

Supporting Information

Absolute Quantification of Isoflavones in the Flowers of *Pueraria lobata* by qHNMR

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Figure S1. ^1H NMR (600 MHz, $\text{DMSO}-d_6$) of 5-methoxydaidzein (**1**)

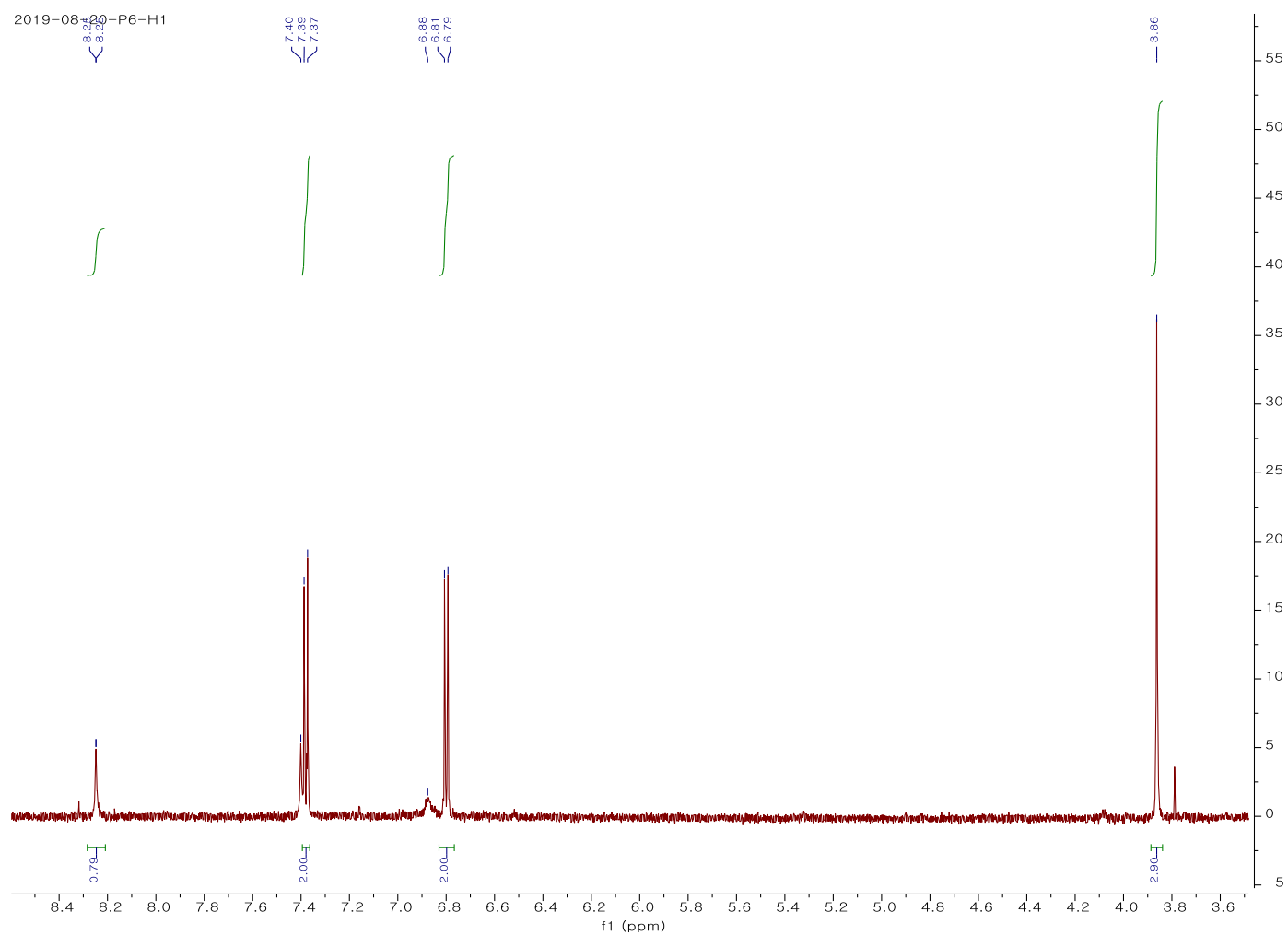


Figure S2. ^1H NMR (600 MHz, $\text{DMSO}-d_6$) of tectorigenin (**2**)

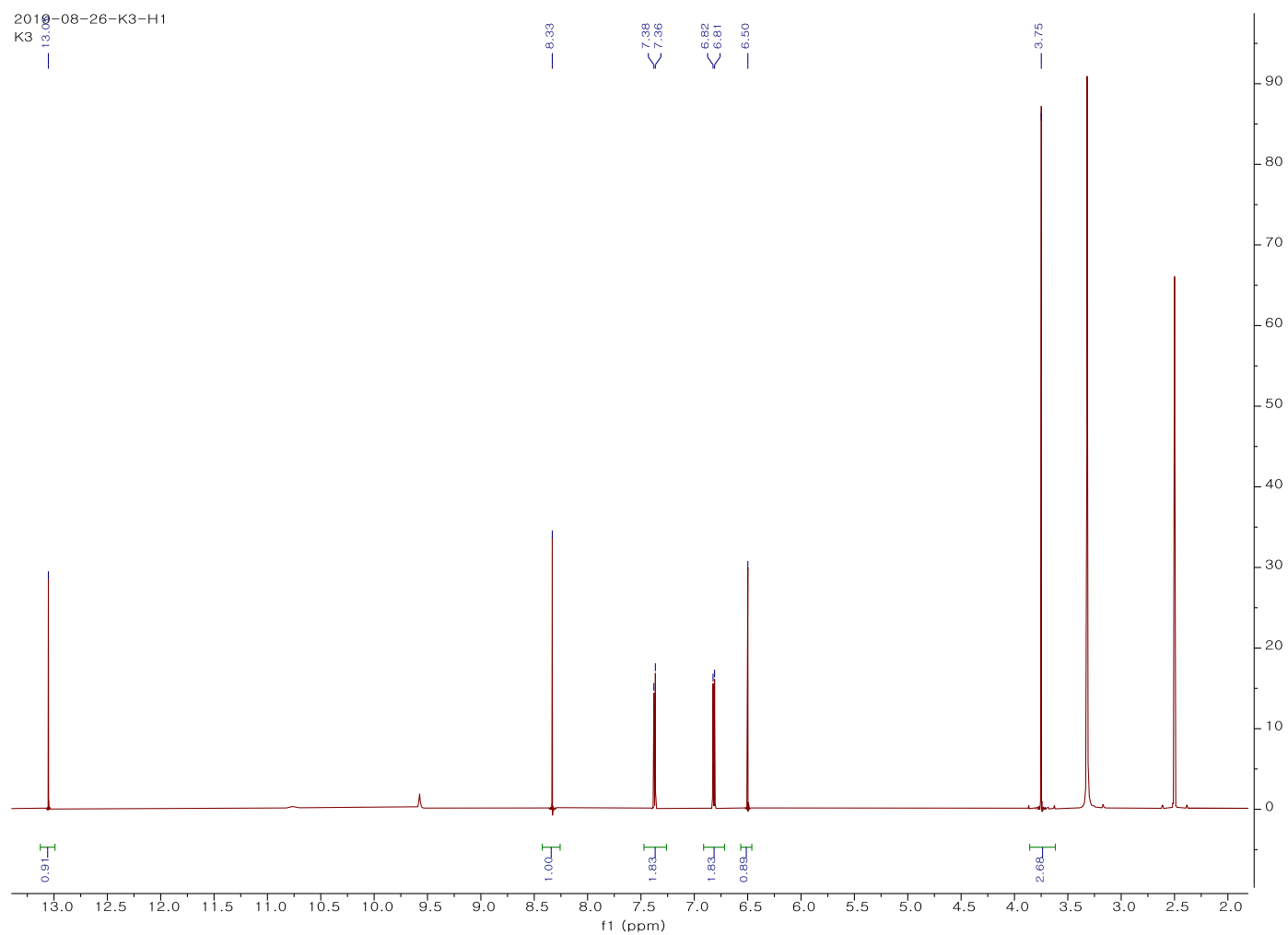


Figure S3. ^1H NMR (600 MHz, $\text{DMSO}-d_6$) of genistin (**3**)

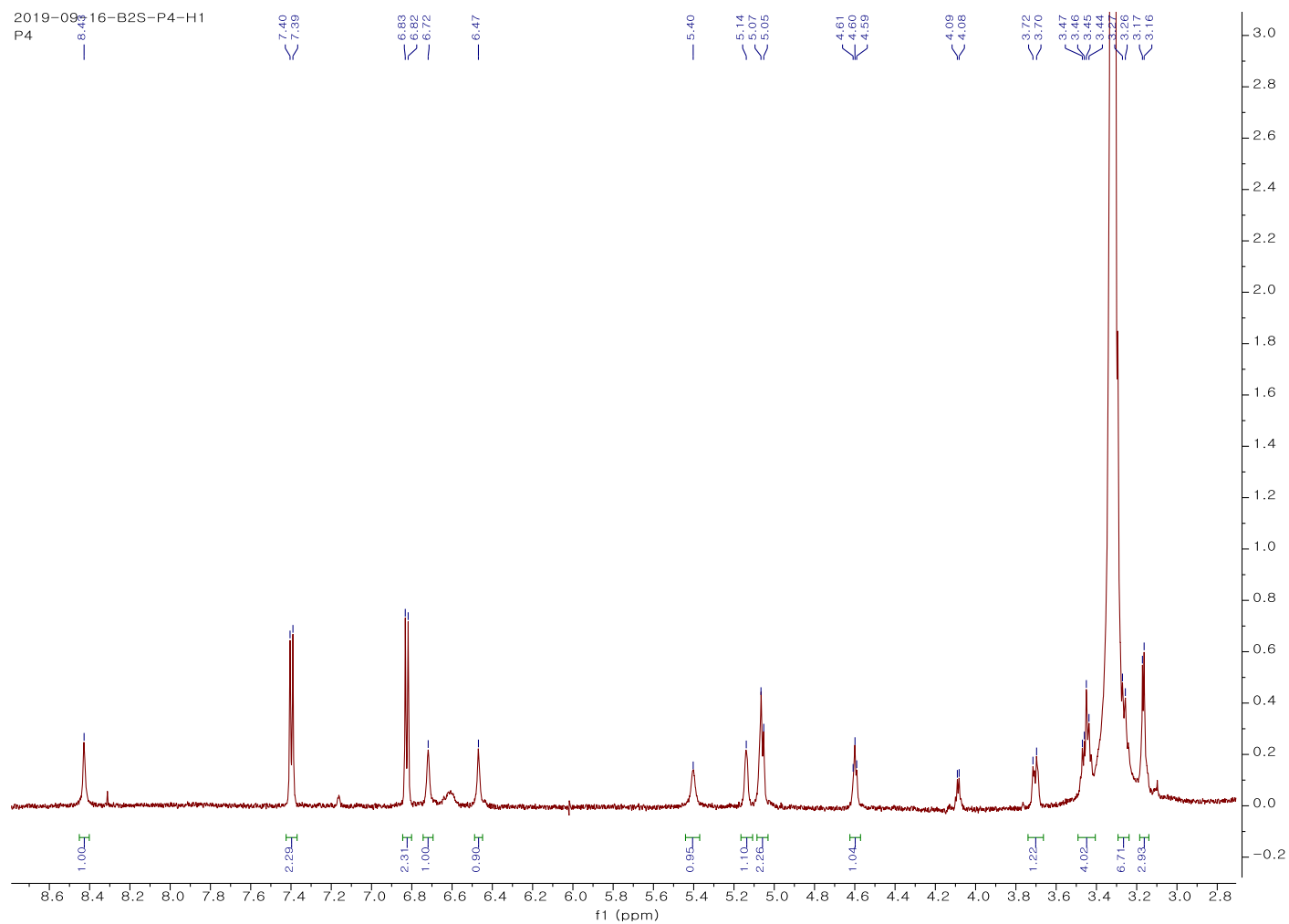


Figure S4. ^1H NMR (600 MHz, $\text{DMSO-}d_6$) of glycitin (**4**)

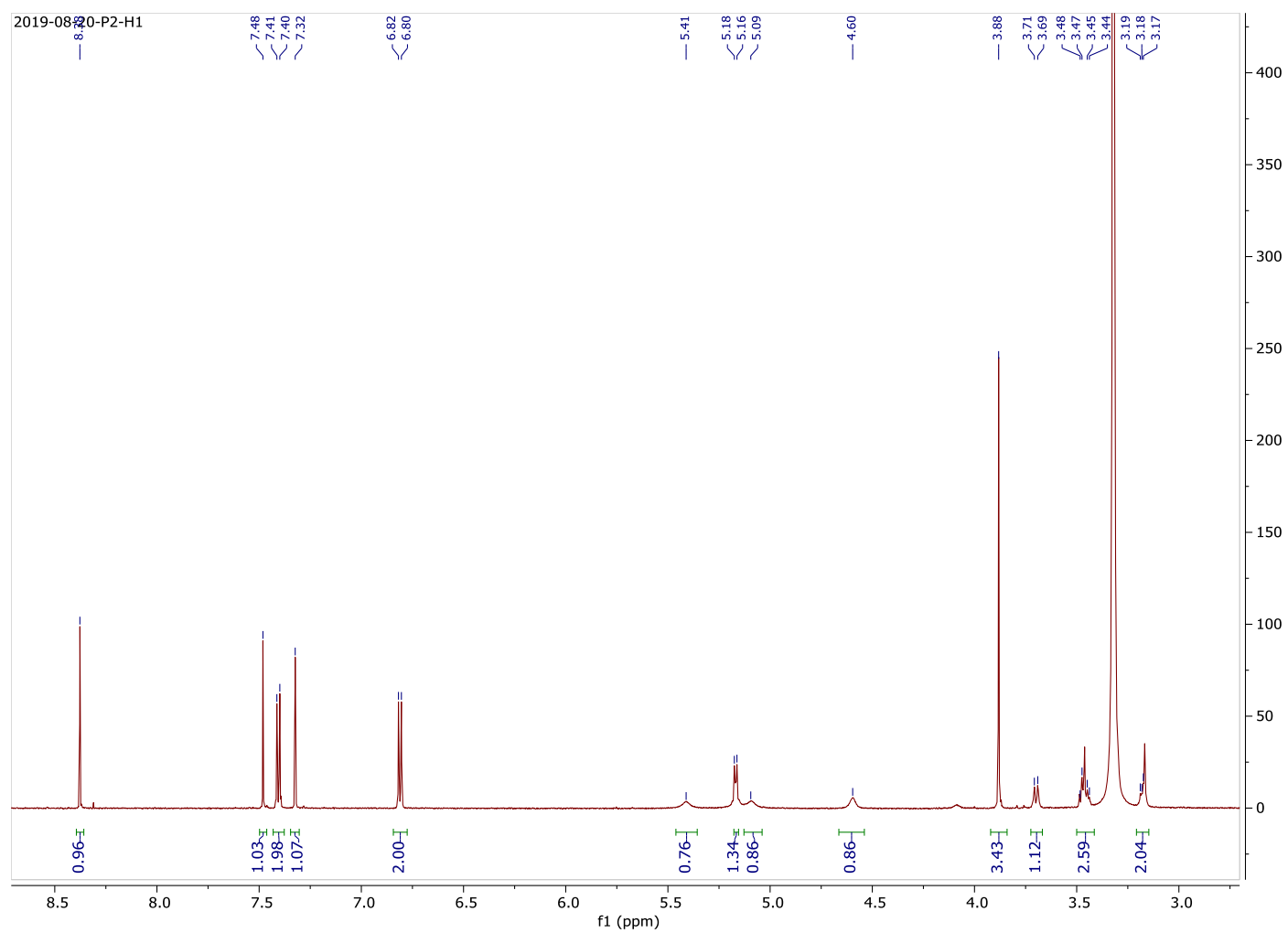


Figure S5. ^1H NMR (600 MHz, $\text{DMSO}-d_6$) of tectoridin (**5**)

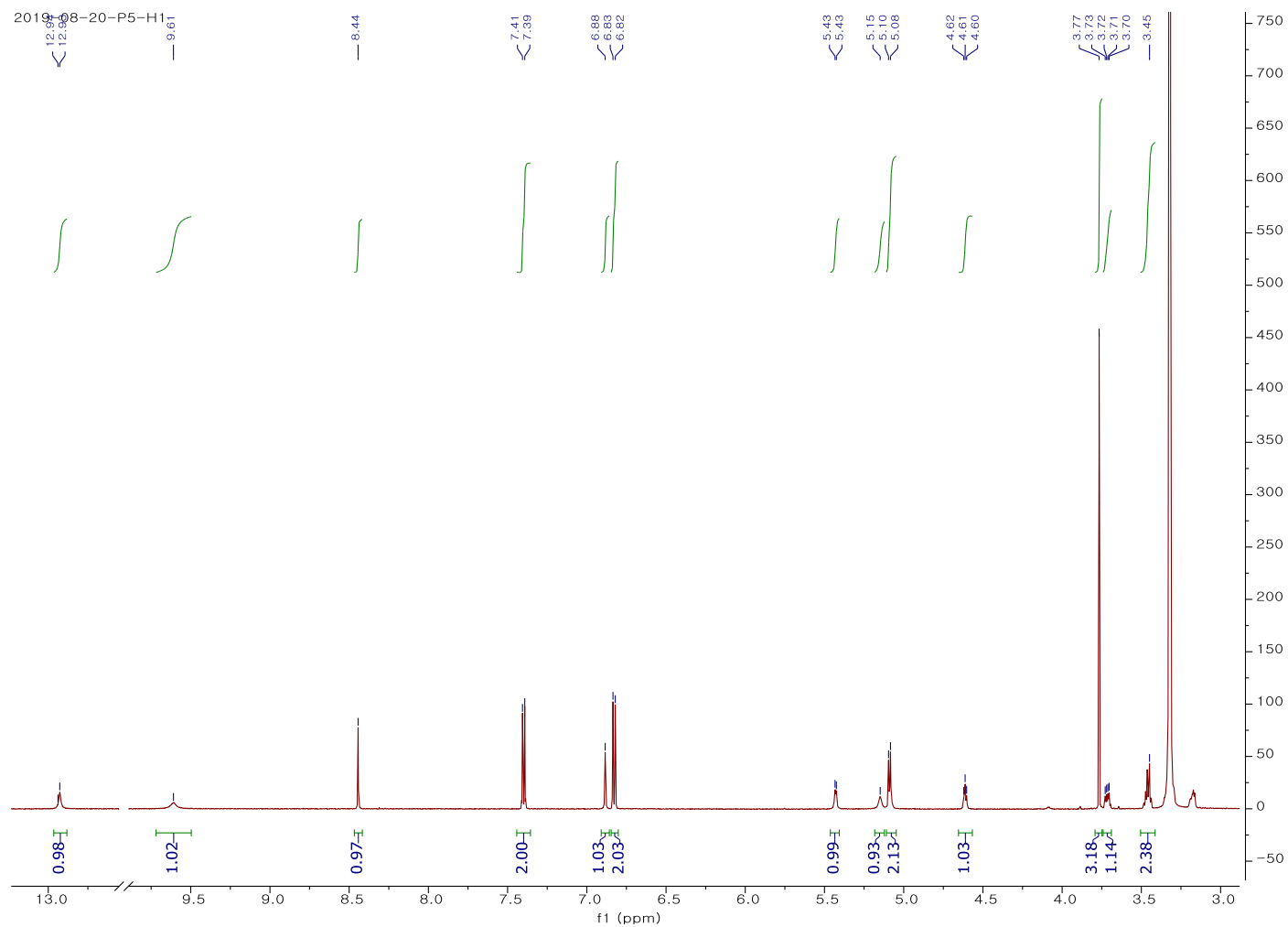


Figure S6. ^1H NMR (600 MHz, $\text{DMSO-}d_6$) of 7- O - β -D-xylopyranosyl-(1-6)- O - β -D-glucopyranoside (**6**)

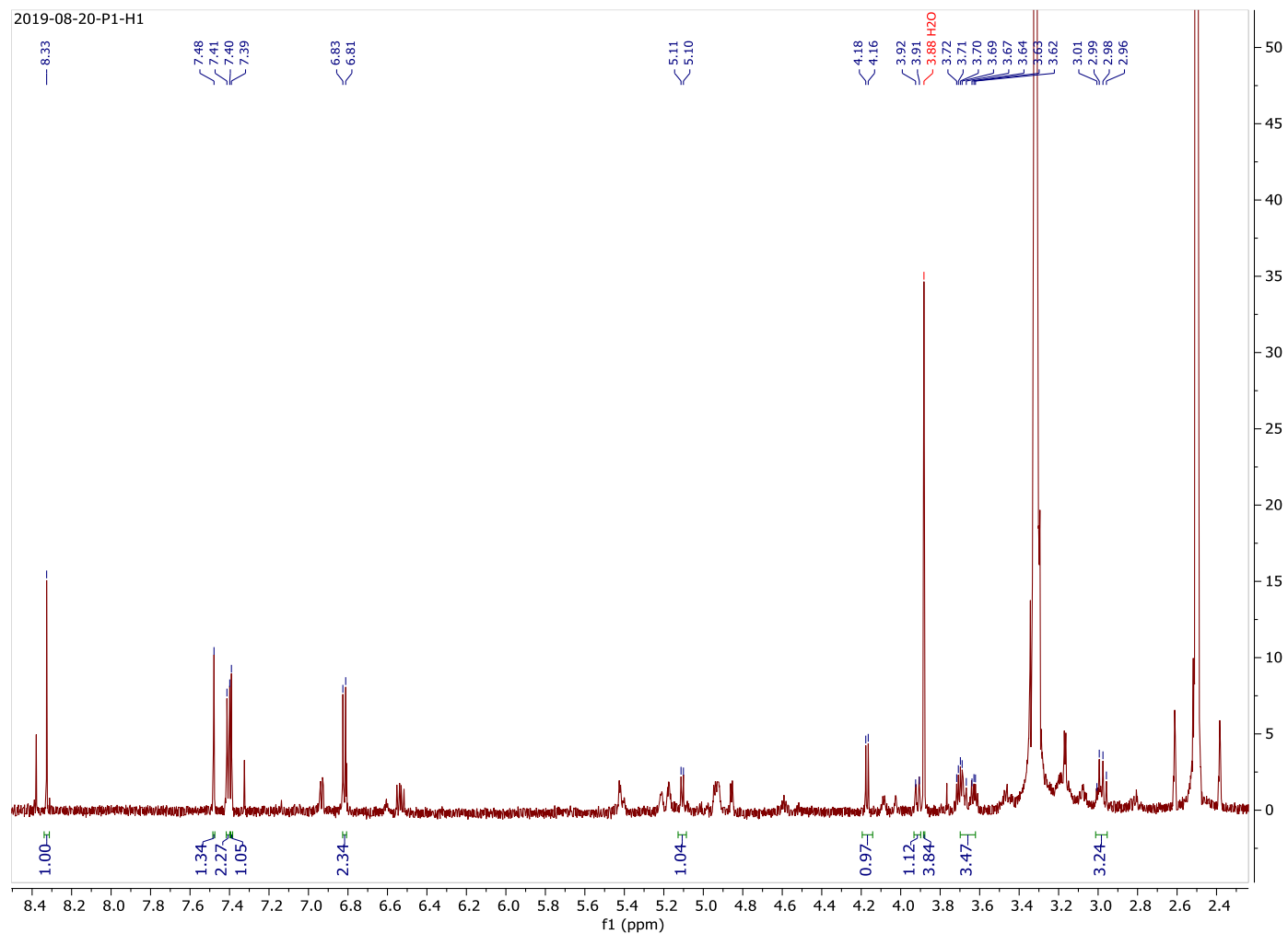


Figure S7. ^1H NMR (600 MHz, $\text{DMSO}-d_6$) of tectorgenin-7- O - β -D-xylosylglucoside (**7**)

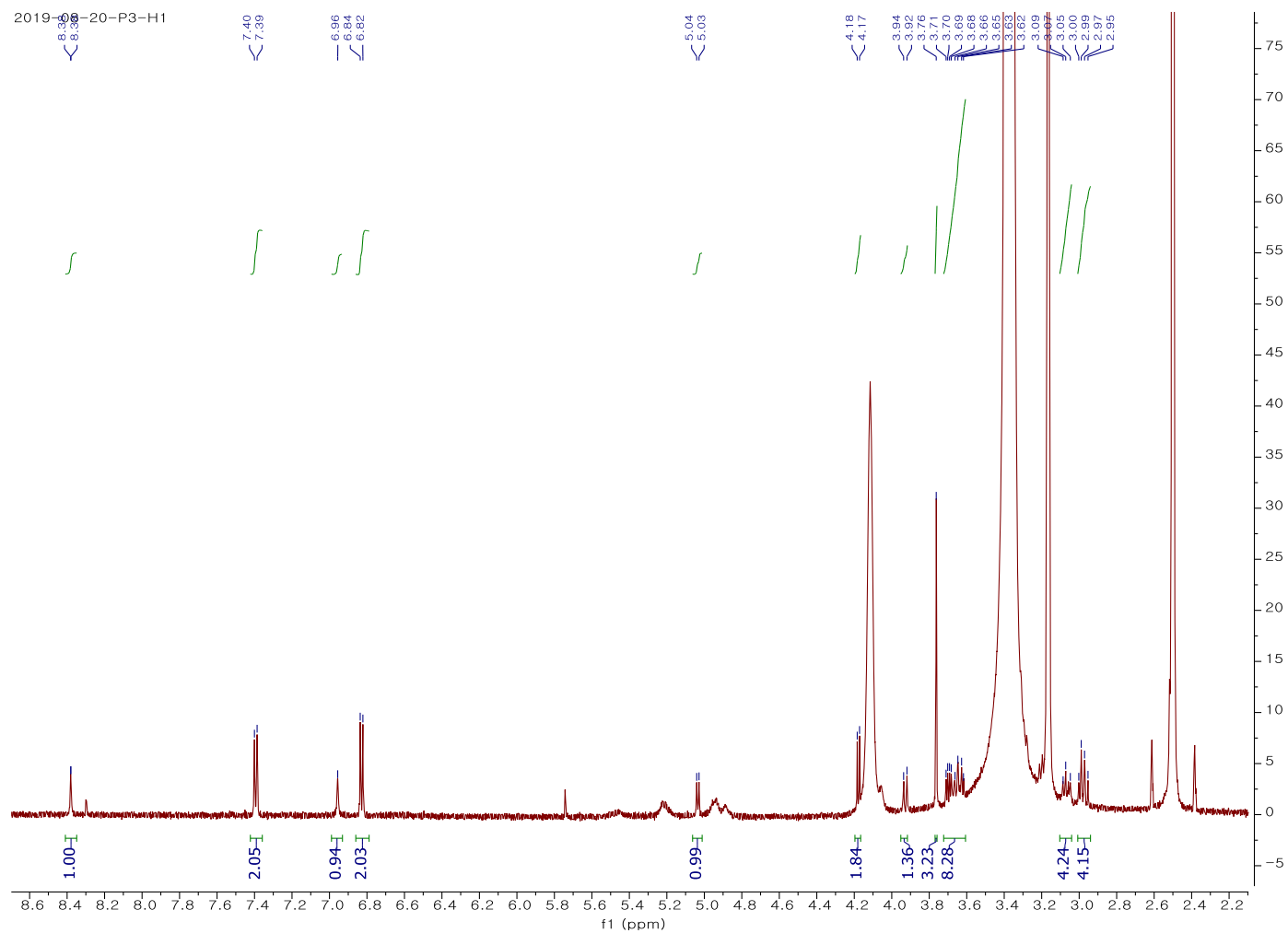


Figure S8. LR-ESI-MS of 5-methoxydaidzein (**1**)

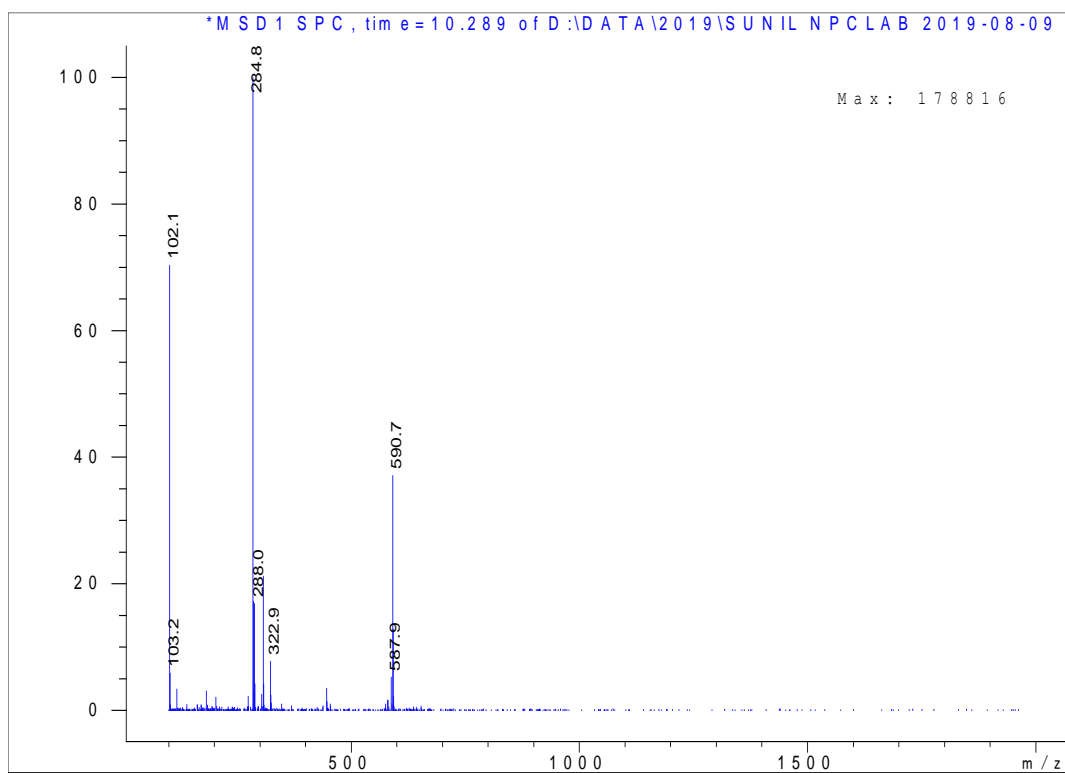


Figure S9. LR-ESI-MS of tectorigenin (**2**)

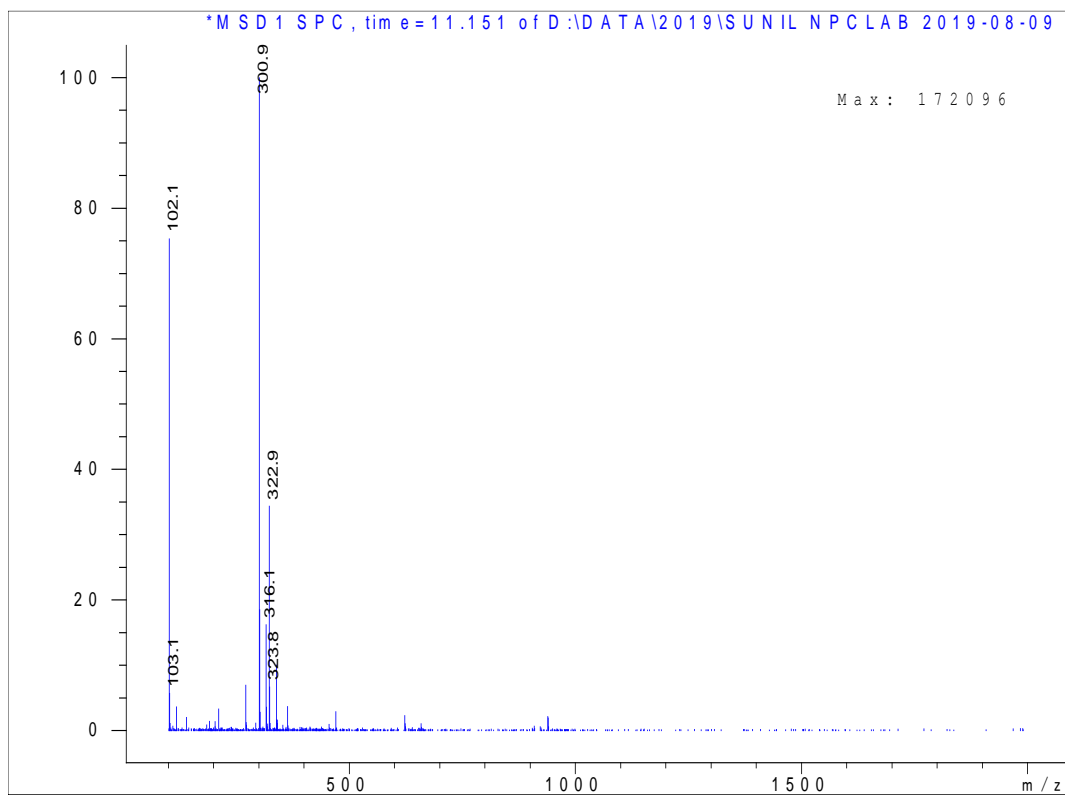


Figure S10. LR-ESI-MS of genistin (**3**)

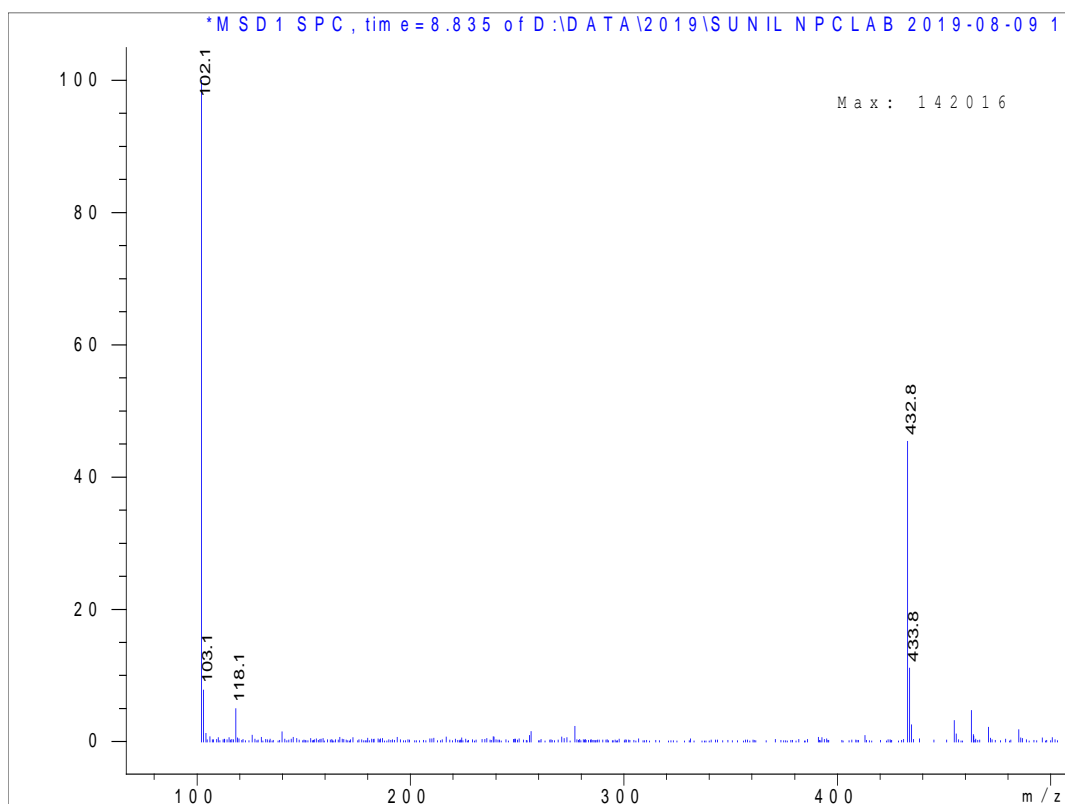


Figure S11. LR-ESI-MS of glycitin (**4**)

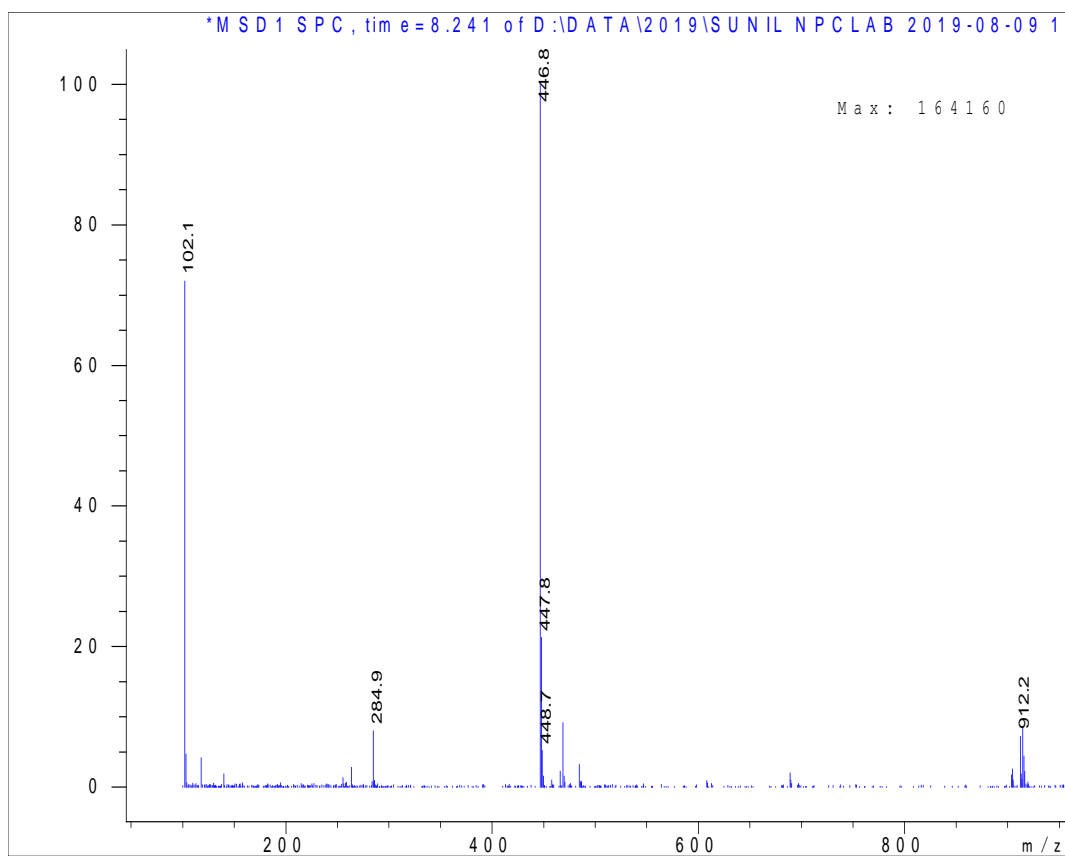


Figure S12. LR-ESI-MS of tectoridin (**5**)

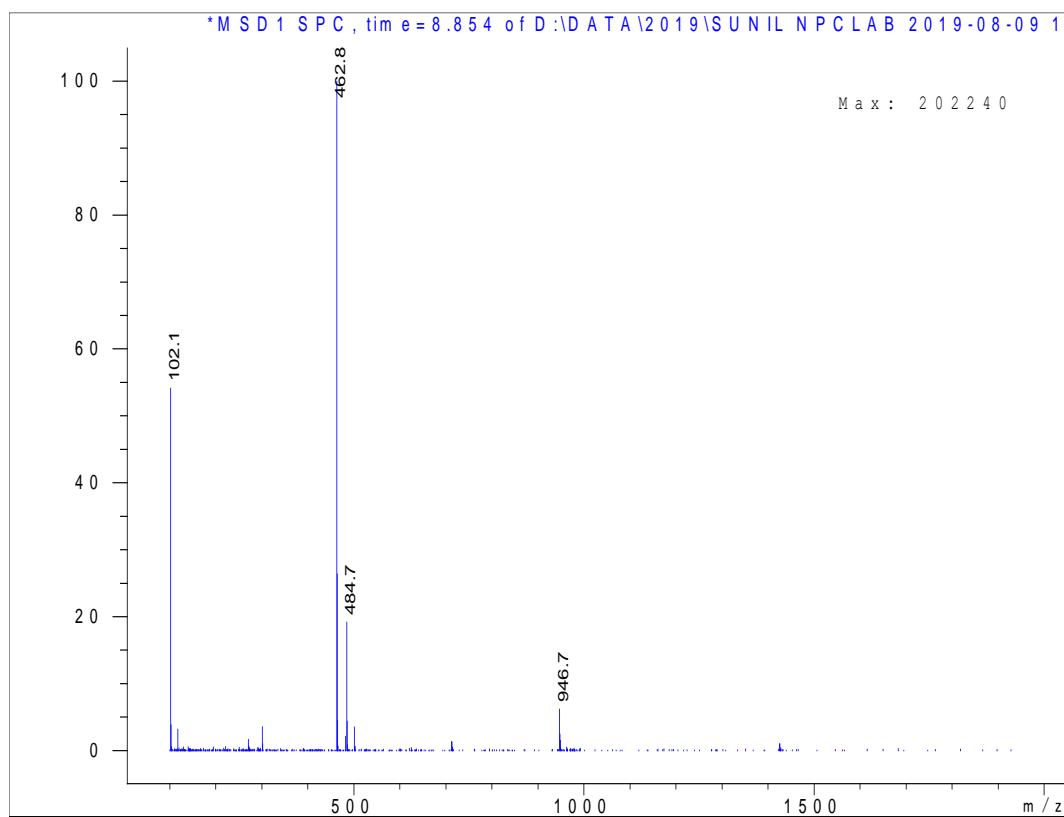


Figure S13. LR-ESI-MS of 7-O- β -D-xylopyranosyl-(1-6)-O- β -D-glucopyranoside (**6**)

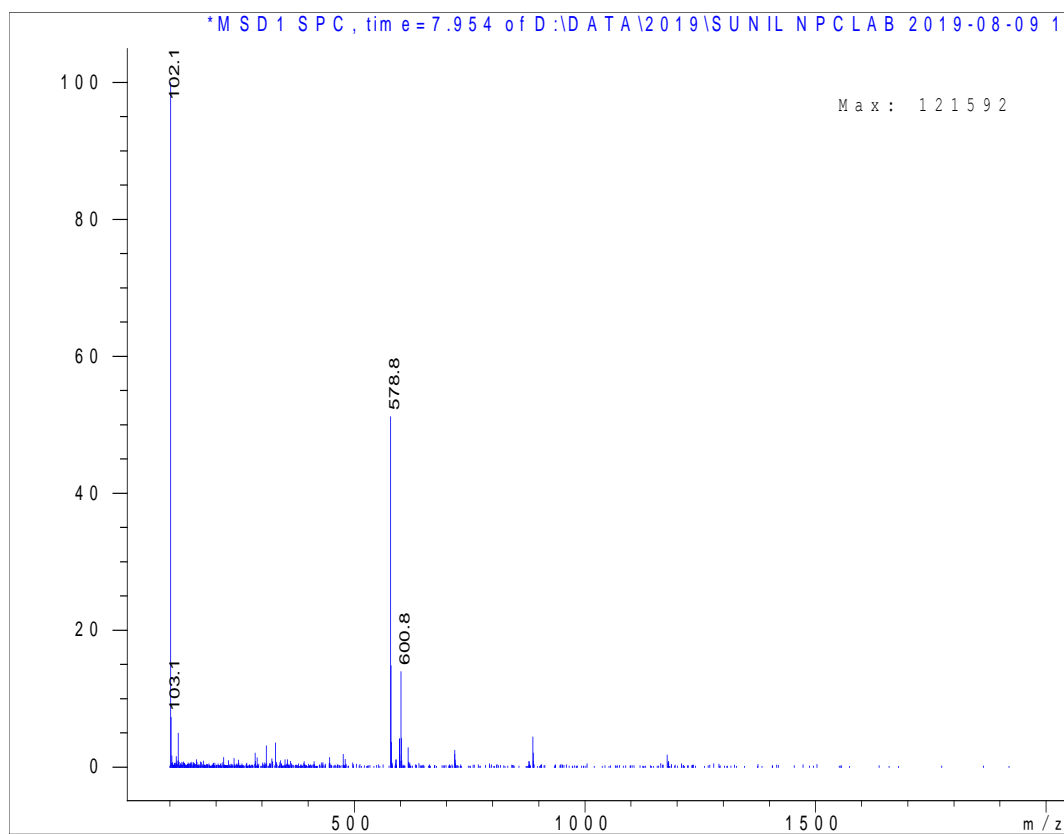


Figure S14. LR-ESI-MS of tectorgenin-7-O- β -D-xylosylglucoside (7)

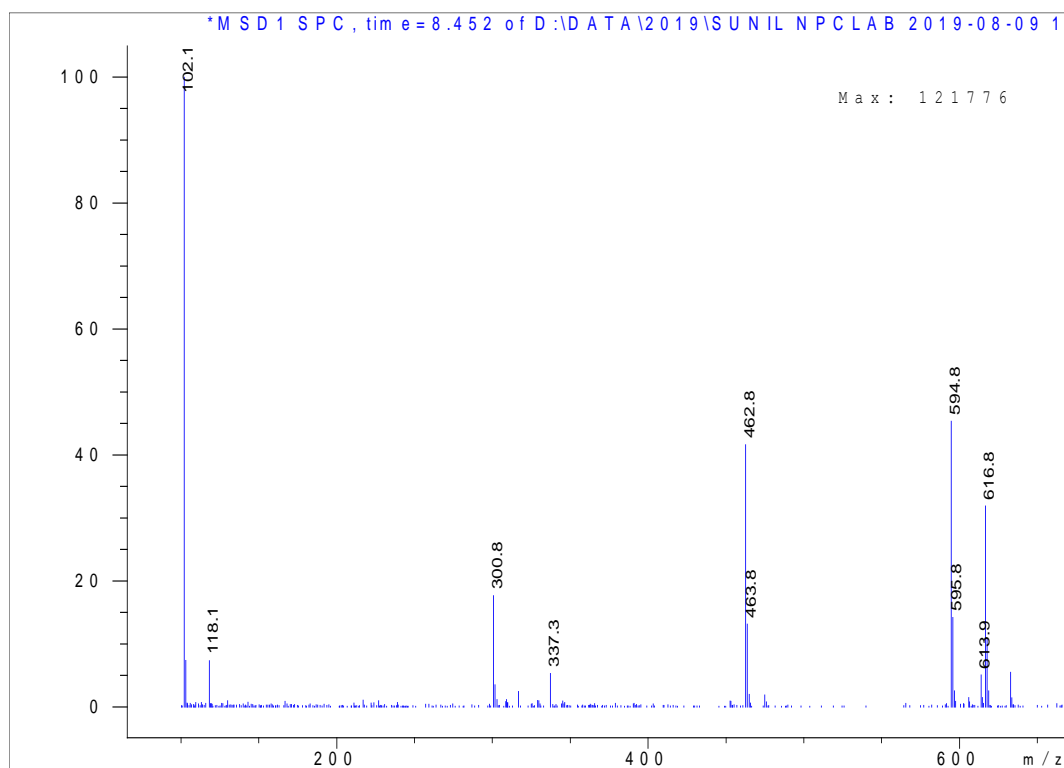


Figure S15. Resonance at δ_H 8.45 ppm of tectoridin to determine LOD and LOQ using S/N ratio.

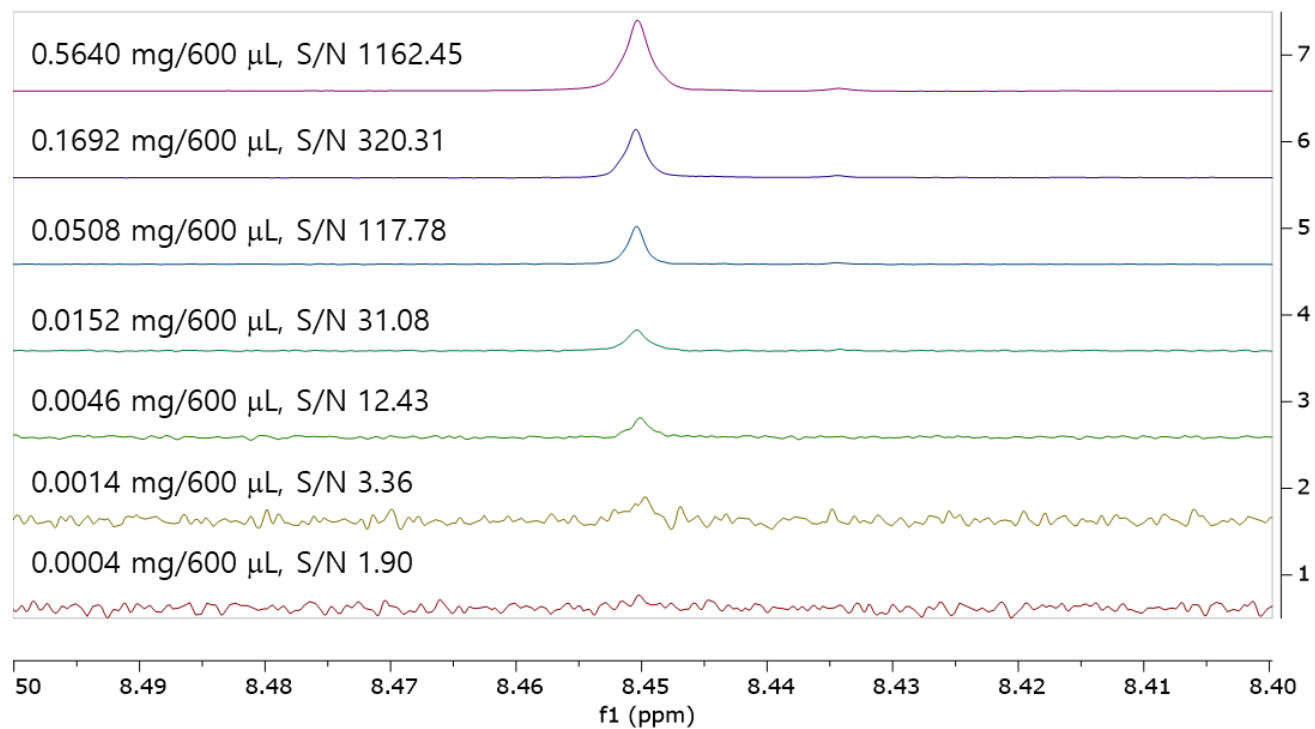


Figure S16. The stacked ^1H NMR spectra of the crude extract with IC before and after spiking of tectoridin (Internal calibrant: methyl 3,5-dinitrobenzoate).

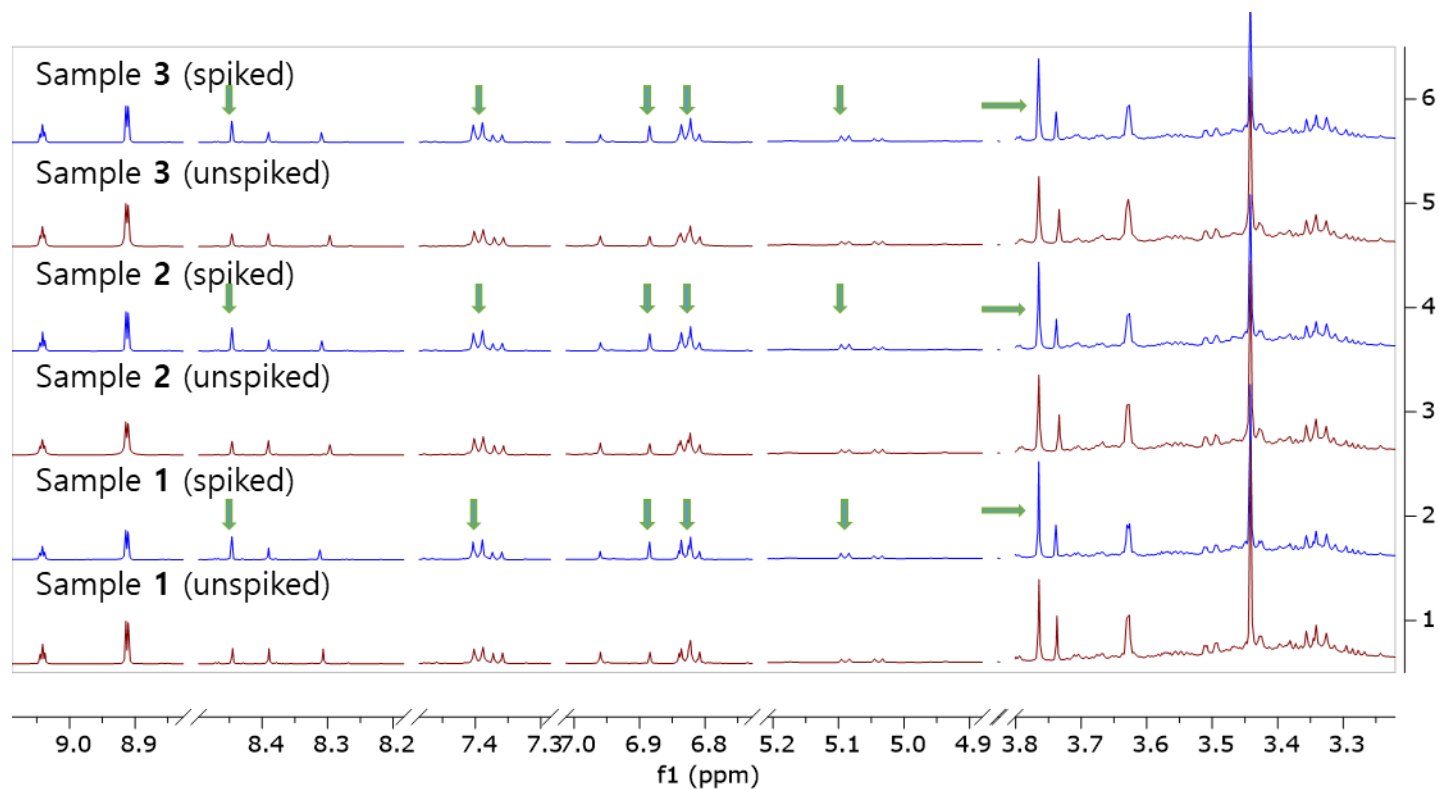


Figure S17. Accuracy determination using the recovery method

| | Qty of tectoridin (mg) | % tectoridin after spiking | Qty of extract (mg) | Qty of tectoridin before spiking (mg) |
|-------------------------------|------------------------|----------------------------|---------------------|---------------------------------------|
| Sample 1 | 1.2933 | 12.4000 | 10.43 | 0.6800 |
| Sample 2 | 1.2976 | 12.9500 | 10.02 | 0.6753 |
| Sample 3 | 1.2392 | 12.3800 | 10.01 | 0.6296 |
| Qty of tectoridin spiked (mg) | | 0.6250 | | |
| Accuracy | | | | |
| | true value (mg) | observed value (mg) | relative error (%) | recovery (%) |
| Sample 1 | 1.3050 | 1.2933 | 0.9059 | 98.1254 |
| Sample 2 | 1.3003 | 1.2976 | 0.2125 | 99.5587 |
| Sample 3 | 1.2546 | 1.2392 | 1.2420 | 97.5374 |
| Average | | | 0.7868 | 98.4072 |

Figure S18. HPLC-UV profiles of the extracts (PLr and PLs) and calibration curves of tectorigenin (**2**), tectoridin (**5**) and tectorigenin-7-*O*- β -D-xylosylglucoside (**7**).

