

Table S1. Specific Real-time RT-qPCR primer sequences containing *IL-6*, *IL-8*, and β -actin genes

Genes	Primers
IL-6	Forward: 5'-AGACAGCCACTCACCTCTTCAG-3' Reverse: 5'-TTCTGCCAGTGCCTCTTTGCTG-3'
IL-8	Forward : 5'-ATGACTTCCAAGCTGGCCGT-3', Reverse : 5'-TCCTTGGCAAACACTGCACCT-3'
β -actin	Forward: 5'-TGTTACCAACTGGGACGACA-3' Reverse : 5'-GGGGTGTGTAAGGTCTCAA-3

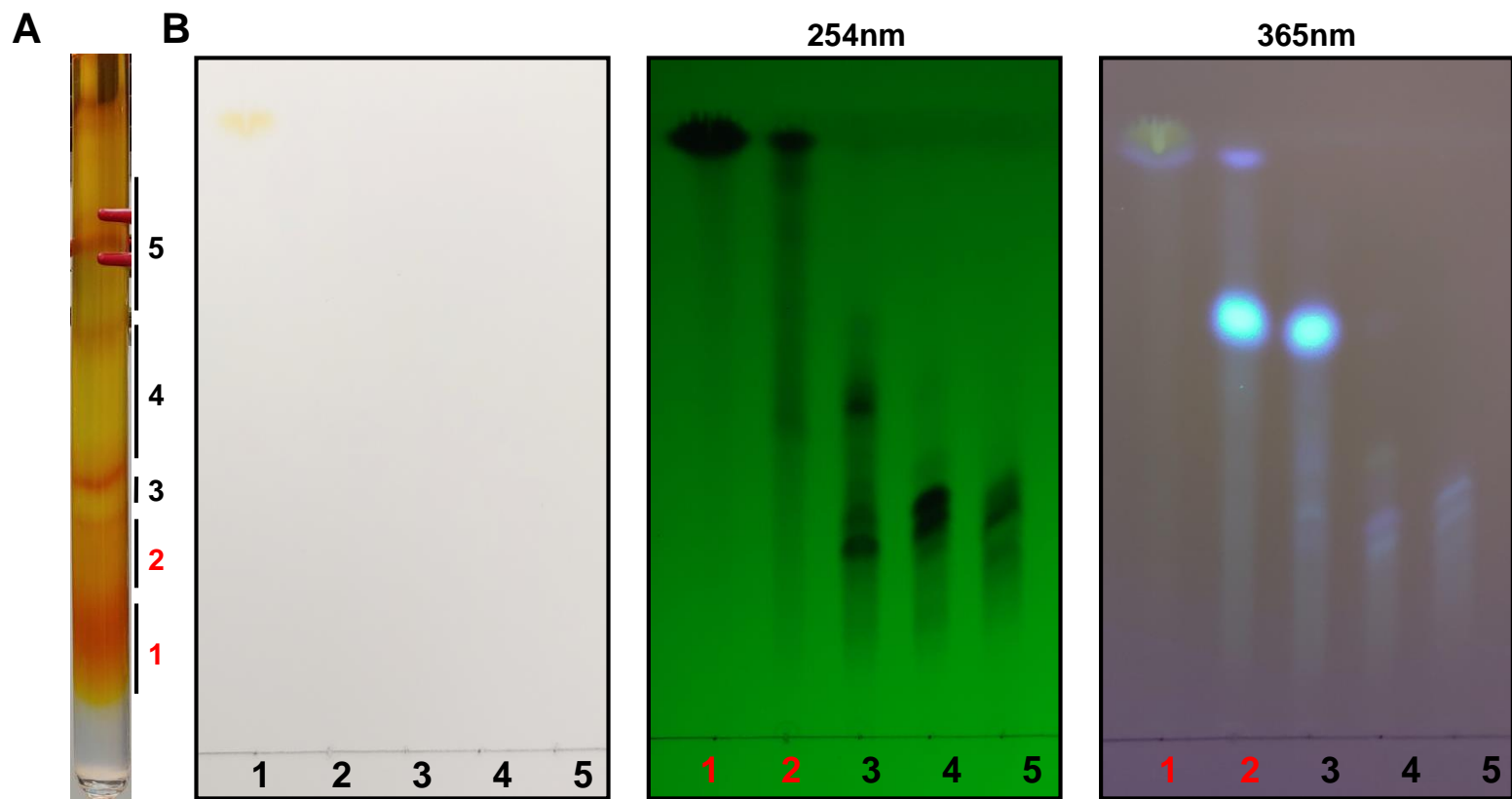


Figure S1. The purification procedure of a mammosphere formation inhibitor derived from carrot extracts using silica gel column chromatography. (A) The sample was isolated by silica gel chromatography with a solvent mixture [CHCl₃ : MeOH (10:1)]. (B) TLC plate analysis of the purified sample (CHCl₃ : MeOH = 10:1). Active fraction: #1 and #2.

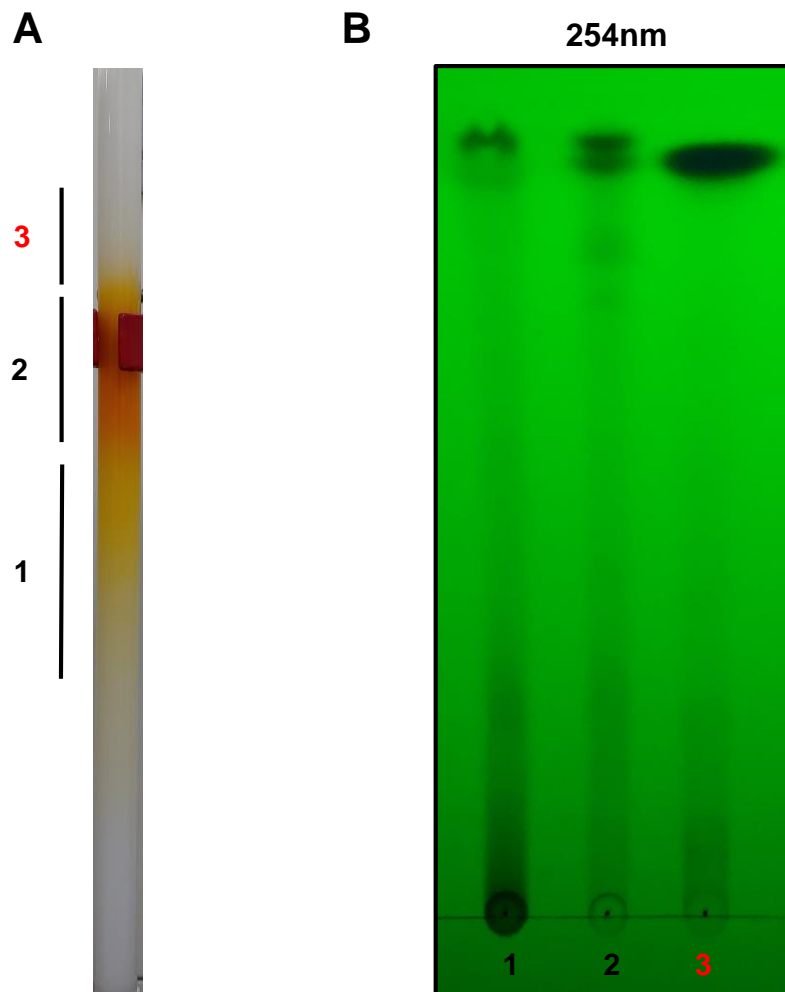


Figure S2. The purification procedure of a mammosphere formation inhibitor derived from carrot using Sephadex LH-20 column chromatography. (A) The sample was isolated by Sephadex LH-20 chromatography with MeOH. (B) TLC plate analysis of the purified sample (CHCl_3 : MeOH = 10:1). Active fraction: #3.

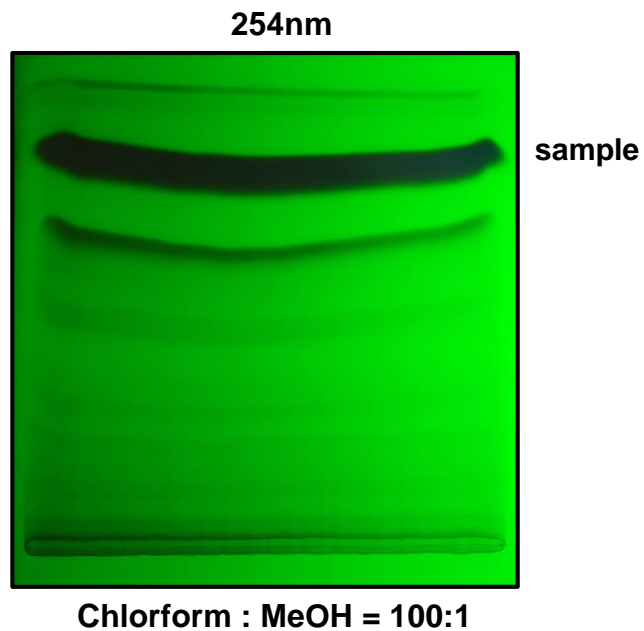
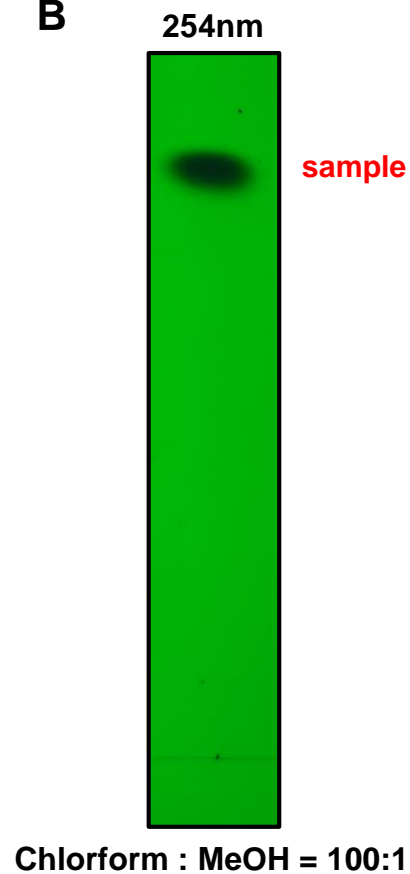
A**B**

Figure S3. The purification procedure of a mammosphere formation inhibitor derived from carrot using preparative thin layer chromatography with CHCl_3 :MeOH (100:1). (A) Preparative TLC chromatography. (B) TLC plate analysis of the prepared TLC band after the samples were scraped and purified (CHCl_3 : MeOH = 100:1).

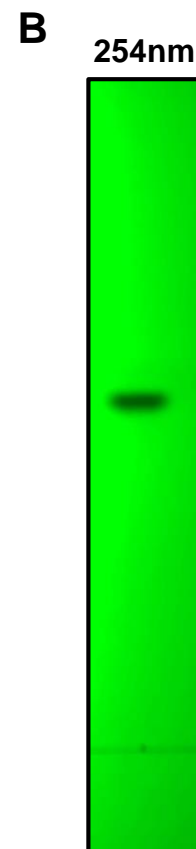
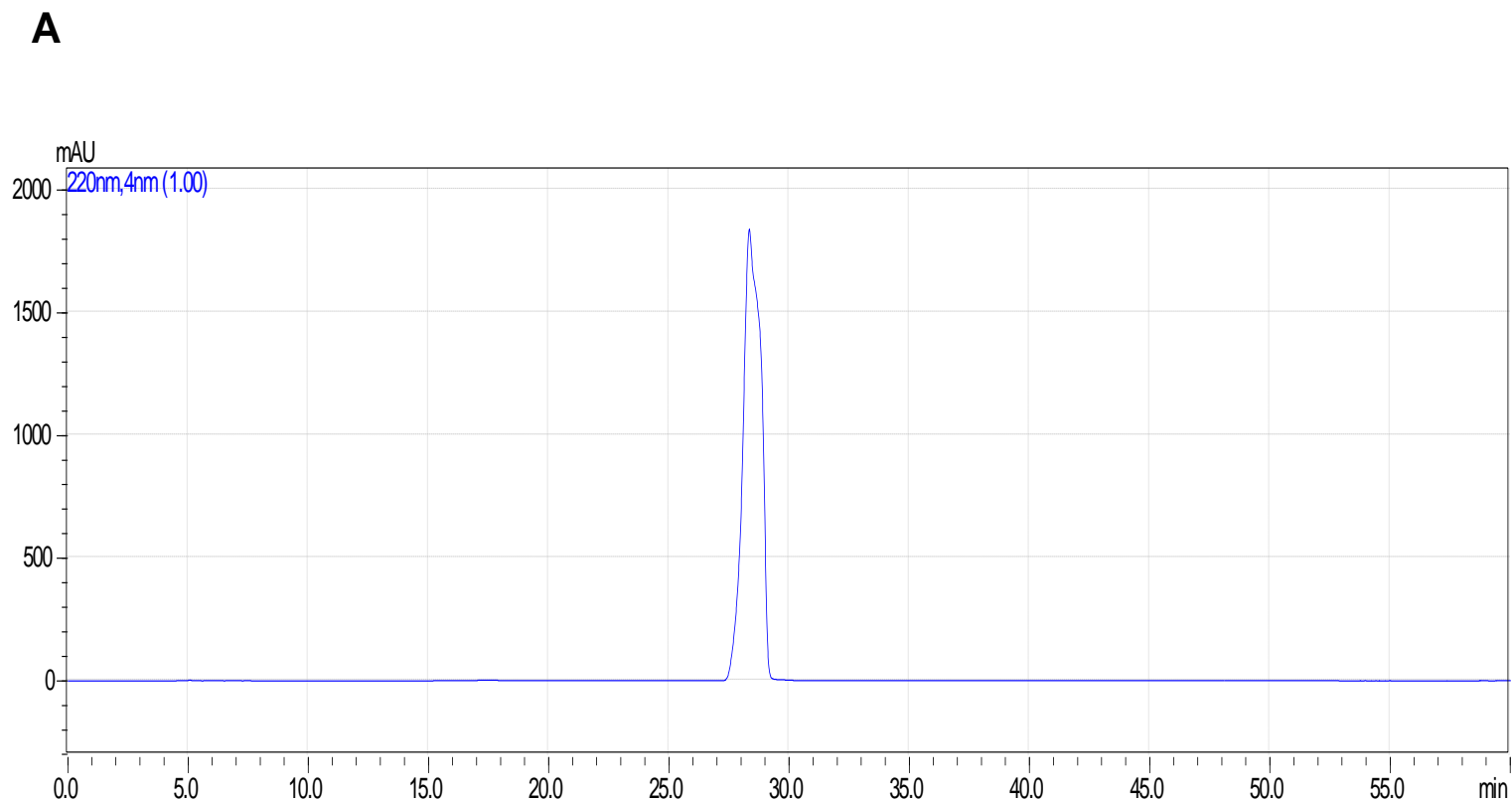
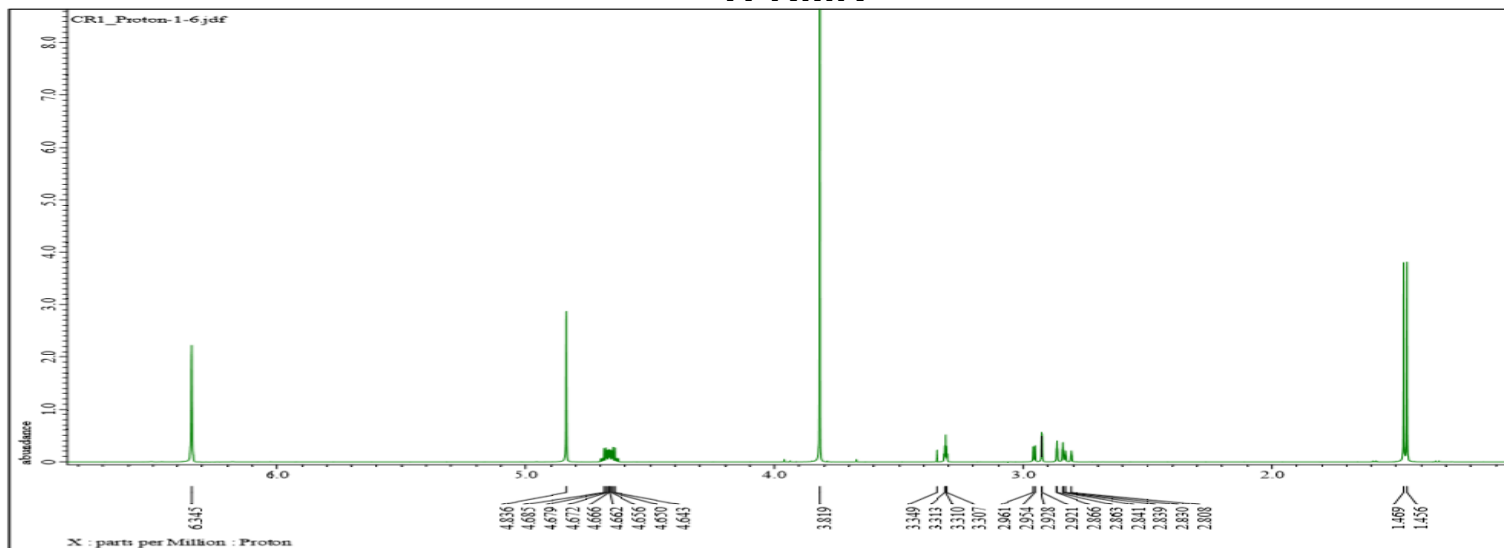


Figure S4. Purification procedure of a mammosphere formation inhibitor derived from carrot using HPLC. (A) Assessment of the major fractions using HPLC at one wavelength. Samples were collected based on the 220 nm wavelength. (B) TLC plate analysis of the purified sample (CHCl_3 : MeOH = 100:1).

H-NMR



C-NMR

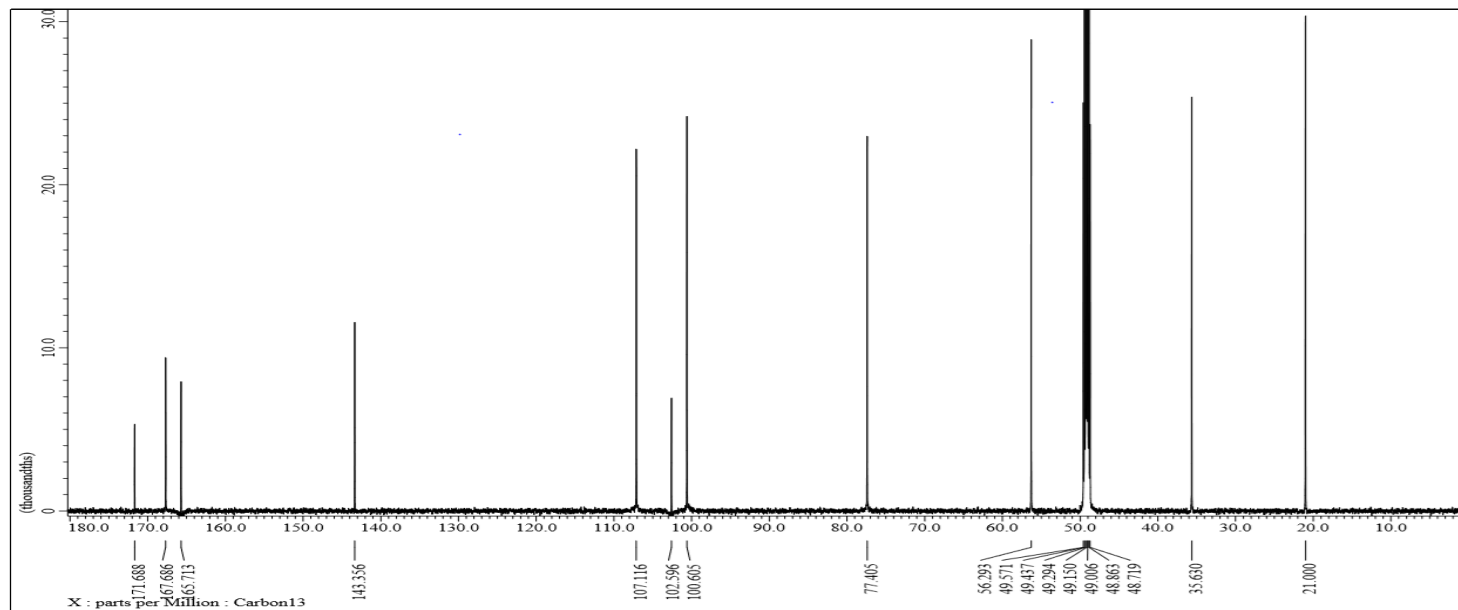


Figure S5. ¹H and ¹³C NMR spectra of the purified sample.

HMQC

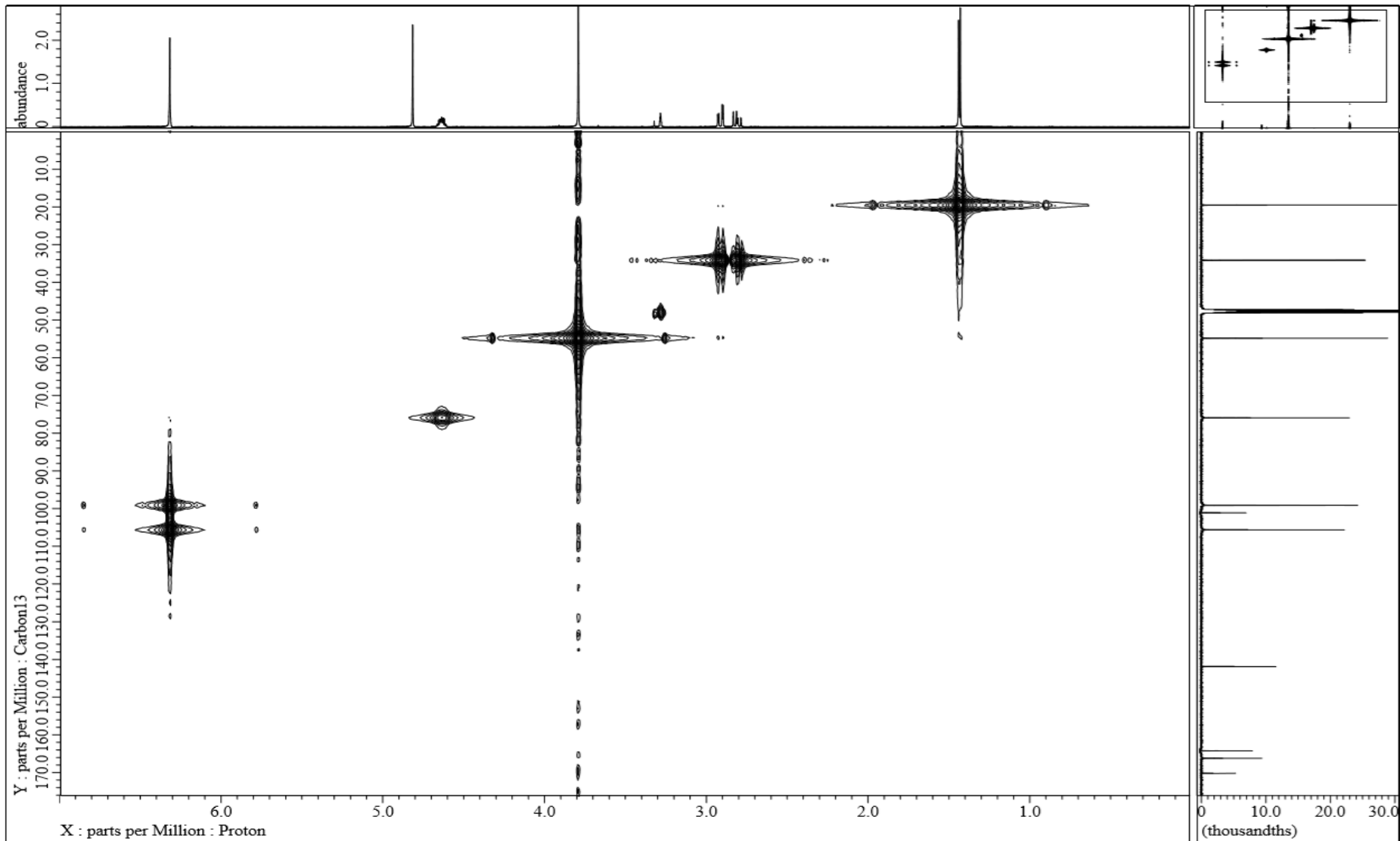


Figure S6. HMQC spectrum of the purified sample.

COSY

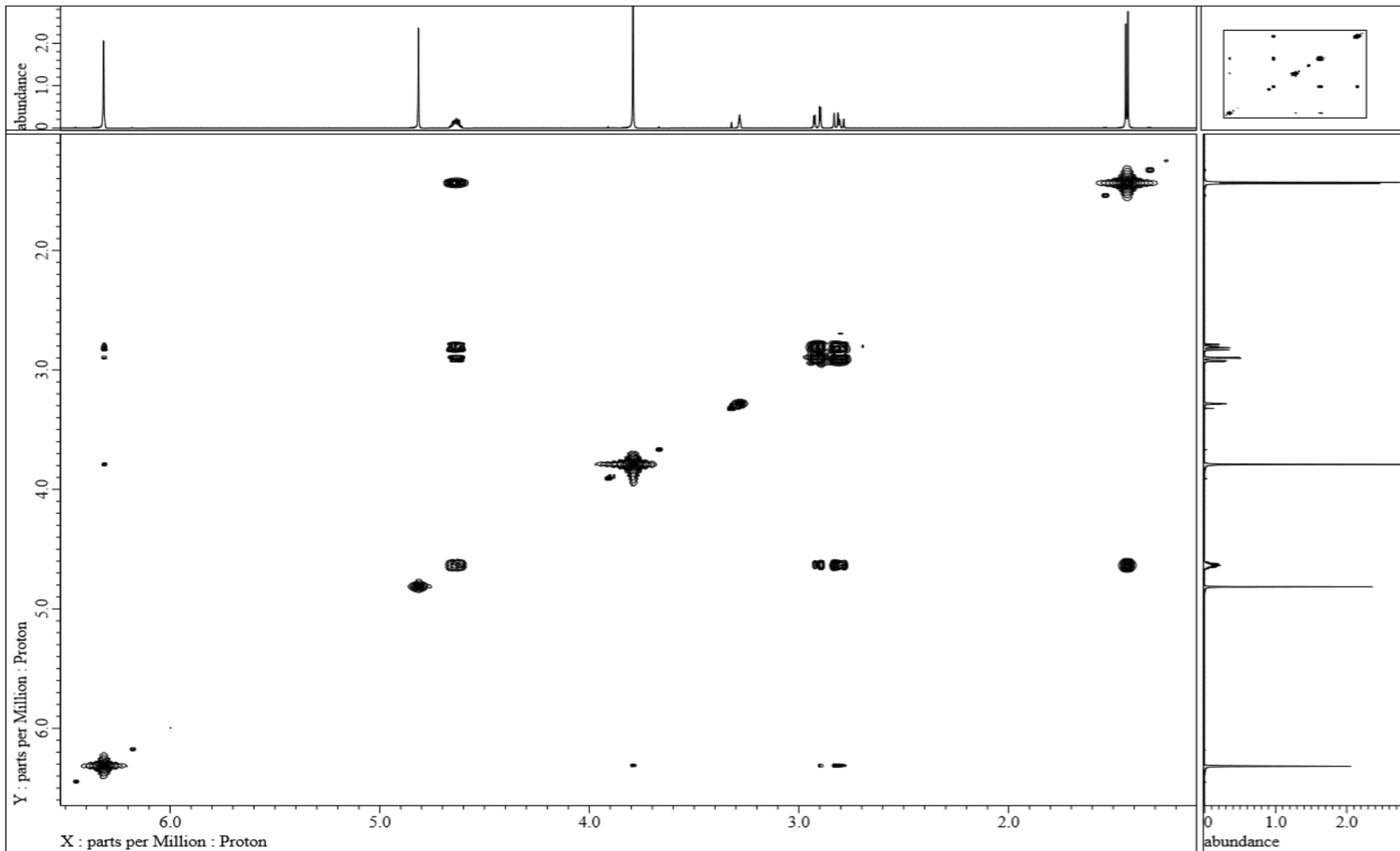


Figure S7. ^1H - ^1H COSY spectrum of the purified sample.

HMBC

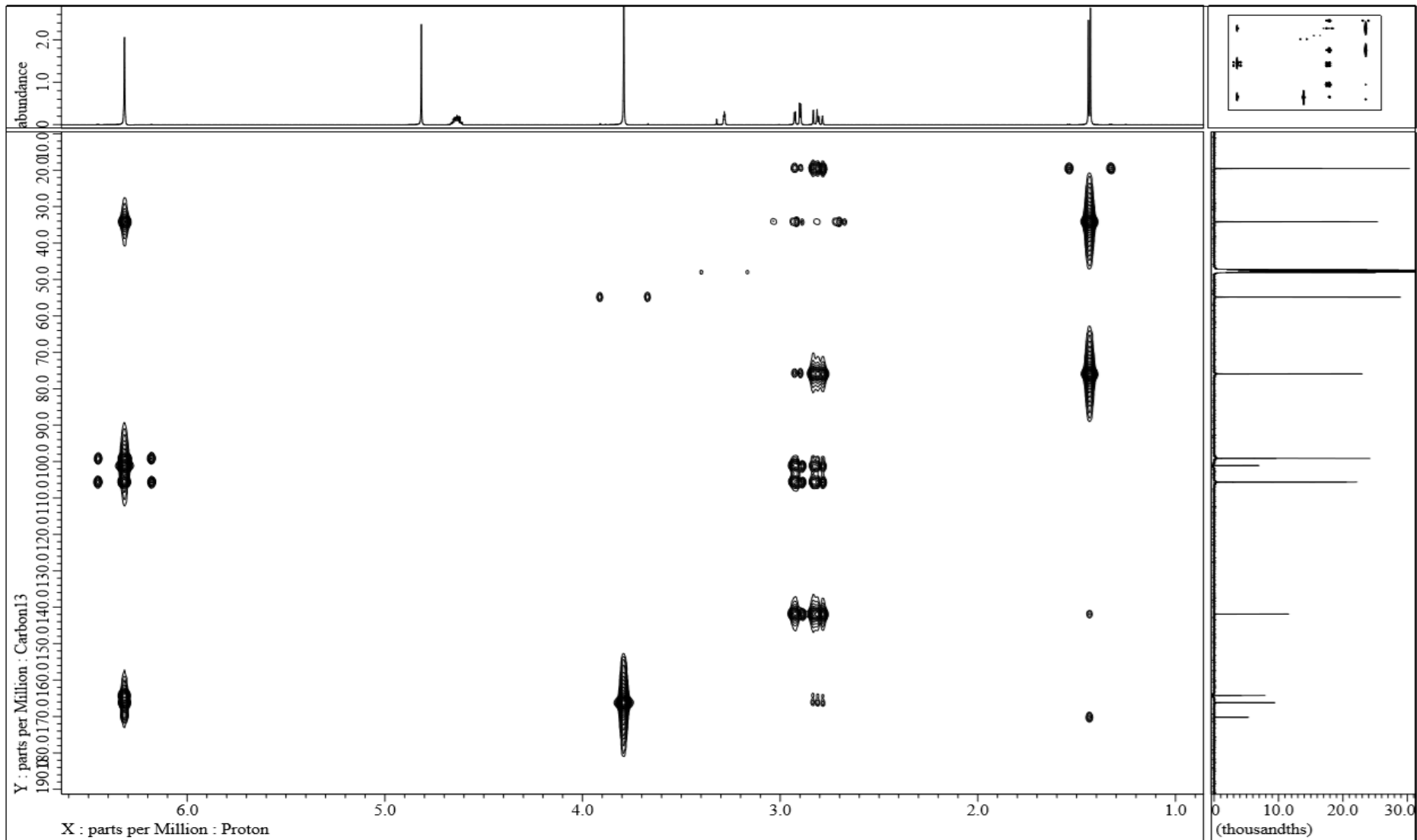


Figure S8. HMBC spectrum of the purified sample.

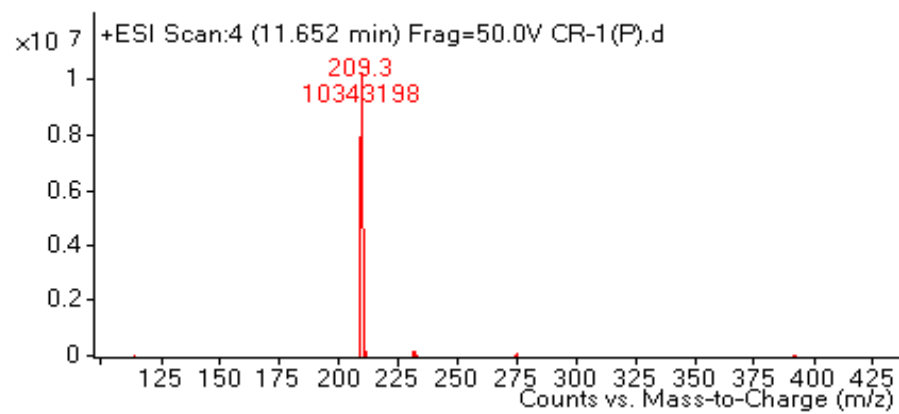
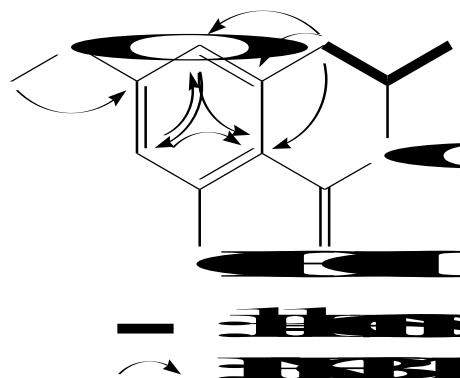
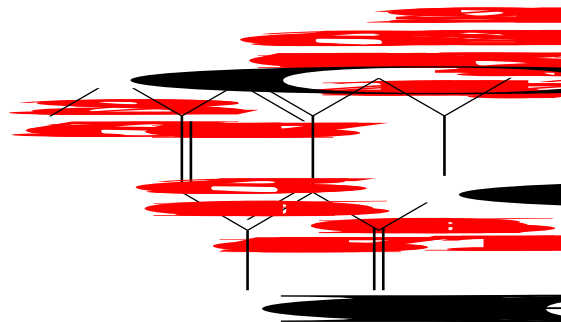
A**B****C**

Figure S9. ESI mass spectrometry (A), two-dimensional NMR data (B), and ¹H and ¹³C peak assignments (C) of the purified sample.