SUPPLEMENTARY INFORMATION

Title: **Allelopathic Polyketides from an Endolichenic Fungus *Myxotrichum* SP. by Using OSMAC Strategy**

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Fig. S1 The systematic position of the endolichenic fungus 081189.

97 **081189**

55 *Myxotrichum deflexum* (AF062814)

Myxotrichum chartarum (AF062813)

Myxotrichum cancellatum (AF062811)

Pseudogymnoascus roseus (AF062819)

0.02

The systematic position of the endolichenic fungus 081189.

The phylogenetic tree based on the nuclear ITS rDNA sequences was inferred using the Neighbor-Joining method [1]. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (1000 replicates) are shown next to the branches [2]. The evolutionary distances were computed using the Maximum Composite Likelihood method [3] and are in the units of the number of base substitutions per site. All positions containing alignment gaps and missing data were eliminated only in pairwise sequence comparisons (Pairwise deletion option). There were a total of 546 positions in the final dataset. Phylogenetic analyses were conducted in MEGA4 [4]. The numbers in brackets in the phylogenetic tree are the GenBank accession numbers of corresponding samples.

1. Saitou N & Nei M (**1987**) The neighbor-joining method: A new method for reconstructing phylogenetic trees. *Molecular Biology and Evolution* **4**:406-425.

2. Felsenstein J (**1985**) Confidence limits on phylogenies: An approach using the bootstrap. *Evolution* **39**:783-791.

3. Tamura K, Nei M & Kumar S (**2004**) Prospects for inferring very large phylogenies by using the neighbor-joining method. *Proceedings of the National Academy of Sciences* (*USA*) **101**:11030-11035.

4. Tamura K, Dudley J, Nei M & Kumar S (**2007**) MEGA4: Molecular Evolutionary Genetics Analysis (MEGA) software version 4.0. *Molecular Biology and Evolution* **24**:1596-1599.

Fig. S2 ^{1}H NMR spectrum (600 MHz) of **1** in Methanol-d$_4$
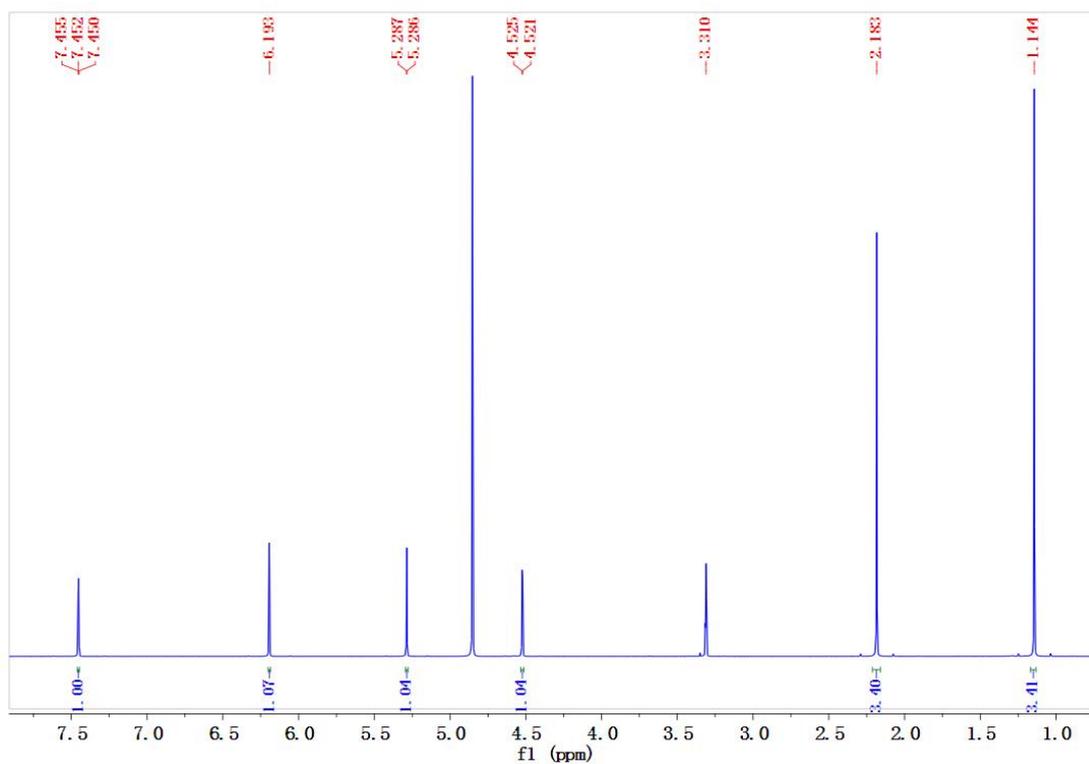
Fig. S3 ^{13}C NMR spectrum (150 MHz) of **1** in Methanol-d$_4$
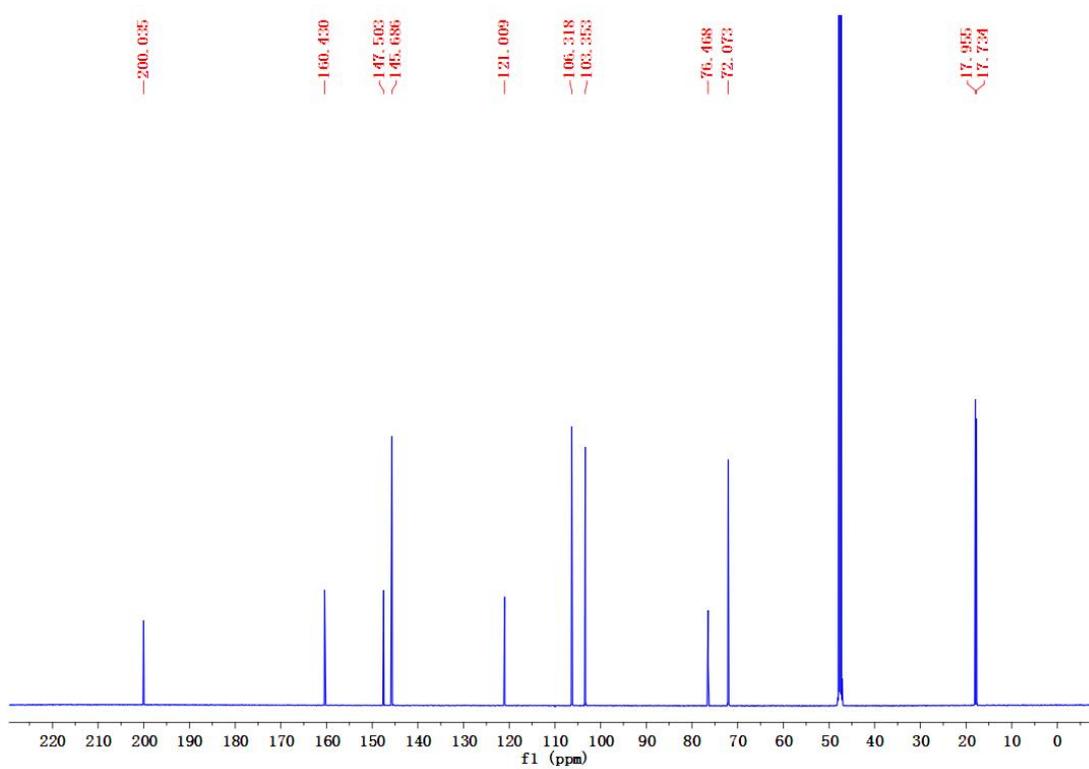
Fig. S4 CD and Induced-CD spectrum of 1
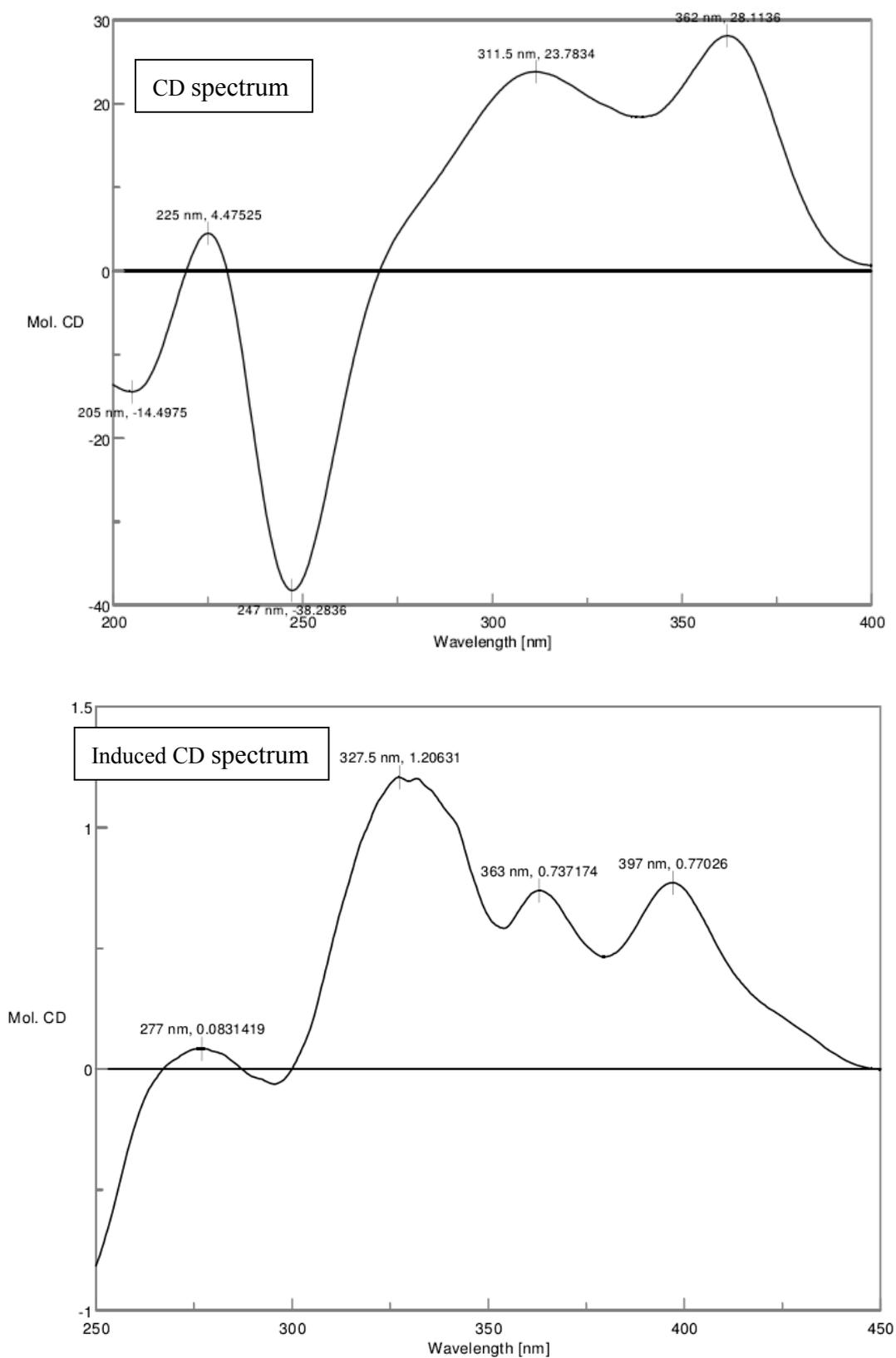
Fig. S5 X-ray of 1
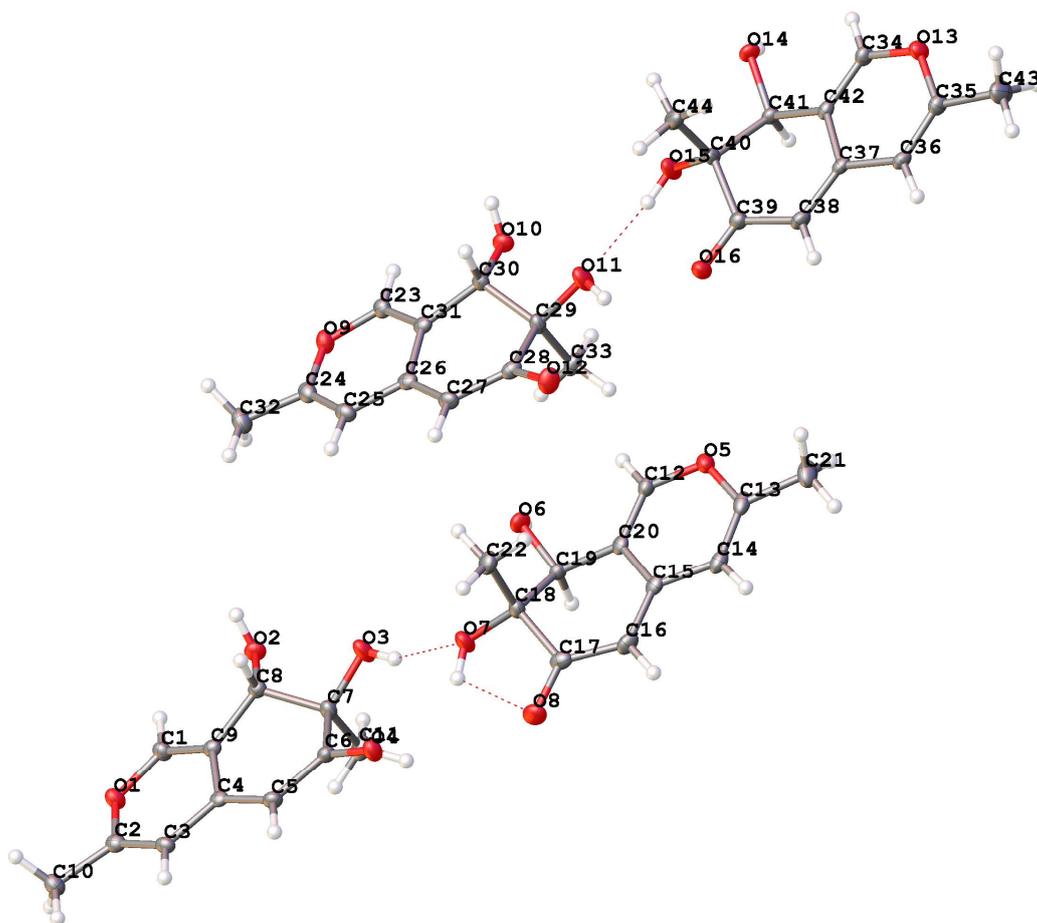
Fig. S6 ^{1}H NMR spectrum (600 MHz) of **2** in Methanol-d$_4$
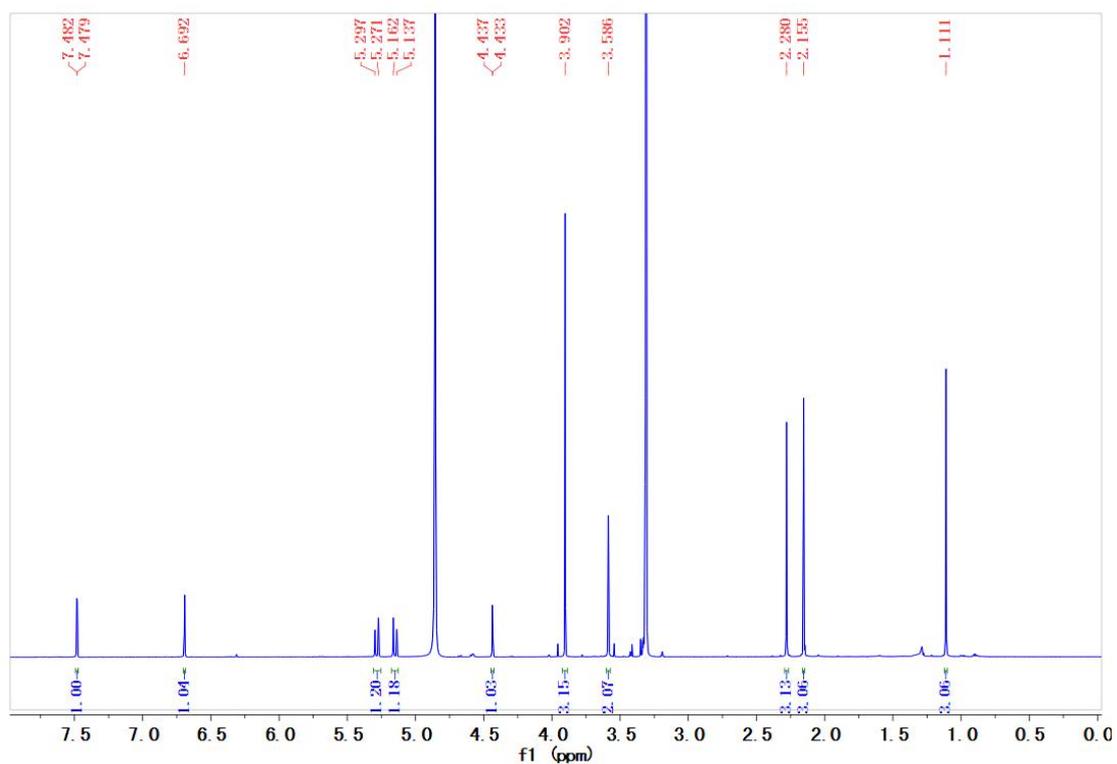
Fig. S7 ^{13}C NMR spectrum (150 MHz) of **2** in Methanol-d$_4$
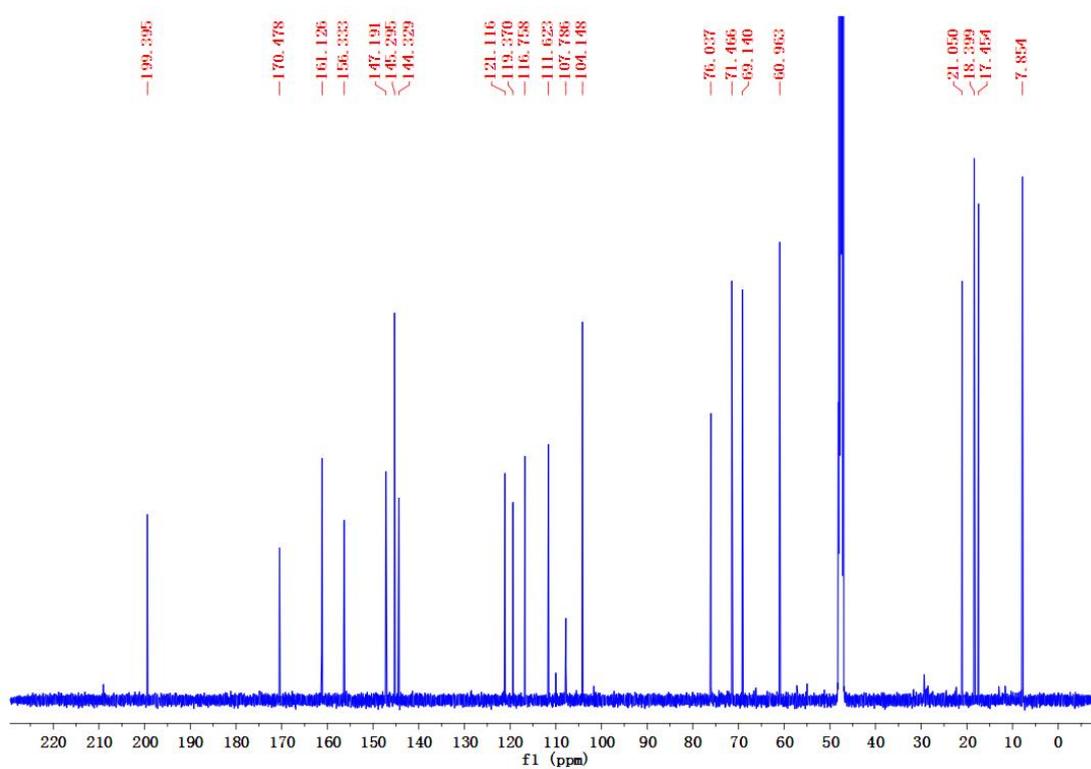
Fig. S8 HSQC spectrum of **2** in Methanol- d_4
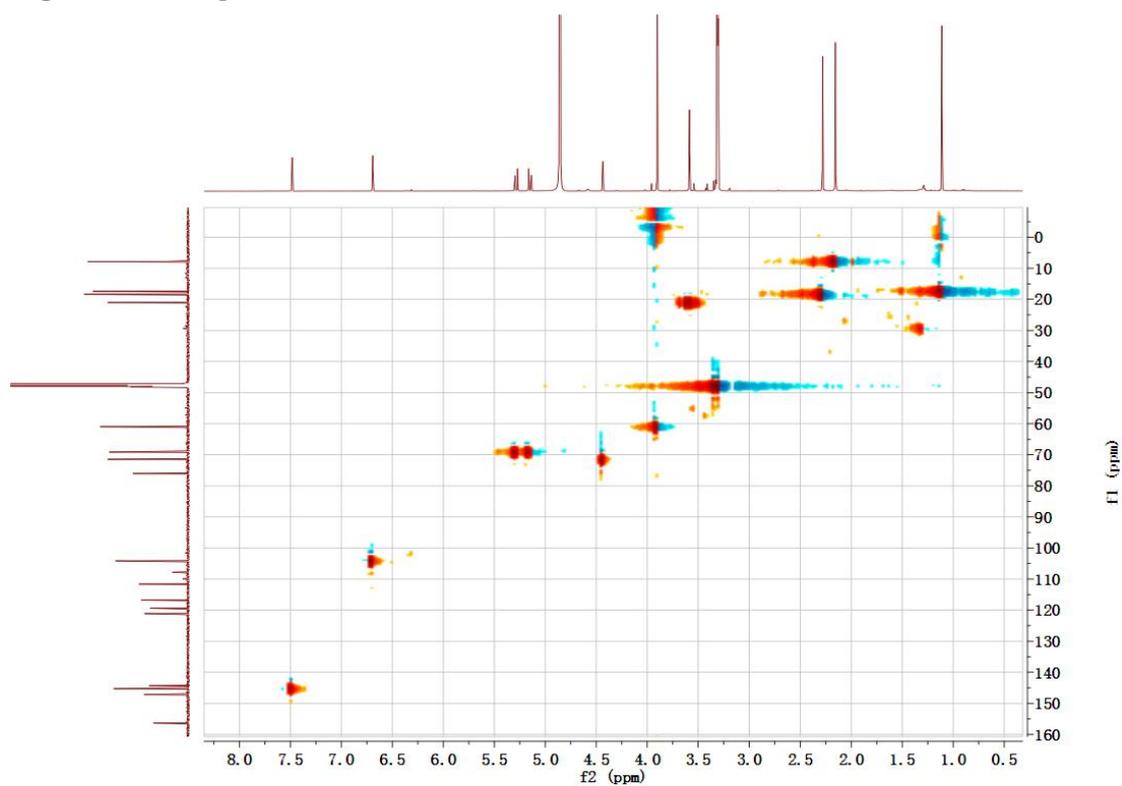
Fig. S9 HMBC spectrum of **2** in Methanol- d_4
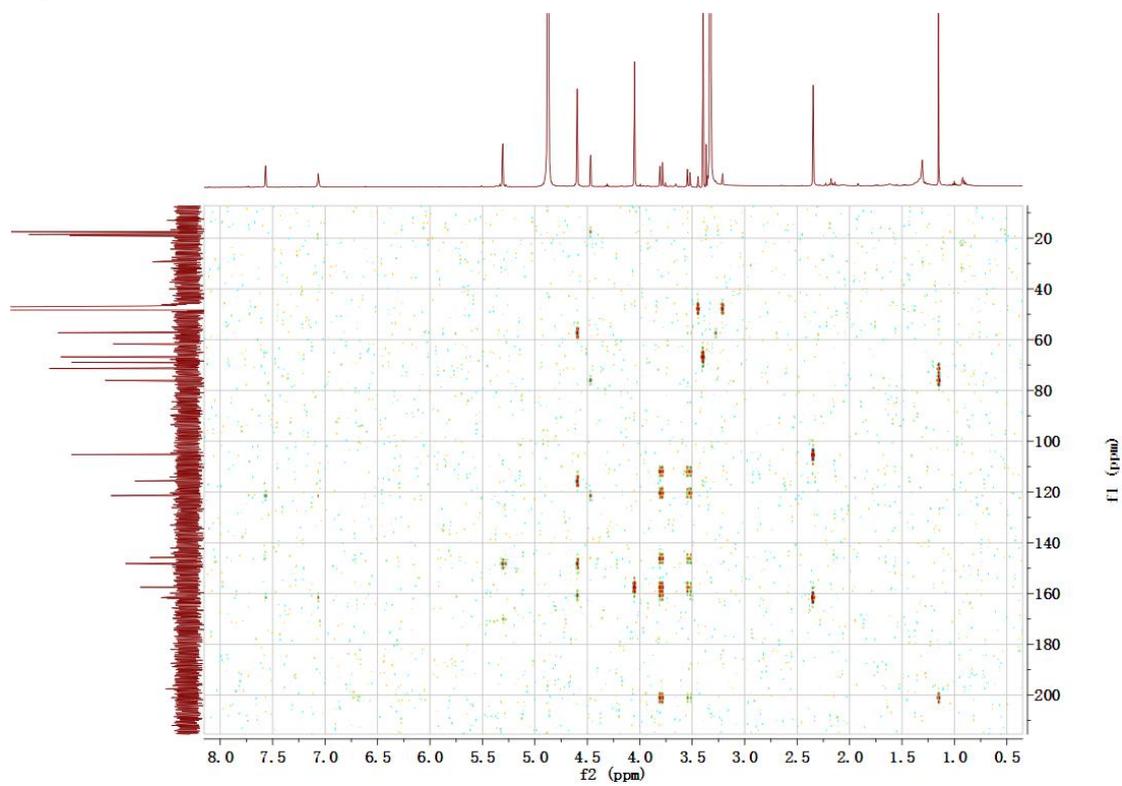
Fig. S10 HRESIMS spectrum of **2**
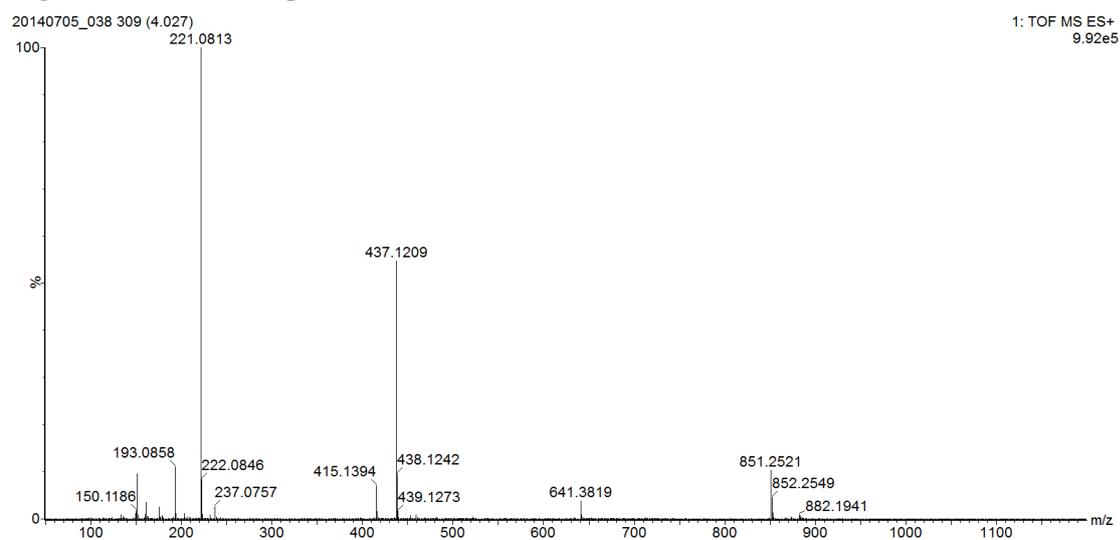
Fig. S11 IR (KBr disc) spectrum of 2
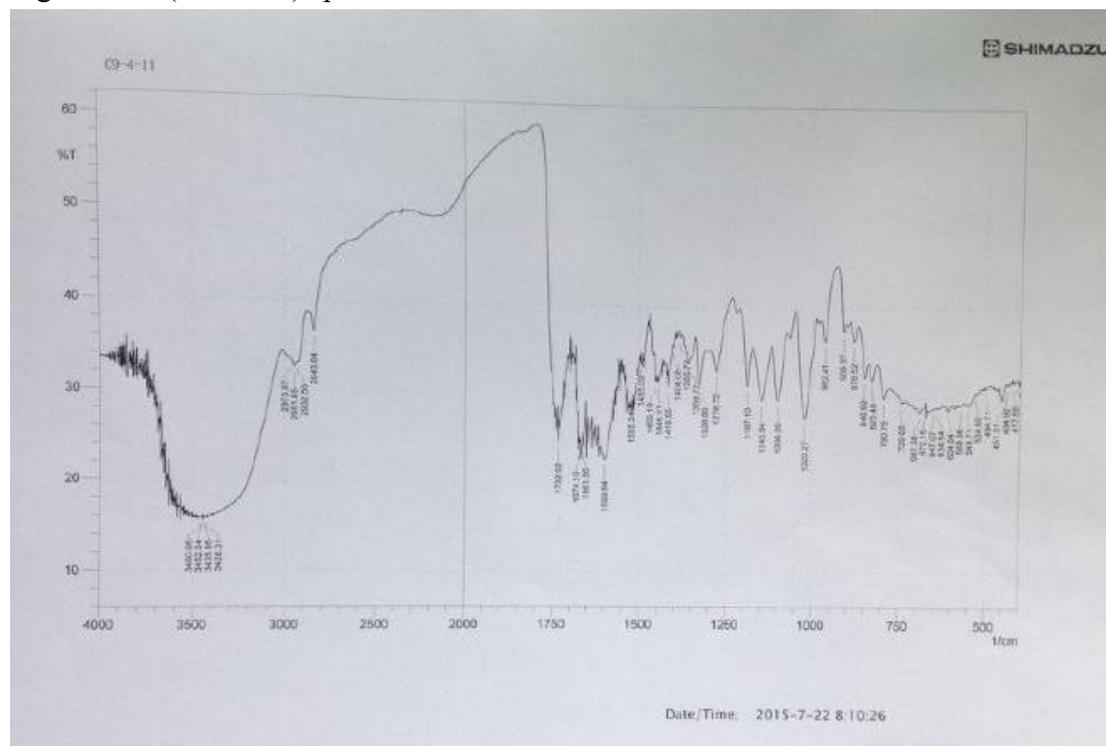
Fig. S12 CD and UV spectra of **2**
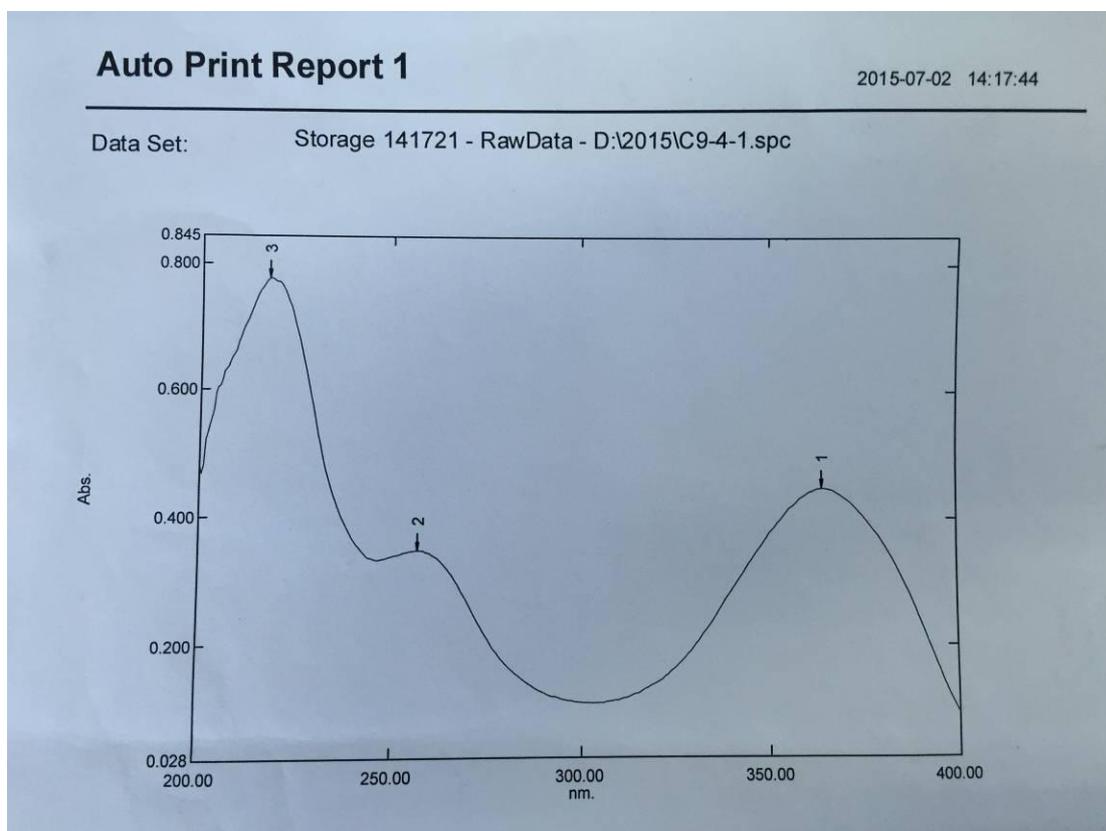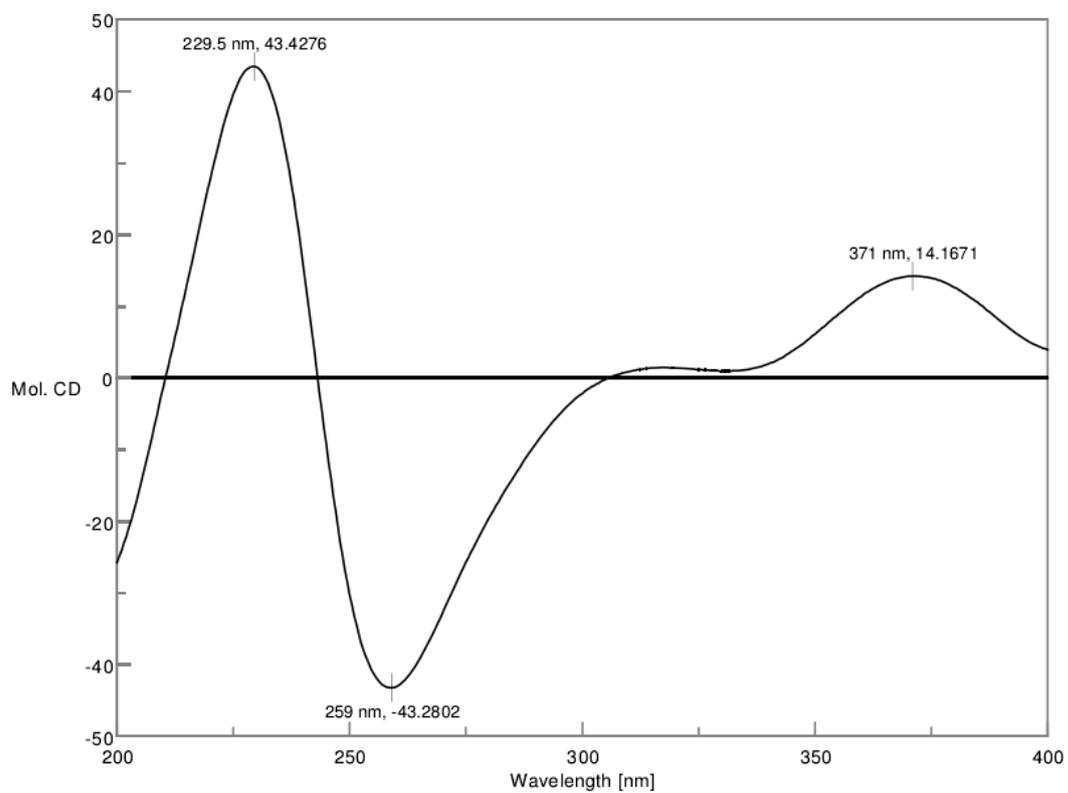
Fig. S13 ^{1}H NMR spectrum (600 MHz) of **3** in Methanol-d$_4$
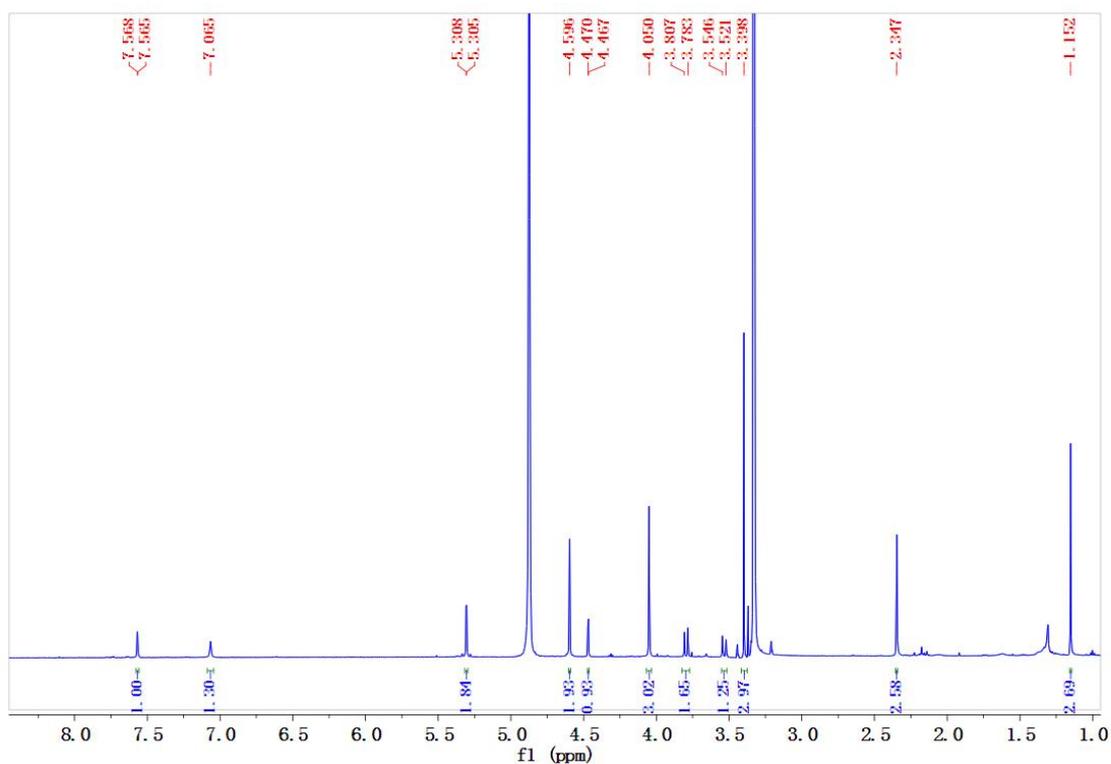
Fig. S14 ^{13}C NMR spectrum (150 MHz) of **3** in Methanol-d$_4$
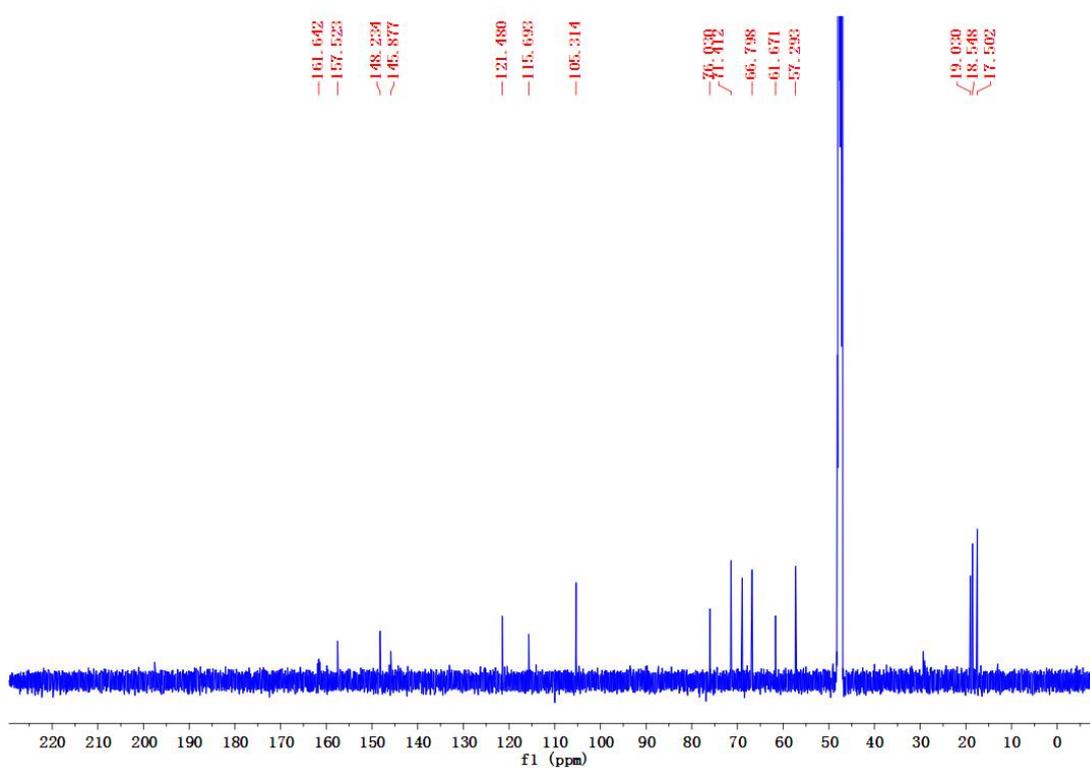
Fig. S15 HSQC spectrum of **3** in Methanol- d$_4$
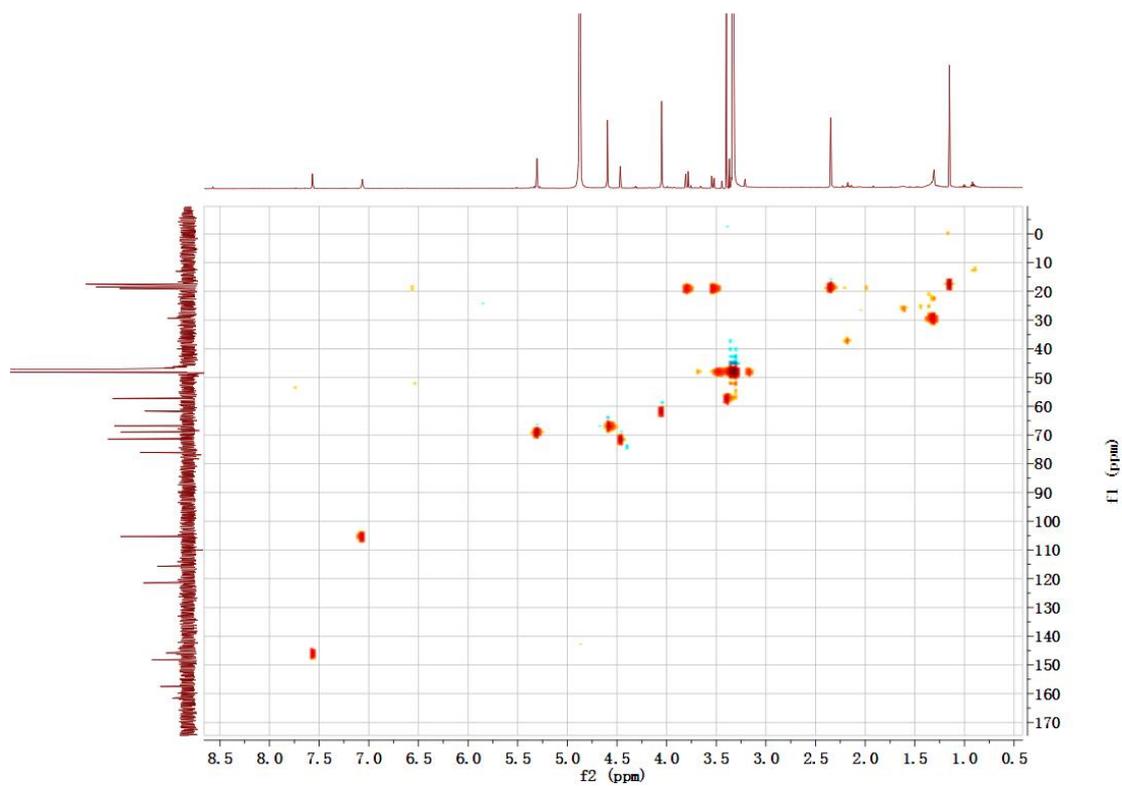
Fig. S16 HMBC spectrum of **3** in Methanol-d$_4$
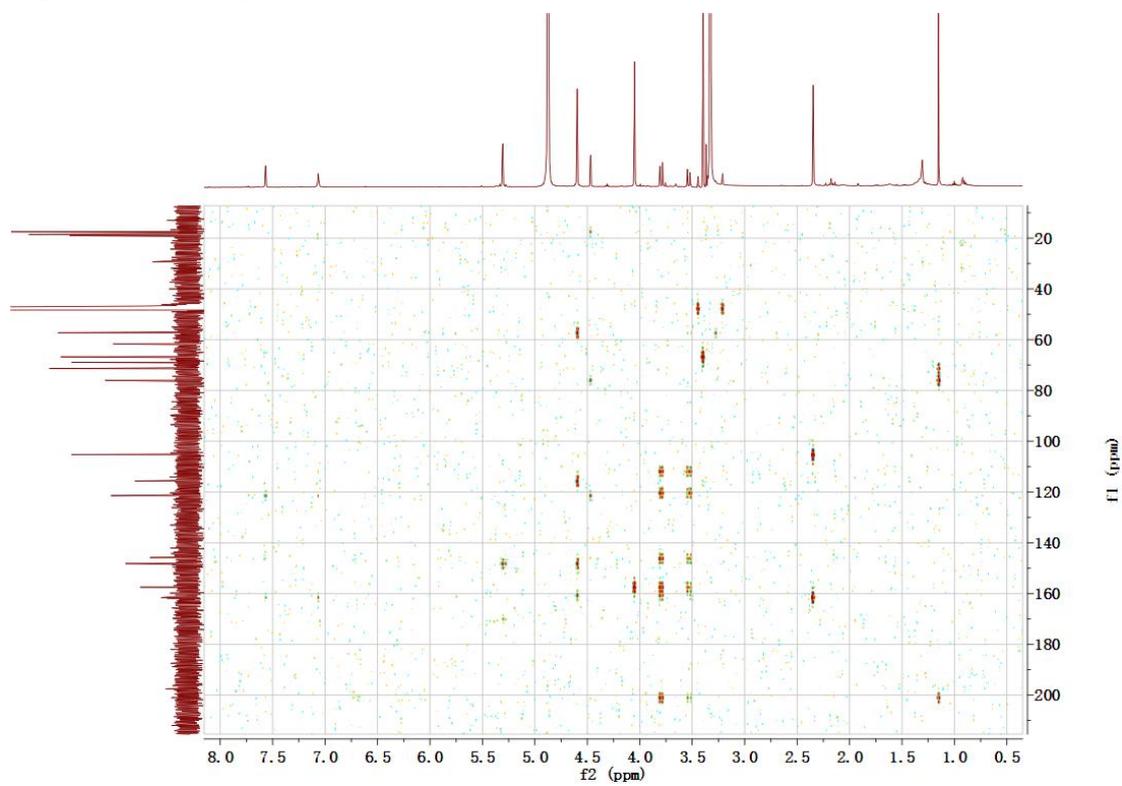
Fig. S17 HRESIMS spectrum of **3**
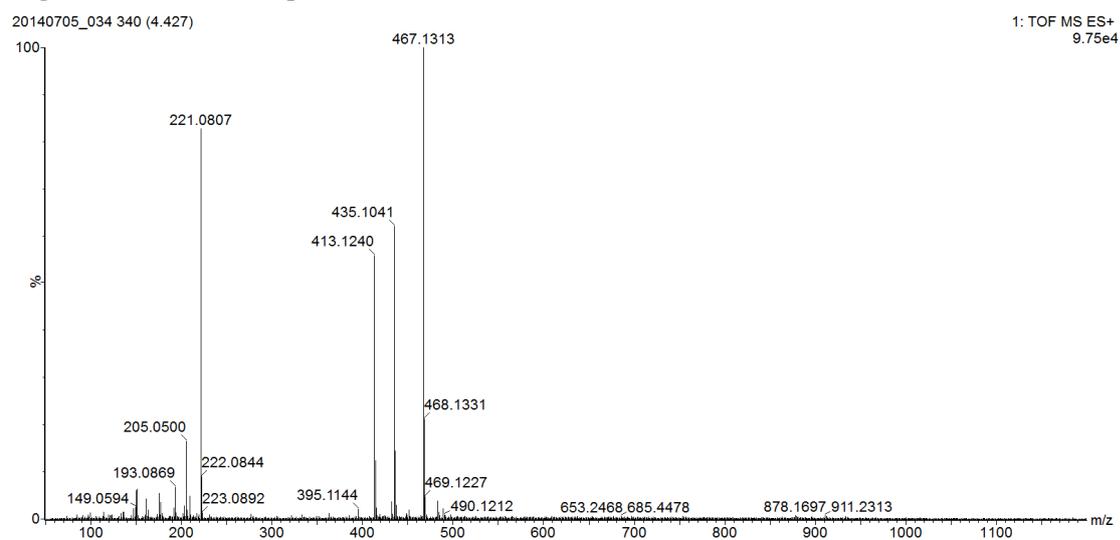
Fig. S18 IR (KBr disc) spectrum of 3

13
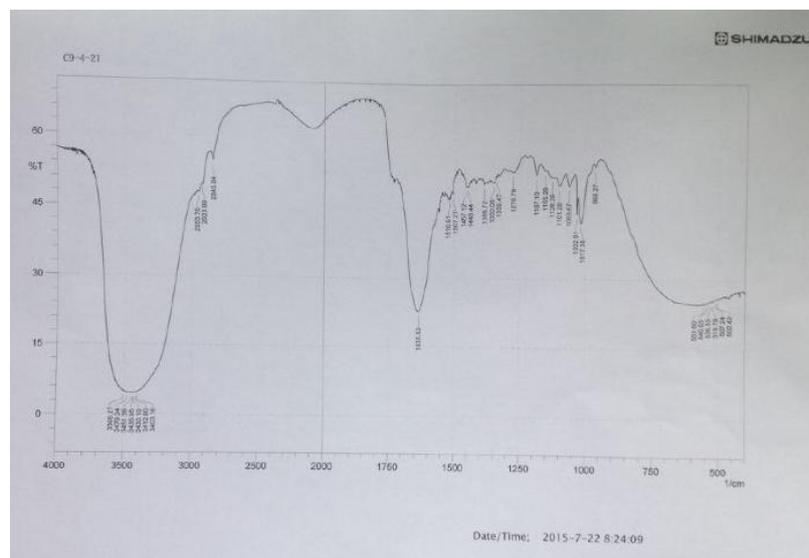
Fig. S19 CD and UV spectra of **3**
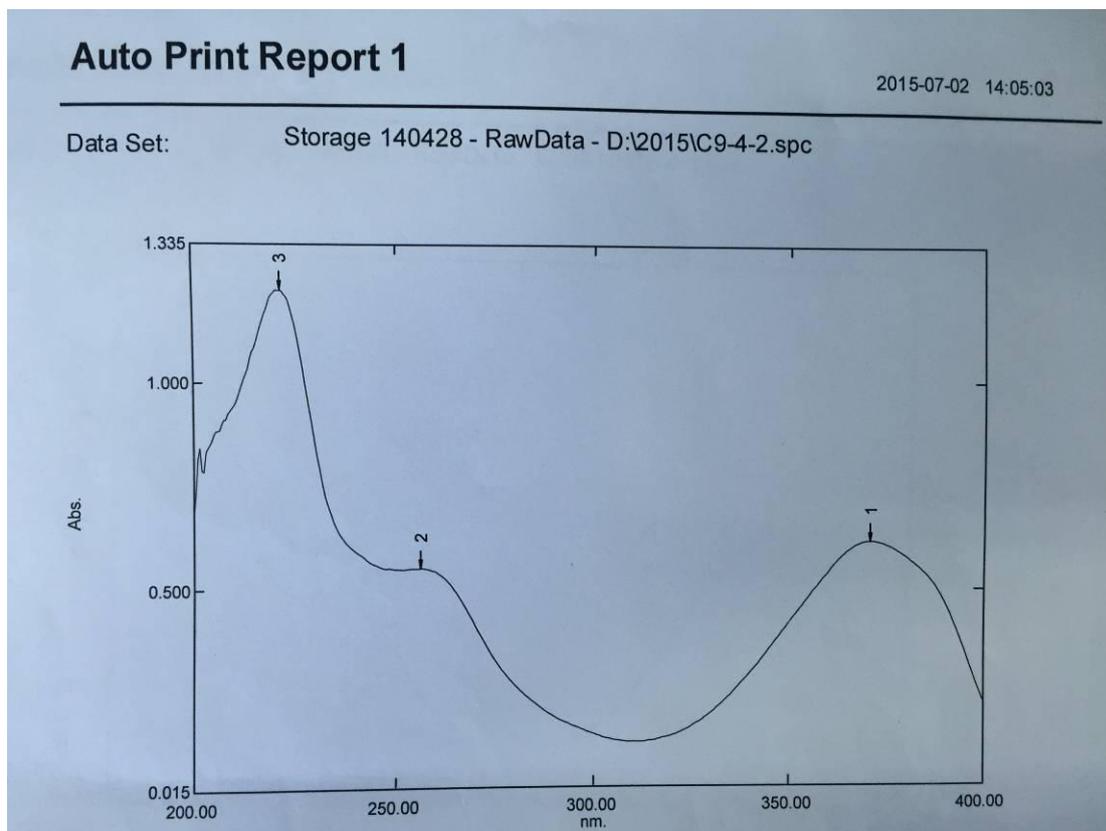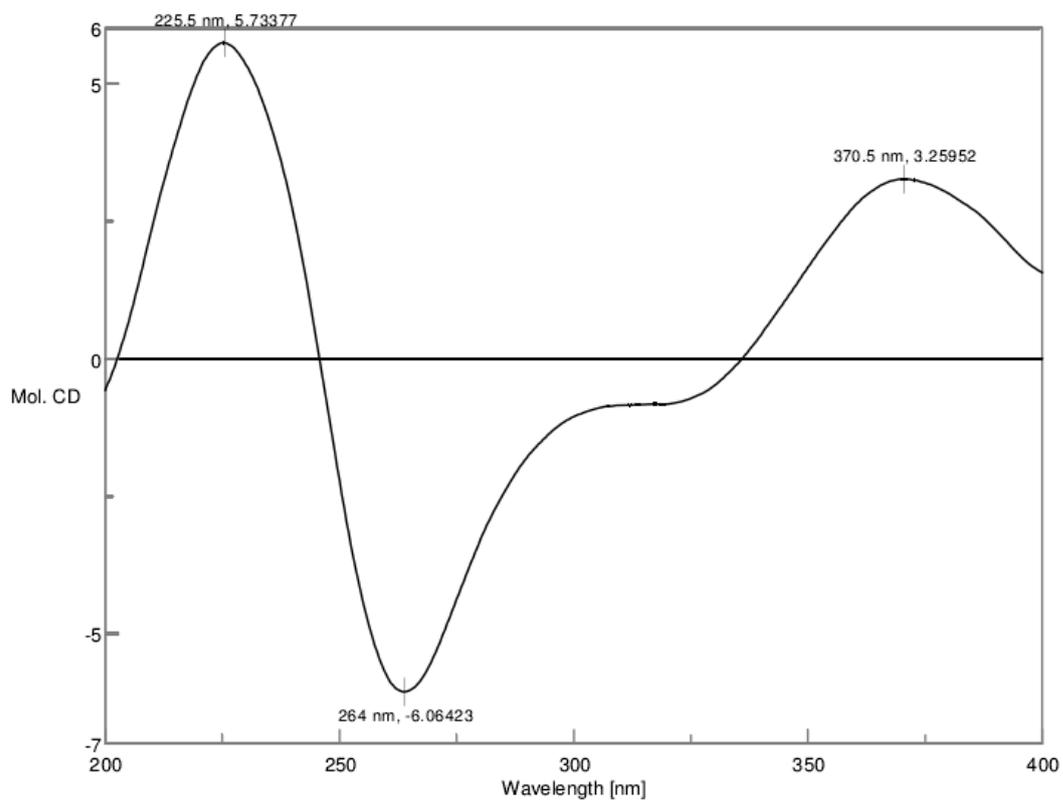
Fig. S20 ^{1}H NMR spectrum (600 MHz) of **4** in Methanol-d$_4$
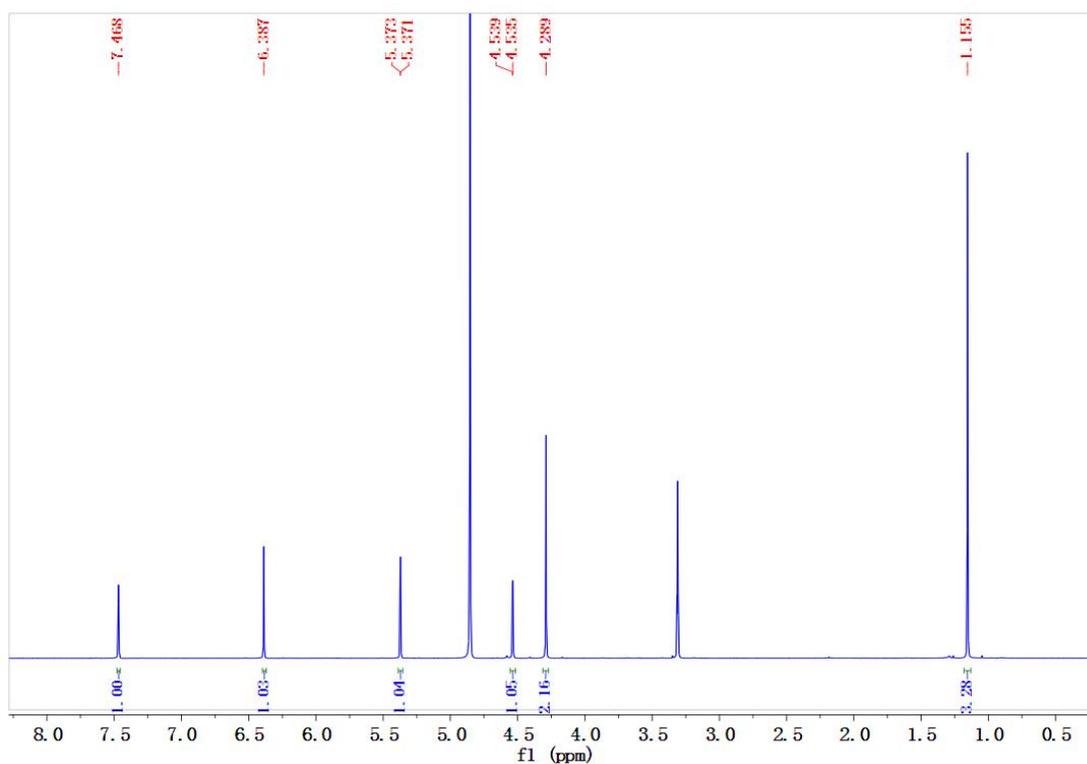
Fig. S21 ^{13}C NMR spectrum (150 MHz) of **4** in Methanol-d$_4$
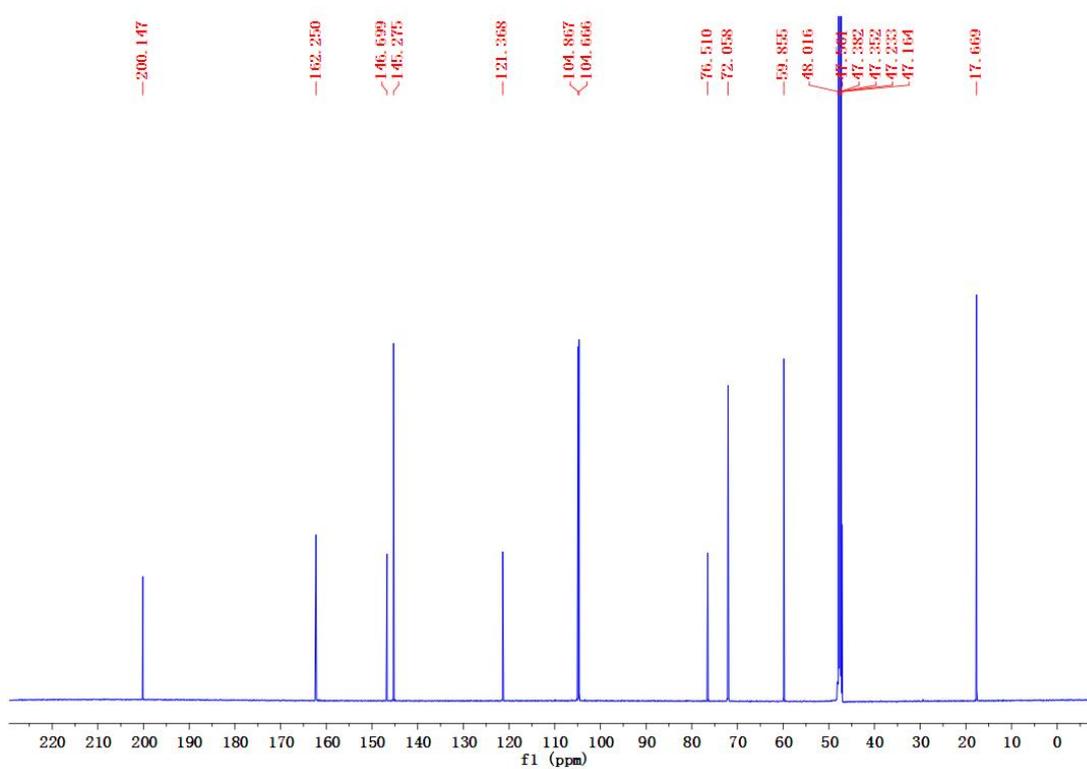
Fig. S22 HSQC spectrum of **4** in Methanol- d$_4$
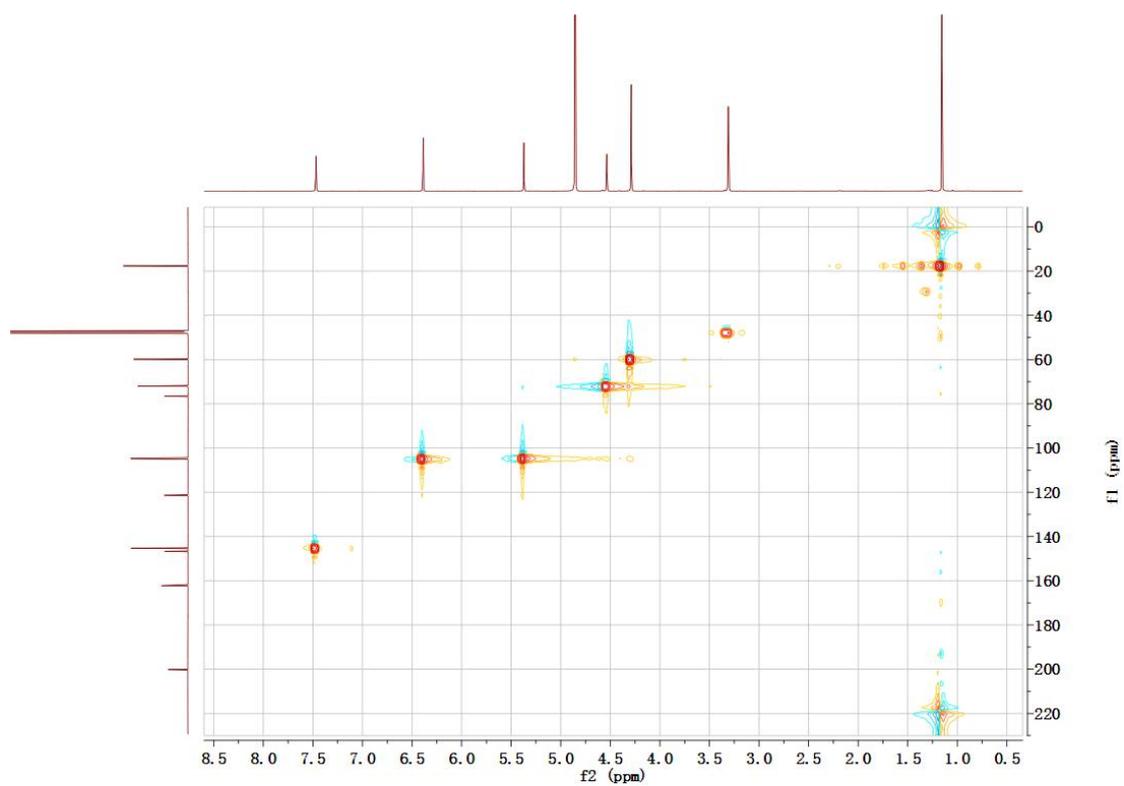
Fig. S23 HMBC spectrum of **4** in Methanol-d$_4$
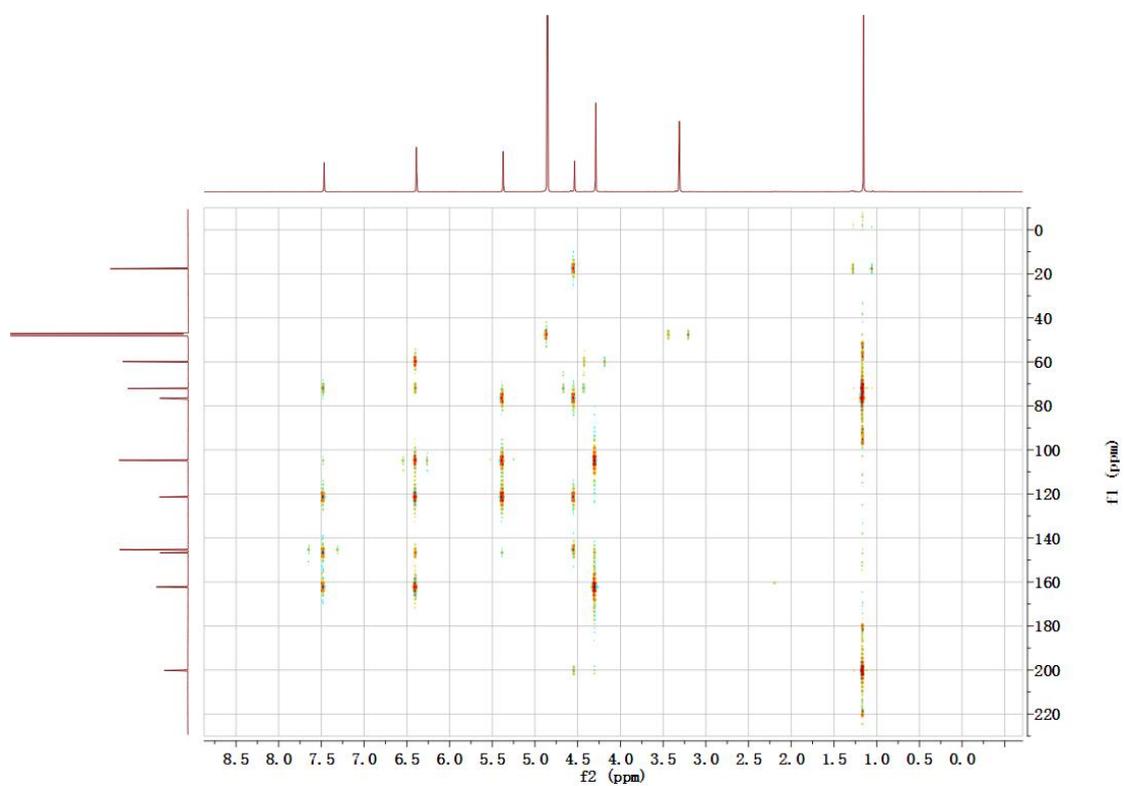
Fig. S24 HRESIMS spectrum of **4**
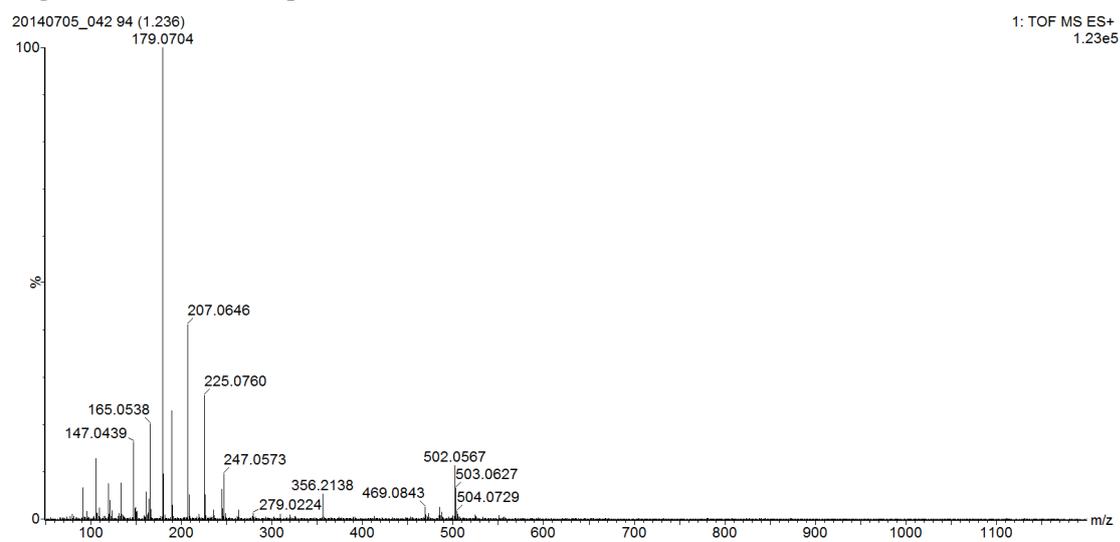
Fig. S25 IR (KBr disc) spectrum of 4
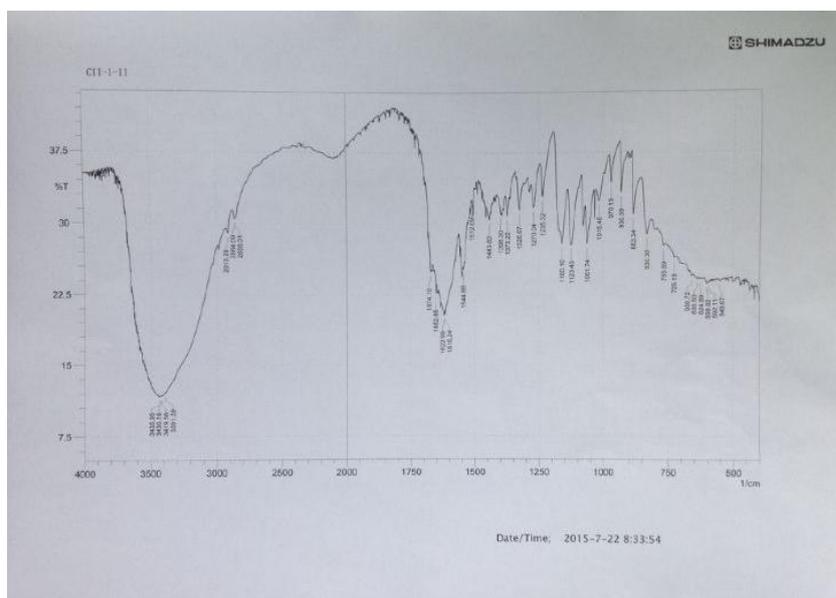
Fig. S26 CD and UV spectra of **4**