

## Supplementary Data

### Cytotoxic flavonoids from *Lannea egregia* Engl. & K. Krause

Oluwatosin T. Ayodele<sup>1,2,3\*</sup>, Olaoluwa O. Olaoluwa<sup>1</sup>, Saheed O. Benson<sup>3</sup>, Olapeju O. Aiyelaagbe<sup>1</sup>, Lutfun Nahar<sup>4\*</sup>, Amos A. Fatokun<sup>3\*</sup> and Satyajit D. Sarker<sup>3</sup>

<sup>1</sup>Department of Chemistry, University of Ibadan, Ibadan, Oyo State, 200284, Nigeria.

<sup>2</sup>Department of Chemistry, Chrisland University, Ajebo Road, Abeokuta, Ogun State, 110222, Nigeria.

<sup>3</sup>Centre for Natural Products Discovery, School of Pharmacy and Biomolecular Sciences, Liverpool John Moores University, Byrom Street, Liverpool L3 3AF, United Kingdom.

<sup>4</sup>Laboratory of Growth Regulators, Palacký University and Institute of Experimental Botany, The Czech Academy of Sciences, Šlechtitelů 27, 78371 Olomouc, Czech Republic.

\*Correspondence: [nahar@ueb.cas.cz](mailto:nahar@ueb.cas.cz) (L.N.); [ayodeleoluwatosin92@gmail.com](mailto:ayodeleoluwatosin92@gmail.com) (O. T. A.); [A.A.Fatokun@ljmu.ac.uk](mailto:A.A.Fatokun@ljmu.ac.uk) (A.A.F.)

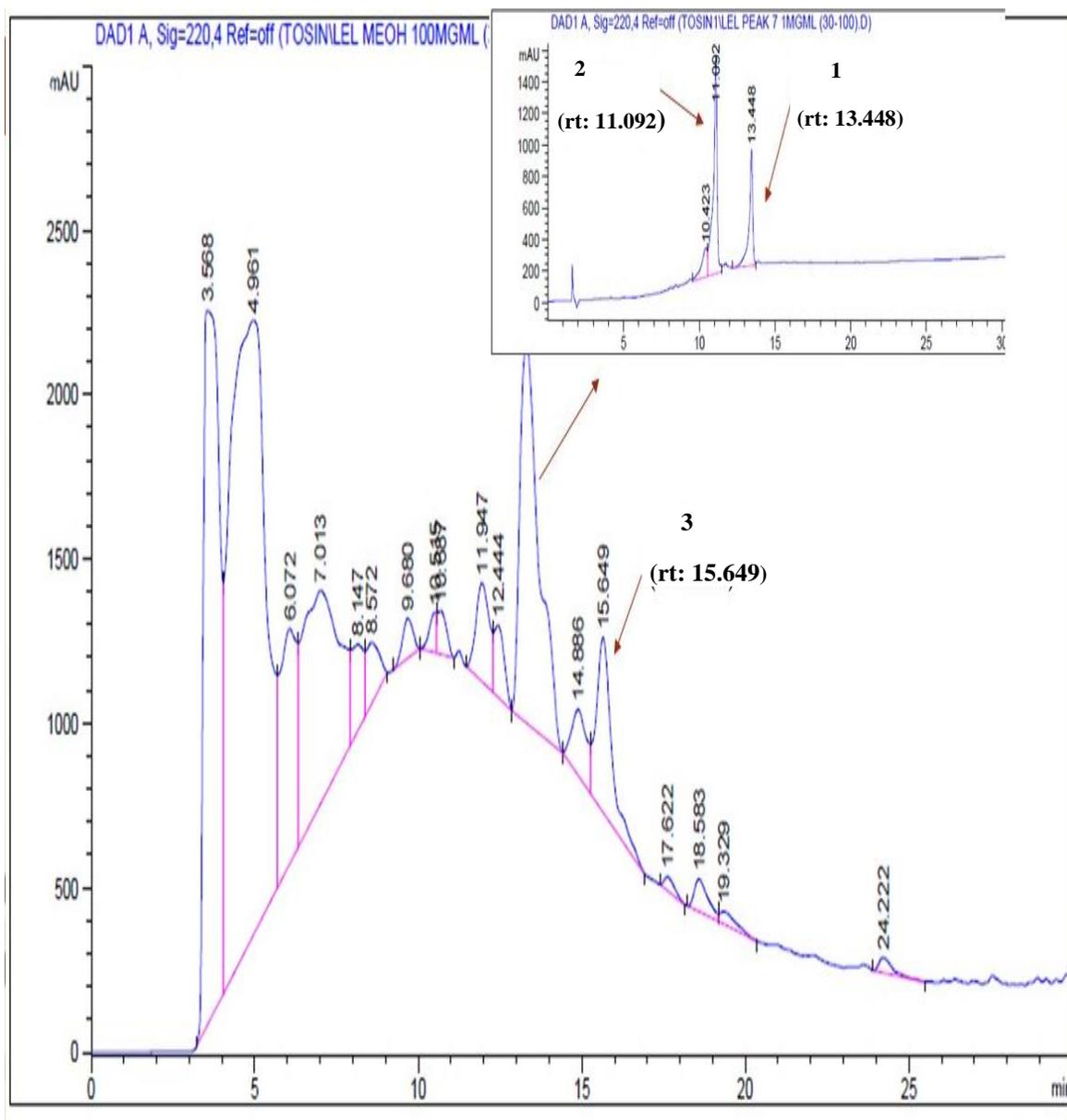


Figure S1. HPLC Chromatogram of Compounds 1 - 3

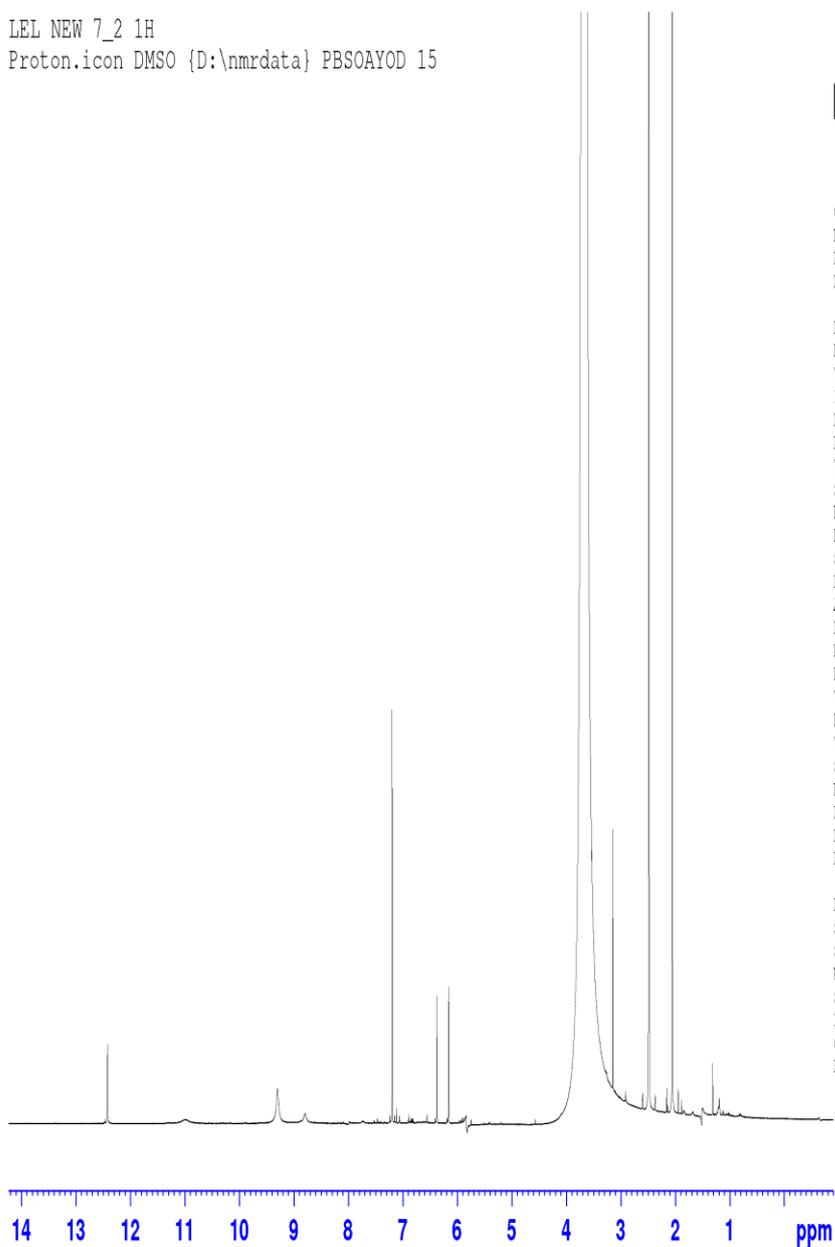
LEL NEW 7\_2 1H  
Proton.icon DMSO {D:\nmrdata} PBSOAYOD 15



Current Data Parameters  
NAME Jul22-2022-PBSOAYOD  
EXPNO 10  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20220722  
Time 18.24 h  
INSTRUM spect  
PROBHD z114607\_0240 (  
PULPROG zg30  
TD 131072  
SOLVENT DMSO  
NS 256  
DS 0  
SWH 18028.846 Hz  
FIDRES 0.275098 Hz  
AQ 3.6350634 sec  
RG 13.79  
DW 27.733 usec  
DE 7.82 usec  
TE 300.0 K  
D1 1.00000000 sec  
TD0 1  
SFO1 600.1337060 MHz  
NUC1 1H  
P0 3.33 usec  
P1 10.00 usec  
PLW1 32.00000000 W

F2 - Processing parameters  
SI 131072  
SF 600.1300150 MHz  
WDW EM  
SSE 0  
LB 0.10 Hz  
GB 0  
PC 1.00



**Figure S2. <sup>1</sup>H NMR Spectrum (600MHz) of Compound 1 in DMSO-d<sub>6</sub>**

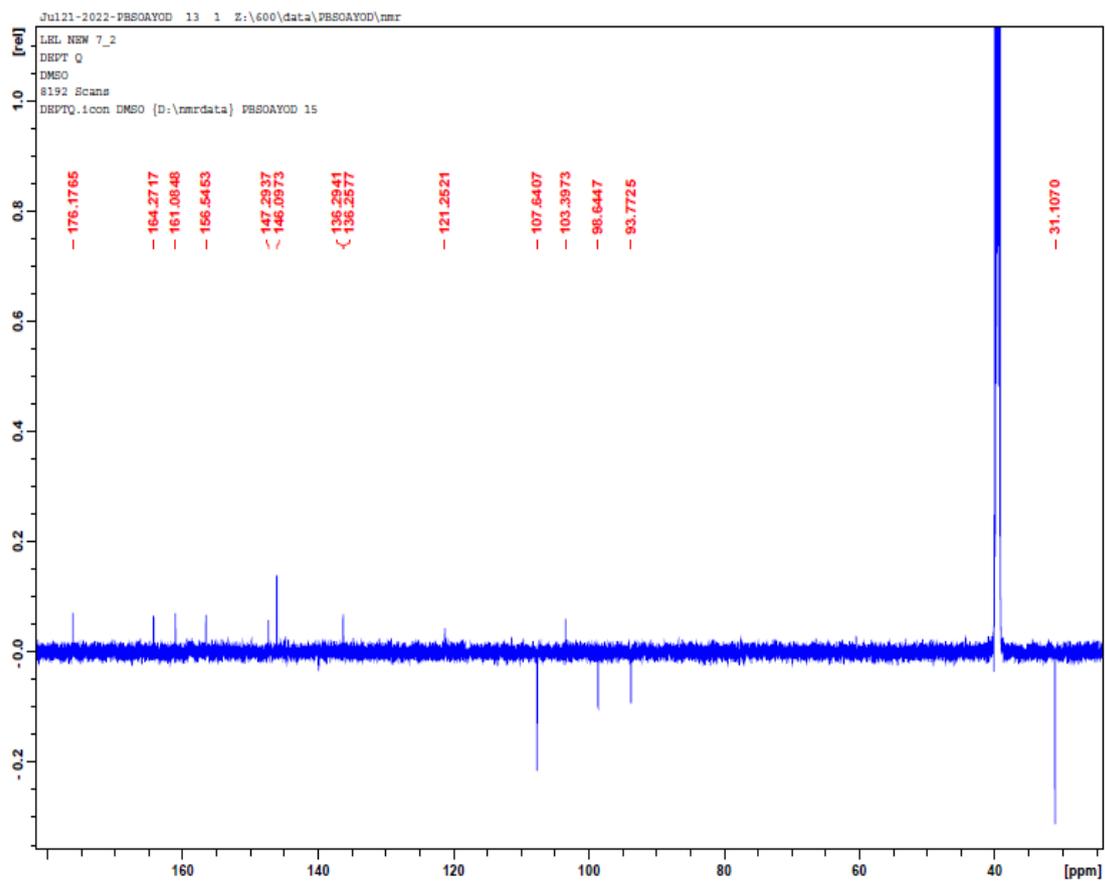
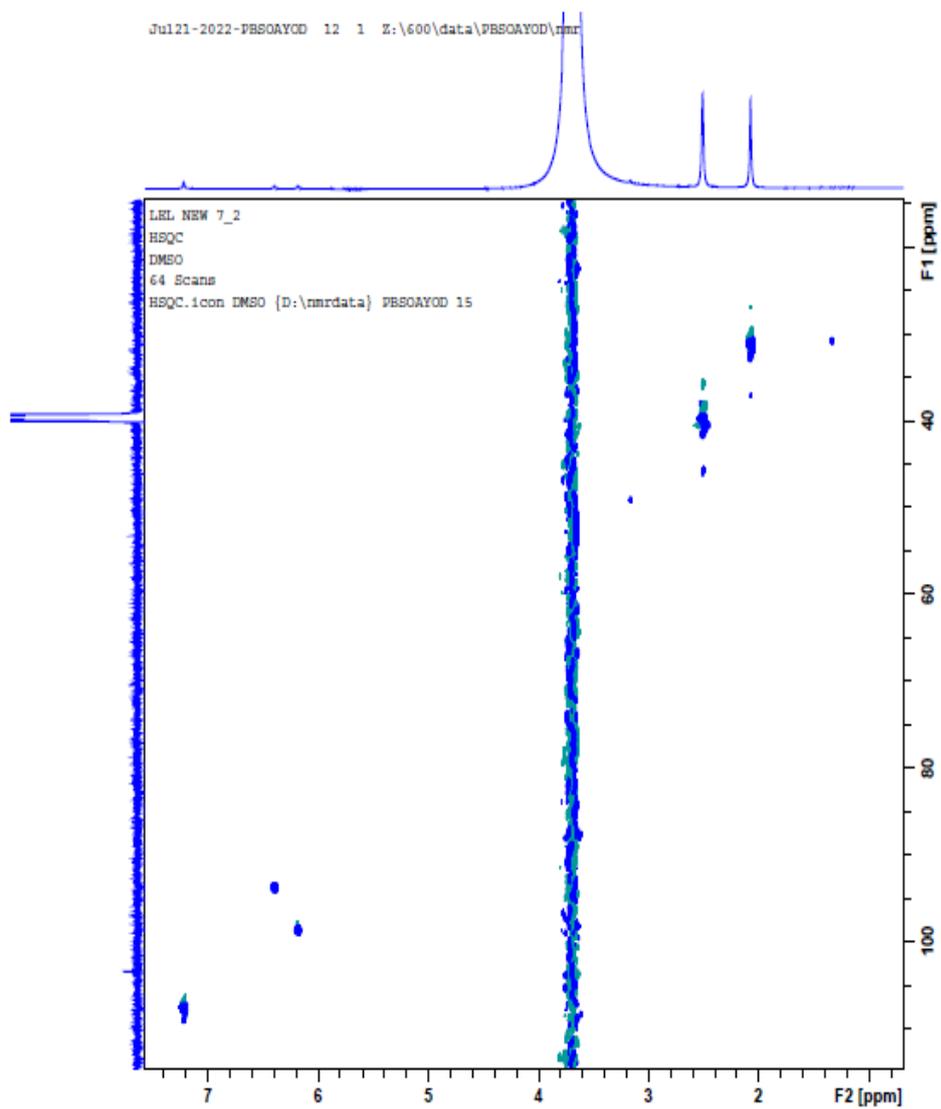


Figure S3.  $^{13}\text{C}$  NMR Spectrum (600MHz) of Compound 1 in DMSO-d<sub>6</sub>



**Figure S4. HSQC NMR Spectrum (600MHz) of Compound 1 in DMSO-d6**

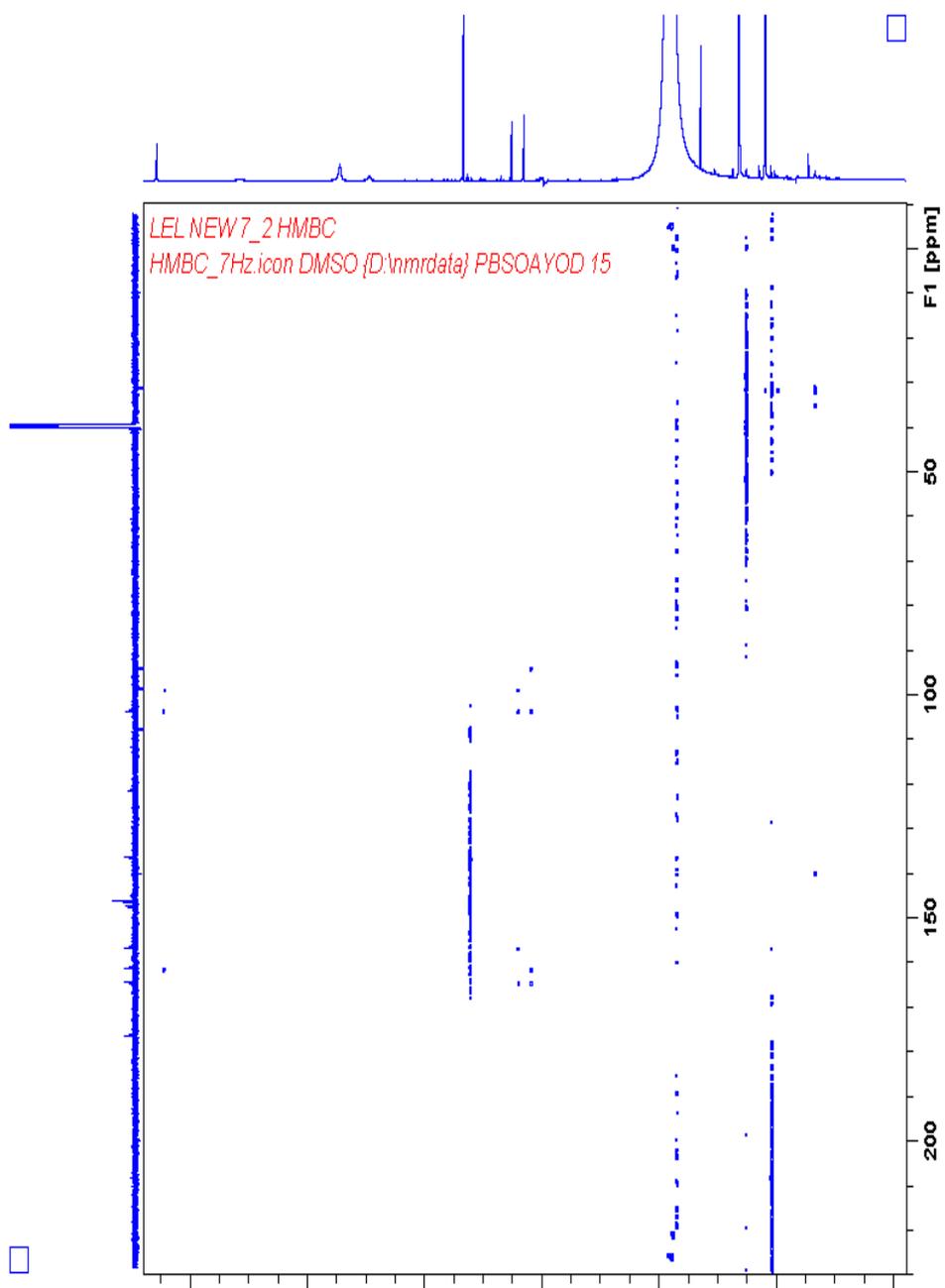
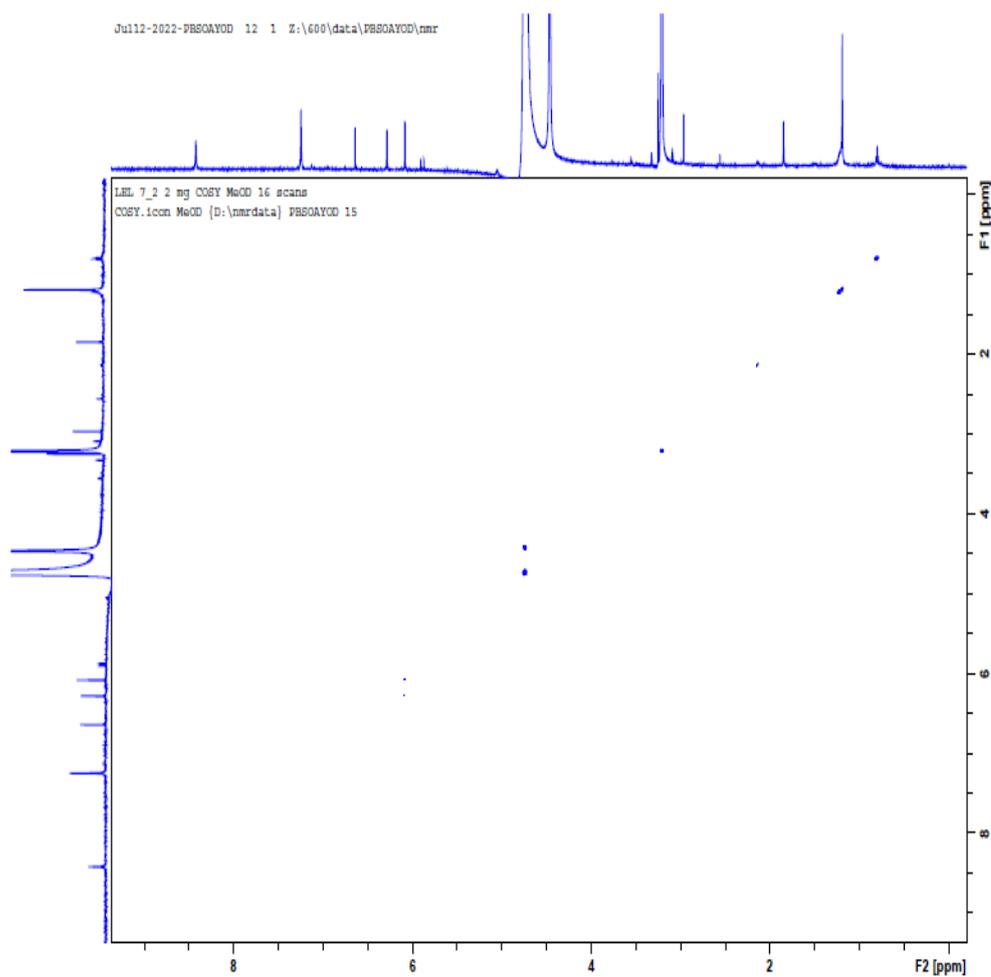
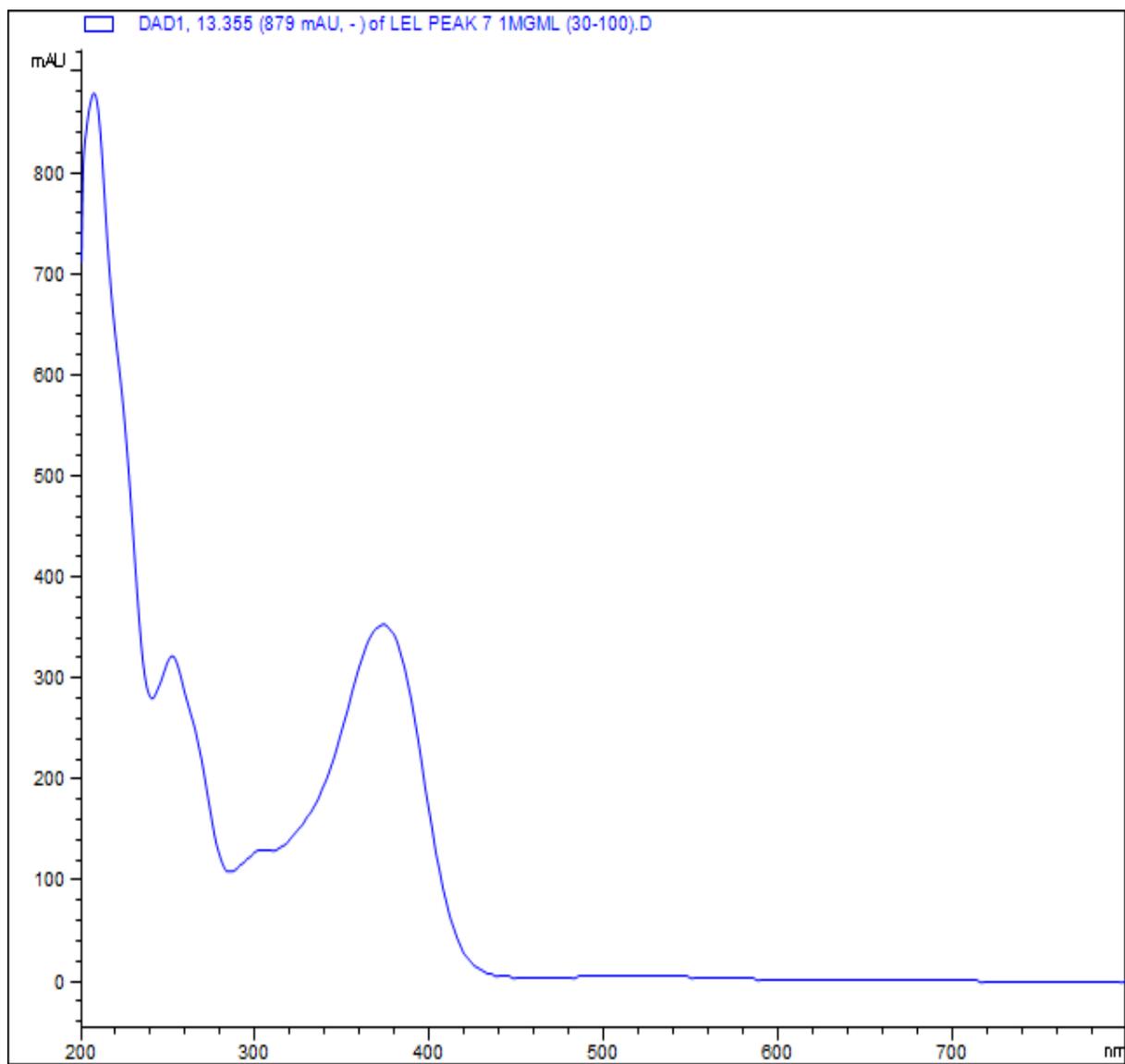


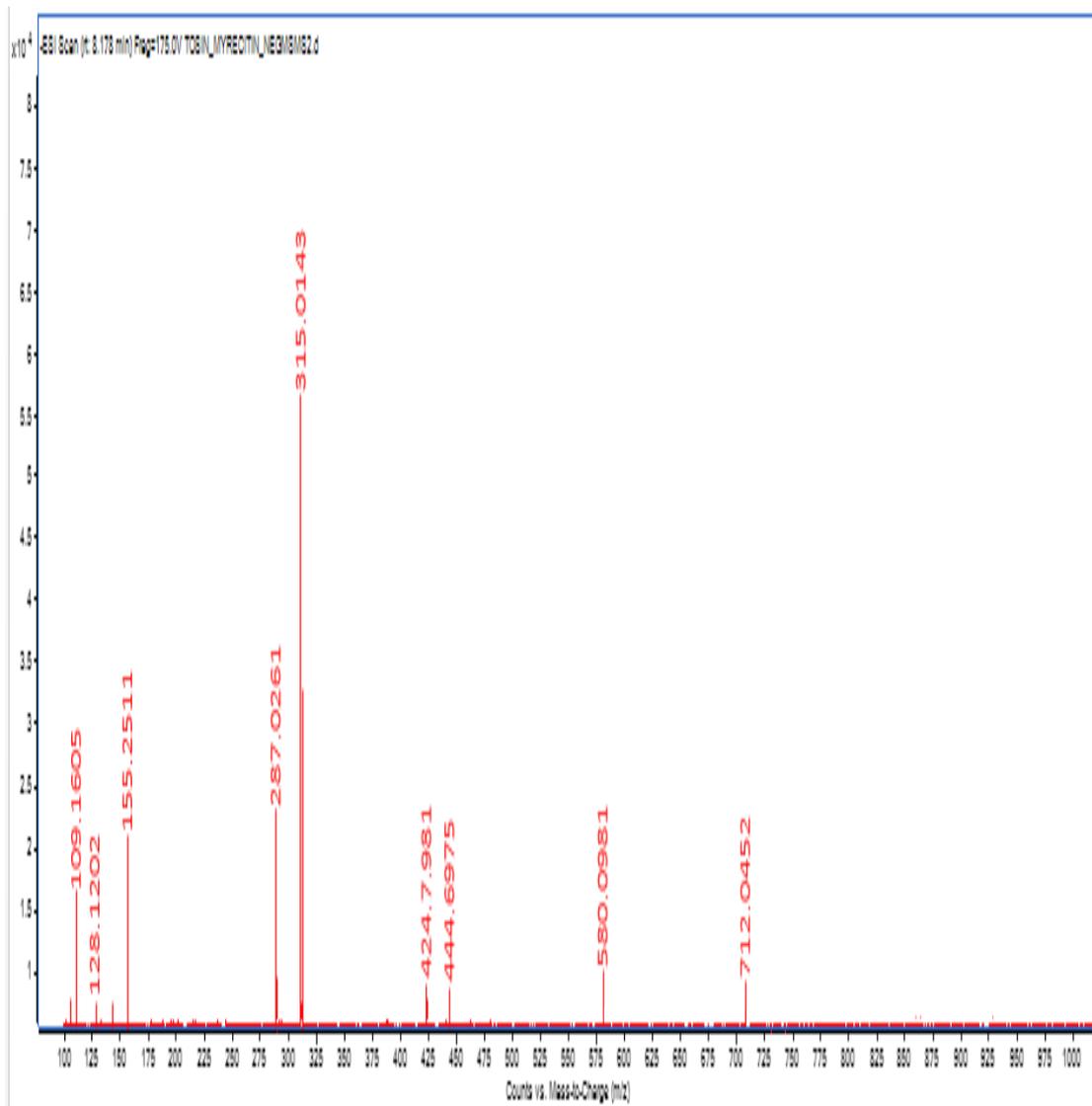
Figure S5. HMBC NMR Spectrum (600MHz) of Compound 1 in DMSO-d6



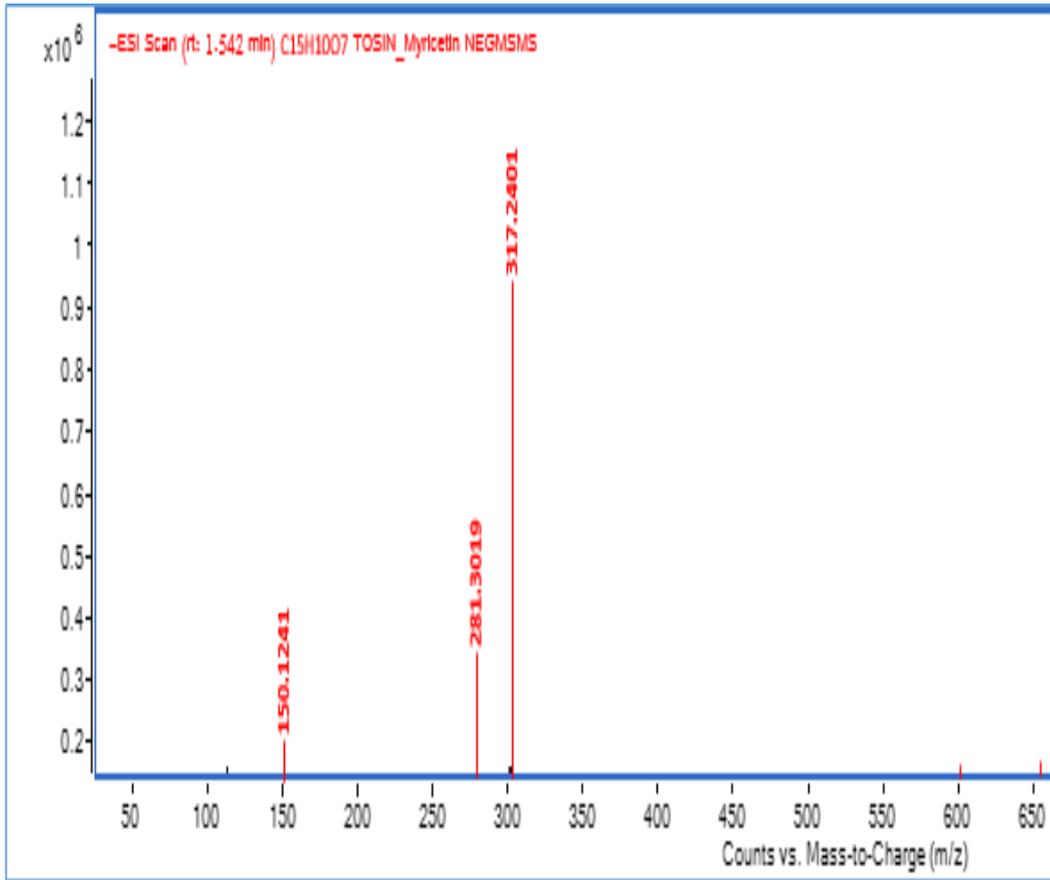
**Figure S6. COSY NMR Spectrum (600 MHz) of Compound 1 in DMSO-d<sub>6</sub>**



**Figure S7. Scanning UV Spectrum of Compound 1**



**Figure S8. LC-MS Fragment Ion Spectrum of Compound 1**



**Figure S9. LC-MS Molecular Ion Spectrum of Compound 1**

LEL 7\_1 6.8mg 1H MeOD 256 scans  
Proton.icon MeOD (D:\nmrdata) PPSOAYOD 16



Current Data Parameters  
NAME Cull13-2022-PPSOAYOD  
EXPNO 10  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20220713  
Time 18.26 n  
INSTRUM spect  
PROBHD 2114607\_0240 (   
PULPROG zg30  
TD 131072  
SOLVENT MeOD

**Figure 4.10**  $^1\text{H}$  NMR Spectm (600MHz) of LE 2 in  $\text{CD}_3\text{OD-d}_4$

**Figure S10.**  $^{13}\text{C}$  NMR Spectrum (600MHz) of Compound 2 in  $\text{CD}_3\text{OD-d}_4$

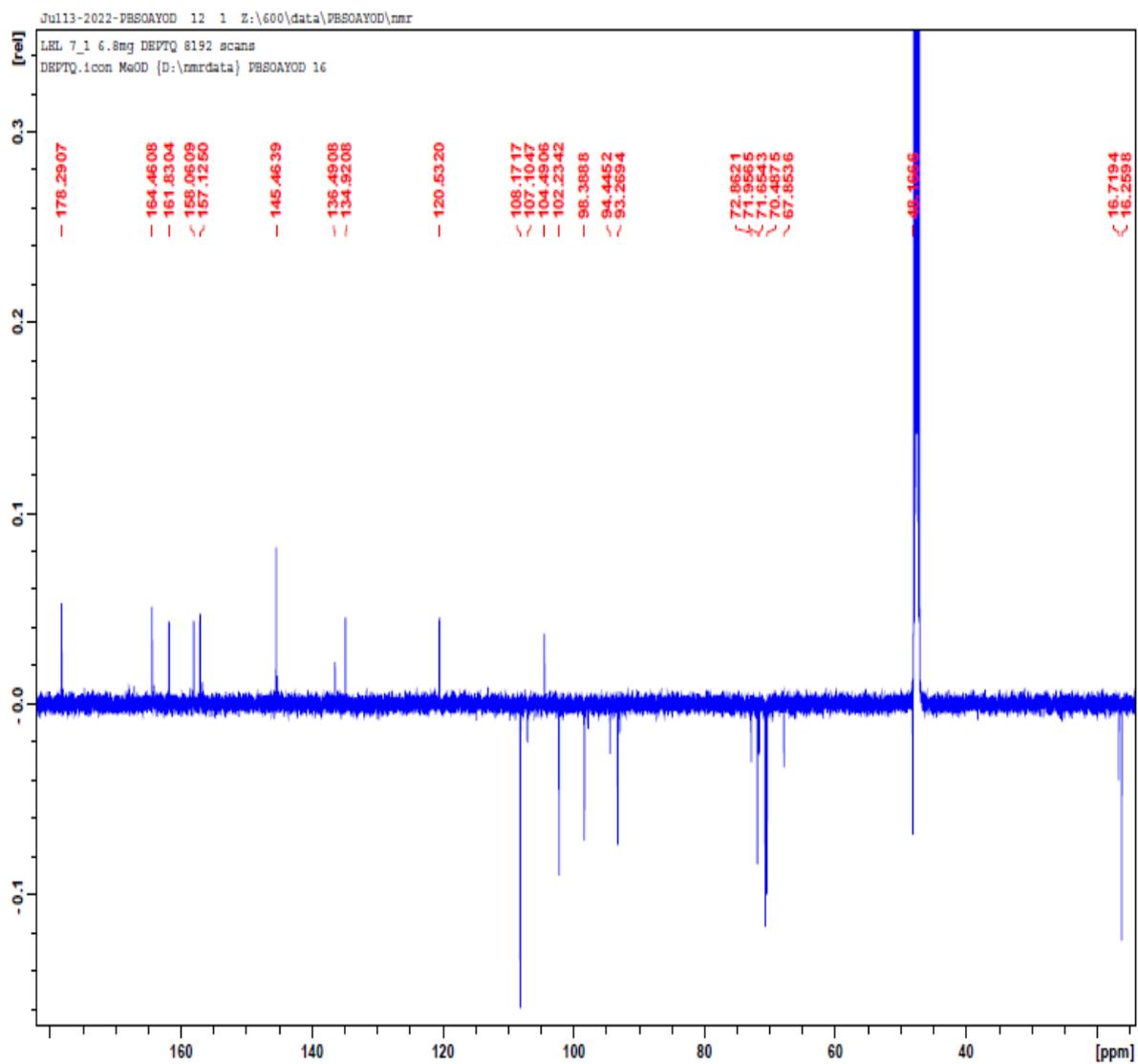
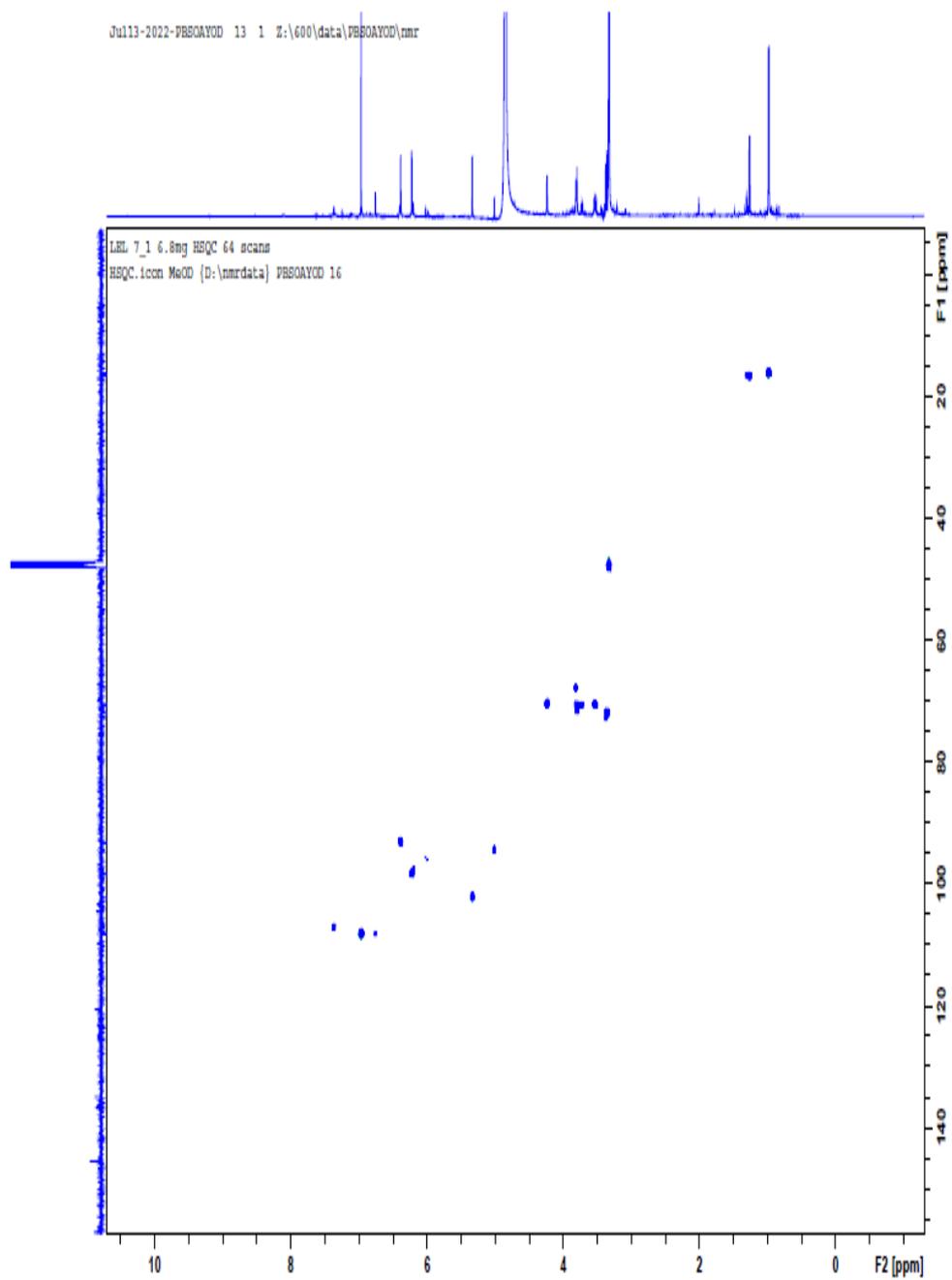
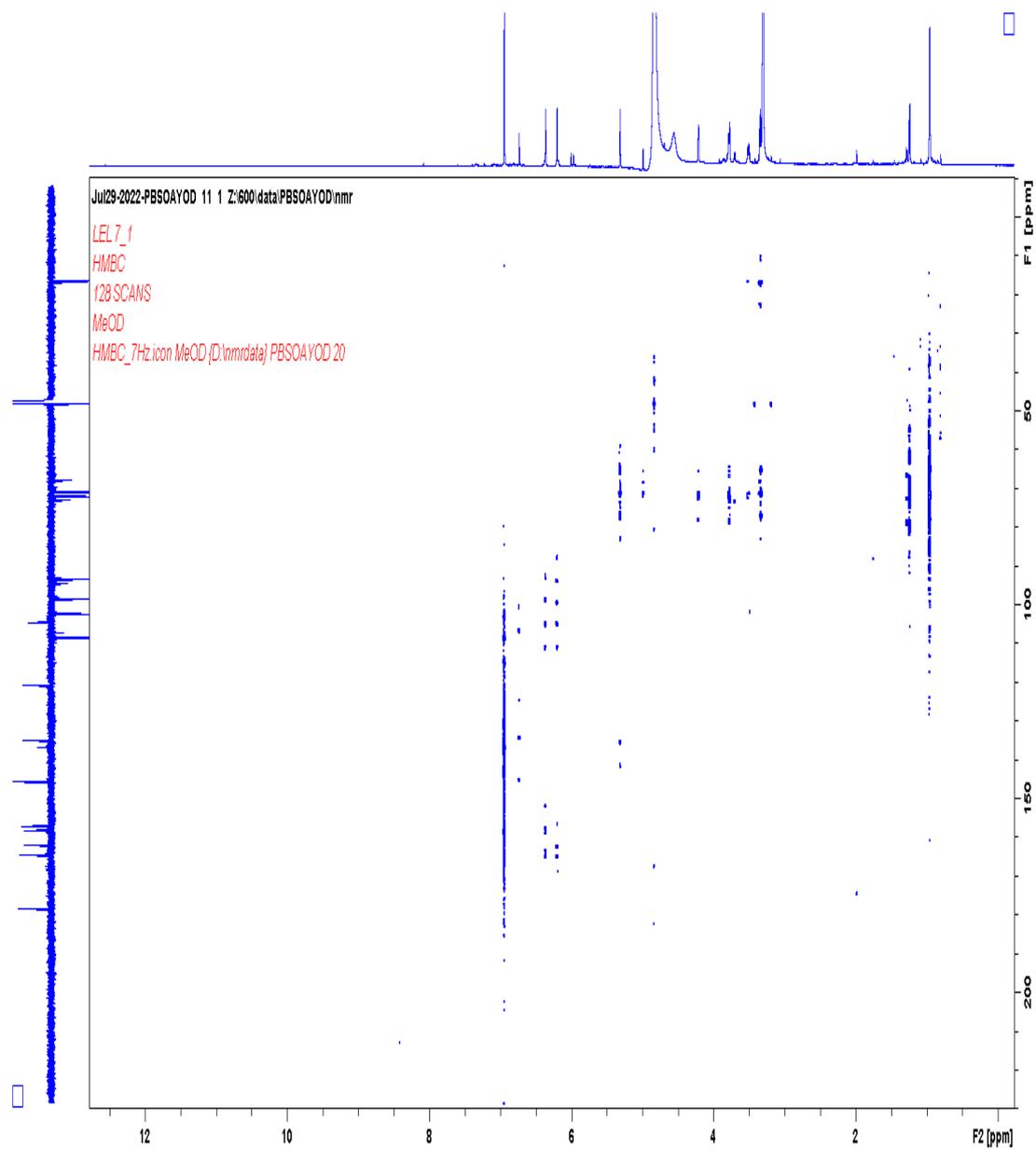


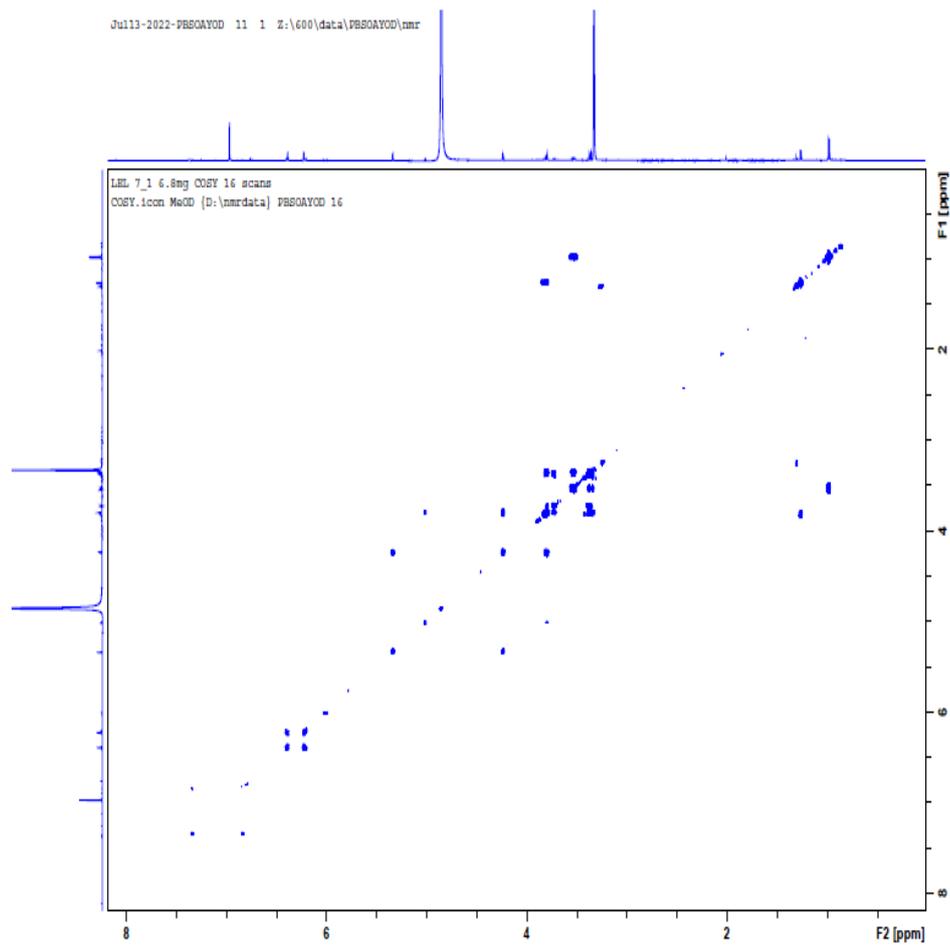
Figure S11.  $^{13}\text{C}$  NMR Spectrum (600MHz) of Compound 2 in  $\text{CD}_3\text{OD-d}_4$



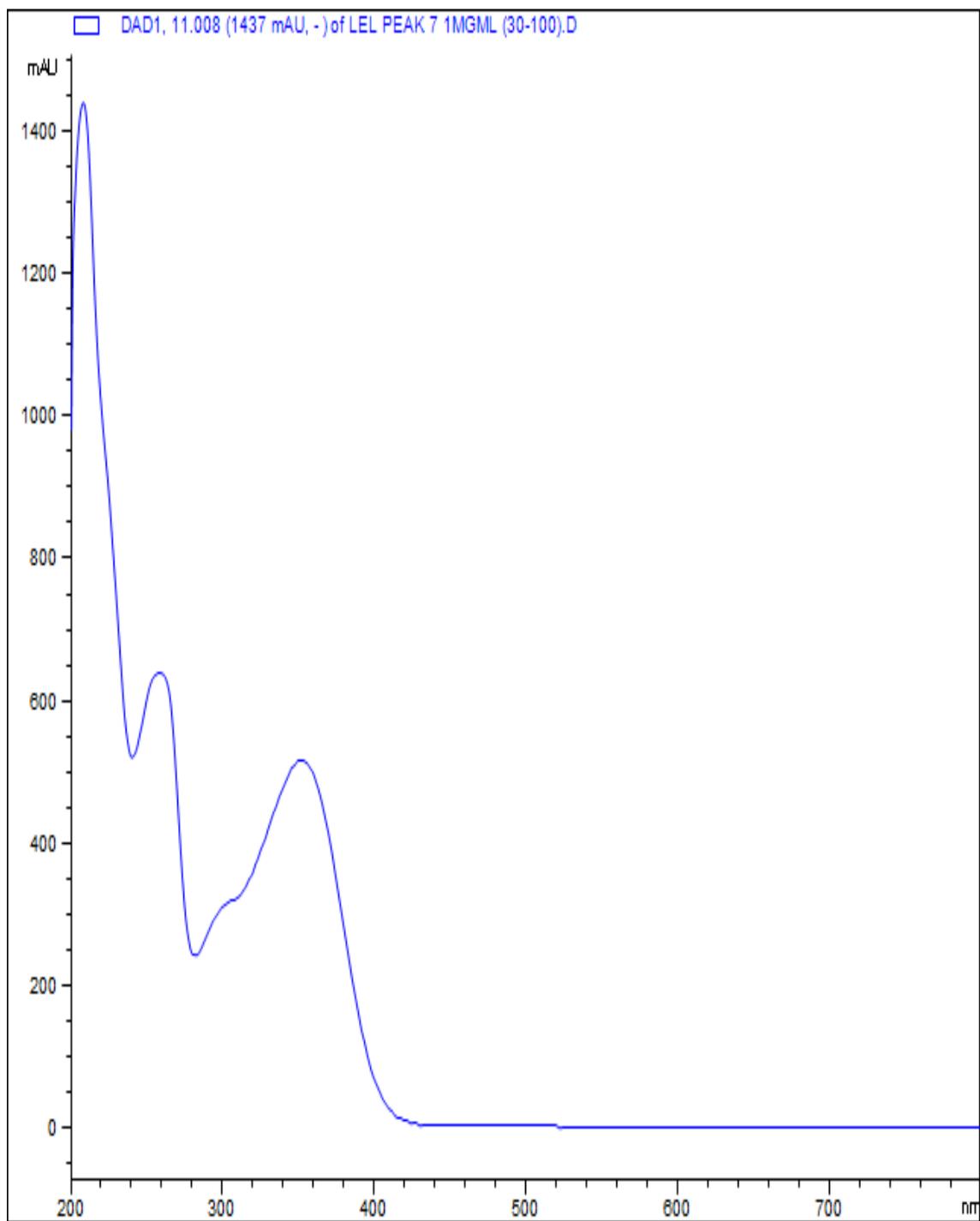
**Figure 12. HSQC NMR Spectrum (600MHz) of Compound 2 in CD<sub>3</sub>OD-d<sub>4</sub>**



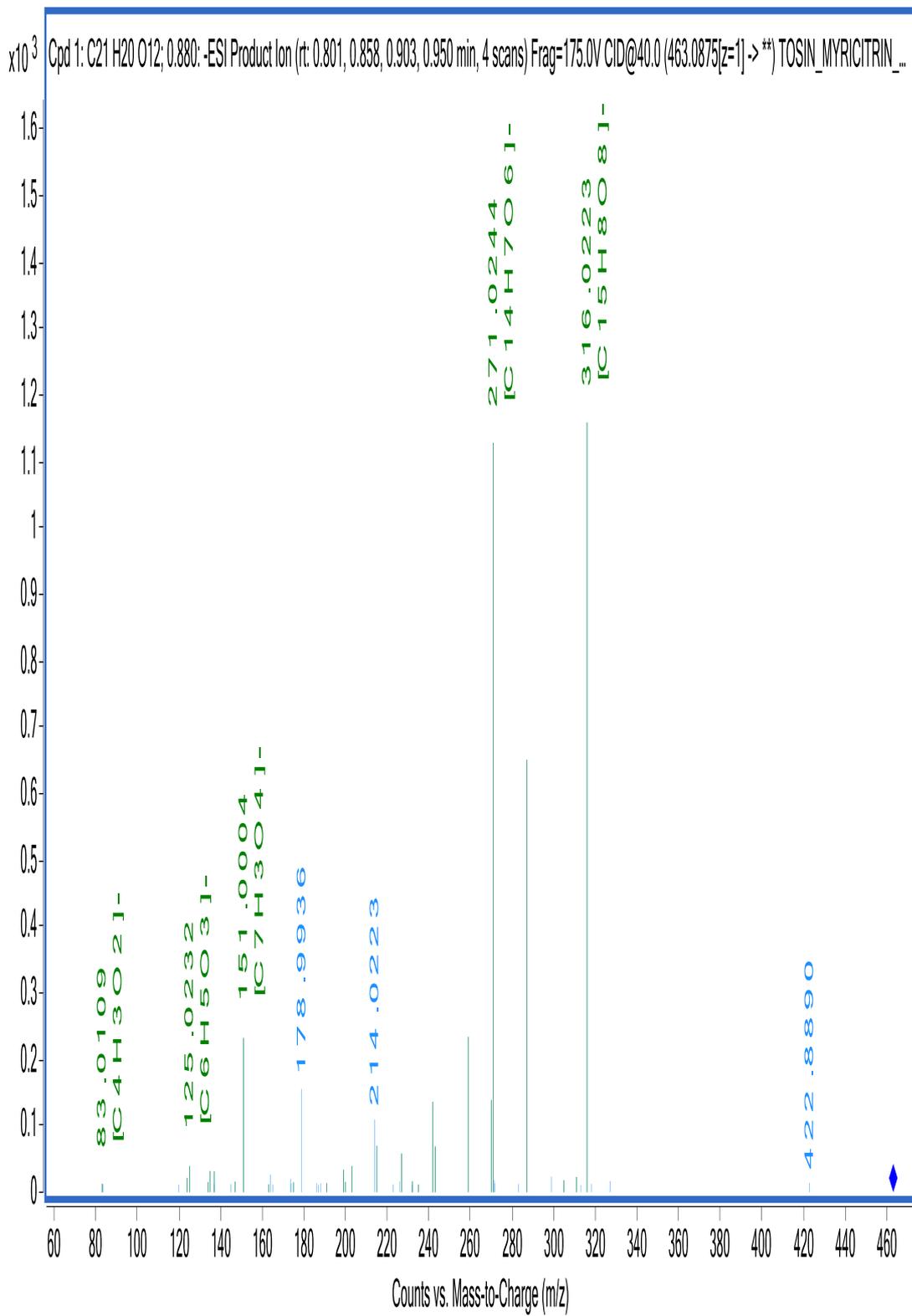
**Figure S13. HMBC NMR Spectrum (600MHz) of Compound 2 in CD<sub>3</sub>OD-d<sub>4</sub>**



**Figure S14. COSY NMR Spectrum (600MHz) of Compound 2 in CD<sub>3</sub>OD-d<sub>4</sub>**



**Figure S15. Scanning UV Spectrum of Compound 2**



**Figure S16. LC-MS Fragment Ion Spectrum of Compound 2**

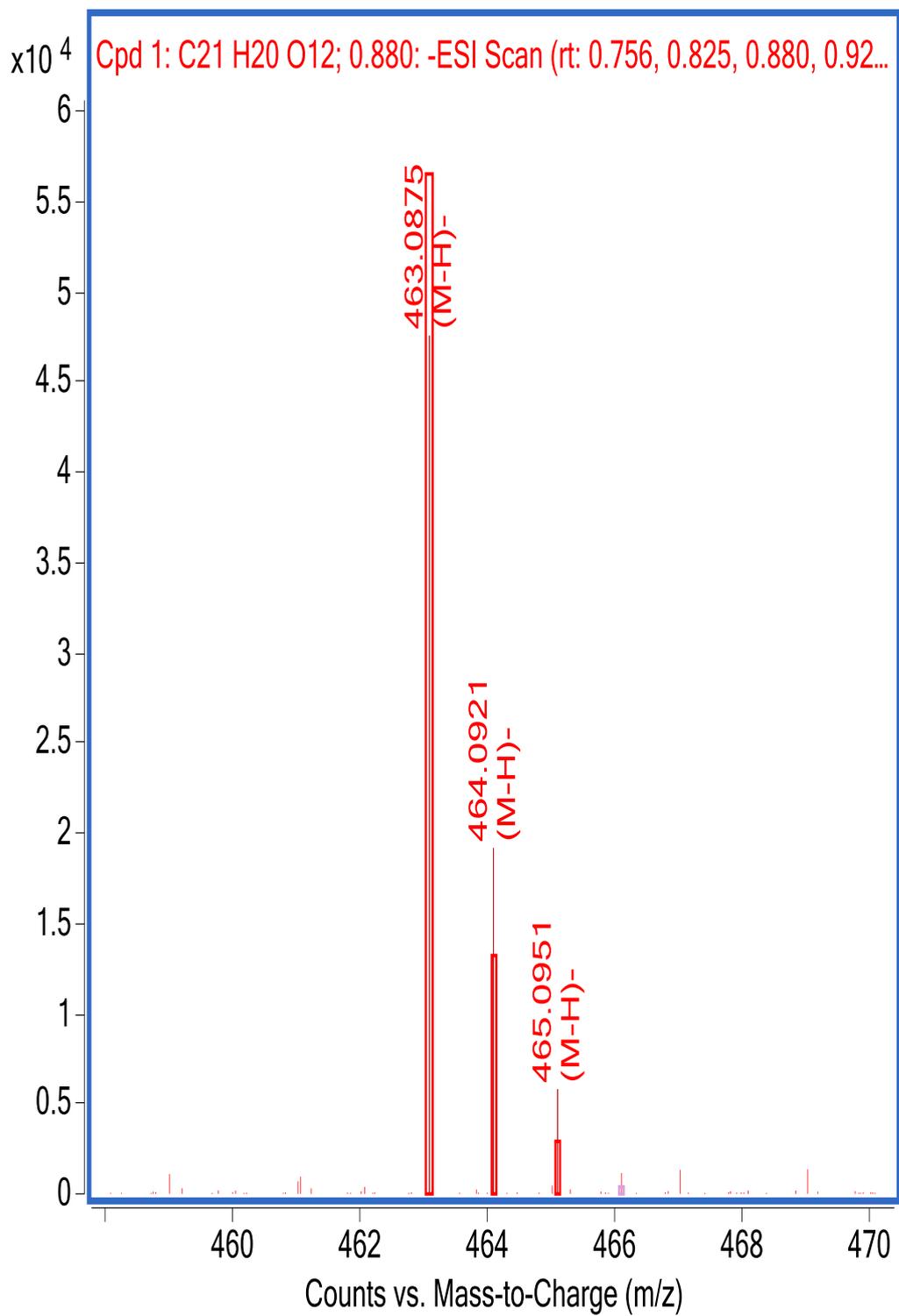
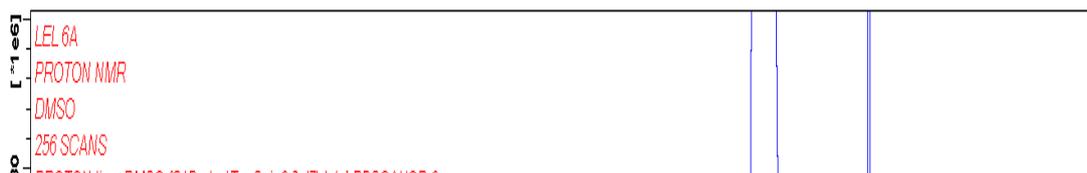


Figure S17. LC-MS Molecular Ion Spectrum of Compound 2



**Figure 4.23** LE 4  $^1\text{H}$  NMR SPECTRA (600MHz) DMSO-d4

**Figure S18.**  $^1\text{H}$  NMR Spectrum (600MHz) of Compound 3 in DMSO-d4

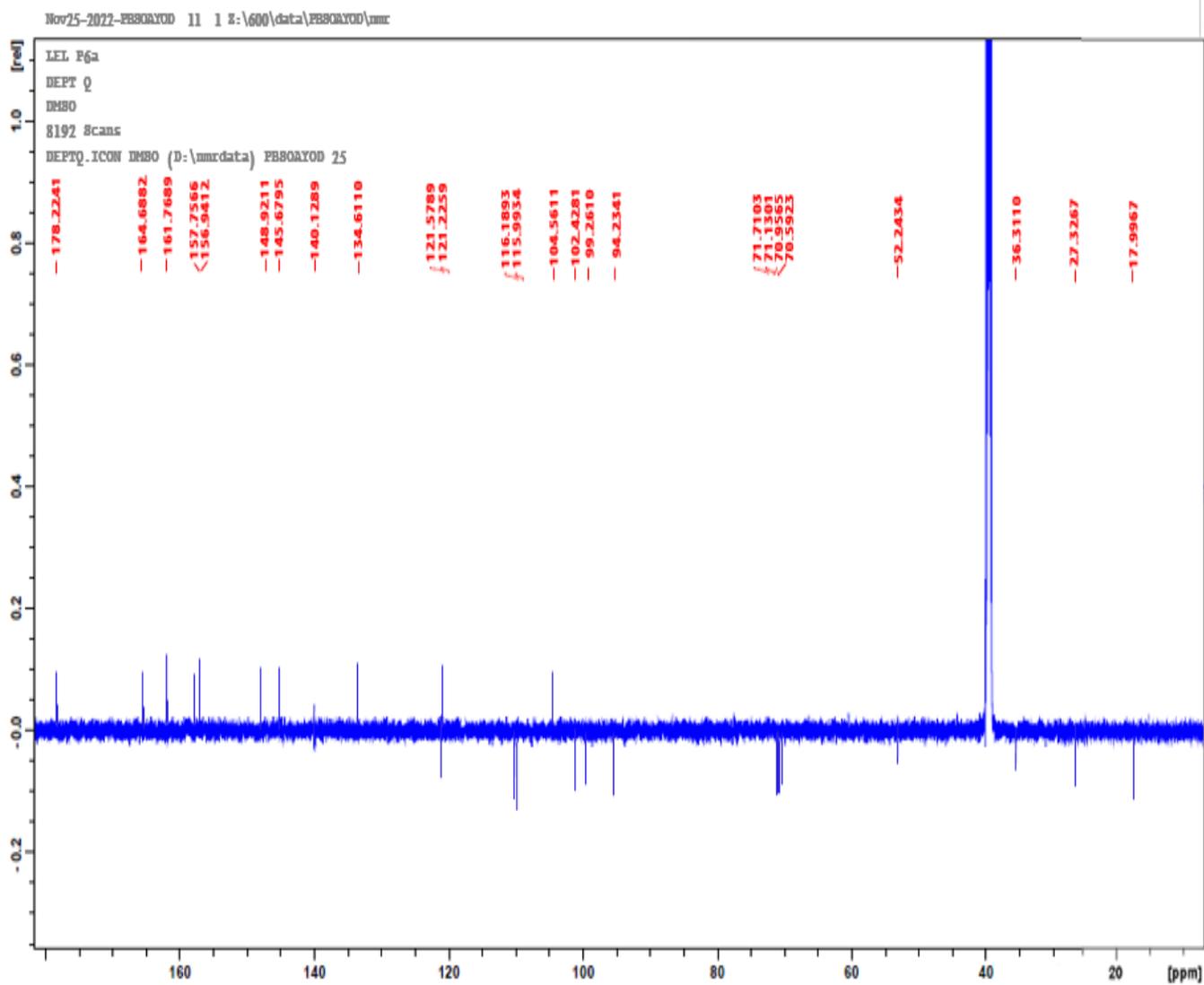


Figure S19.  $^{13}\text{C}$  NMR Spectrum (600MHz) of Compound 3 in DMSO-d<sub>4</sub>

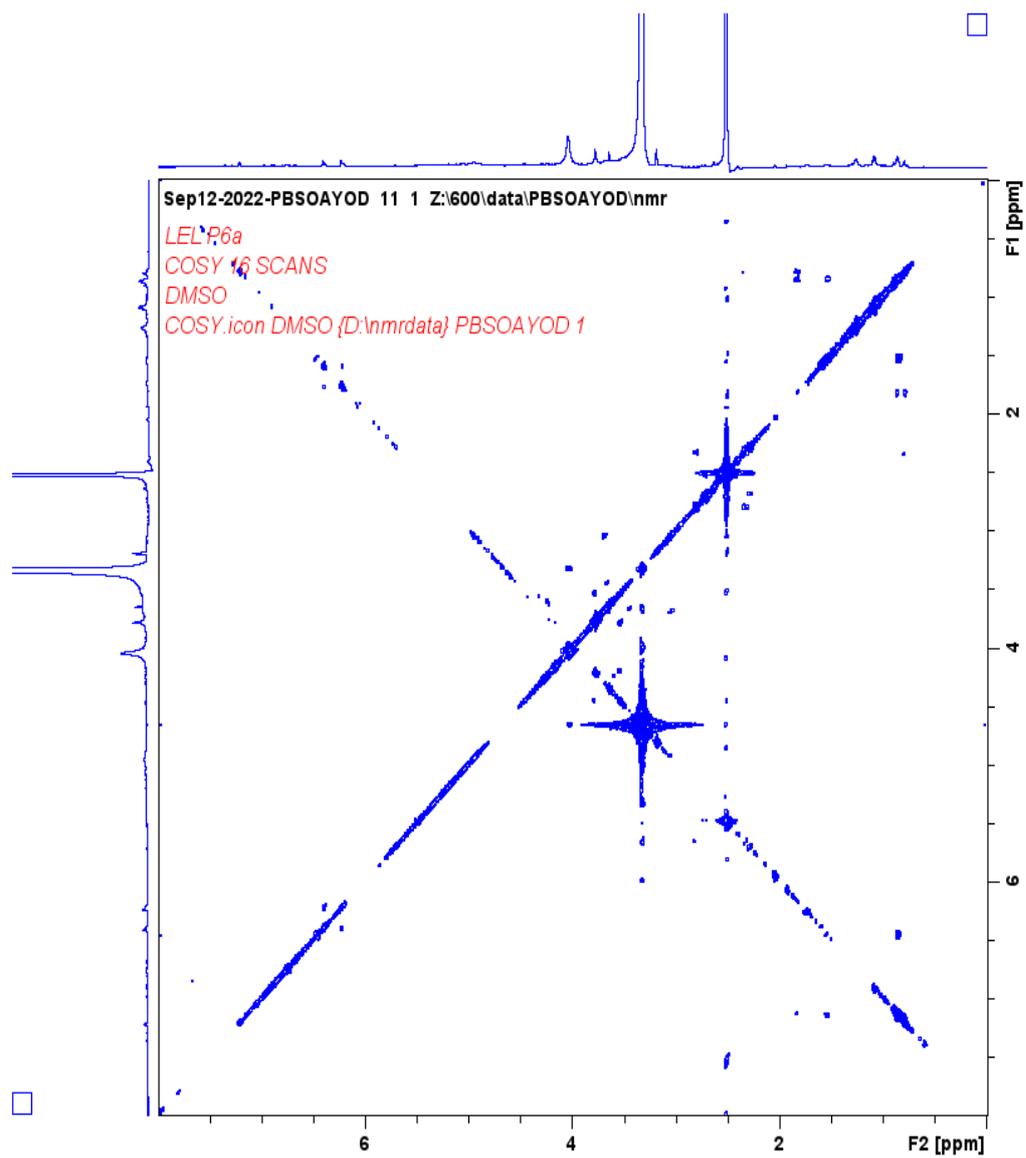
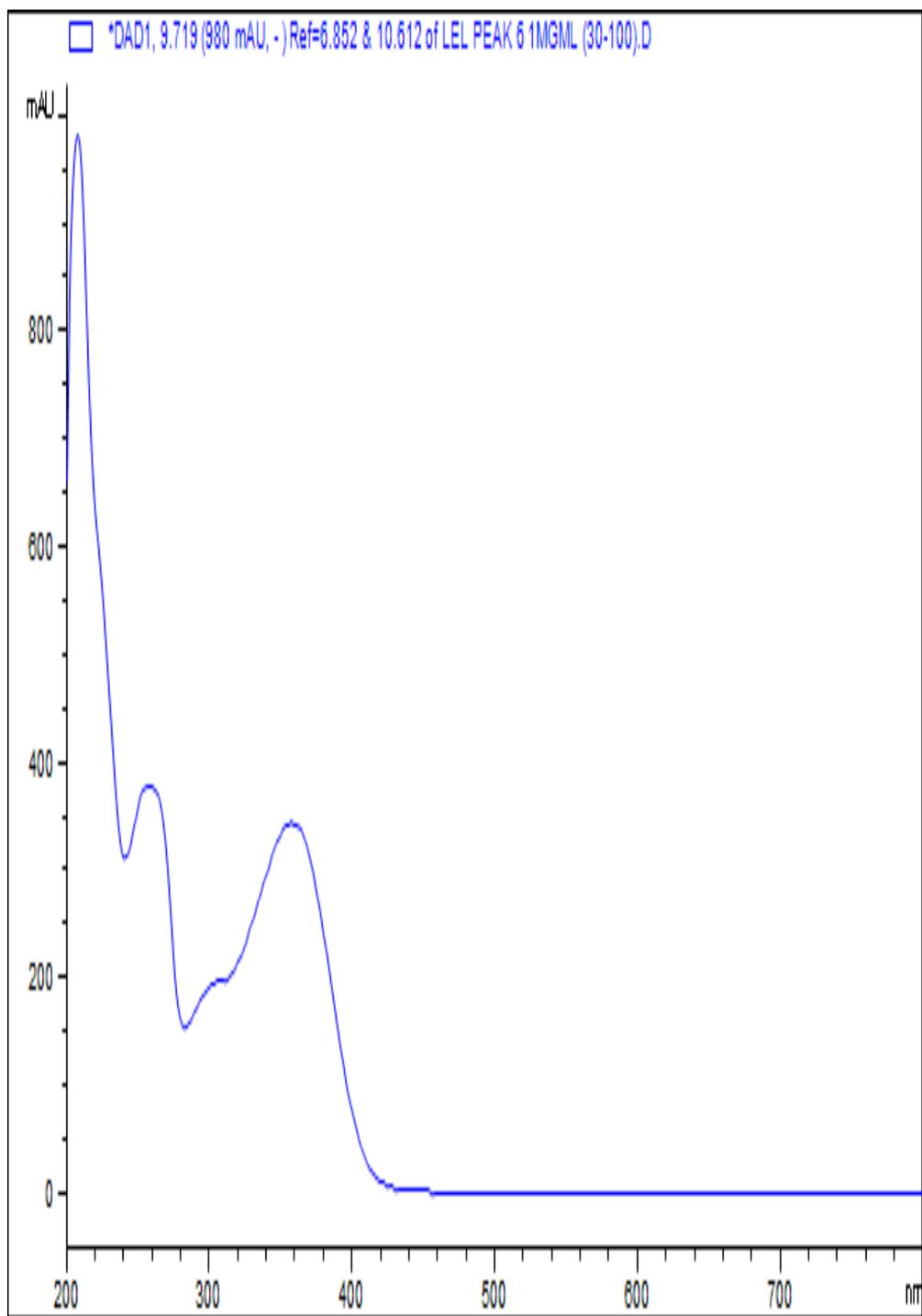
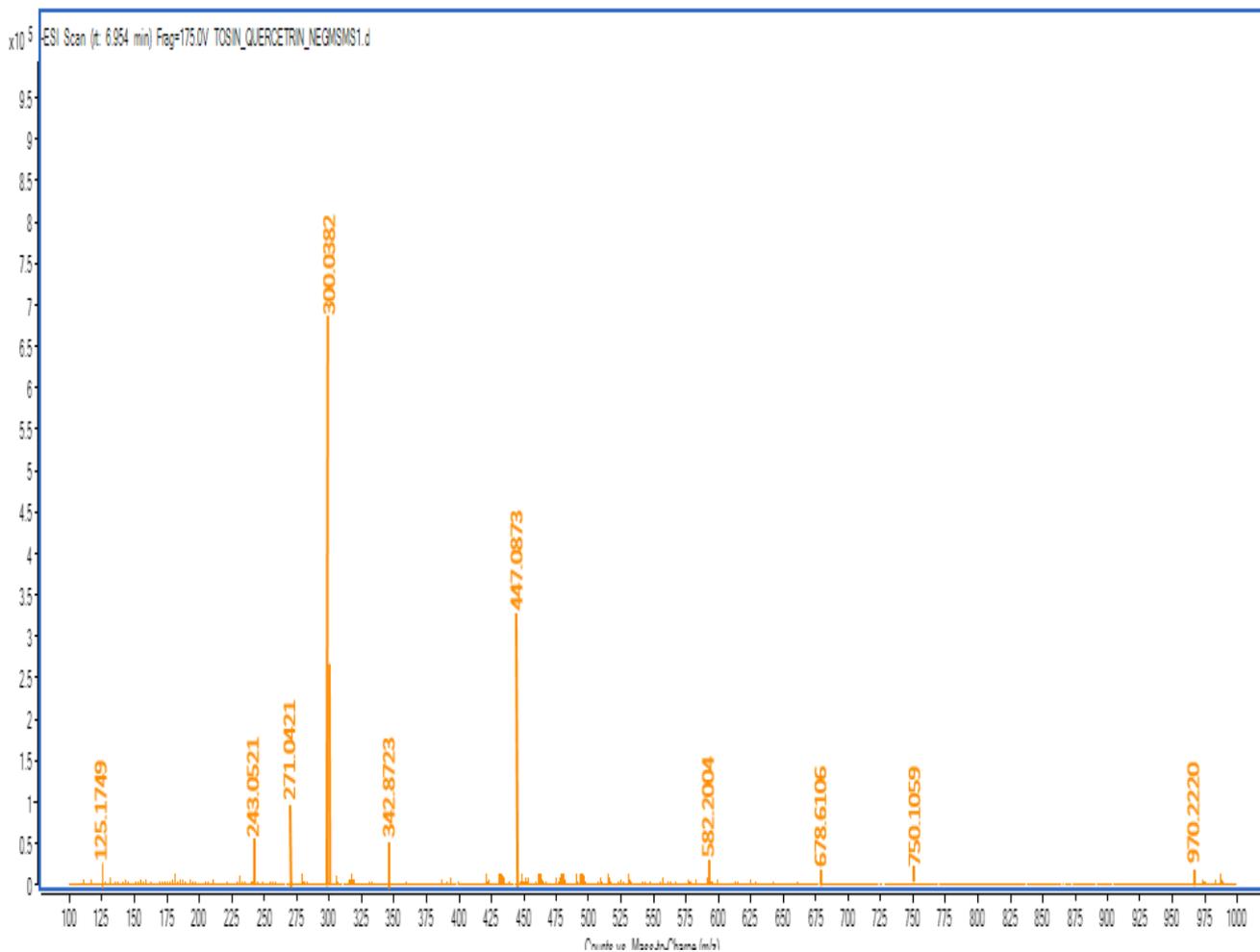


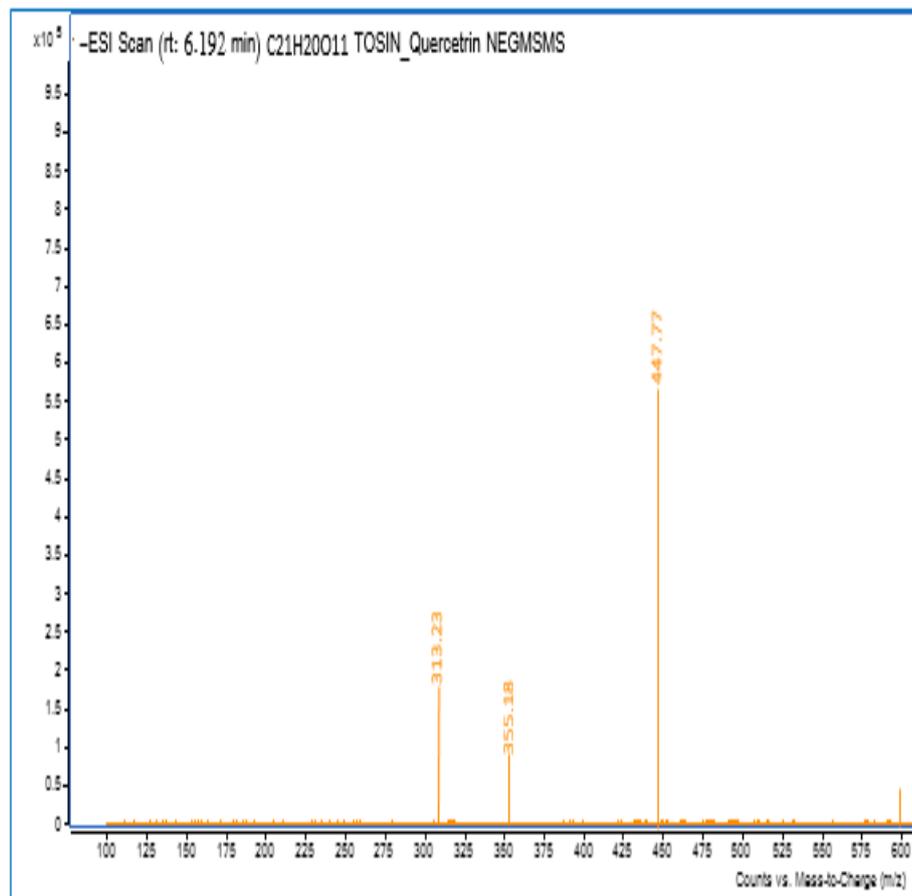
Figure S20. COSY NMR Spectrum (600MHz) of Compound 3 in DMSO-d4



**Figure S21. Scanning UV Spectrum of Compound 3**



**Figure S22. LC-MS Fragment Ion Spectrum of Compound 3**



**Figure S23. LC-MS Molecular Ion Spectrum of Compound 3**