

Supplementary Material

Figure S1: Copies of ^1H - and ^{13}C -NMR spectra of compounds **2a–2p**.

Figure S2: Lineweaver-Burk and Dixon plots for compounds **2l** and **2p** against AChE and BChE.

Figure S2: Lineweaver-Burk and Dixon plots for compounds **2l** and **2p** against β -secretase.

Figure S1: Copies of ^1H - and ^{13}C -NMR spectra of compounds 2a–2p.

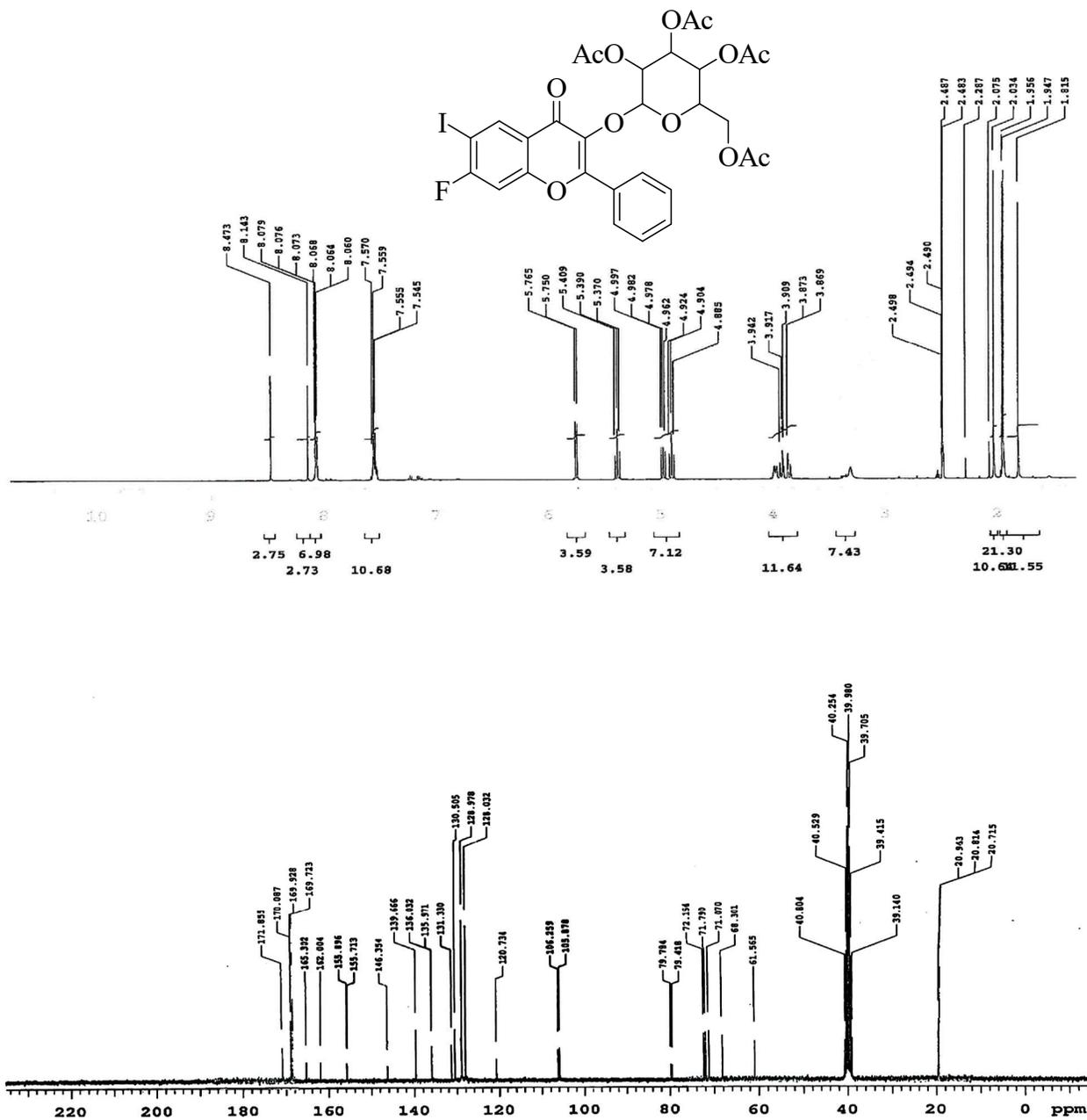


Figure S1.1: ^1H - and ^{13}C -NMR spectra of 2a in $\text{DMSO-}d_6$ at 500 and 125 MHz, respectively.

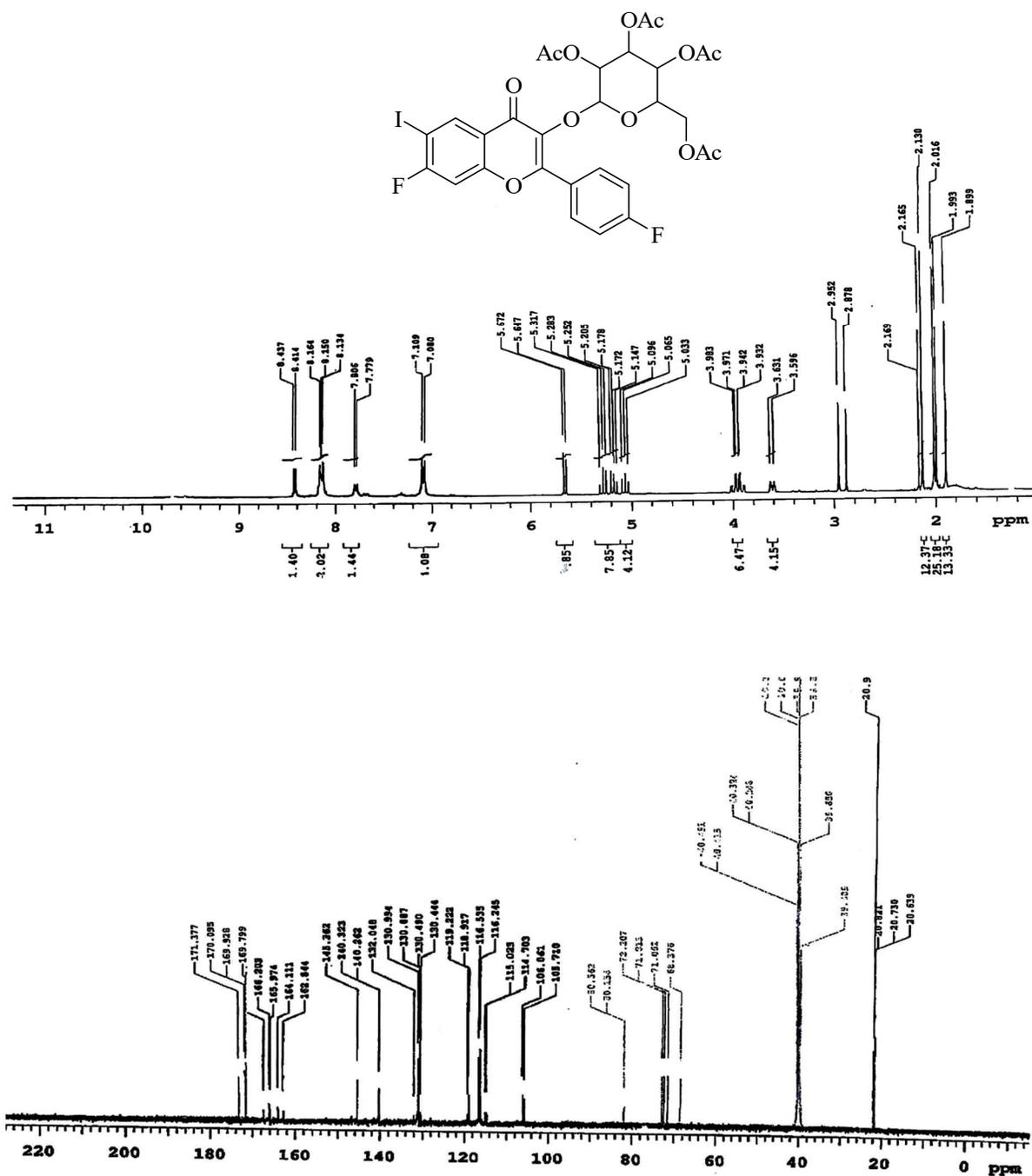


Figure S1.2: ¹H- and ¹³C-NMR spectra of **2b** in DMSO-*d*₆ at 300 and 75 MHz, respectively.

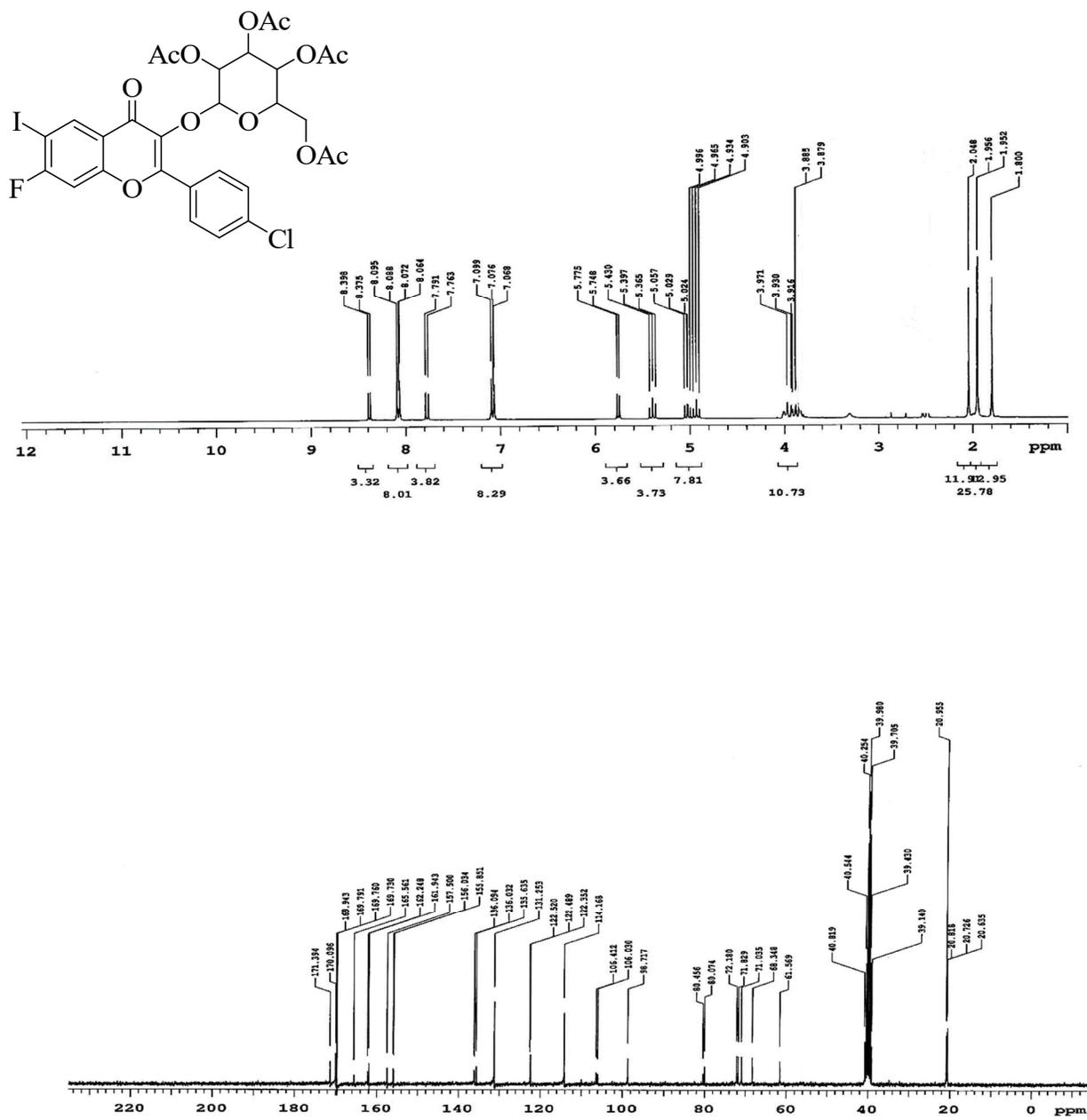


Figure S1.3: ¹H- and ¹³C-NMR spectra of 2c in DMSO-d₆ at 300 and 75 MHz, respectively.

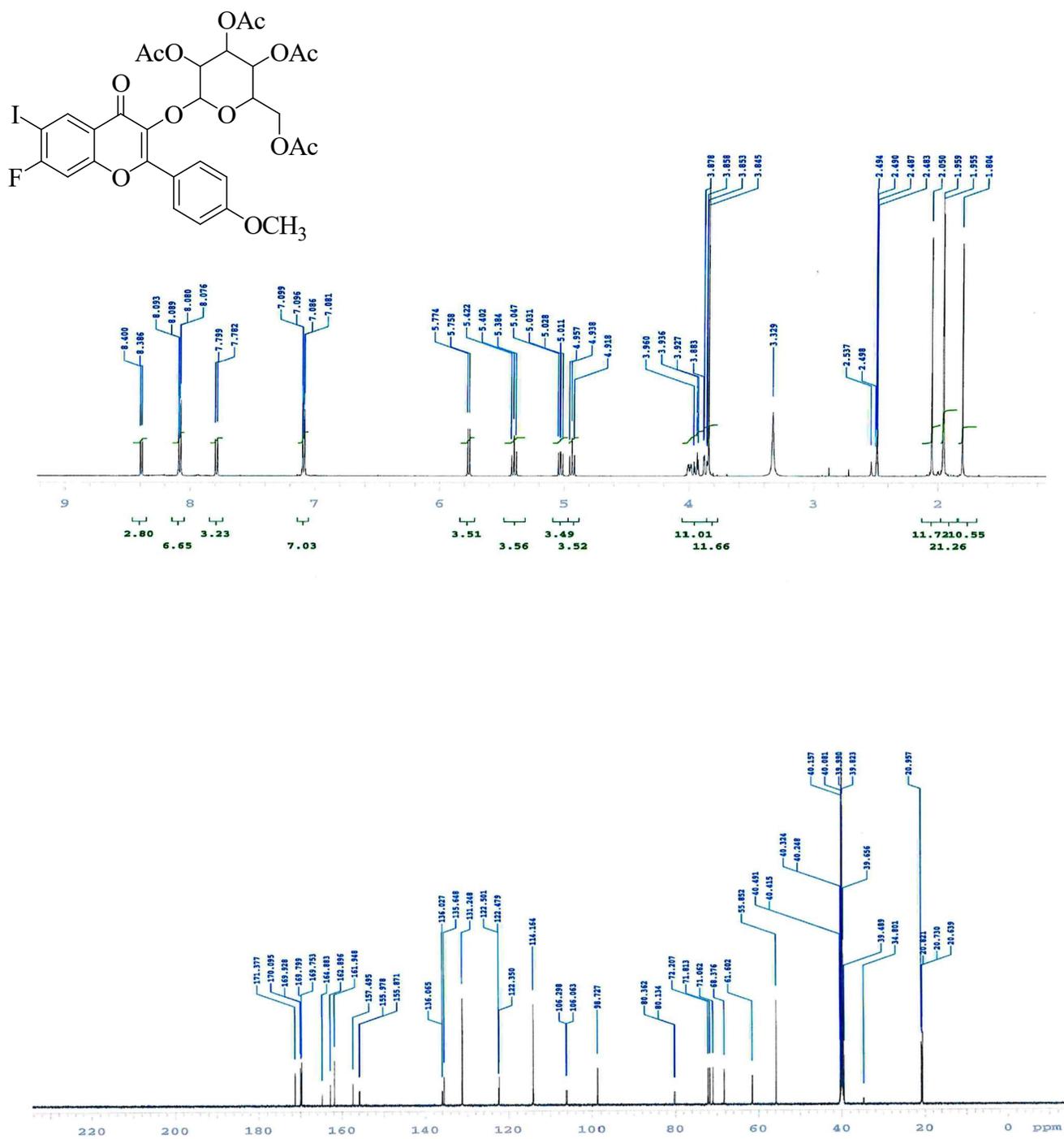


Figure S14: ¹H- and ¹³C-NMR spectra of 2d in DMSO-*d*₆ at 500 and 125 MHz, respectively.

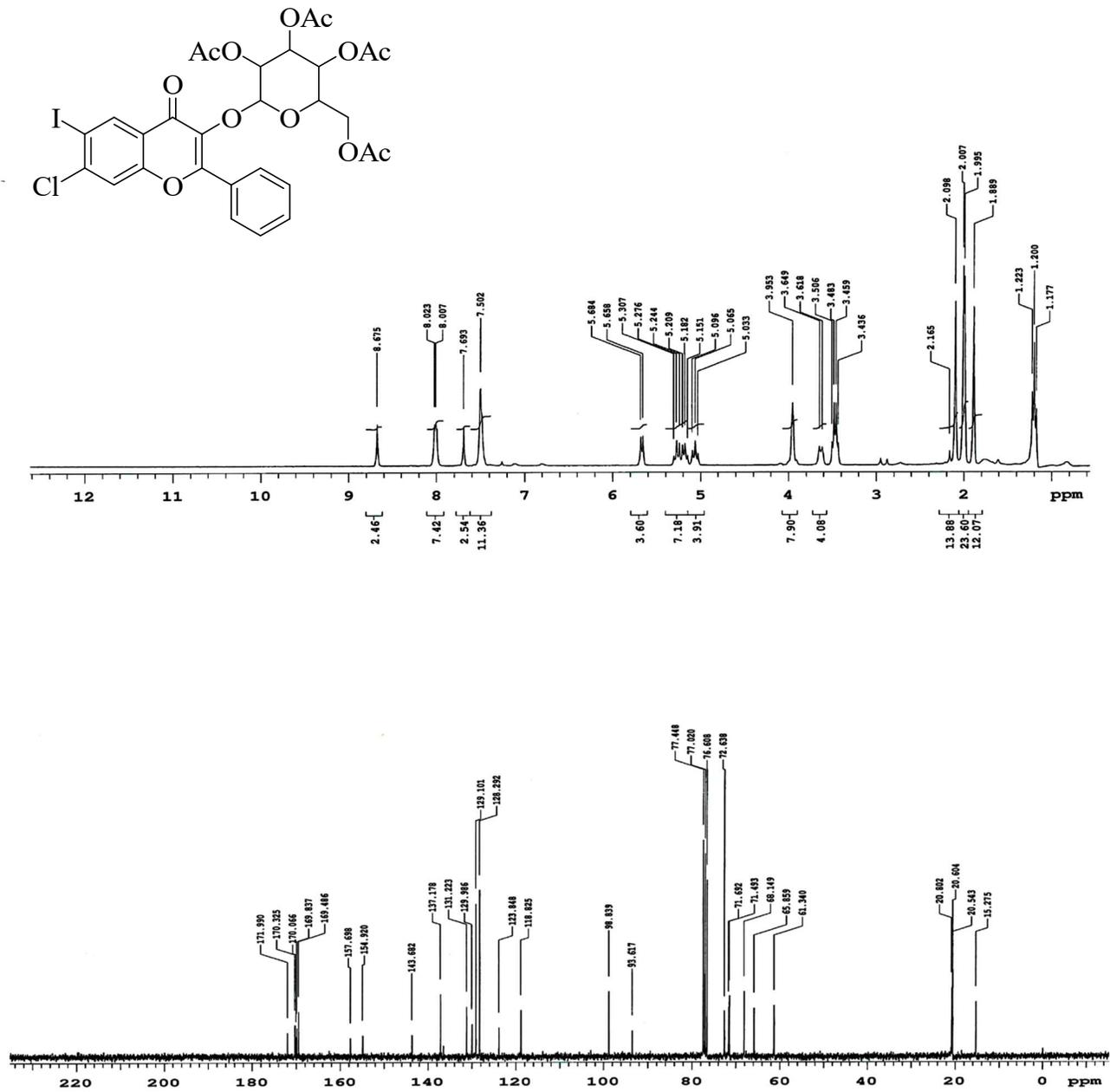


Figure S1.5: ¹H- and ¹³C-NMR spectra of **2e** in CDCl₃ at 300 and 75 MHz, respectively.

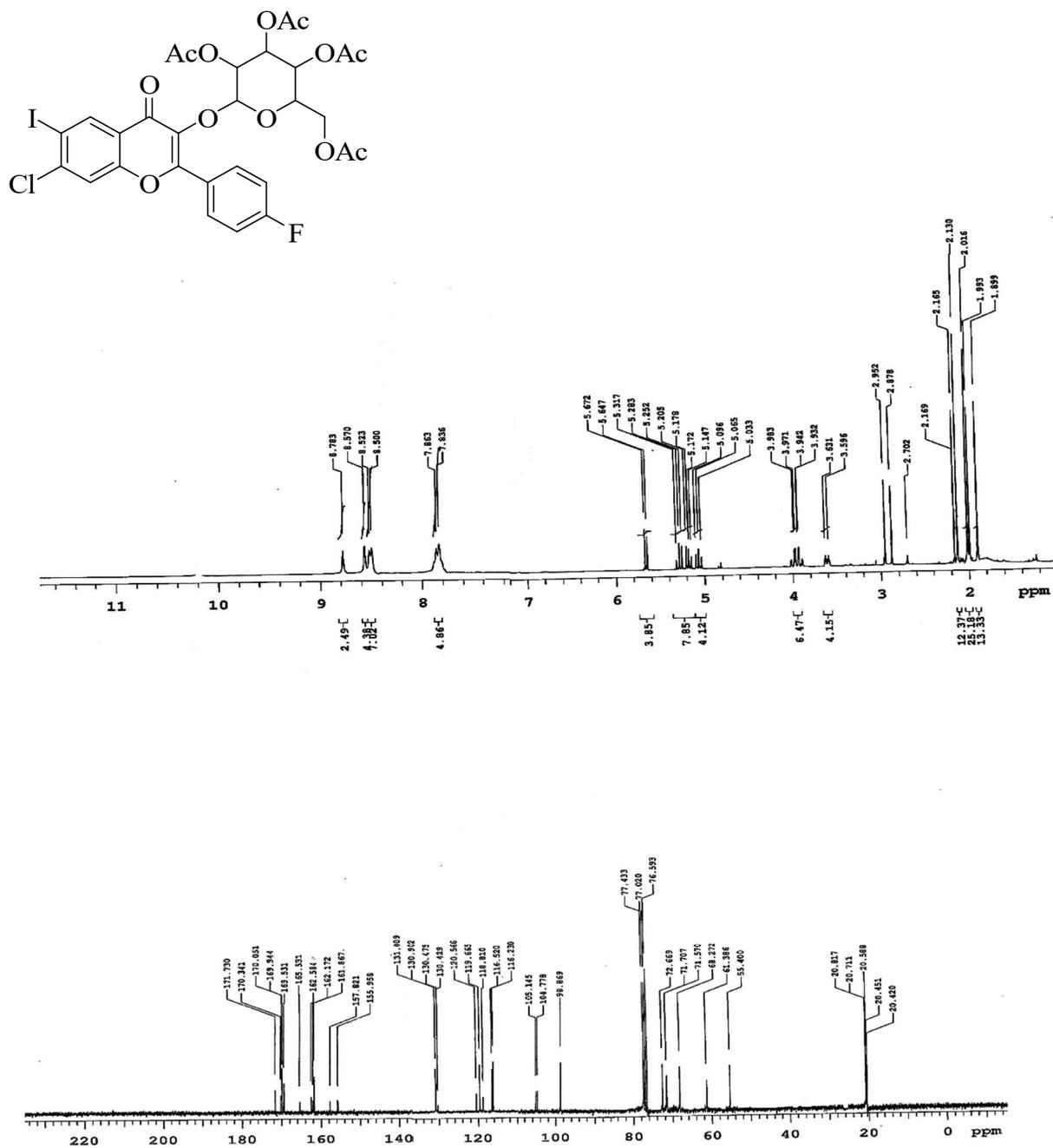


Figure S1.6: ¹H- and ¹³C-NMR spectra of **2f** in CDCl₃ at 300 and 75 MHz, respectively.

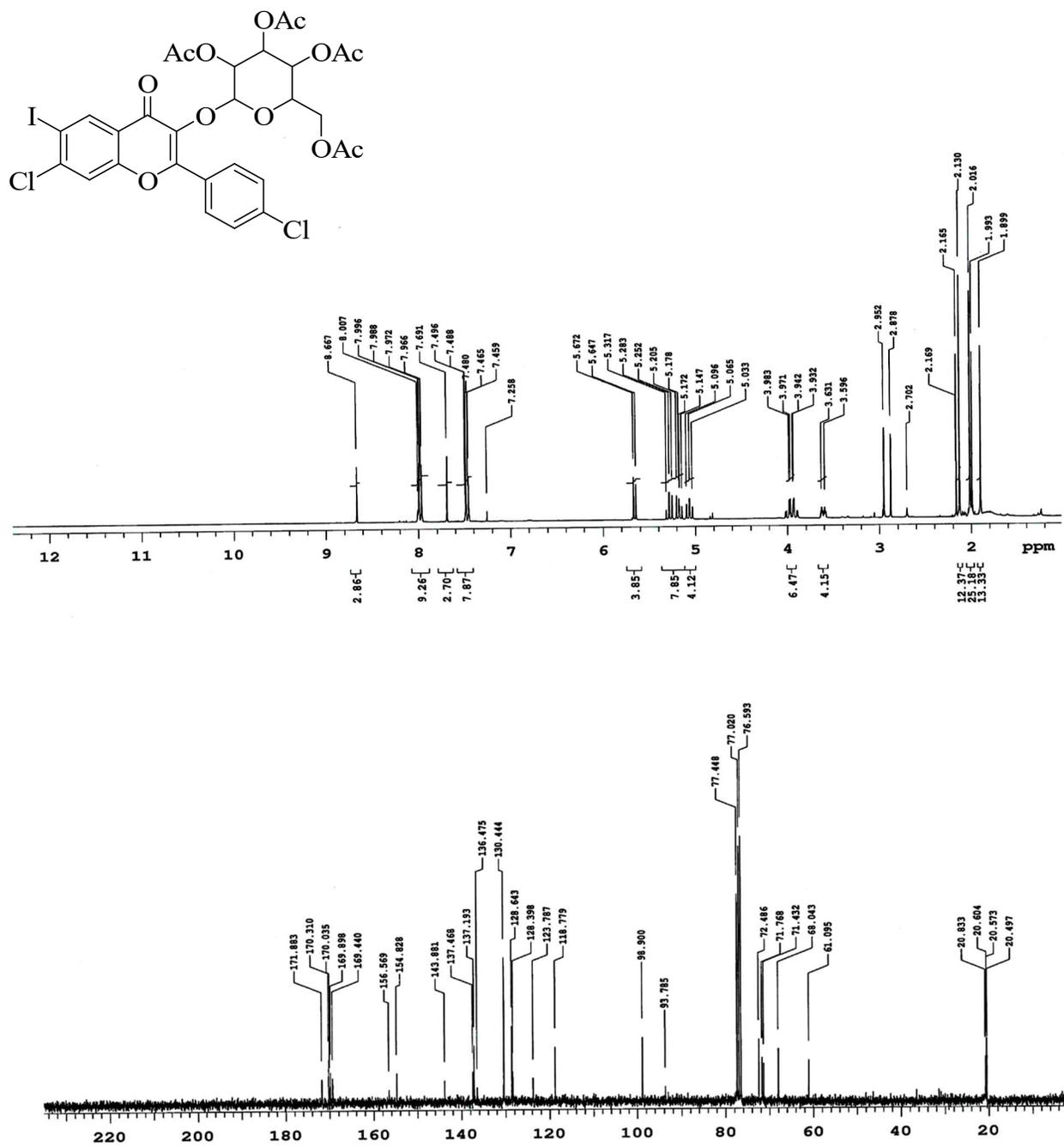


Figure S1.7: ¹H- and ¹³C-NMR spectra of 2g in CDCl₃ at 300 and 75 MHz, respectively.

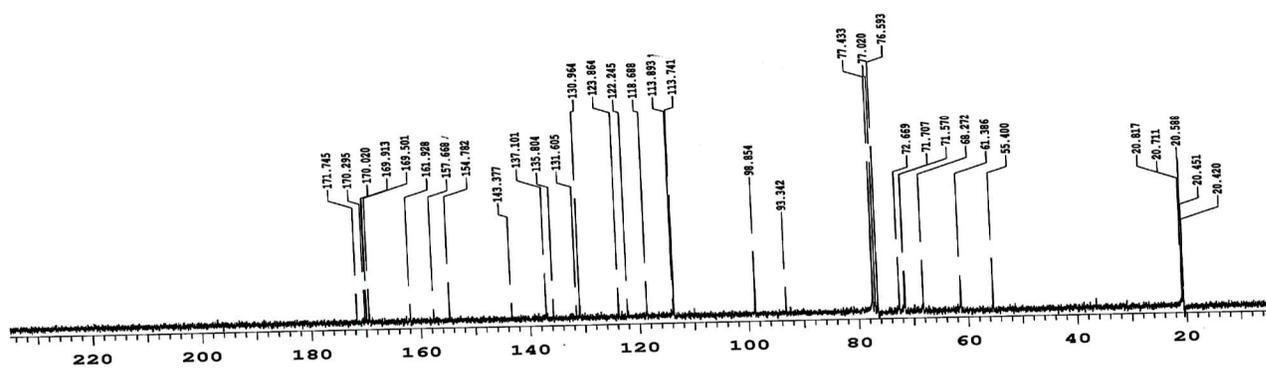
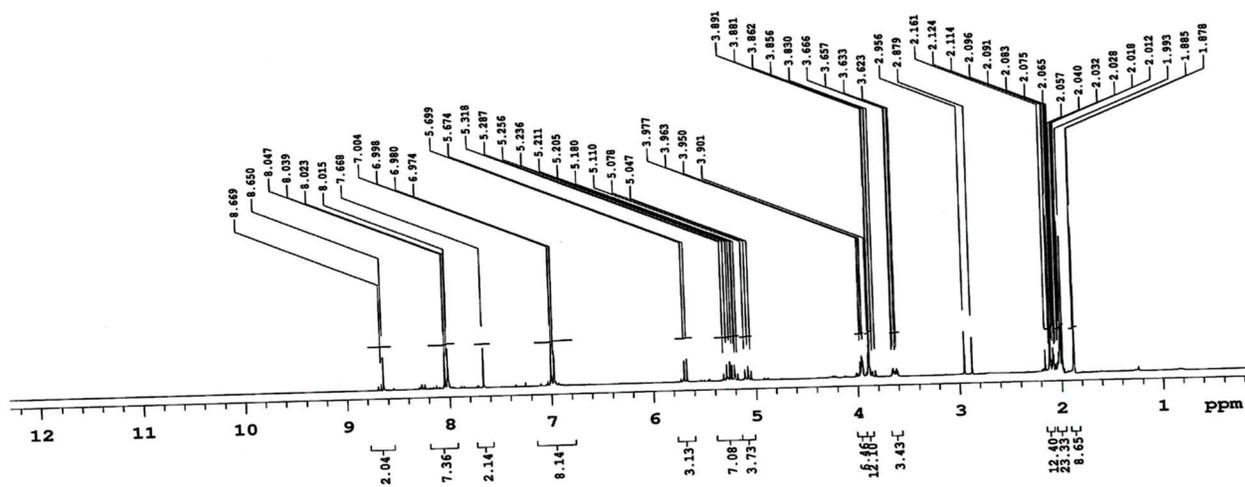
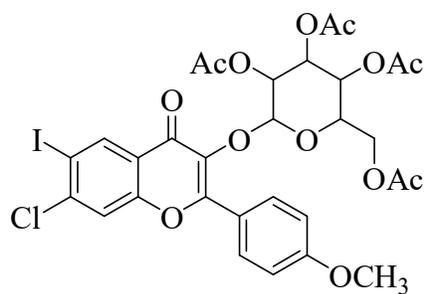


Figure S1.8: ^1H - and ^{13}C -NMR spectra of **2h** in CDCl_3 at 300 and 75 MHz, respectively.

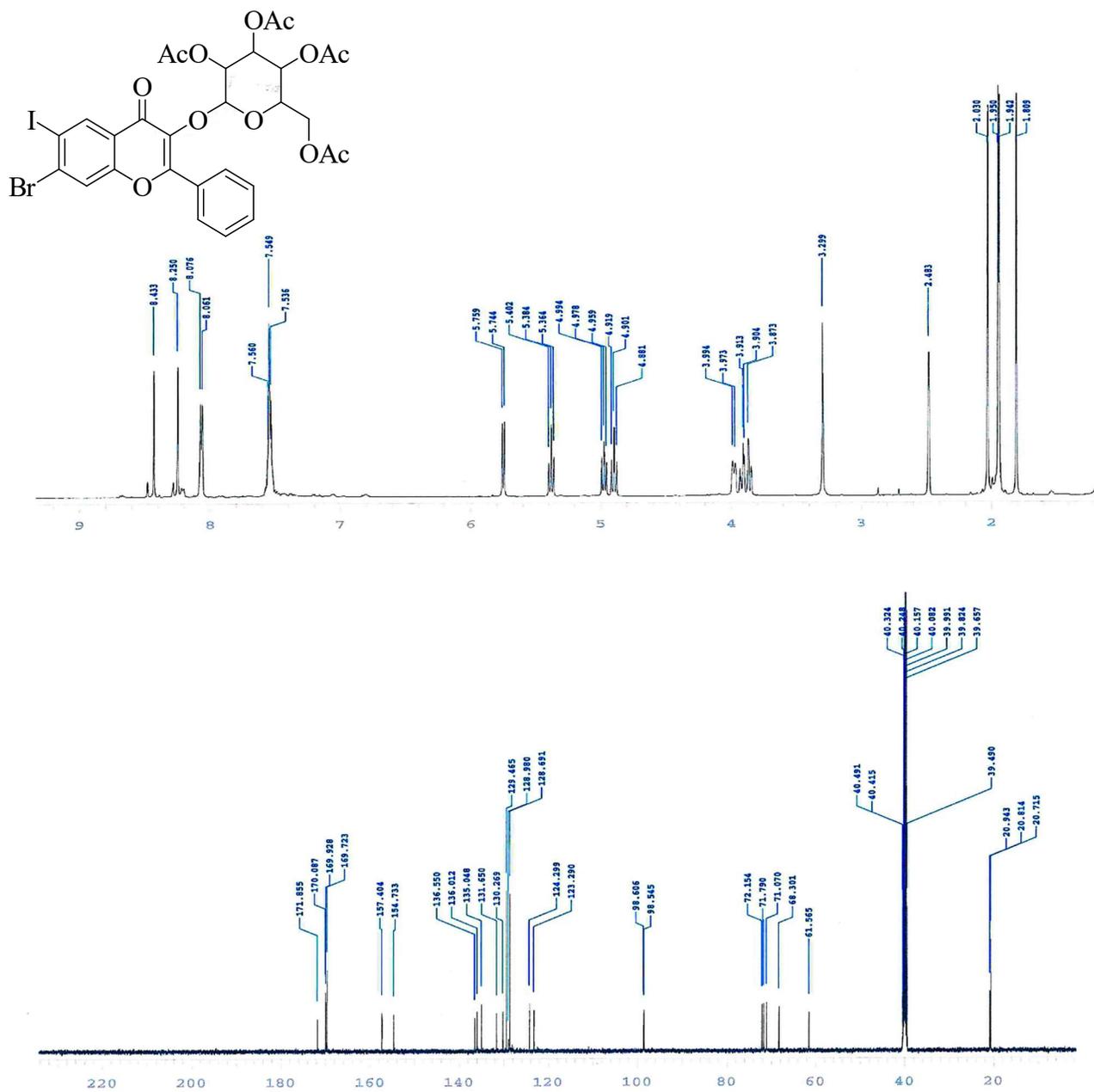


Figure S1.9: ¹H- and ¹³C-NMR spectra of **2i** in DMSO-*d*₆ at 500 and 125 MHz, respectively.

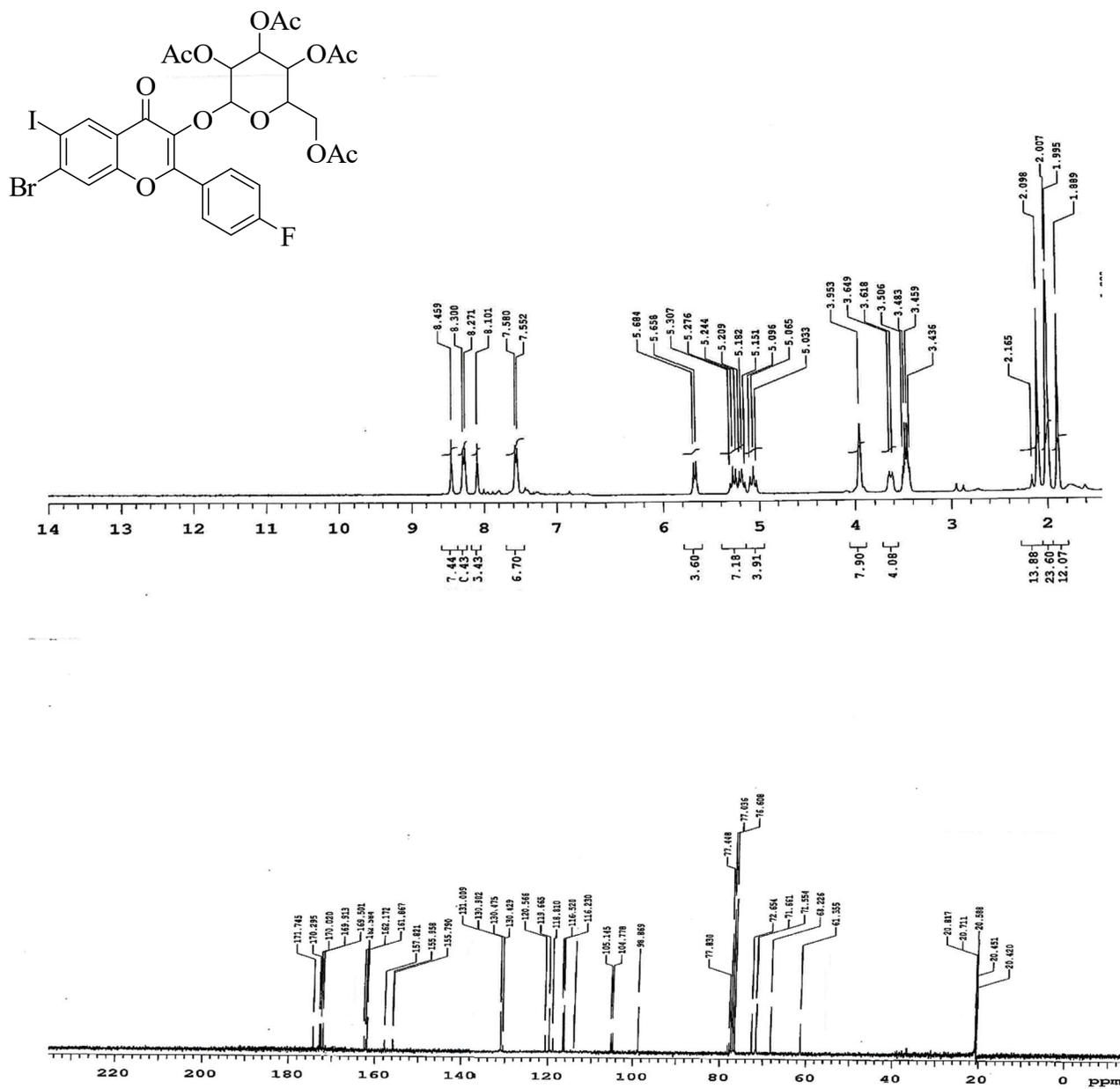


Figure S1.10: ¹H- and ¹³C-NMR spectra of 2j in CDCl₃ at 300 and 75 MHz, respectively.

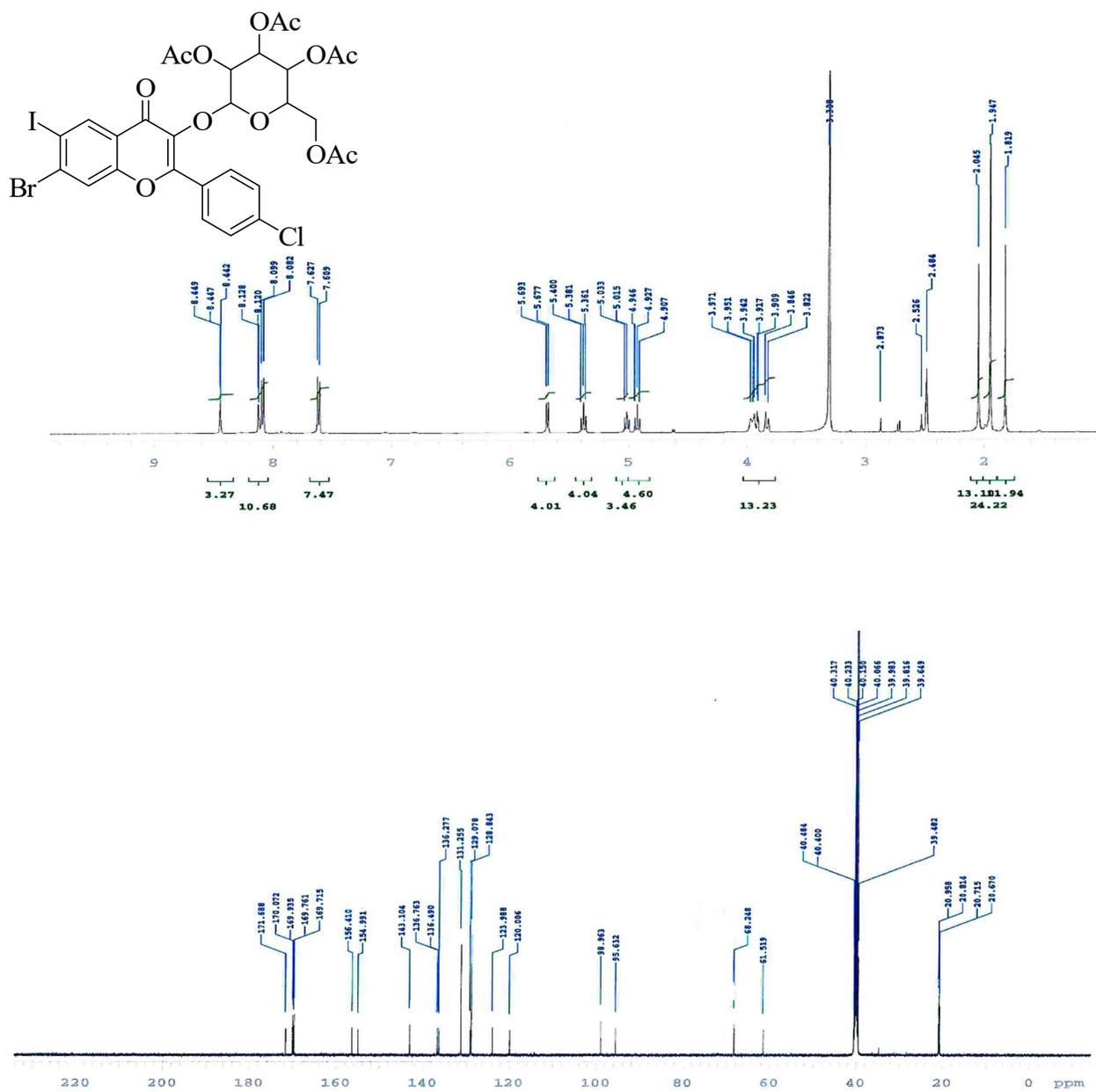


Figure S1.11: ¹H- and ¹³C-NMR spectra of 2k in DMSO-*d*₆ at 500 and 125 MHz, respectively.

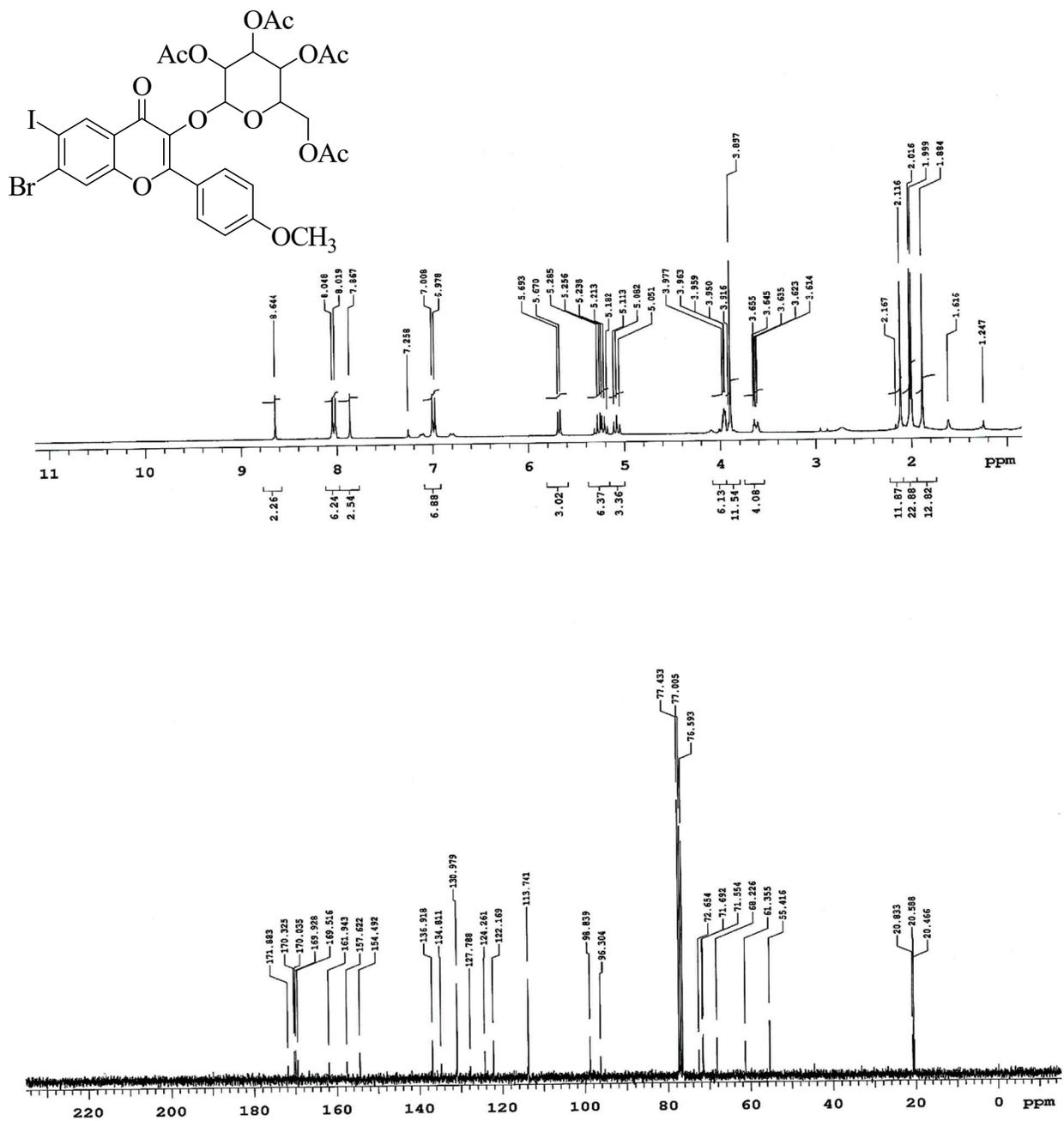


Figure S1.12: ¹H- and ¹³C-NMR spectra of **21** in CDCl₃ at 300 and 75 MHz, respectively.

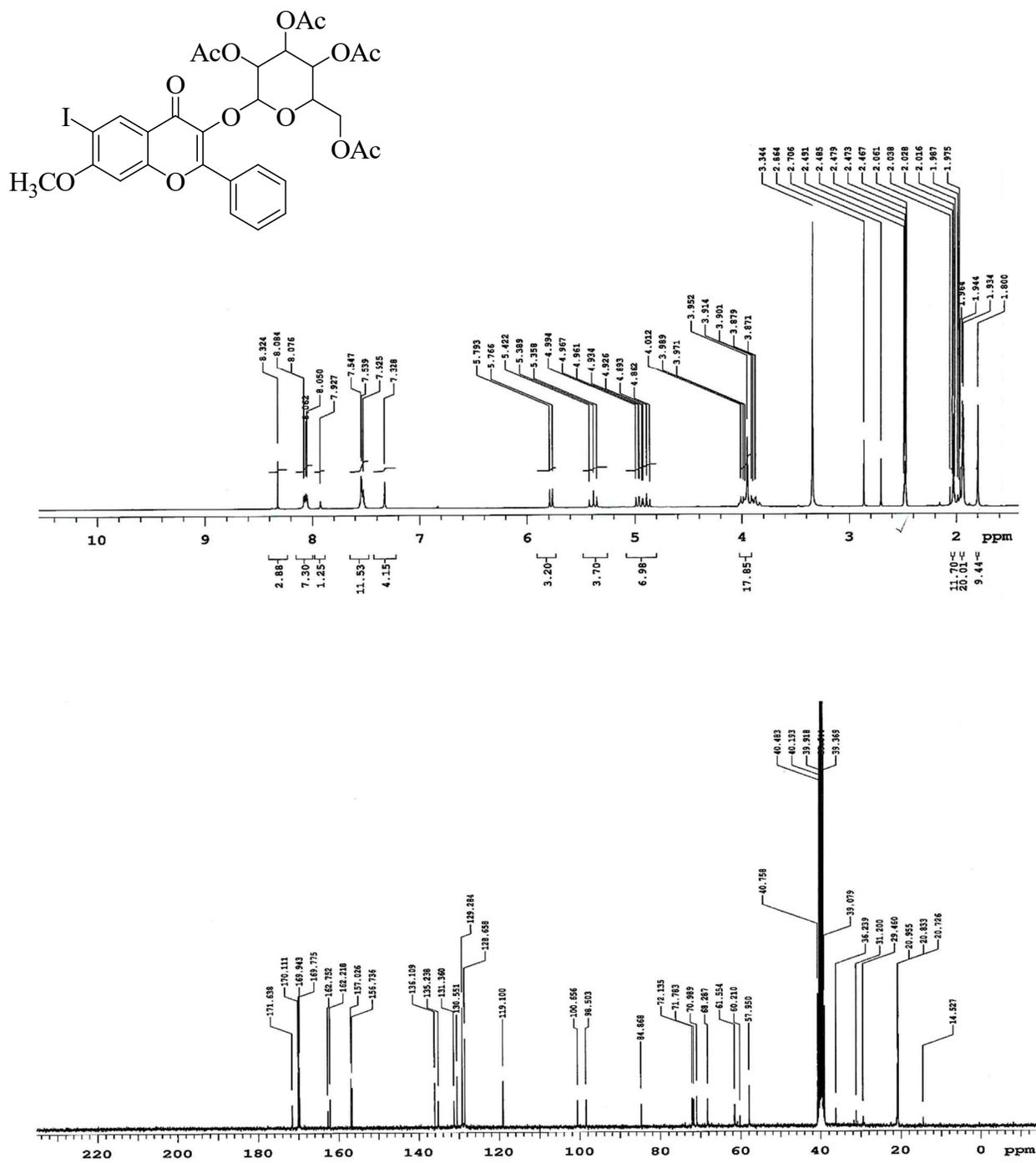


Figure S1.13: ¹H- and ¹³C-NMR spectra of **2m** in DMSO-*d*₆ at 300 and 75 MHz, respectively

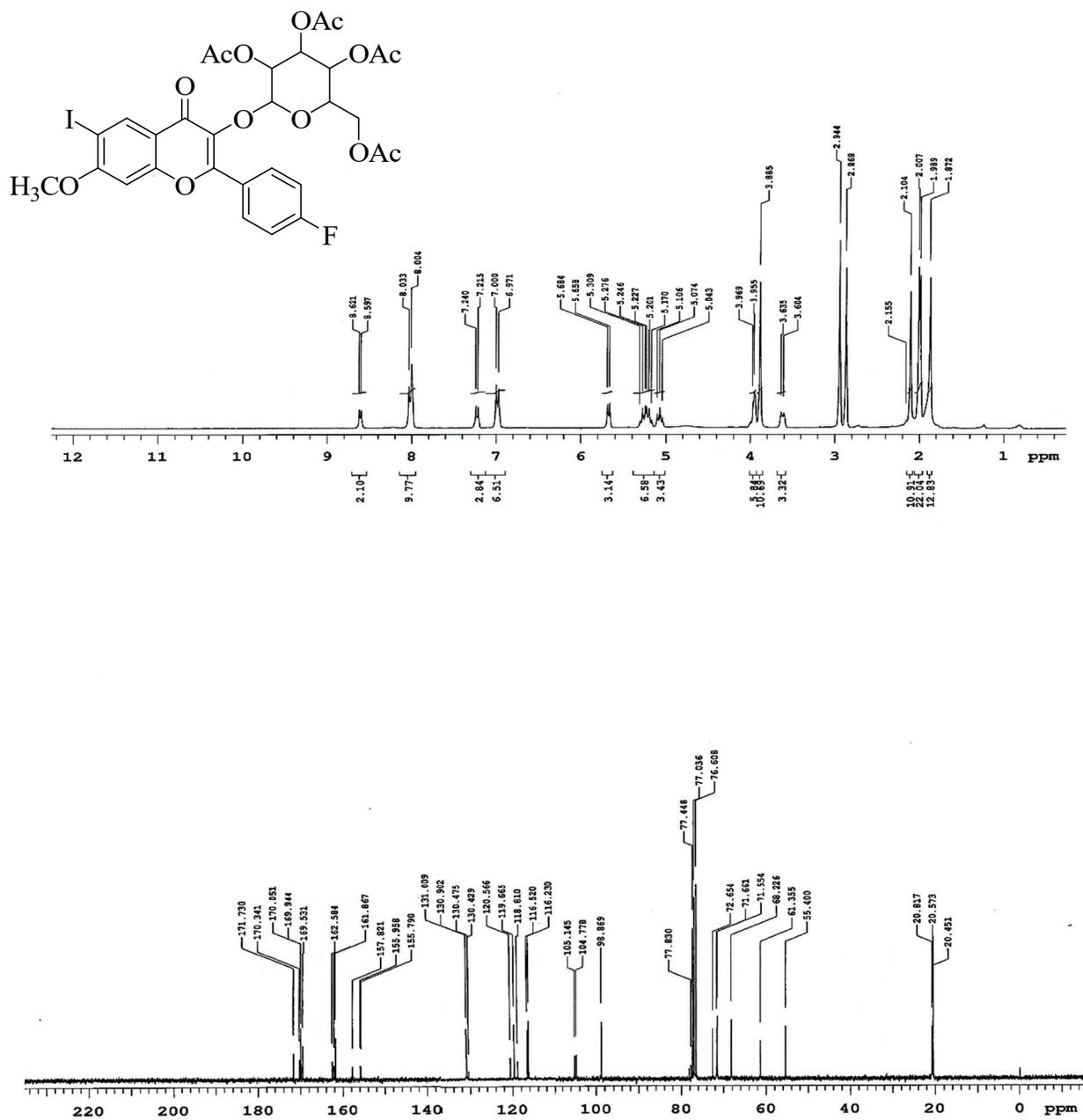


Figure S1.14: ¹H- and ¹³C-NMR spectra of **2n** in CDCl₃ at 300 and 75 MHz, respectively.

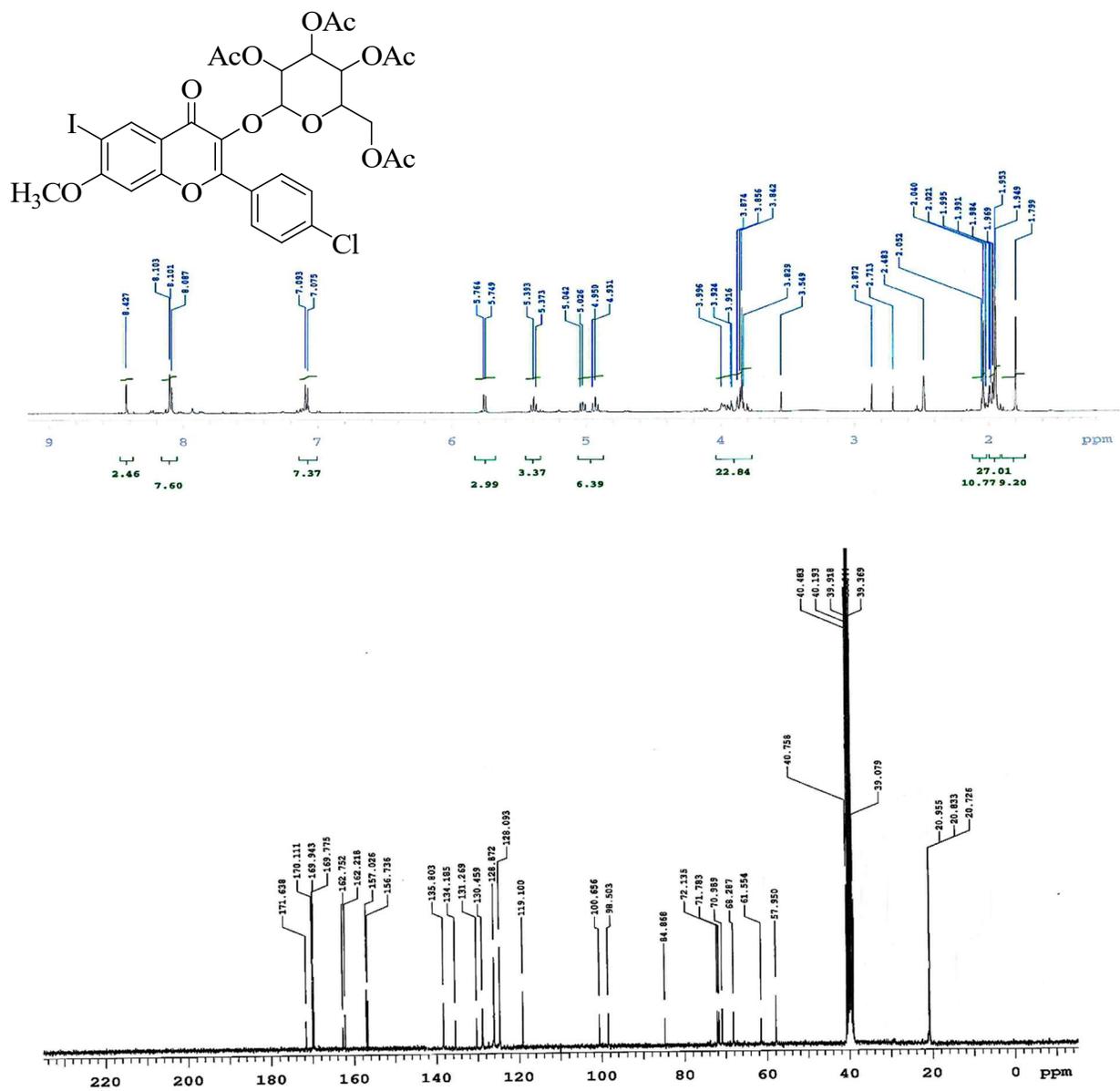


Figure S1.15: ¹H- and ¹³C-NMR spectra of **2o** in DMSO-*d*₆ at 500 and 125 MHz, respectively.

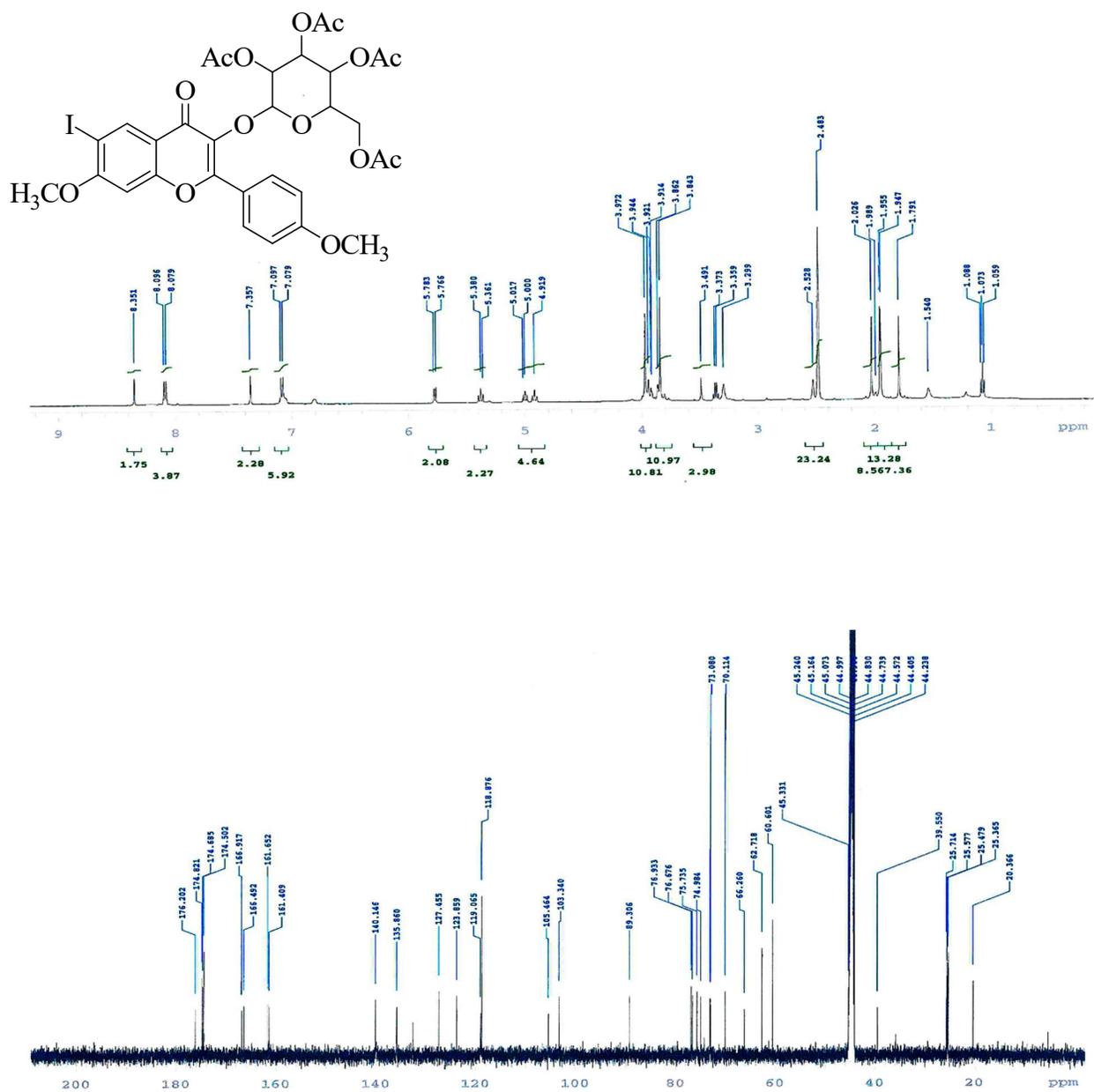


Figure S1.16: ¹H- and ¹³C-NMR spectra of **2p** in DMSO-*d*₆ at 500 and 125 MHz, respectively.

Figure S2: Lineweaver-Burk and Dixon plots for compounds 2l and 2p against AChE and BChE.

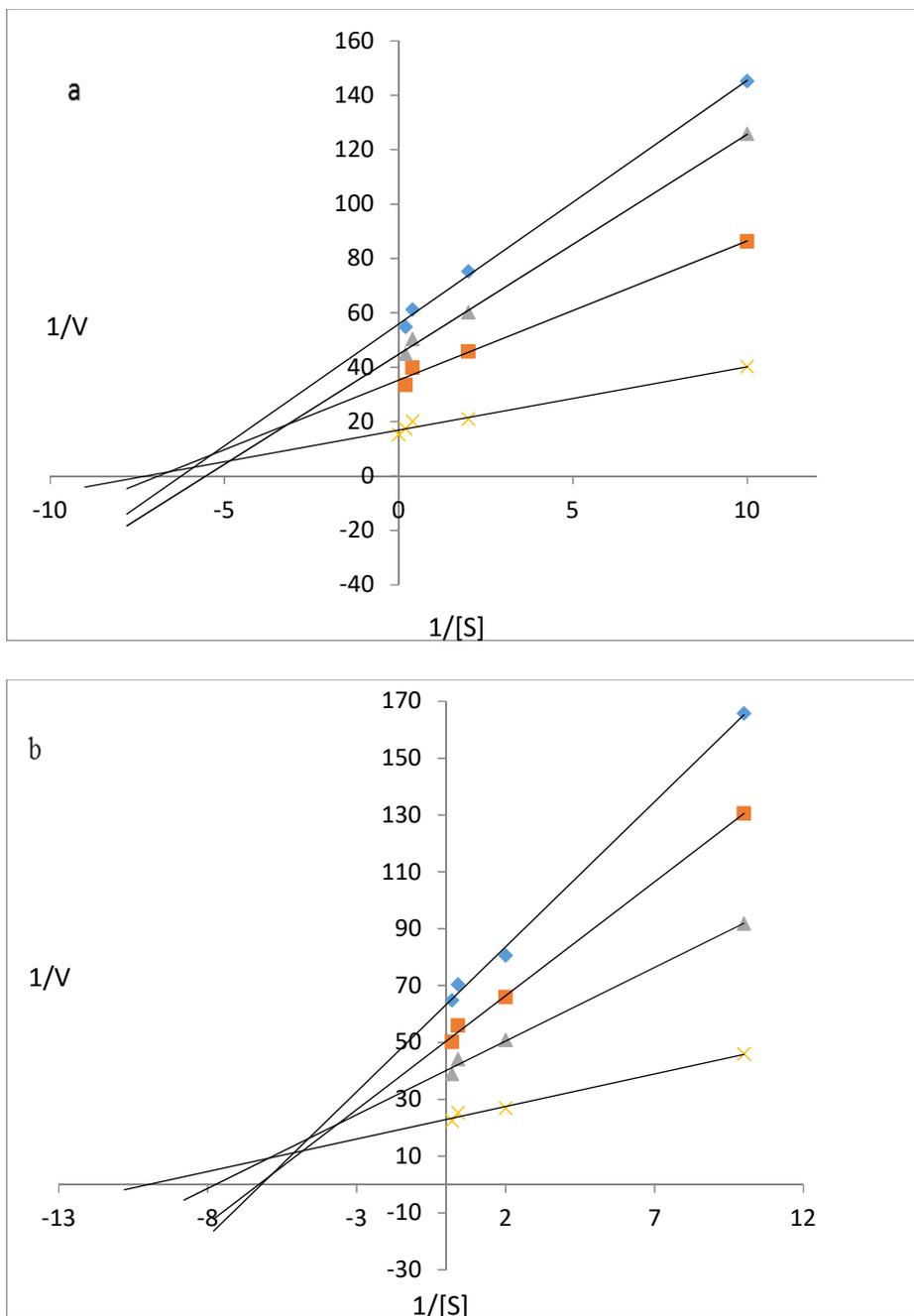


Figure S2.1: Lineweaver-Burk plots for inhibition of AChE by 2l (a) and 2p (b). Yellow symbols and fitted straight lines represent enzyme activity in the absence of inhibitor, while grey (2.5 μM), orange (3.5 μM) and blue (5 μM) represent various concentrations of inhibitor.

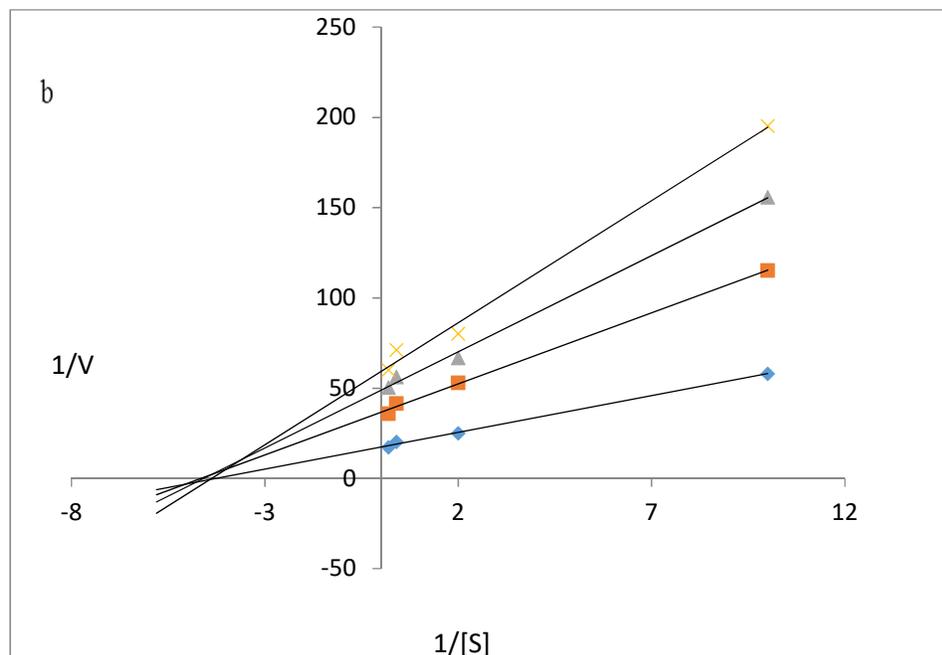
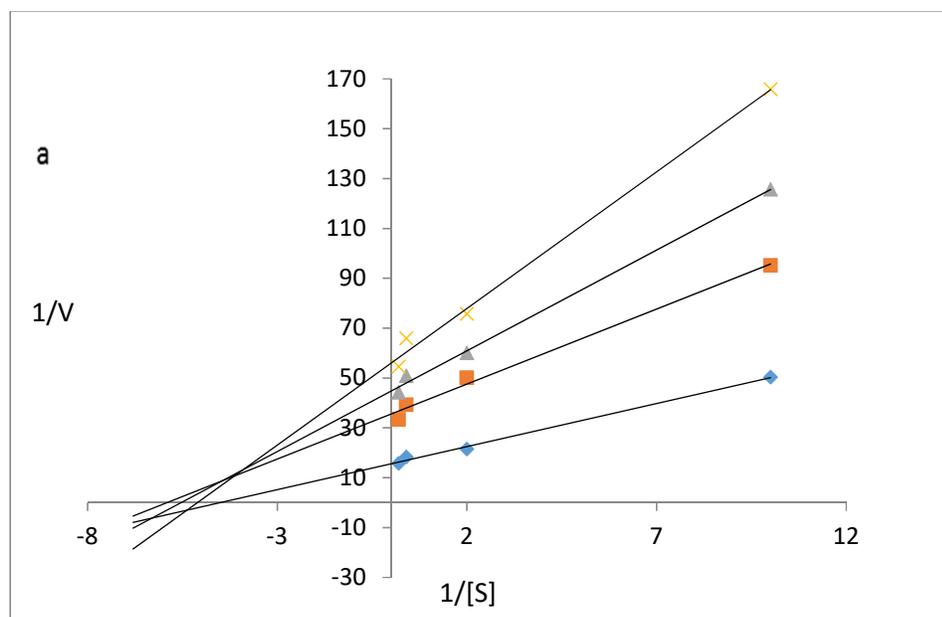


Figure S2.2: Lineweaver–Burk plots for inhibition of BChE by **21** (a) and **2p** (b). Blue symbols and fitted straight lines represent enzyme activity in the absence of inhibitor, while orange (2.5 μM), grey (3.5 μM) and yellow (5 μM) represent various concentrations of inhibitor.

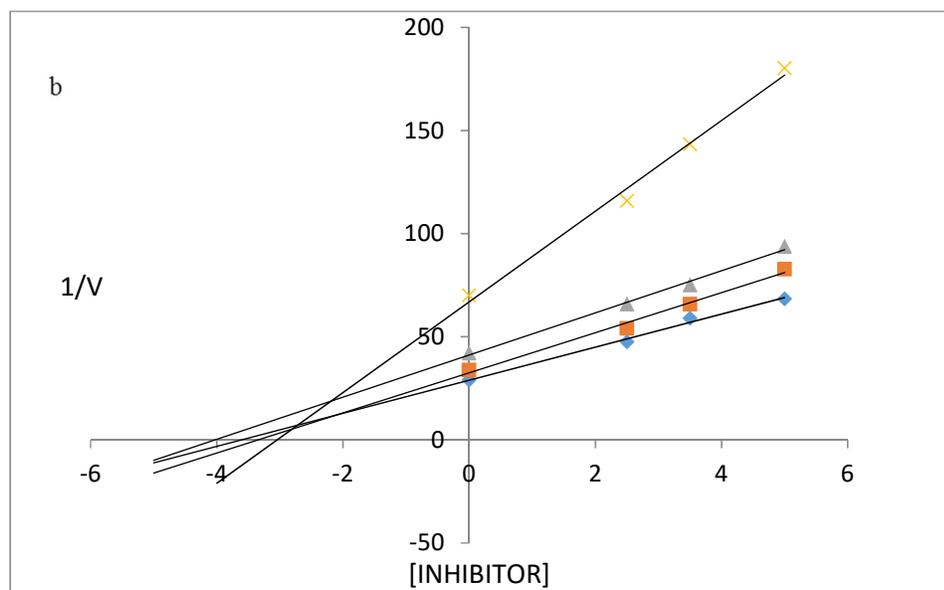
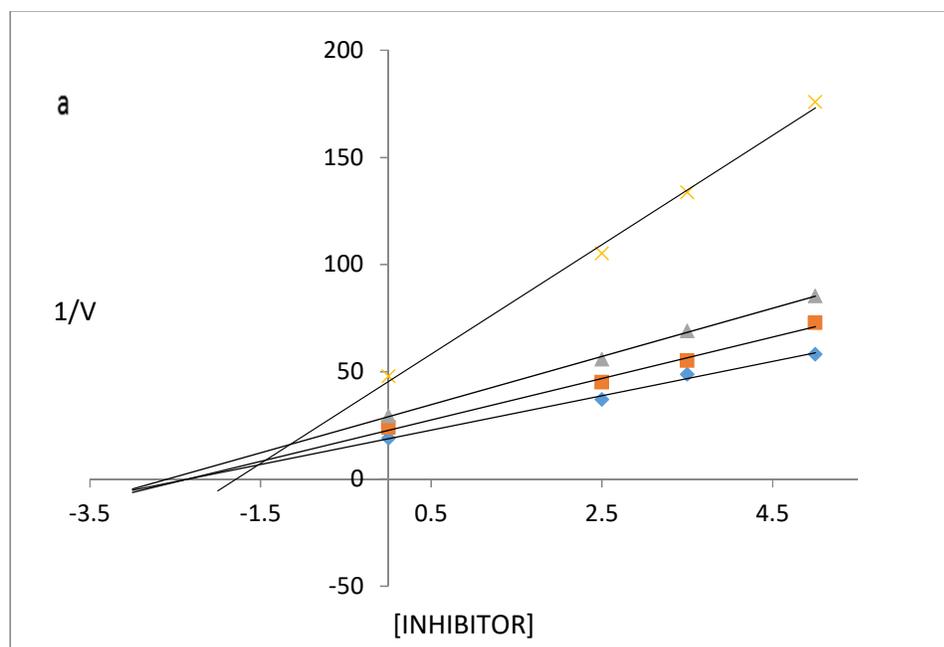


Figure S2.3: Dixon plots for inhibition of AChE by **2l** (a), **2p** (b). Blue symbols and fitted straight lines represent enzyme activity with 5 mM substrate, while orange (2.5 mM), grey (0.5 mM) and yellow (0.1 mM) represent various concentrations of substrate.

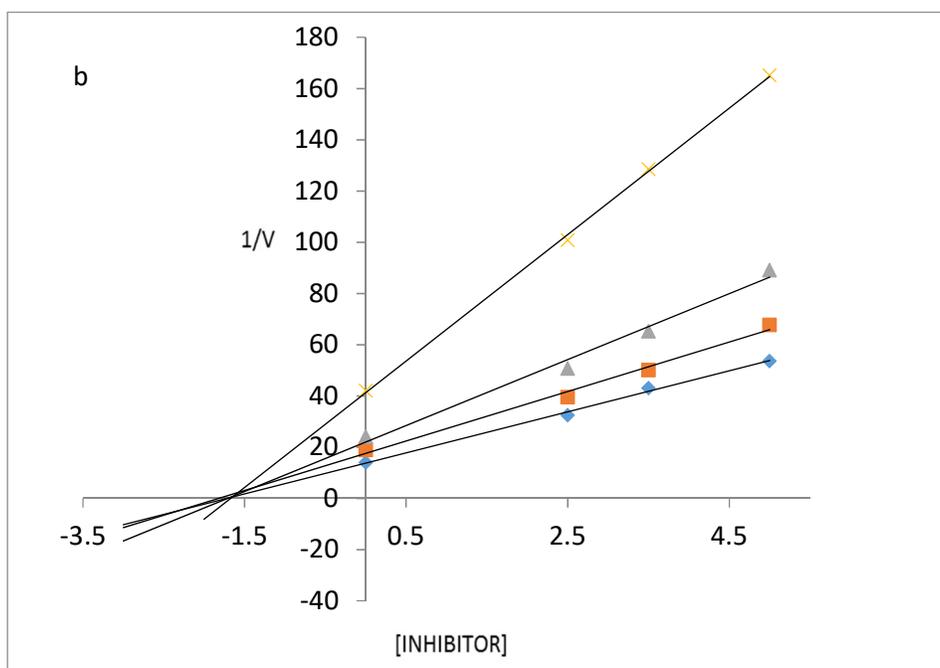
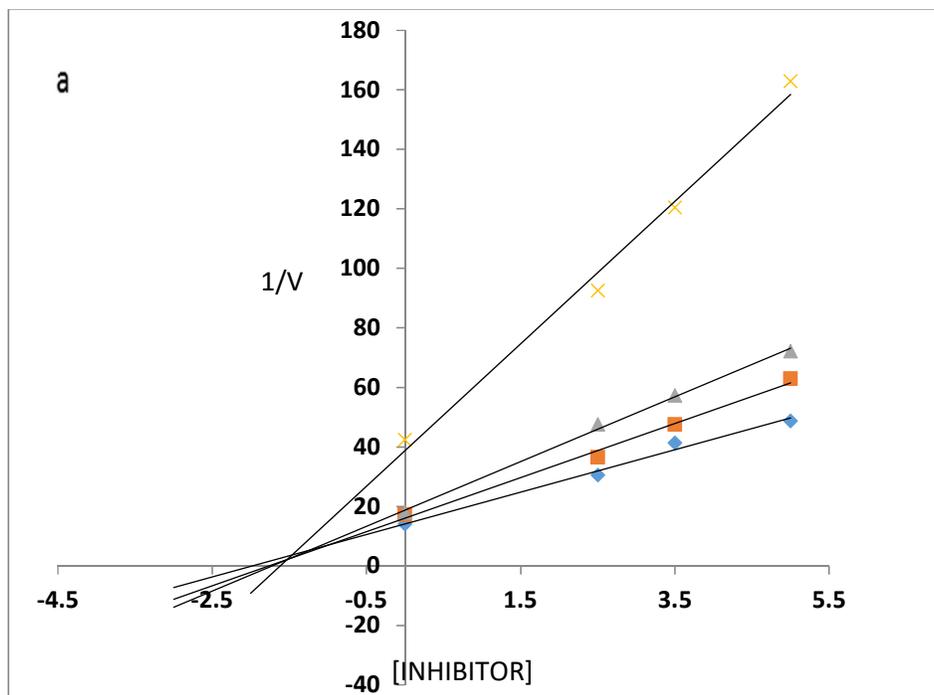


Figure S2.4: Dixon plots for inhibition of BChE by **2l** (a) and **2p** (b). Blue symbols and fitted straight lines represent enzyme activity with 5 mM substrate, while orange (2.5 mM), grey (0.5 mM) and yellow (0.1 mM) represent various concentrations of substrate.

Figure S3: Lineweaver-Burk and Dixon plots for compounds 2l and 2p against β -secretase.

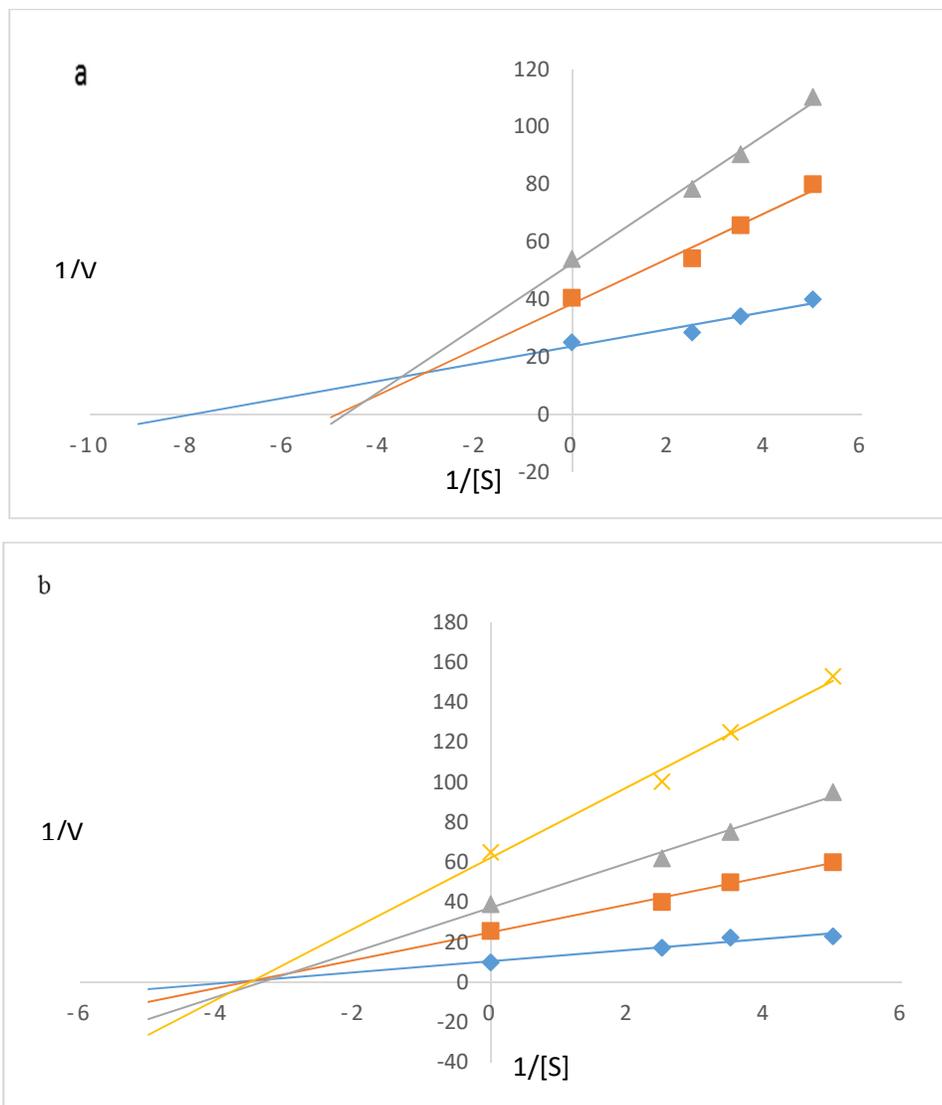


Figure S3.1: Lineweaver–Burk plots for inhibition of BACE-1 by **2l** (a) and **2p** (b). Blue symbols and fitted straight lines represent enzyme activity in the absence of inhibitor, while orange (2.5 μ M), grey (3.5 μ M) and yellow (5 μ M) represent various concentrations of inhibitor

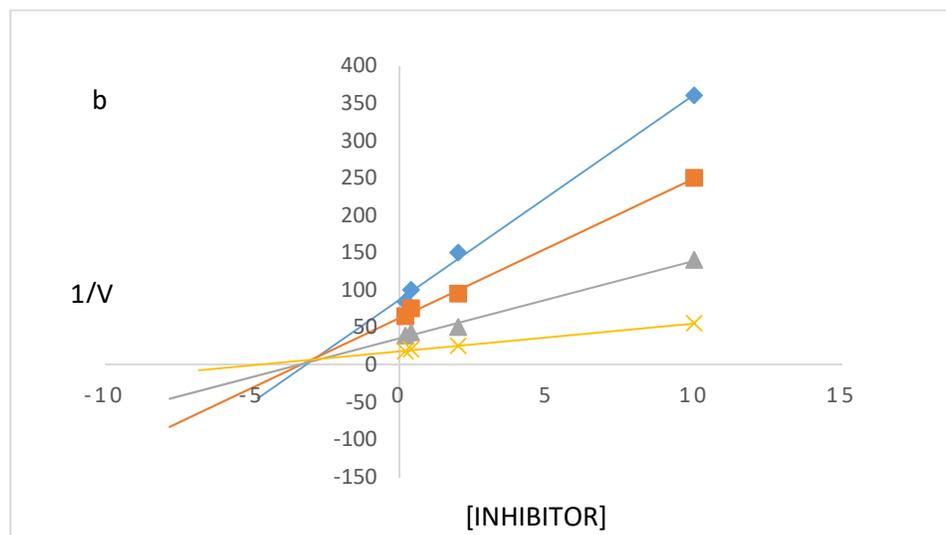
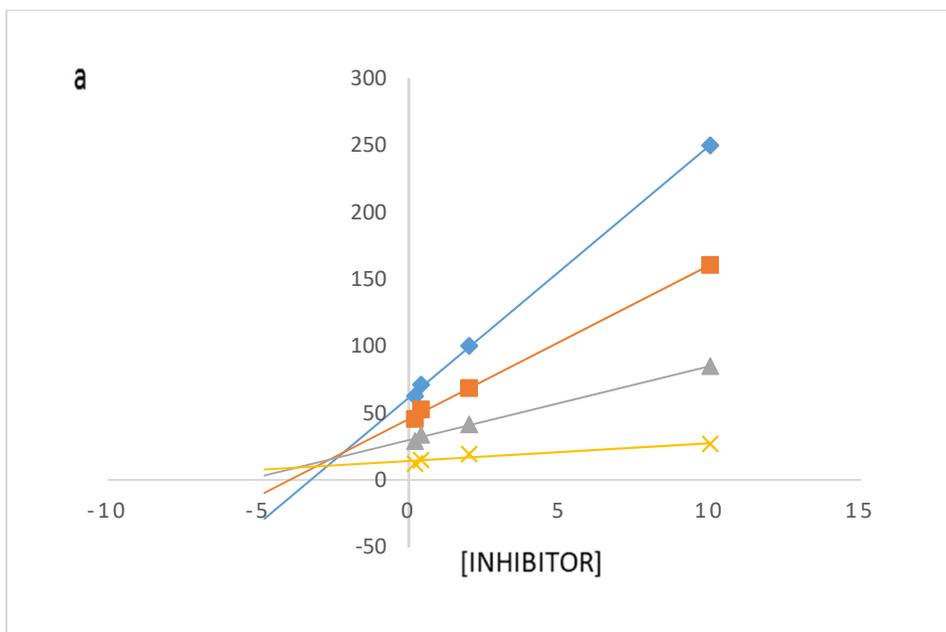


Figure S3.2: Dixon plots for inhibition of BACE-1 by **2l** (a) and **2p** (b). Blue symbols and fitted straight lines represent enzyme activity with 0.1 mM substrate, while orange (0.5 mM), grey (2.5 mM) and yellow (5 mM) represent various concentrations of substrate.