

## Supplementary materials

### **Antioxidant and urate-lowering effects of different solvent extracts and major bioactive components from celery seeds**

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Table S1

The date of isolated compounds.

Isolated compounds	<sup>1</sup> H-NMR (600 MHz, DMSO)	<sup>13</sup> H-NMR (151 MHz, DMSO)
Apigenin	12.96 (s, 1H), 10.81 (s, 1H), 10.37 (s, 1H), 7.92 (d, J = 8.7 Hz, 3H), 6.92 (d, J = 8.7 Hz, 2H), 6.78 (s, 1H), 6.48 (d, J = 1.8 Hz, 1H), 6.19 (d, J = 1.8 Hz, 1H).	182.22, 164.61, 164.21, 161.93, 161.64, 157.78, 128.95, 121.65, 116.43, 104.17, 103.32, 99.31, 94.43.
Apiin	12.98 (brs, 1H), 10.40 (brs, 1H), 7.96 (d, J = 8.8 Hz, 2H), 6.94 (d, J = 8.8 Hz, 2H), 6.87 (s, 1H), 6.81 (d, J = 2.0 Hz, 1H), 6.43 (d, J = 2.0 Hz, 1H), 5.35 (s, 1H), 5.30 (d, J = 5.0 Hz, 1H), 5.17 (d, J = 7.4 Hz, 2H), 5.07 (d, J = 5.0 Hz, 1H), 4.66 (s, 2H), 4.52 (s, 1H), 3.91 (d, J = 9.4 Hz, 1H), 3.76 - 3.69 (m, 2H), 3.66 (d, J = 9.3 Hz, 1H), 3.54 - 3.45 (m, 4H), 3.31 - 3.28 (m, 2H), 3.21 - 3.16 (m, 1H).	182.47, 164.76, 163.15, 161.99, 161.62, 157.39, 129.11, 121.38, 116.50, 109.17, 105.83, 103.54, 99.79, 98.55, 95.28, 79.76, 77.50, 77.26, 76.51, 76.14, 74.47, 70.26, 64.67, 60.98.
Luteolin	12.95 (s, 1H), 10.81 (s, 1H), 9.90 (s, 1H), 9.40 (s, 1H), 7.40 - 7.35 (m, 2H), 6.86 (d, J = 8.3 Hz, 1H), 6.65 (s, 1H), 6.42 (d, J = 1.9 Hz, 1H), 6.16 (d, J = 1.9 Hz, 1H).	182.07, 164.54, 164.30, 161.89, 157.70, 150.10, 146.14, 121.92, 119.41, 116.43, 113.78, 104.12, 103.29, 99.24, 94.26.
Graveobioside A	7.41 (d, J = 8.7 Hz, 2H), 6.86 (d, J = 7.8 Hz, 1H), 6.76 (d, J = 11.6 Hz, 1H), 6.71 (s, 1H), 6.40 (d, J = 9.1 Hz, 1H), 5.33 (s, 1H), 5.15 (d, J = 7.4 Hz, 1H), 5.05 (d, J = 7.5 Hz, 1H), 3.89 (d, J = 9.4 Hz, 1H), 3.72 (s, 1H), 3.69 (d, J = 10.7 Hz, 2H), 3.63 (d, J = 9.3 Hz, 1H), 3.52 - 3.39 (m, 5H), 3.36 (dd, J = 14.0, 7.0 Hz, 1H), 3.32 - 3.21 (m, 3H), 3.16 (dd, J = 14.5, 7.4 Hz, 2H).	182.37, 164.94, 163.14, 161.64, 157.38, 150.38, 146.25, 121.85, 119.66, 116.45, 114.03, 109.18, 105.83, 103.64, 99.78, 98.50, 95.12, 79.76, 77.47, 77.22, 76.52, 76.17, 74.46, 70.25, 64.68, 60.99.
Chrysoeriol	12.95 (s, 2H), 10.80 (s, 1H), 9.95 (s, 1H), 7.54 (d, J = 6.7 Hz, 2H), 6.91 (d, J = 8.9 Hz, 1H), 6.88 (s, 1H), 6.49 (d, J = 1.6 Hz, 1H), 6.17 (d, J = 1.7 Hz, 1H), 3.87 (s, 3H).	182.23, 164.56, 164.08, 161.85, 157.75, 151.14, 148.44, 121.93, 120.78, 116.17, 110.60, 104.13, 103.64, 99.24, 94.47, 56.39.
Graveobioside B	7.59 - 7.54 (m, 2H), 6.96 (s, 1H), 6.93 (d, J = 8.2 Hz, 1H), 6.82 (d, J = 1.8 Hz, 1H), 6.41 (d, J = 1.7 Hz, 1H), 5.33 (s, 1H), 5.14 (d, J = 7.4 Hz, 1H), 3.89 (d, J = 9.4 Hz, 1H), 3.86 (s, 3H), 3.72 (s, 1H), 3.69 (d, J = 10.3 Hz, 1H), 3.63 (d, J = 9.3 Hz, 1H), 3.47 (tt, J = 13.0, 7.5 Hz, 6H), 3.36 (dd, J = 14.0, 7.0 Hz, 2H), 3.29 (dd, J = 16.8, 11.2 Hz, 4H), 3.16 (t, J = 9.0 Hz, 1H).	182.45, 164.65, 163.13, 161.52, 157.34, 151.67, 148.55, 121.54, 121.00, 116.25, 110.75, 109.15, 105.81, 103.81, 99.78, 98.63, 95.38, 79.71, 77.56, 77.25, 76.50, 76.18, 74.43, 70.27, 64.65, 60.96, 56.42.

Fig. S1.  $^1\text{H-NMR}$  (600 MHz,  $\text{DMSO-d}_6$ ) and  $^{13}\text{C-NMR}$  (151 MHz,  $\text{DMSO-d}_6$ ) spectrum for **Apiin**.

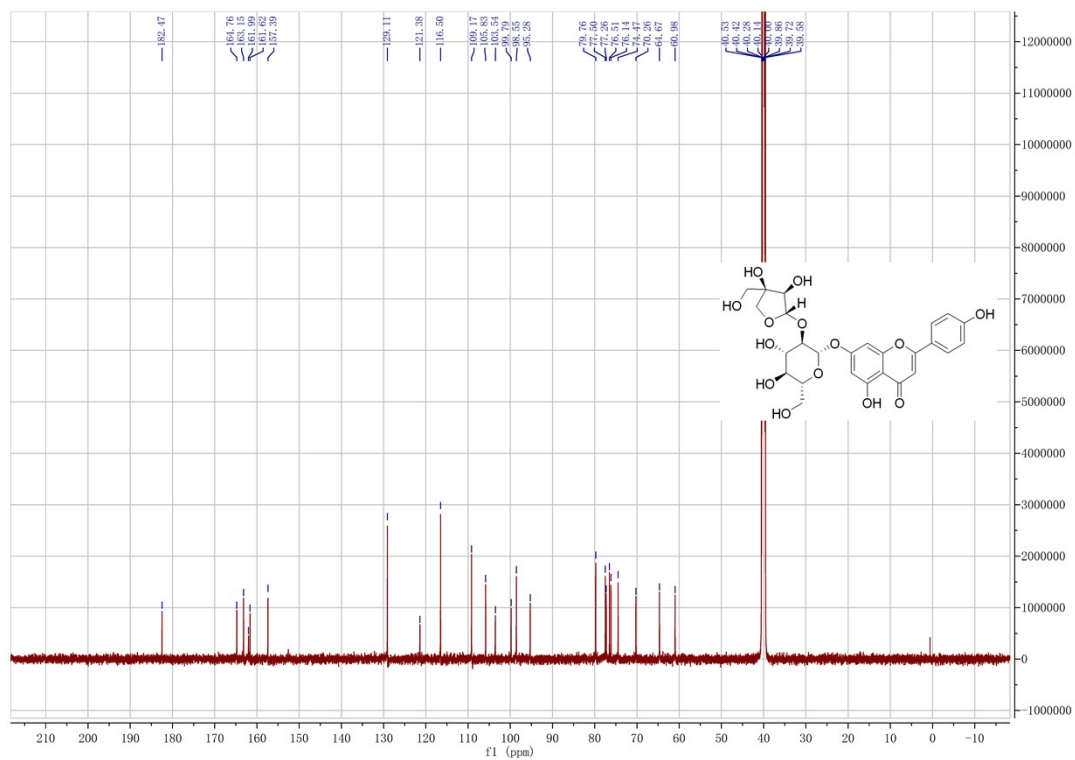
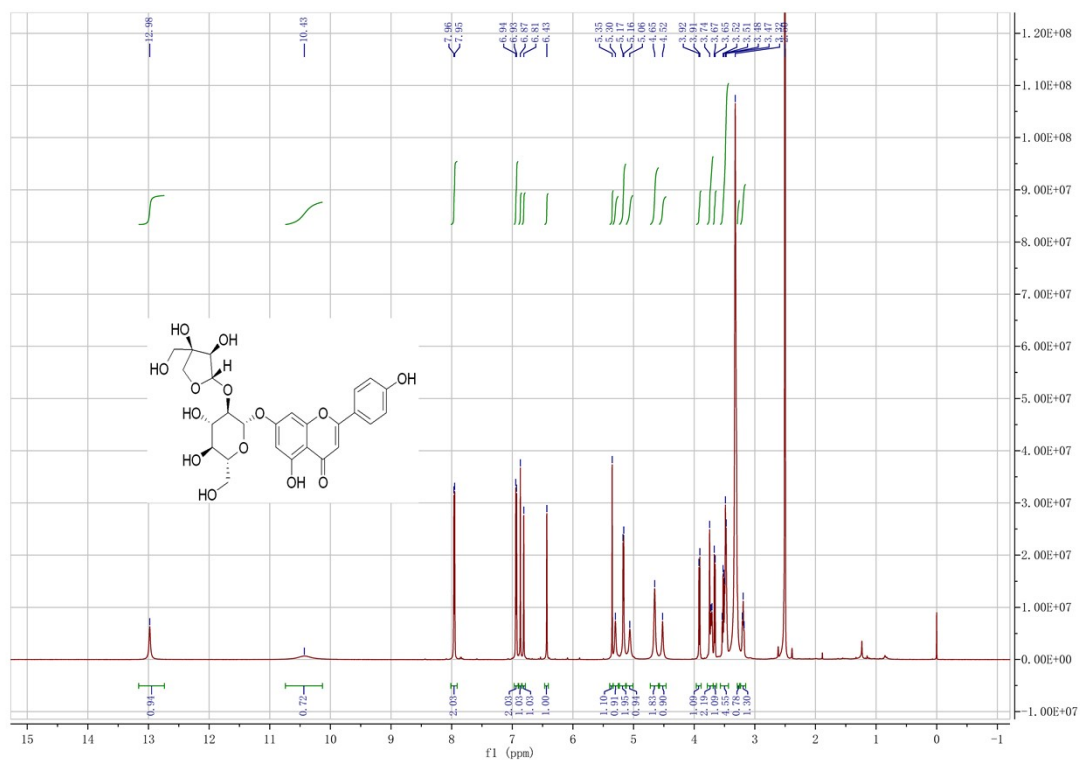


Fig. S2.  $^1\text{H-NMR}$  (600 MHz,  $\text{DMSO-d}_6$ ) and  $^{13}\text{C-NMR}$  (151 MHz,  $\text{DMSO-d}_6$ ) spectrum for **Apigenin**.

