SUPPLEMENTARY MATERIAL

Isolation and structure elucidation of a new flavonol glycoside from *Sabia parviflora*

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Abstract

A new flavonol glycoside named Sabiapside A (1), along with four known compounds, quercetin-3-O-gentiobioside (2), camellianoside (3), isobariclisin-3-O-rutinoside (4), tsubakioside A (5), was isolated from *Sabia parviflora*. Their structures were elucidated by extensive spectroscopic analysis including MS, UV, IR and NMR data. The antioxidant activities of these glycosides evaluated by ABTS⁺ and DPPH radical scavenging reaction was higher than that of vitamin C used as the reference antioxidant.

Table S1. Antioxidant activity of compounds 1-5.

<table>
<thead>
<tr>
<th>Compound</th>
<th>IC₅₀ (μg/mL) ABTS⁺</th>
<th>IC₅₀ (μg/mL) DPPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.97±0.12</td>
<td>3.63±1.05</td>
</tr>
<tr>
<td>2</td>
<td>4.62±0.28</td>
<td>3.72±0.51</td>
</tr>
</tbody>
</table>

Figure S1. Key HMBC correlations of compound 1

Figure S2. ¹H NMR spectrum of compound 1

Figure S3. ¹³C NMR spectrum of compound 1

Figure S4. DEPT spectrum of compound 1

Figure S5. ¹H-¹H COSY spectrum of compound 1

Figure S6. HSQC spectrum of compound 1

Figure S7. HMBC spectrum of compound 1

Figure S8. IR spectrum of compound 1

Figure S9. UV spectrum of compound 1

Figure S10. HR-ESI-MS spectrum of compound 1
<table>
<thead>
<tr>
<th></th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2.88±0.71</td>
<td>2.41±0.44</td>
</tr>
<tr>
<td>4</td>
<td>3.65±0.72</td>
<td>3.55±0.34</td>
</tr>
<tr>
<td>5</td>
<td>5.78±0.64</td>
<td>7.95±1.04</td>
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<tr>
<td>vitamin C</td>
<td>7.14±0.82</td>
<td>15.88±0.97</td>
</tr>
</tbody>
</table>

*IC₅₀ values were presented as mean ± standard deviation of three independent experiments (n = 3). Vitamin C served as a positive control.*

Figure S1. Key HMBC correlations of compound 1

Figure S2. ¹H NMR spectrum of compound 1
Figure S3. $^{13}$C NMR spectrum of compound 1

Figure S4. DEPT spectrum of compound 1

Figure S5. $^1$H-$^1$H COSY spectrum of compound 1

Figure S6. HSQC spectrum of compound 1
Figure S7. HMBC spectrum of compound 1

Figure S8. IR spectrum of compound 1

Figure S9. UV spectrum of compound 1 (in MeOH)
Figure S10. HR-ESI-MS spectrum of compound 1 (in MeOH)