

## Supporting Information

### Synthesis of novel fatty acid 3,4-Dihydropyrimidin-2-(1H)-one and antitumoral activity against breast and gastric cancer cells

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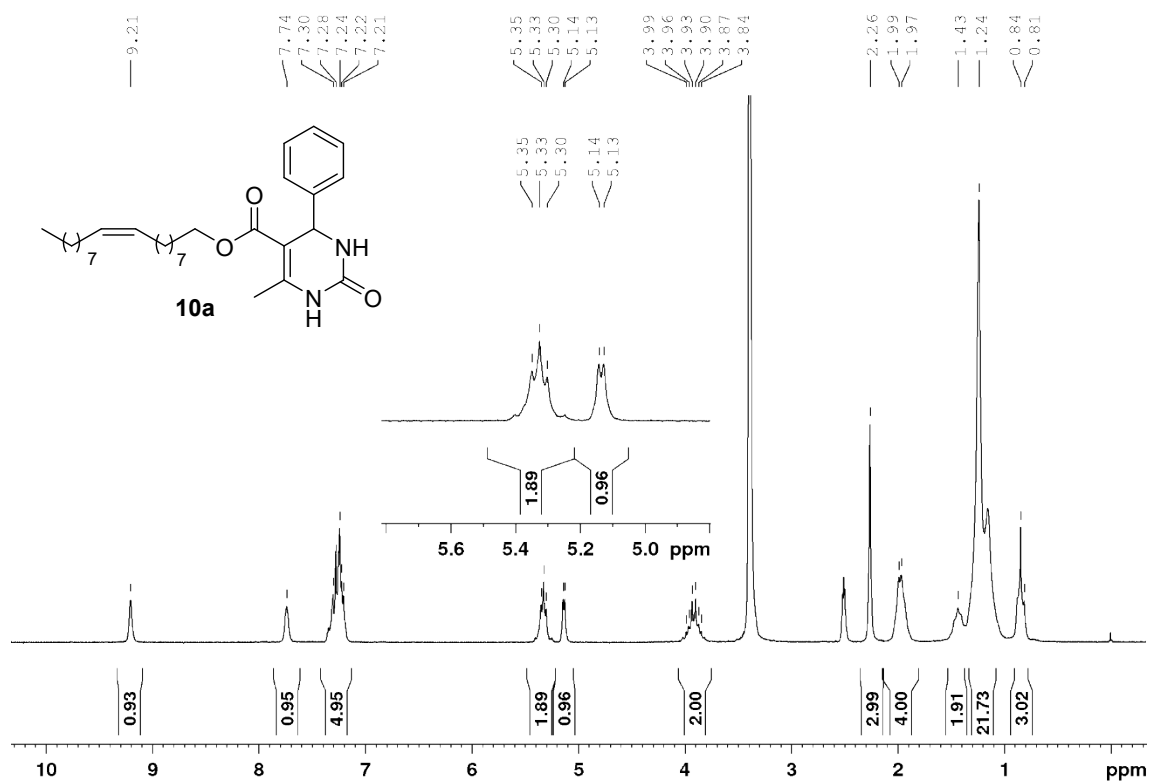
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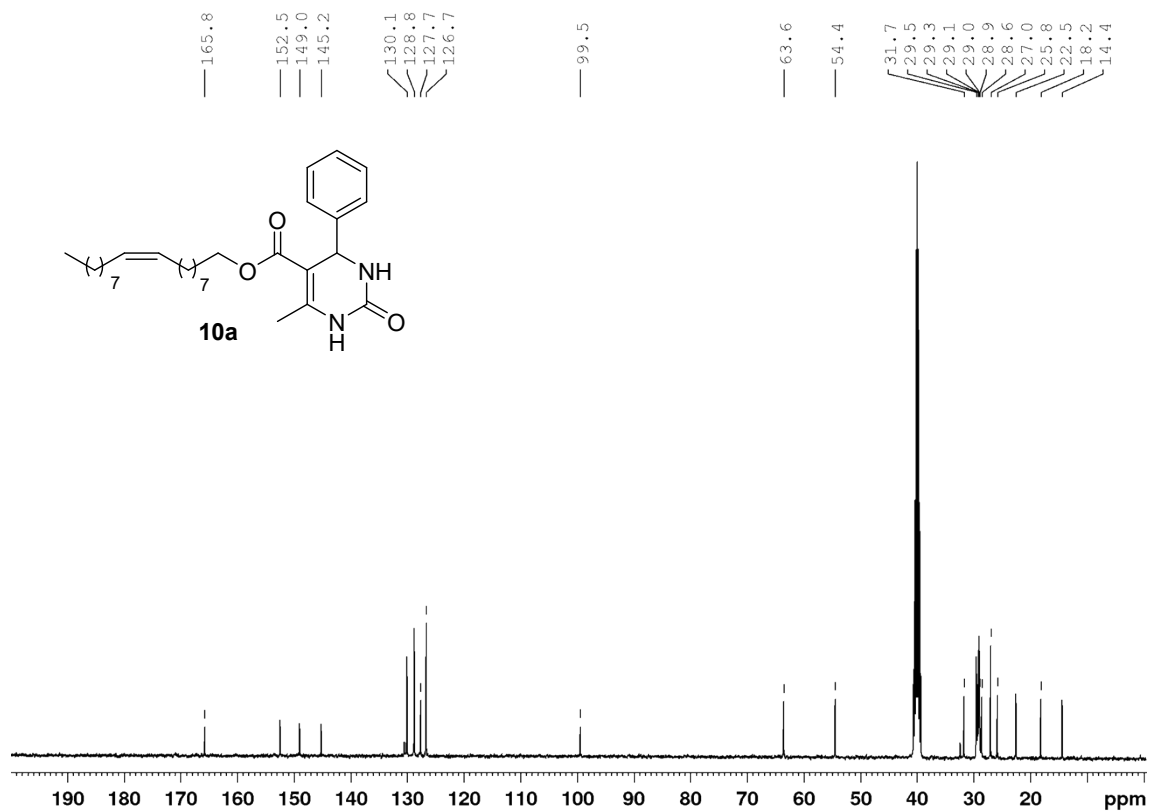
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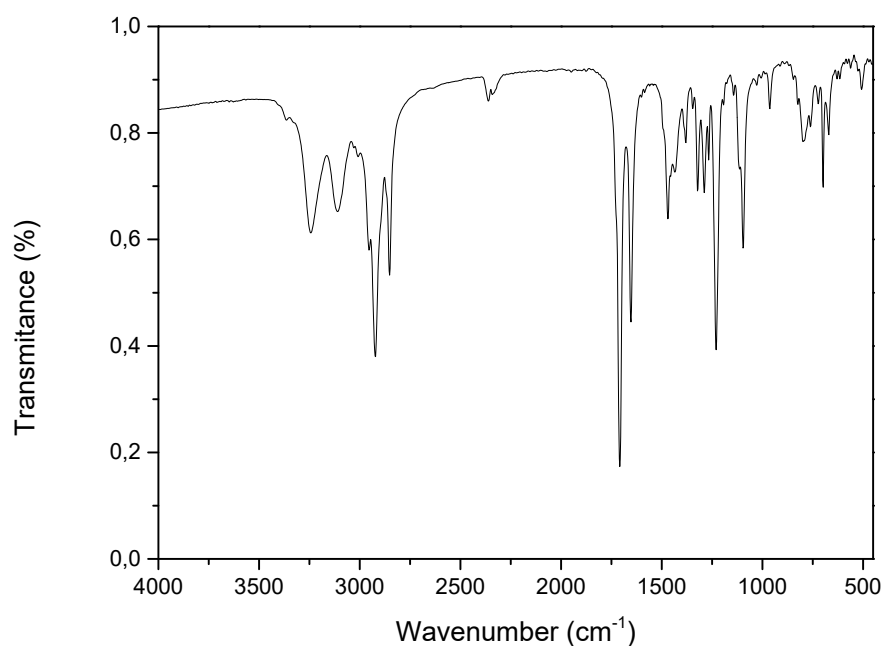
1. Selected <sup>1</sup> H, <sup>13</sup> C NMR and Infrared spectra .....	S01-S60
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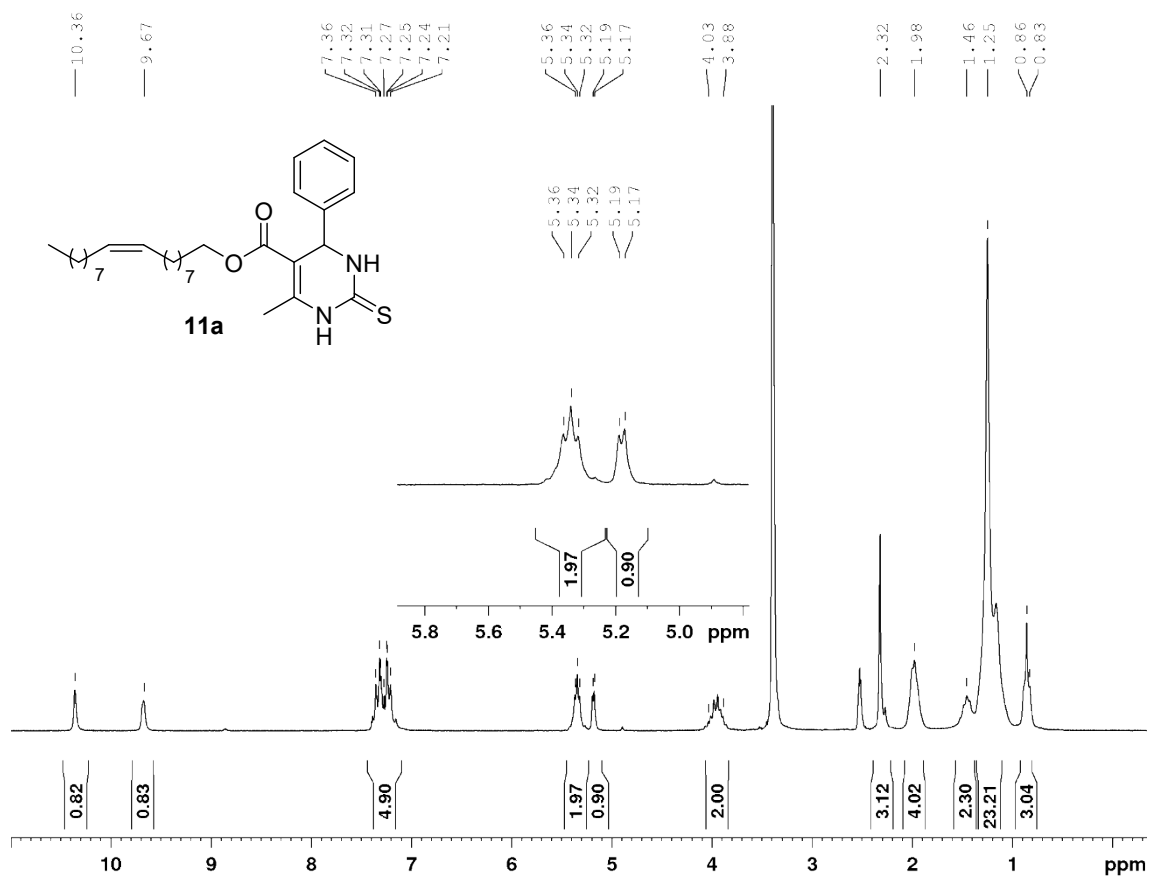
**Figure S1.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10a**



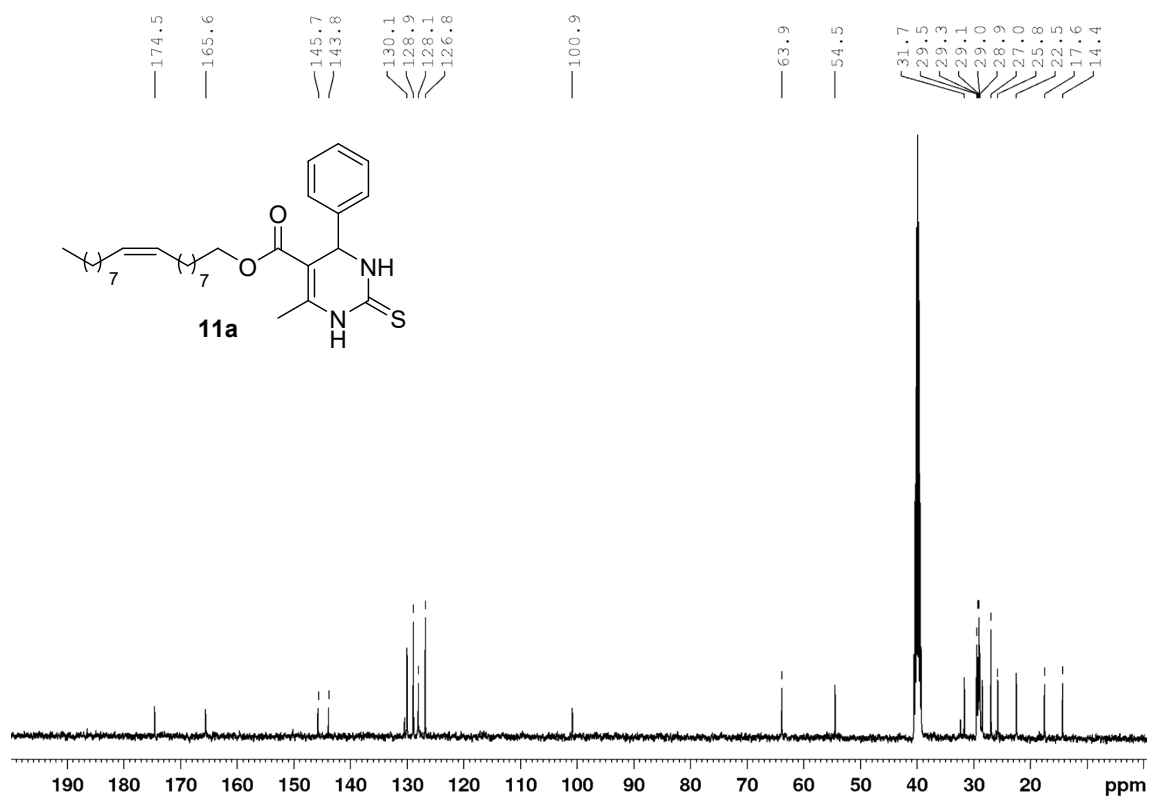
**Figure S2.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10a**



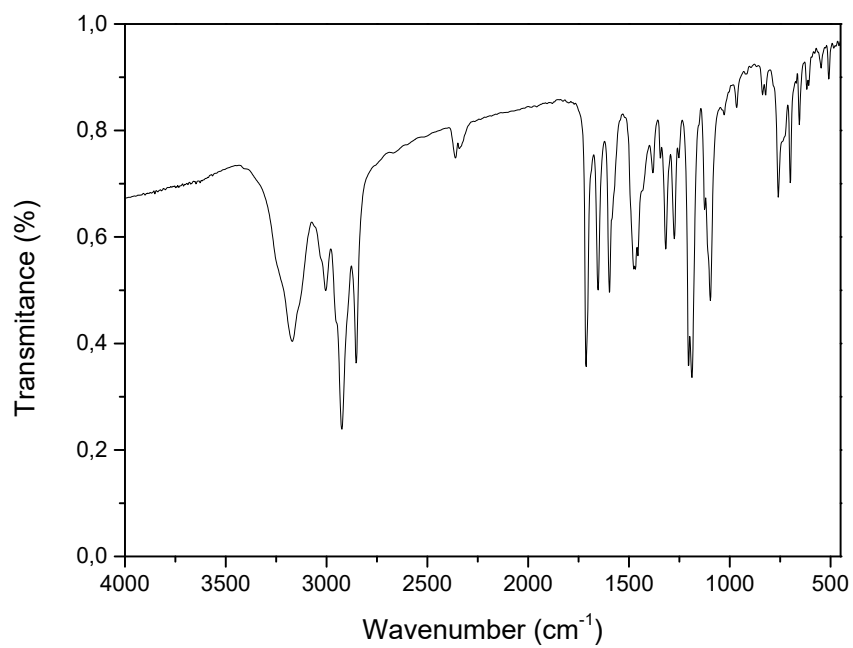
**Figure S3.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10a**



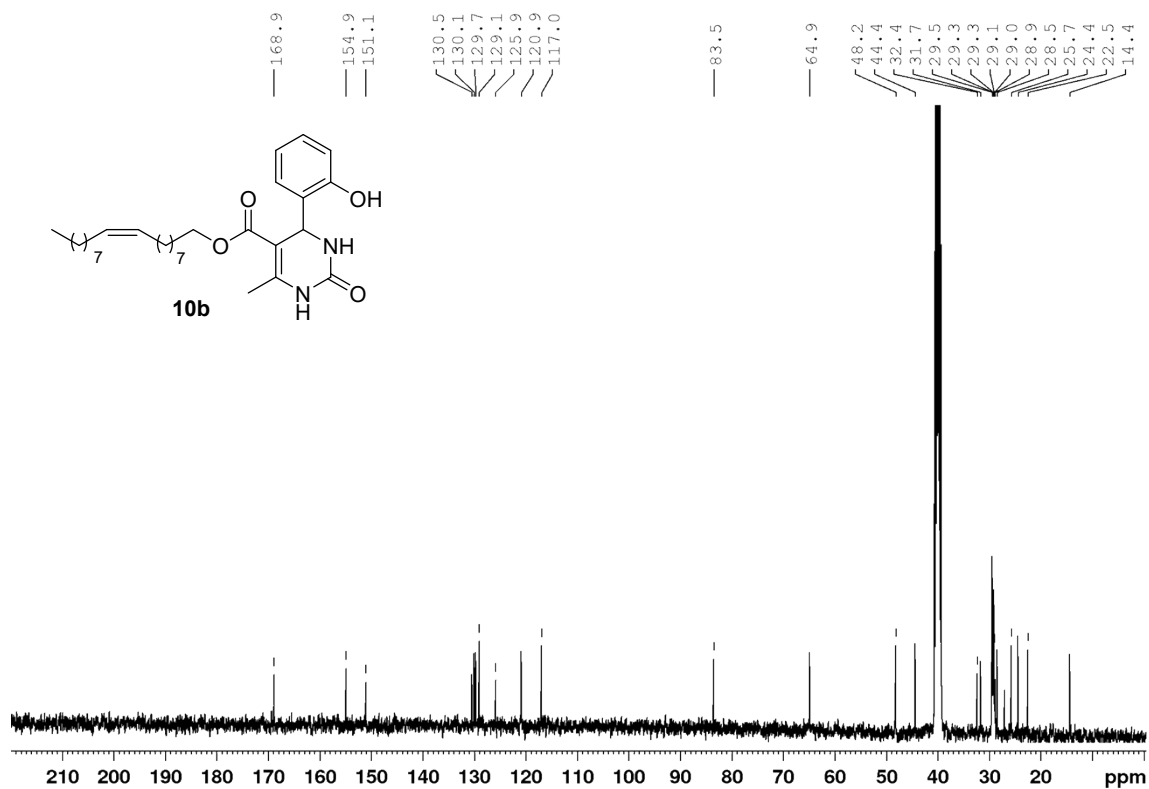
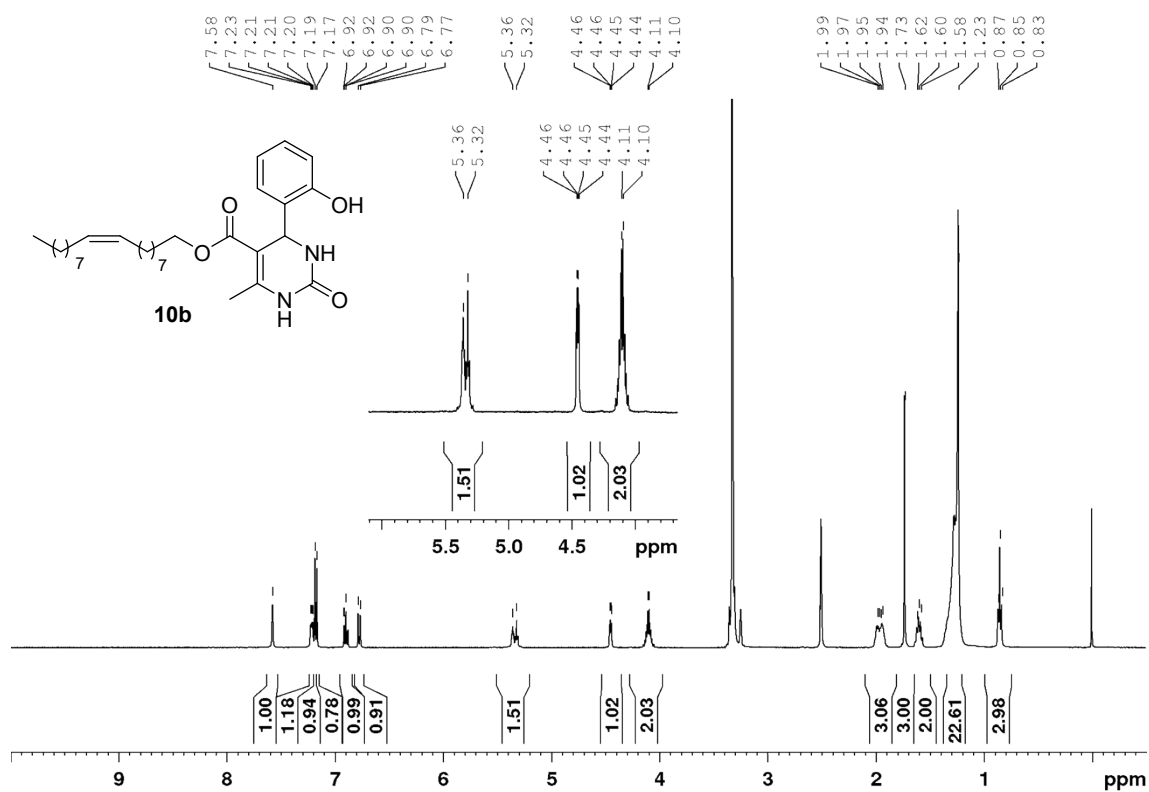
**Figure S4.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11a**

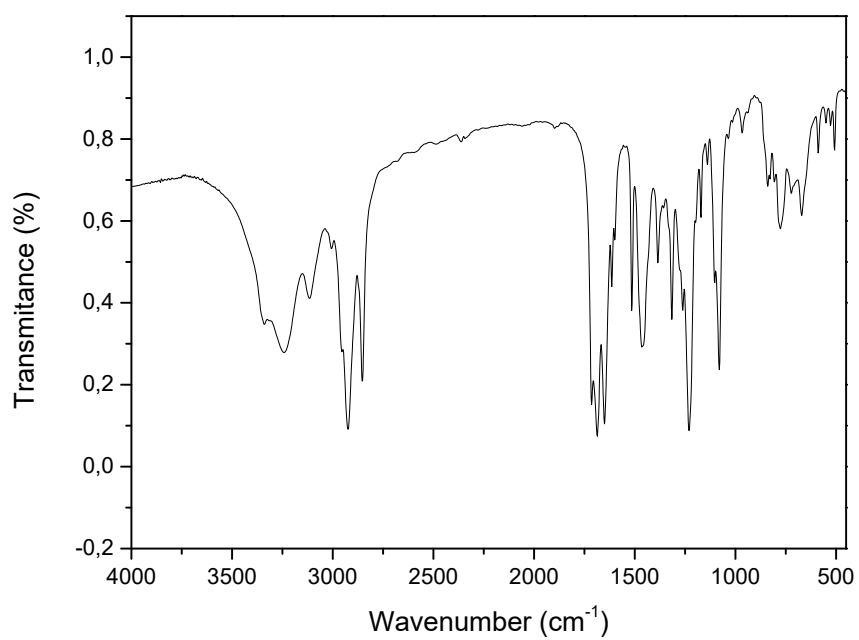


**Figure S5.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11a**

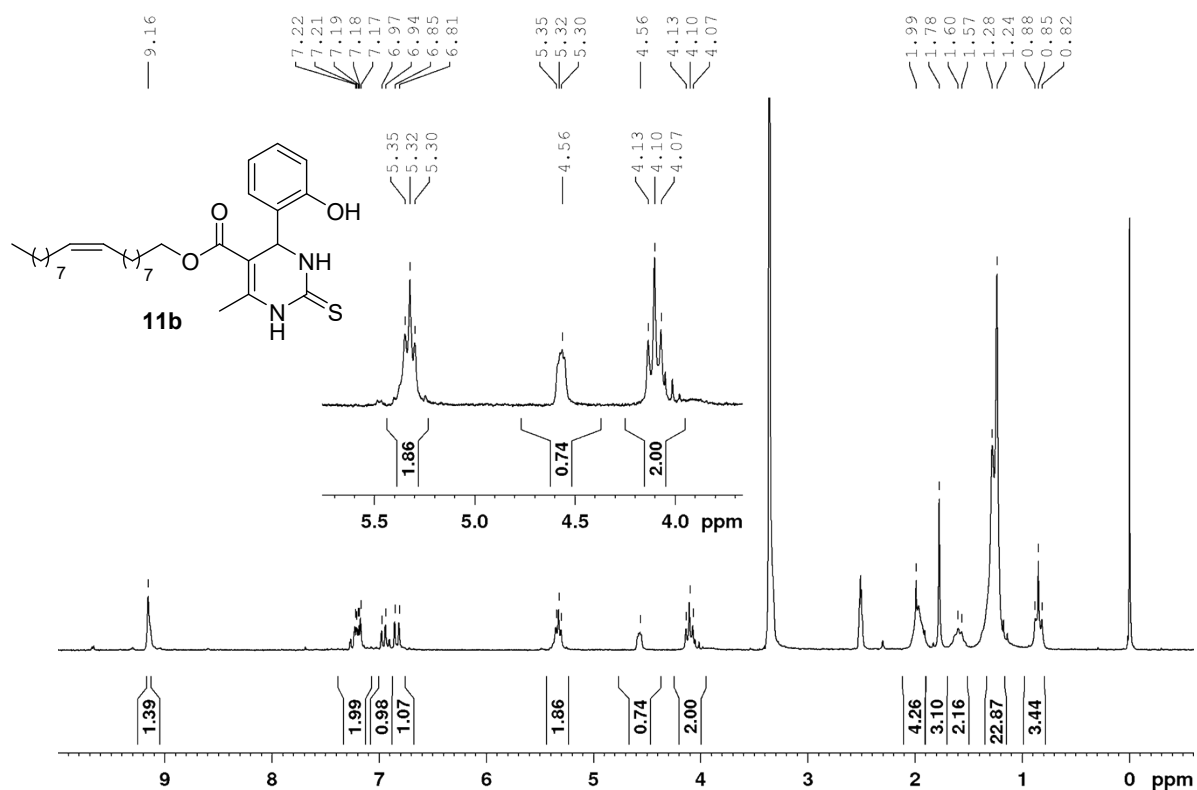


**Figure S6.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **11a**

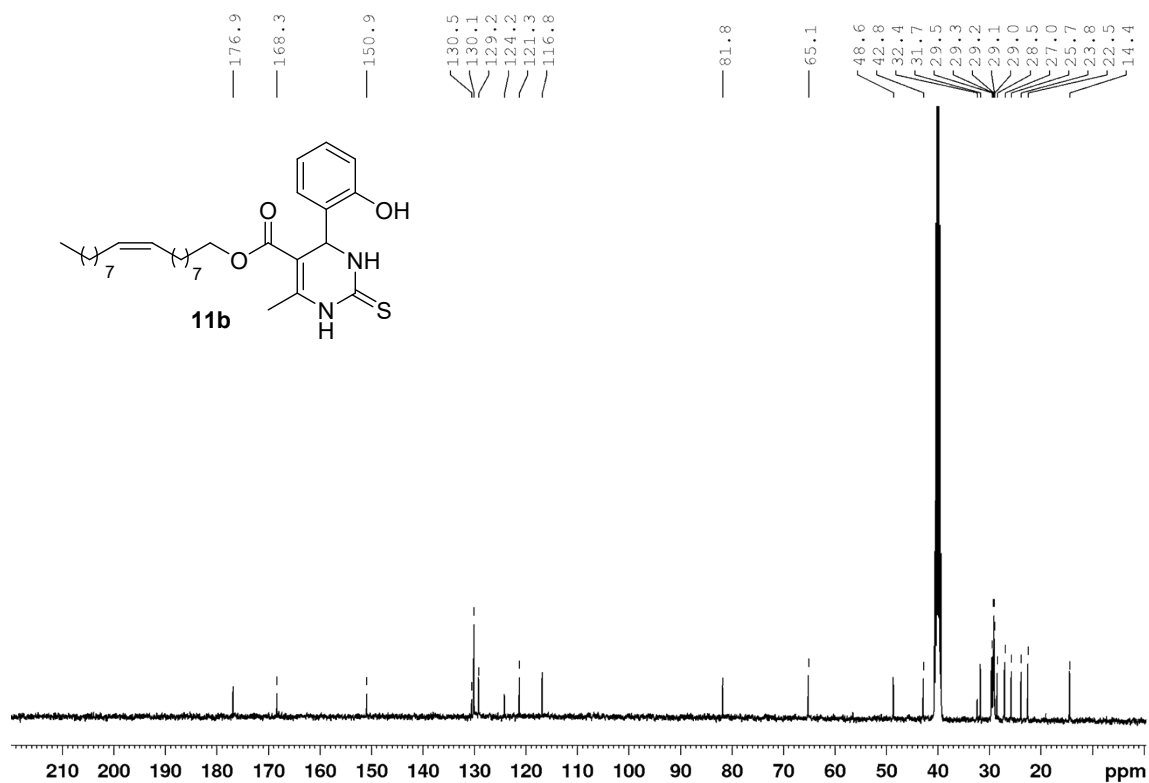




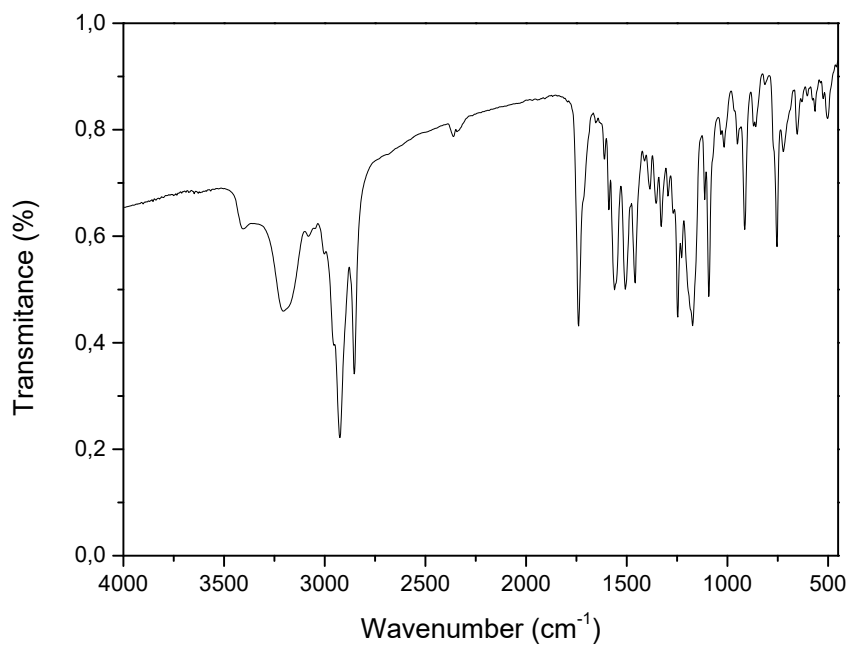
**Figure S9.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10b**



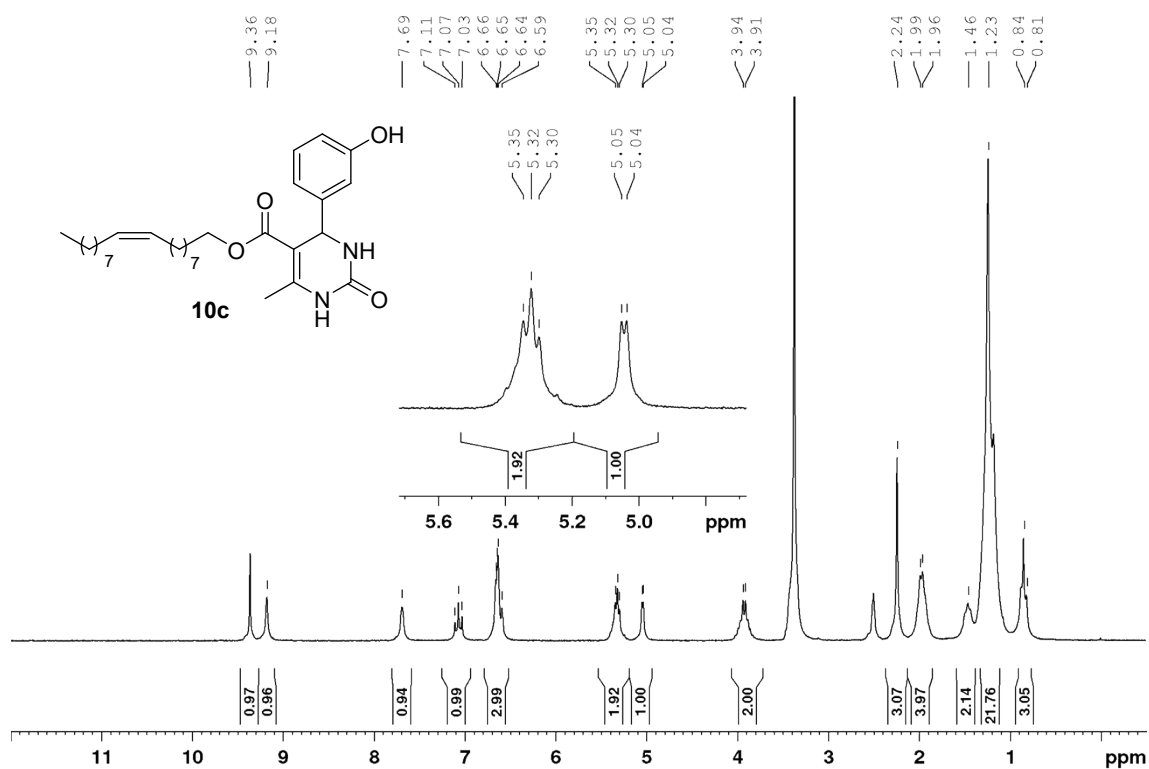
**Figure S10.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11b**



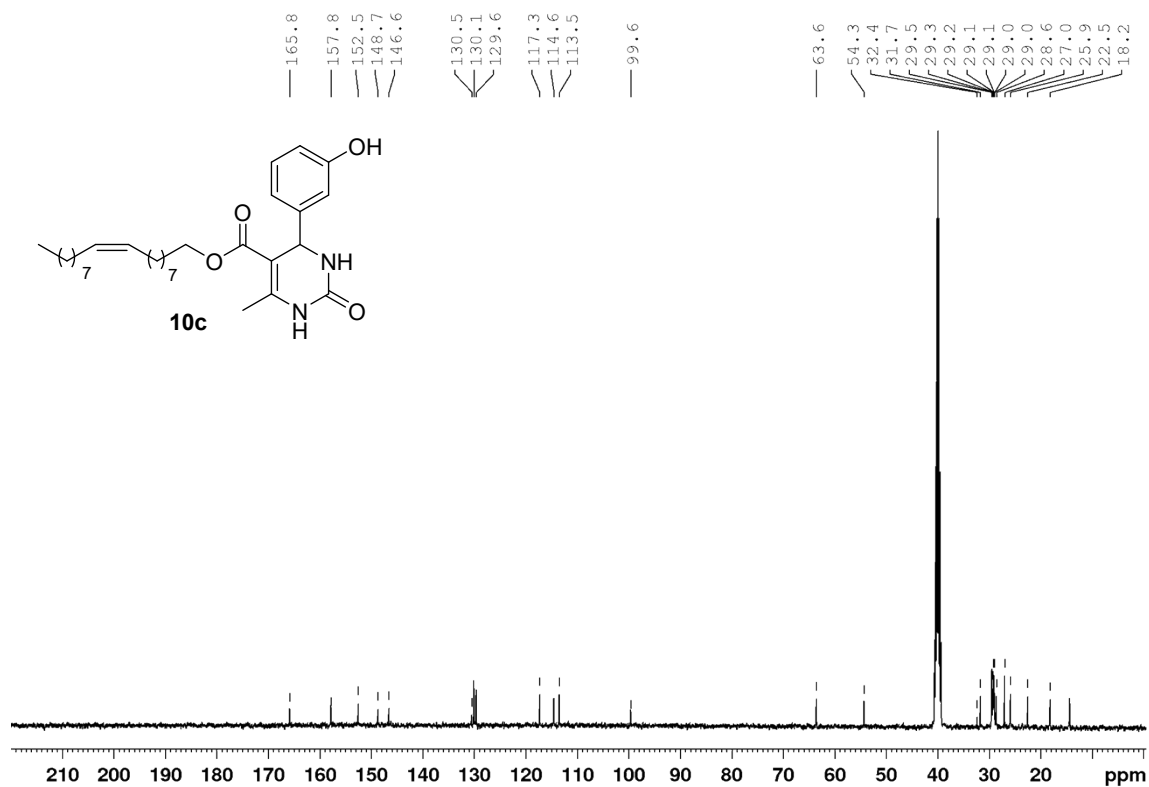
**Figure S11.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11b**



**Figure S12.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **11b**

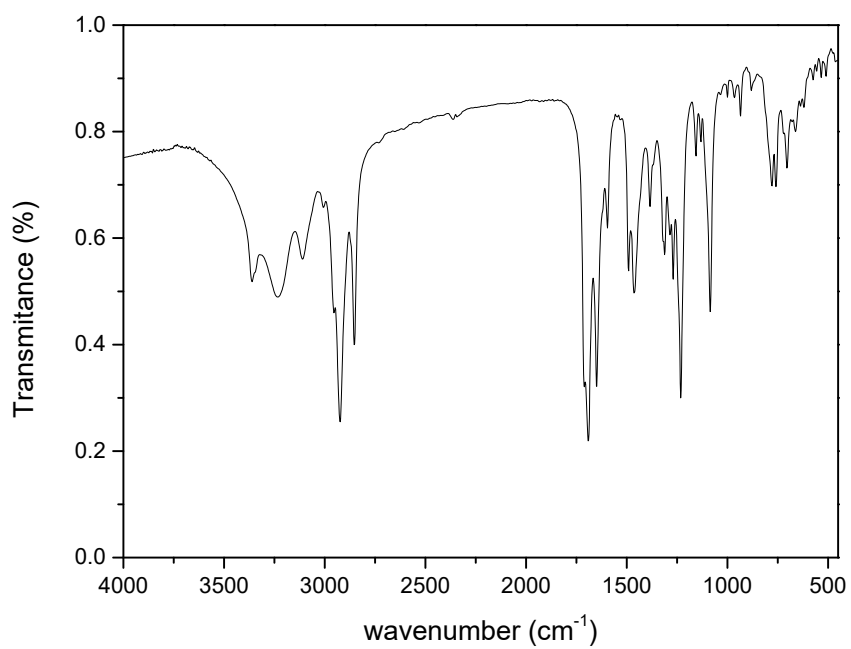


**Figure S13.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10c**

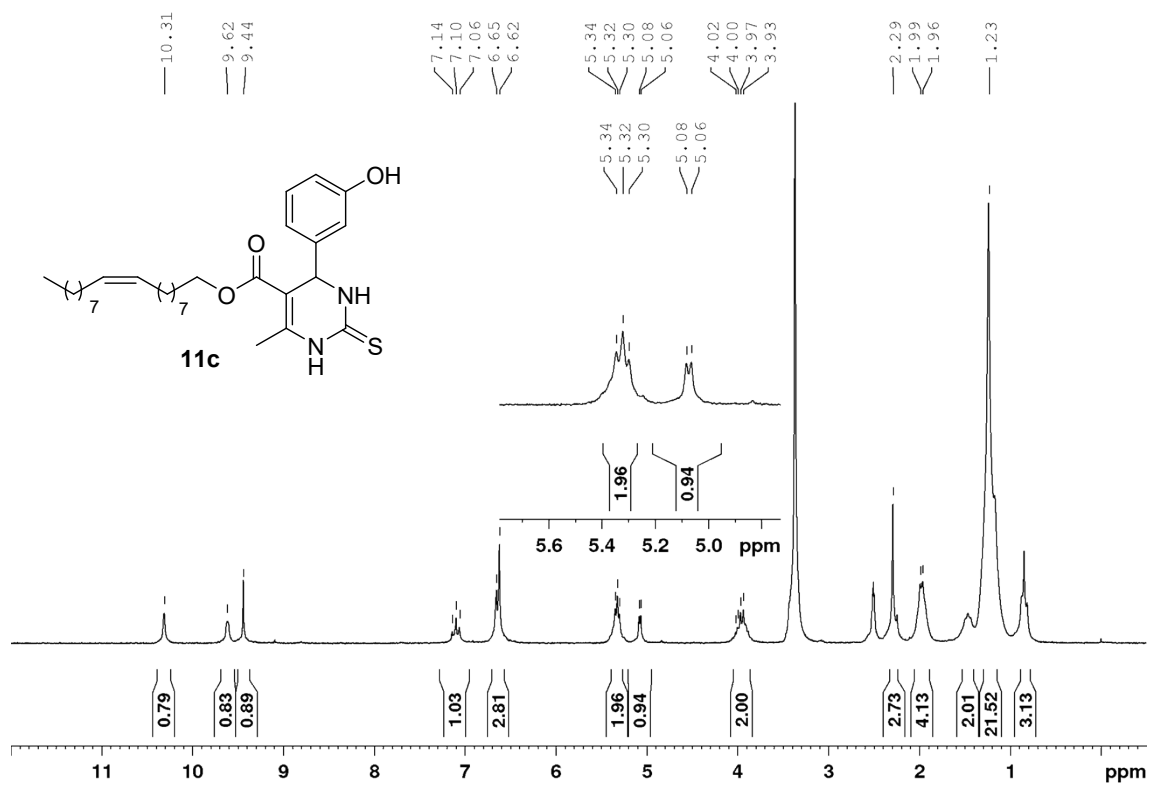


**Figure S14.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10c**

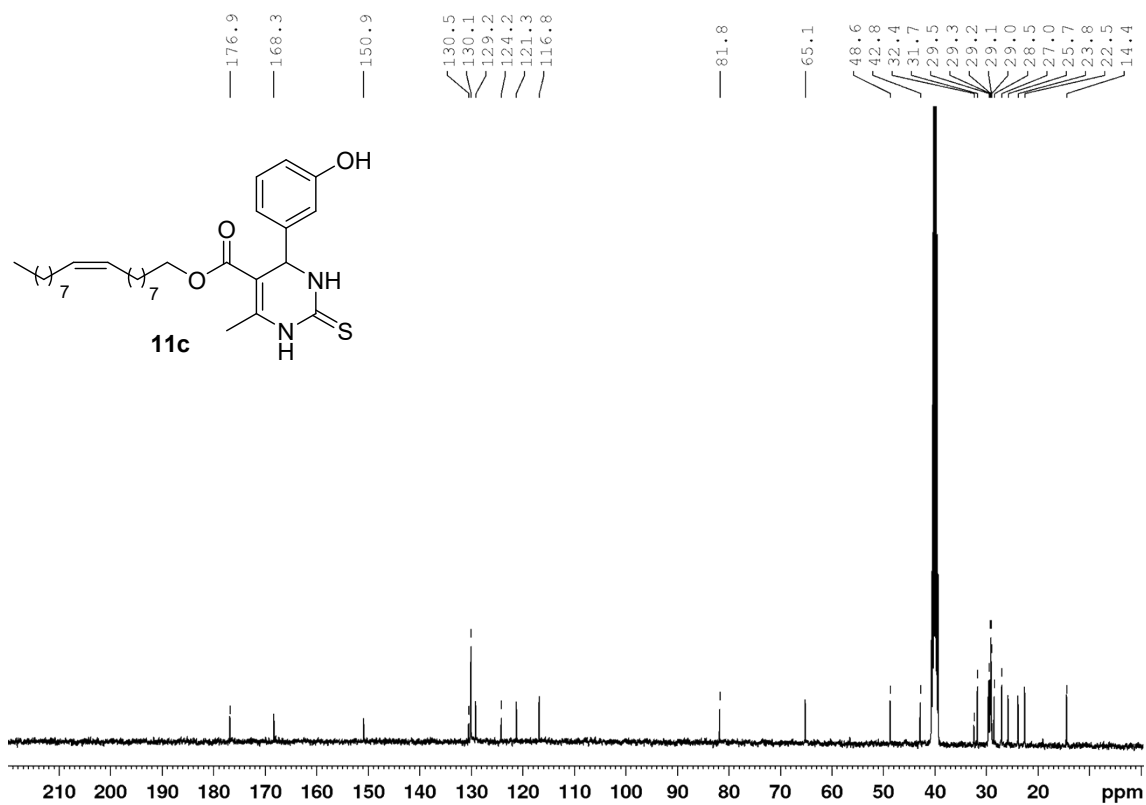




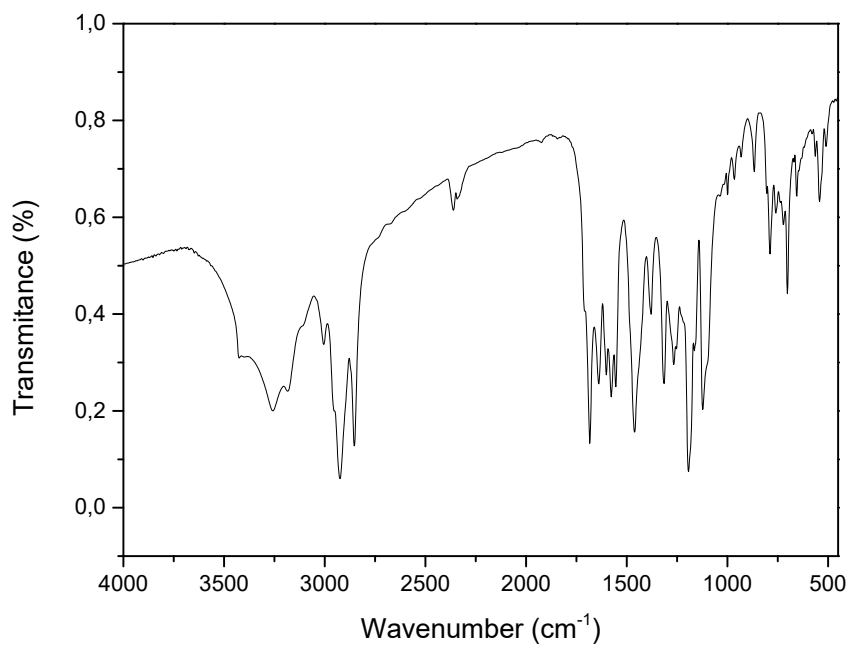
**Figure S15.** FT-IR (4000-400 cm<sup>-1</sup>, KBr) spectrum of **10c**



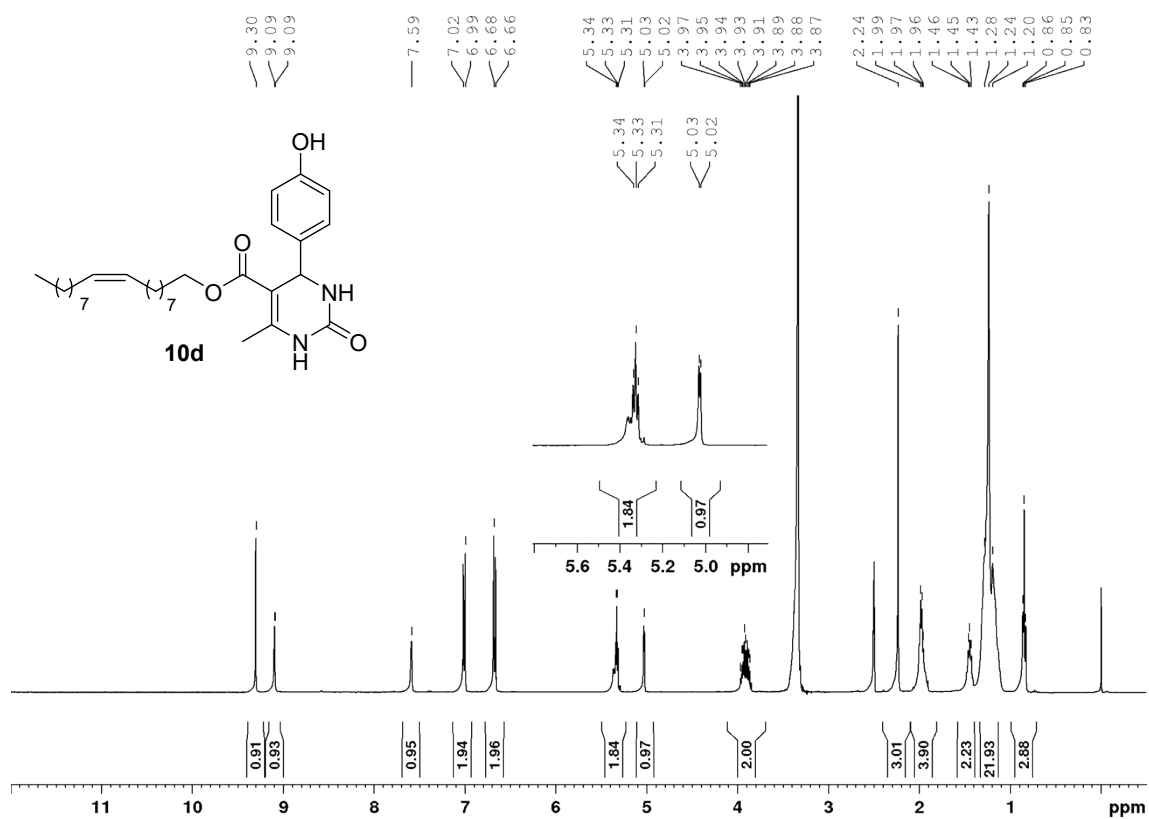
**Figure S16.** <sup>1</sup>H NMR (400 MHz, DMSO-d<sub>6</sub>) spectrum of **11c**



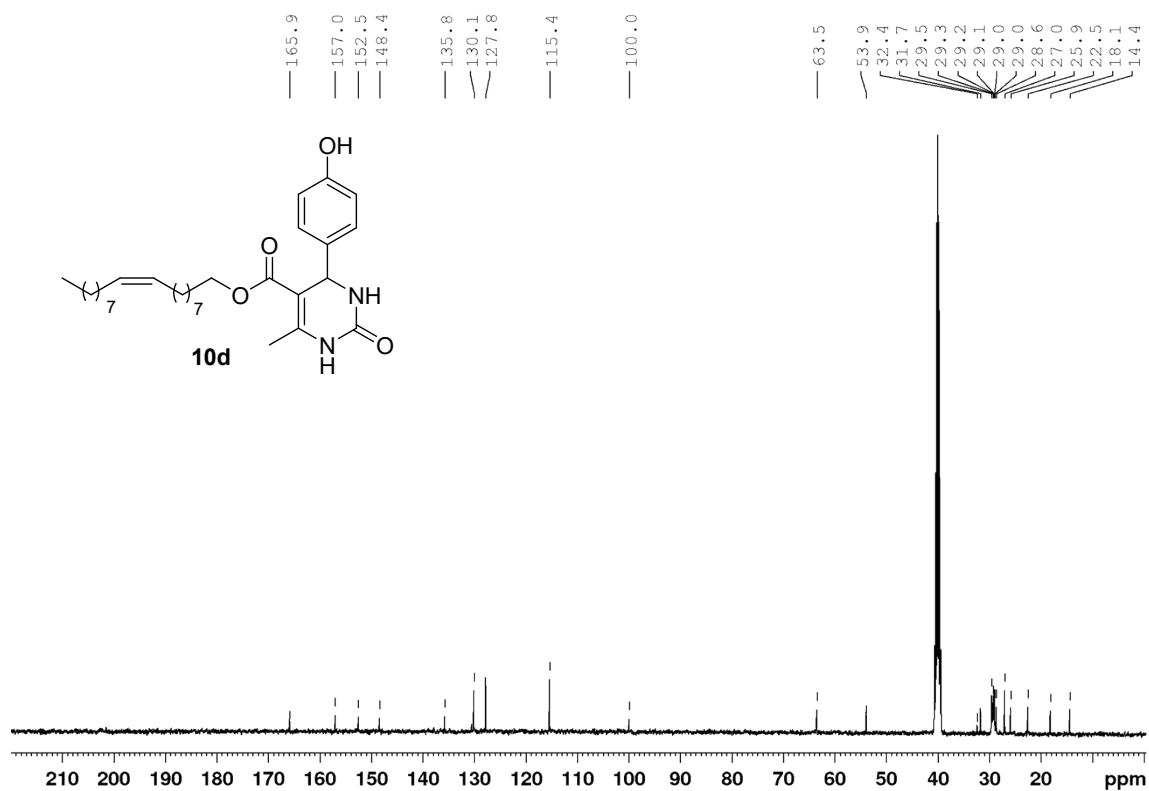
**Figure S17.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11c**



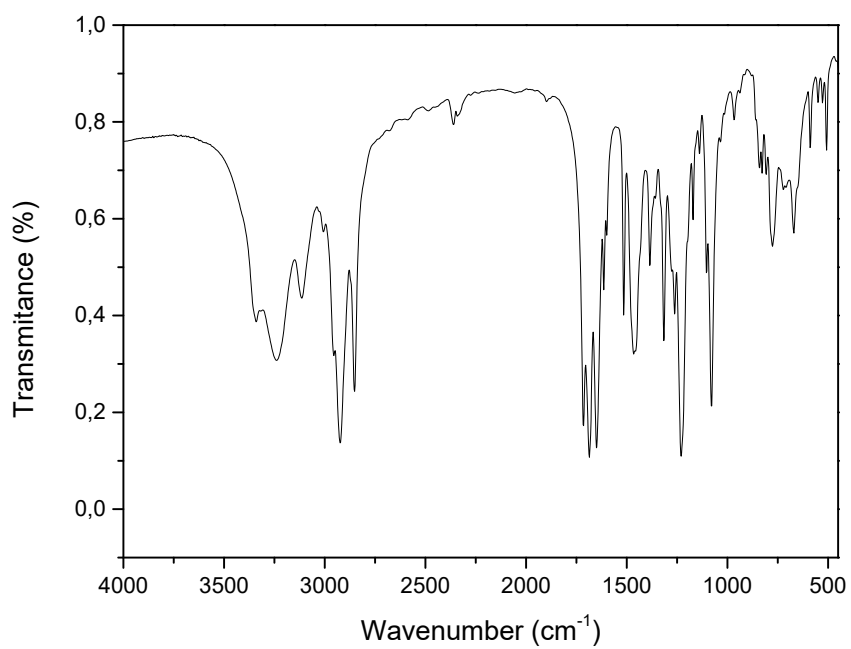
**Figure S18.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **11c**



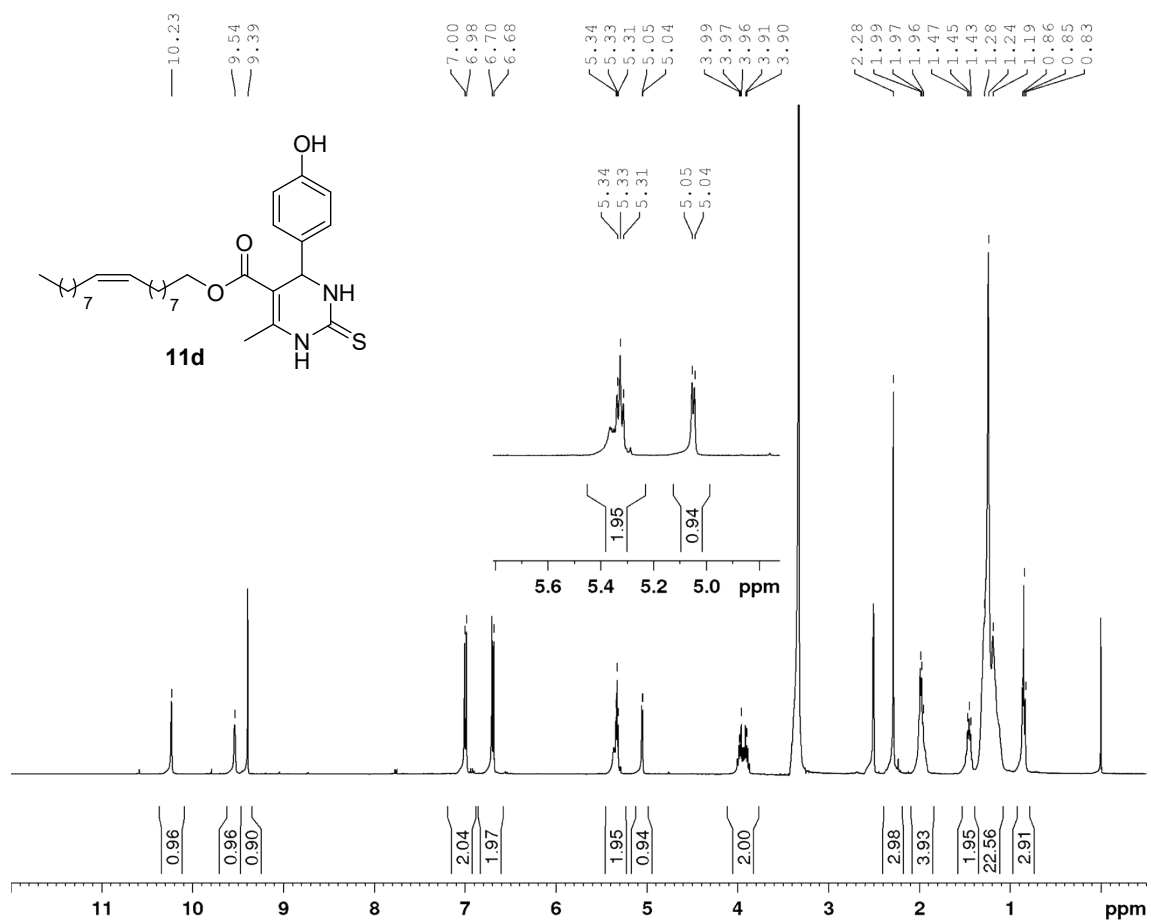
**Figure S19.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10d**



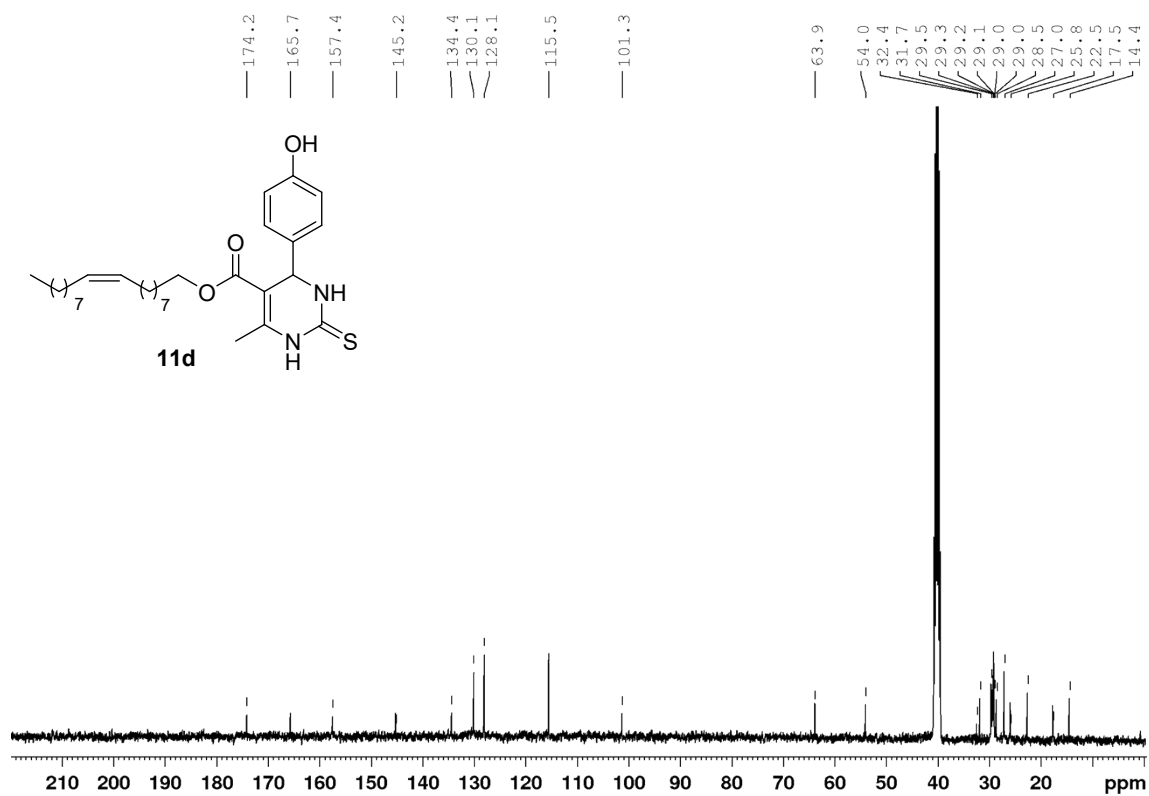
**Figure S20.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10d**



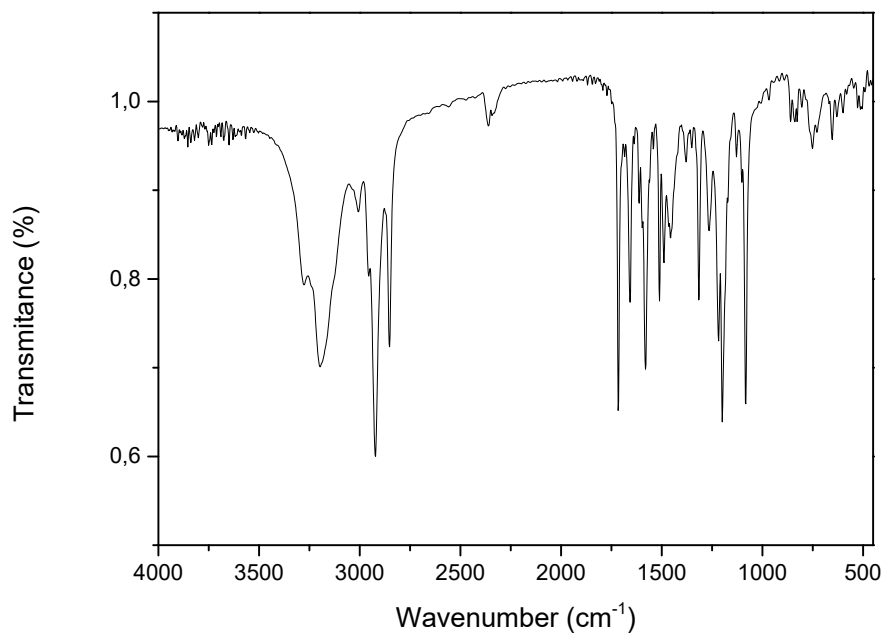
**Figure S21.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10d**



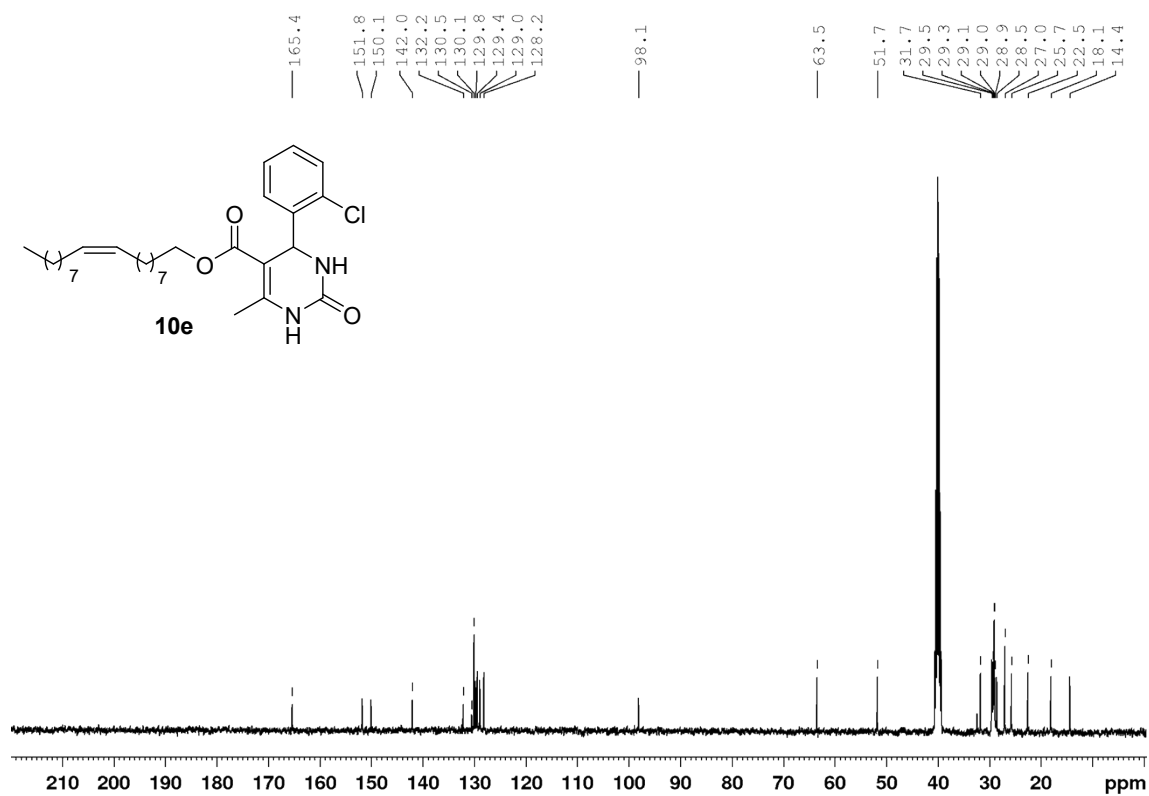
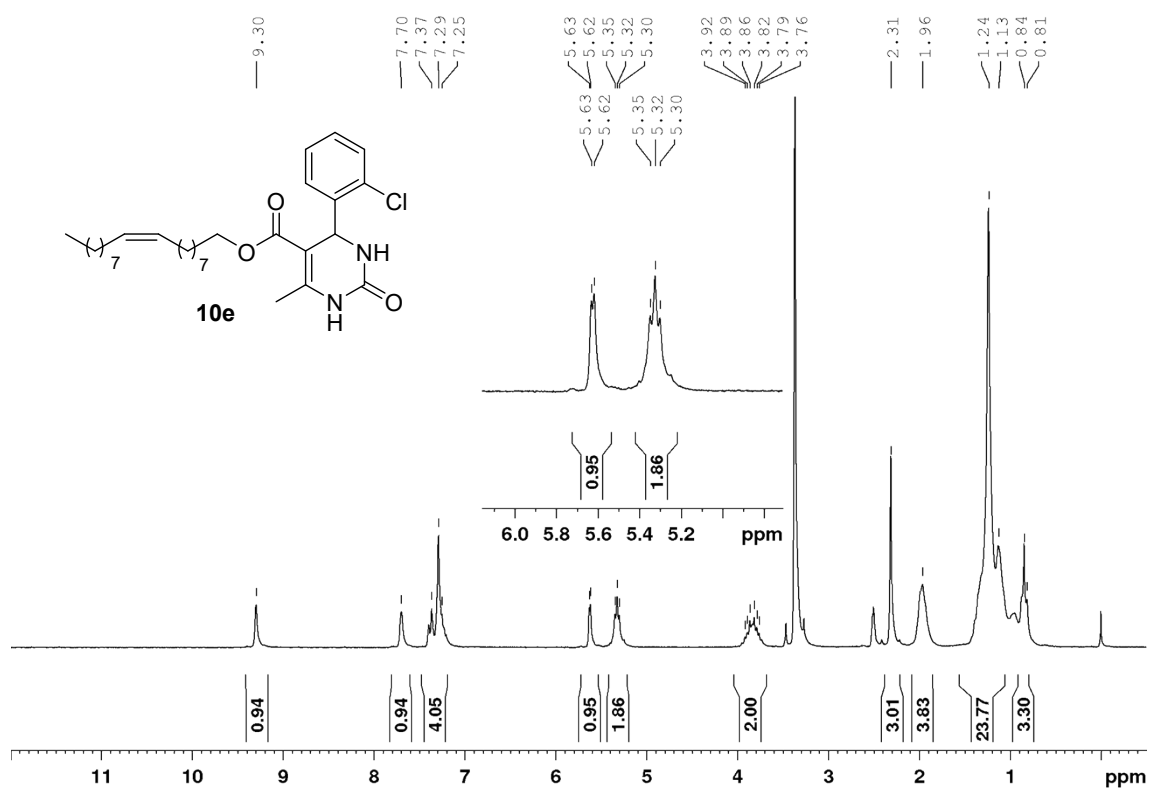
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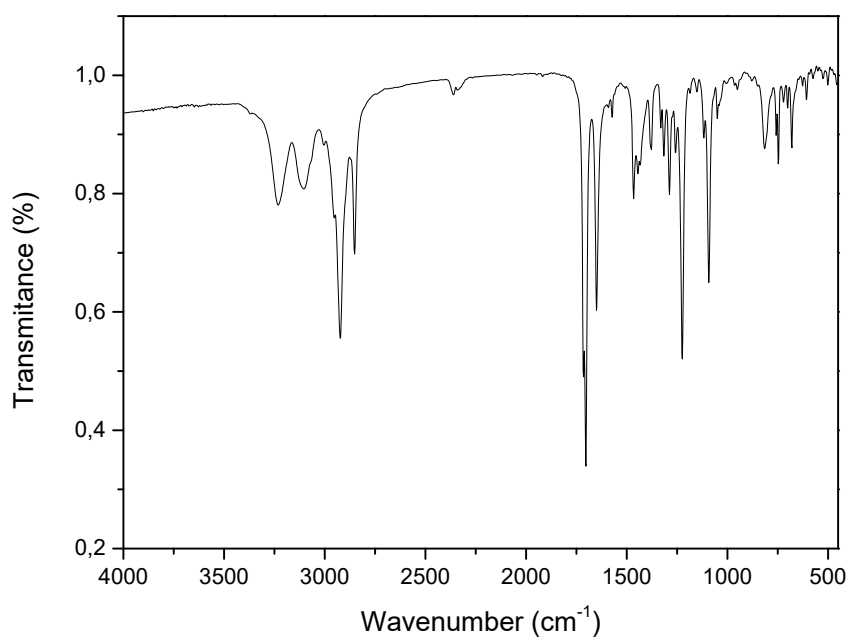


**Figure S23.** <sup>13</sup>C NMR (100 MHz, DMSO-d<sub>6</sub>) spectrum of **11d**

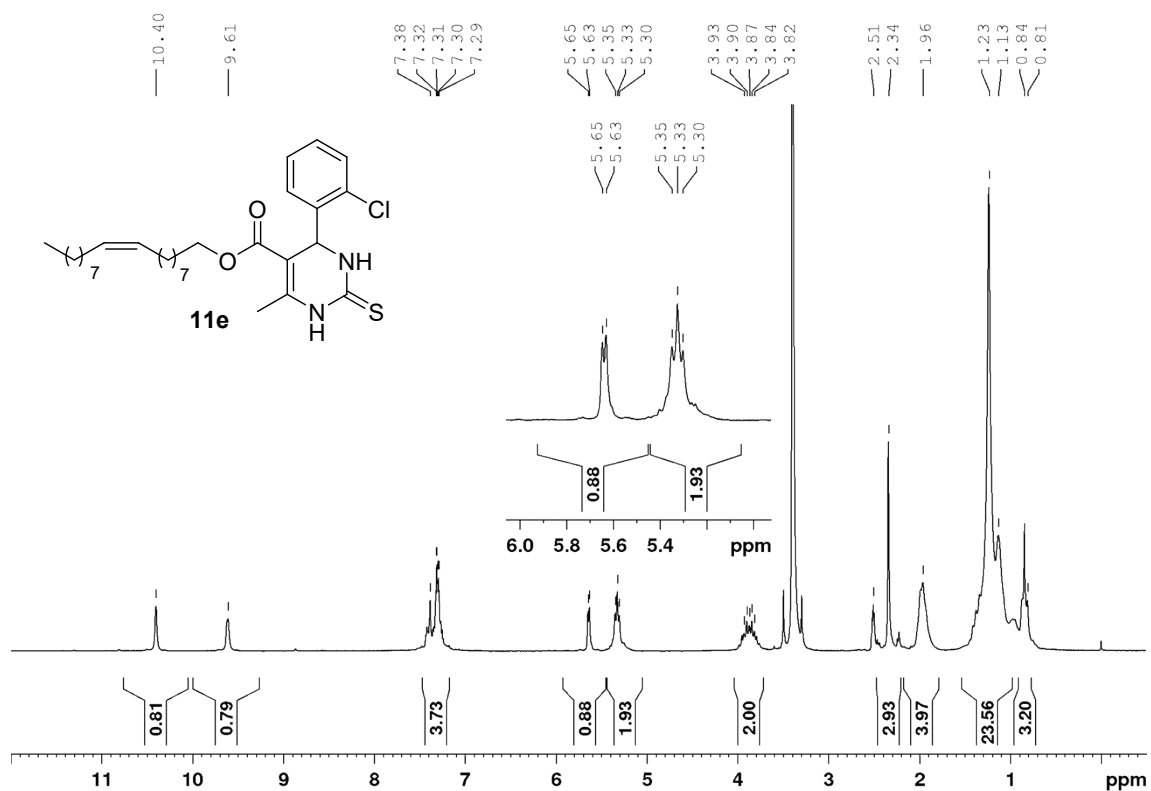


**Figure S24.** FT-IR (4000-400 cm<sup>-1</sup>, KBr) spectrum of **11d**

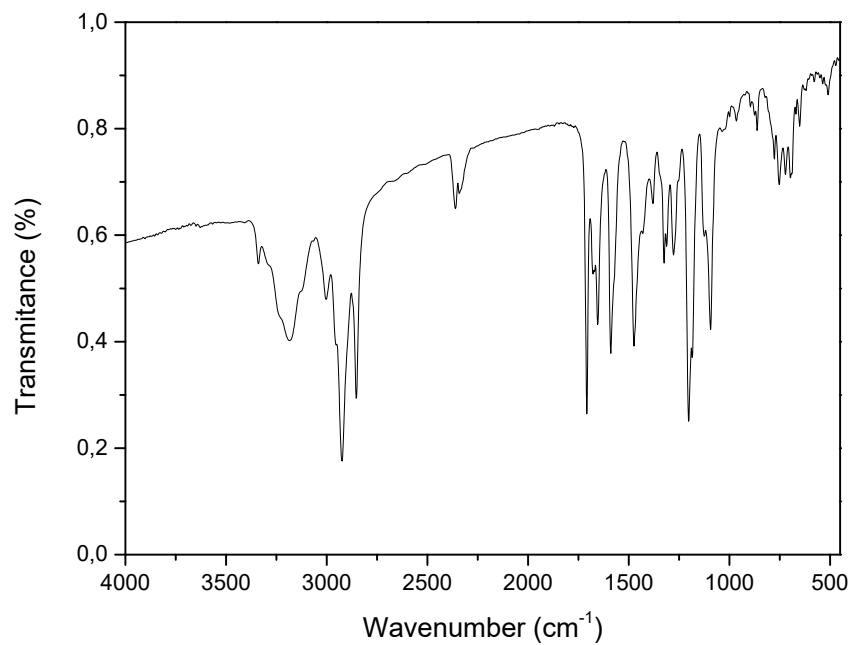
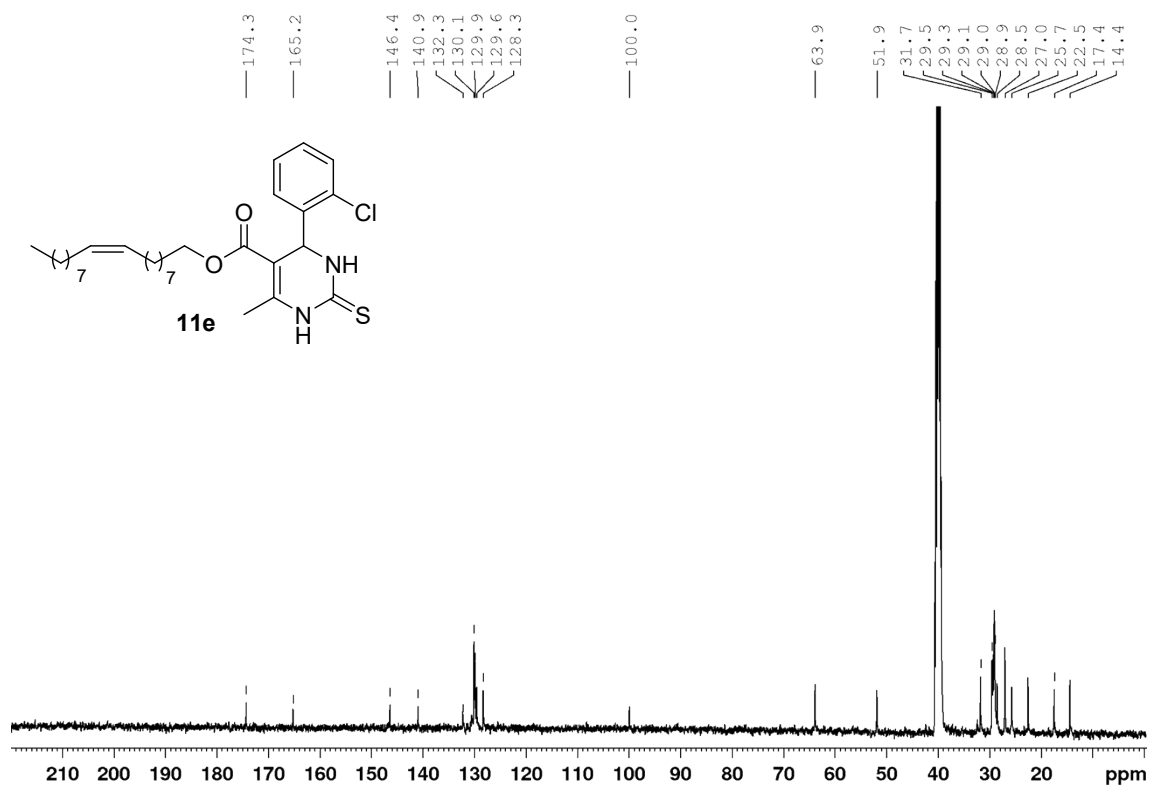




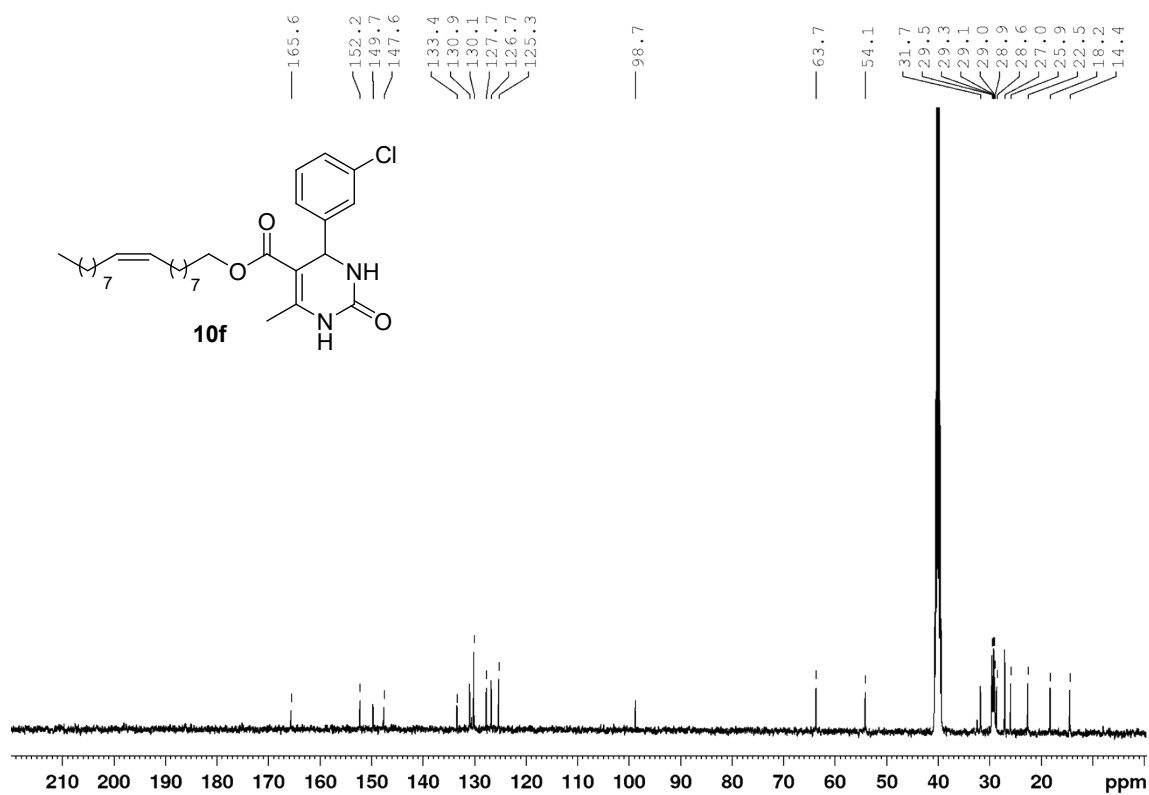
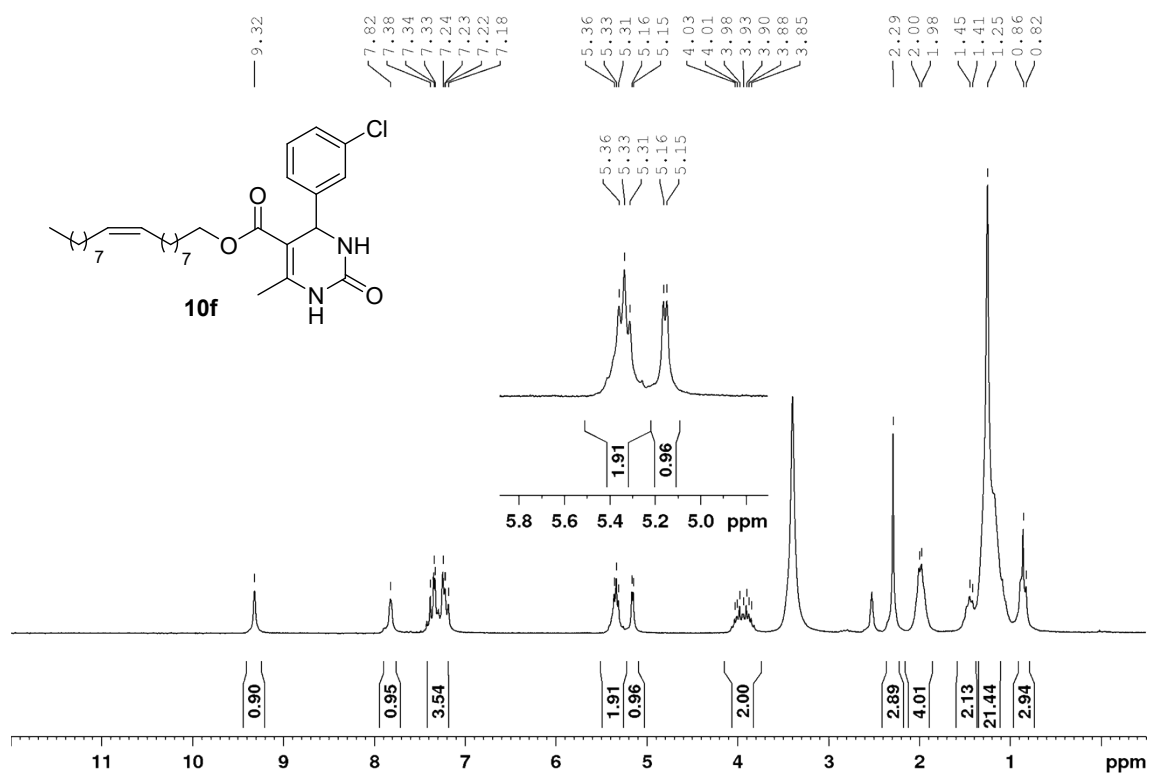
**Figure S27.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10e**

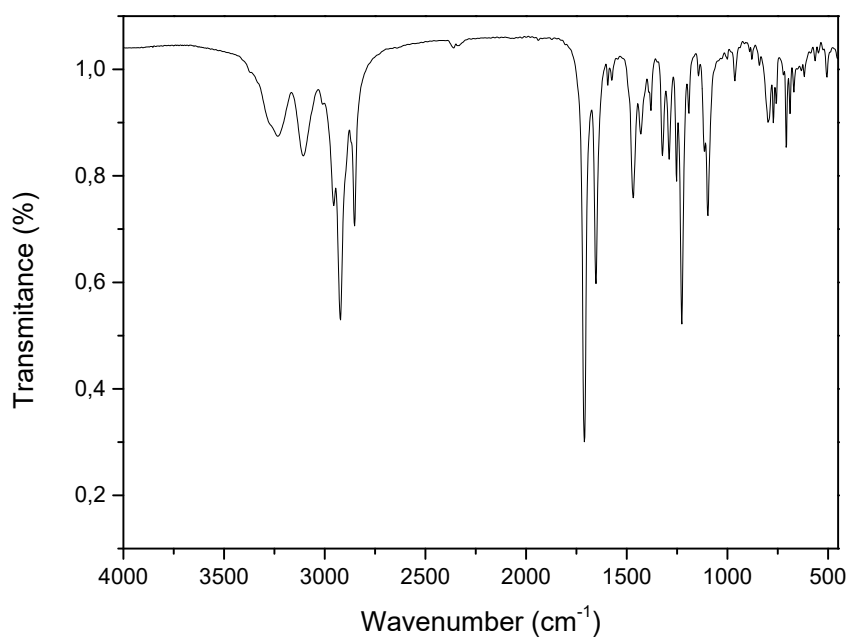


**Figure S28.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11e**

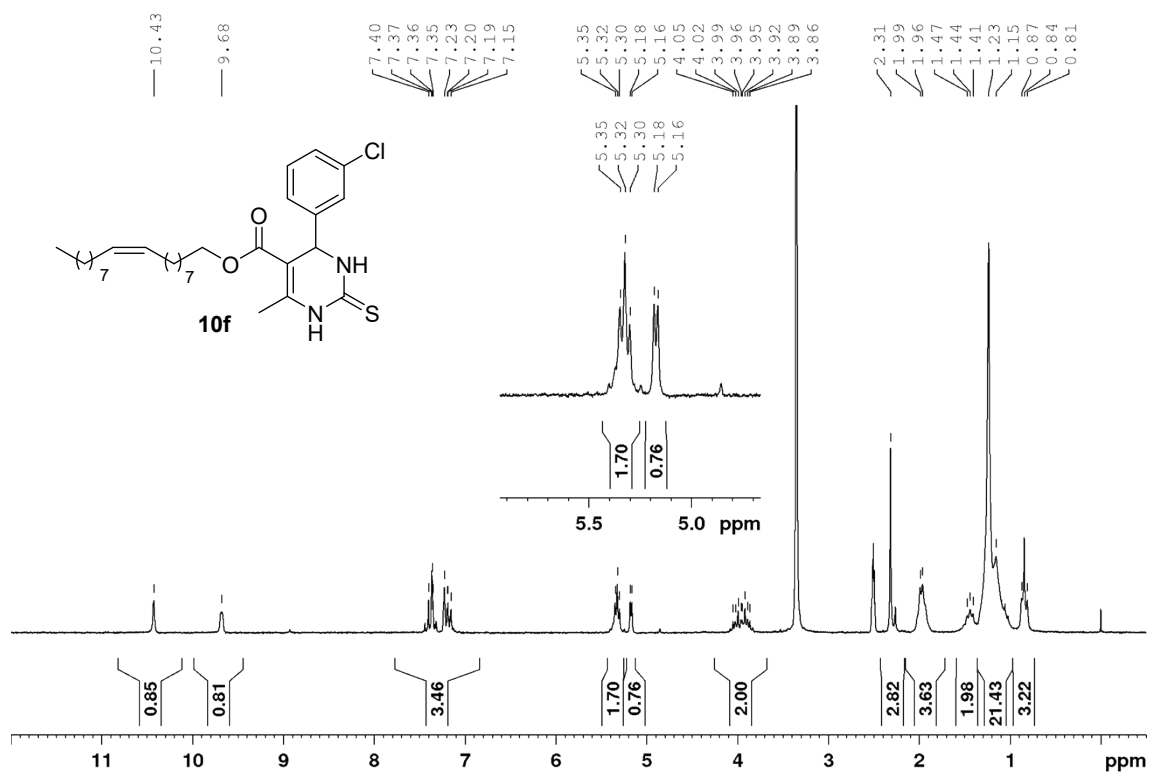




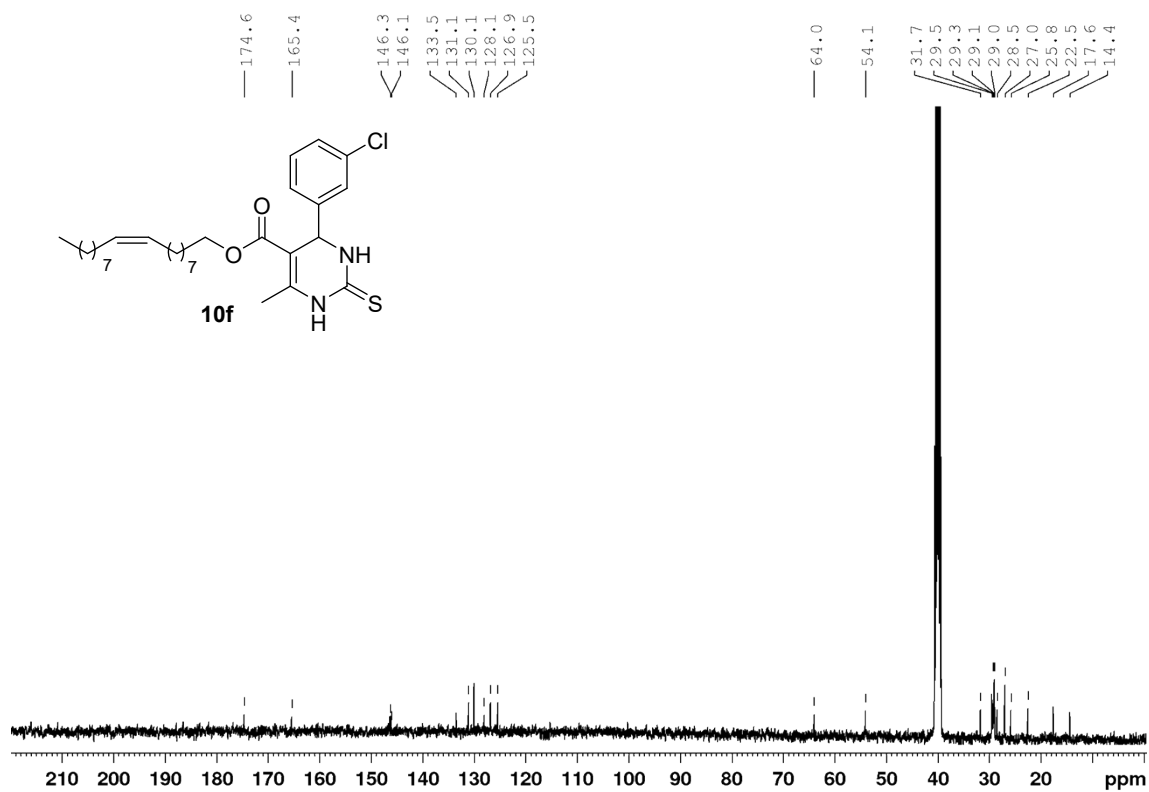




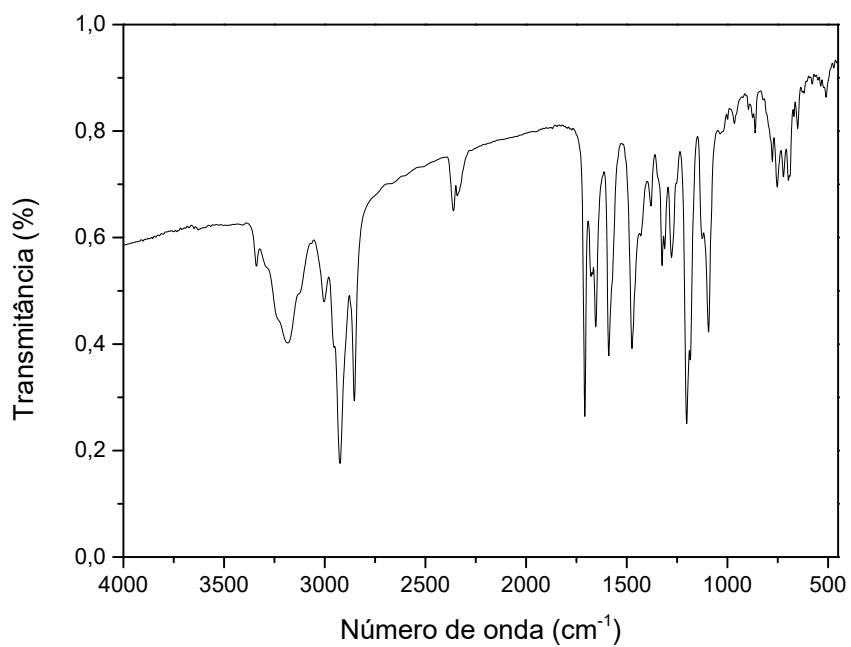
**Figure S33.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10f**



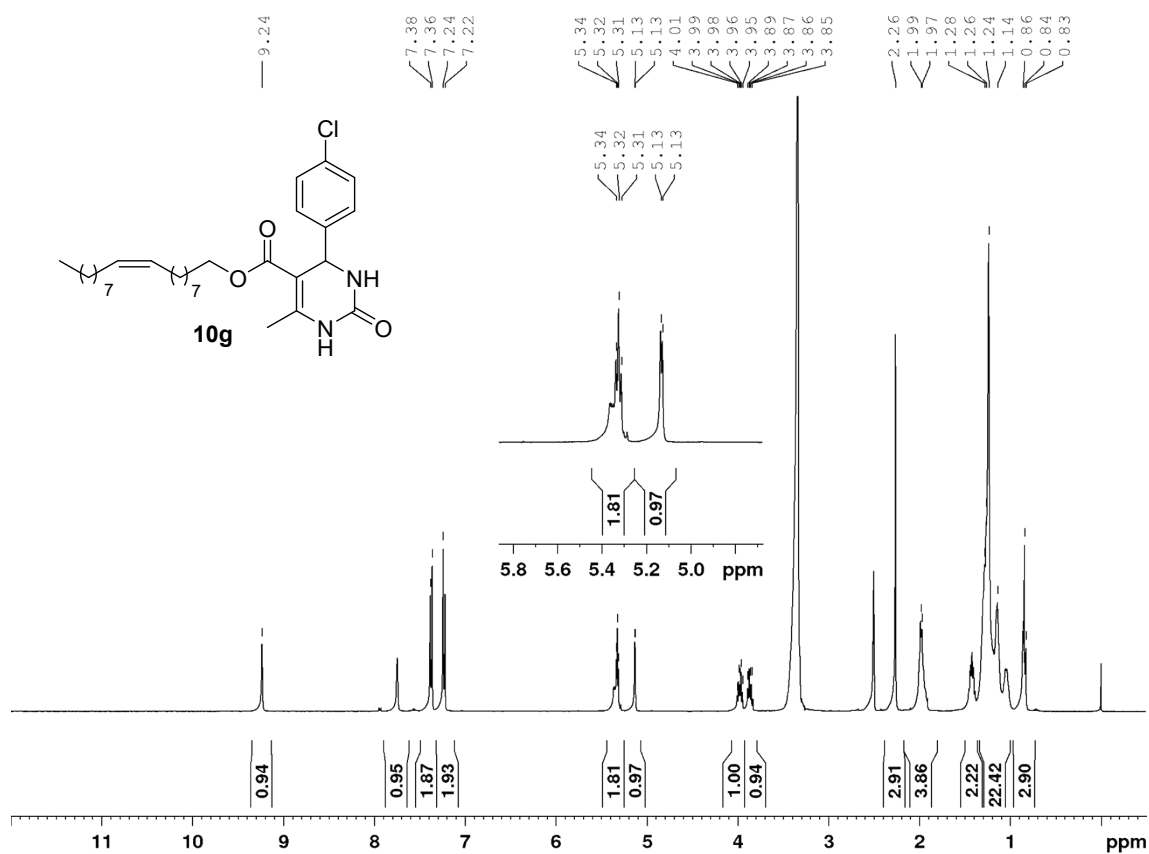
**Figure S34.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11f**



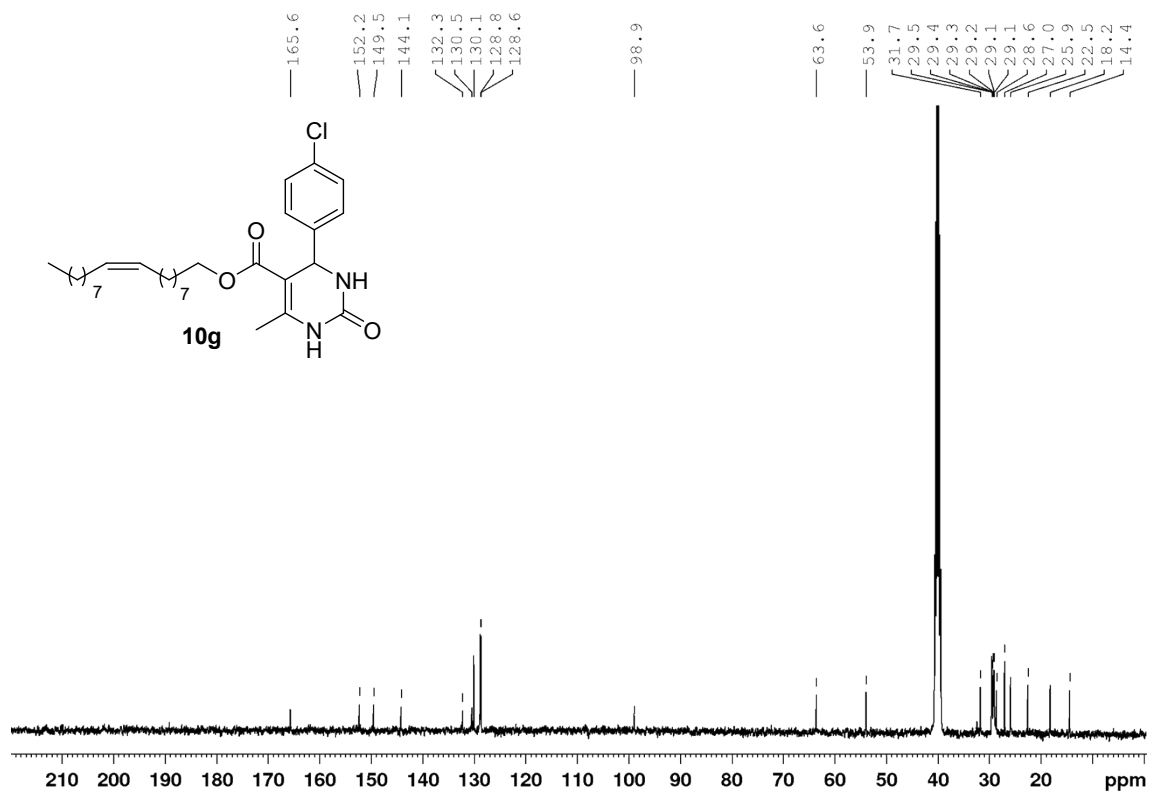
**Figure S35.** <sup>13</sup>C NMR (100 MHz, DMSO-d<sub>6</sub>) spectrum of **11f**



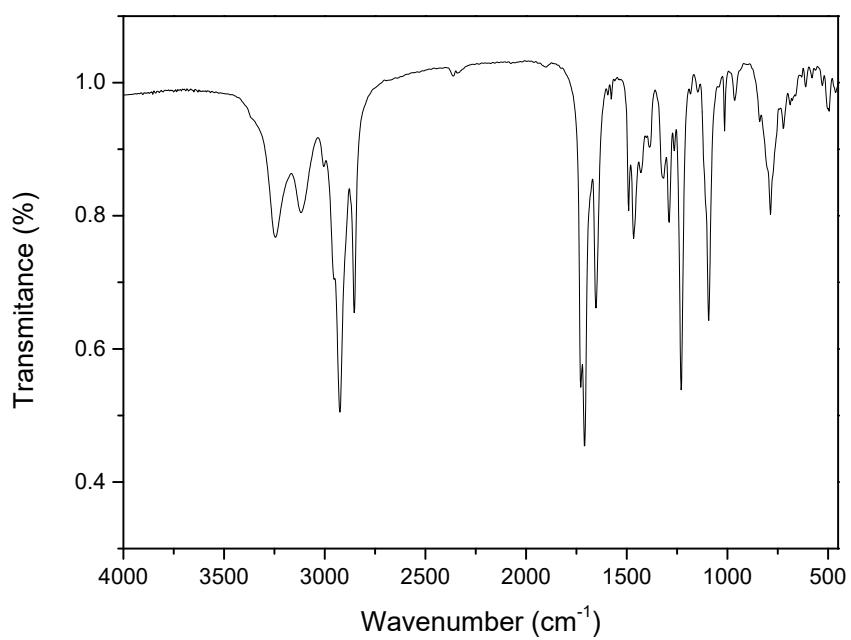
**Figure S36.** FT-IR (4000-400 cm<sup>-1</sup>, KBr) spectrum of **11f**



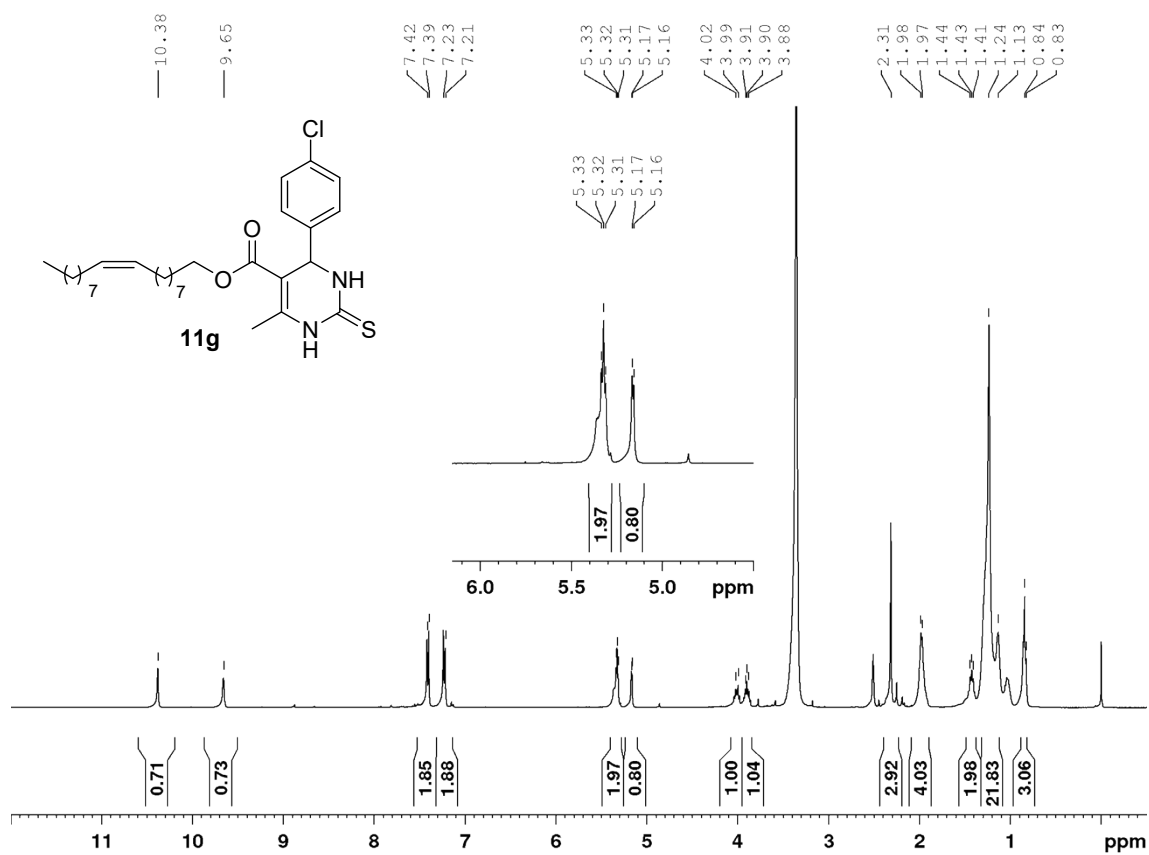
**Figure S37.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10g****



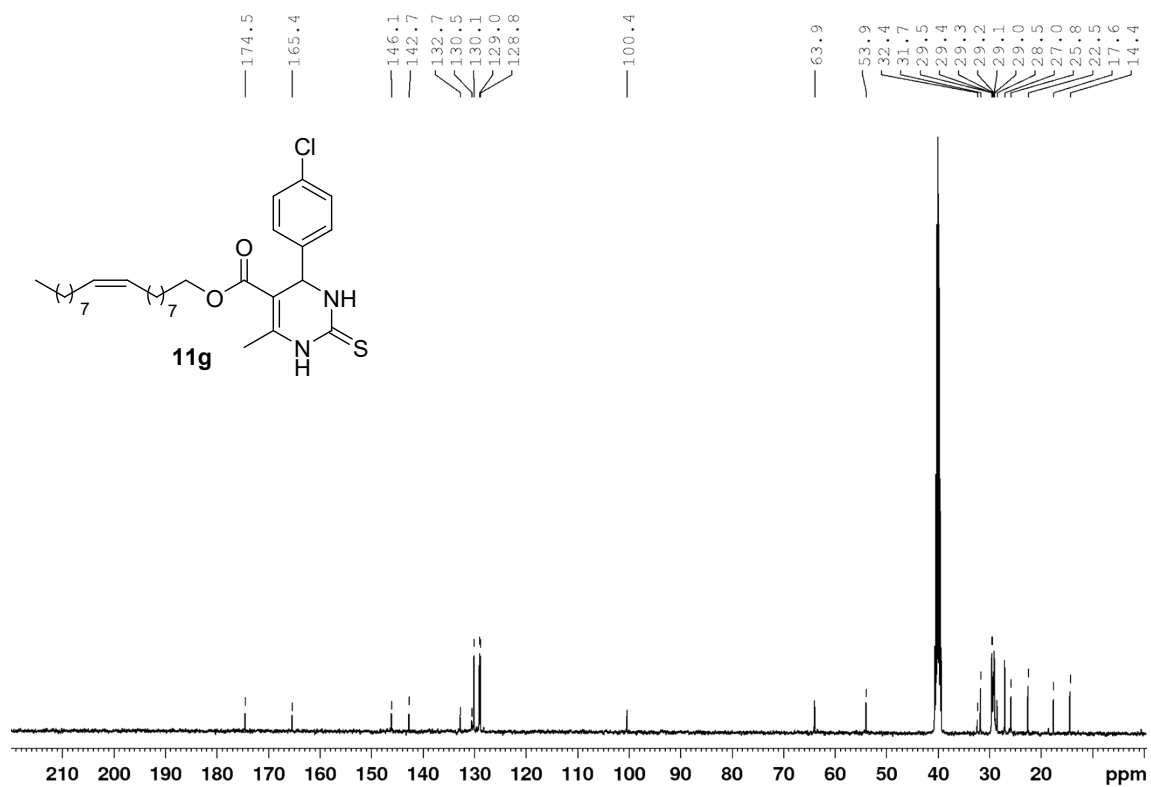
**Figure S38.  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10g****



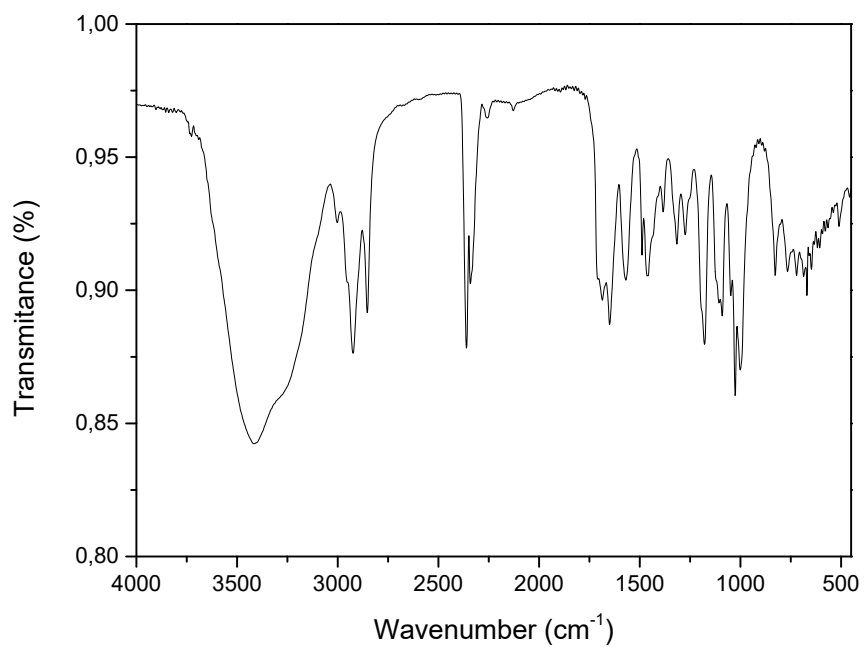
**Figure S39.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10g**



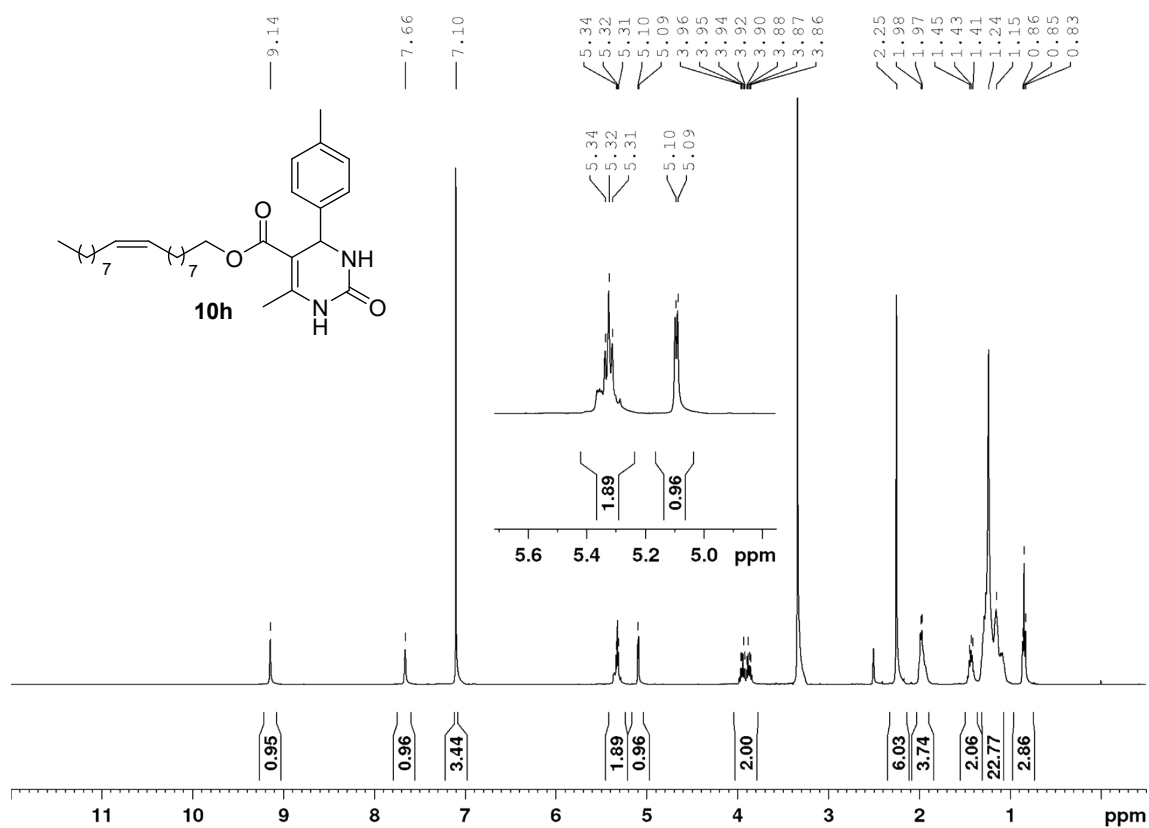
**Figure S40.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11g**



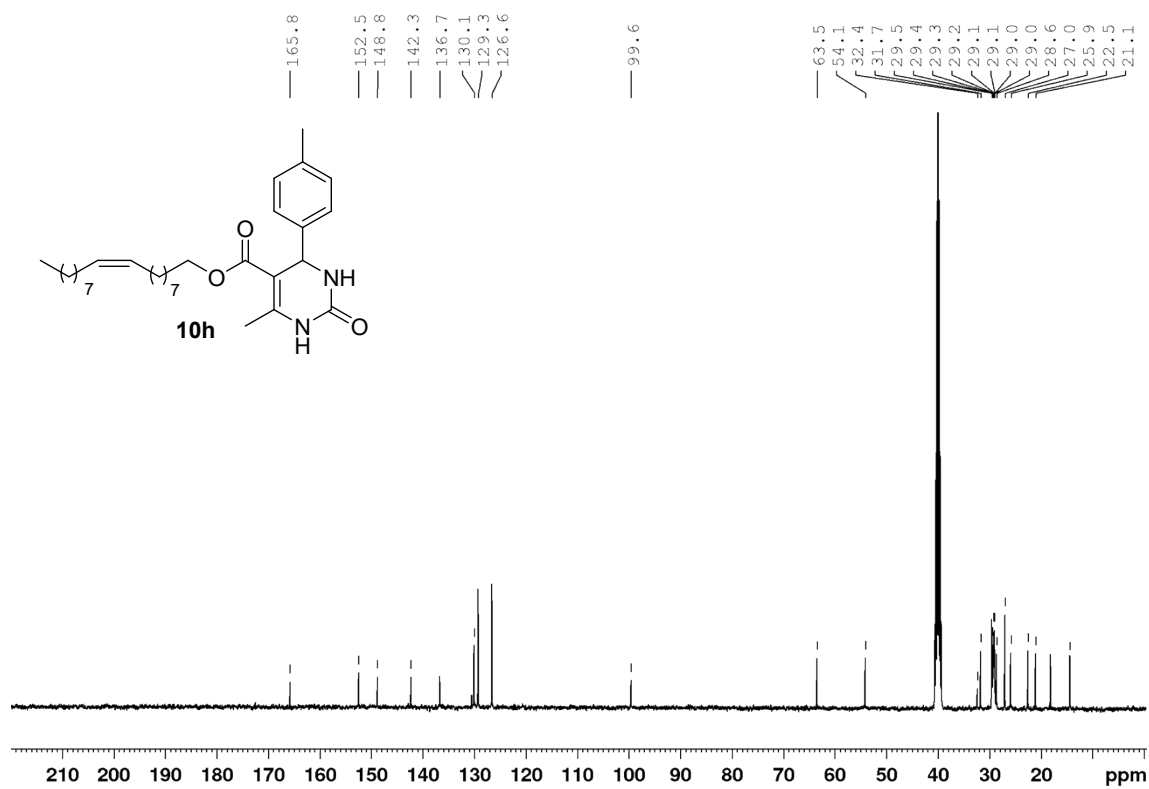
**Figure S41.** <sup>13</sup>C NMR (100 MHz, DMSO-d<sub>6</sub>) spectrum of **11g**



**Figure S42.** FT-IR (4000-400 cm<sup>-1</sup>, KBr) spectrum of **11g**



**Figure S43.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10h**



**Figure S44.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10h**

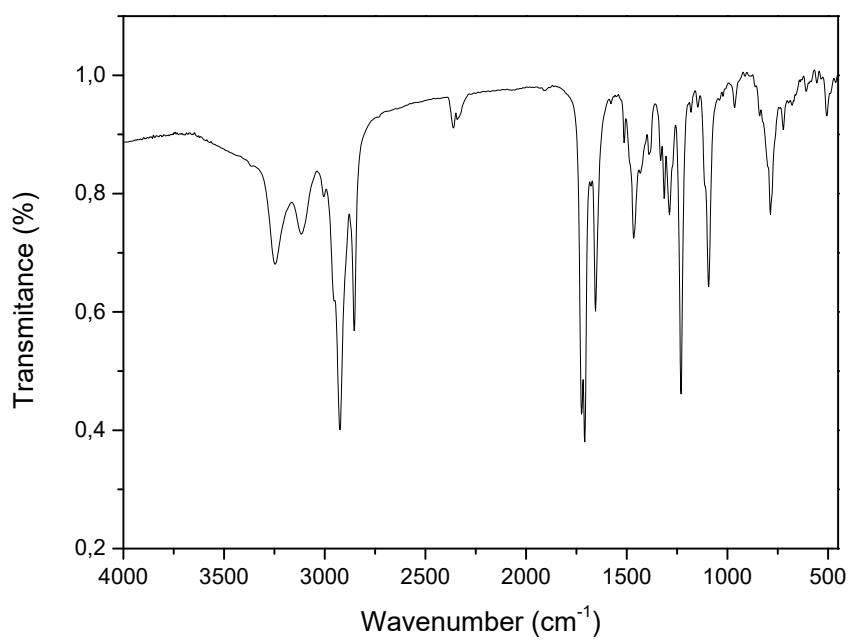


Figure S45. FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10h**

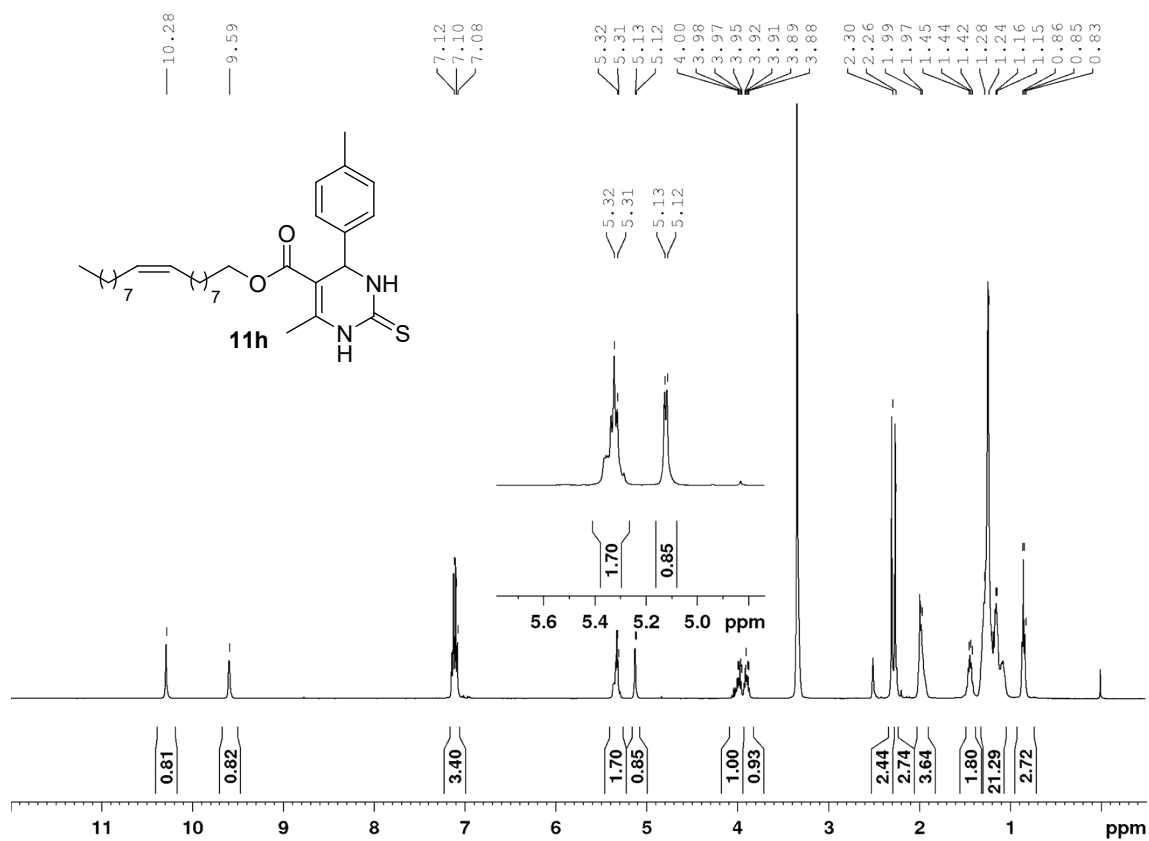
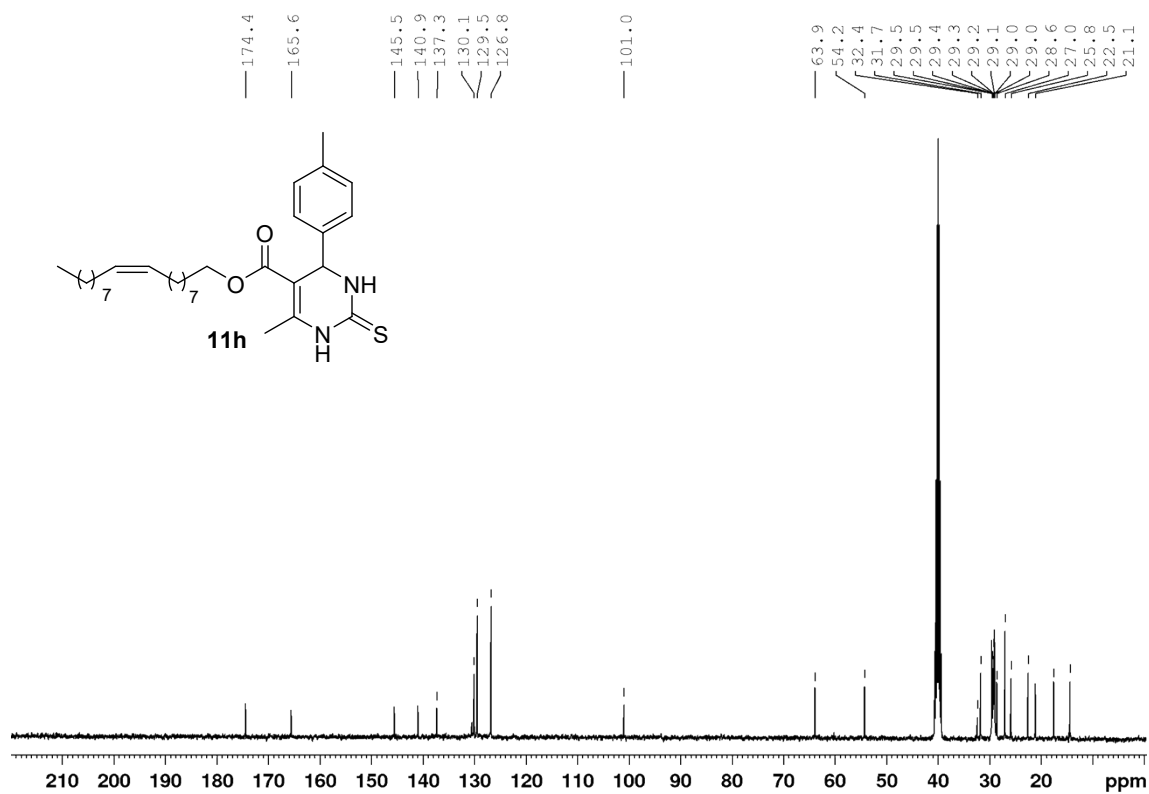
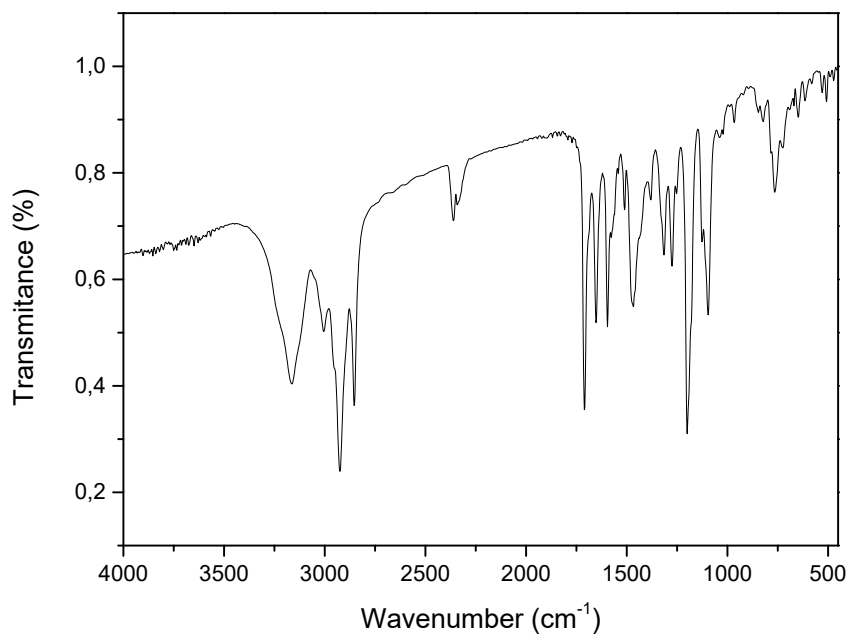


Figure S46.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11h**

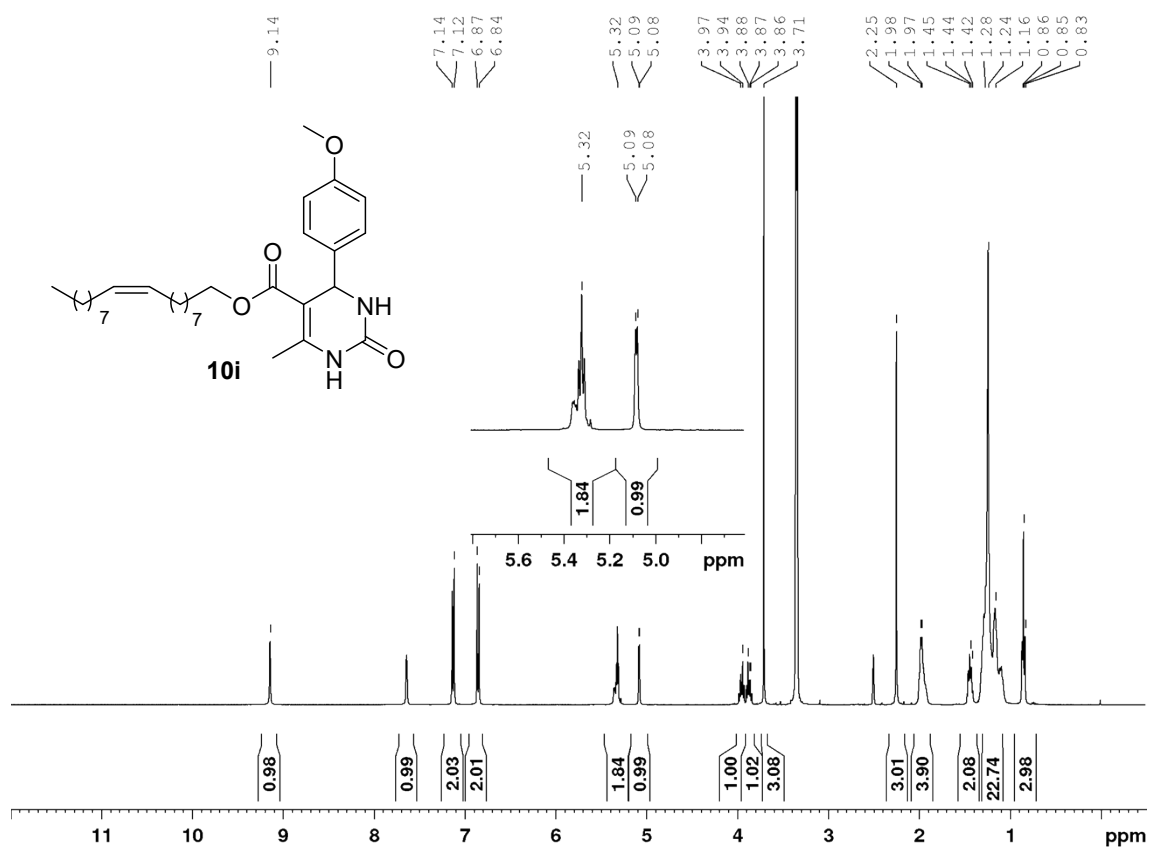




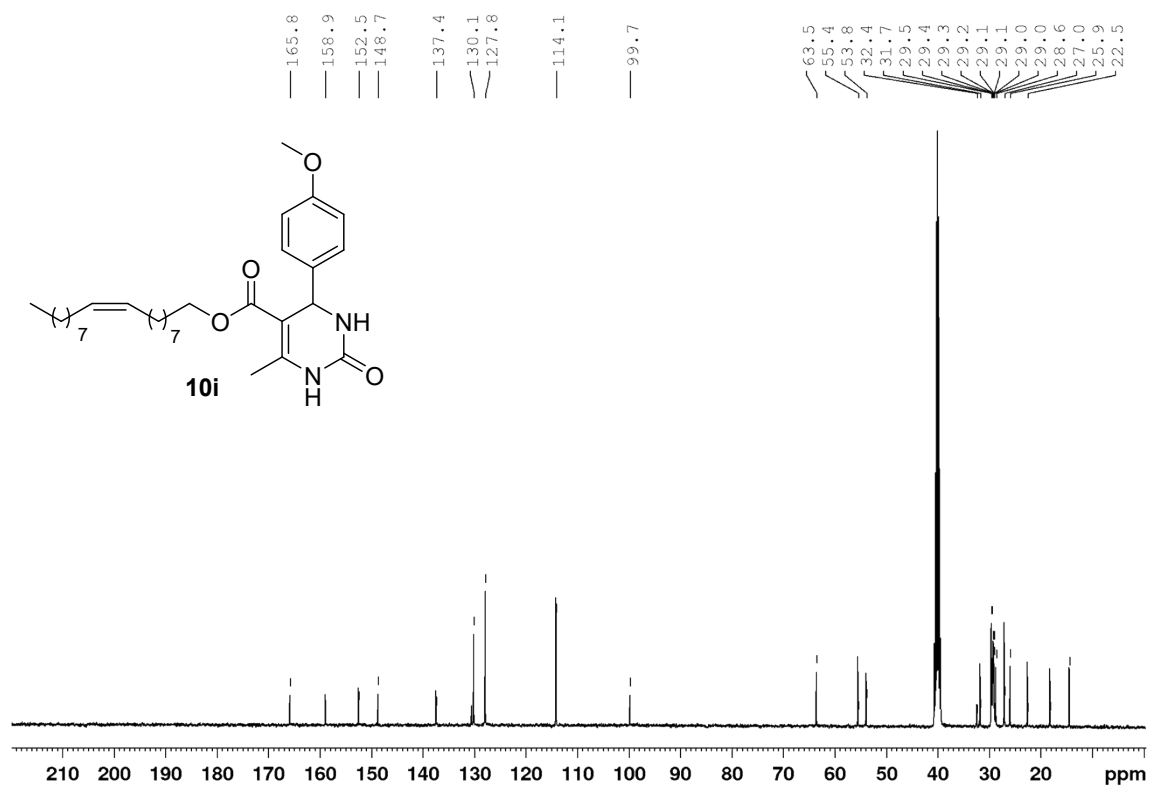
**Figure S47.**  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ) spectrum of **11h**



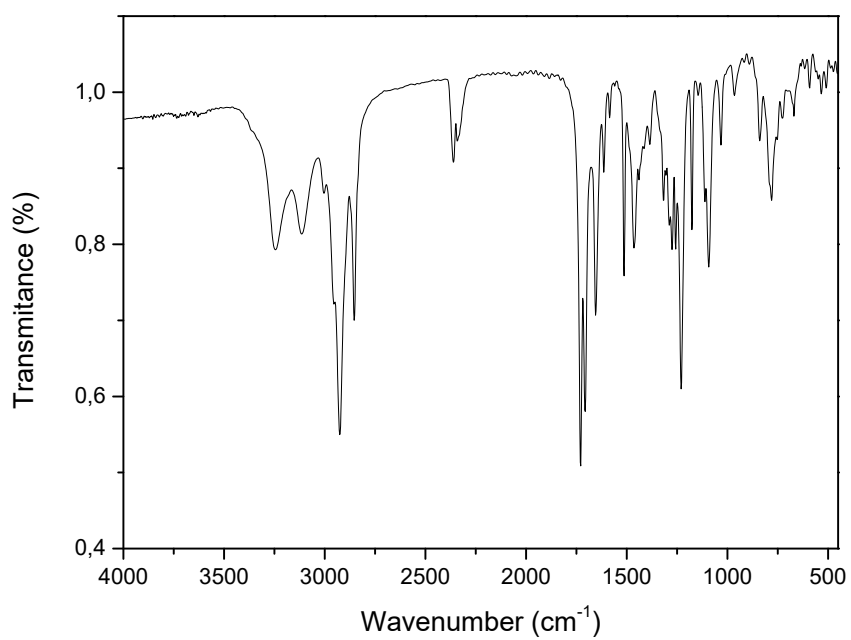
**Figure S48.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **11h**



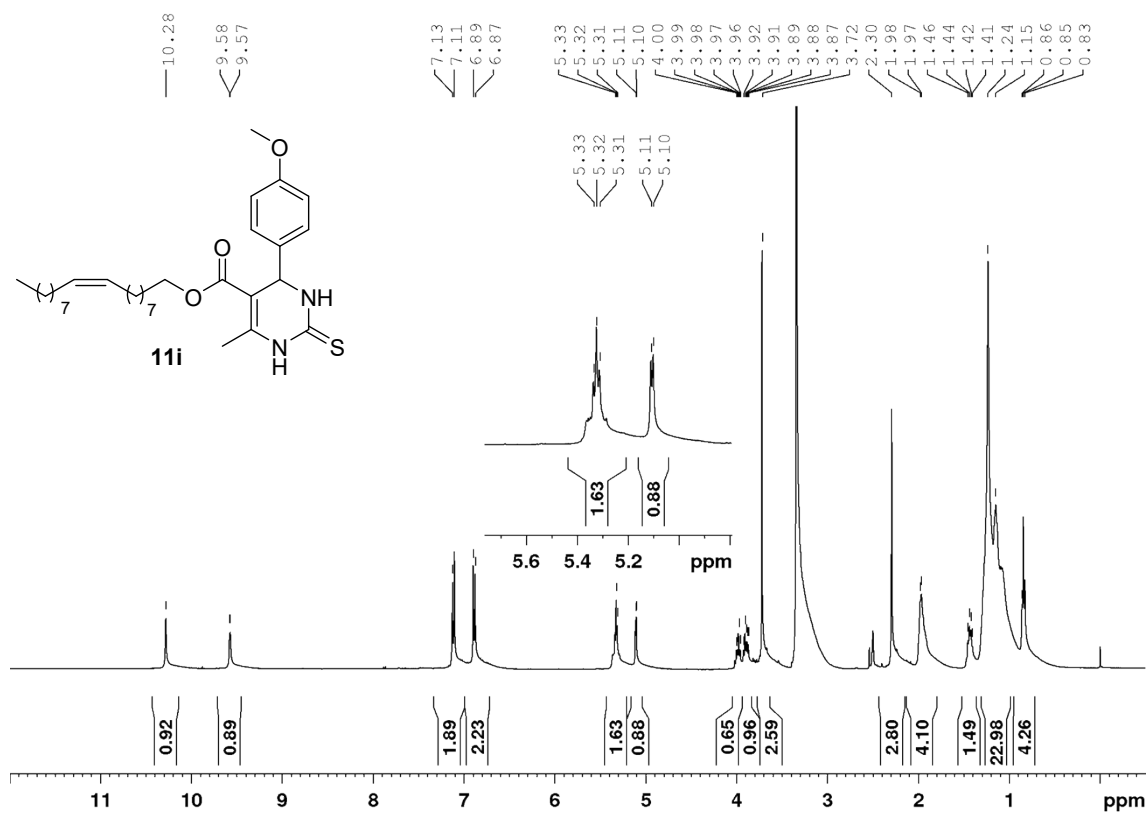
**Figure S49.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10i**



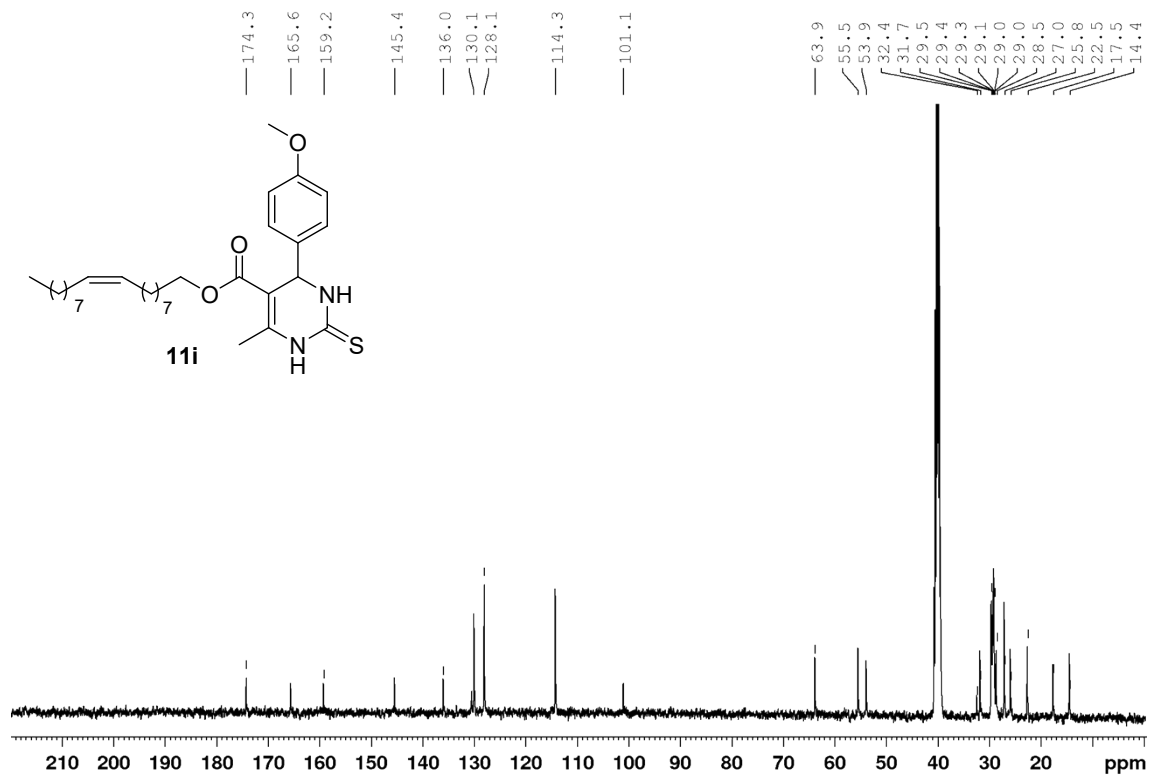
**Figure S50.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **10i**



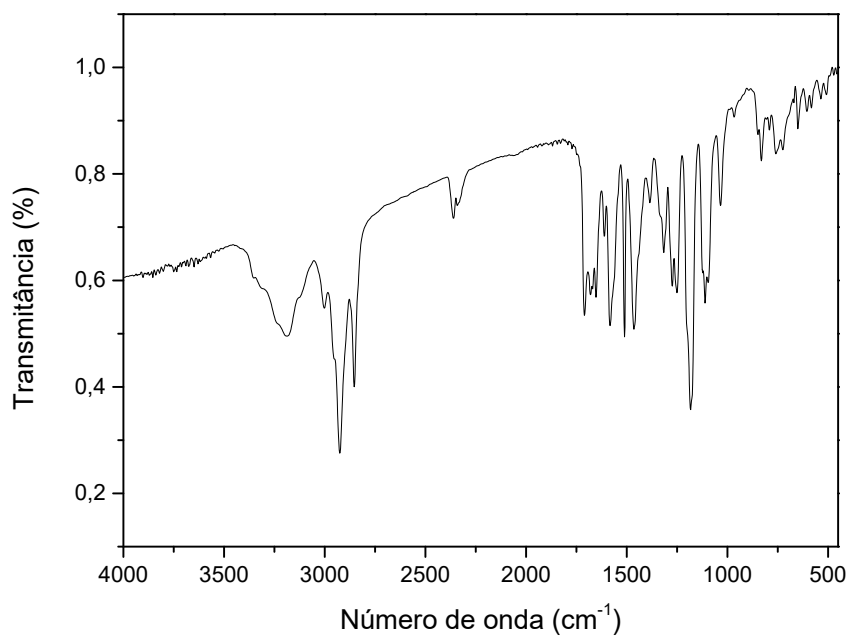
**Figure S51.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10i**



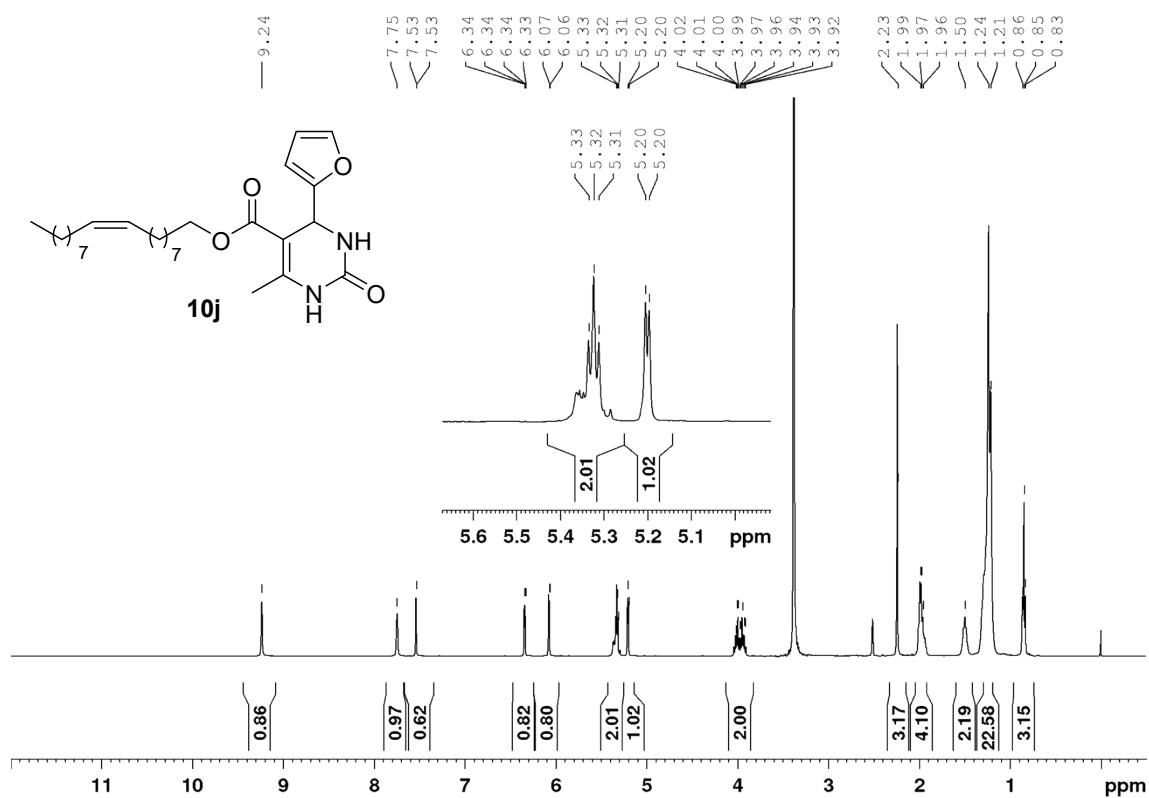
**Figure S52.**  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11i**



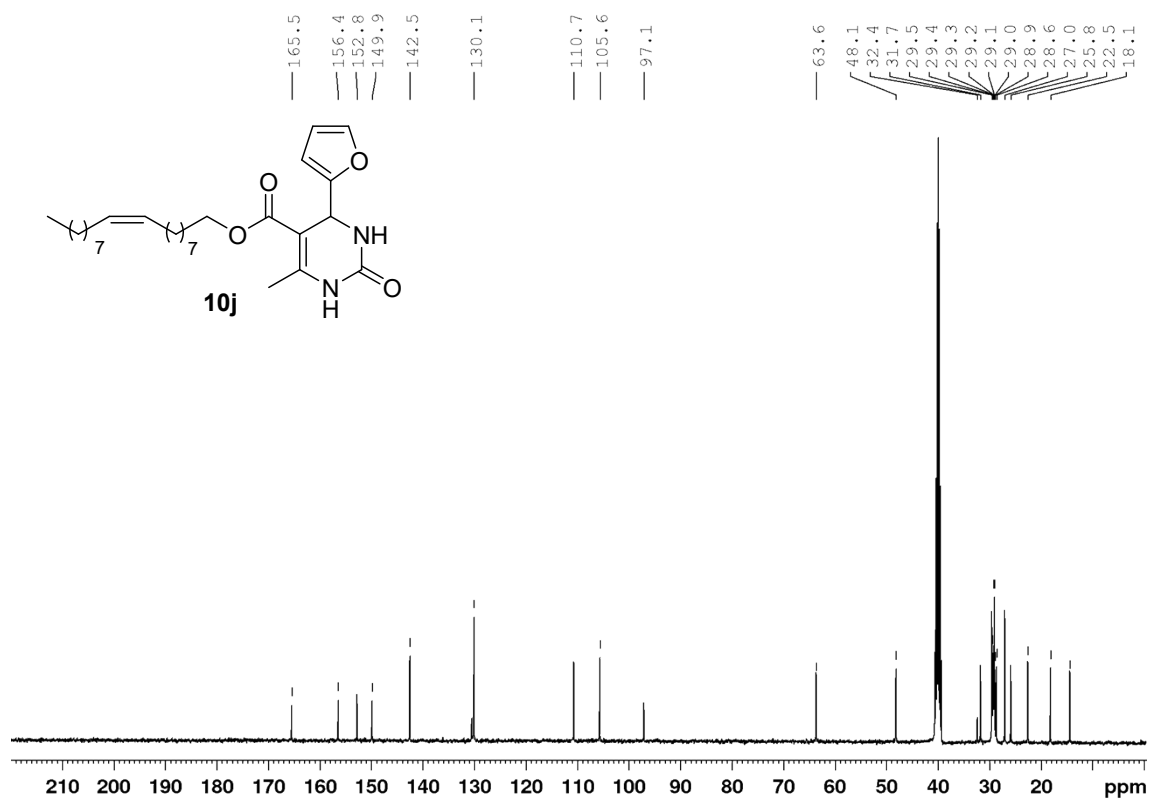
**Figure S53.** <sup>13</sup>C NMR (100 MHz, DMSO-d<sub>6</sub>) spectrum of **11i**



**Figure S54.** FT-IR (4000-400 cm<sup>-1</sup>, KBr) spectrum of **11i**



**Figure S55.  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ) spectrum of **10j****



**Figure S56.  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ) spectrum of **10j****

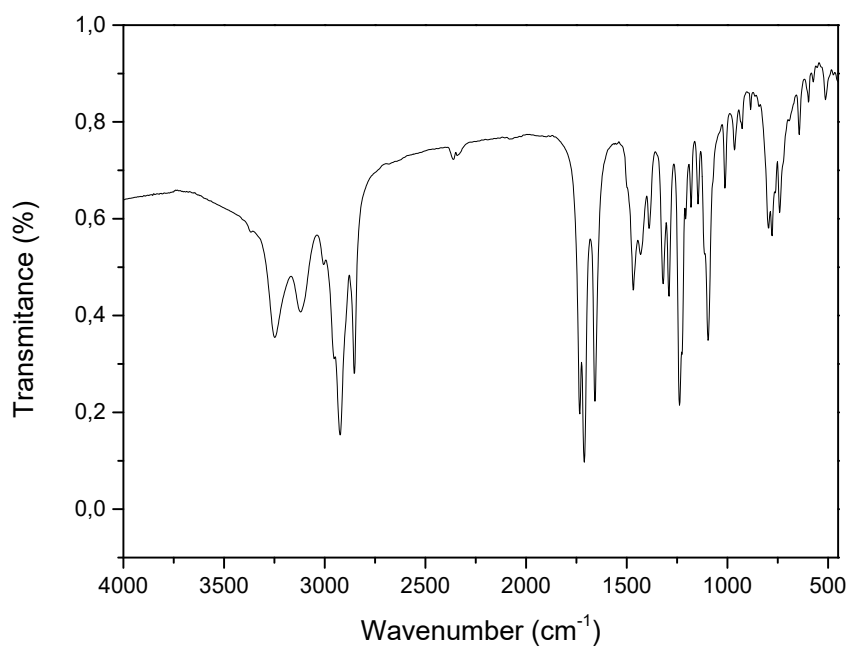


Figure S57. FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **10j**

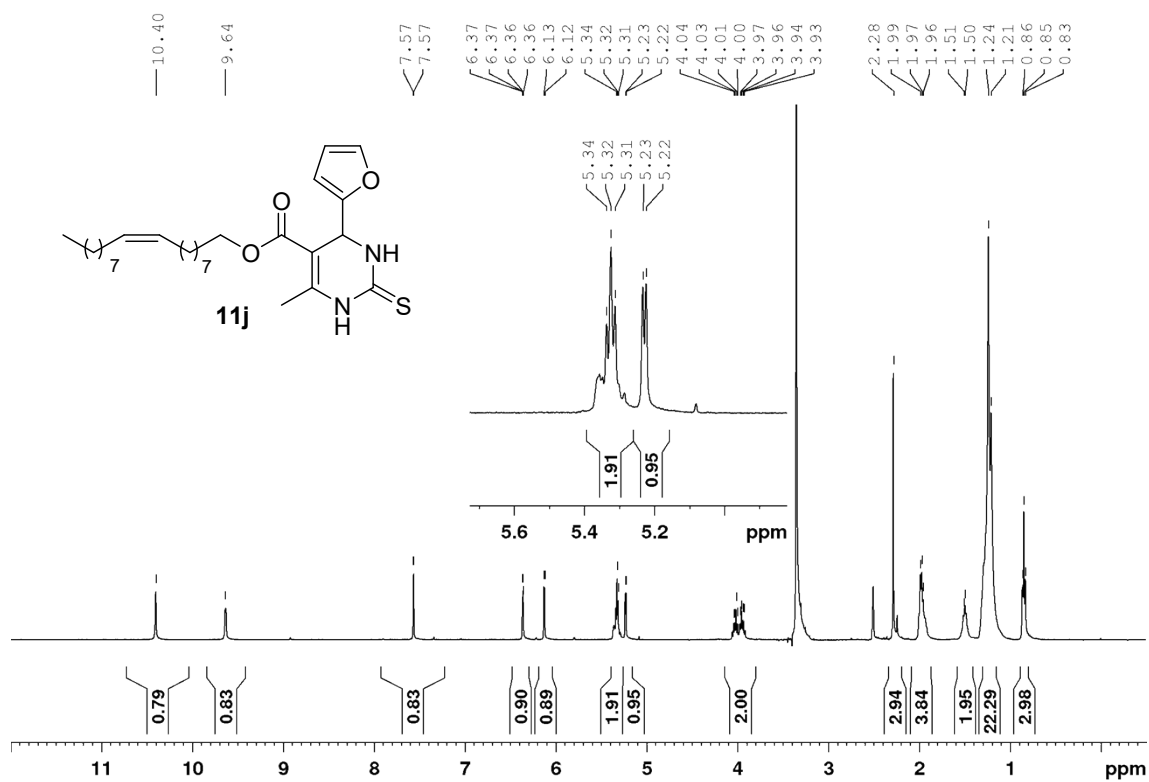
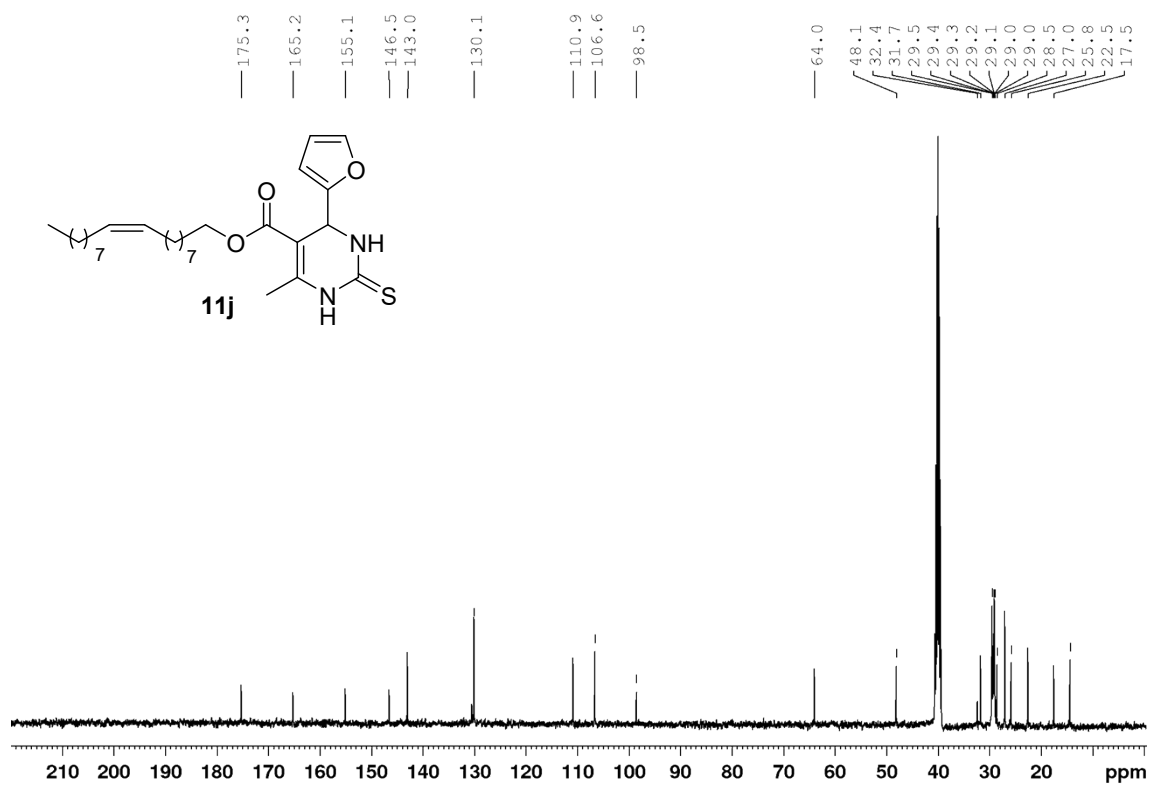
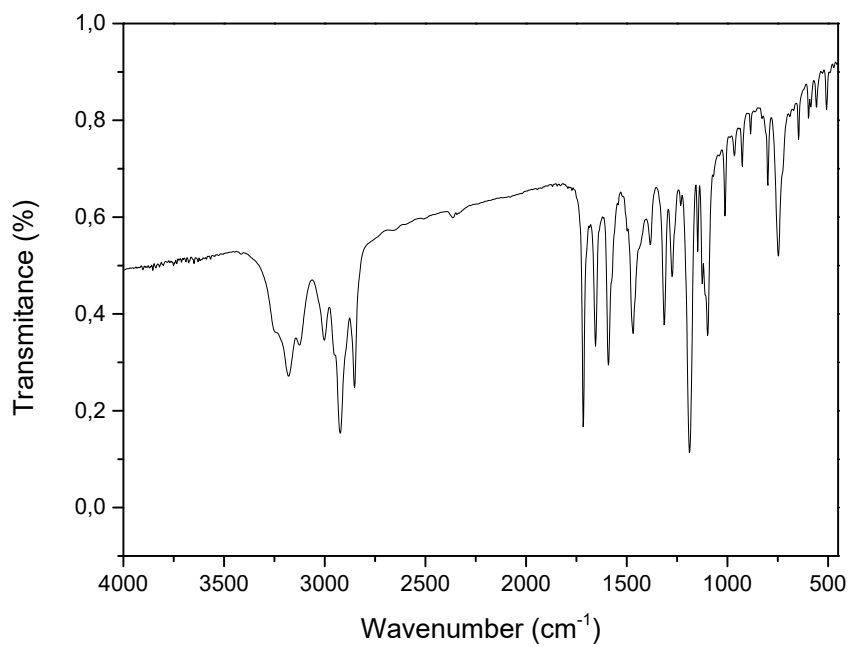


Figure S58.  $^1\text{H}$  NMR (400 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11j**



**Figure S59.**  $^{13}\text{C}$  NMR (100 MHz,  $\text{DMSO-d}_6$ ) spectrum of **11j**



**Figure S60.** FT-IR (4000-400  $\text{cm}^{-1}$ , KBr) spectrum of **11j**