

## Supplementary materials

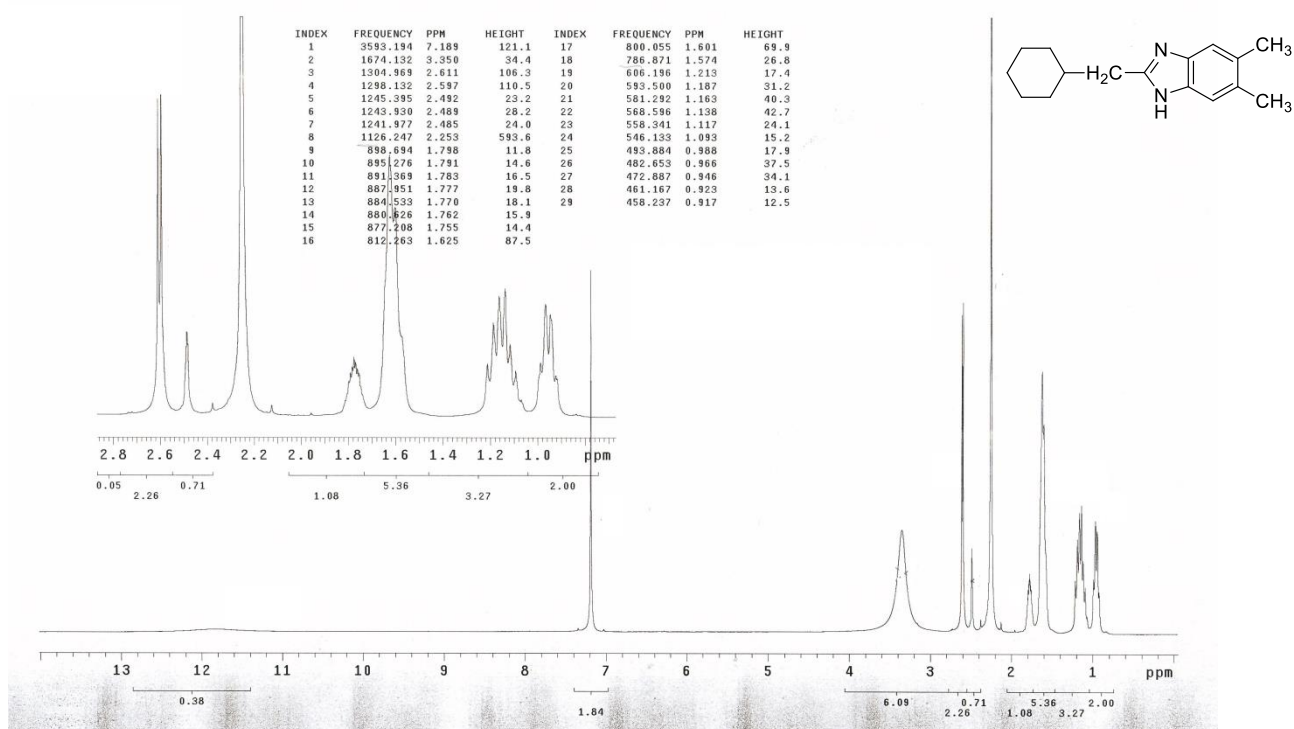


Figure S1. <sup>1</sup>H-NMR of compound 2 (500 MHz, DMSO-*d*<sub>6</sub>)

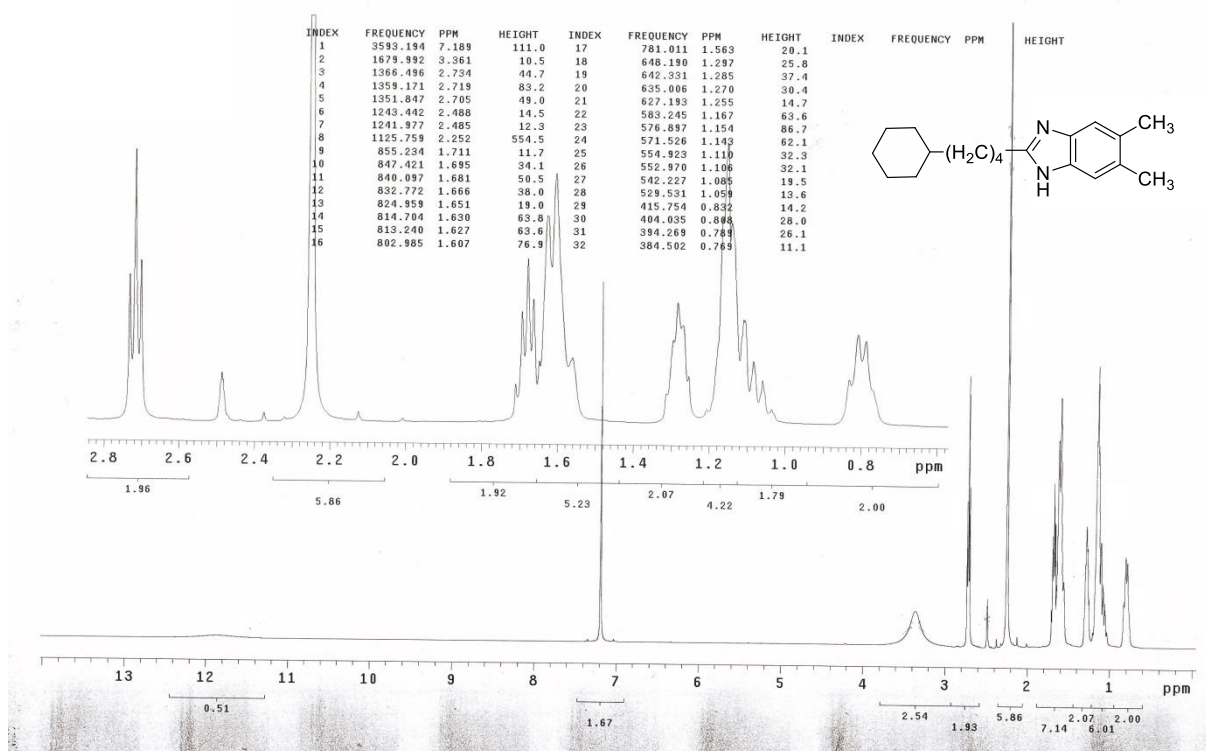
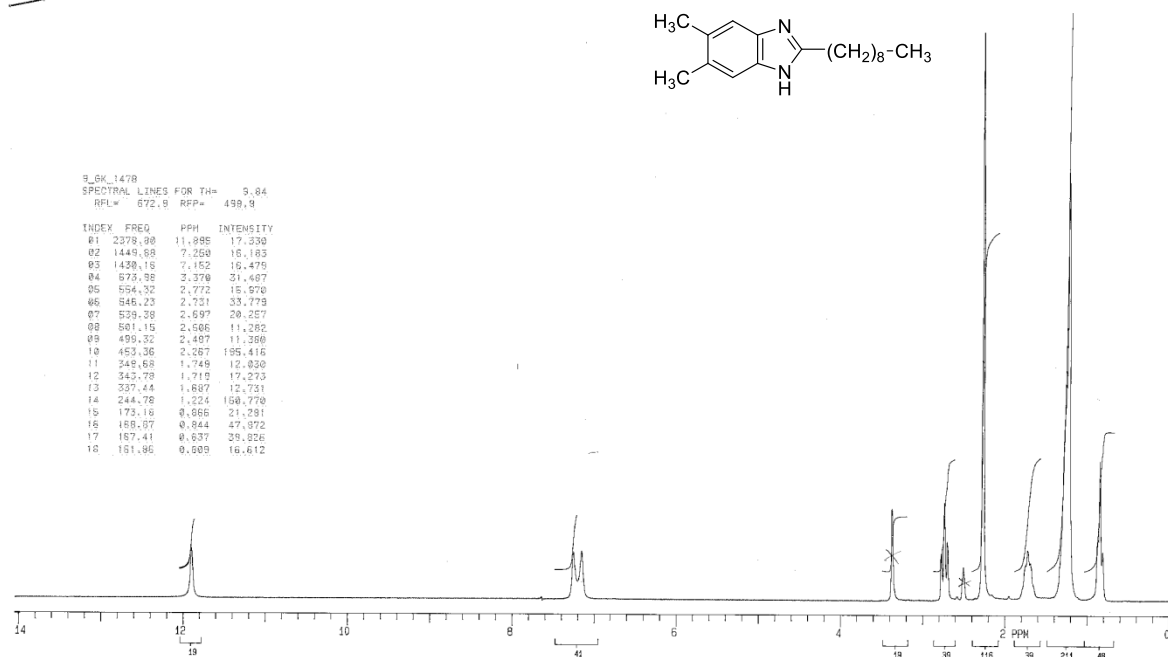
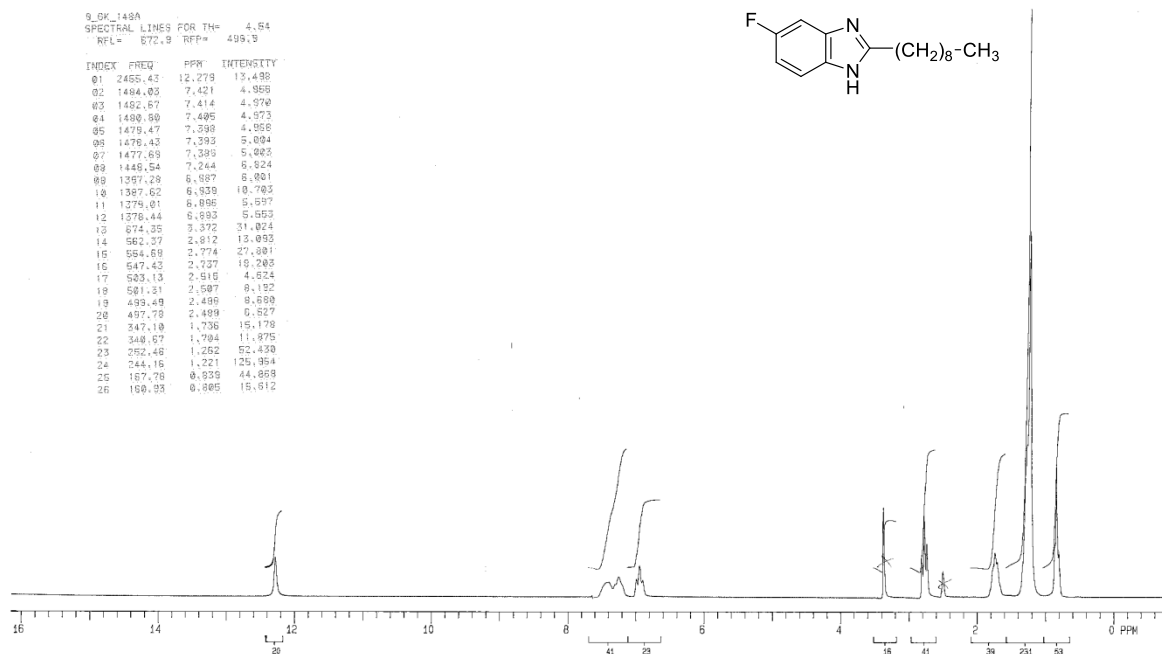


Figure S2. <sup>1</sup>H-NMR of compound 3 (500 MHz, DMSO-*d*<sub>6</sub>)



**Figure S3**  $^1\text{H-NMR}$  of compound **4** (200 MHz,  $\text{DMSO-d}_6$ )



**Figure S4**  $^1\text{H-NMR}$  of compound **6** (200 MHz,  $\text{DMSO-d}_6$ )

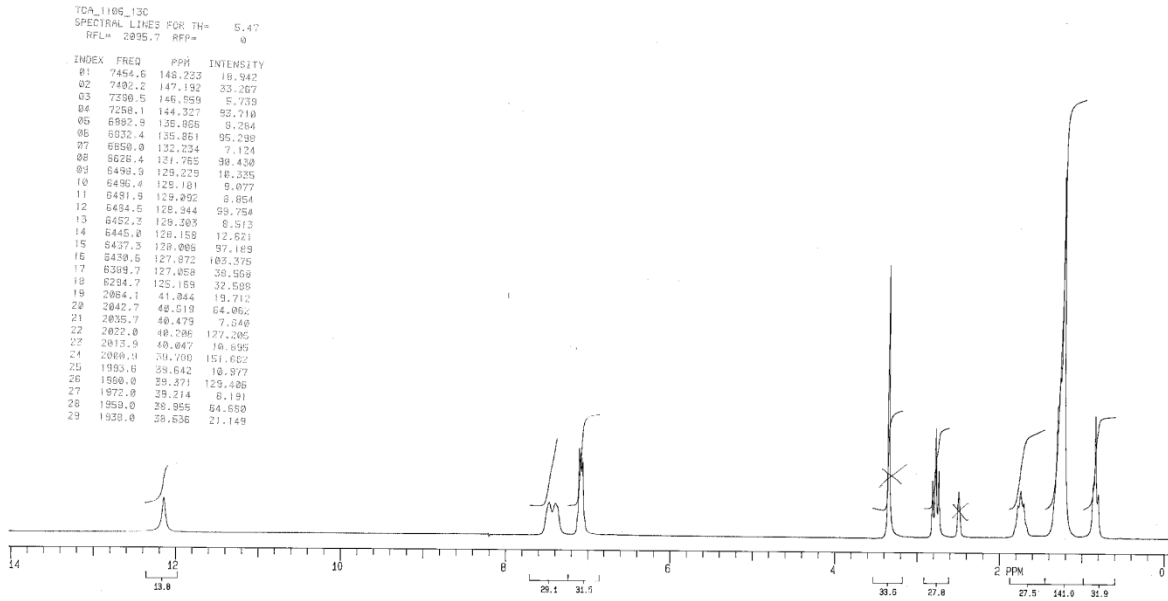
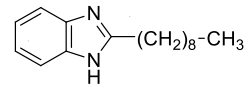


Figure S5 <sup>1</sup>H-NMR of compound **8** (200 MHz, DMSO-*d*<sub>6</sub>)

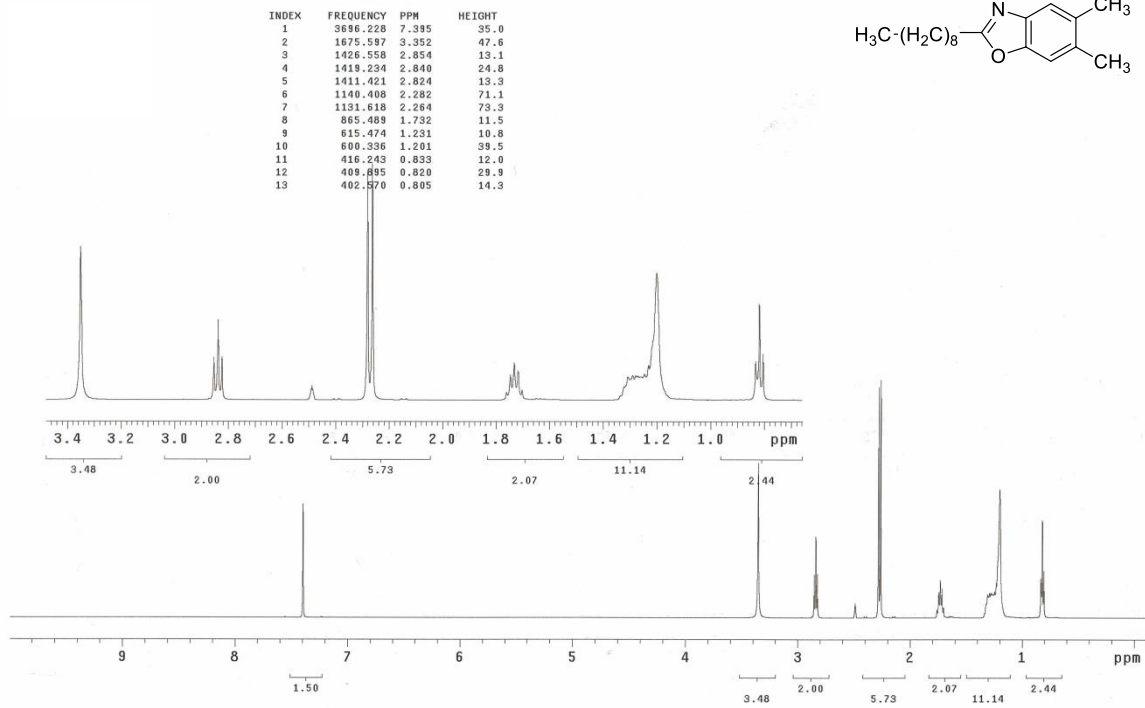
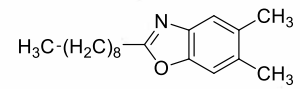


Figure S6. <sup>1</sup>H-NMR of compound **10** (500 MHz, DMSO-*d*<sub>6</sub>)

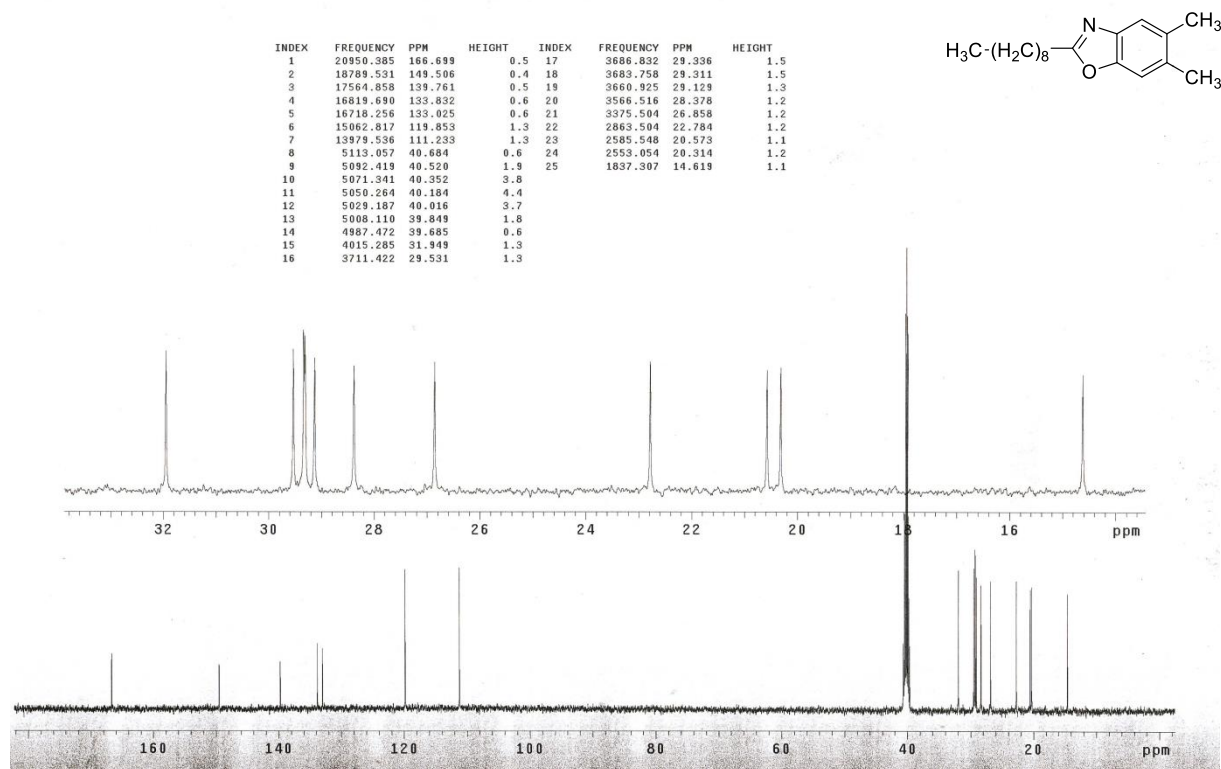


Figure S7. <sup>13</sup>C-NMR of compound 10 (500 MHz, DMSO-*d*<sub>6</sub>)

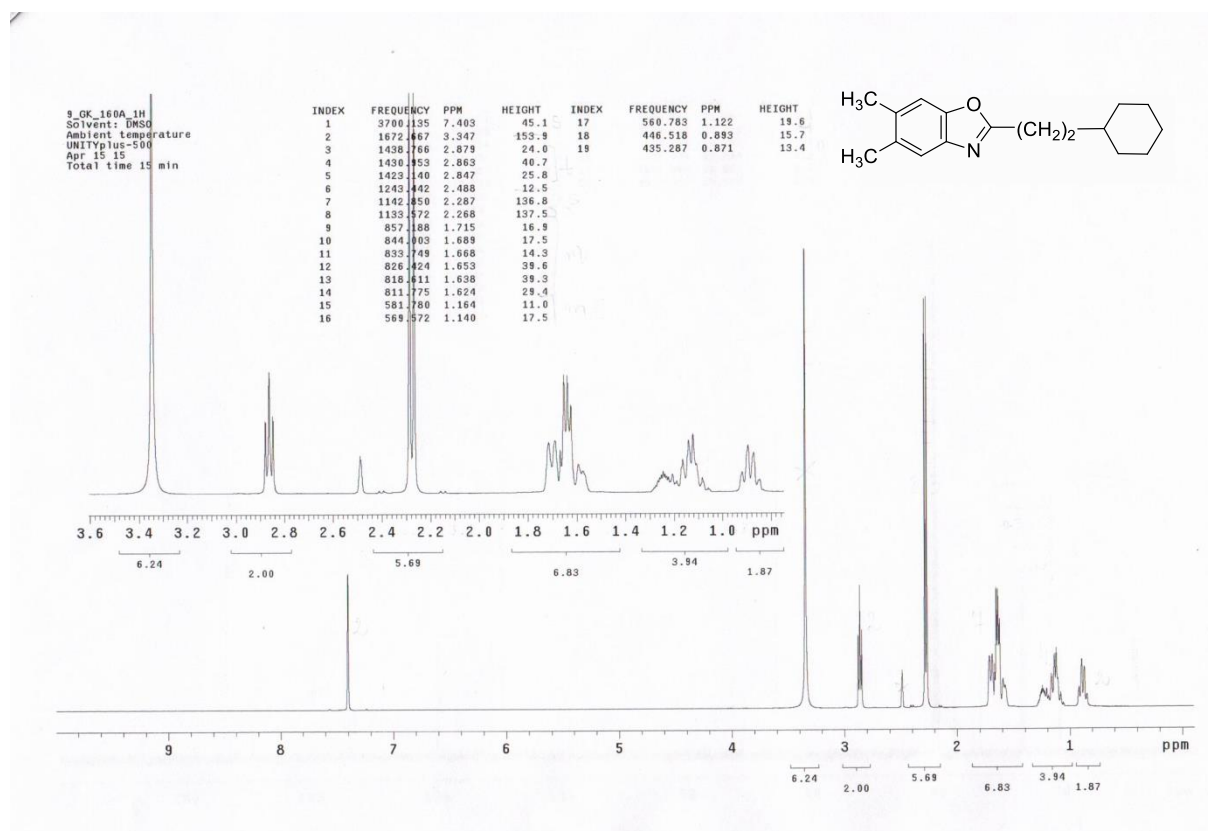


Figure S8. <sup>1</sup>H-NMR of compound 11 (500 MHz, DMSO-*d*<sub>6</sub>)

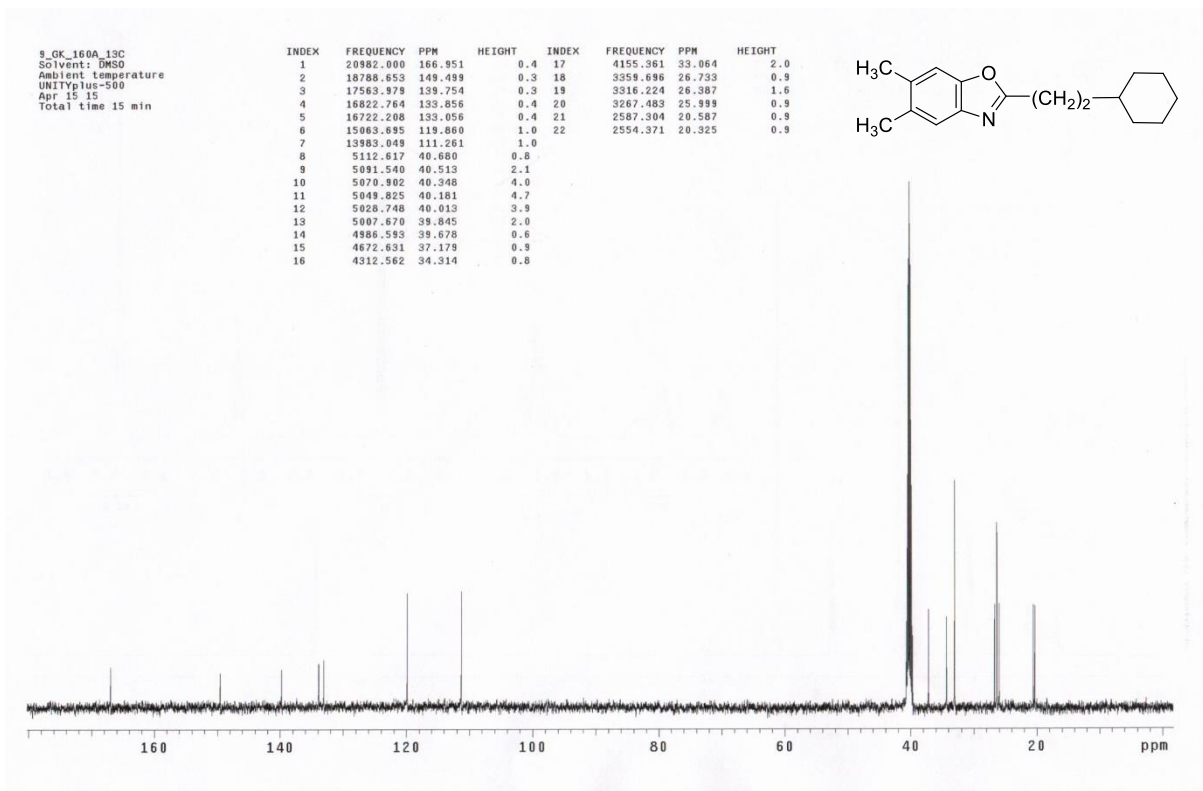


Figure S9.  $^{13}\text{C}$ -NMR of compound **11** (500 MHz, DMSO- $d_6$ )

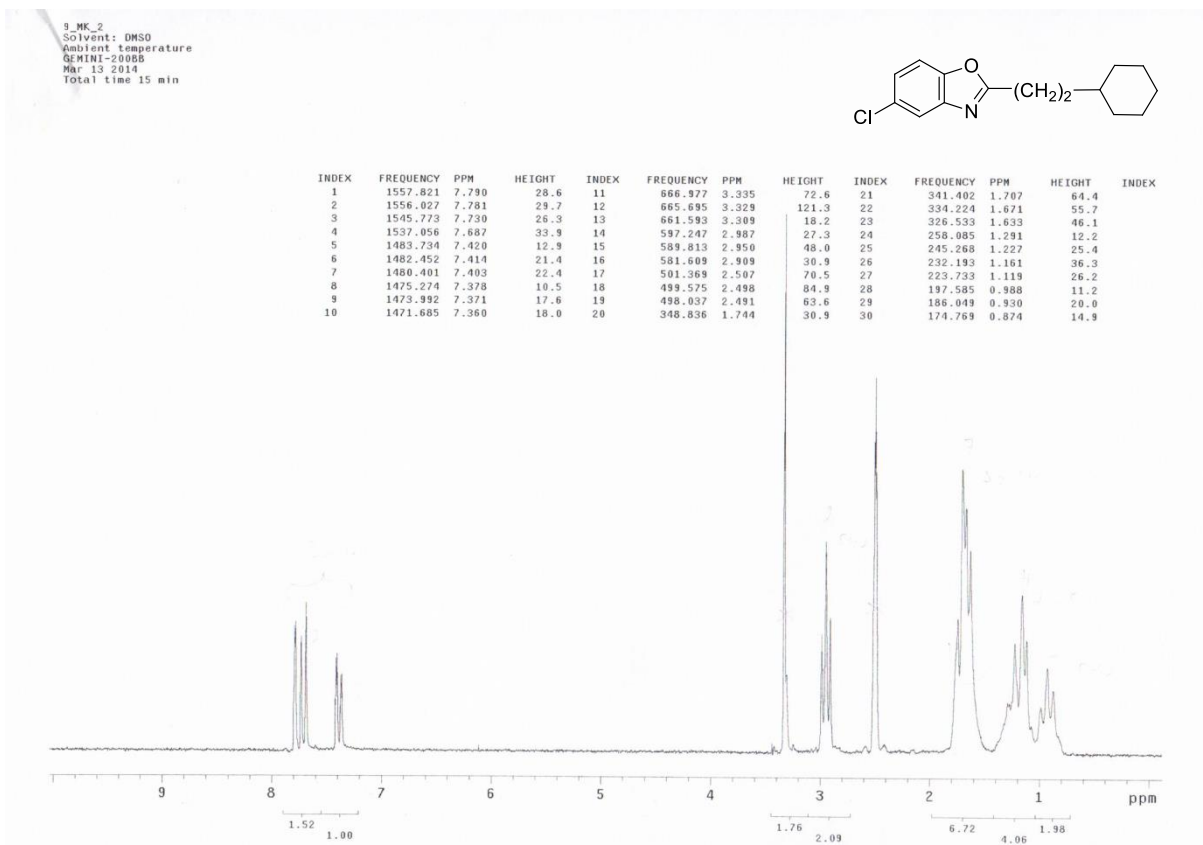
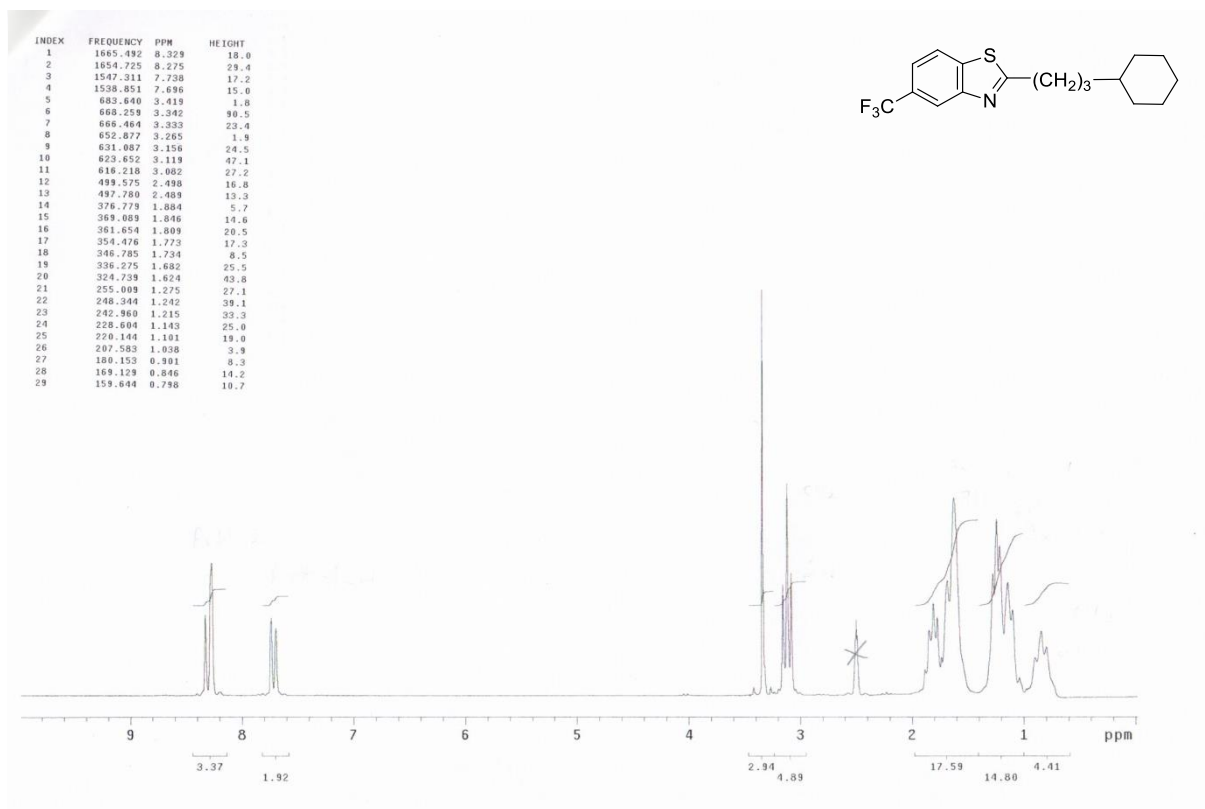
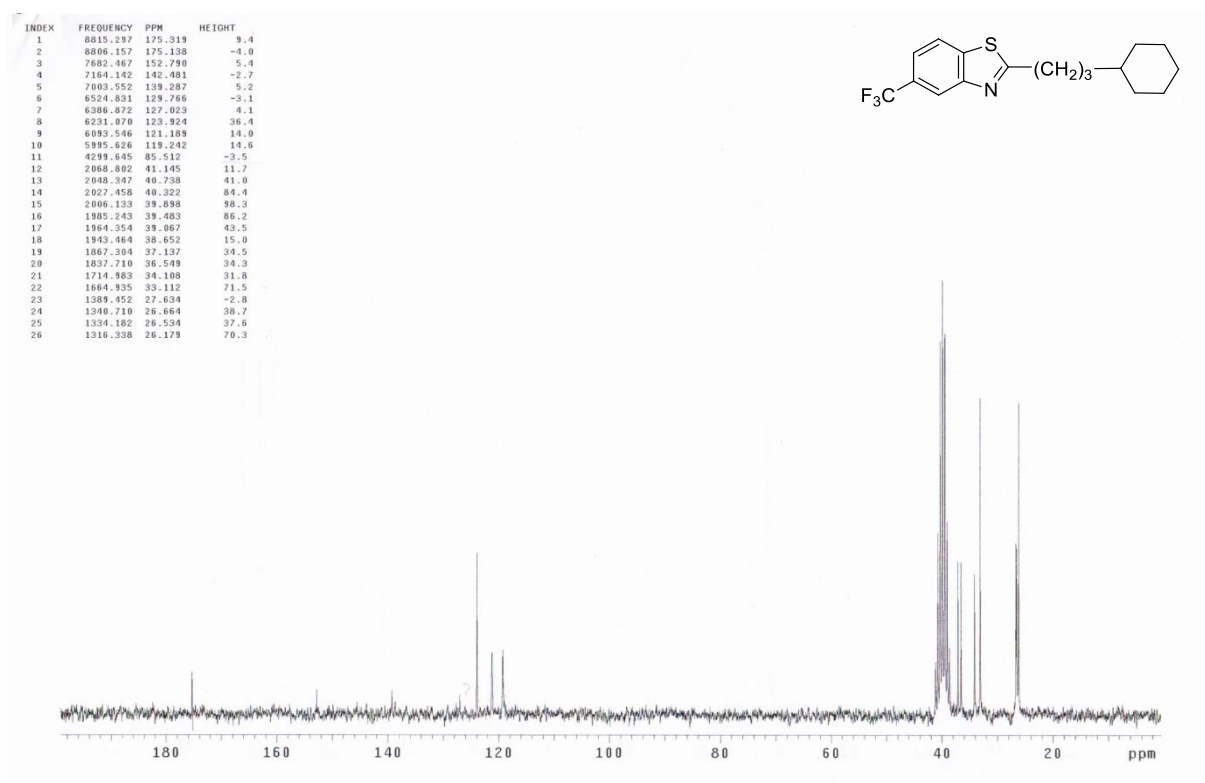


Figure S10.  $^1\text{H}$ -NMR of compound **12** (500 MHz, DMSO- $d_6$ )



**Figure S11.**  $^1\text{H-NMR}$  of compound **16** (500 MHz,  $\text{DMSO-}d_6$ )



**Figure S12.**  $^{13}\text{C-NMR}$  of compound **16** (500 MHz,  $\text{DMSO-}d_6$ )

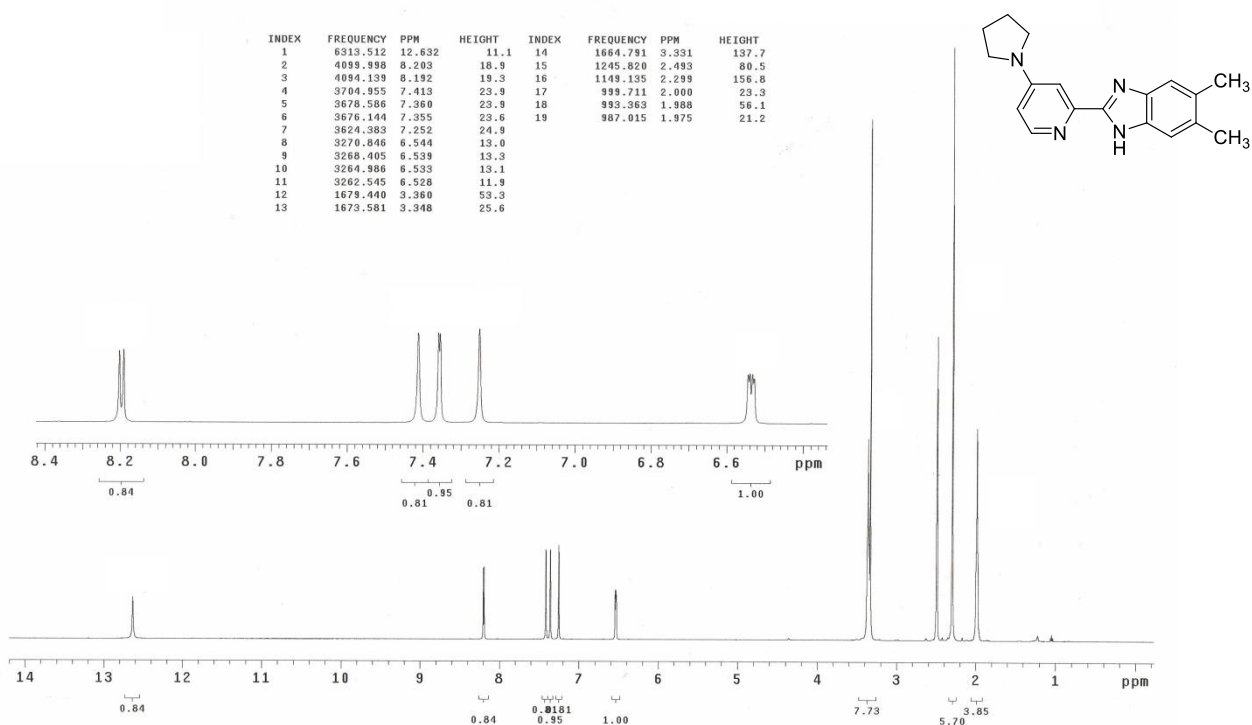


Figure S13. <sup>1</sup>H-NMR of compound 18 (500 MHz, DMSO-*d*<sub>6</sub>)

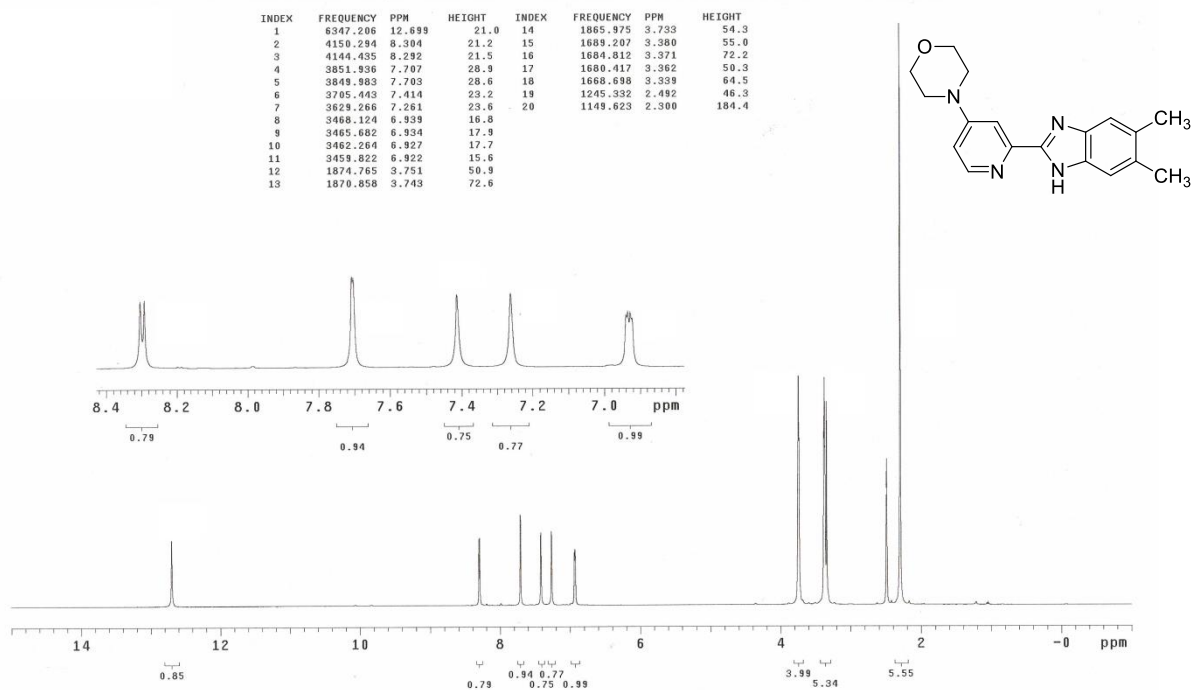


Figure S14. <sup>1</sup>H-NMR of compound 19 (500 MHz, DMSO-*d*<sub>6</sub>)