Generation of Unusual Angucyclinones by Incorporation of Phenylamine Analogues into a Biosynthetic Intermediate

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Supplmentary Materials

Figure S1. HPLC analysis of reactions of the phenylamine analogues (**3a**-**6a**) with **2** to generate compounds **3**-**6**. Lane I, the standard **2**; lane II, the reaction of (3-ethynyl)phenylamine (**3a**) with **2**; lane III, the reaction of (3,4-dimethyl)phenylamine (**4a**) with **2**; lane IV, the reaction of (3,4-methylenedioxy)phenylamine (**5a**) with **2**; lane V, the reaction of (4-bromo-3-methyl)phenylamine (**6a**) with **2**. Compound **2** was fully converted into **3**-**6** in each reaction. The compound labelled with asterisk was an unknown impurity in (3,4-methylenedioxy)phenylamine (**5a**) sample.

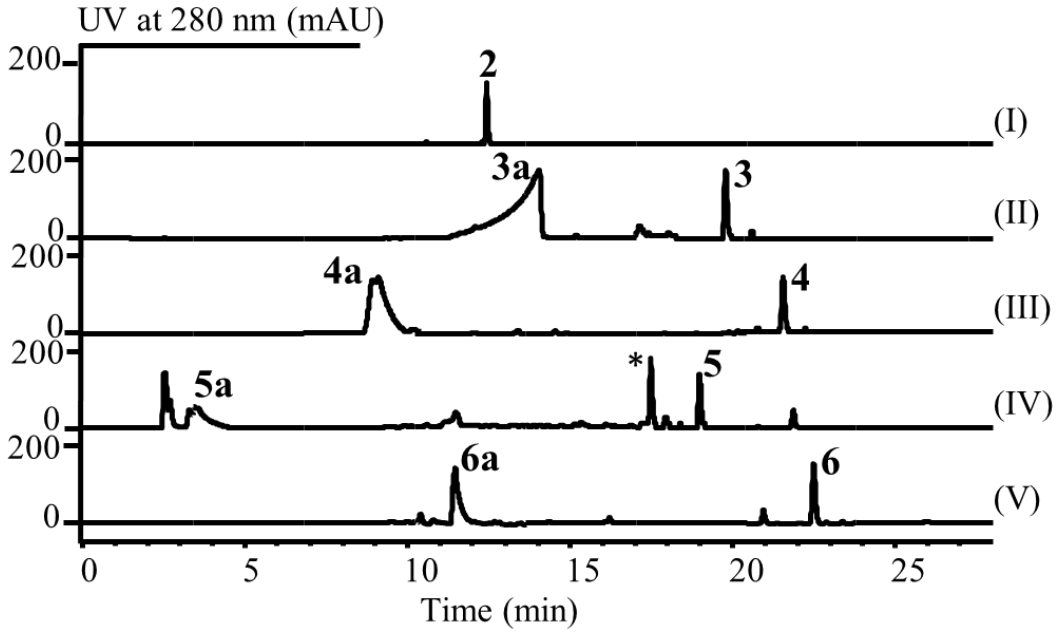

Figure S2. The ^{1}H NMR (600 MHz) spectrum of **3** in DMSO-d_6.

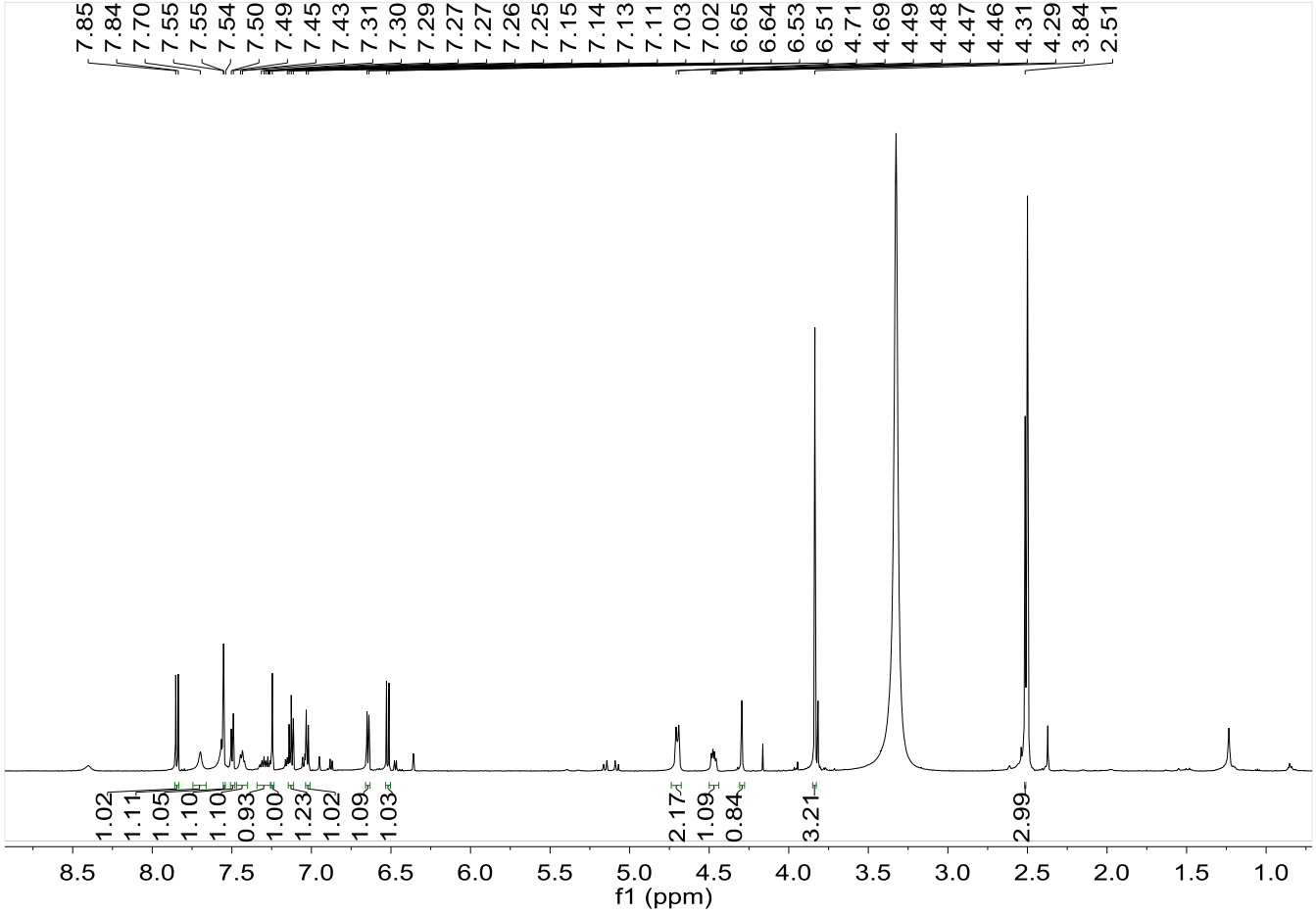

Figure S3. The ^{13}C NMR (150 MHz) spectrum of **3** in DMSO-d_6.

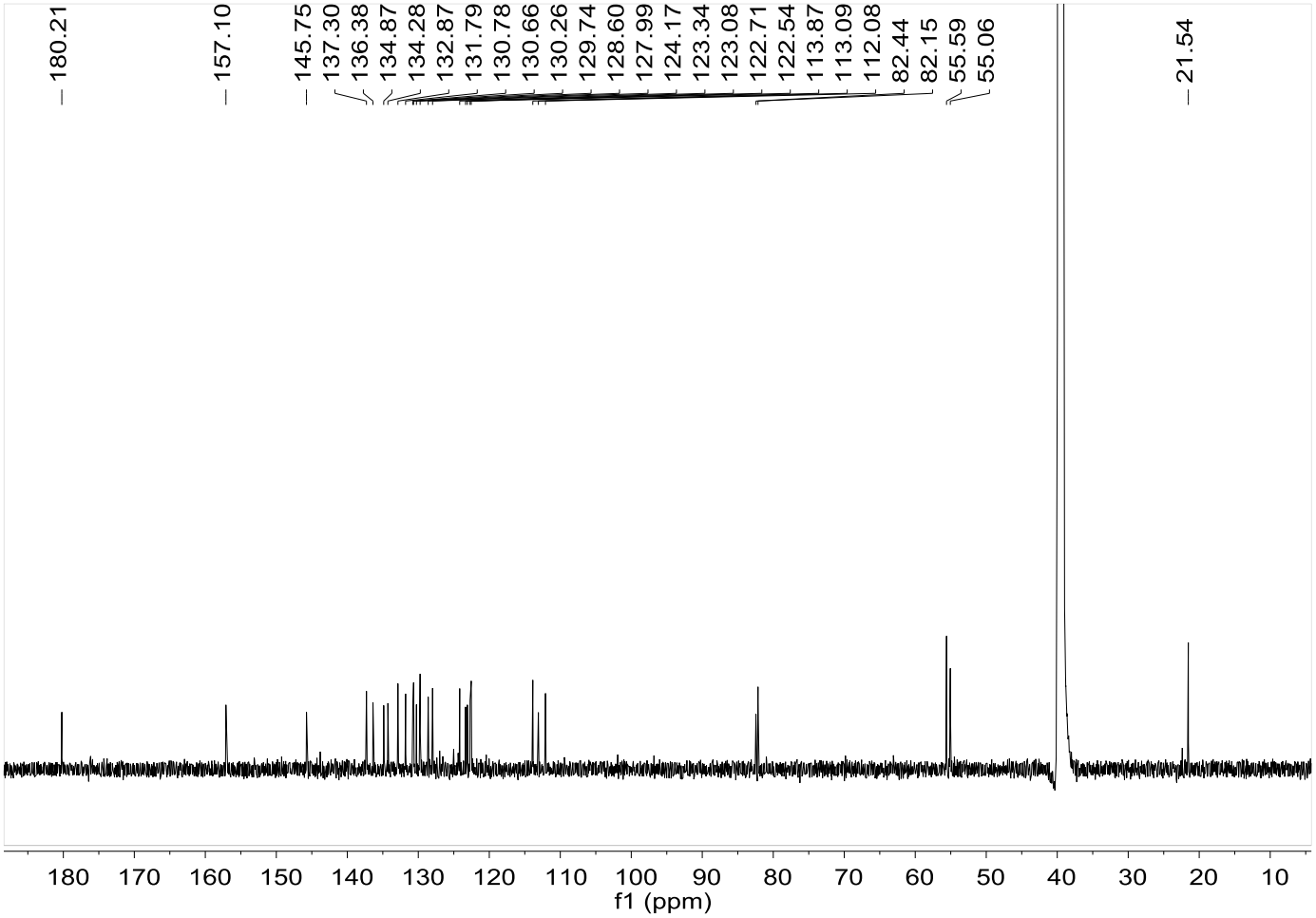

Figure S4. The HRESIMS spectrum of **3**.

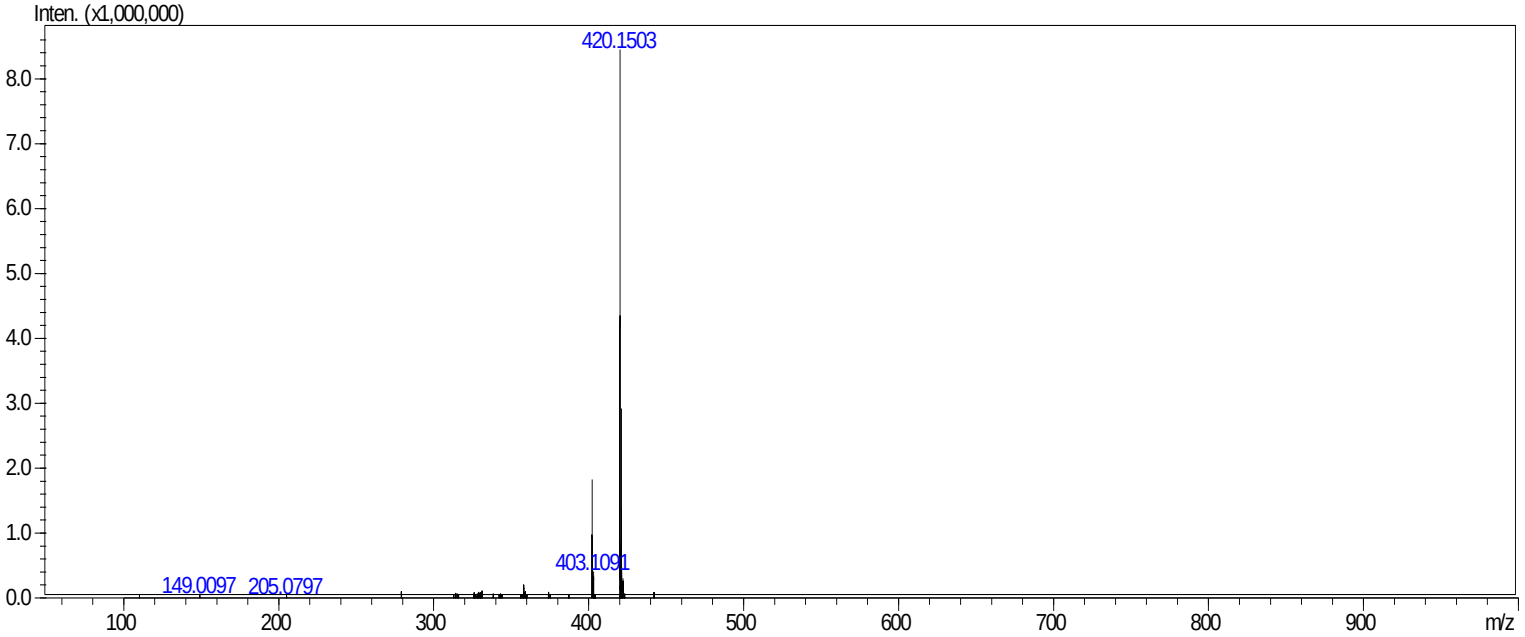

Figure S5. The IR spectrum of **3**.

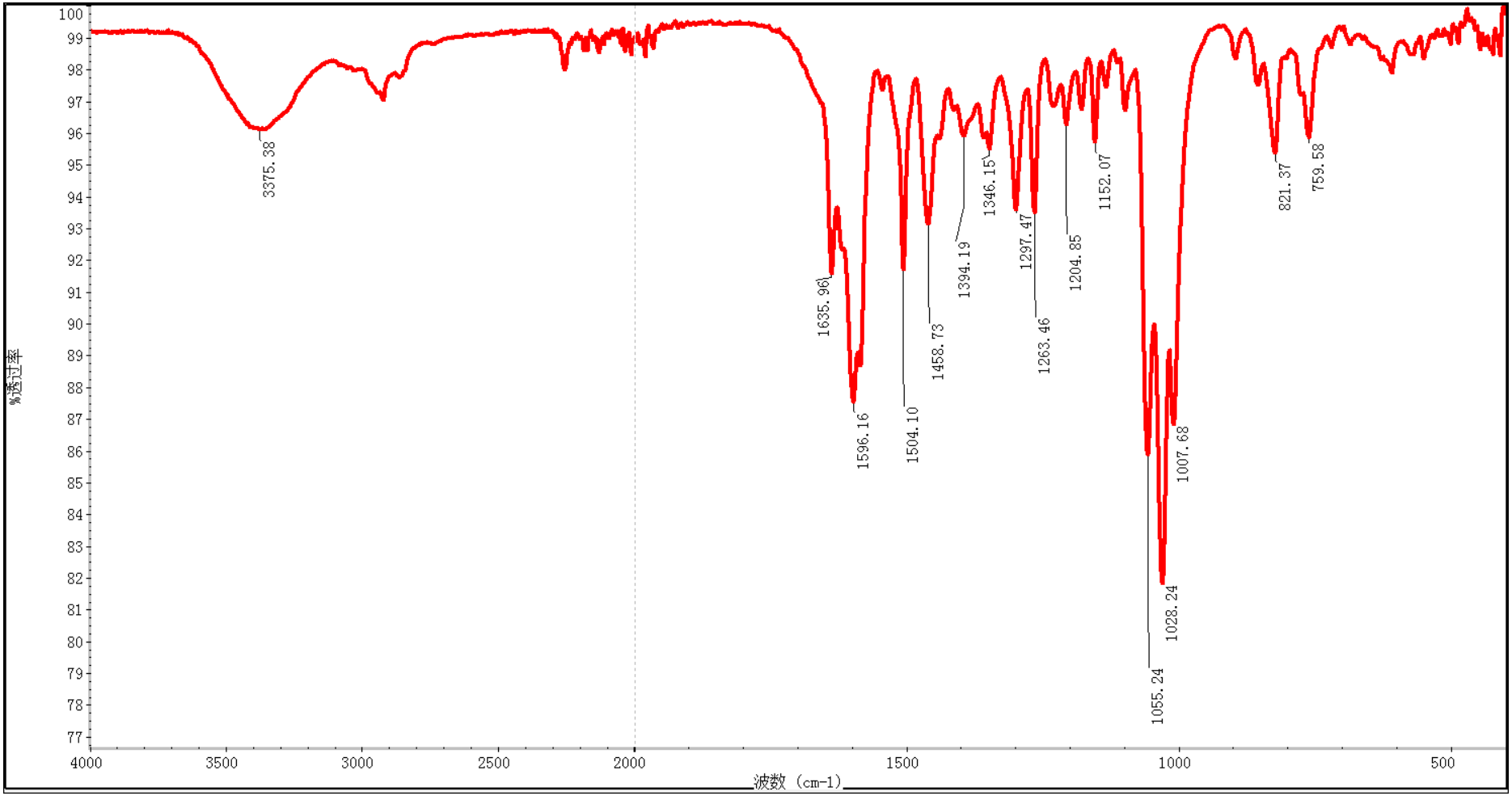

Figure S6. The ^{1}H NMR (600 MHz) spectrum of **4** in DMSO-d_6.

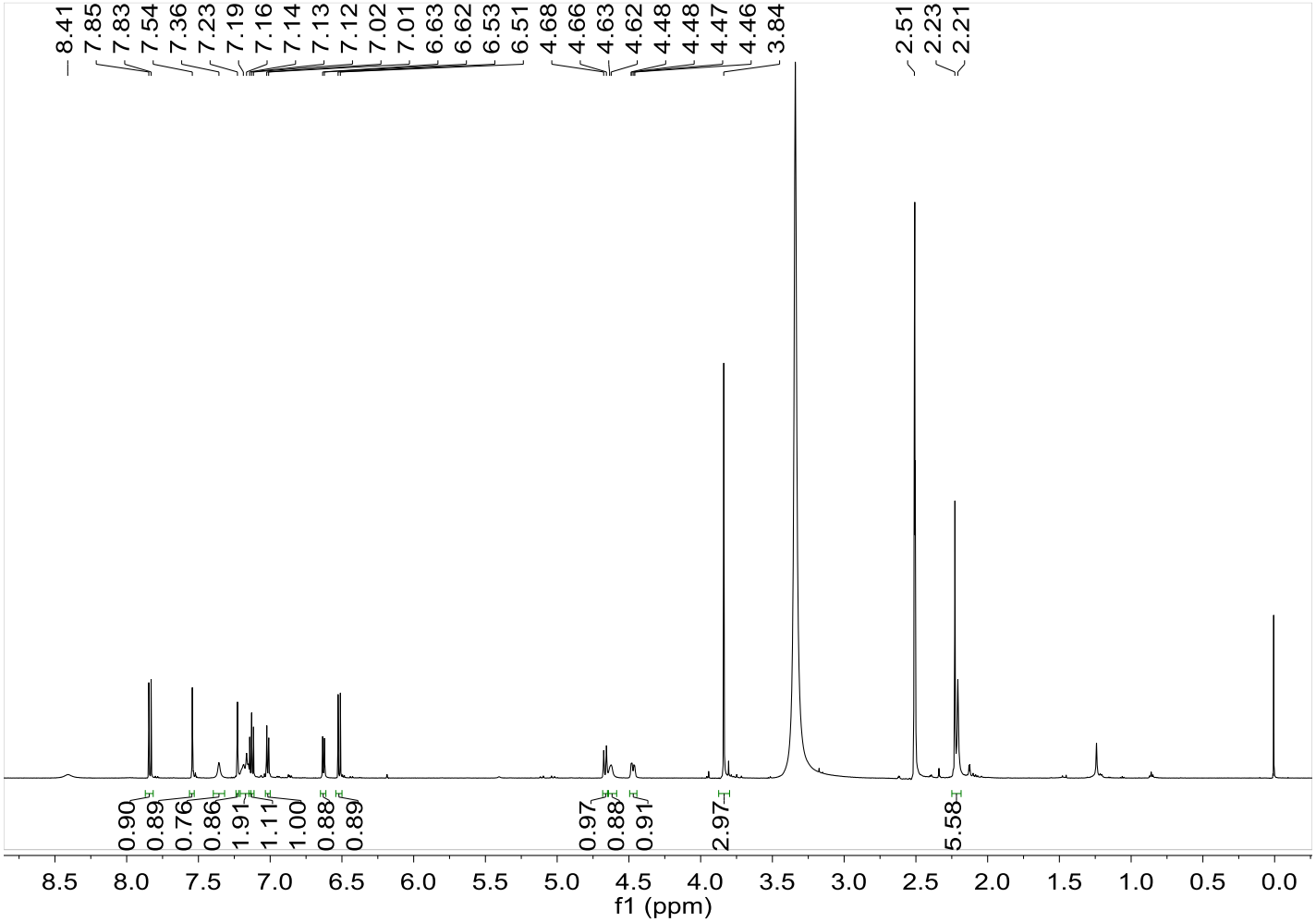

Figure S7. The ^{13}C NMR (150 MHz) spectrum of **4** in acetone-d_6.

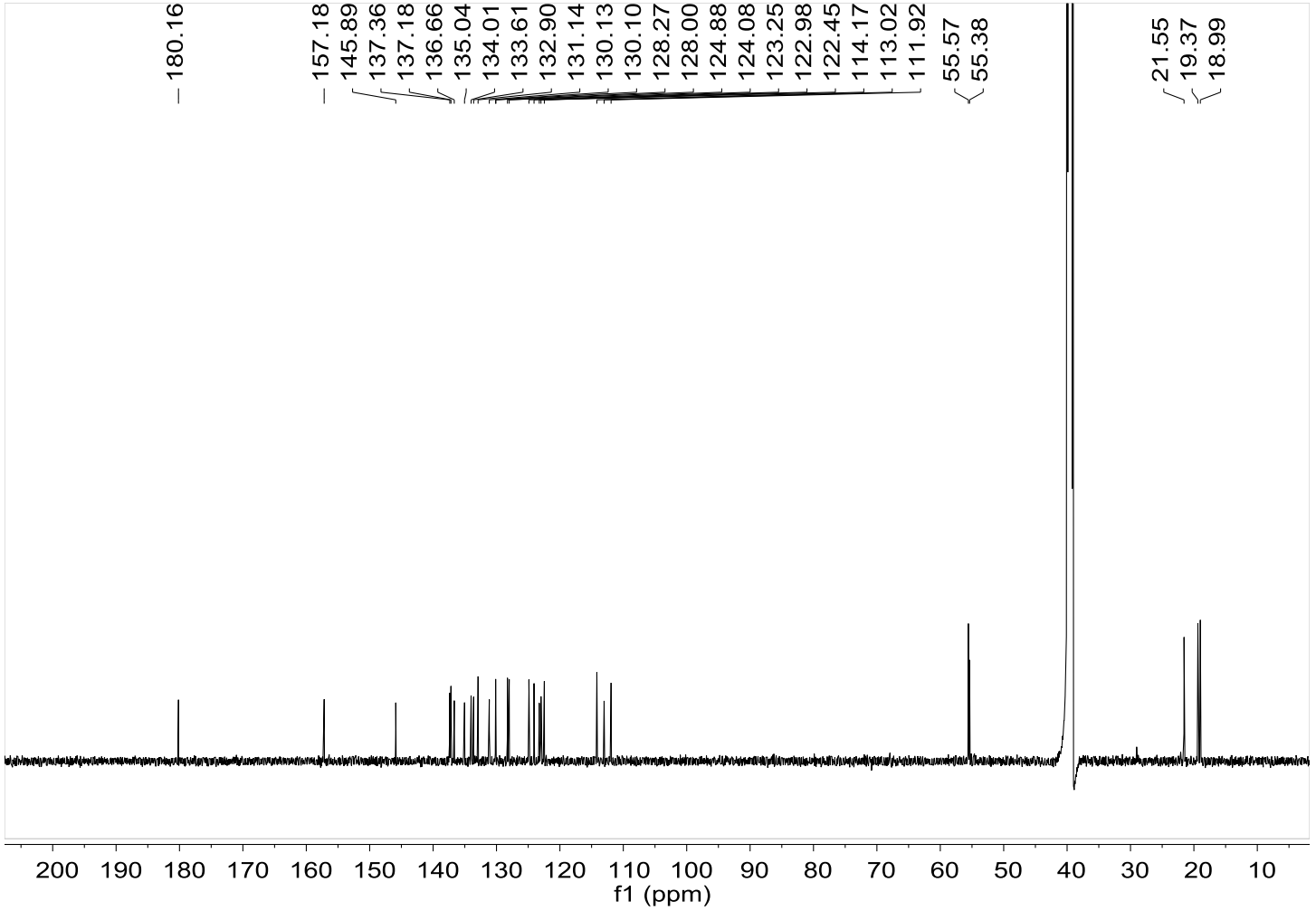

Figure S8. The HRESIMS spectrum of **4**.

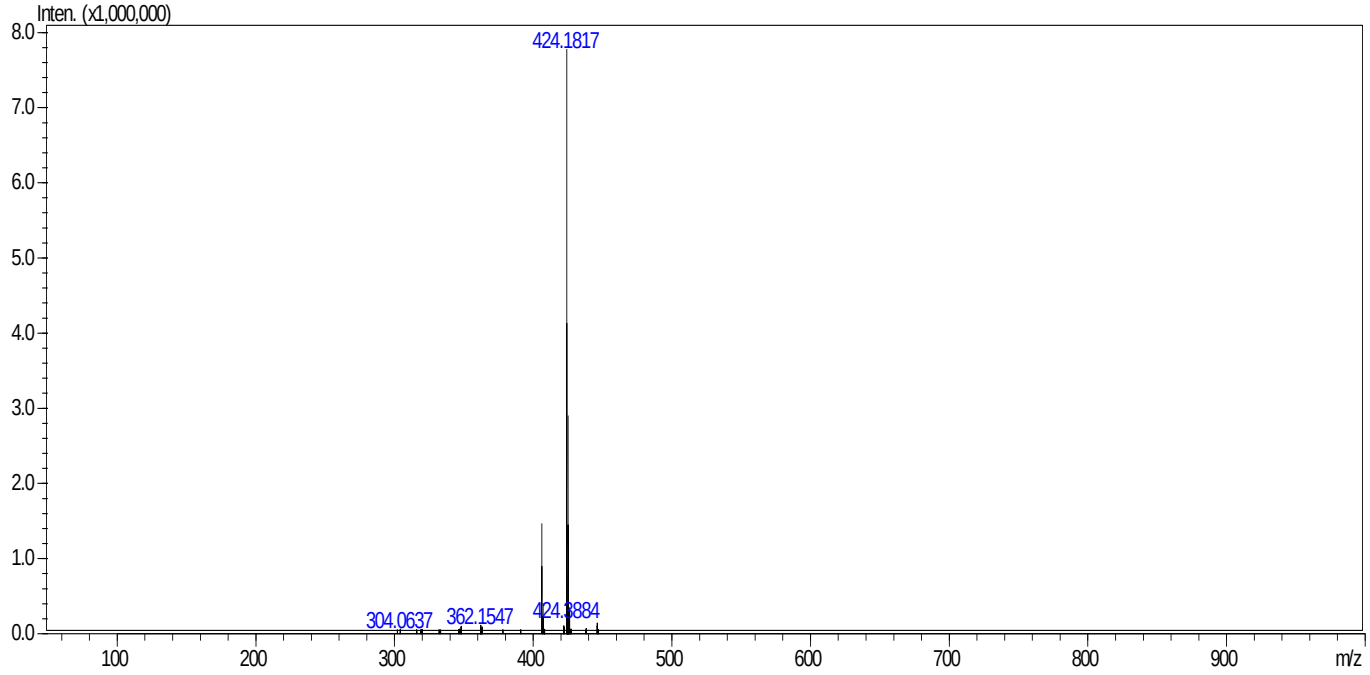

Figure S9. The IR spectrum of **4**.

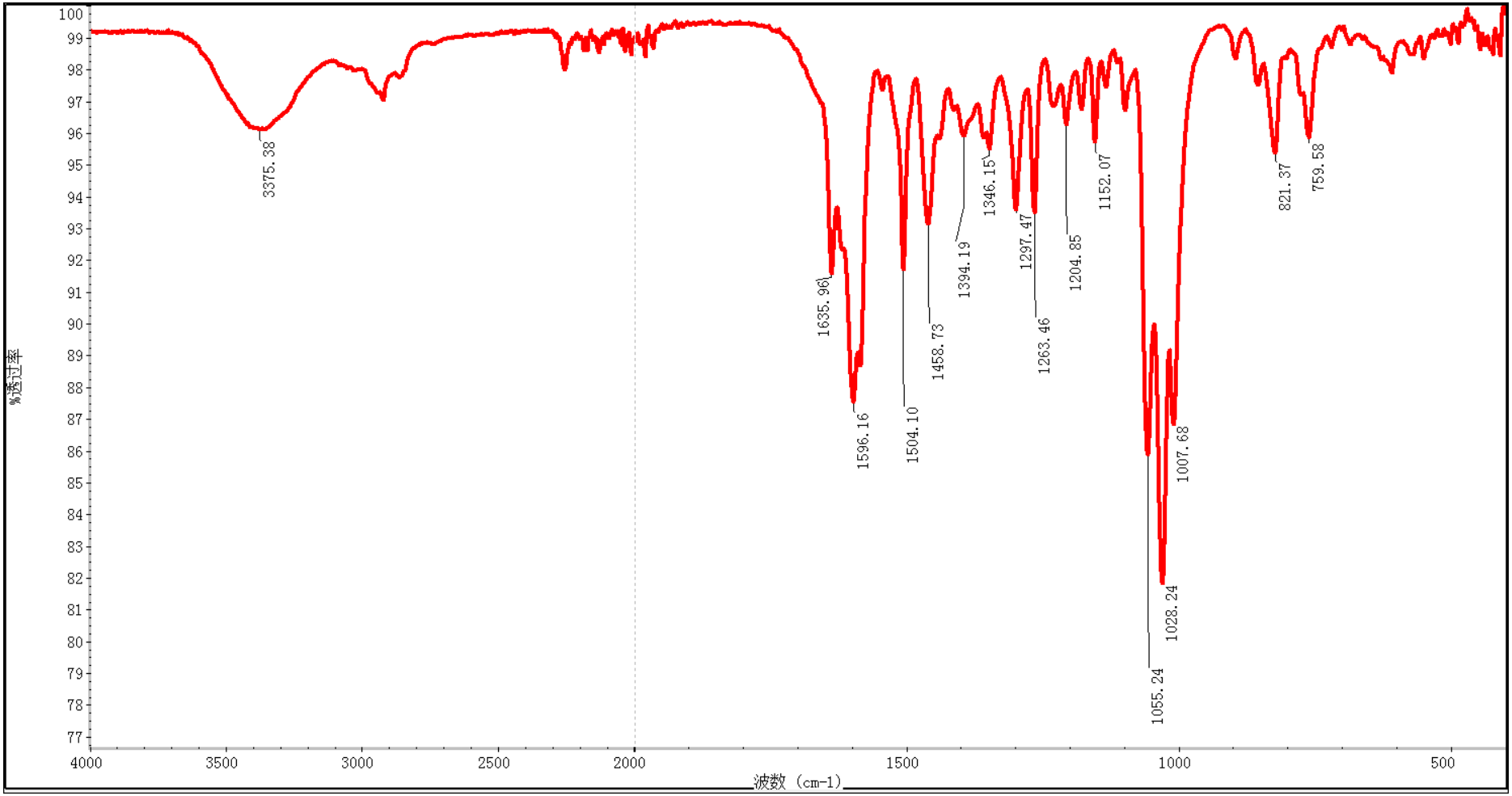

Figure S10. The ^{1}H NMR (600 MHz) spectrum of **5** in DMSO-d_6.

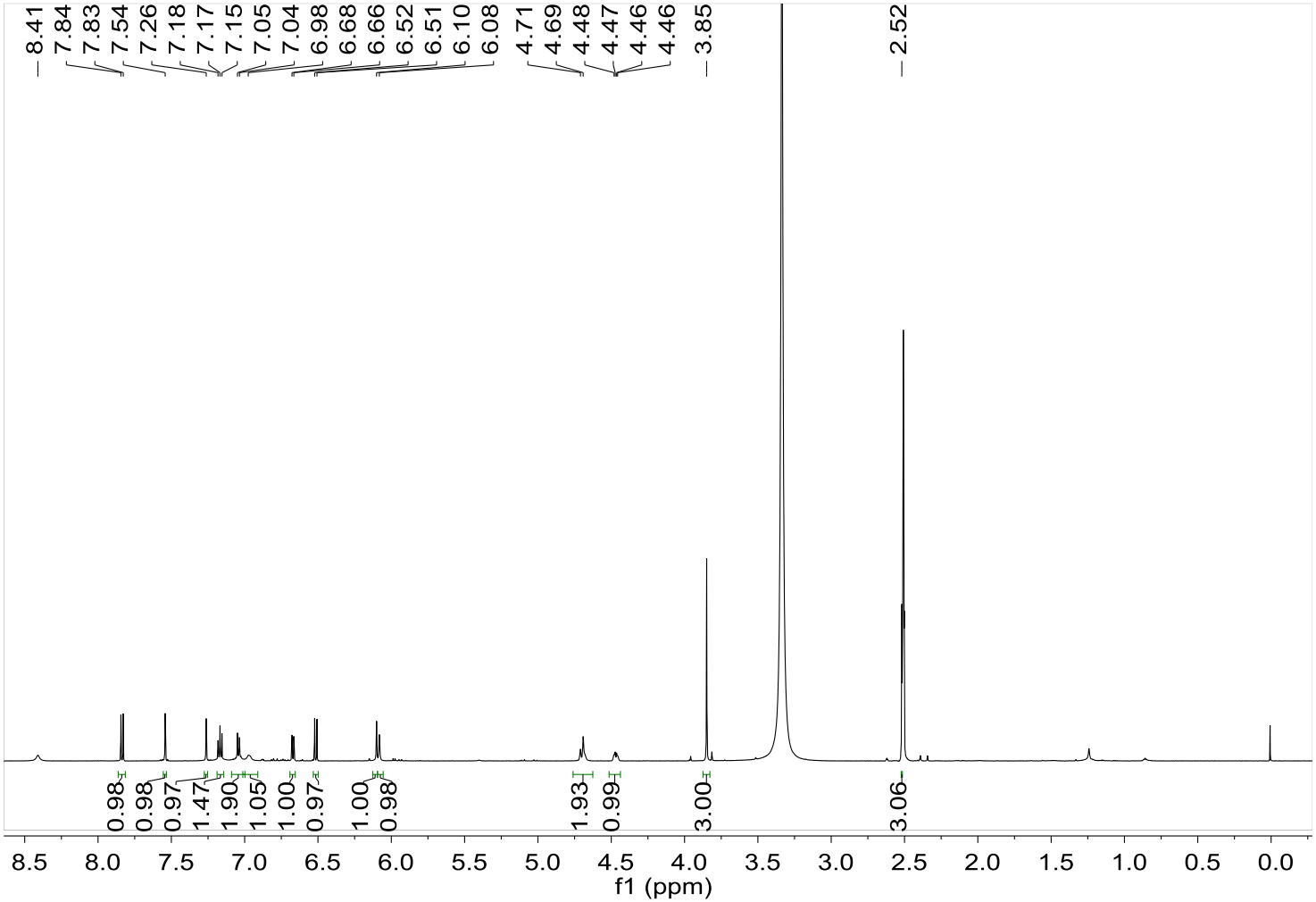

Figure S11. The ^{13}C NMR (150 MHz) spectrum of **5** in DMSO-d_6.

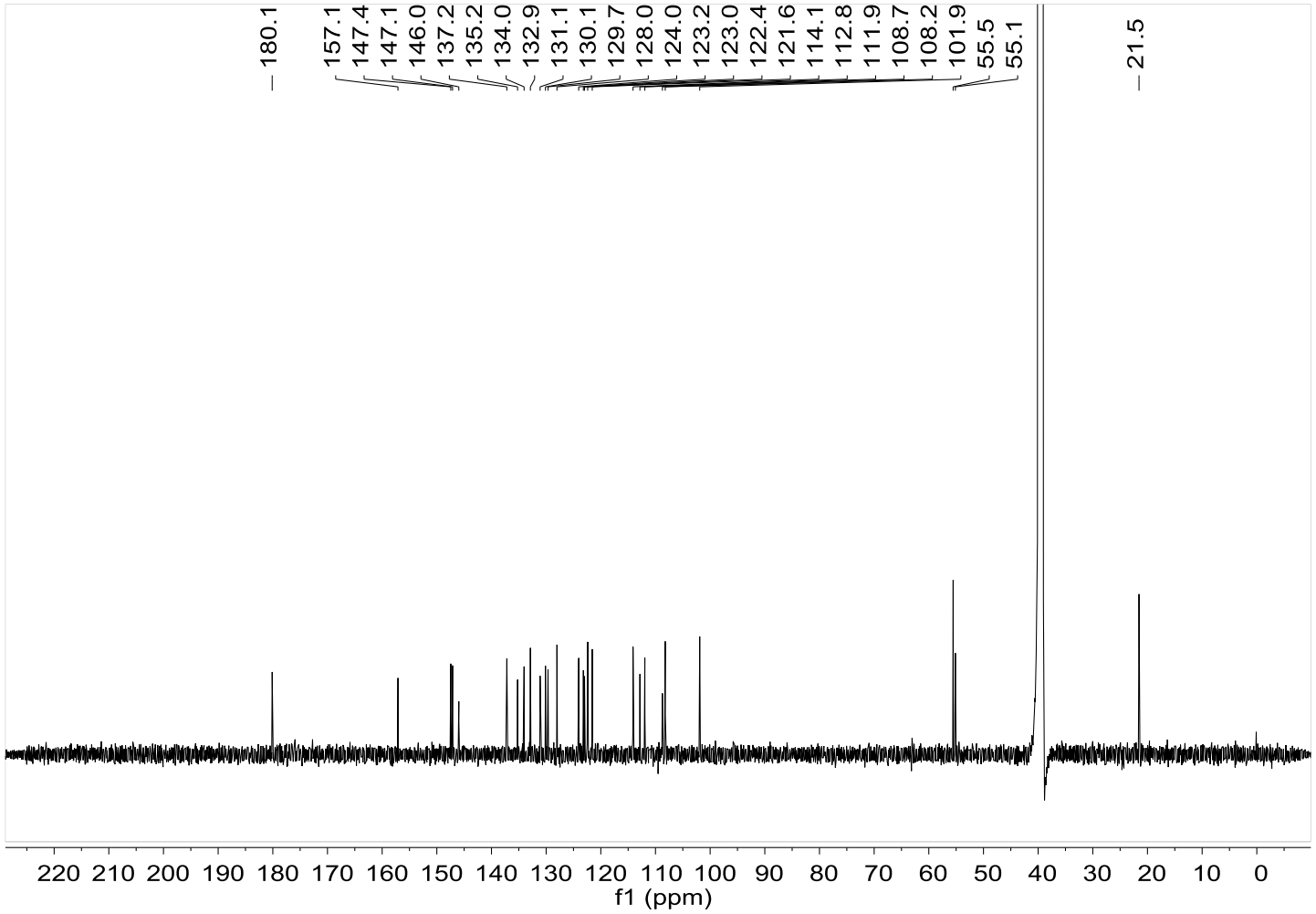

Figure S12. The HRESIMS spectrum of **5**.

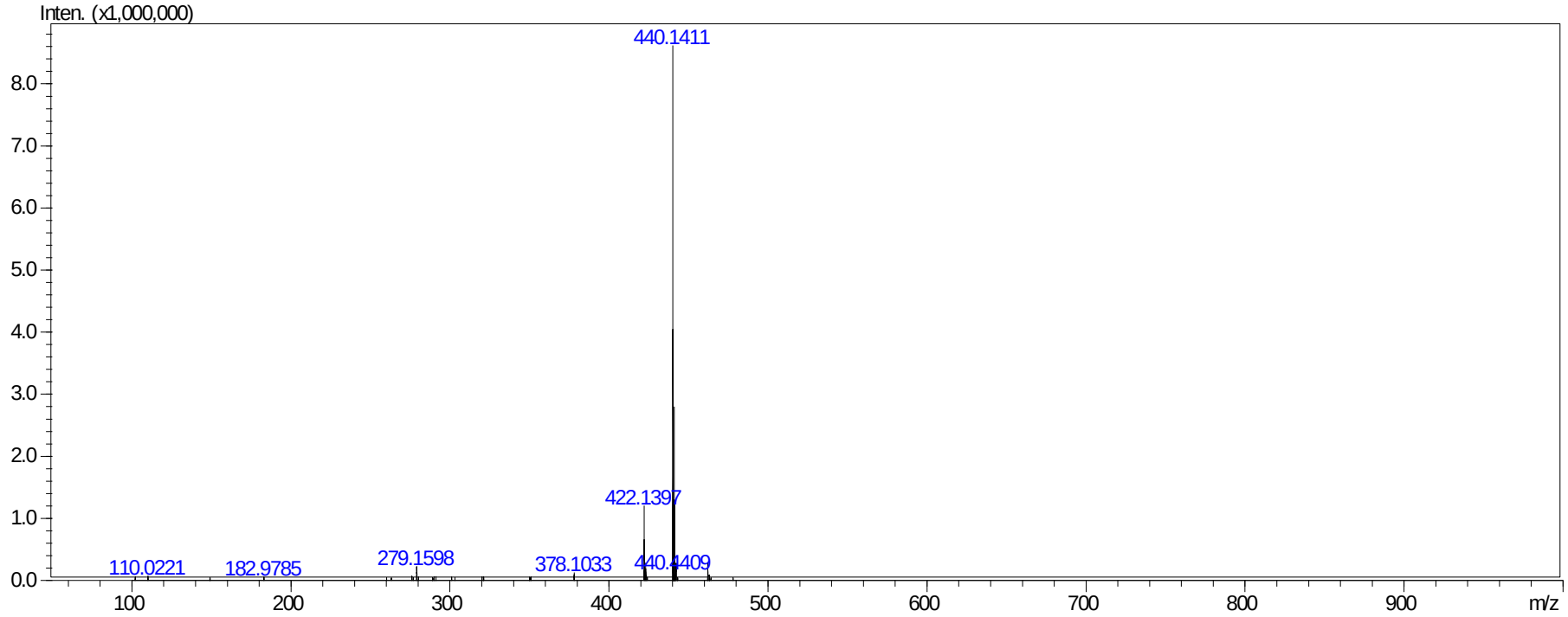

Figure S13. The IR spectrum of **5**.

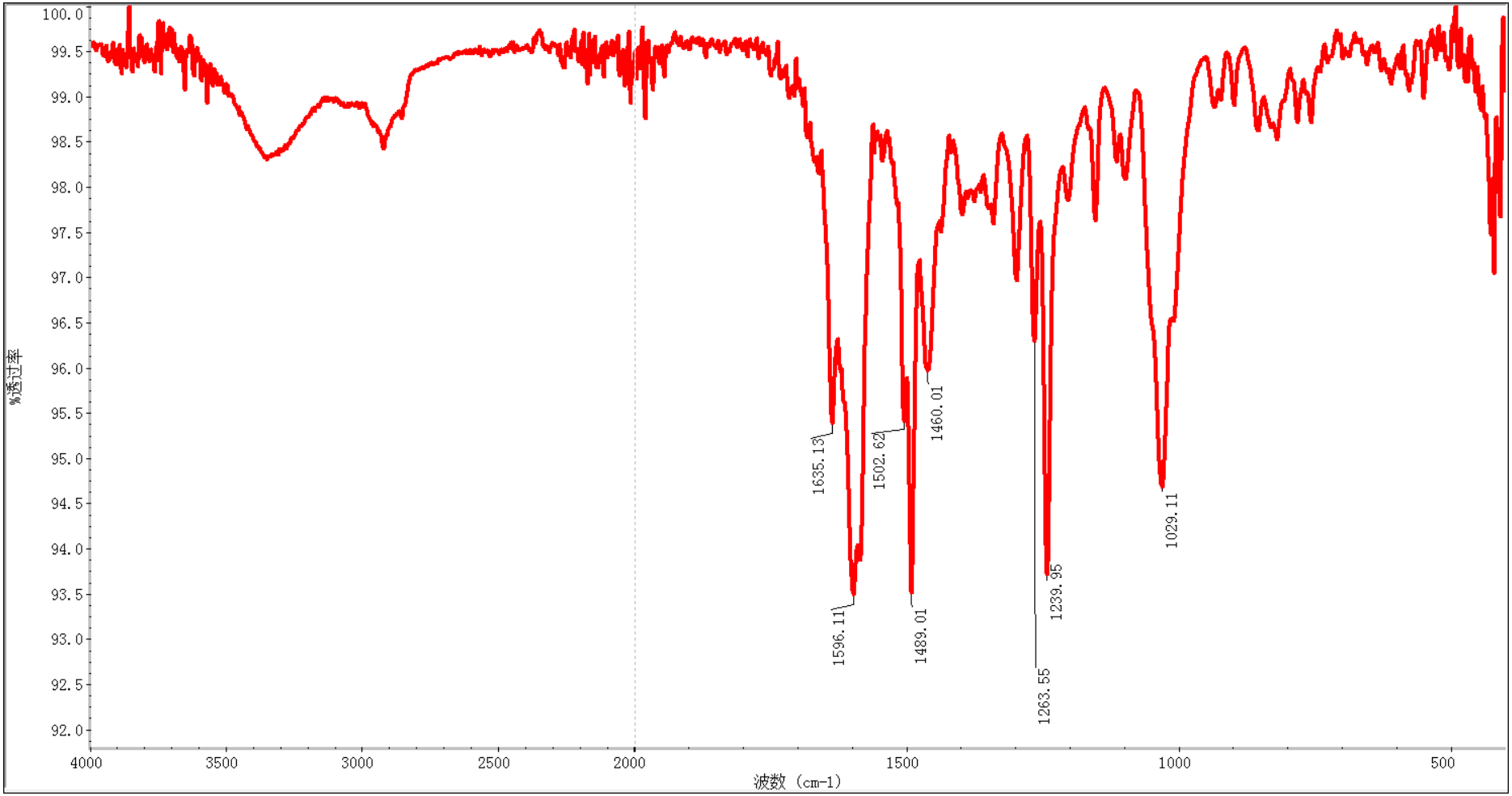

Figure S14. The ^{1}H NMR (600 MHz) spectrum of **6** in DMSO-d_6.

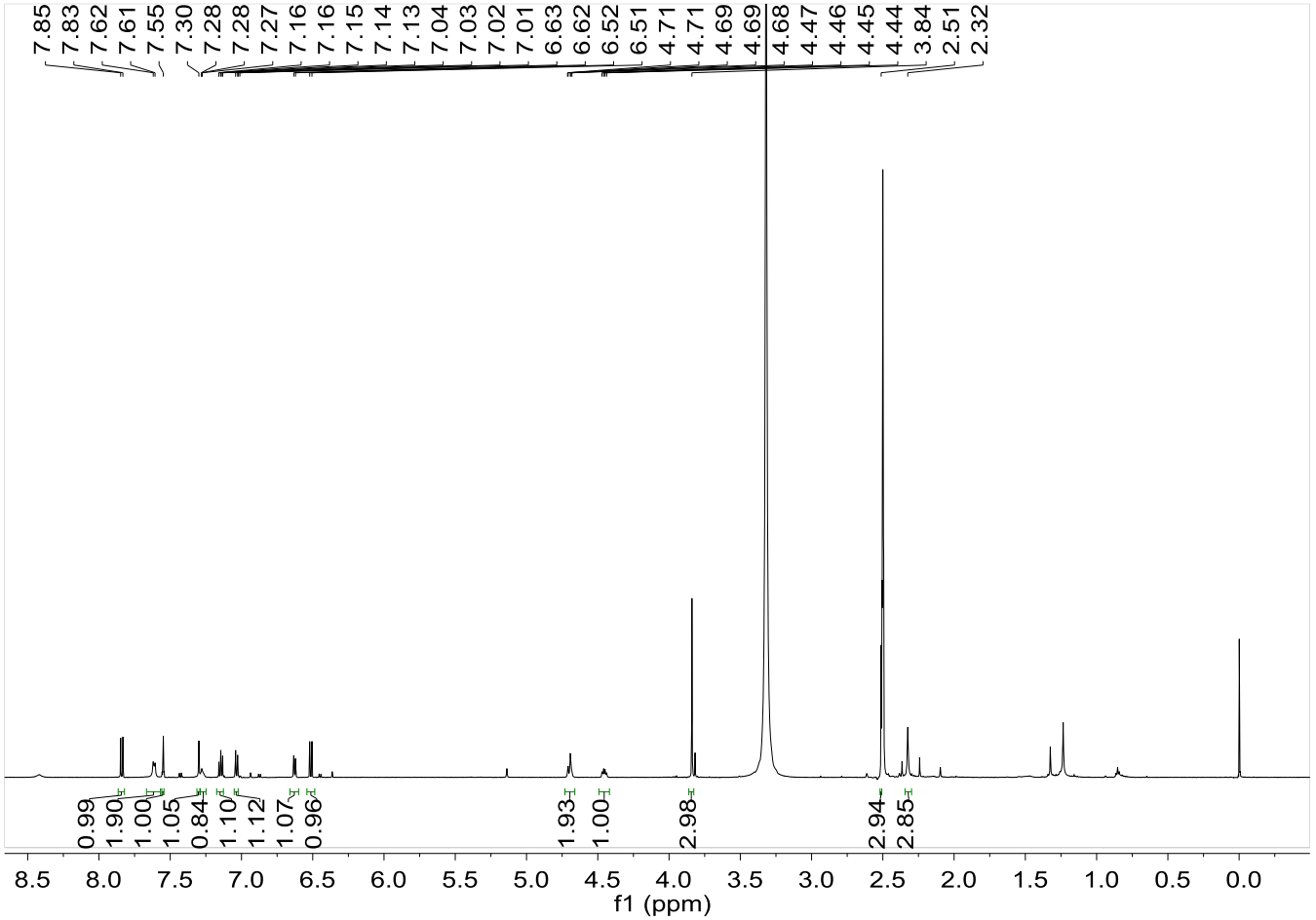

Figure S15. The ^{13}C NMR (150 MHz) spectrum of **6** in DMSO-d_6.

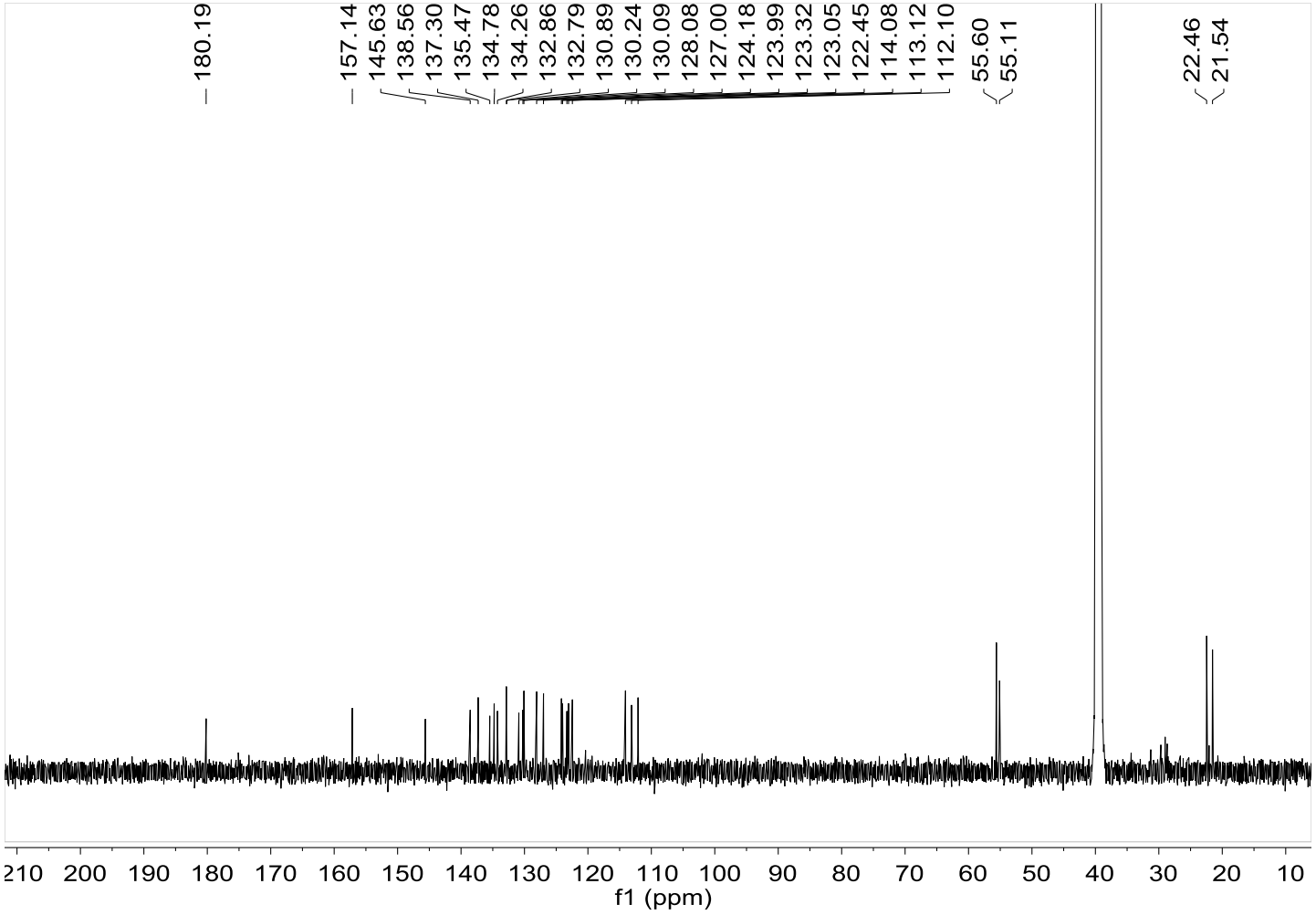

Figure S16. The HRESIMS spectrum of **6**.

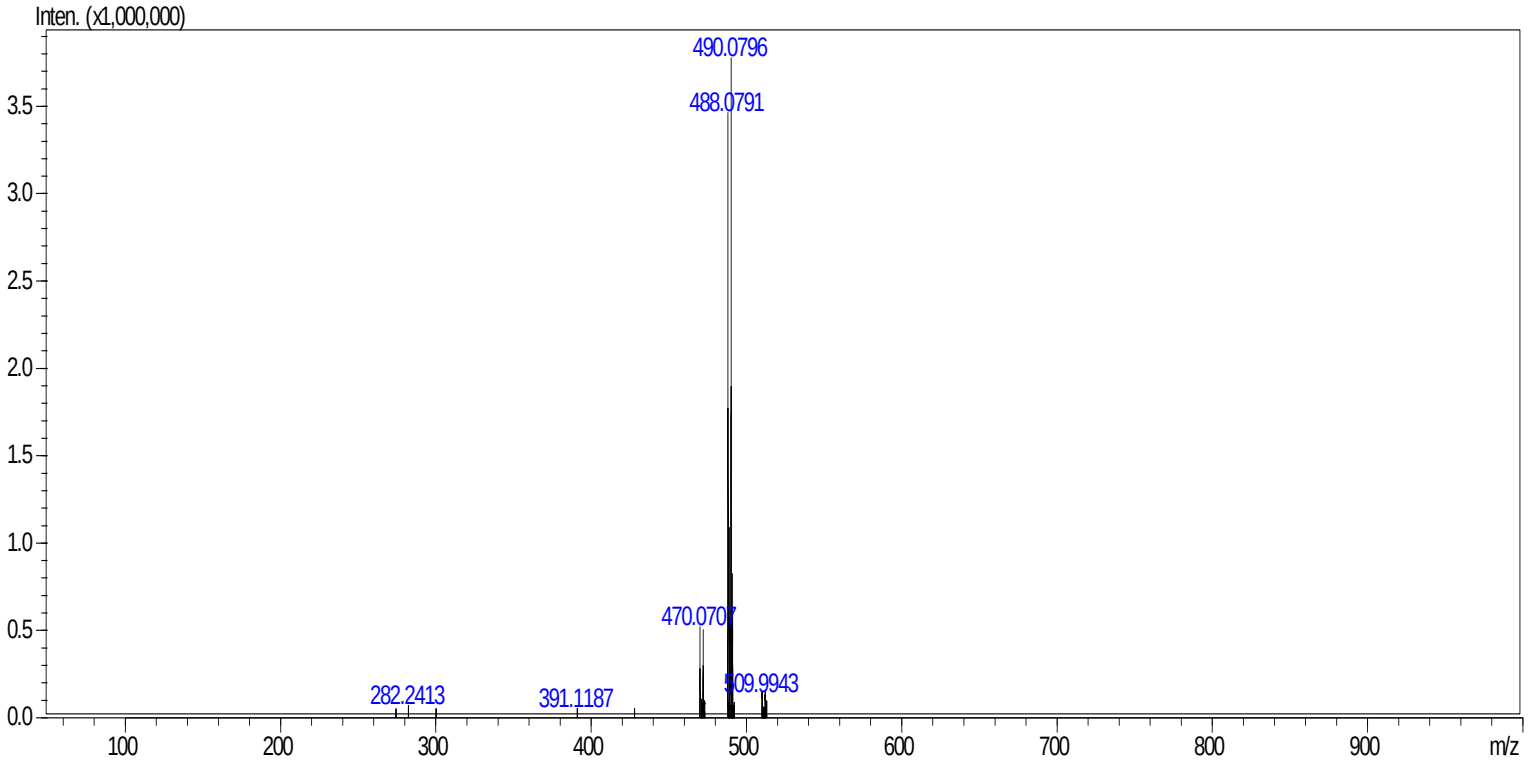

Figure S17. The IR spectrum of **6**.