Supporting Information

C5-morpholinomethylation of *N*1-sulfonylcytosines by one-pot microwave assisted Mannich reaction

Josipa Matić,[a,b,*] Irena Nekola,[c] Aleksandar Višnjevac[d], Renata Kobetić,[a] Irena Martin-Kleiner,[e] Marijeta Kralj,[e,b] and Biserka Žinić[a,b,*]

[a] *Laboratory for Biomolecular Interactions and Spectroscopy, Division of Organic Chemistry and Biochemistry, Ruđer Bošković Institute, Bijenička cesta 54, 10000 Zagreb, Croatia.*

[b] *BioZyne Ltd., Bijenička cesta 54, 10000 Zagreb, Croatia.*

[c] *Pliva Croatia TAPI R&D, Prilaz baruna Filipovića 25, 10000 Zagreb, Croatia.*

[d] *Laboratory for Chemical and Biological Crystallography, Division of Physical Chemistry, Ruđer Bošković Institute, Bijenička cesta 54, 10000 Zagreb, Croatia.*

[e] *Laboratory of Experimental Therapy, Division of Molecular Medicine, Ruđer Bošković Institute, Bijenička cesta 54, 10000 Zagreb, Croatia.*

E-mail: bzinic@irb.hr

E-mail: jmatic@irb.hr

Contents

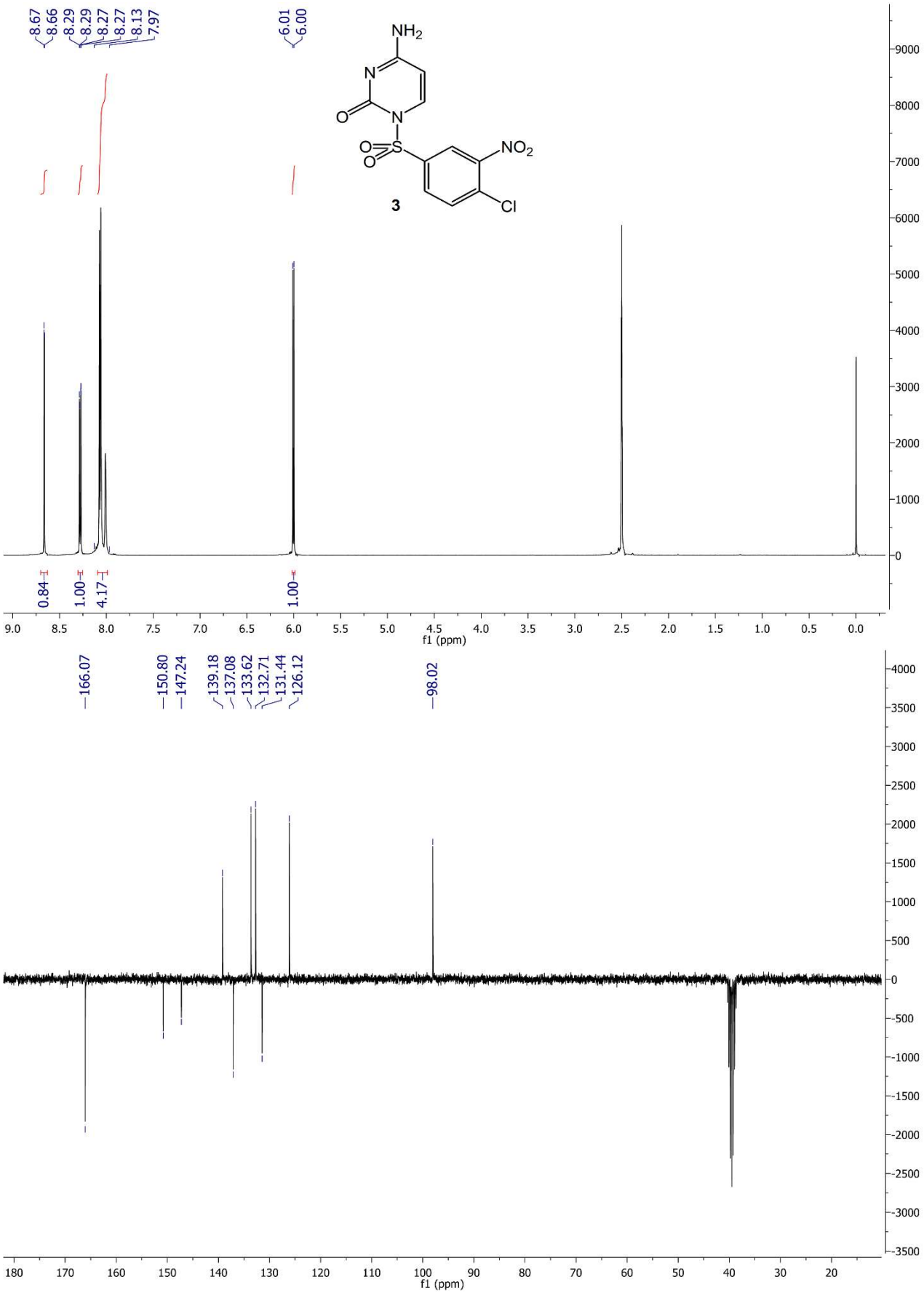


Fig. S1 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **3**.

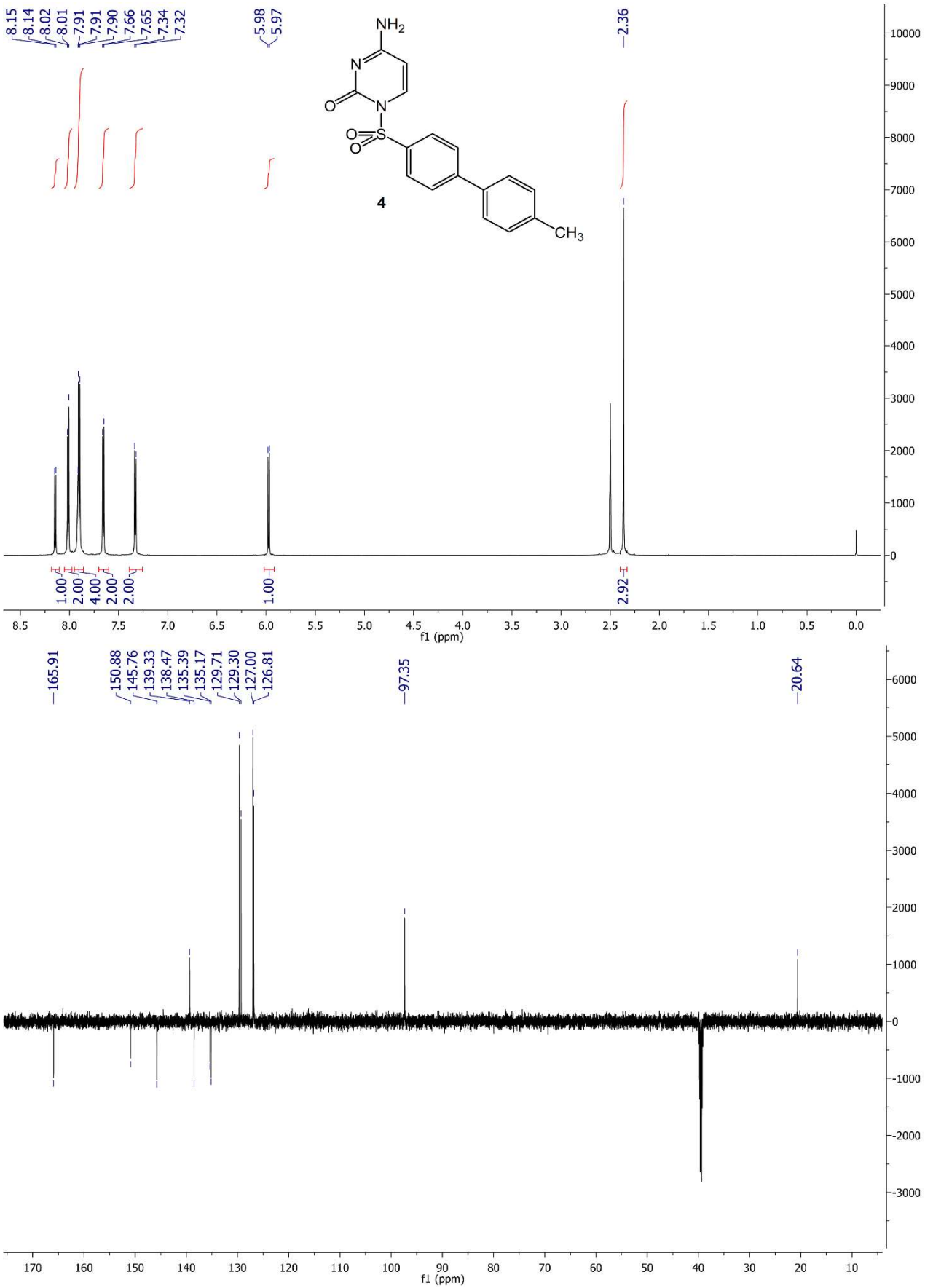


Fig. S2 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (151 MHz, APT, DMSO-d_6) of the compound **4**.

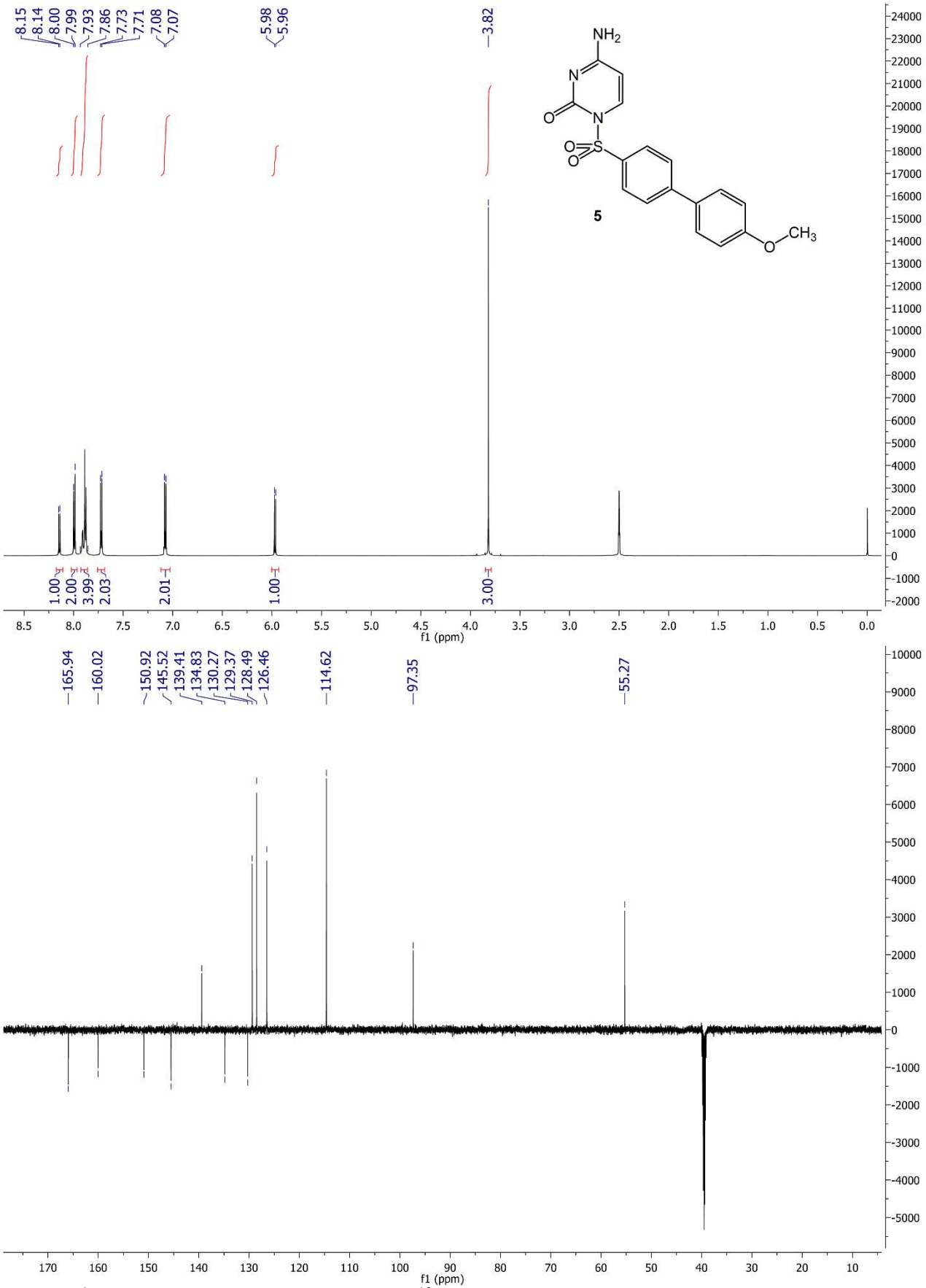


Fig. S3 ^{1}H NMR (300 MHz, DSO-d_6) and ^{13}C NMR spectra (151 MHz, APT, DMSO-d_6) of the compound **5**.

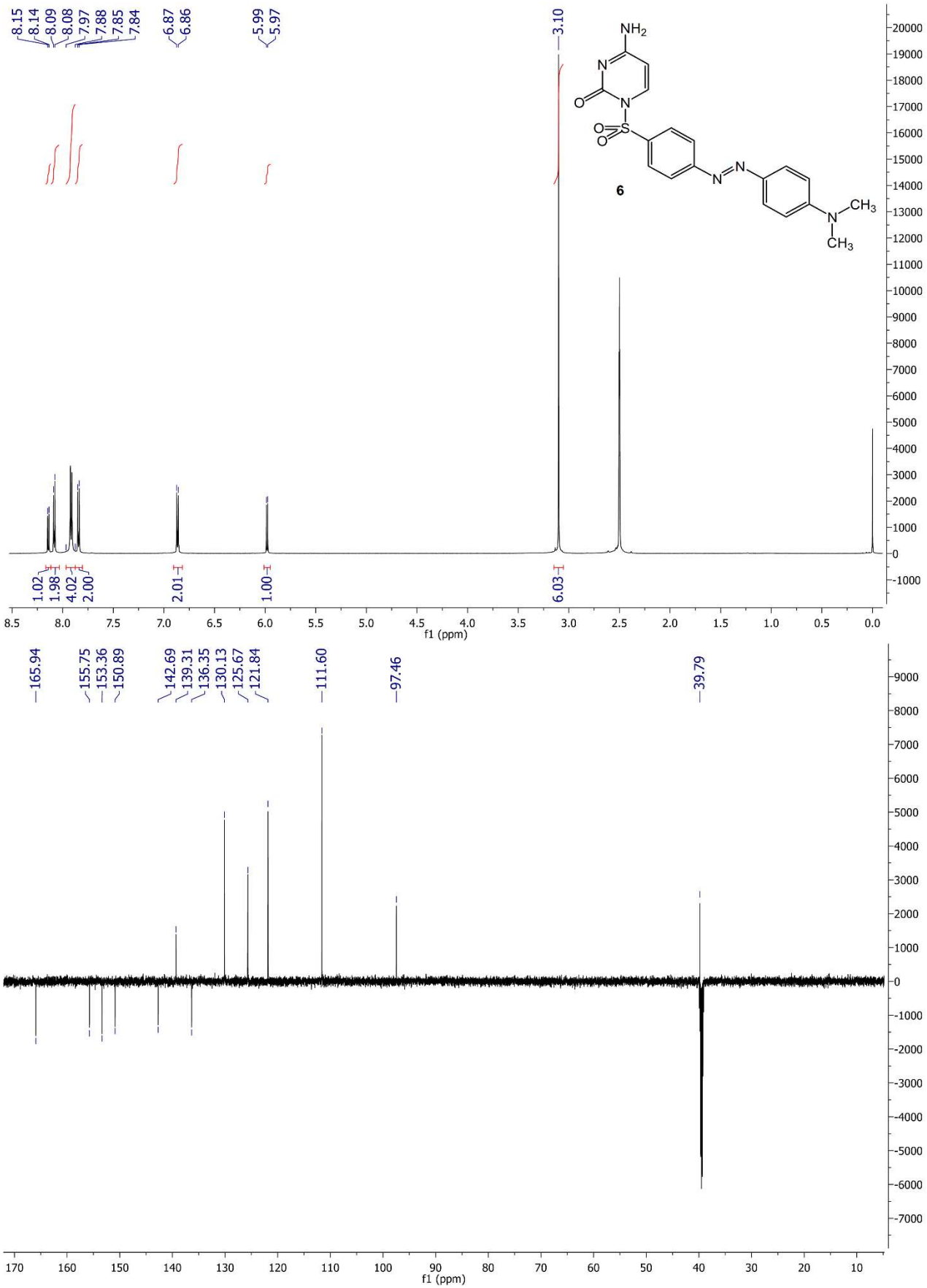


Fig. S4 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (151 MHz, APT, DMSO-d_6) of the compound **6**.

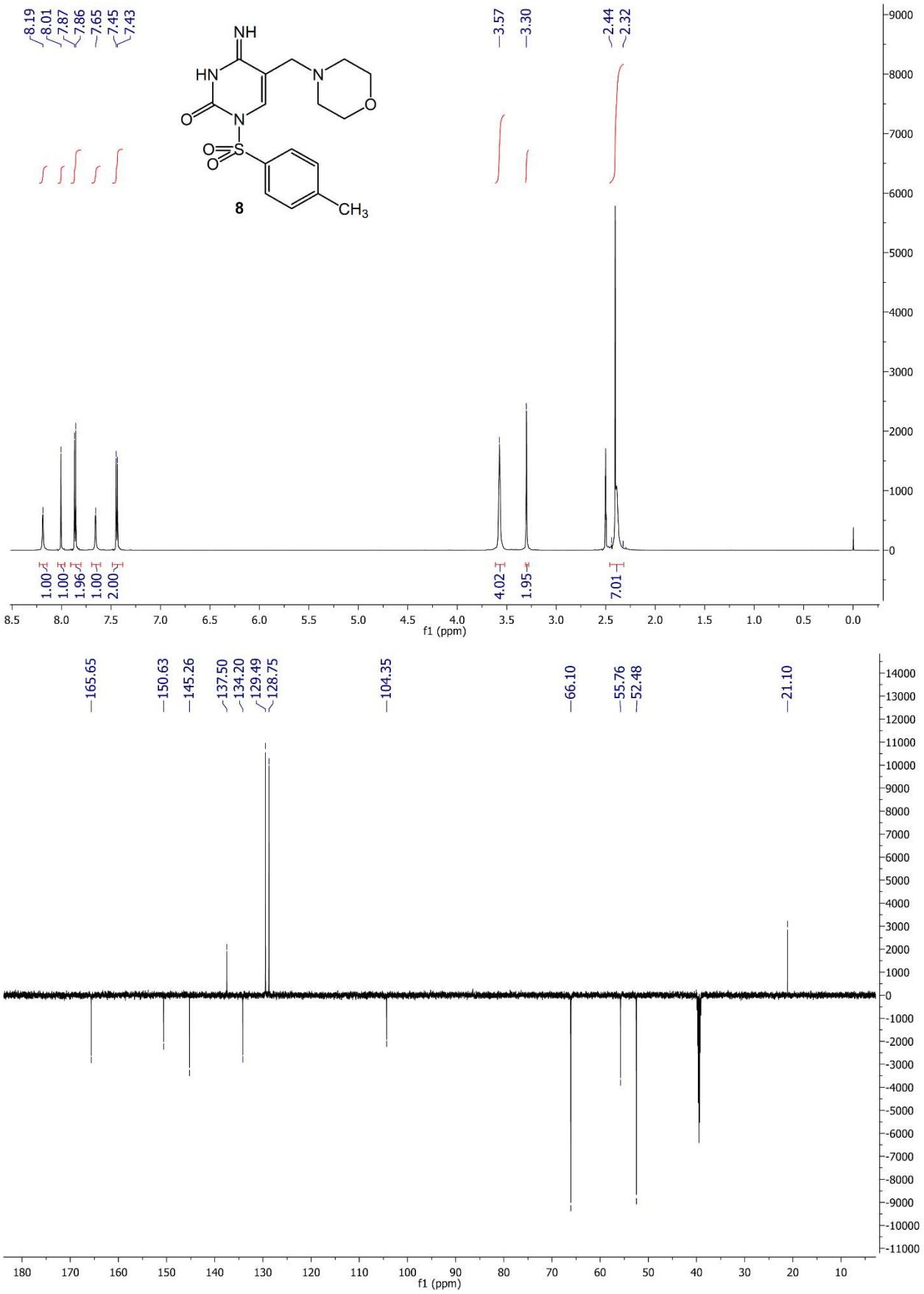


Fig. S5 ^{1}H NMR (600 MHz, DMSO-d_6) and ^{13}C NMR spectra (151 MHz, APT, DMSO-d_6) of the compound **8**.

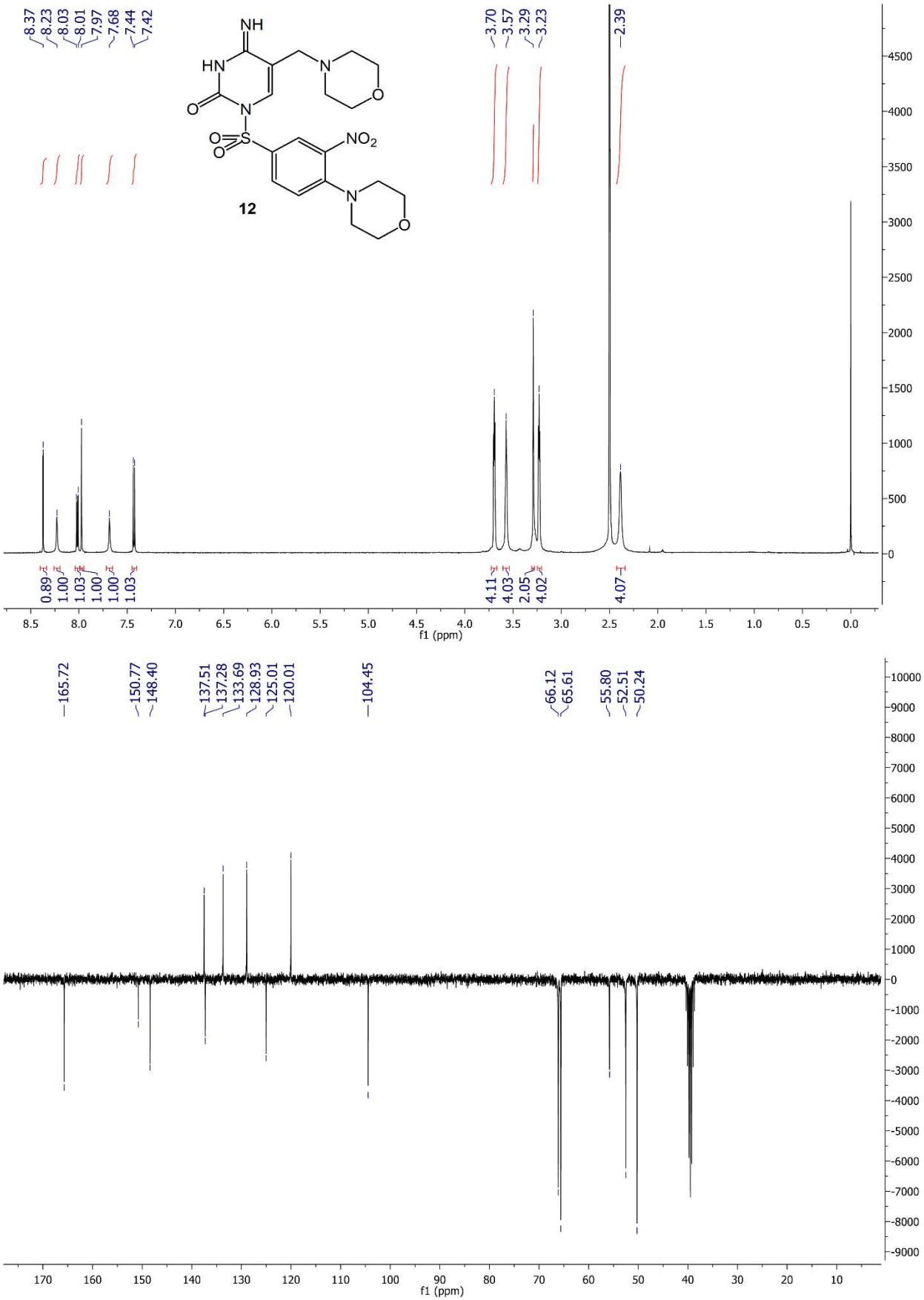


Fig. S6 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **12**.

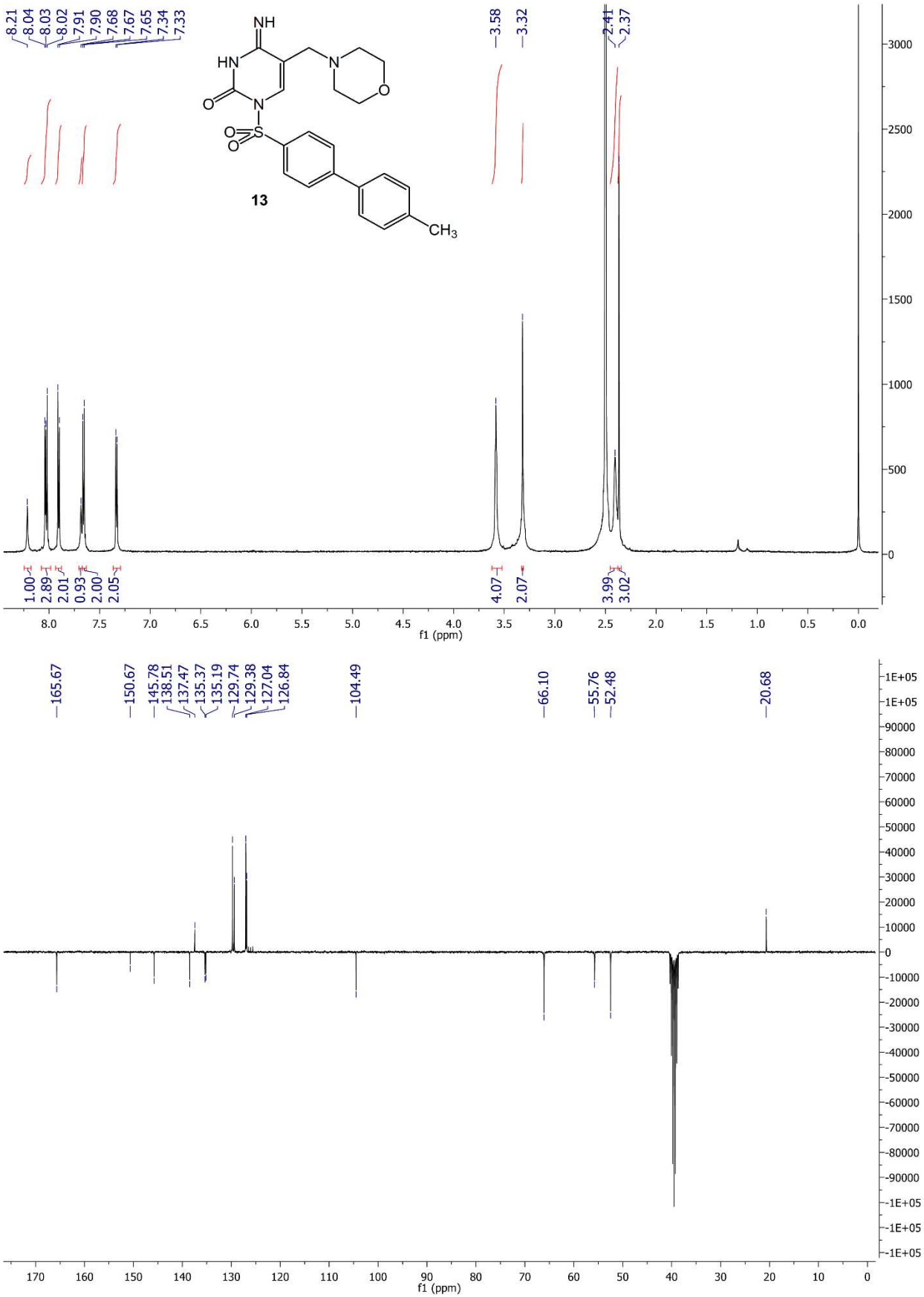


Fig. S7 ^{1}H NMR (600 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **13**.

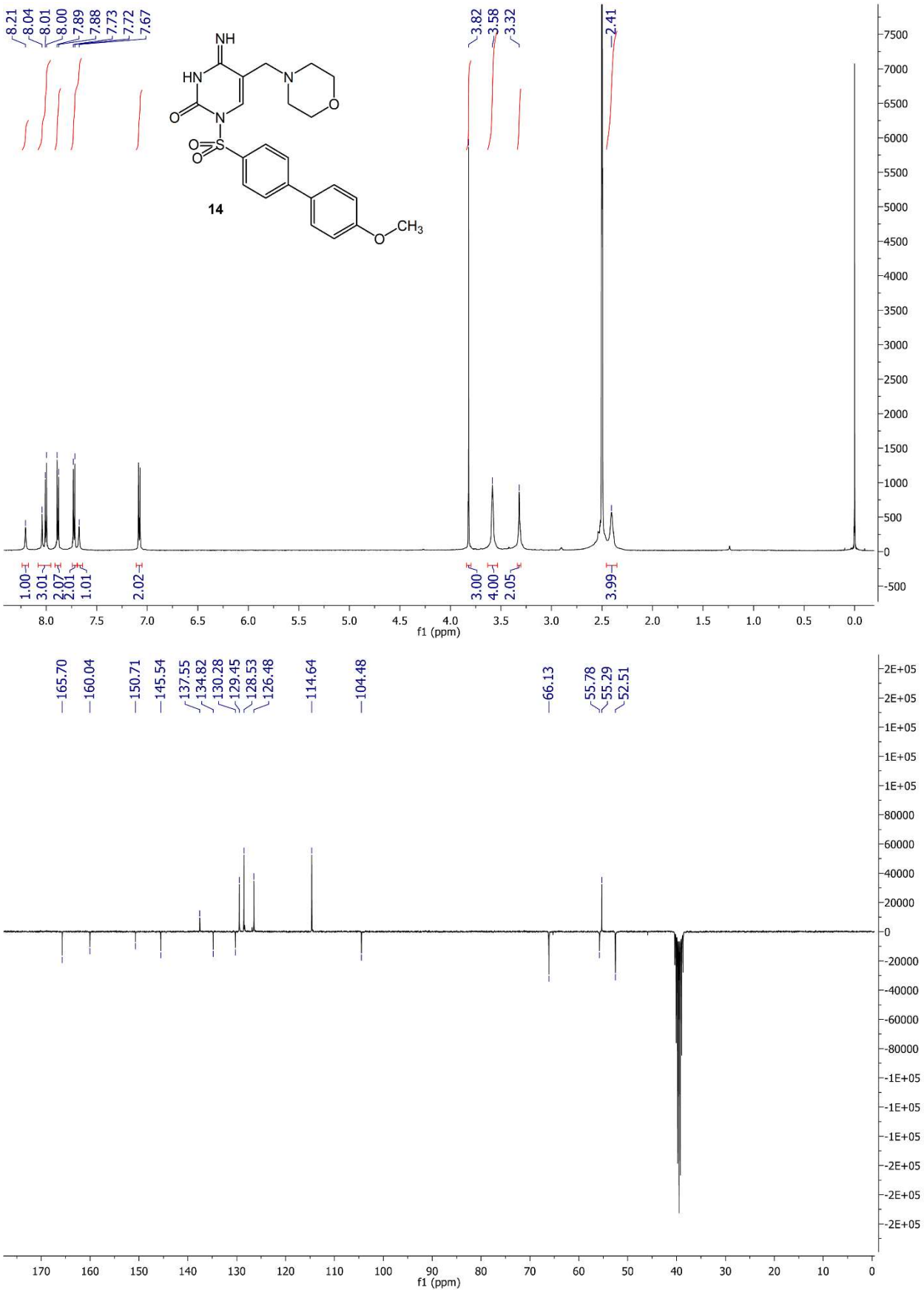


Fig. S8 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **14**.

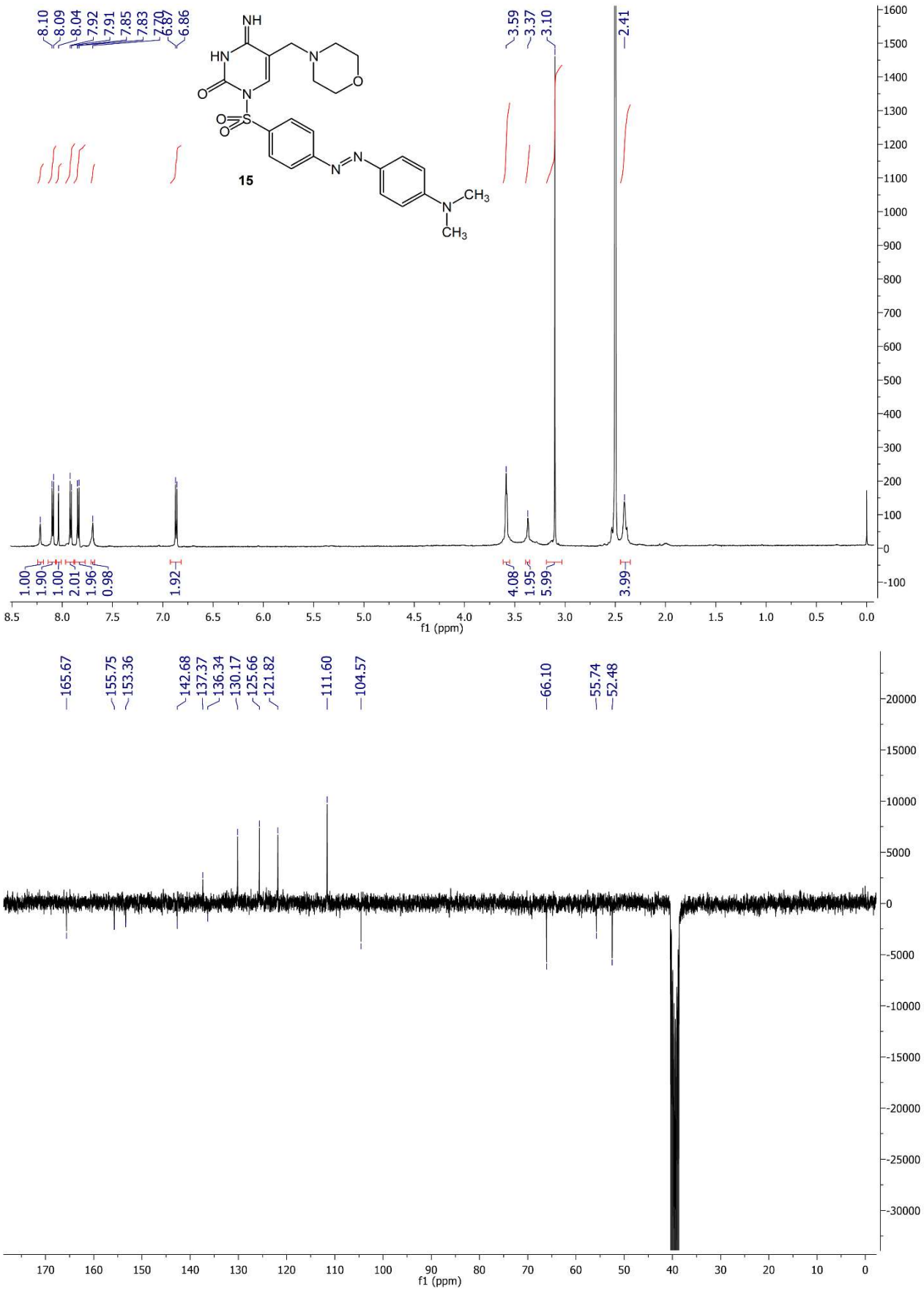


Fig. S9 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **15**.

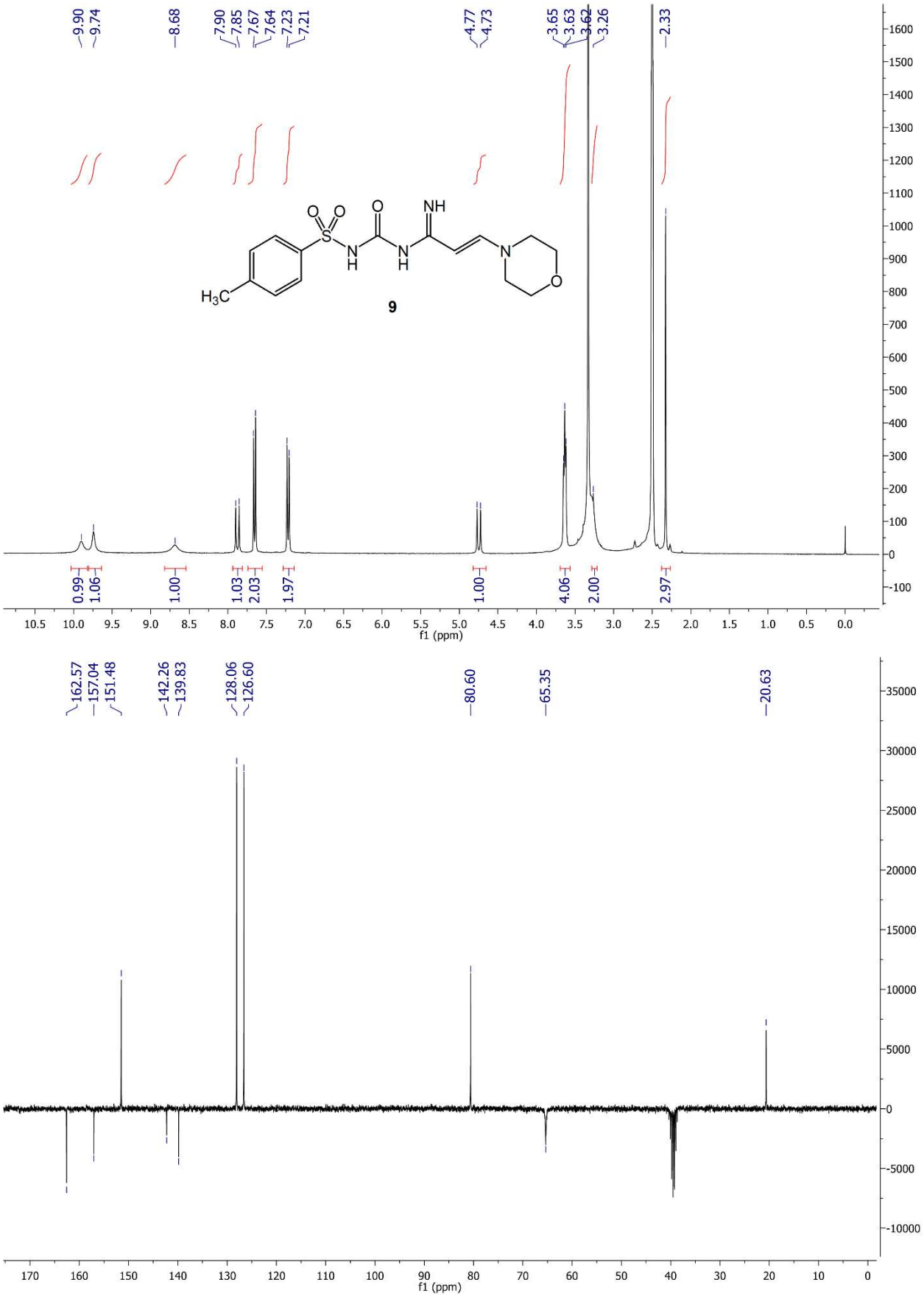


Fig. S10 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **9**.

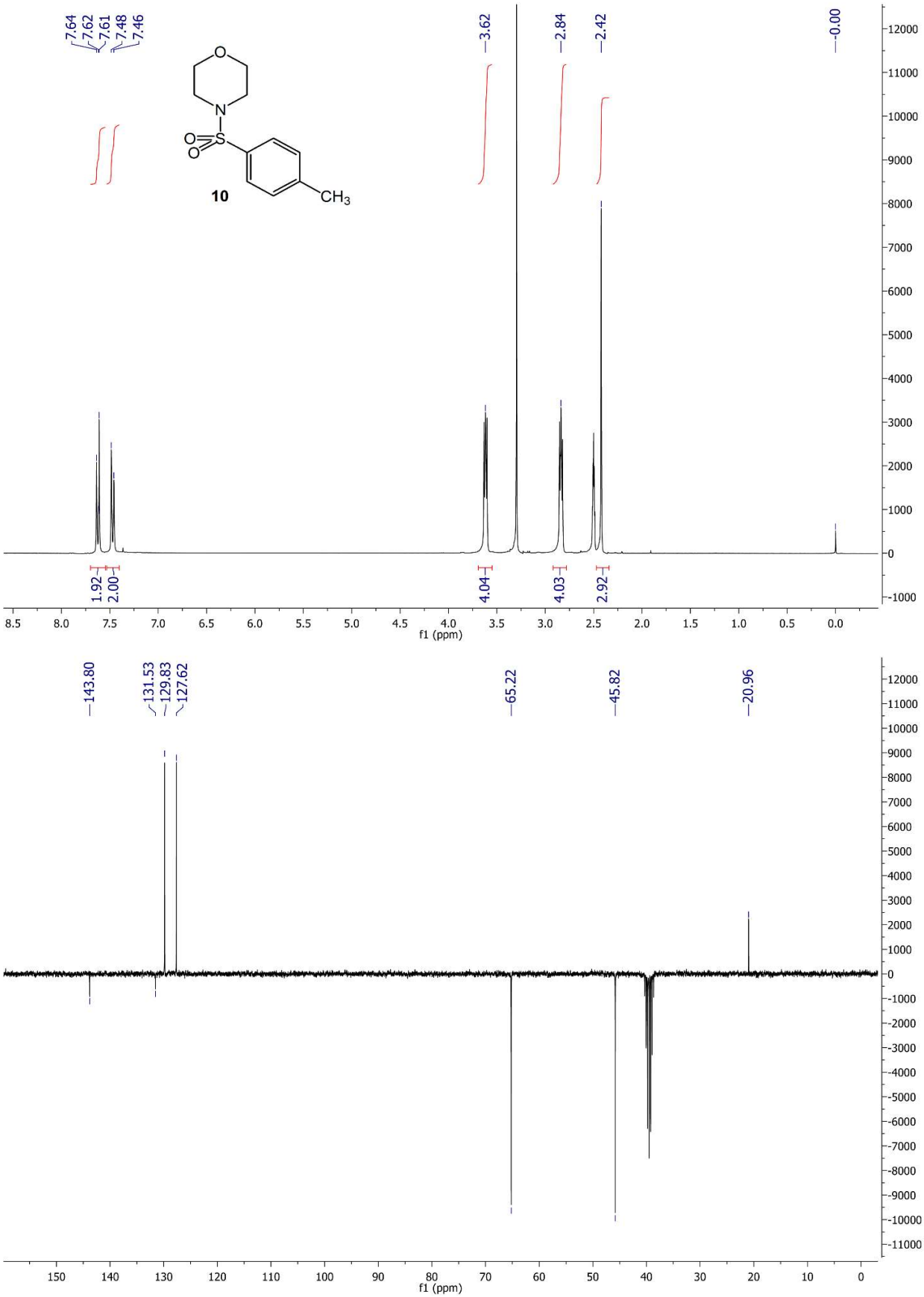


Fig. S11 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **10**.

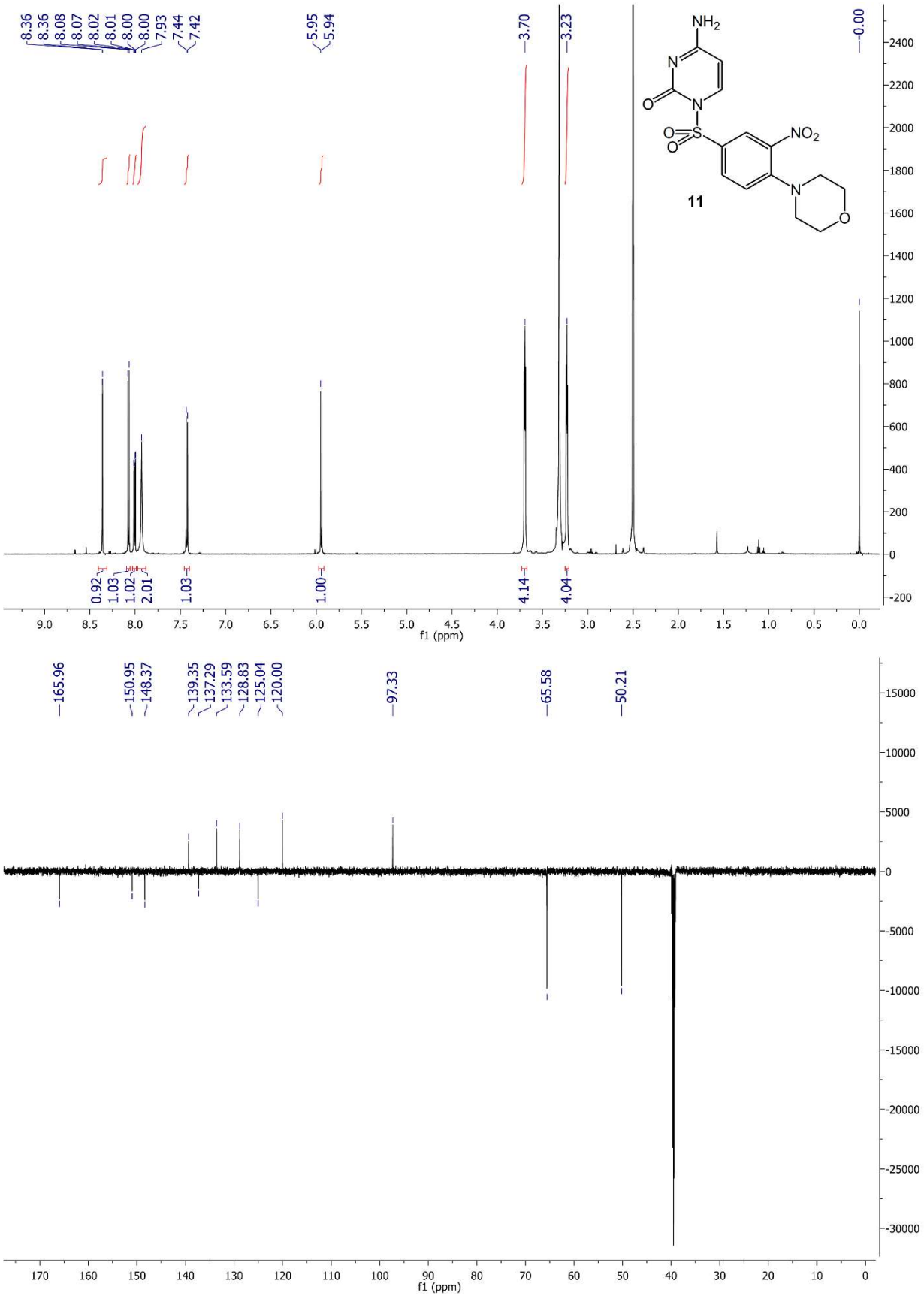


Fig. S12 ^{1}H NMR (300 MHz, DMSO-d_6) and ^{13}C NMR spectra (75 MHz, APT, DMSO-d_6) of the compound **11**.

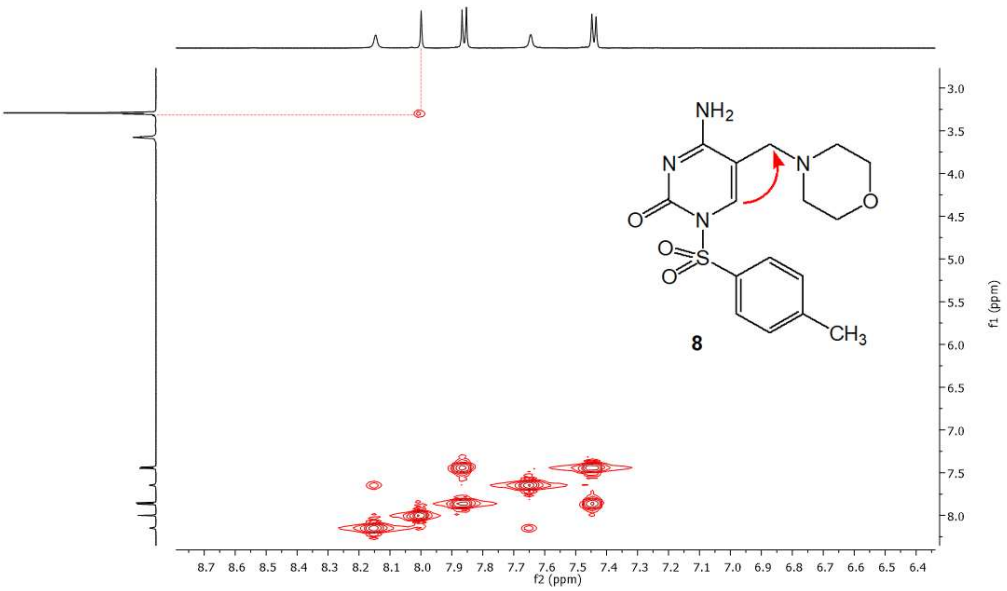
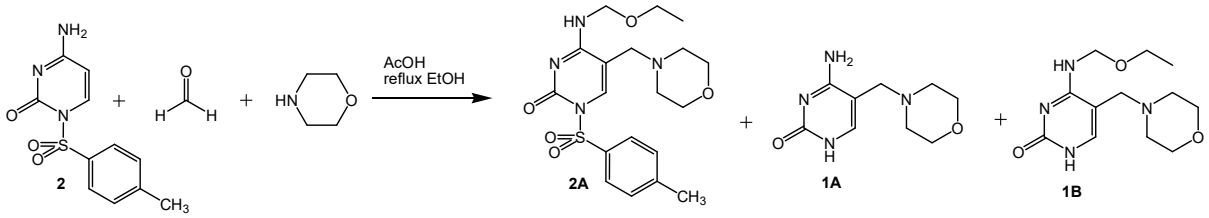


Fig. S13 Part of the COSY 2d NMR spectra of the compound **2**.



Scheme S14 Mannich morpholinomethylation attempted by classical heating (reflux).