

Supporting Information

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A New Dihydrophenanthrene with Cell Viability Enhancing Activities from *Spiranthes sinensis*

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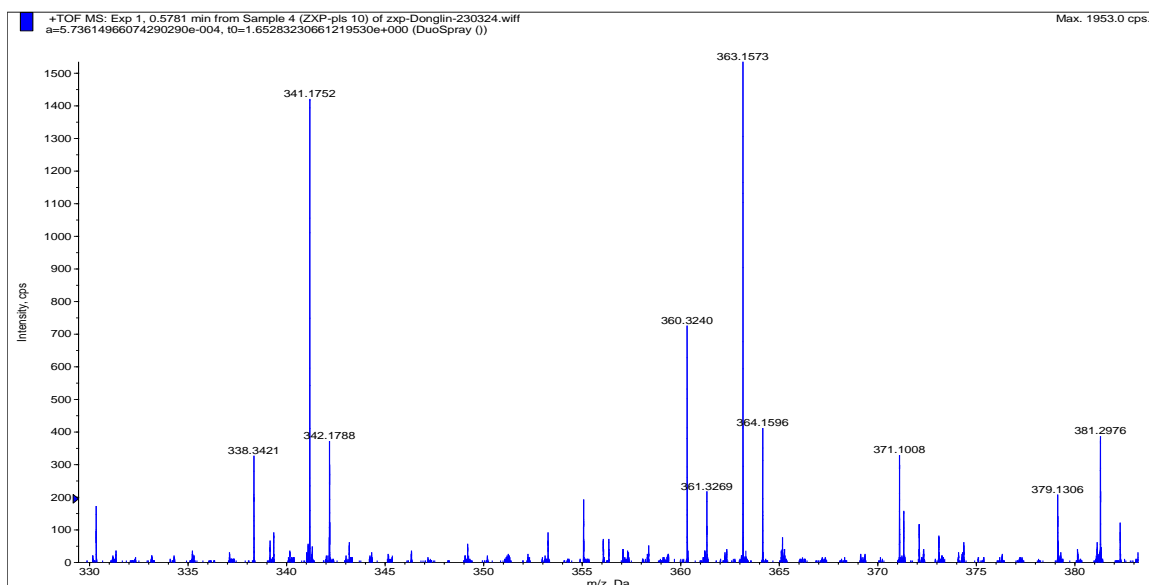


Figure S1: HR-ESI-MS spectrum of **1** (Positive mode)

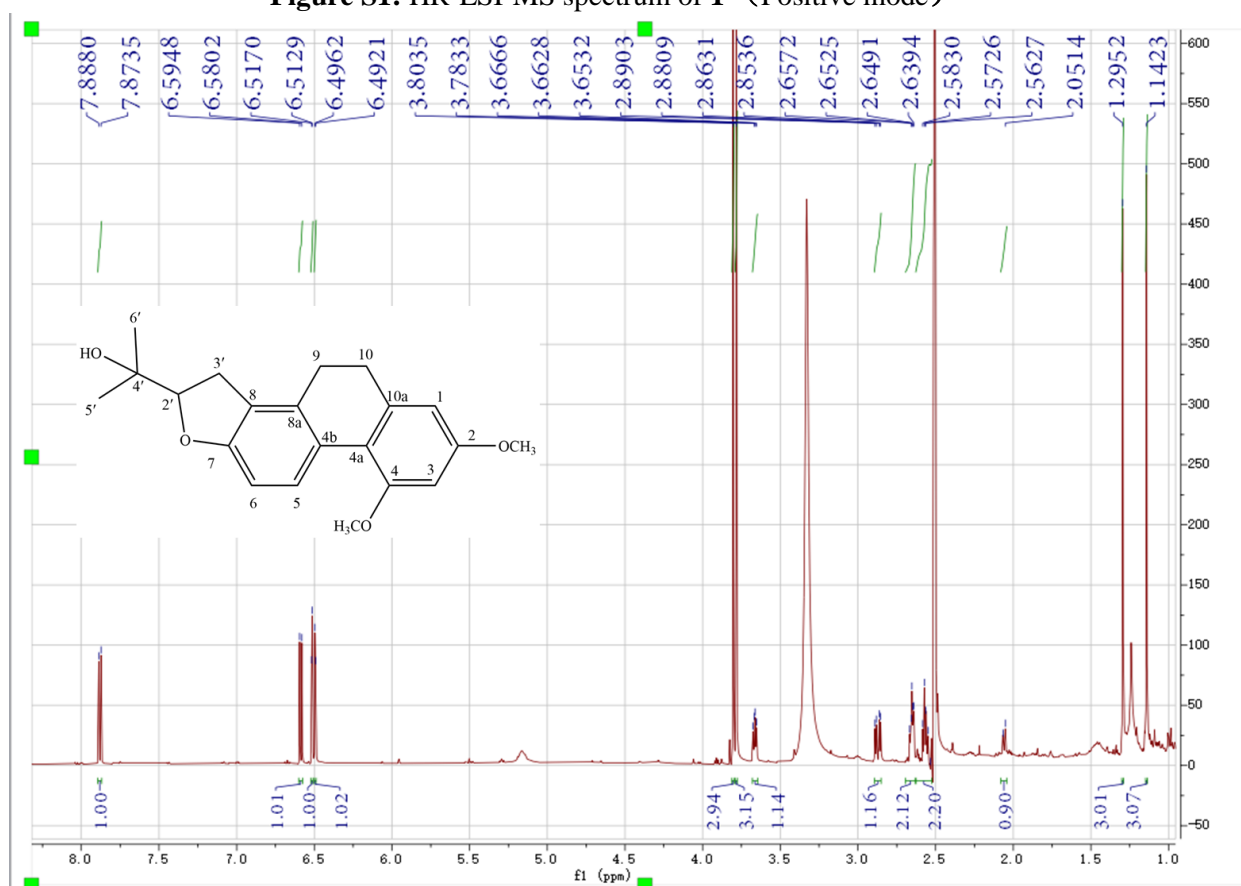


Figure S2: ¹H-NMR (600MHz, DMSO-*d*₆) spectrum of **1**

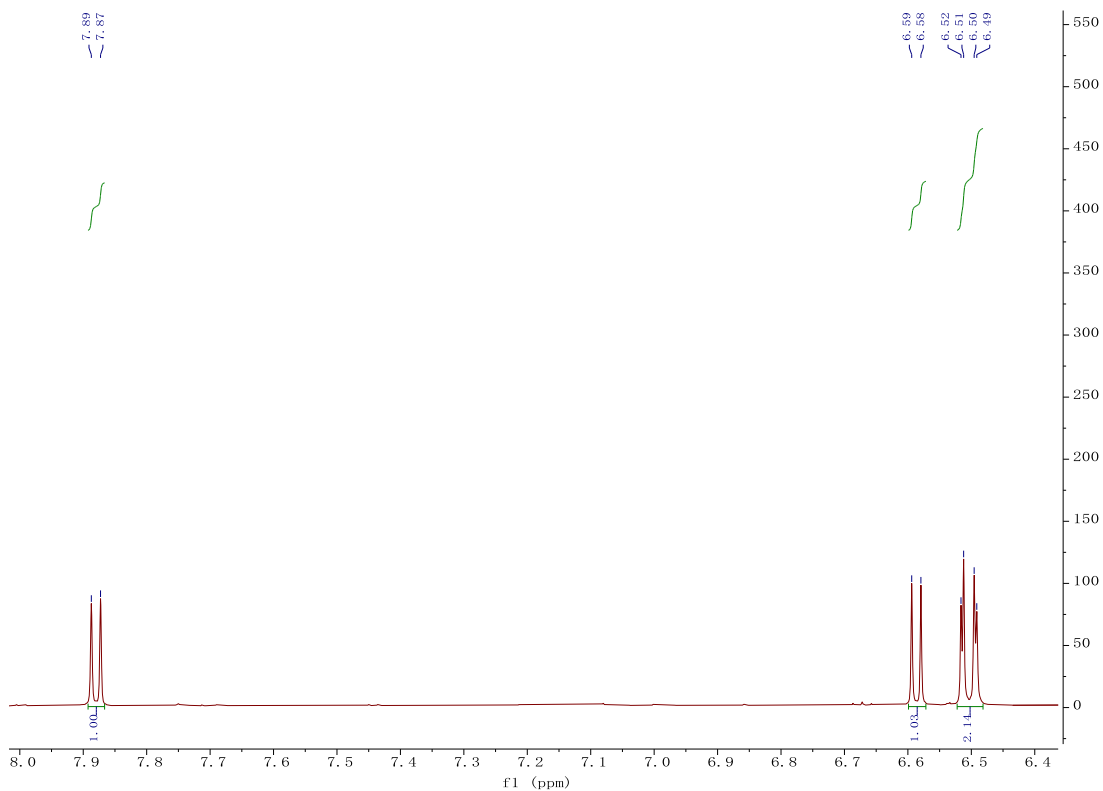


Figure S3: ¹H-NMR (600MHz, DMSO-*d*₆) spectrum of **1** (from δH 6.4 ppm to δH 8.0 ppm)

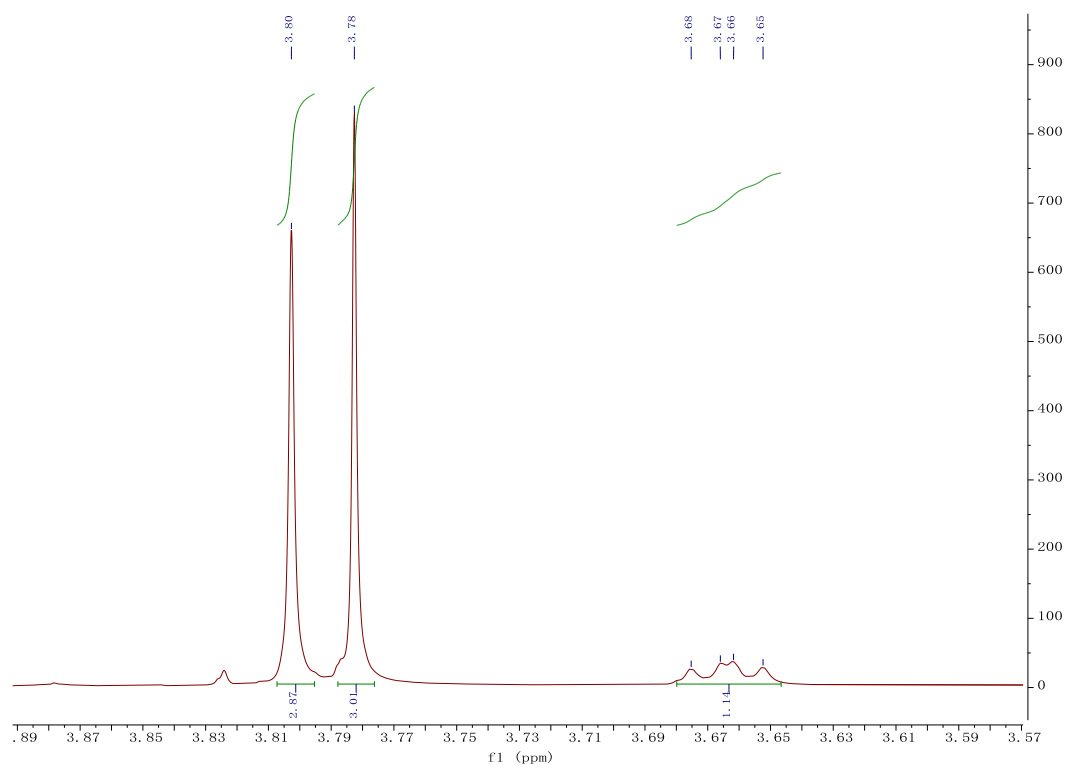


Figure S4: ¹H-NMR (600MHz, DMSO-*d*₆) spectrum of **1** (from δH 3.6 ppm to δH 3.85 ppm)

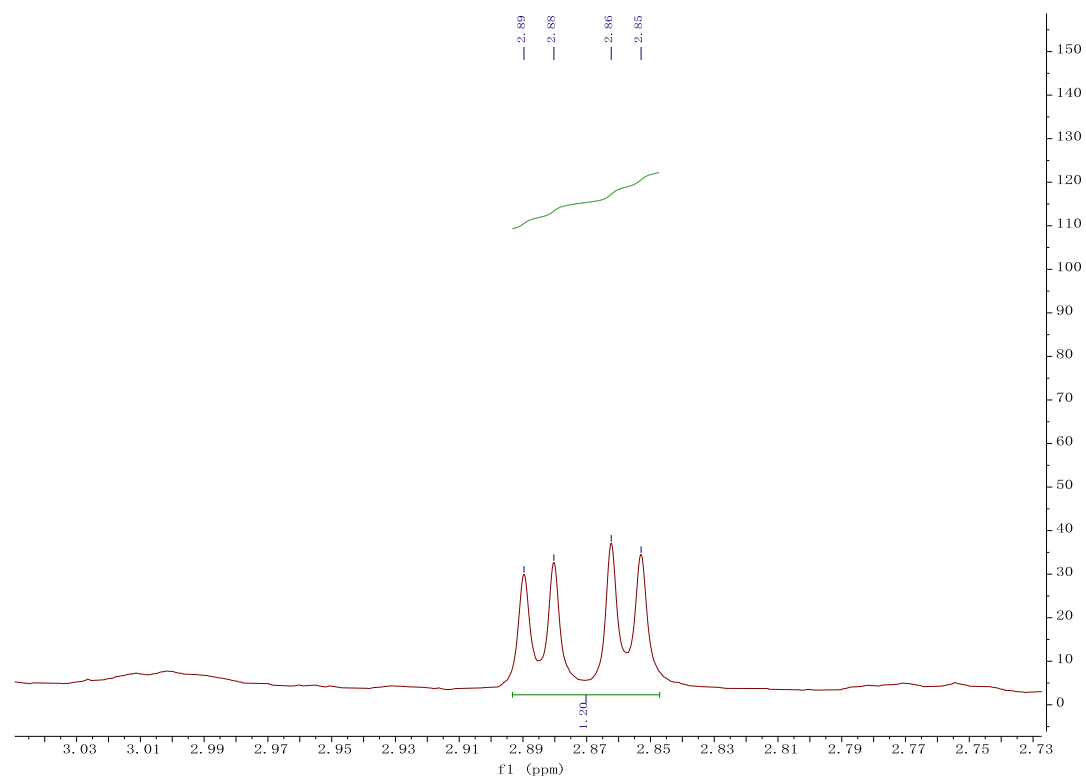


Figure S5: $^1\text{H-NMR}$ (600MHz, $\text{DMSO-}d_6$) spectrum of **1** (from δH 2.8 ppm to δH 3.0 ppm)

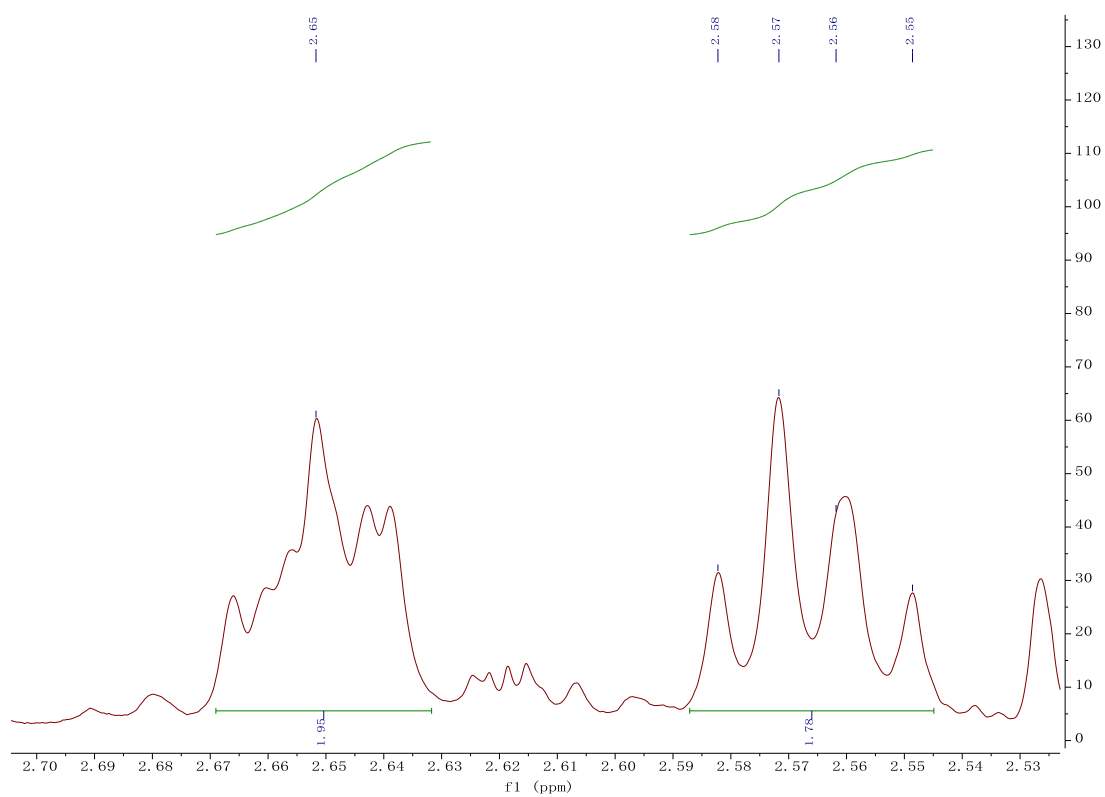


Figure S6: $^1\text{H-NMR}$ (600MHz, $\text{DMSO-}d_6$) spectrum of **1** (from δH 2.53 ppm to δH 2.68 ppm)

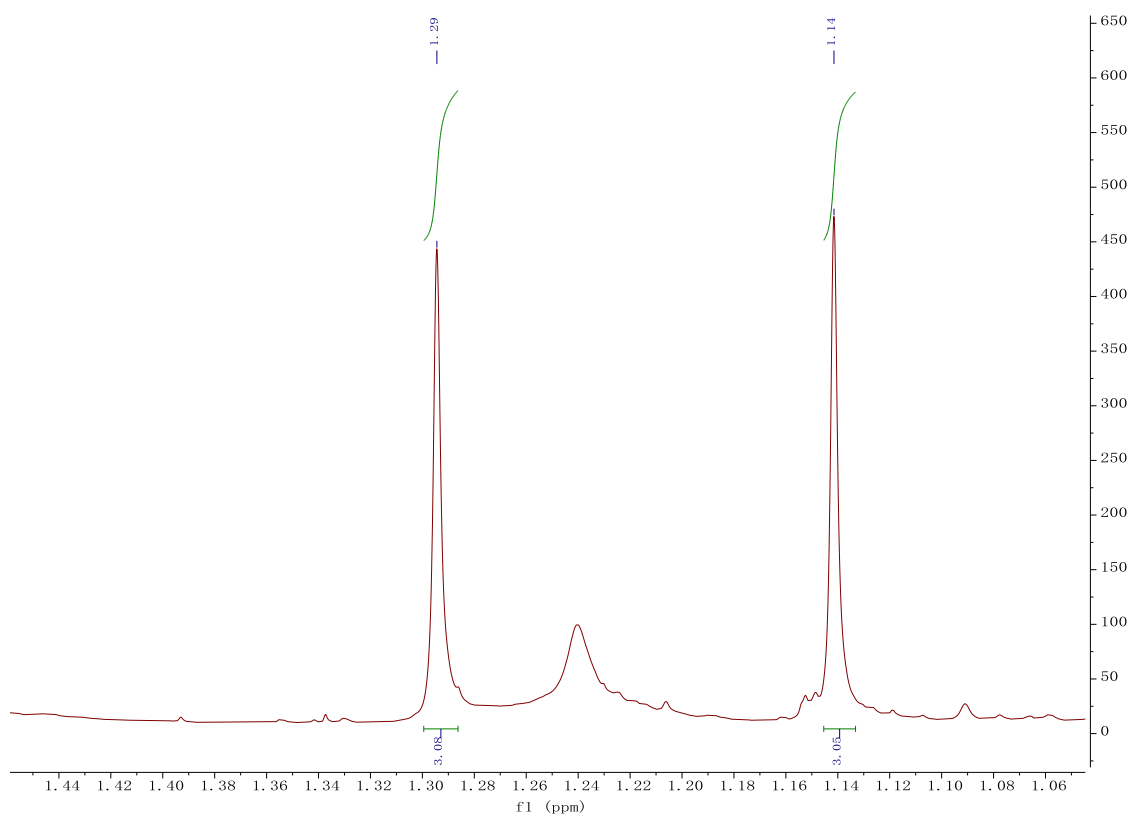


Figure S7: $^1\text{H-NMR}$ (600MHz, $\text{DMSO-}d_6$) spectrum of **1** (from δ H 1.1 ppm to δ H 1.4 ppm)

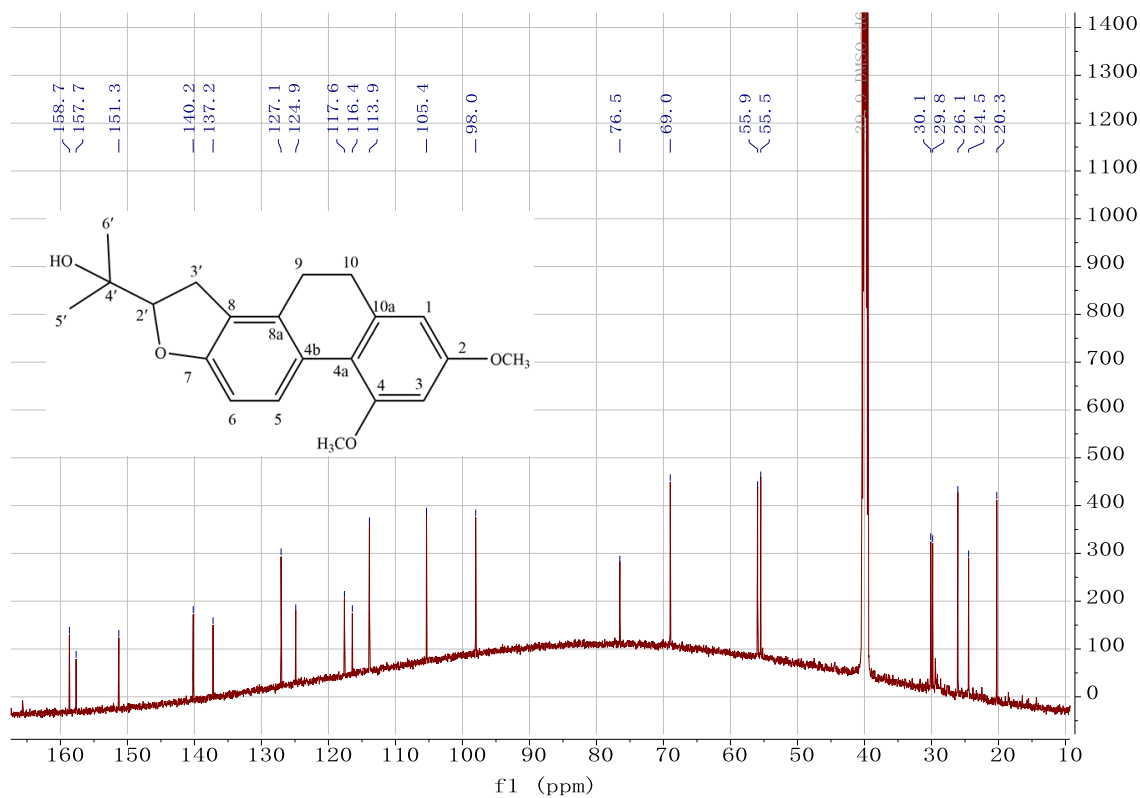


Figure S8: $^{13}\text{C-NMR}$ (150MHz, $\text{DMSO-}d_6$) spectrum of **1**

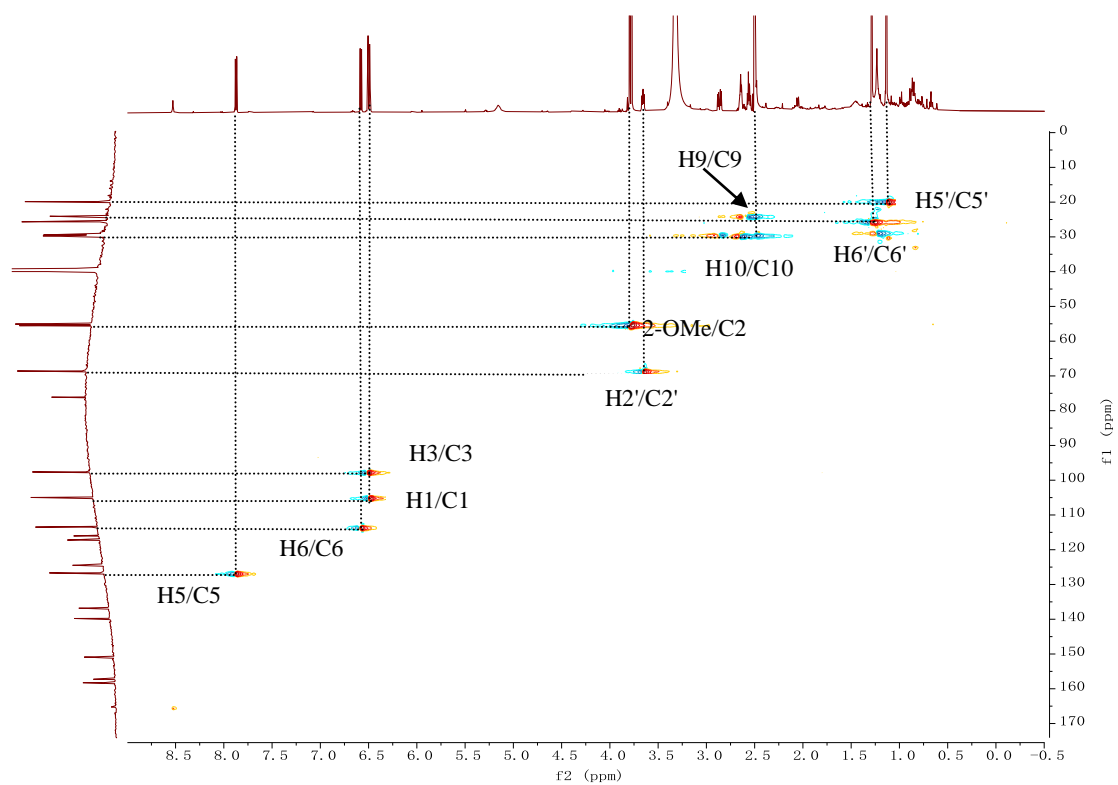


Figure S9: HSQC spectrum of 1

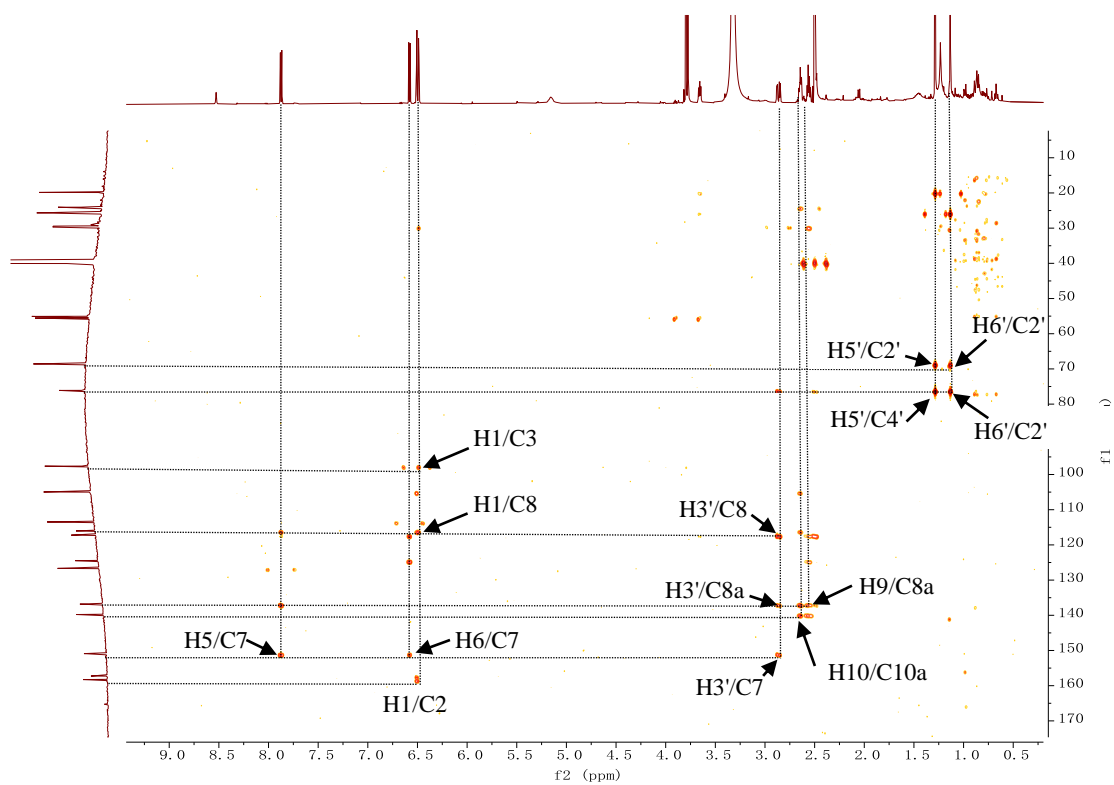


Figure S10: HMBC spectrum of 1

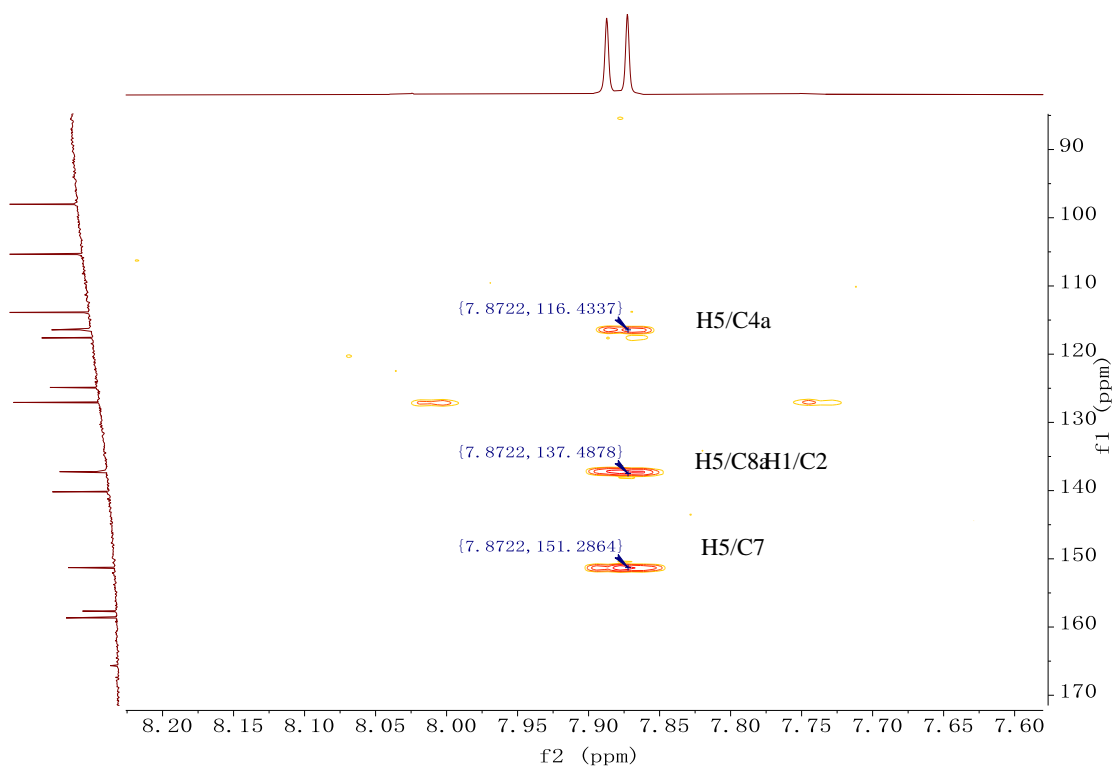


Figure S11: HMBC spectrum of **1** (from δ H 7.7 ppm to δ H 8.0 ppm)

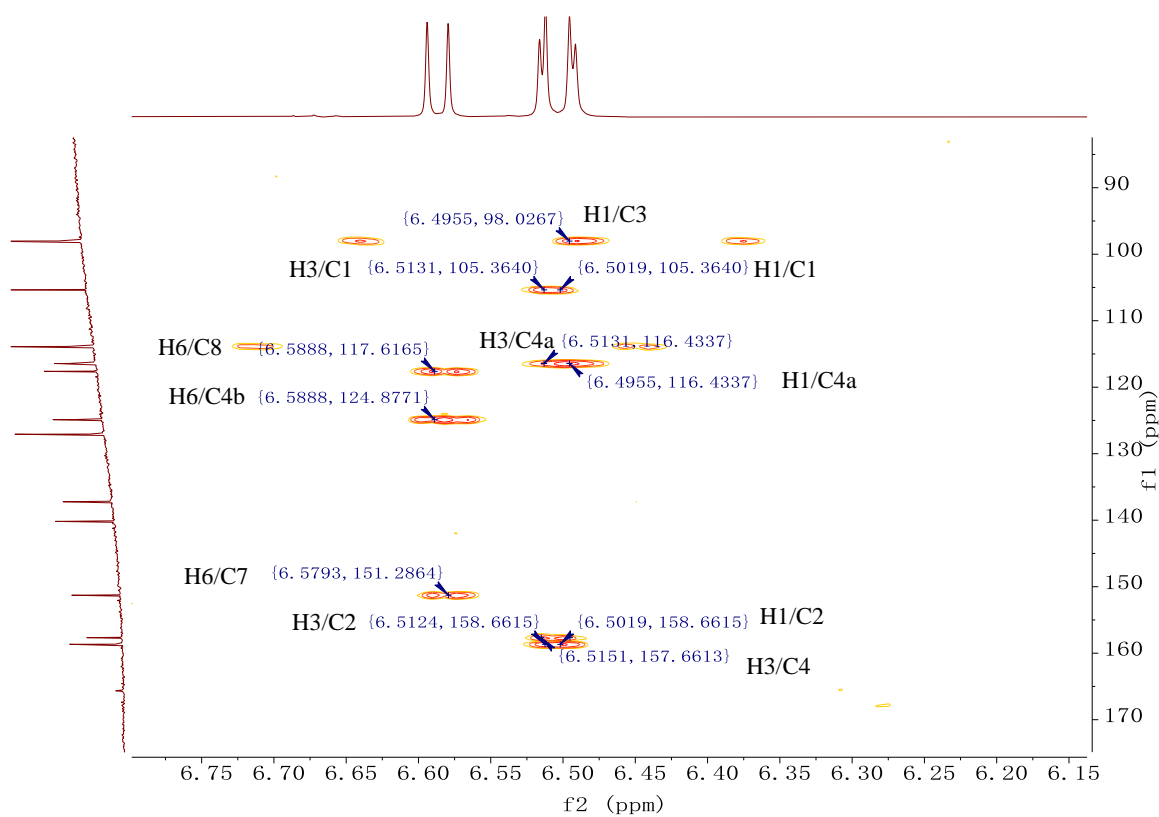


Figure S12: HMBC spectrum of **1** (from δ H 6.2 ppm to δ H 6.8 ppm)

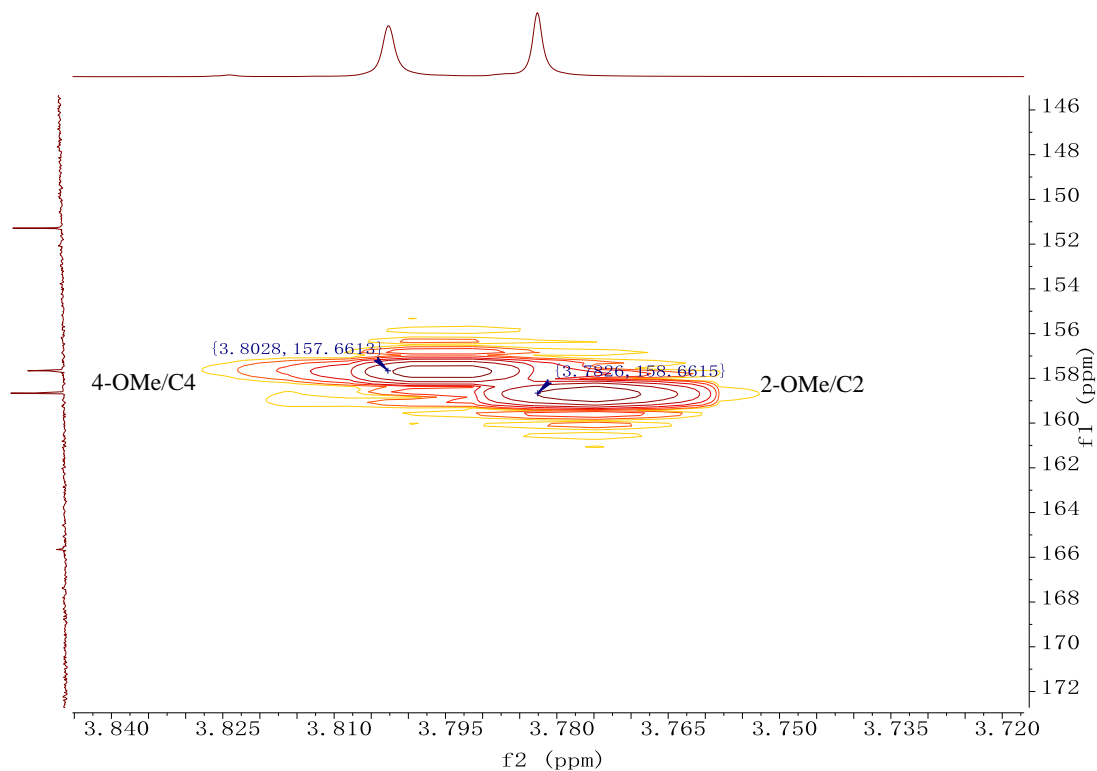


Figure S13: HMBC spectrum of **1** (from δ H 3.7 ppm to δ H 3.8 ppm)

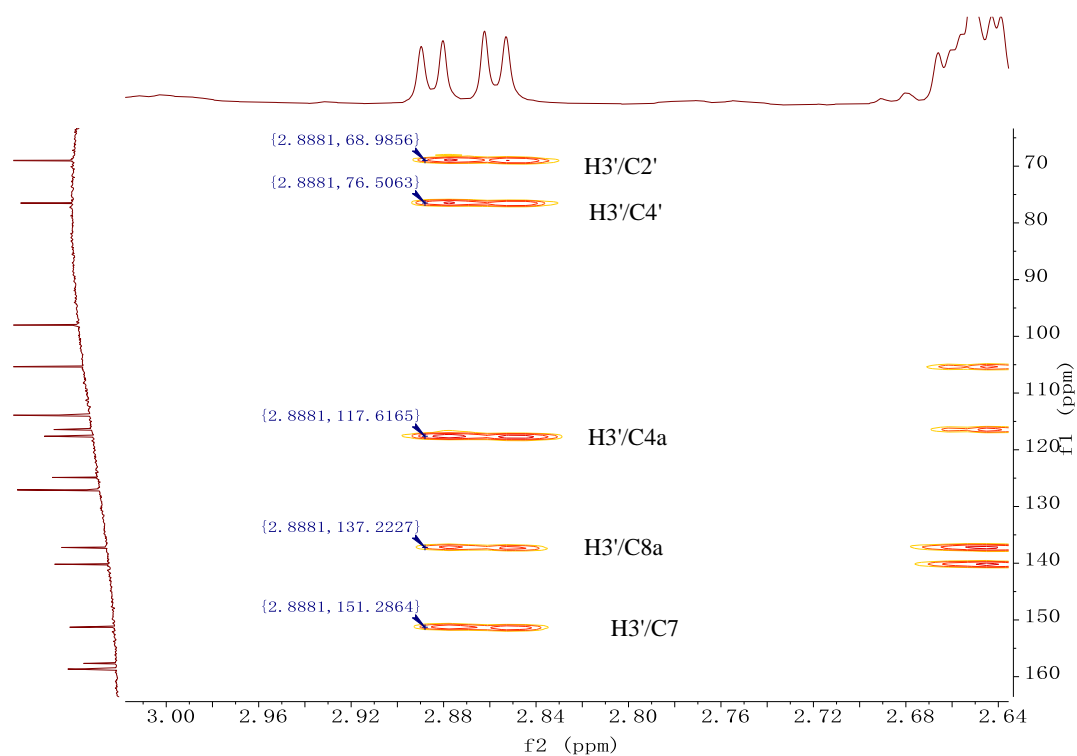


Figure S14: HMBC spectrum of **1** (from δ H 2.7 ppm to δ H 3.0 ppm)

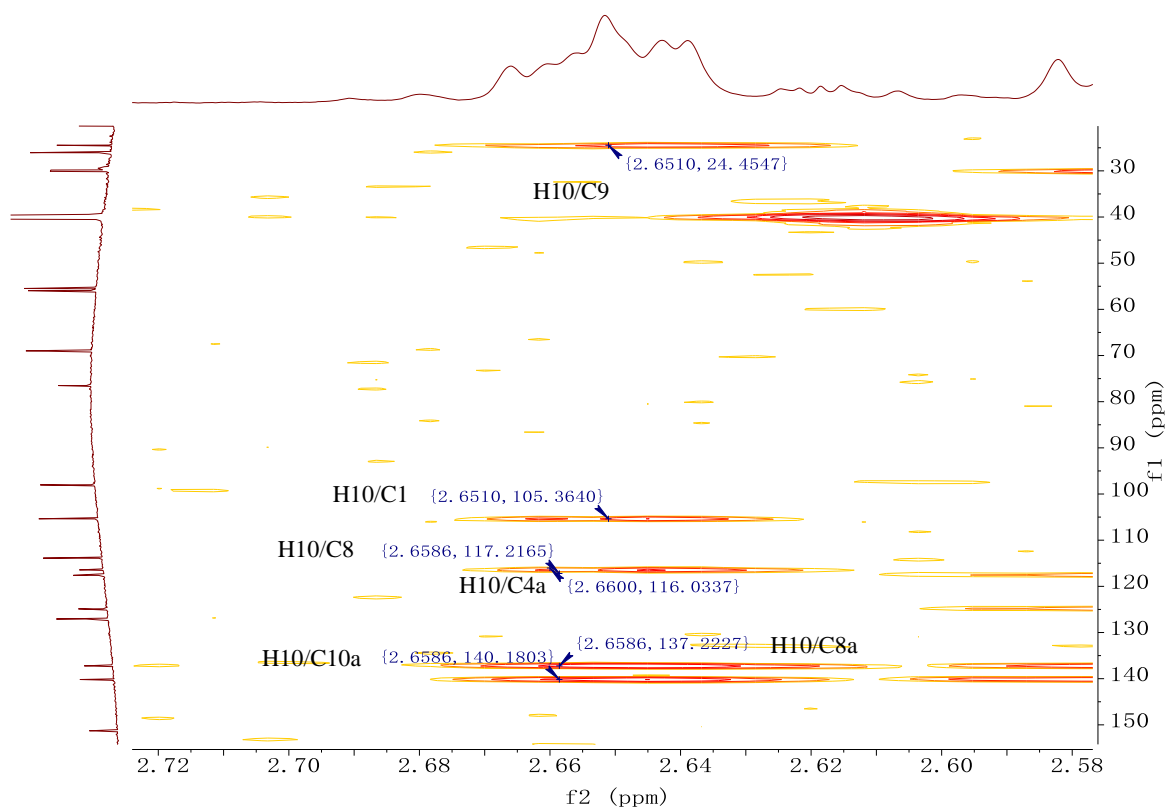


Figure S15: HMBC spectrum of **1** (from δ H 2.6 ppm to δ H 2.7 ppm)

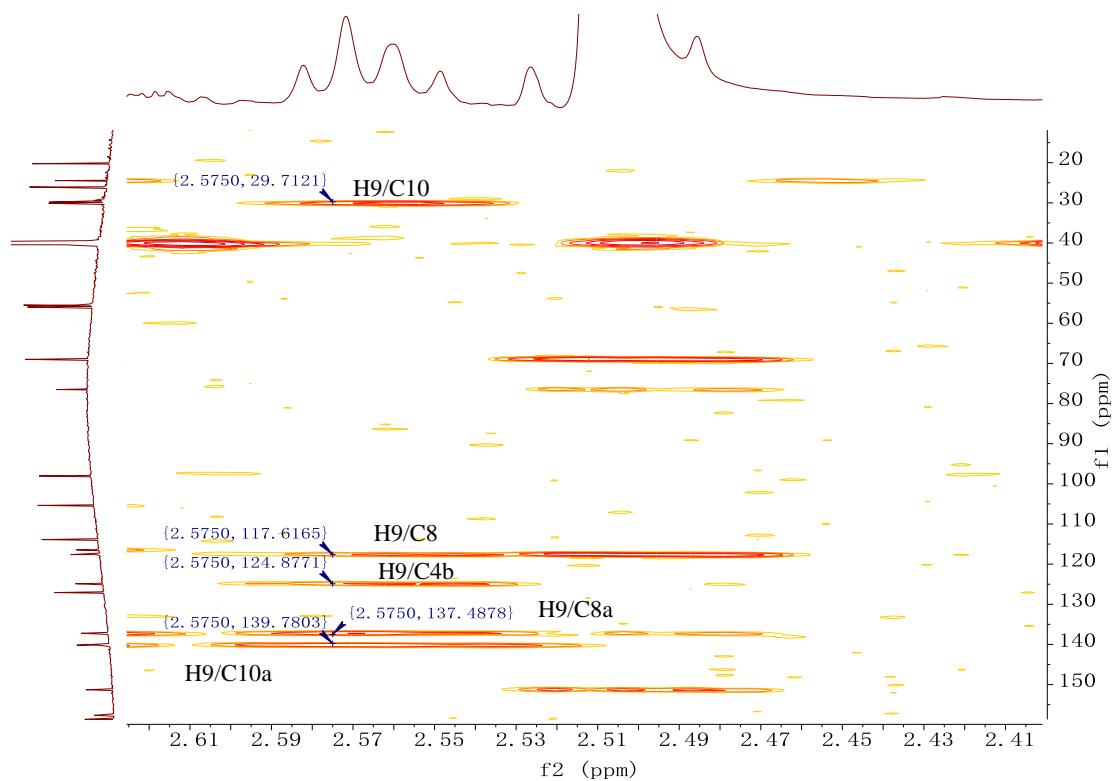


Figure S16: HMBC spectrum of **1** (from δ H 2.5 ppm to δ H 2.6 ppm)

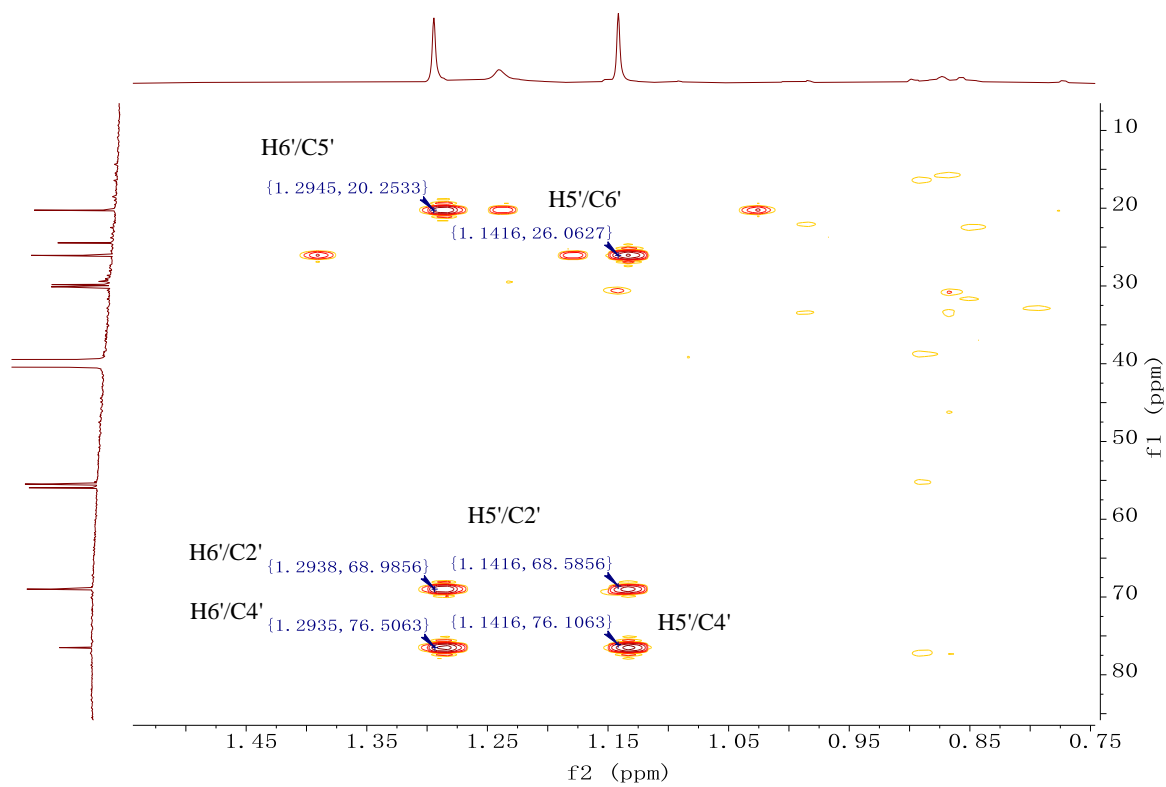


Figure S17: HMBC spectrum of **1** (from δ H 1.0 ppm to δ H 1.5 ppm)

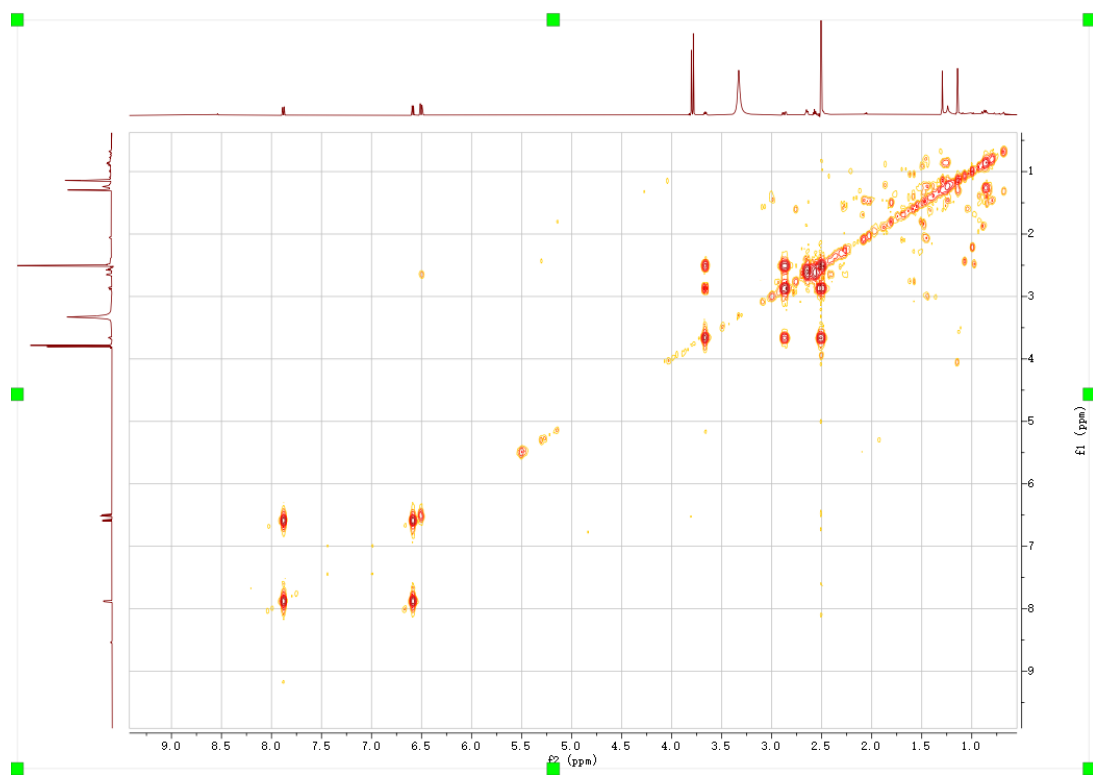


Figure S18: ^1H - ^1H COSY spectrum of **1**

Extraction of dihydrophenanthrene derivative and its application in fatty liver treatment

1 0 0 0 Citation Map Download Print Bookmark

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By: Zhang, Xiaopo; Liu, Chenpeng; Dong, Lin; Zhang, Yong; Zhang, Caiyun; He, Xiaowen

The present invention belongs to the field of natural drugs, specifically relating to extraction of dihydrophenanthrene derivative from Radix Panacis Quinquefolii and its application in fatty liver treatment. In particular, dihydrophenanthrene derivative is isolated from the petroleum ether extract of 95% ethanol extract of dried roots of Radix Panacis Quinquefolii by various separation methods, through exptl. verification, this compound can enhance the vitality of MIN6 cells induced by PA, antagonize the damage effect of PA on MIN6 cells, and have a protective effect on MIN6 cells, the same time, the compound can significantly reduce intracellular TG levels, improve lipid accumulation, and have potential therapeutic effects on fatty liver.

Keywords: dihydrophenanthrene derivative extraction Radix Panacis Quinquefolii fatty liver treatment

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Patent Family

Patent	Language	Kind Code	PatentPak Options	Publication Date	Application Number	Application Date
CN116768833	Chinese	A	PDF PDF+ Viewer	2023-09-19	CN2023-10685685	2023-06-09

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IPC Data

Figure S21: SciFinder search report of compound 1

Note: The compounds in the report have undetermined configurations

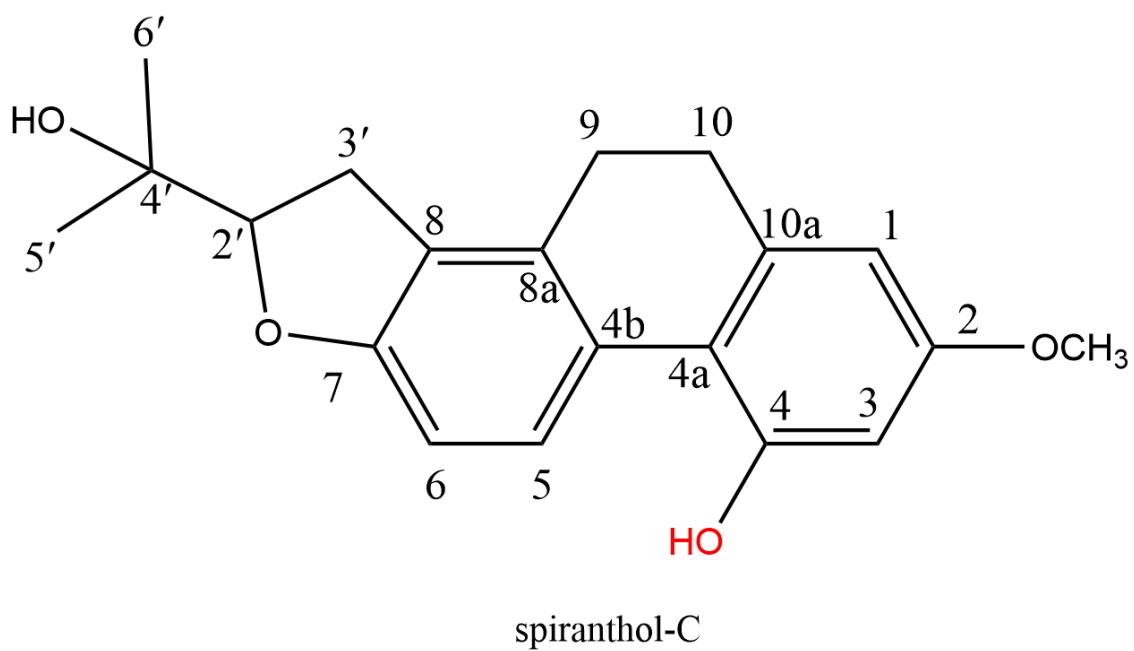
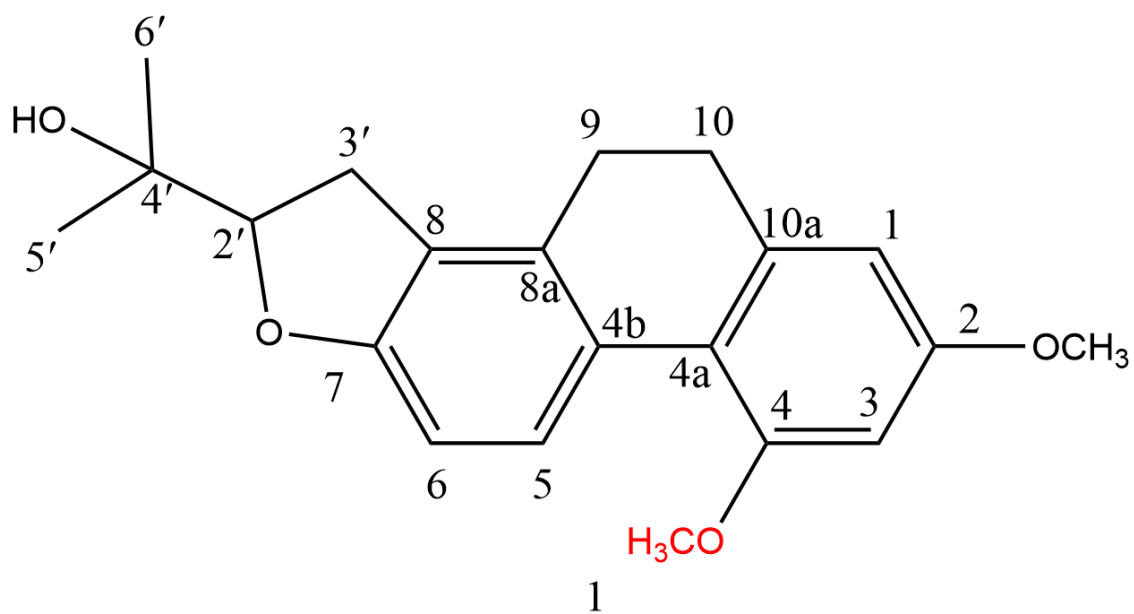


Figure S22: Structure of compound **1** and *Spiranthol-C*