

SUPPLEMENTARY INFORMATION

Reinvestigating the synthesis of key intermediates in the preparation of zolazepam. I: (5-Chloro-1,3-dimethyl-1H-pyrazol-4-yl)(2-fluorophenyl) methanone

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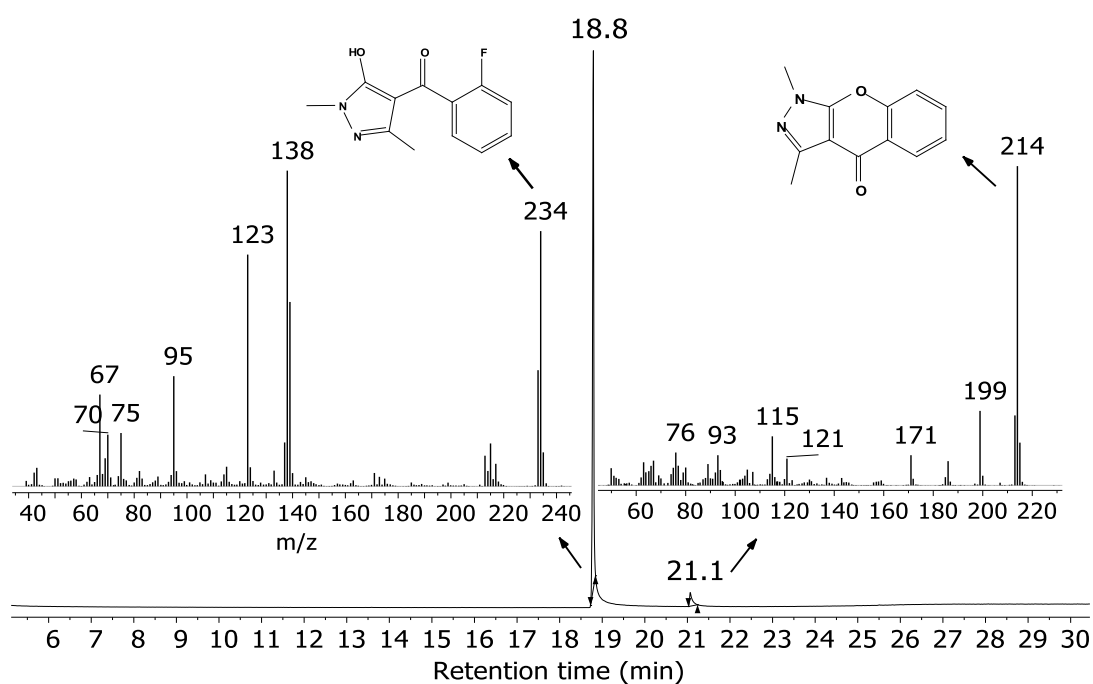


Figure 1. GC-MS analysis (chromatogram and fragmentation pattern) of purified **III** (99.5%) containing 0.5% of tricyclic side product.

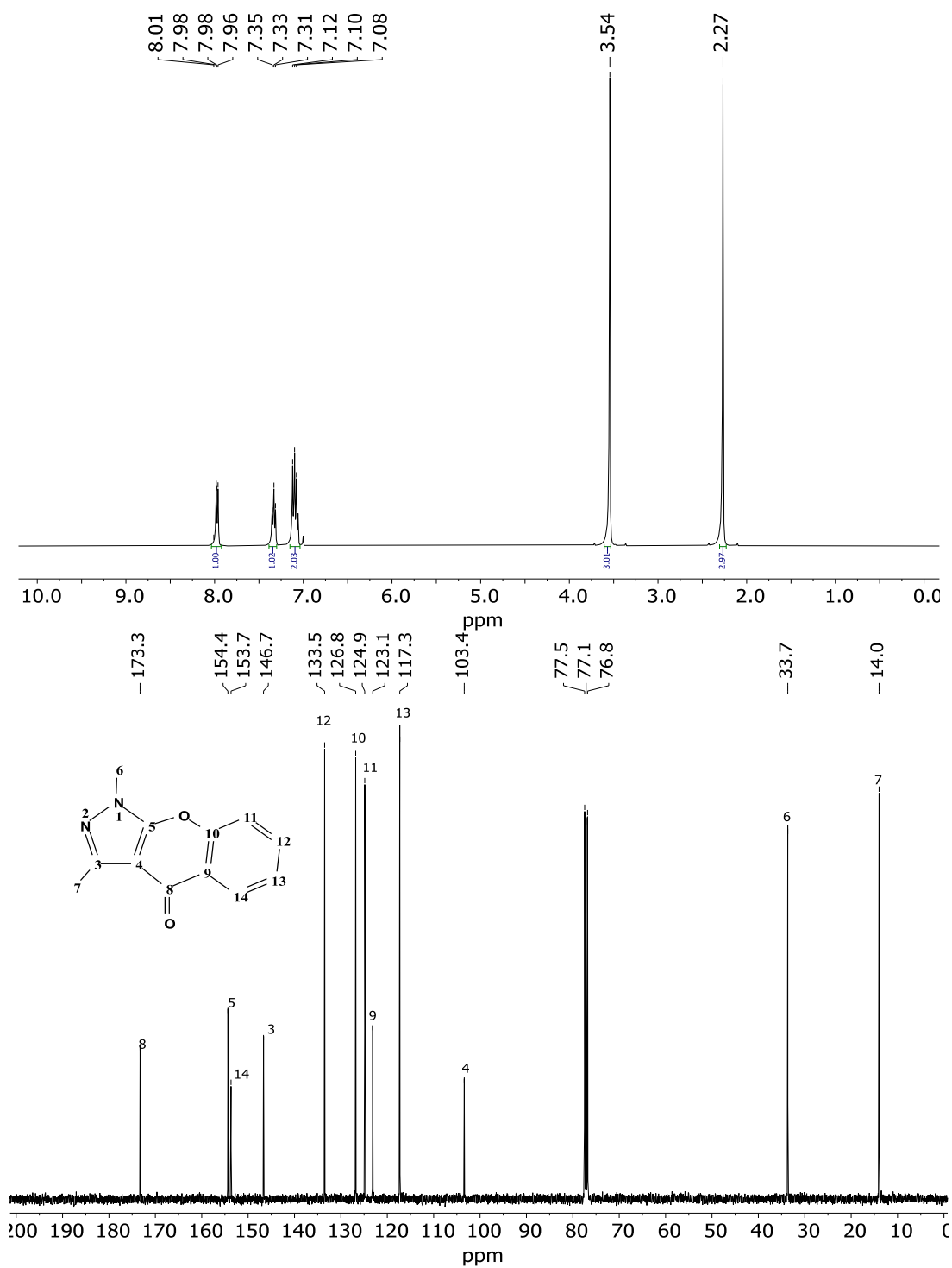


Figure 2. ^1H and ^{13}C NMR spectra of tricyclic side product.

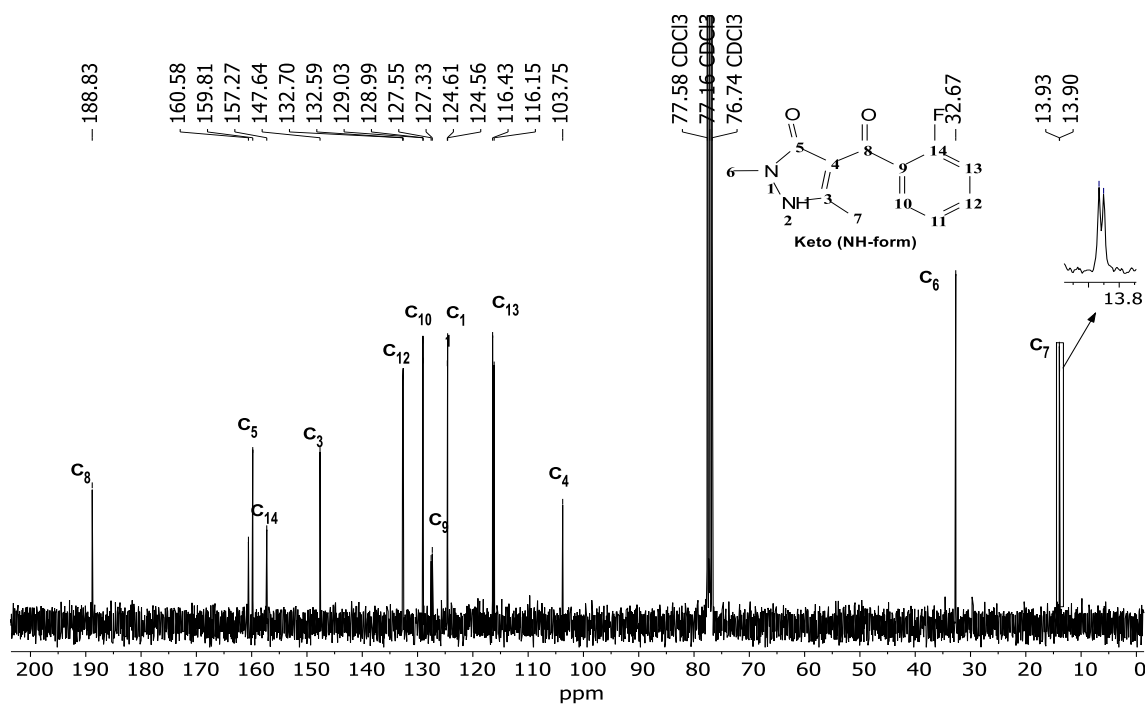


Figure 3. ¹³C NMR spectra of **III** in CDCl₃.

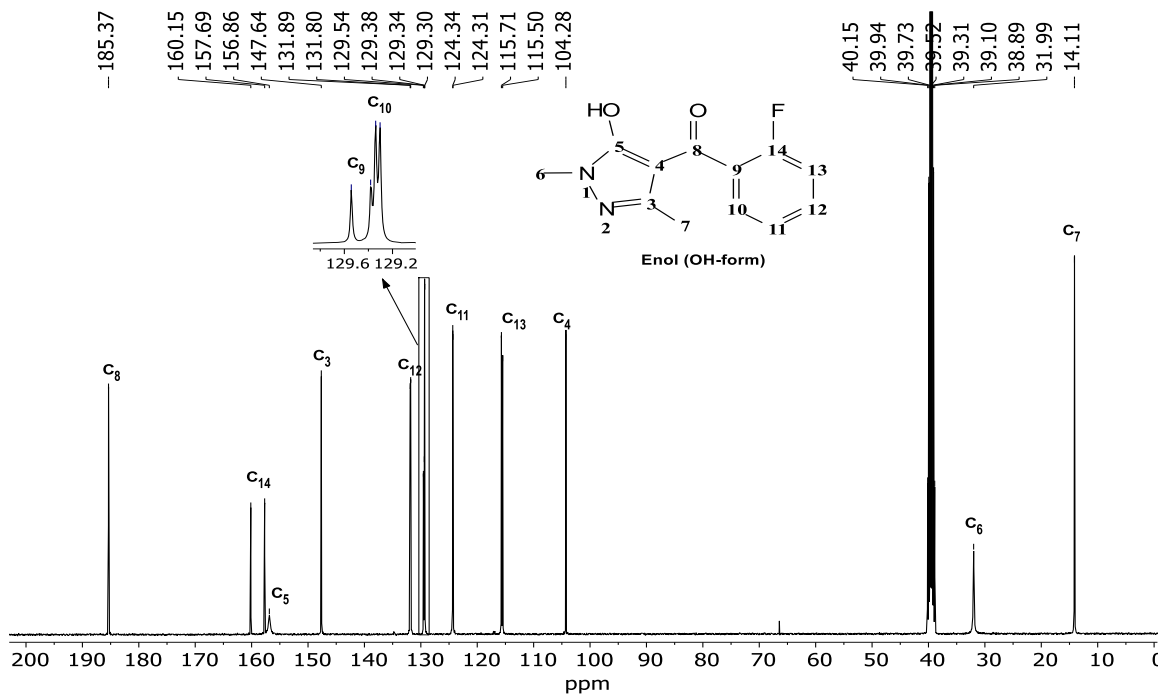


Figure 4. ¹³C NMR spectra of **III** in DMSO-d₆.

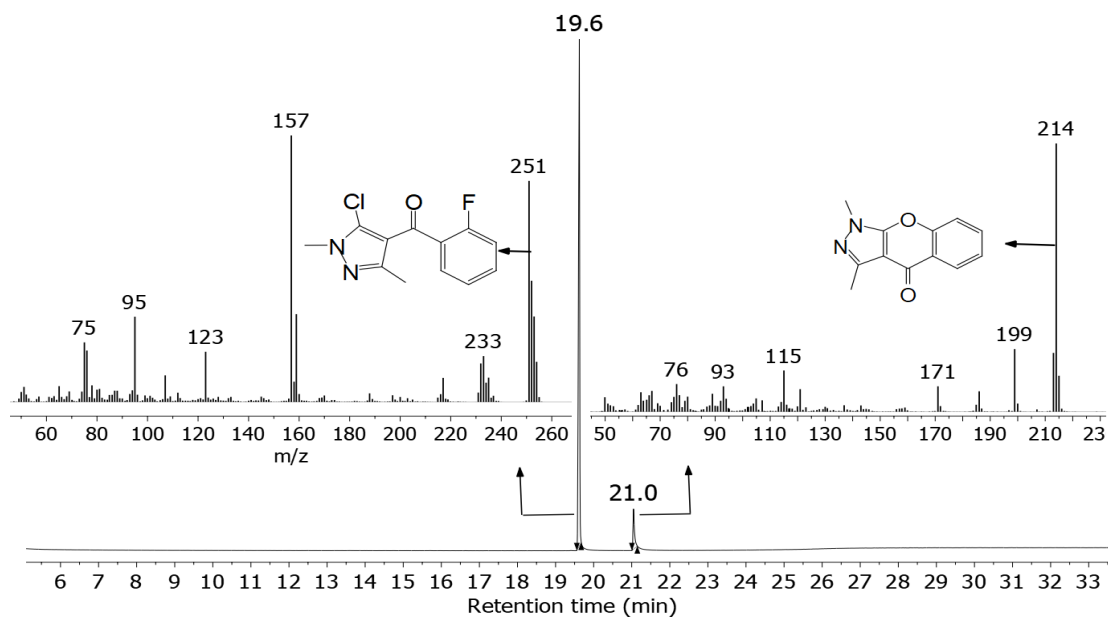


Figure 5. GC-MS analysis (chromatogram and fragmentation patterns) of purified **IV** (97.5%) containing 2.5% of tricyclic side product (**V**)

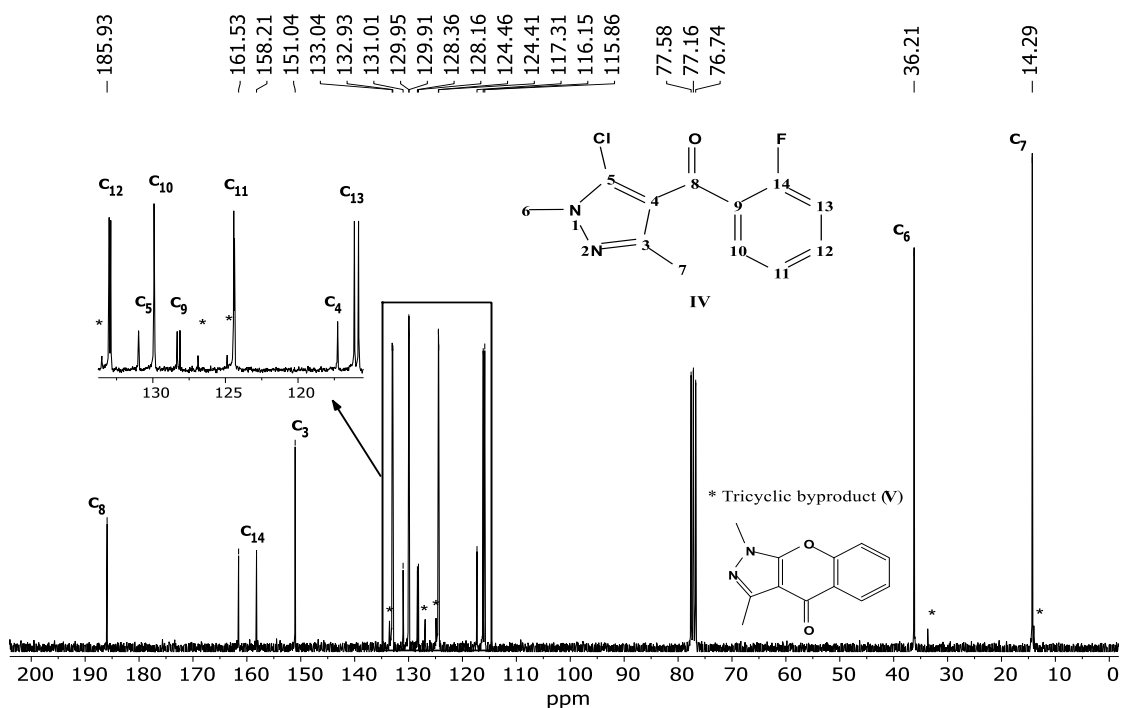


Figure 6. ^{13}C NMR spectra of purified **IV** (97.5%) containing 2.5% of tricyclic side product (**V**) in CDCl_3

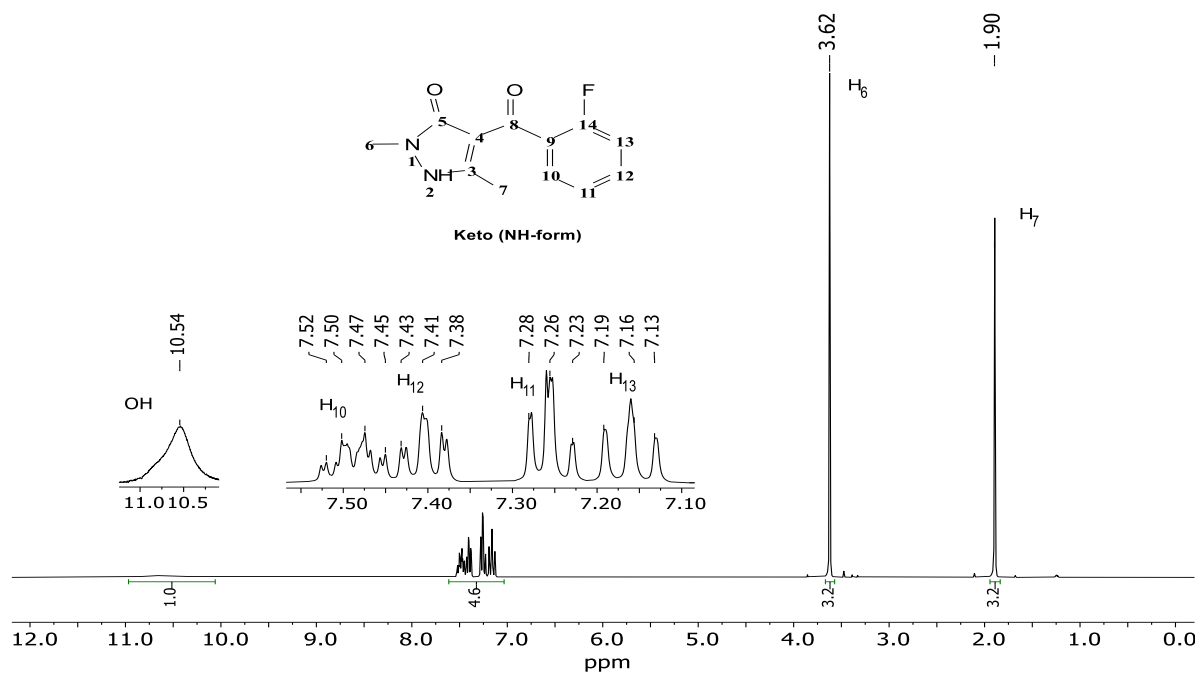


Figure S1. ¹H NMR spectra of **III** in CDCl₃.

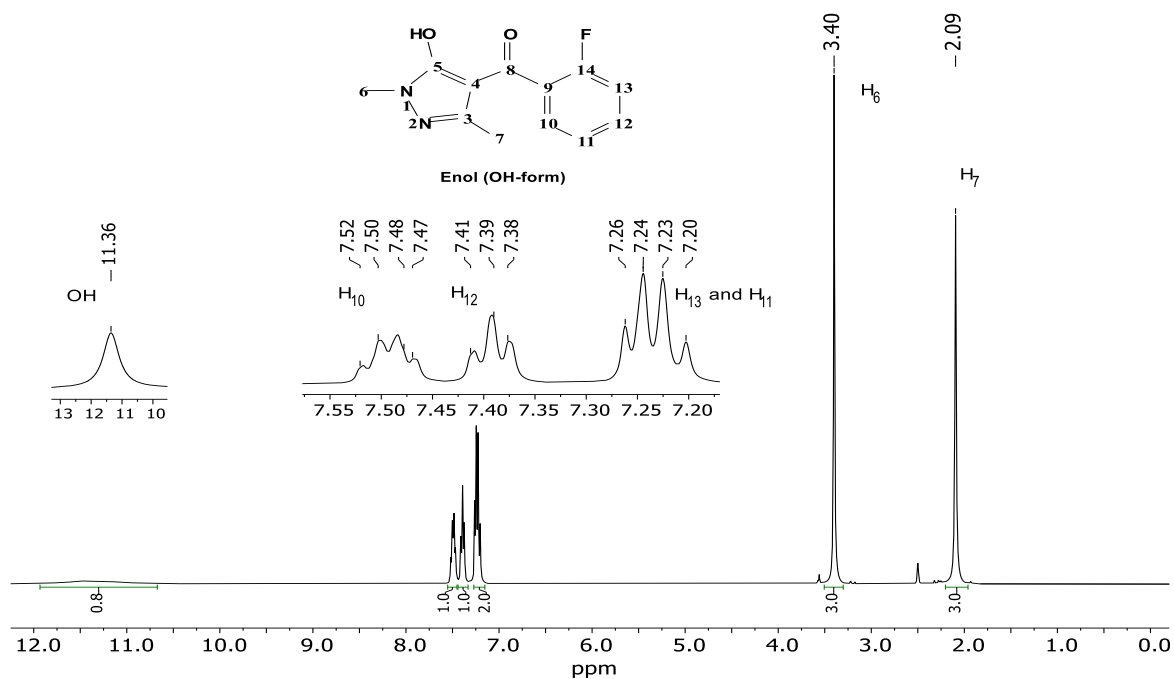


Figure S2. ¹H NMR spectra of **III** in DMSO-d₆.

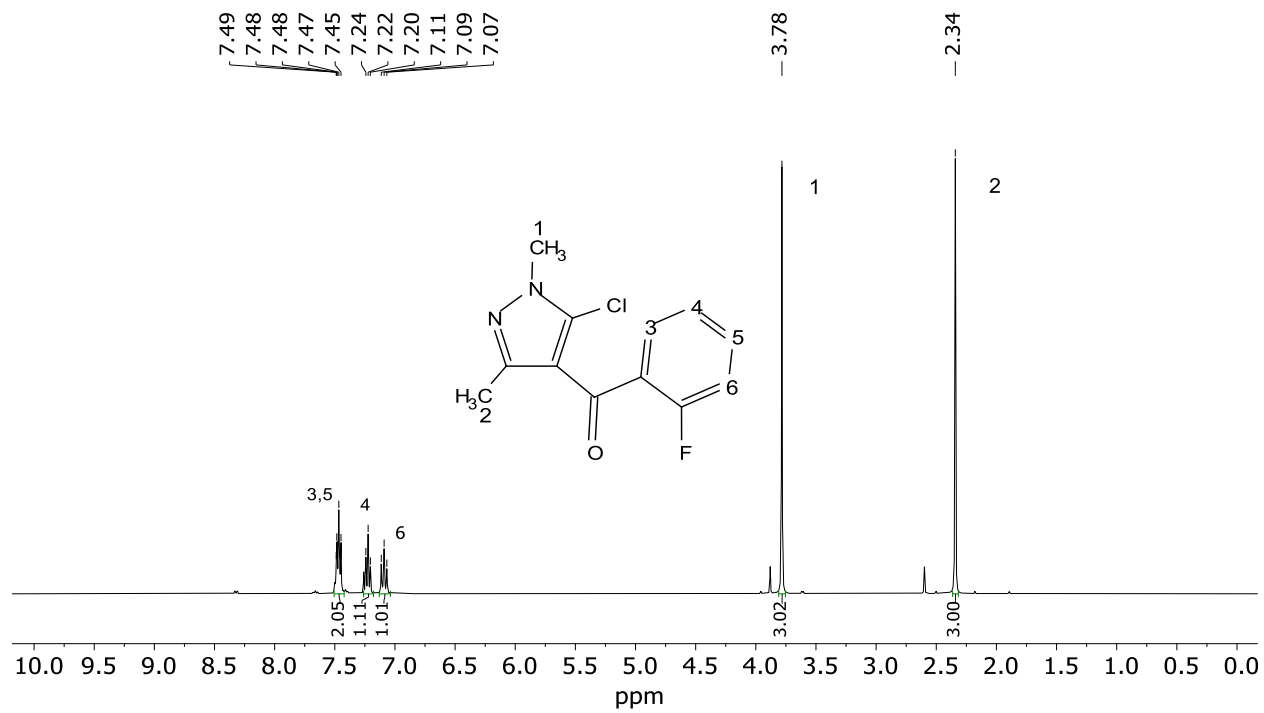


Figure S3. ¹H NMR spectra of IV in CDCl₃.