

Figure S2. ¹H-NMR, ¹³C-NMR and HRMS spectrums of compound 11.

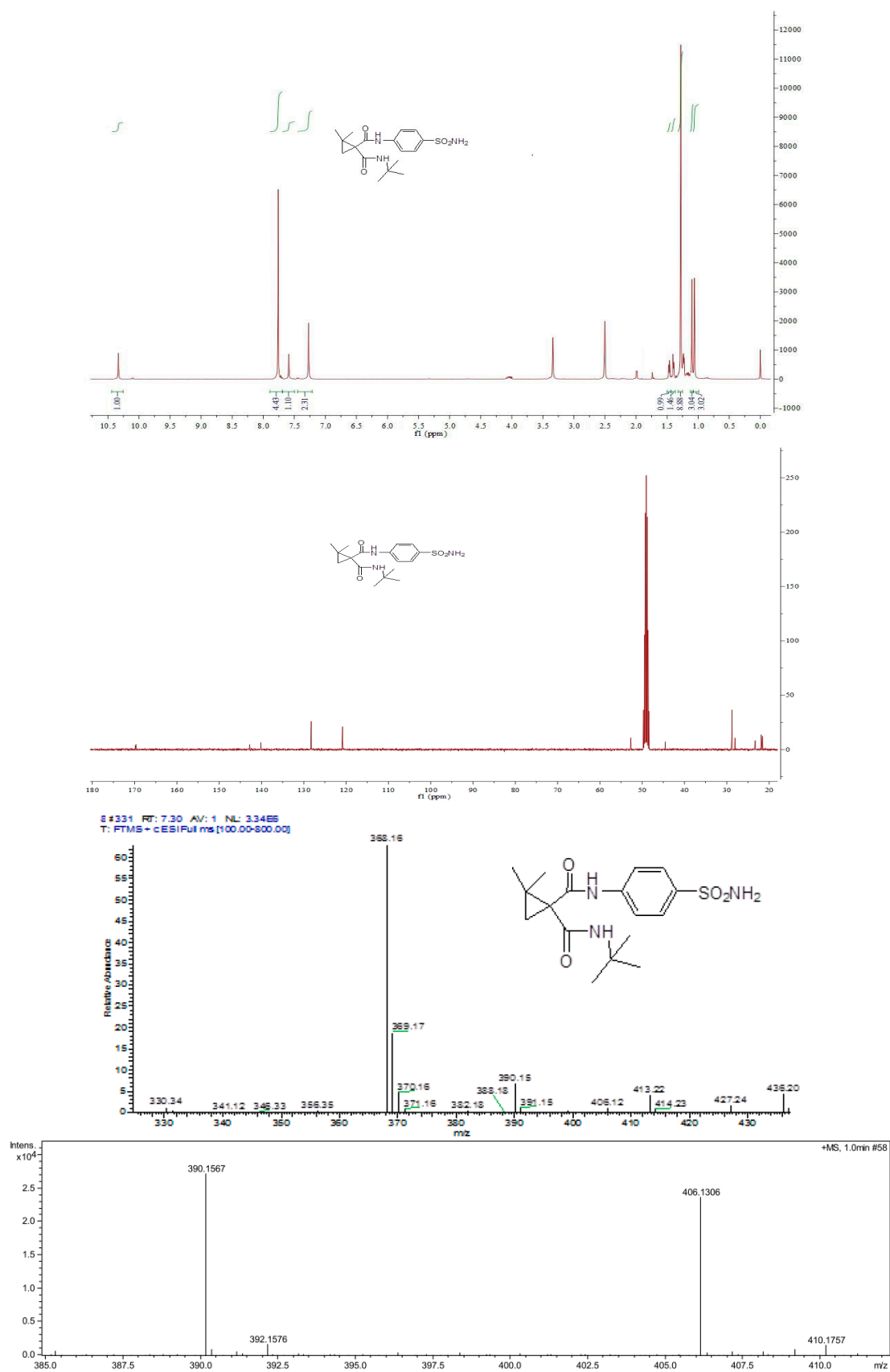


Figure S3. ^1H -NMR, ^{13}C -NMR, MS-ESI and HRMS spectrums of compound **12a**.

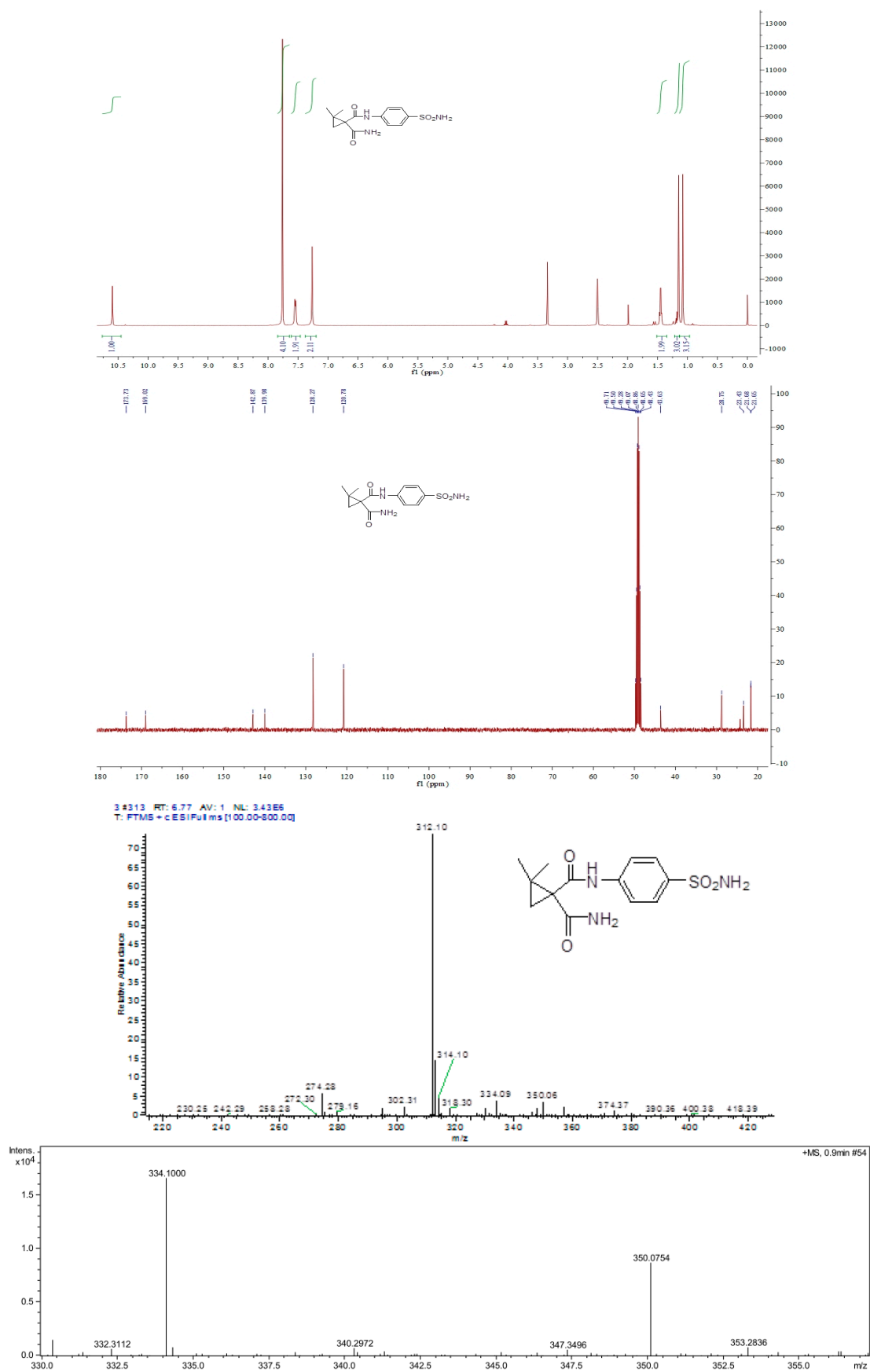


Figure S5. ¹H-NMR, ¹³C-NMR, MS-ESI and HRMS spectra of compound 12c.

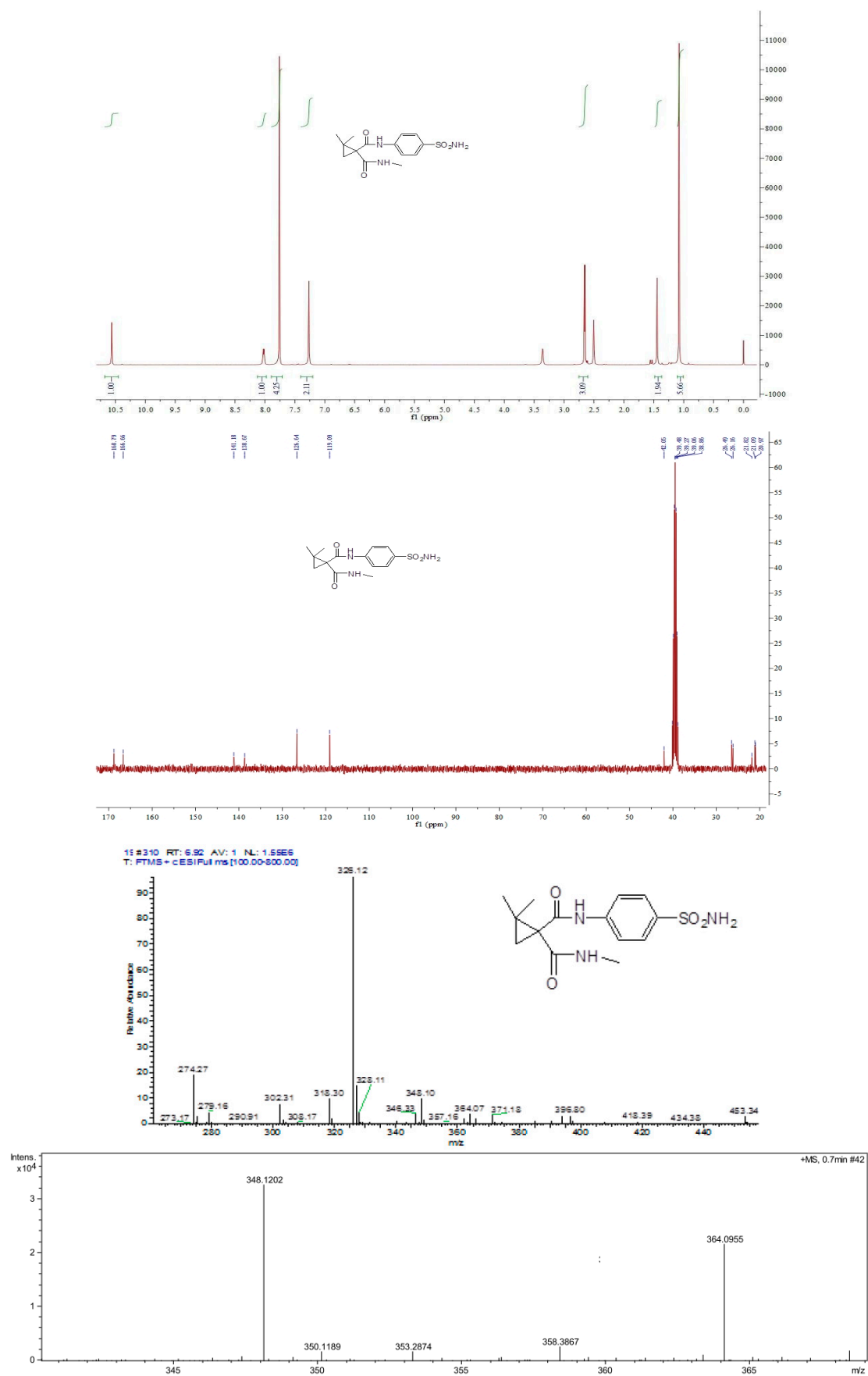


Figure S6. ^1H -NMR, ^{13}C -NMR, MS-ESI and HRMS spectrums of compound **12d**.

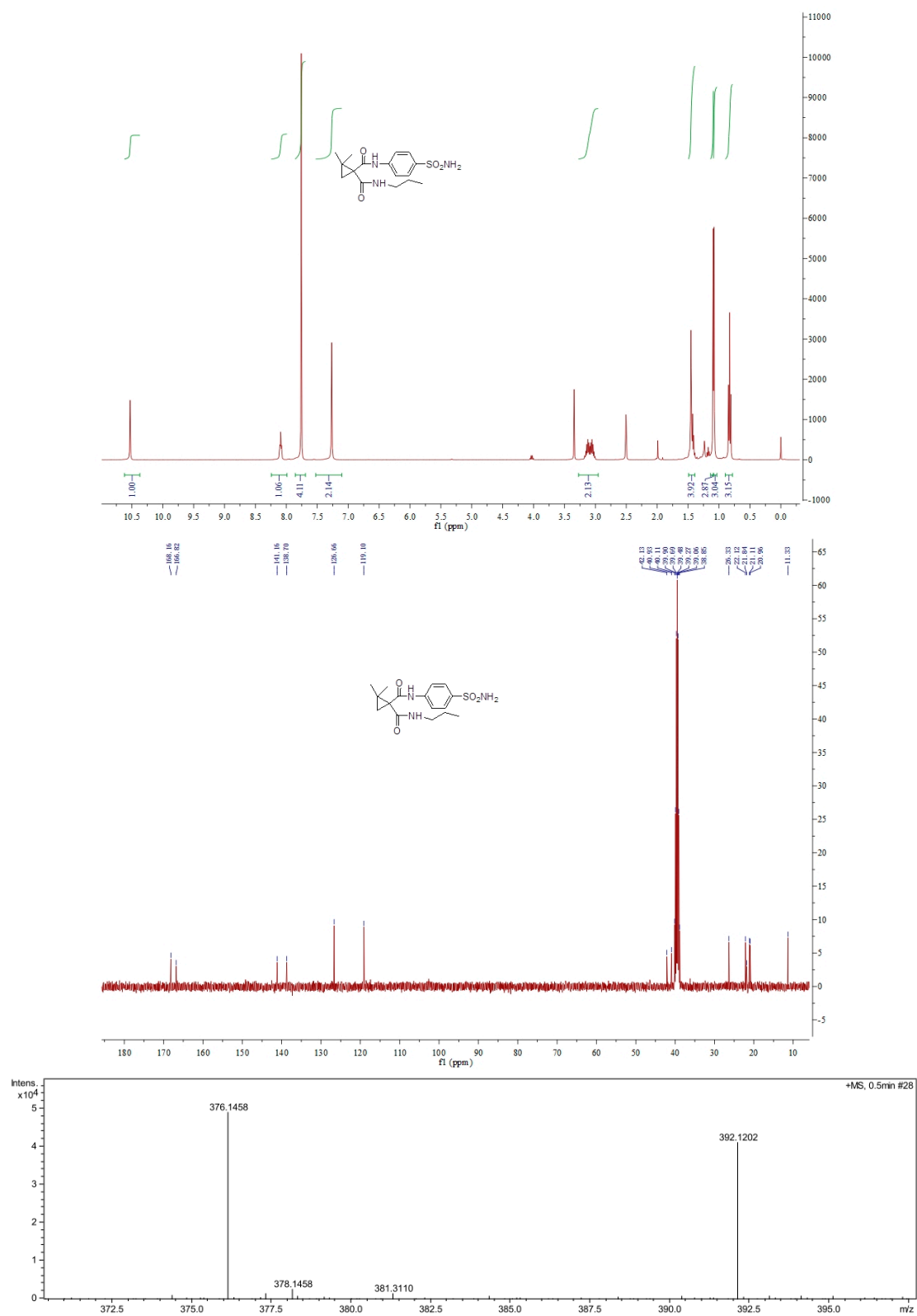


Figure S7. ^1H -NMR, ^{13}C -NMR and HRMS spectra of compound **12e**.

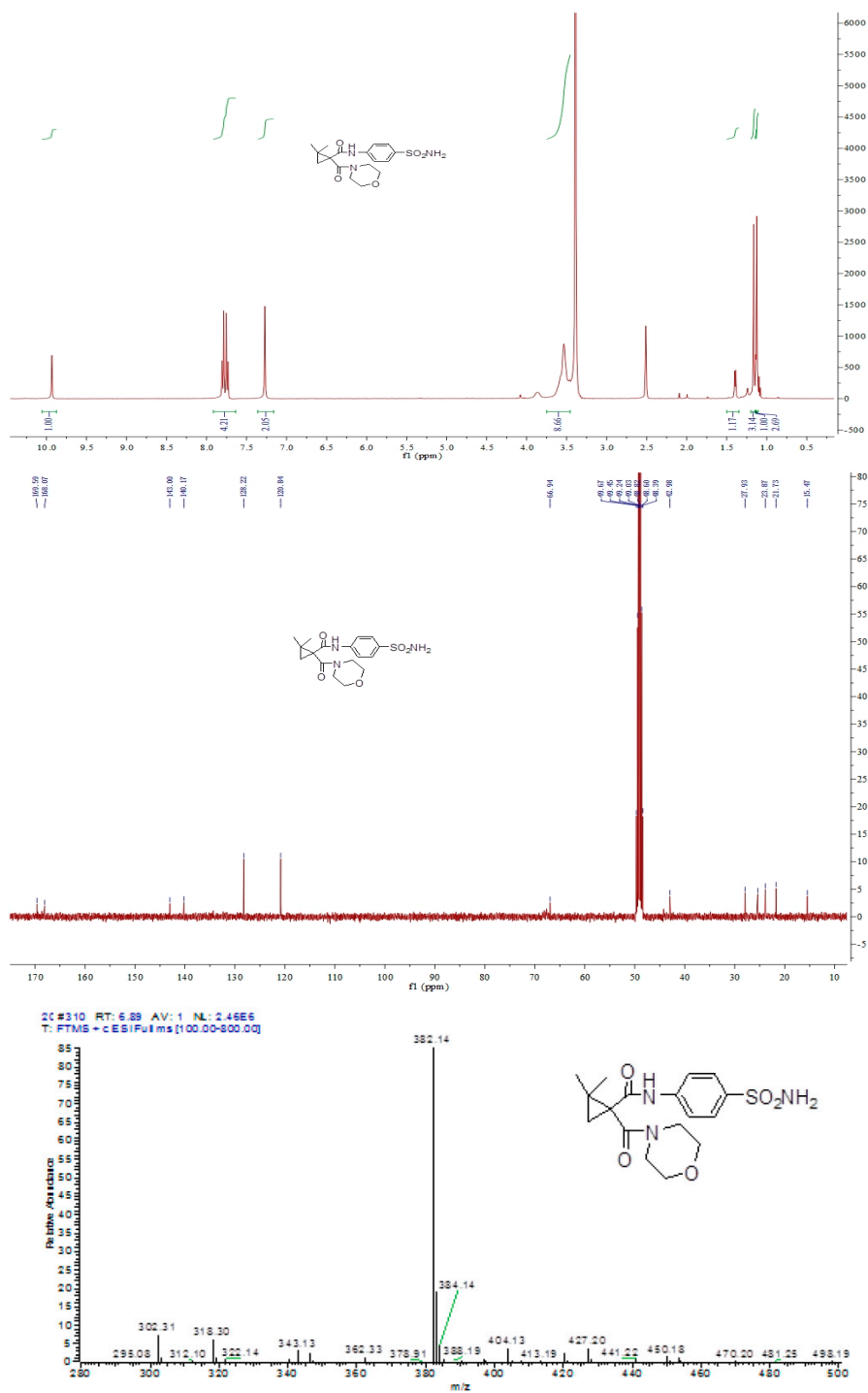


Figure S8. ^1H -NMR, ^{13}C -NMR and MS-ESI spectrums of compound 12g.

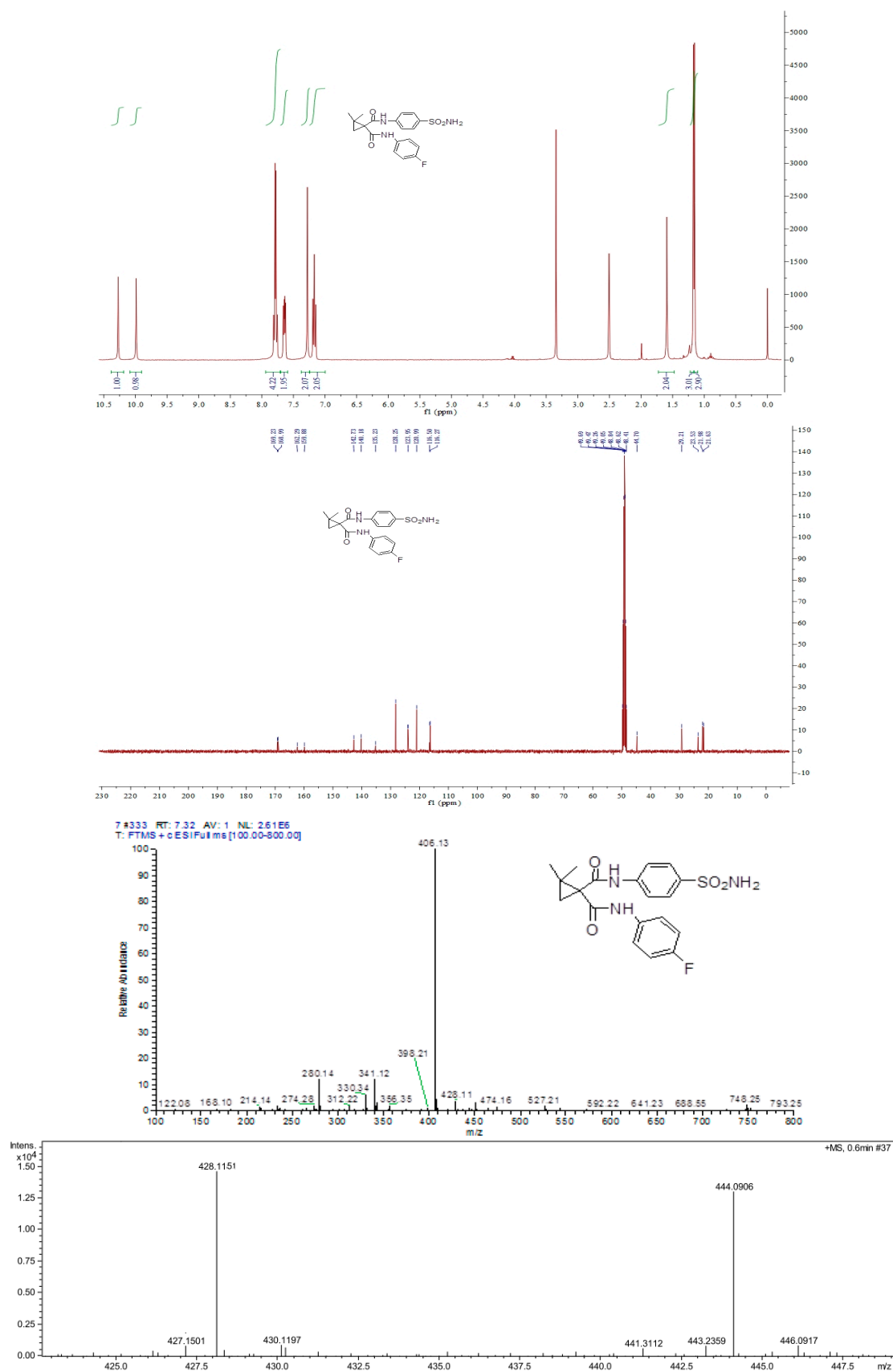


Figure S9. $^1\text{H-NMR}$, $^{13}\text{C-NMR}$, MS-ESI and HRMS spectra of compound **12h**.

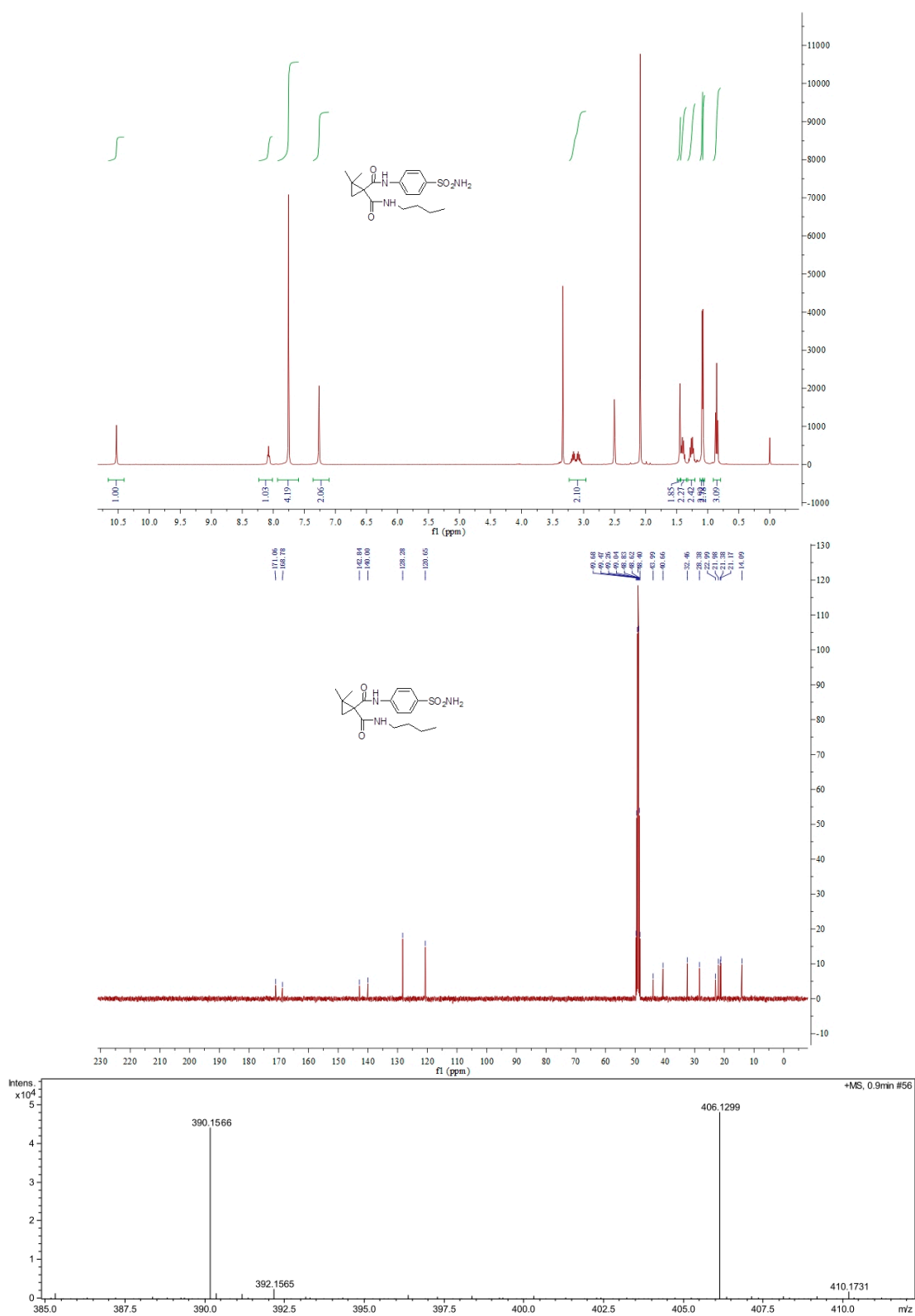


Figure S12. $^1\text{H-NMR}$, $^{13}\text{C-NMR}$ and HRMS spectra of compound **12k**.

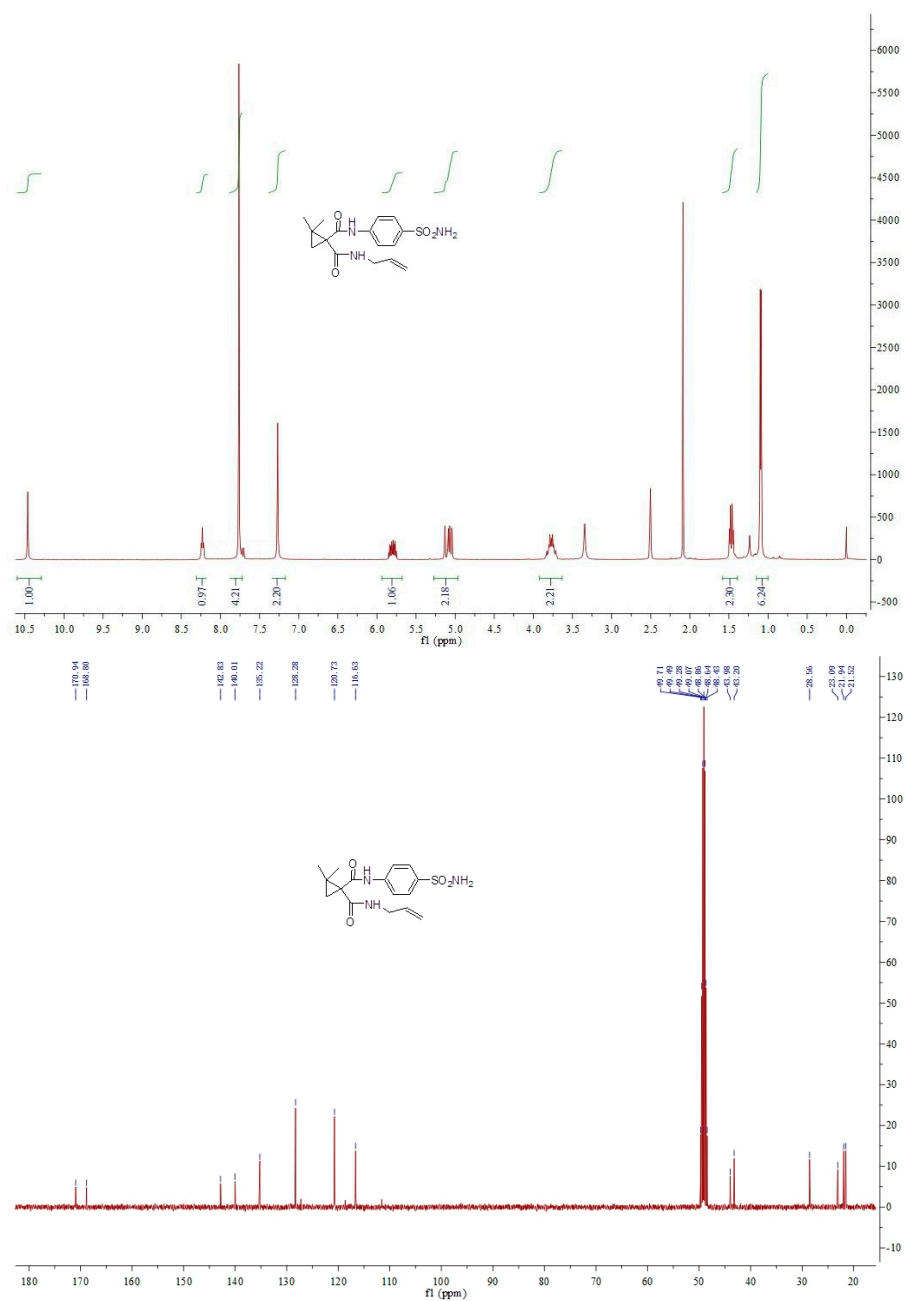


Figure S13. $^1\text{H-NMR}$ and $^{13}\text{C-NMR}$ spectrums of compound 12n.

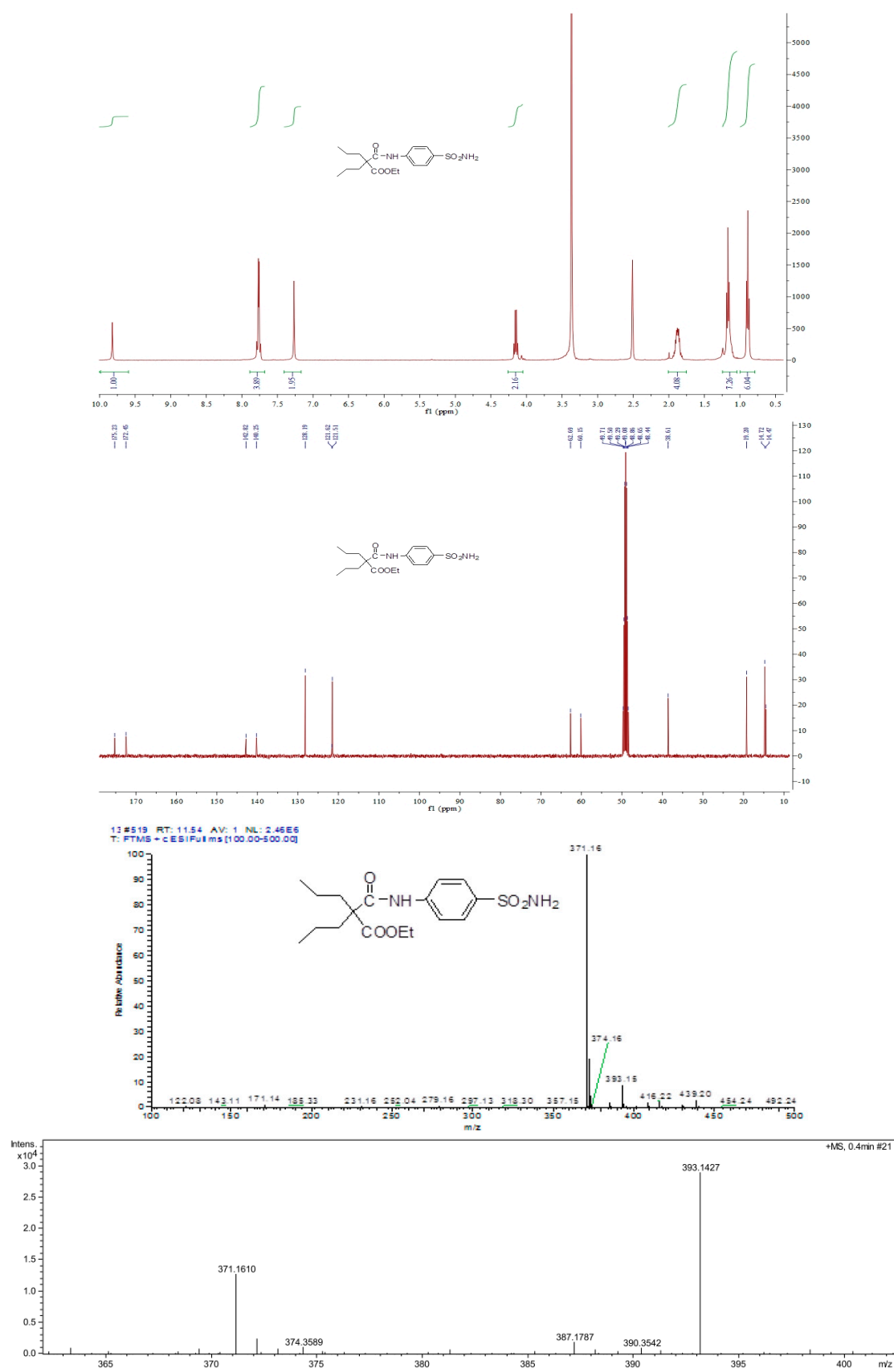


Figure S14. ¹H-NMR, ¹³C-NMR, MS-ESI and HRMS spectrums of compound 16.

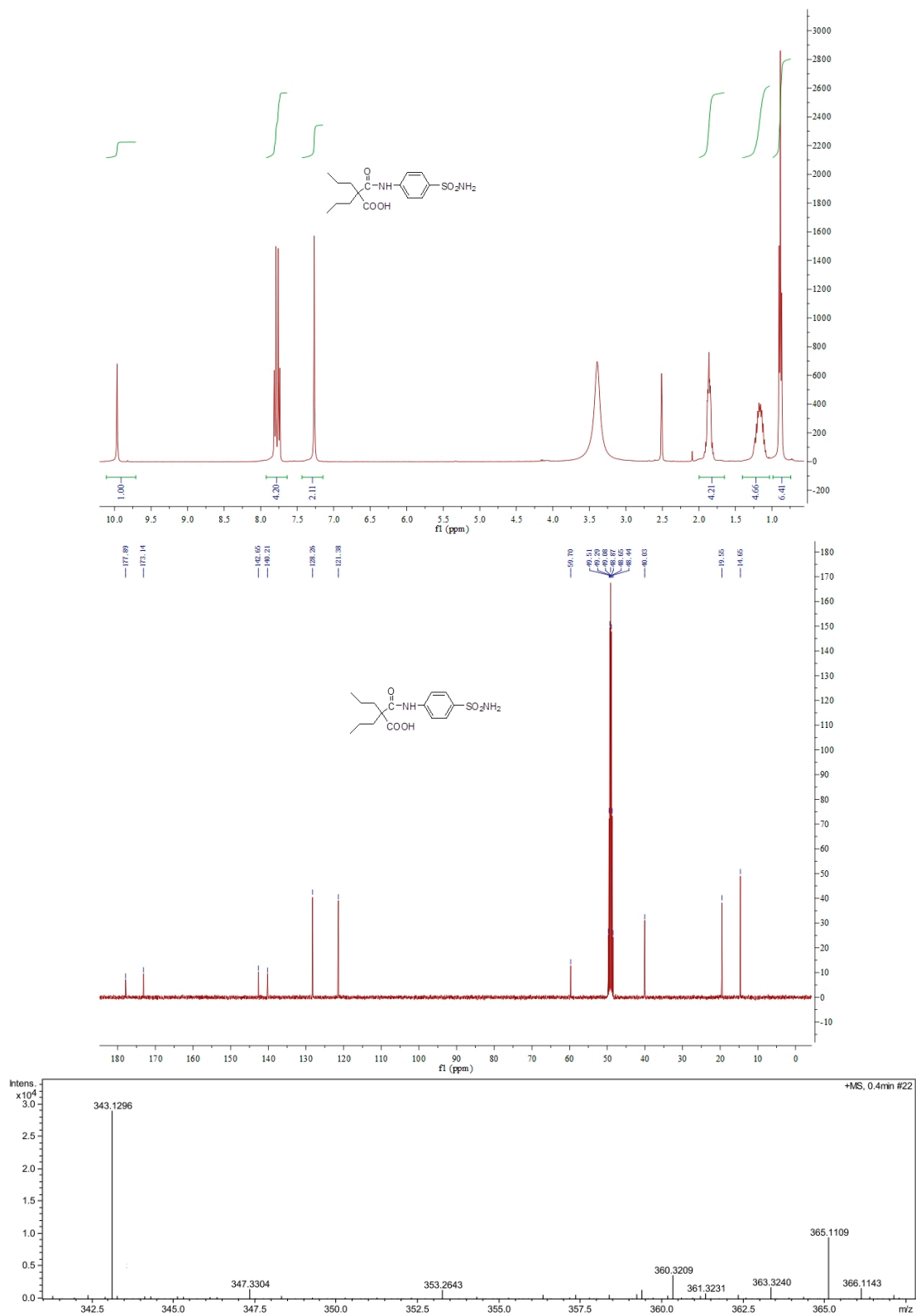


Figure S15. ¹H-NMR, ¹³C-NMR and HRMS spectra of compound 17.

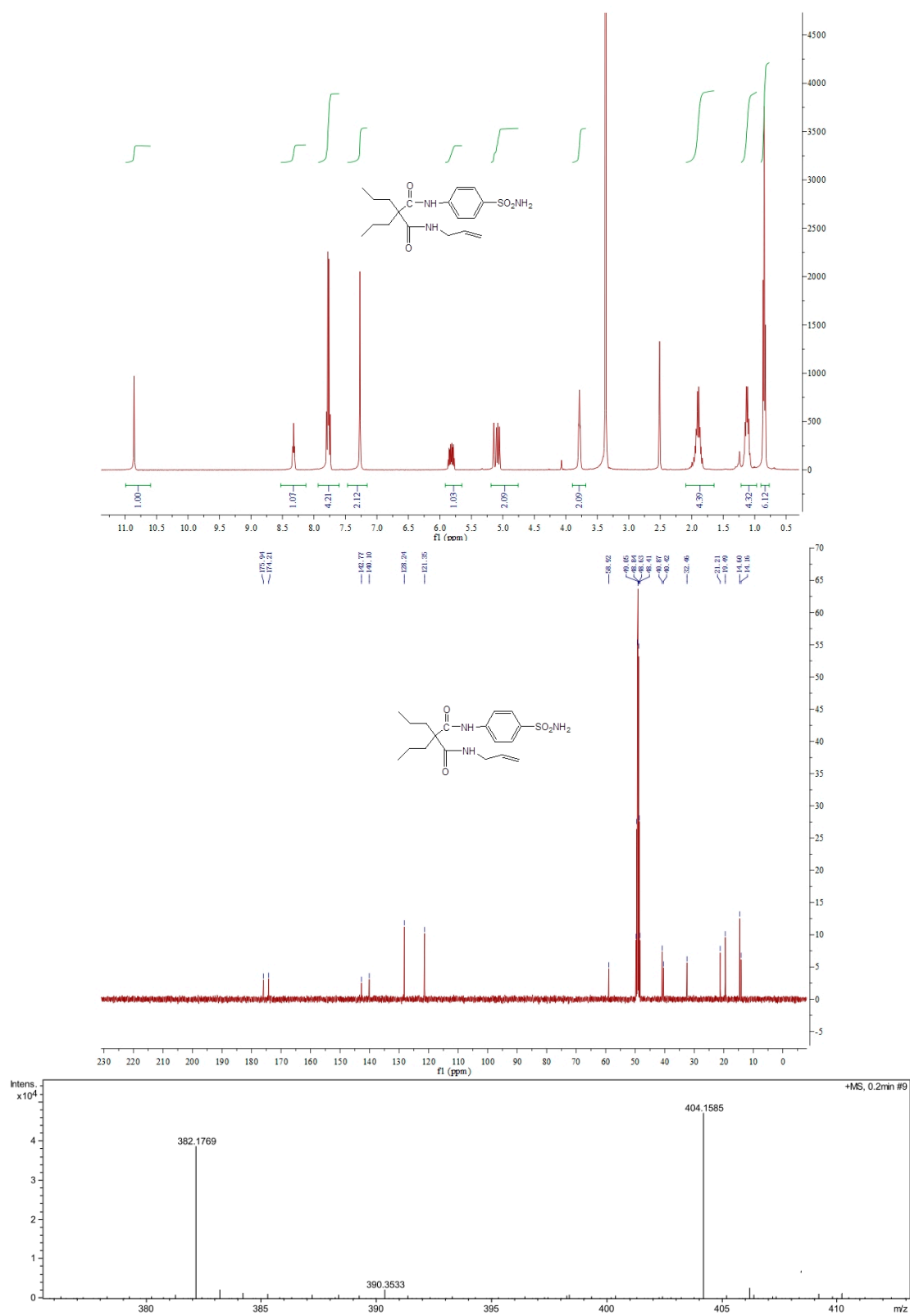


Figure S16. $^1\text{H-NMR}$, $^{13}\text{C-NMR}$ and HRMS spectra of compound **18a**.

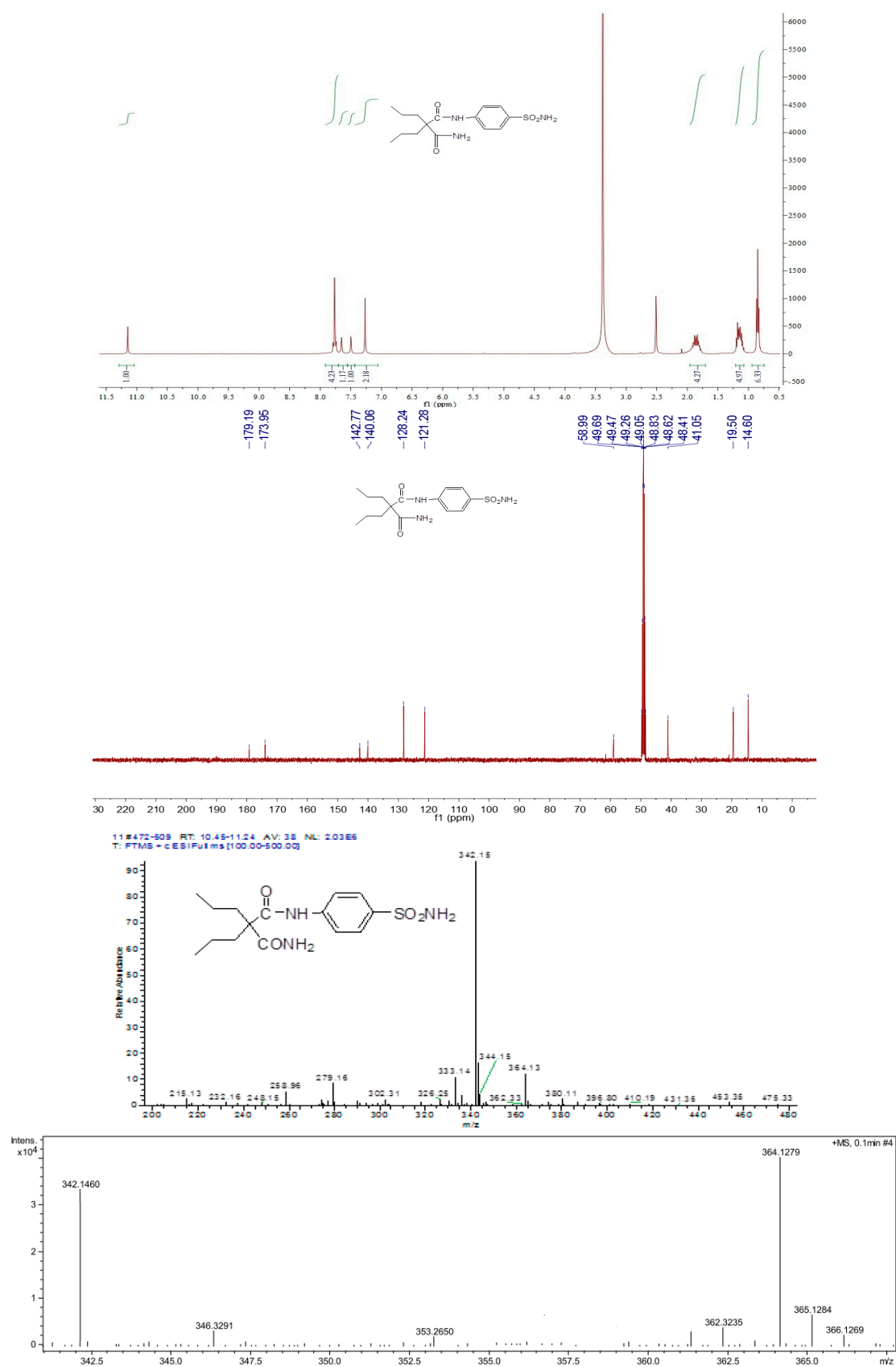


Figure S17. ¹H-NMR, ¹³C-NMR, MS-ESI and HRMS spectrums of compound **18b**.

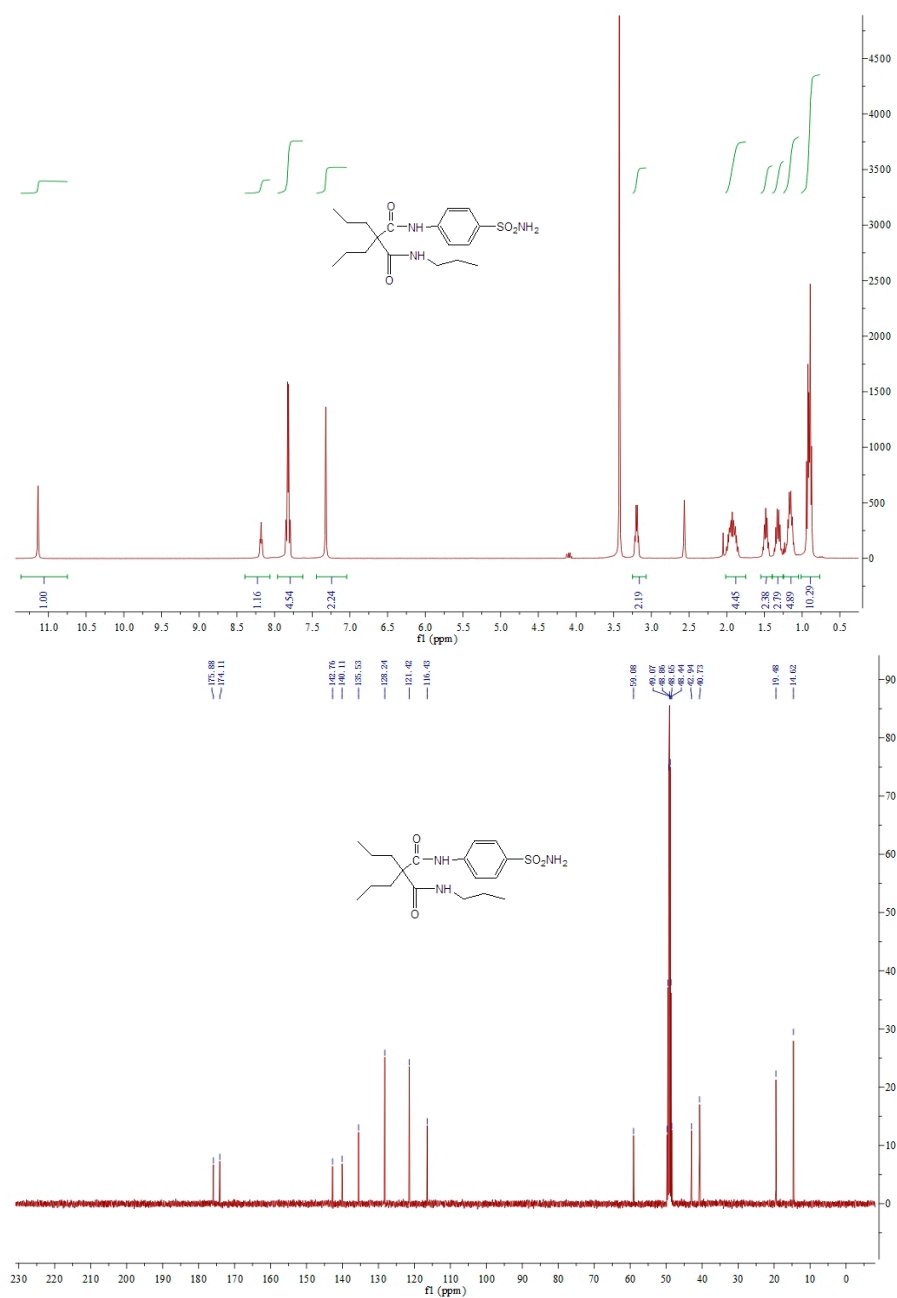


Figure S18. ^1H -NMR and ^{13}C -NMR spectra of compound **18c**.