

## Supporting Information

### Congeners derived from microtubule-active phenylpyrimidines produce a potent and long-lasting paralysis of *Schistosoma mansoni* *in vitro*

Ludovica Monti,<sup>a</sup> Anne-Sophie Cornec,<sup>b</sup> Killian Oukoloff,<sup>a</sup> Jane Kovalevich,<sup>c</sup> Kristen Prijs,<sup>c</sup> Thibault Alle,<sup>a</sup> Kurt R. Brunden,<sup>c</sup> Amos B. Smith, III,<sup>b</sup> Nelly El-Sakkary,<sup>a</sup> Lawrence J. Liu,<sup>a</sup> Ali Syed,<sup>a</sup> Danielle E. Skinner,<sup>a</sup> Carlo Ballatore,<sup>a,\*</sup> and Conor R. Caffrey<sup>a,\*</sup>

<sup>a</sup>Center for Discovery and Innovation in Parasitic Diseases (CDIPD), Skaggs School of Pharmacy and Pharmaceutical Sciences, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093

<sup>b</sup>Department of Chemistry, School of Arts and Sciences, University of Pennsylvania, 231 South 34<sup>th</sup> St., Philadelphia, PA 19104-6323

<sup>c</sup>Center for Neurodegenerative Disease Research, Perelman School of Medicine, University of Pennsylvania, 3600 Spruce Street, Philadelphia, PA 19104-6323

### Corresponding Author Information

\*C.B. E-mail: [cballatore@health.ucsd.edu](mailto:cballatore@health.ucsd.edu)

\*C.R.C. E-mail: [ccaffrey@health.ucsd.edu](mailto:ccaffrey@health.ucsd.edu)

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**Figure S1.** Washout experiments after a 1 and 24 h incubation with **25**, **28** and **29** (page S1).

**NMR spectra of test compounds** (page S2 – S25).

**Video S1.** Adult *S. mansoni* 24 h after exposure to DMSO (control).

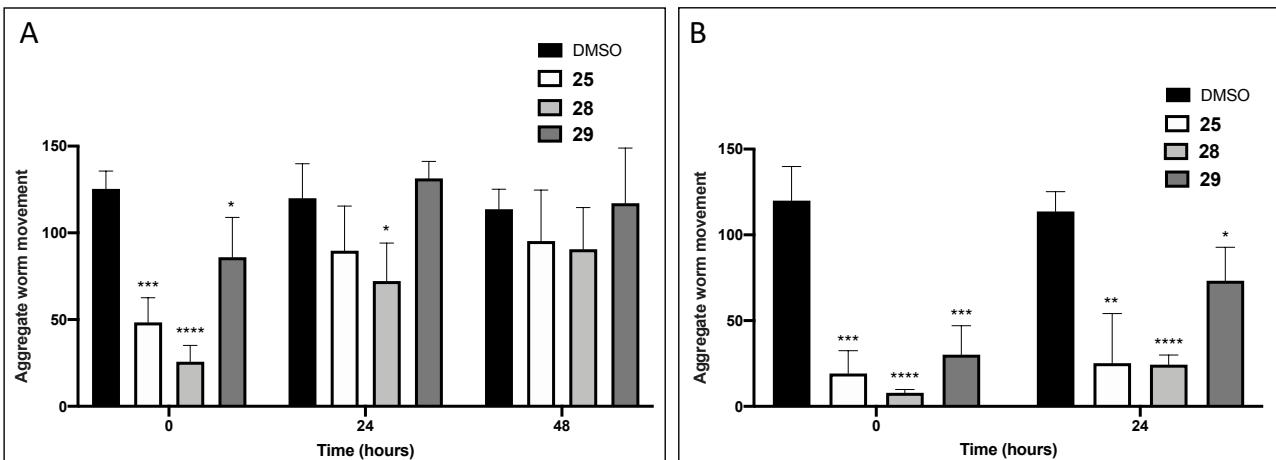
**Video S2.** Adult *S. mansoni* 24 h after exposure to 5 µM **15**.

**Video S3.** Adult *S. mansoni* 24 h after exposure to 5 µM **25**.

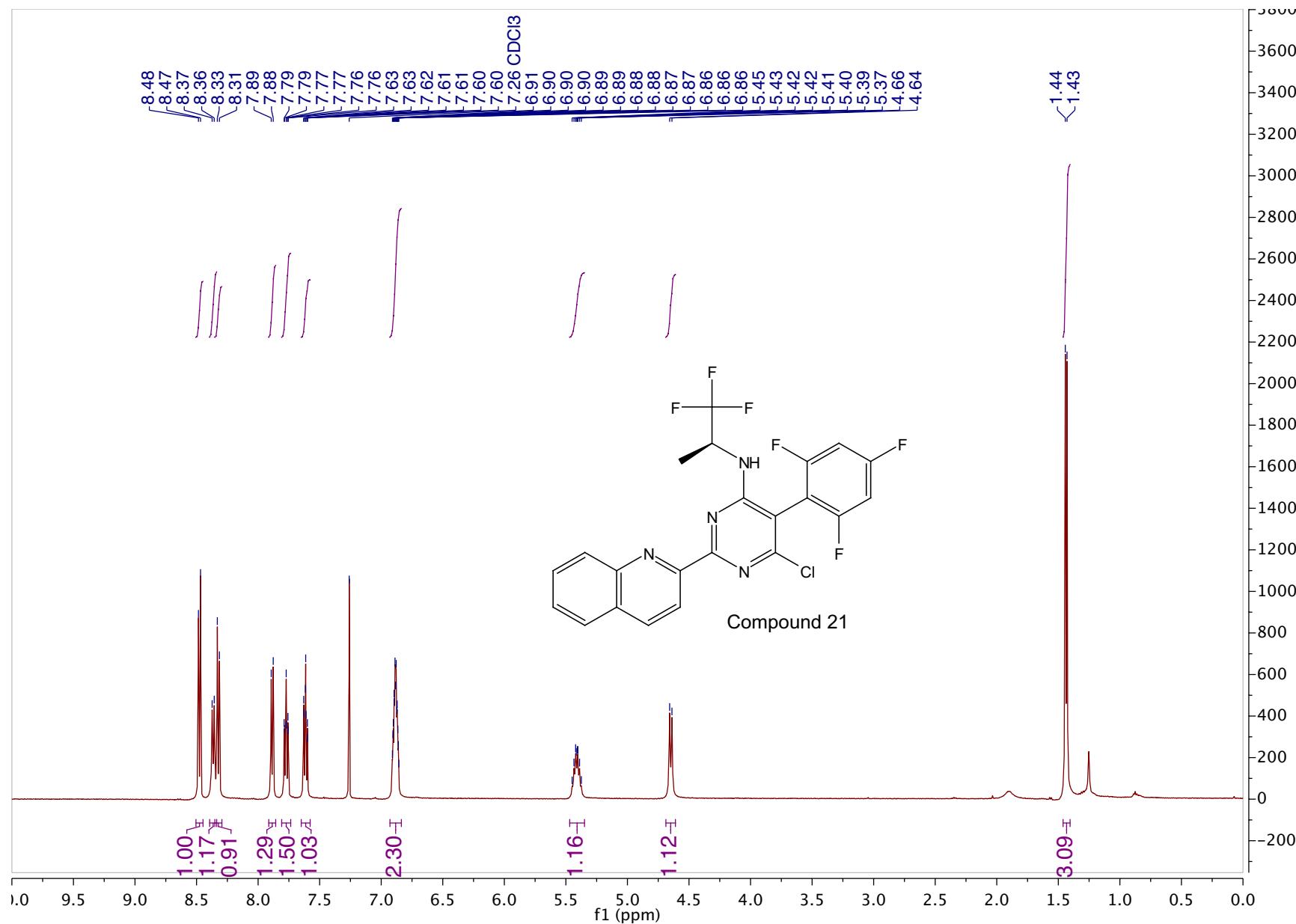
**Video S4.** Adult *S. mansoni* incubated with 2 µM **28** for 5 h, then washed extensively and incubated for an additional 48 h.

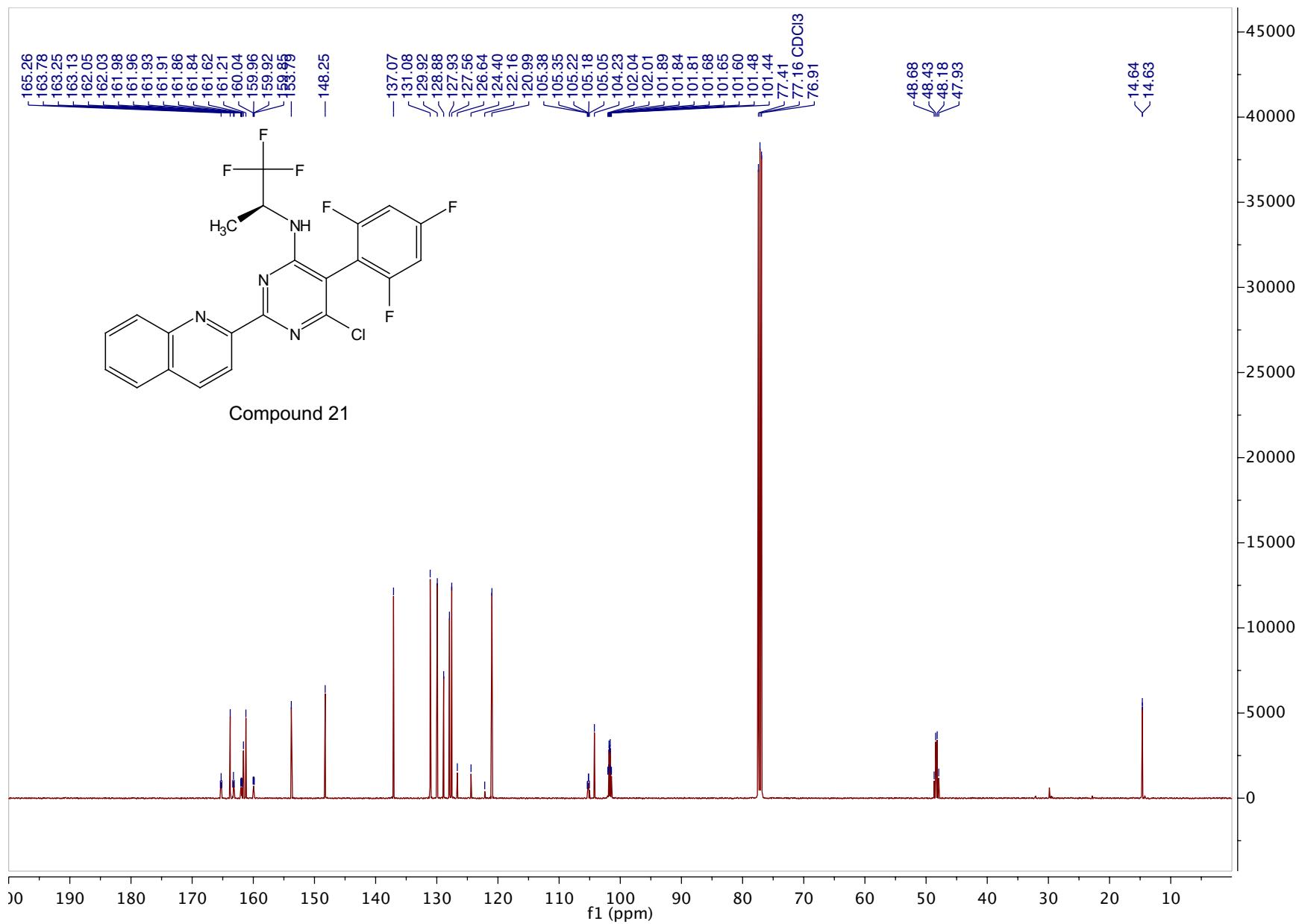
**Video S5.** Adult *S. mansoni* handled as per Video S4 but without the presence of **28**.

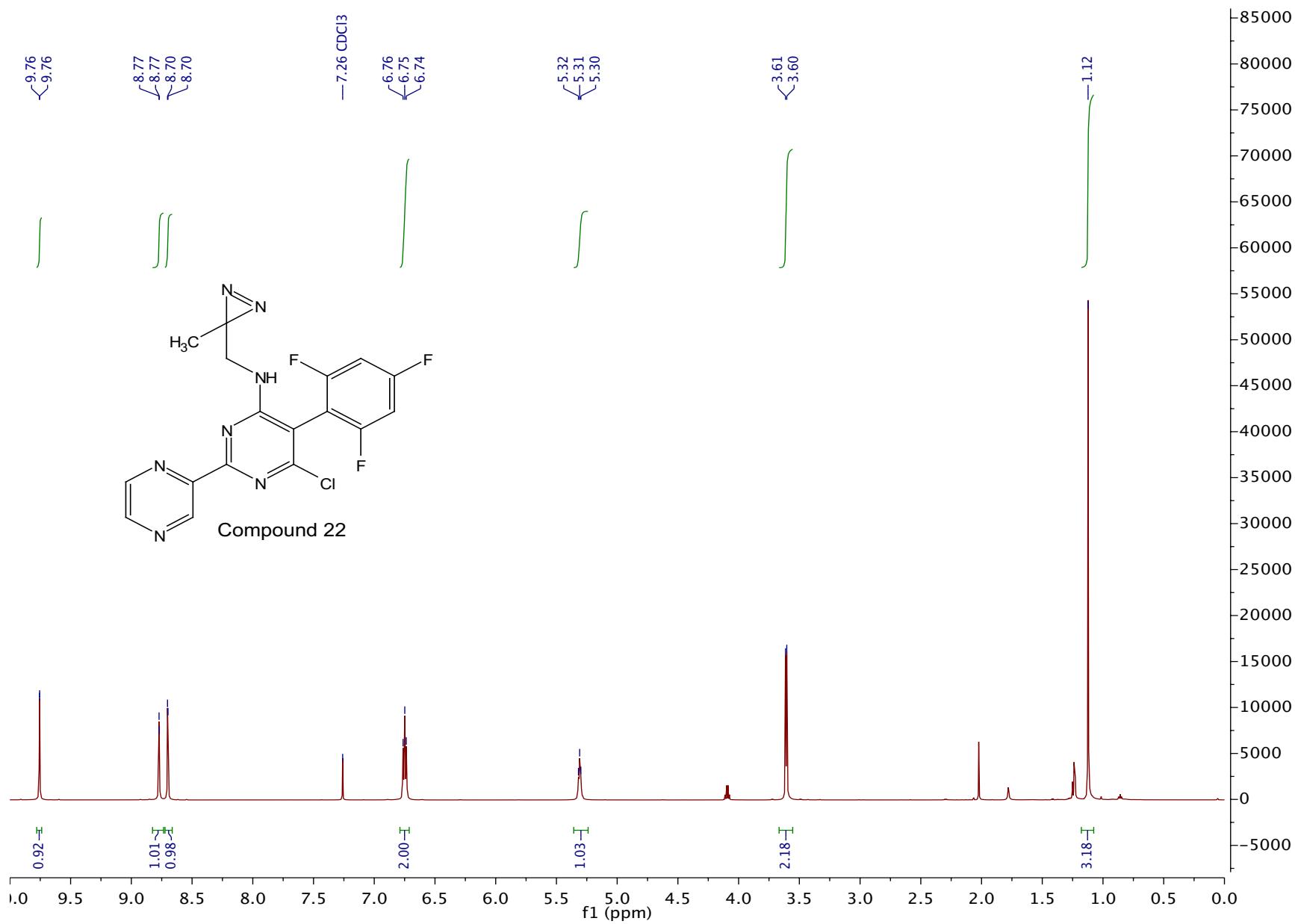
*Video S1 – S5 are available as separate files*

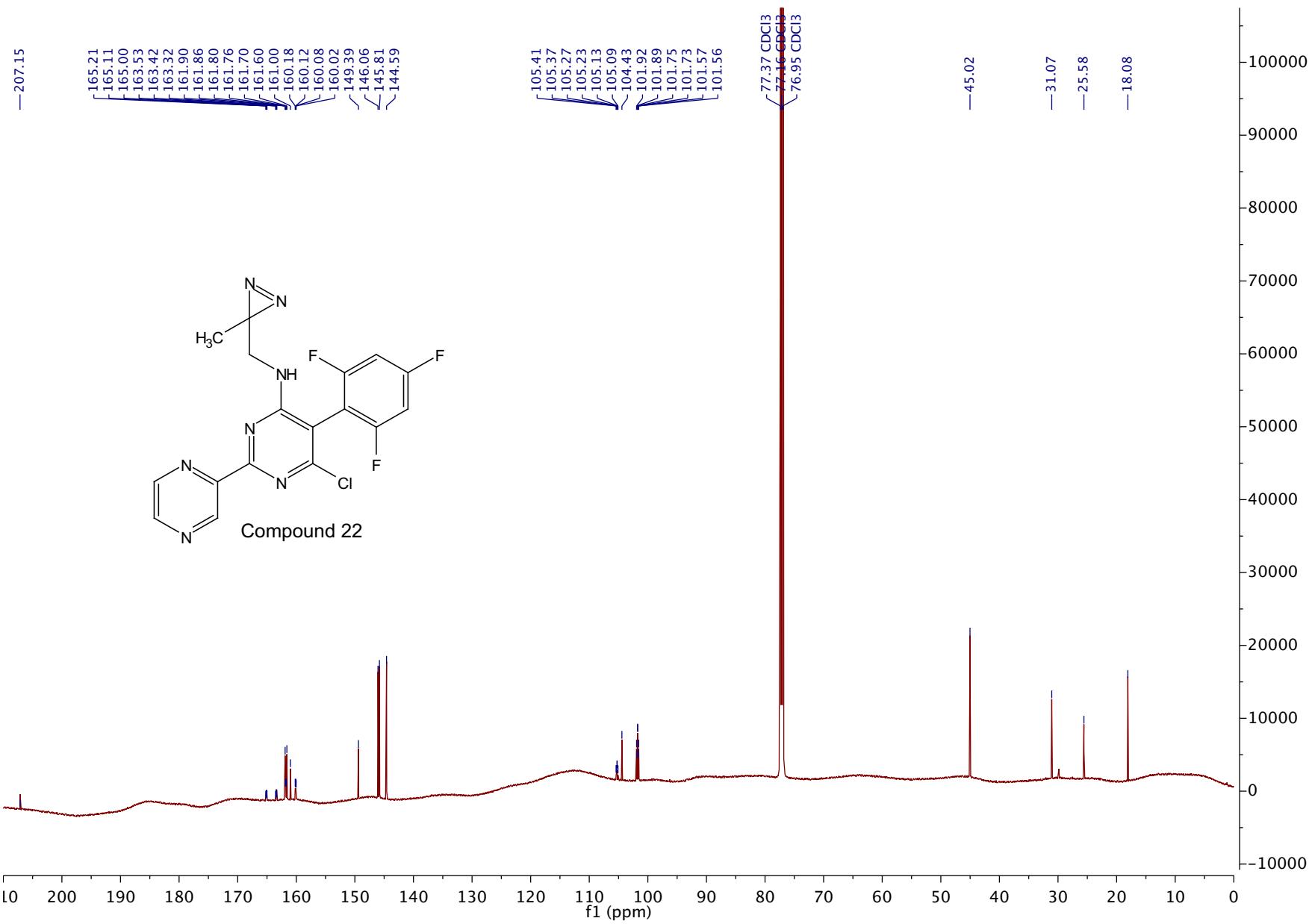


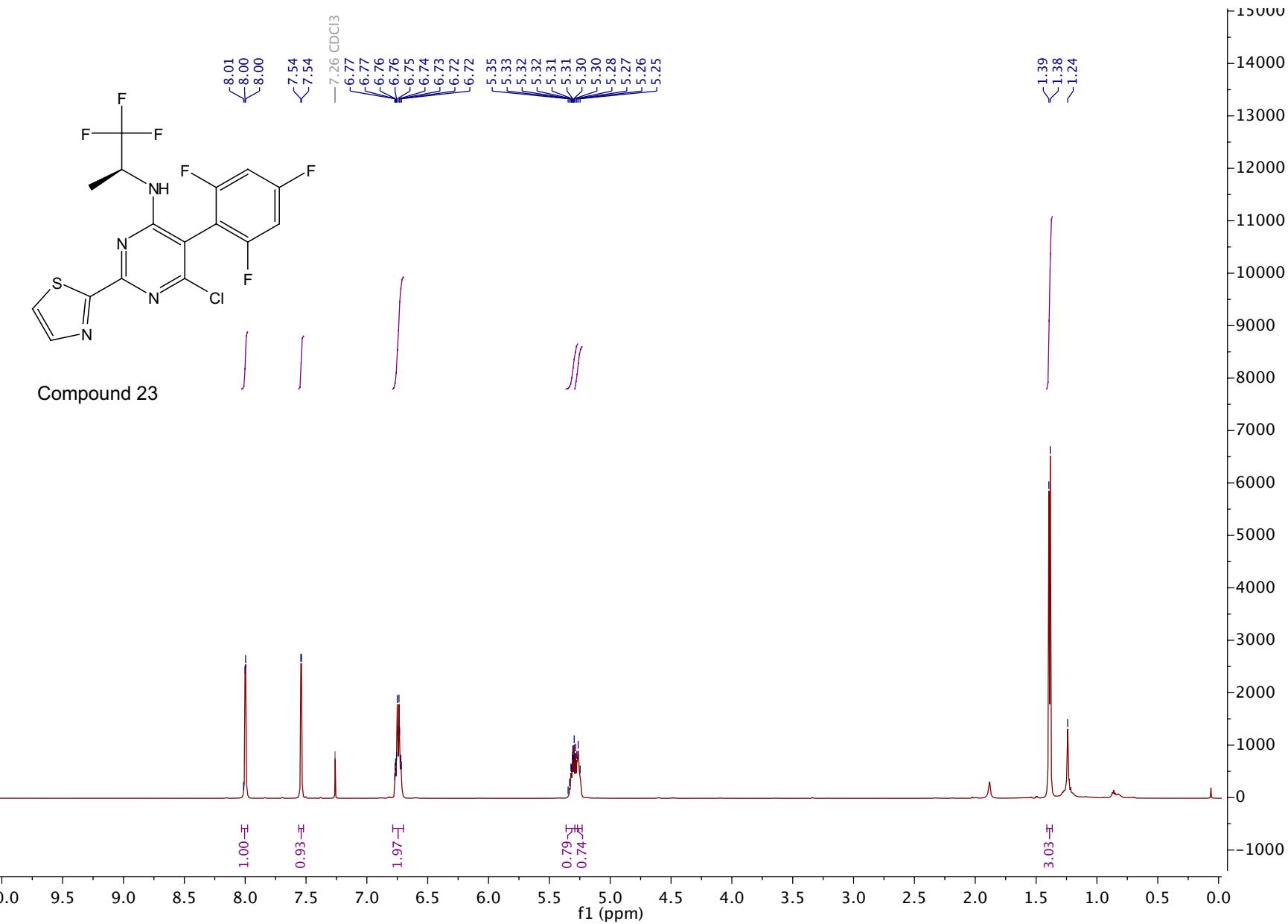
**Figure S1.** *S. mansoni* adult worm motility remains suppressed even after removal of the phenylpyrimidines **25**, **28** and **29**. Parasites were preincubated with 0.5% DMSO or 2  $\mu$ M of test compound for 1 h (A) or 24 h (B). Just prior to exchanging the incubation volume six times (Time 0), worm motility was measured by WormAssay and then again 24 h and 48 h (A) or 24 h (B) after the exchange. Assays were performed twice each in duplicate, and data are expressed as means  $\pm$  SD values relative to the DMSO controls: \* $p$  < 0.05, \*\* $p$  < 0.01, \*\*\* $p$  < 0.001 and \*\*\*\* $p$  < 0.0001 by the unpaired Student's *t*-test.

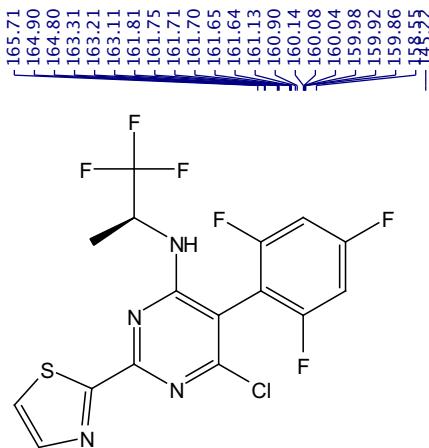




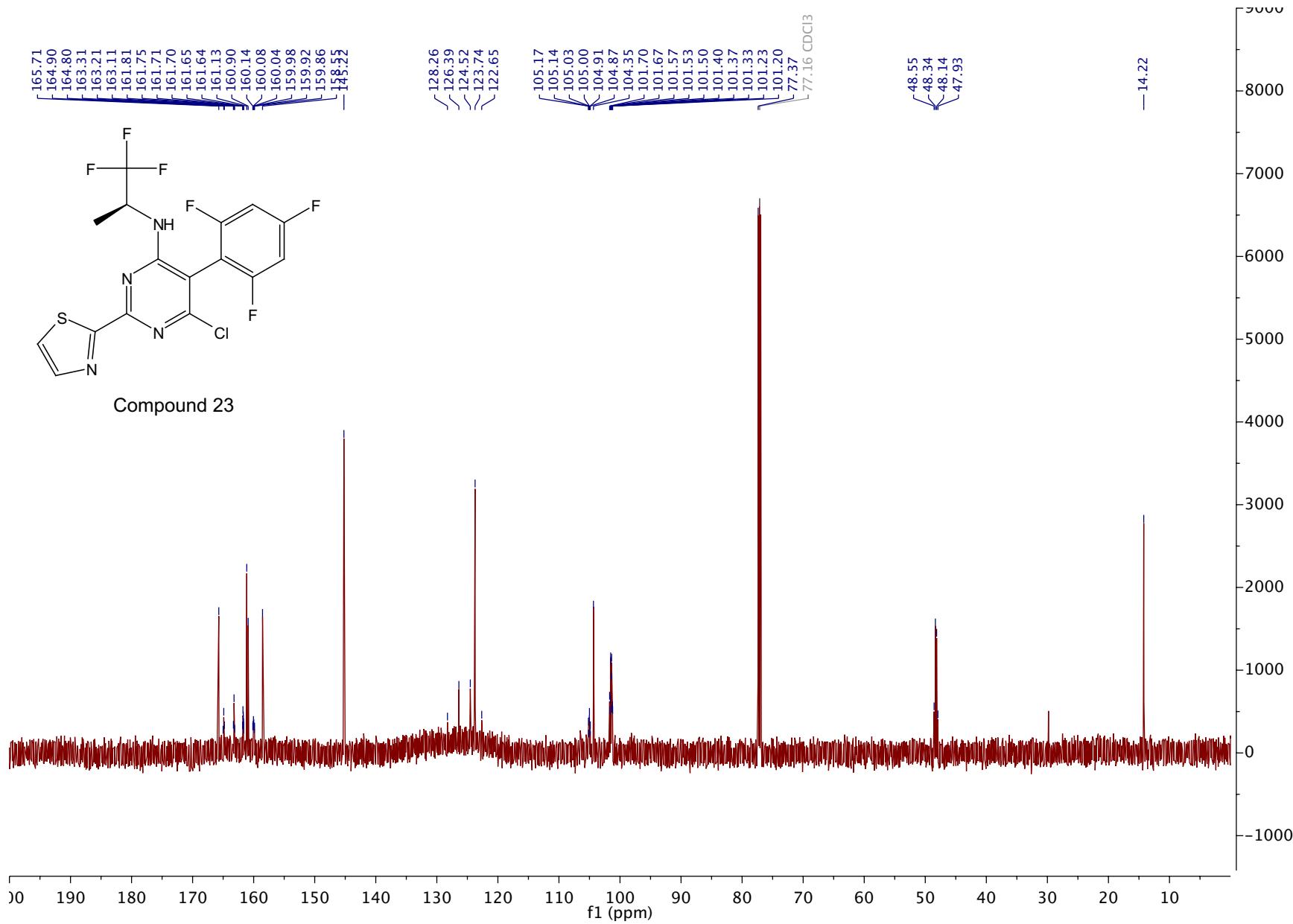


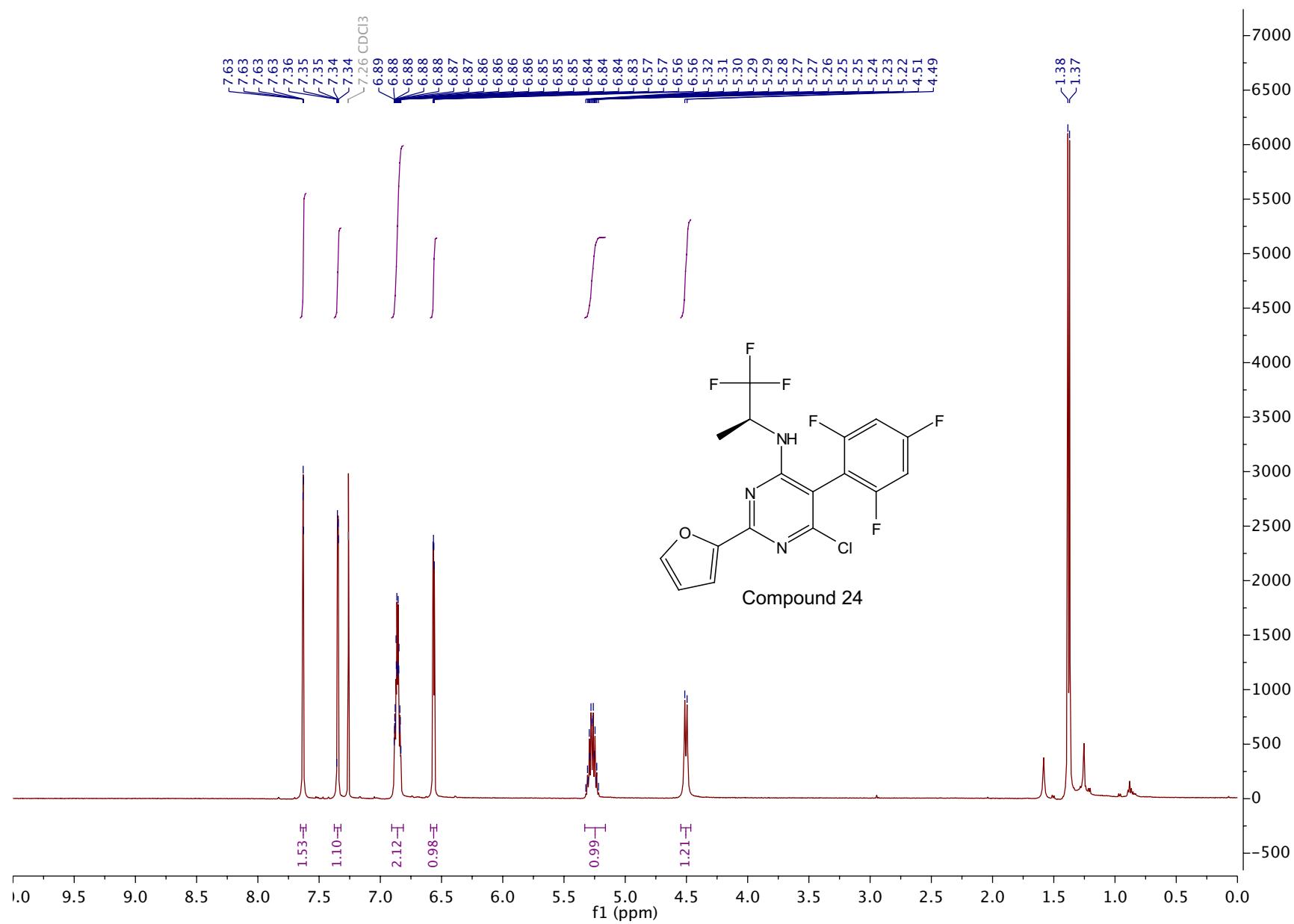


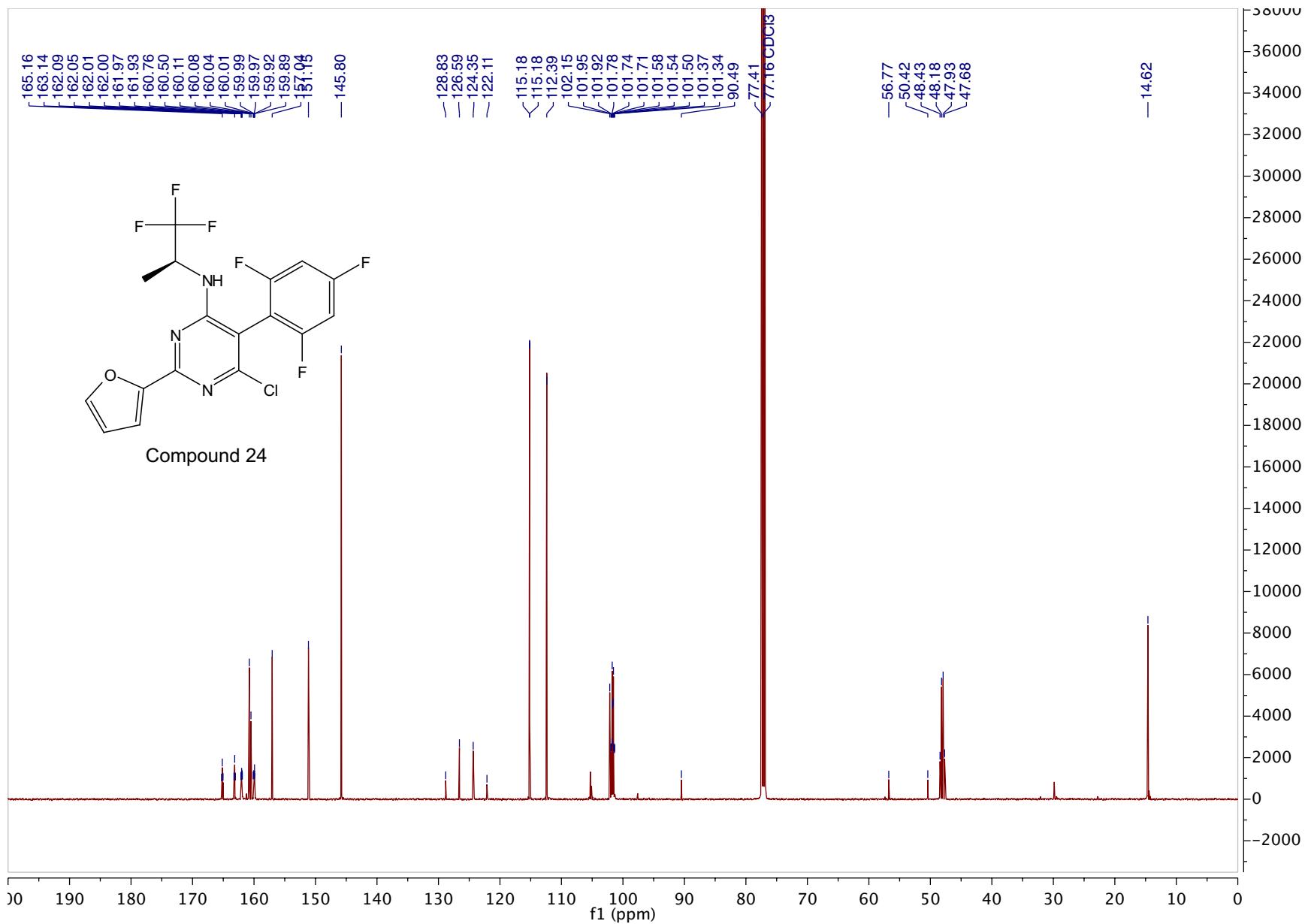


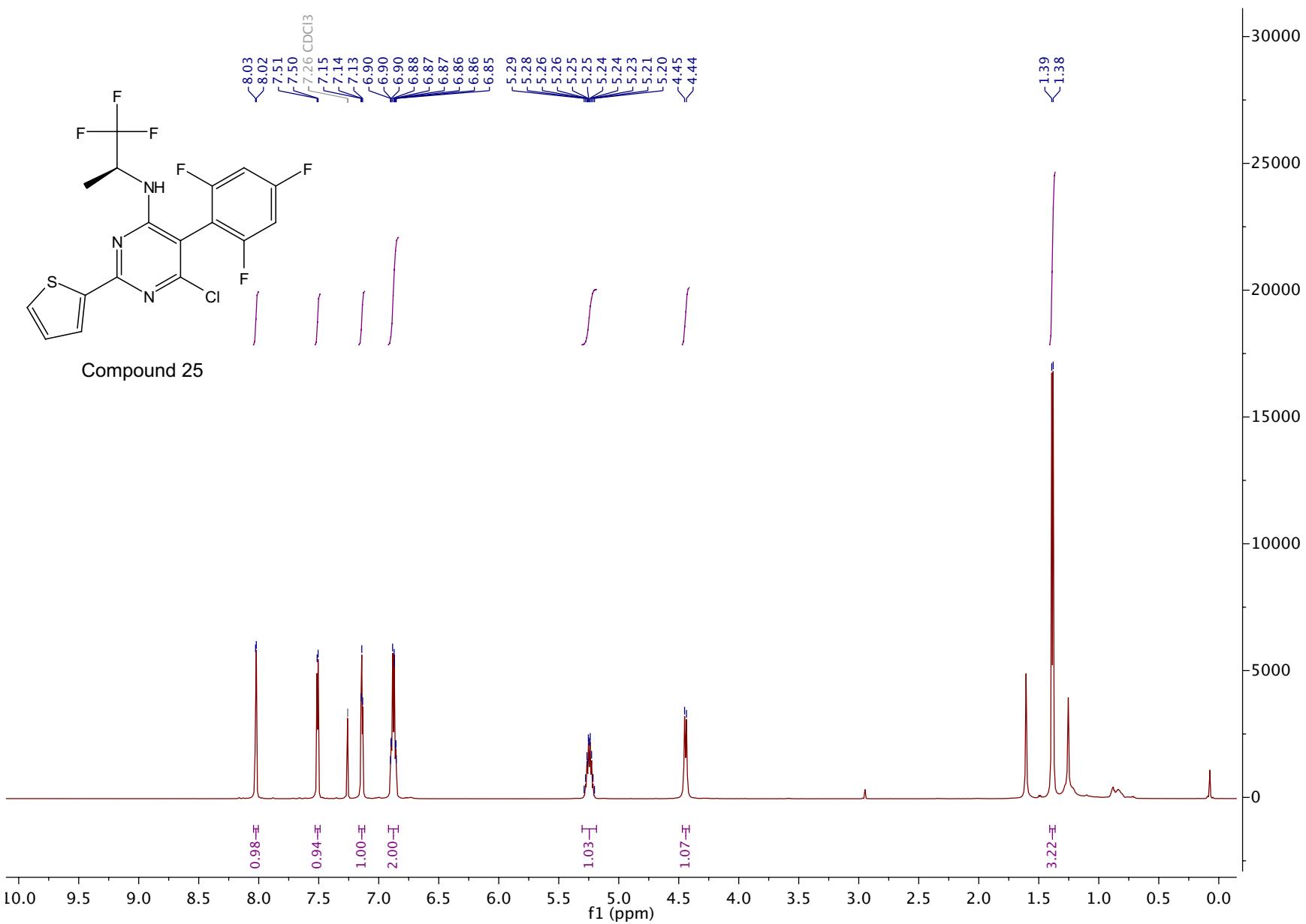


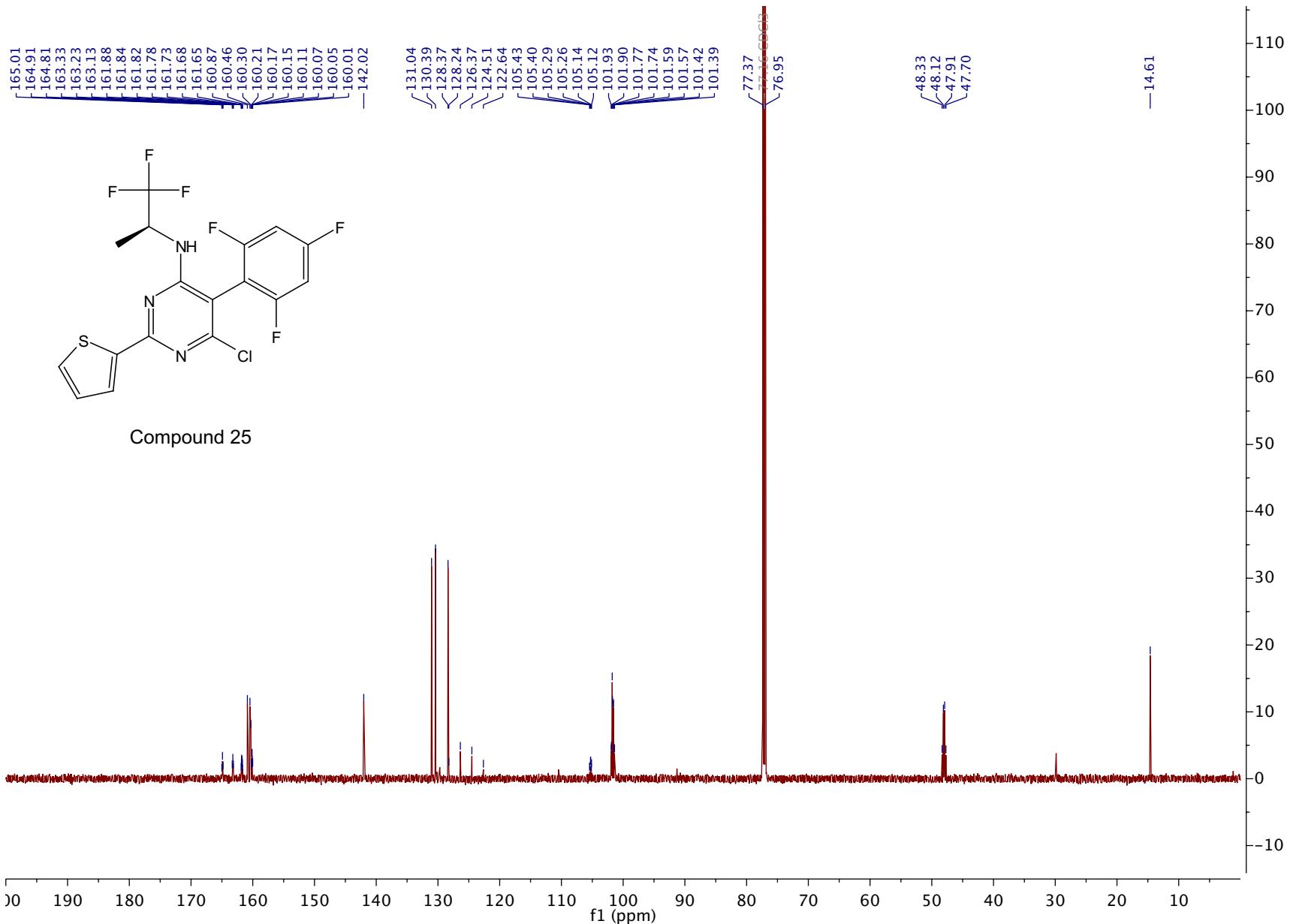
## Compound 23











Compound 25

