

Supporting Information

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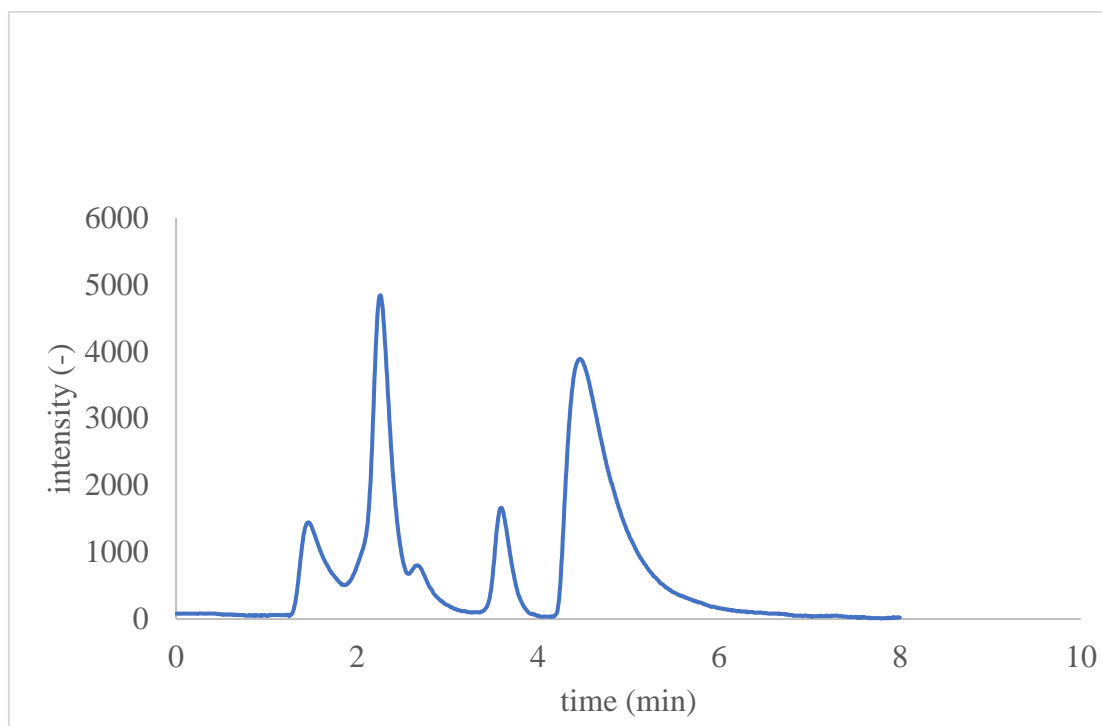


Figure S1. HPLC Chromatogram (silica, CHCl_3 :MeOH = 98:2, 1 ml/min) of aglycone **5**, UV = 254 nm, t_R = 4.453 min.

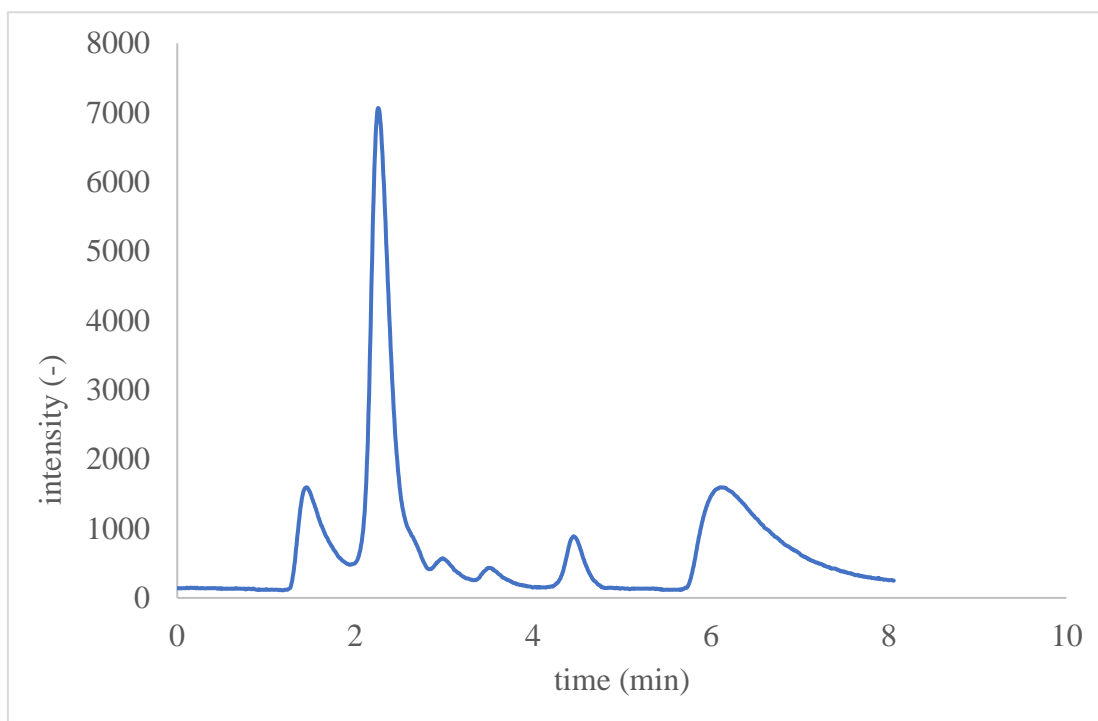


Figure S2. HPLC Chromatogram (CHCl_3 :MeOH = 95:5, 1 ml/min) of aglycone **6**, UV = 254 nm, t_R = 3.59 min.

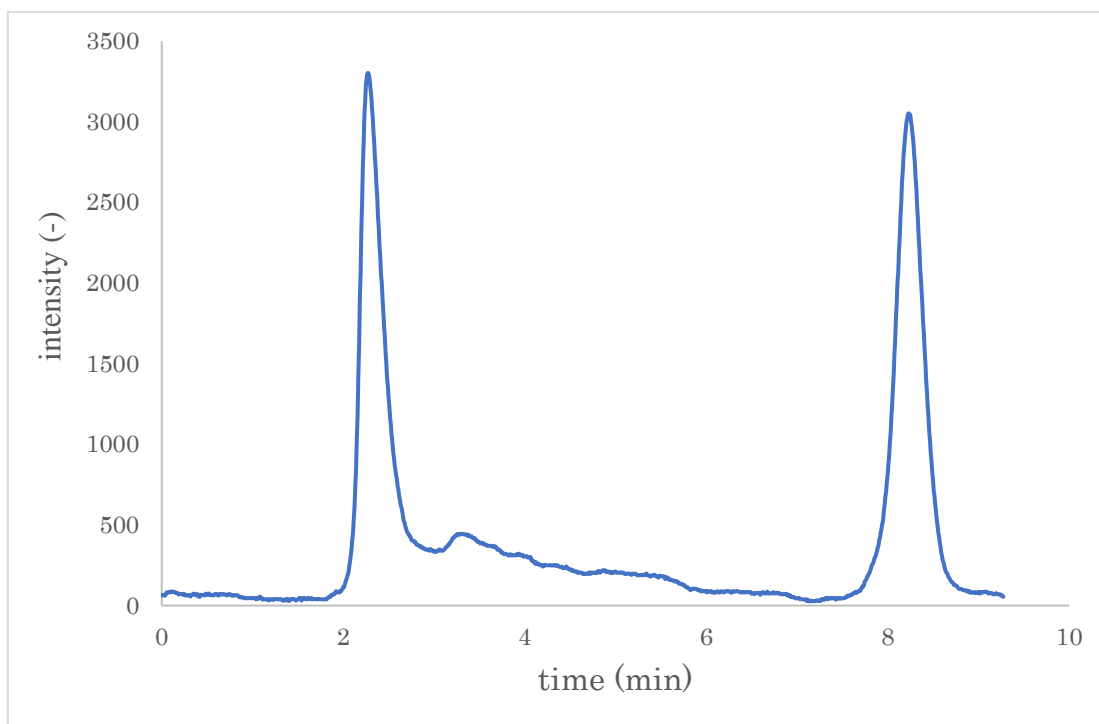


Figure S3. HPLC Chromatogram (CHCl₃, 1 ml/min) of aglycone **7**, UV = 270 nm, t_R = 8.22 min.

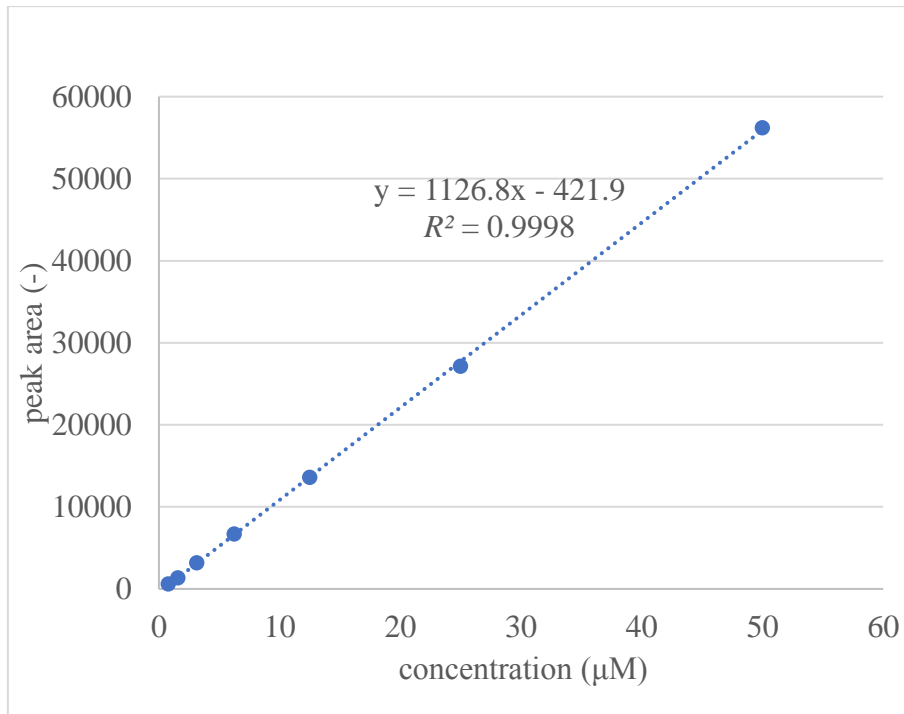


Figure S4. Calibration curve of **5** based on the HPLC analysis.

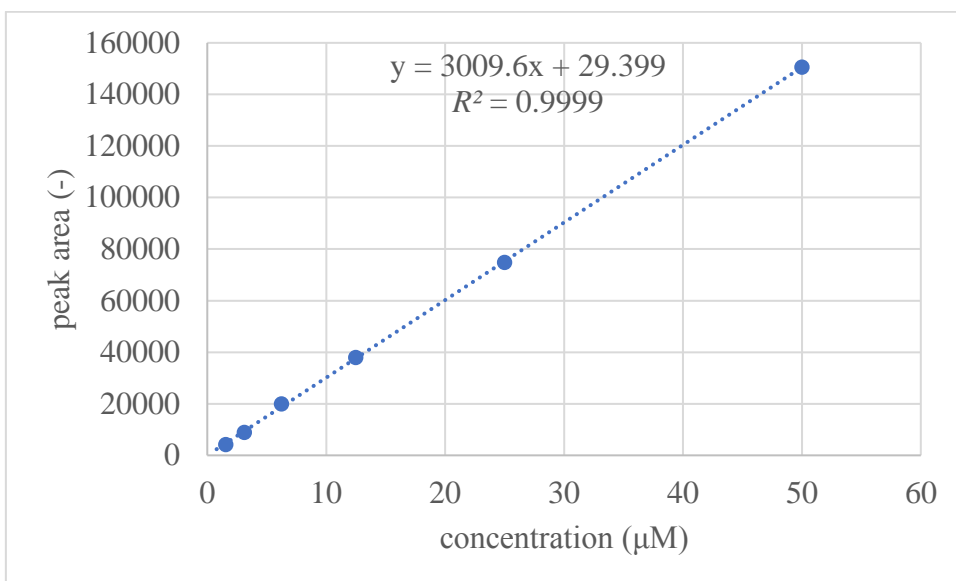


Figure S5. Calibration curve of **6** based on the HPLC analysis.

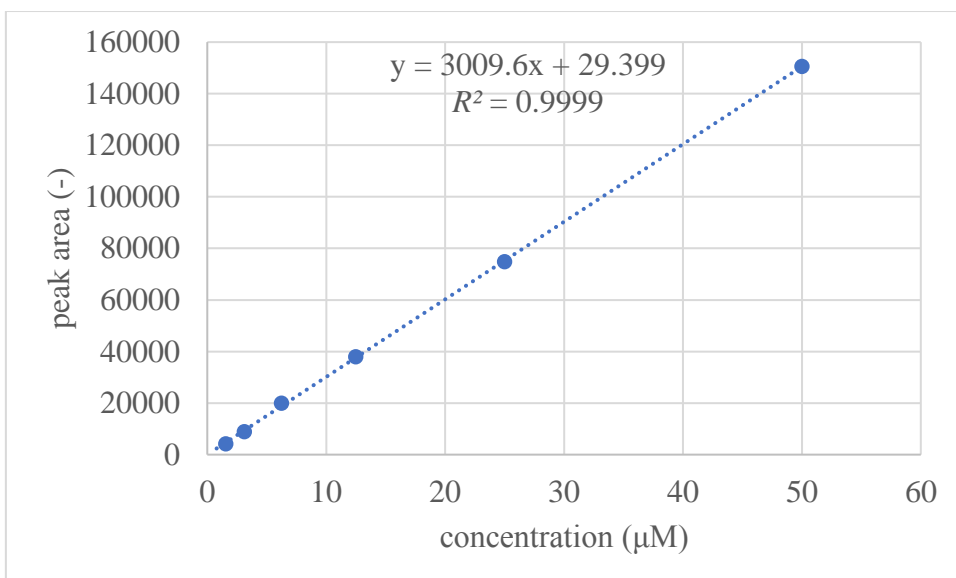


Figure S6. Calibration curve of **7** based on the HPLC analysis.

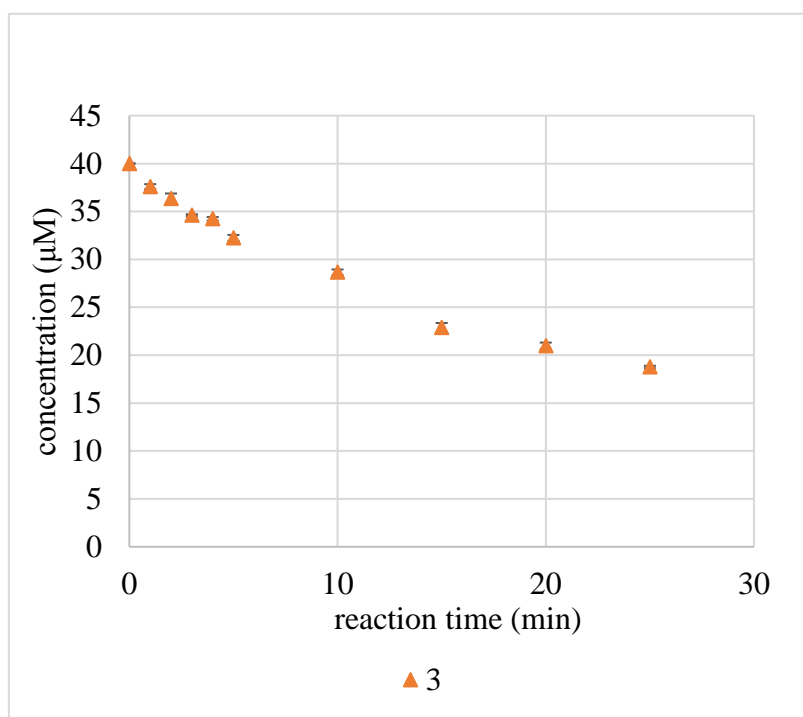


Figure S7. Time-dependent reduction profile of TEMPO *O*-galactoside **3** with 60 μL of β -galactosidase in 0.1 M PBS (pH 7.4) at 323 K. Each data represents mean \pm S.D., $n = 3$.

Table S1. Pseudo-first-order rate constants k (min^{-1}) for the initial rate of reduction of TEMPO *O*-galactoside **3** with 60 μL of β -galactosidase at 323 K, based on the Figure S7. (mean \pm S.D., $n = 3$)

Compound	k (min^{-1})	R^2
3	$4.2 \times 10^{-2} \pm 1.9 \times 10^{-3}$	0.99

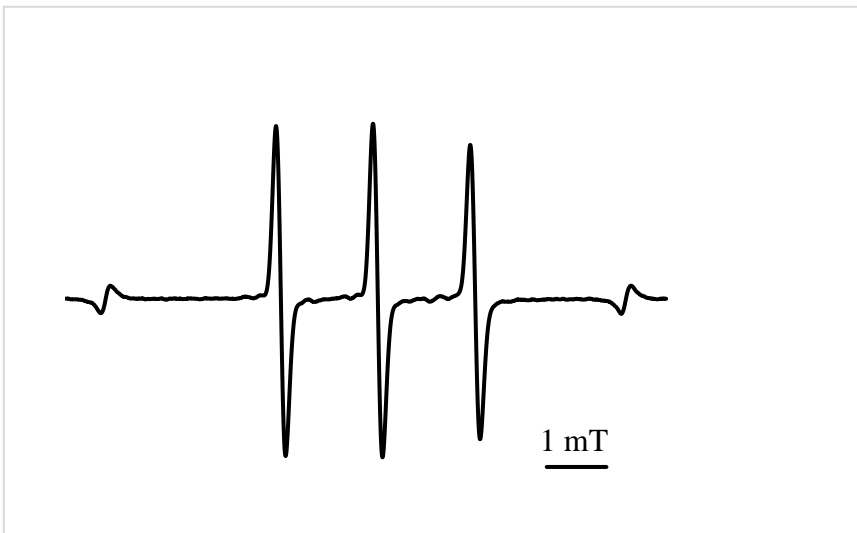


Figure S8. ESR spectrum of **2**.

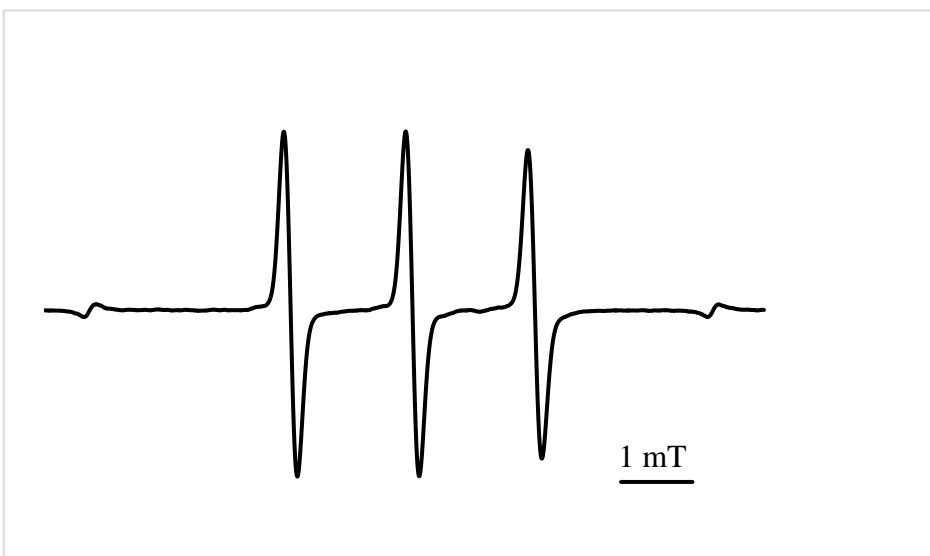


Figure 9. ESR spectrum of **3**.

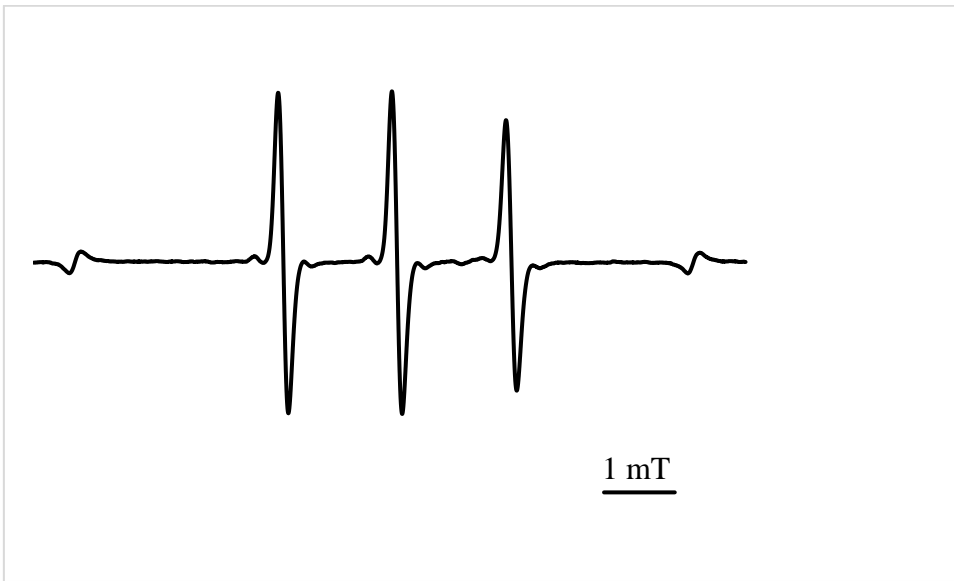


Figure 10. ESR spectrum of **4**.