Supplementary Material (ESI) for Organic & Biomolecular Chemistry

Promoting the formation and stabilization of human telomeric G-quadruplex DNA, inhibition of telomerase and cytotoxicity by phenanthroline derivatives†

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Electronic Supplementary Information (ESI)

Fig.S1 FRET-melting curves of F21T with various concentrations of compounds a-d in buffer containing 100 mM NaCl.

Fig.S2 FRET-melting curves of F21T with 0, 0.4 and 1μM of compounds a-d in buffer containing 100 mM KCl.

Fig.S3 Competitive FRET-melting curves of F21T with 1μM of compounds a-d and 0, 2 and 5μM of duplex competitor ds26 in buffer containing 100 mM NaCl.

Fig. S4 Spectrum of ^{1}H NMR for ligand (300 MHz, DMSO-d_6)

Fig. S5 Spectrum of ^{13}C NMR for ligand (75 MHz, DMSO-d_6)

Fig. S6 Spectrum of ^{1}H NMR for compound a(300 MHz, DMSO-d_6)

Fig. S7 Spectrum of ^{13}C NMR for compound a (75 MHz, DMSO-d_6)

Fig. S8 Spectrum of ^{1}H NMR for compound b(300 MHz, DMSO-d_6)

Fig. S9 Spectrum of ^{13}C NMR for compound b (75 MHz, DMSO-d_6)

Fig. S10 Spectrum of ^{1}H NMR for compound c(300 MHz, DMSO-d_6)

Fig. S11 Spectrum of ^{13}C NMR for compound c (75 MHz, DMSO-d_6)

Fig. S12 Spectrum of ^{1}H NMR for compound d(300 MHz, methanol-d_4)

Fig. S13 Spectrum of ^{13}C NMR for compound d (75 MHz, DMSO-d_6)

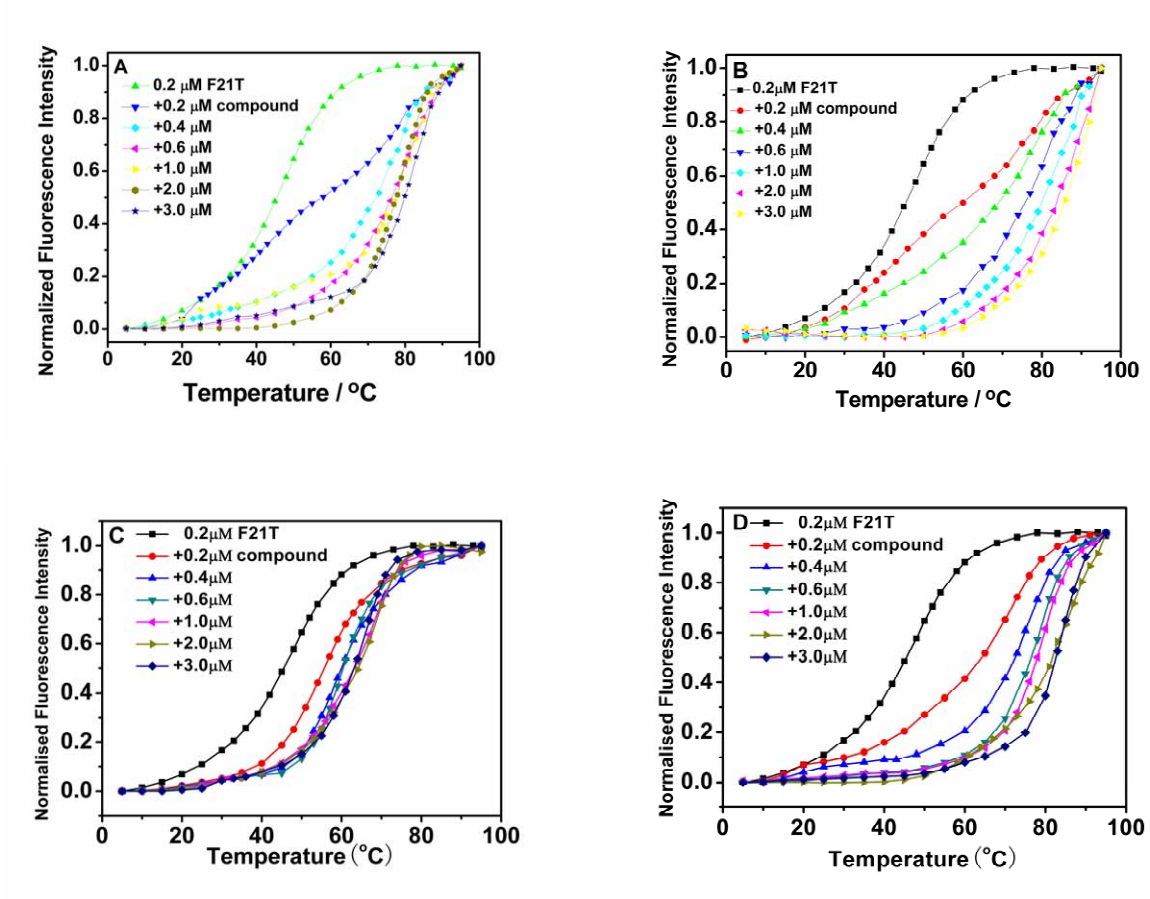

Fig.S1 FRET-melting curves of F21T with various concentrations of compounds a-d in buffer containing 100 mM NaCl.

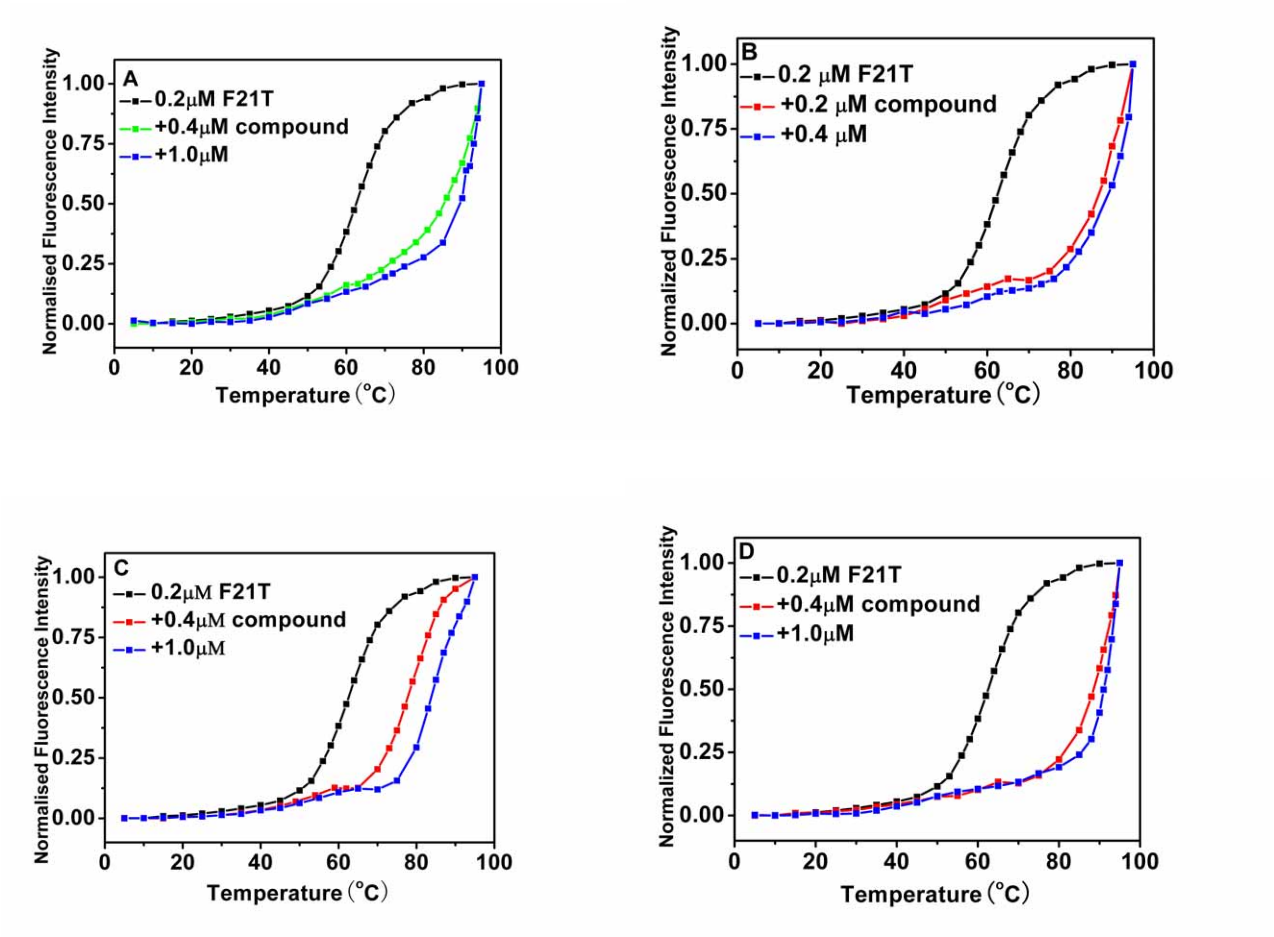

Fig.S2 FRET-melting curves of F21T with 0, 0.4 and 1μM of compounds a-d in buffer containing 100 mM KCl.

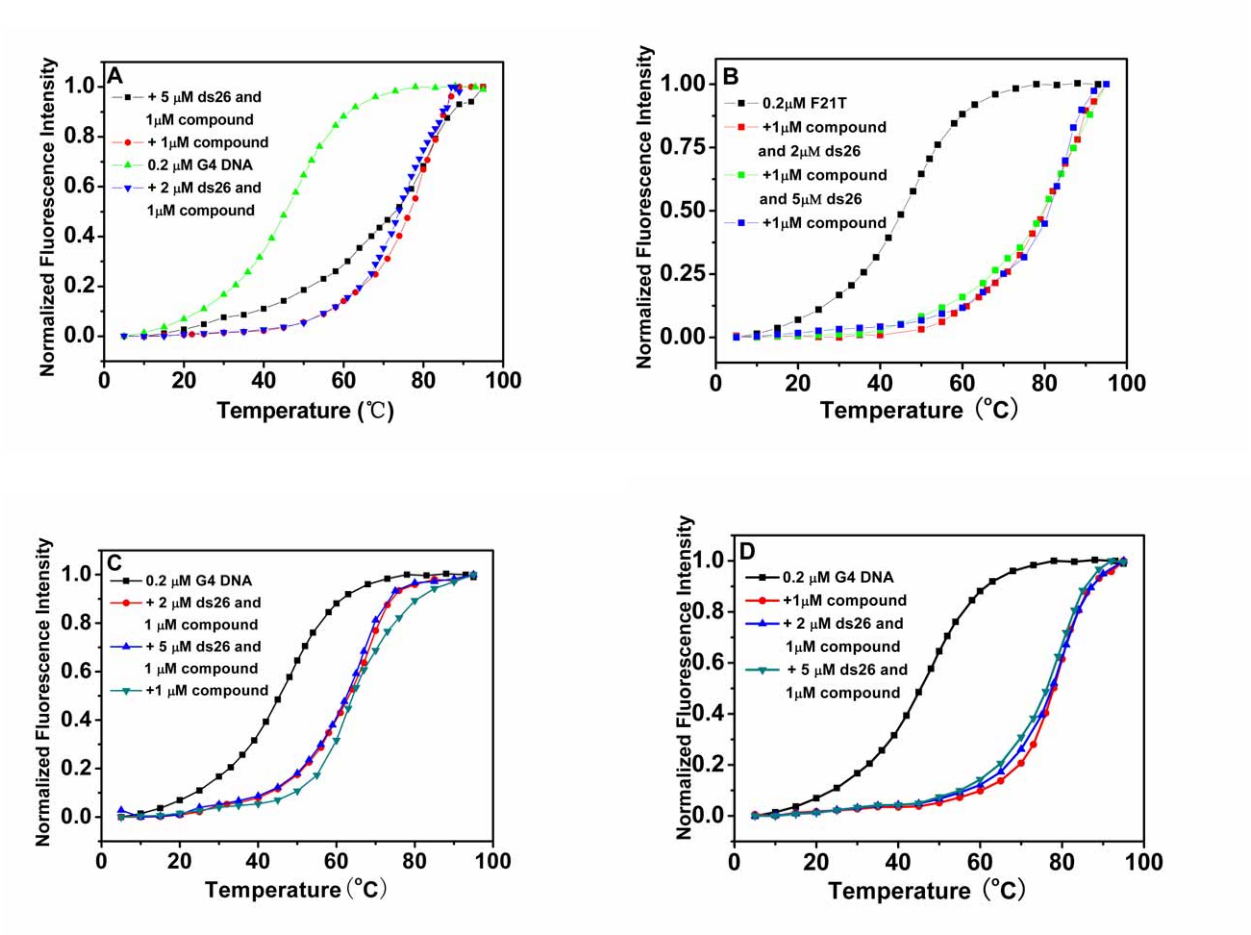

Fig.S3 Competitive FRET-melting curves of F21T with 1μM of compounds a-d and 0, 2 and 5μM of duplex competitor ds26 in buffer containing 100 mM NaCl.

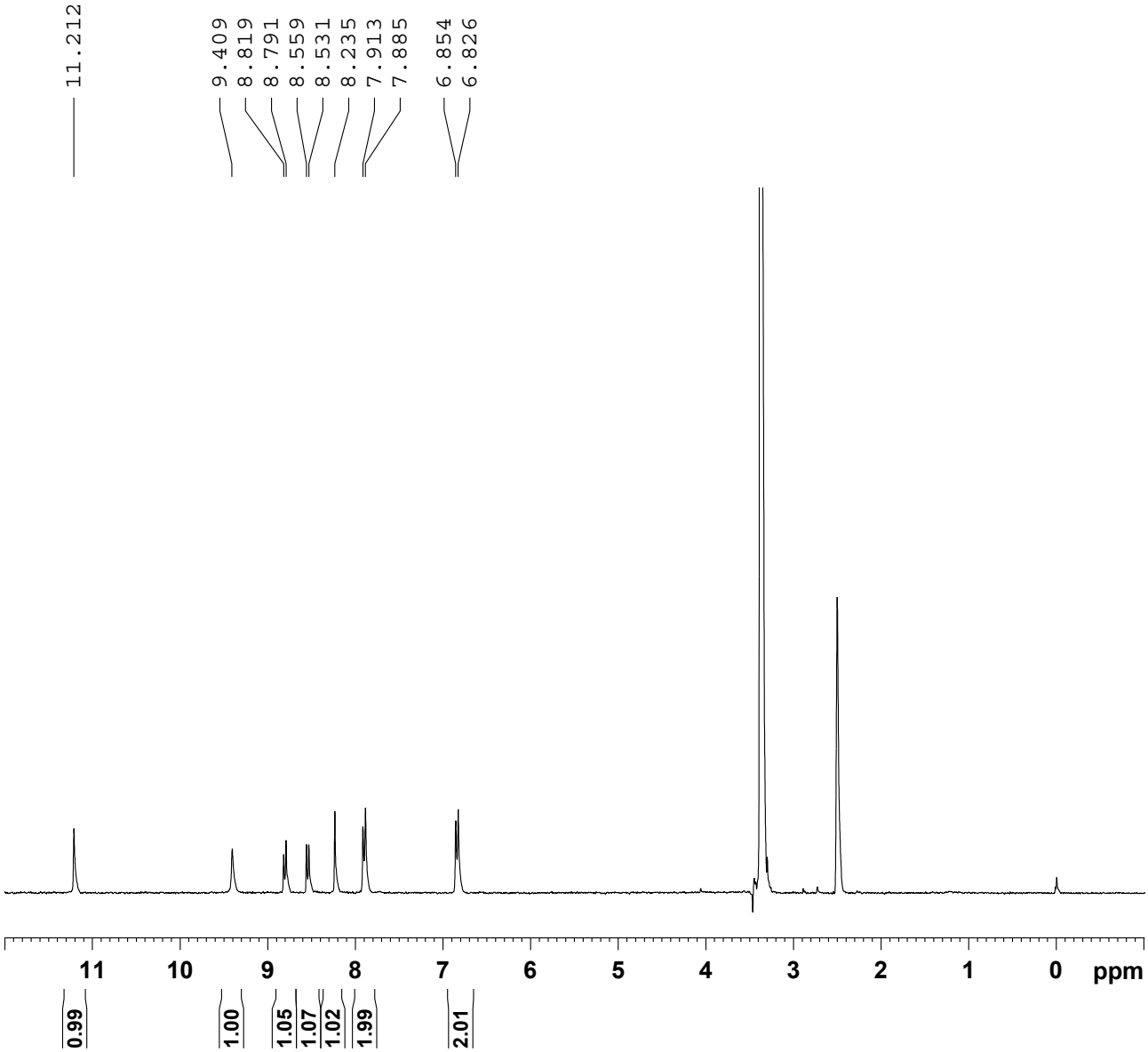

Fig. S4 Spectrum of ^{1}H NMR for ligand (300 MHz, DMSO-d_6)

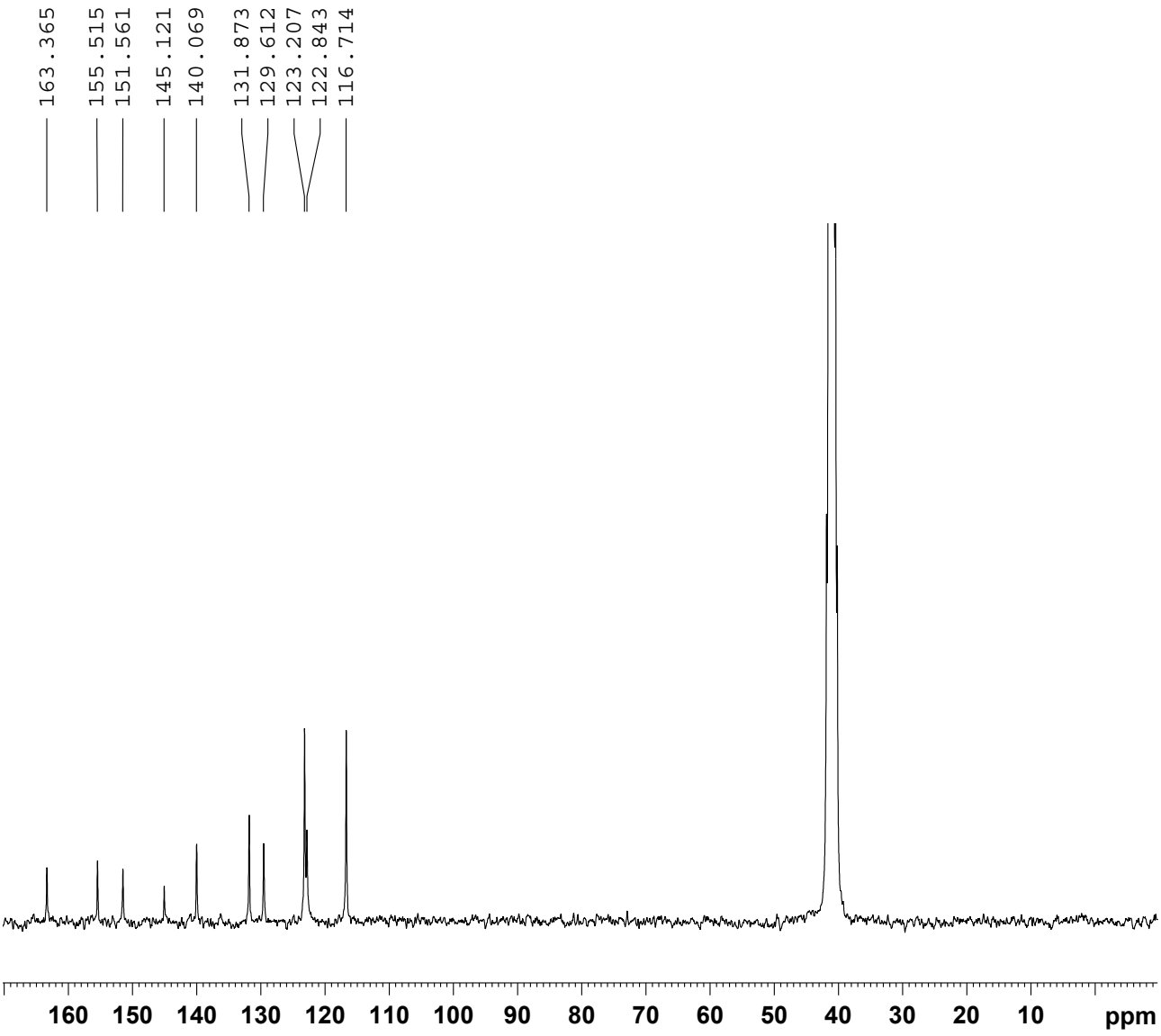

Fig. S5 Spectrum of ^{13}C NMR for ligand (75 MHz, DMSO-d_6)

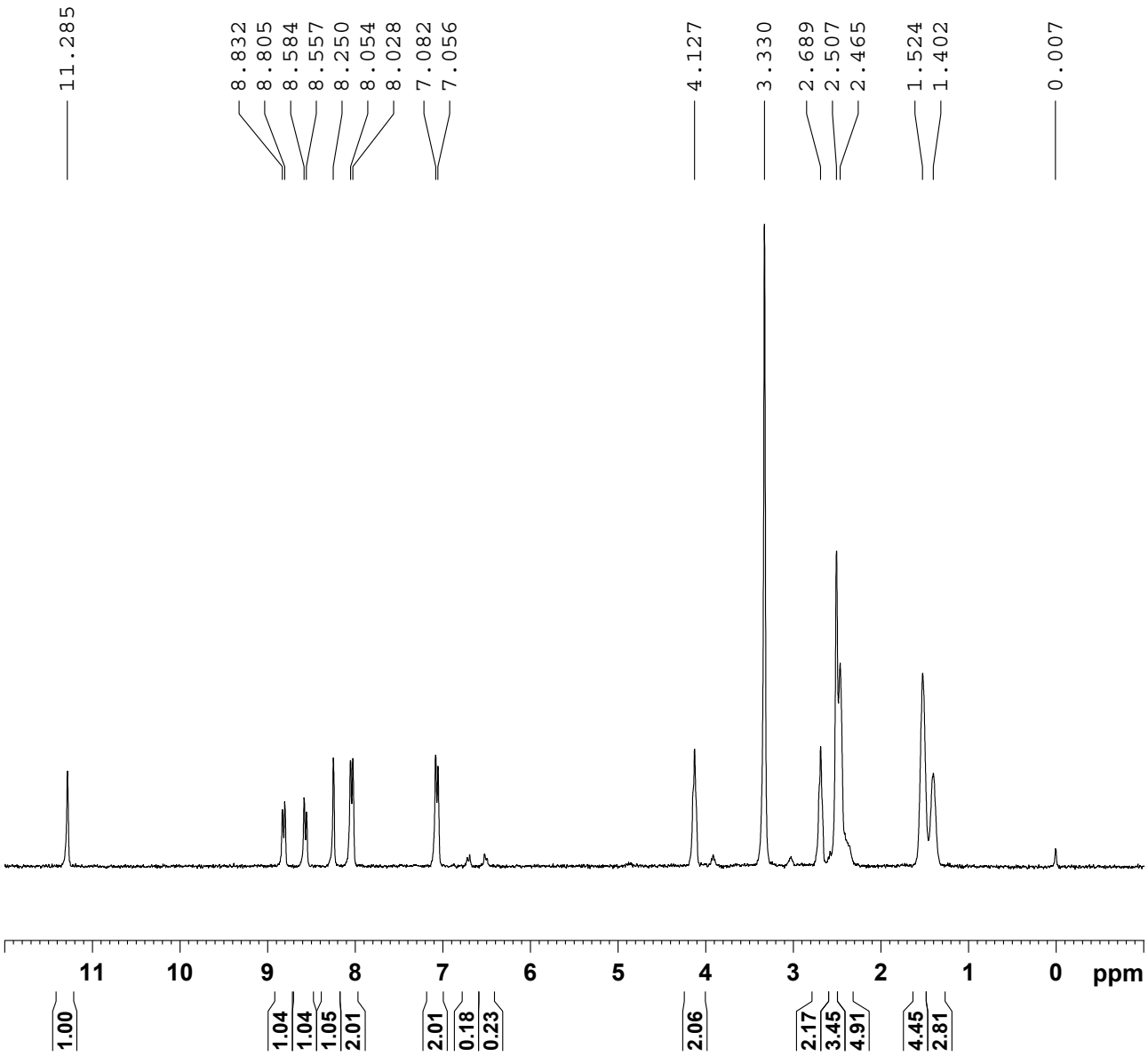

Fig. S6 Spectrum of ^{1}H NMR for compound a (300 MHz, DMSO-d_6)

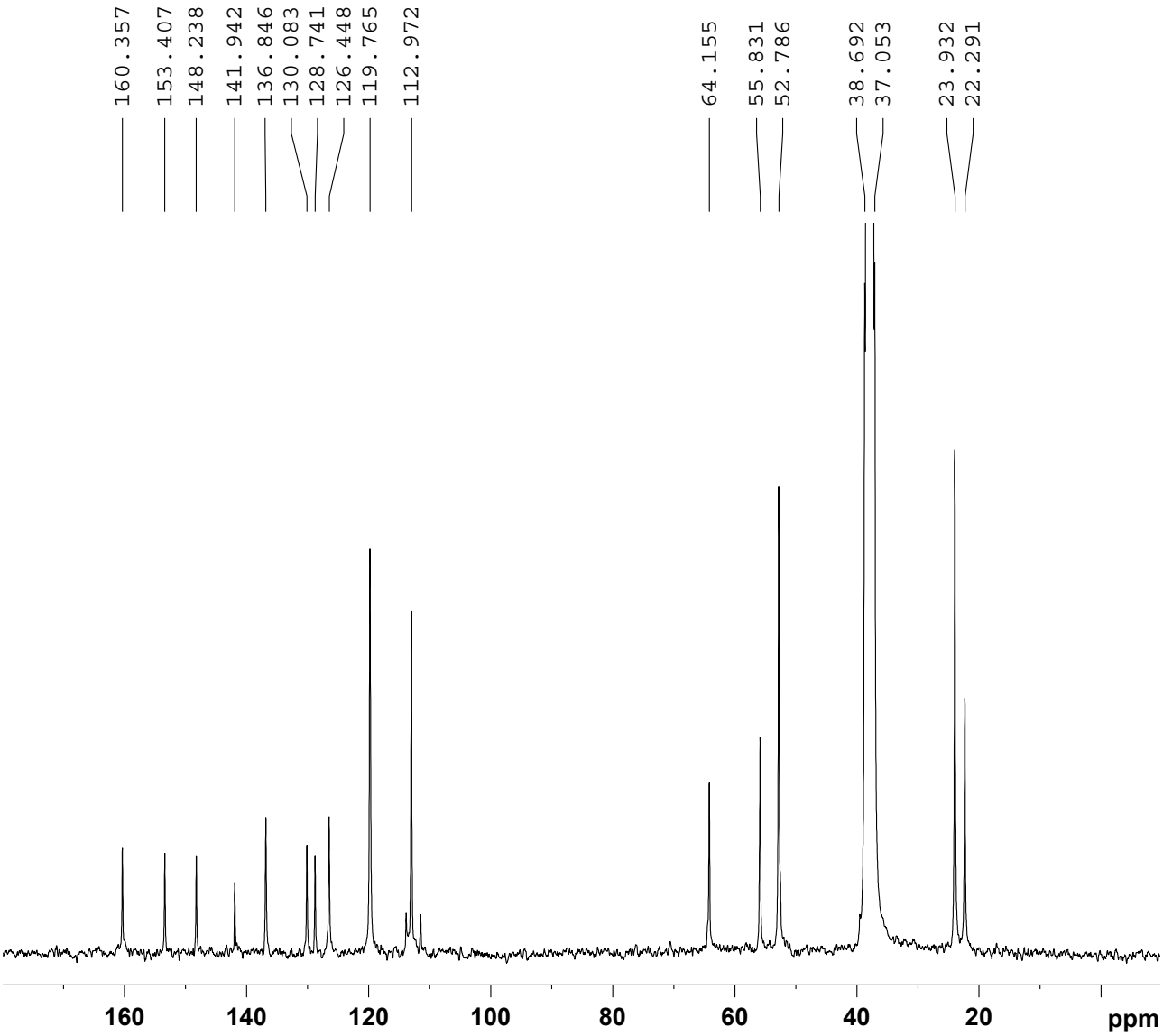

Fig. S7 Spectrum of ^{13}C NMR for compound a (75 MHz, DMSO-d_6)

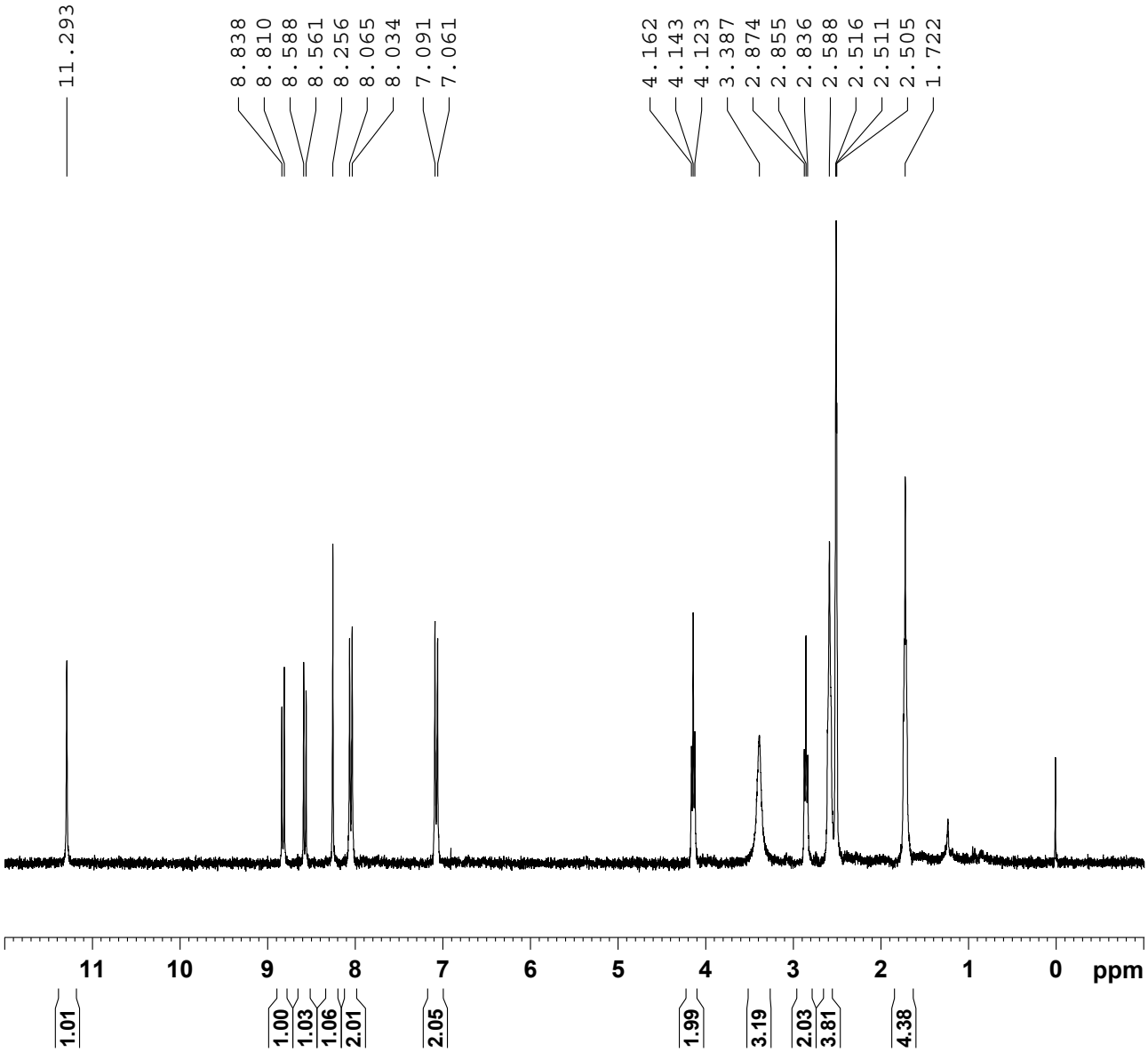

Fig. S8 Spectrum of ^{1}H NMR for compound b (300 MHz, DMSO-d_6)

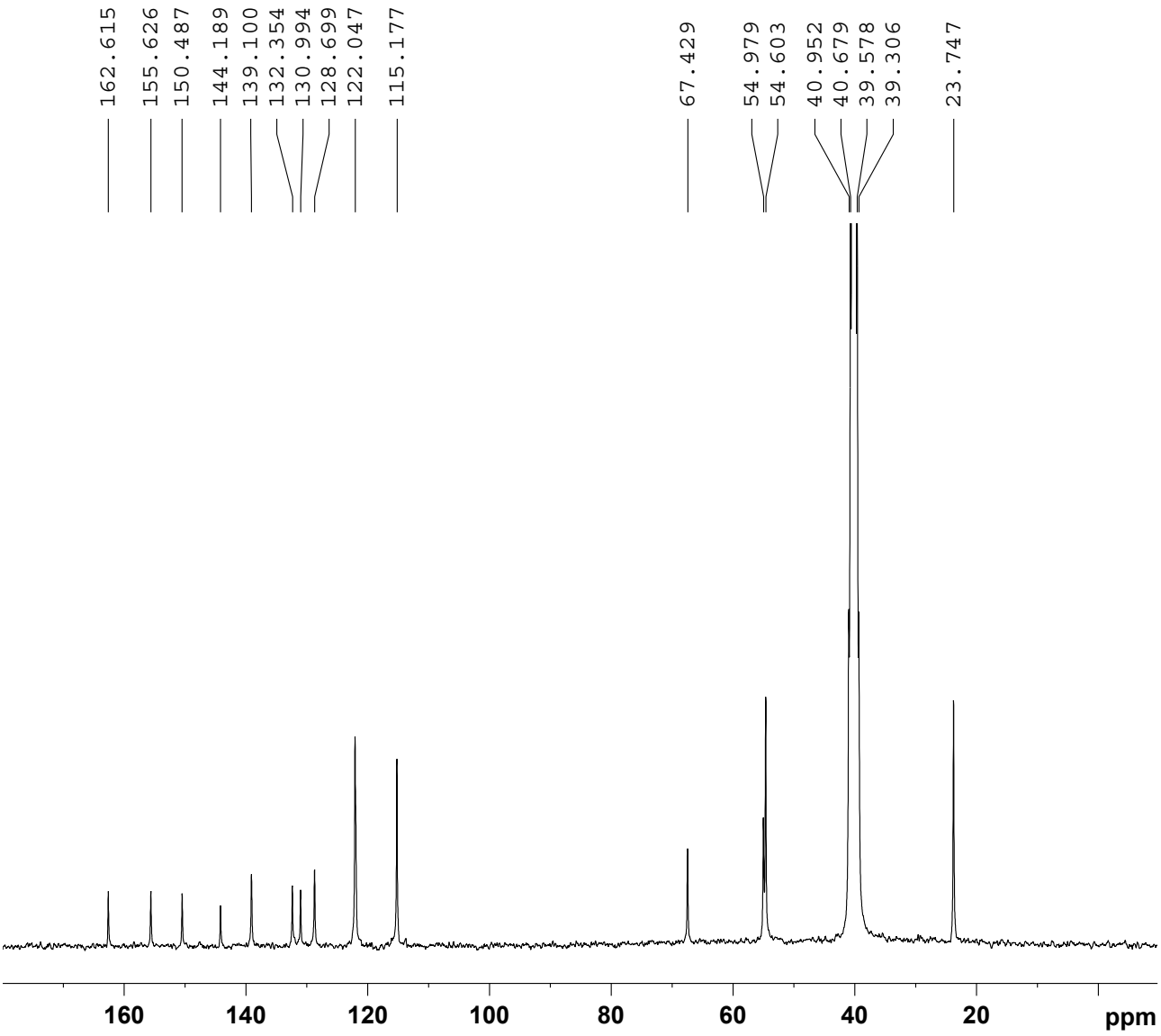

Fig. S9 Spectrum of ^{13}C NMR for compound b (75 MHz, DMSO-d_6)

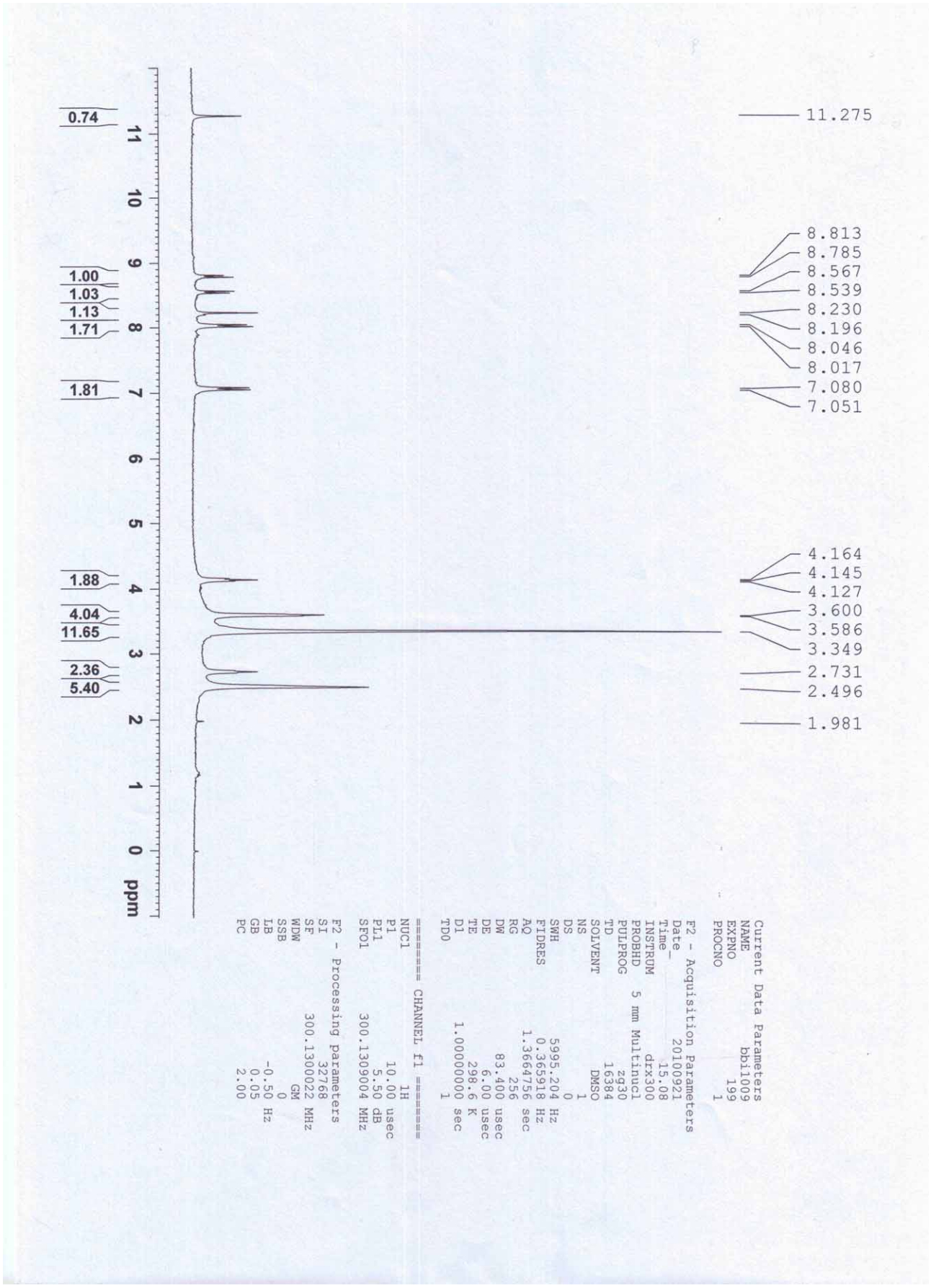

Fig. S10 Spectrum of ^{1}H NMR for compound c (300 MHz, DMSO-d_6)

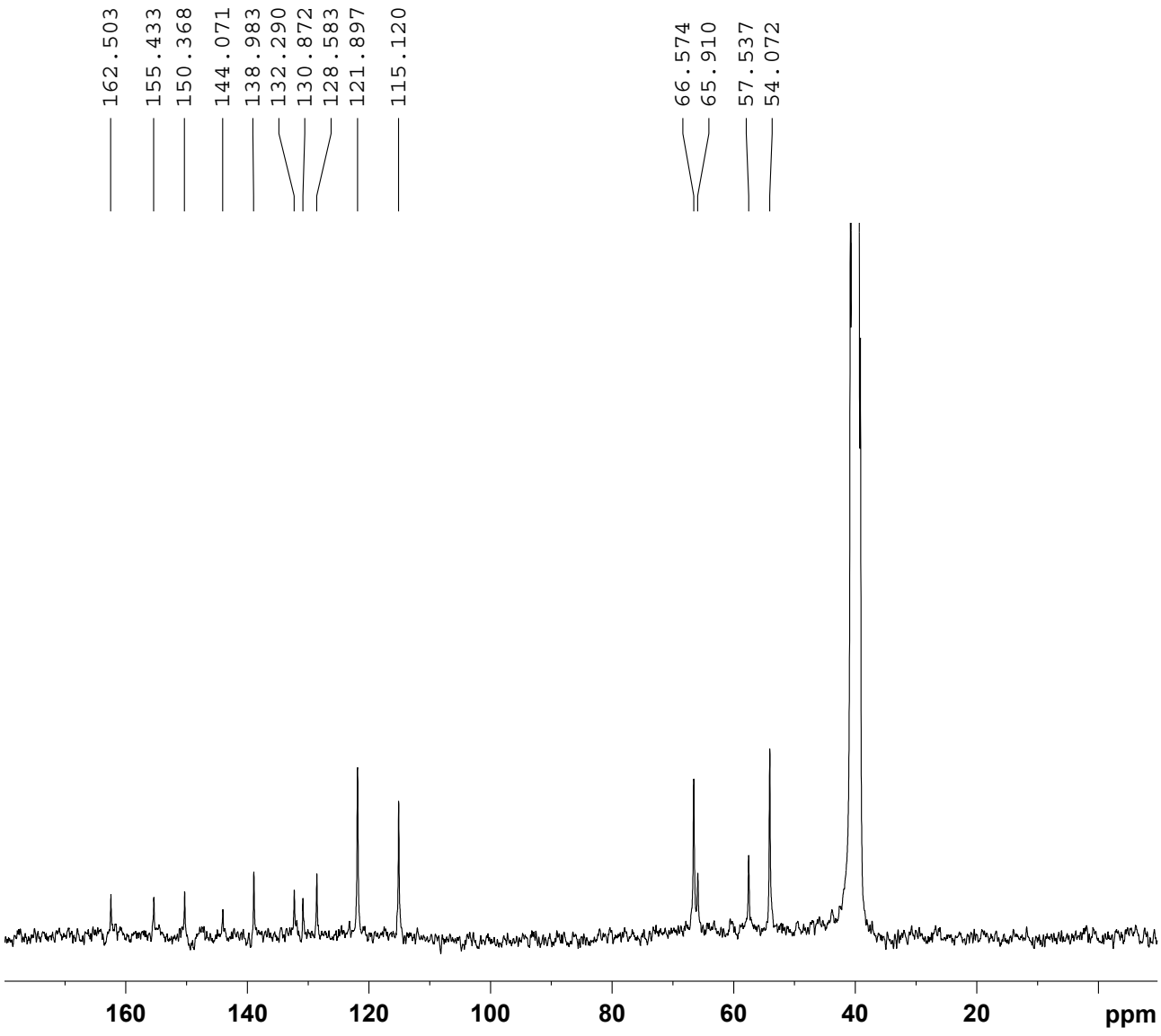

Fig. S11 Spectrum of ^{13}C NMR for compound c (75 MHz, DMSO-d_6)

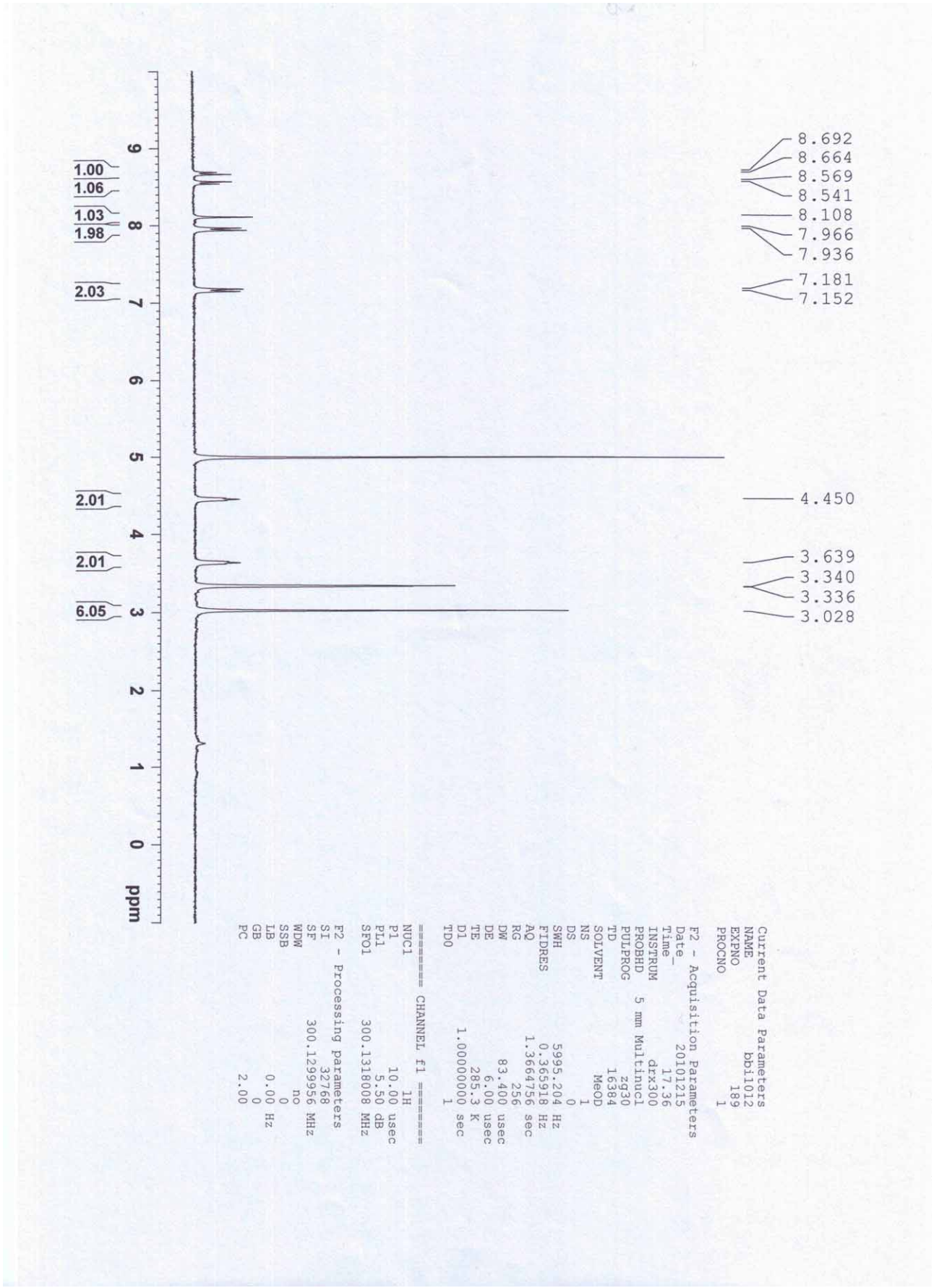

Fig. S12 Spectrum of ^{1}H NMR for compound d (300 MHz, methanol-d_4)

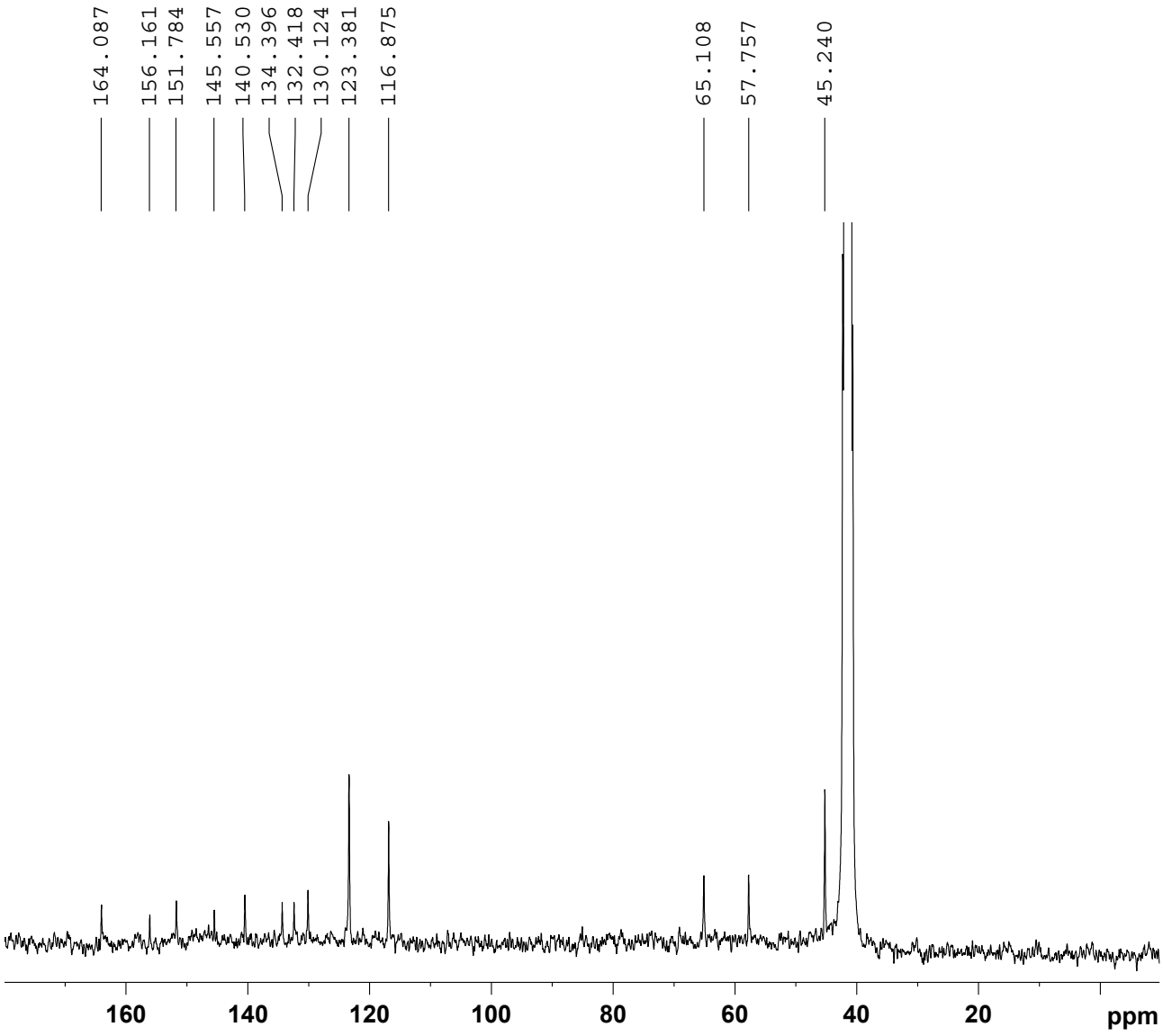

Fig. S13 Spectrum of ^{13}C NMR for compound d (75 MHz, DMSO-d_6)