

SUPPLEMENTARY MATERIAL

Antipromastigote and cytotoxic activities of flavonoids from *Fridericia speciosa* leaves

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Alpinetin (**1**). ^1H NMR (500 MHz, DMSO- d_6) δ : 7.48 (brd, $J = 7.3$, 2H, H-2' and H-6'), 7.41 (t, $J = 7.3$, 2H, H-3' and H-5'), 7.36 (brd, $J = 7.3$, 1H, H-4'), 6.06 (d, $J = 1.8$, 1H, H-8), 5.99 (d, $J = 1.8$, 1H, H-6), 5.47 (dd, $J = 12.5$ and 2.7, 1H, H-2), 3.73 (s, 3H, OCH $_3$), 2.96 (dd, $J = 12.5$ and 16.0, 1H, H-3), 2.60 (dd, $J = 16.0$ and 2.7, 1H, H-3). ^{13}C NMR (100 MHz, DMSO- d_6) δ : 187.2 (C-4), 164.7 (C-7), 163.9 (C-9), 162.1 (C-5), 139.1 (C-1'), 128.4 (C-3' and C-5'), 128.2 (C-4'), 126.3 (C-2' and C-6'), 104.3 (C-10), 95.6 (C-6), 93.4 (C-8), 77.9 (C-2), 55.5 (OCH $_3$), 44.8 (C-3).

Luteolin (**2**). ^1H NMR (500 MHz, DMSO- d_6) δ : 12.97 (s, 1H, 5-OH), 7.40 (brd, $J = 8.4$, H-6'), 7.38 (brs, 1H, H-2'), 6.87 (d, $J = 8.4$, 1H, H-5'), 6.64 (s, 1H, H-3), 6.42 (d, $J = 1.3$, 1H, H-8), 6.17 (d, $J = 1.3$, 1H, H-6). ^{13}C NMR (100 MHz, DMSO- d_6) δ : 181.5 (C-4), 164.5 (C-7), 163.8 (C-2), 161.4 (C-5), 157.2 (C-9), 149.9 (C-4'), 145.7 (C-3'), 121.2 (C-1'), 118.9 (C-6'), 115.9 (C-5'), 113.1 (C-2'), 103.4 (C-10), 102.6 (C-3), 98.9 (C-6), 93.8 (C-8).

Diosmetin (**3**). ^1H NMR (400 MHz, DMSO- d_6) δ : 12.96 (s, 1H, 5-OH), 7.55 (dd, $J = 8.0$ and 2.0, 1H, H-6'), 7.54 (brs, 1H, H-2'), 6.92 (d, $J = 8.0$, 1H, H-5'), 6.86 (s, 1H, H-3), 6.47 (d, $J = 1.6$, 1H, H-8), 6.15 (d, $J = 1.6$, 1H, H-6), 3.88 s (3H, 4'-OCH $_3$).

Apigenin (**4**). ^1H NMR (400 MHz, DMSO- d_6) δ : 12.95 (s, 1H, 5-OH), 7.91 (d, $J = 8.8$, 2H, H-2' and H-6'), 6.92 (d, $J = 8.8$, 2H, H-3' and H-5'), 6.76 (s, 1H, H-3), 6.46 (d, $J = 2.0$, 1H, H-8), 6.16 (d, $J = 2.0$, 1H, H-6).

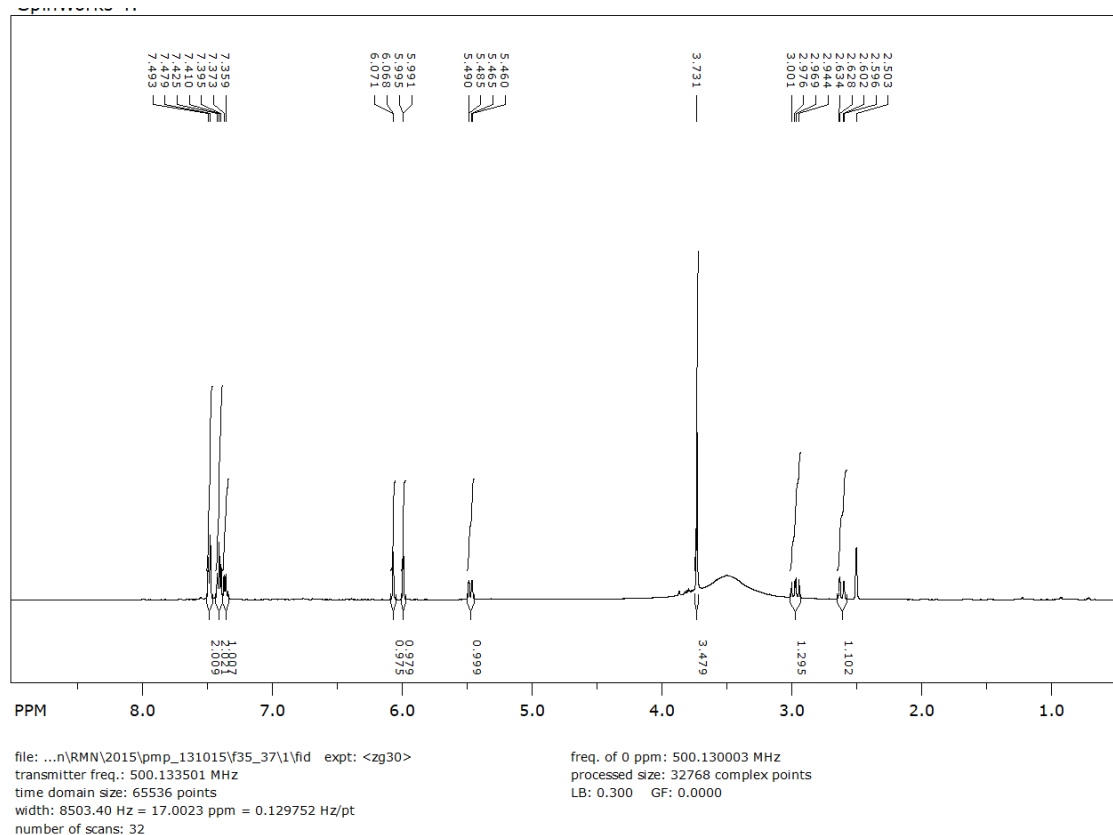


Figure 1S. ^1H NMR spectrum of alpinetin (**1**) (DMSO- d_6 , 500 MHz)

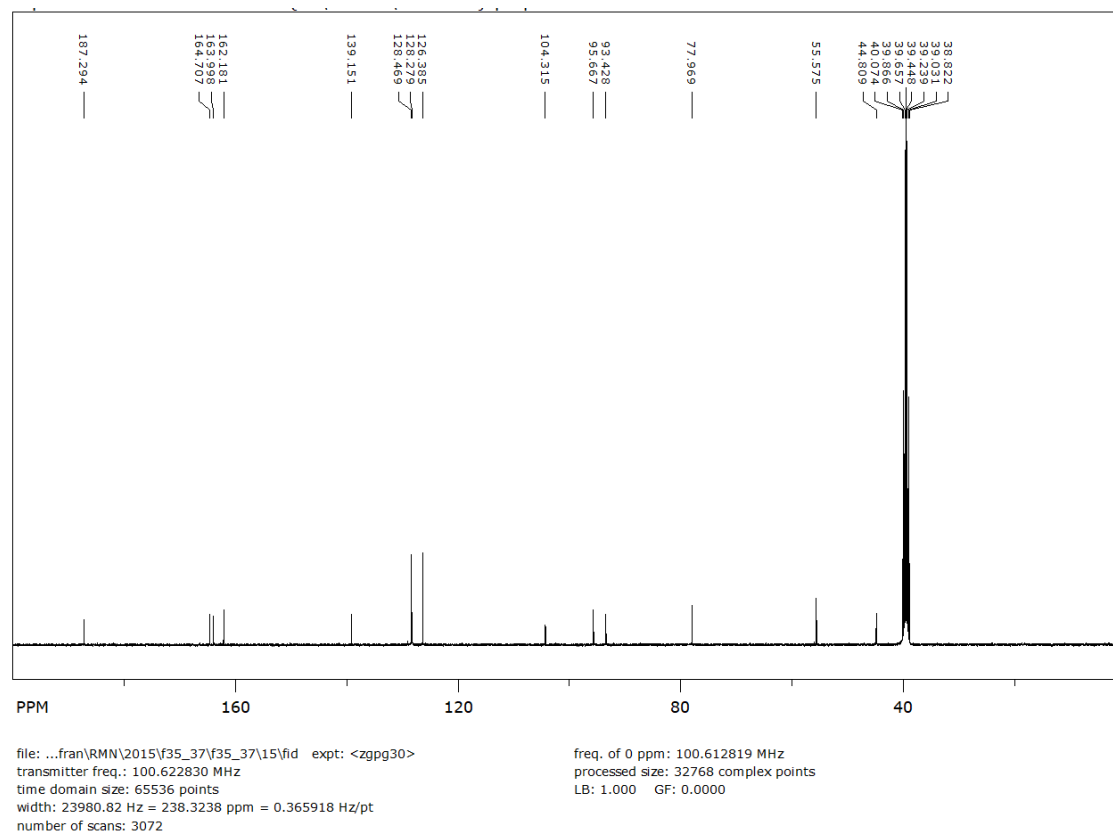


Figure 2S. ^{13}C NMR spectrum of alpinetin (**1**) (DMSO- d_6 , 100 MHz)

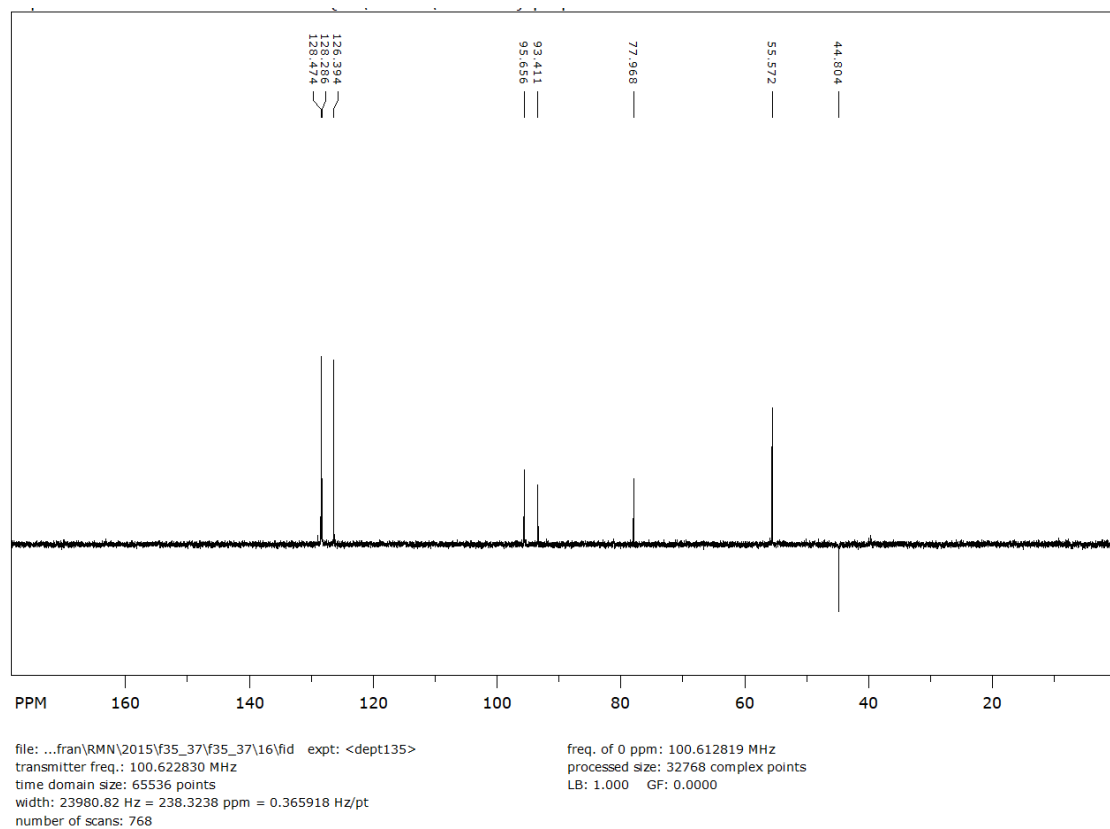


Figure 3S. DEPT spectrum of alpinetin (**1**) (DMSO- d_6 , 100 MHz)

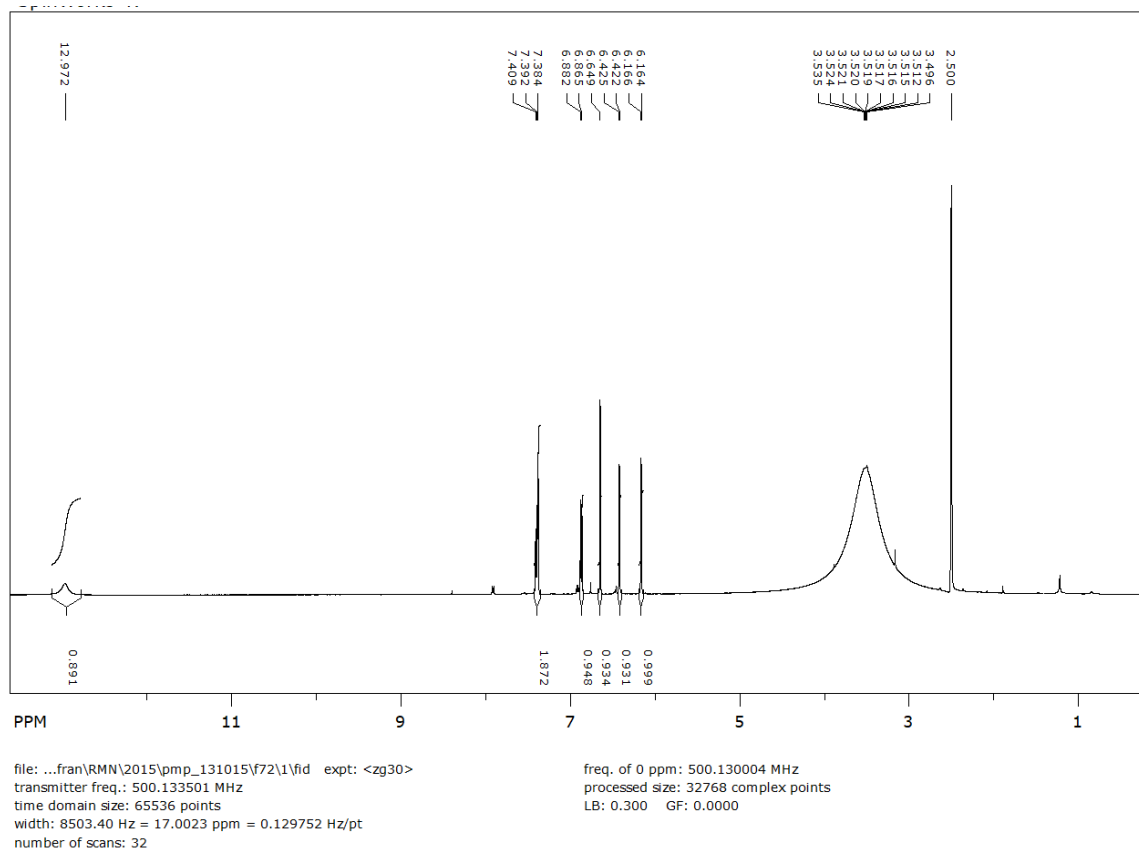


Figure 4S. ^1H NMR spectrum of luteolin (**2**) (DMSO- d_6 , 500 MHz).

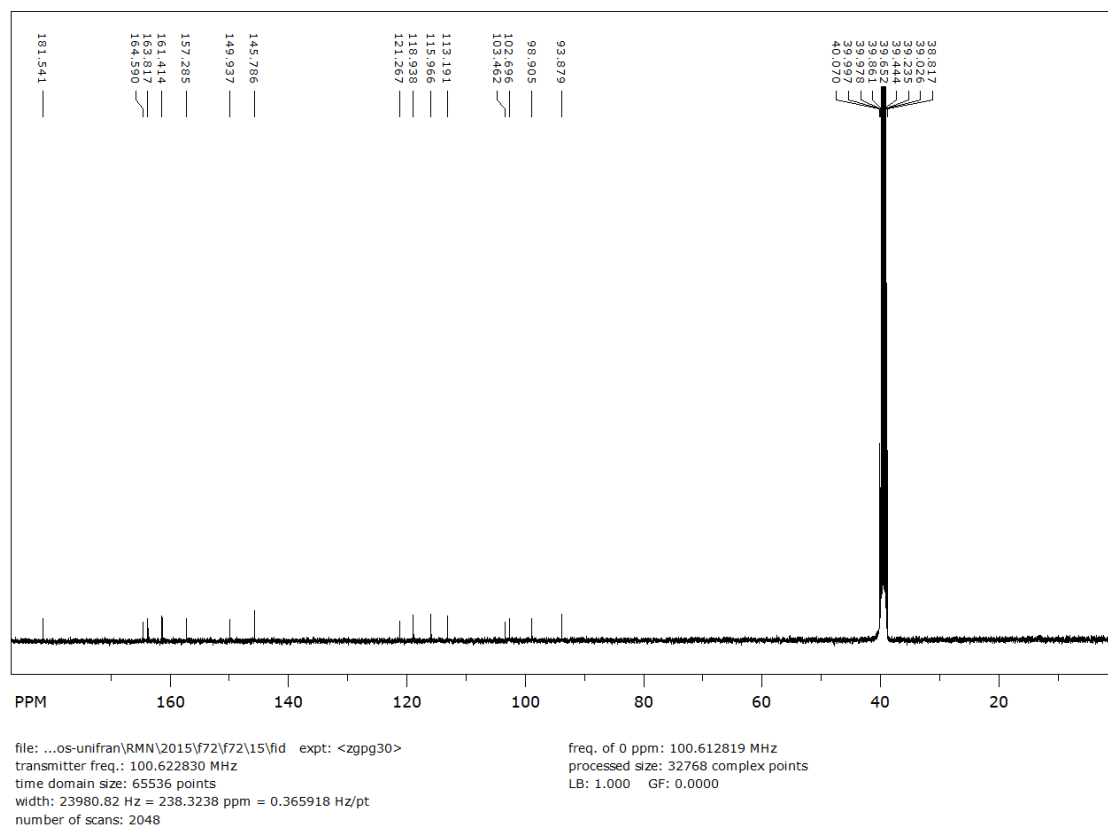


Figure 5S. ^{13}C NMR spectrum of luteolin (**2**) (DMSO- d_6 , 100 MHz)

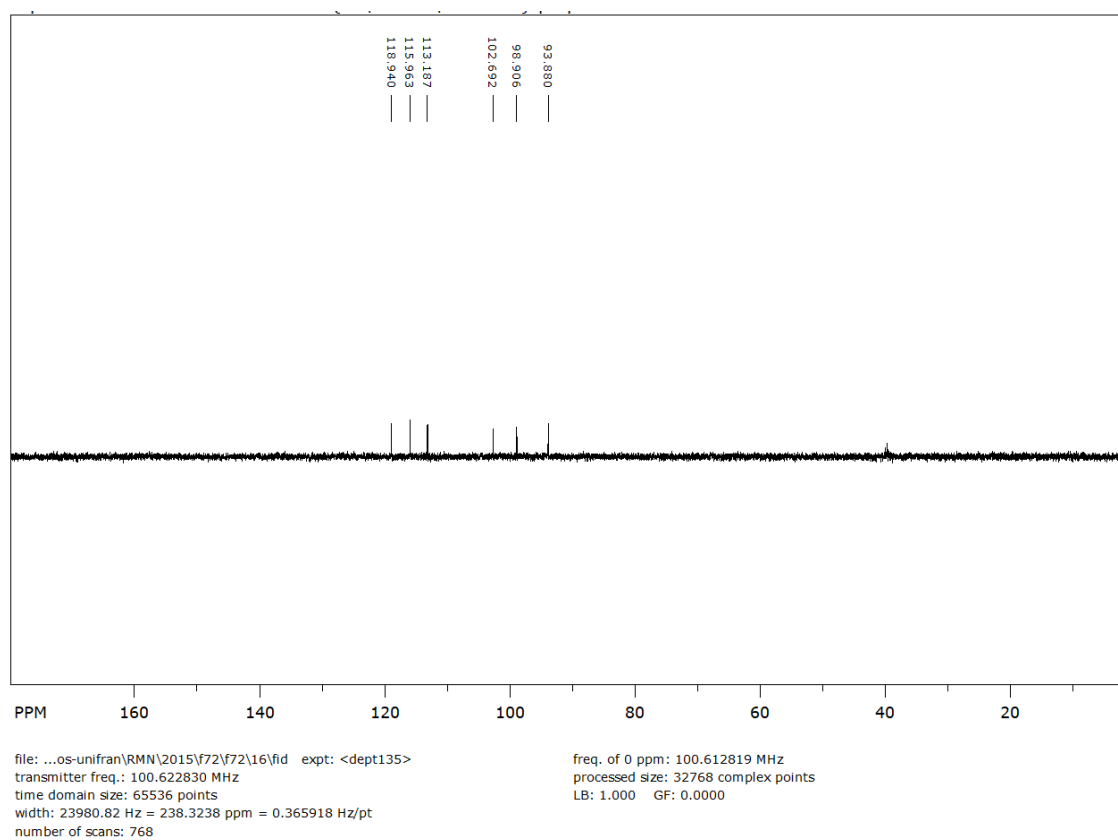


Figure 6S. DEPT spectrum of luteolin (**2**) (DMSO- d_6 , 100 MHz)

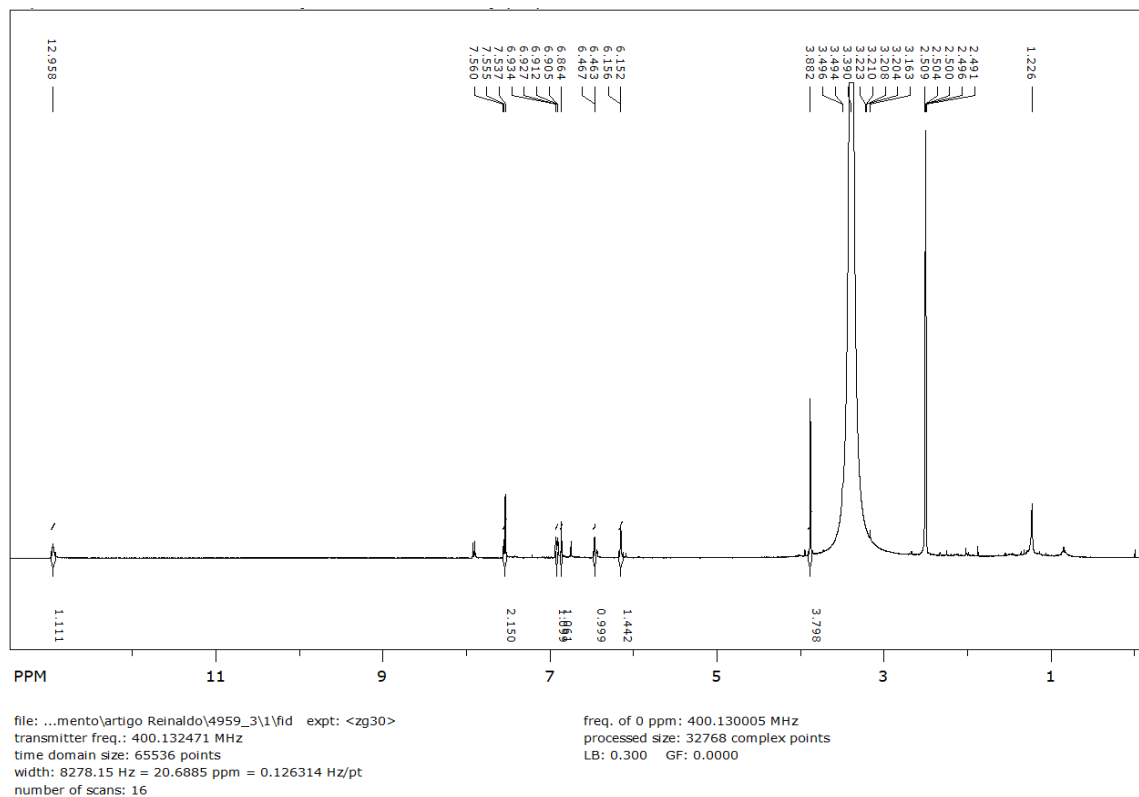


Figure 7S. ^1H NMR spectrum of diosmetin (**3**) ($\text{DMSO-}d_6$, 400 MHz)

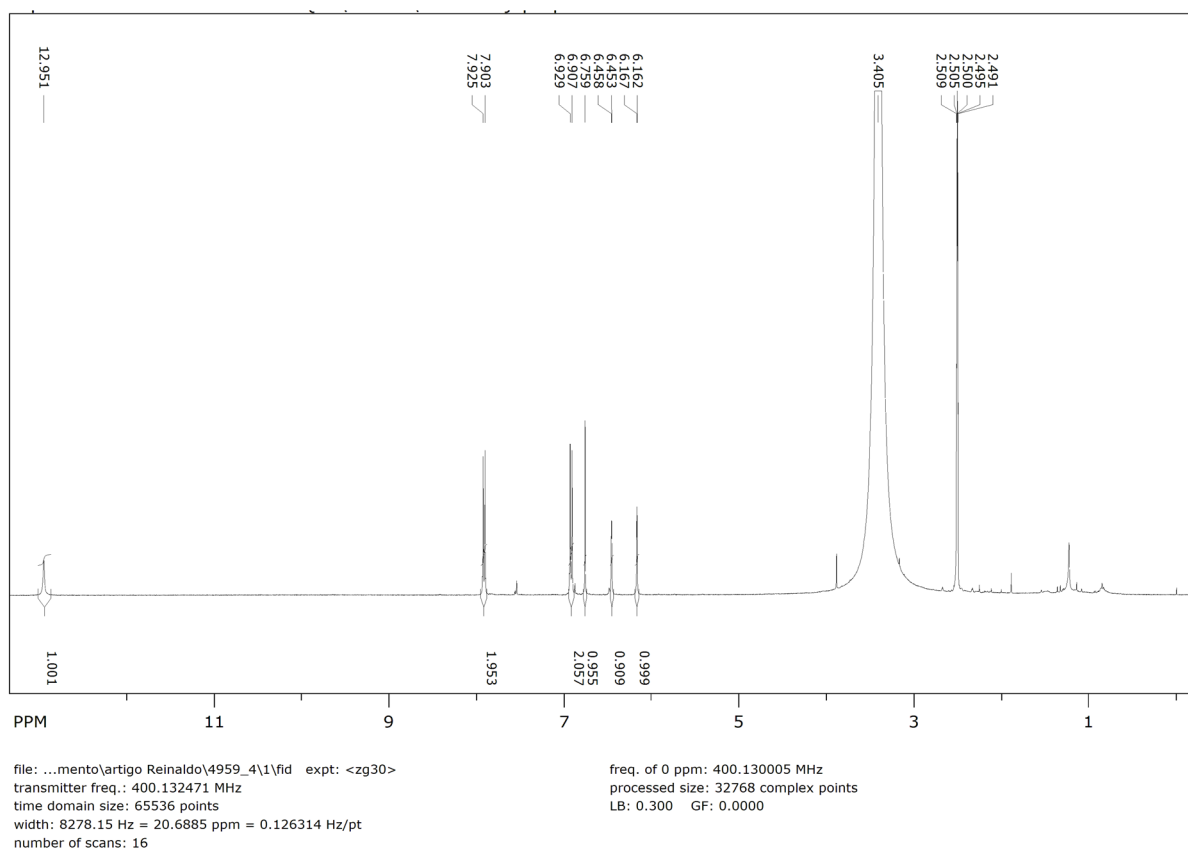


Figure 8S. ^1H NMR spectrum of apigenin (**4**) ($\text{DMSO-}d_6$, 400 MHz)

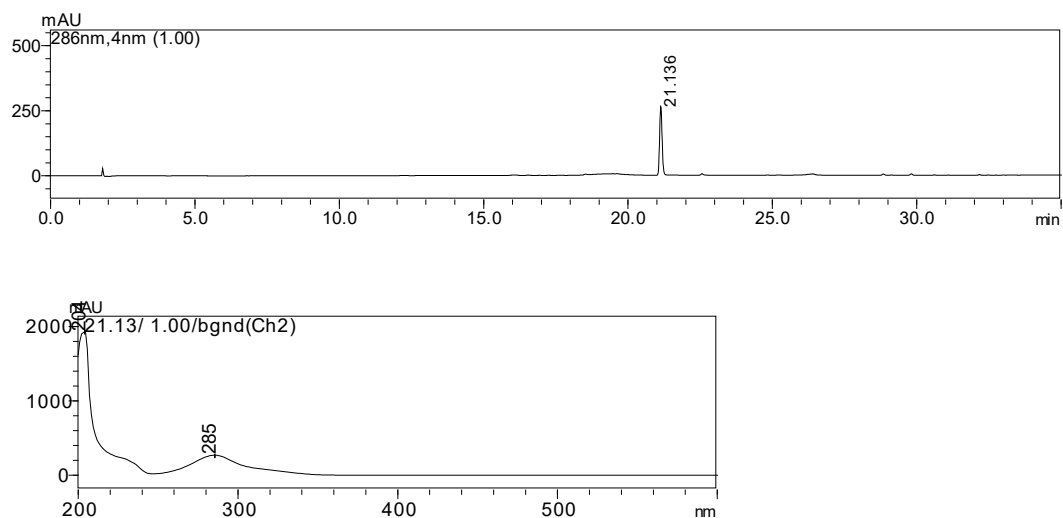


Figure 9S. HPLC-DAD chromatogram and UV-Vis spectrum of **1**. HPLC conditions: methanol/water (0.4% formic acid) linear gradient from 20% to 100% methanol in 30 min, 100% methanol for 5 min, flow = 0.6 mL min⁻¹, injection volume = 20 µL, oven temperature = 40 °C, and column ODS Phenomenex Kinetex C18 (100 x 4.60 mm, 2.6 µm)

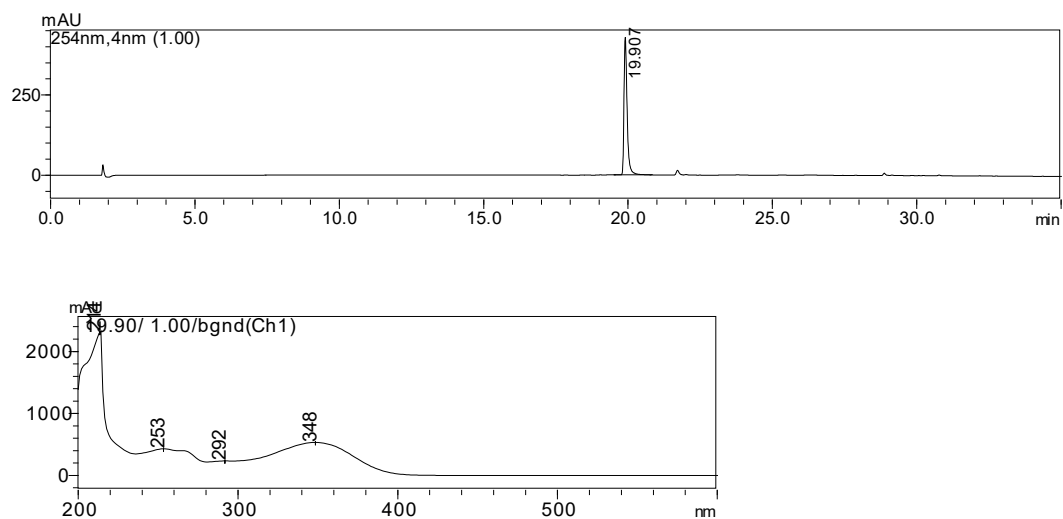


Figure 10S. HPLC-DAD chromatogram and UV-Vis spectrum of **2**. HPLC conditions: methanol/water (0.4% formic acid) linear gradient from 20% to 100% methanol in 30 min, 100% methanol for 5 min, flow = 0.6 mL min⁻¹, injection volume = 20 µL, oven temperature = 40 °C, and column ODS Phenomenex Kinetex C18 (100 x 4.60 mm, 2.6 µm)

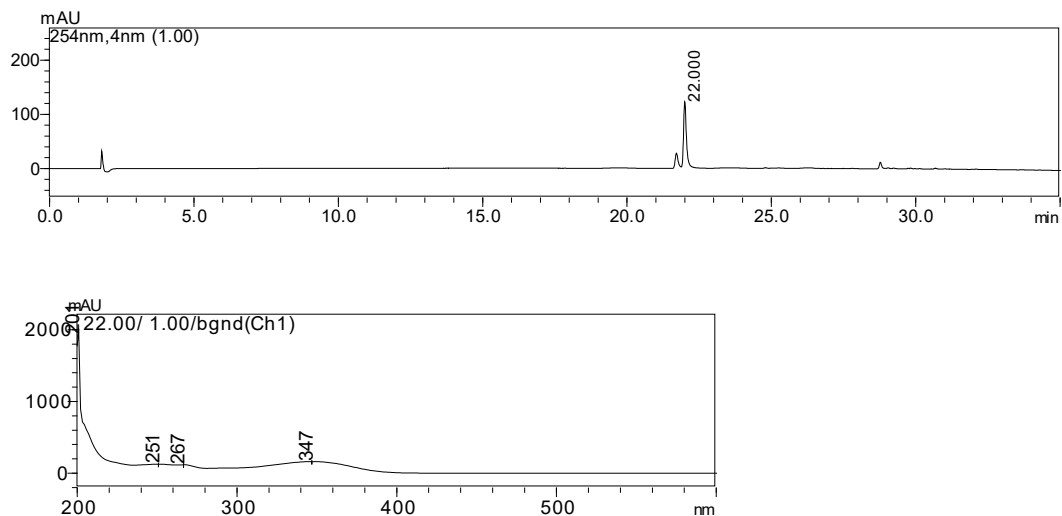


Figure 11S. HPLC-DAD chromatogram and UV-Vis spectrum of **3**. HPLC conditions: methanol/water (0.4% formic acid) linear gradient from 20% to 100% methanol in 30 min, 100% methanol for 5 min, flow = 0.6 mL min⁻¹, injection volume = 20 µL, oven temperature = 40 °C, and column ODS Phenomenex Kinetex C18 (100 x 4.60 mm, 2.6 µm)

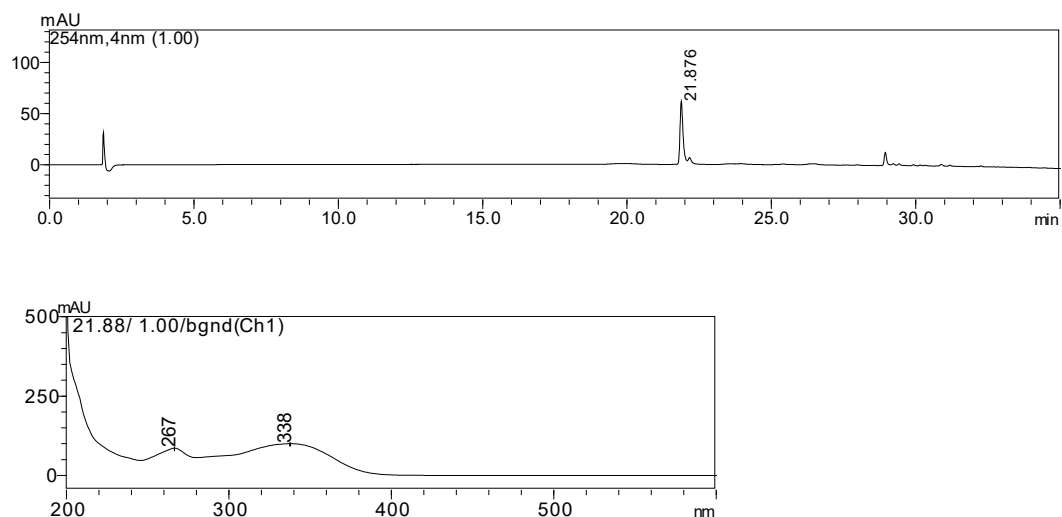


Figure 12S. HPLC-DAD chromatogram and UV-Vis spectrum of **4**. HPLC conditions: methanol/water (0.4% formic acid) linear gradient from 20% to 100% methanol in 30 min, 100% methanol for 5 min, flow = 0.6 mL min⁻¹, injection volume = 20 µL, oven temperature = 40 °C, and column ODS Phenomenex Kinetex C18 (100 x 4.60 mm, 2.6 µm)