Supporting Information

Isocoumarins and Benzofurans from the Mangrove Endophytic Fungus *Talaromyces amestolkiae* Possessing *α*-Glucosidase Inhibitory and Antibacterial Activities

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Fig. S1 HREIMS spectrum of **1**

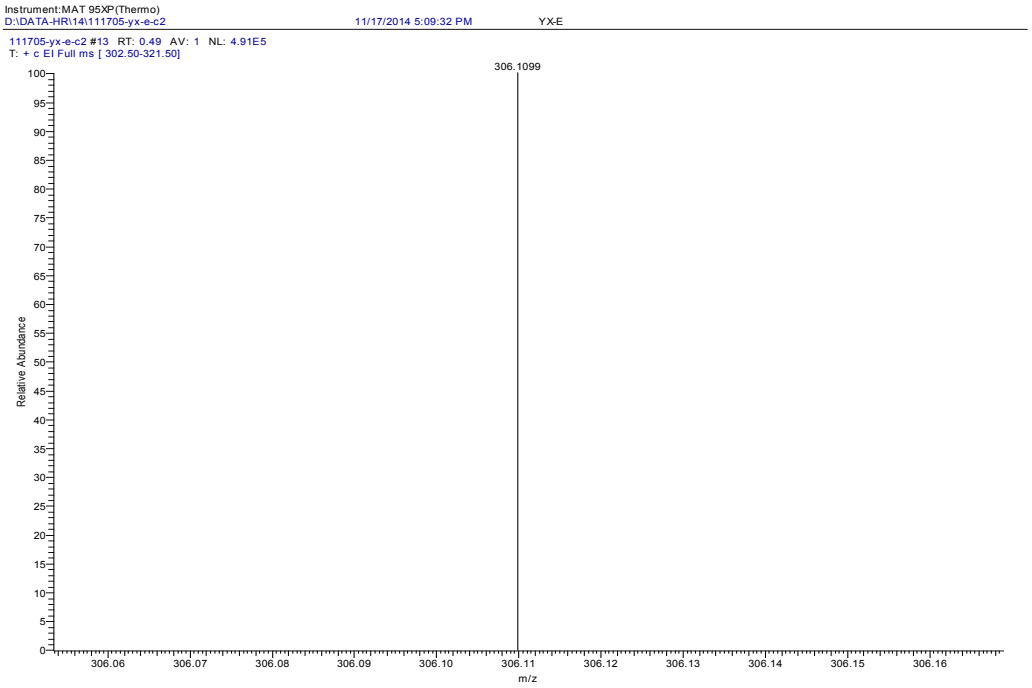

Fig. S2 ^{1}H NMR spectrum of **1** in $CDCl_3$

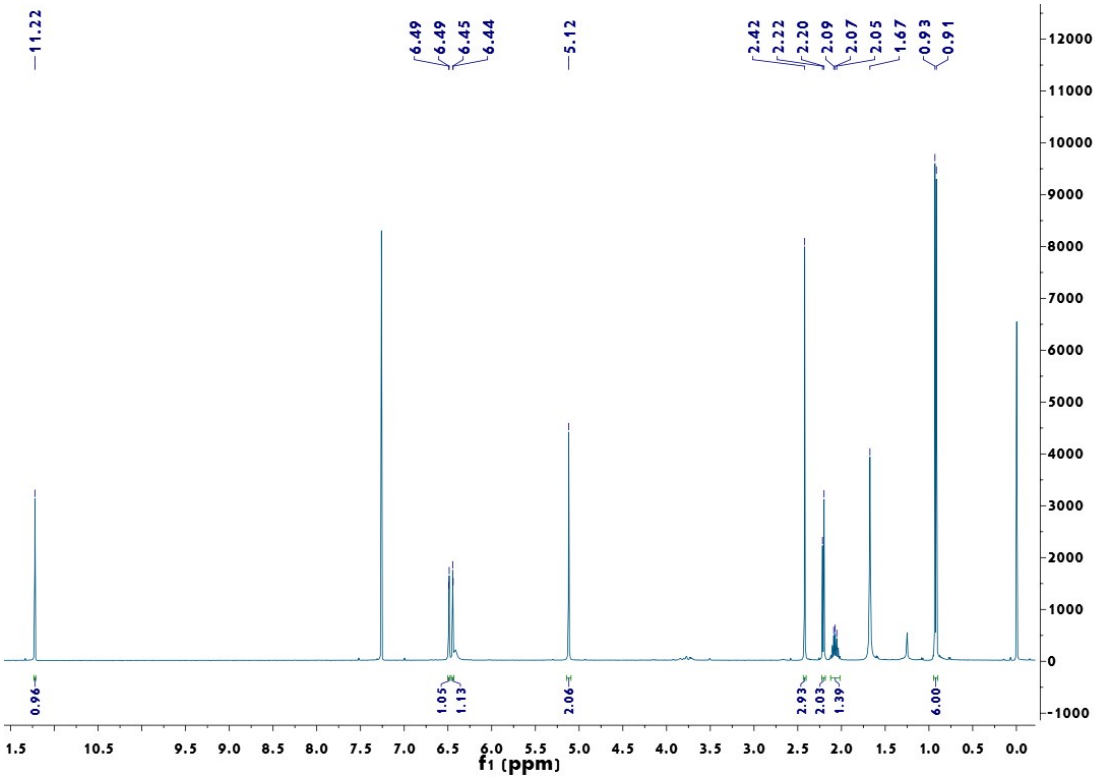

Fig. S3 ^{13}C NMR spectrum of **1** in $CDCl_3$

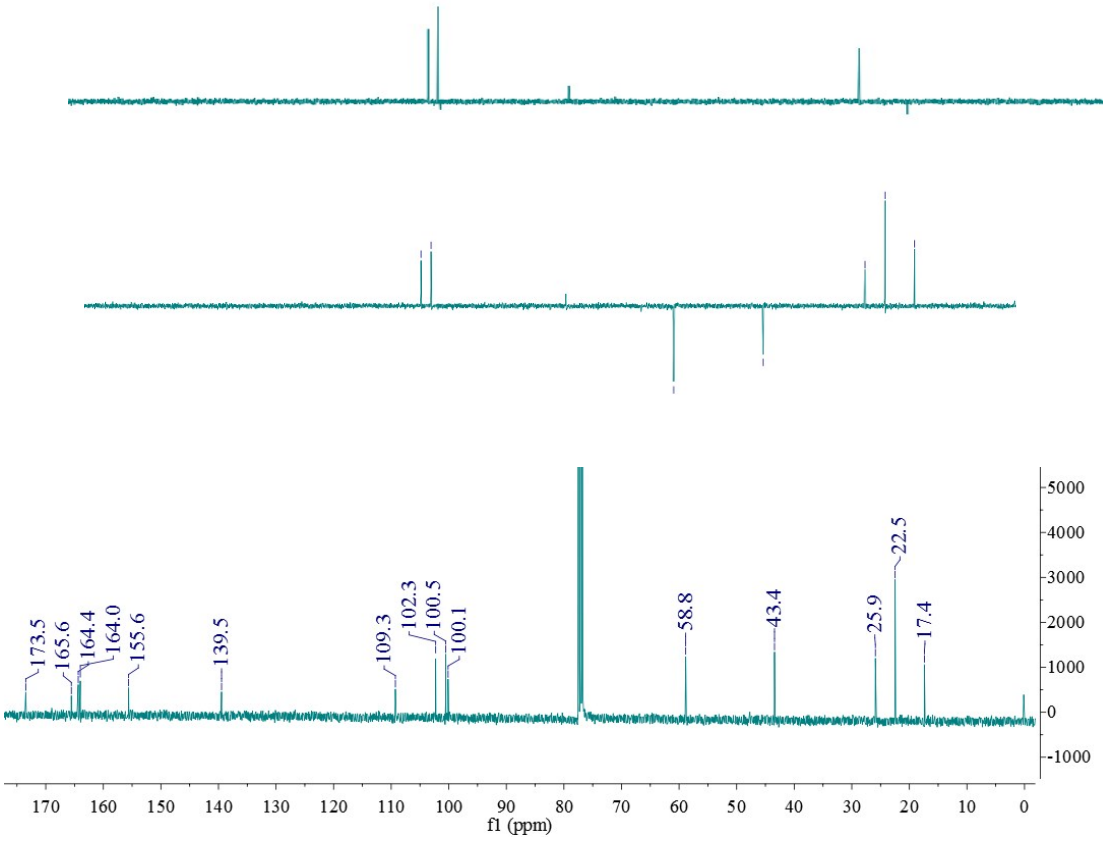

Fig. S4 HSQC spectrum of **1** in $CDCl_3$

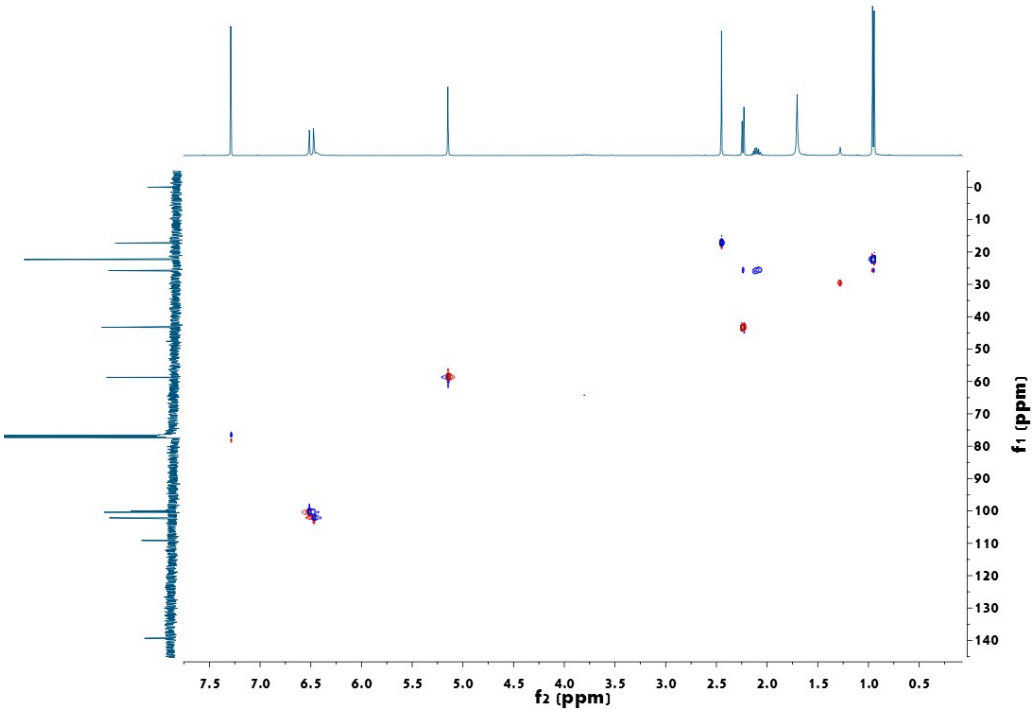

Fig. S5 ^{1}H–^{1}H COSY spectrum of **1** in $CDCl_3$

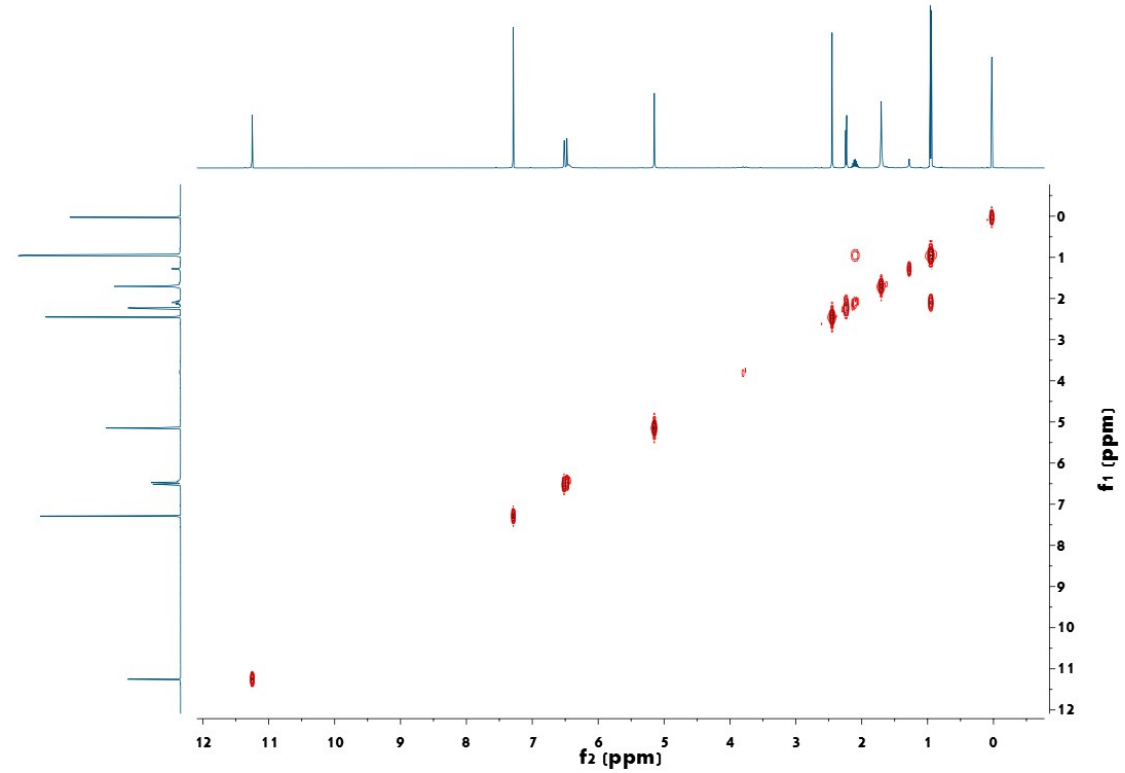

Fig. S6 HMBC spectrum of **1** in $CDCl_3$

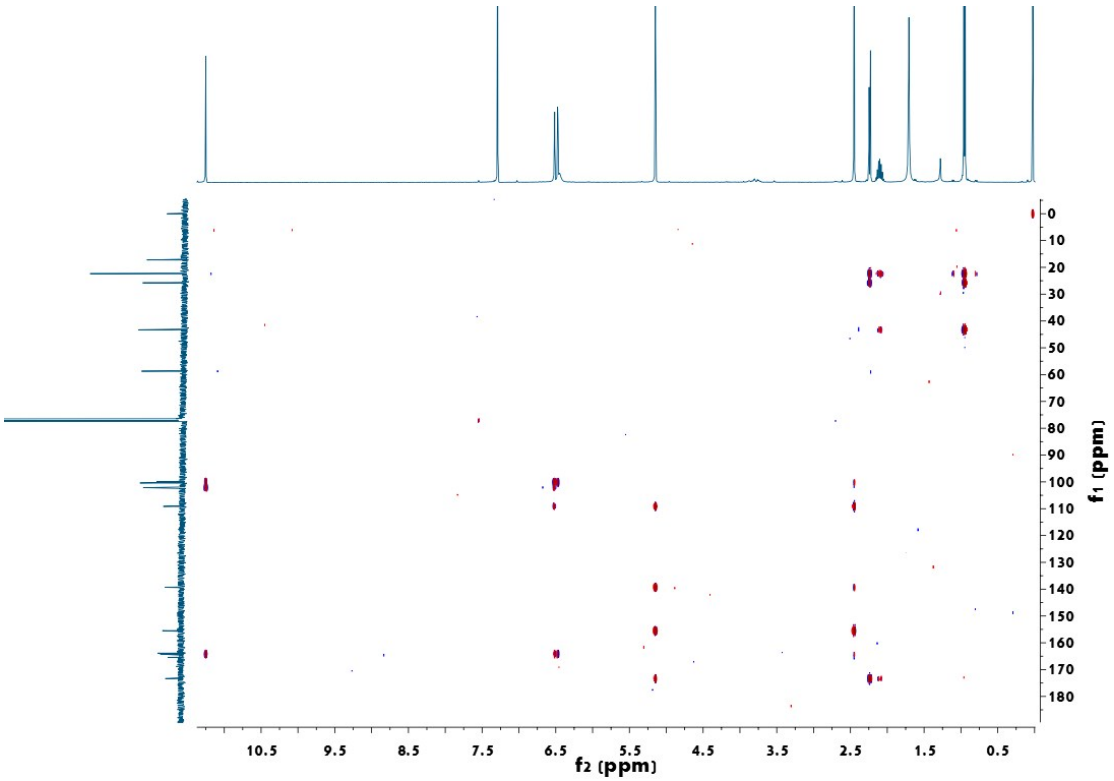

Fig. S7 HRESIMS spectrum of **2**

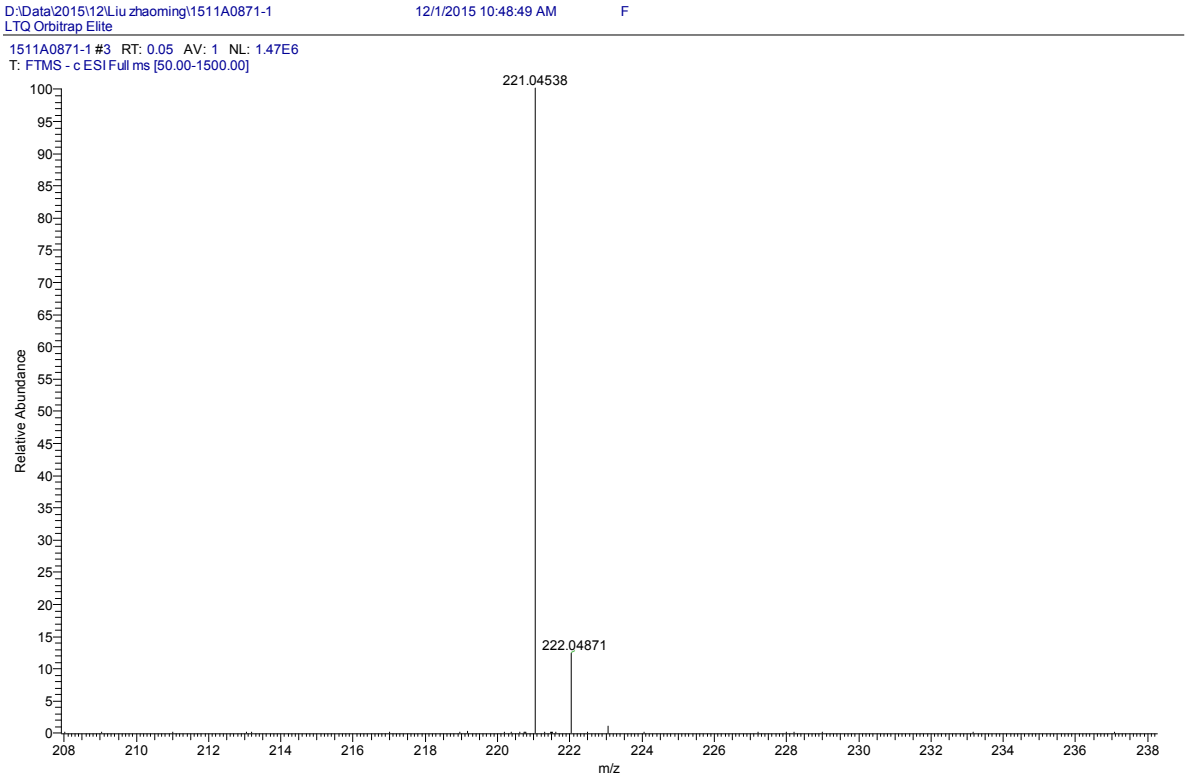

Fig. S8 ^{1}H NMR spectrum of **2** in $CDCl_3$

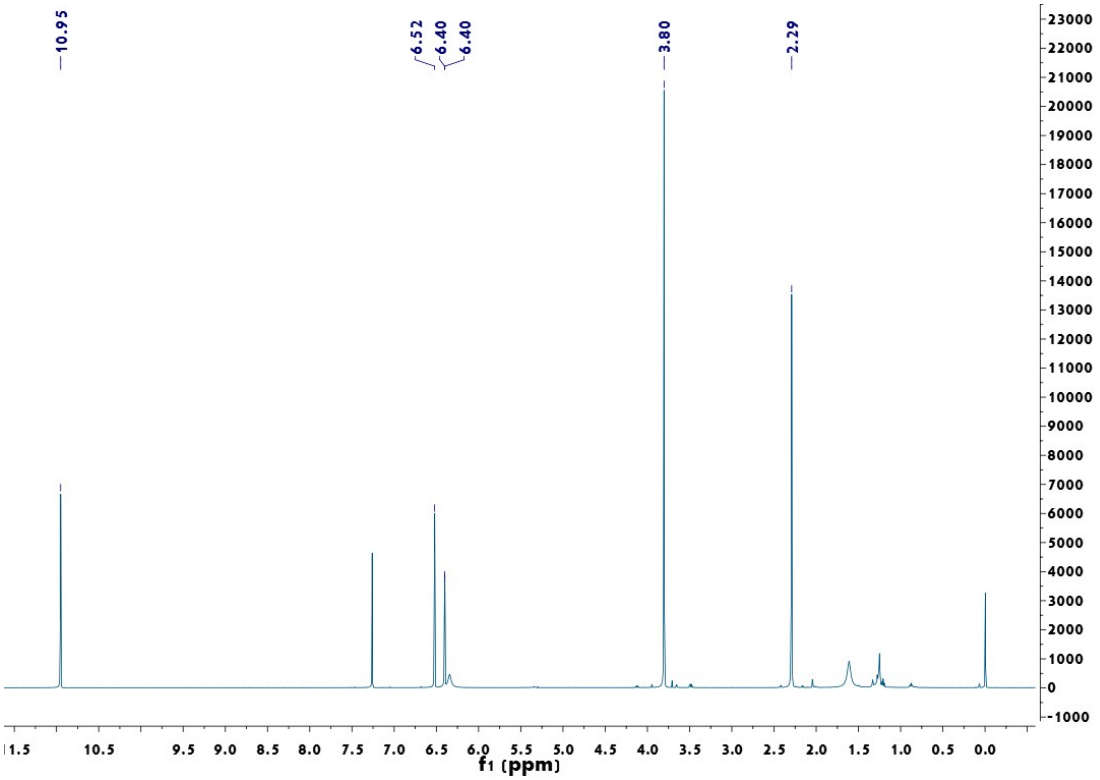

Fig. S9 ^{13}C NMR spectrum of **2** in $CDCl_3$

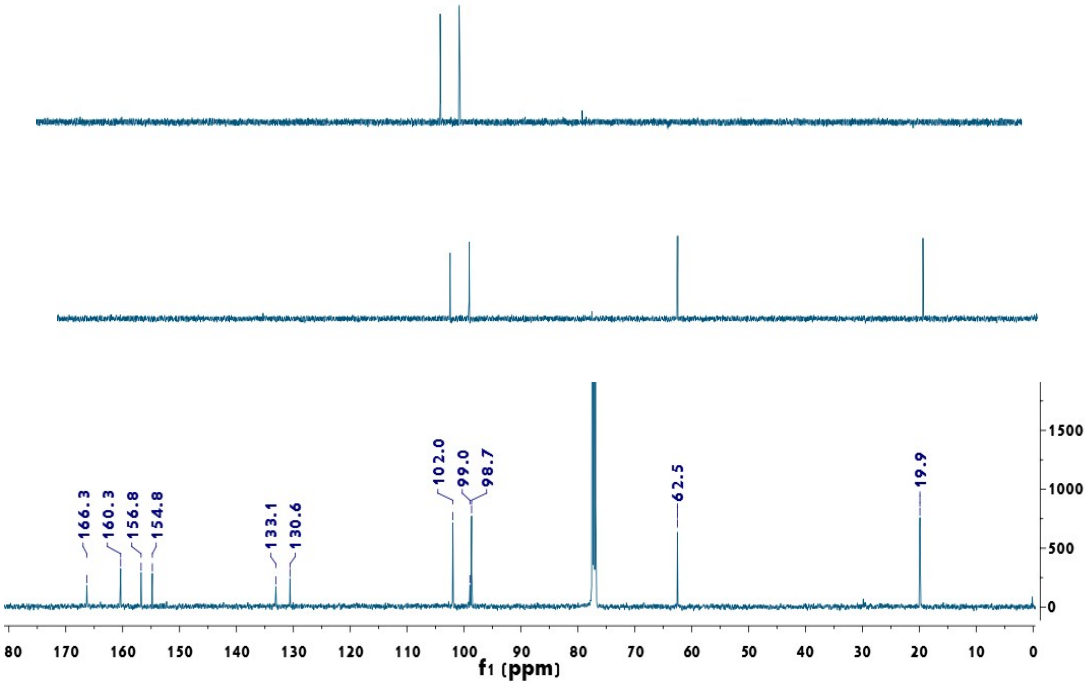

Fig. S10 HSQC spectrum of **1** in $CDCl_3$

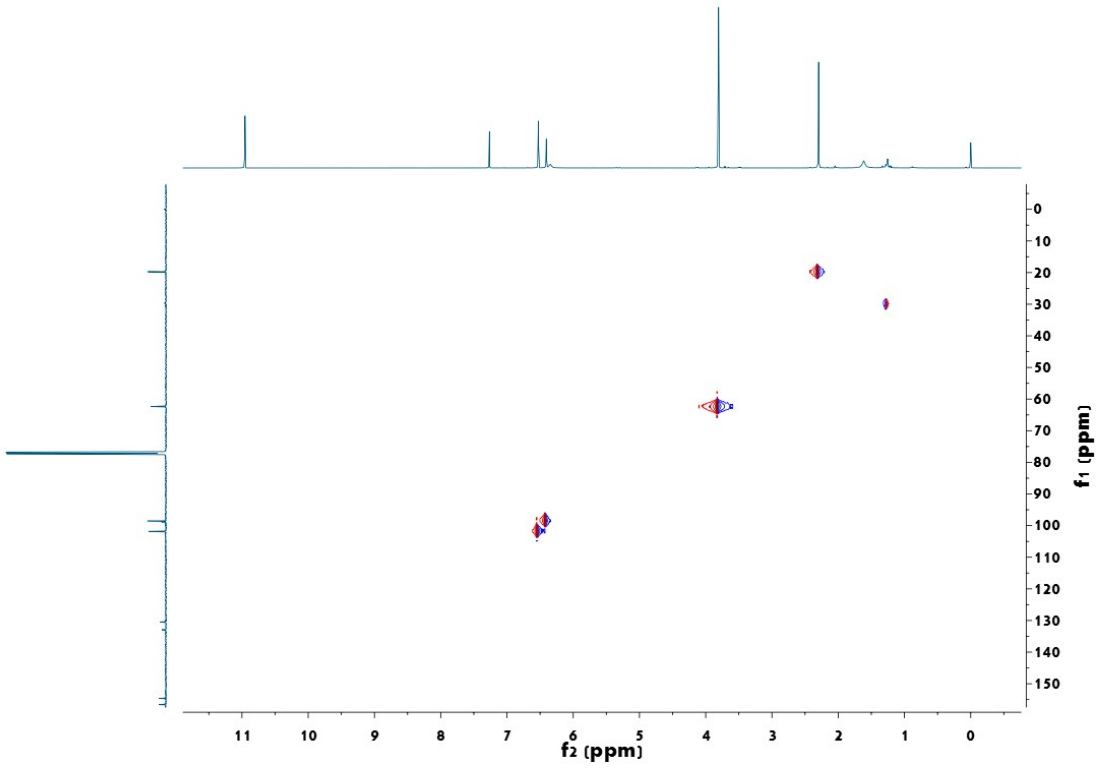

Fig. S11 ^{1}H–^{1}H COSY spectrum of **2** in $CDCl_3$

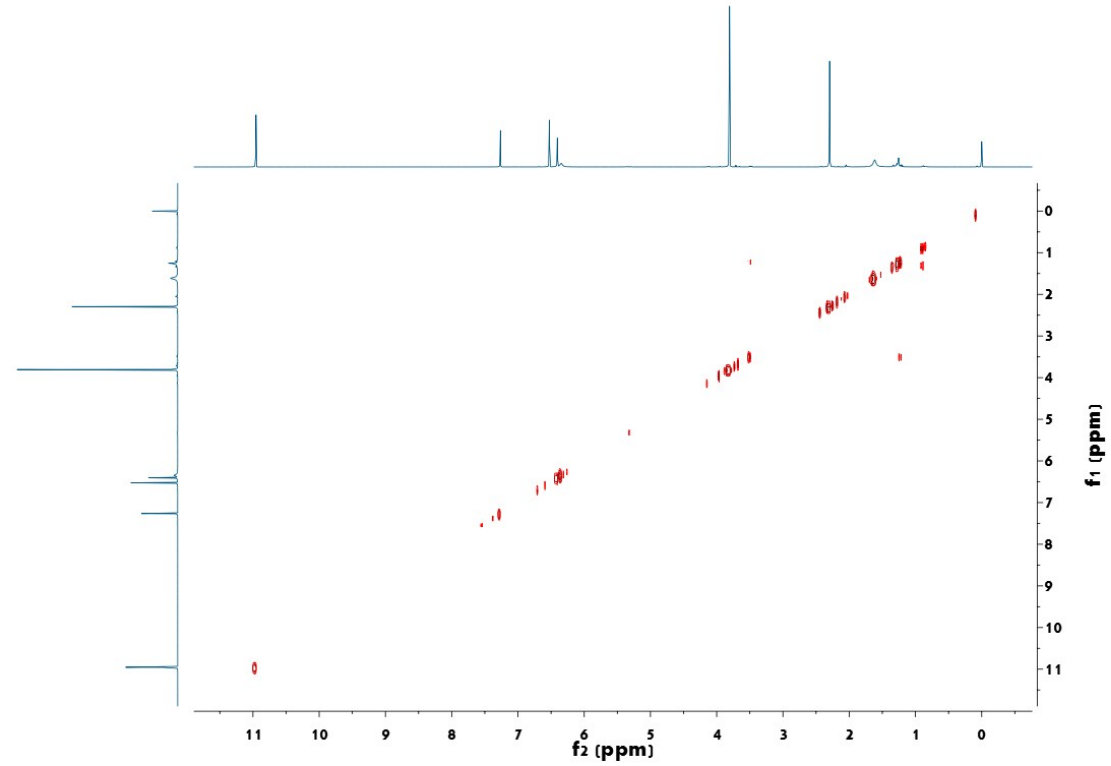

Fig. S12 HMBC spectrum of **2** in $CDCl_3$

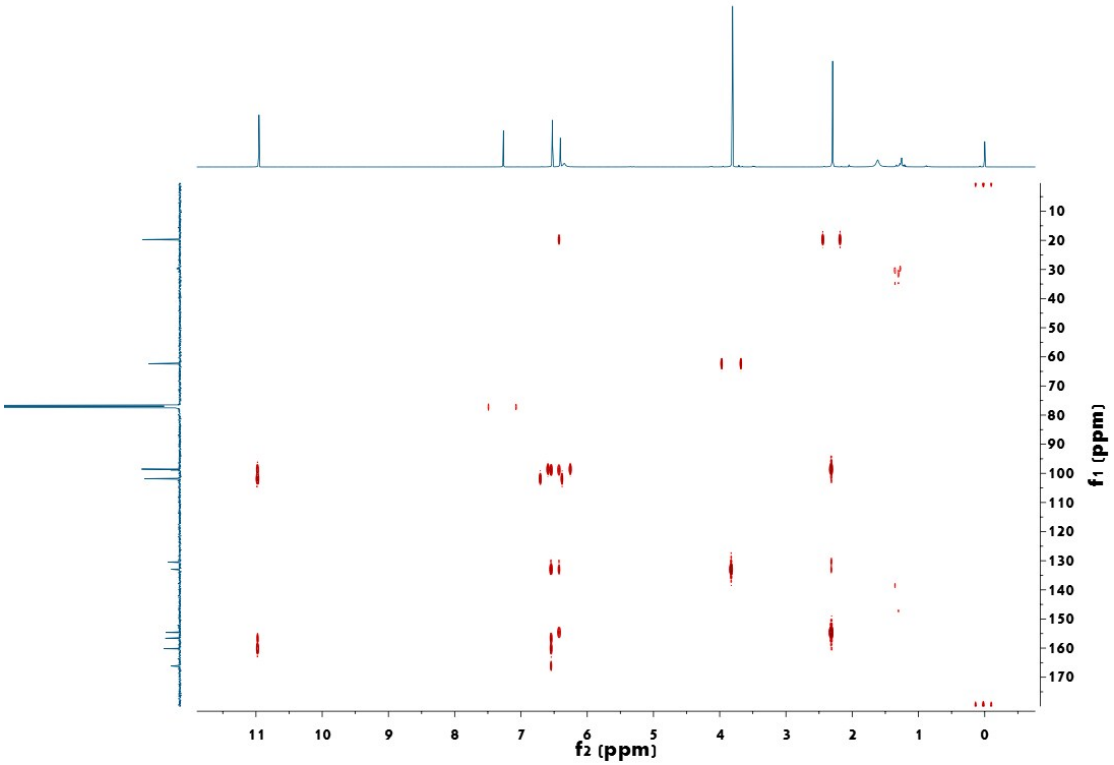

Fig. S13 HRESIMS spectrum of **3**

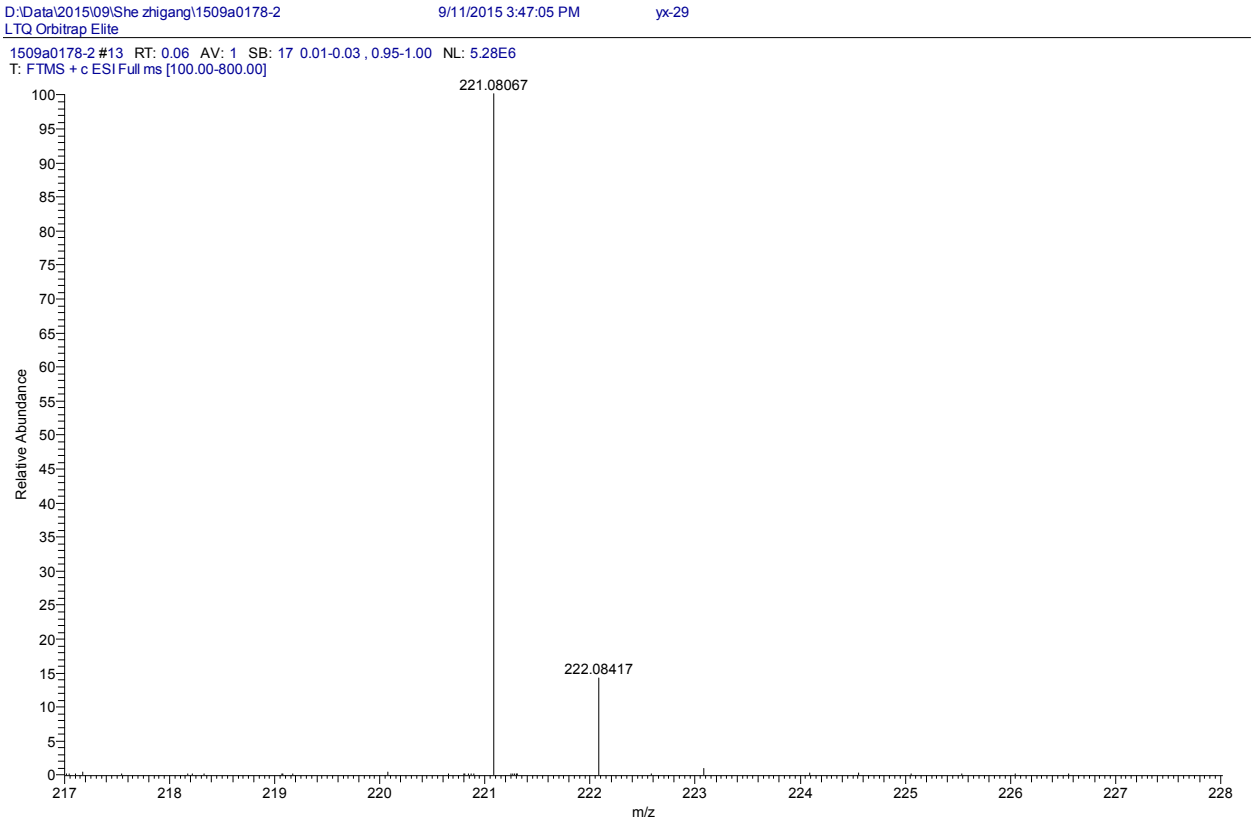

Fig. S14 ^{1}H NMR spectrum of **3** in DMSO-d_6

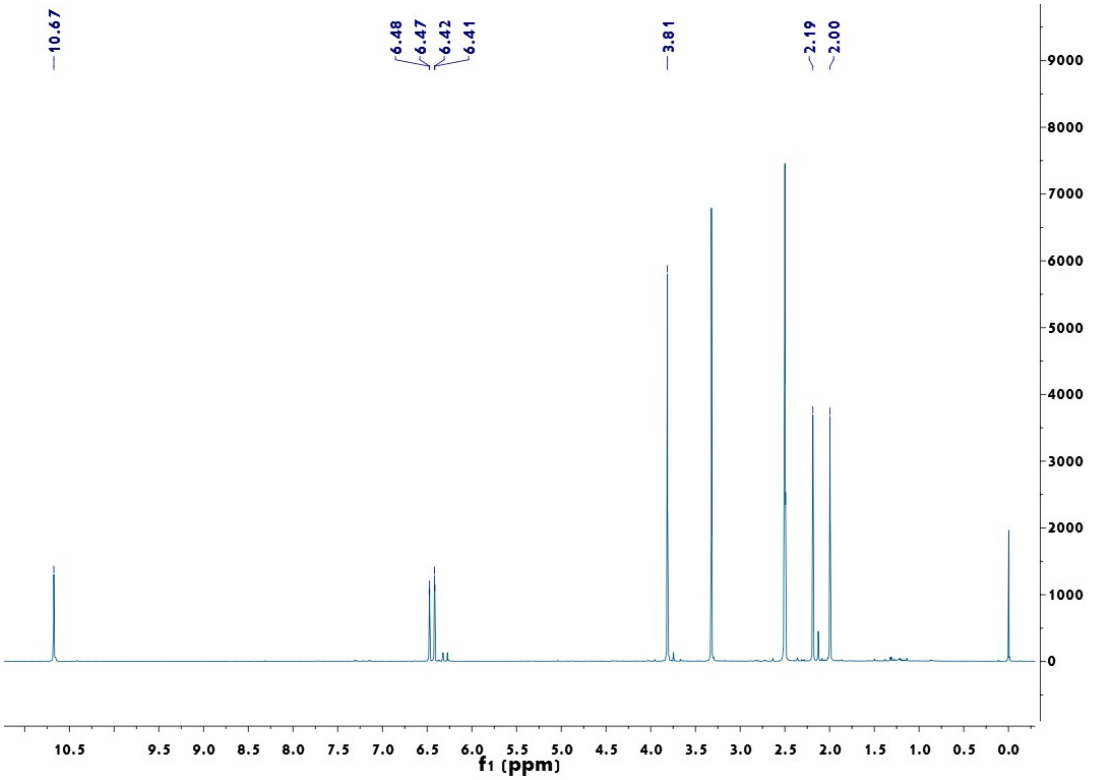

Fig. S15 ^{13}C NMR spectrum of **3** in DMSO-d_6

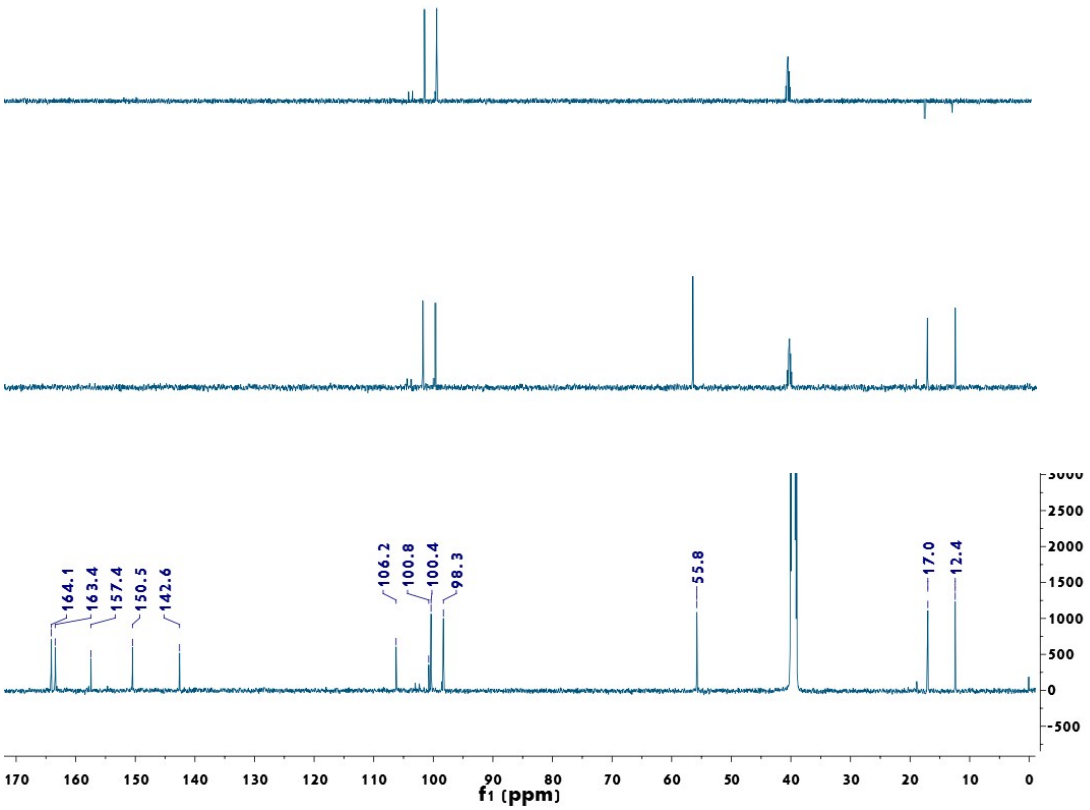

Fig. S16 HSQC spectrum of **3** in DMSO-d_6

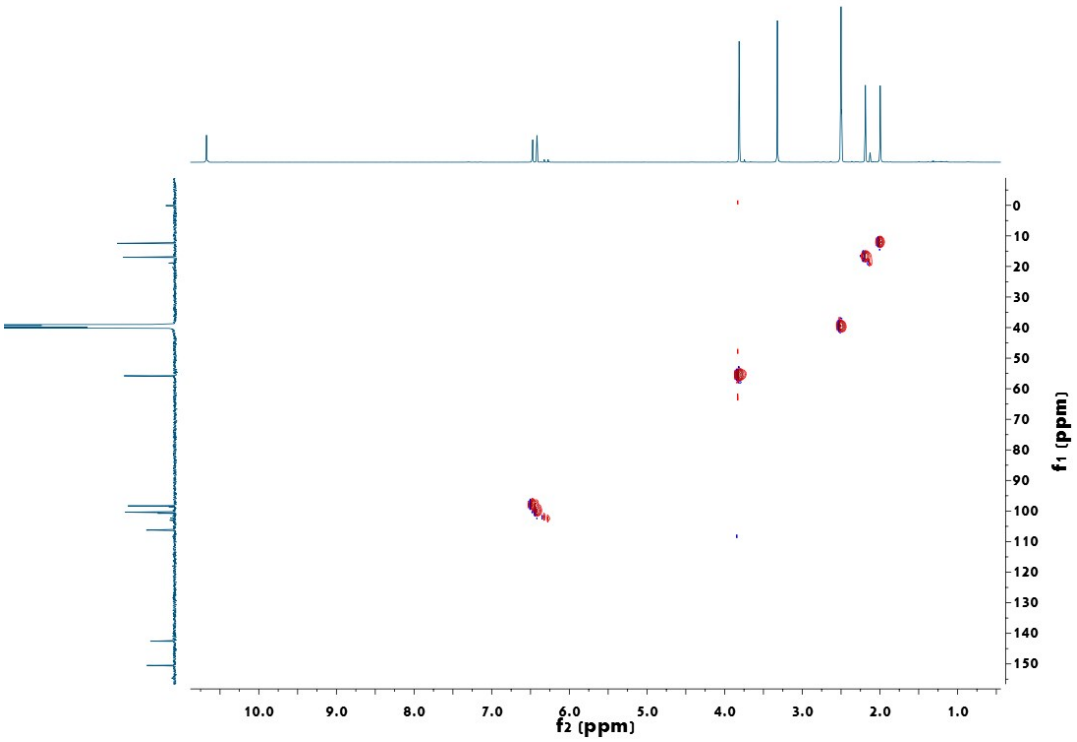

Fig. S17 ^{1}H–^{1}H COSY spectrum of **3** in DMSO-d_6

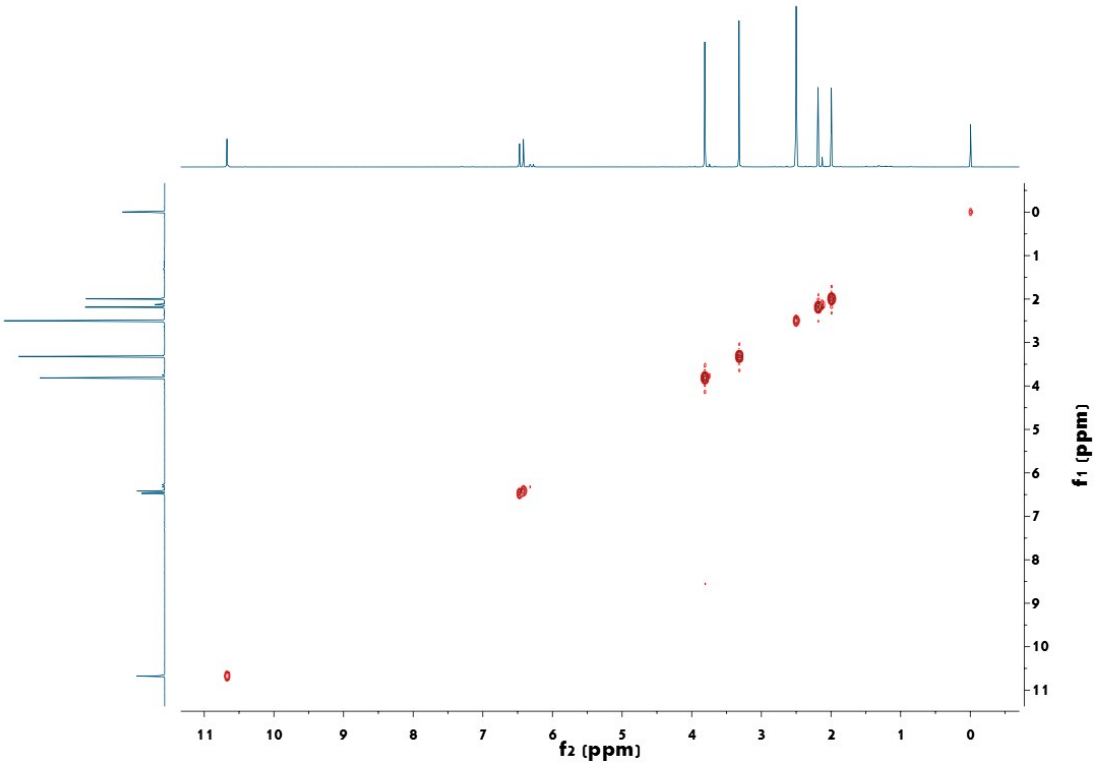

Fig. S18 HMBC spectrum of **3** in DMSO-d_6

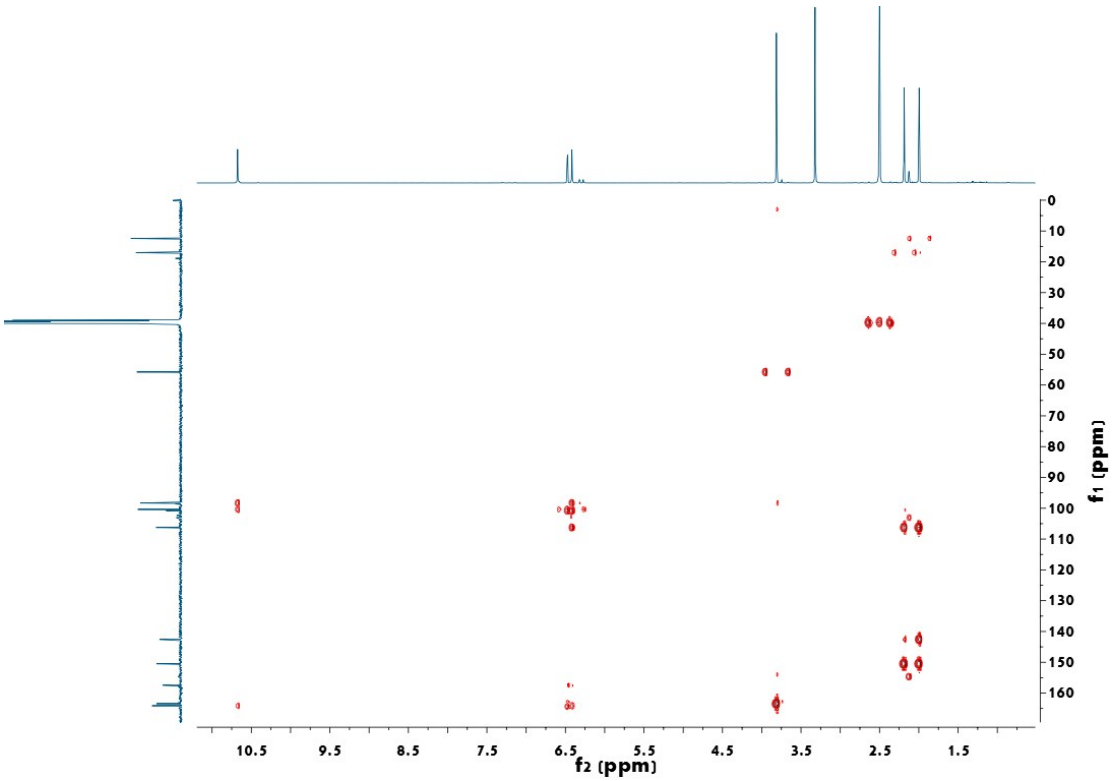

Fig. S19 HRESIMS spectrum of **4**

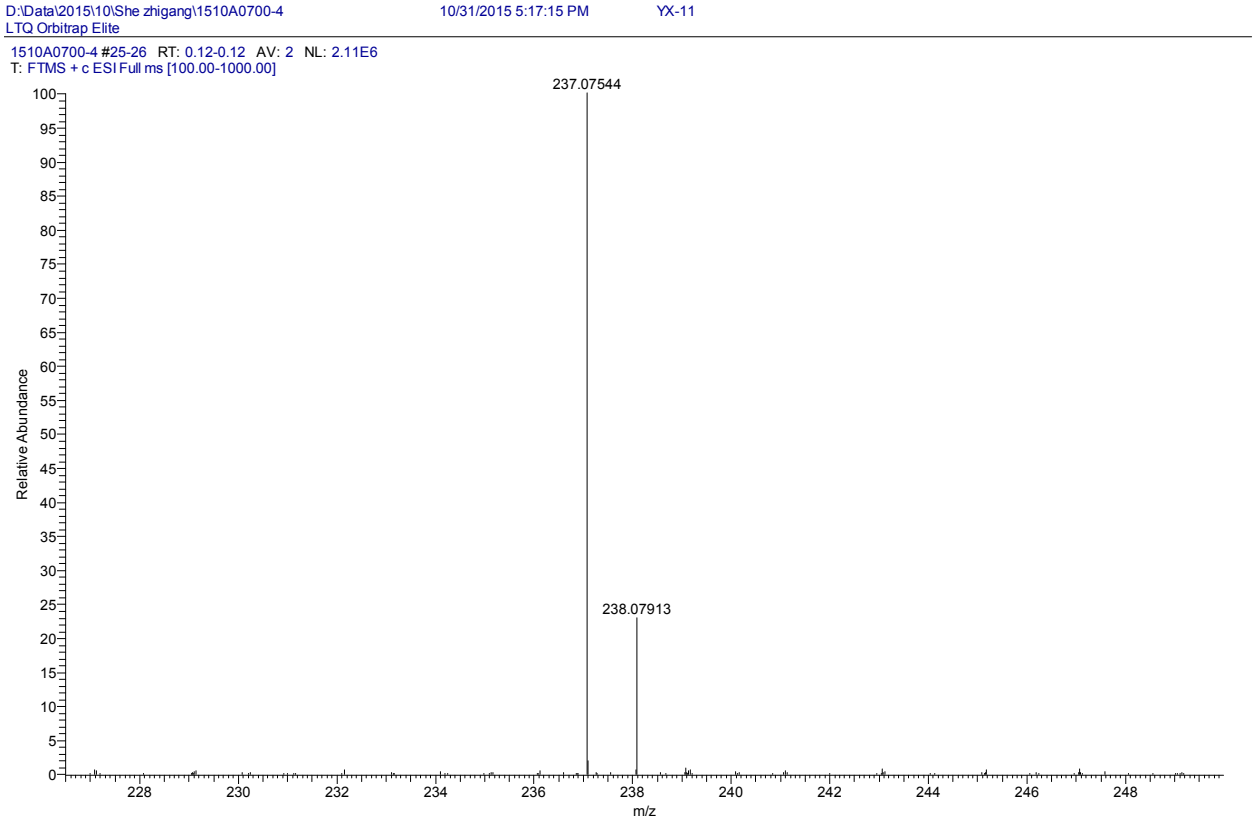

Fig. S20 ^{1}H NMR spectrum of **4** in DMSO-d_6

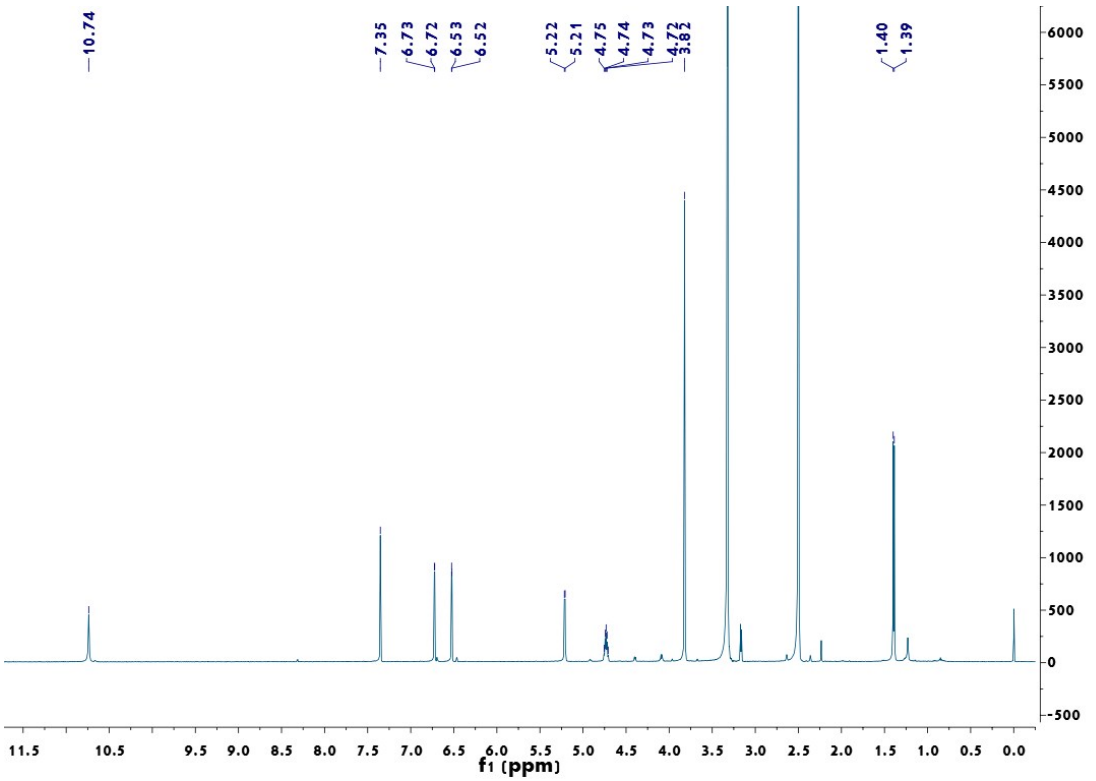

Fig. S21 ^{13}C NMR spectrum of **4** in DMSO-d_6

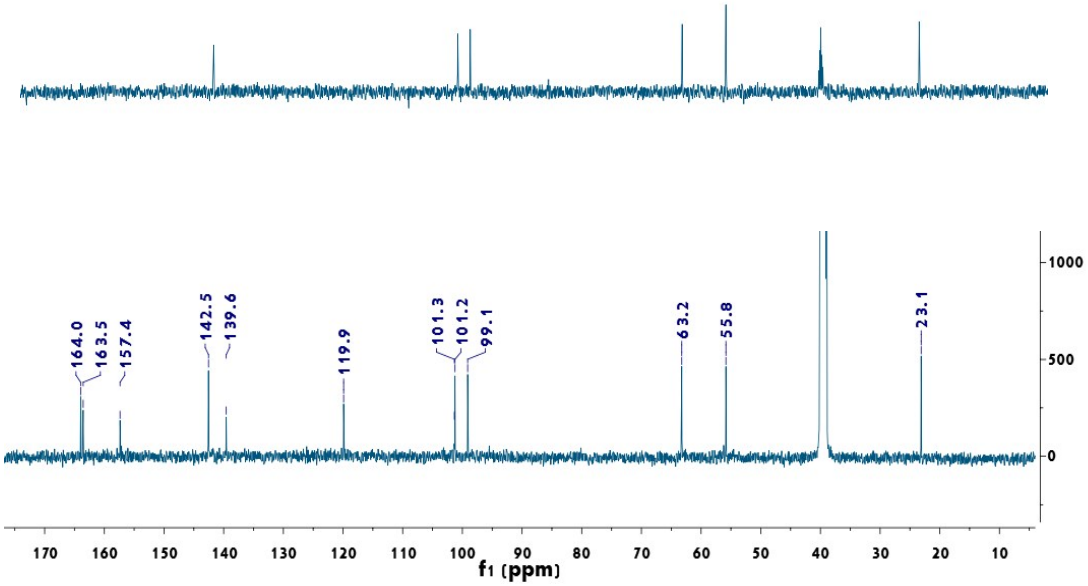

Fig. S22 HSQC spectrum of **4** in DMSO-d_6

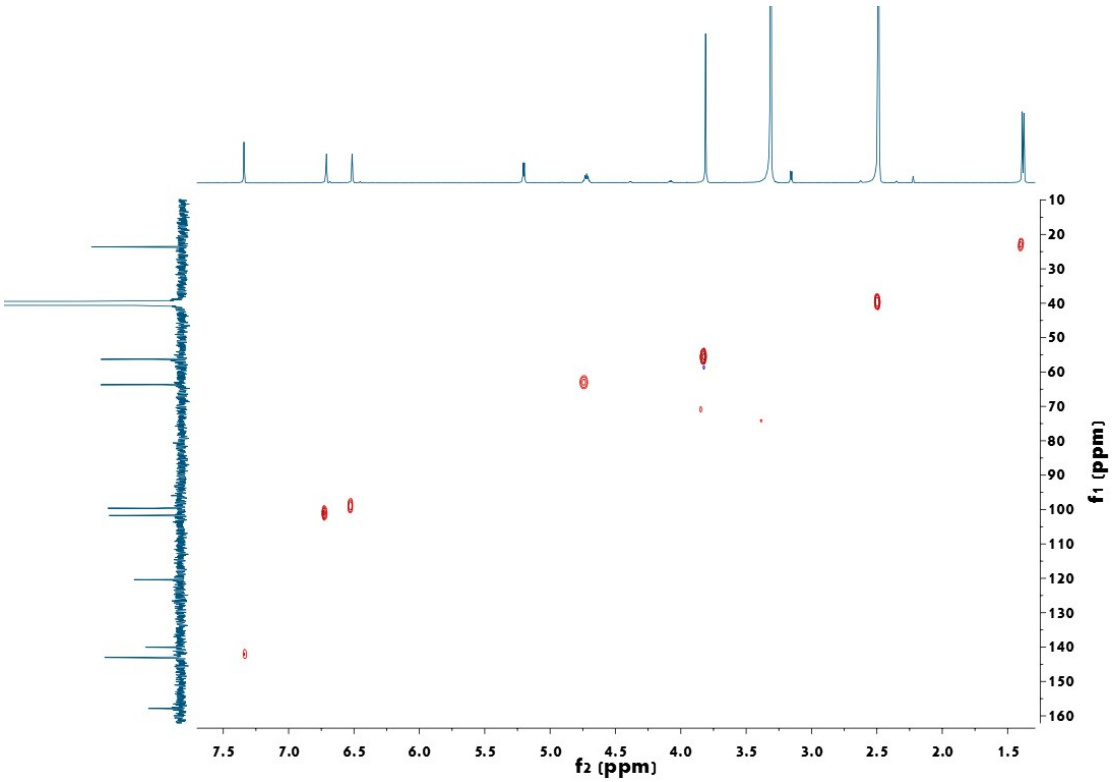

Fig. S23 ^{1}H–^{1}H COSY spectrum of **4** in DMSO-d_6

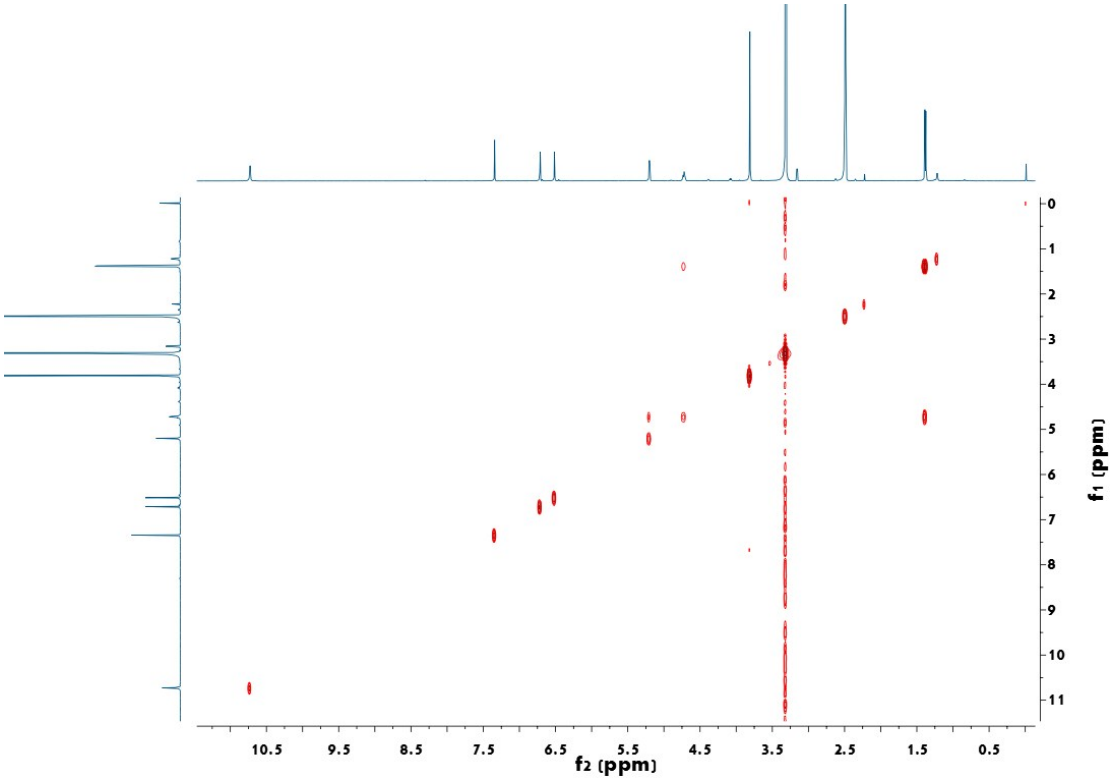

Fig. S24 HMBC spectrum of **4** in DMSO-d_6

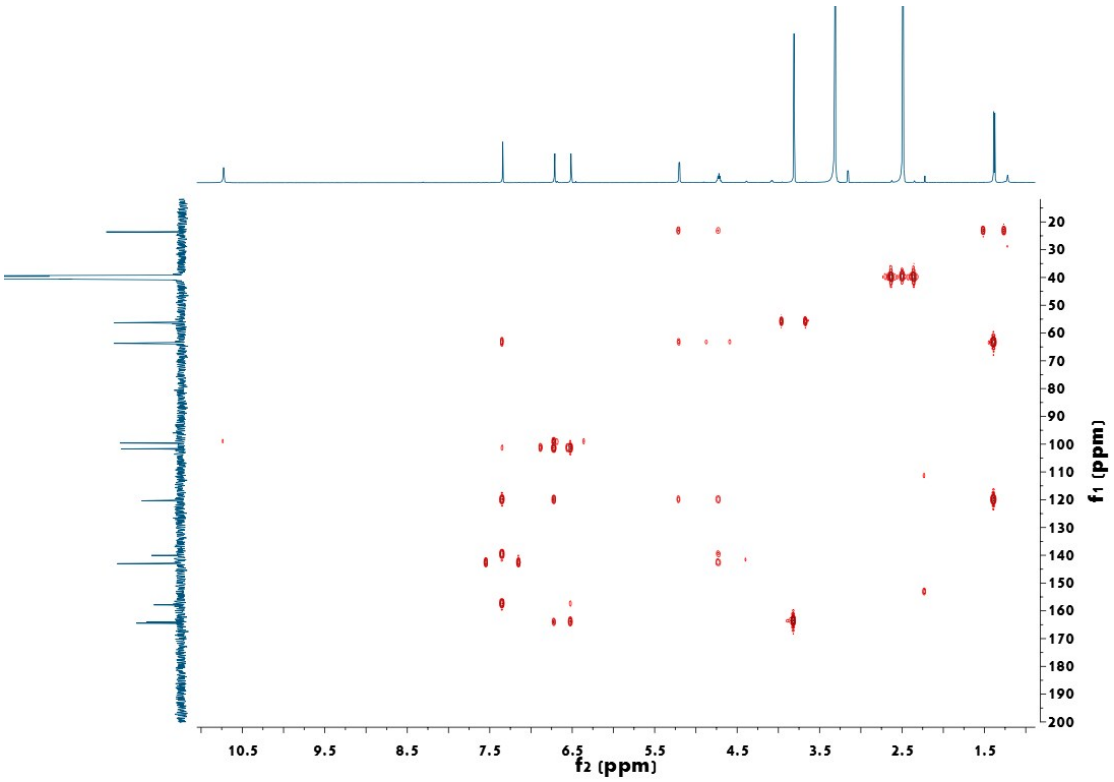

Fig. S25 HRESIMS spectrum of **14**

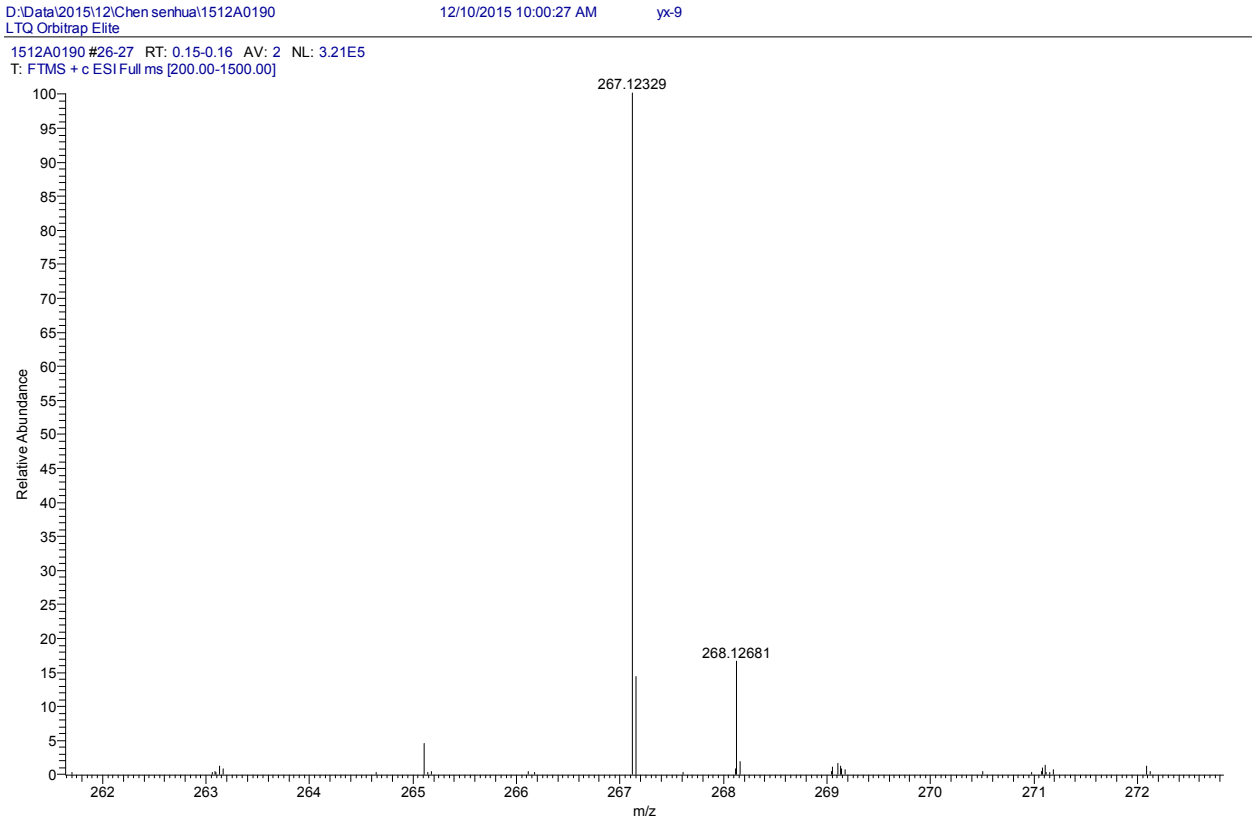

Fig. S26 ^{1}H NMR spectrum of **14** MeOH-d_4.

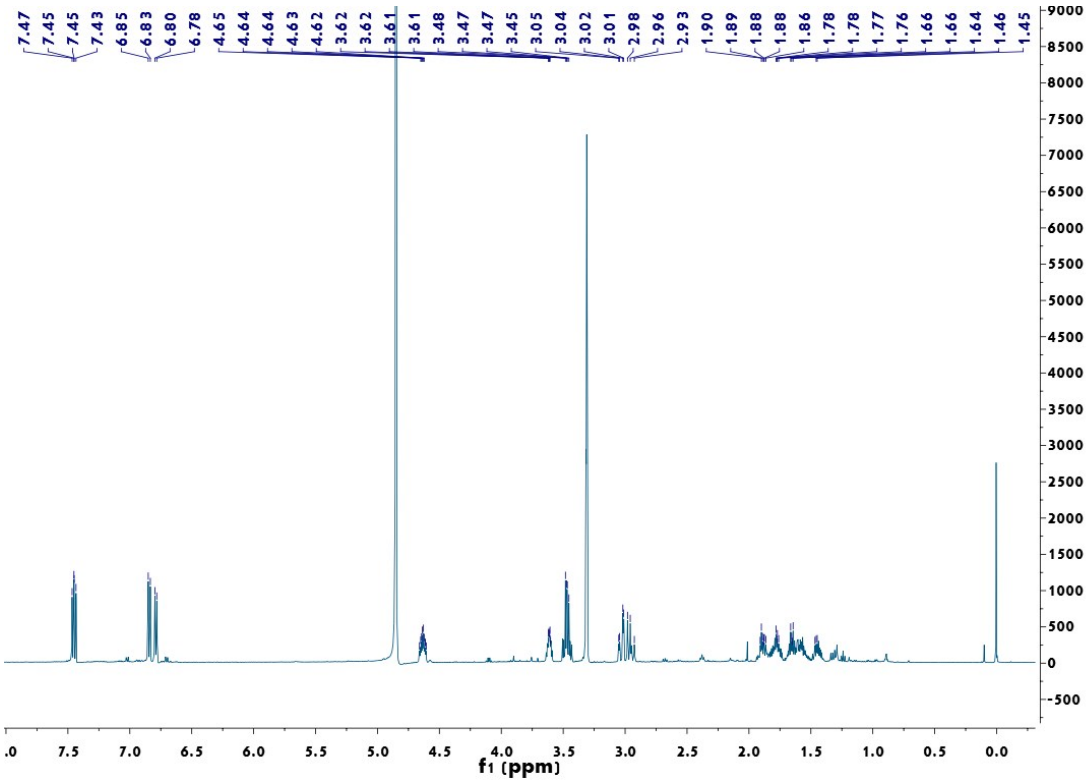

Fig. S27 ^{13}C NMR spectrum of **14** in MeOH-d_4.

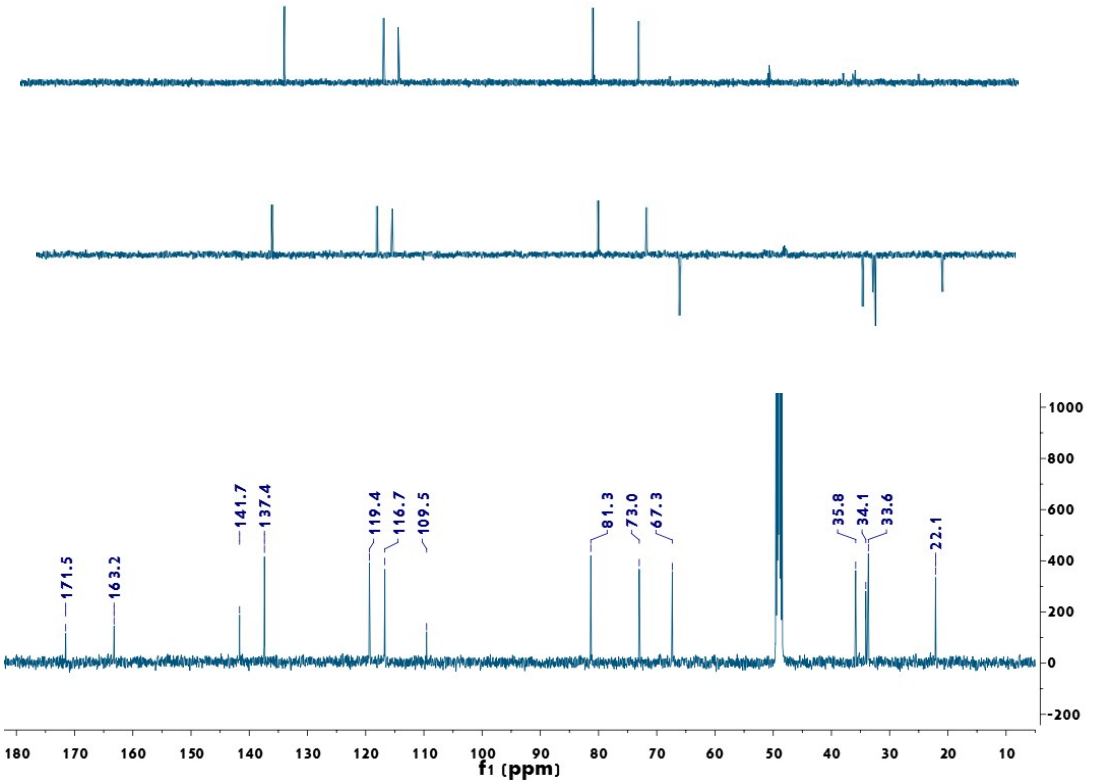

Fig. S28 HSQC spectrum of **14** in MeOH-d_4.

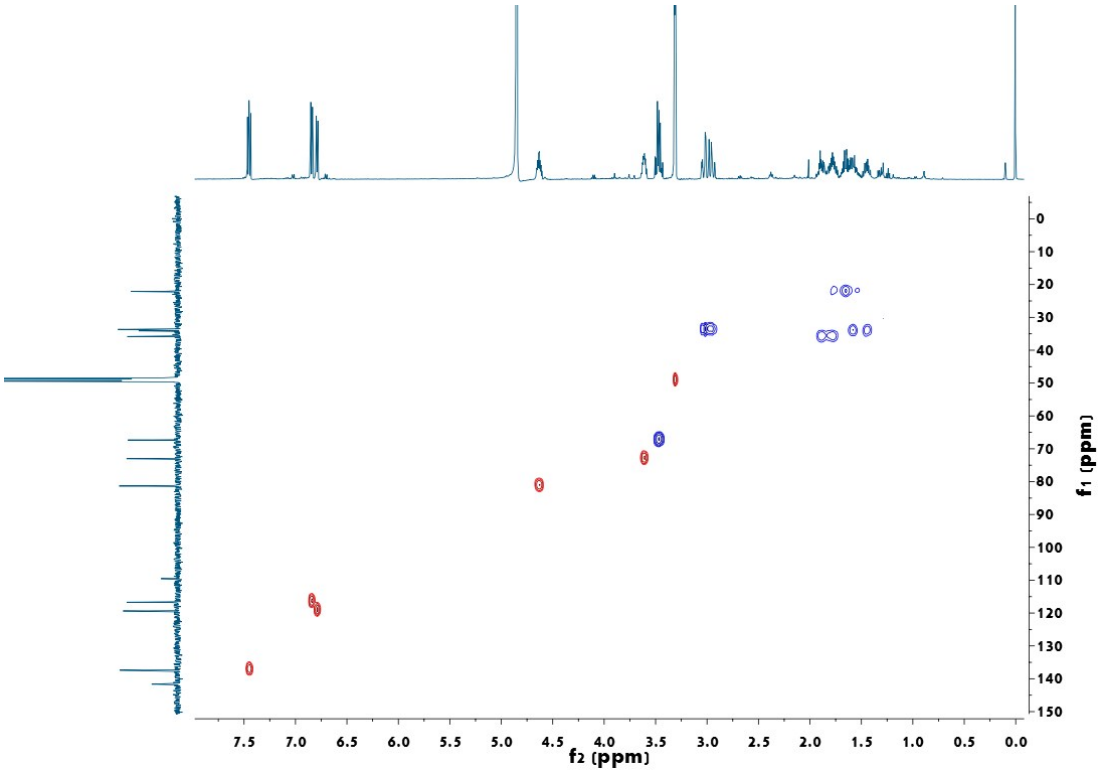

Fig. S29 ^{1}H–^{1}H COSY spectrum of **14** in MeOH-d_4.

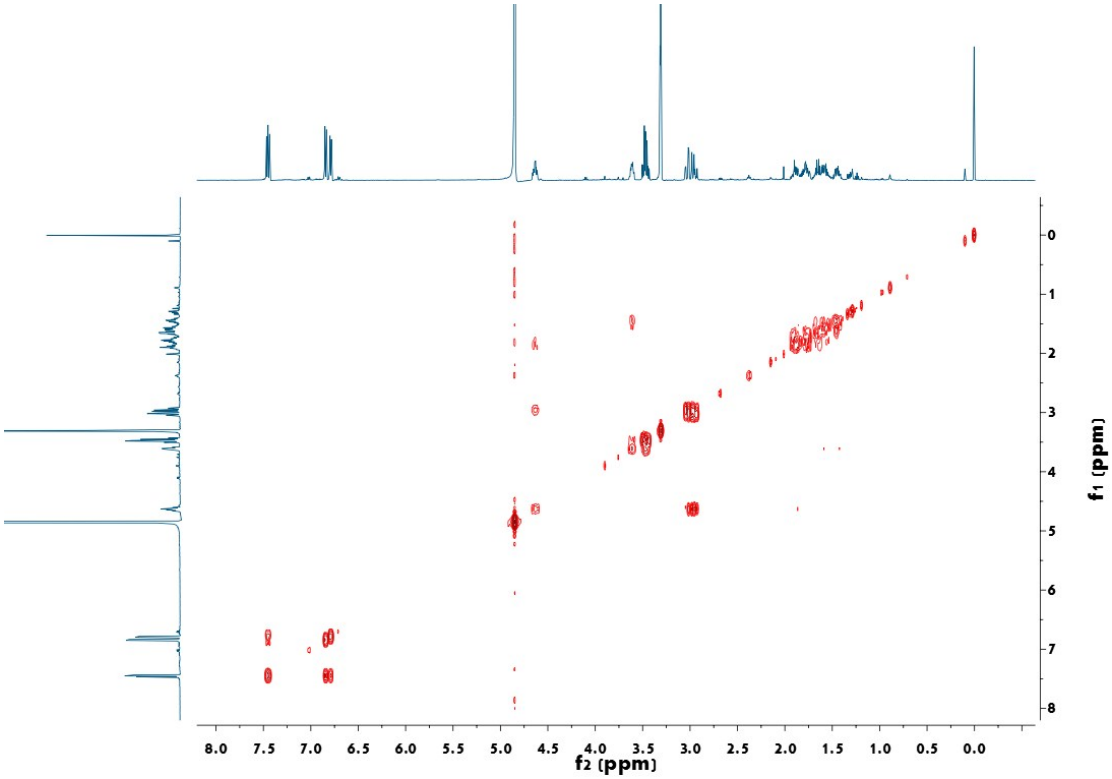

Fig. S30 HMBC spectrum of **14** in MeOH-d_4.

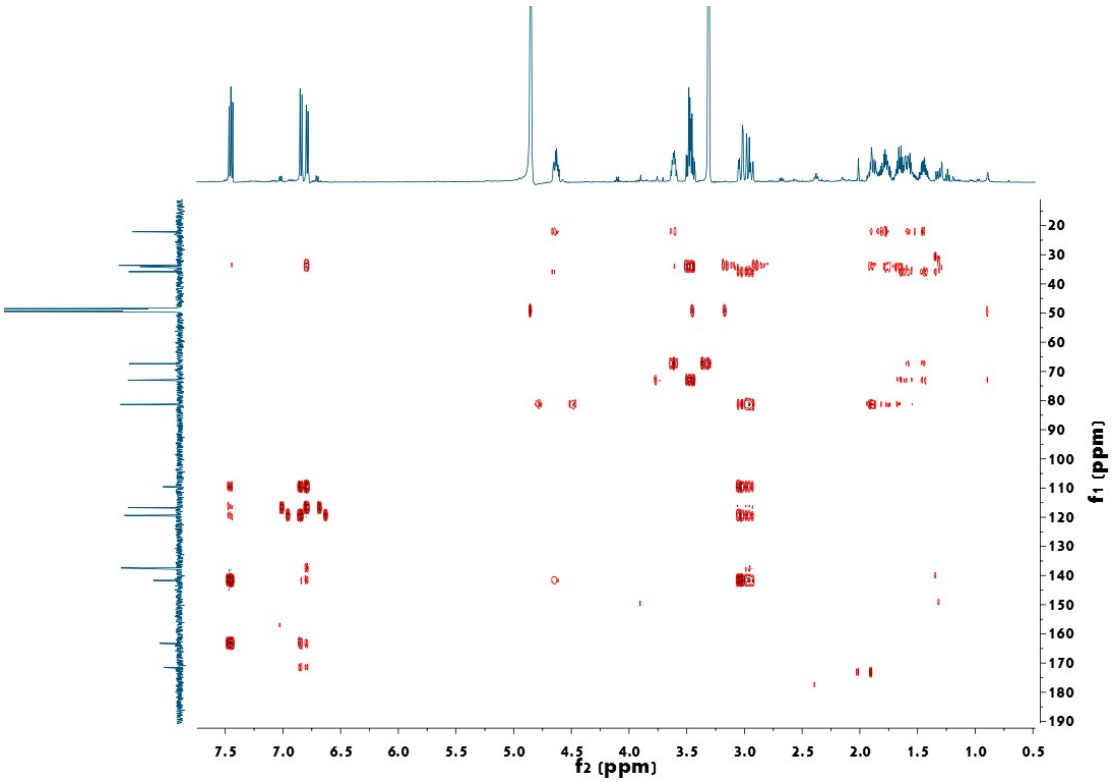

Fig. S31 HREIMS spectrum of **15**

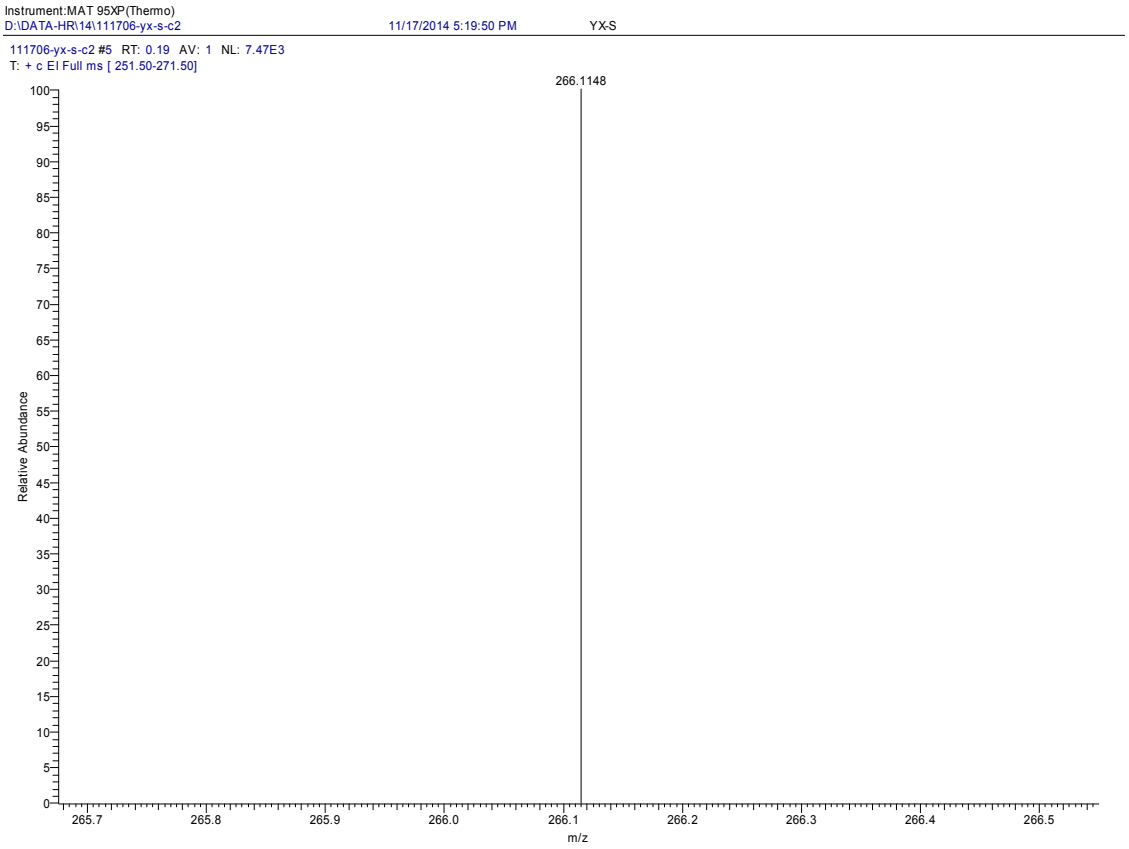

Fig. S32 ^{1}H NMR spectrum of **15** MeOH-d_4.

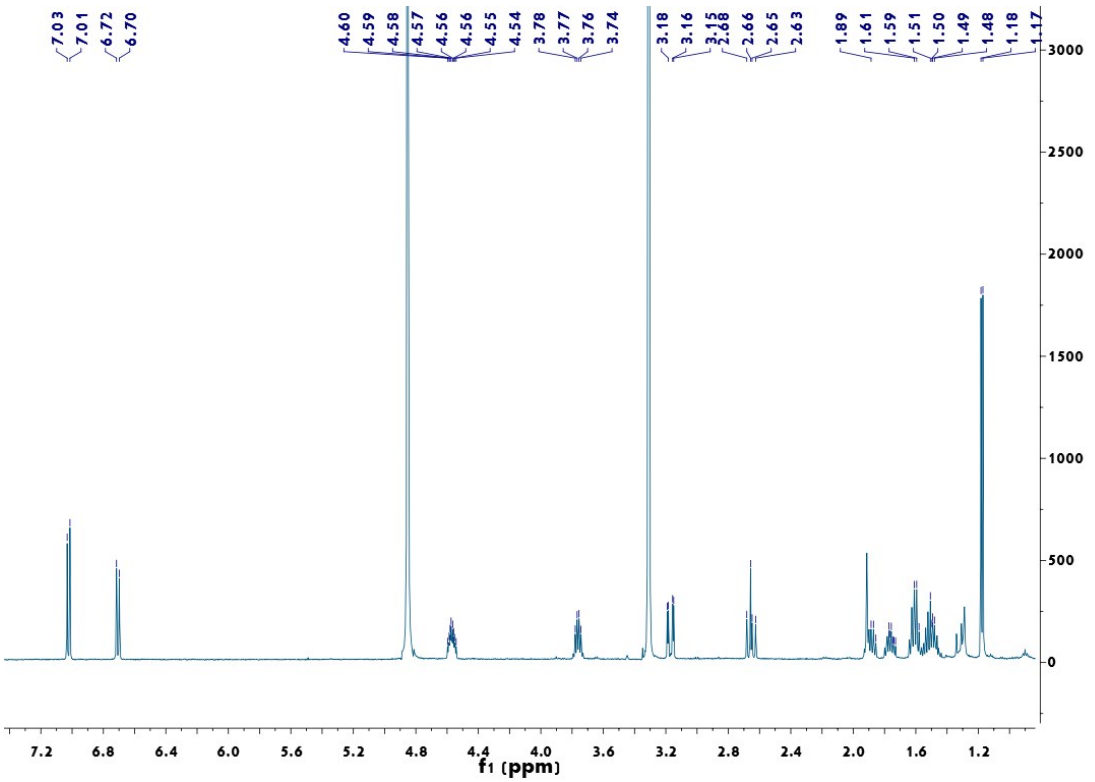

Fig. S33 ^{13}C NMR spectrum of **15** in MeOH-d_4.

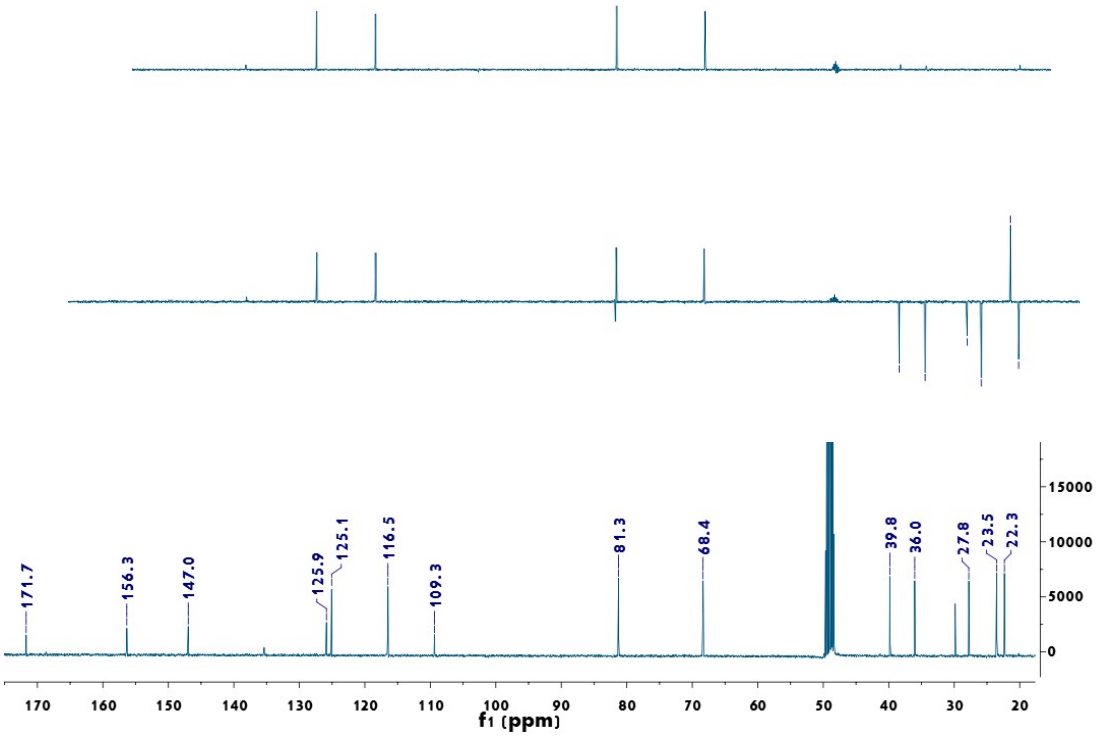

Fig. S34 HSQC spectrum of **15** in MeOH-d_4.

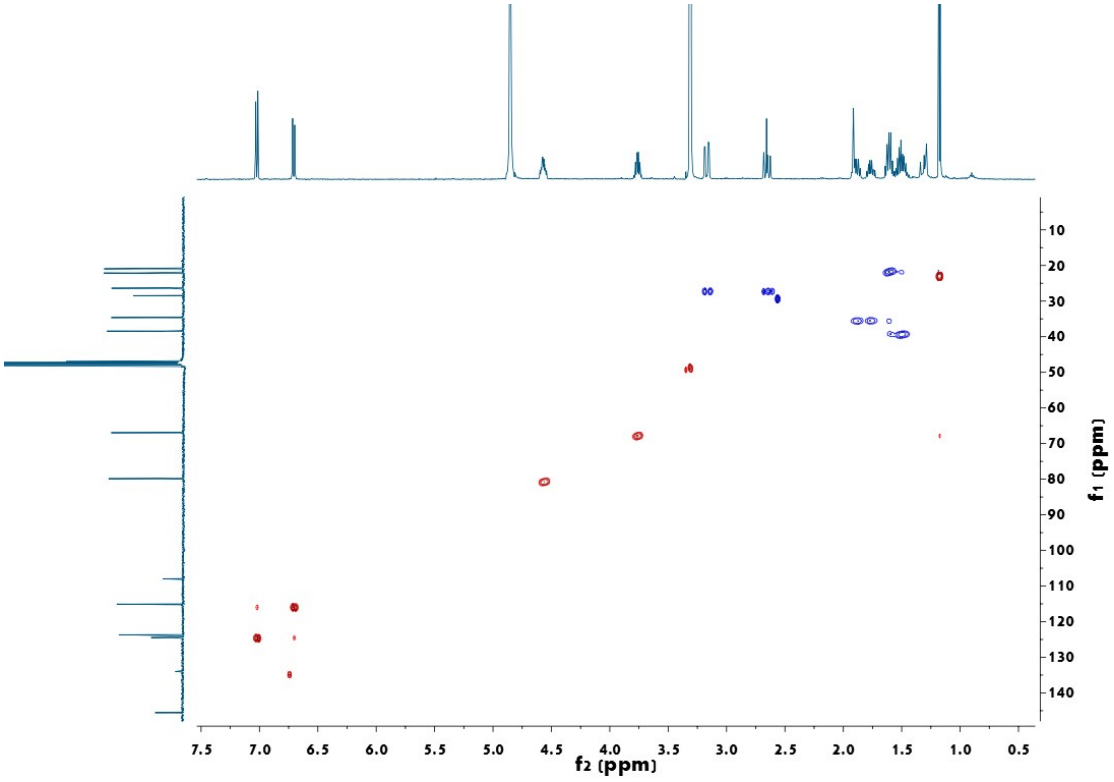

Fig. S35 ^{1}H–^{1}H COSY spectrum of **15** in MeOH-d_4.

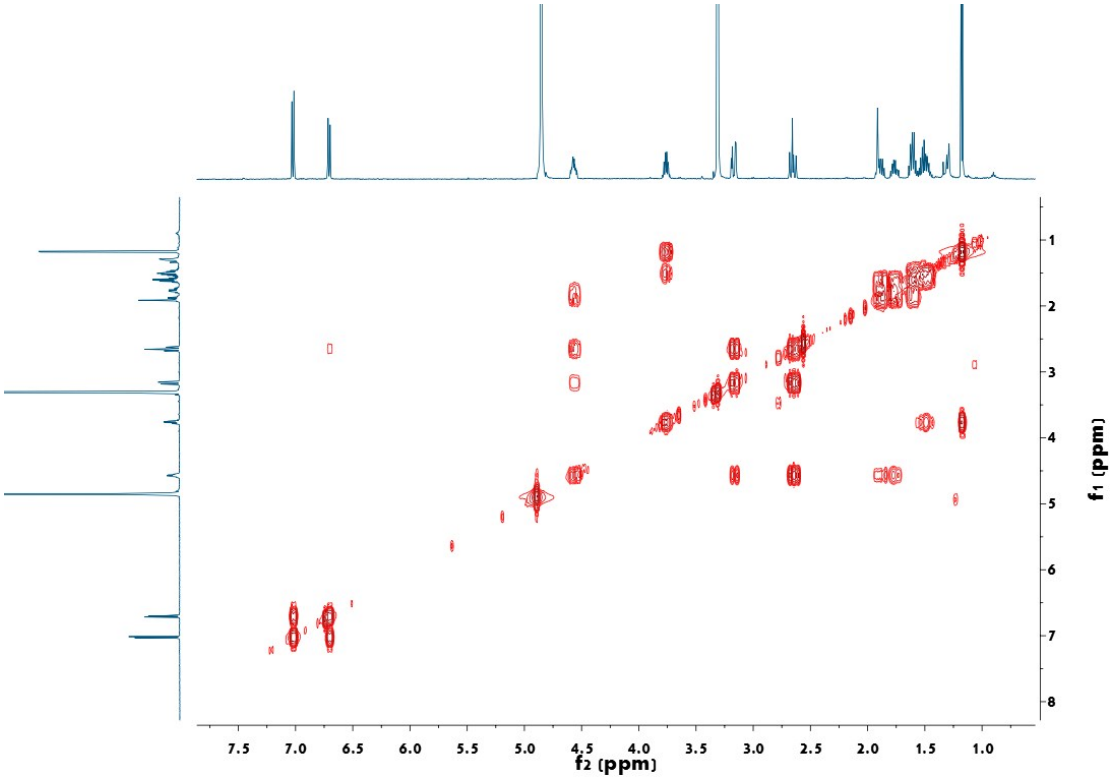

Fig. S36 HMBC spectrum of **15** in MeOH-d_4.

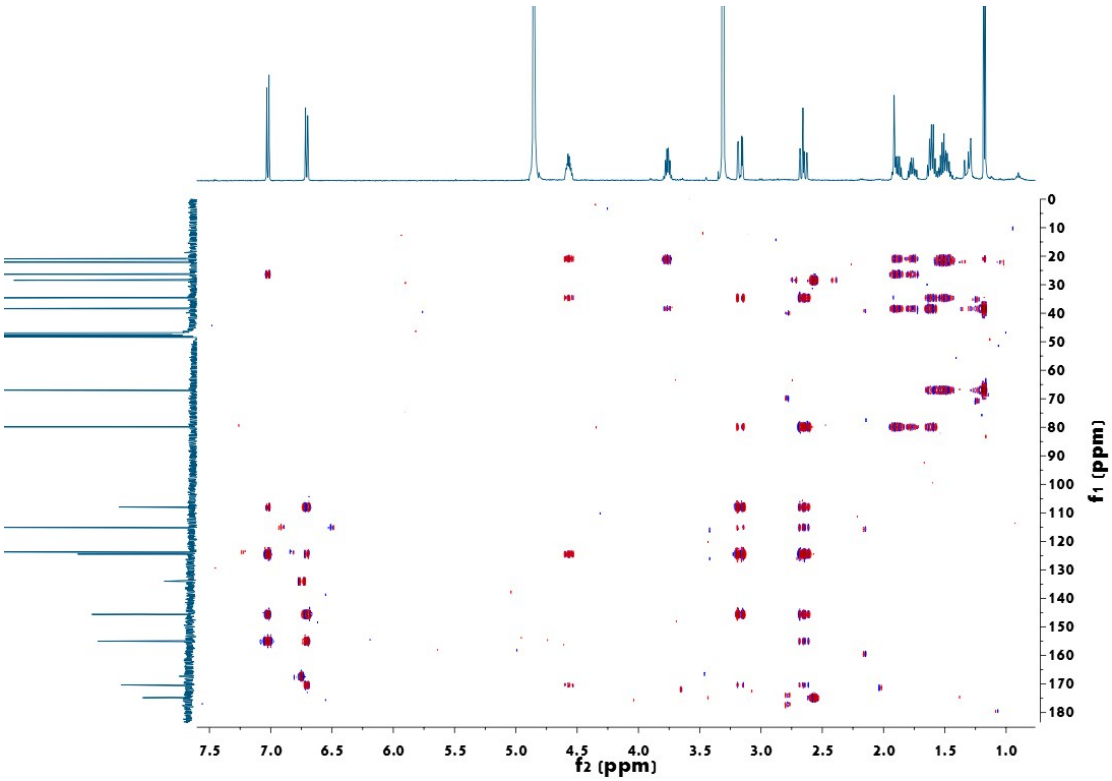

Fig. S37 HREIMS spectrum of **16**

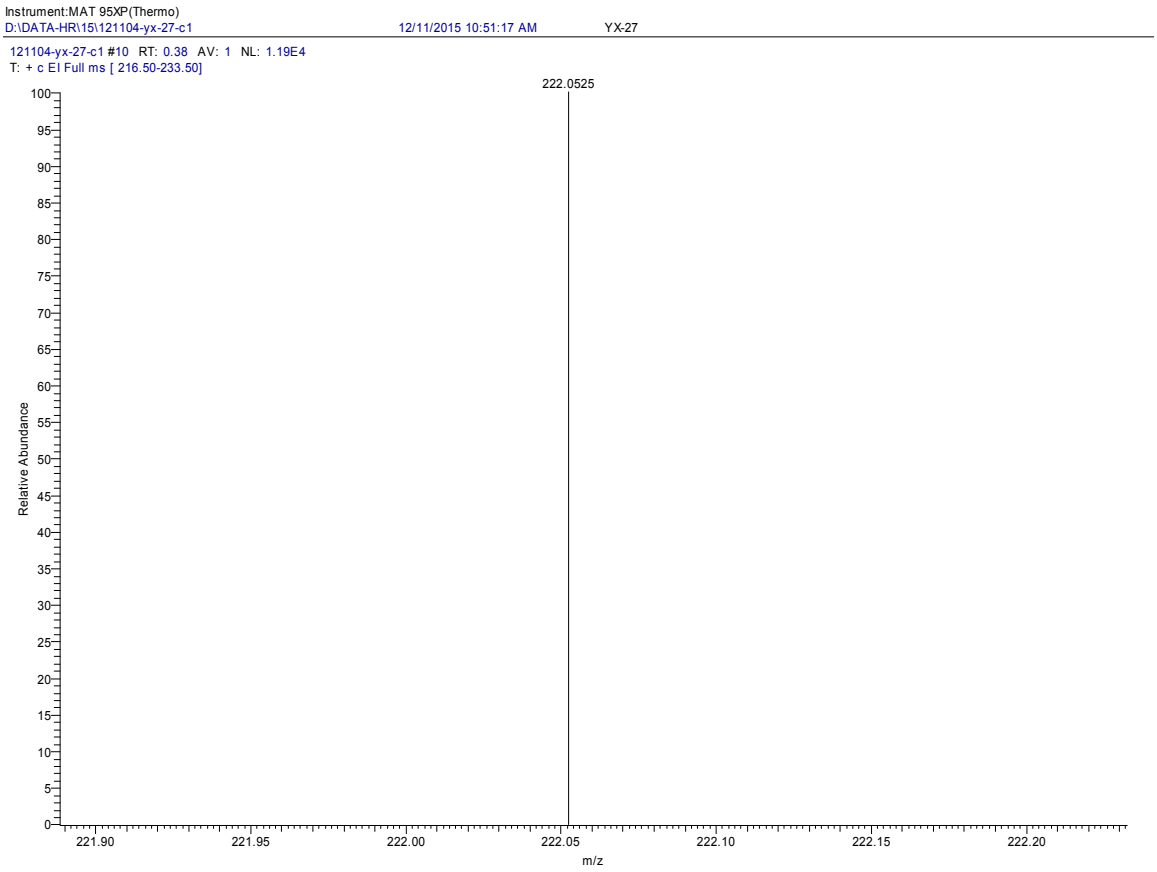

Fig. S38 ^{1}H NMR spectrum of **16** MeOH-d_4.

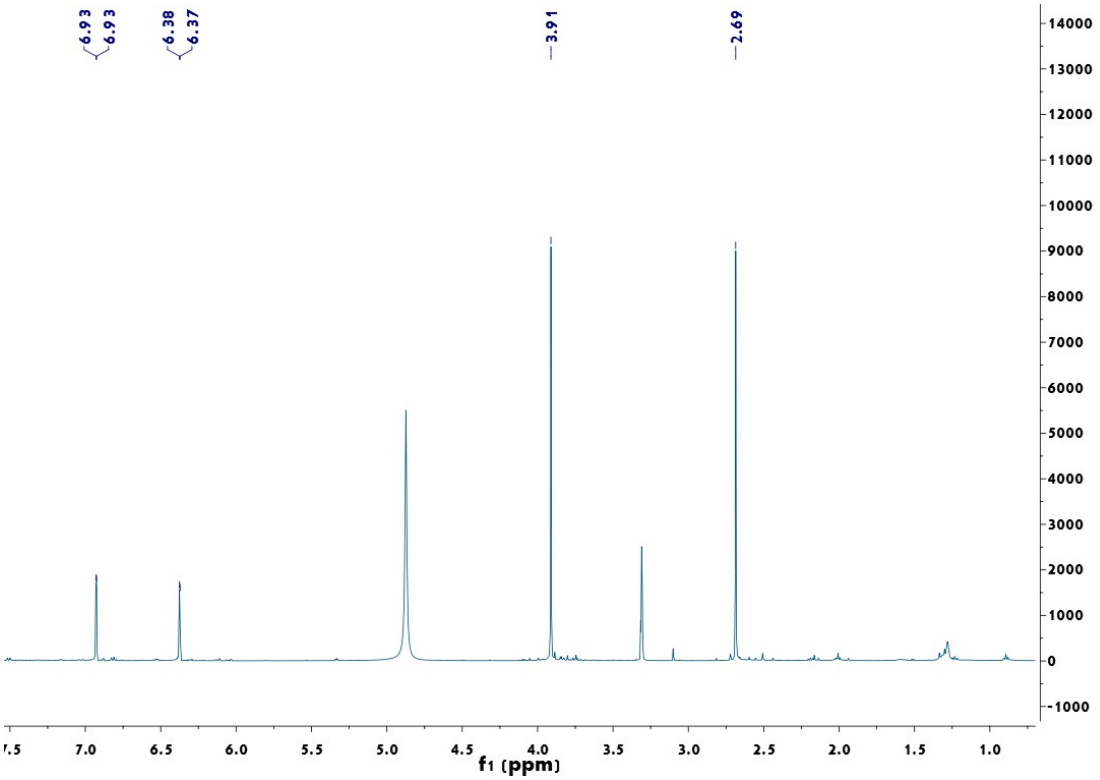

Fig. S39 ^{13}C NMR spectrum of **16** in MeOH-d_4.

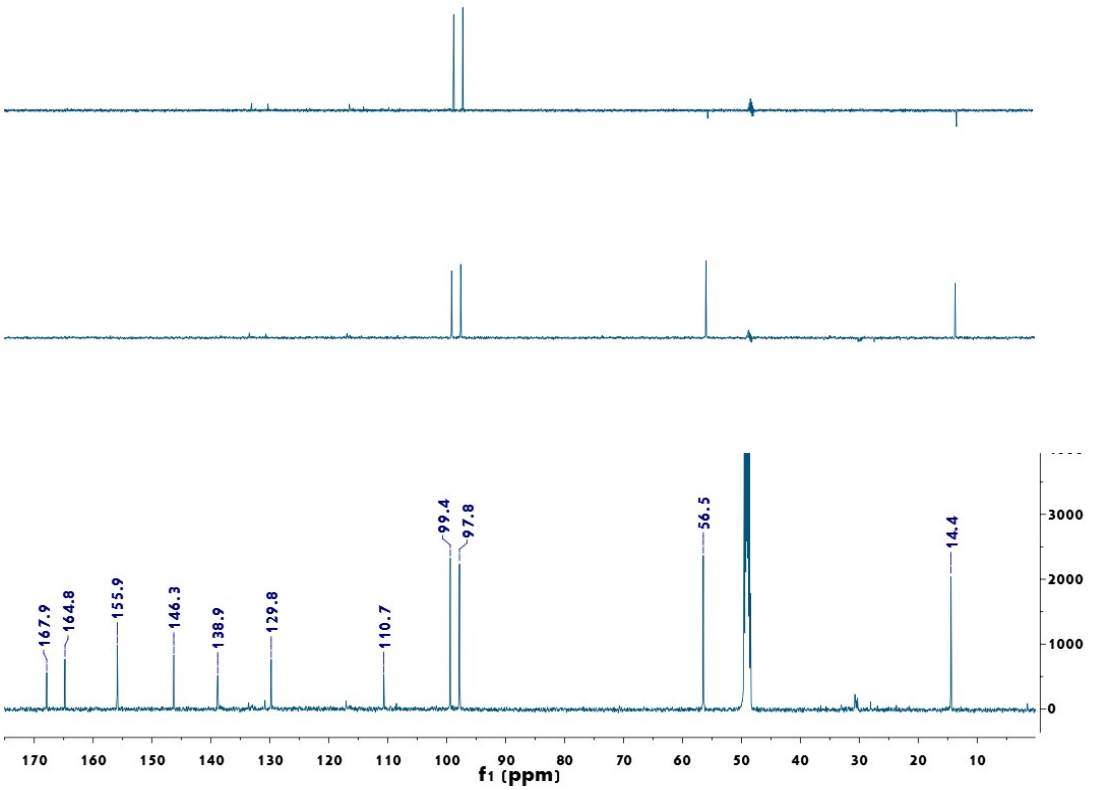

Fig. S40 HSQC spectrum of **16** in MeOH-d_4.

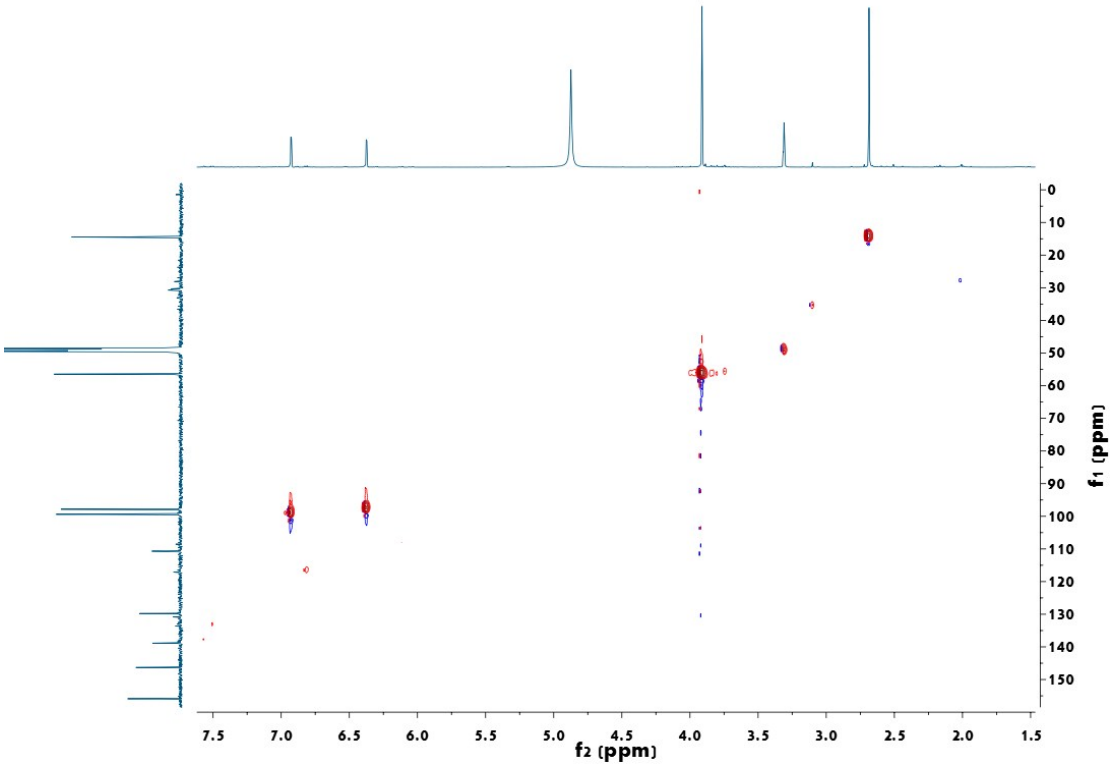

Fig. S41 ^{1}H–^{1}H COSY spectrum of **16** in MeOH-d_4.

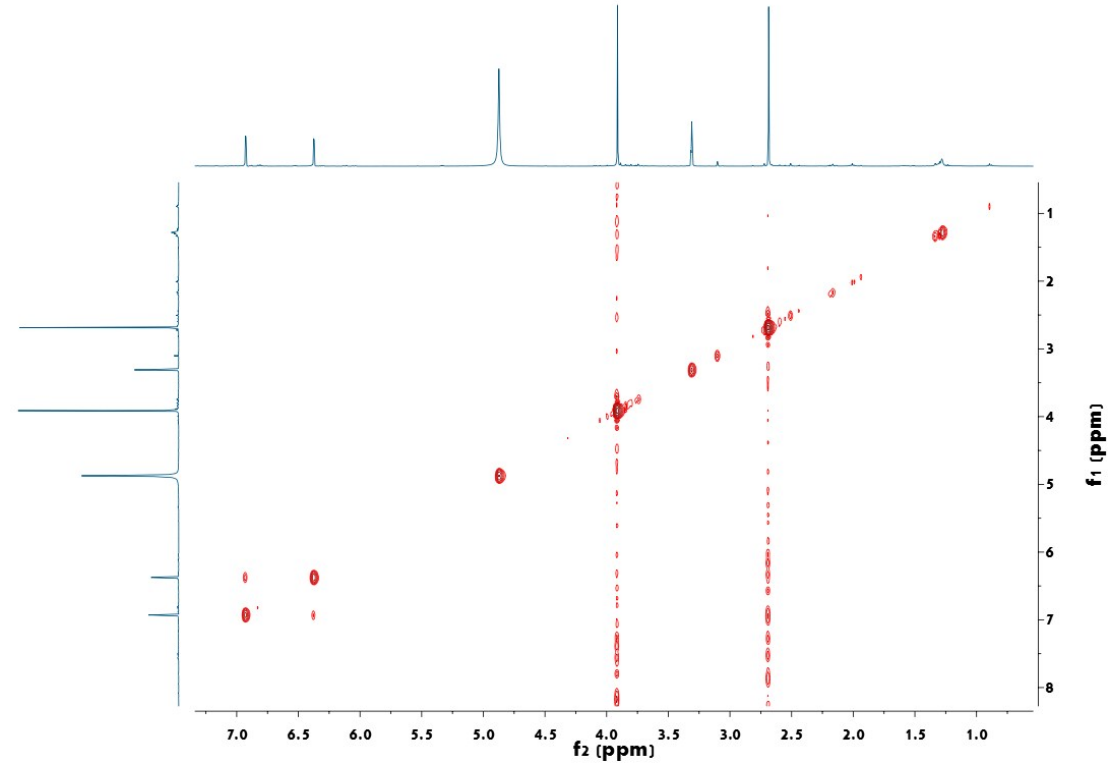

Fig. S42 HMBC spectrum of **16** in MeOH-d_4.

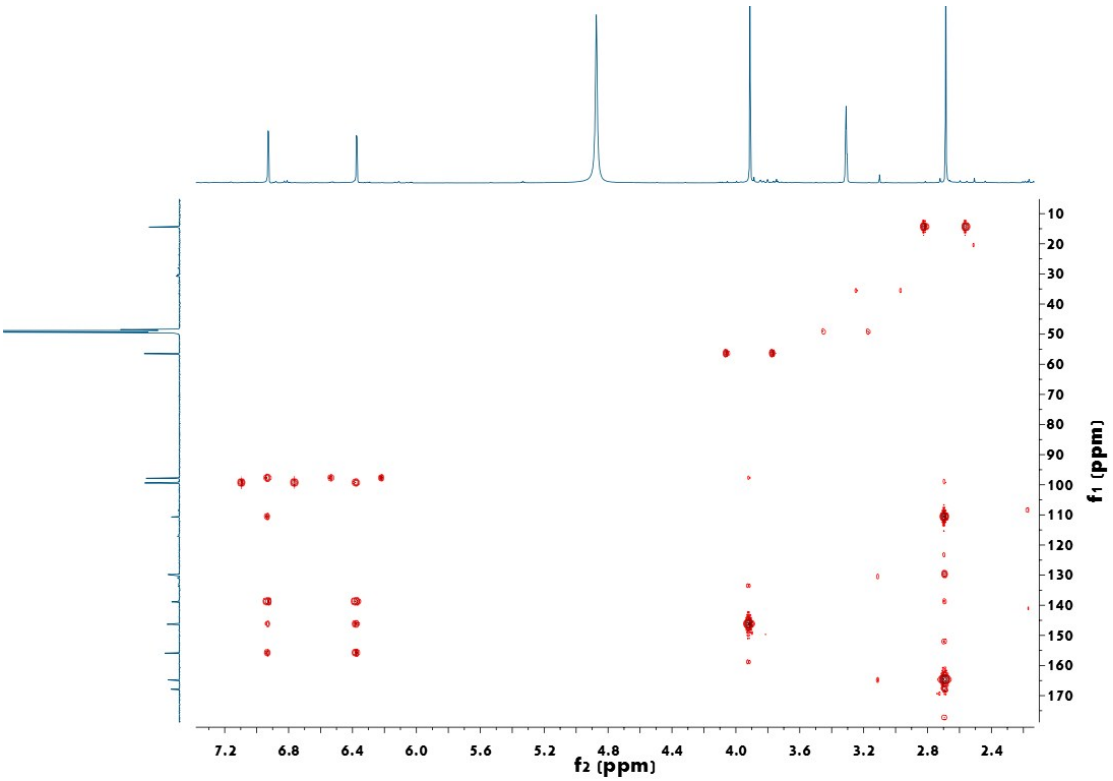

Fig. S43 HRESIMS spectrum of **17**

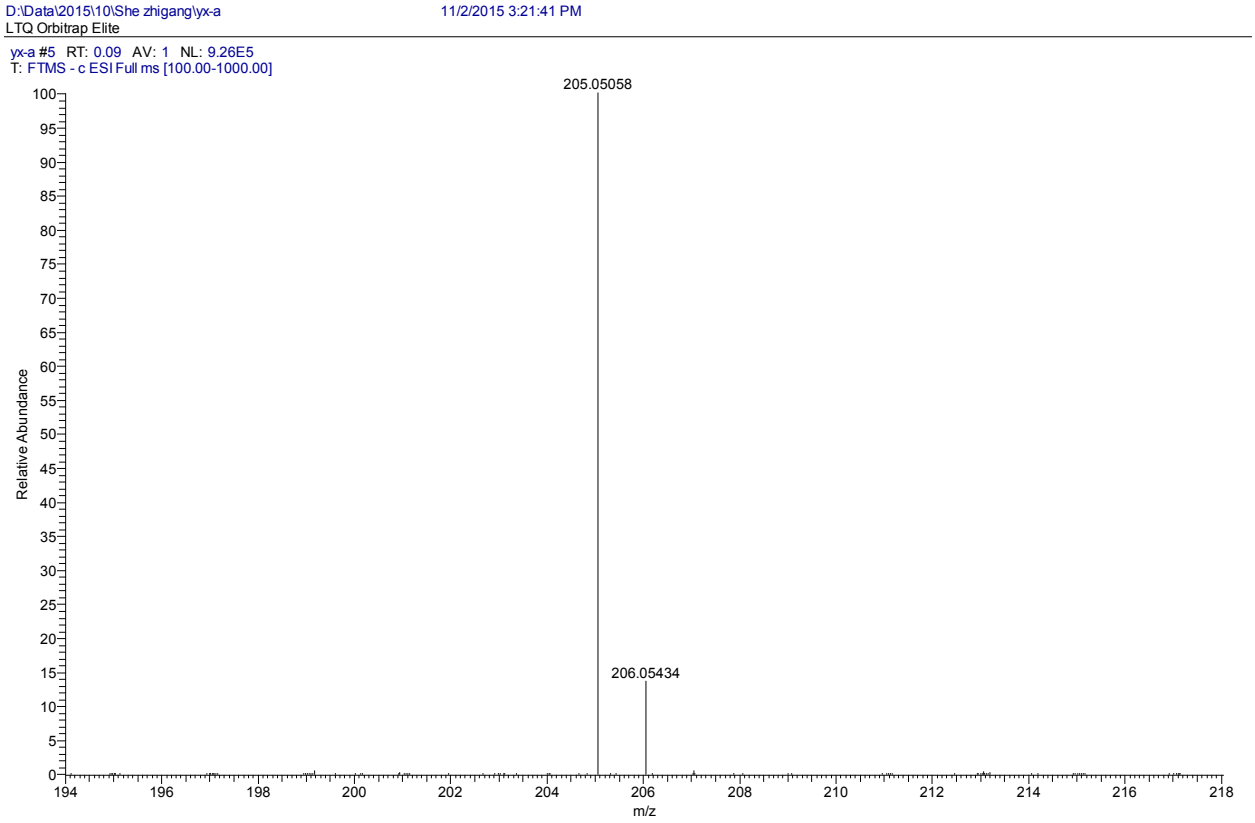

Fig. S44 ^{1}H NMR spectrum of **17** MeOH-d_4.

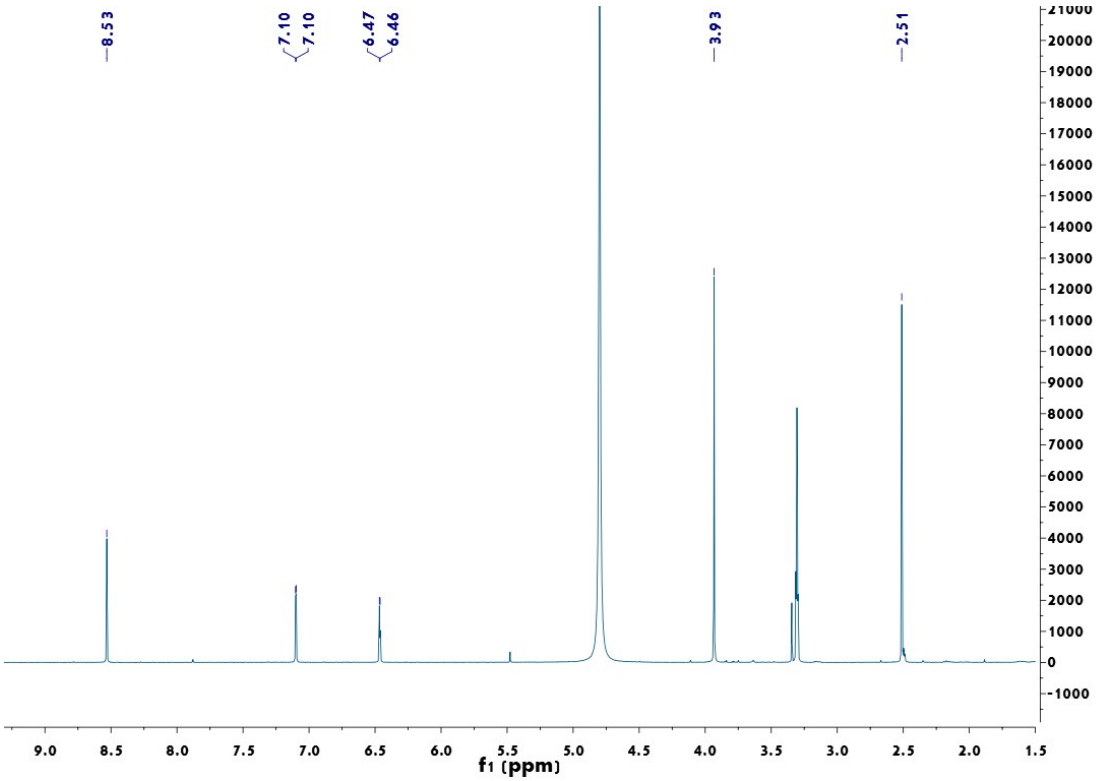

Fig. S45 ^{13}C NMR spectrum of **17** in MeOH-d_4.

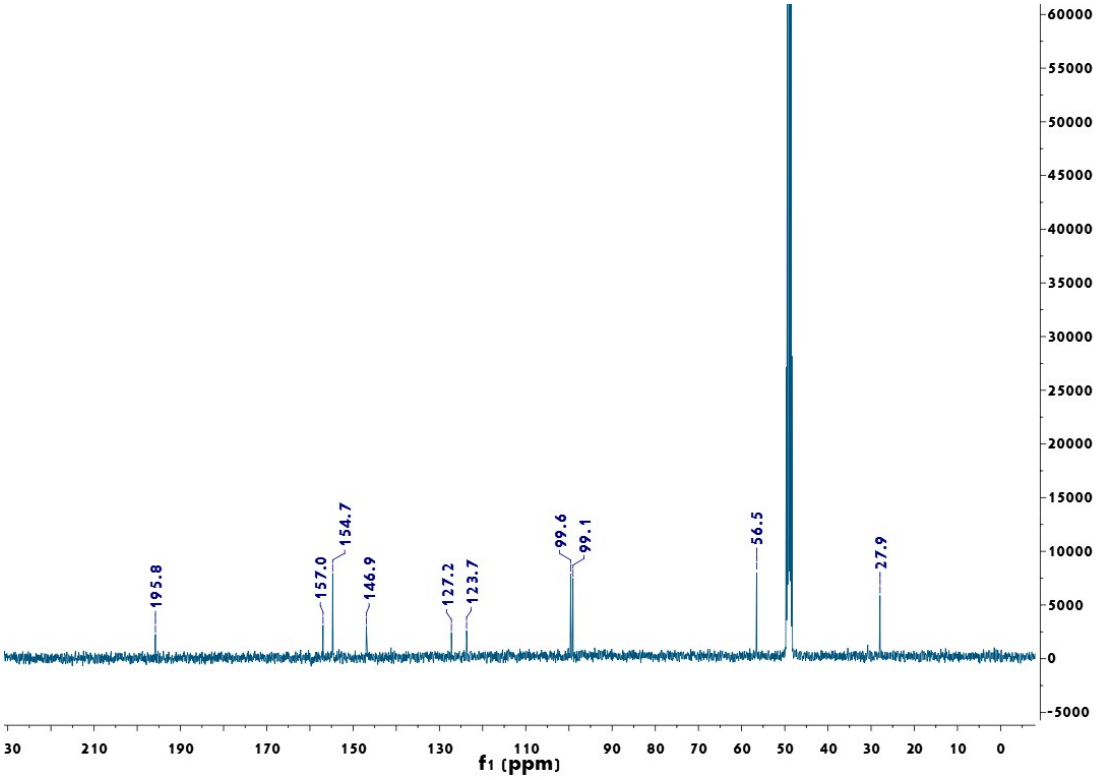

Fig. S46 HSQC spectrum of **17** in MeOH-d_4.

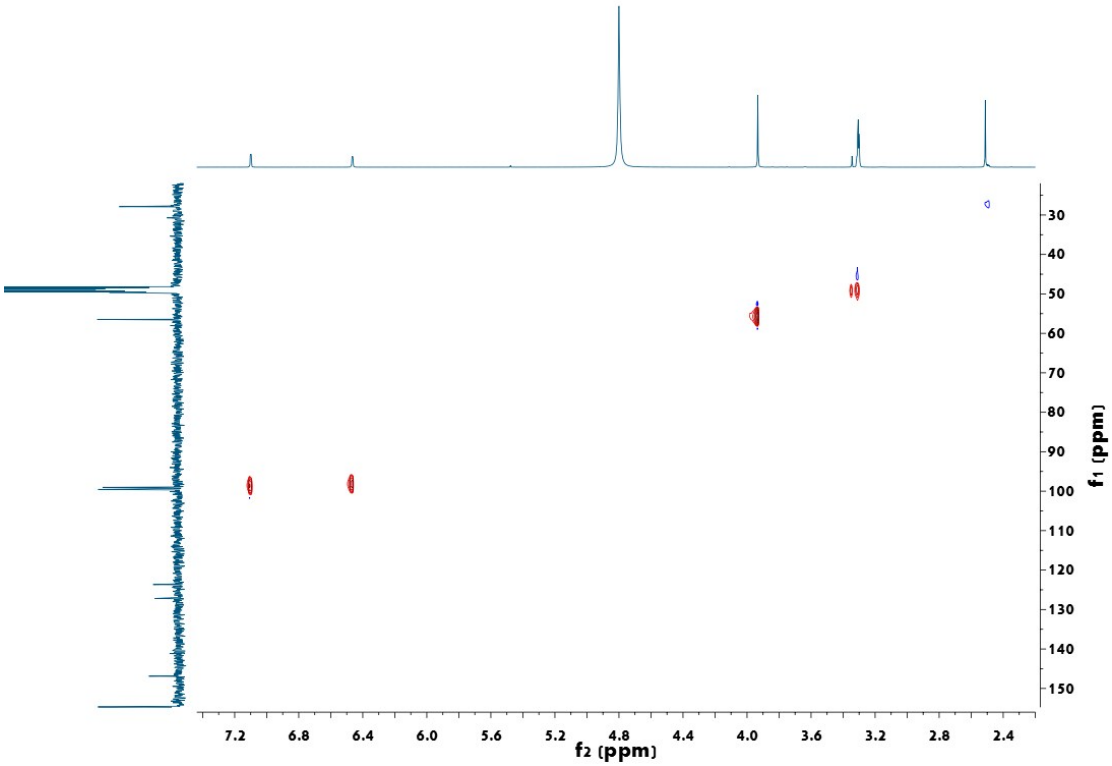

Fig. S47 ^{1}H–^{1}H COSY spectrum of **17** in MeOH-d_4.

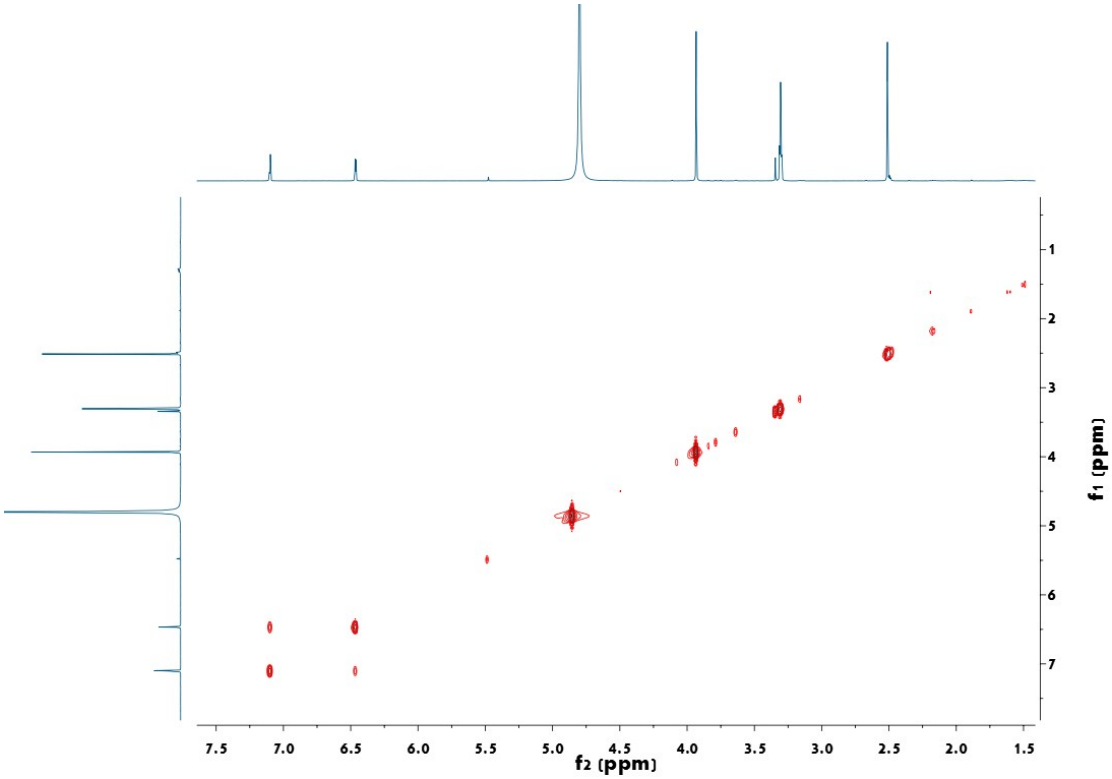

Fig. S48 HMBC spectrum of **17** in MeOH-d_4.

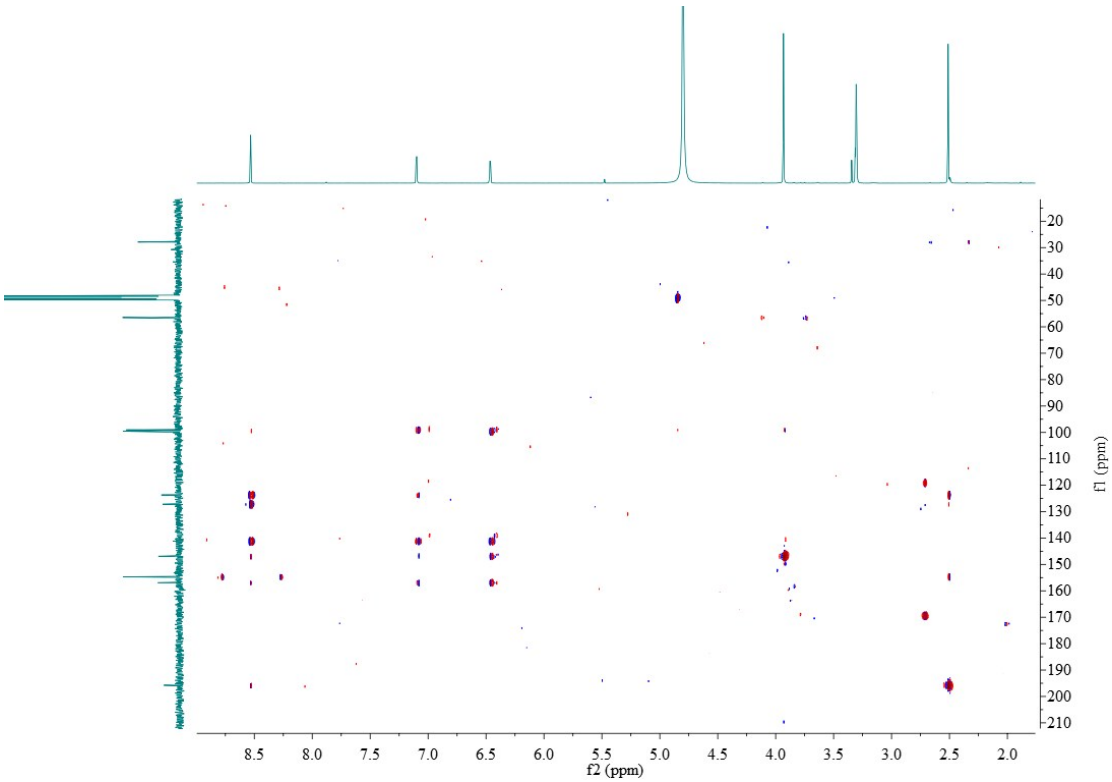

Fig. S49 ^{1}H NMR spectrum of **4a** $CDCl_3$

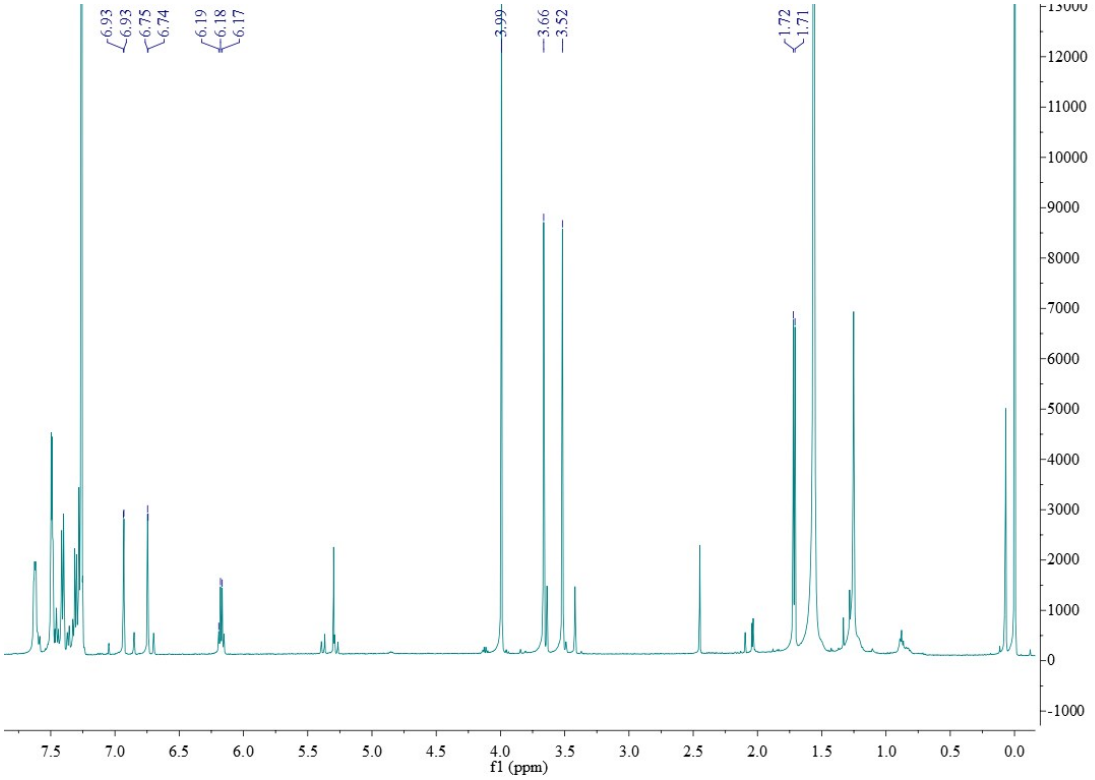

Fig. S50 ^{1}H NMR spectrum of **4b** $CDCl_3$

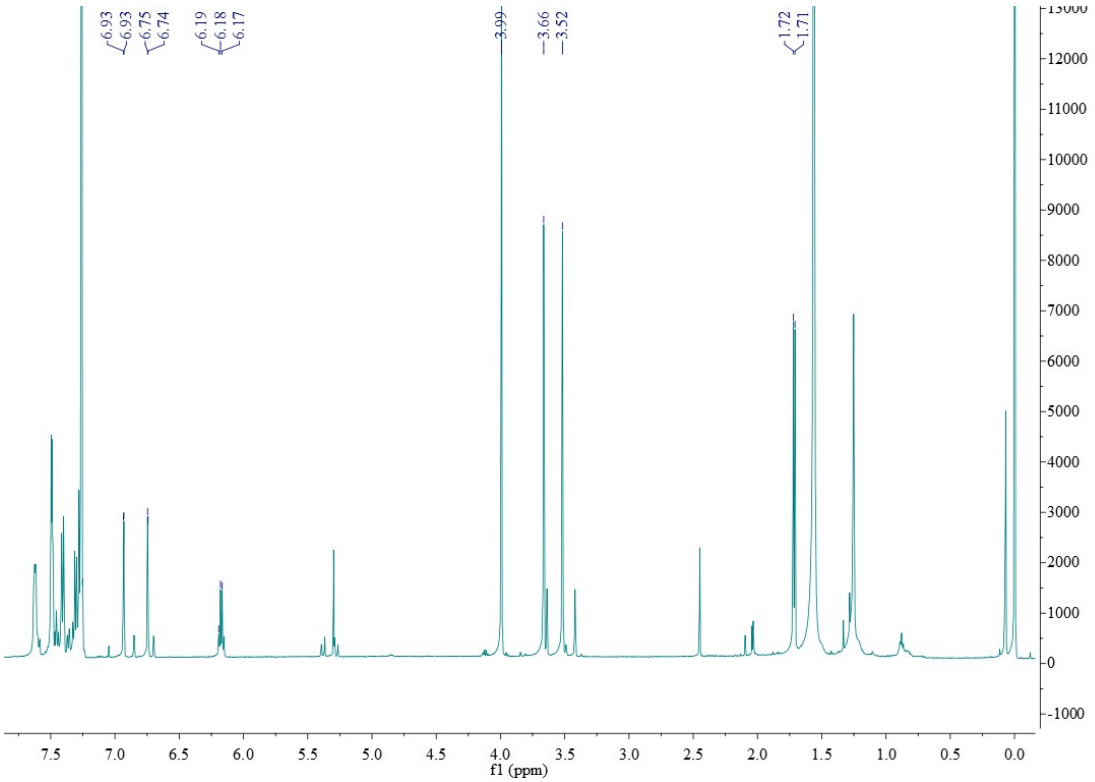

Fig. S51 ^{1}H NMR spectrum of **14a** $CDCl_3$

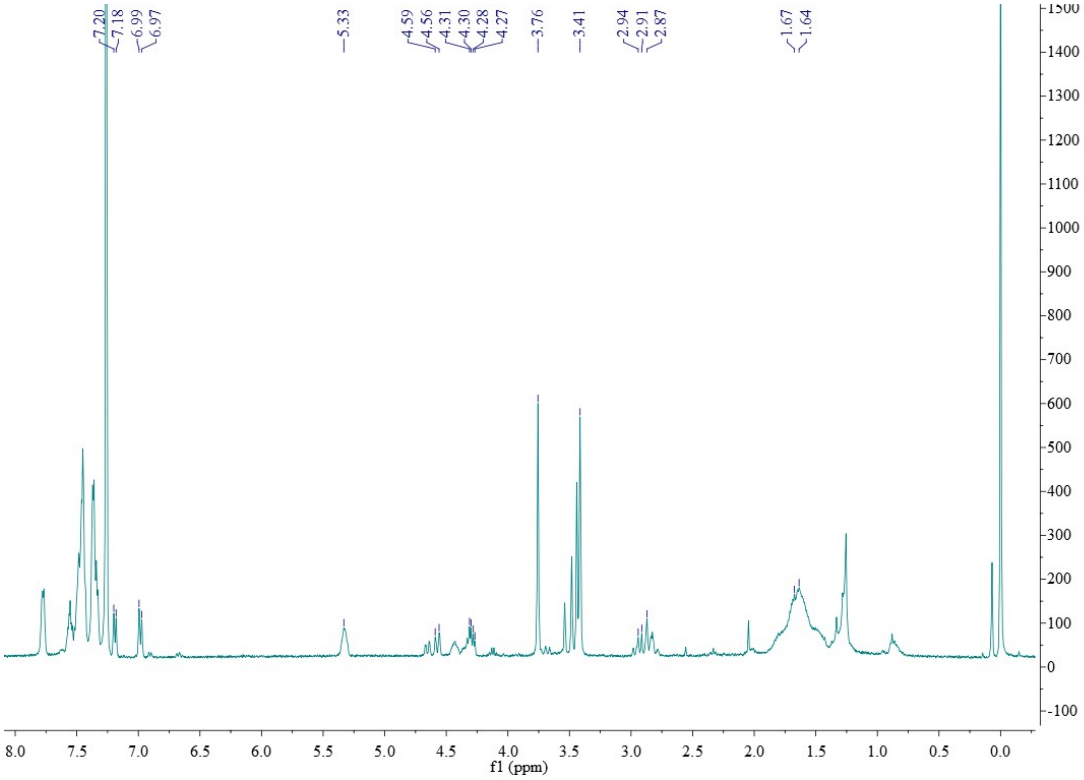

Fig. S52 ^{1}H NMR spectrum of **14b** $CDCl_3$

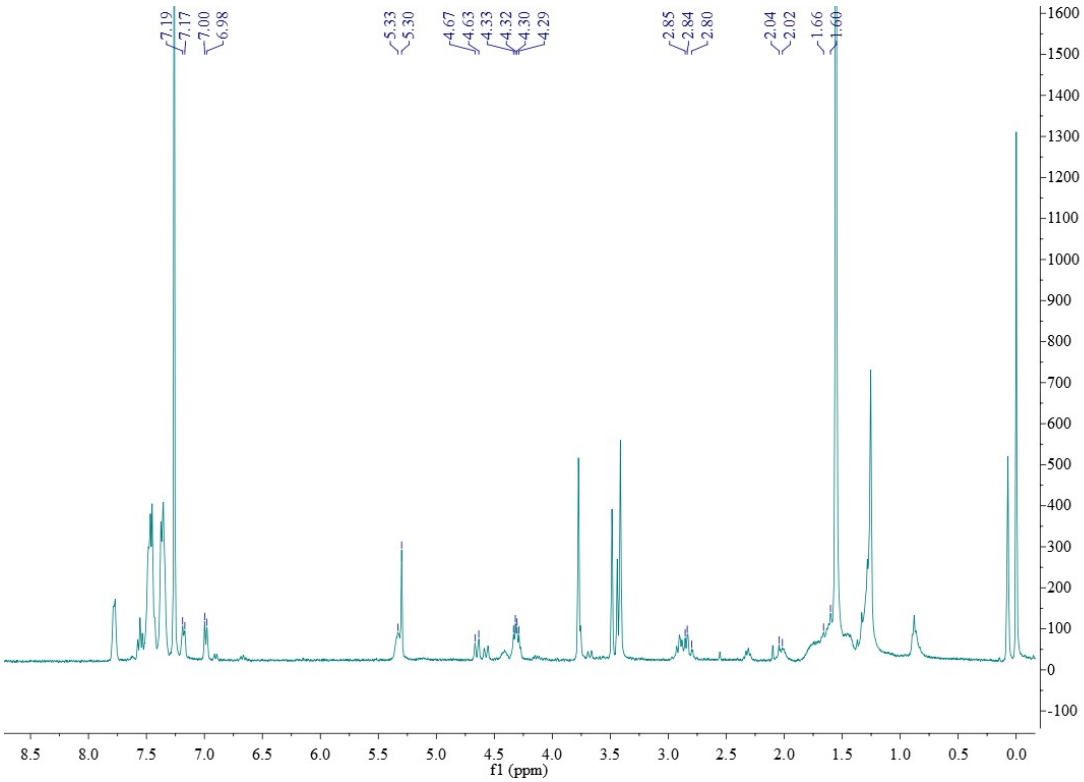

Fig. S53 ^{1}H NMR spectrum of **15a** $CDCl_3$

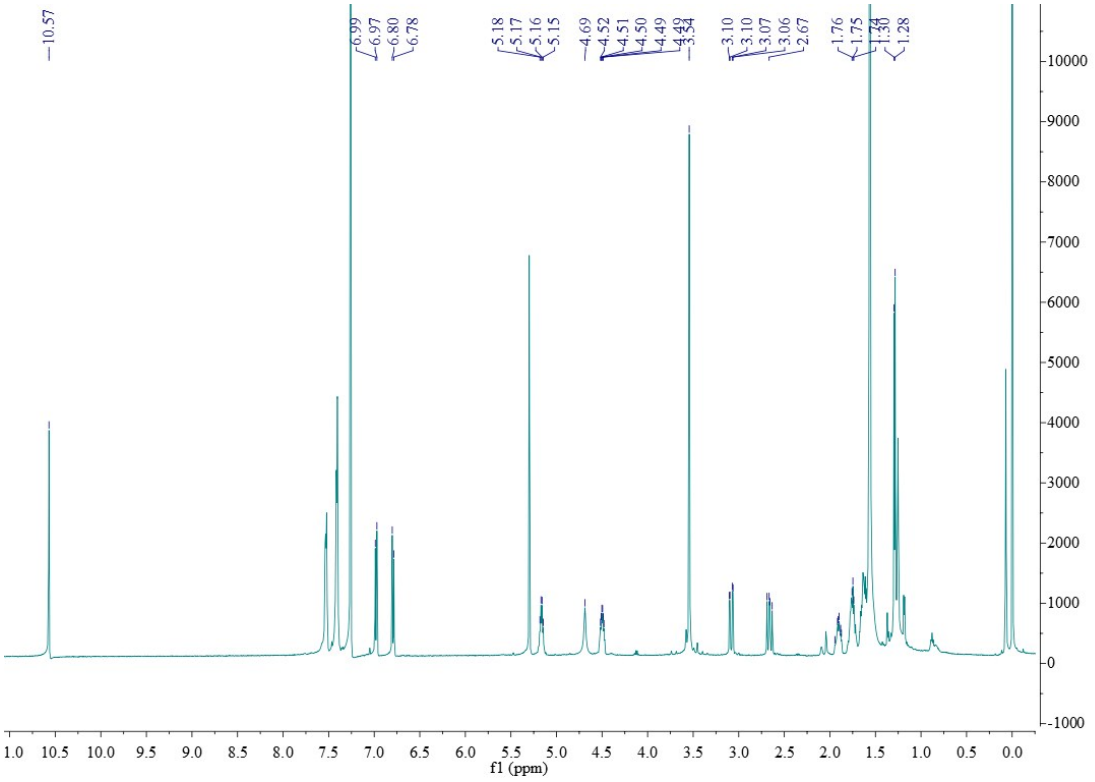

Fig. S54 ^{1}H NMR spectrum of **15b** $CDCl_3$

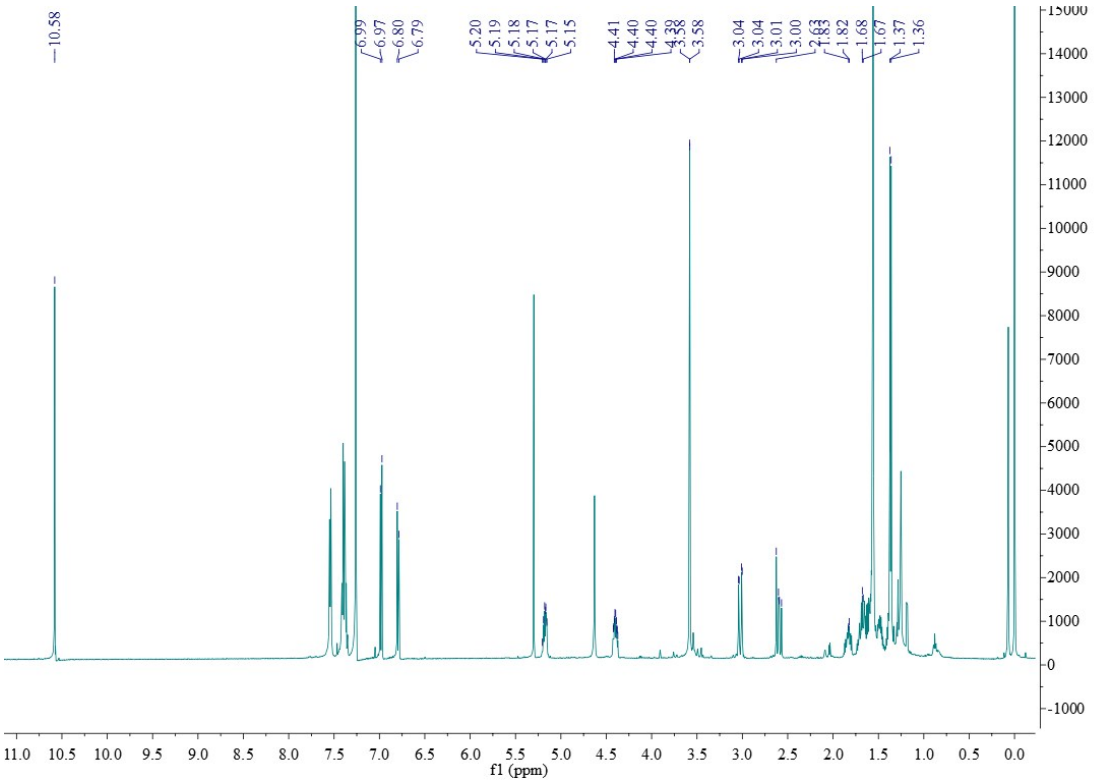

Fig. S55 X-ray crystallographic analysis of compound **5**

Colorless crystals of **5** were obtained by recrystallization from MeOH. $C_{22}H_{20}O_{12}$, *Mr* = 476.38, orthorhombic, *a* = 7.0831(2) Å, *b* = 10.0442(2) Å, *c* = 28.1976(5) Å, α = 90.00, β = 90.00, γ = 90.00, *V* = 2006.09(8) Å^3, space group $P2_12_12_1$, *Z* = 4, *Dcalcd* = 1.286 mg/m^3, μ(Cu Kα) = 1.577 m^{-1}, and F(000) = 992.0. Crystal dimensions: 0.42 × 0.32 × 0.26 mm^3. Independent reflections: 3561 (R_{int} = 0.0307). The final R_1 values were 0.0286, ωR_2 = 0.0722 (I > 2σ(I)). Flack parameter value was 0.06(13). CCDC number: 1444470. The single crystal X-ray diffraction data was collected at 123 K on an Single-crystal data were measured on an Agilent Gemini Ultra diffractometer with Cu Kα radiation (λ = 1.54178 Å). The structures were solved by direct methods (SHELXS-97) and refined using full-matrix least-squares difference Fourier techniques. Hydrogen atoms bonded to carbons were placed on the geometrically ideal positions by the "ride on" method. Hydrogen atoms bonded to oxygen were located by the difference Fourier method and were included in the calculation of structure factors with isotropic temperature factors. Crystallographic data for **5** has been deposited with the Cambridge Crystallographic Data Centre. Copies of the data can be obtained, free of charge, on application to the Director, CCDC, 12 Union Road, Cambridge CB2 1EZ, UK (fax: 44-(0)1223-336033, or e-mail: deposit@ccdc.cam.ac.uk).

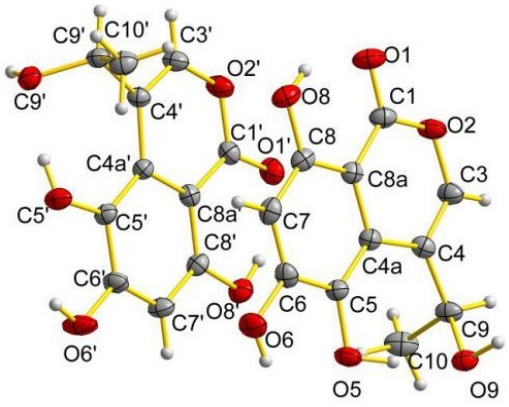

Fig.S55 X-ray crystallographic analysis of compound **5**.