# SUPPLEMENTARY MATERIAL

## Catalogue

| Figure | Description | Page |
|--------|-------------|------|
| S1 | $^1$H NMR (600 MHz, DMSO-$d_6$) spectrum of the new compound 1 | 1 |
| S2 | $^{13}$C NMR (150 MHz, DMSO-$d_6$) spectrum of the new compound 1 | 1 |
| S3 | HSQC spectrum of the new compound 1 | 2 |
| S4 | HMBC spectrum of the new compound 1 | 2 |
| S5 | $^1$H-$^1$H COSY spectrum of the new compound 1 | 3 |
| S6 | NOESY spectrum of the new compound 1 | 3 |
| S7 | Enlarged NOESY spectrum of the new compound 1 | 4 |
| S8 | HRESIMS spectrum of the new compound 1 | 4 |
| S9 | The chromatogram of the glucose standard and hydrolyzation product of 1 | 5 |
| S10 | $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 2 | 5 |
| S11 | $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 2 | 6 |
| S12 | HSQC spectrum of the new compound 2 | 6 |
| S13 | HMBC spectrum of the new compound 2 | 7 |
| S14 | $^1$H-$^1$H COSY spectrum of the new compound 2 | 7 |
| S15 | NOESY spectrum of the new compound 2 | 8 |
| S16 | Enlarged NOESY spectrum of the new compound 2 | 8 |
| S17 | HRESIMS spectrum of the new compound 2 | 9 |
| S18 | The chromatogram of the glucose standard and hydrolyzation product of 2 | 9 |
| S19 | $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 3 | 10 |
| S20 | $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 3 | 10 |
| S21 | HSQC spectrum of the new compound 3 | 11 |
| S22 | HMBC spectrum of the new compound 3 | 11 |
| S23 | $^1$H-$^1$H COSY spectrum of the new compound 3 | 12 |
| S24 | NOESY spectrum of the new compound 3 | 12 |
| S25 | Enlarged NOESY spectrum of the new compound 3 | 13 |
| S26 | HRESIMS spectrum of the new compound 3 | 13 |
| S27 | The chromatogram of the glucose standard and hydrolyzation product of 3 | 14 |
| S28 | $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 4 | 14 |
| S29 | $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 4 | 15 |
| S30 | HSQC spectrum of the new compound 4 | 15 |
| S31 | HMBC spectrum of the new compound 4 | 16 |
| S32 | NOESY spectrum of the new compound 4 | 16 |
| S33 | HRESIMS spectrum of the new compound 4 | 17 |
| S34 | $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 5 | 17 |
| S35 | $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 5 | 18 |
| S36 | HSQC spectrum of the new compound 5 | 18 |
| S37 | HMBC spectrum of the new compound 5 | 19 |
| S38 | NOESY spectrum of the new compound 5 | 19 |
| S39 | HRESIMS spectrum of the new compound 5 | 20 |
Figure S1. $^1$H NMR (600 MHz, DMSO-$d_6$) spectrum of the new compound 1.

Figure S2. $^{13}$C NMR (150 MHz, DMSO-$d_6$) spectrum of the new compound 1.
Figure S3. HSQC spectrum of the new compound 1.

Figure S4. HMBC spectrum of the new compound 1.
Figure S5. $^1$H-$^1$H COSY spectrum of the new compound 1.

Figure S6. NOESY spectrum of the new compound 1.
Figure S7. Enlarged NOESY spectrum of the new compound 1.

Figure S8. HRESIMS spectrum of the new compound 1.
Figure S9. The chromatogram of the glucose standard and hydrolyzation product of 1.

Figure S10. $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 2.
Figure S11. $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 2.

Figure S12. HSQC spectrum of the new compound 2.  

6
Figure S13. HMBC spectrum of the new compound 2.

Figure S14. $^1$H-$^1$H COSY spectrum of the new compound 2.
Figure S15. NOESY spectrum of the new compound 2.

Figure S16. Enlarged NOESY spectrum of the new compound 2.
Figure S17. HRESIMS spectrum of the new compound 2.

Figure S18. The chromatogram of the glucose standard and hydrolyzation product of 2.
Figure S19. $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 3.

Figure S20. $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 3.
Figure S21. HSQC spectrum of the new compound 3.

Figure S22. HMBC spectrum of the new compound 3.
Figure S23. $^1\text{H}-^1\text{H}$ COSY spectrum of the new compound 3.

Figure S24. NOESY spectrum of the new compound 3.
Figure S25. Enlarged NOESY spectrum of the new compound 3.

Figure S26. HRESIMS spectrum of the new compound 3.
Figure S27. The chromatogram of the glucose standard and hydrolyzation product of 3.

Figure S28. $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 4.
Figure S29. $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 4.

Figure S30. HSQC spectrum of the new compound 4.
Figure S31. HMBC spectrum of the new compound 4.

Figure S32. NOESY spectrum of the new compound 4.
Figure S33. HRESIMS spectrum of the new compound 4.

Figure S34. $^1$H NMR (600 MHz, CD$_3$OD) spectrum of the new compound 5.
Figure S35. $^{13}$C NMR (150 MHz, CD$_3$OD) spectrum of the new compound 5.

Figure S36. HSQC spectrum of the new compound 5.
Figure S37. HMBC spectrum of the new compound 5.

Figure S38. NOESY spectrum of the new compound 5.
Figure S39. HRESIMS spectrum of the new compound 5.