Supplementary Data

Synthesis, characterization and biological studies of diosgenyl analogs

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Compound **3b**:

Fig.S1. ¹H and ¹³C NMR spectra of compound **3b**

Compound **5b**:

Fig.S2. ¹H and ¹³C NMR spectra of compound **5b**

Compound **6b**:

Fig.S3. ¹H and ¹³C NMR spectra of compound **6b**

Compound **3c**:

Fig.S4. ¹H and ¹³C NMR spectra of compound **3c**

Compound 5c:

Fig.S5. ¹H and ¹³C NMR spectra of compound 5c

Compound 6c:

Fig.S6. ¹H and ¹³C NMR spectra of compound 6c

Compound 3:

Fig.S7. ¹H and ¹³C NMR spectra of compound 3

Compound 5:

Fig.S8. ¹H and ¹³C NMR spectra of compound 5

Compound 6:

Fig.S9. ¹H and ¹³C NMR spectra of compound 6

Compound **7a**:

Fig.S10. ¹H and ¹³C NMR spectra of compound **7a**

Compound **8a**:

Fig.S11. ¹H and ¹³C NMR spectra of compound **8a**

Compound 11a:

Fig.S13. ¹H and ¹³C NMR spectra of compound 11a

Compound 7:

Fig.S14. ¹H and ¹³C NMR spectra of compound 7

Compound **8**:

Fig.S15. ¹H and ¹³C NMR spectra of compound **8**

Compound **11**:

Fig.S17. ^1H and ^{13}C NMR spectra of compound **11**

Compound **12**:

Fig.S18. ^1H and ^{13}C NMR spectra of compound **12**

Compound 13:

Fig.S19. ¹H and ¹³C NMR spectra of compound 13

Compound **14a**:

Fig. S20. ¹H and ¹³C NMR spectra of compound **14a**

Compound **15a**:

Fig. S21. ¹H and ¹³C NMR spectra of compound **15a**

Compound 16a:

16a ¹H NMR CDCl₃ 2013.10.16

16a ¹³C NMR CDCl₃ 2013.10.16

Fig. S22. ¹H and ¹³C NMR spectra of compound 16a

Compound **17a**:

Fig. S23. ¹H and ¹³C NMR spectra of compound **17a**

Compound **14**:

Fig. S24. ¹H and ¹³C NMR spectra of compound **14**

Compound **15**:

Fig. S25. ¹H and ¹³C NMR spectra of compound **15**

Compound **16**:

Fig. S26. ¹H and ¹³C NMR spectra of compound **16**

Compound **17**:

Fig. S27. ^1H and ^{13}C NMR spectra of compound **17**

Compound 21:

Fig. S28. ^1H and ^{13}C NMR spectra of compound 21

Compound **22**:

Fig. S29. ¹H and ¹³C NMR spectra of compound **22**

Compound 23:

Fig. S30. ¹H and ¹³C NMR spectra of compound 23

Compound 24:

24 ¹H NMR CDCl₃ 2013.12.04

24 ¹³C NMR CDCl₃ 2013.12.04

Fig. S31. ¹H and ¹³C NMR spectra of compound 24

Compound **27**:

27 ¹H NMR CDCl₃ 2014.04.16

27 ¹³C NMR CDCl₃ 2014.04.16

Fig. S32. ¹H and ¹³C NMR spectra of compound **27**

Compound 28:

Fig. S33. ¹H and ¹³C NMR spectra of compound 28

Compound **29**:

Fig. S34. ¹H and ¹³C NMR spectra of compound **29**

Compound **30**:

Fig. S35. ^1H spectra of compound **30**

Compound **32**:

Fig. S36. ¹H and ¹³C NMR spectra of compound **32**