Supplementary data for the article:

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European Journal of Medicinal Chemistry

SUPPLEMENTARY DATA

Anthraquinone-chalcone hybrids: Synthesis, preliminary antiproliferative evaluation and DNA-interaction studies

Violeta Marković [a], Nevena Debeljak [a], Tatjana Stanojković [b], Branka Kolundžija [b], Dušan Sladić [c], Miroslava Vujčić [d], Barbara Janović [d], Nikola Tanić [e], Milka Perović [e], Vesna Tešić [e], Jadranka Antić [f] and Milan D. Joksović [a,*]

[a] Faculty of Science, Department of Chemistry, University of Kragujevac, R. Domanovica 12, 34000 Kragujevac, Serbia

[b] Institute of Oncology and Radiology of Serbia, Pasterova 14, 11000 Belgrade, Serbia

[c] Faculty of Chemistry, University of Belgrade, Studentski trg 16, 11000 Belgrade, Serbia

[d] Institute for Chemistry, Technology and Metallurgy, Njegoševa 12, 11000 Belgrade, Serbia

[e] Institute for Biological Research "Siniša Stanković", Department of Neurobiology, University of Belgrade, Bulevar Despota Stefana 142, 11060 Belgrade, Serbia

[f] Institute of Endocrinology, Diabetes and Metabolic Diseases, Clinical Center of Serbia, Dr Subotića 13, 11000 Belgrade, Serbia

[*] Corresponding author. *E-mail address*: mjoksovic@kg.ac.rs (M.D. Joksović).

Content

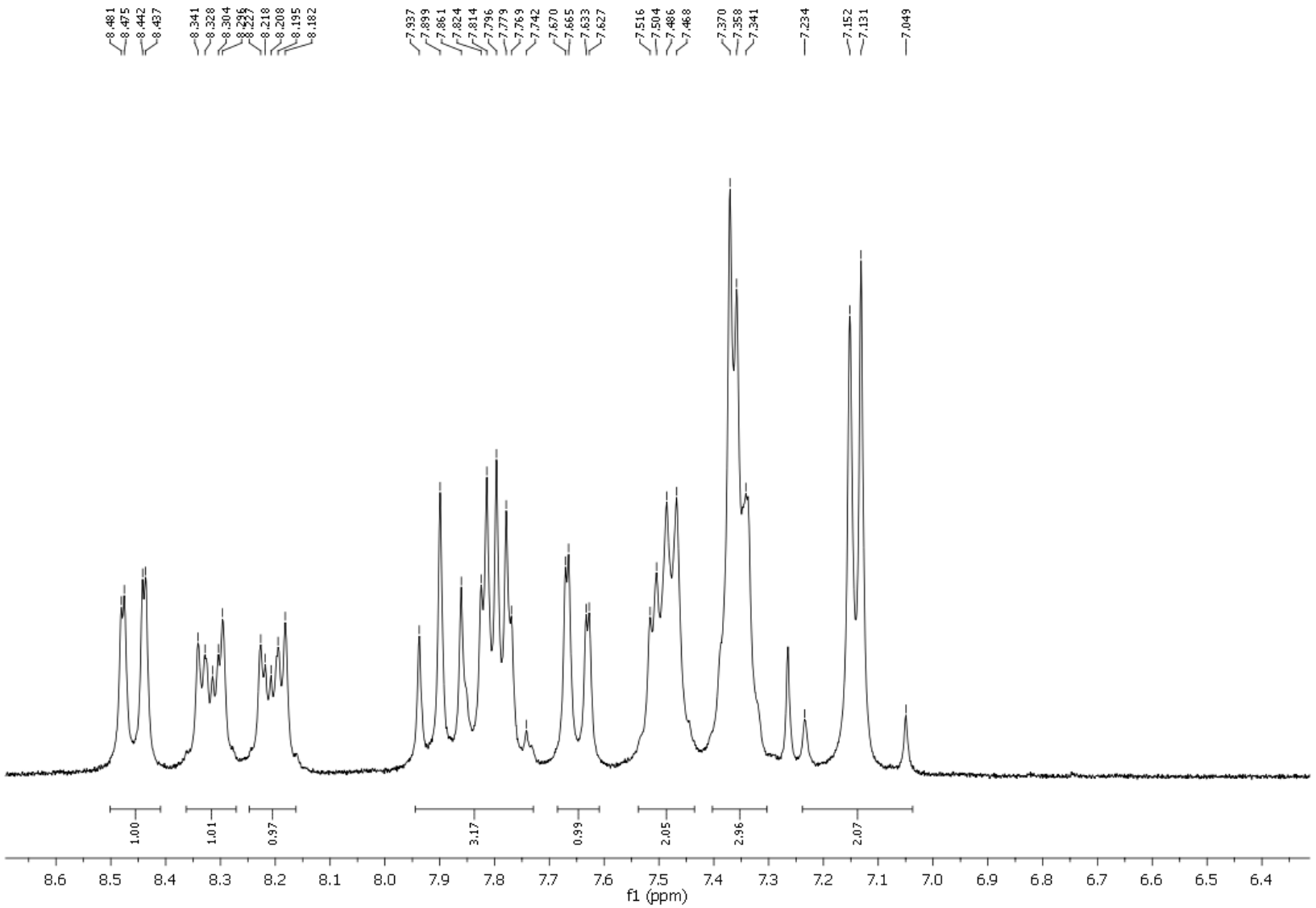

Fig. S1. ^{1}H NMR spectrum of **2a** in $CDCl_3$ (200 MHz).

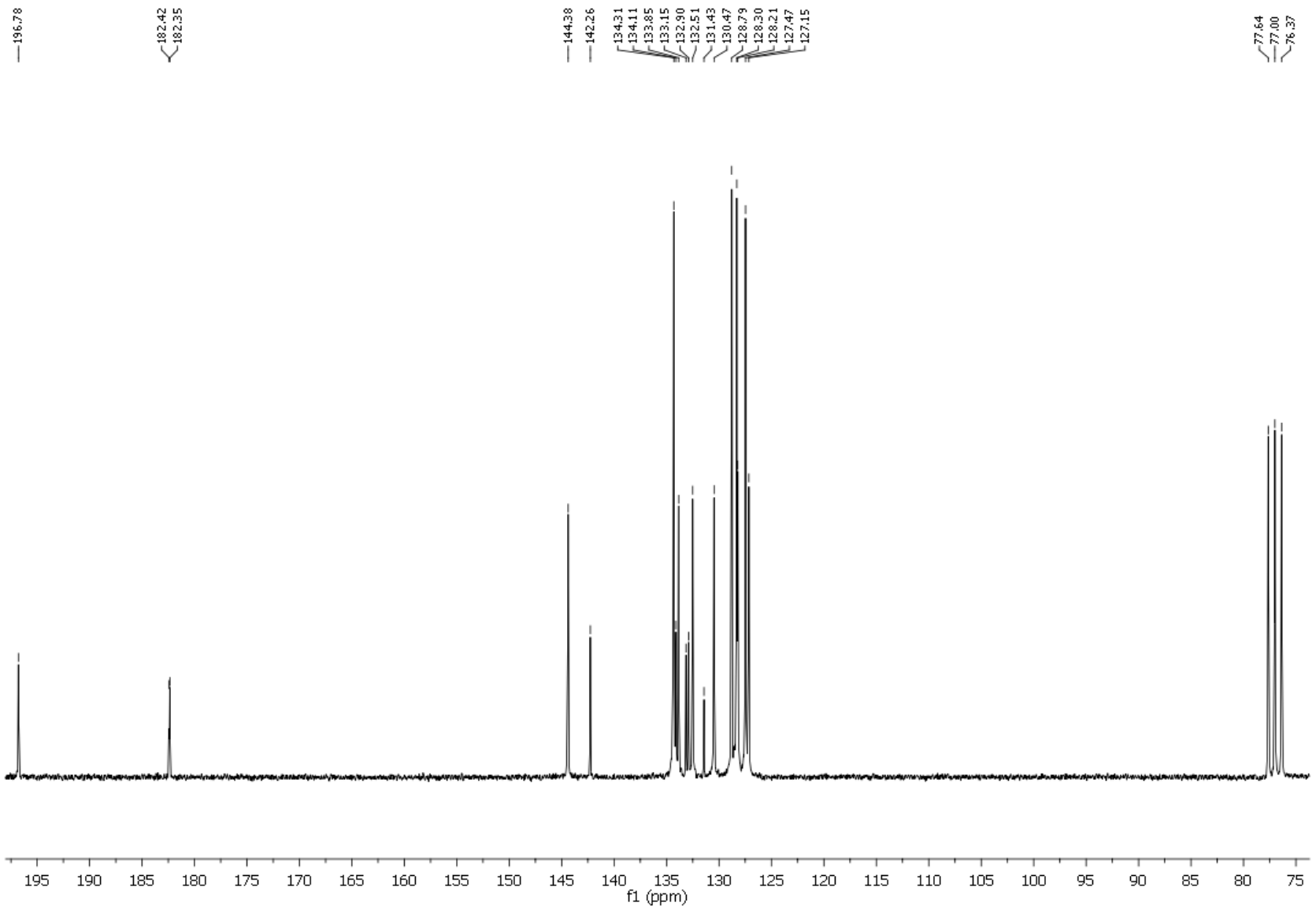

Fig. S2. ^{13}C NMR spectrum of **2a** in $CDCl_3$ (50 MHz).

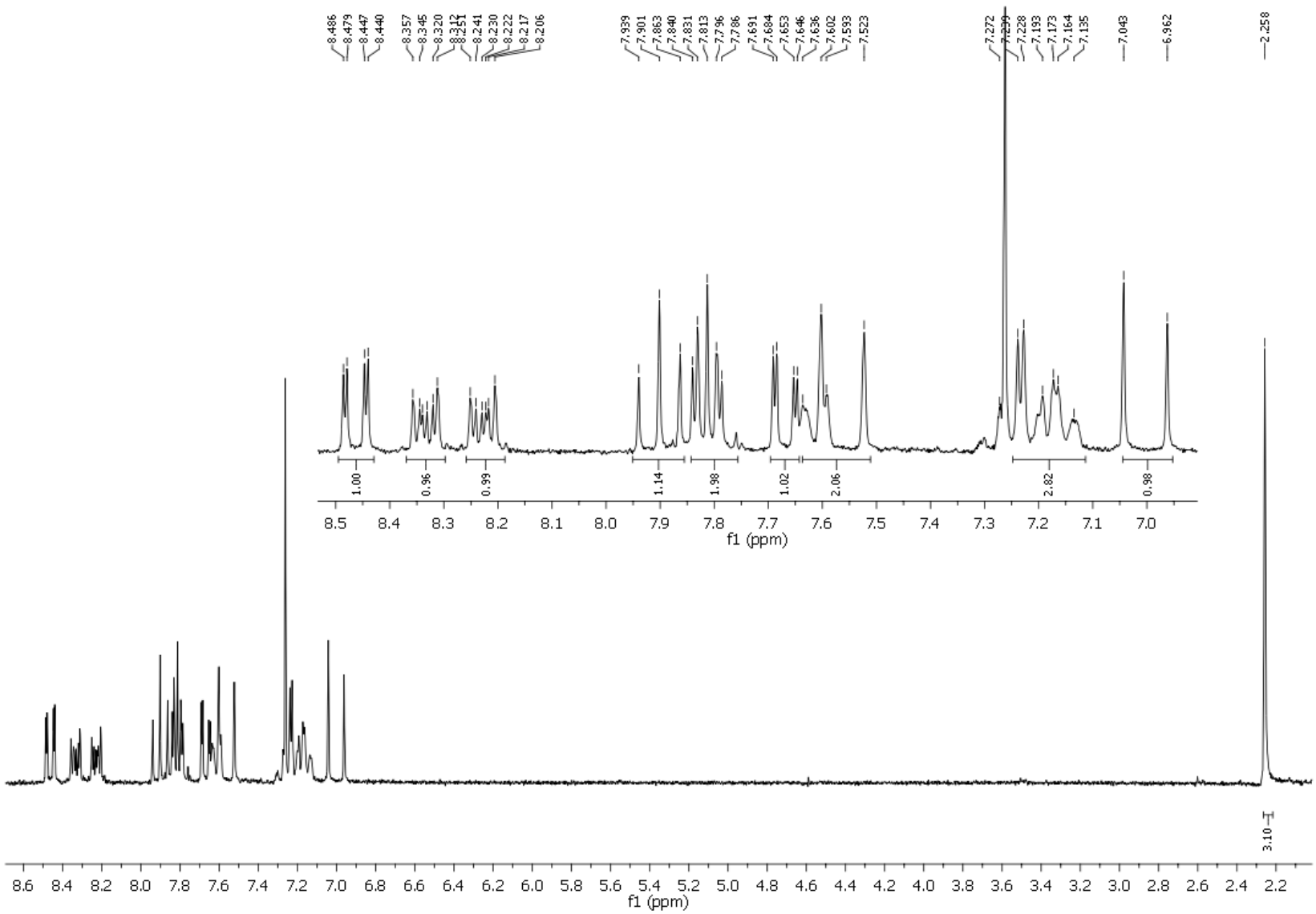

Fig. S3. ^{1}H NMR spectrum of **2b** in $CDCl_3$ (200 MHz).

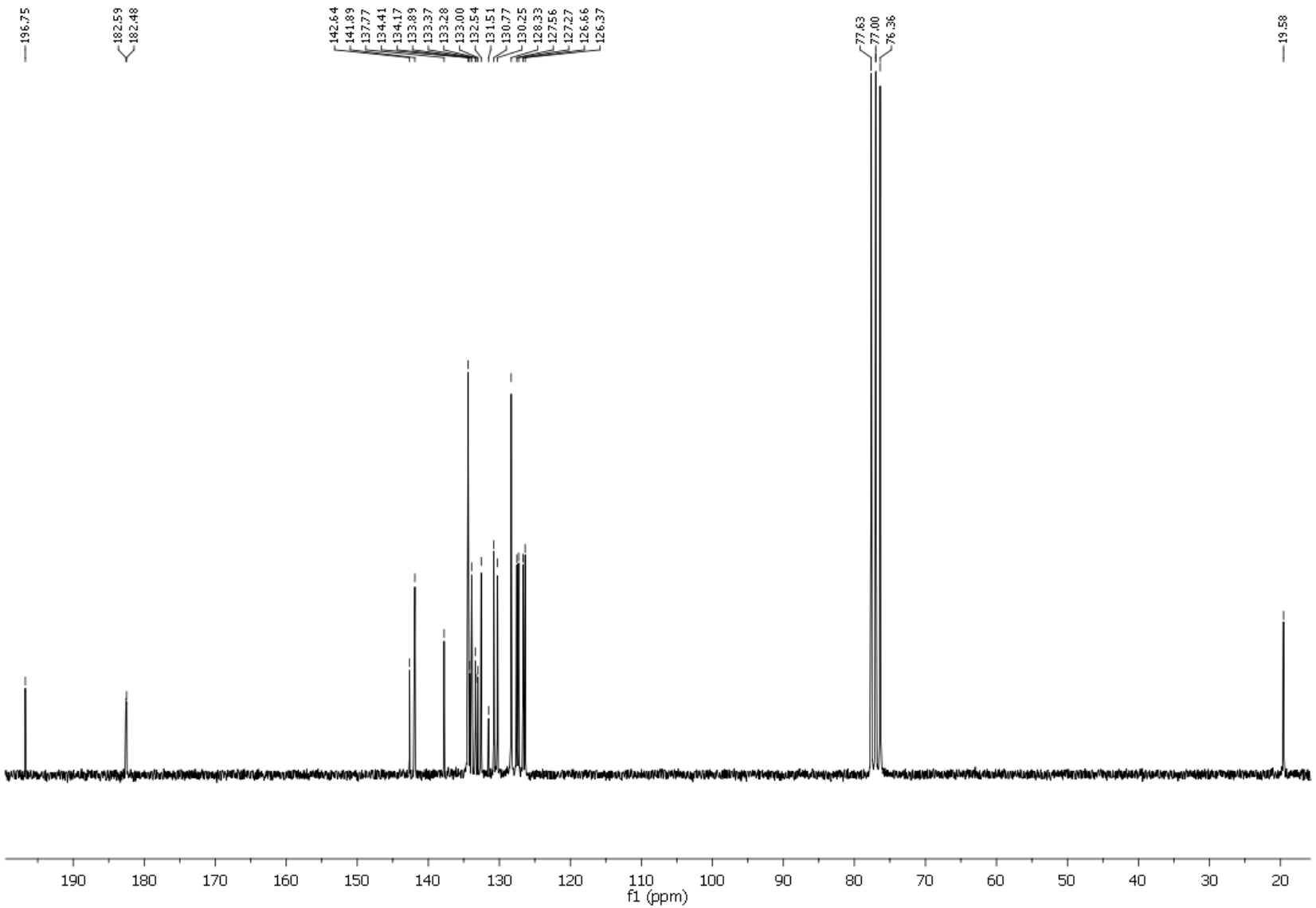

Fig. S4. ^{13}C NMR spectrum of **2b** in $CDCl_3$ (50 MHz).

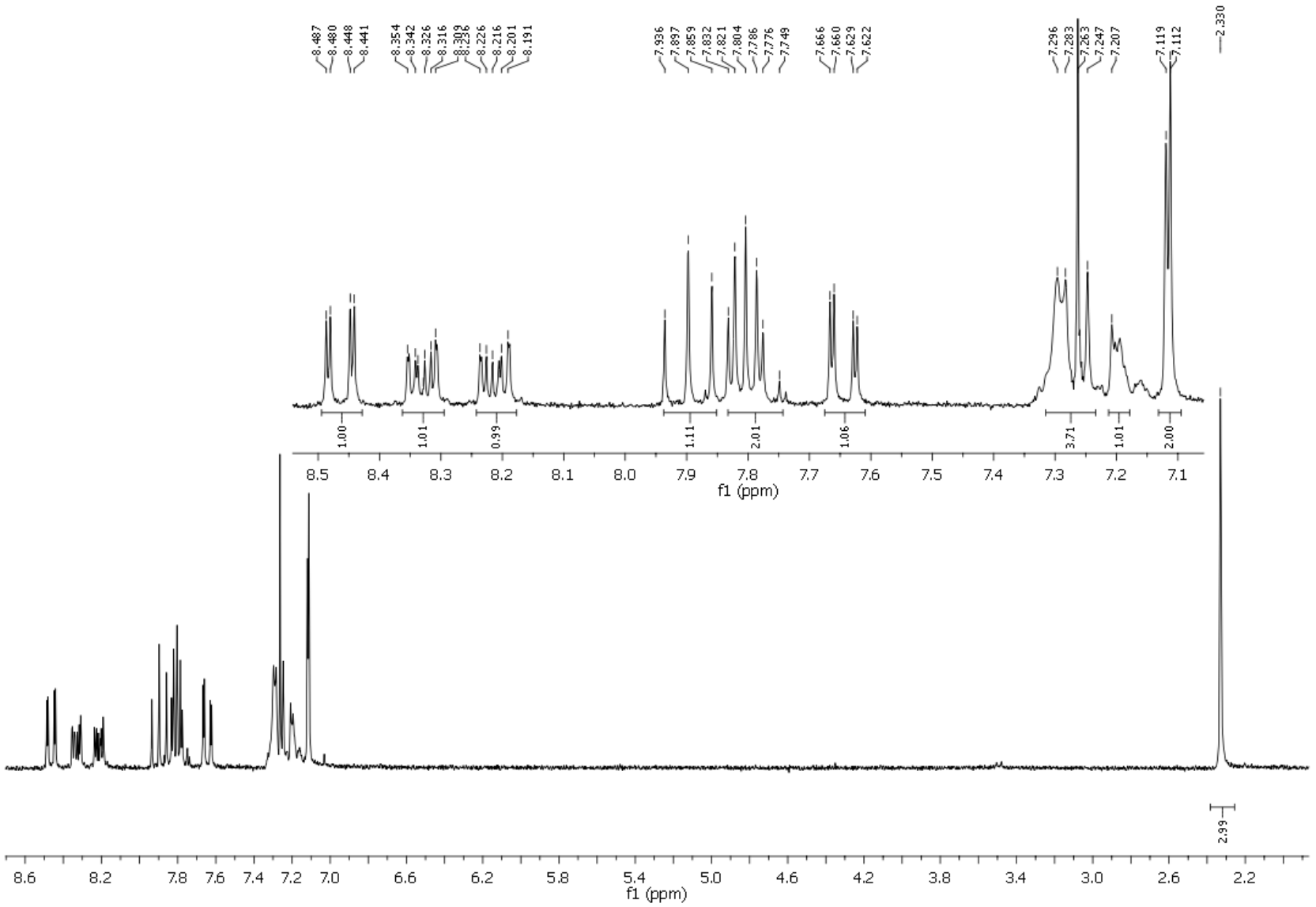

Fig. S5. ^{1}H NMR spectrum of **2c** in $CDCl_3$ (200 MHz).

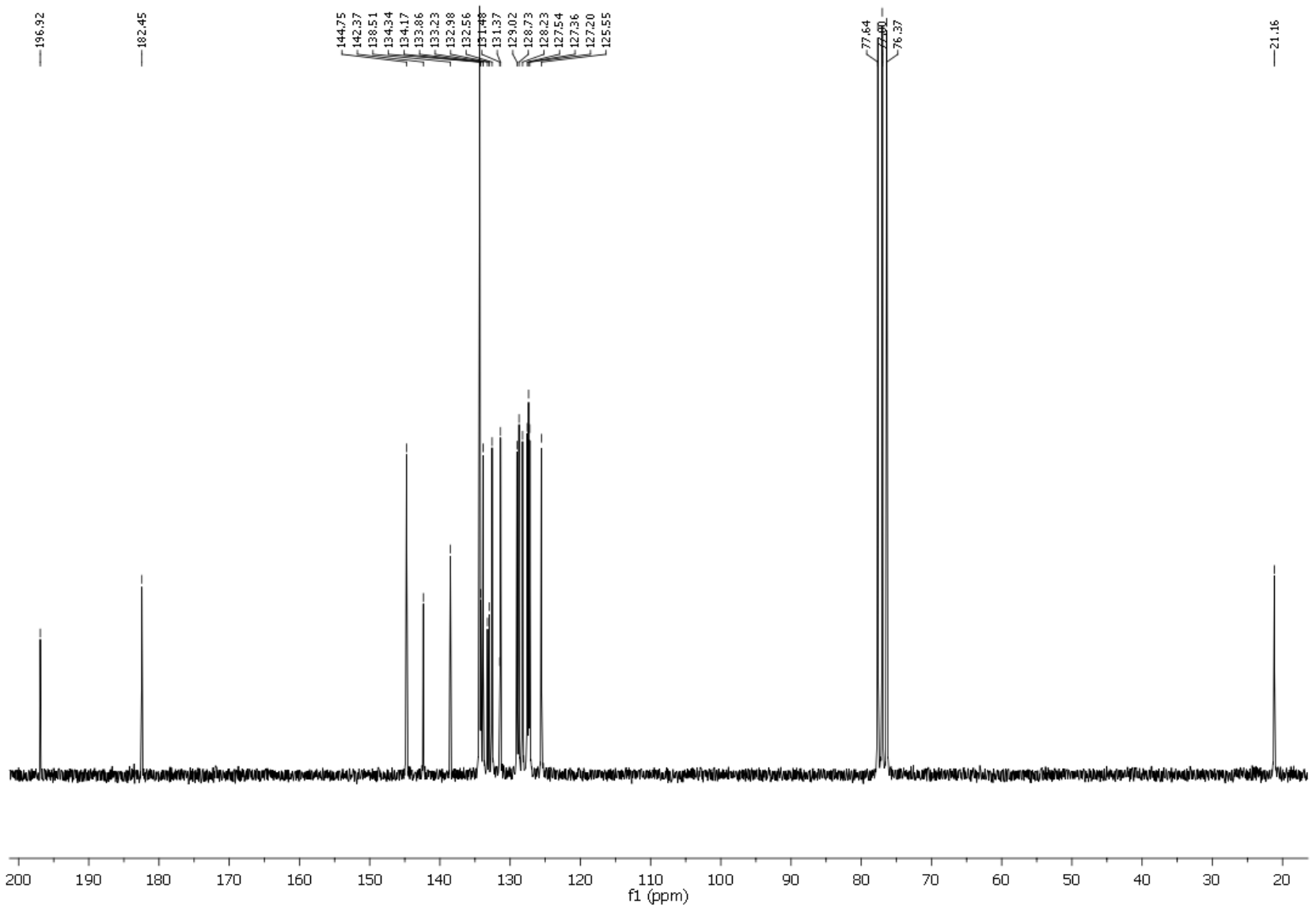

Fig. S6. ^{13}C NMR spectrum of **2c** in $CDCl_3$ (50 MHz).

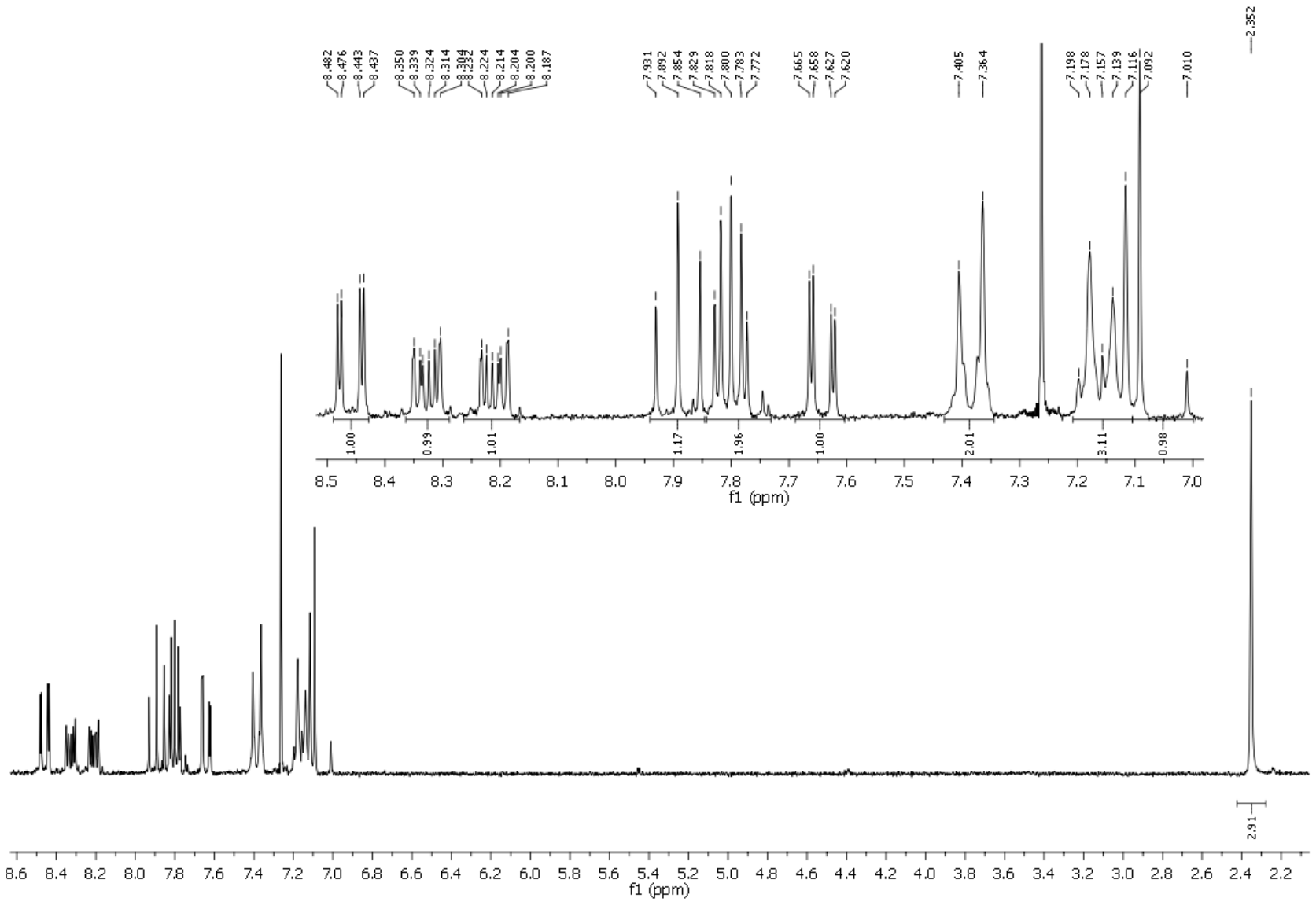

Fig. S7. ^{1}H NMR spectrum of **2d** in $CDCl_3$ (200 MHz).

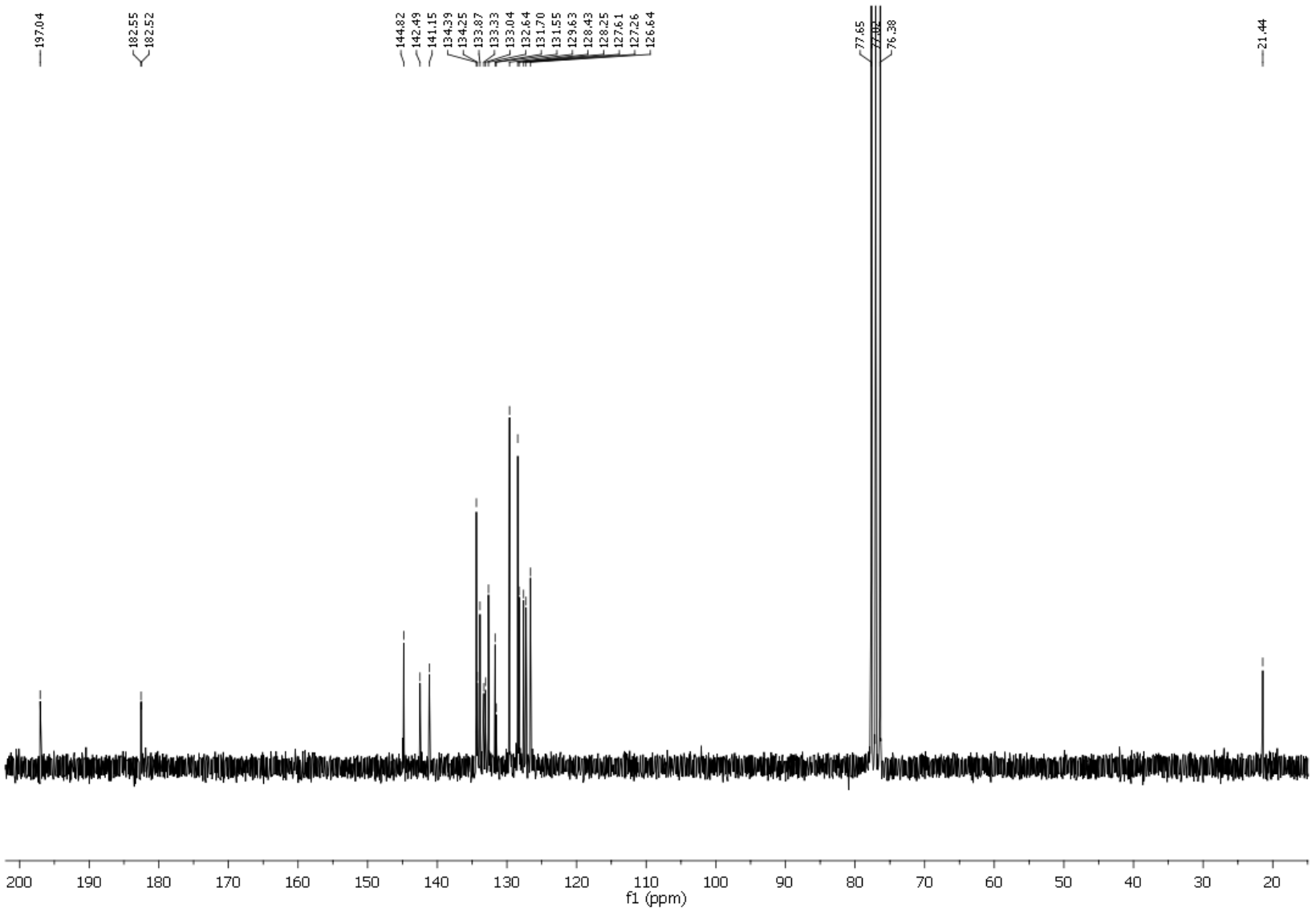

Fig. S8. ^{13}C NMR spectrum of **2d** in $CDCl_3$ (50 MHz).

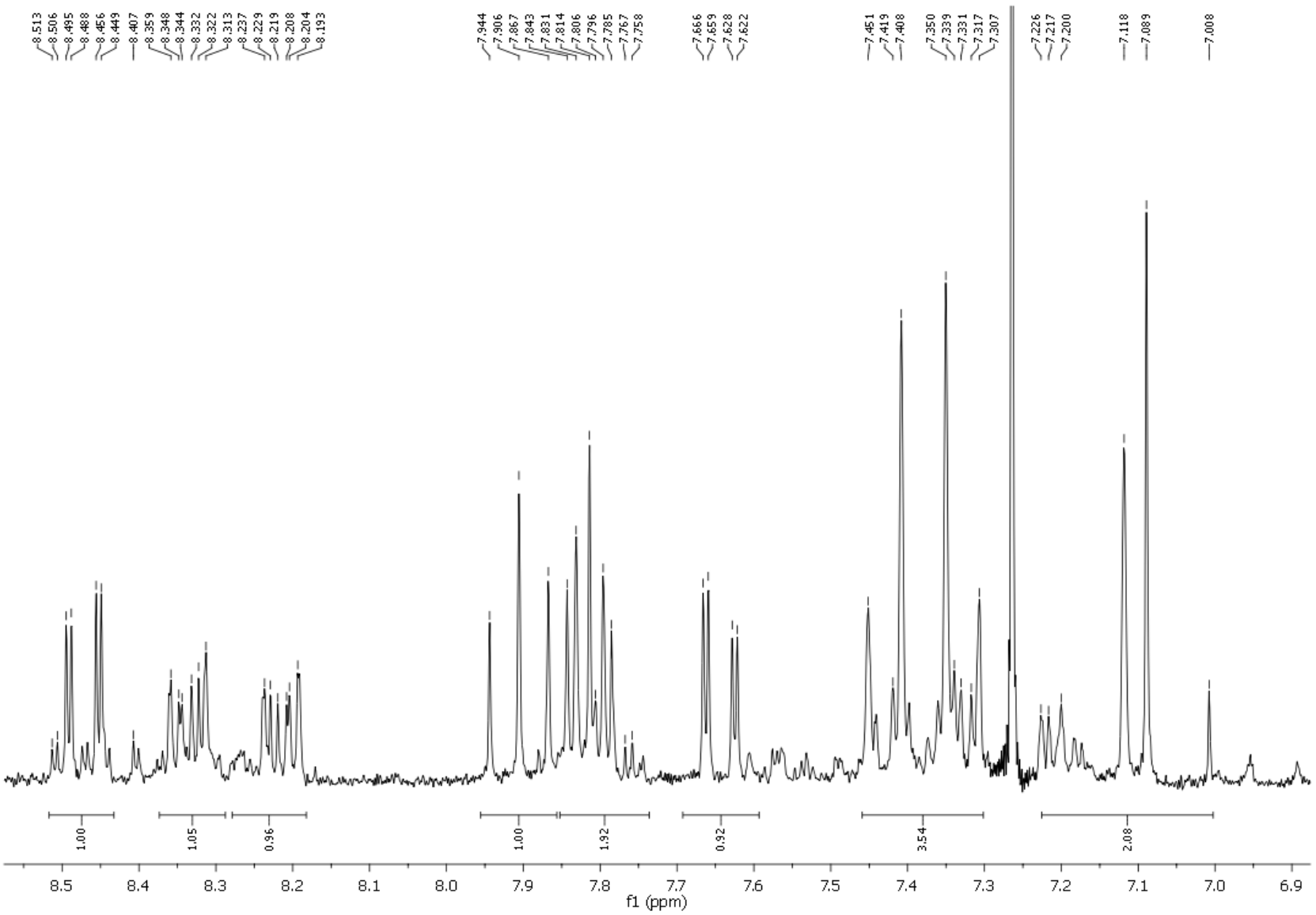

Fig. S9. ^{1}H NMR spectrum of **2e** in $CDCl_3$ (200 MHz).

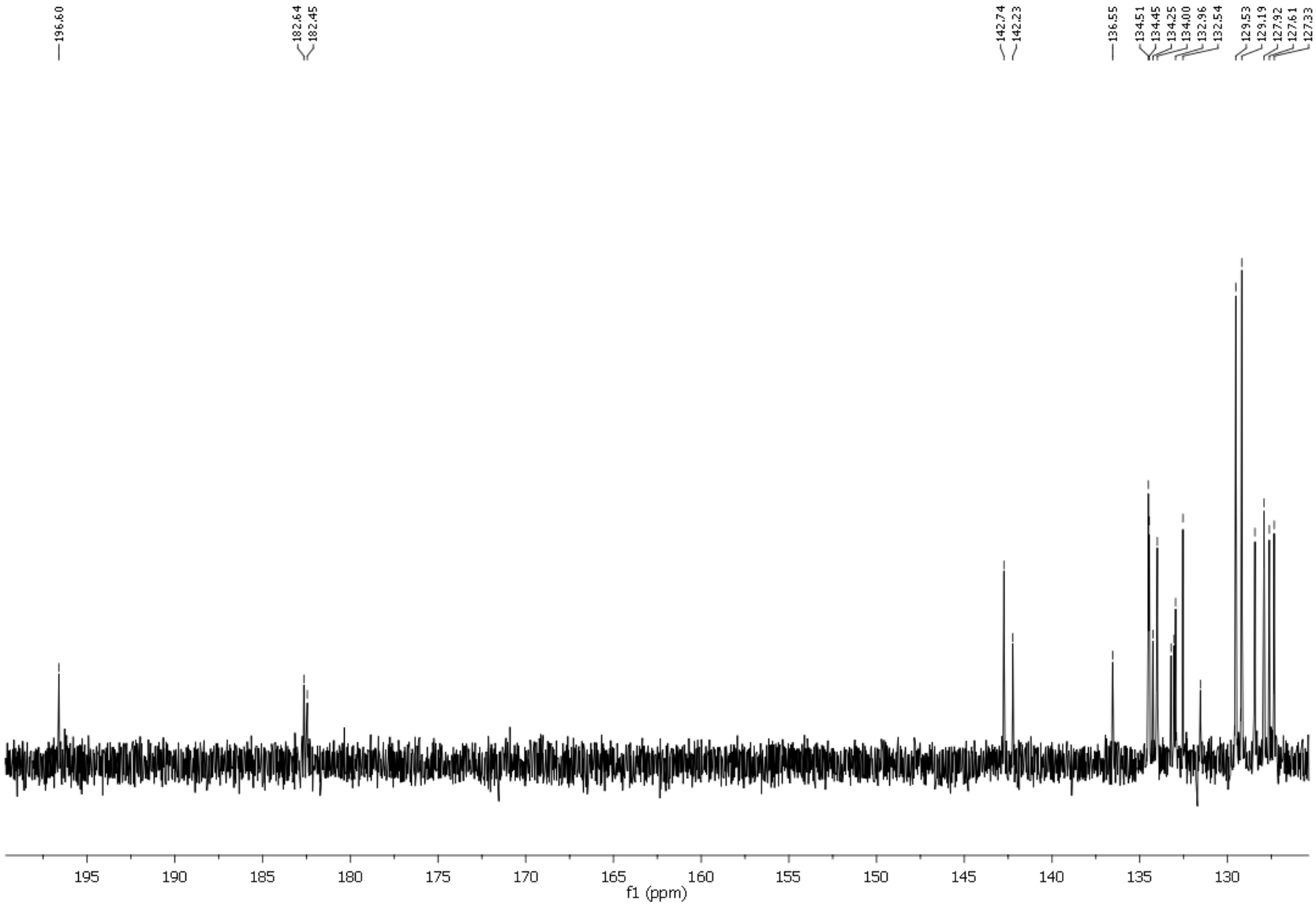

Fig. S10. ^{13}C NMR spectrum of **2e** in $CDCl_3$ (50 MHz).

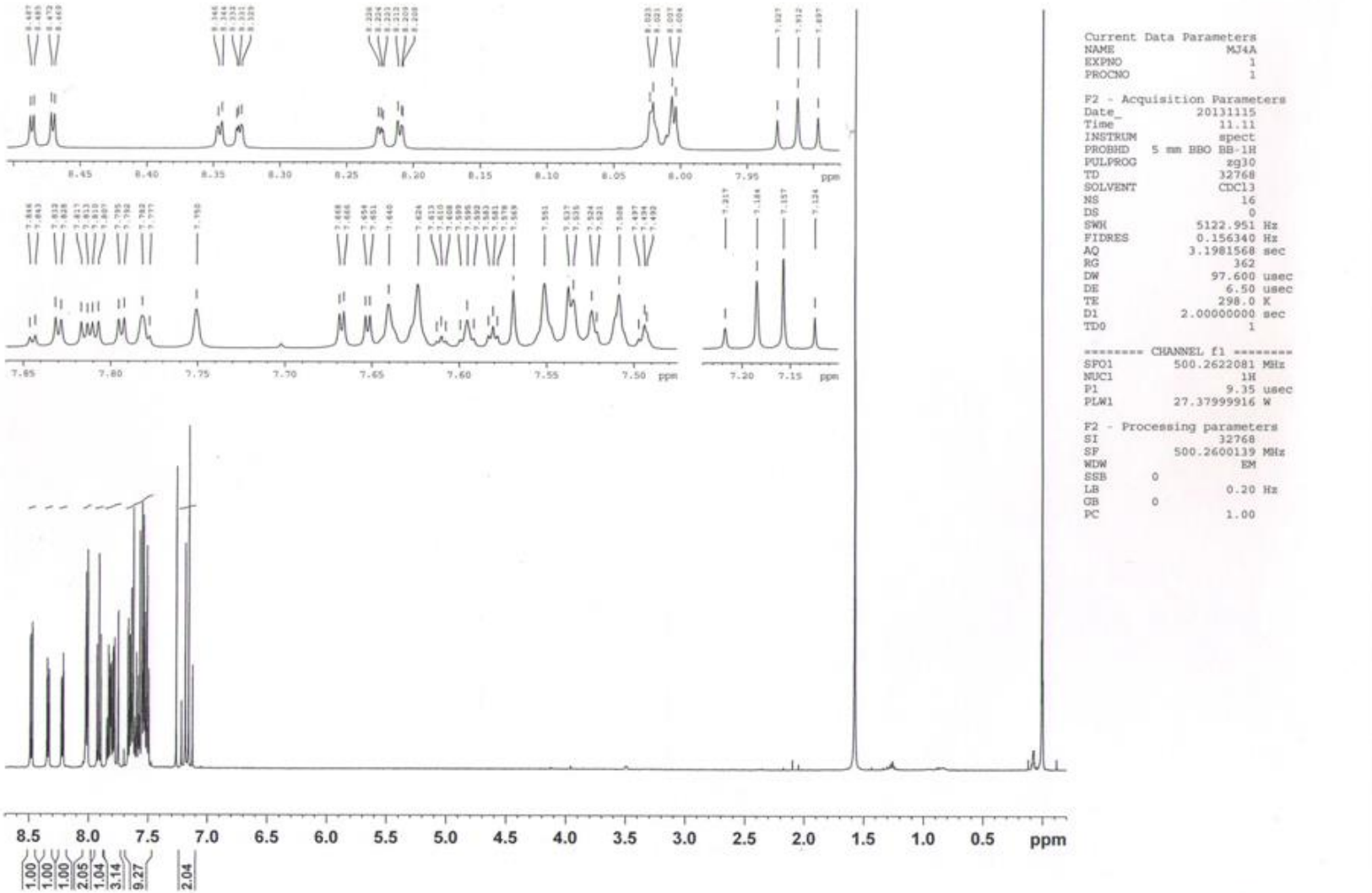

Fig. S11. ^{1}H NMR spectrum of **4a** in $CDCl_3$ (500 MHz).

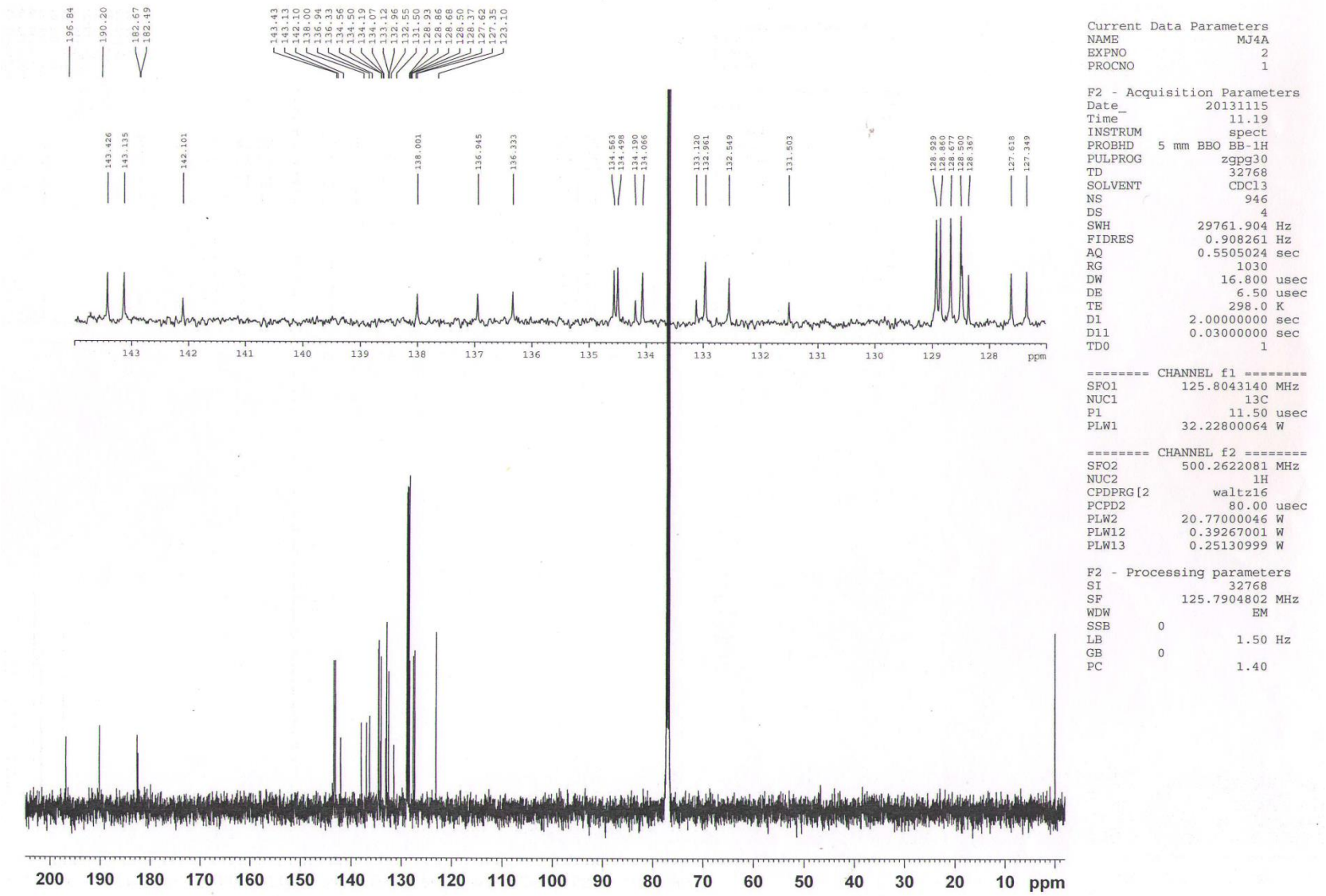

Fig. S12. ^{13}C NMR spectrum of **4a** in $CDCl_3$ (125 MHz).

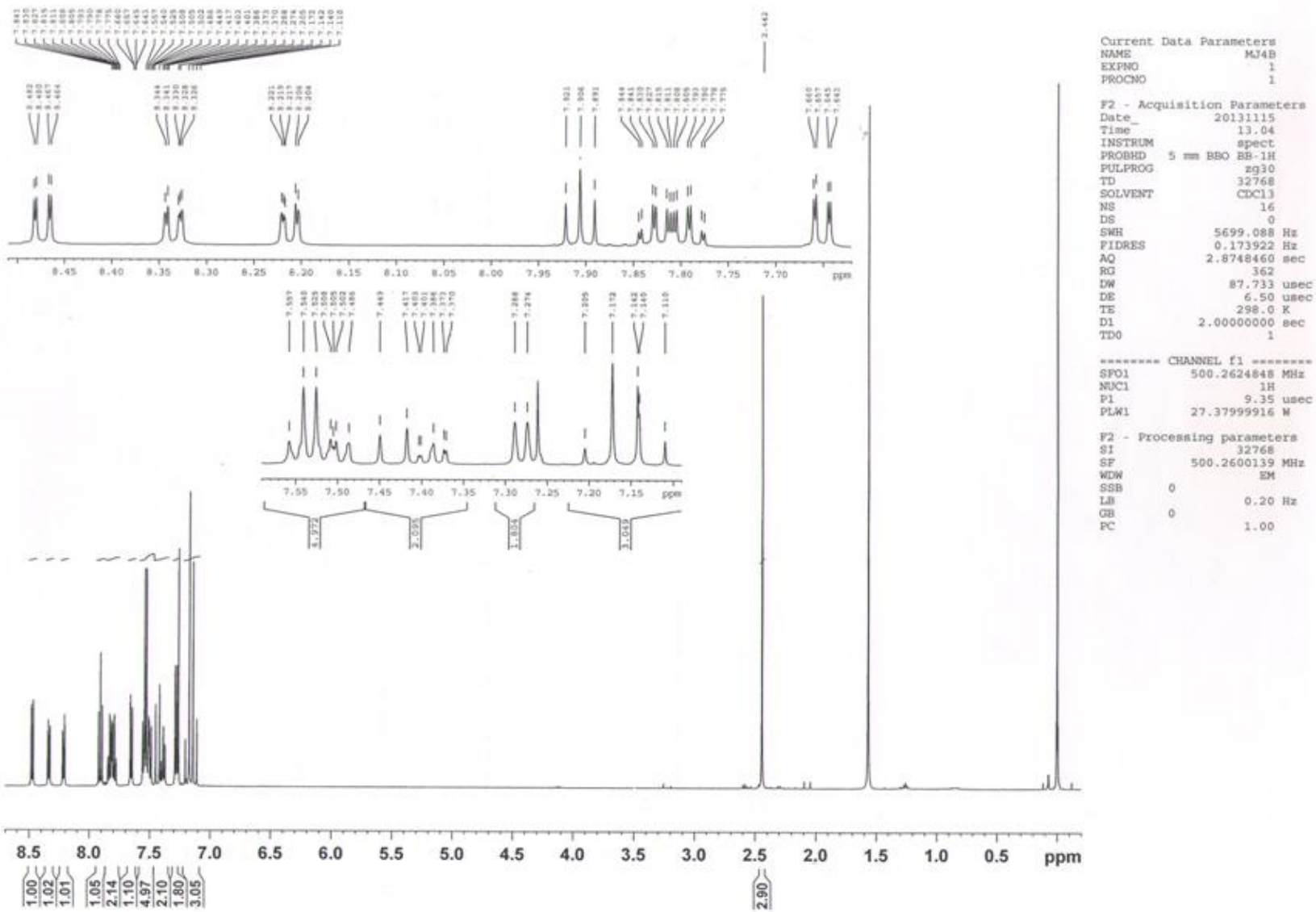

Fig. S13. ^{1}H NMR spectrum of **4b** in $CDCl_3$ (500 MHz).

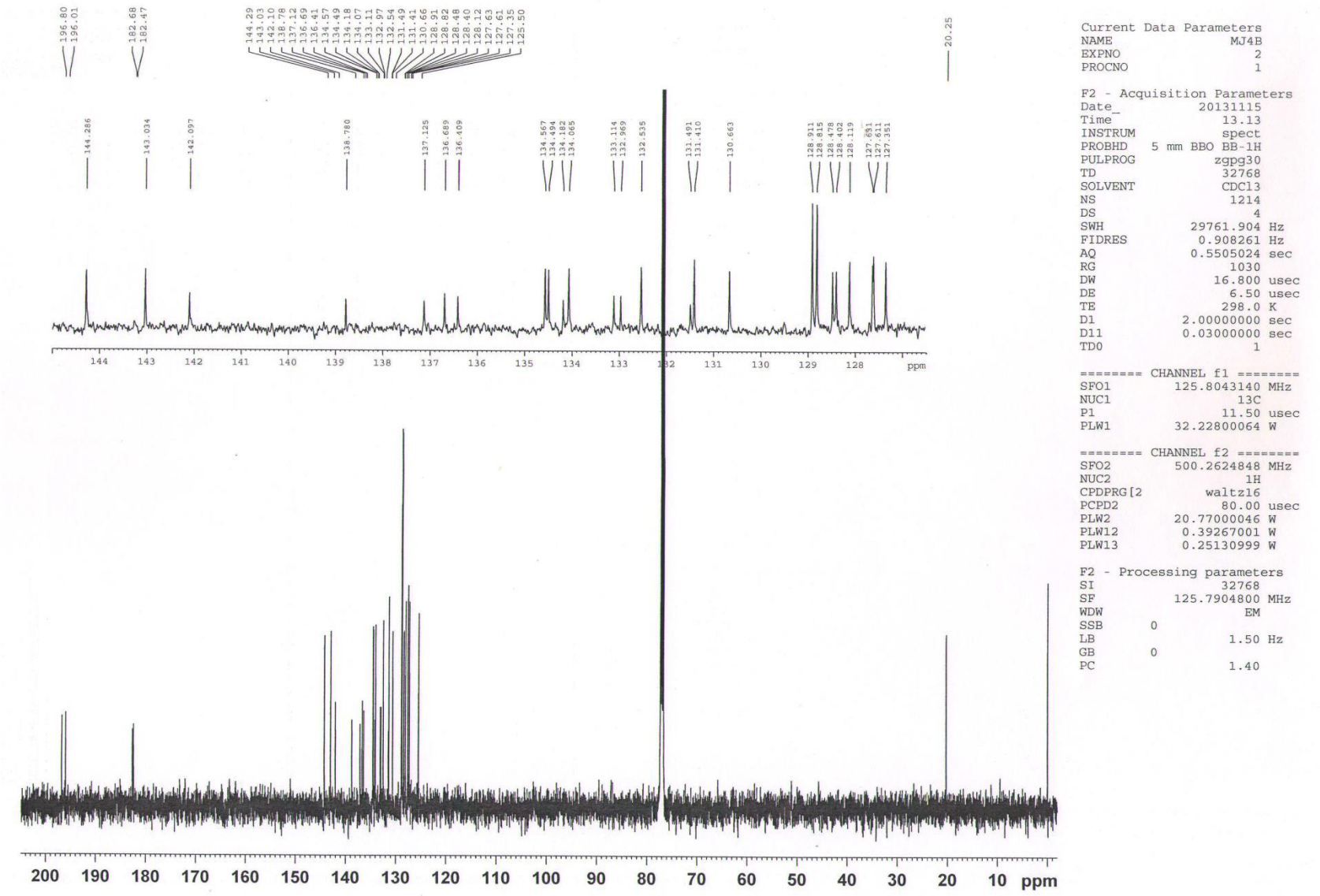


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Fig. S14. ^{13}C NMR spectrum of **4b** in $CDCl_3$ (125 MHz).

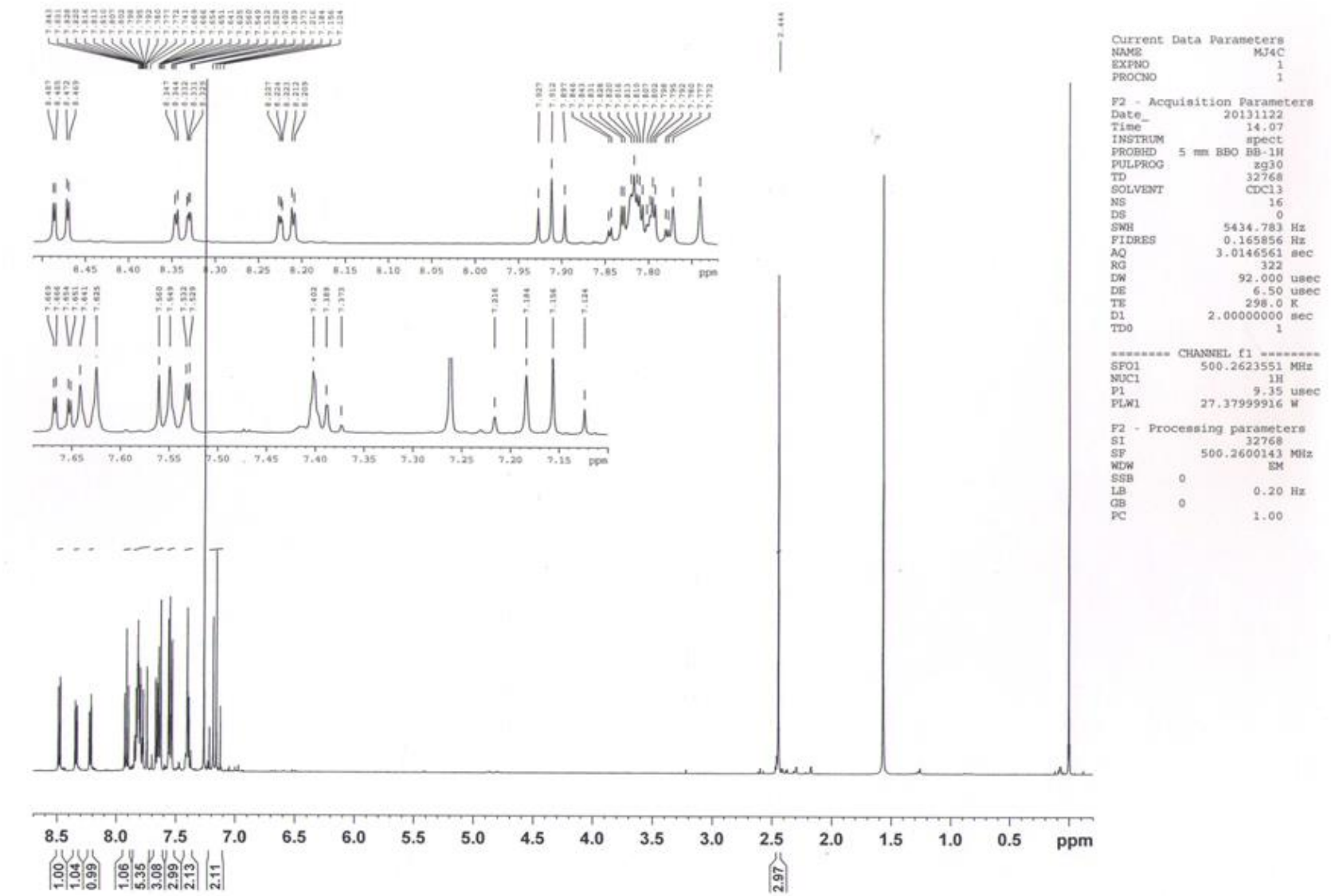
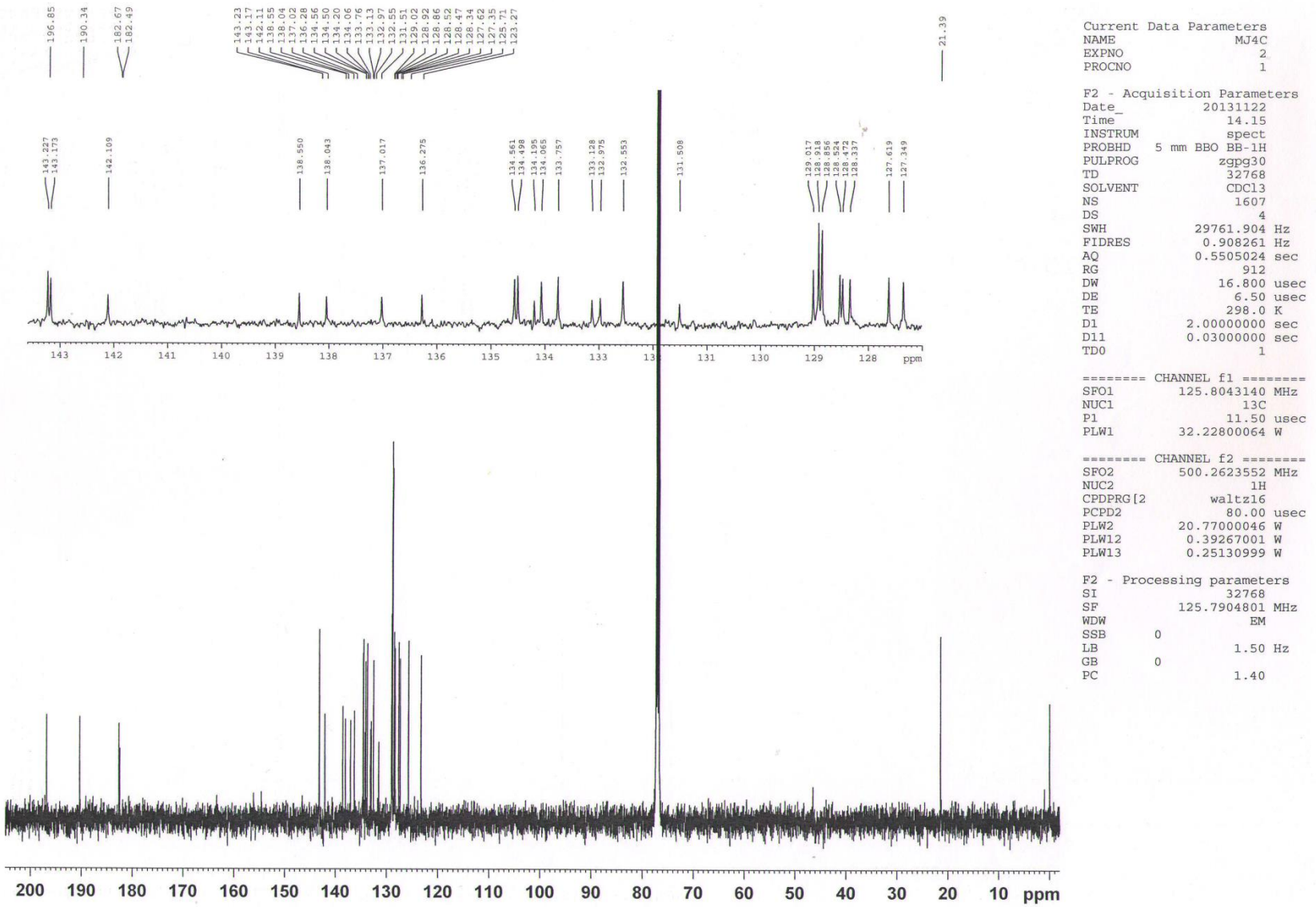


Fig. S15. ^{1}H NMR spectrum of **4c** in $CDCl_3$ (500 MHz).

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PLW13          0.25130999 W

F2 - Processing parameters
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Fig. S16. ^{13}C NMR spectrum of **4c** in $CDCl_3$ (125 MHz).

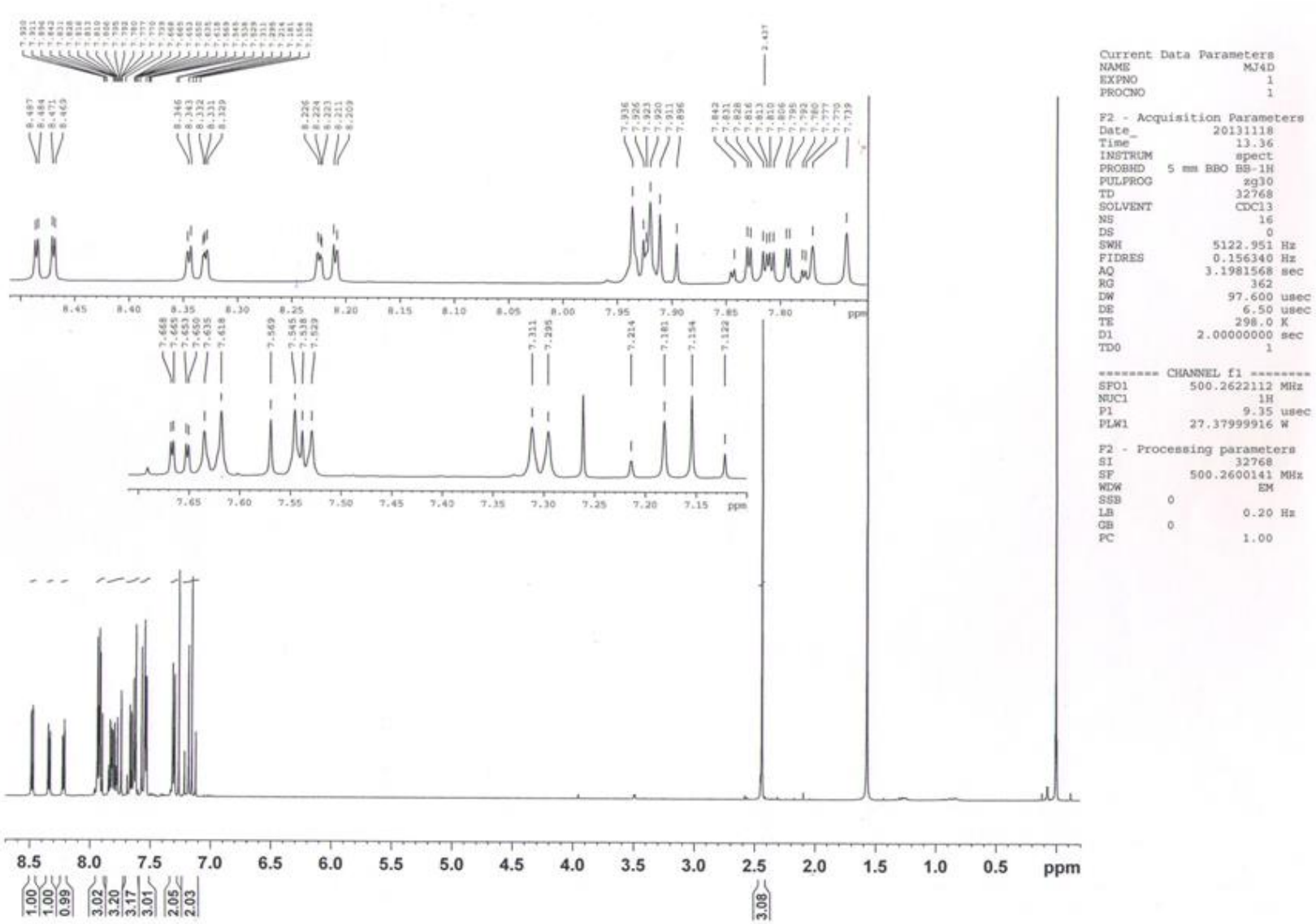
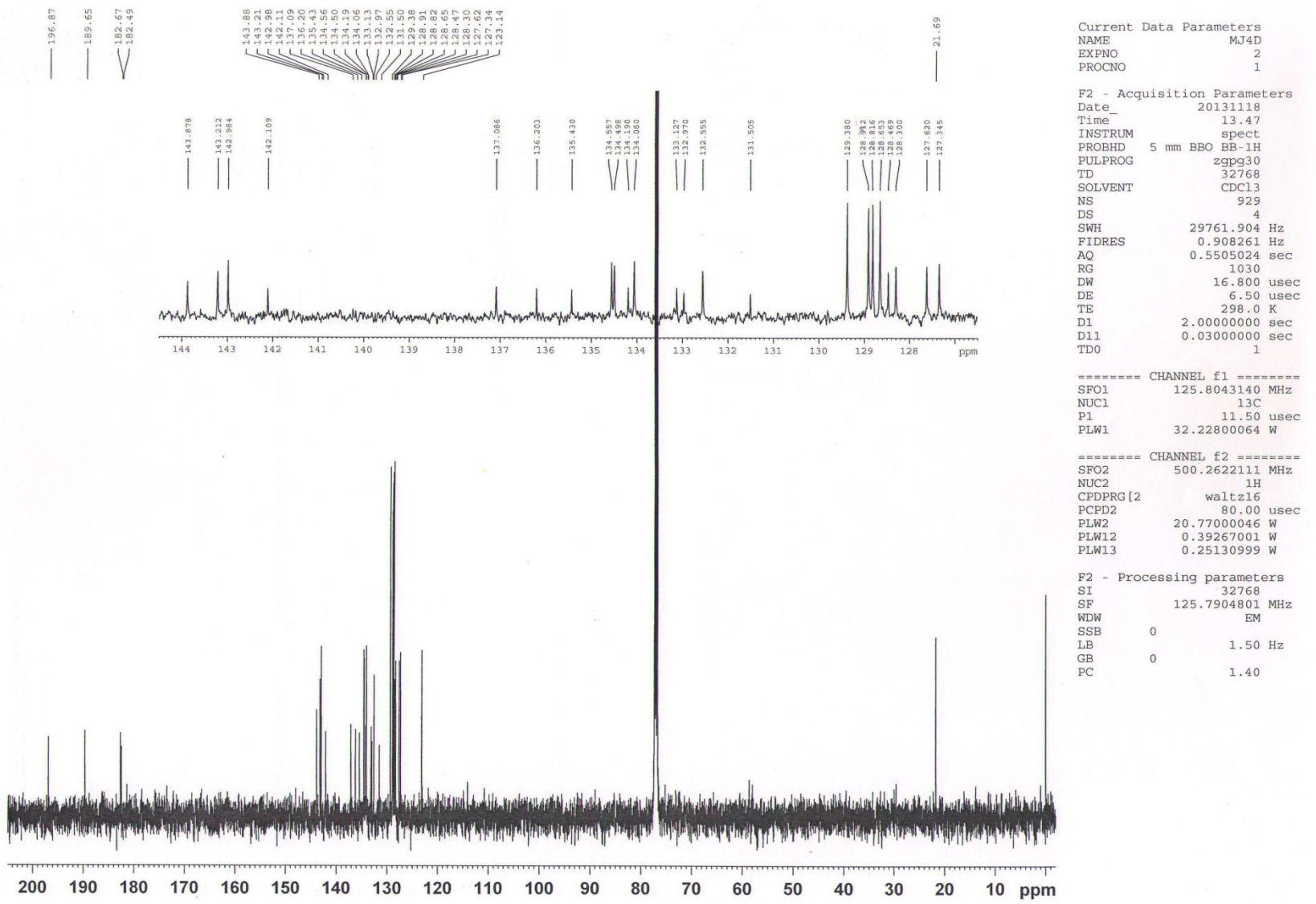


Fig. S17. ^{1}H NMR spectrum of **4d** in $CDCl_3$ (500 MHz).

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PLW13          0.25130999 W

F2 - Processing parameters
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Fig. S18. ^{13}C NMR spectrum of **4d** in $CDCl_3$ (125 MHz).

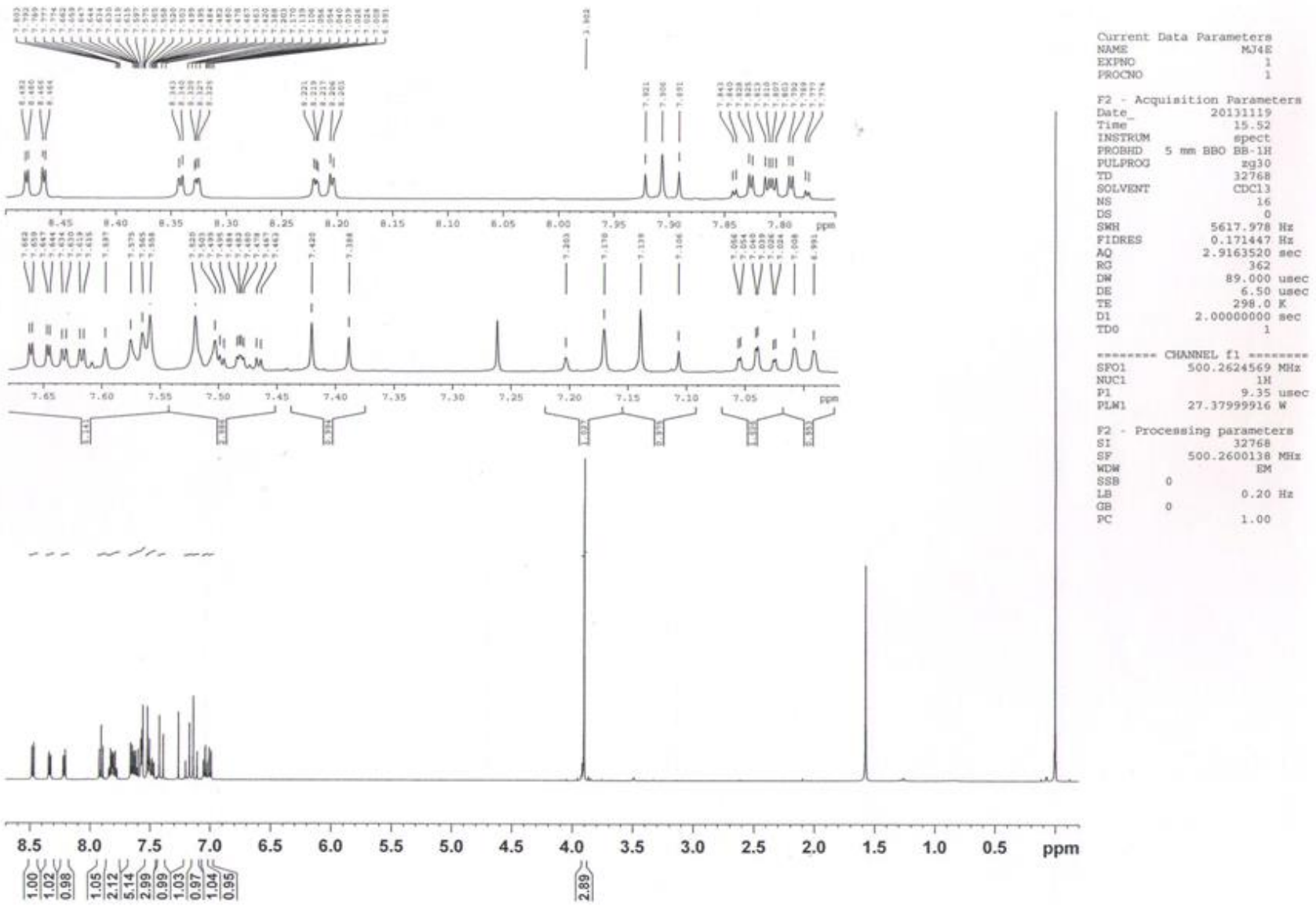


Fig. S19. ^{1}H NMR spectrum of **4e** in $CDCl_3$ (500 MHz).

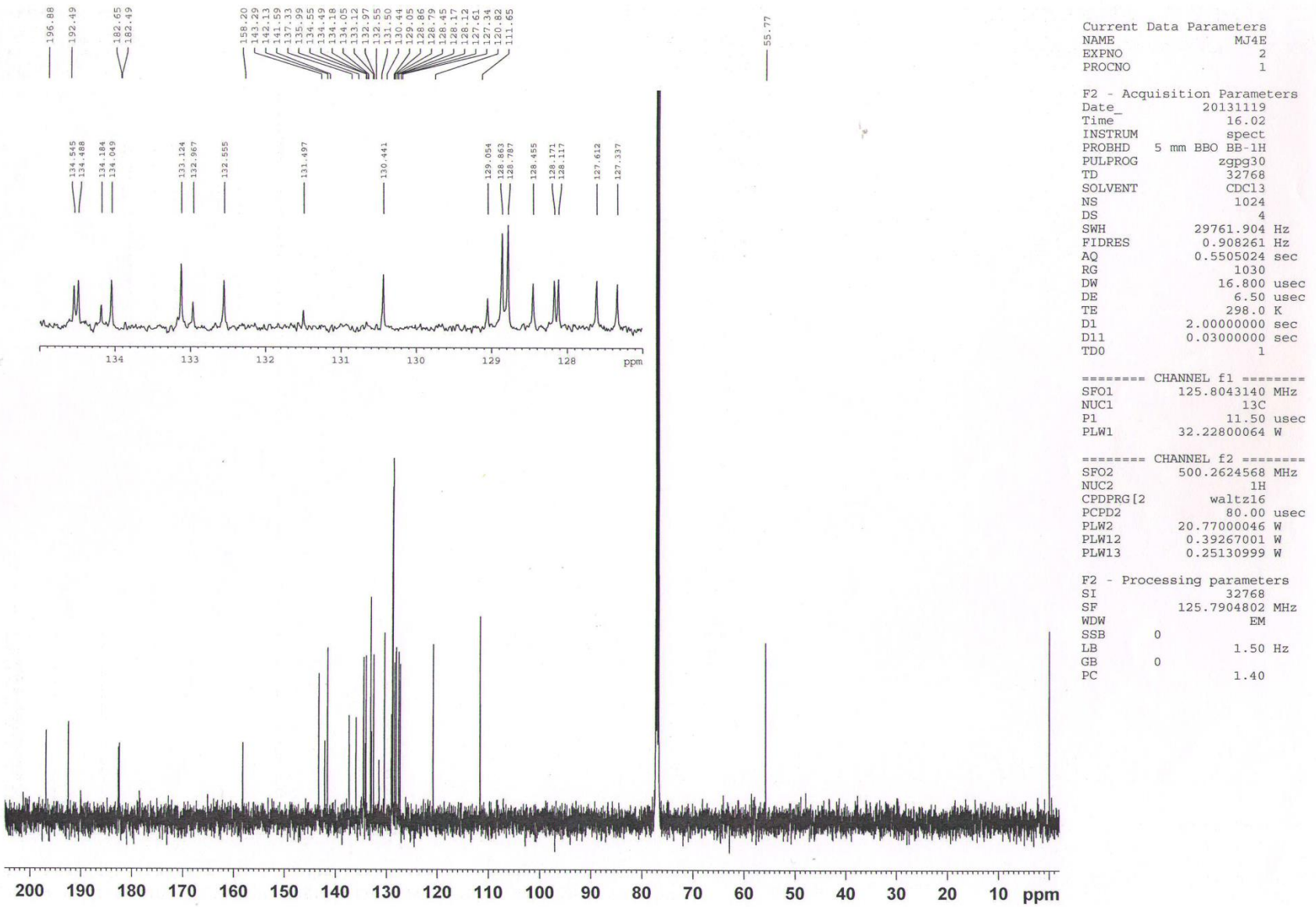


Fig. S20. ^{13}C NMR spectrum of **4e** in $CDCl_3$ (125 MHz).

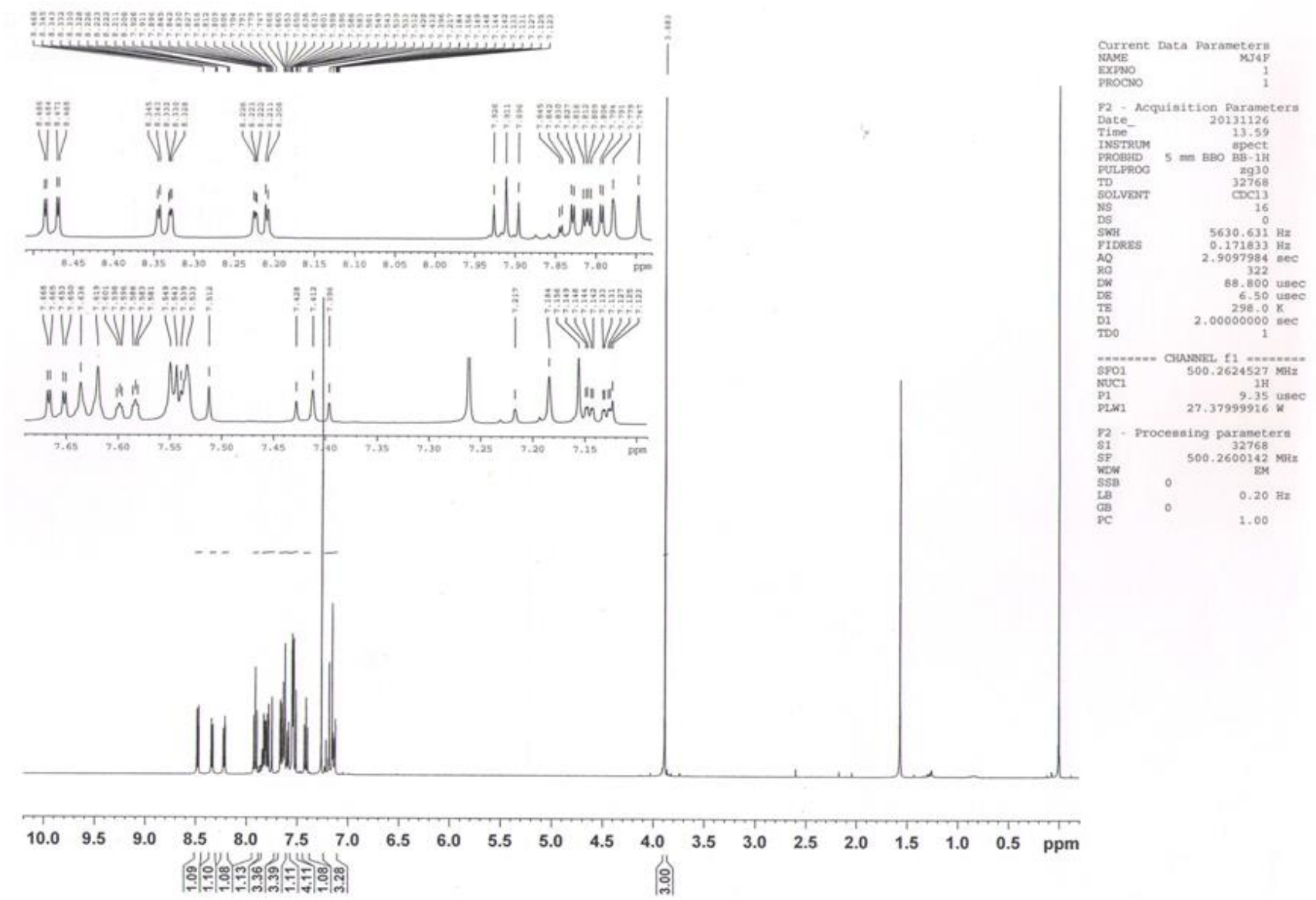
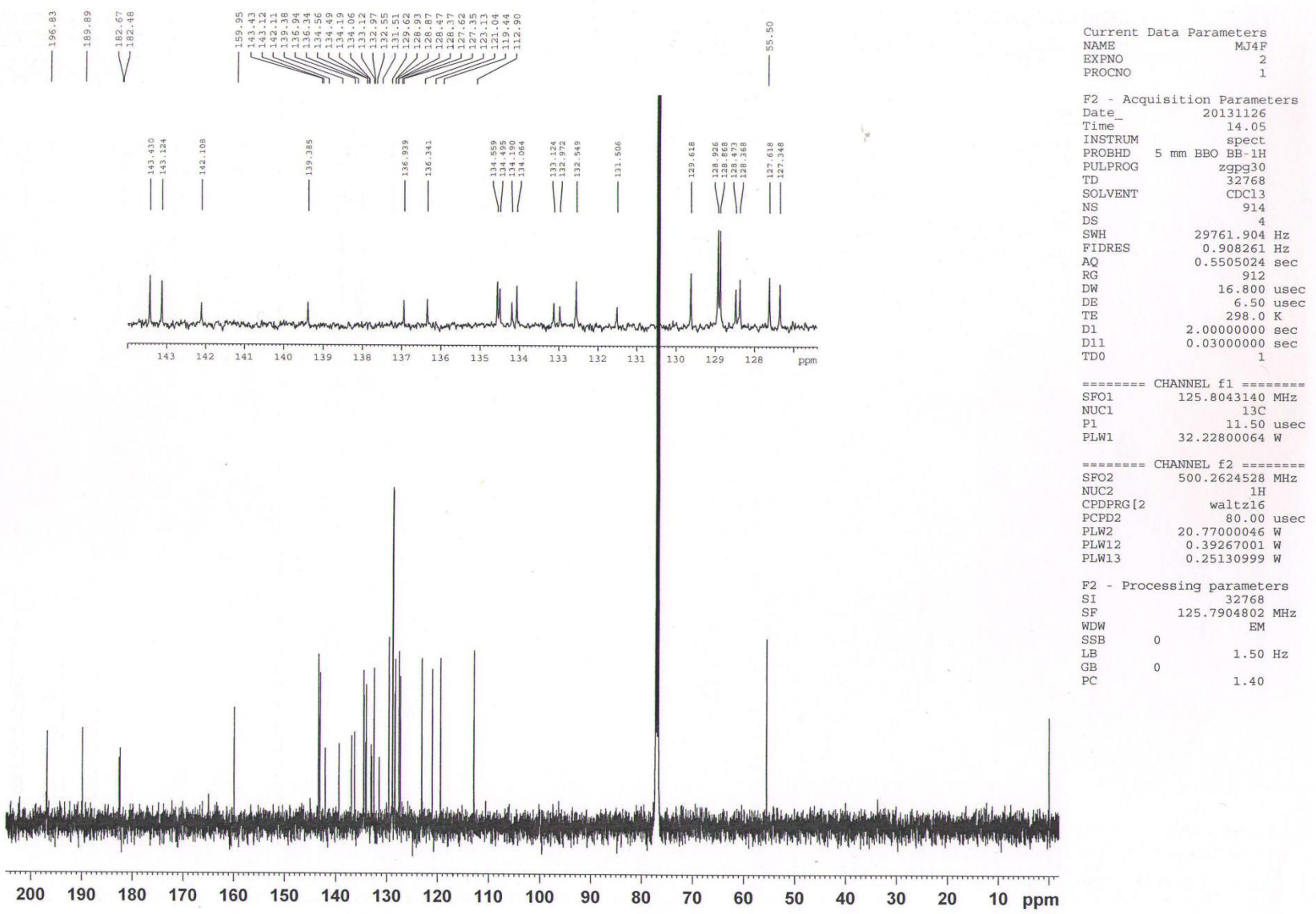


Fig. S21. ^{1}H NMR spectrum of **4f** in $CDCl_3$ (500 MHz).

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DE                   6.50 usec
TE                  298.0 K
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D11              0.03000000 sec
TD0                      1

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NUC2                    1H
CPDPRG[2             waltz16
PCPD2                80.00 usec
PLW2           20.77000046 W
PLW12           0.39267001 W
PLW13           0.25130999 W

F2 - Processing parameters
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Fig. S22. ^{13}C NMR spectrum of **4f** in $CDCl_3$ (125 MHz).

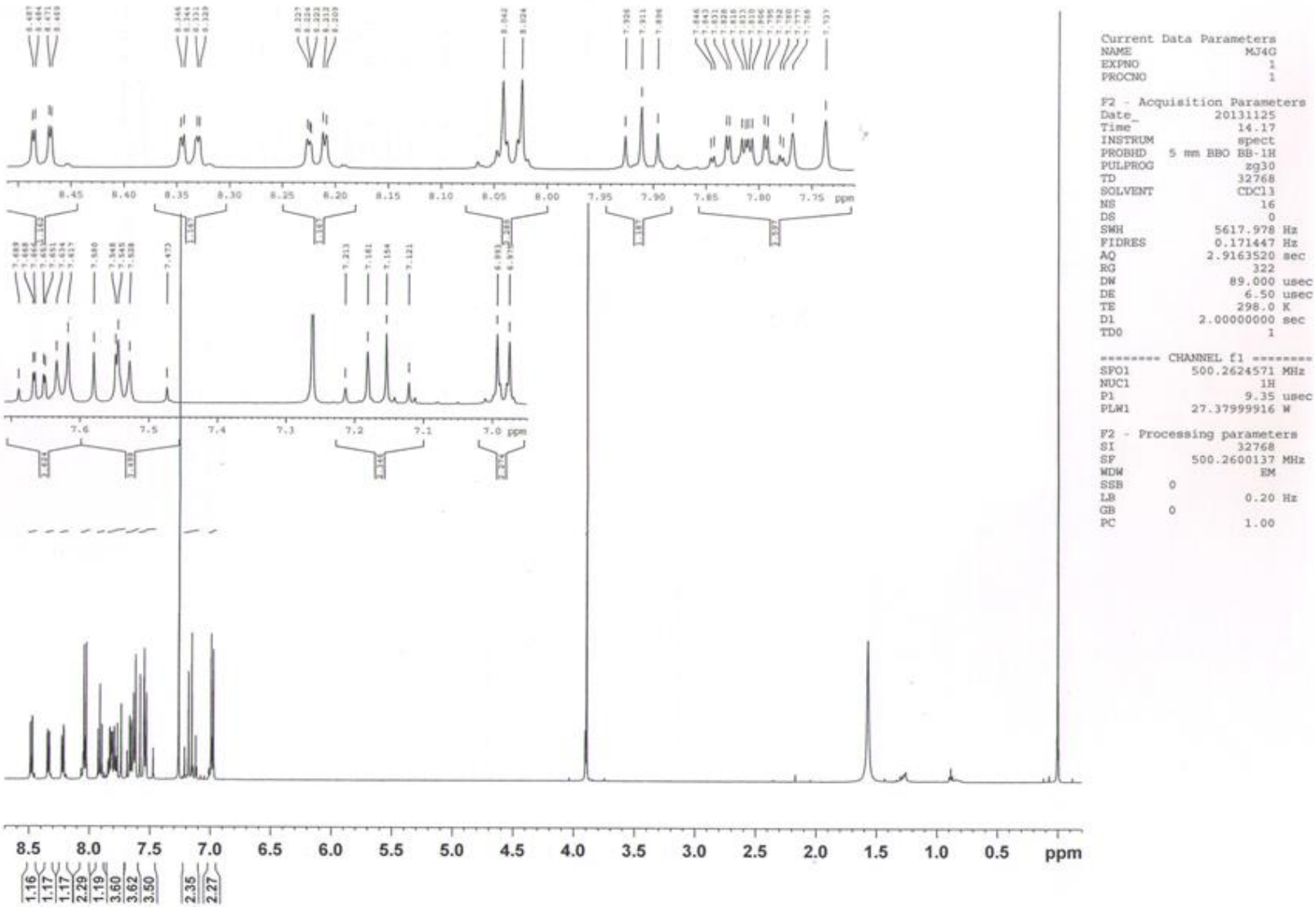

Fig. S23. ^{1}H NMR spectrum of **4g** in $CDCl_3$ (500 MHz).

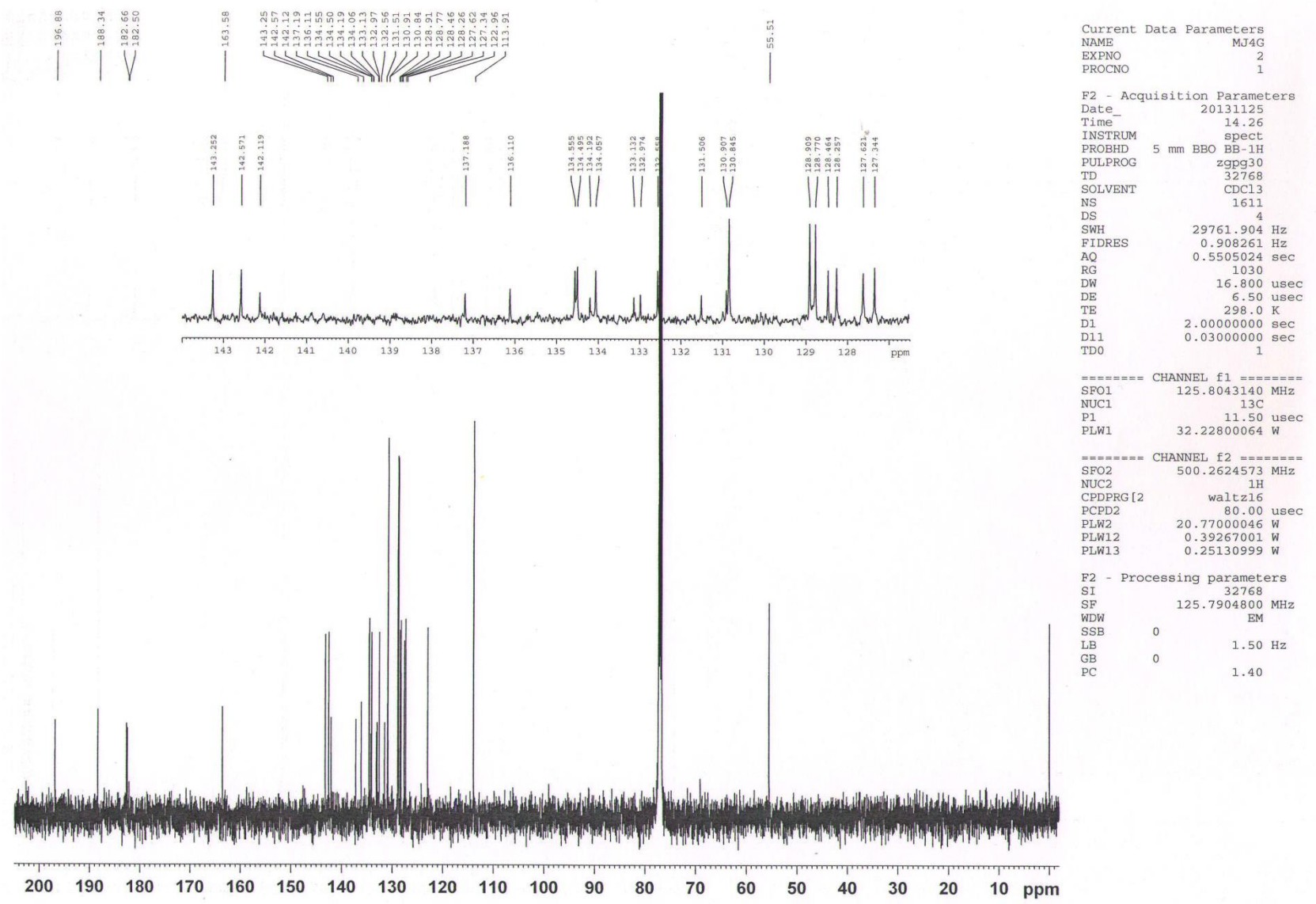

Fig. S24. ^{13}C NMR spectrum of **4g** in $CDCl_3$ (125 MHz).

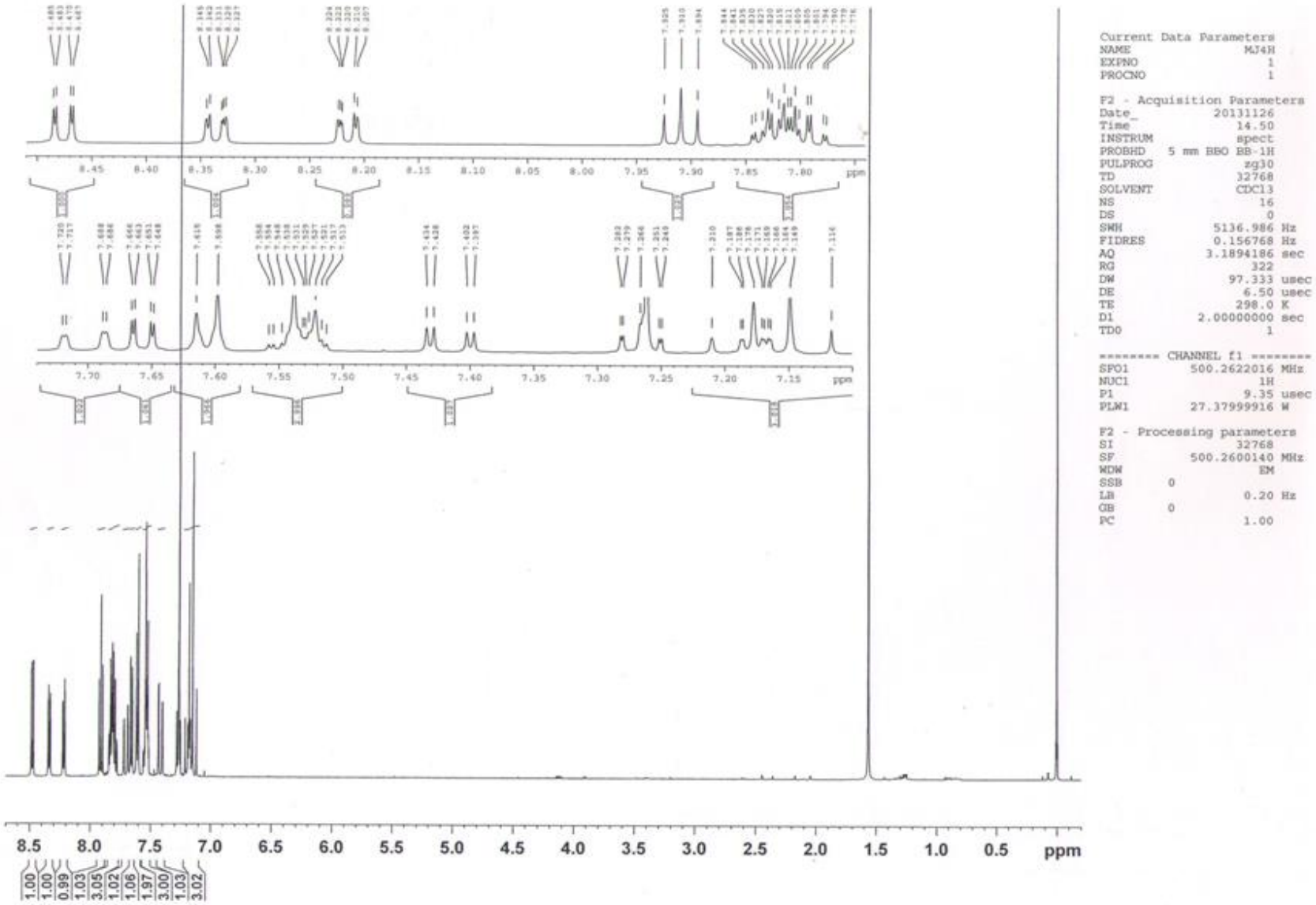

Fig. S25. ^{1}H NMR spectrum of **4h** in $CDCl_3$ (500 MHz).

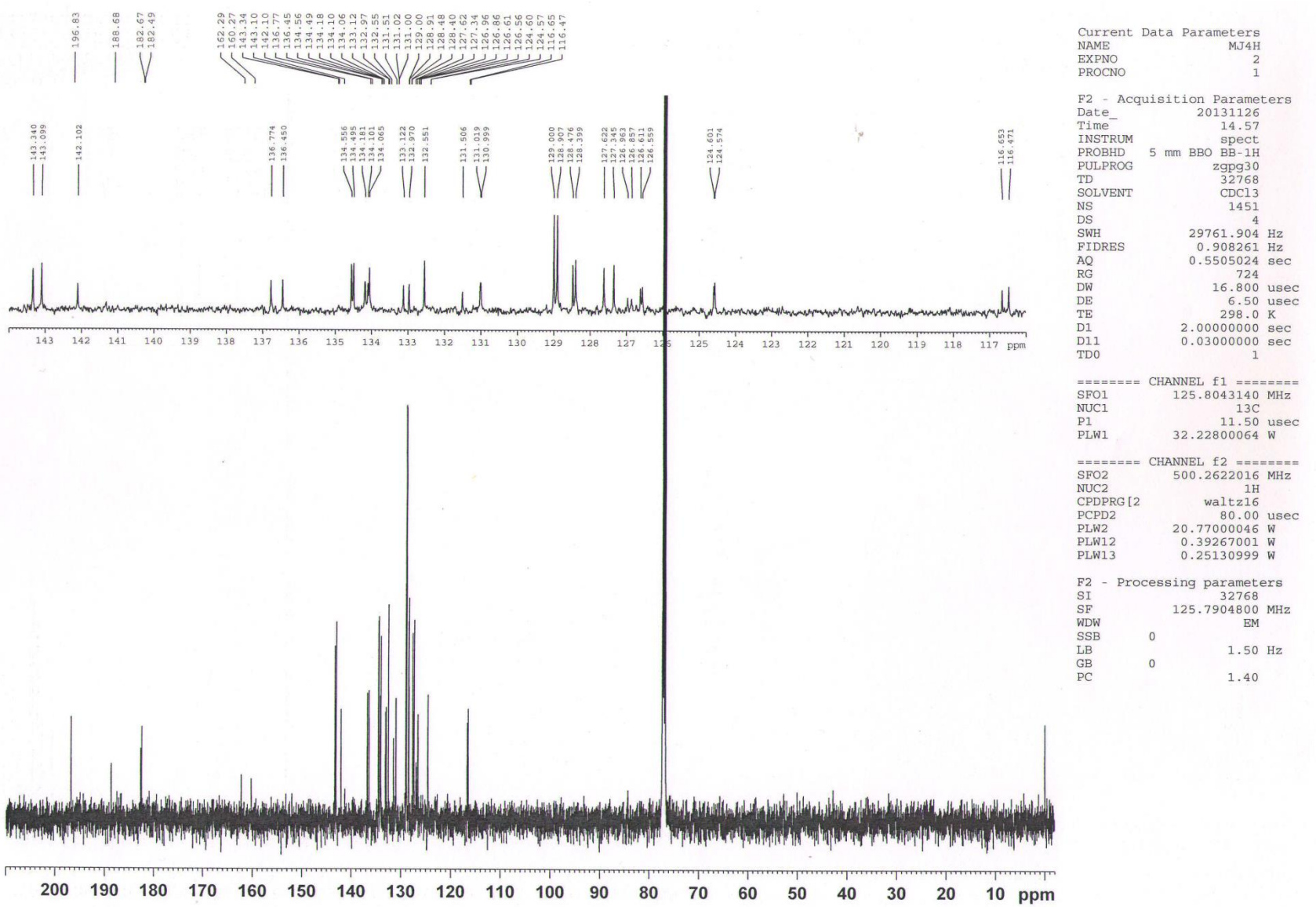

Fig. S26. ^{13}C NMR spectrum of **4h** in $CDCl_3$ (125 MHz).

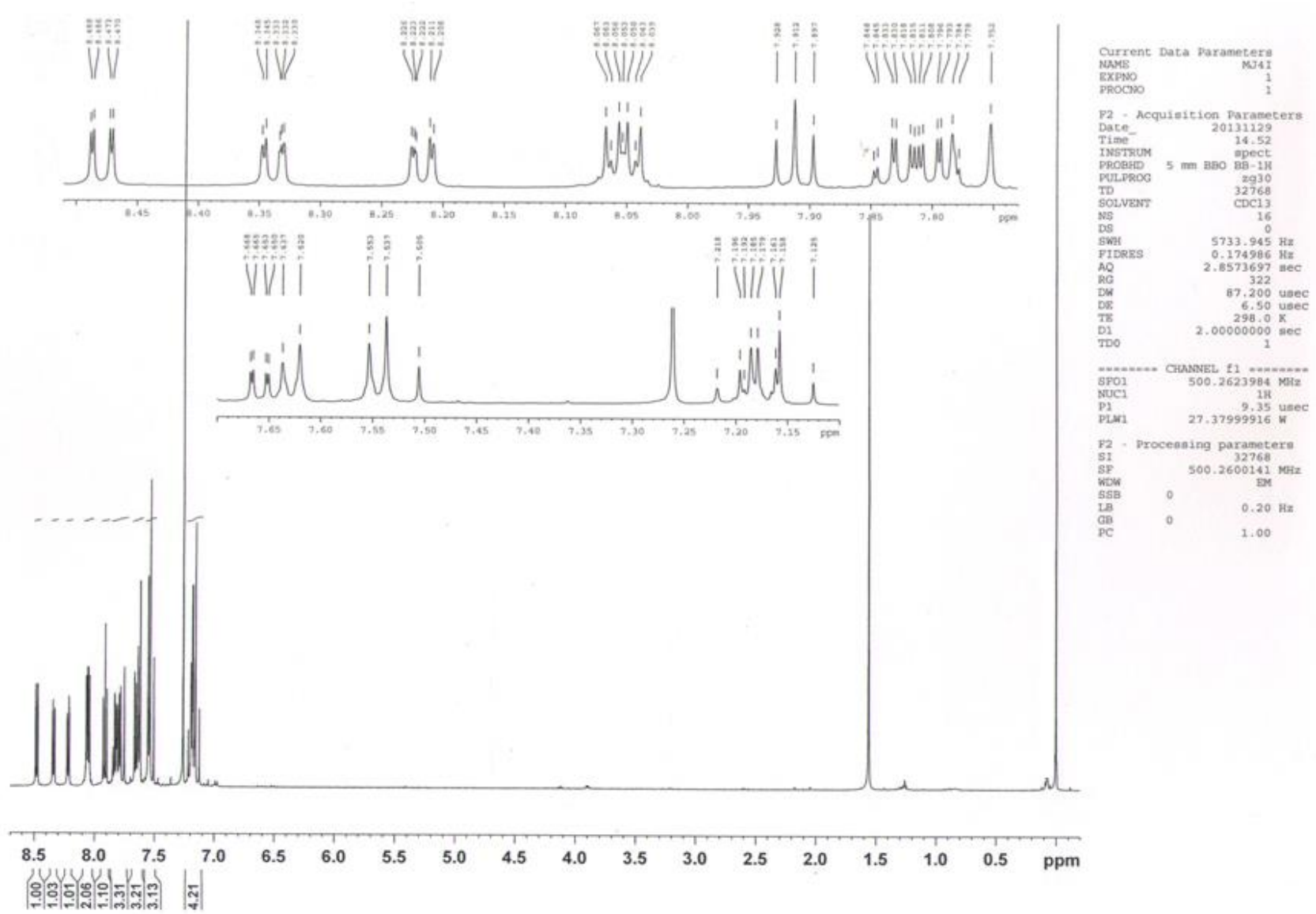

Fig. S27. ^{1}H NMR spectrum of **4i** in $CDCl_3$ (500 MHz).

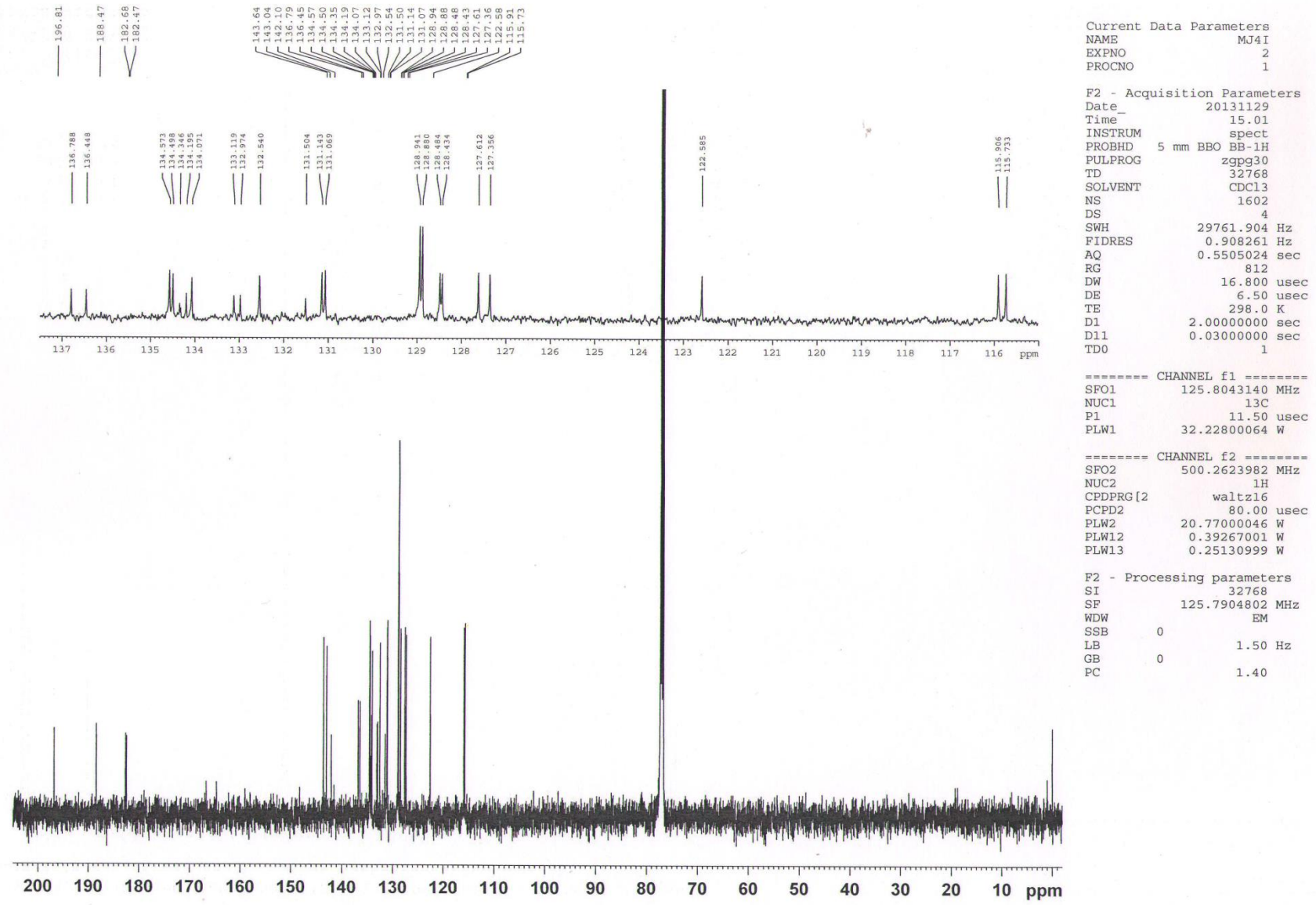

Fig. S28. ^{13}C NMR spectrum of **4i** in $CDCl_3$ (125 MHz).

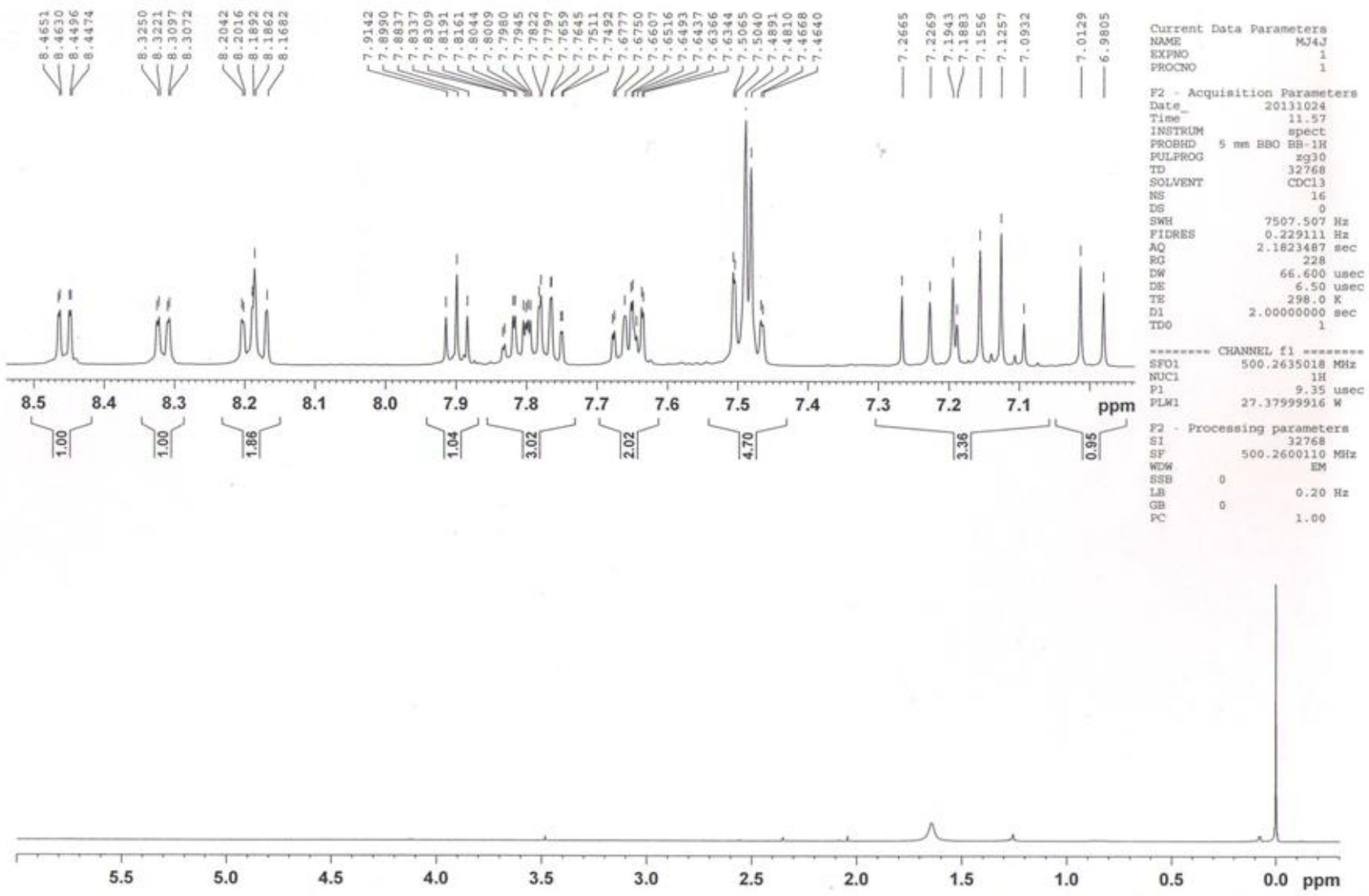

Fig. S29. ^{1}H NMR spectrum of **4j** in $CDCl_3$ (500 MHz).

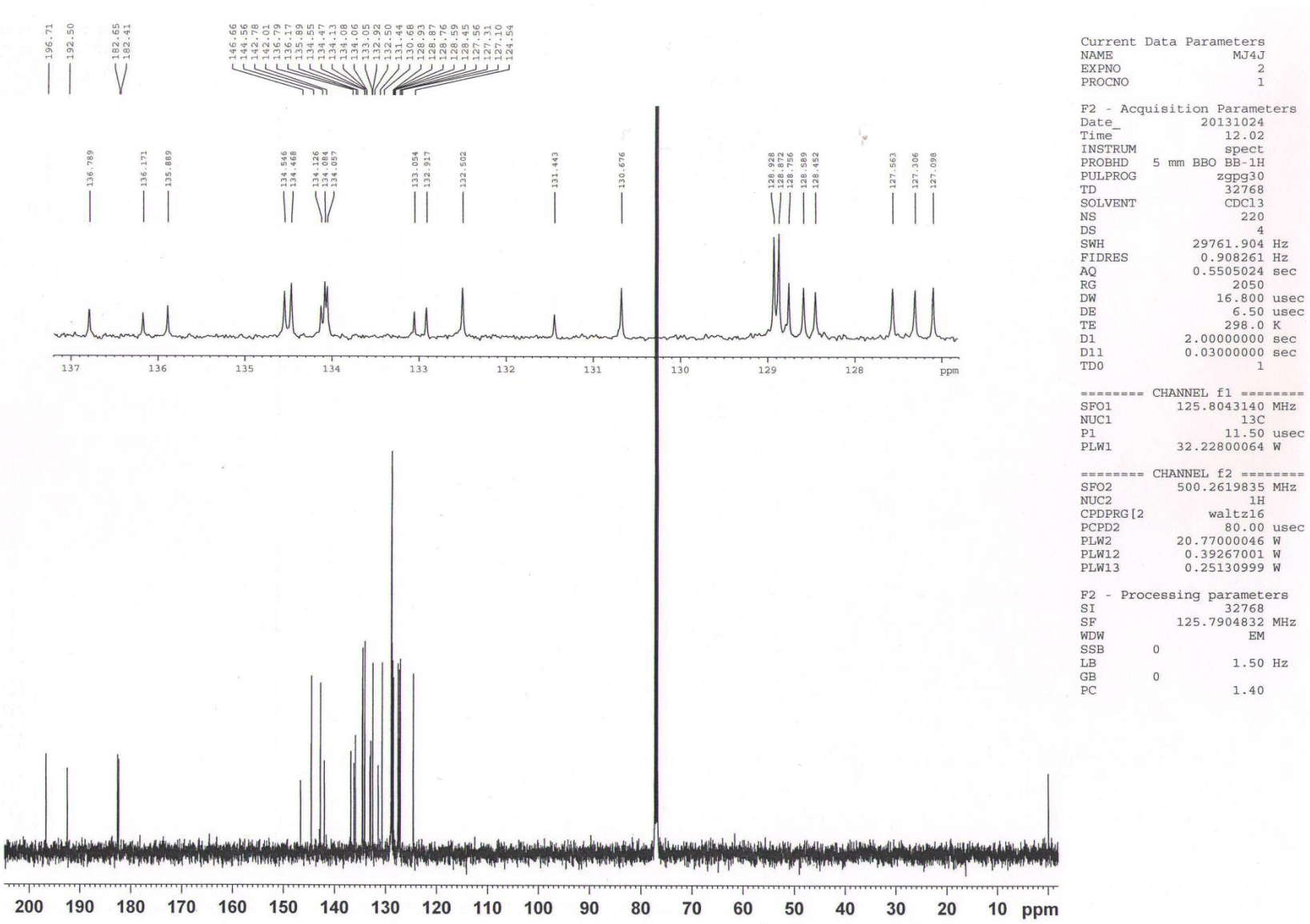

Fig. S30. ^{13}C NMR spectrum of **4j** in $CDCl_3$ (125 MHz).

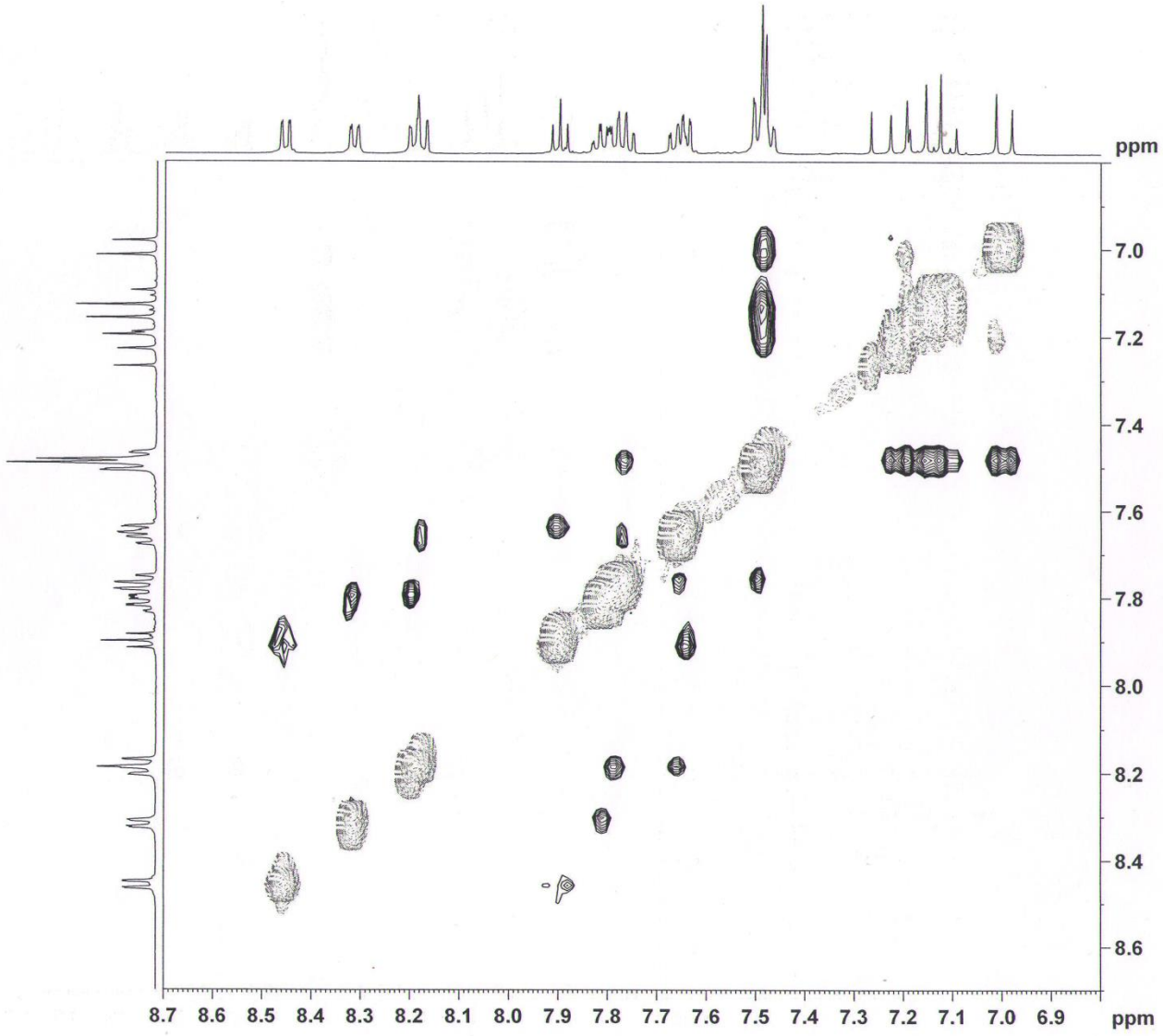


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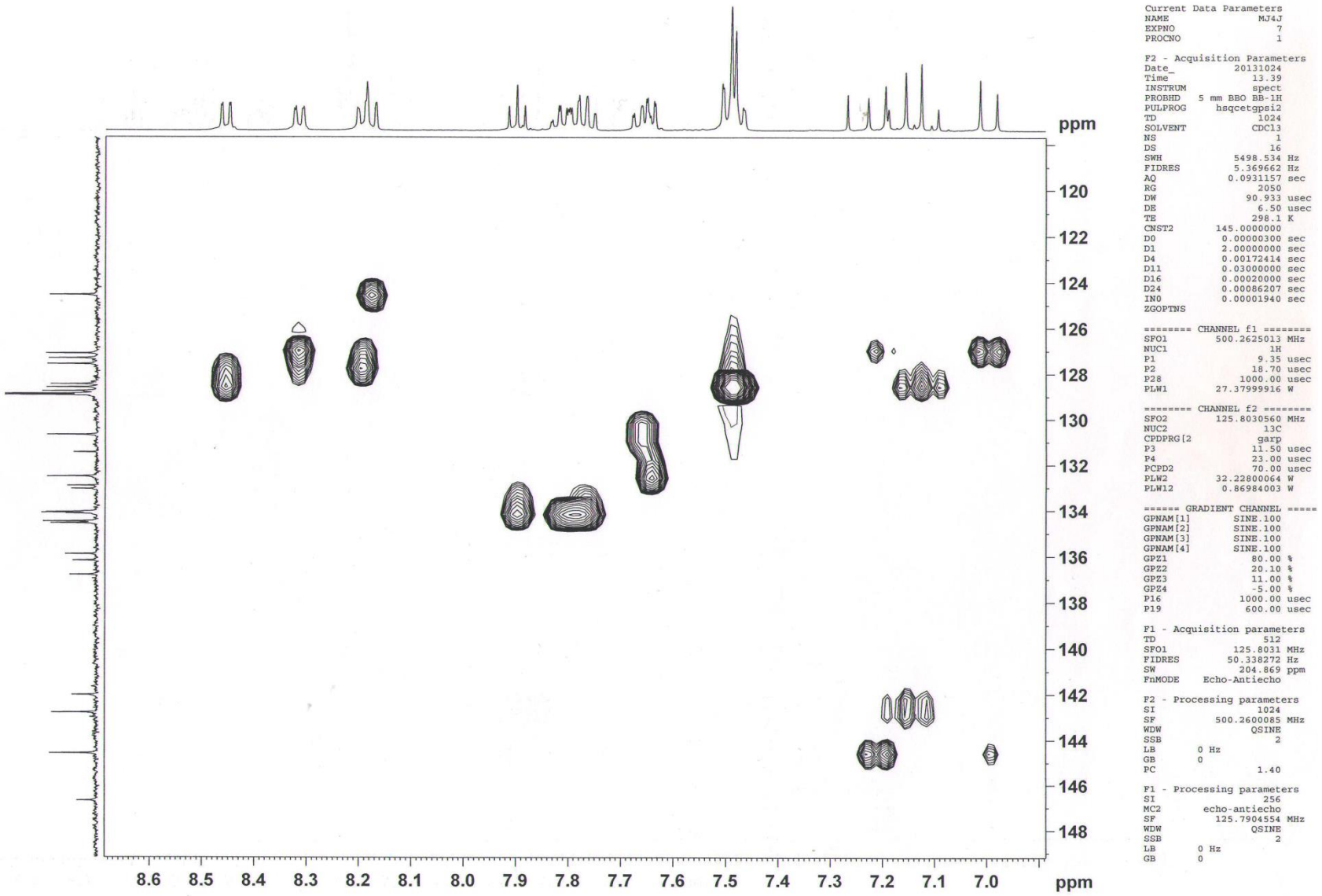
Fig. S31. NOESY spectrum of **4j** in $CDCl_3$ (500 MHz).

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TD                     512
SFO1            125.8031 MHz
FIDRES          50.338272 Hz
SW                204.869 ppm
FnMODE      Echo-Antiecho

F2 - Processing parameters
SI                    1024
SF              500.2600085 MHz
WDW                   QSINE
SSB                       2
LB          0 Hz
GB          0
PC                     1.40

F1 - Processing parameters
SI                     256
MC2          echo-antiecho
SF              125.7904554 MHz
WDW                   QSINE
SSB                       2
LB          0 Hz
GB          0
```

Fig. S32. HSQC spectrum of **4j** in $CDCl_3$ (500 MHz).

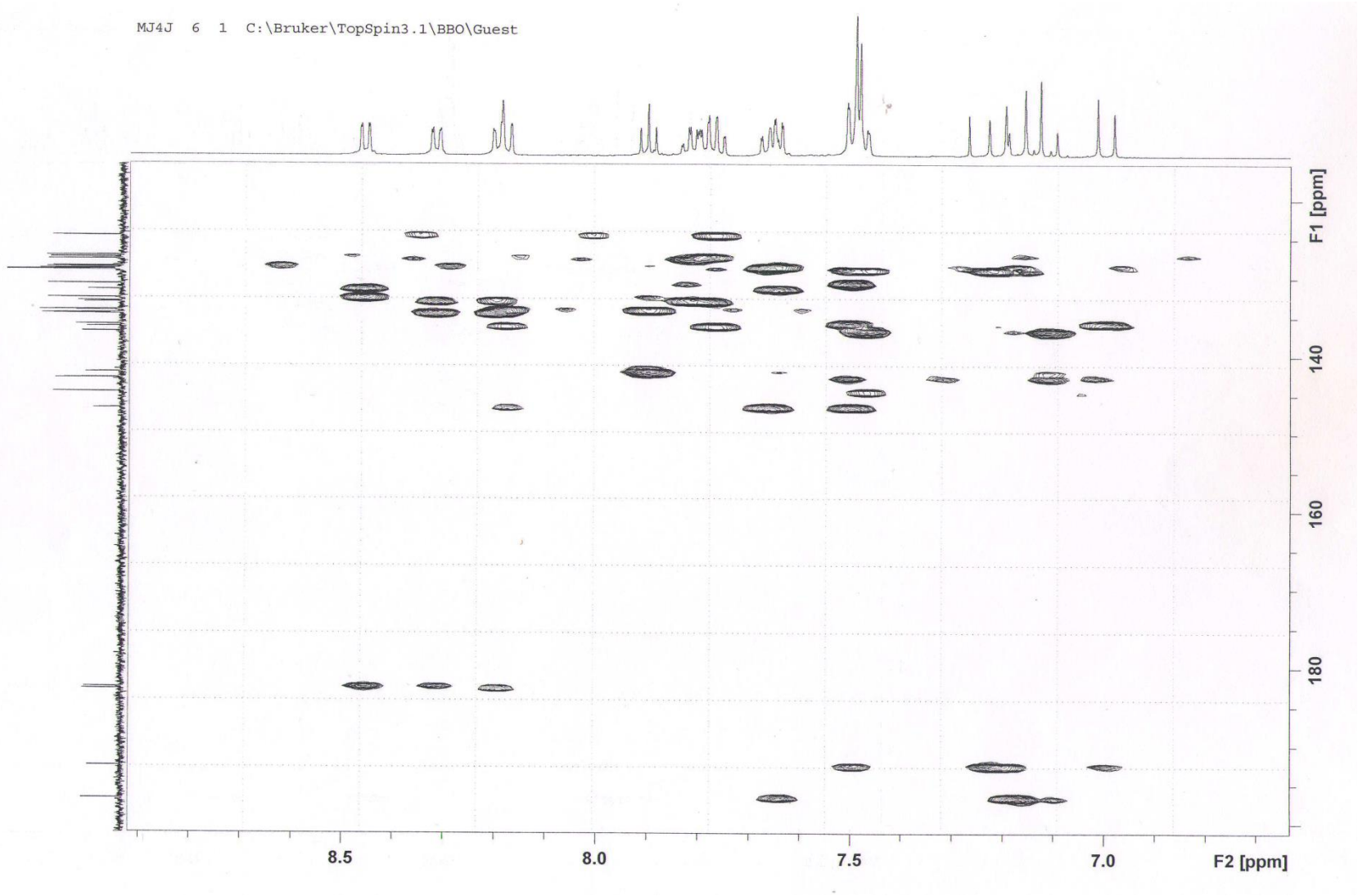

Fig. S33. HMBC spectrum of **4j** in $CDCl_3$ (500 MHz).