SUPPLEMENTARY MATERIAL

A new flavonol glycoside from the aerial parts of *Epimedium koreanum* Nakai

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Acknowledgement

This research was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2012R1A1A4A01009908).

ABSTRACT

A new prenylated flavonol glycoside (**1**) was isolated from a 95% methanol extract of the dried and powdered aerial parts of *Epimedium koreanum* Nakai (Herba Epimedii), along with seven previously known flavonoids (**2-8**). The chemical structure of the new compound (**1**) was established to be 5-hydroxy-4'-methoxy-8-(2-hydroxy-3-methyl-3-butenyl)flavone 3-*O*- α -L-rhamnopyranosyl-7-*O*- β -D-glucopyranoside on the basis of spectroscopic methods. The antioxidant activities of these compounds were determined by the DPPH (2,2-diphenyl-1-picrylhydrazyl) free-radical scavenging assay, and kaempferitrin (**8**) showed a high reactivity with DPPH.

Keywords: *Epimedium koreanum* Nakai; flavonol glycoside; antioxidant activity

Supplemental Figure Legend

Table S1. DPPH radical scavenging activities of compounds **1-8** (n=3).

Figure S1. ^1H -NMR spectrum of compound **1** (500MHz, Methanol- d_4).

Figure S2. ^{13}H -NMR spectrum of compound **1** (125MHz, Methanol- d_4).

Figure S3. The HMBC spectrum and its main correlations of compound **1**.

Table S1. DPPH radical scavenging activities of compounds **1-8** (n=3).

Compound	IC ₅₀ (μg/mL)	Compound	IC ₅₀ (μg/mL)
Vit-C	36.9	5	>1000
1	>1000	6	>1000
2	>1000	7	>1000
3	>1000	8	45.5
4	>1000		

Figure S1.

Figure S2.

Figure S3.