

## Supplementary Information

**Figure S1.**  $^1\text{H}$  NMR spectrum of nocapyrone R (**1**) at 500 MHz in  $\text{CDCl}_3$ .

**Figure S2.**  $^{13}\text{C}$  NMR spectrum of nocapyrone R (**1**) at 100 MHz in  $\text{CDCl}_3$ .

**Figure S3.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of nocapyrone R (**1**) at 500 MHz in  $\text{CDCl}_3$ .

**Figure S4.** HSQC spectrum of nocapyrone R (**1**) at 500 MHz in  $\text{CDCl}_3$ .

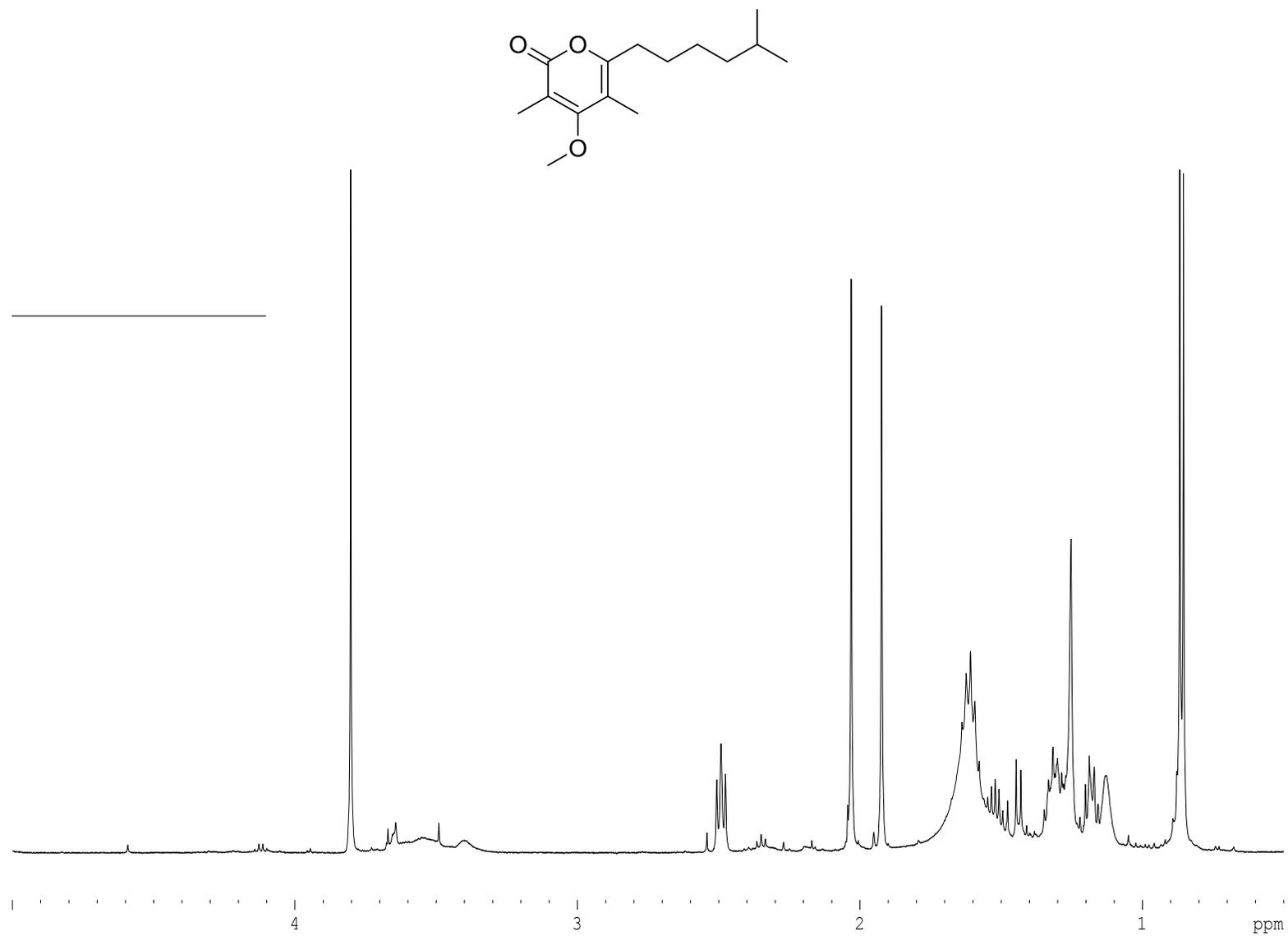
**Figure S5.** HMBC spectrum of nocapyrone R (**1**) at 500 MHz in  $\text{CDCl}_3$ .

**Figure S6.**  $^1\text{H}$  NMR spectrum of *nat*-**5**-(*R*)-2A1P at 500 MHz in  $\text{CDCl}_3$ .

**Figure S7.**  $^1\text{H}$  NMR spectrum of standard (*S*)-**5**-(*S*)-2A1P at 500 MHz in  $\text{CDCl}_3$ .

**Figure S8.**  $^1\text{H}$  NMR spectrum of standard (*S*)-**5**-(*R*)-2A1P at 500 MHz in  $\text{CDCl}_3$ .

**Figure S1.**  $^1\text{H}$  NMR spectrum of nocapyrone R (**1**) at 500 MHz in  $\text{CDCl}_3$ .



**Figure S2.**  $^{13}\text{C}$  NMR spectrum of nocapyrone R (1) at 100 MHz in  $\text{CDCl}_3$ .

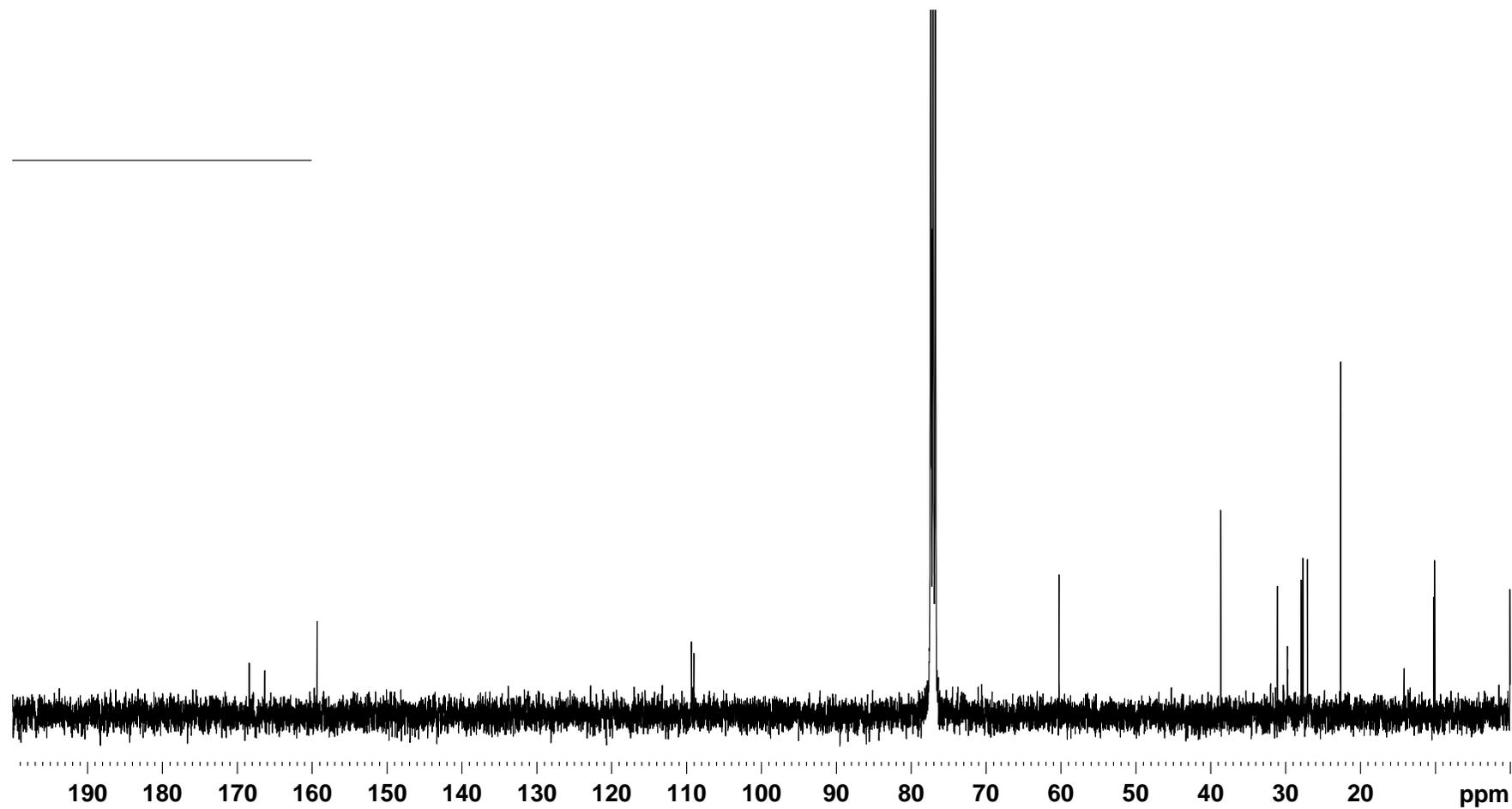
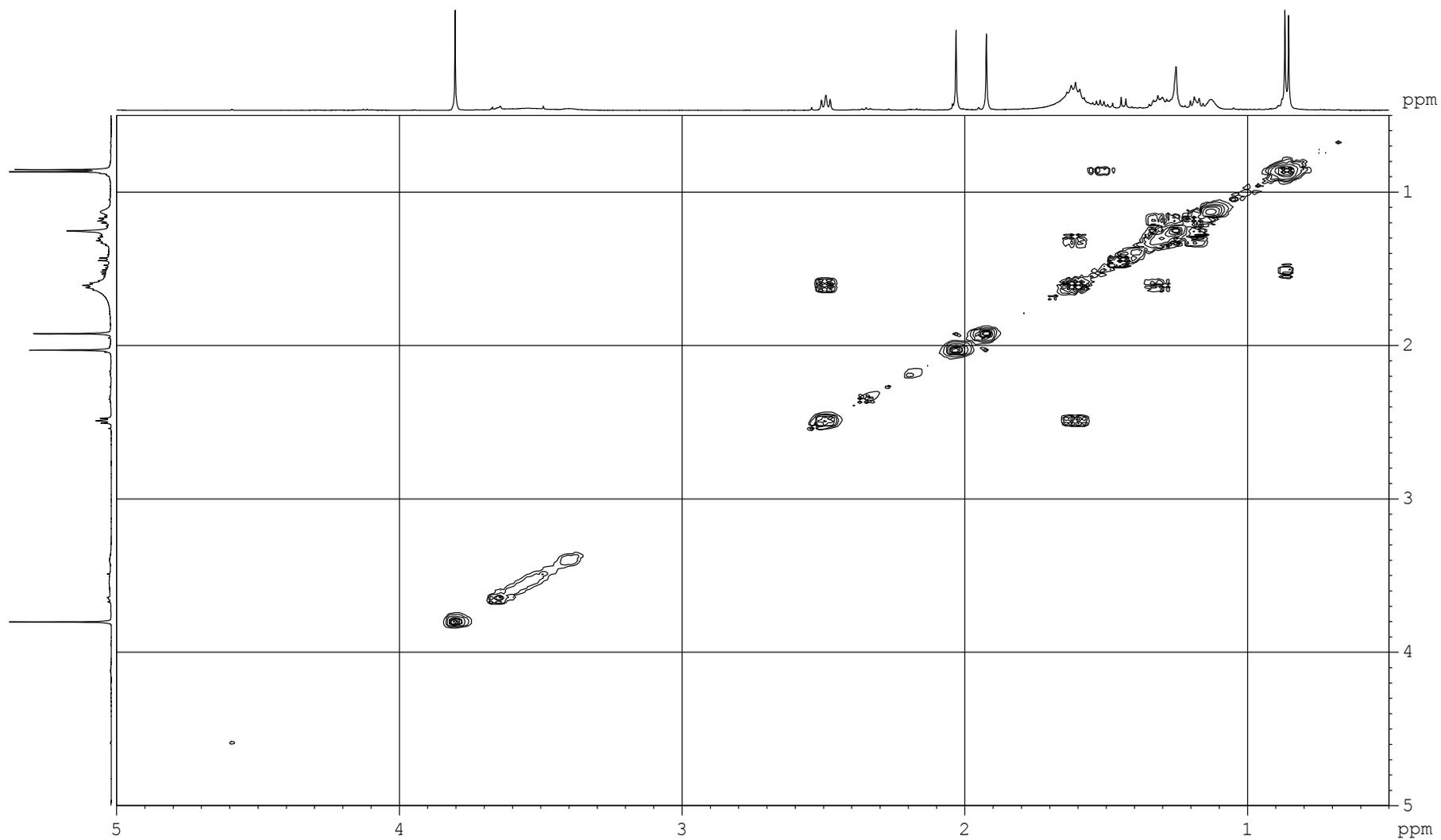
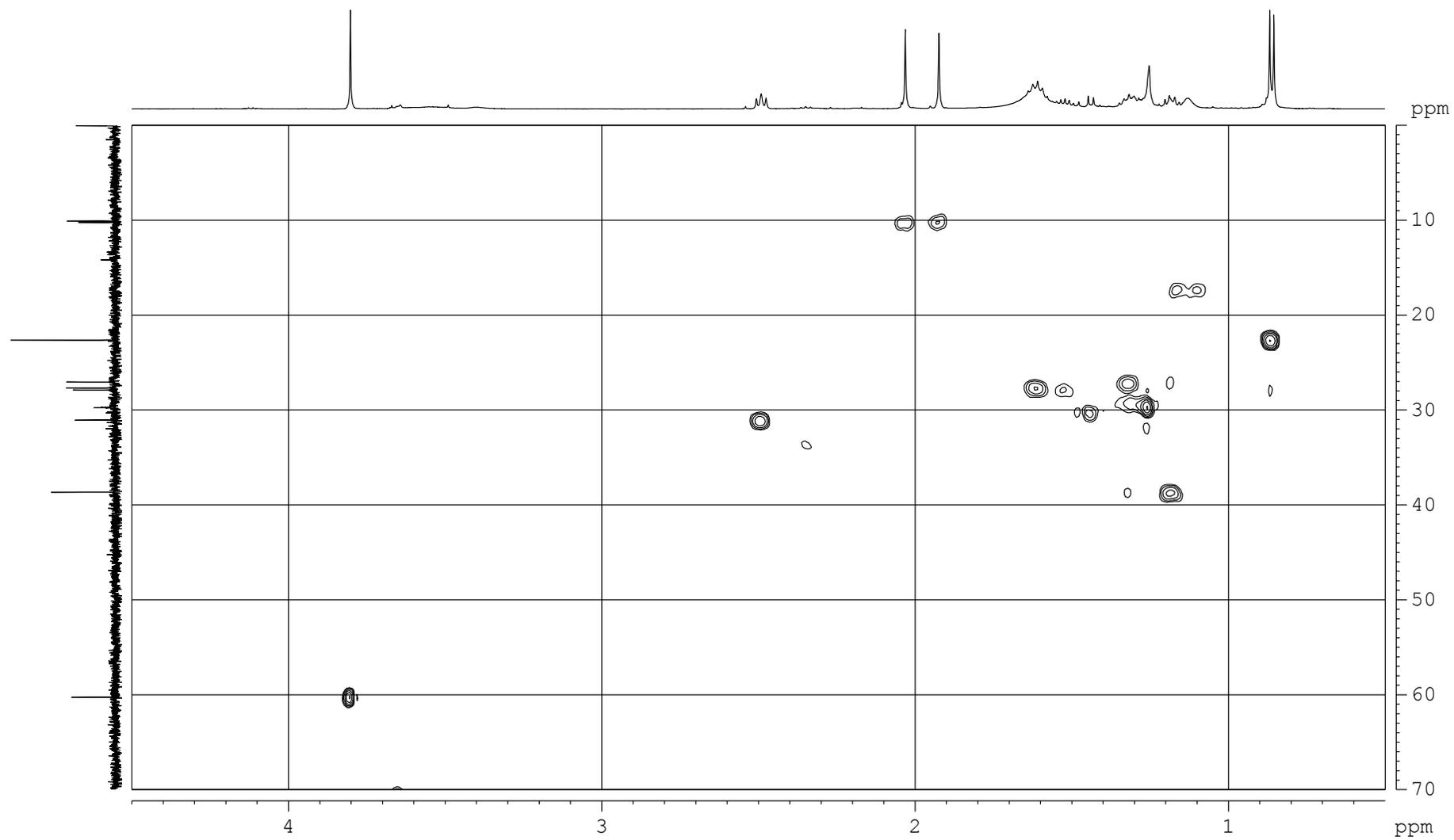
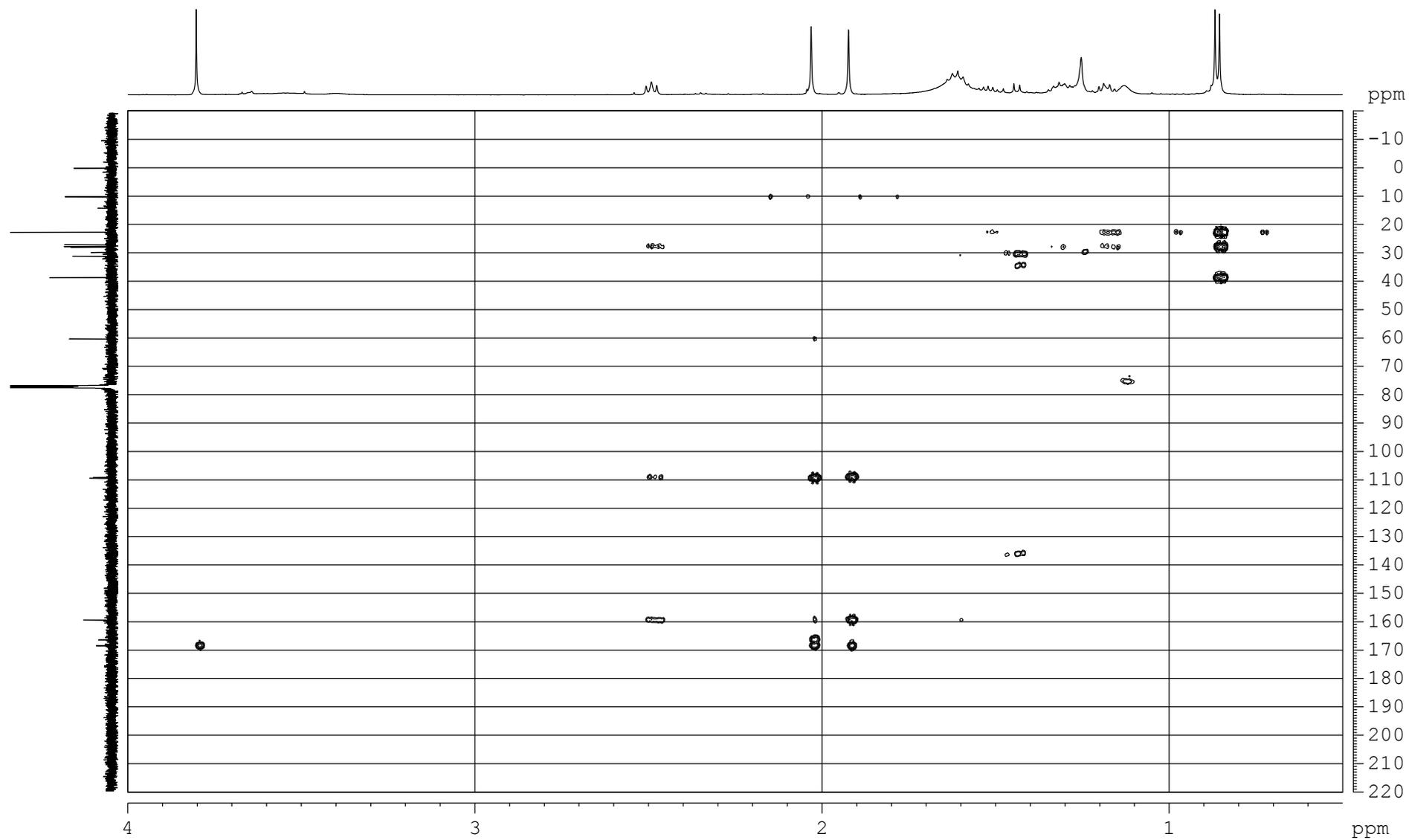
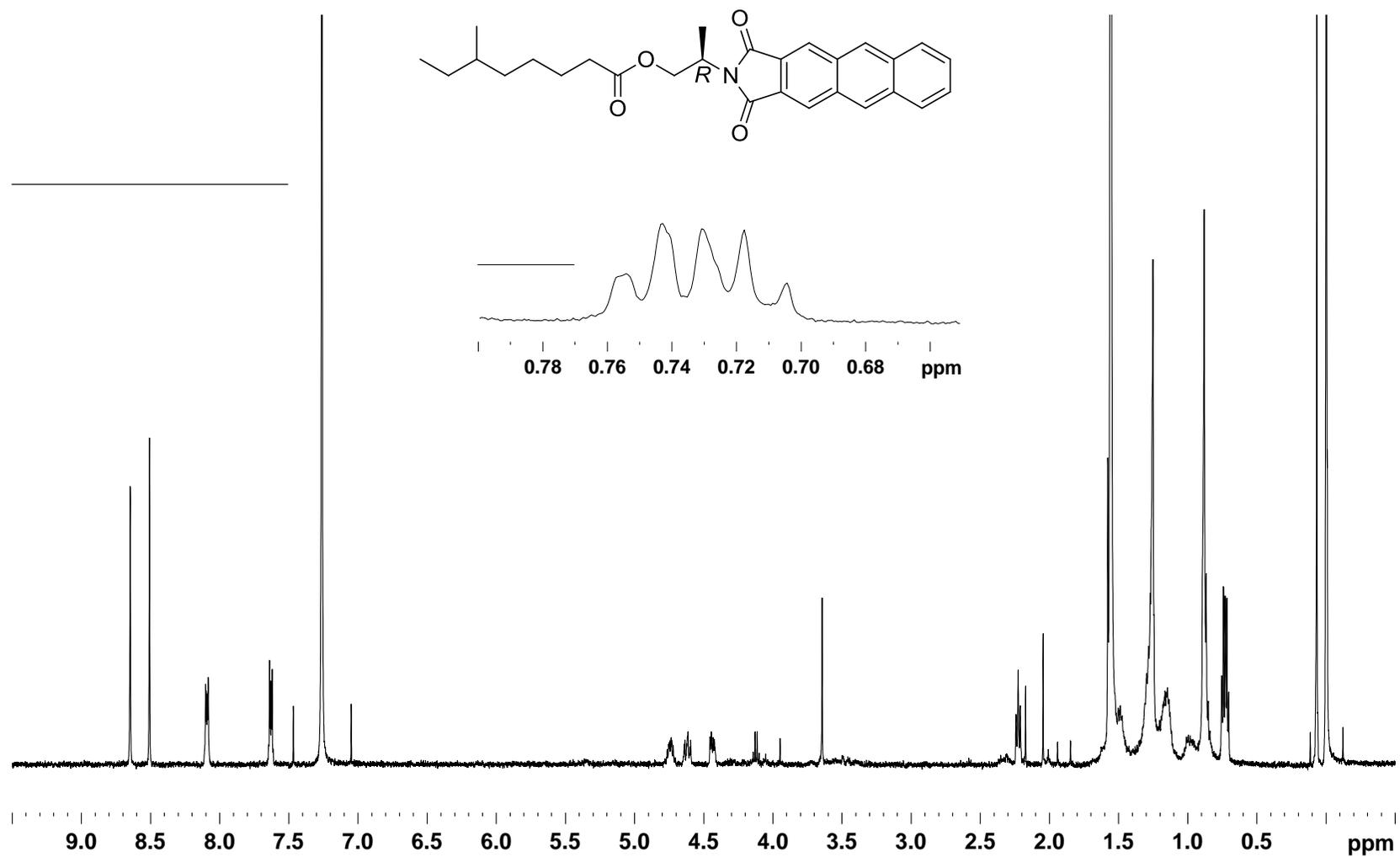


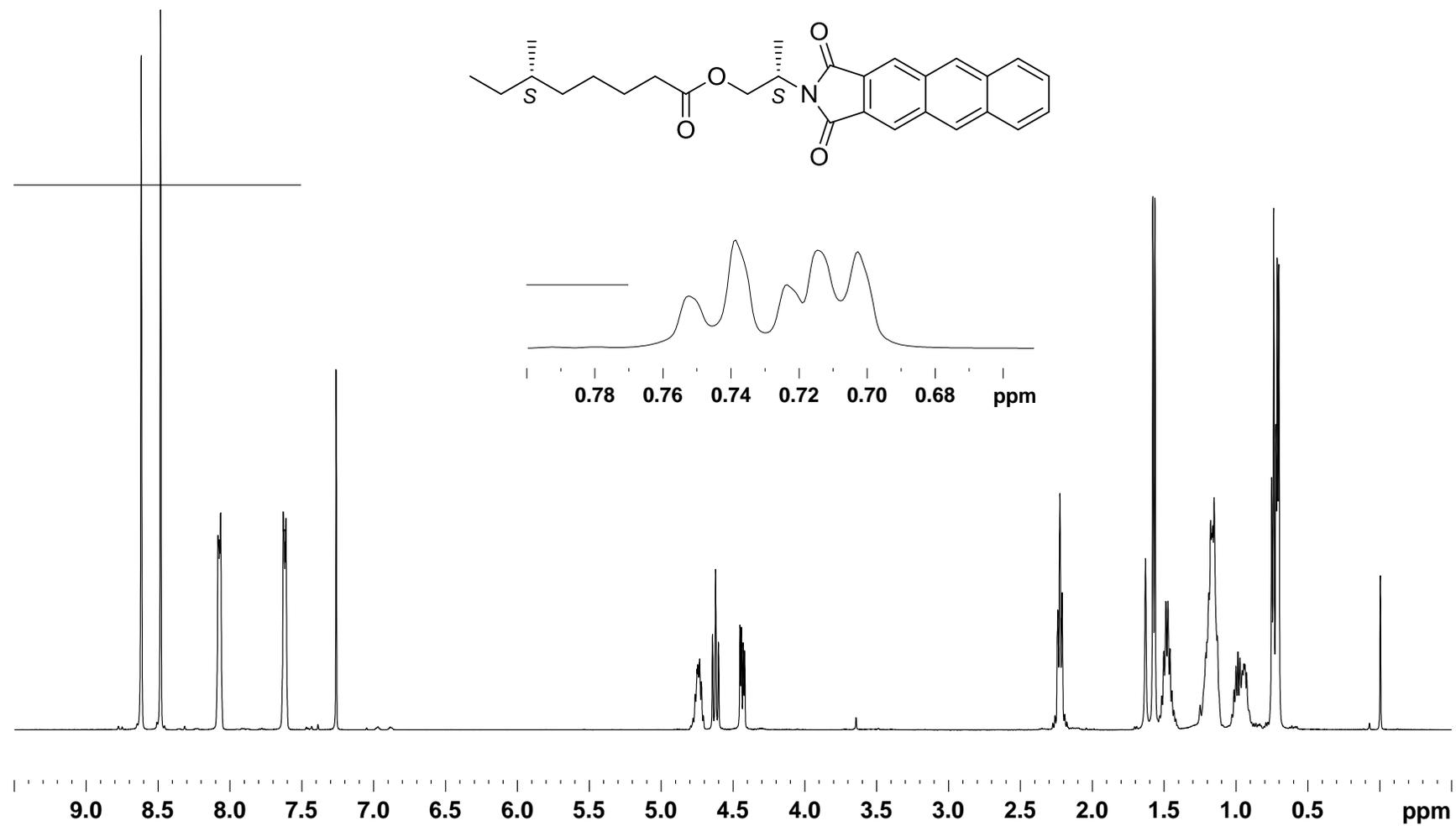
Figure S3.  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of nocapyrone R (1) at 500 MHz in  $\text{CDCl}_3$ .



**Figure S4.** HSQC spectrum of nocapyrone R (1) at 500 MHz in CDCl<sub>3</sub>.

**Figure S5.** HMBC spectrum of nocapyrone R (1) at 500 MHz in CDCl<sub>3</sub>.

**Figure S6.**  $^1\text{H}$  NMR spectrum of *nat-5-(R)-2A1P* at 500 MHz in  $\text{CDCl}_3$ .

**Figure S7.**  $^1\text{H}$  NMR spectrum of standard (*S*)-5-(*S*)-2A1P at 500 MHz in  $\text{CDCl}_3$ .

**Figure S8.**  $^1\text{H}$  NMR spectrum of standard (*S*)-5-(*R*)-2A1P at 500 MHz in  $\text{CDCl}_3$ .