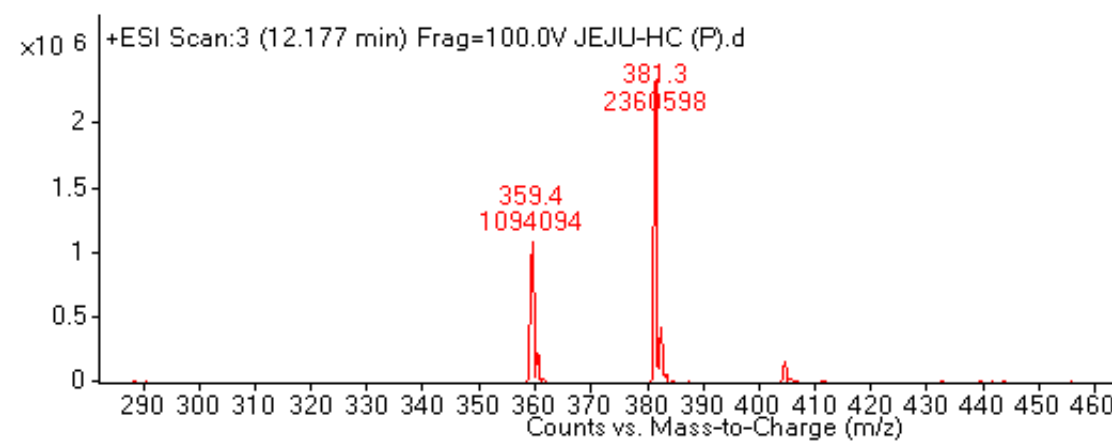
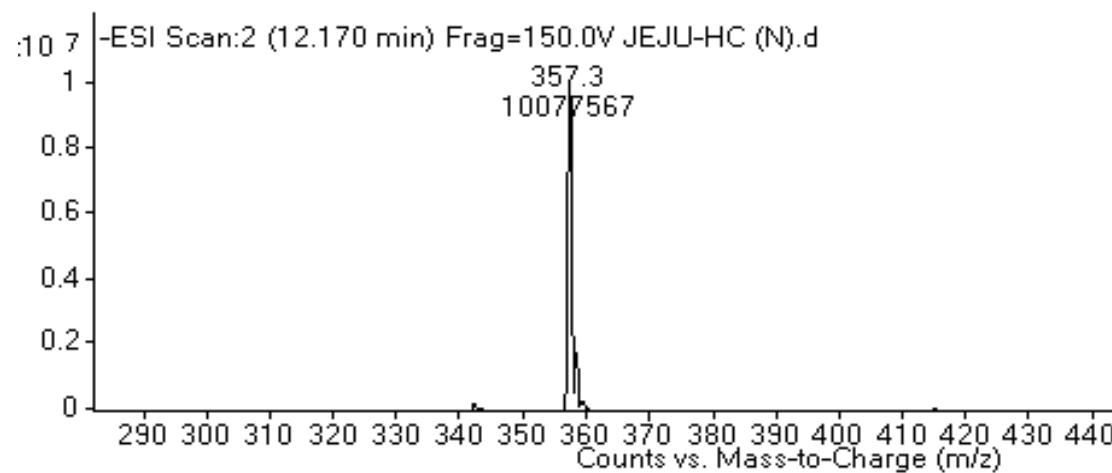


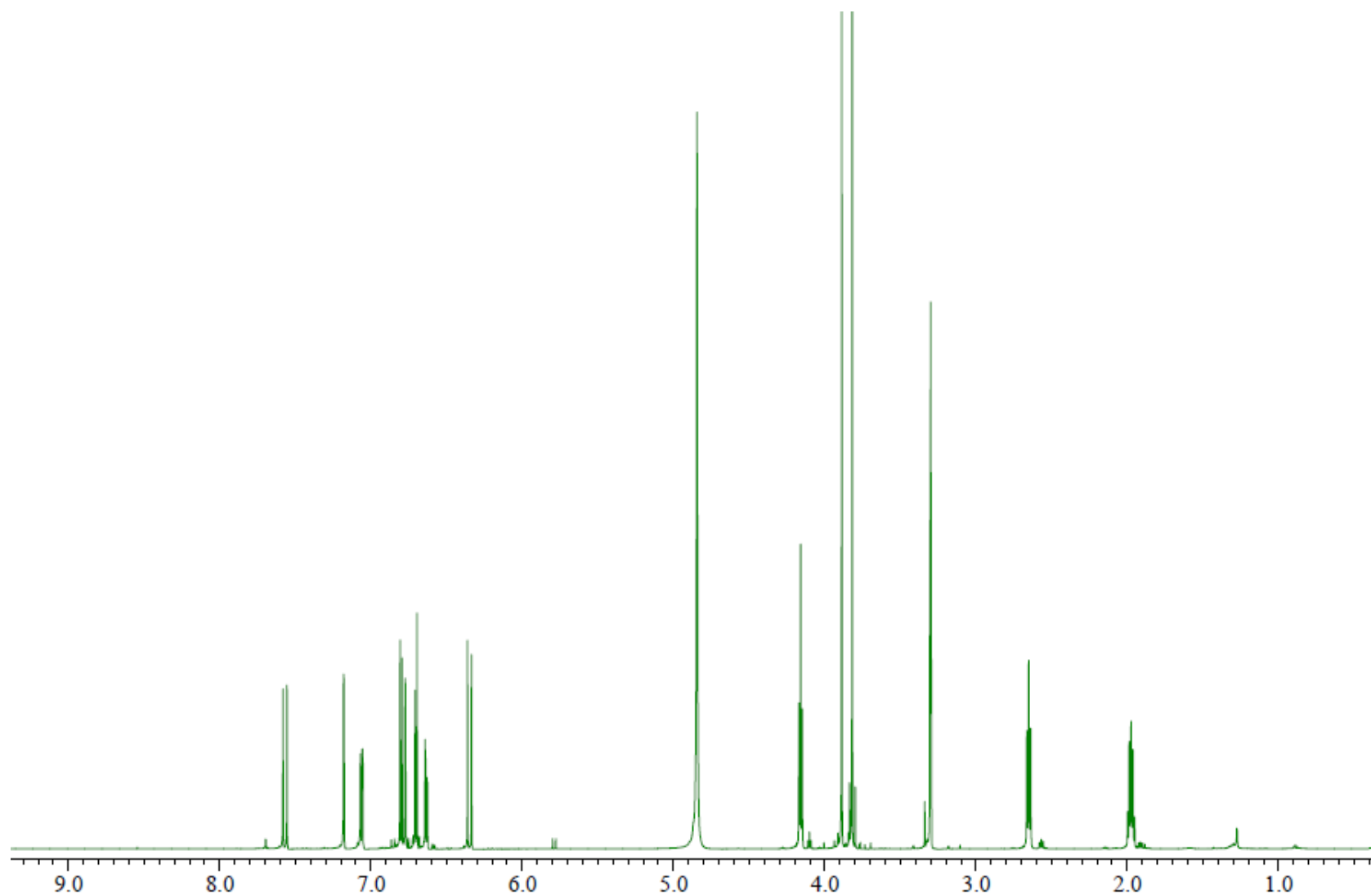
### Positive mode



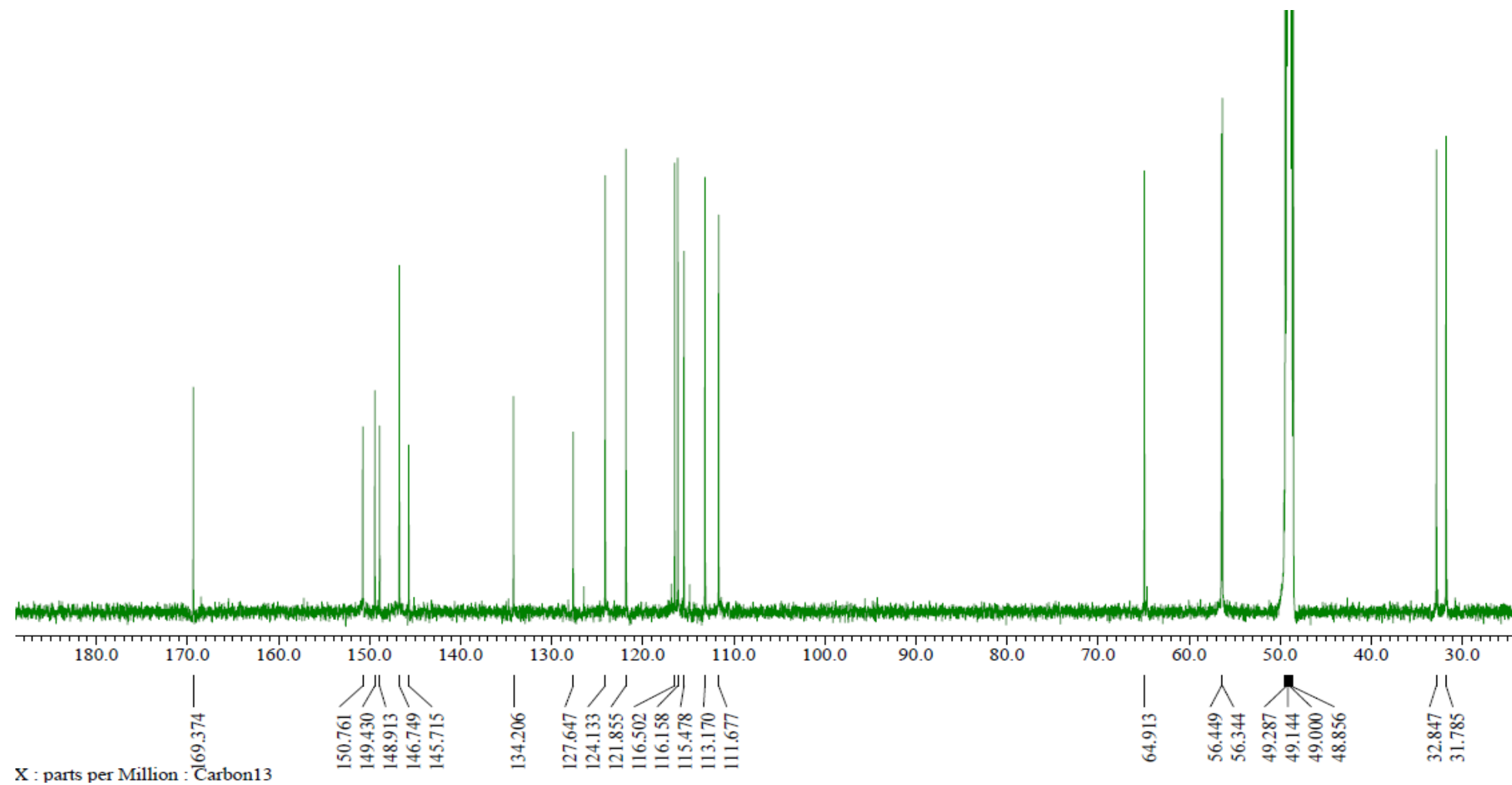
### Negative mode



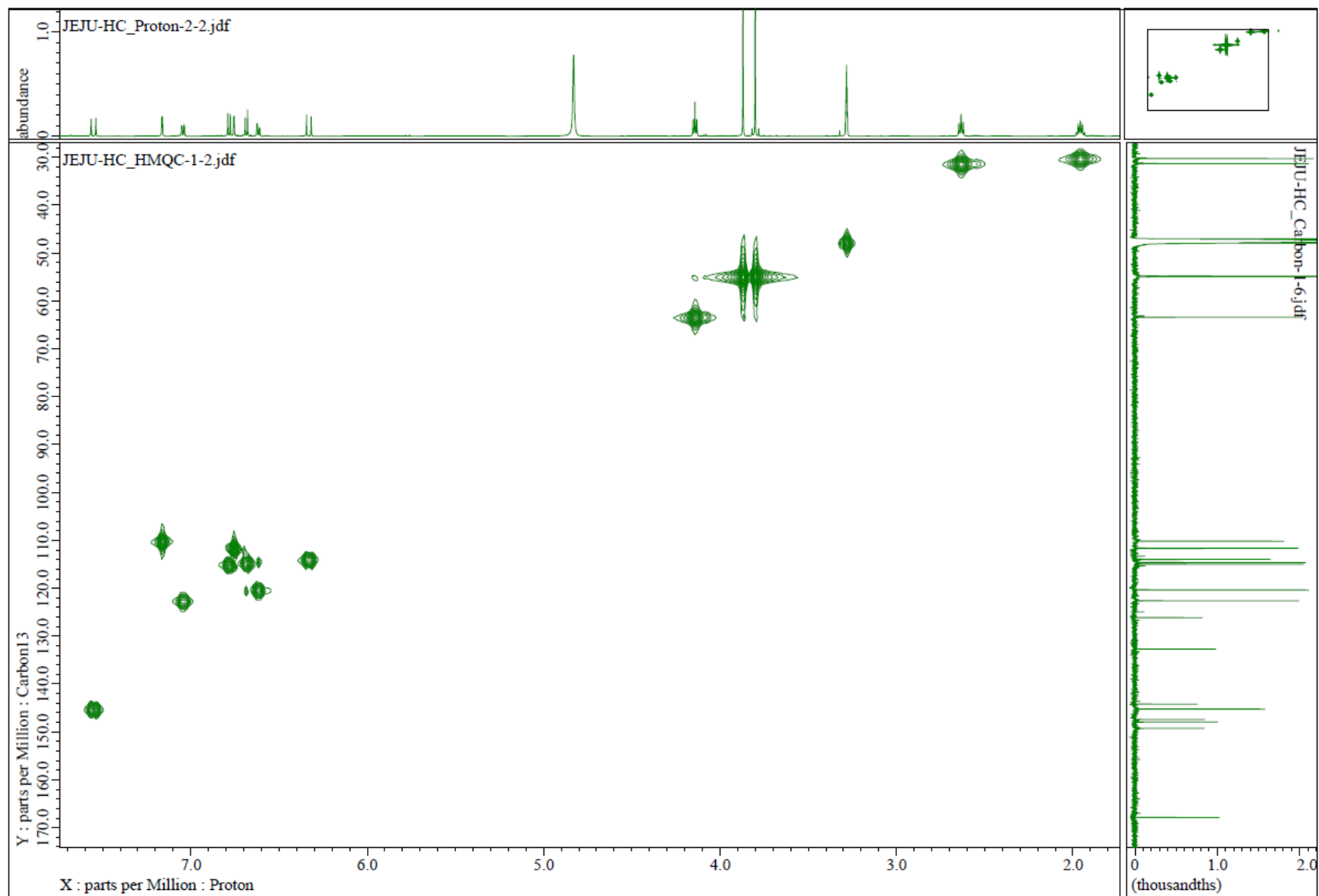
**Figure S1.** LC-ESI-mass spectrometry of the purified compound.



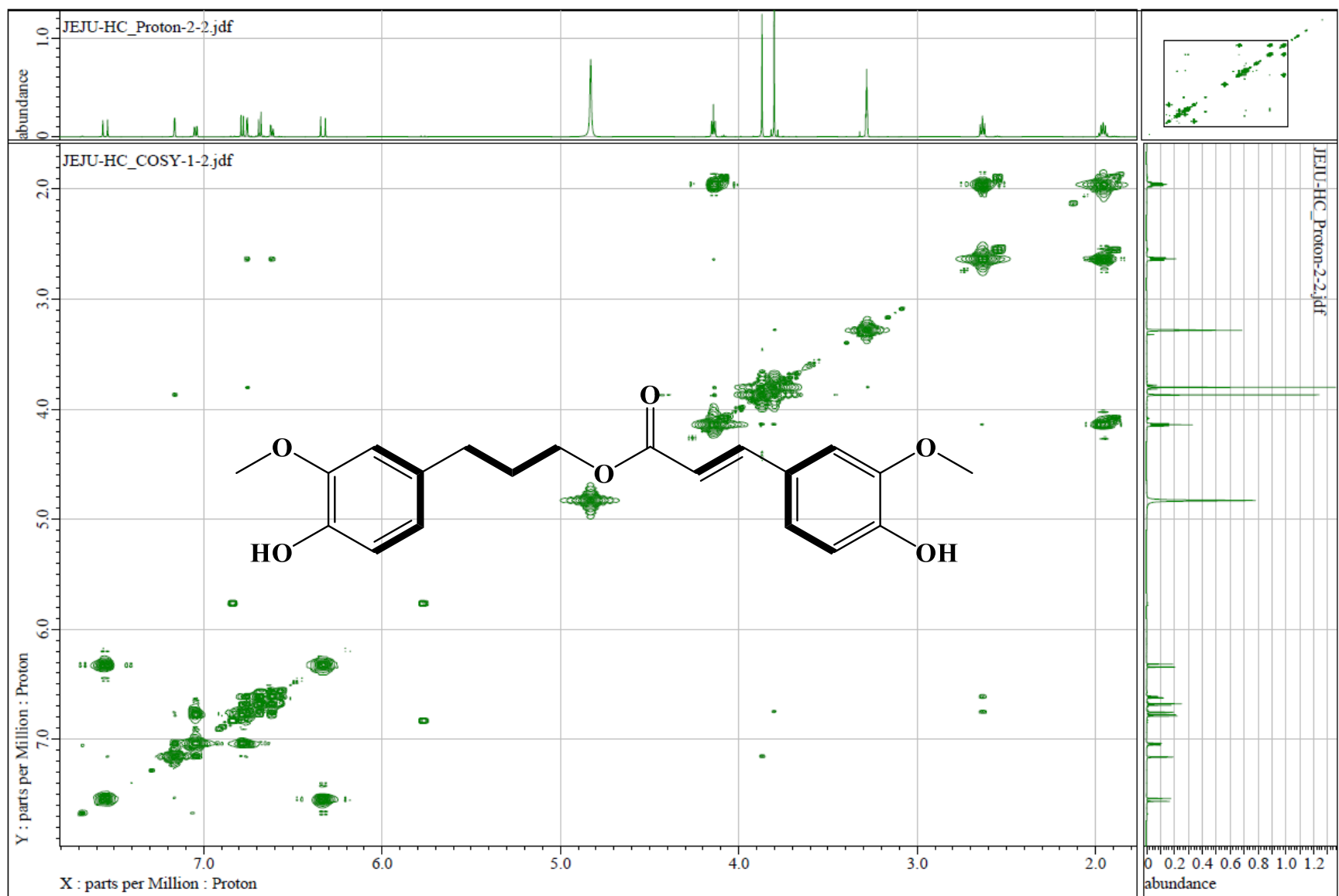
**Figure S2.**  $^1\text{H}$  NMR spectrum of the purified compound.



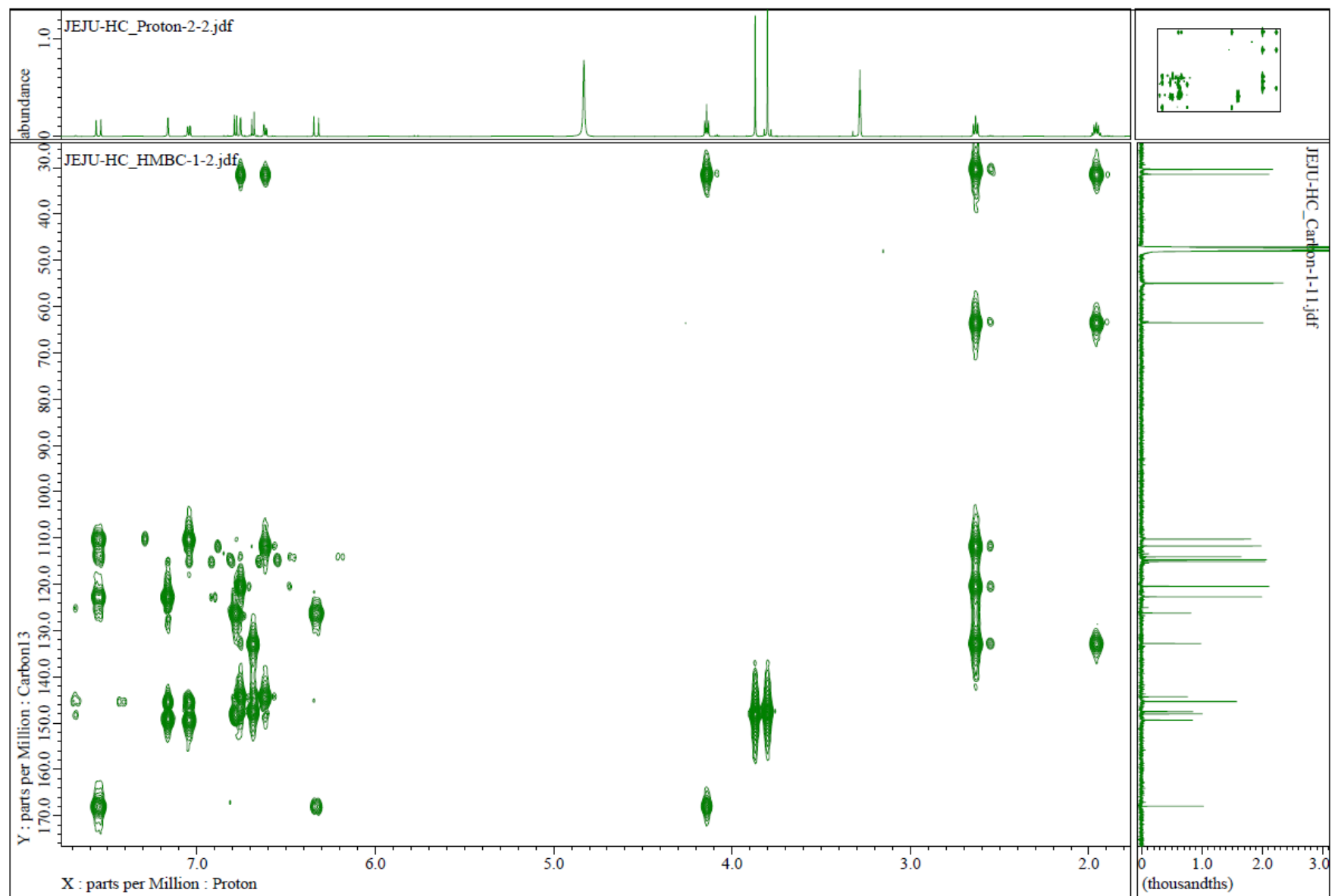
**Figure S3.**  $^{13}\text{C}$  NMR spectrum of the purified compound.



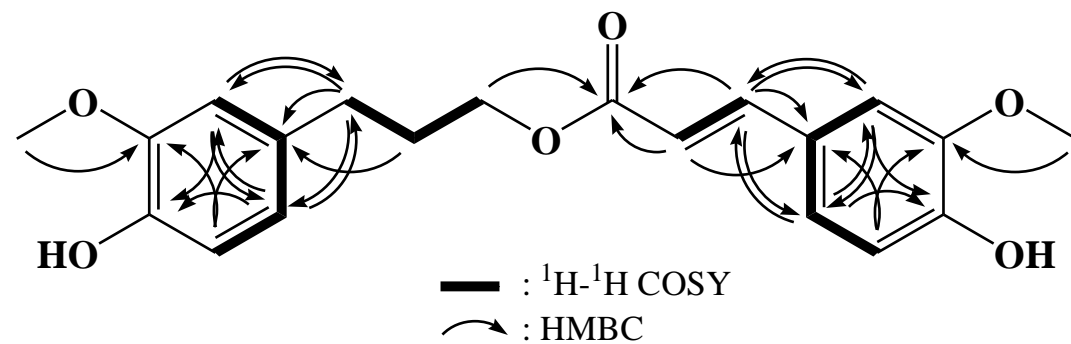
**Figure S4.** HMQC spectrum of the purified compound.



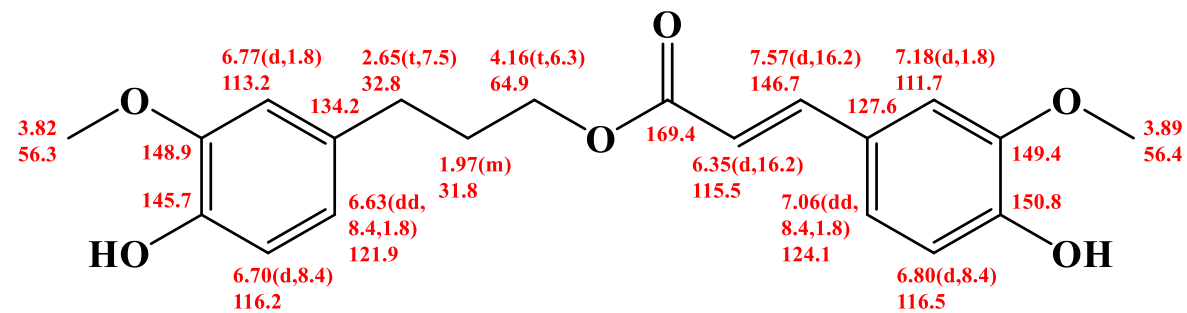
**Figure S5.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of the purified compound.



**Figure S6.** HMBC spectrum of the purified compound.

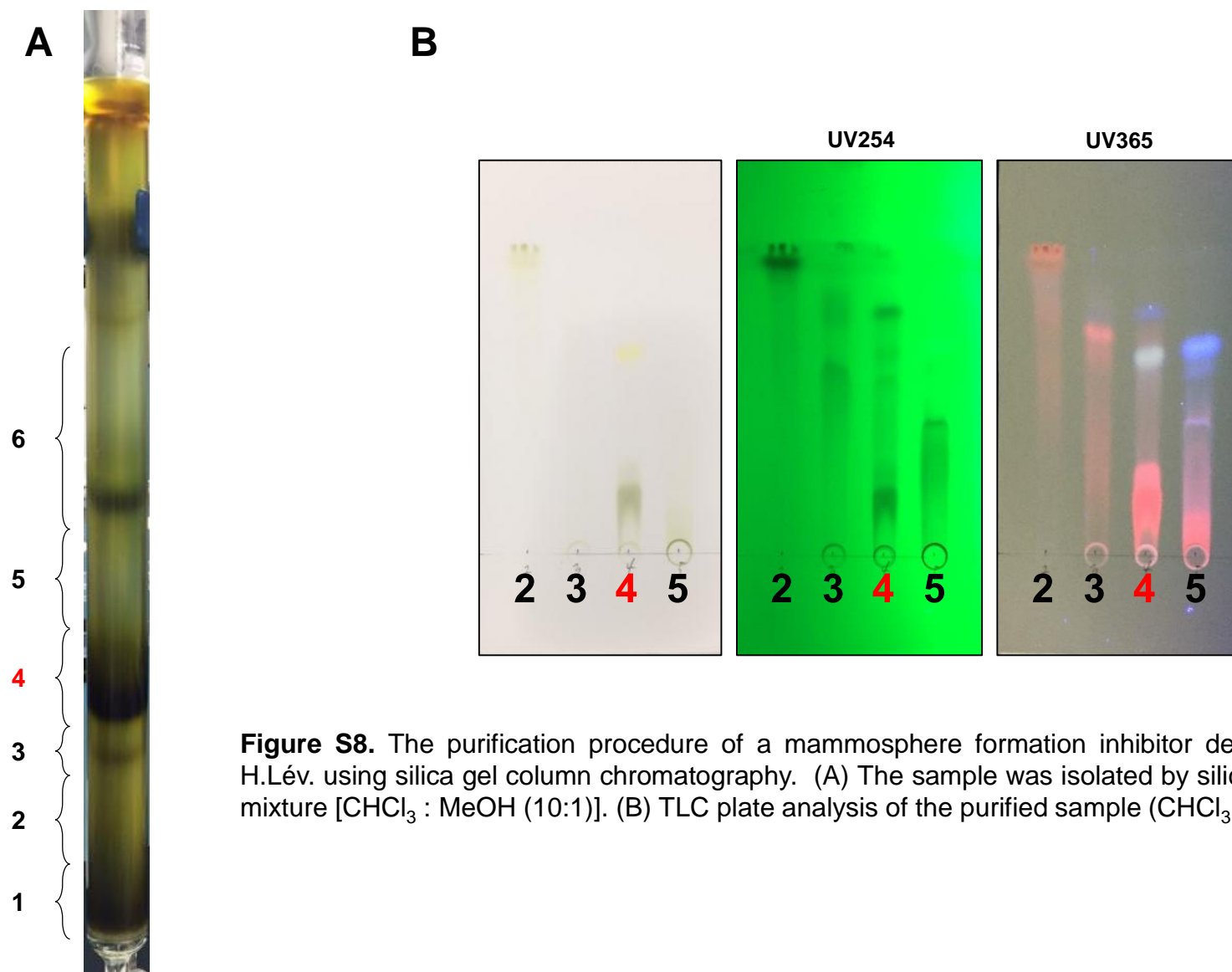


**Two-dimensional NMR correlations**



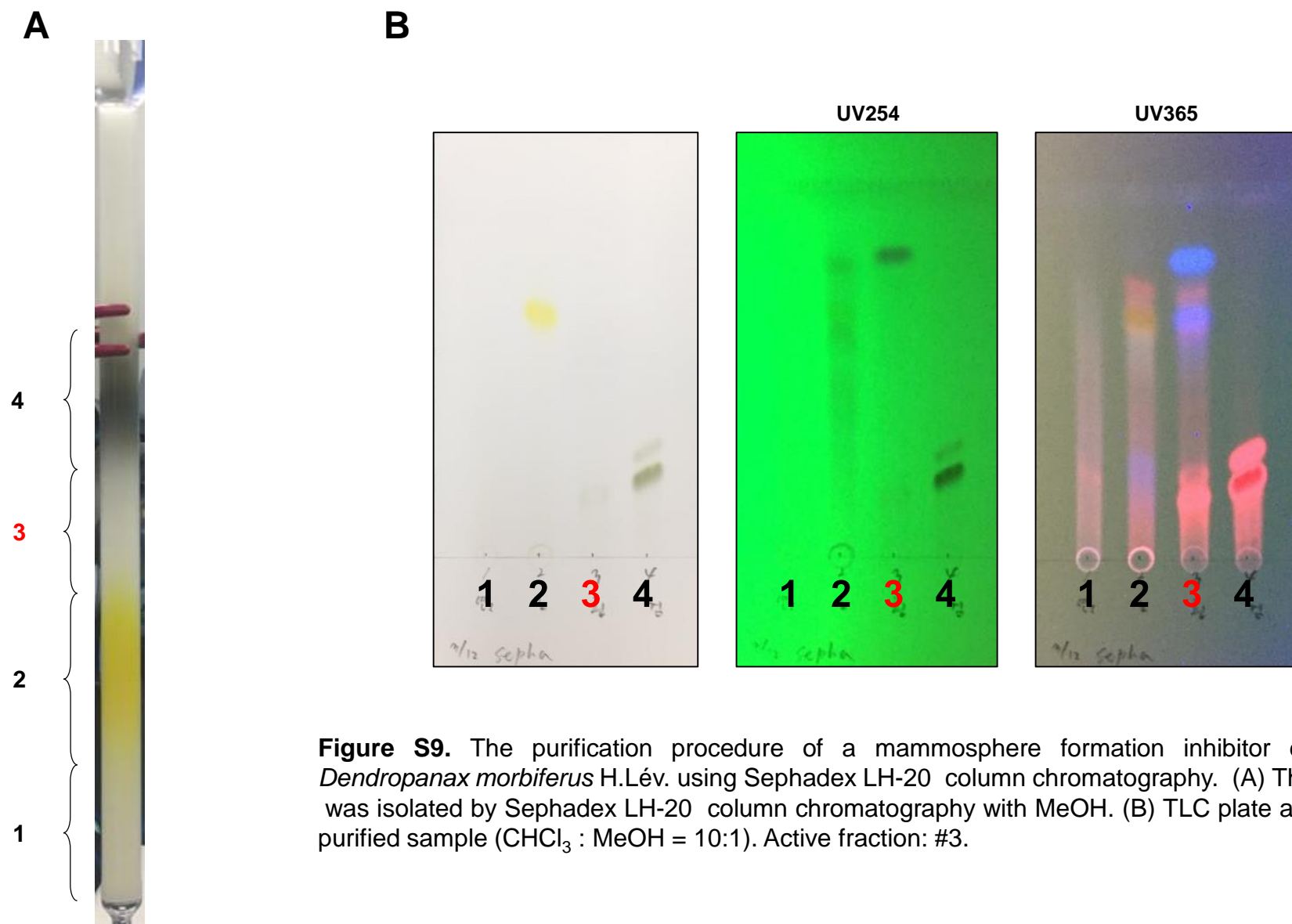
**$^1\text{H}$  and  $^{13}\text{C}$  peak assignments**

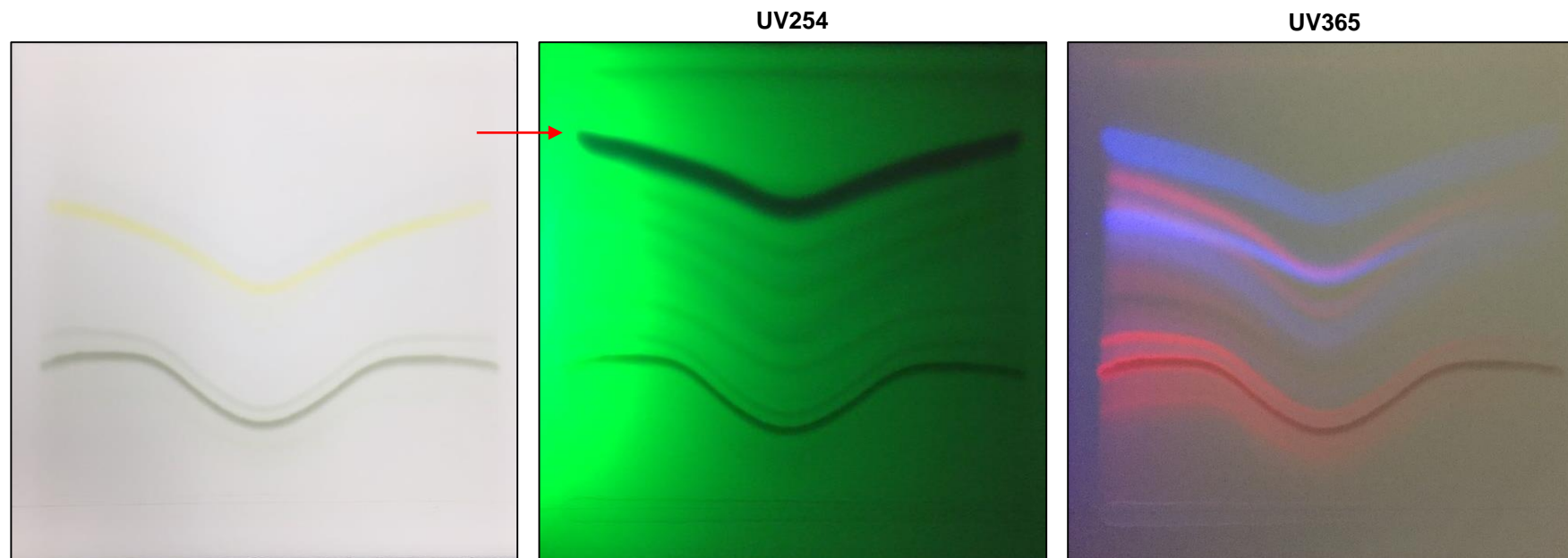
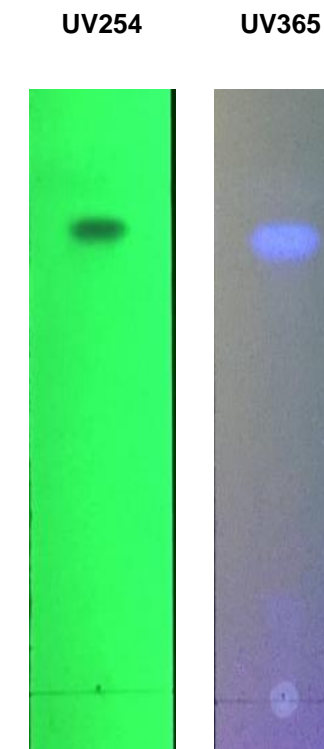
**Figure S7.** Two-dimensional NMR correlations and  $^1\text{H}$ ,  $^{13}\text{C}$  peak assignments of the purified compound.



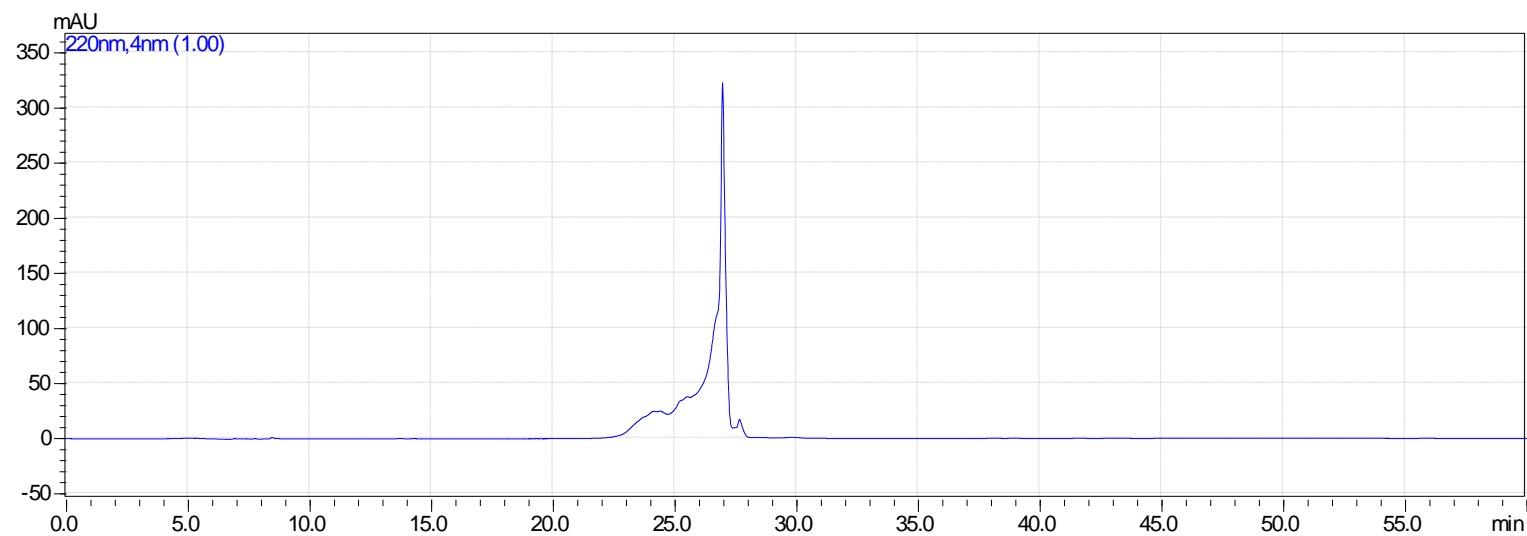
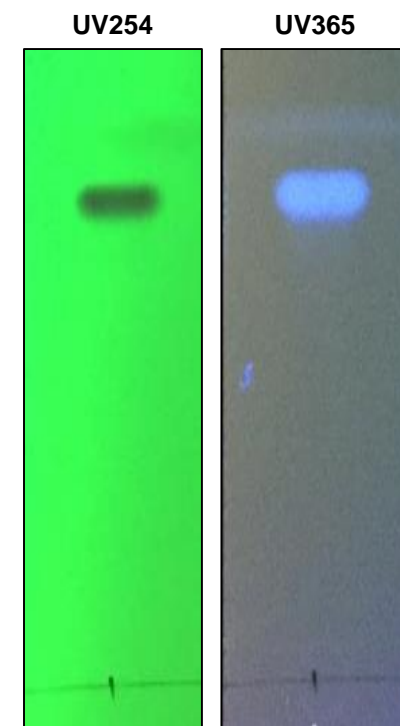
**Figure S8.** The purification procedure of a mammosphere formation inhibitor derived from *Dendropanax morbiferus* H.Lév. using silica gel column chromatography. (A) The sample was isolated by silica gel chromatography with a solvent mixture [CHCl<sub>3</sub> : MeOH (10:1)]. (B) TLC plate analysis of the purified sample (CHCl<sub>3</sub> : MeOH = 10:1). Active fraction: #4.



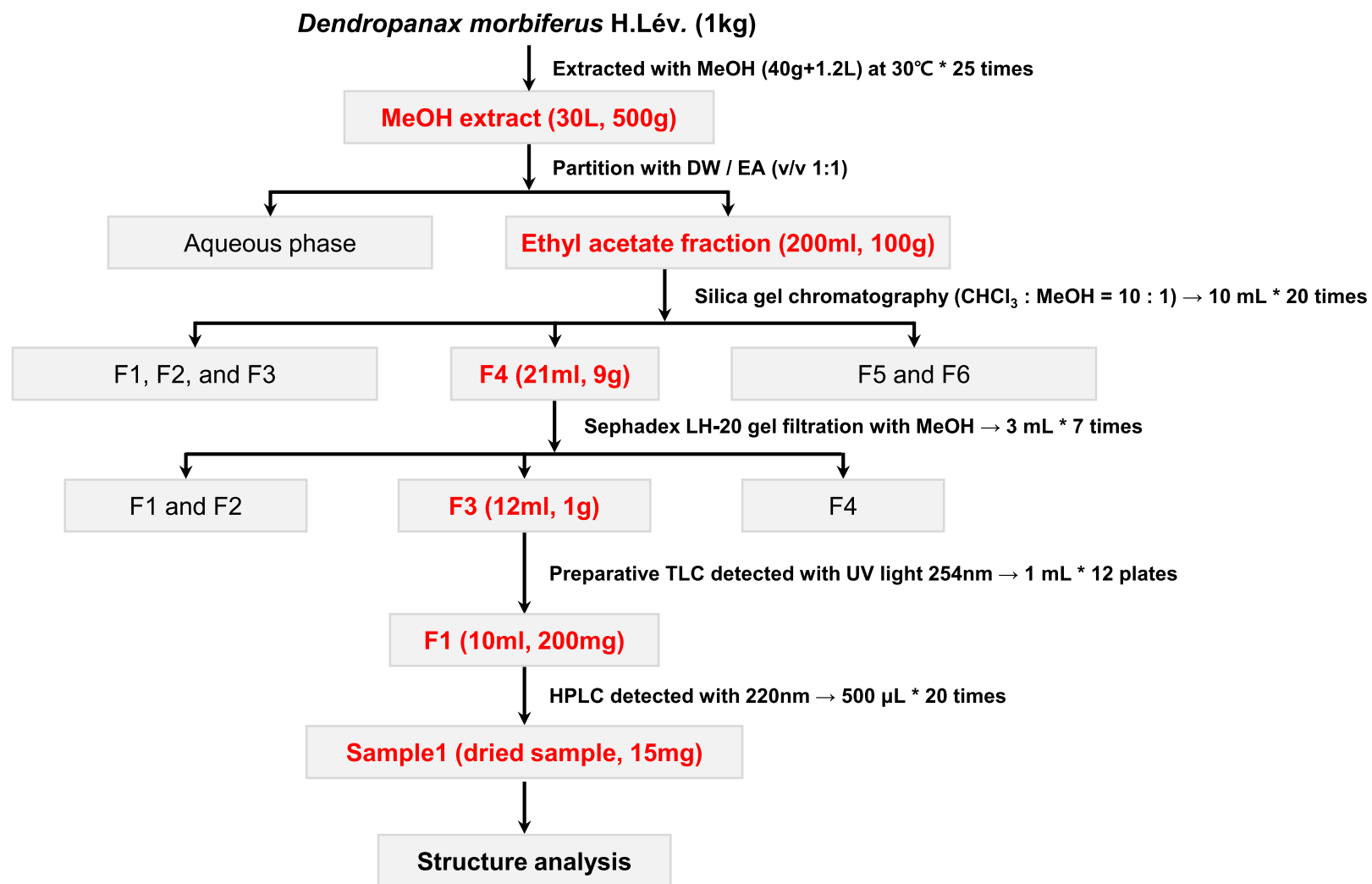


**A****B**

**Figure S10.** The purification procedure of a mammosphere formation inhibitor derived from *Dendropanax morbiferus* H.Lév. using preparative thin layer chromatography with  $\text{CHCl}_3$ :MeOH (30:1). (A) Preparative TLC chromatography. (B) TLC plate analysis of the prepared TLC bands after the samples were scraped and purified ( $\text{CHCl}_3$  : MeOH = 10:1).

**A****B**

**Figure S11.** Purification of a mammosphere formation inhibitor derived from *Dendropanax morbiferus* H.Lév. using HPLC. (A) Assessment of the major fraction using HPLC. Samples were collected based on the 220 nm wavelengths. (B) TLC plate analysis of the purified sample (CHCl<sub>3</sub> : MeOH = 10:1).



**Figure S12.** Purification scheme of a mammosphere formation inhibitor derived from *Dendropanax morbiferus* H.Lév.

**Table S1.** Specific Real-time RT-qPCR primer sequences containing *Nanog*, *CD44*, *Oct4*, *c-myc*, *Sox2*, and  $\beta$ -*actin* genes

Genes	Primers
Nanog	<ul style="list-style-type: none"> <li>Forward: 5'-ATGCCTCACACGGAGACTGT-3'</li> <li>Reverse: 5'-AAGTGGGTTGTTTGCCTTTG-3'</li> </ul>
CD44	<ul style="list-style-type: none"> <li>Forward: 5'-AGAAGGTGTGGGCAGAAGAA-3'</li> <li>Reverse: 5'-AAATGCACCATTTCTGAGA-3'</li> </ul>
Oct4	<ul style="list-style-type: none"> <li>Forward: 5'-AGCAAAACCCGGAGGAGT-3'</li> <li>Reverse: 5'-CCACATCGGCCTGTGTATATC-3'</li> </ul>
c-myc	<ul style="list-style-type: none"> <li>Forward: 5'-AATGAAAAGGCCCCCAAGGTAGTTATCC-3'</li> <li>Reverse: 5'-AGCAAAACCCGGAGGAGT-3'</li> </ul>
Sox2	<ul style="list-style-type: none"> <li>Forward: 5'-TTGCTGCCTCTTTAAGACTAGGA-3'</li> <li>Reverse: 5'-CTGGGGCTCAAACCTCTCTC-3'</li> </ul>
$\beta$ -actin	<ul style="list-style-type: none"> <li>Forward: 5'-TGTTACCAACTGGGACGACA-3'</li> <li>Reverse: 5'-GGGGTGTTGAAGGTCTCAA-3'</li> </ul>