### Supplementary data

# Biomimetic Synthesis of Resveratrol Trimers Catalyzed by Horseradish

### Peroxidase

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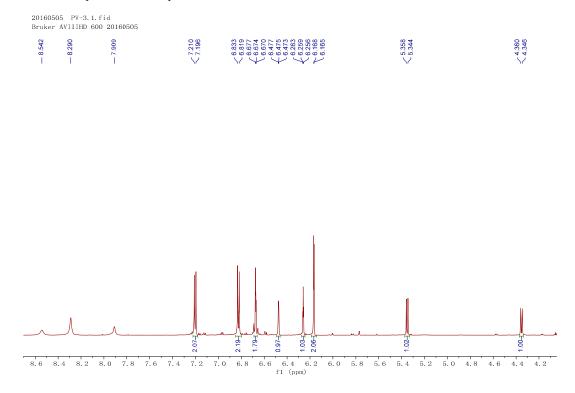
### CONTENTS

- S1. <sup>1</sup>H-NMR spectrum of compound **3** in CD<sub>3</sub>COCD<sub>3</sub>.
- S2. <sup>13</sup>C-NMR spectrum of compound **3** in CD<sub>3</sub>COCD<sub>3</sub>.
- S3. DEPT spectrum of compound **3** in CD<sub>3</sub>COCD<sub>3</sub>.
- S4. HSQC spectrum of compound 3 in CD<sub>3</sub>COCD<sub>3</sub>.
- S5. HMBC spectrum of compound **3** in CD<sub>3</sub>COCD<sub>3</sub>.
- S6. NOESY spectrum of compound 3 in CD<sub>3</sub>COCD<sub>3</sub>.
- S7. HRESIMS spectrum of compound 3.
- S8. UV spectrum of compound 3 in CH<sub>3</sub>OH.
- S9. IR spectrum of compound **3**.
- S10. <sup>1</sup>H-NMR spectrum of compound 4 in CD<sub>3</sub>OD.
- S11. <sup>13</sup>C-NMR spectrum of compound **4** in CD<sub>3</sub>OD.
- S12. DEPT spectrum of compound 4 in CD<sub>3</sub>OD.
- S13. HSQC spectrum of compound 4 in CD<sub>3</sub>OD.
- S14. HMBC spectrum of compound 4 in CD<sub>3</sub>OD.
- S15. NOESY spectrum of compound 4 in CD<sub>3</sub>OD.
- S16. COSY spectrum of compound 4 in CD<sub>3</sub>OD.
- S17. HRESIMS spectrum of compound 4.
- S18. UV spectrum of compound 4 in CH<sub>3</sub>OH.

S19. IR spectrum of compound 4.

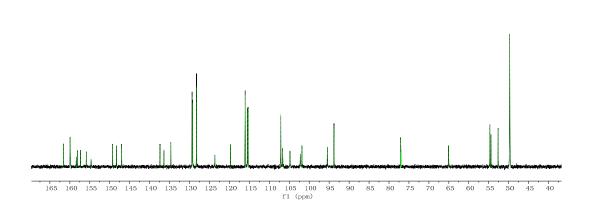
- S20. <sup>1</sup>H-NMR spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.
- S21. <sup>13</sup>C-NMR spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.
- S22. DEPT spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.
- S23. HSQC spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.
- S24. HMBC spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.
- S25. NOESY spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.
- S26. COSY spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.
- S27. HRESIMS spectrum of compound 5.
- S28. UV spectrum of compound 5 in CH<sub>3</sub>OH.
- S29. IR spectrum of compound 5.
- S30. HPLC chromatogram of biotransformation products of 1 and 2.

#### S1. <sup>1</sup>H-NMR spectrum of compound **3** in CD<sub>3</sub>COCD<sub>3</sub>.



# S2. <sup>13</sup>C-NMR spectrum of compound **3** in CD<sub>3</sub>COCD<sub>3</sub>.

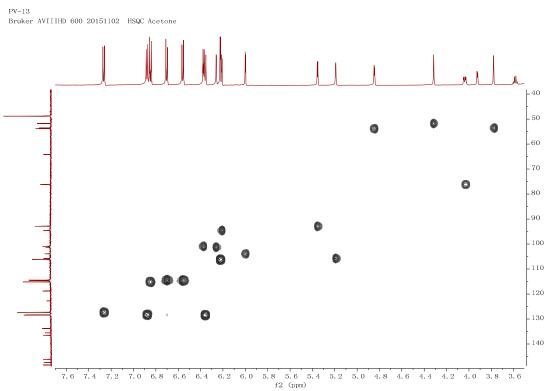
PV-13 Bruker AVIIIHD 600 20151019	C13 Acetone						
161.6 159.9 158.4 158.3 157.3 157.3 155.9 149.3 149.3 149.3	<ul> <li>137.4</li> <li>136.4</li> <li>136.4</li> <li>134.7</li> <li>134.7</li> <li>134.7</li> <li>134.7</li> <li>139.2</li> <li>129.2</li> <li>129.2</li> <li>129.2</li> <li>129.2</li> </ul>	15, 10, 23	く 107.1 く 106.7 104.8 人 101.8	- 95.4 - 93.8	< 77.1 77.0	- 65.1	54.7 54.5 7 52.6 - 49.7



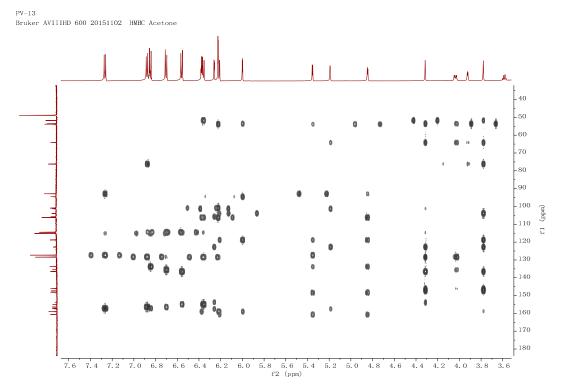
### S3. DEPT spectrum of compound 3 in CD<sub>3</sub>COCD<sub>3</sub>.

PV-13 Bruker AVIIIHD 600 20151022 DEPT Acetone Lliu П 165 160 155 150 145 140 135 130 125 120 115 110 105 100 95 f1 (ppm) 

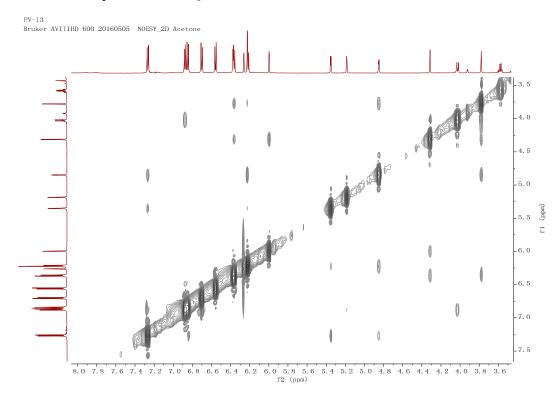
# S4. HSQC spectrum of compound 3 in CD<sub>3</sub>COCD<sub>3</sub>.



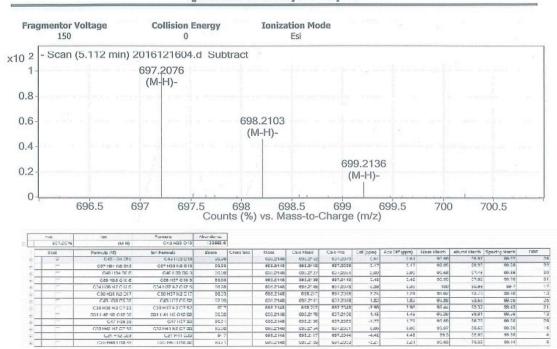
### S5. HMBC spectrum of compound 3 in CD<sub>3</sub>COCD<sub>3</sub>.



S6. NOESY spectrum of compound 3 in CD<sub>3</sub>COCD<sub>3</sub>.

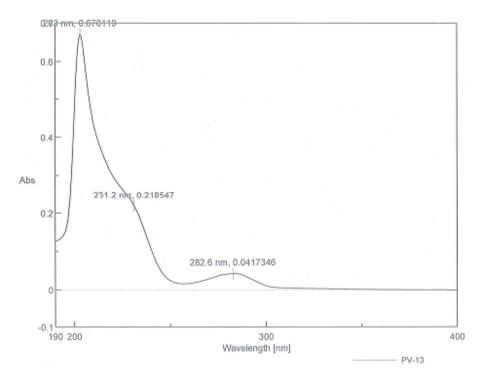


### S7. HRESIMS spectrum of compound 3.

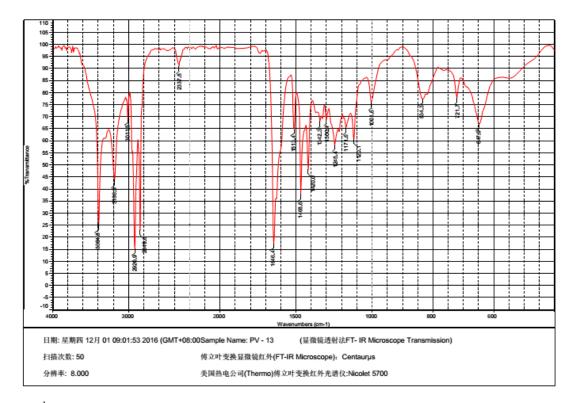


### **Qualitative Analysis Report**

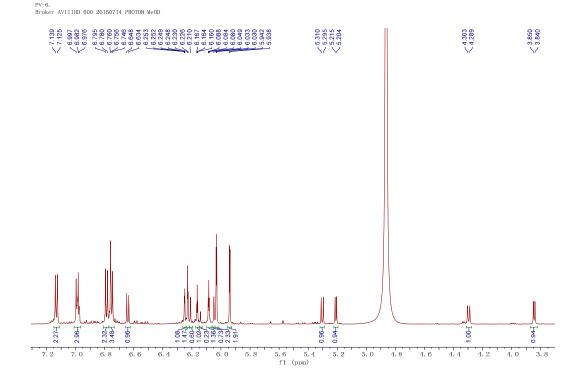
S8. UV spectrum of compound 3 in CH<sub>3</sub>OH.



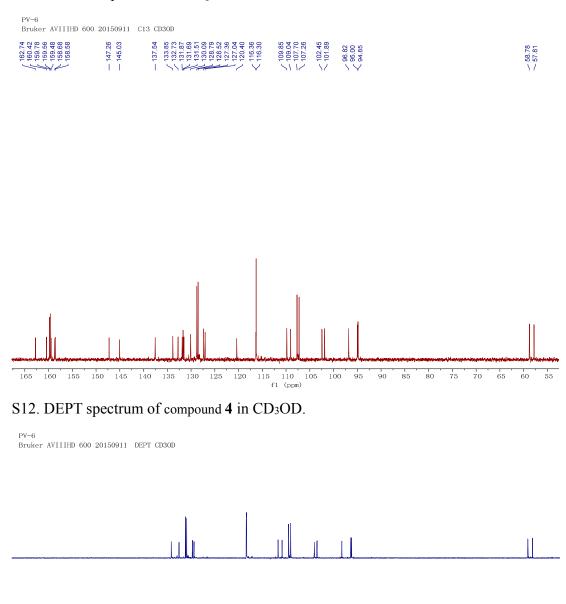
S9. IR spectrum of compound **3**.

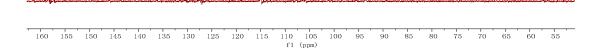


# S10. <sup>1</sup>H-NMR spectrum of compound 4 in CD<sub>3</sub>OD.

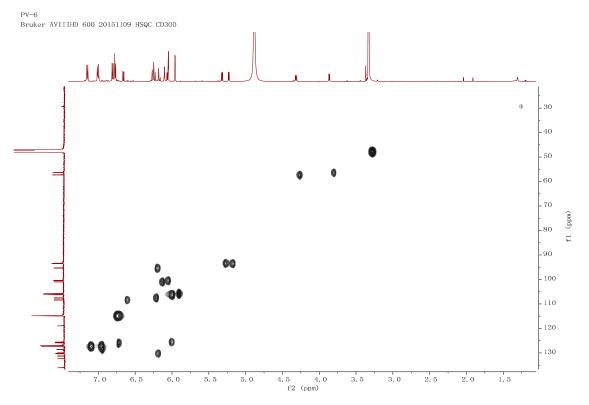


S11.<sup>13</sup>C-NMR spectrum of compound **4** in CD<sub>3</sub>OD.

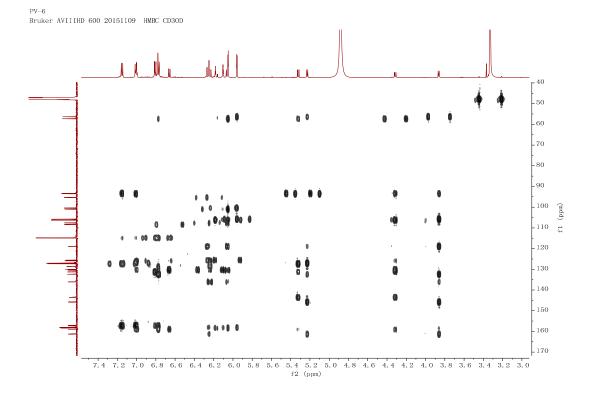




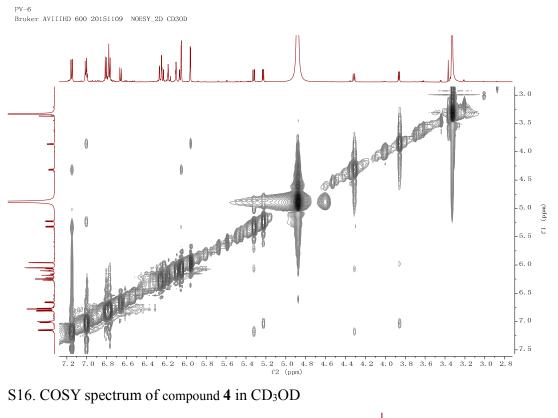
# S13. HSQC spectrum of compound 4 in CD<sub>3</sub>OD.

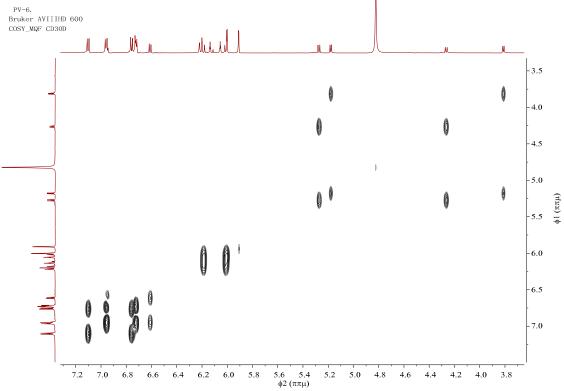


S14. HMBC spectrum of compound 4 in CD<sub>3</sub>OD.

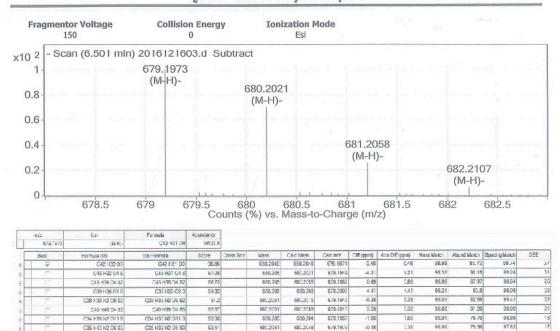


### S15. NOESY spectrum of compound 4 in CD<sub>3</sub>OD.



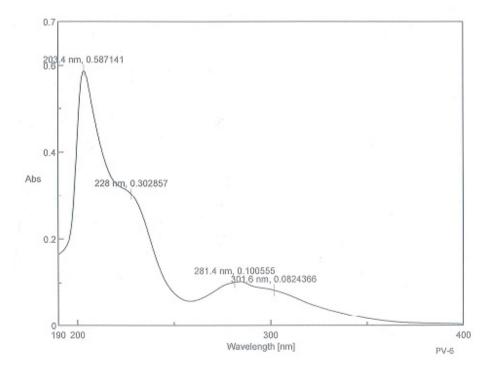


### S17. HRESIMS spectrum of compound 4.

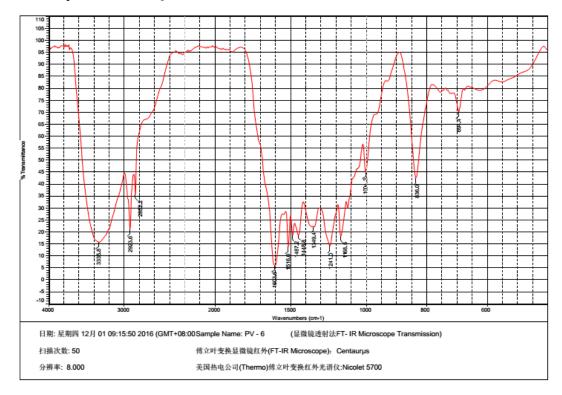


# **Qualitative Analysis Report**

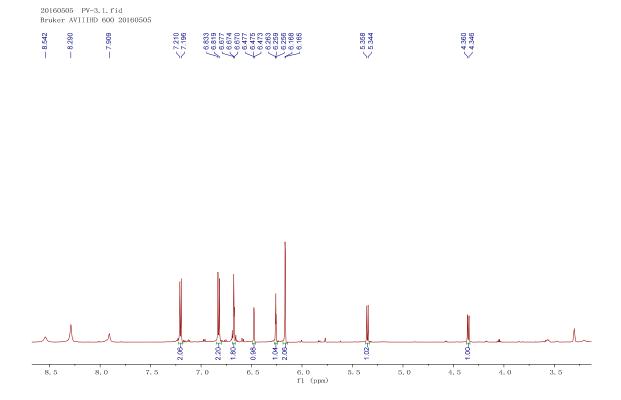
S18. UV spectrum of compound 4 in CH<sub>3</sub>OH.

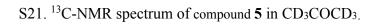


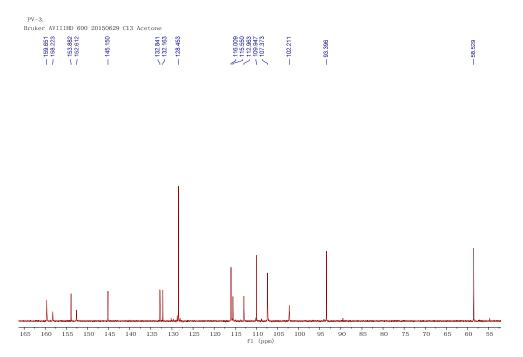
S19. IR spectrum of compound 4.



# S20. <sup>1</sup>H-NMR spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.

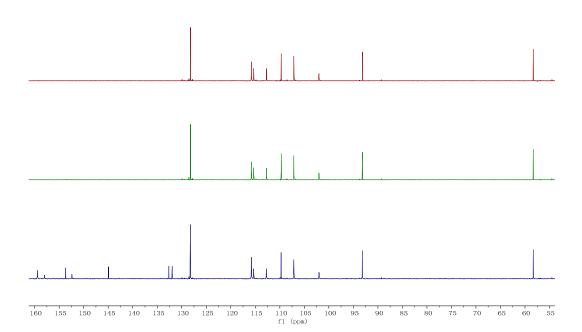




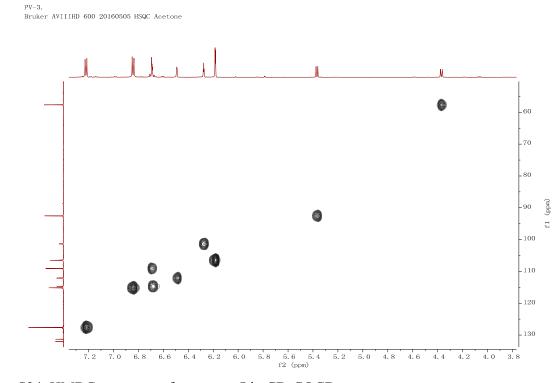


### S22. DEPT spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.

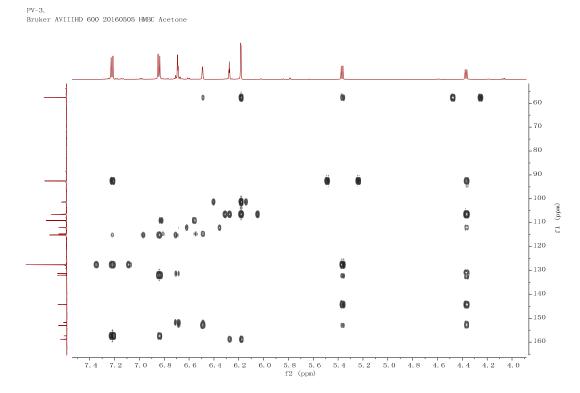
PV-3 Bruker AVIIIHD 600 20160505 DEPT Acetone



### S23. HSQC spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.

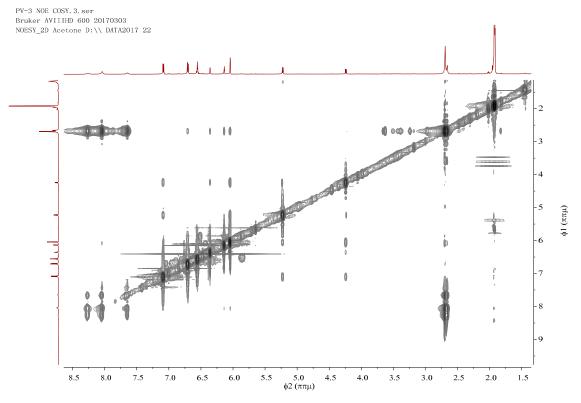


S24. HMBC spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.



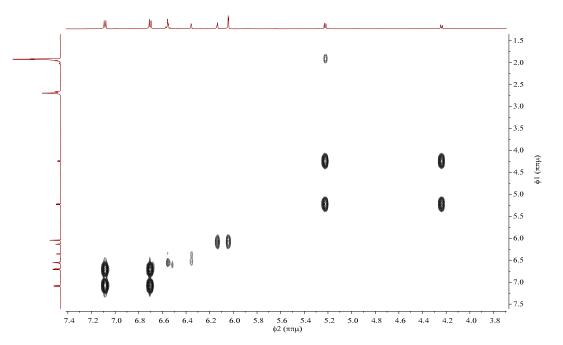
13

### S25. NOESY spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.

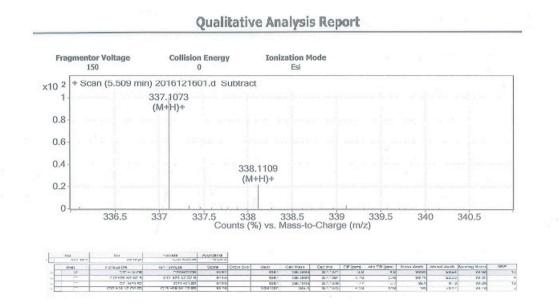


S26. COSY spectrum of compound 5 in CD<sub>3</sub>COCD<sub>3</sub>.

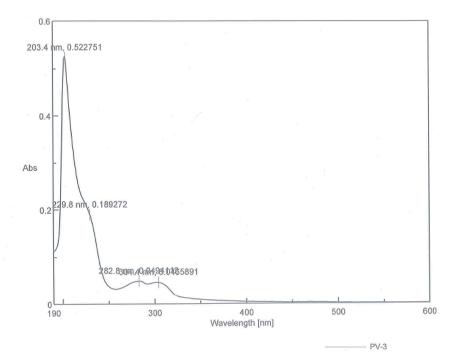




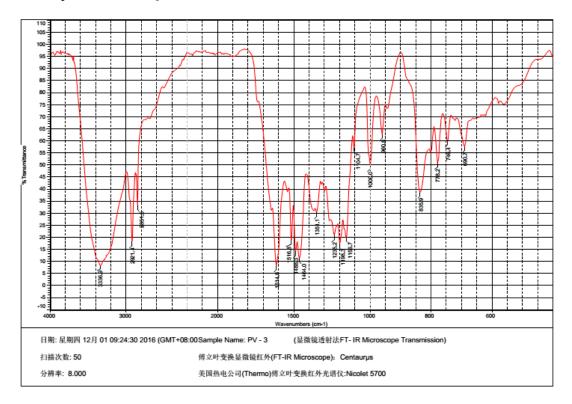
### S27. HRESIMS spectrum of compound 5.



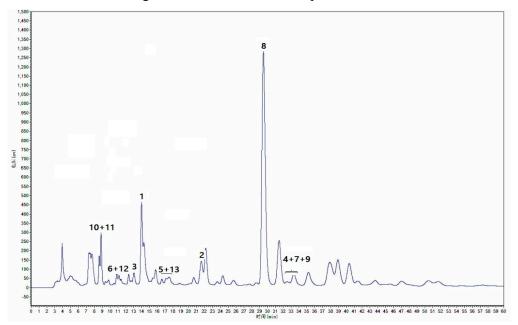
S28. UV spectrum of compound **5** in CH<sub>3</sub>OH.



S29. IR spectrum of compound 5.



S30. HPLC chromatogram of biotransformation products of 1 and 2.



Analysis of biotransformation products of 1 and 2 catalyzed by HRP/H<sub>2</sub>O<sub>2</sub>. (40% CH<sub>3</sub>CN/H<sub>2</sub>O,  $\lambda$  = 280 nm, 2 mL/min, YMC column packed with C18, 250 mm × 10 mm)