## SUPPLEMENTARY DATA

Figure S1. Variable temperature <sup>1</sup>H-NMR spectra of compound 1 (500 MHz, DMSO- $d_{\delta}$ ) showing *ap/sp* isomerisation of the amide bond.



**Figure S2.** <sup>1</sup>H-NMR spectra of compound **1** in DMSO- $d_6$  (A) and CDCl<sub>3</sub> (B) (400 MHz).







Figure S4. HMBC spectra of compound 1.



## Figure S5. NOESY spectra of compound 1.

Figure S6. Variable temperature <sup>1</sup>H-NMR spectra of compound **2a** (500 MHz, DMSO- $d_{\delta}$ ) showing *ap/sp* isomerisation of the amide bond.





293.15K



Figure S7. <sup>13</sup>C NMR and APT spectra of compound 2a in DMSO- $d_6$  (75 MHz).



Figure S8. HMBC spectra of compound 2a.







**Figure S10.** Variable temperature <sup>1</sup>H-NMR spectra of compound **2c** (500 MHz, DMSO- $d_6$ ) showing *ap/sp* isomerisation of the amide bond.

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Figure S11. <sup>13</sup>C-NMR and APT spectra of compound 2c in DMSO- $d_6$  (75 MHz).

![](_page_11_Figure_0.jpeg)

Figure S12. HMBC spectra of compound 2c.

![](_page_12_Figure_0.jpeg)

Figure S14. HMBC spectra of compound 2d.

![](_page_13_Figure_1.jpeg)

![](_page_14_Figure_0.jpeg)

Figure S15. <sup>1</sup>H- and <sup>13</sup>C-NMR spectra of compound **3a** in DMSO- $d_6$  (300/75 MHz).

![](_page_15_Figure_0.jpeg)

Figure S16. <sup>1</sup>H-NMR and DEPTQ spectra of compound 12 in DMSO- $d_6(400/125$  MHz).