

## Supplementary Materials

# Methoxyflavones from Black Ginger (*Kaempferia parviflora* Wall. ex Baker) and their Inhibitory Effect on Melanogenesis in B16F10 Mouse Melanoma Cells

Chen Huo <sup>1,†</sup>, Sullim Lee <sup>2,†</sup>, Min Jeong Yoo <sup>1</sup>, Bum Soo Lee <sup>1</sup>, Yoon Seo Jang <sup>1</sup>, Ho Kyong Kim <sup>3</sup>, Seulah Lee <sup>1,4</sup>, Han Yong Bae <sup>5,\*</sup> and Ki Hyun Kim <sup>1,\*</sup>

<sup>1</sup> School of Pharmacy, Sungkyunkwan University, Suwon 16419, Republic of Korea

<sup>2</sup> Department of Life Science, College of Bio-Nano Technology, Gachon University, Seongnam 13120, Republic of Korea

<sup>3</sup> STL company, Yongin 17086, Republic of Korea

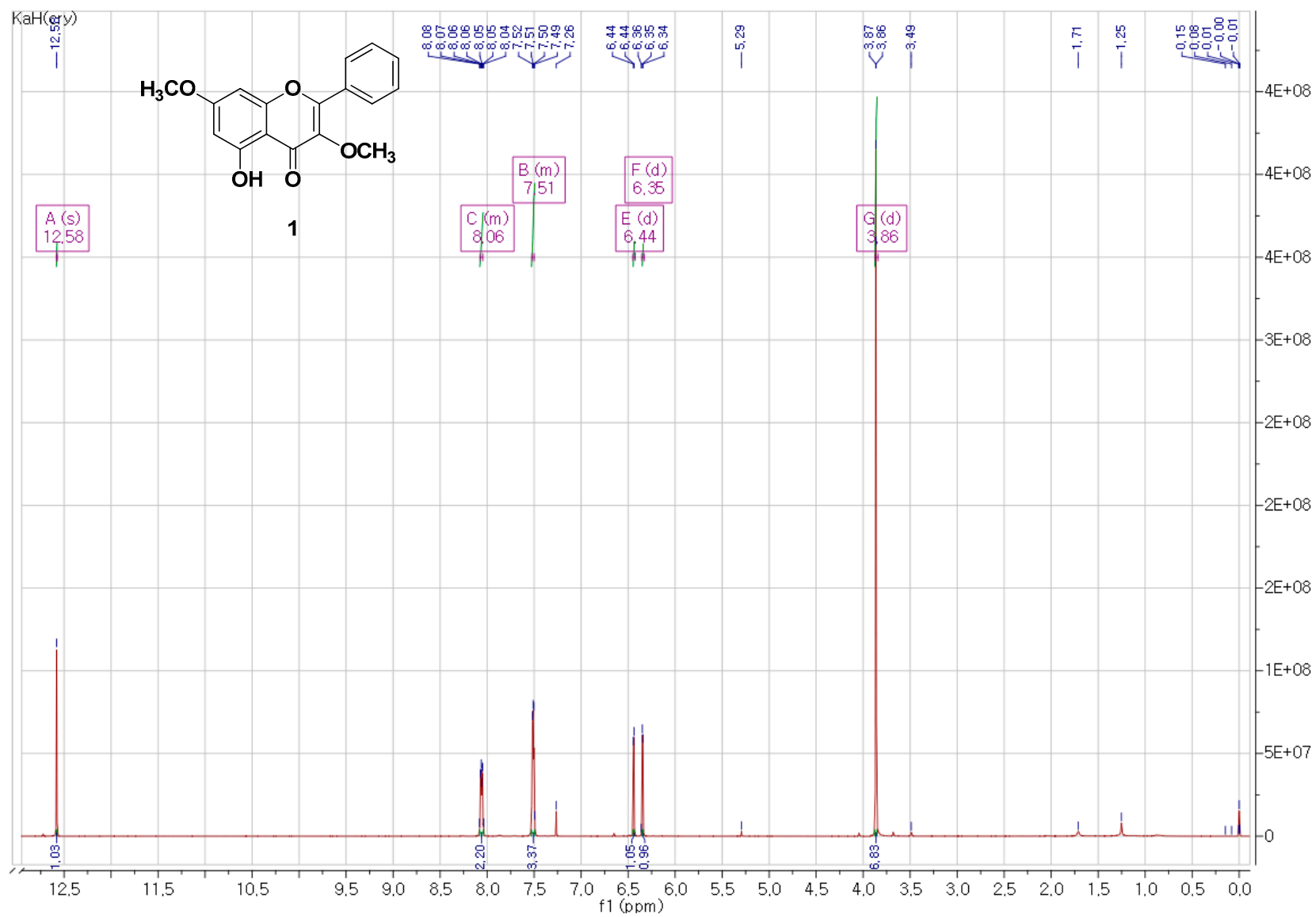
<sup>4</sup> Department of Oriental Medicine Biotechnology, College of Life Sciences, Kyung Hee University, Yongin 17104, Republic of Korea

<sup>5</sup> Department of Chemistry, Sungkyunkwan University, Suwon 16419, Republic of Korea

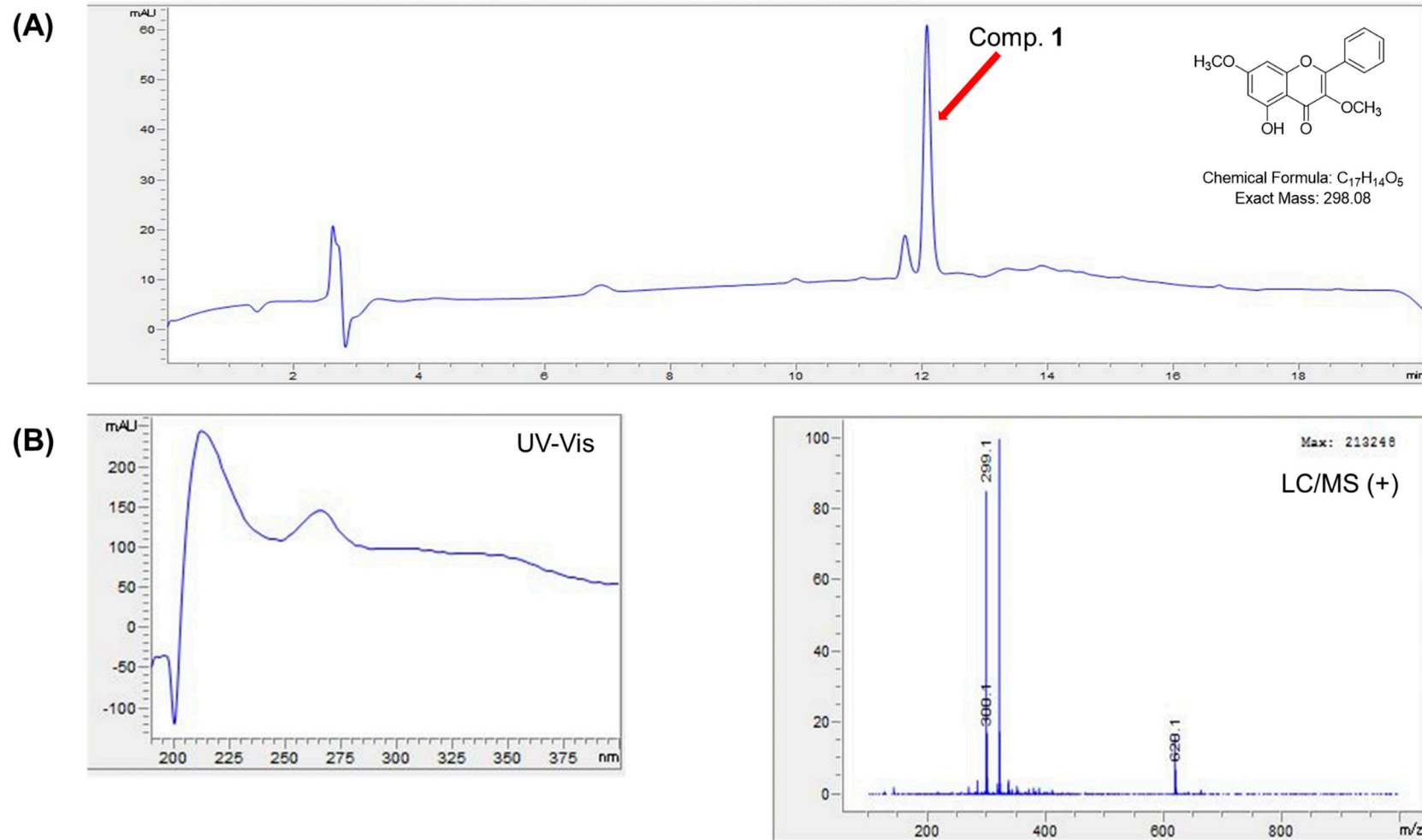
\* Correspondence: hybae@skku.edu (H.Y.B.); khkim83@skku.edu (K.H.K.); Tel.: +82-31-290-7700 (K.H.K.)

† These authors contributed equally to this study.

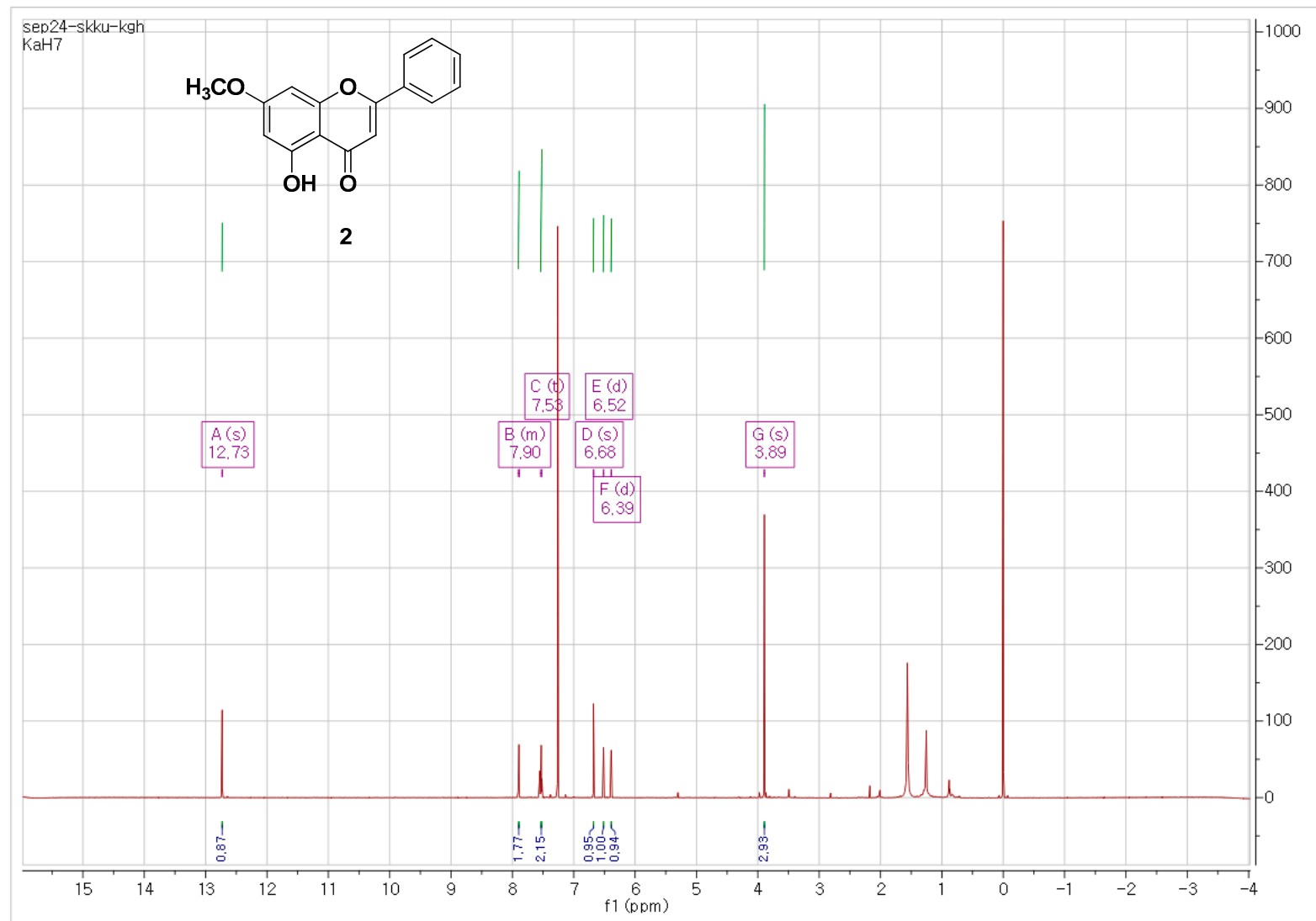
**Figure S1** :  $^1\text{H}$ -NMR spectrum of compound **1** (in  $\text{CDCl}_3$ )  
**Figure S2** : UV chromatogram of LC/MS and UV and MS data for compound **1**  
**Figure S3** :  $^1\text{H}$ -NMR spectrum of compound **2** (in  $\text{CDCl}_3$ )  
**Figure S4** : UV chromatogram of LC/MS and UV and MS data for compound **2**  
**Figure S5** :  $^1\text{H}$ -NMR spectrum of compound **3** (in  $\text{CDCl}_3$ )  
**Figure S6** : UV chromatogram of LC/MS and UV and MS data for compound **3**  
**Figure S7** :  $^1\text{H}$ -NMR spectrum of compound **4** (in  $\text{CDCl}_3$ )  
**Figure S8** : UV chromatogram of LC/MS and UV and MS data for compound **4**  
**Figure S9** :  $^1\text{H}$ -NMR spectrum of compound **5** (in  $\text{CDCl}_3$ )  
**Figure S10** : UV chromatogram of LC/MS and UV and MS data for compound **5**  
**Figure S11** :  $^1\text{H}$ -NMR spectrum of compound **6** (in  $\text{CDCl}_3$ )  
**Figure S12** : UV chromatogram of LC/MS and UV and MS data for compound **6**



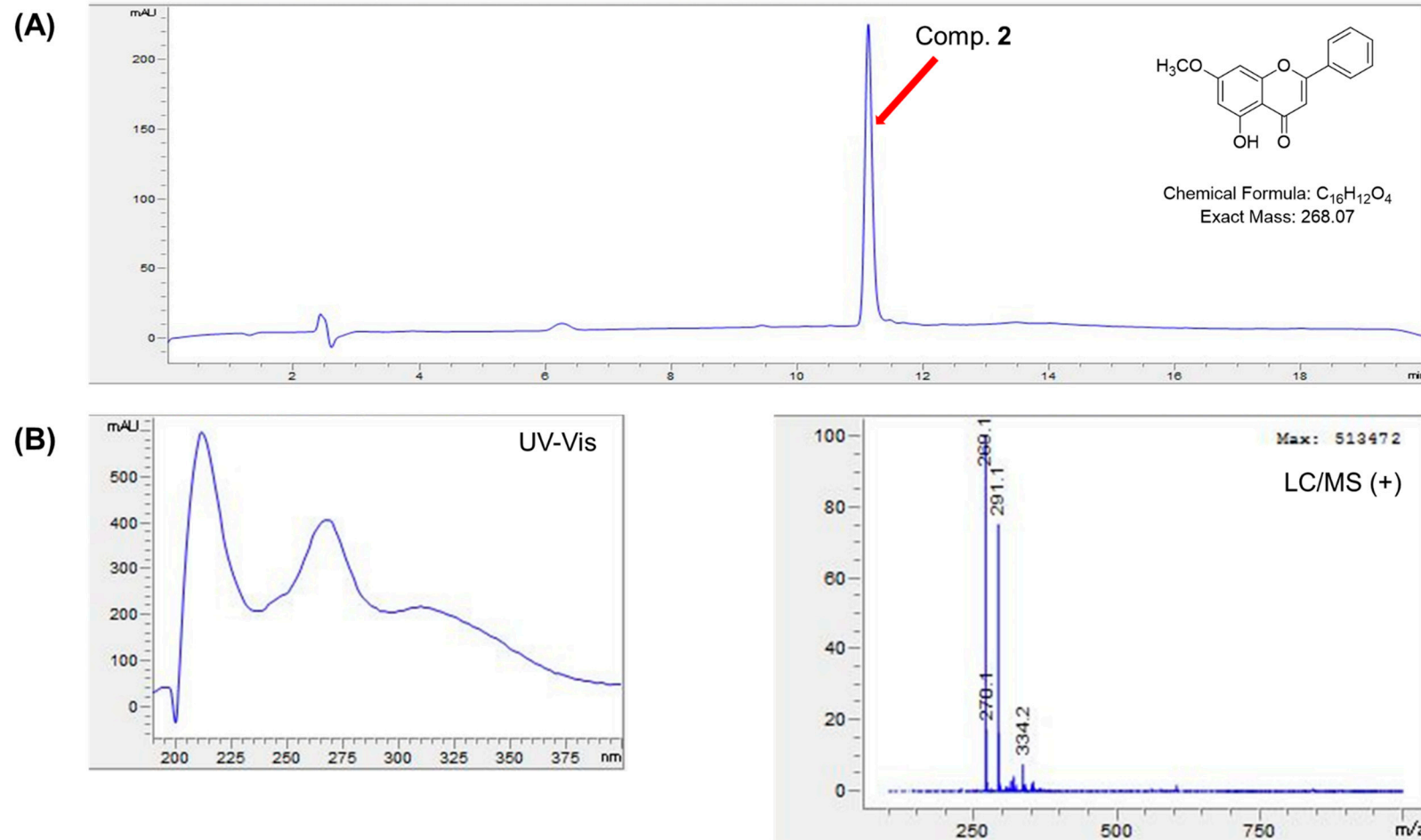
**Figure S1** : <sup>1</sup>H-NMR spectrum of compound 1 (in CDCl<sub>3</sub>)



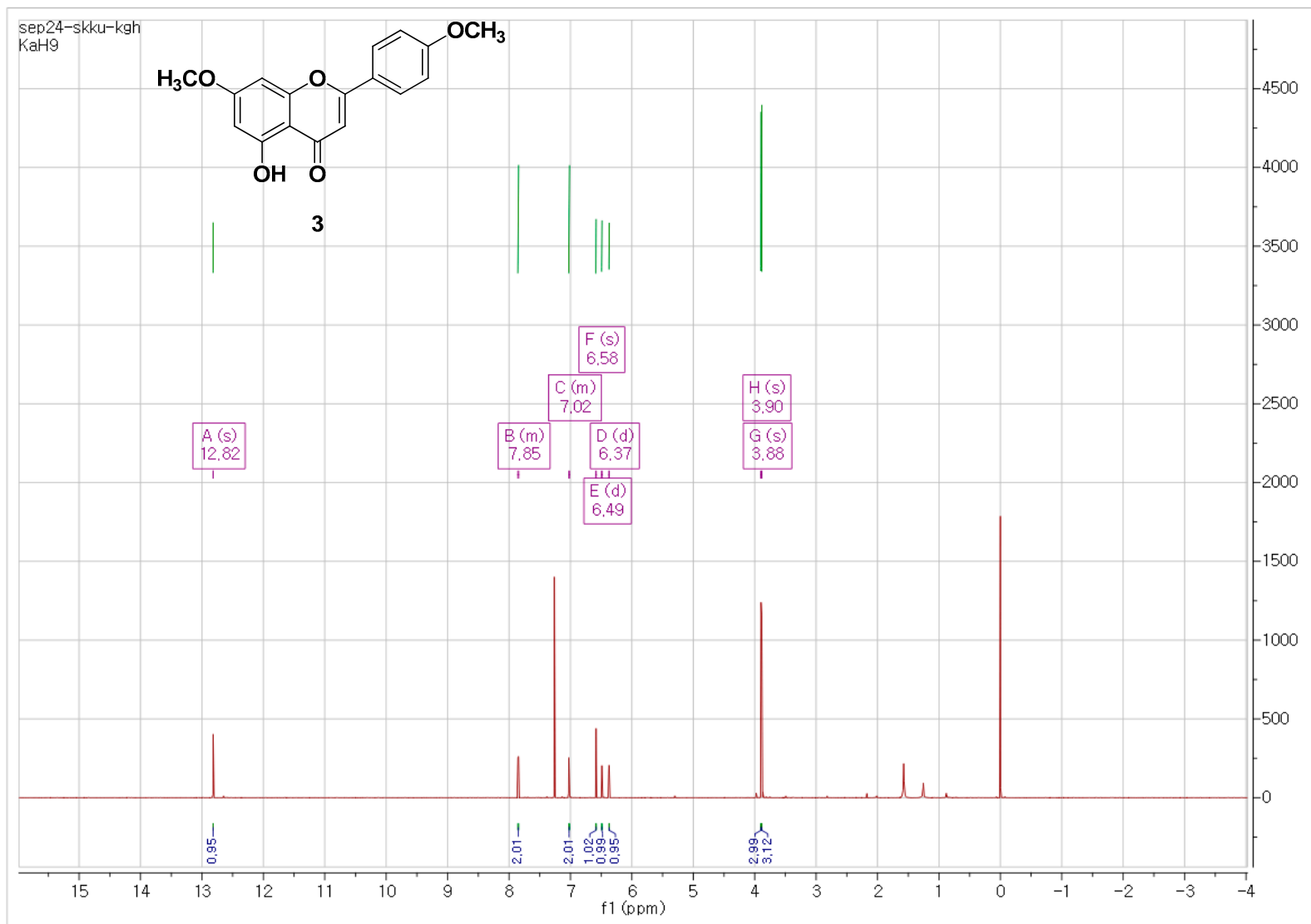
**Figure S2 :** (A) UV chromatogram of LC/MS (detection wavelength: 254 nm) and (B) UV and MS data for compound 1



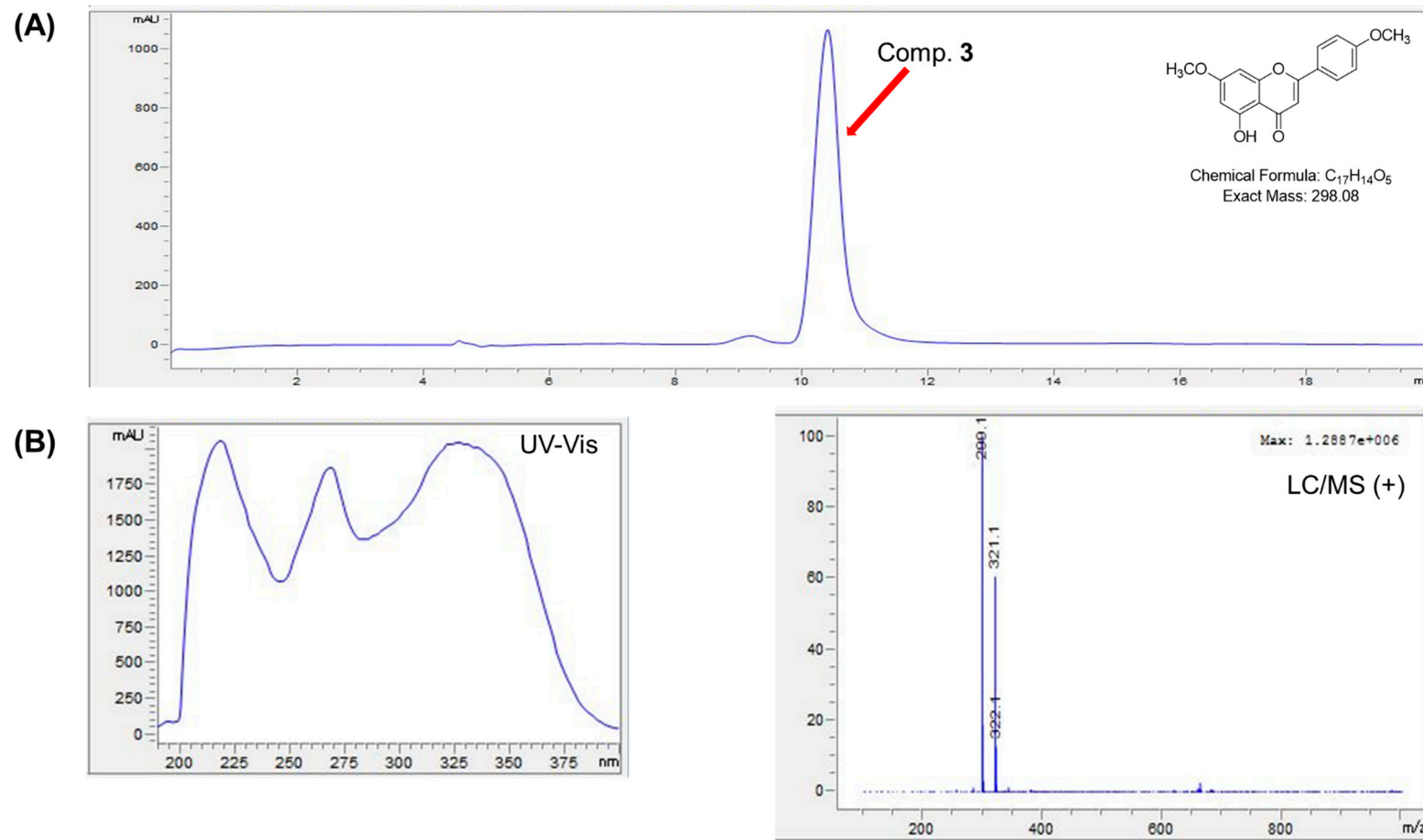
**Figure S3** :  $^1\text{H}$ -NMR spectrum of compound **2** (in  $\text{CDCl}_3$ )



**Figure S4** : (A) UV chromatogram of LC/MS (detection wavelength: 254 nm) and (B) UV and MS data for compound 2

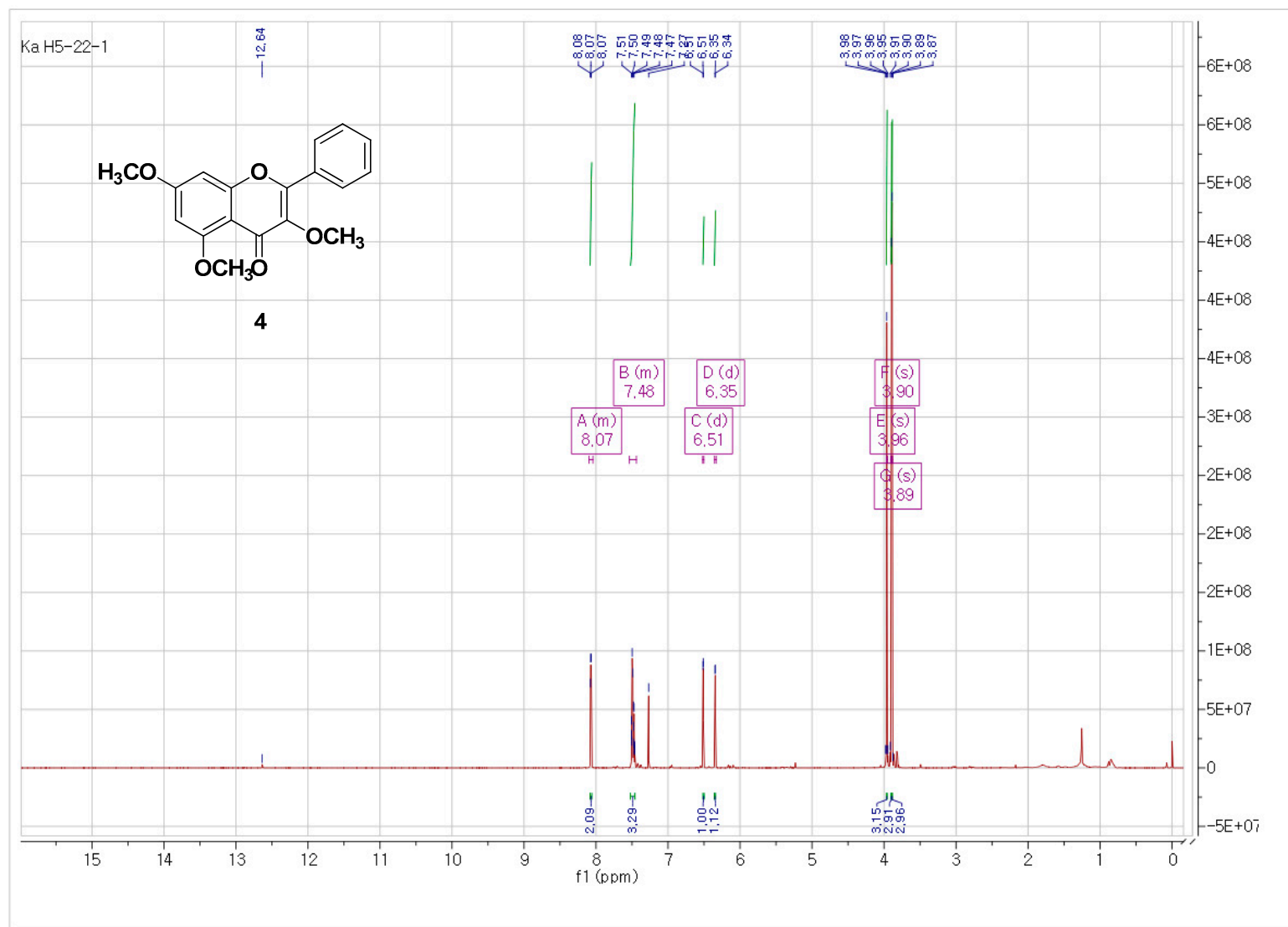


**Figure S5 :** <sup>1</sup>H-NMR spectrum of compound **3** (in CDCl<sub>3</sub>)

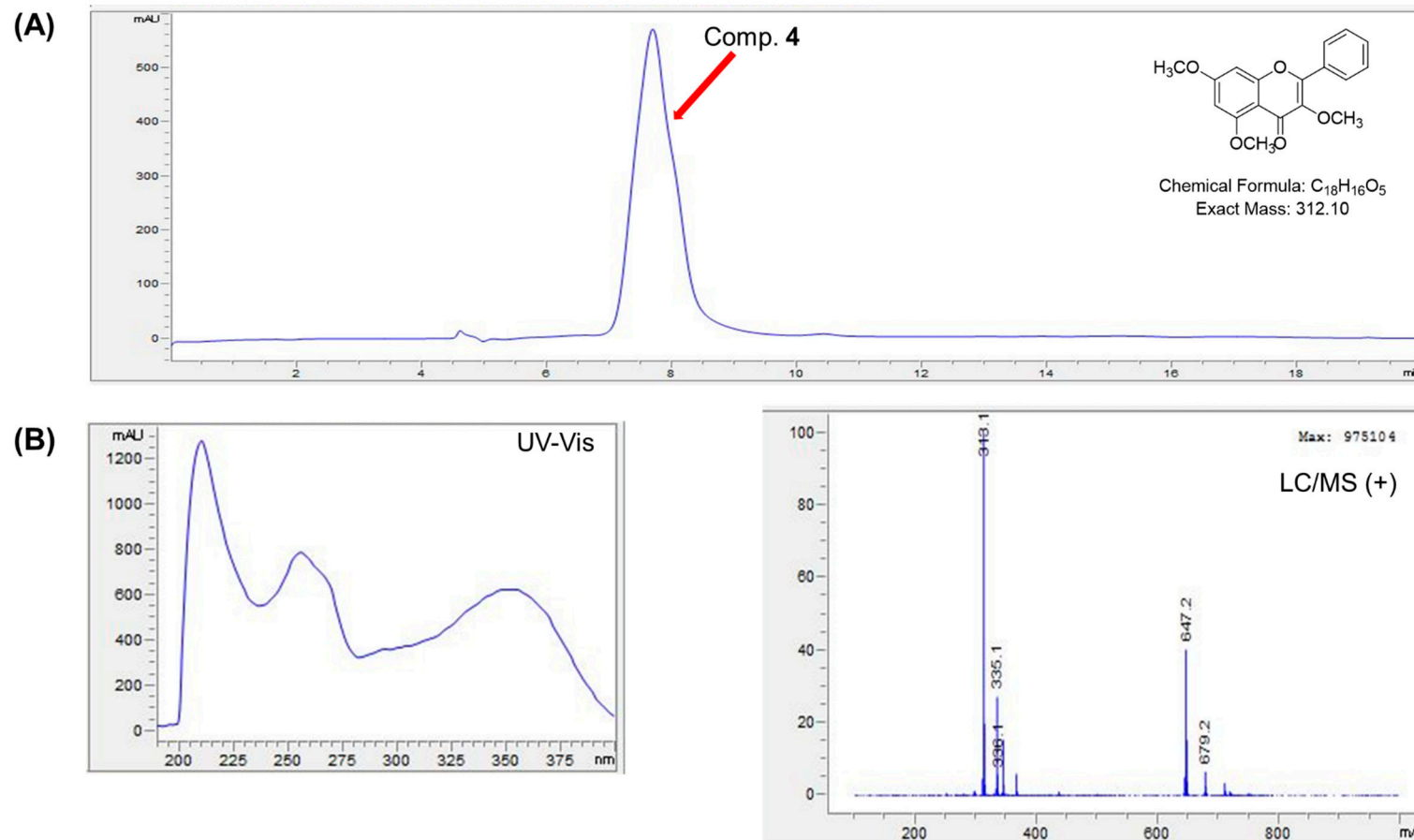


**Figure S6** : (A) UV chromatogram of LC/MS (detection wavelength: 254 nm) and (B) UV and MS data for compound 3





**Figure S7** : <sup>1</sup>H-NMR spectrum of compound **4** (in CDCl<sub>3</sub>)



**Figure S8** : (A) UV chromatogram of LC/MS (detection wavelength: 254 nm) and (B) UV and MS data for compound **4**

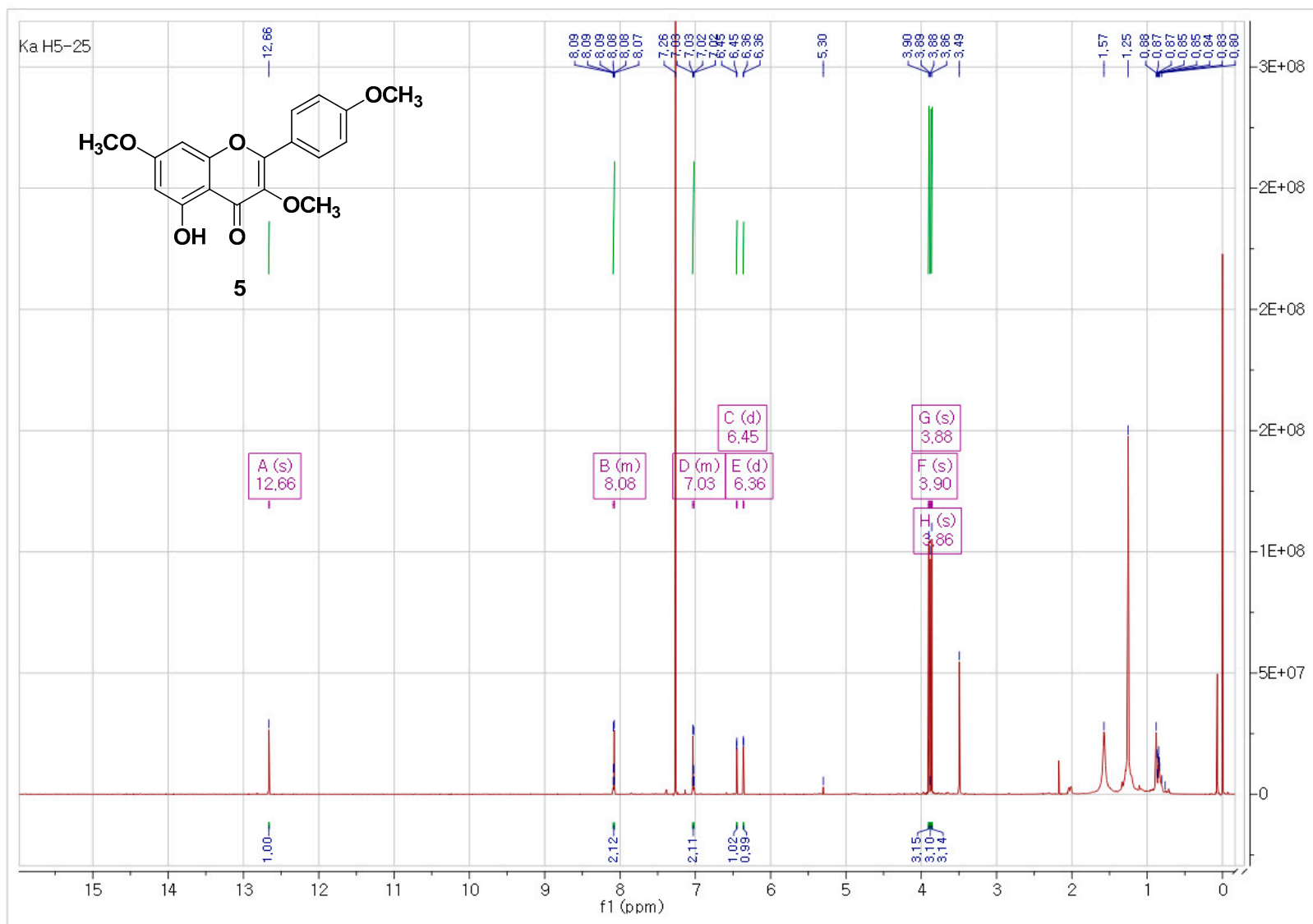
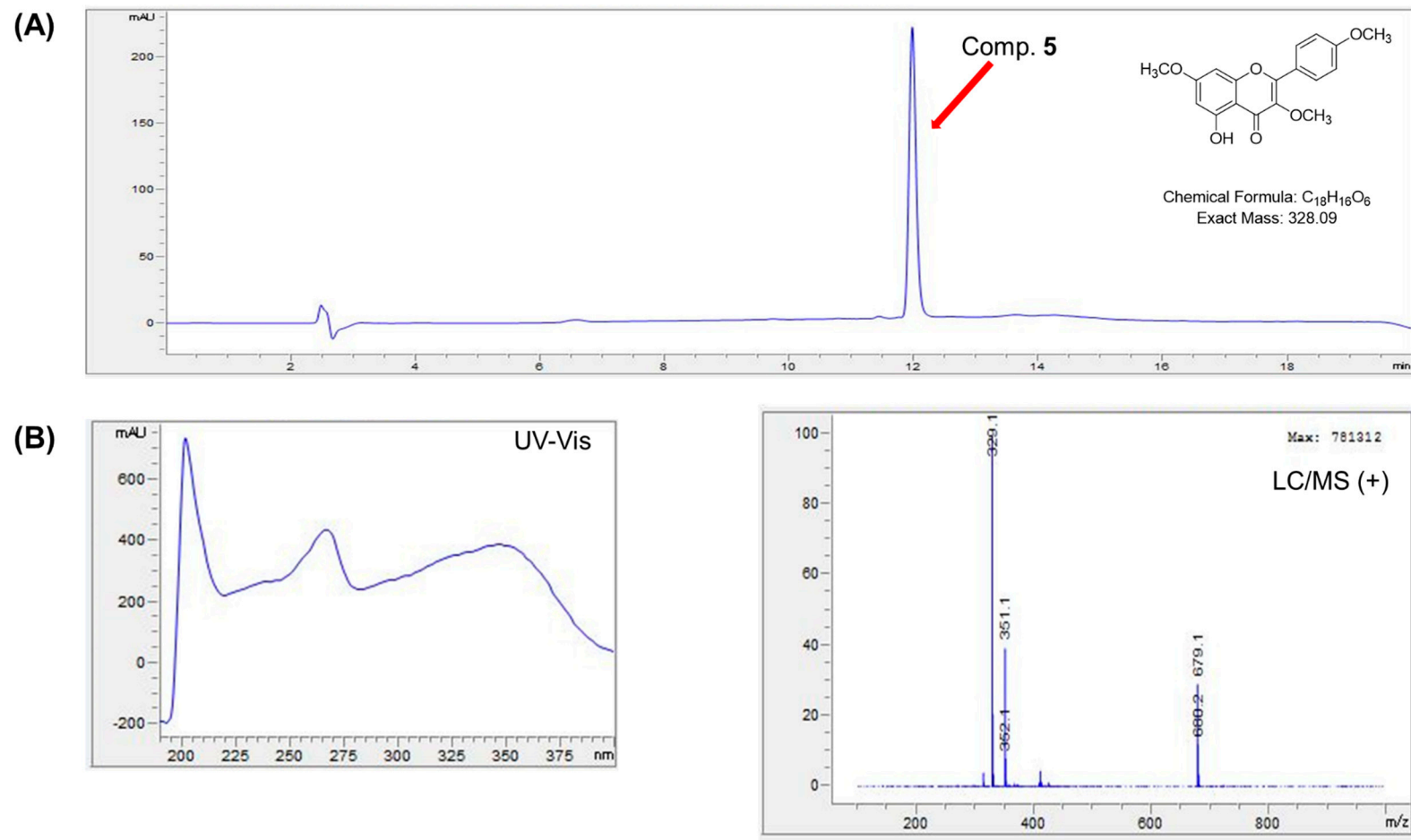
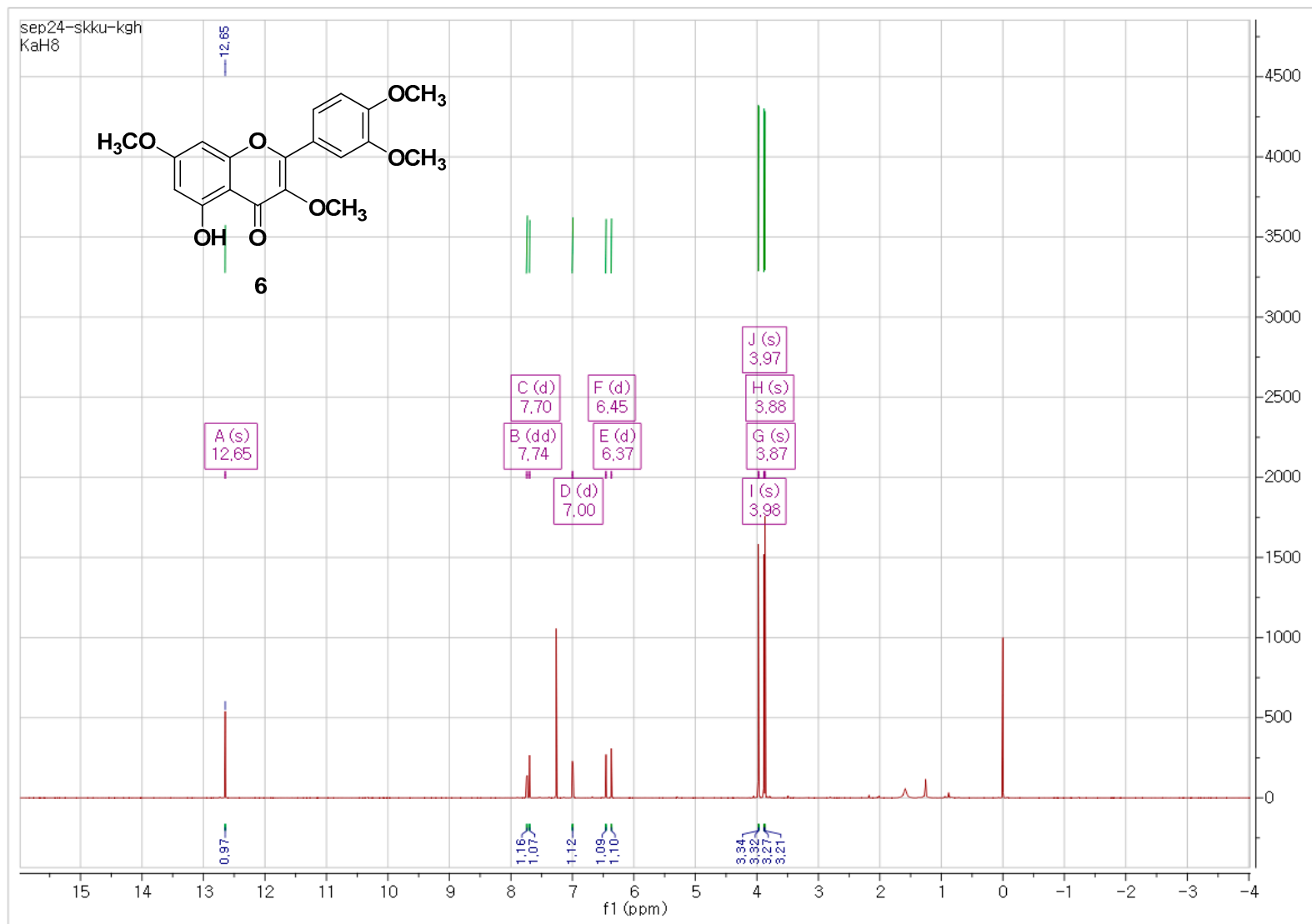


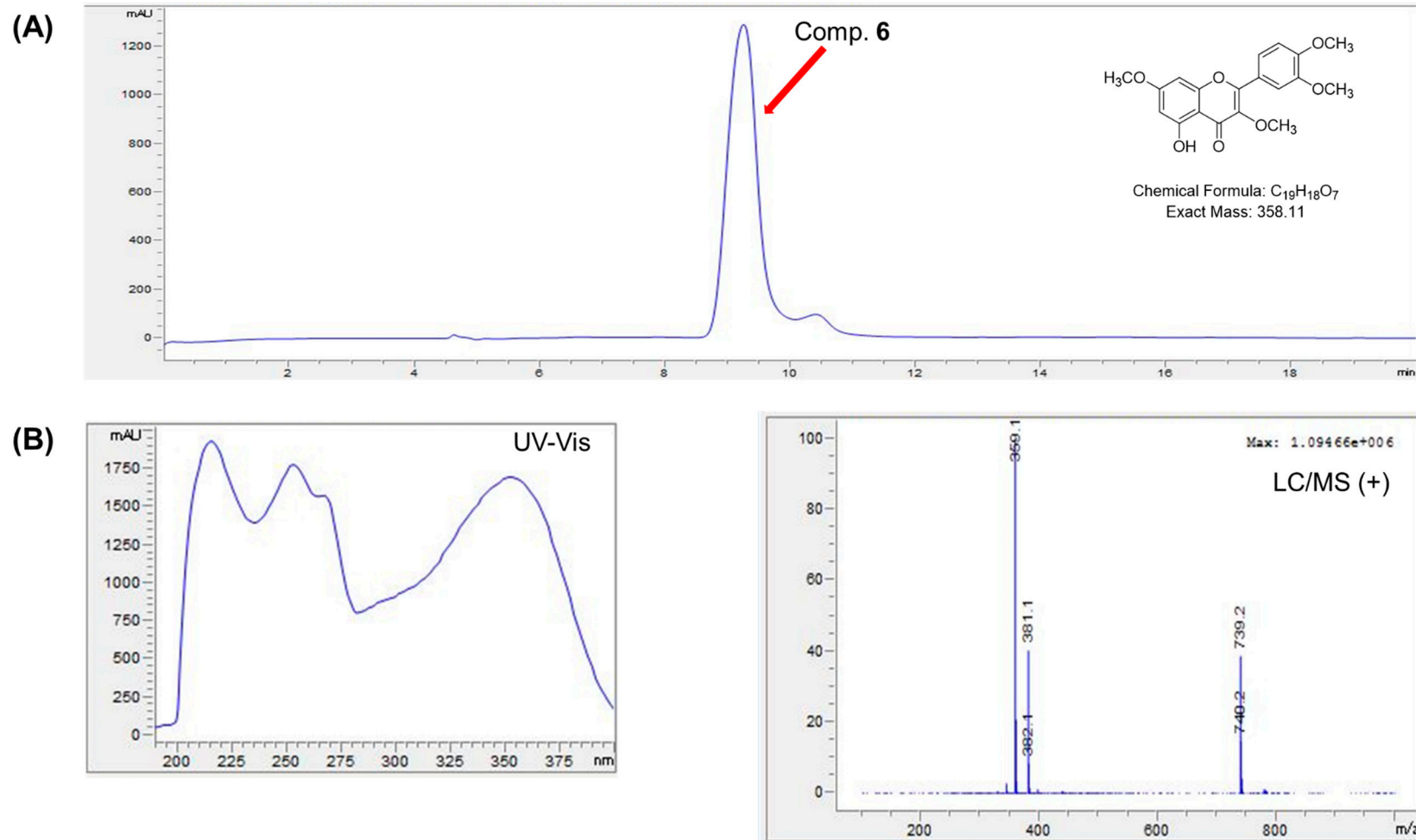
Figure S9 :  $^1\text{H}$ -NMR spectrum of compound 5 (in  $\text{CDCl}_3$ )



**Figure S10** : (A) UV chromatogram of LC/MS (detection wavelength: 254 nm) and (B) UV and MS data for compound 5



**Figure S11** :  $^1\text{H}$ -NMR spectrum of compound **6** (in  $\text{CDCl}_3$ )



**Figure S12 :** (A) UV chromatogram of LC/MS (detection wavelength: 254 nm) and (B) UV and MS data for compound 6