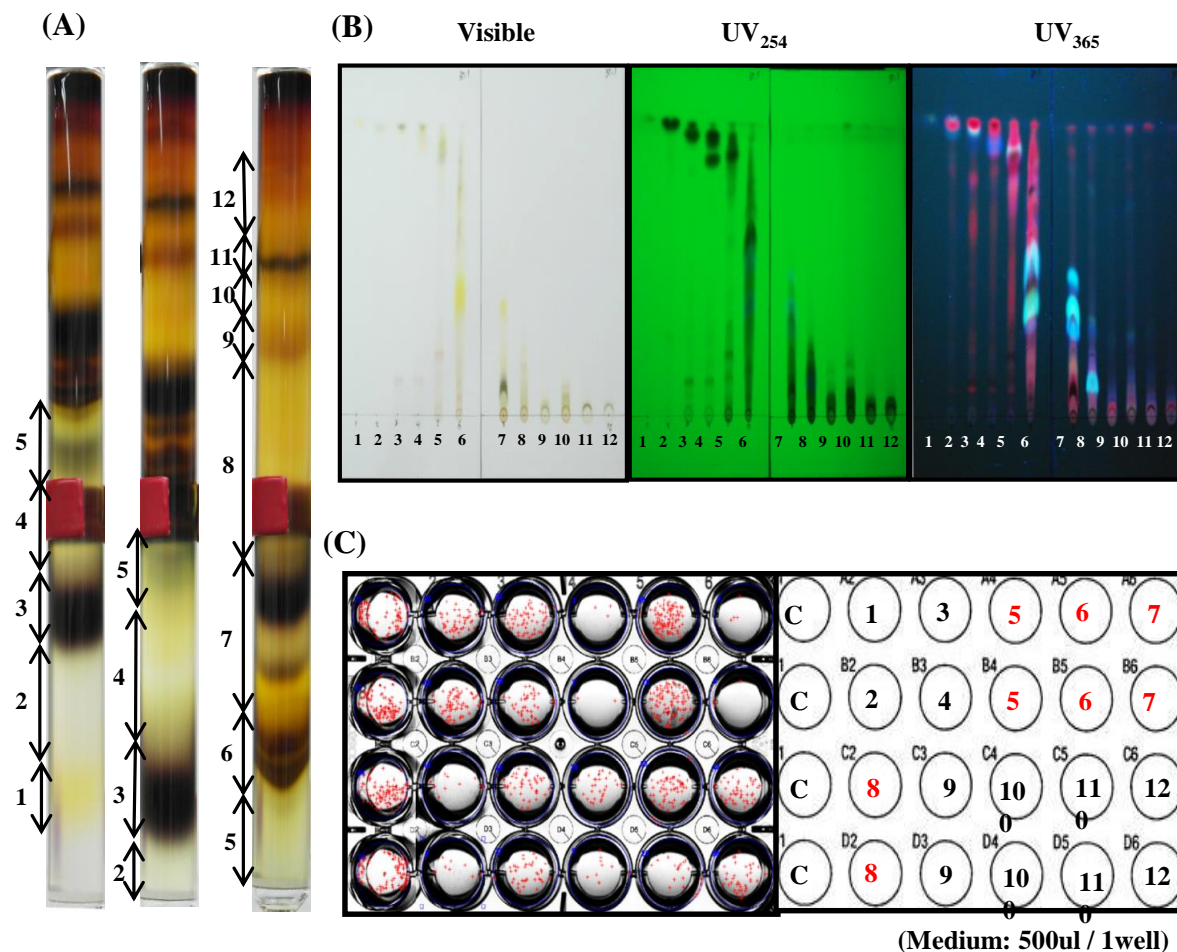
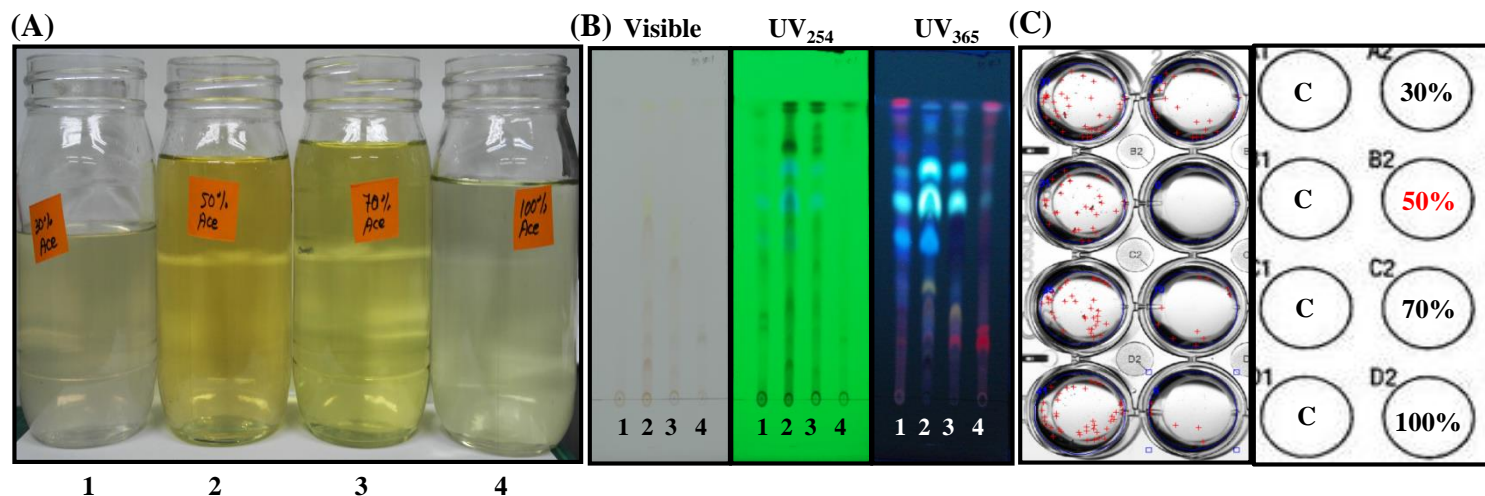


**Table S1. Specific Real-time RT-qPCR primer sequences containing *IL-6*, *IL-8*, and *β-actin* genes**

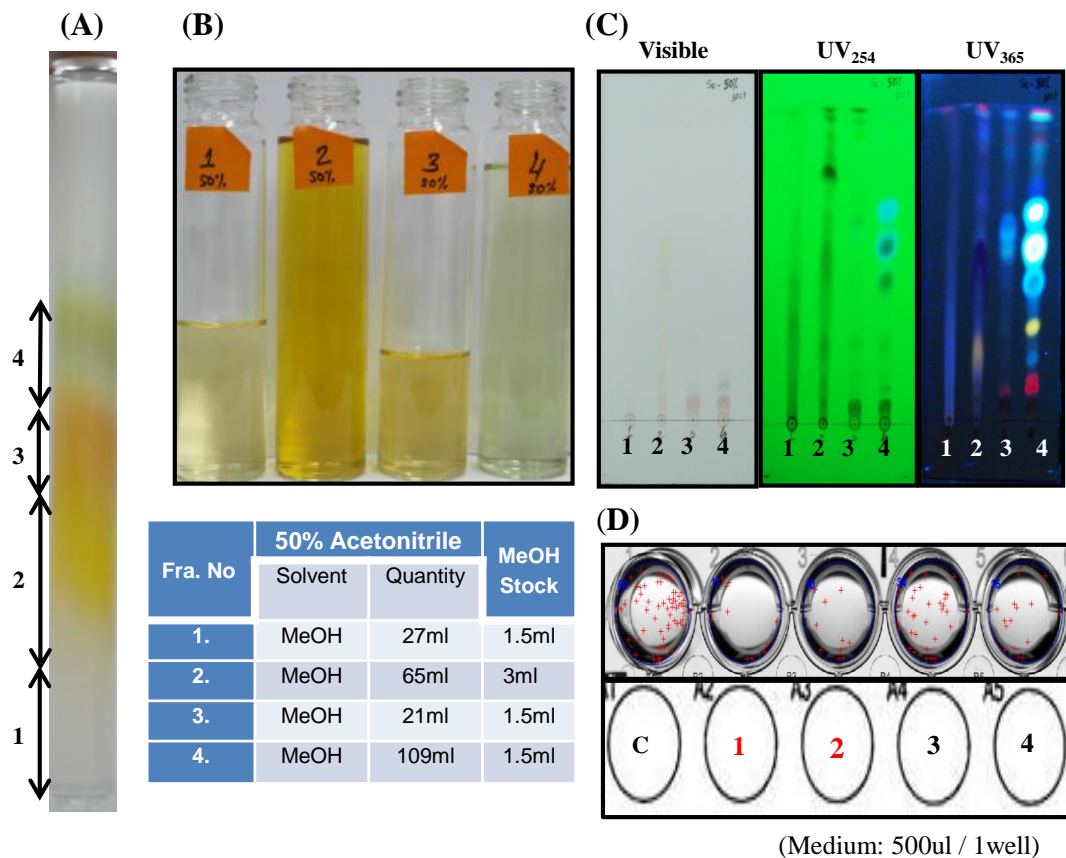
Genes	Primers
IL-6	Forward: 5'-AGACAGCCACTCACCTCTTCAG-3' Reverse: 5'-TTCTGCCAGTGCCTCTTTGCTG-3'
IL-8	Forward : 5'-ATGACTTCCAAGCTGGCCGT-3', Reverse : 5'-TCCTTGGCAAACTGCACCT-3'
β-actin	Forward: 5'-TGTTACCAACTGGGACGACA-3' Reverse : 5'-GGGGTGTGGAAGGTCTCAAA-3



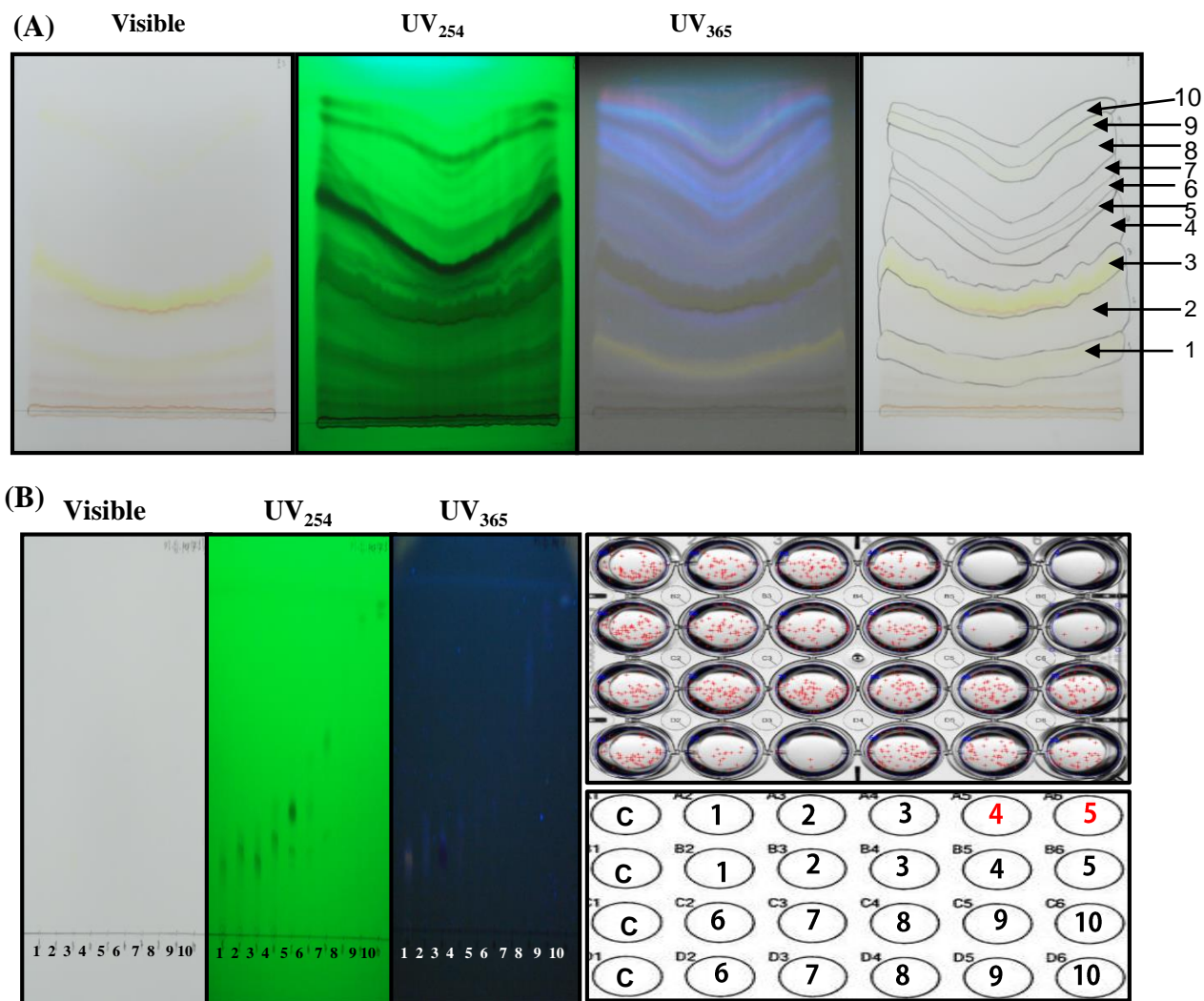
**Supplementary Figure S1. The purification procedure of cancer stem cell inhibitor derived from *S. chinensis* using SiO<sub>2</sub> gel chromatography.** (A) Sample was isolated by using SiO<sub>2</sub> gel chromatography with solvent mixture CHCl<sub>3</sub>: MeOH = 30:1 (B) TLC plate's analysis of the purified sample. The eluted fractions were spotted on TLC plate and developed in solvent-saturated chamber in CHCl<sub>3</sub>: MeOH = 30:1. The TLC plates were dried, and the spots on TLC plates were analyzed and detected under UV lamp. (C) Mammospheres formation assay using breast cancer stem cell derived from MCF-7 cells. Cells were treated with 1μl and 2μl of each fraction. After a week incubation (5% CO<sub>2</sub>, humidified incubator at 37°C, 7 days), the mammospheres were scanned and counting the tumorspheres in NICE program.



**Supplementary Figure S2. Purification procedure of cancer stem cell inhibitor in *Saururus chinensis* using Reversed-Phase C<sub>18</sub> (ODS) gel chromatography.** (A) ODS open column chromatography is eluted with 30%, 50%, 70% and 100% of CH<sub>3</sub>CN using partial-purified sample. (B) Thin-layer chromatography analysis of the partial-purified sample from ODS resin, purified-sample were spotted and developed in chloroform: methanol (30:1). UV was used to detect the samples. (C) Mammosphere formation assay using breast cancer stem cell derived from MCF-7 cells using partial-purified.

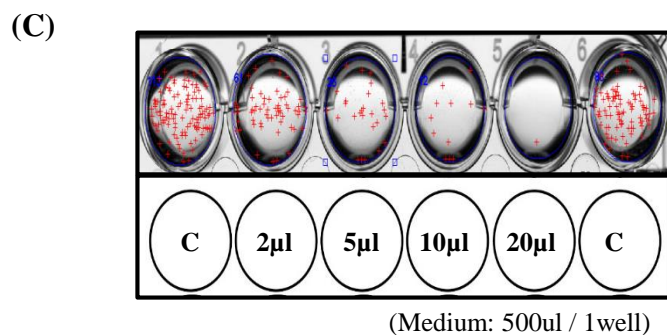
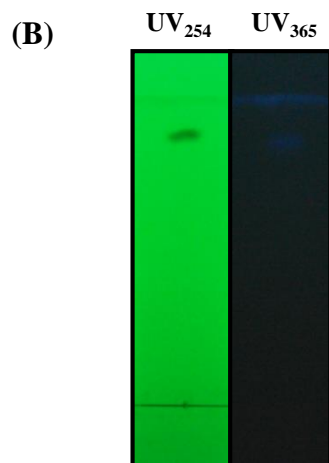
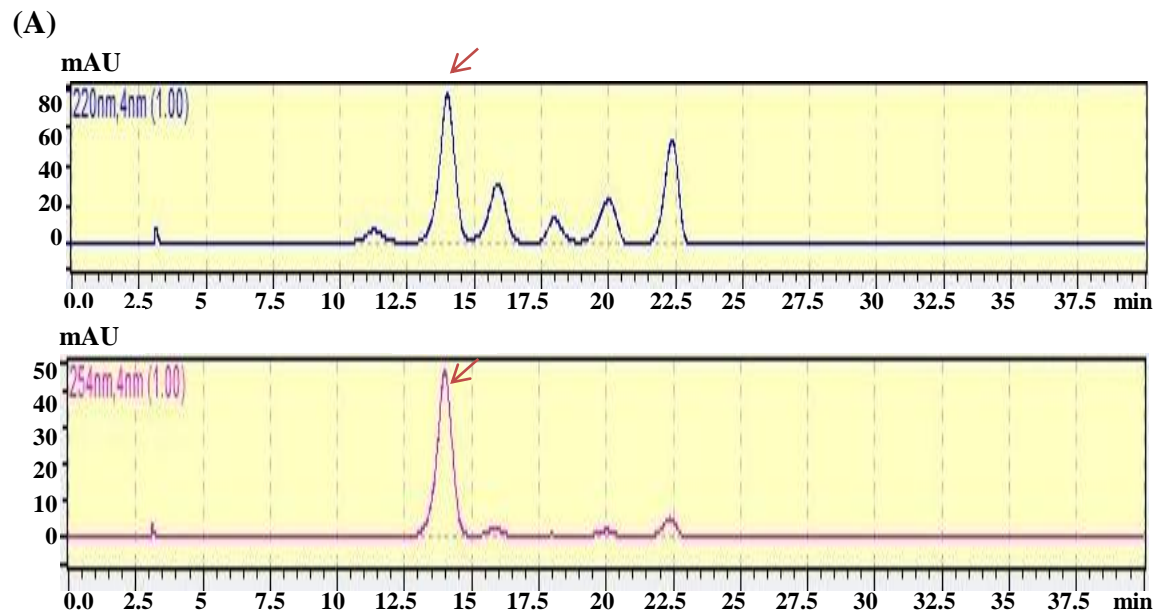


**Supplementary Figure S3. Purification procedure of cancer stem cell inhibitor in *Saururus chinensis* using Sephadex LH-20 gel chromatography.** (A) Sephadex LH-20 column chromatography eluted with methanol. (B) Image of sample's color and table of the sample fractions. (C) Thin-layer chromatography analysis of the eluted fractions of *Saururus chinensis* which developed in chloroform/methanol (30:1). (D) Mammosphere formation assay using breast cancer stem cell derived from MCF-7 cells using partial-purified sample.

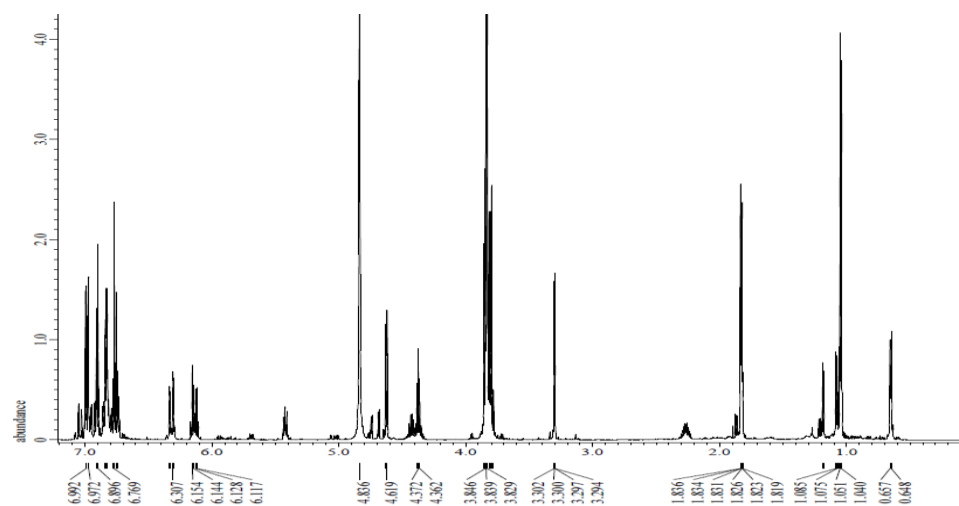


**Supplementary Figure S4. Purification procedure of cancer stem cell inhibitor in *Saururus chinensis* using a preparative thin layer chromatography (TLC).** (A) Preparative Thin Layer Chromatography of partial-purified sample. (B) Thin layer chromatography analysis of the Prep-TLC fractions which developed in chloroform/methanol (30:1). (C) Mammosphere formation assay using breast cancer stem cell derived from MCF-7 cells using partial-purified sample.

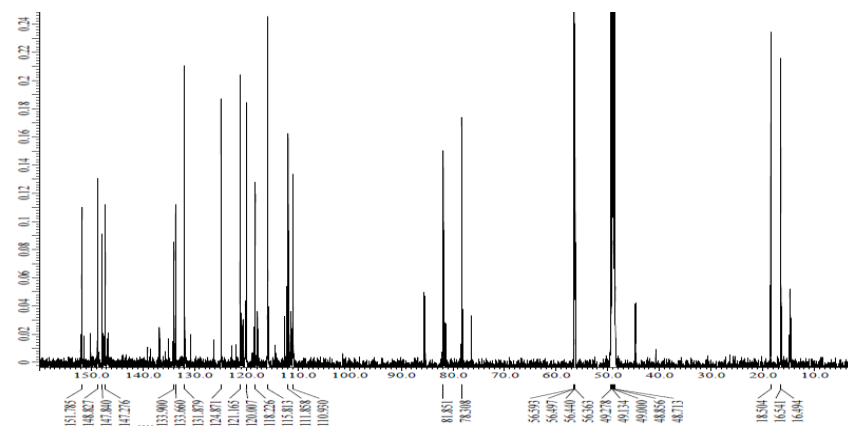




**Supplementary Figure S5. Major fraction collected by using High Performance Liquid Chromatography in two wavelength. Sample was collected based on 254 nm wavelength. (A)** Upper figure; HPLC chromatogram was detected in UV<sub>220nm</sub>. Down figure; HPLC chromatogram was detected in UV<sub>254nm</sub>. **(B)** Thin-layer chromatography analysis of the HPLC purified sample. **(C)** Mammosphere formation assay using breast cancer stem cell derived from MCF-7 cells using partial purified sample.

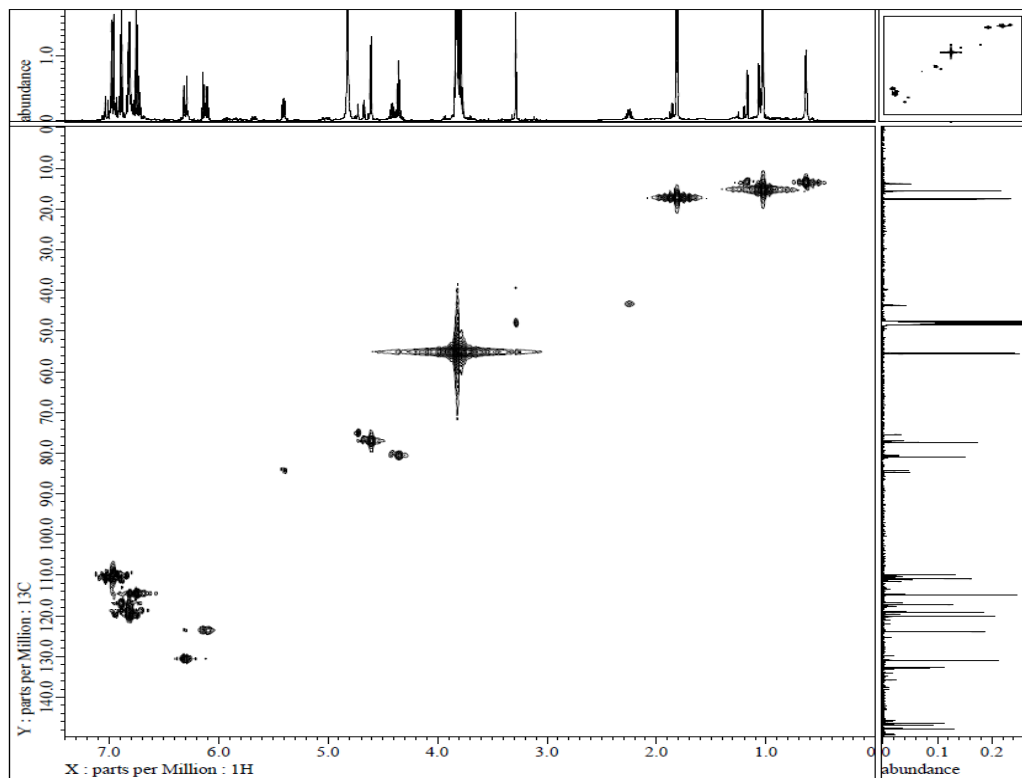


**<sup>1</sup>H-NMR spectrum**



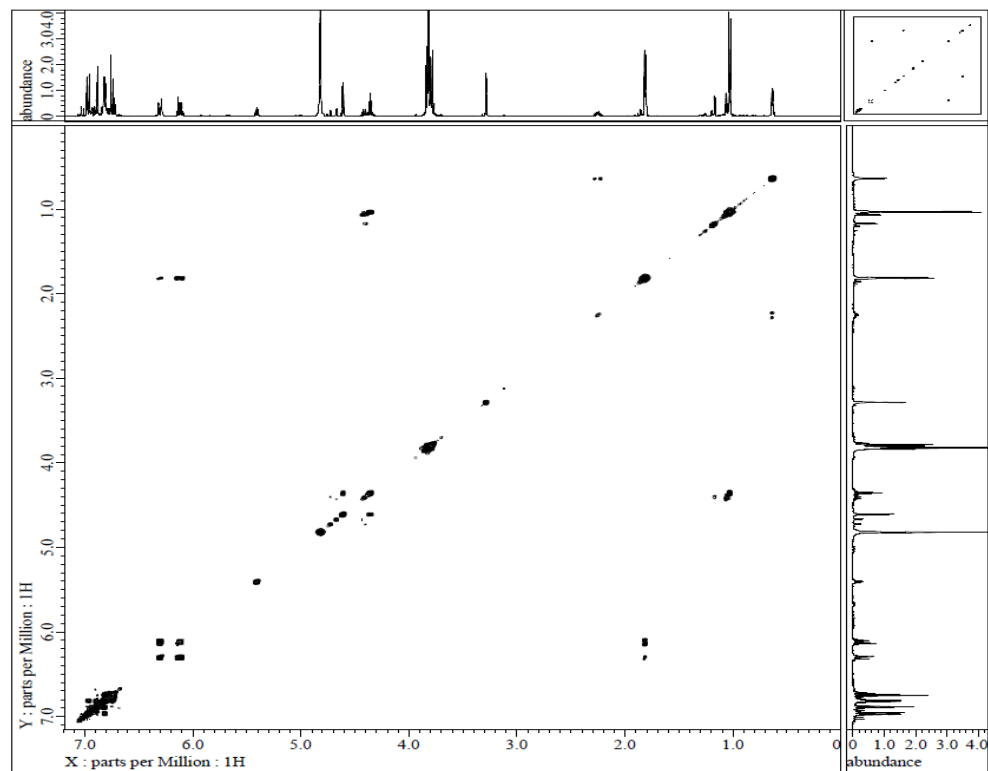
**<sup>13</sup>C-NMR spectrum**

**Supplementary Figure S6. <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of the purified sample**

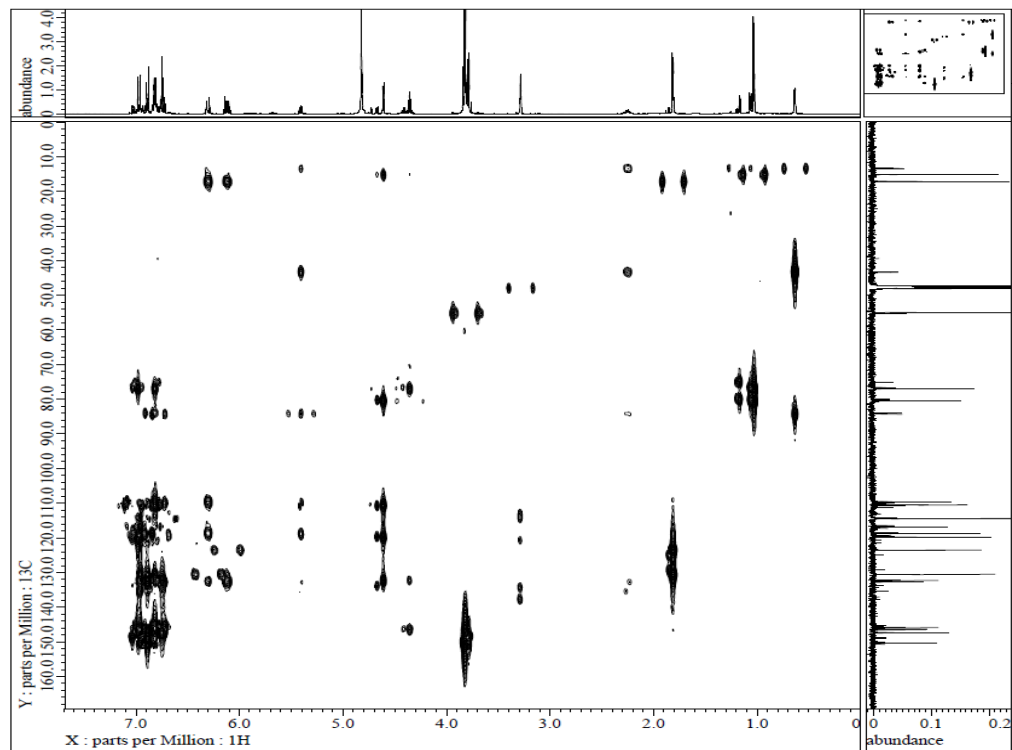


**Supplementary Figure S7. HMQC spectrum of the purified sample**



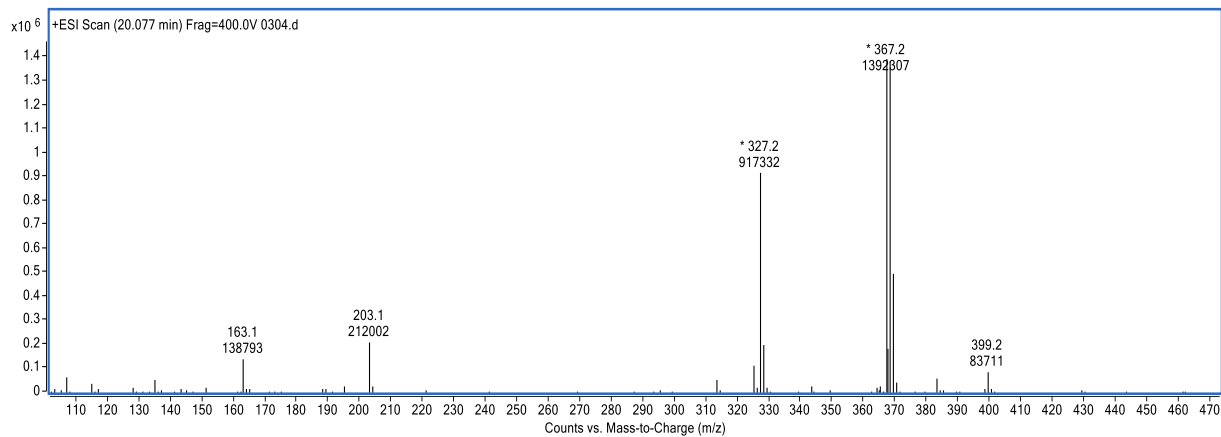


**Supplementary Figure S8.  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of the purified sample**

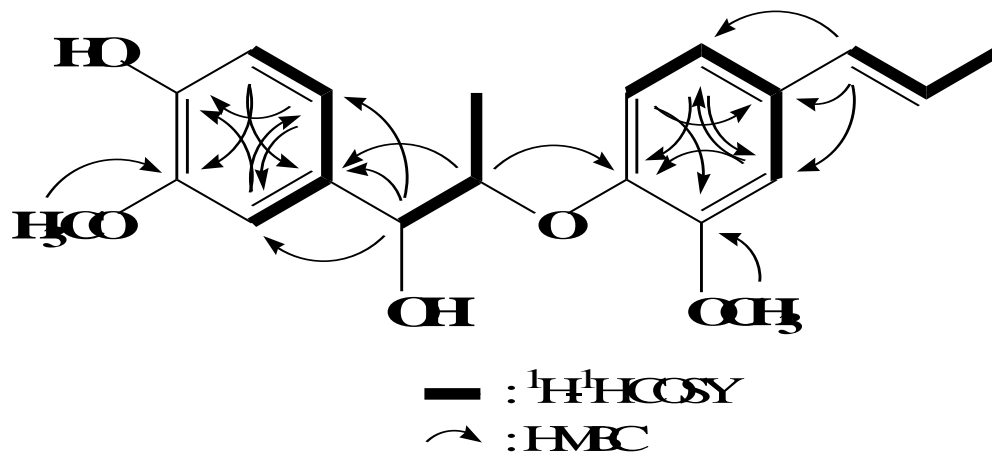


**Supplementary Figure S9. HMBC spectrum of the purified sample**

**(A)**



**(B)**



**Supplementary Figure S10. ESI mass spectrometry (A) and two-dimensional NMR data (B) of the purified sample**