.006
7.002
6.990
4.683
3.924
2.00
2.01
2.02
0.84
3.41
f1 (ppm)



1a

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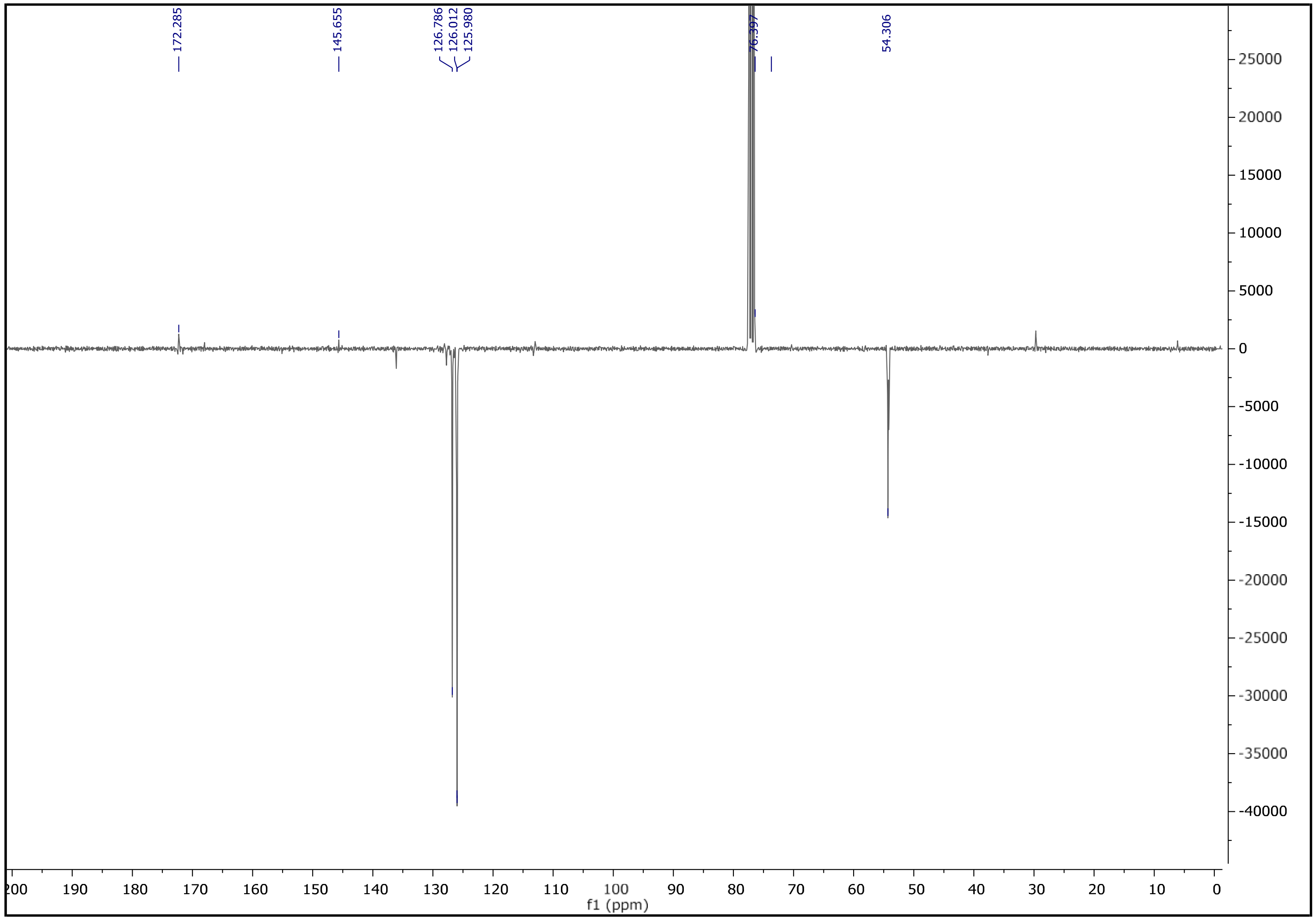

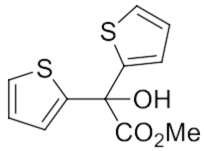

1a

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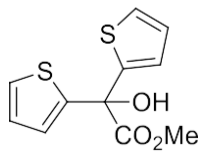

1a

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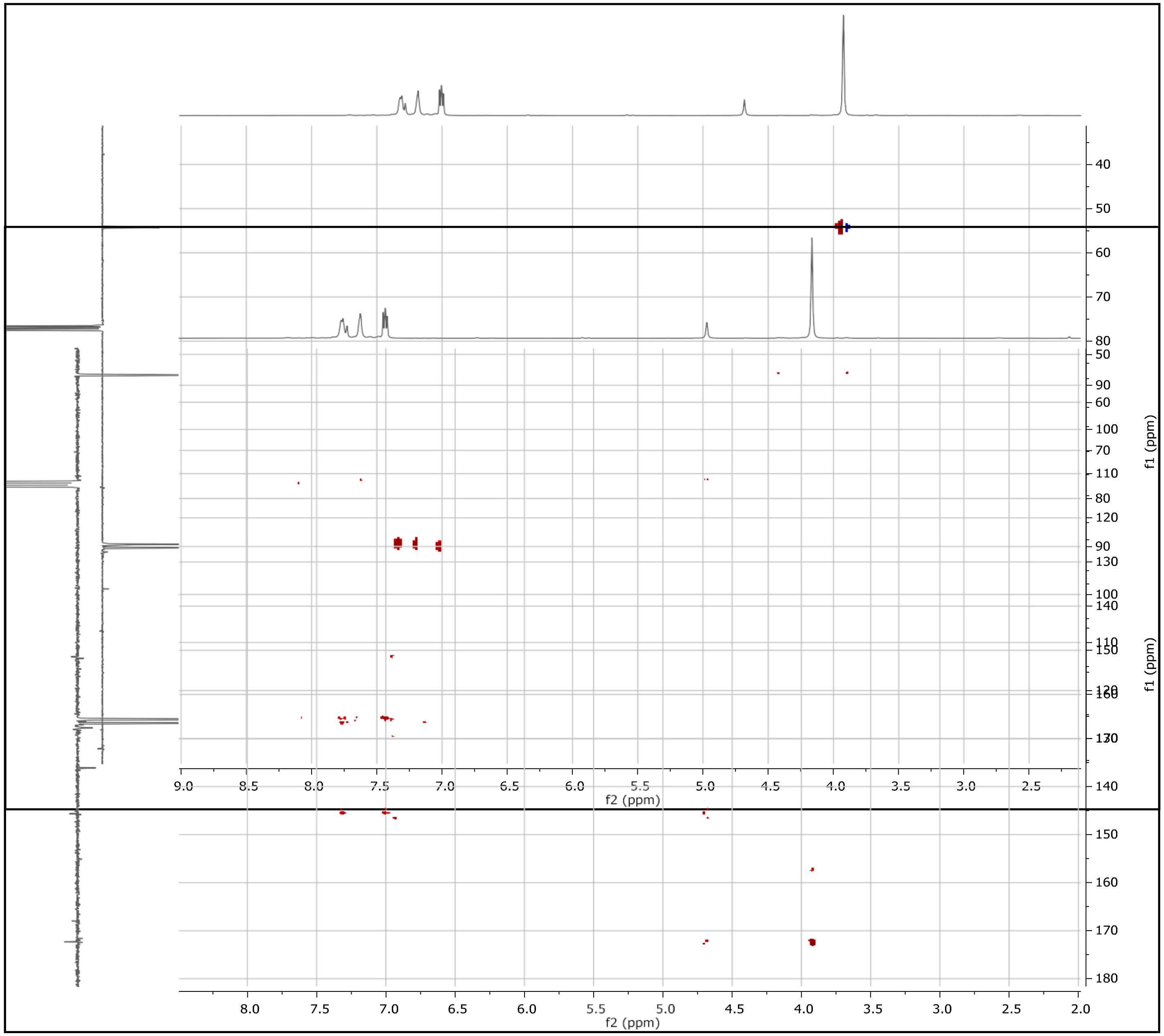
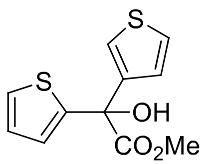
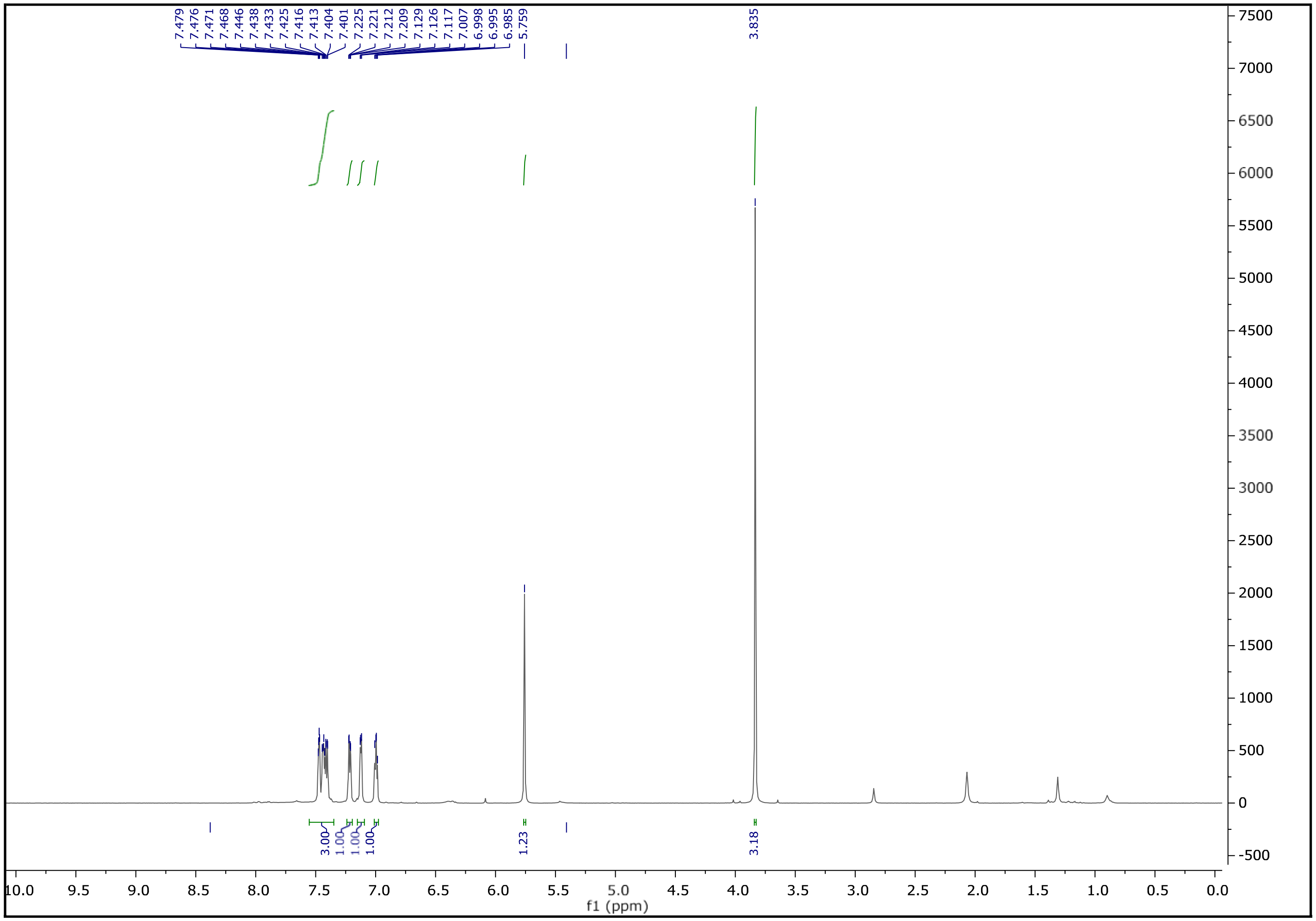
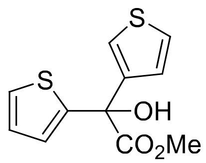




1b

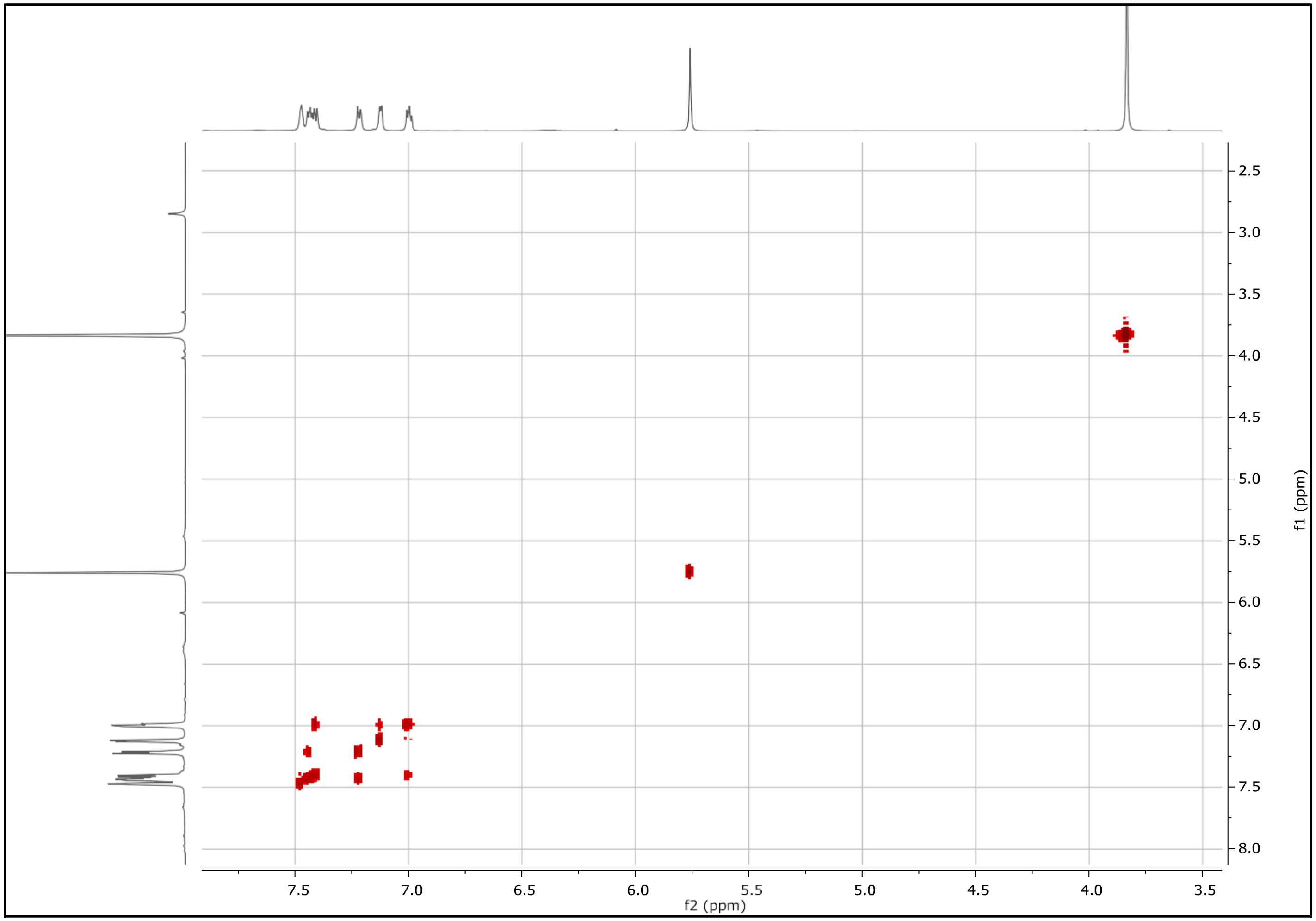
400 MHz, *Acetone- d_6*

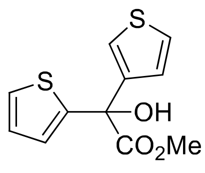




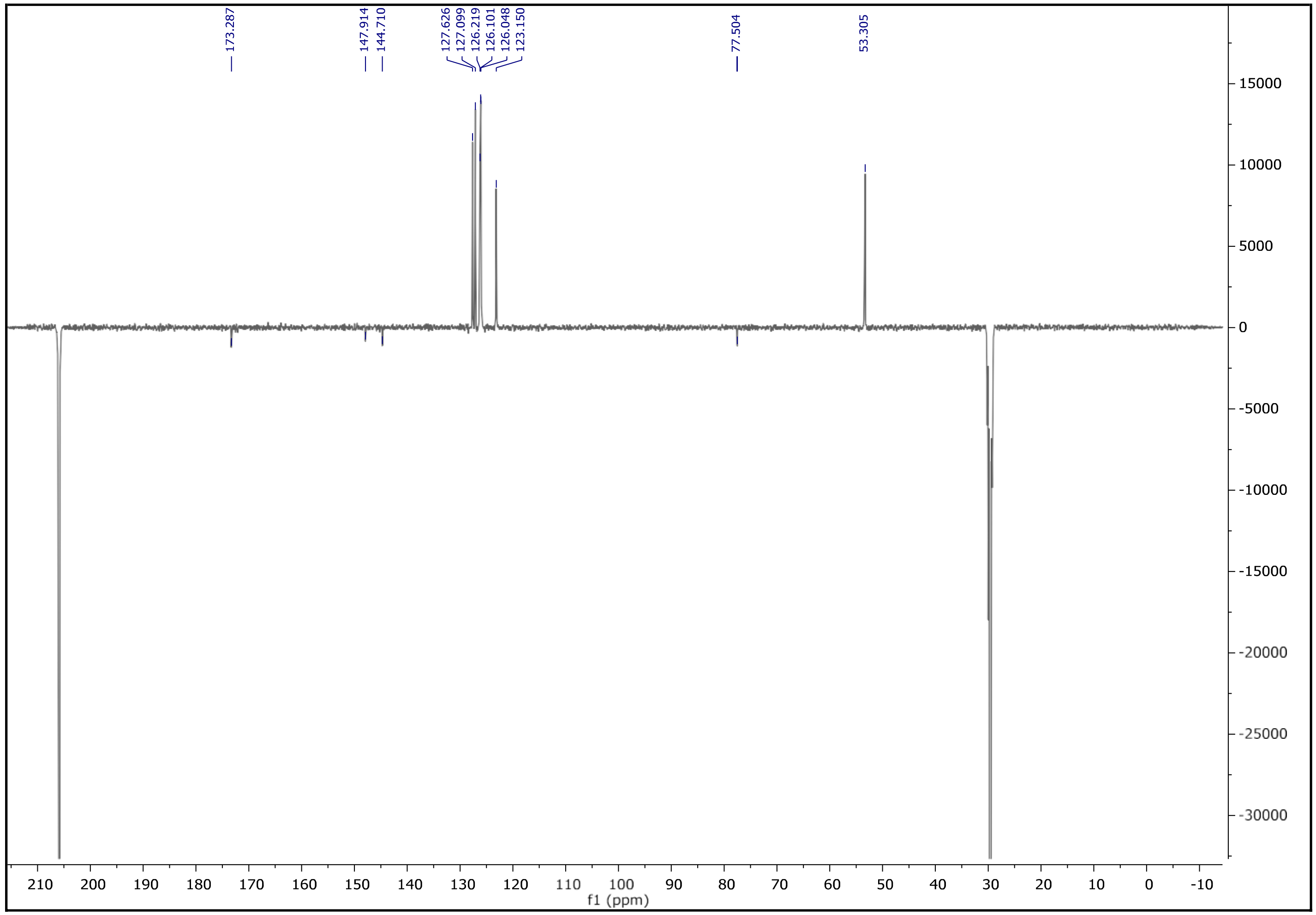
1b

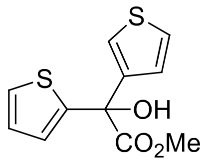
400 MHz, *Acetone-* d_6




S
S
OH
CO2Me

1b


173.287
147.914
144.710
127.626
127.099
126.219
126.101
126.048
123.150
77.504
53.305
15000
10000
5000
0
-5000
-10000
-15000
-20000
-25000
-30000
210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 -10
f1 (ppm)



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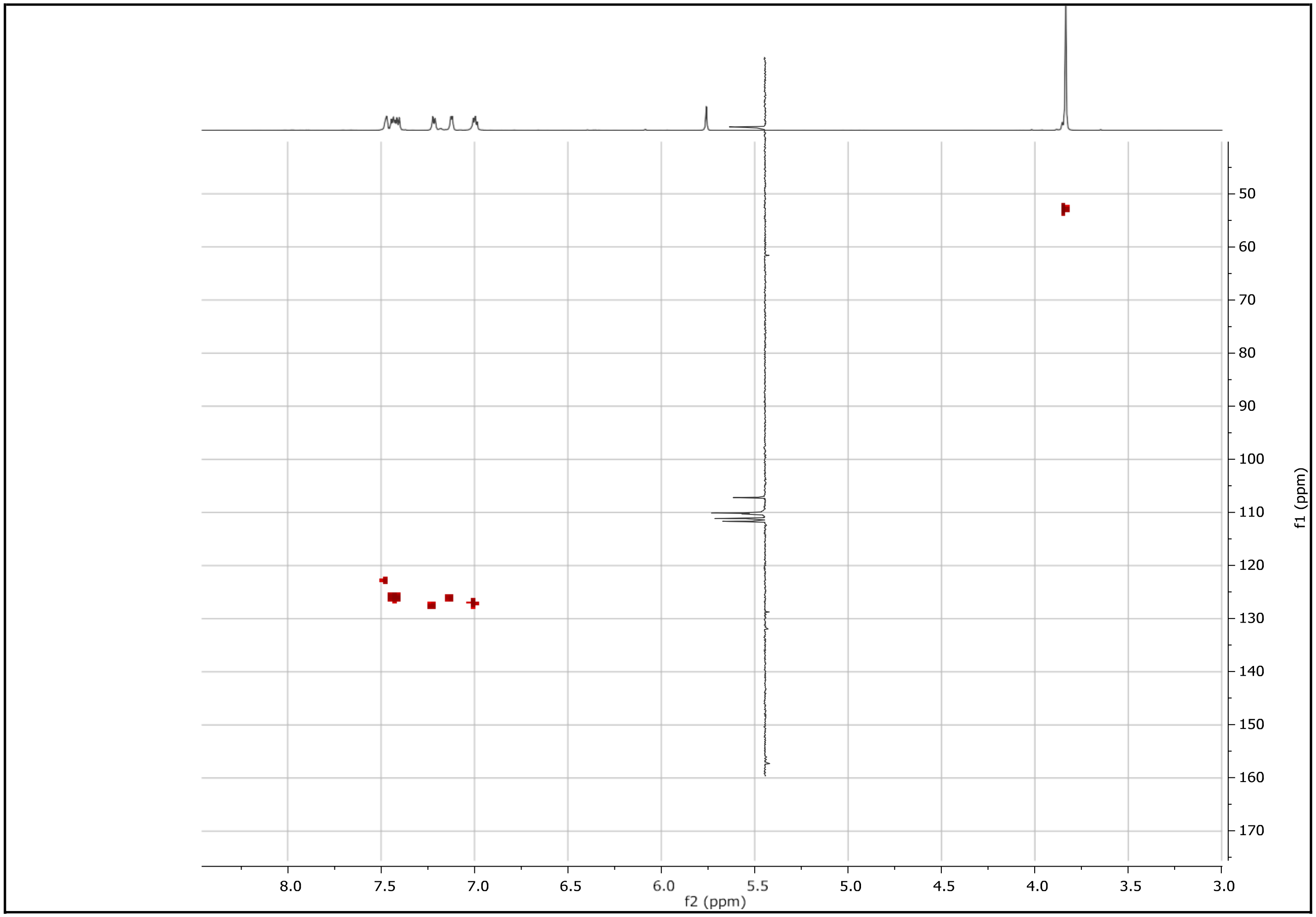

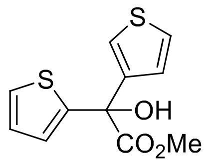

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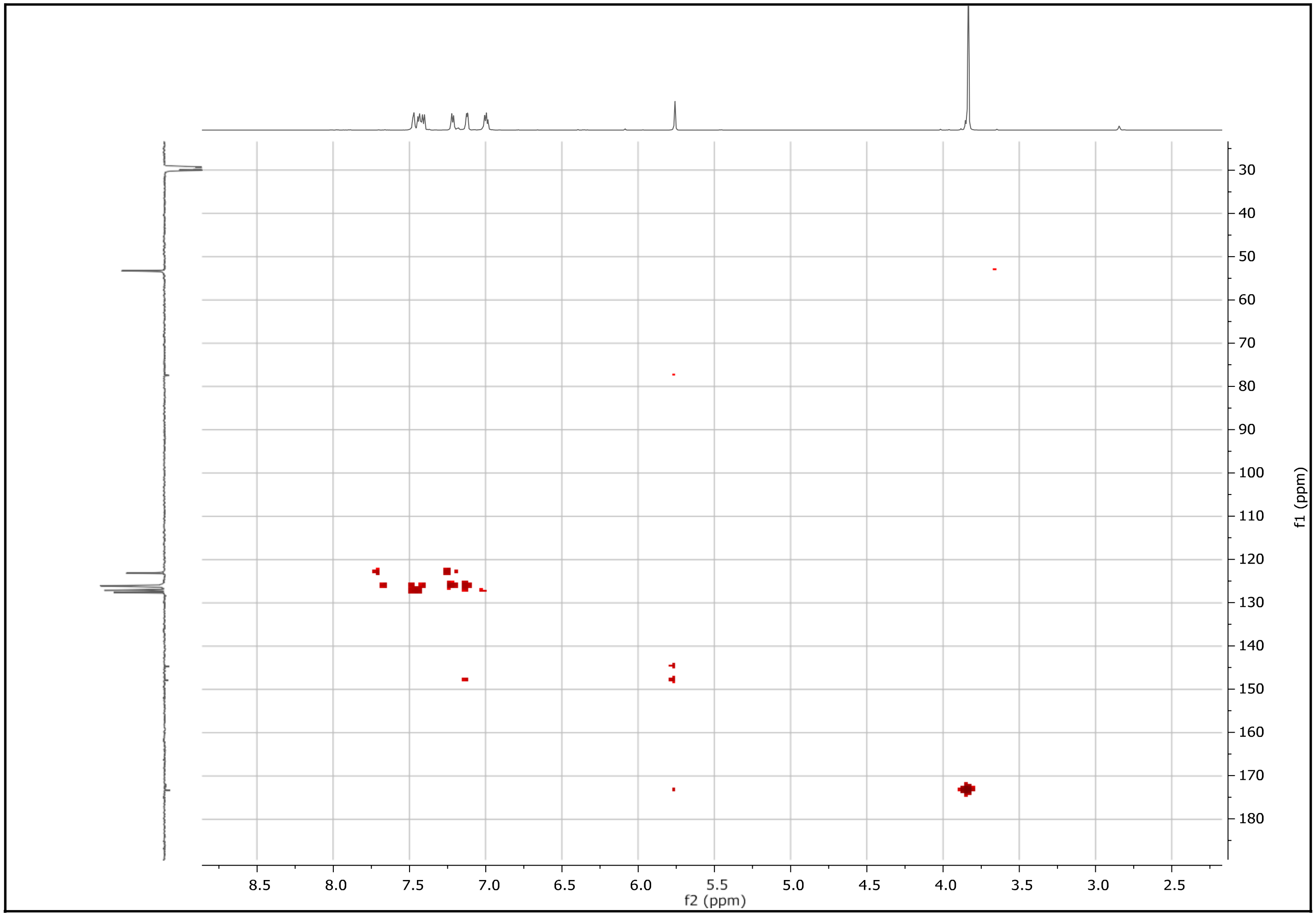
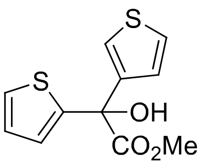
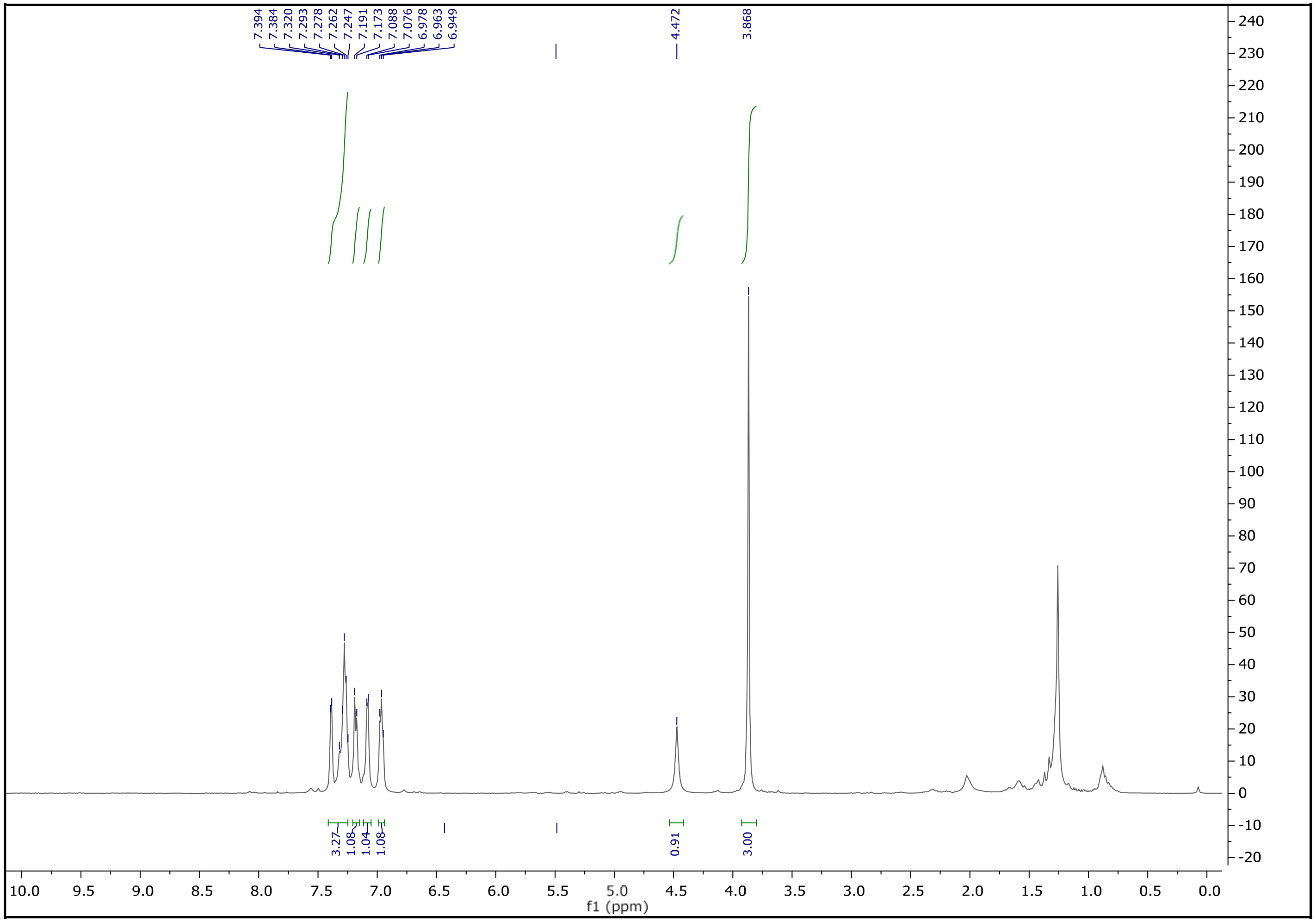
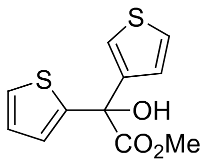




1b

300 MHz, $CDCl_3$





1b

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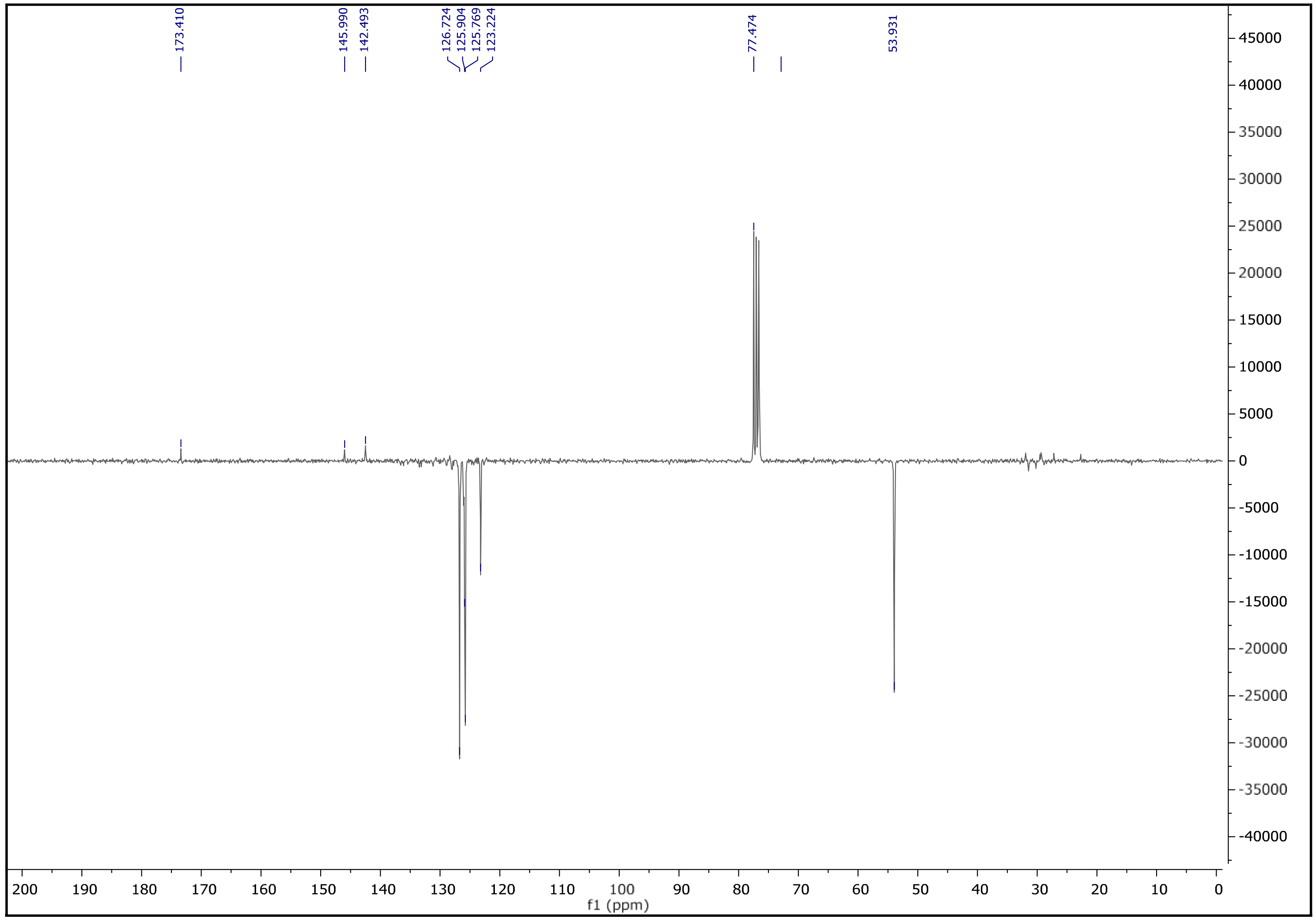

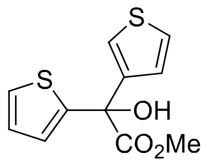

1b

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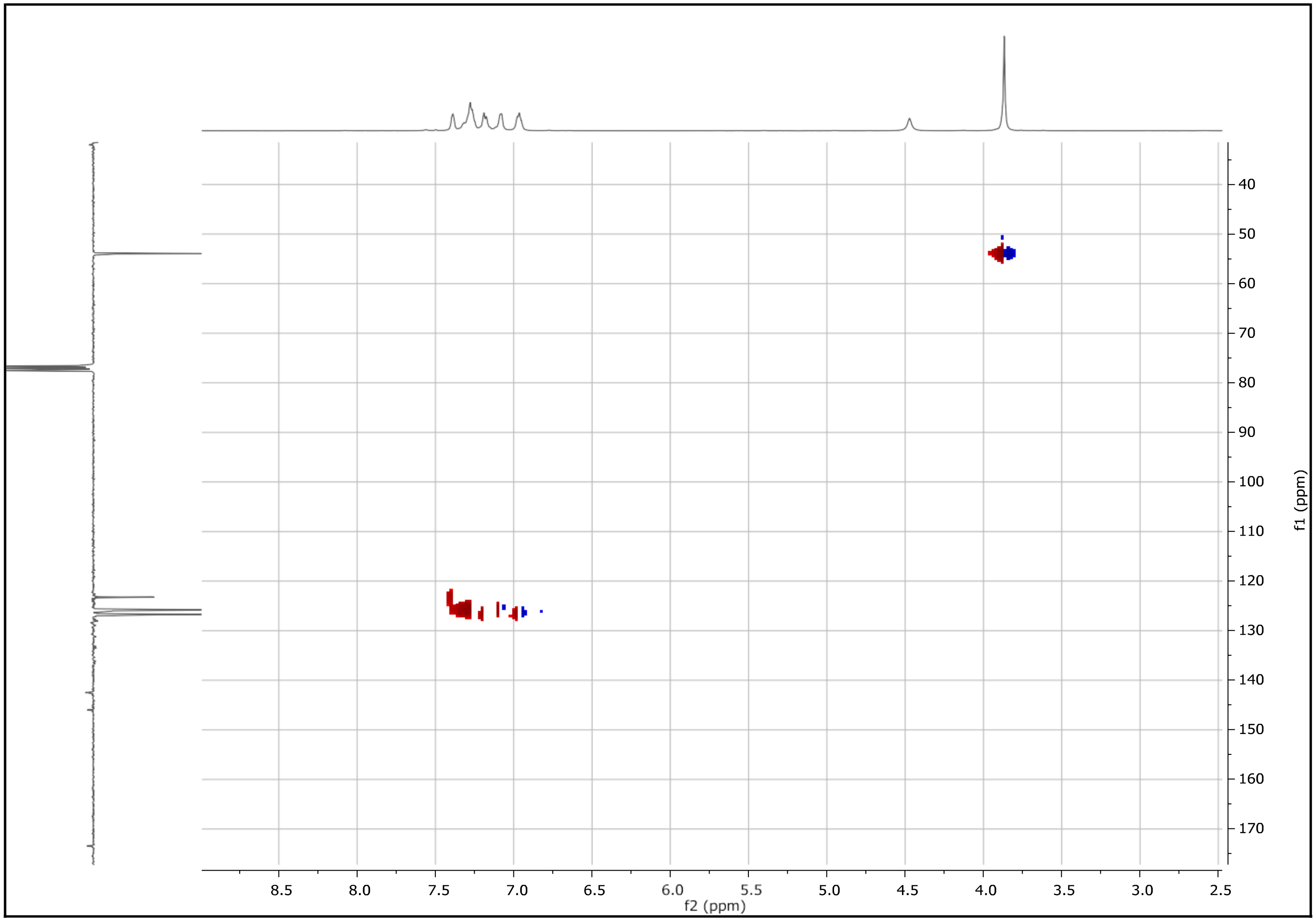

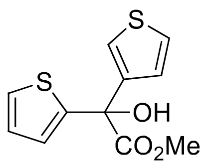

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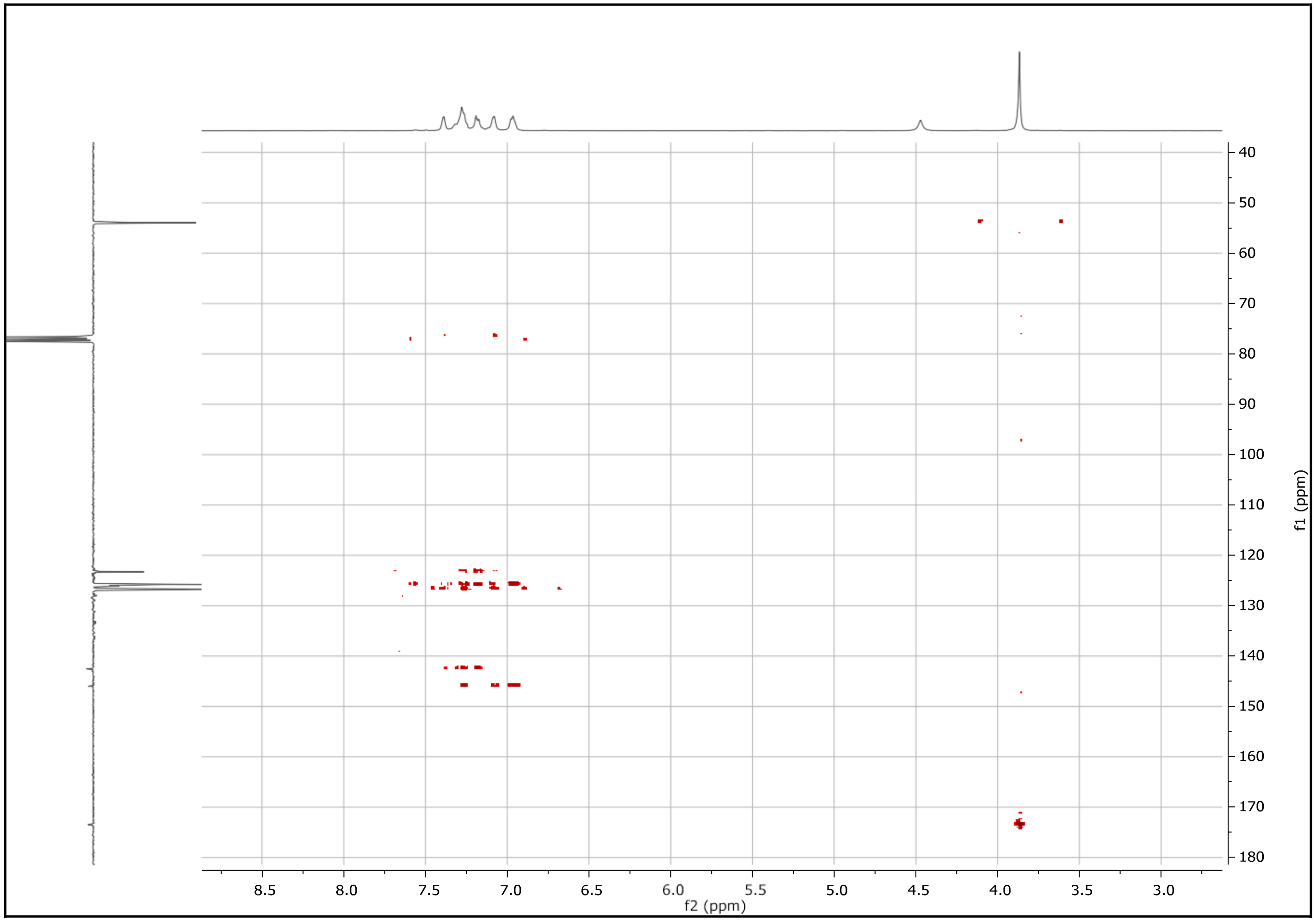
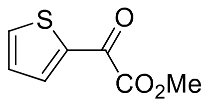
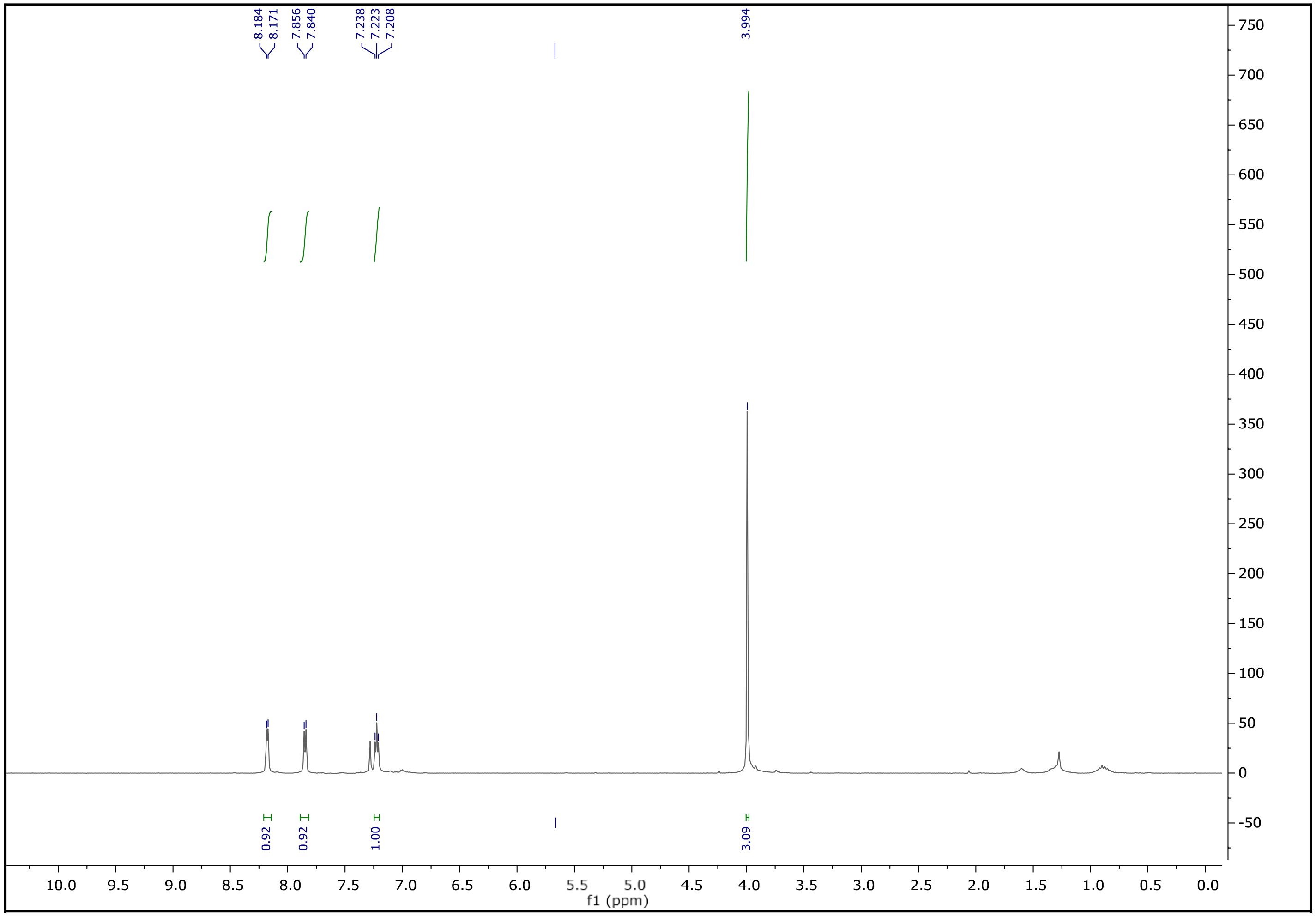
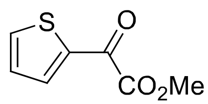




4a

400 MHz, $CDCl_3$





4a

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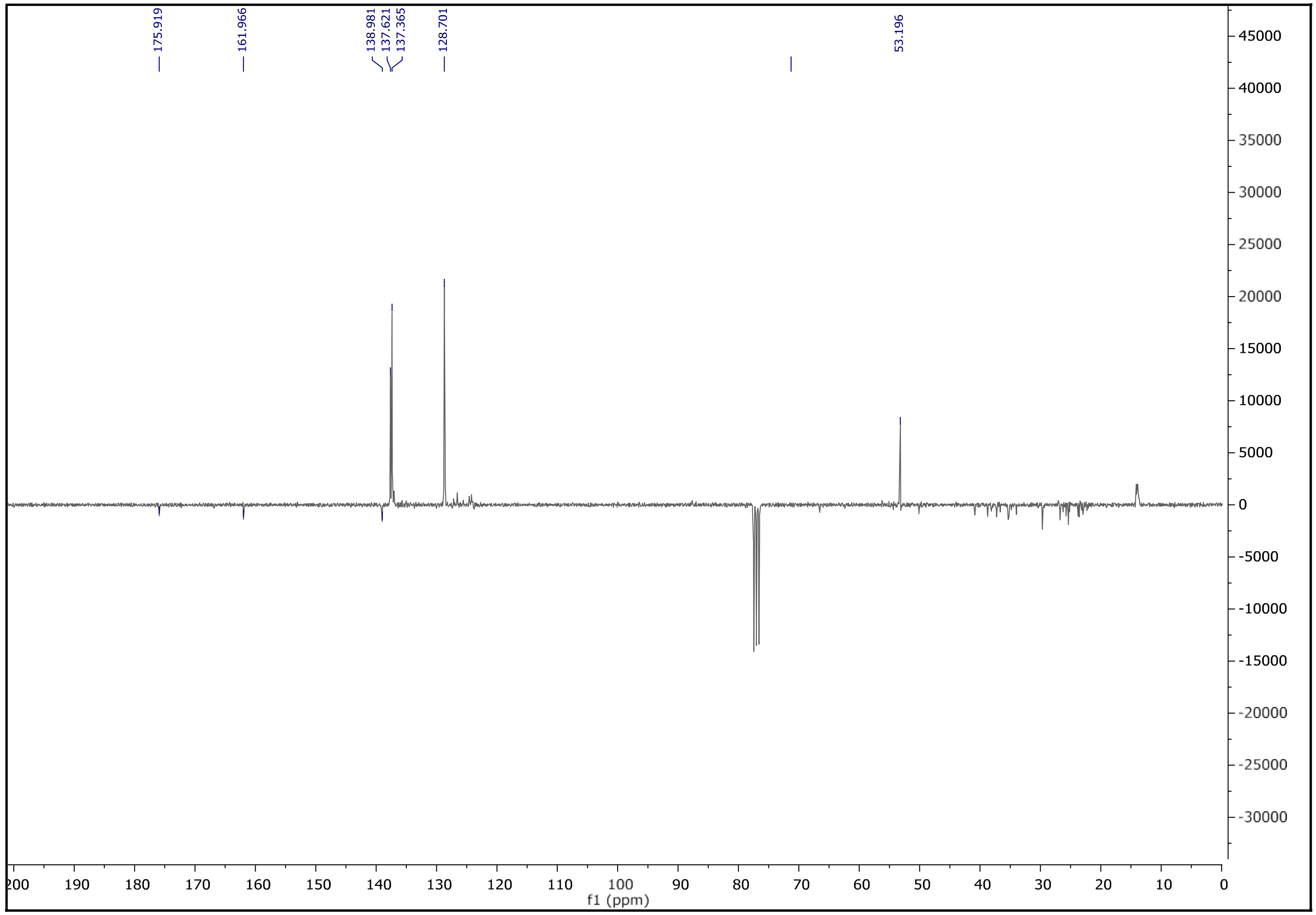

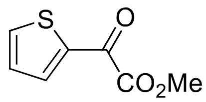

4a

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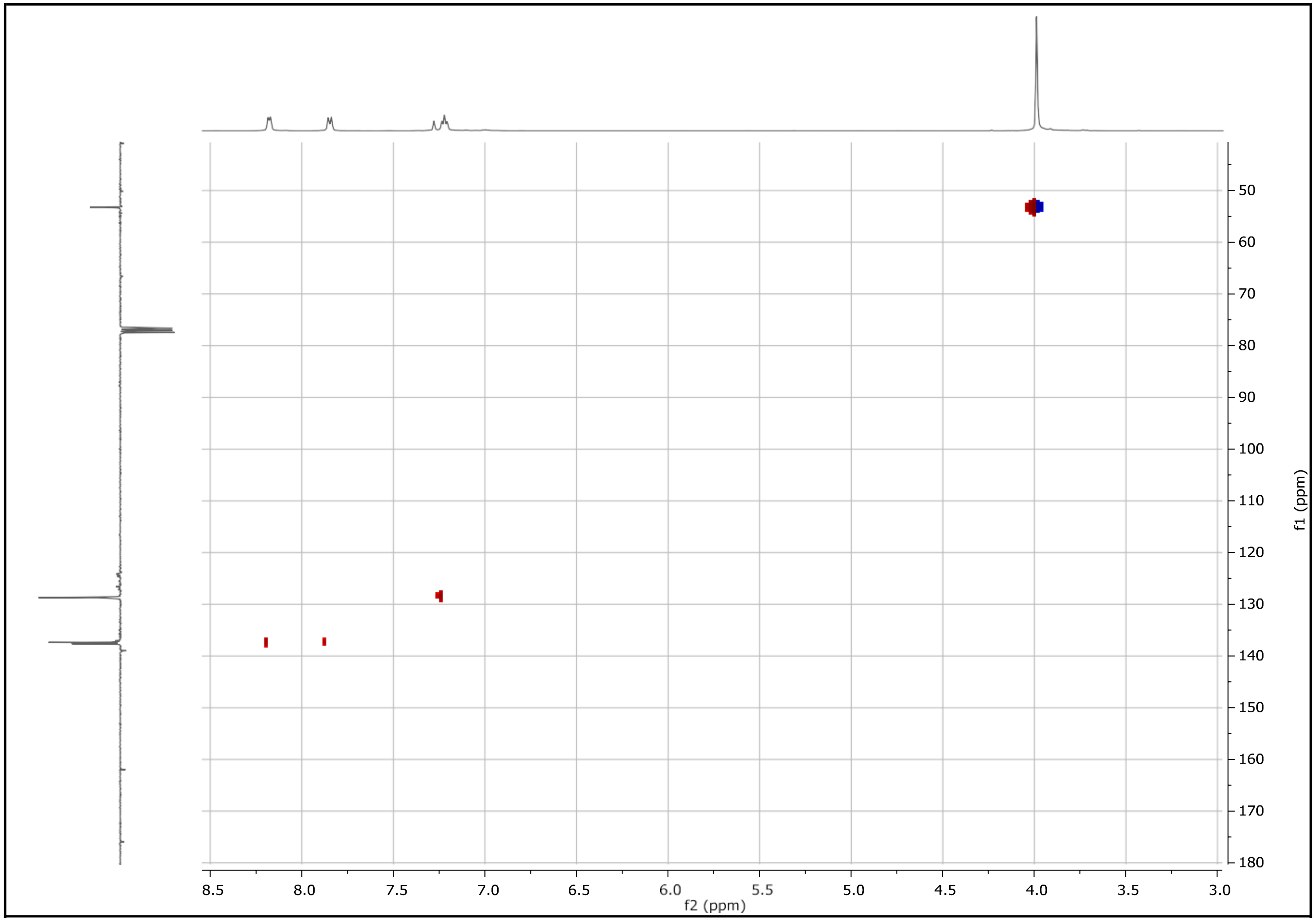

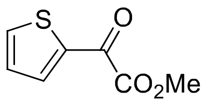

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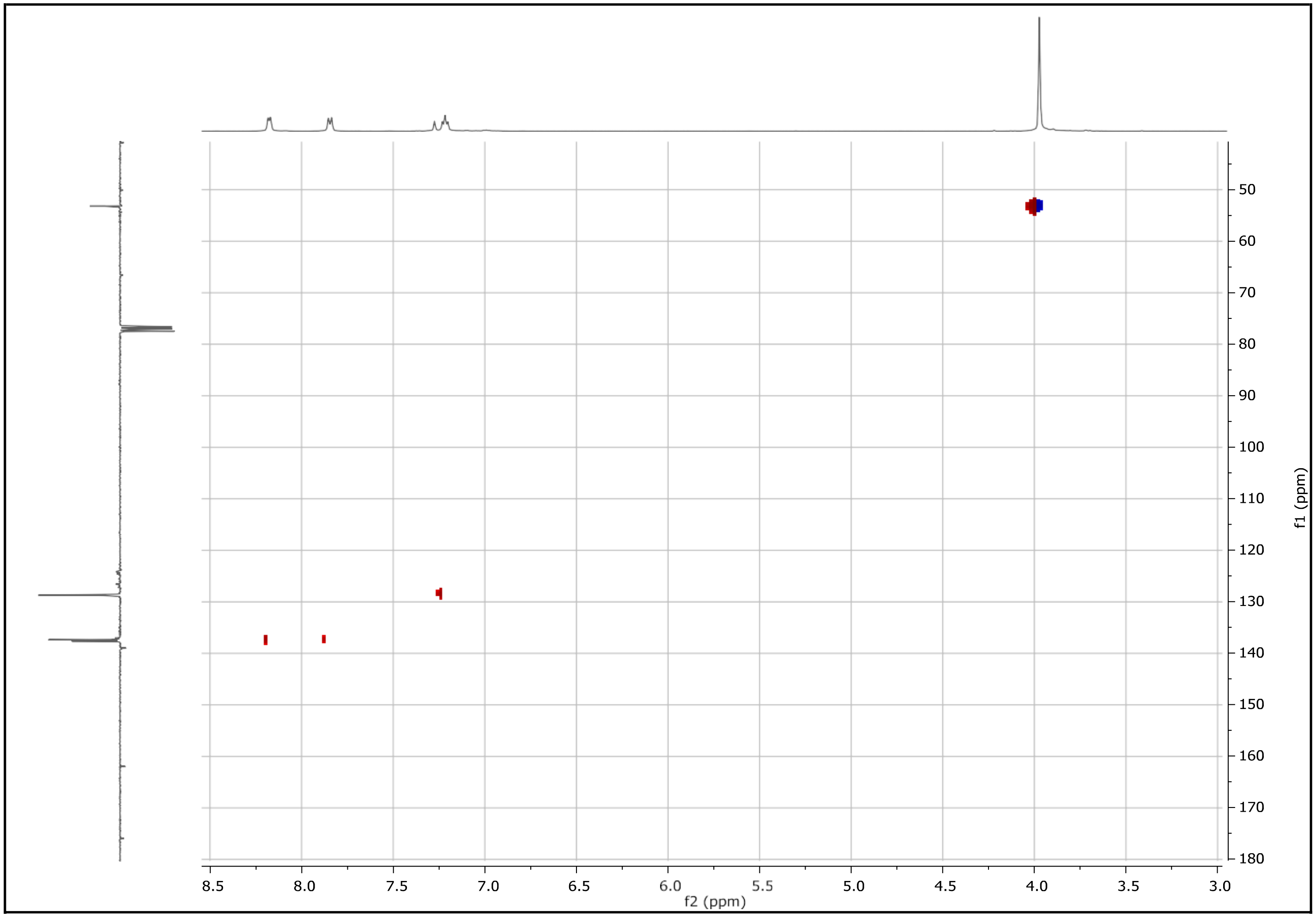

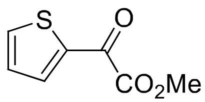

4a

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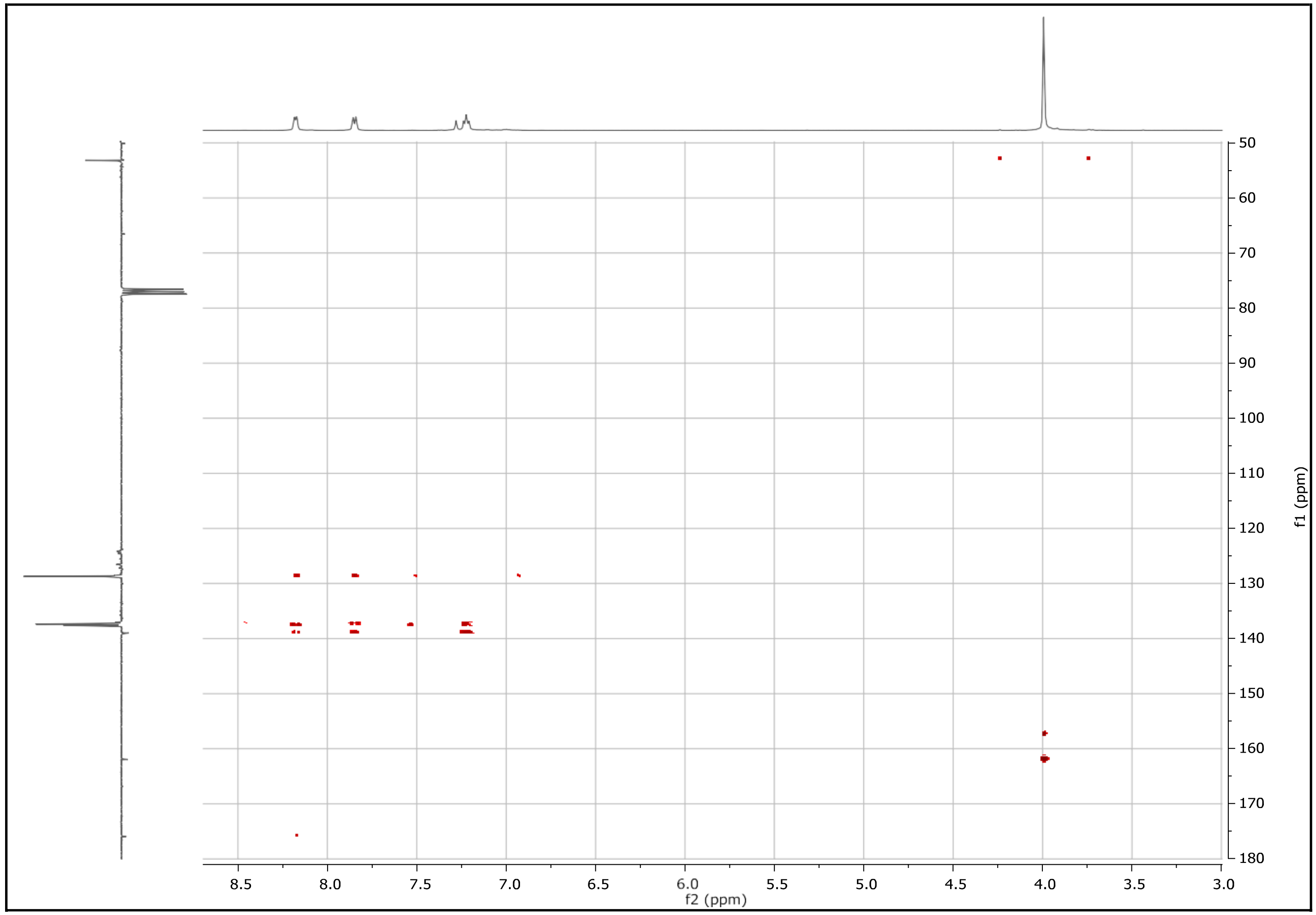
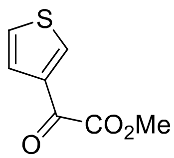
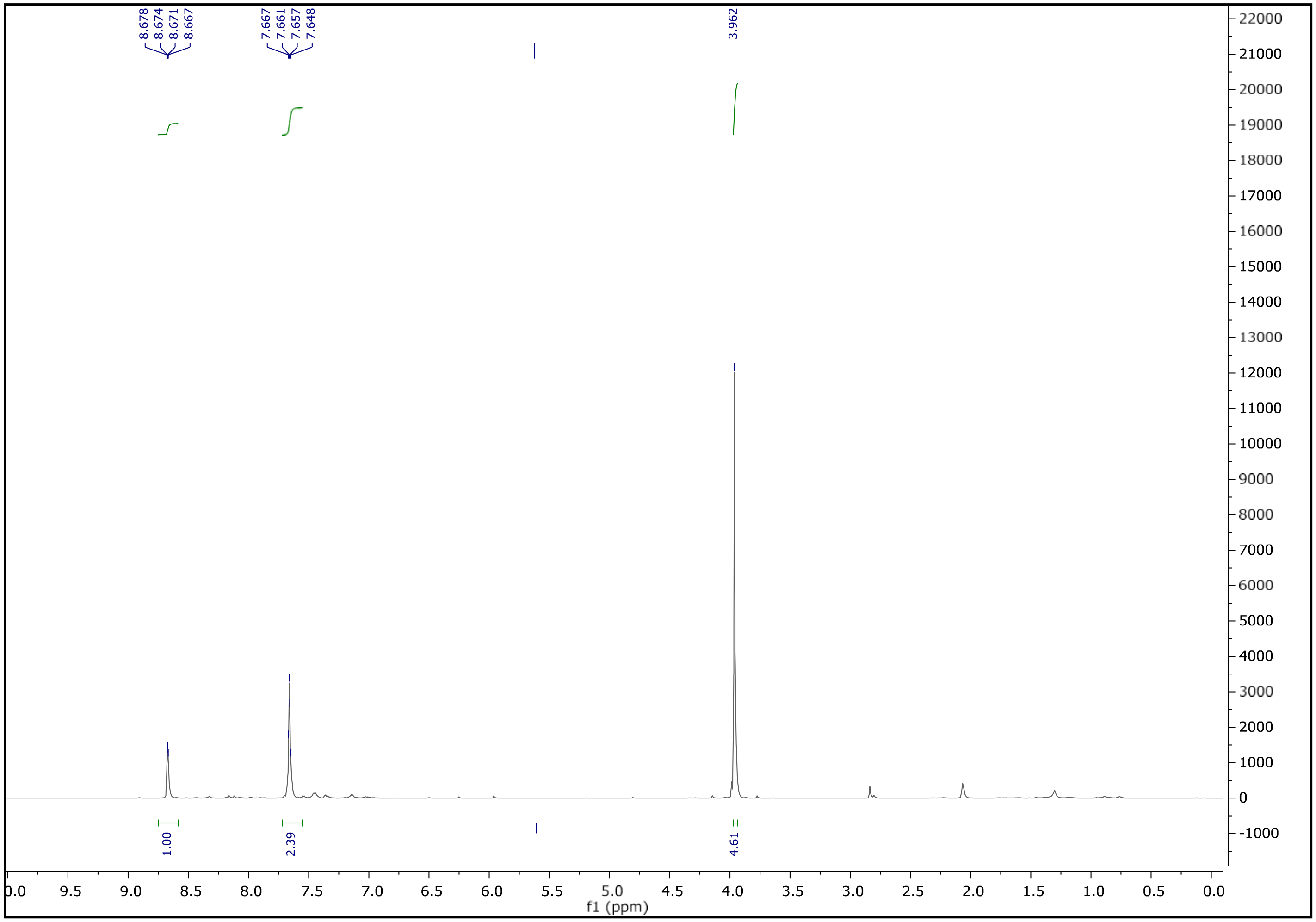
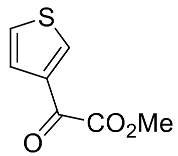




4b

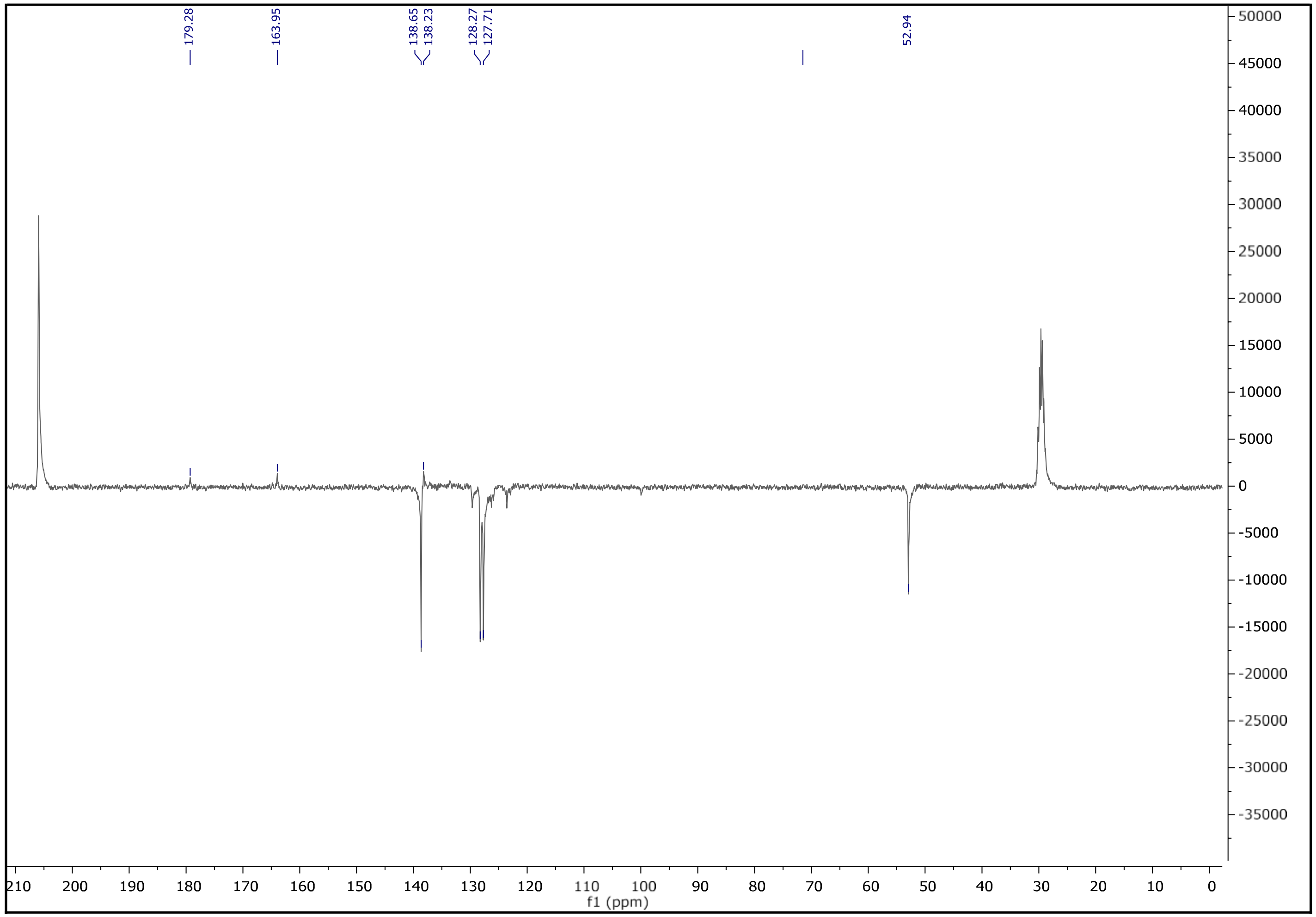
400 MHz, *Acetone$_{d\text{-}6}$*

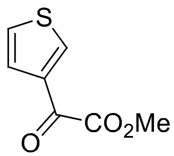




4b

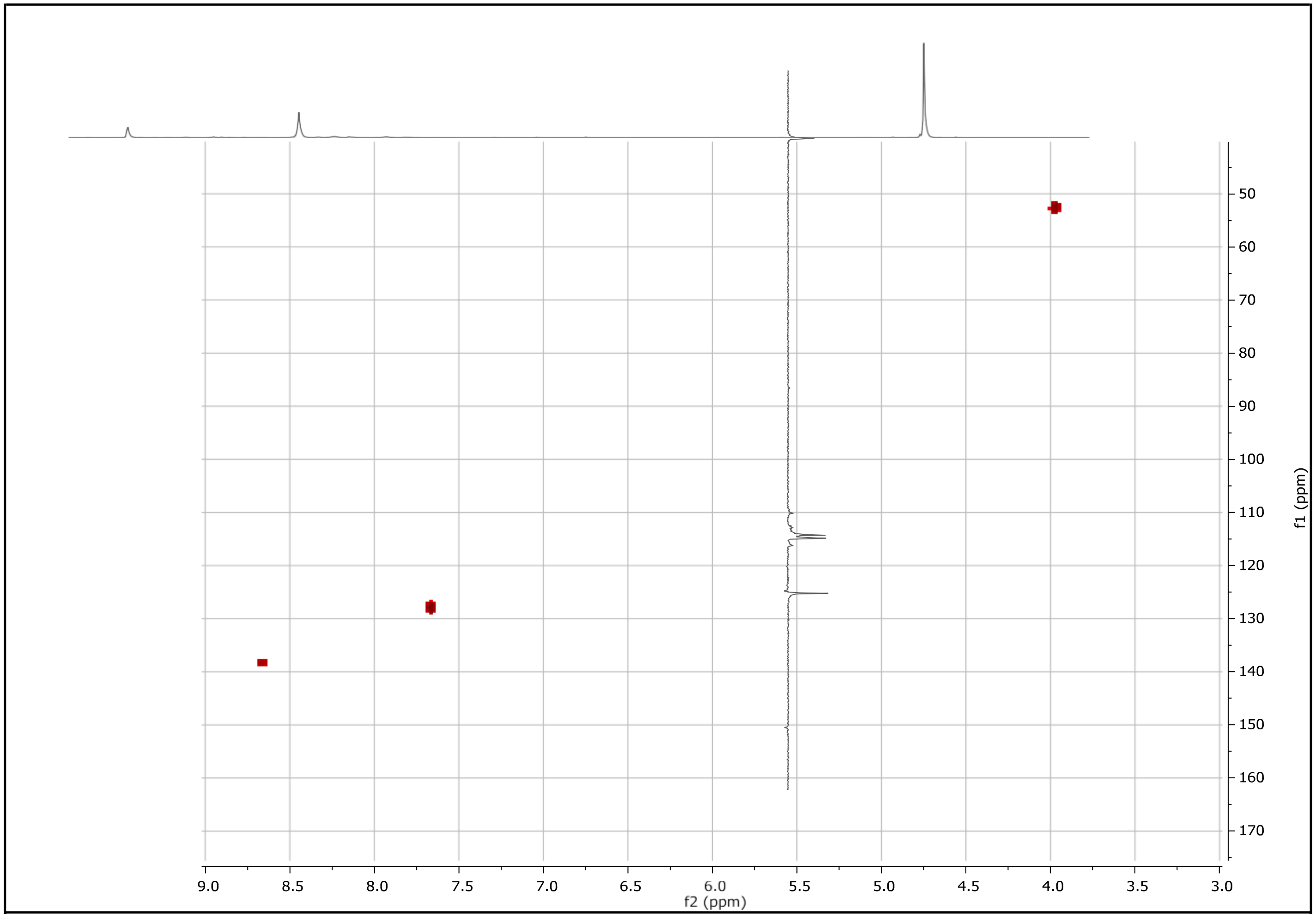
400 MHz, *Acetone$_{d-6}$*

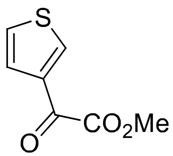




4b

400 MHz, *Acetone*$_{d\text{-}6}$





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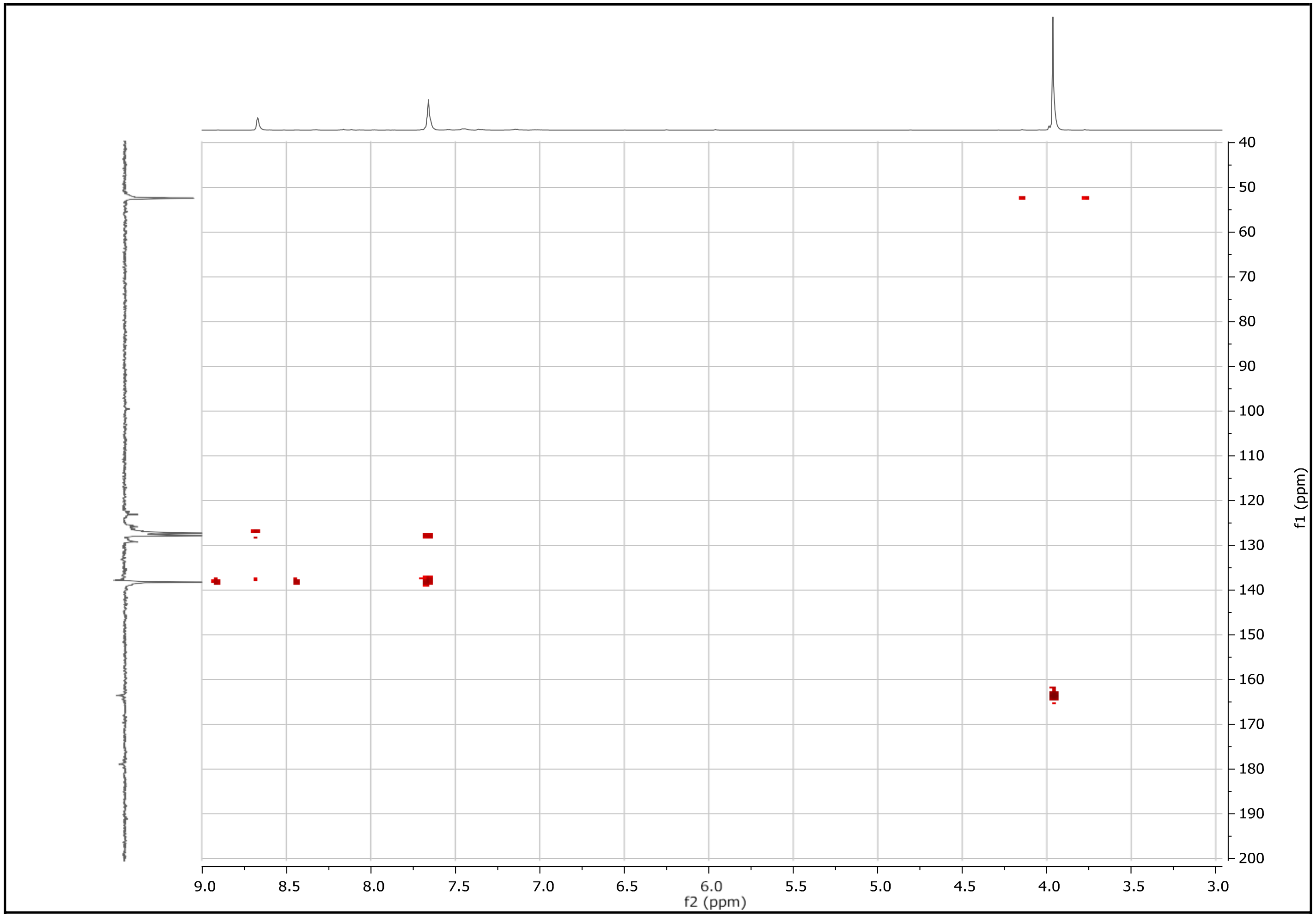
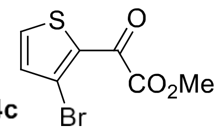
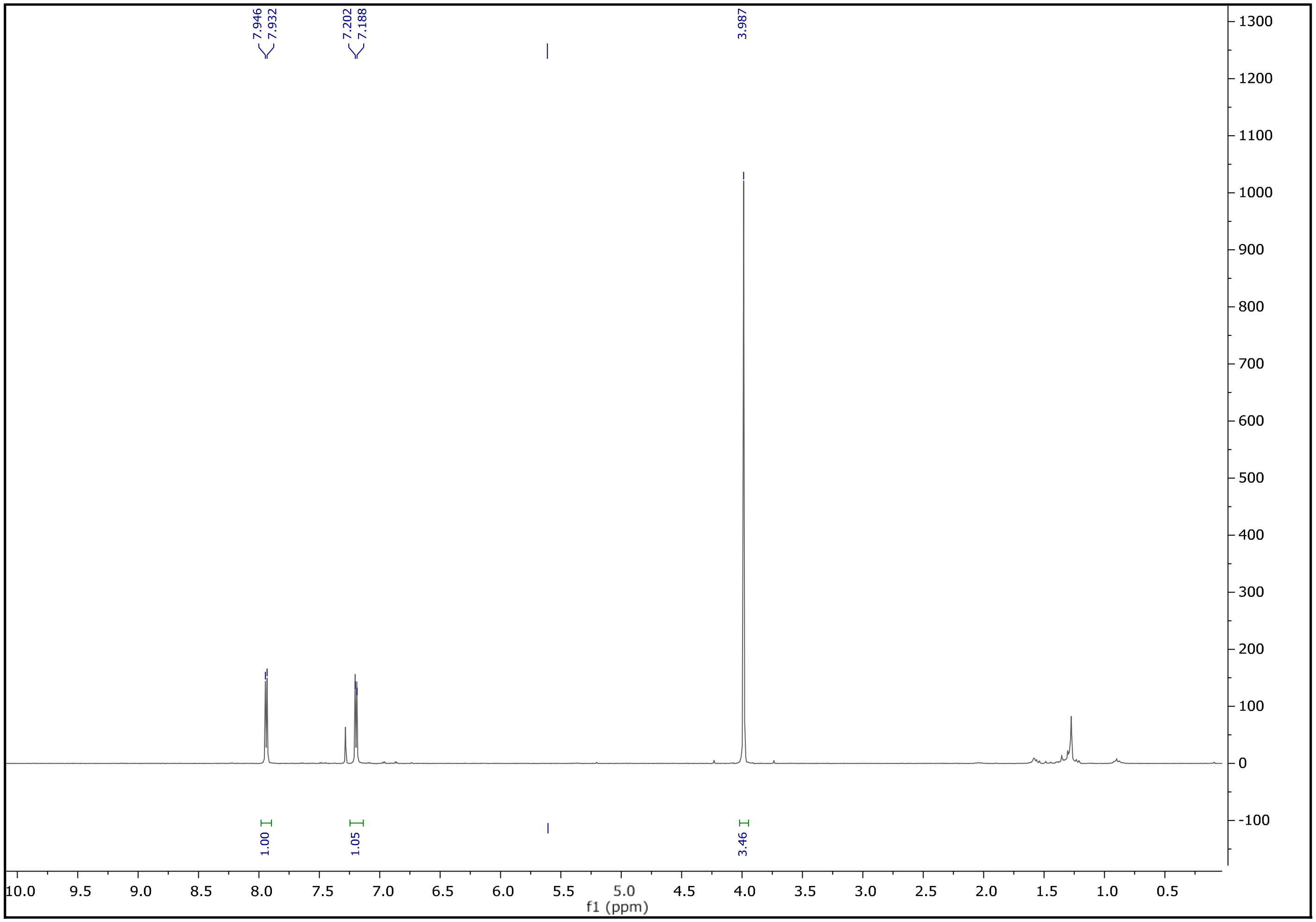
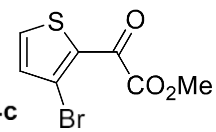




4c

300 MHz, $CDCl_3$





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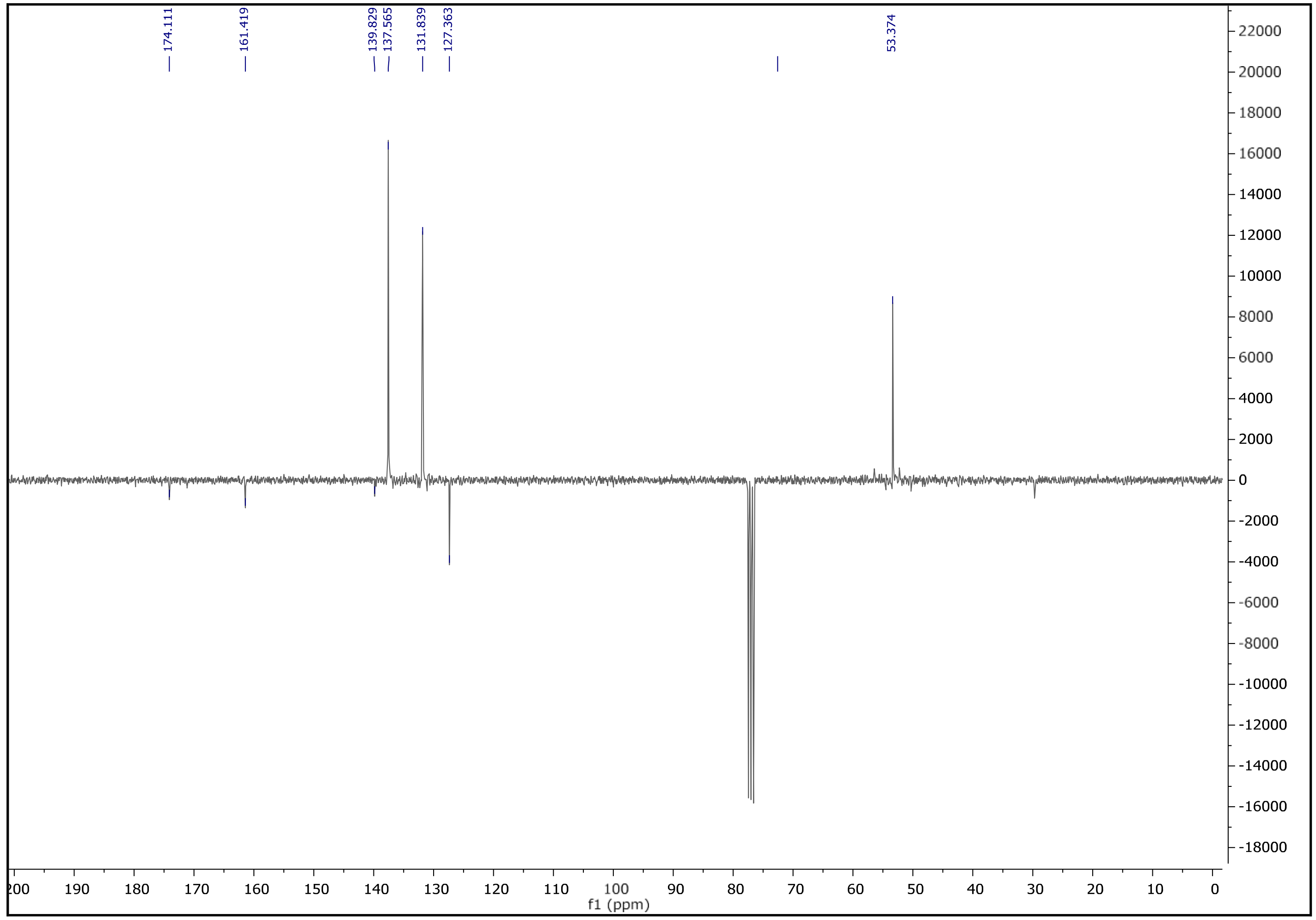

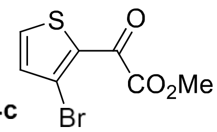

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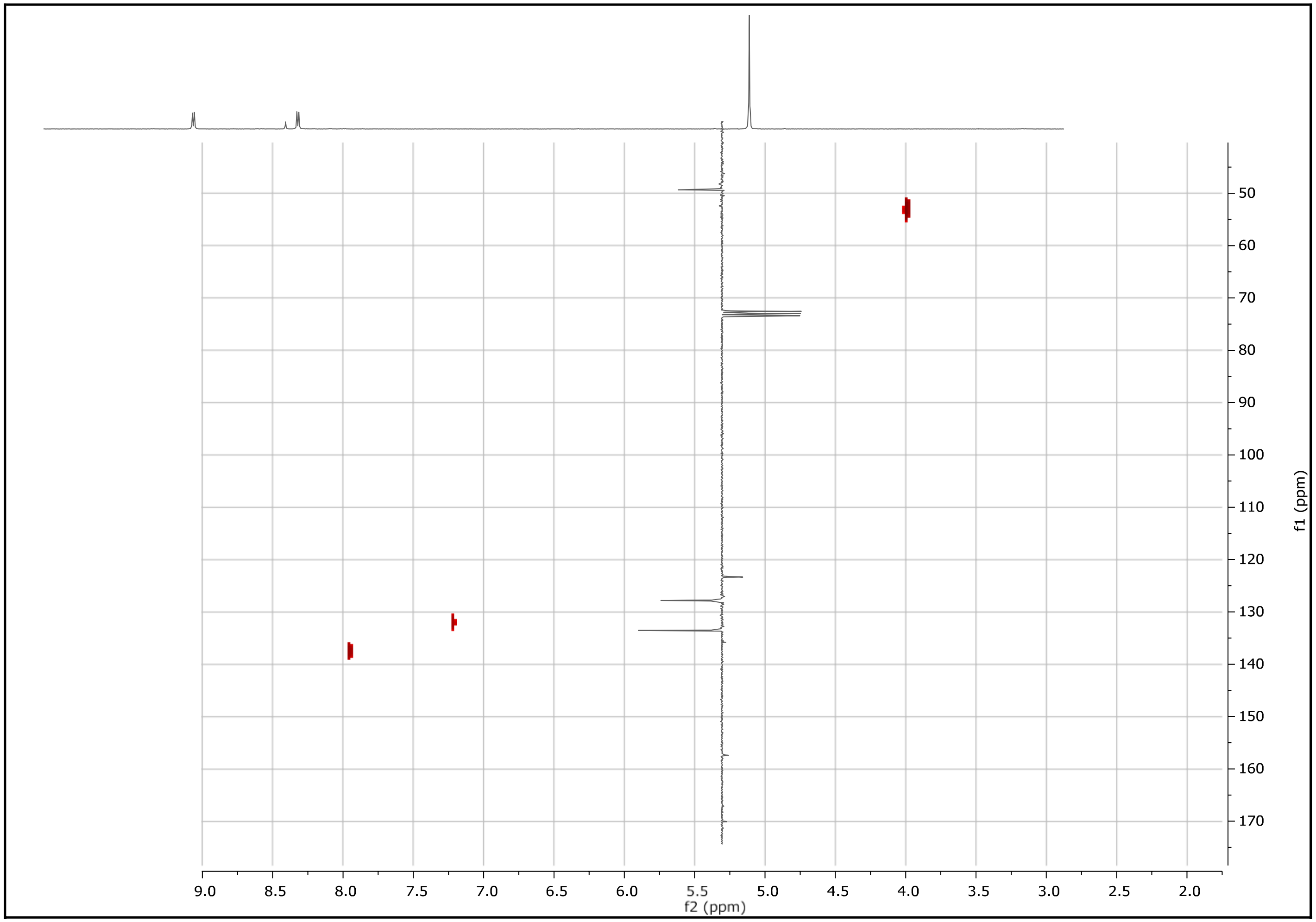

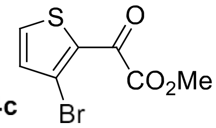

4c

300 MHz, $CDCl_3$