

Supplementary Materials

Two New Fatty Acid Derivatives, Omphalotols A and B and Anti-*Helicobacter pylori* Fatty Acid Derivatives from Poisonous Mushroom *Omphalotus japonicus*

Seulah Lee ^{1,2,†}, Tae Wan Kim ^{1,†}, Yong Hoon Lee ¹, Dong-Min Kang ³, Rhim Ryoo ⁴, Yoon-Joo Ko ⁵, Mi-Jeong Ahn ³, and Ki Hyun Kim^{1,*}

¹ School of Pharmacy, Sungkyunkwan University, Suwon 16419, Korea; seulah@kopri.re.kr (S.L.); asde8282@naver.com (T.W.K.)

² Division of Life Sciences, Korea Polar Research Institute, KIOST, Incheon, 21990, Korea

³ College of Pharmacy and Research Institute of Pharmaceutical Sciences, Gyeongsang National University, Jinju 52828, Korea; kdm7105@gnu.ac.kr (D.M.K.); amj5812@gnu.ac.kr (M.J.A.)

⁴ Special Forest Products Division, Forest Bioresources Department, National Institute of Forest Science, Suwon 16631, Korea; rryoo@korea.kr (R.R.)

⁵ Laboratory of Nuclear Magnetic Resonance, National Center for Inter-University Research Facilities (NCIRF), Seoul National University, Gwanak-gu, Seoul 08826, Korea; yjko@snu.ac.kr (Y.J.K.)

* Correspondence: khkim83@skku.edu (K.H.K.); Tel.: +82-31-290-7700 (K.H.K.)

† These authors contributed equally to this study

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Figure S1. HR-ESIMS data of 1

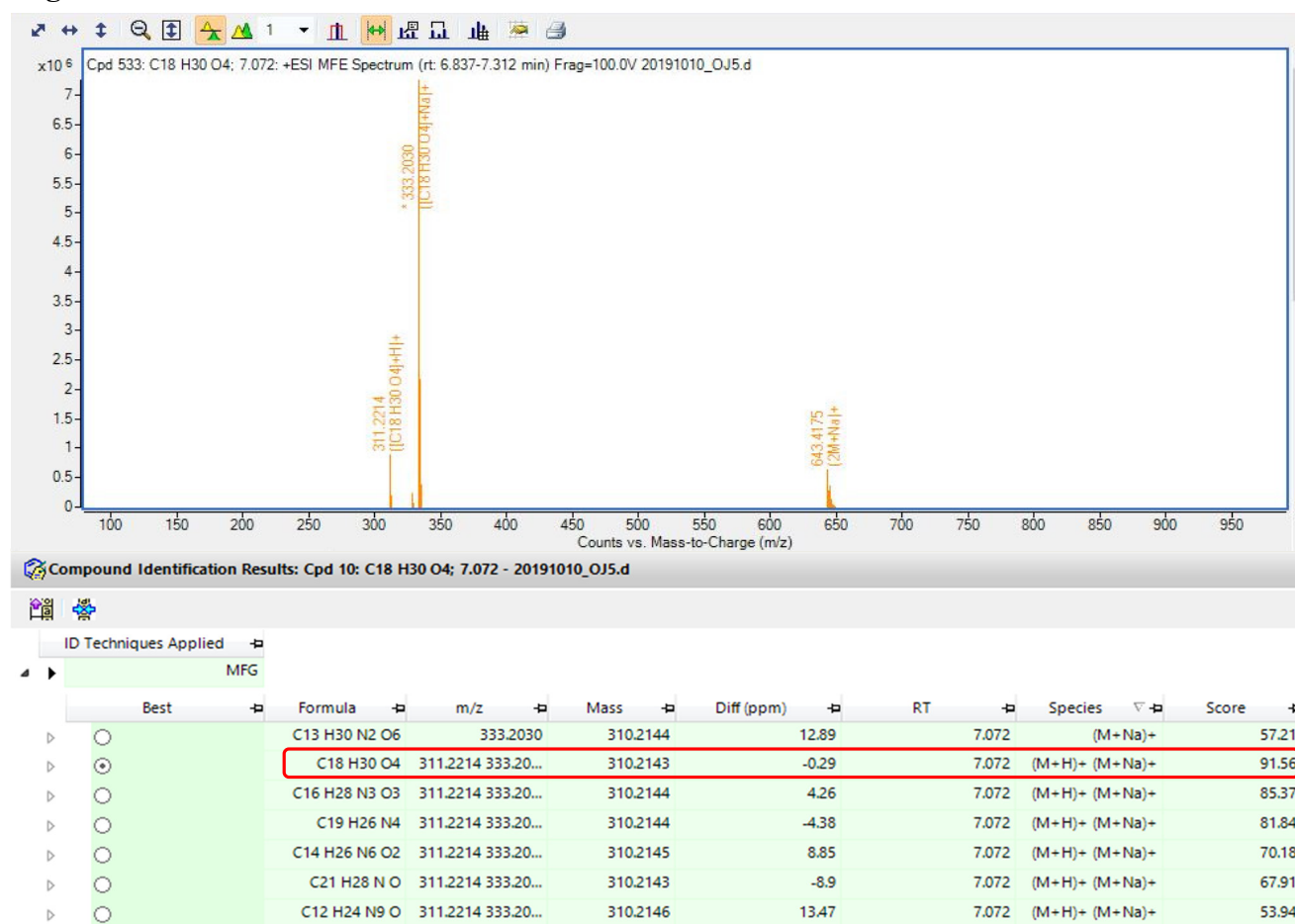


Figure S2. UV spectrum of **1**

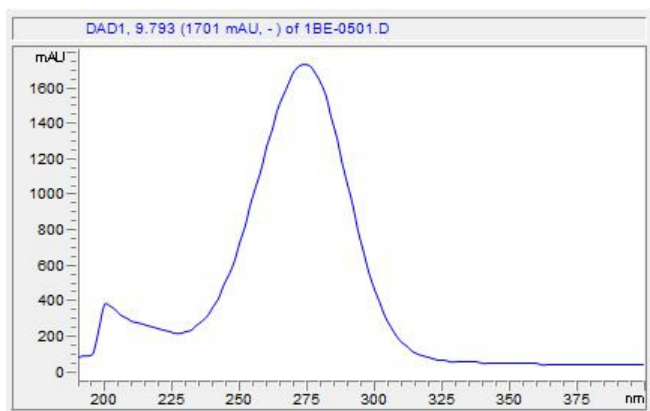


Figure S3. ^1H NMR spectrum of **1** (CD_3OD , 700 MHz)

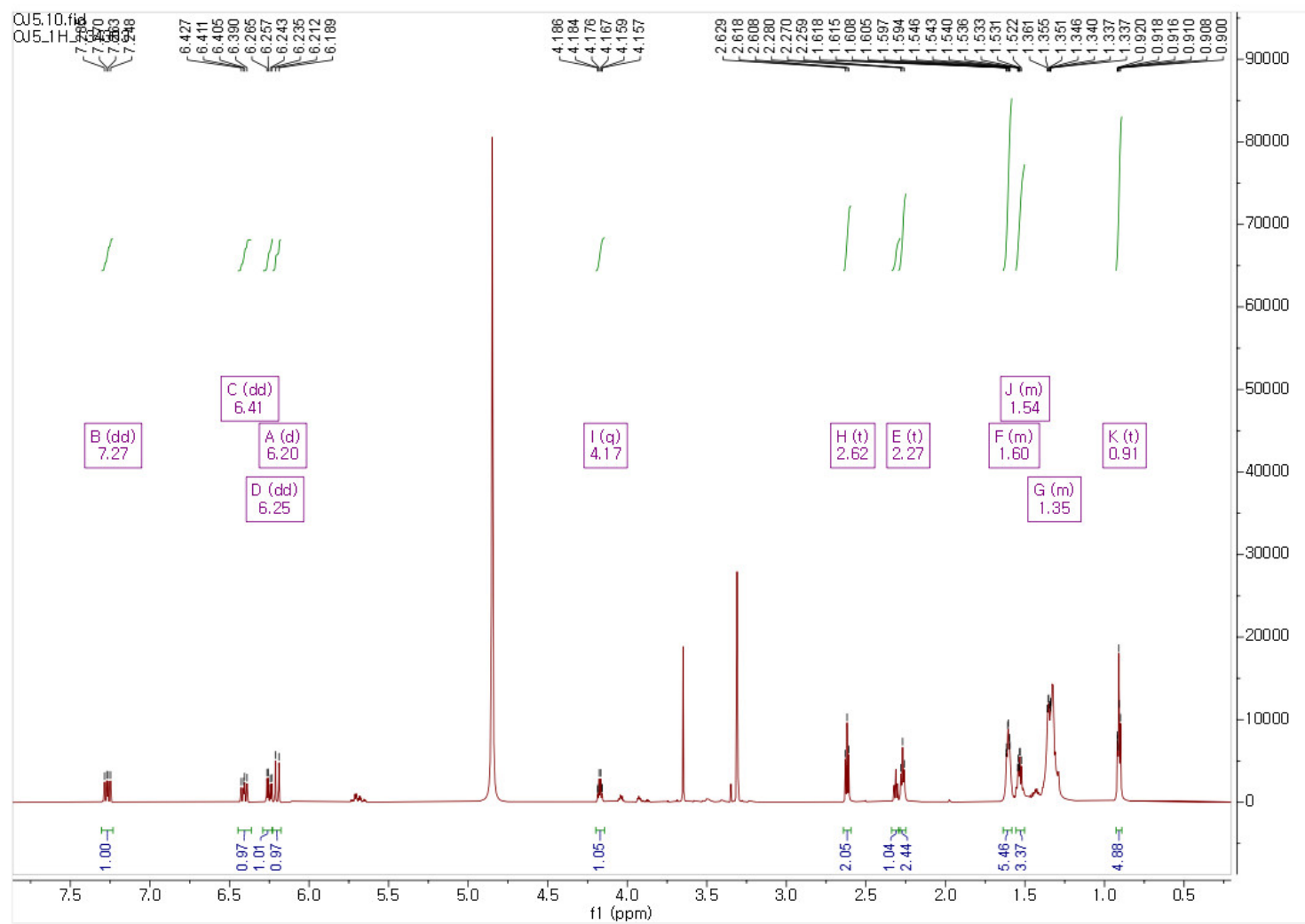


Figure S4. HSQC spectrum of **1**

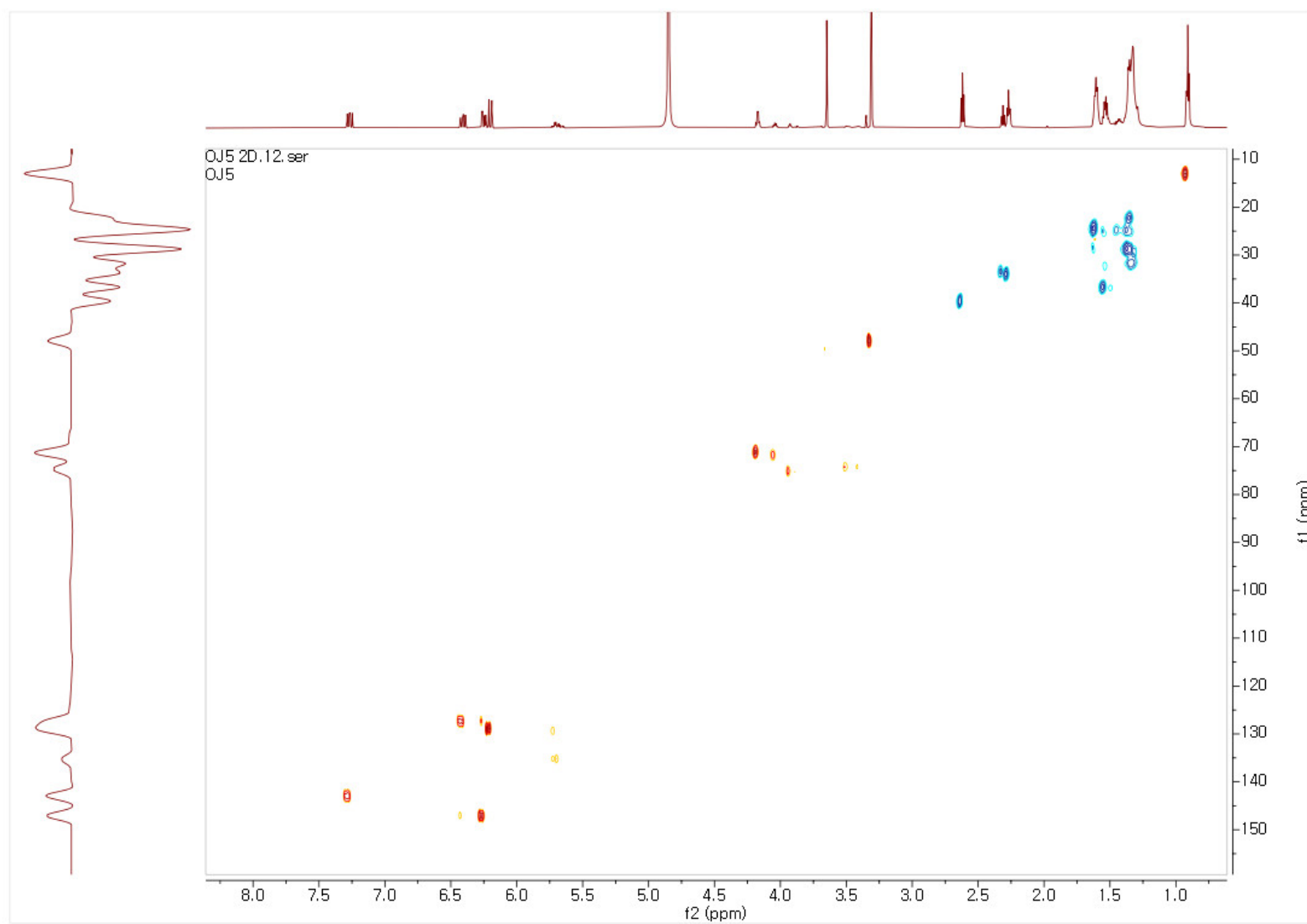


Figure S5. HMBC spectrum of **1**

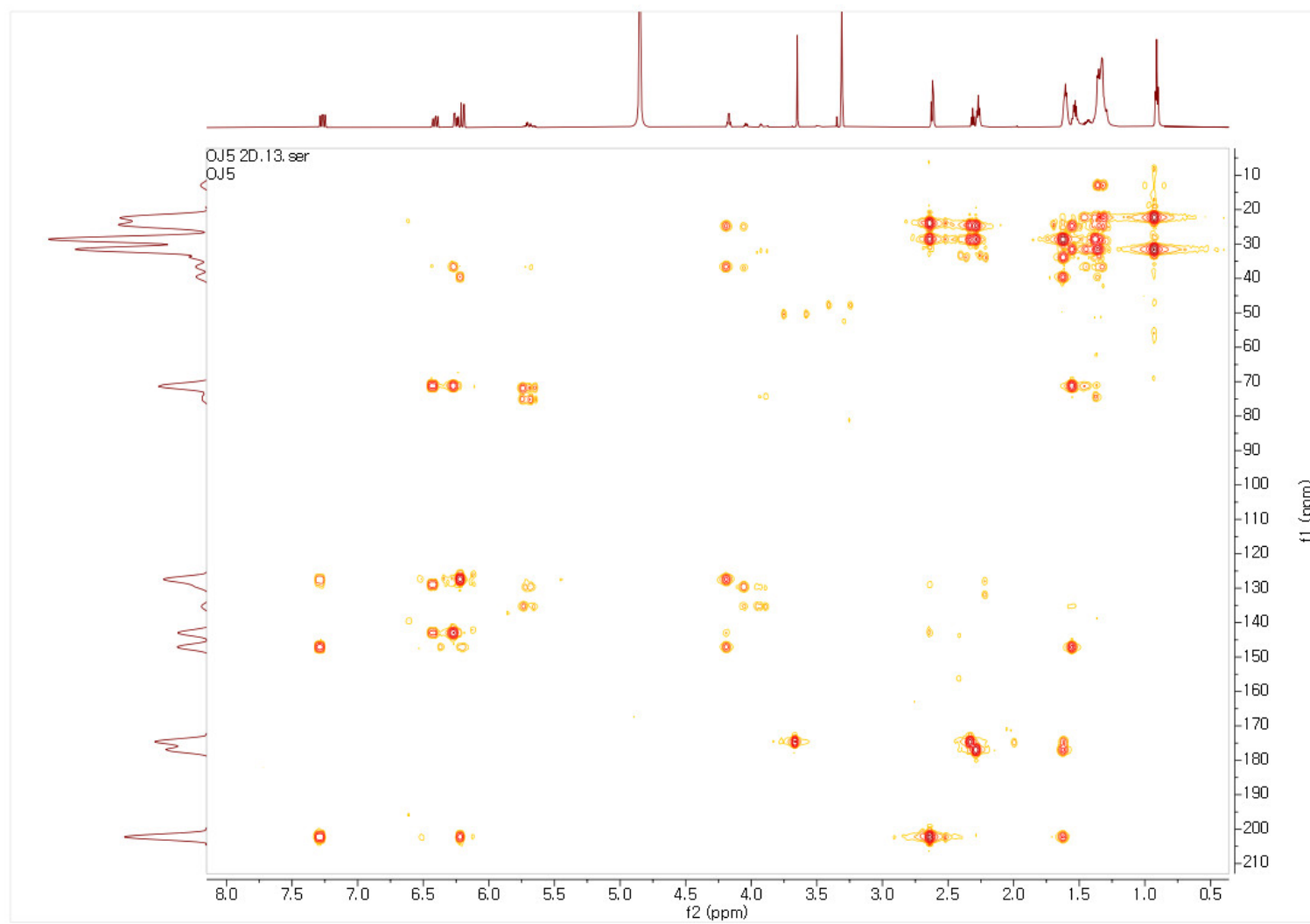


Figure S6. TOCSY spectrum of **1**

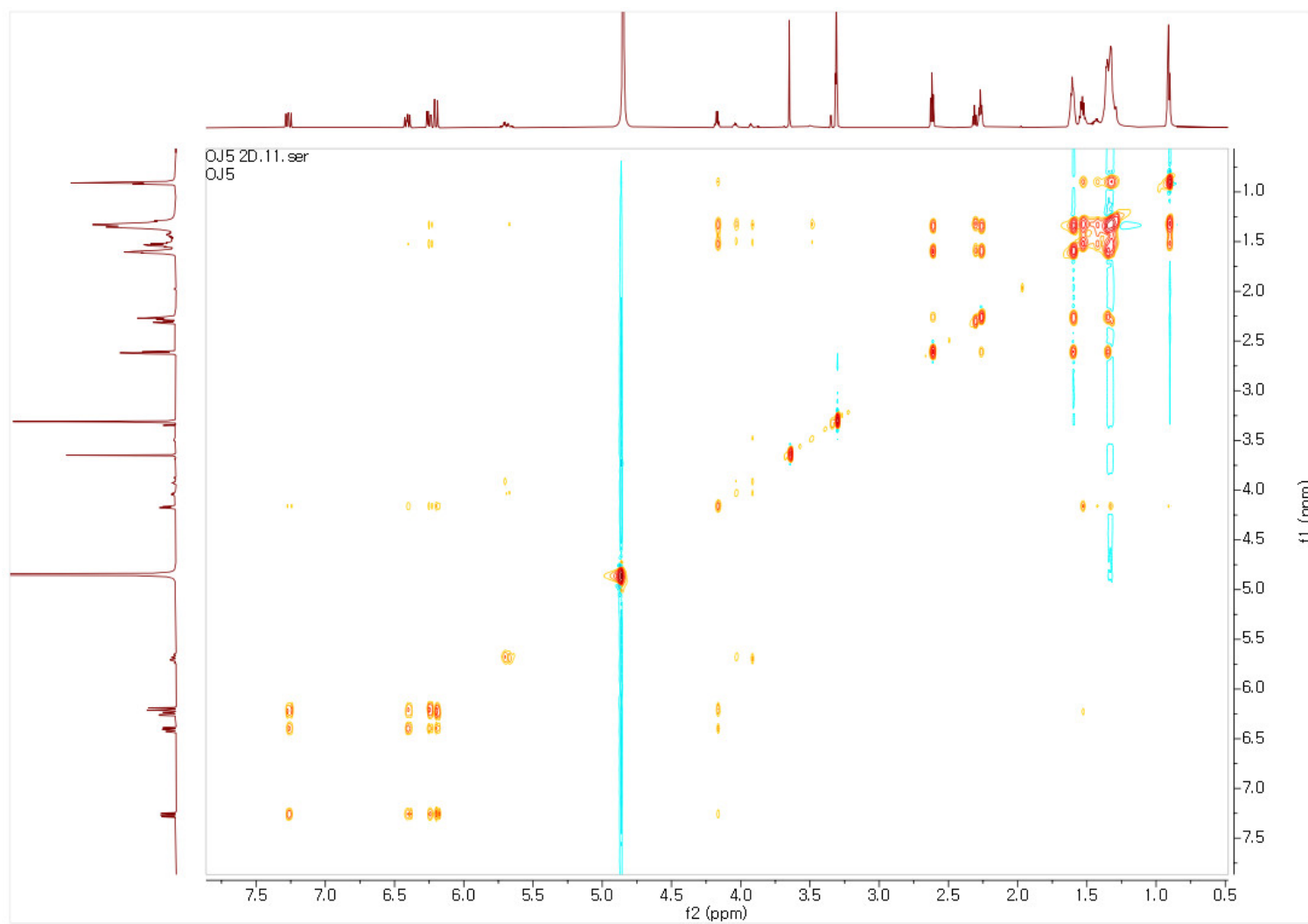


Figure S7. MS/MS analysis of **1** (MS^2 333 $[\text{M} + \text{Na}]^+ \rightarrow$ full-scan)

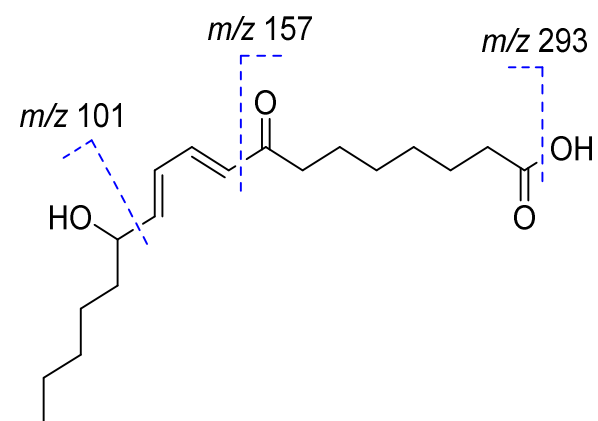
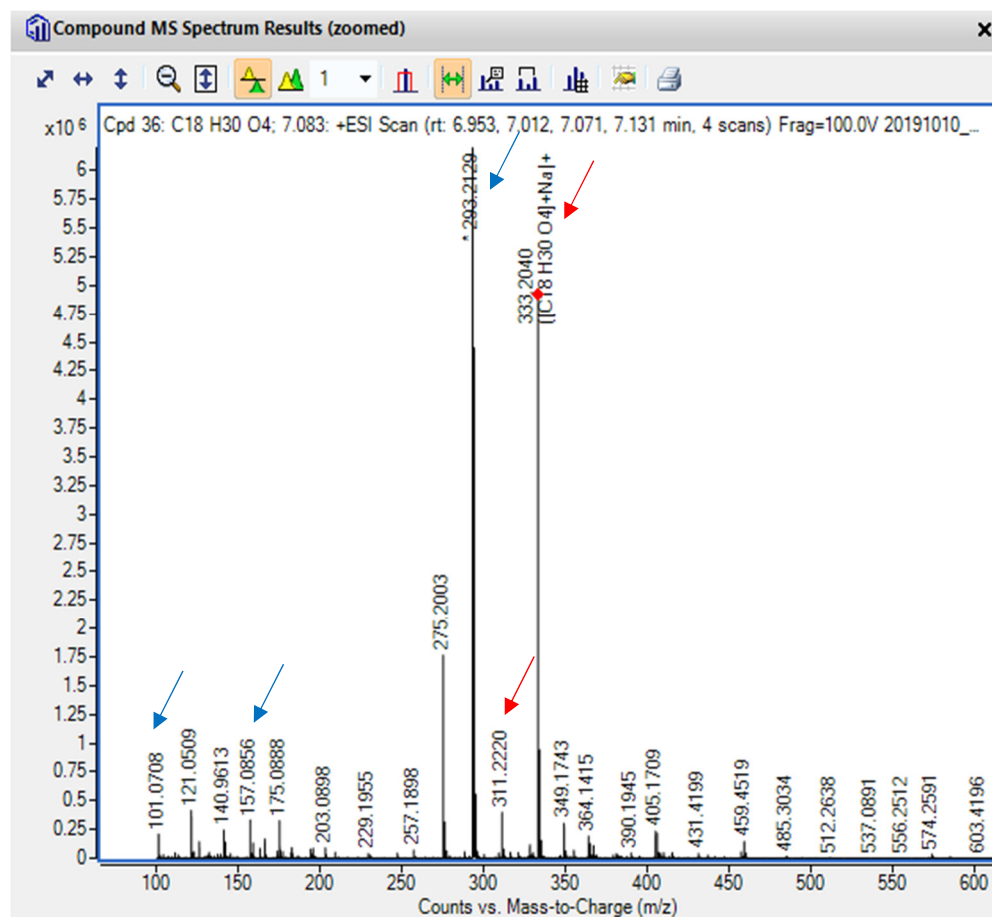


Figure S8. LC/MS data of acylated derivative from CEA reaction of **1**: (A) An acylated derivative of compound **1** in *R*-HBTM catalyzed acylation reaction; (B) An acylated derivative of compound **1** in *S*-HBTM catalyzed acylation reaction

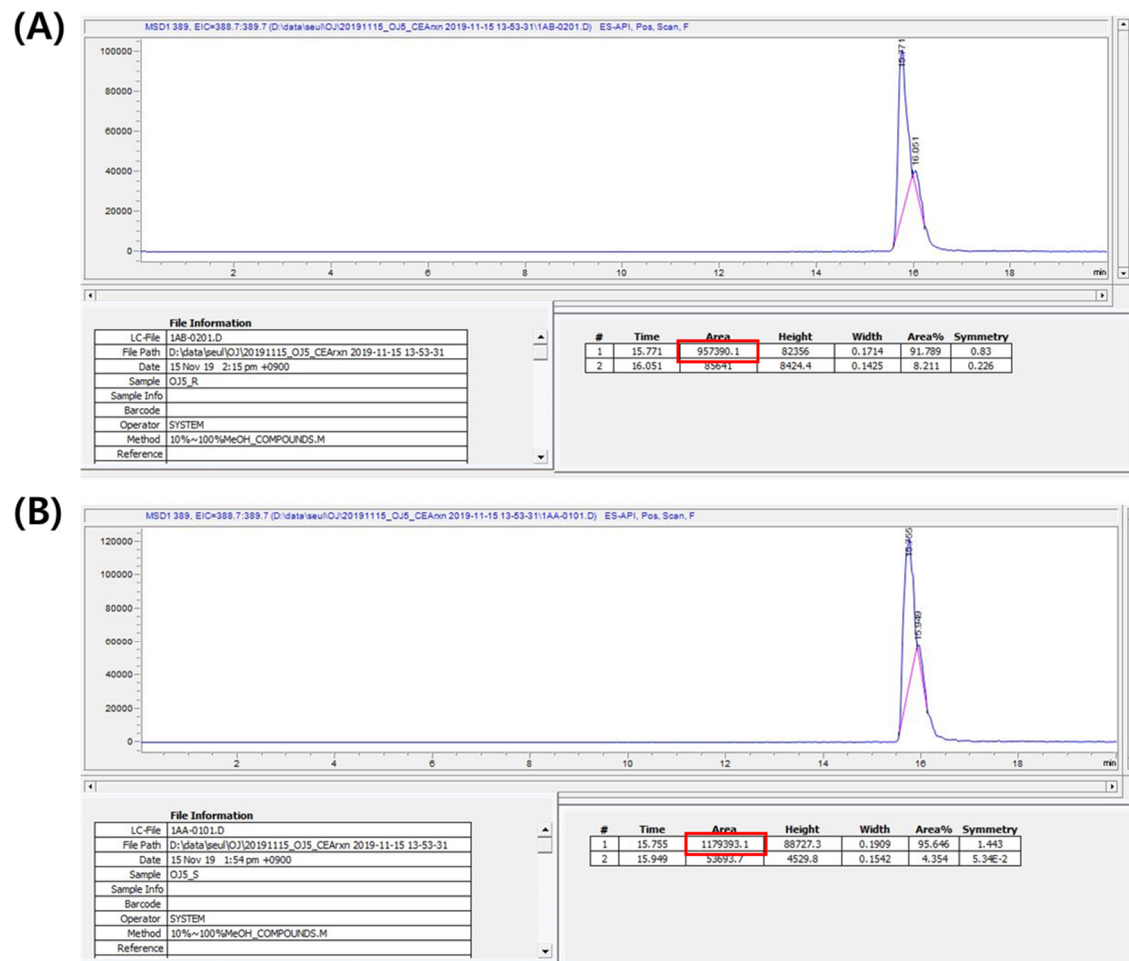


Figure S9. HR-ESIMS data of **2**

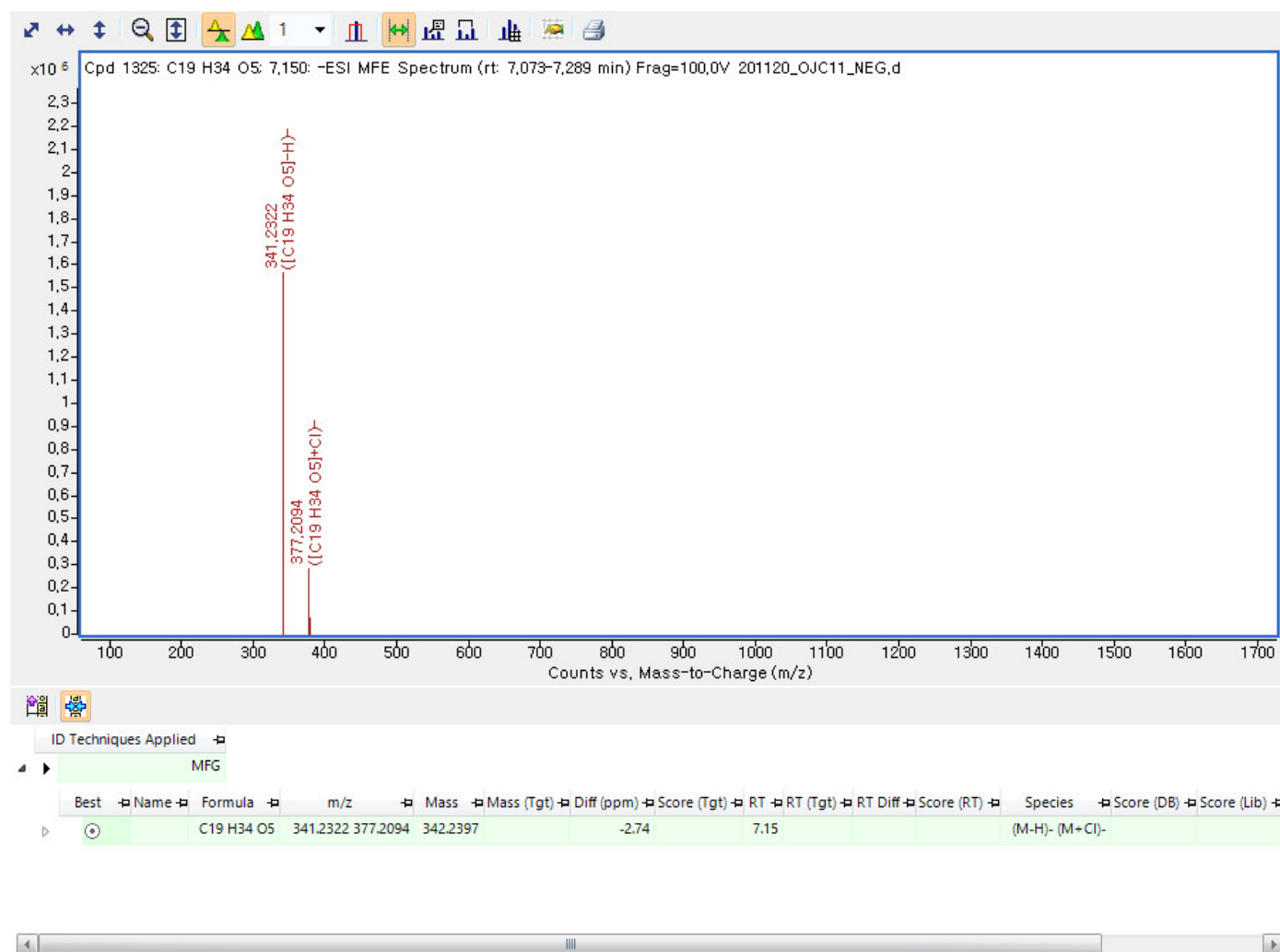


Figure S10. UV spectrum of **2**

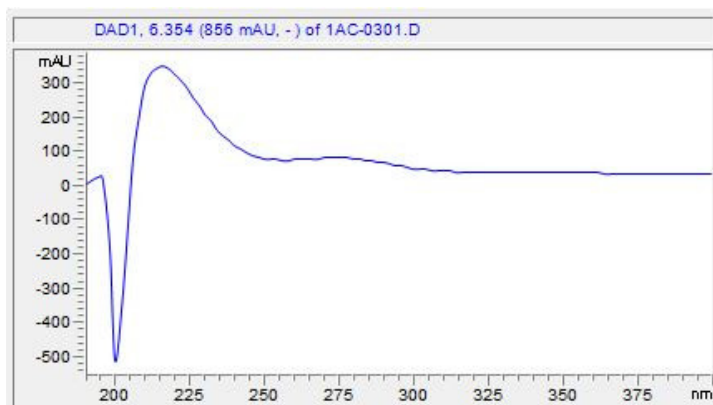


Figure S11. ^1H NMR spectrum of **2** (CDCl_3 , 850 MHz)

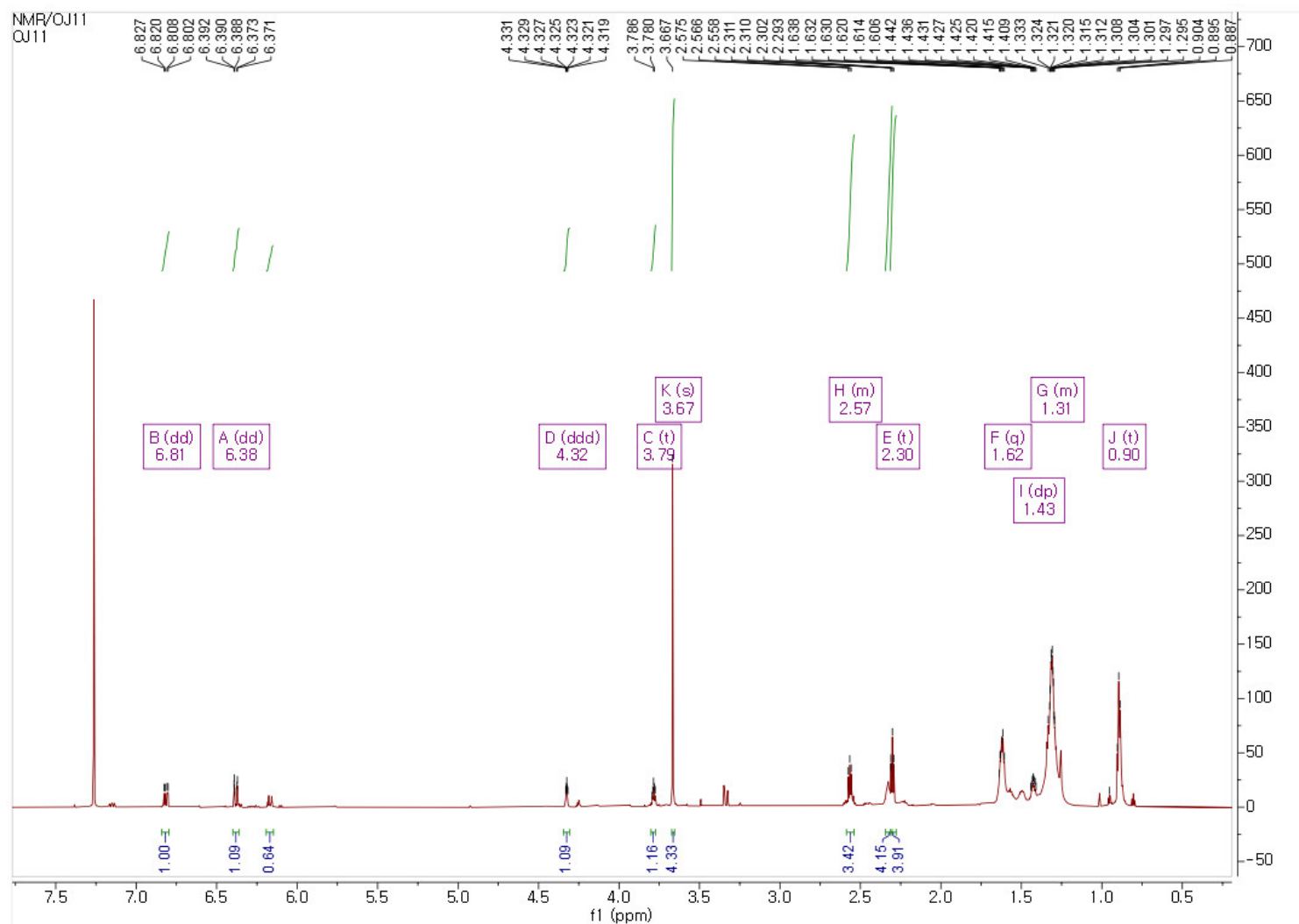


Figure S12. HSQC spectrum of **2**

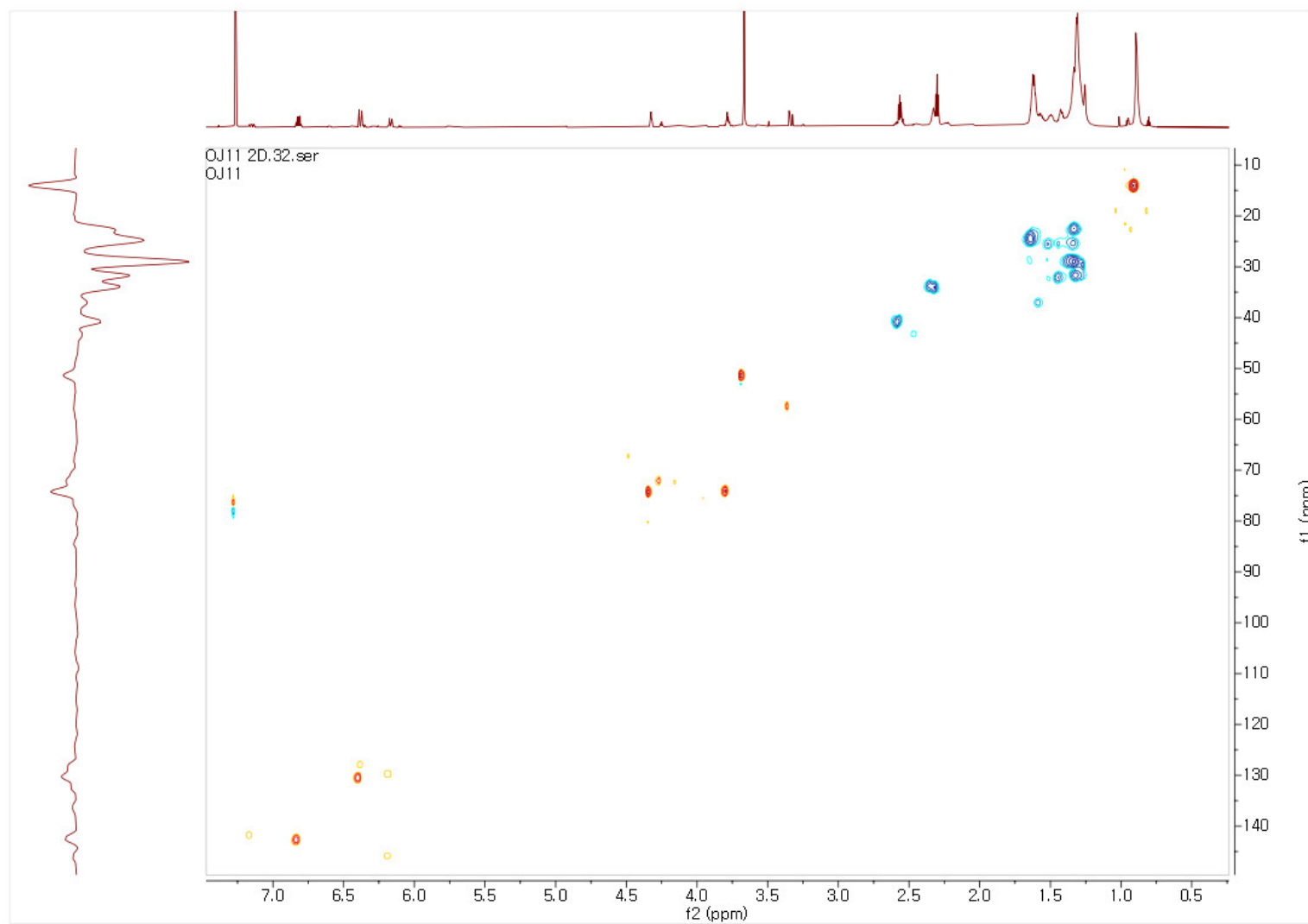


Figure S13. HMBC spectrum of **2**

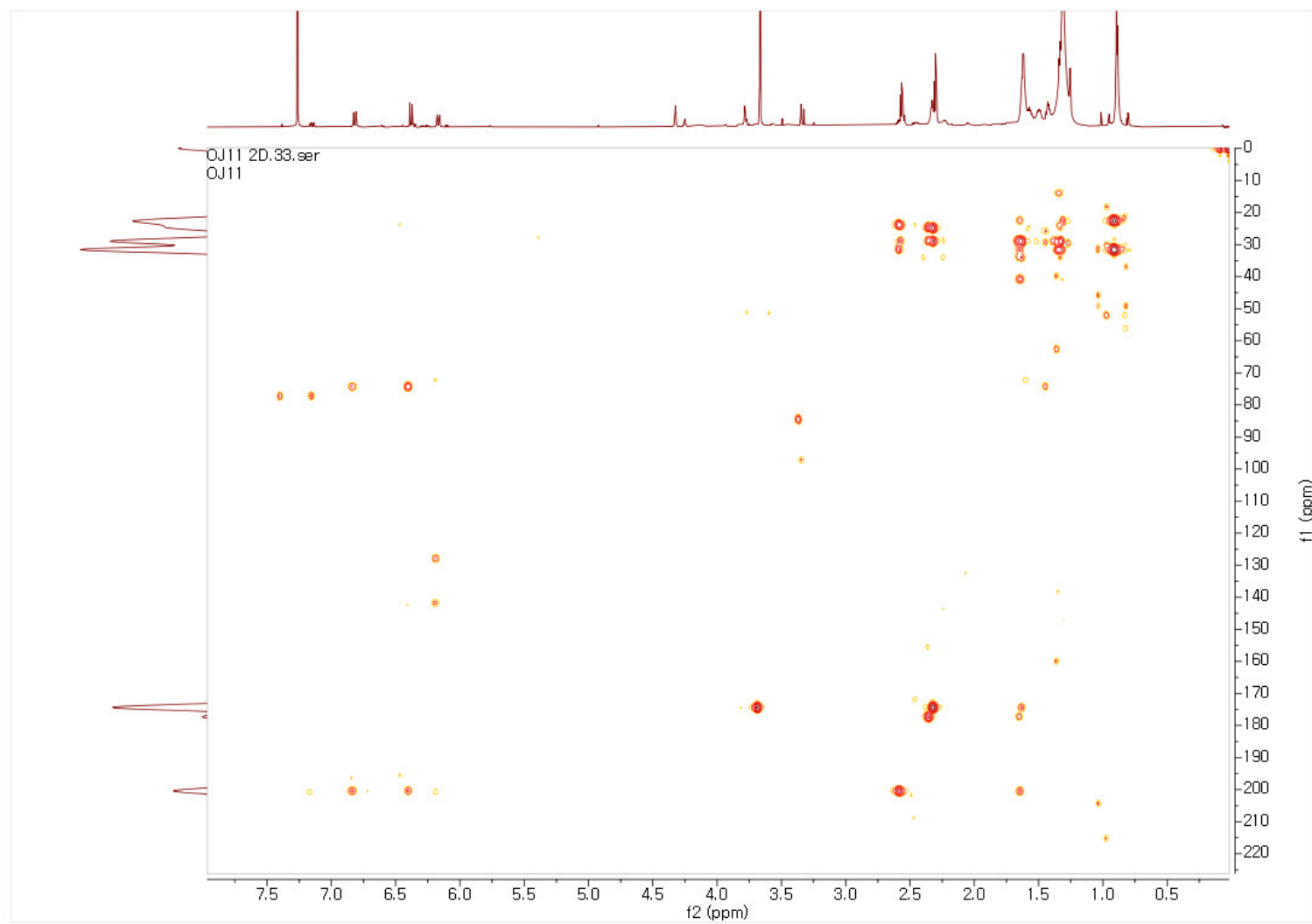


Figure S14. ^1H - ^1H COSY spectrum of **2**

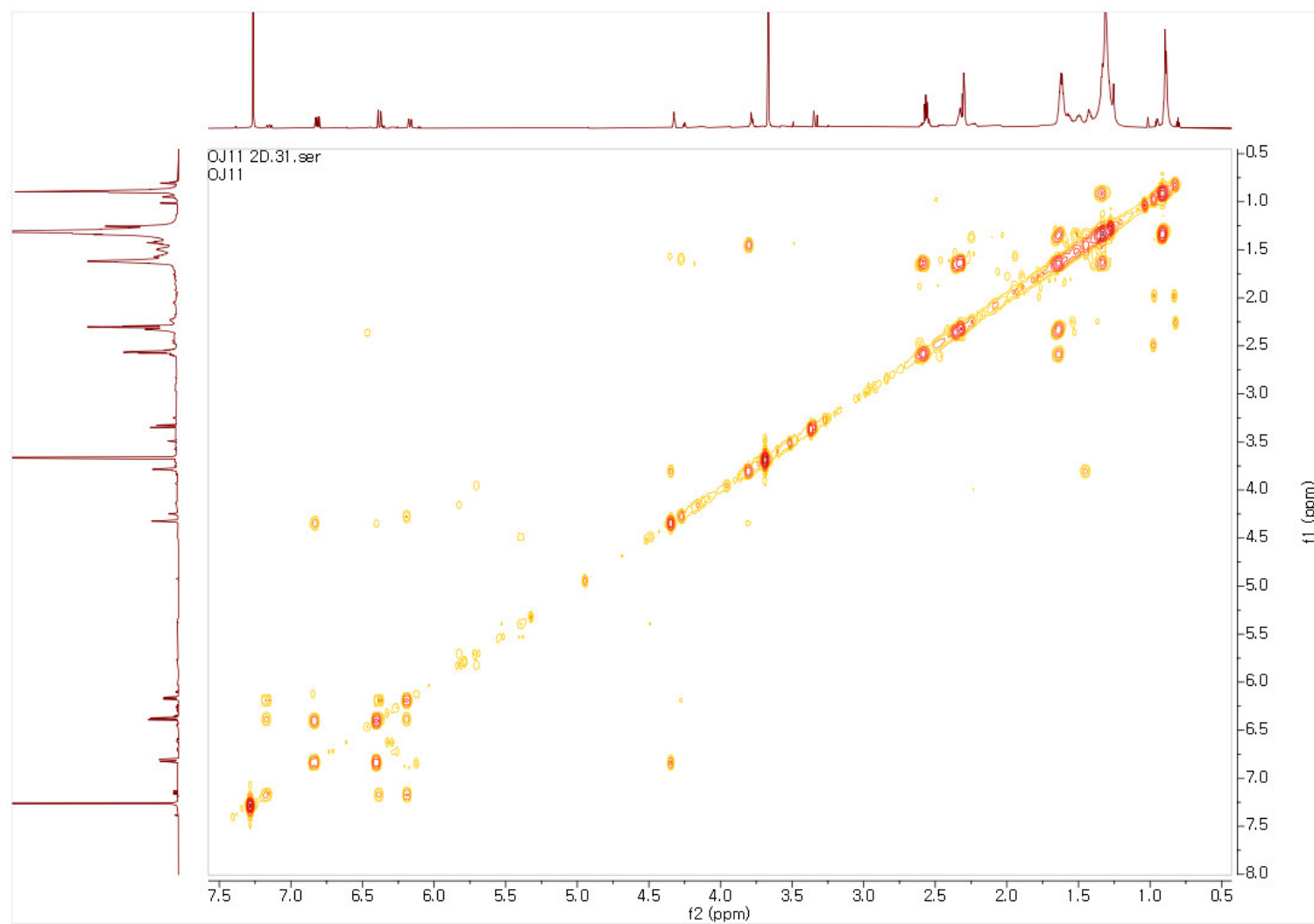
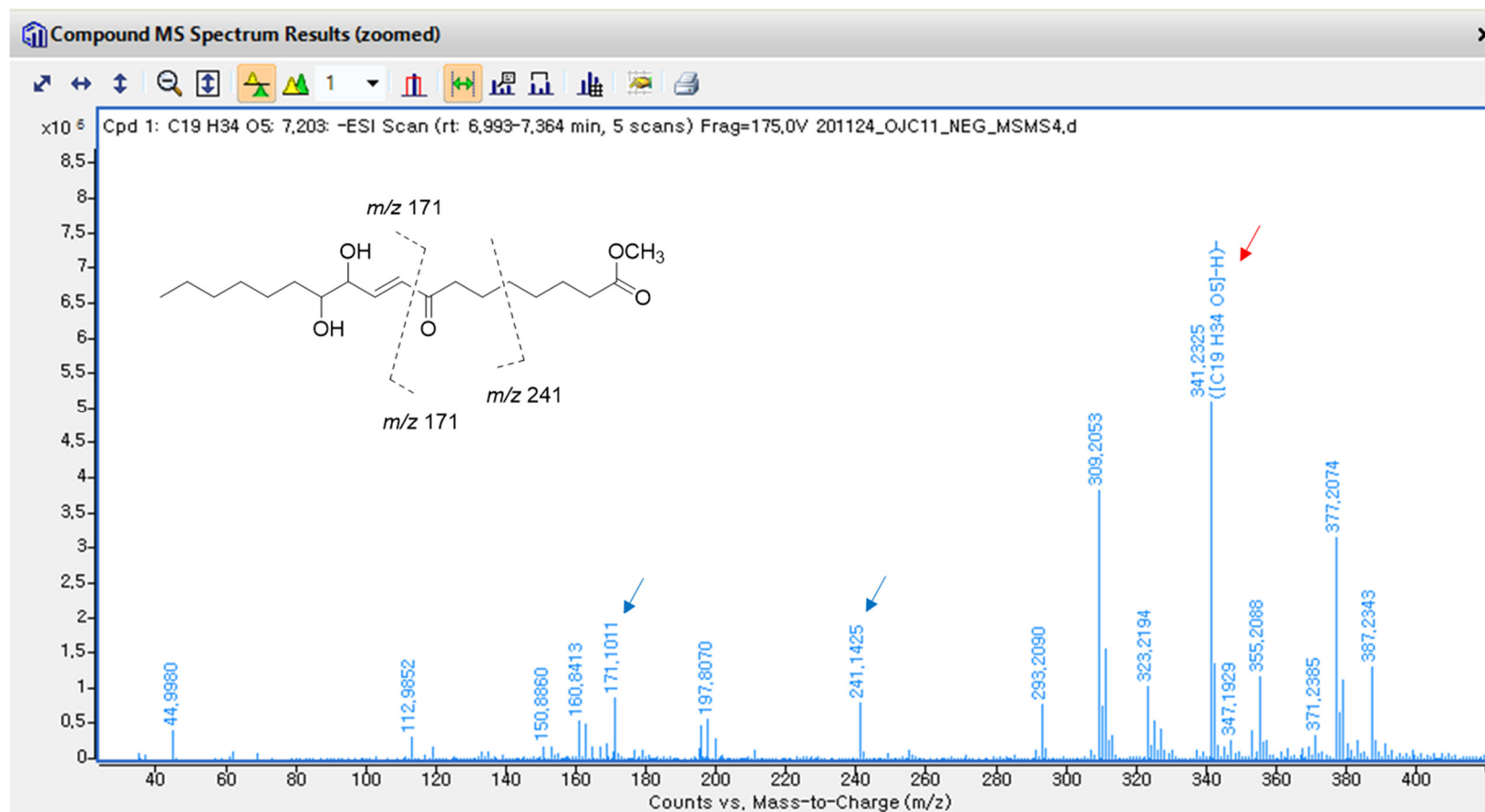


Figure S15. MS/MS analysis of **2** (MS^2 341 $[\text{M} - \text{H}]^- \rightarrow$ full-scan)



General experimental procedure

Optical rotations were measured using a Jasco P-1020 polarimeter (Jasco, Easton, MD, USA). Infrared (IR) spectra were recorded on a Bruker IFS-66/S FT-IR spectrometer (Bruker, Karlsruhe, Germany). Ultraviolet (UV) spectra were acquired on an Agilent 8453 UV-visible spectrophotometer (Agilent Technologies, Santa Clara, CA, USA). High-resolution (HR)-electrospray ionization (ESI) mass and tandem mass (MS/MS) spectra were recorded on an Agilent 1290 Infinity II series with a 6545 LC/Q-TOF mass spectrometer (Agilent Technologies). NMR spectra were recorded on a Bruker AVANCE III spectrometer (Bruker). Preparative high-performance liquid chromatography (HPLC) was conducted using a Waters 1525 binary HPLC pump with a Waters 996 photodiode array detector (Waters) and an Agilent Eclipse C₁₈ column (250 × 21.2 mm, 5 μm; flow rate: 5 mL/min) (Agilent Technologies), and semi-preparative HPLC was performed using a Shimadzu Prominence HPLC System with SPD-20A/20AV Series Prominence HPLC UV-Vis Detectors (Shimadzu, Tokyo, Japan). LC/MS analysis was performed on an Agilent 1200 series HPLC system with a diode array detector and 6130 Series ESI mass spectrometer using an analytical Kinetex C₁₈ 100 Å column (100 mm × 2.1 mm i.d., 5 μm) (Phenomenex, Torrance, CA). Column chromatography was performed using silica gel 60 (Merck, Darmstadt, Germany, 230-400 mesh) and RP-C₁₈ silica gel (Merck, 230-400 mesh). Thin-layer chromatography (TLC) was conducted using precoated silica gel F₂₅₄ plates and reverse-phase (RP)-18 F_{254s} plates (Merck). Spots on TLC were detected using UV light and heating after dipping in anisaldehyde-sulfuric acid.