Supporting Information

Amaranzoles B-F, Imidazole-2-carboxy Steroids from the Marine Sponge, *Phorbas amaranthus*. C24-*N*- and C24-*O*-Analogs from a Divergent Oxidative Biosynthesis.

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Contents

Figure S1. ^{1}H NMR spectrum for amaranzole B (**2**) in CD_3OD at 600 MHz

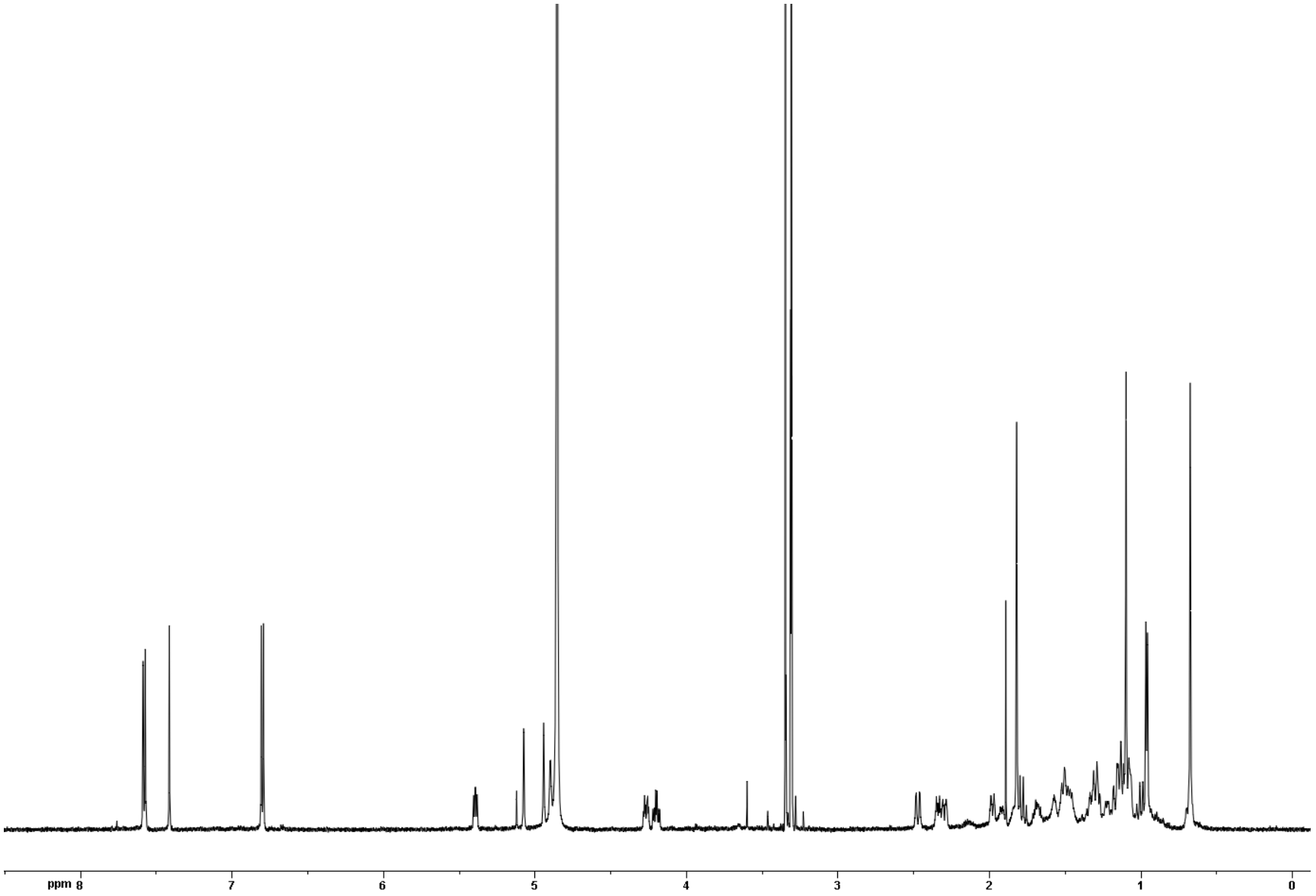

Figure S2. DQF-COSY spectrum for amaranzole B (**2**) in CD_3OD at 600 MHz

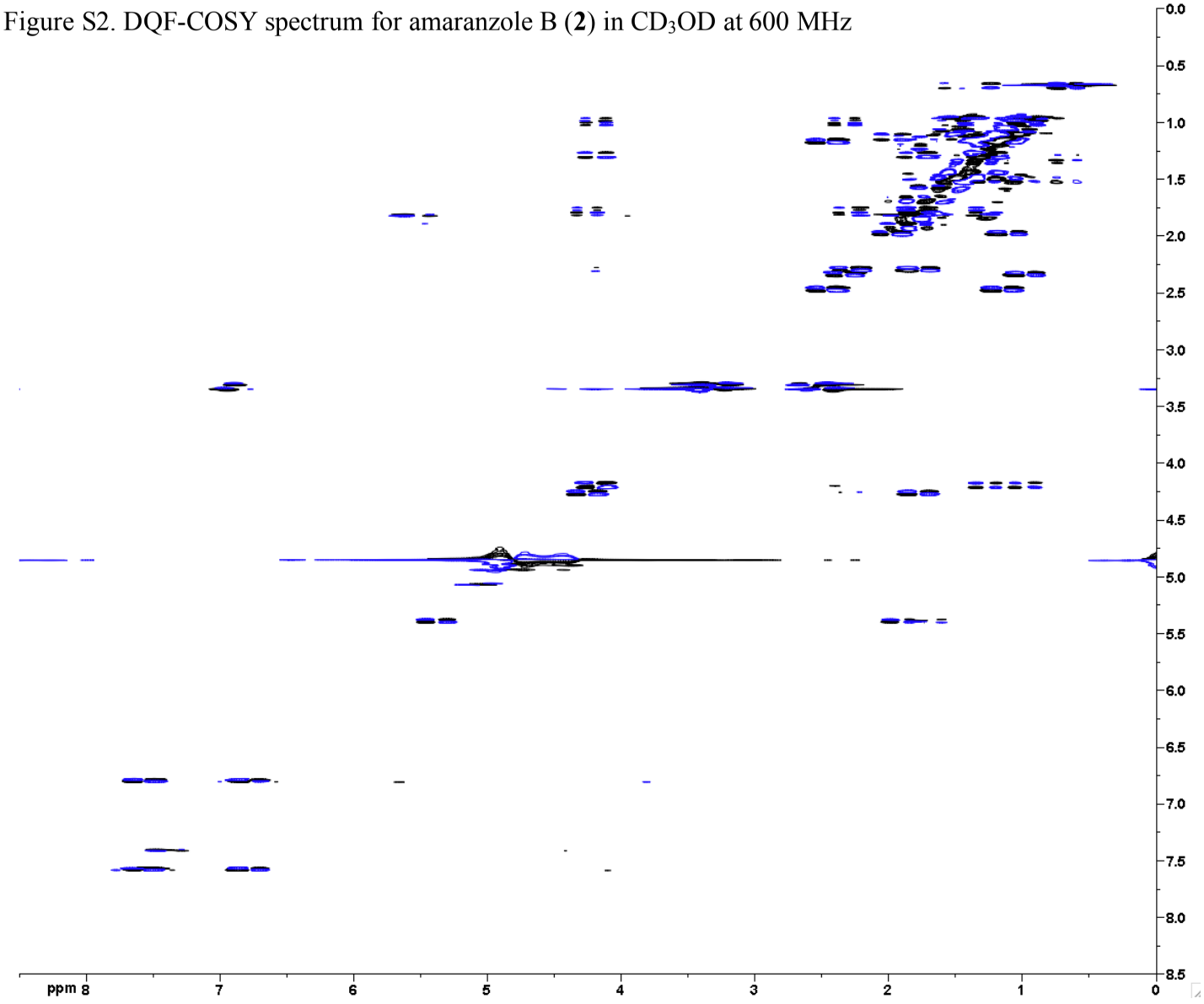

Figure S3. gHSQC spectrum for amaranzole B (**2**) in CD_3OD at 600 MHz

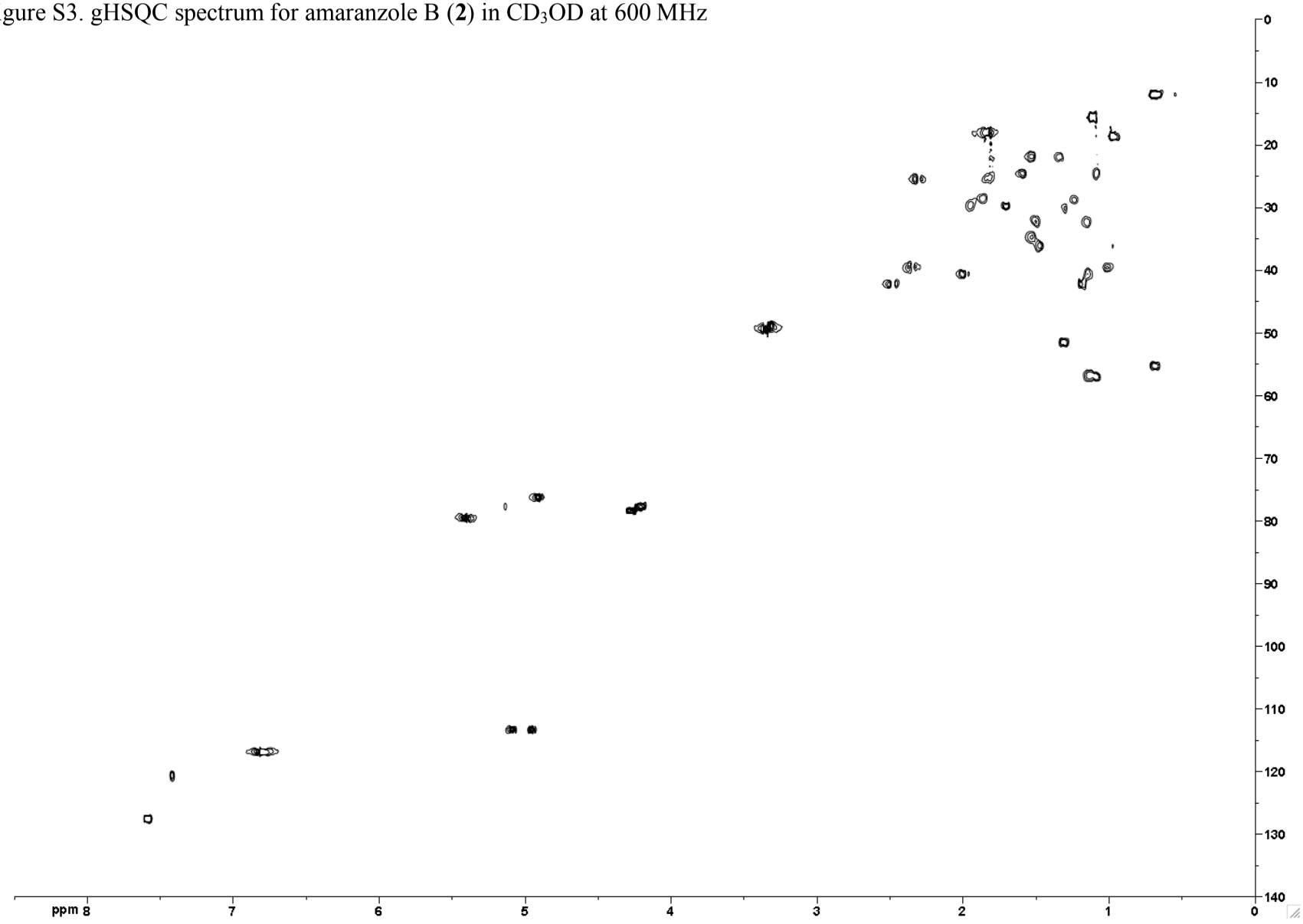

Figure S4. gHMBC spectrum for amaranzole B (**2**) in CD_3OD at 600 MHz

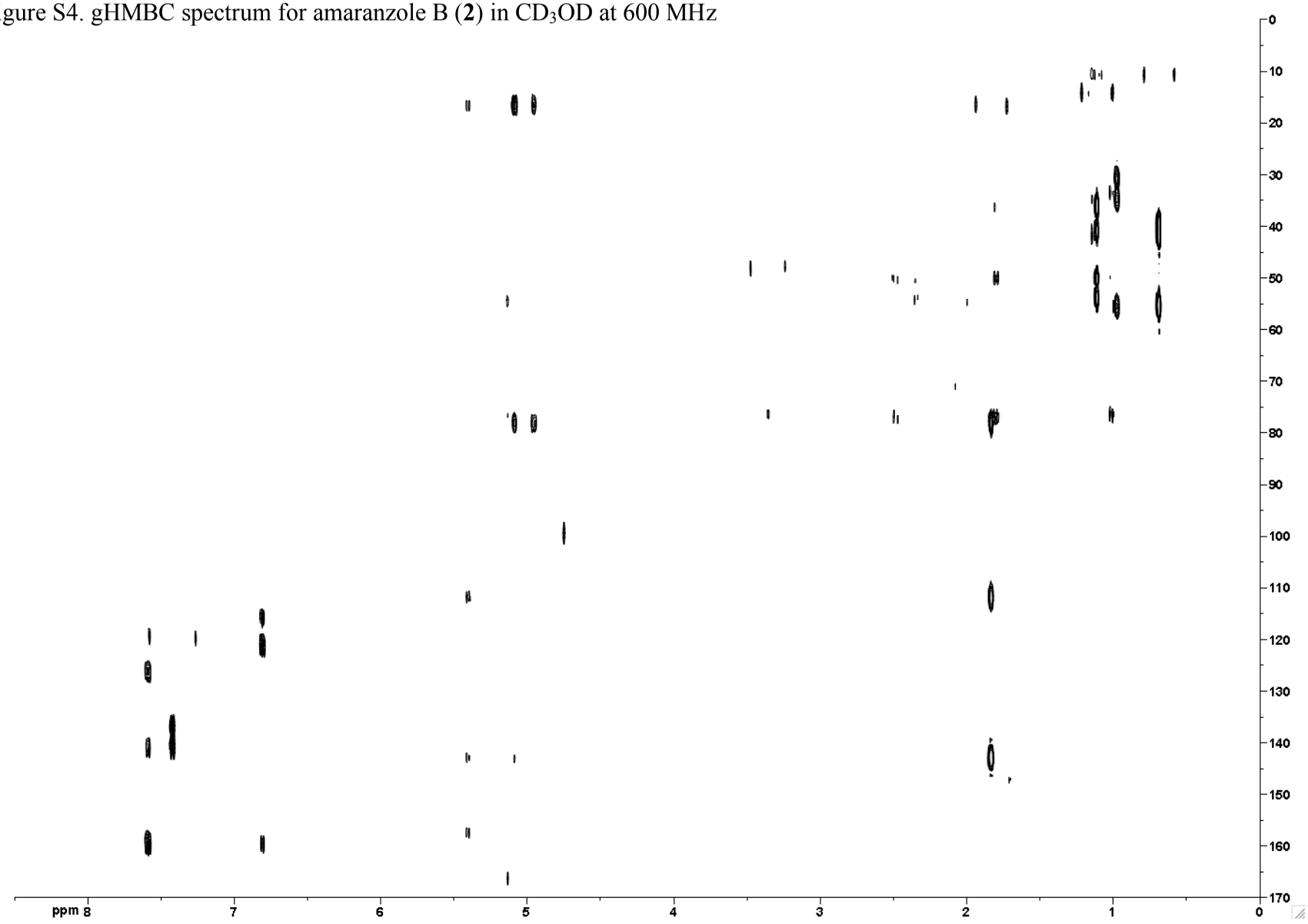

Figure S5. ^{1}H NMR spectrum for amaranzole C (**3**) in CD_3OD at 600 MHz

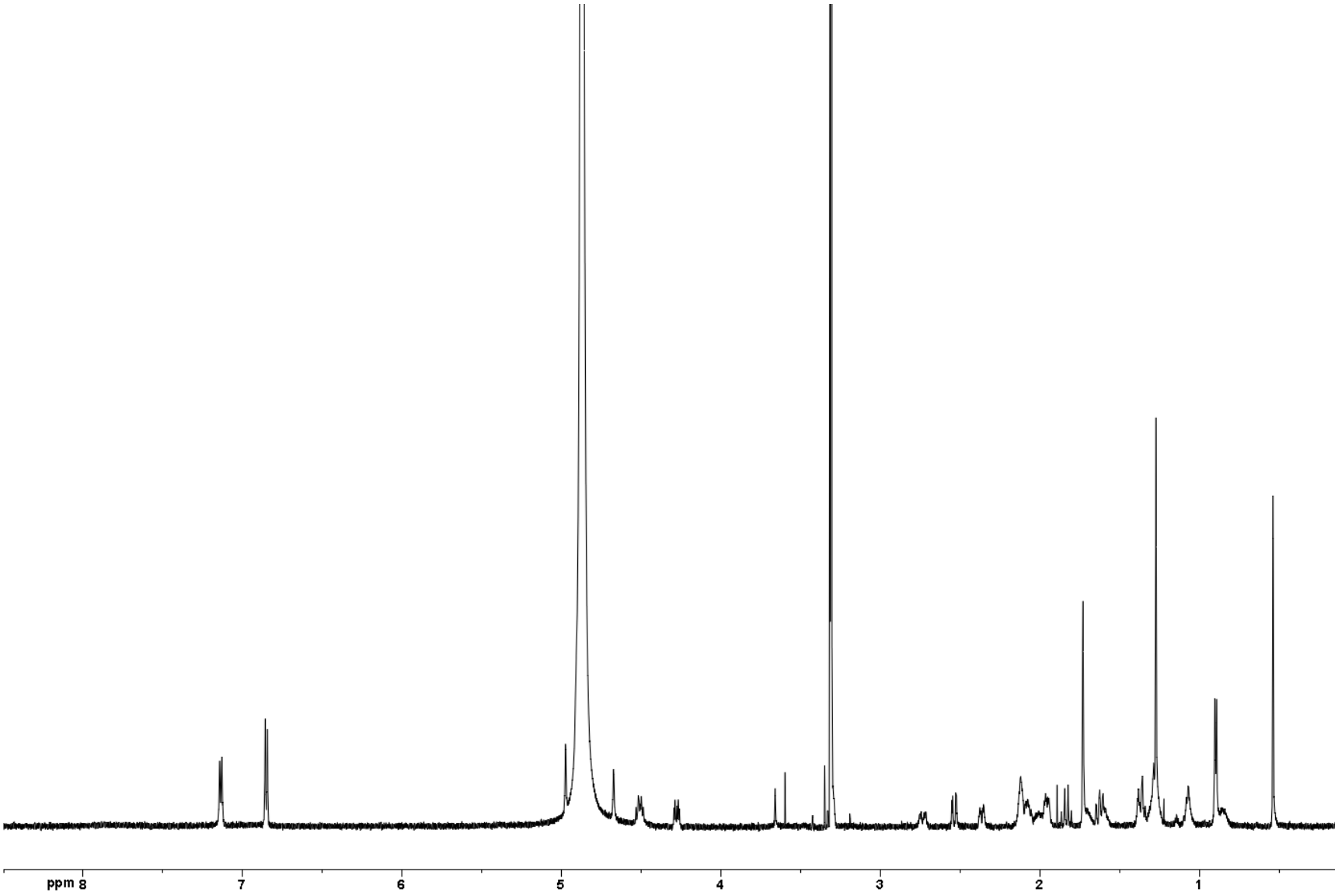

Figure S6. ^{1}H NMR spectrum for amaranzole D (**4**) in CD_3OD at 600 MHz

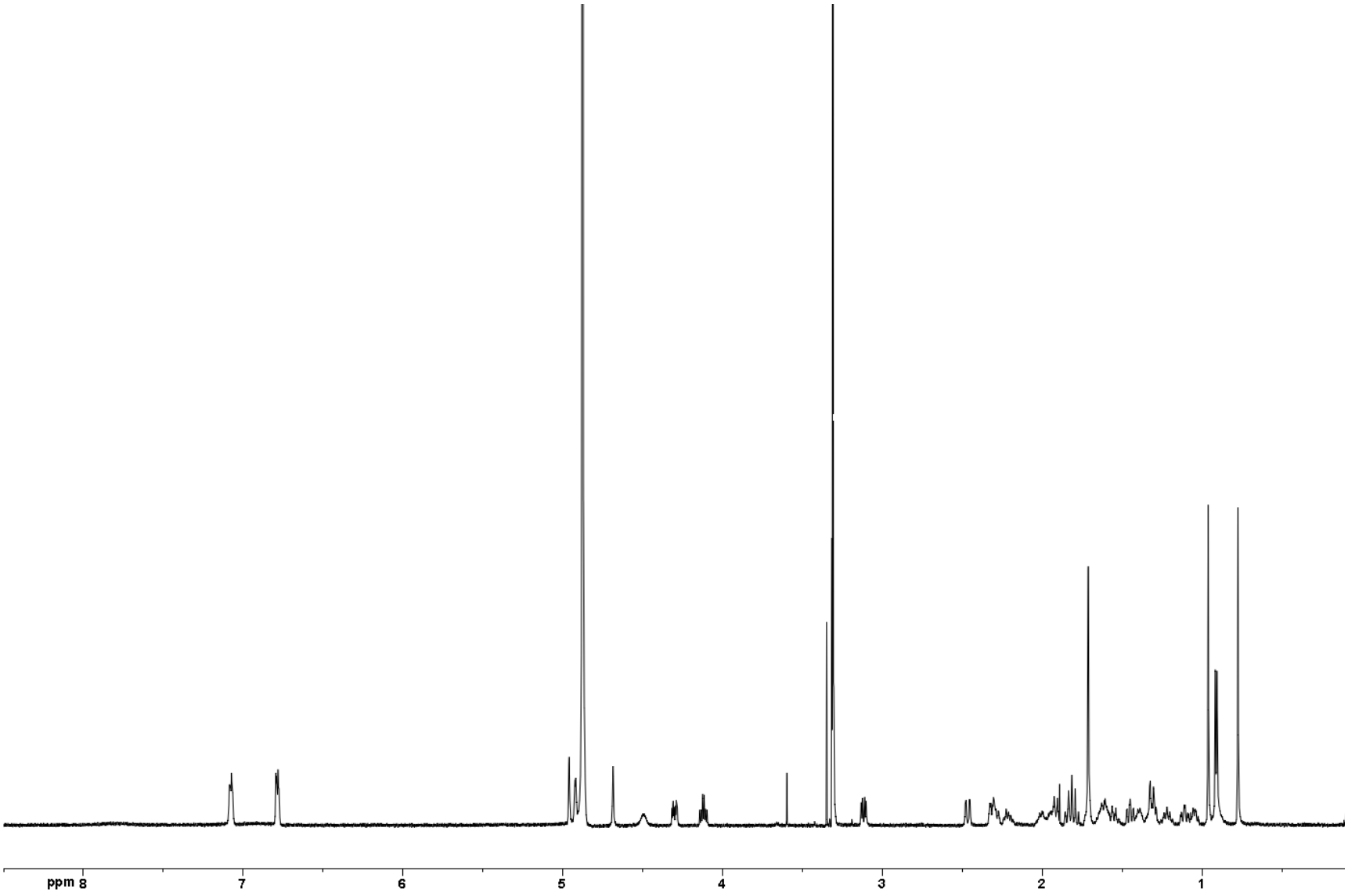

Figure S7. ^{1}H NMR spectrum for amaranzole E (**5**) in CD_3OD at 600 MHz

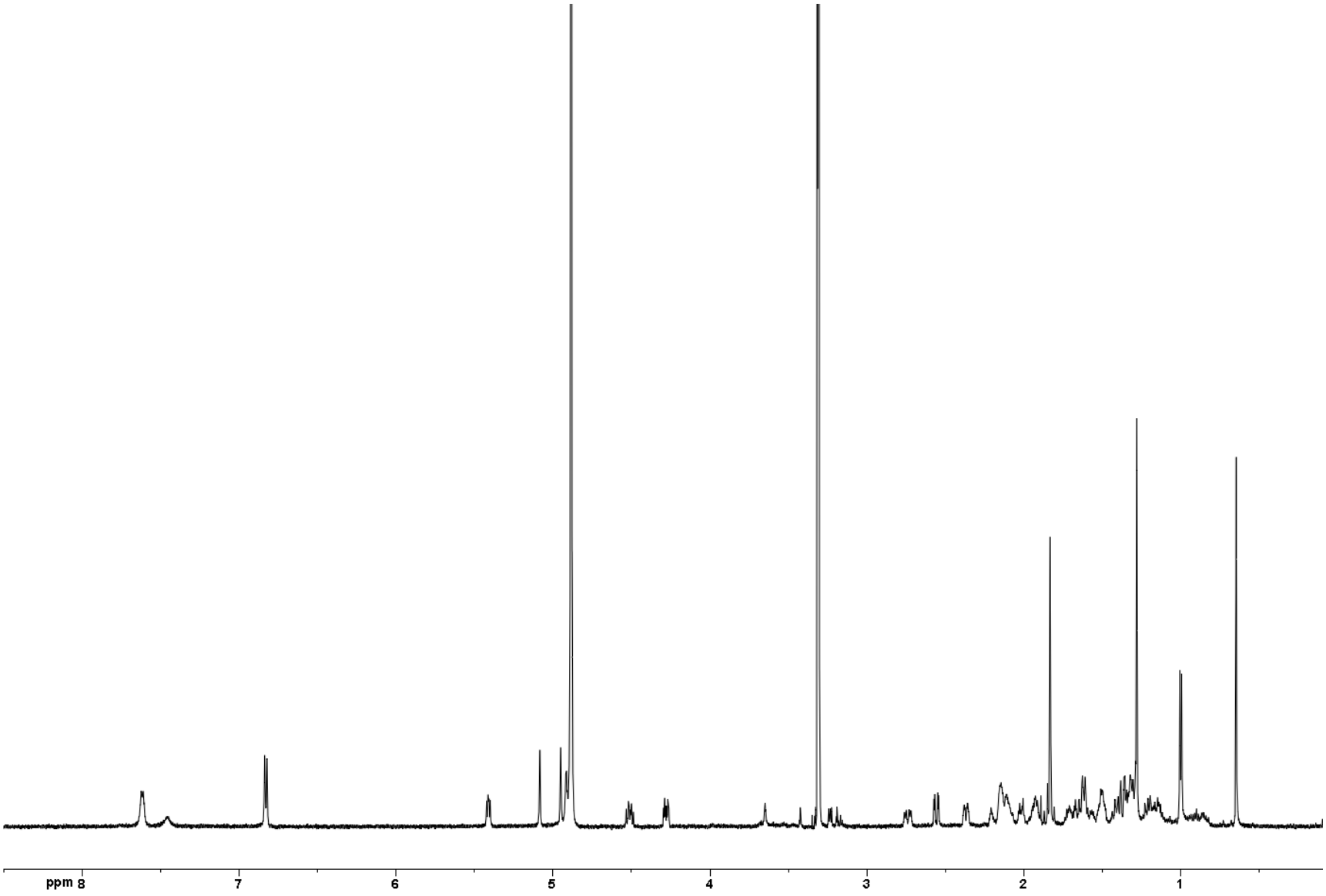

Figure S8. ^{1}H NMR spectrum for amaranzole F (**6**) in CD_3OD at 600 MHz

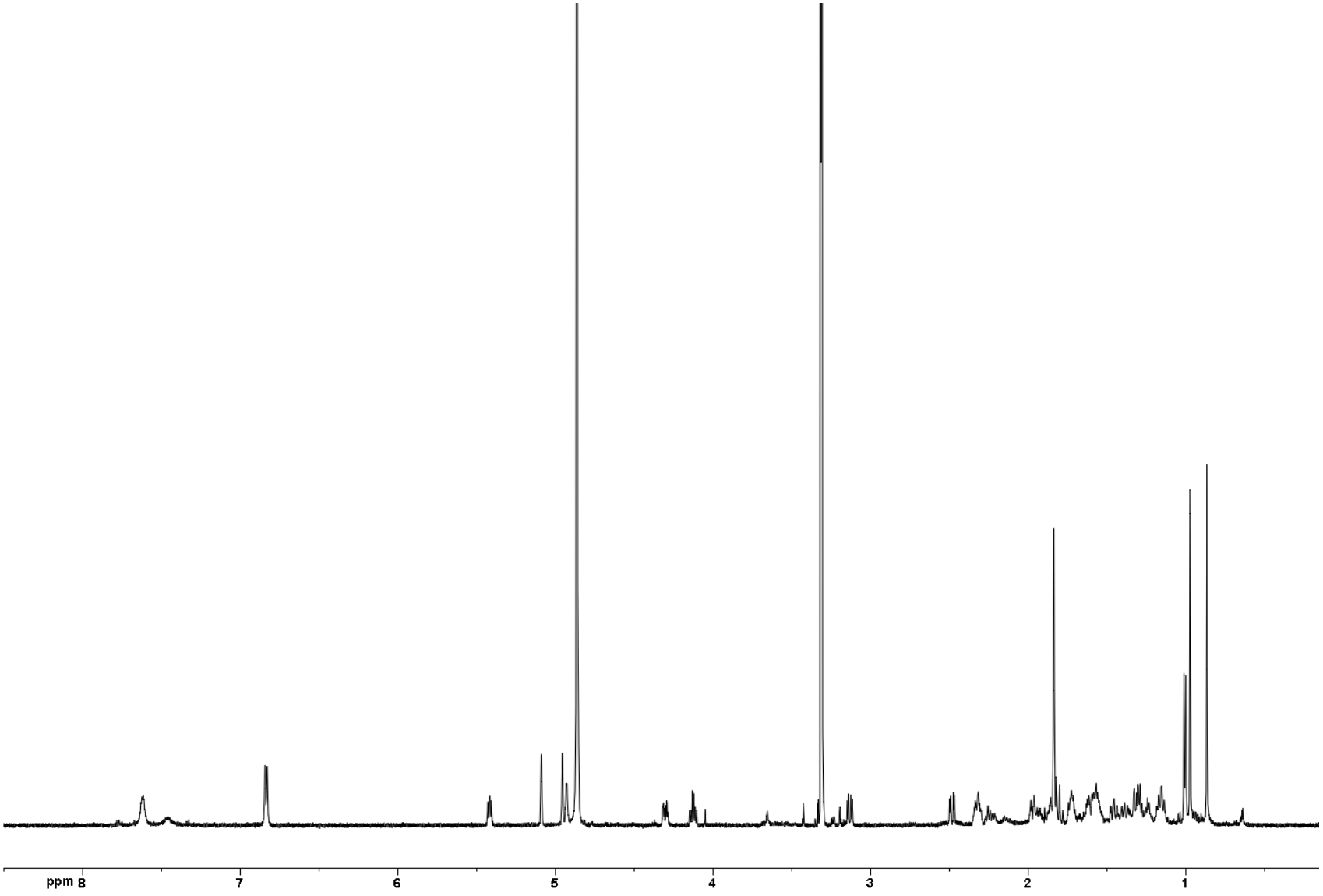

Figure S9. ^{1}H NMR spectrum for N,O-dimethyl-amaranzole B (**7**) in CD_3OD at 600 MHz

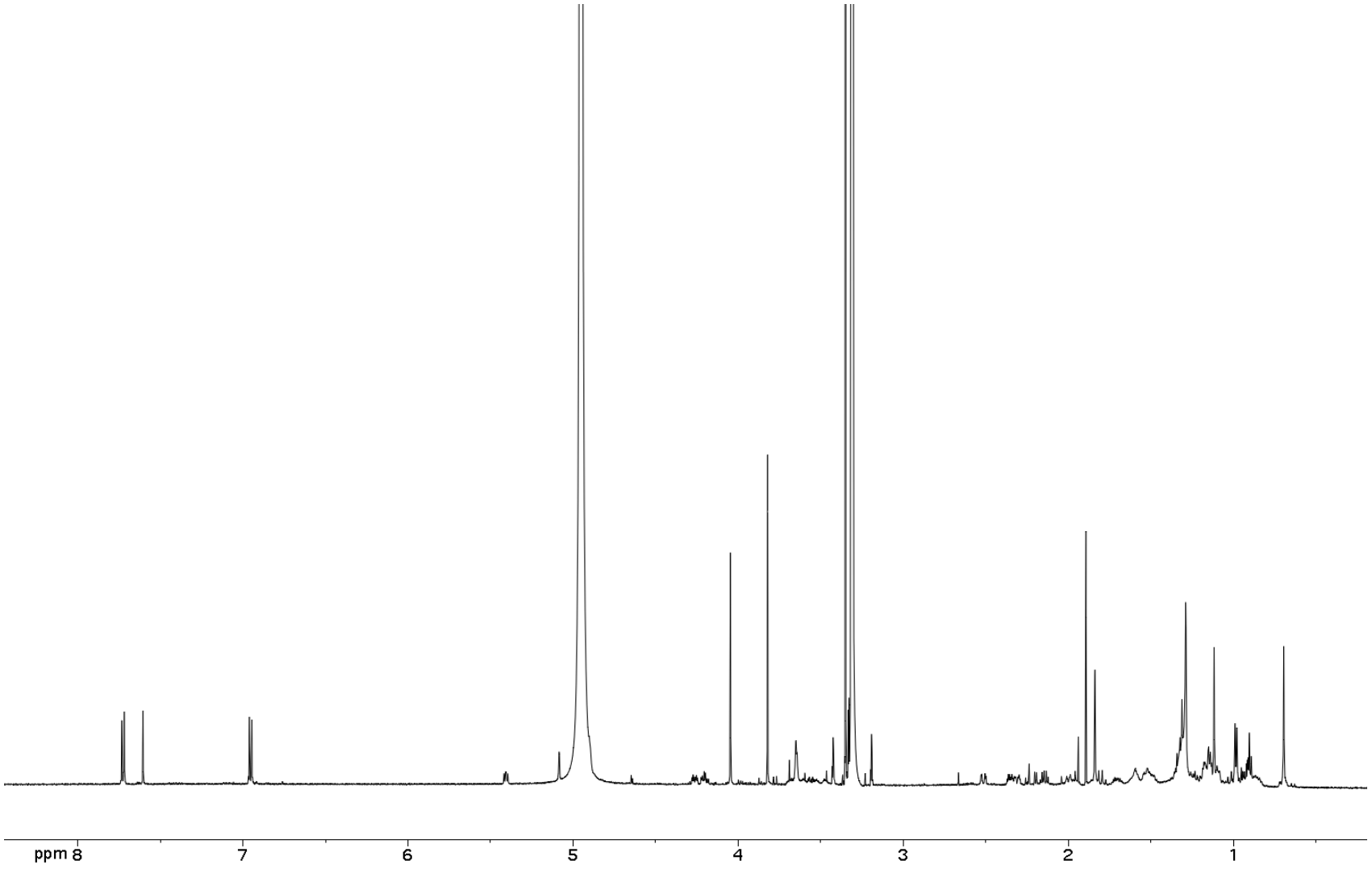

Figure S10. ^{1}H NMR spectrum for compound **14** in $CDCl_3$+0.1% TFA-*d* at 400 MHz

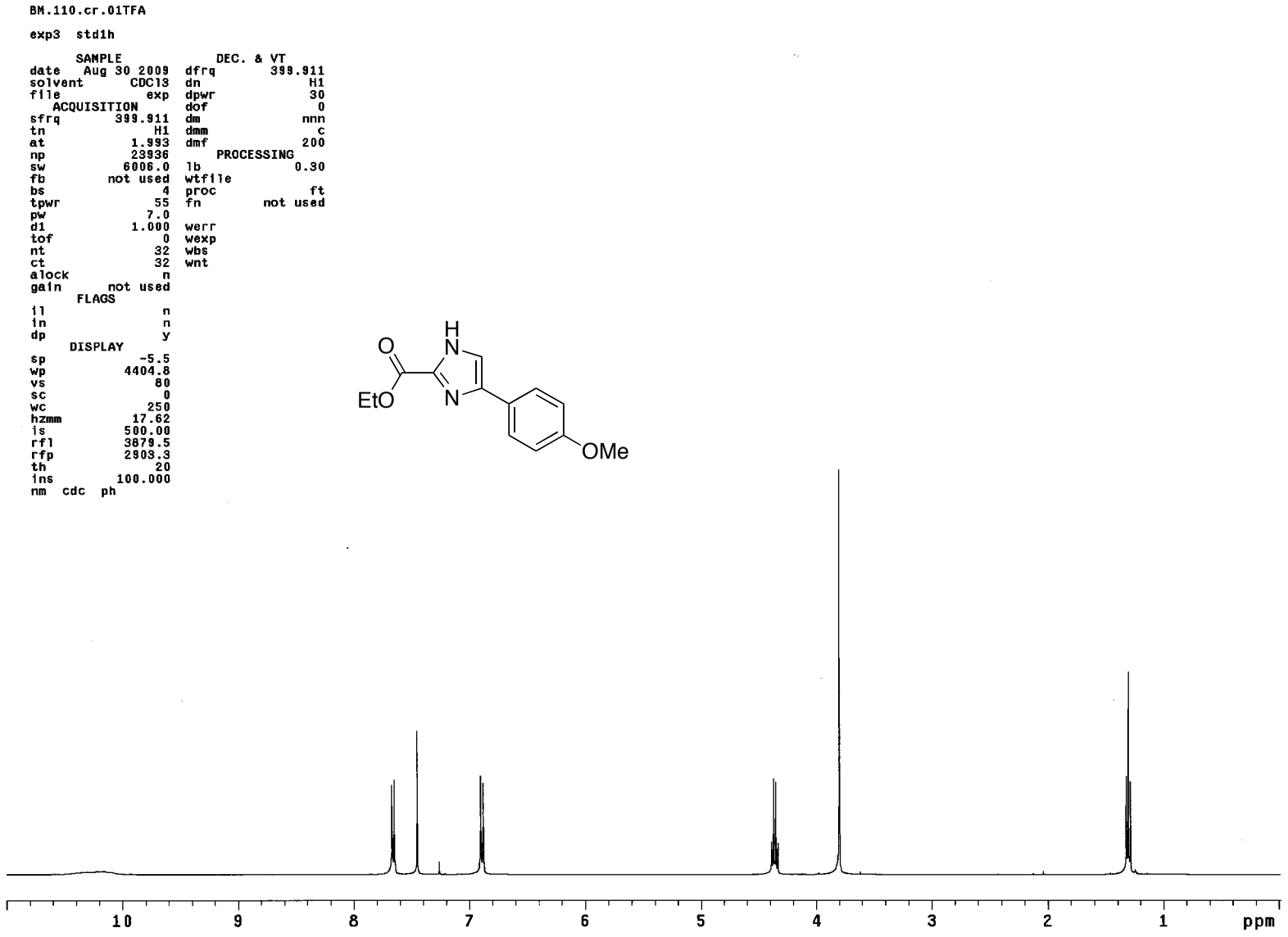

Figure S11. ^{13}C NMR spectrum for compound **14** in $CDCl_3$+0.1% TFA-*d* at 400 MHz

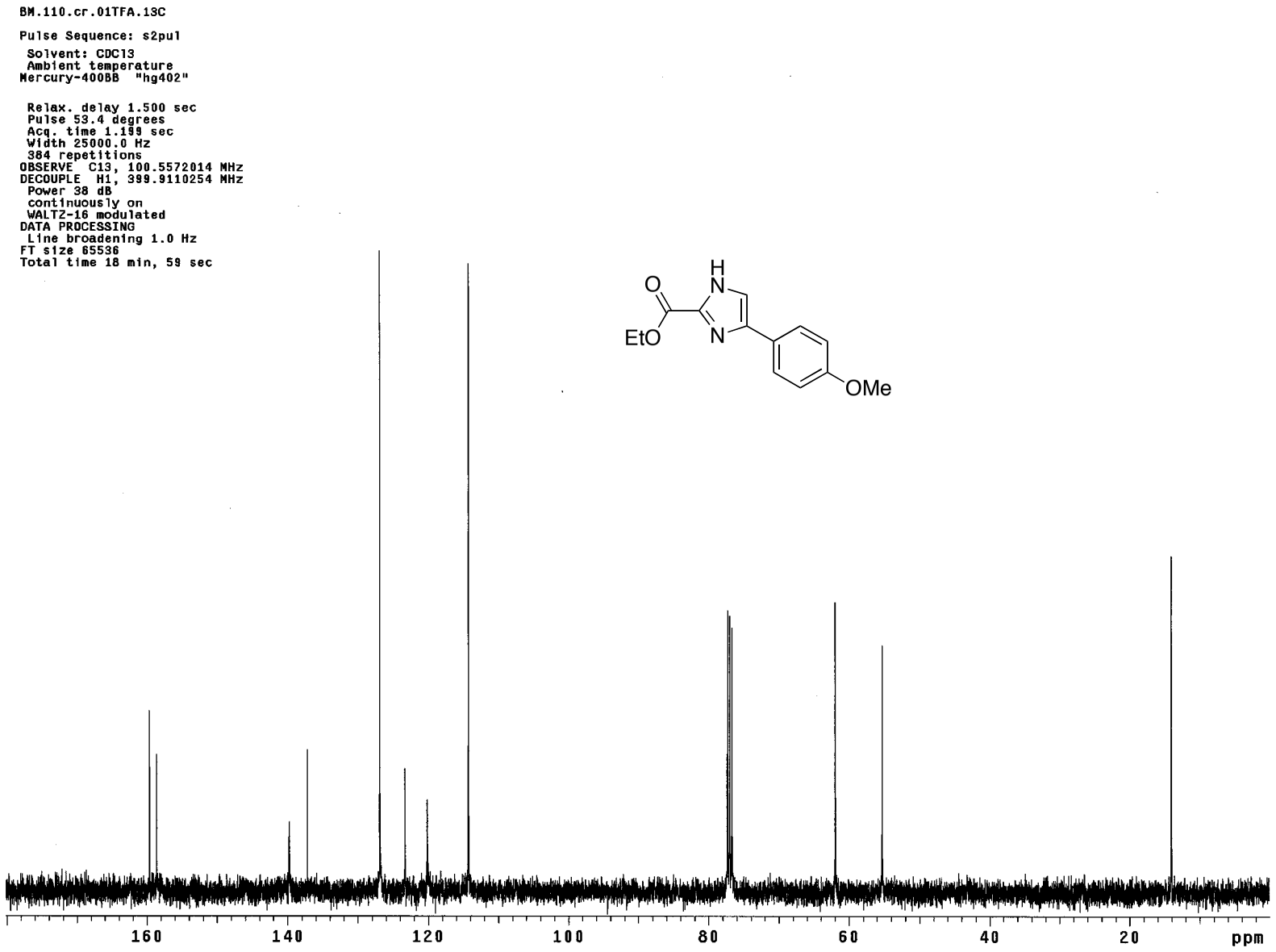

Figure S12. ^{1}H NMR spectrum for compound **15a** in $CDCl_3$ at 400 MHz

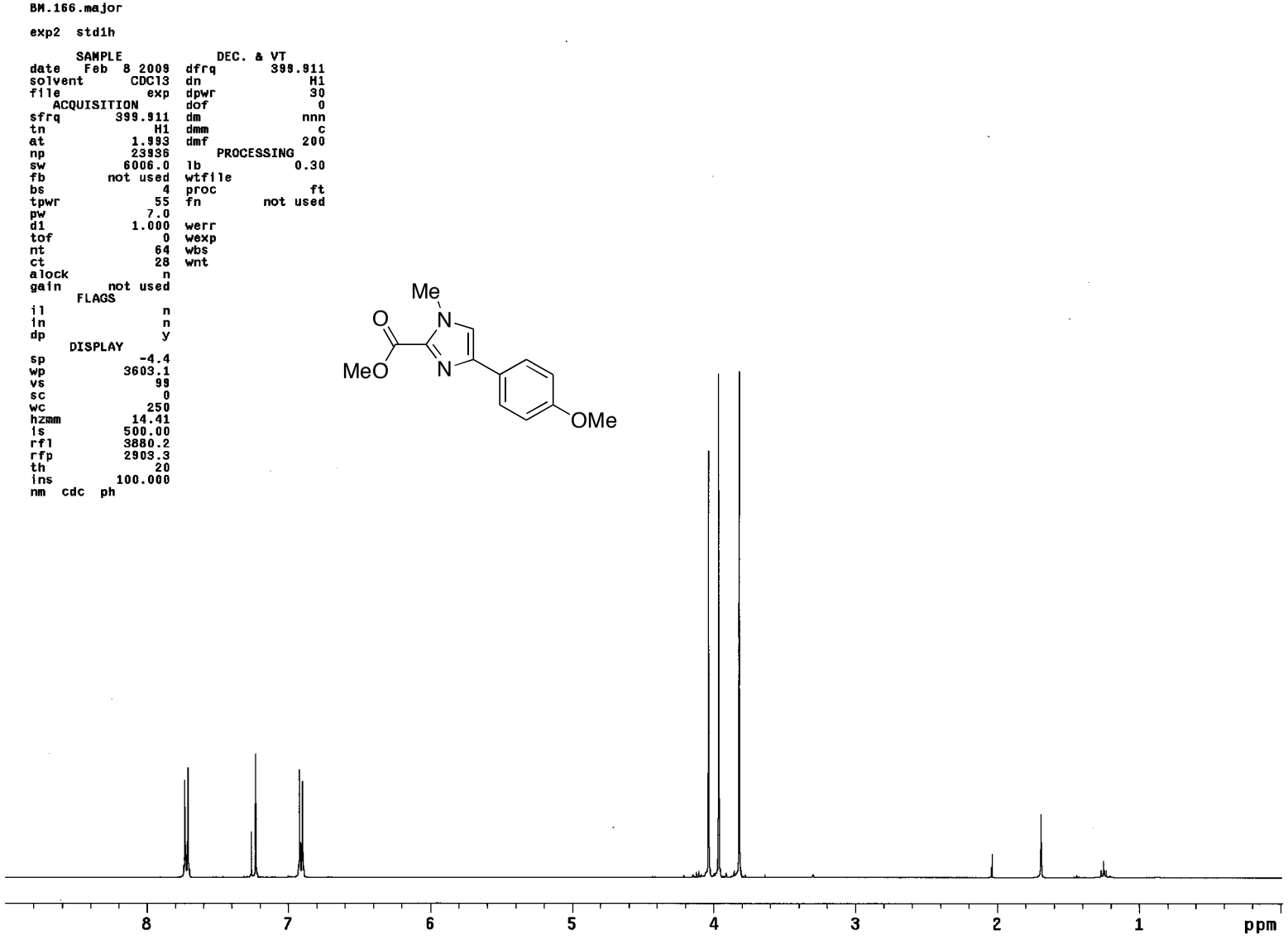

Figure S13. ^{13}C NMR spectrum for compound **15a** in $CDCl_3$ at 400 MHz

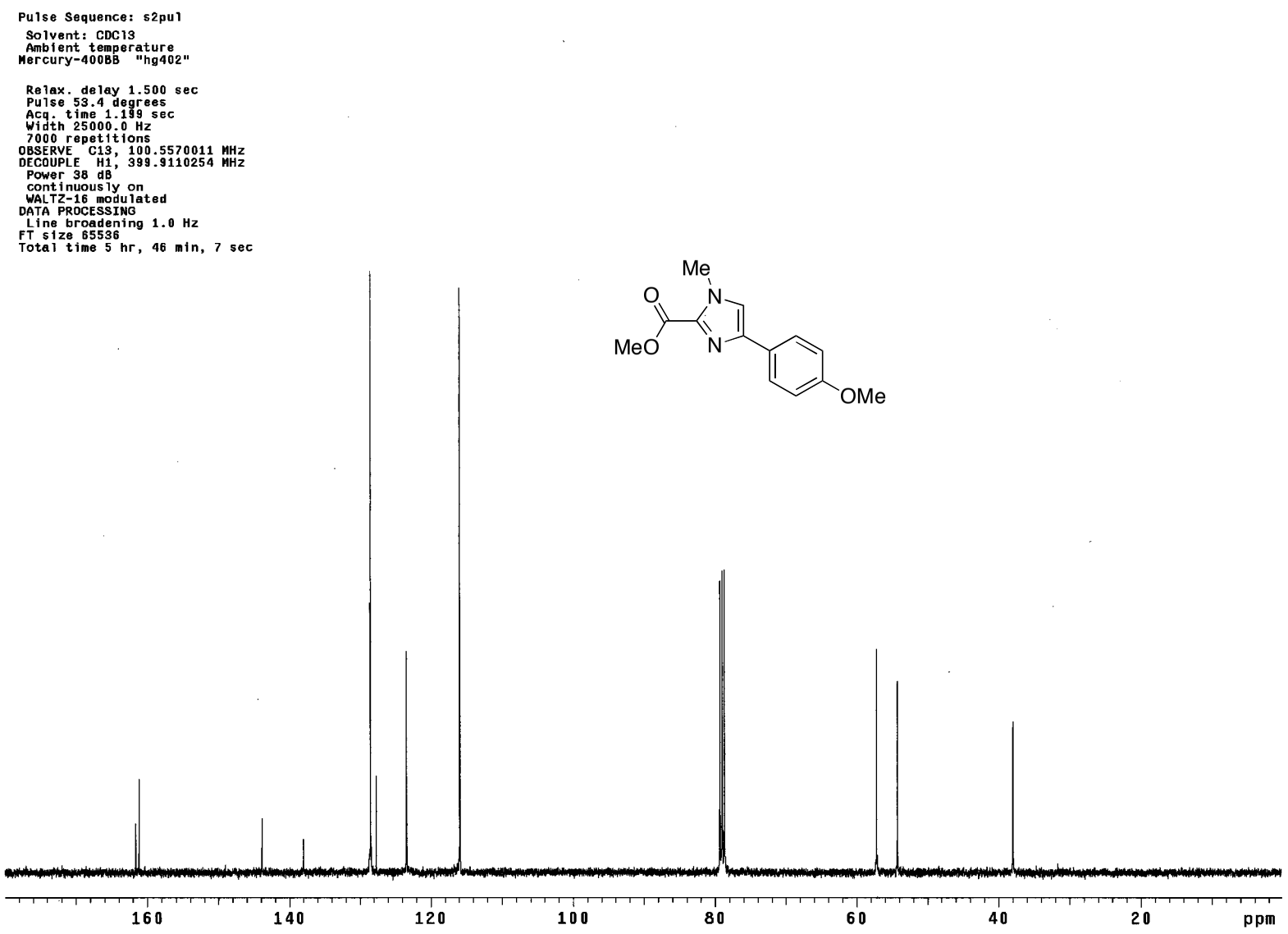

Figure S14. ^{1}H NMR spectrum for compound **15b** in $CDCl_3$ at 400 MHz

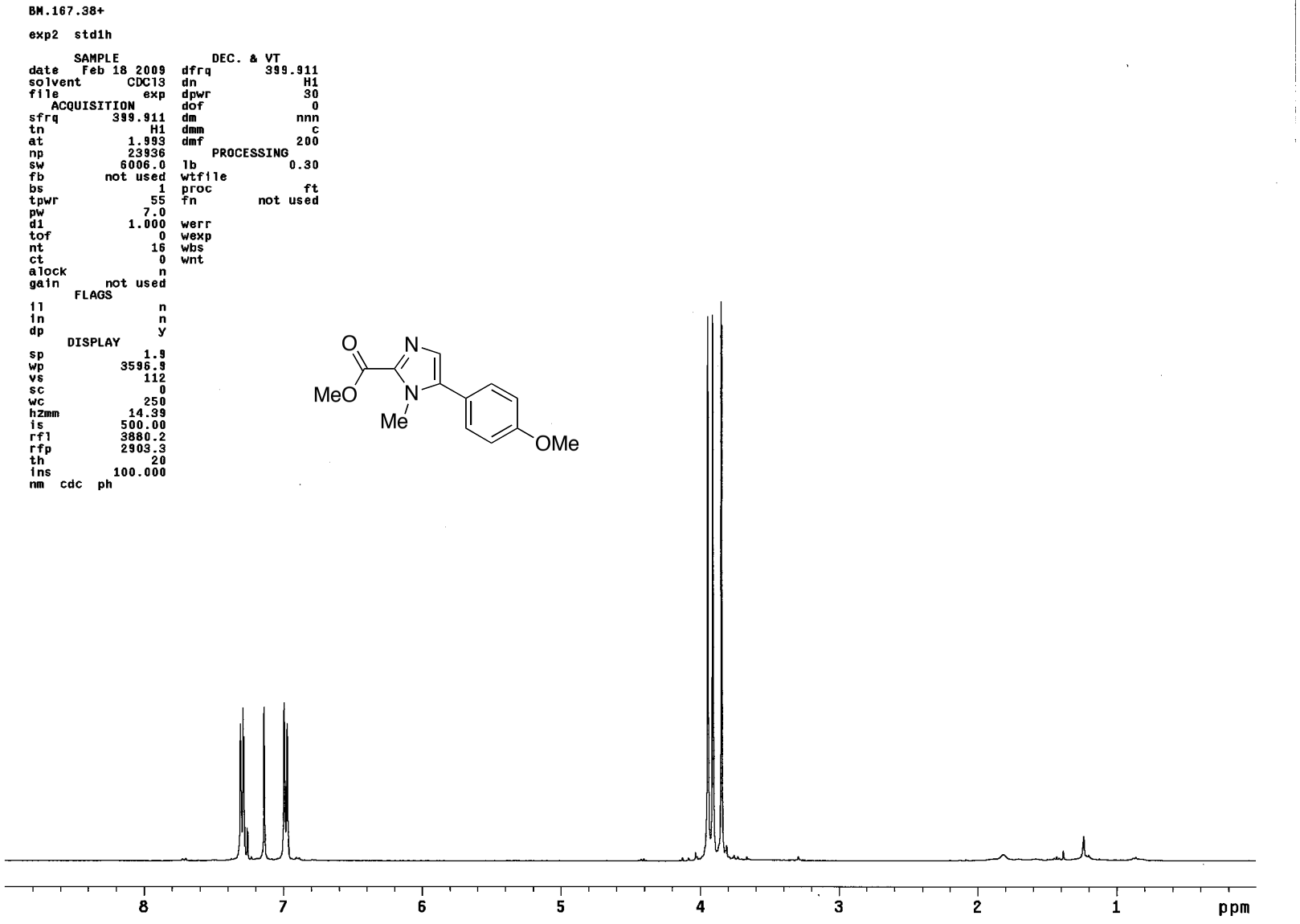

Figure S15. ^{13}C NMR spectrum for compound **15b** in $CDCl_3$ at 400 MHz

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BM.167.38+.13C

Pulse Sequence: s2pul
 Solvent: CDCl3
 Ambient temperature
Mercury-400BB  "hg402"

 Relax. delay 1.500 sec
 Pulse 53.4 degrees
 Acq. time 1.199 sec
 Width 25000.0 Hz
 1024 repetitions
OBSERVE  C13, 100.5572029 MHz
DECOUPLE  H1, 399.9110254 MHz
 Power 38 dB
 continuously on
 WALTZ-16 modulated
DATA PROCESSING
 Line broadening 1.0 Hz
FT size 65536
Total time 50 min, 37 sec
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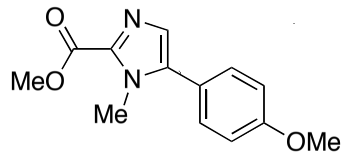


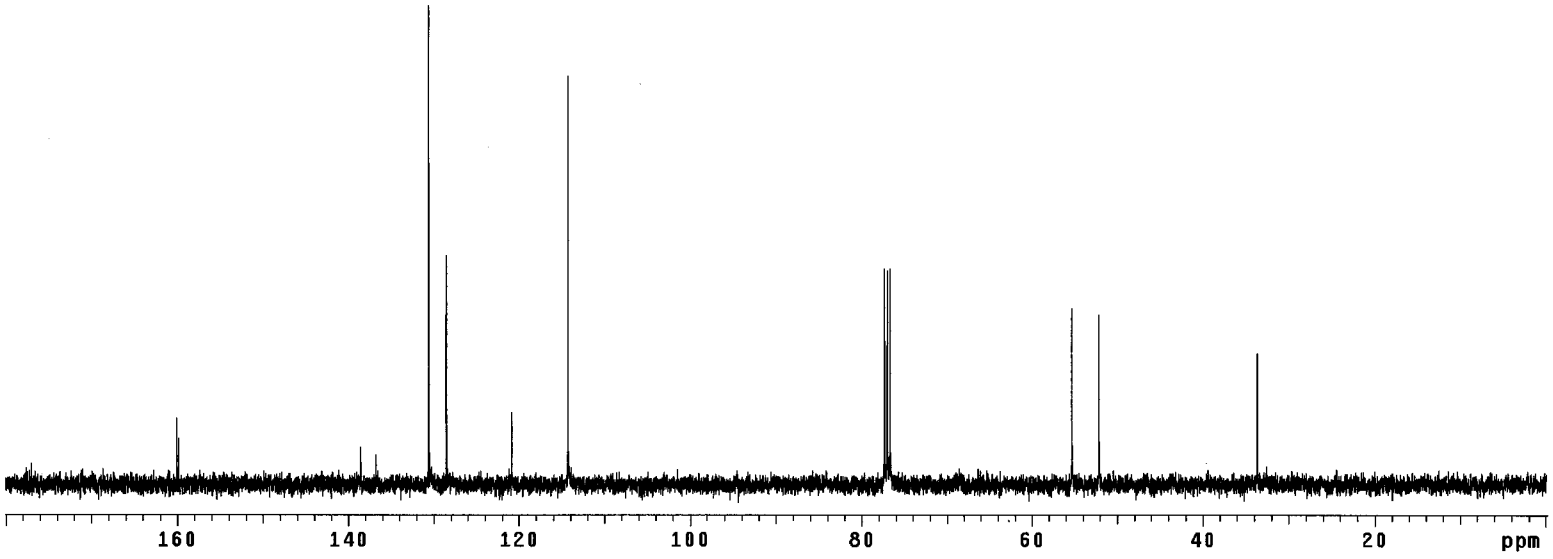


Figure S16. ^{1}H NMR spectrum for compound **10** in DMSO-d_6 at 400 MHz

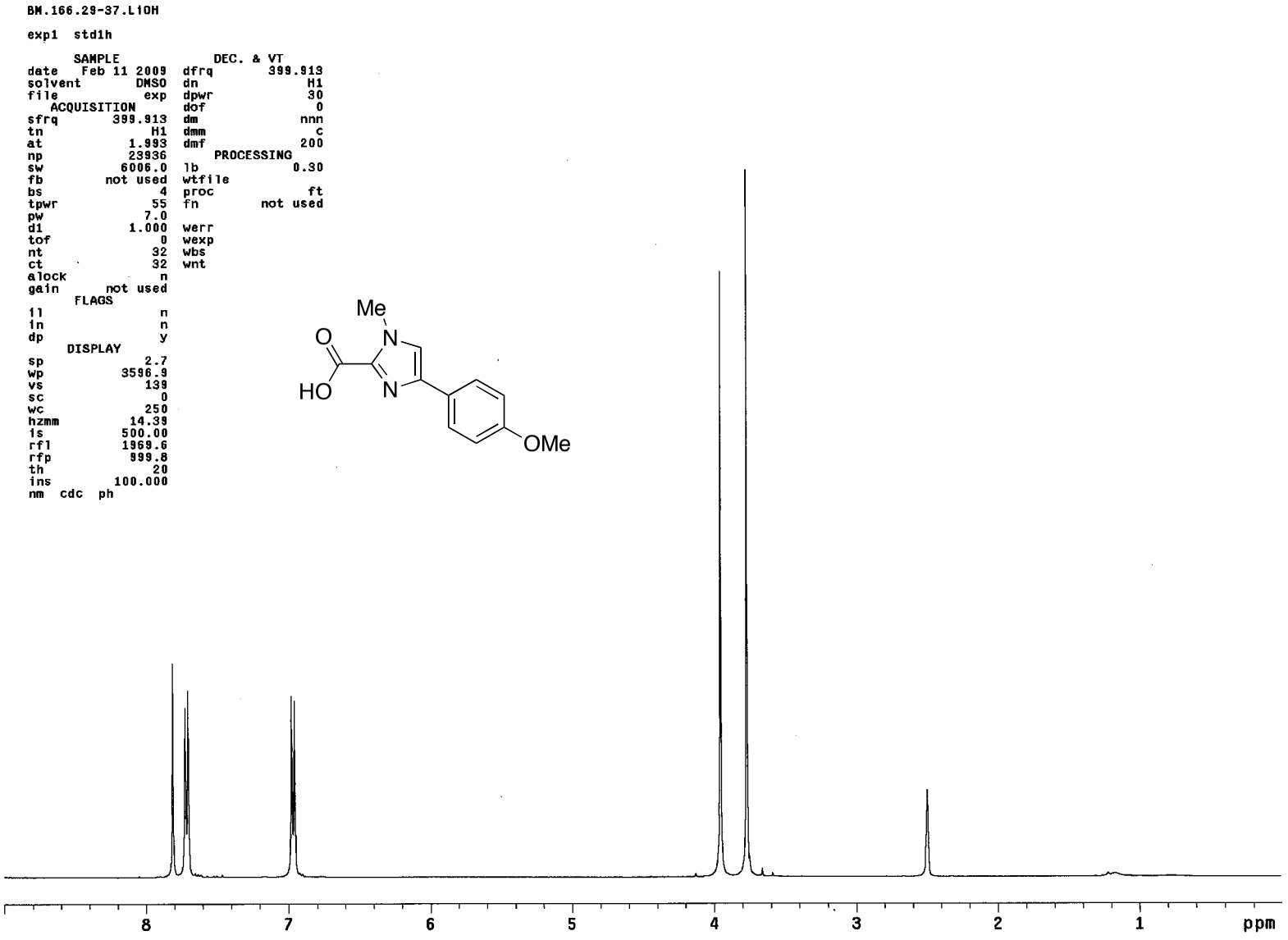


Figure S17. ^{13}C NMR spectrum for compound **10** in DMSO-d_6 at 400 MHz

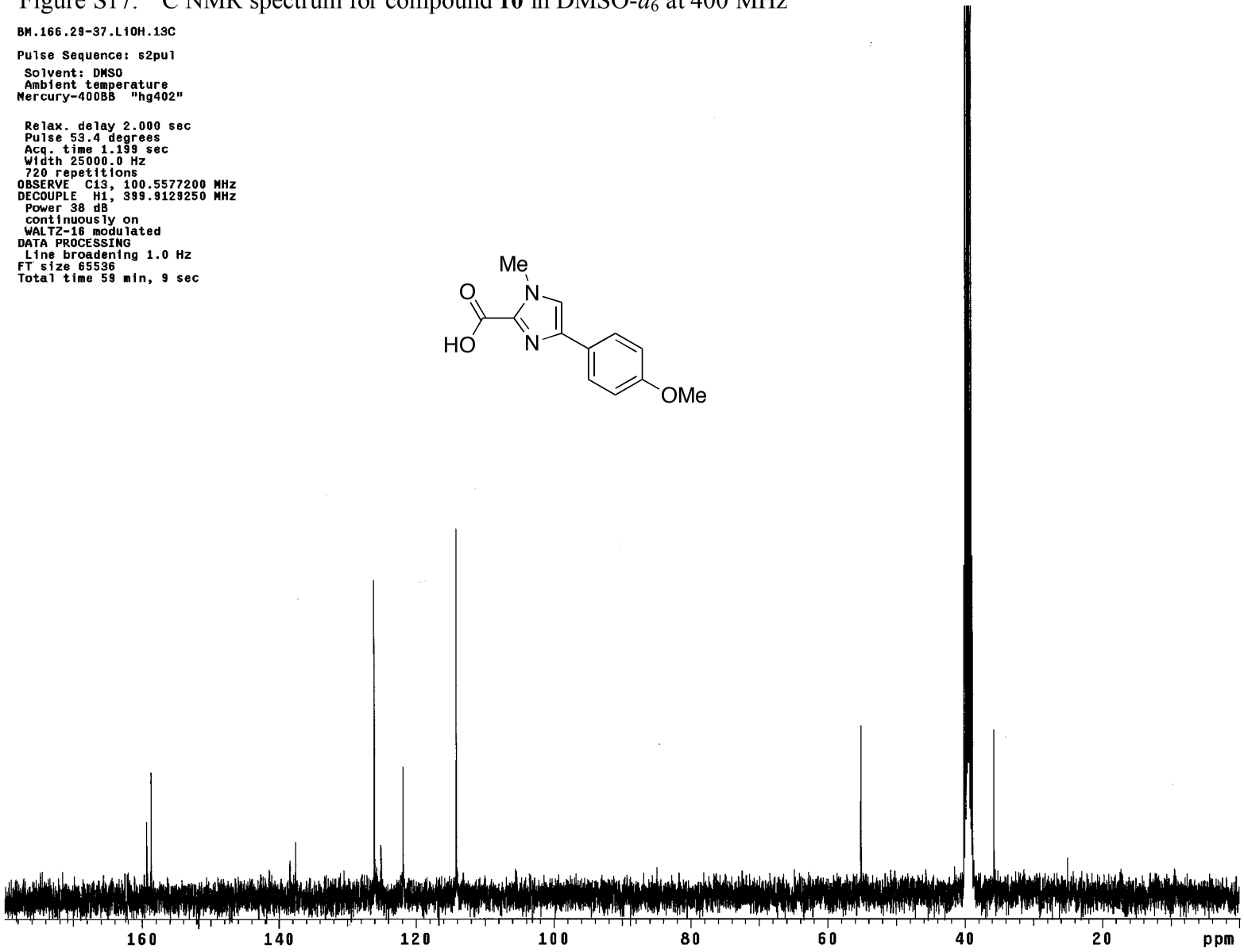


Figure S18. ^{1}H NMR spectrum for compound (±)-**8** in CD_3OD at 400 MHz

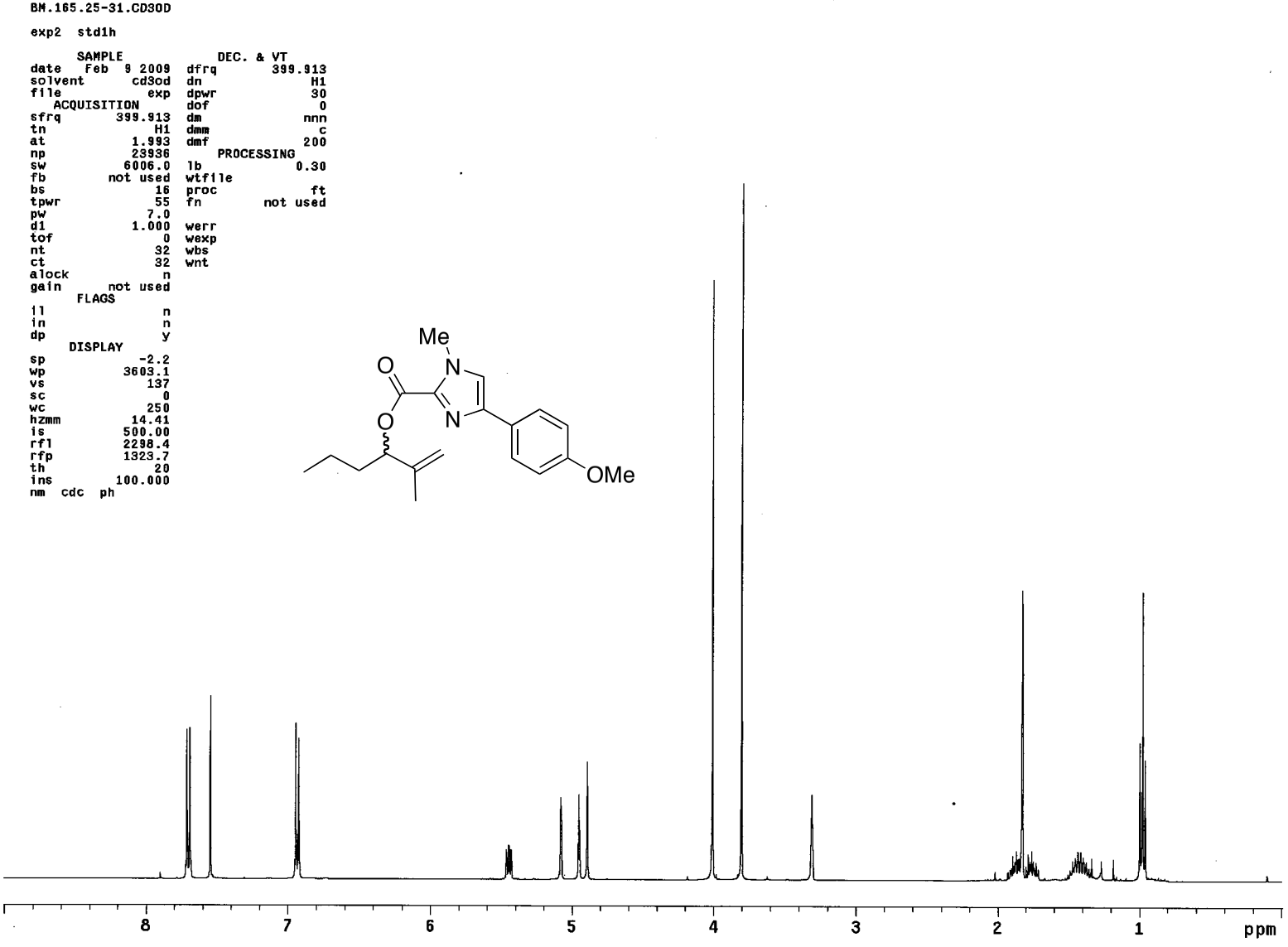


Figure S19. ^{13}C NMR spectrum for compound (±)-**8** in CD_3OD at 400 MHz

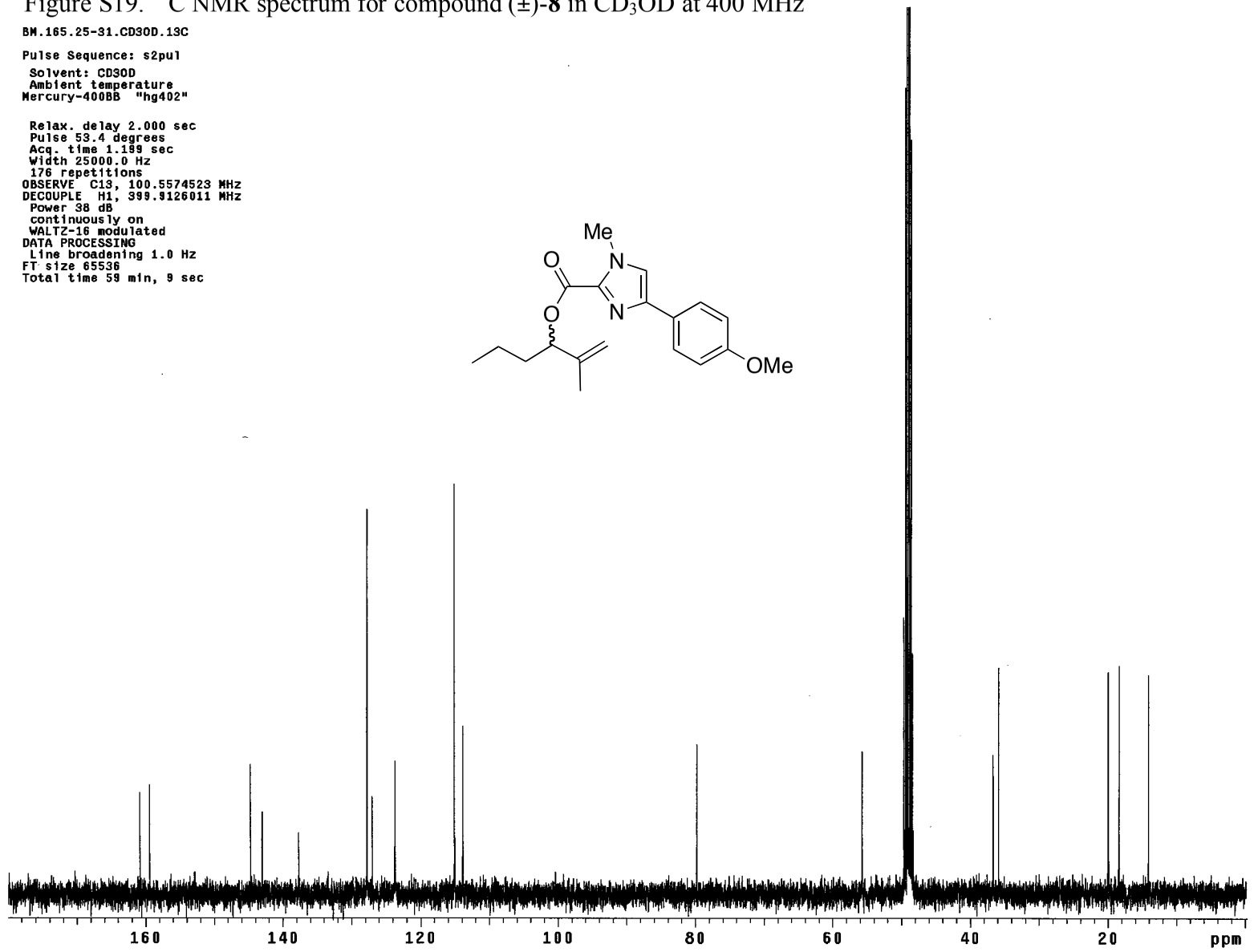


Figure S20. ^{1}H NMR spectrum for compound (–)-(*R*)-**9** in CD_3OD at 400 MHz

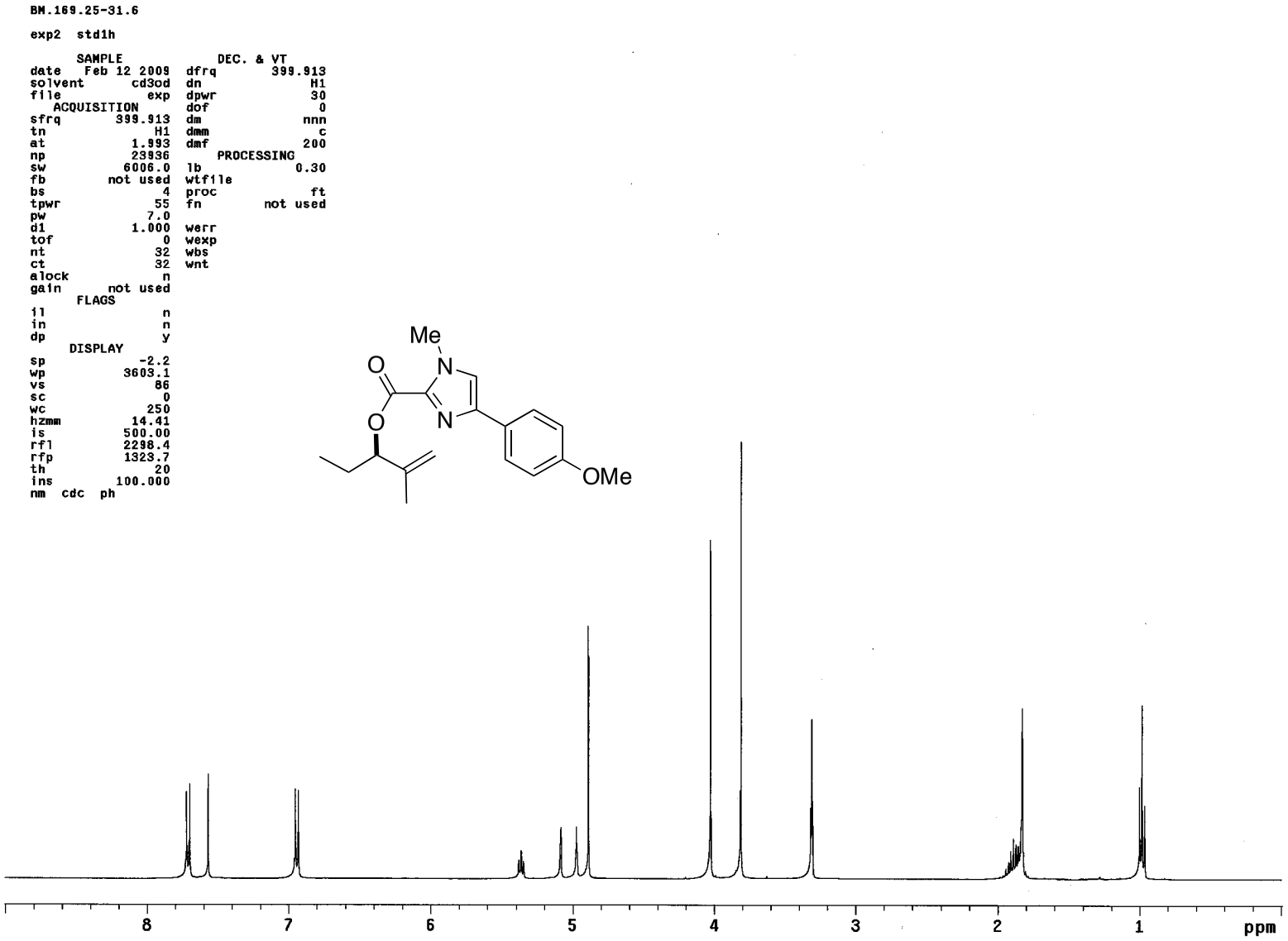


Figure S21. ^{13}C NMR spectrum for compound (–)-(*R*)-**9** in CD_3OD at 400 MHz

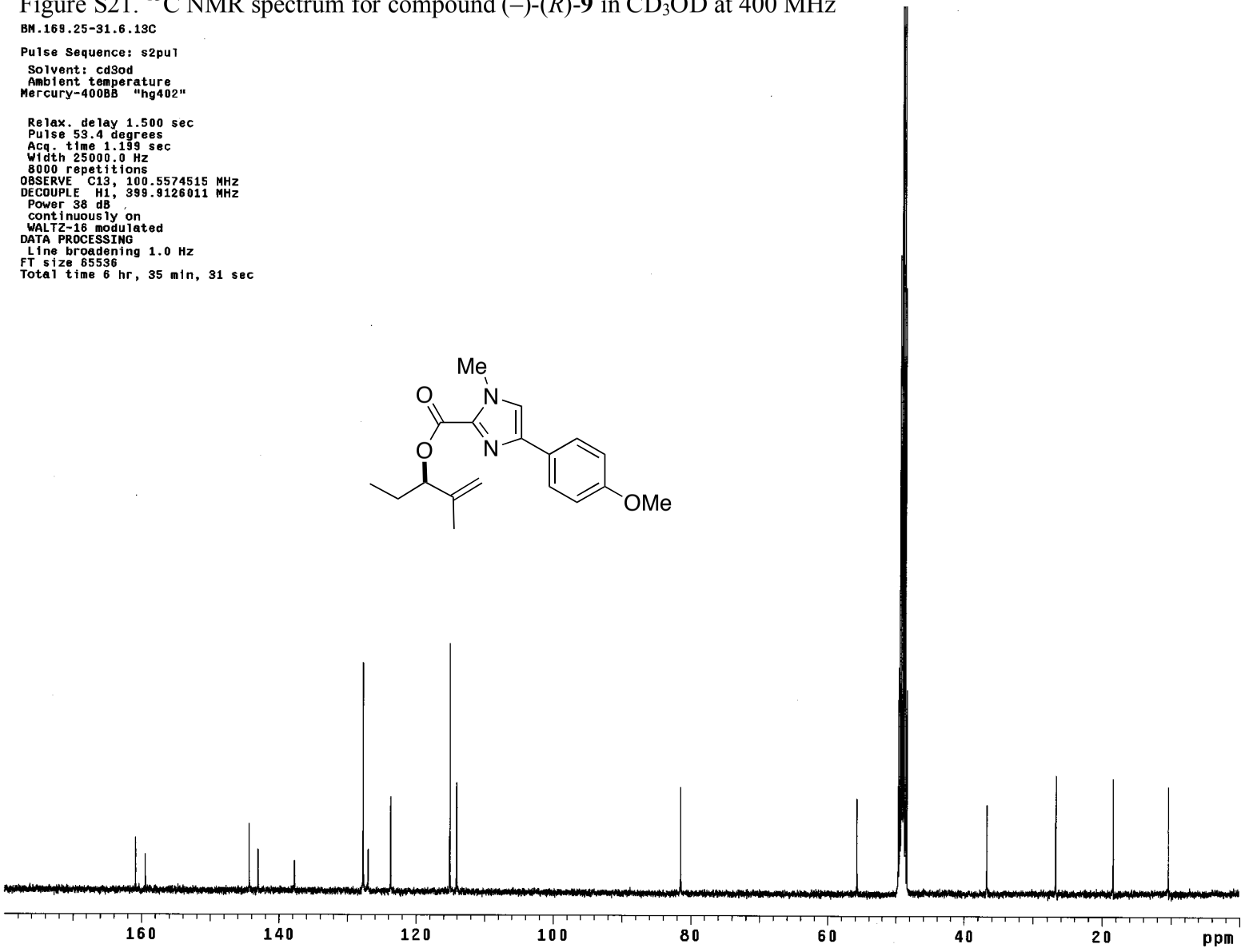
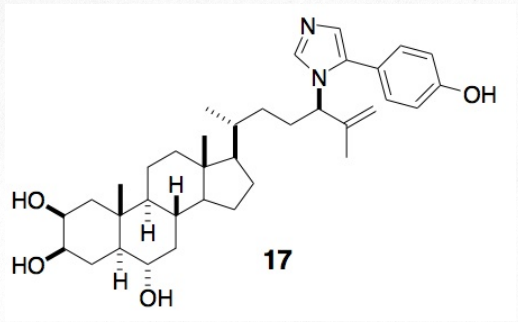


Figure S22. ^{1}H NMR spectrum for compound **17** (CD_3OD, 500 MHz)



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