Supporting Information

Design, synthesis, and characterization of (1-(4-aryl)-1H-1,2,3-triazol-4-yl)methyl, substituted phenyl-6-methyl-2-oxo-1,2,3,4-tetrahydropyrimidine-5-carboxylates against Mycobacterium tuberculosis

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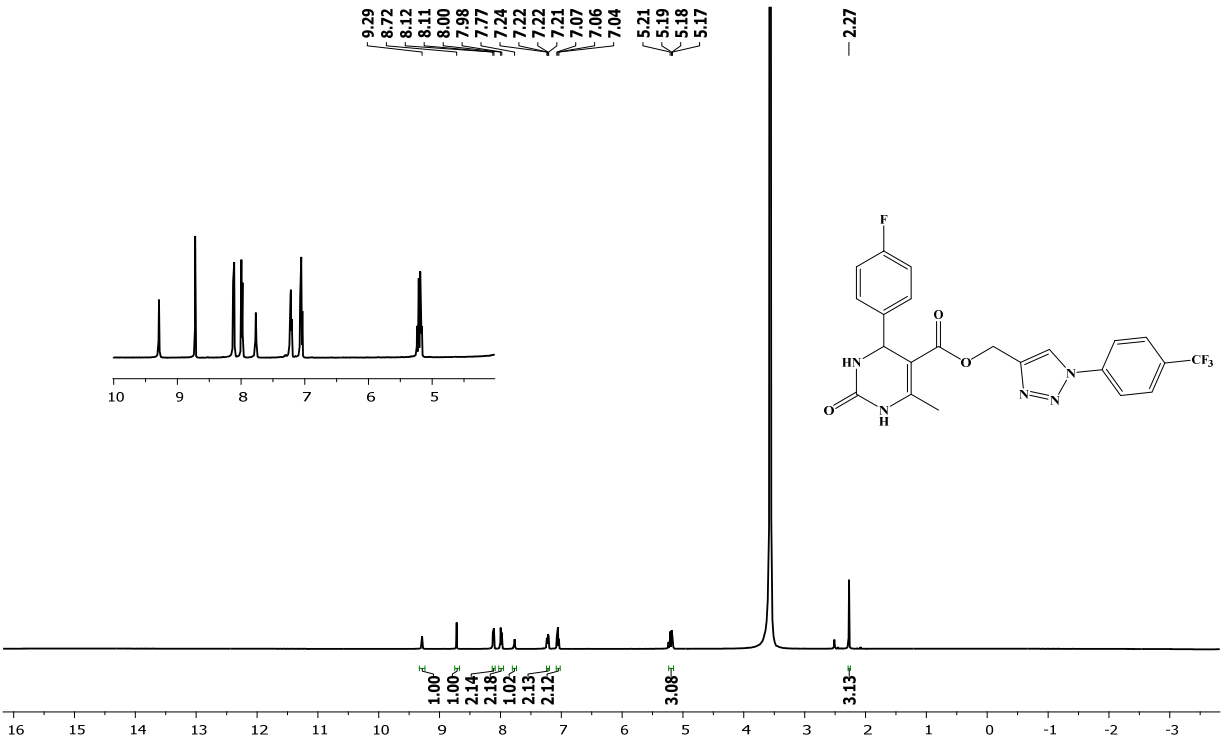
General Information:

All the chemicals were purchased from Sigma-Aldrich Corporation (analytical grade) and were used without further purification. FT-IR spectra were registered on a Bruker IFS 55 equinox FTIR spectrophotometer as KBr discs. ^{1}H- and ^{13}C-NMR spectra were recorded using a Bruker 400 or 500 MHz spectrometer in the solvents indicated (referenced to the residual 1H signals in the deuterated solvents) using TMS as internal standard. Chemical shifts are reported in ppm (δ scale), coupling constant (*J*) values are given in hertz (Hz). The splitting pattern is abbreviated as follows: s, singlet; d, doublet; m, multiplet. TLC analysis of reaction mixtures was performed on Merck aluminium plates coated with silica gel (60 F254). Compounds were visualized by ultra-violet irradiation at 254 and 366nm. Merck silica gel (60-120 mesh) was used for column chromatography.

General procedure for the synthesis of (1-(4-substitutedphenyl)-1H-1,2,3-triazol-4-yl)methyl 4-substitutedphenyl-6-methyl-2-oxo-1,2,3,4-tetrahydropyrimidine-5-carboxylates:

A 25 ml round bottom flask equipped with a condenser was charged with substituted arylazide (1.0 mmol) as well as DHPMs having terminal alkynyl group (1.0 mmol) which was synthesized by the four component Biginelli like cyclo-condensation reaction of *tert*-butyl β-ketoester (1.0 mmol), propargyl alcohol (1.2 mmol), arylaldehyde (1.0 mmol) and urea (1.2 mmol). The entire reaction mixture allowed to stir for 3h at room temperature along with catalytic amount of $Cu(OAc)_2$ (0.1 mmol) and sodium ascorbate (0.2 mmol) in 1 : 2 ratio of acetone and water (2 ml) as a solvent till the reaction was complete. The progress of the reaction was monitored by TLC (4: 6 of Hexane and Ethylacetate). After completion of the reaction as indicated on TLC, the contents were concentrated under reduced pressure to remove excess of acetone and the crude reaction mixture was extracted with ethyl acetate and water. The combined organic extract, after drying over anhydrous sodium sulfate, was again concentrated under reduced pressure to obtain the product. For analytically pure products, the final solid mass was purified by column chromatography using the Hexane/EtOAc (4: 6) as the eluent to give the pure product in 77 – 93 % yield.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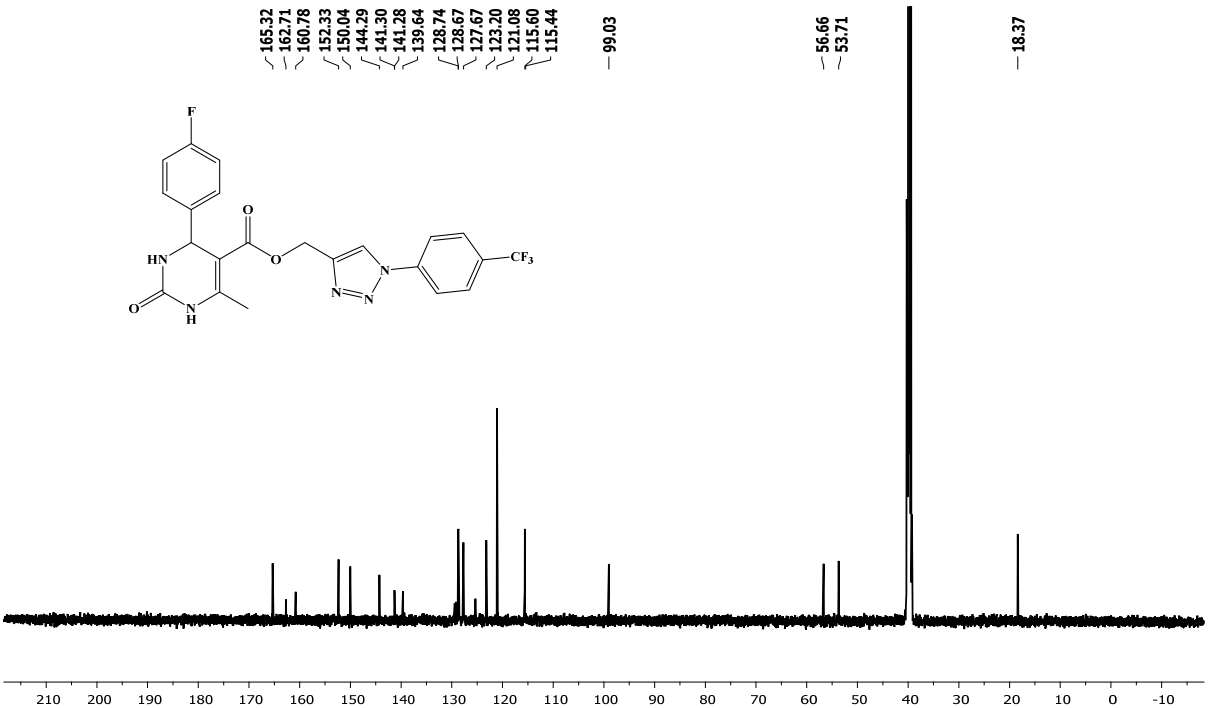
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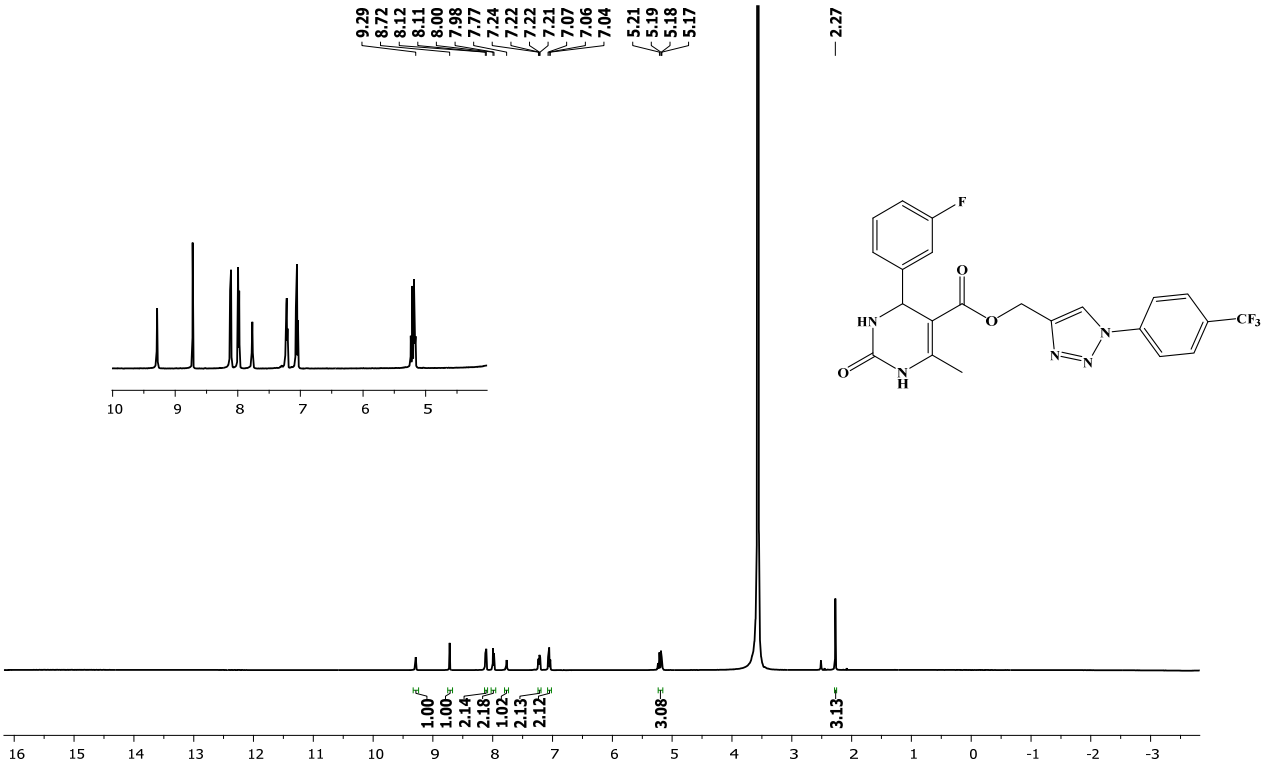
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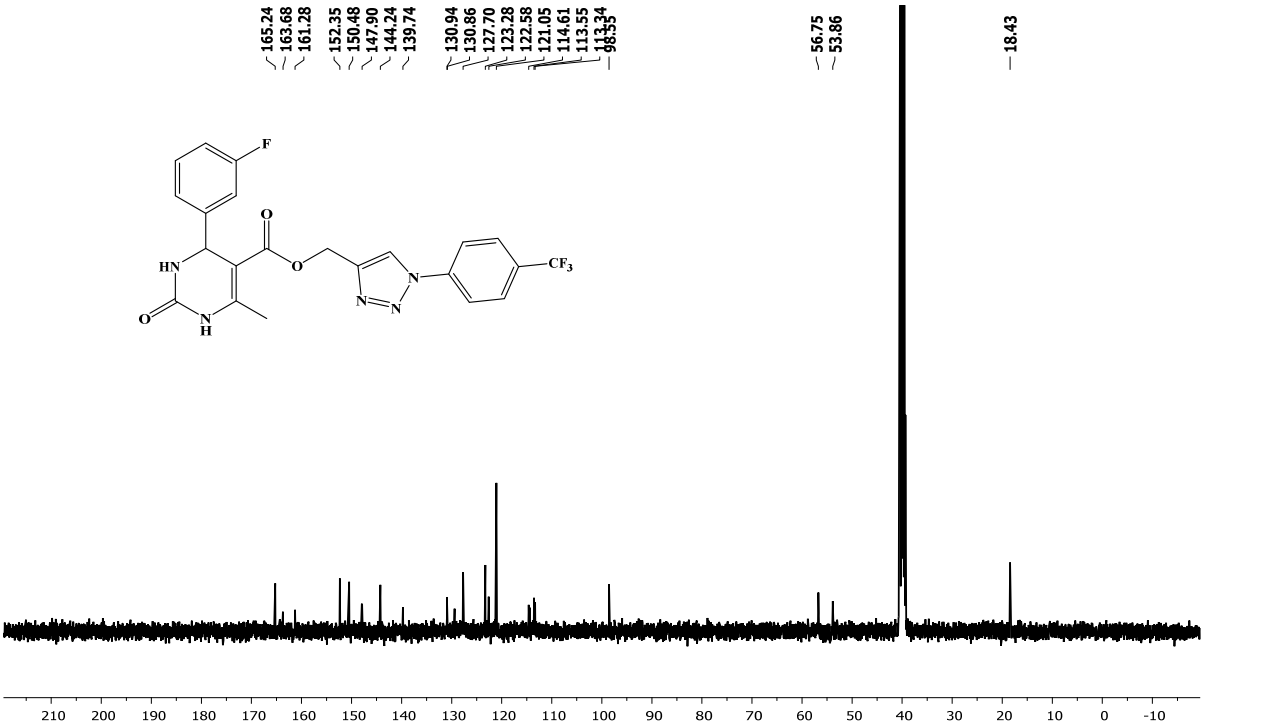
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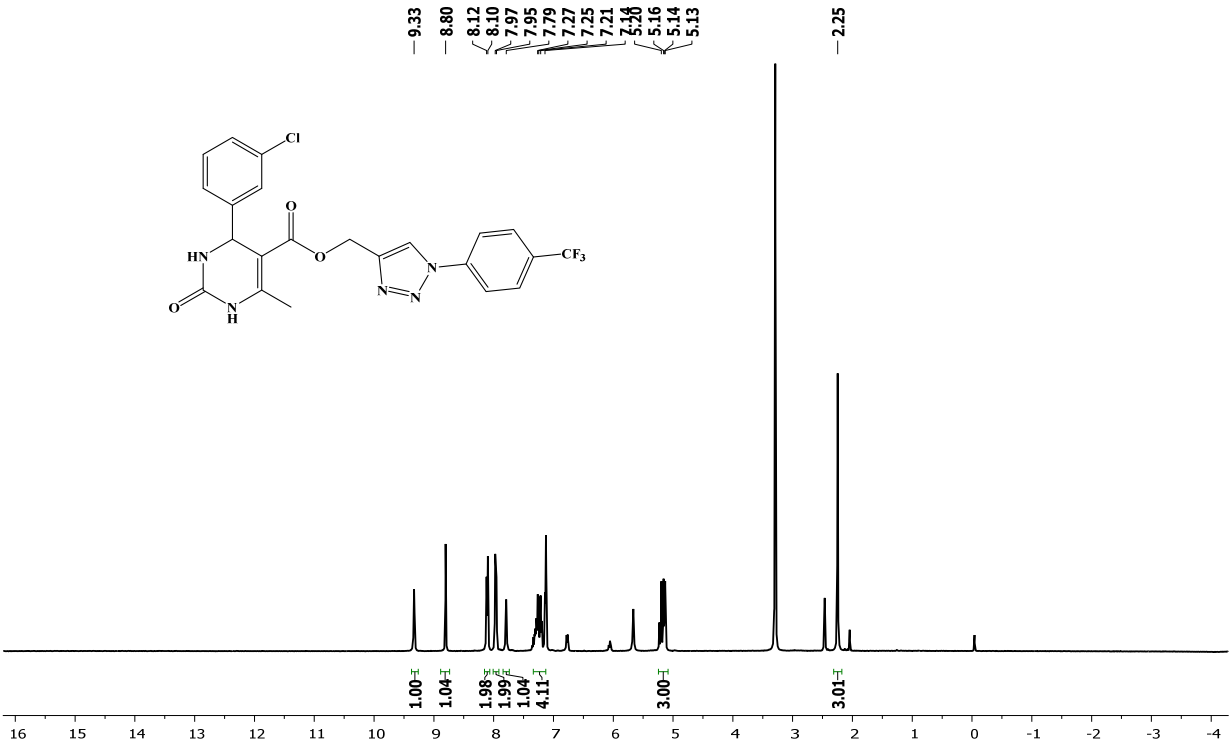
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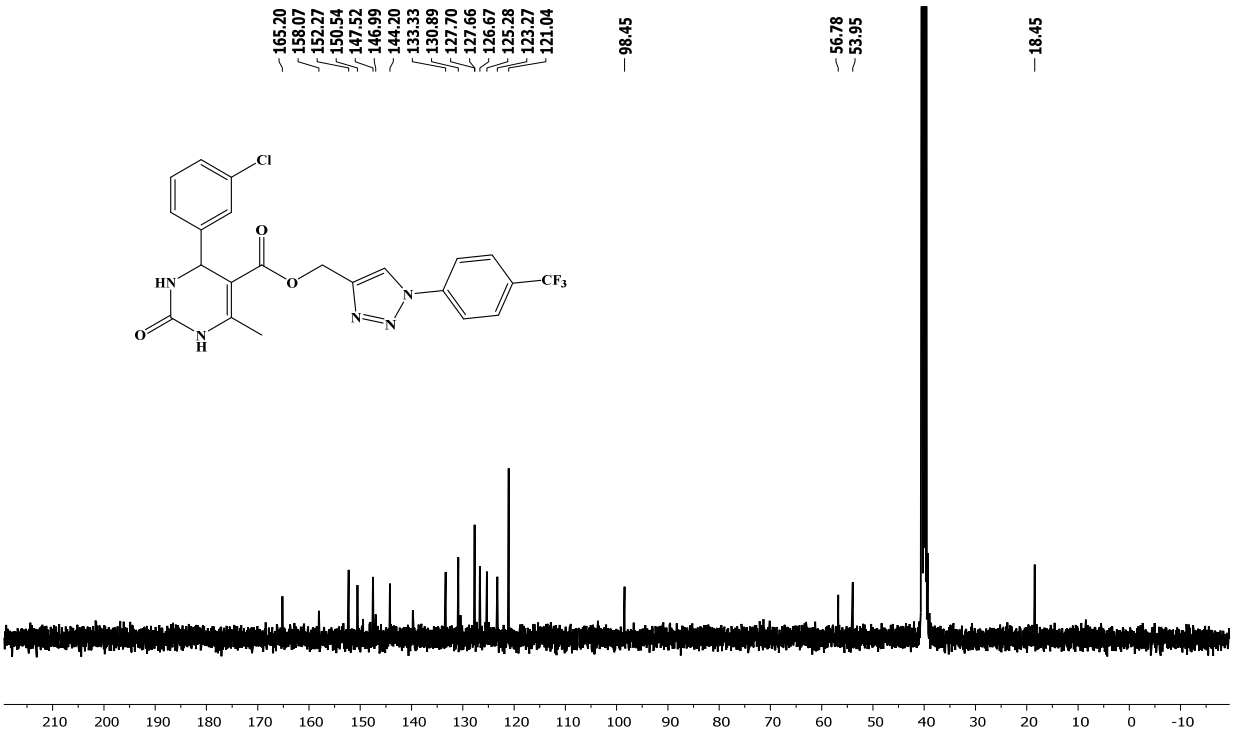
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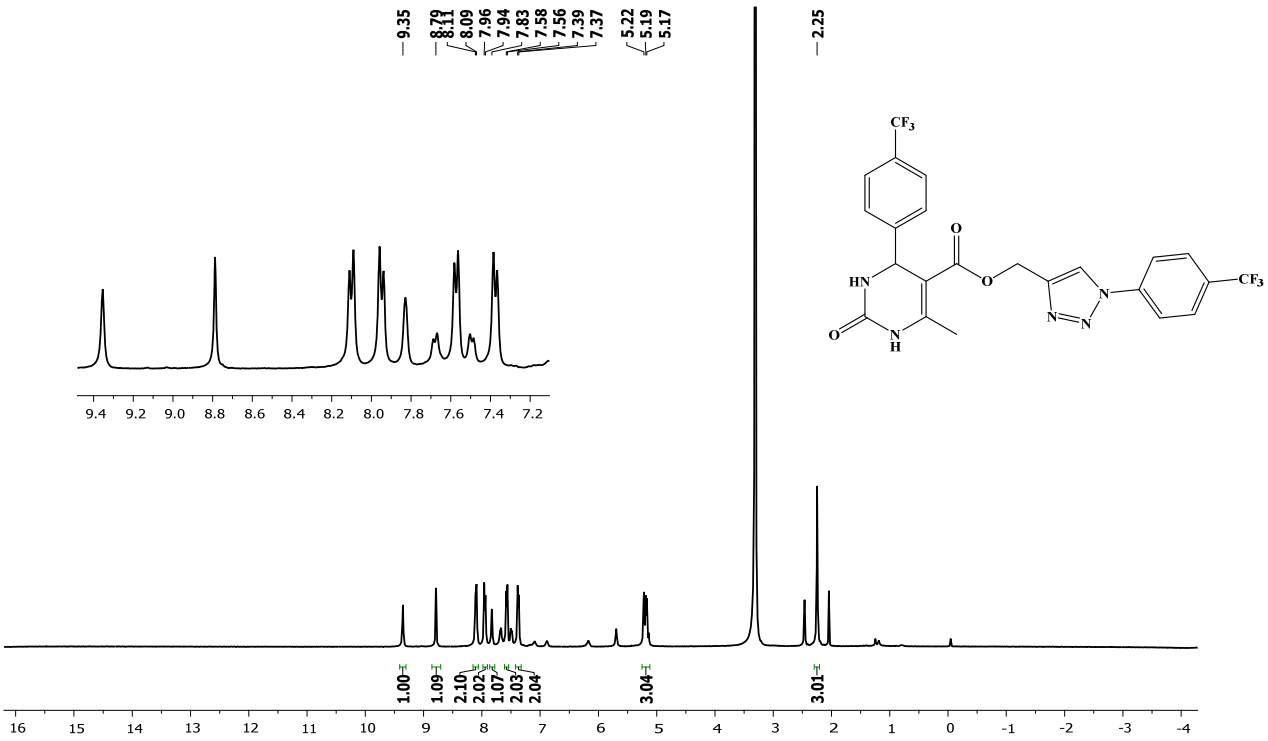
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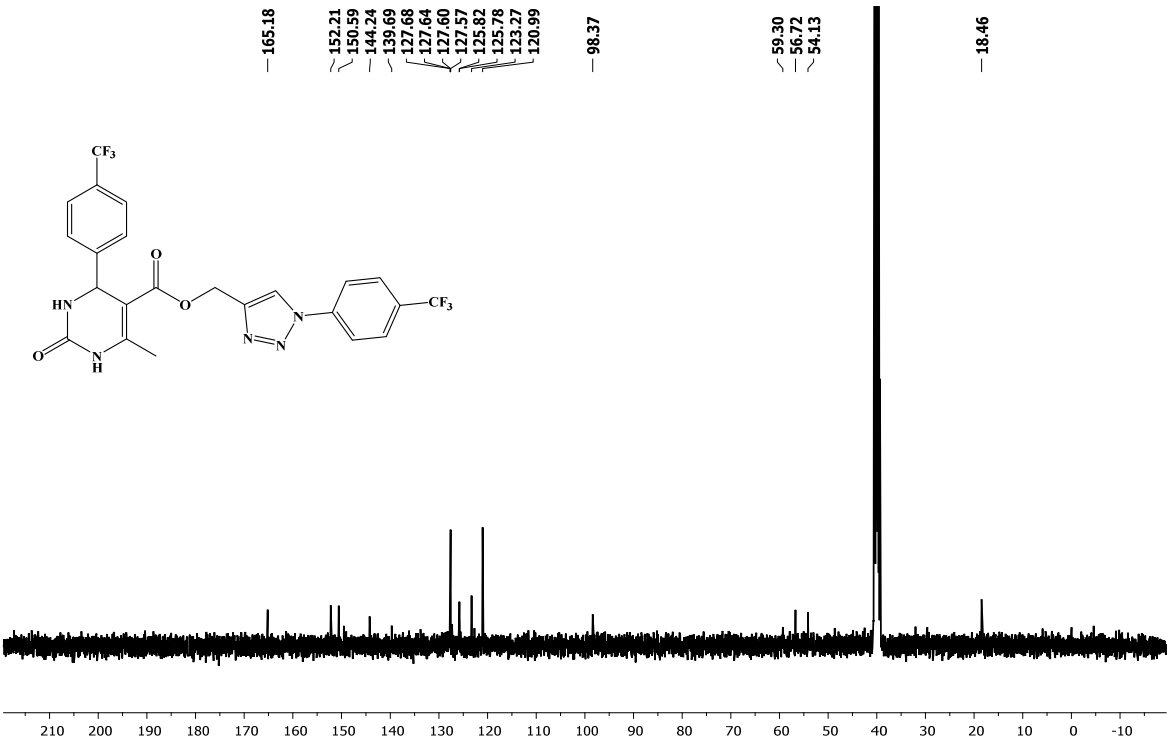
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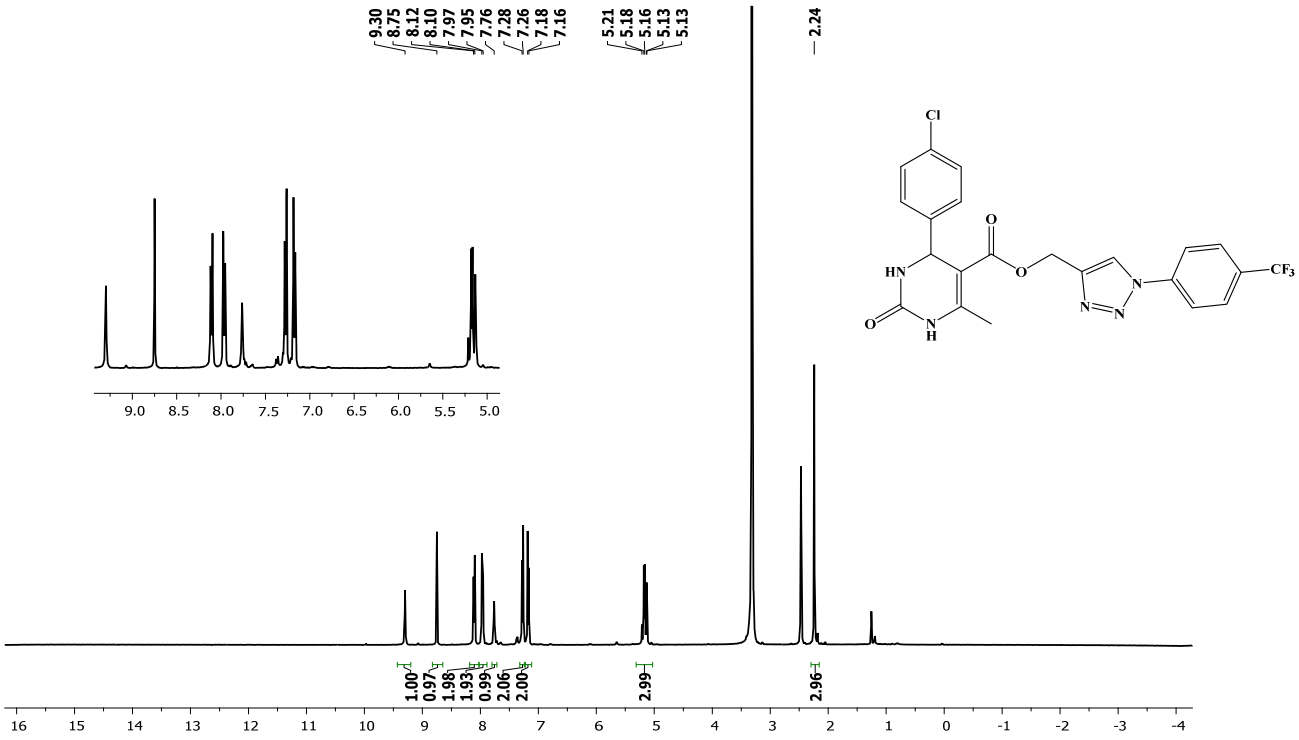
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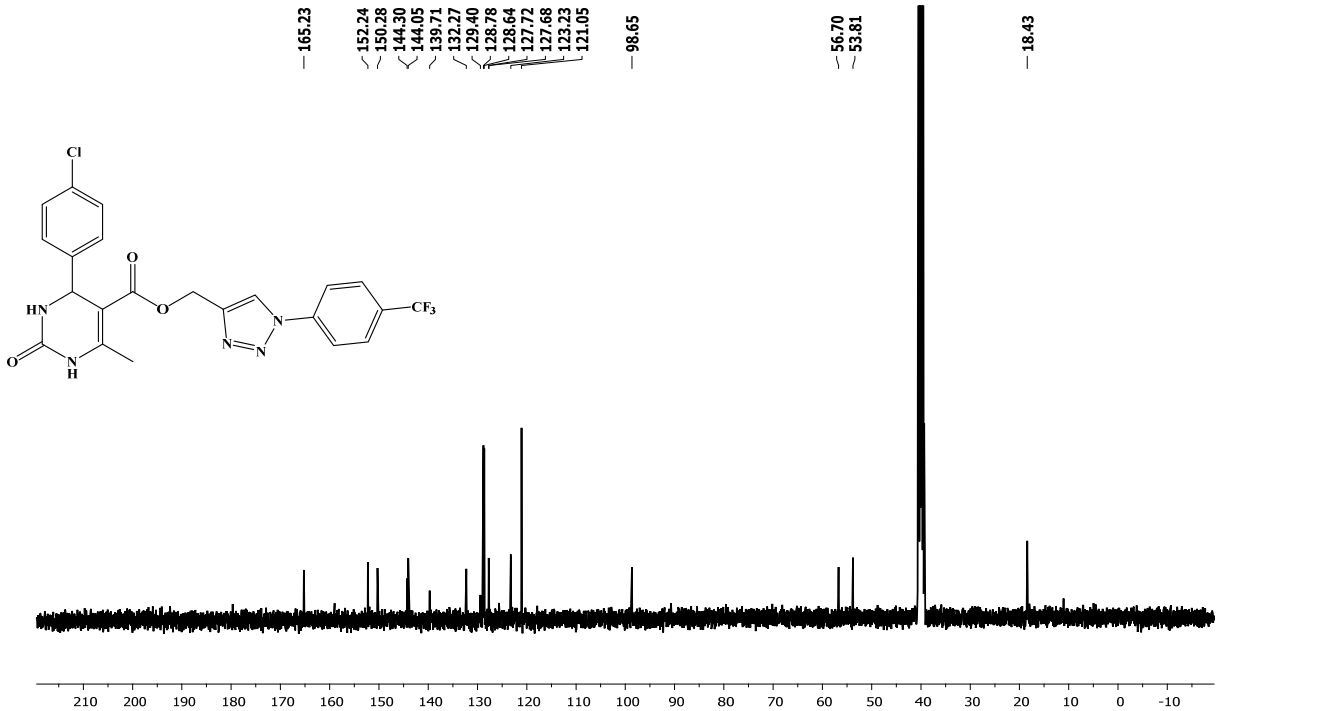
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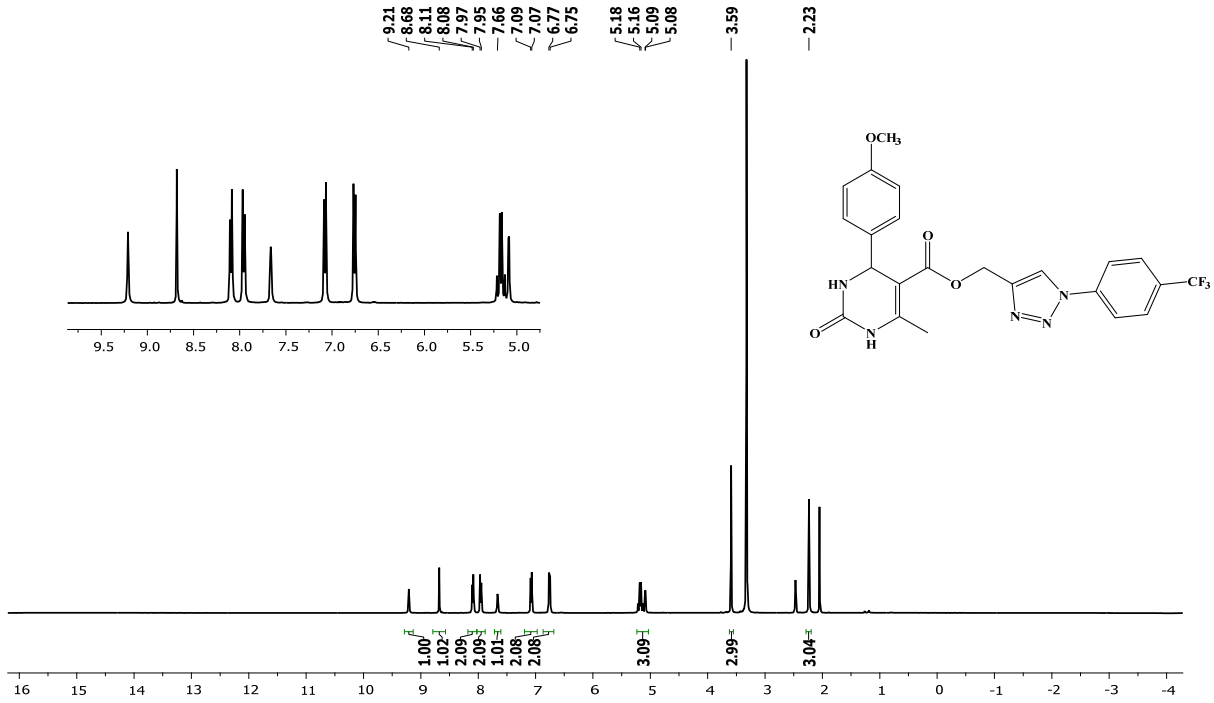
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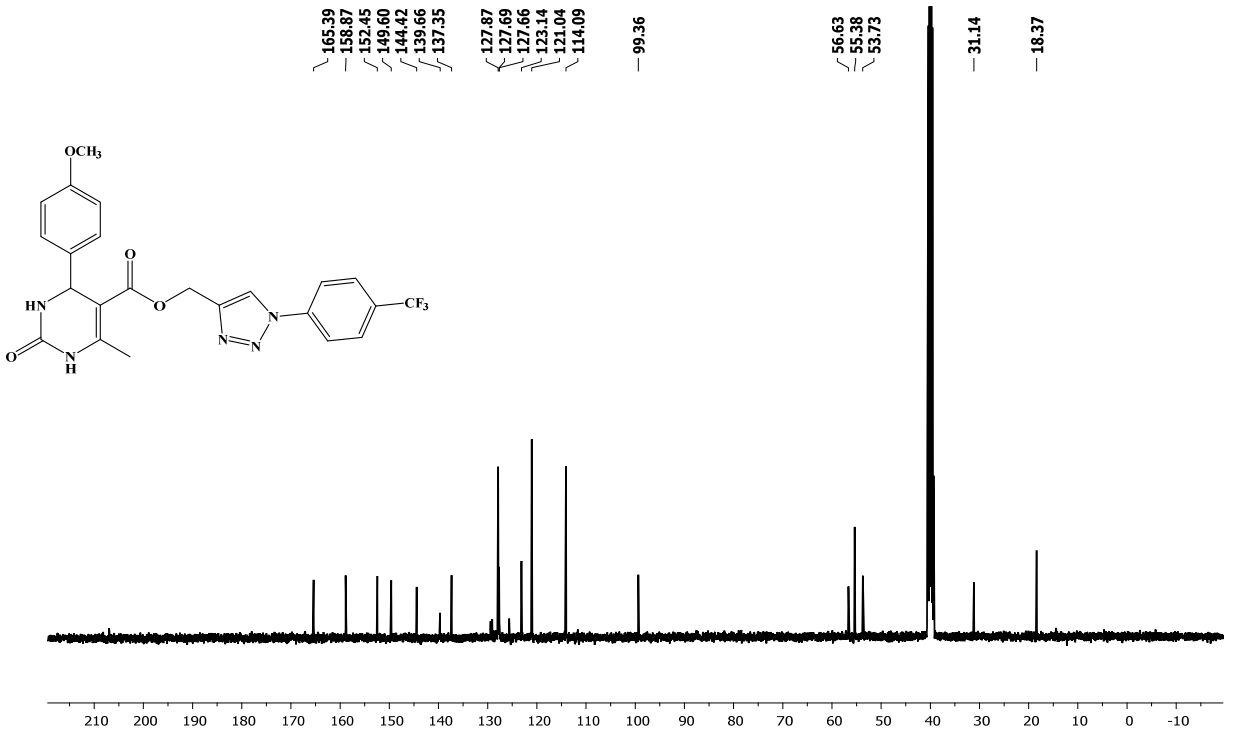
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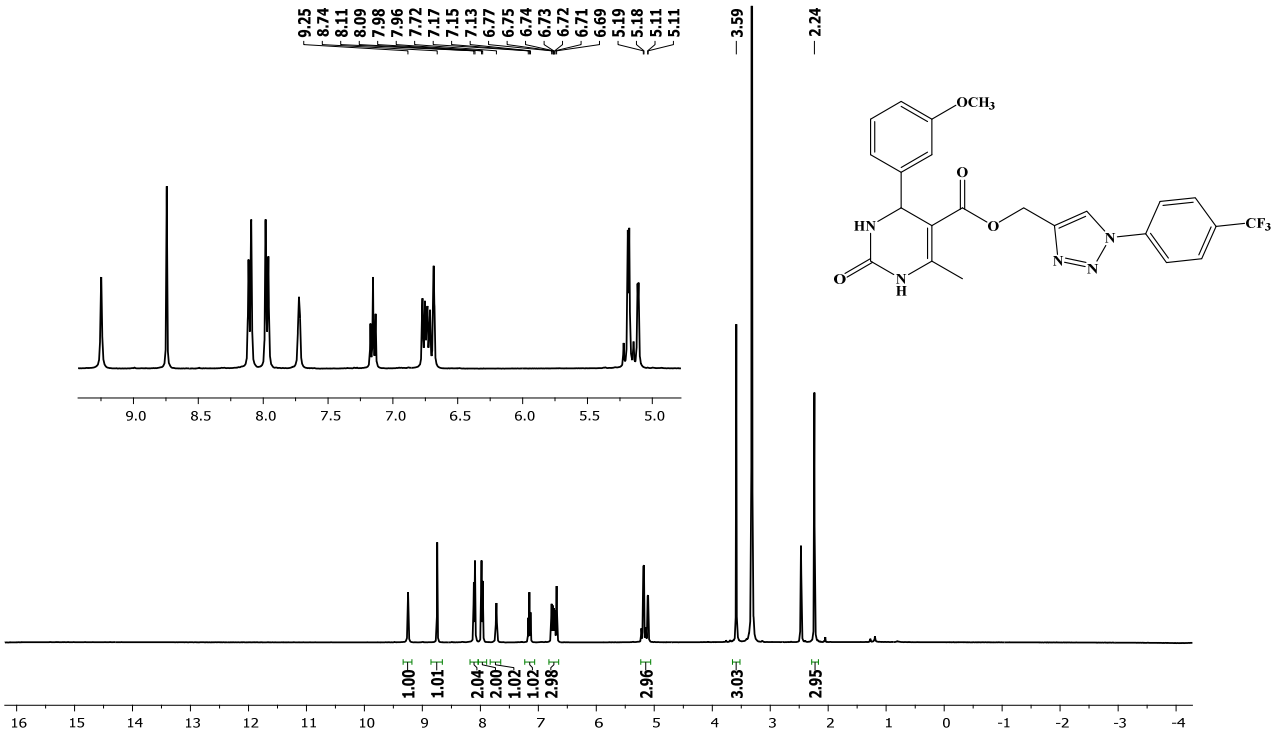
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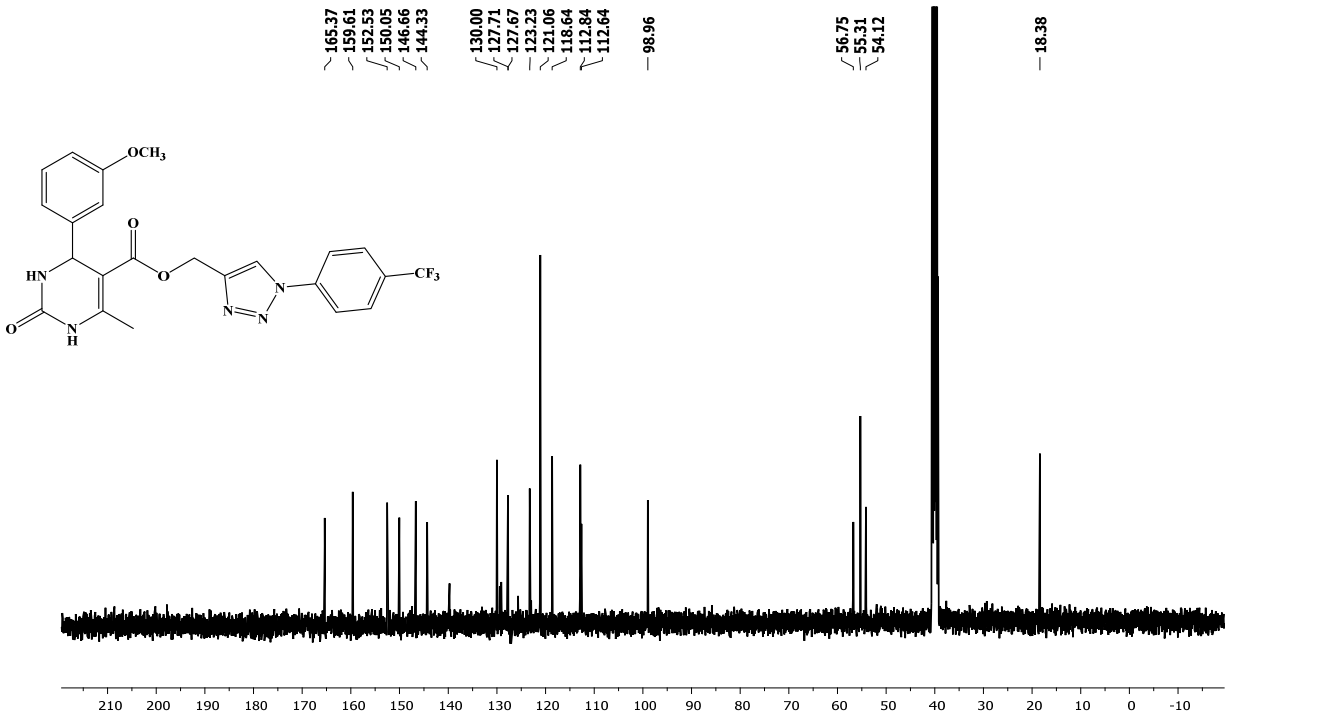
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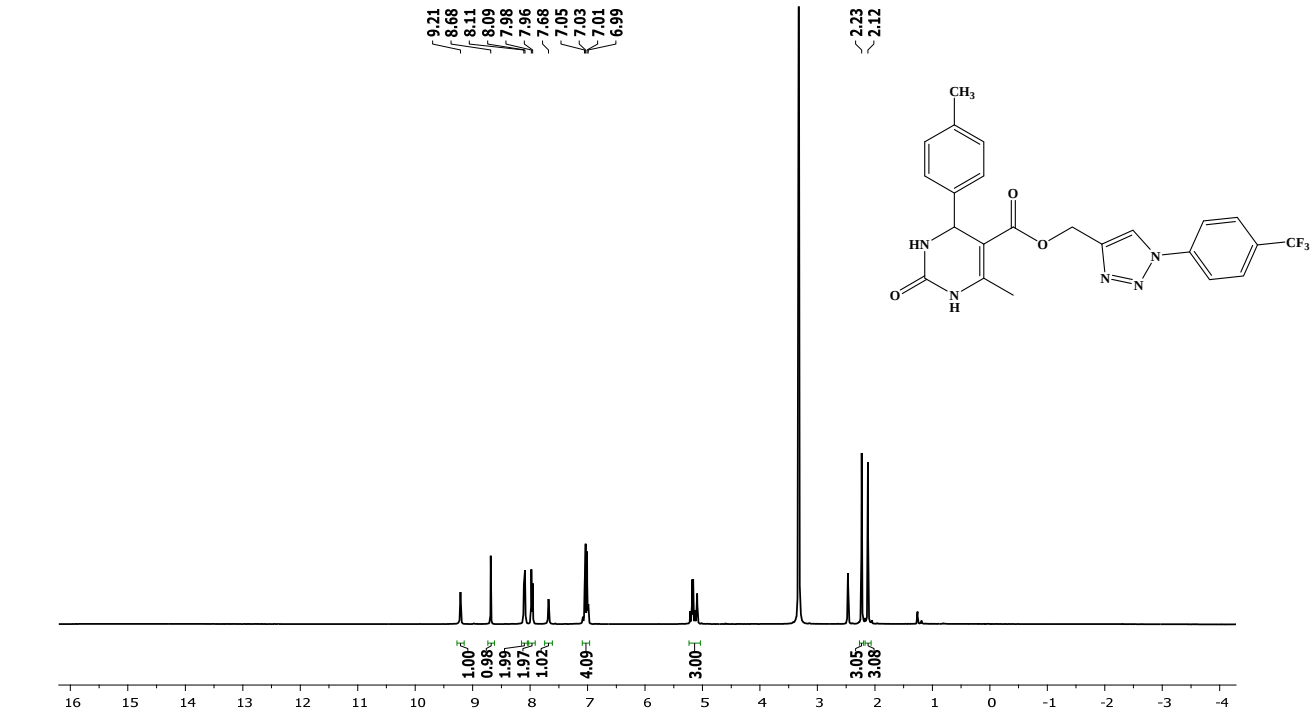
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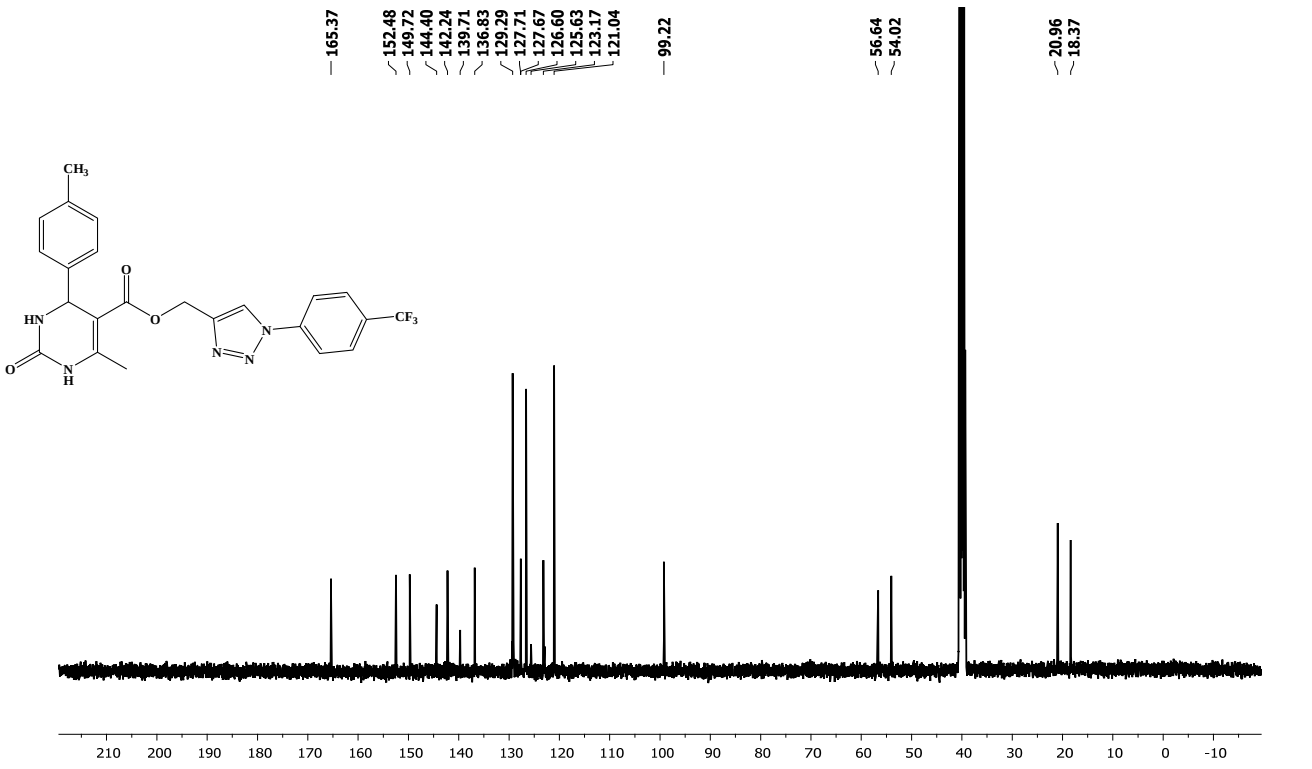
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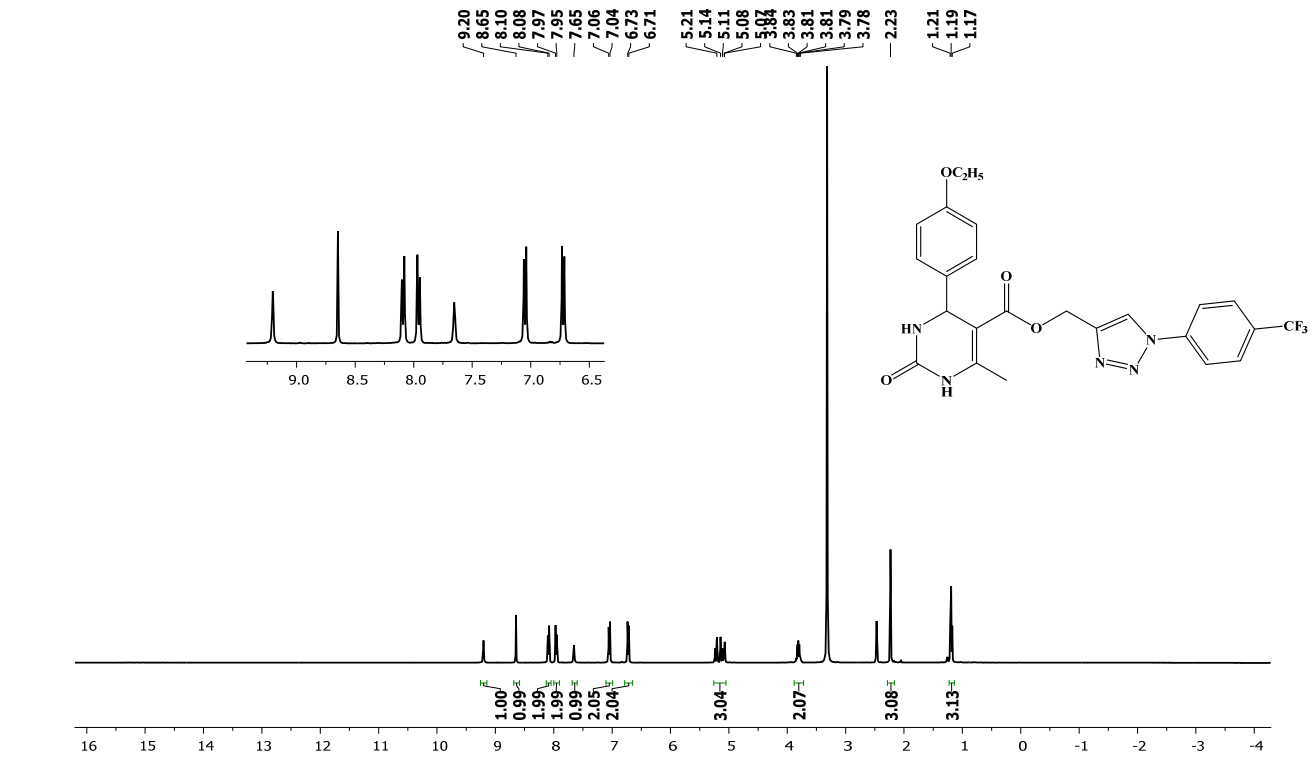
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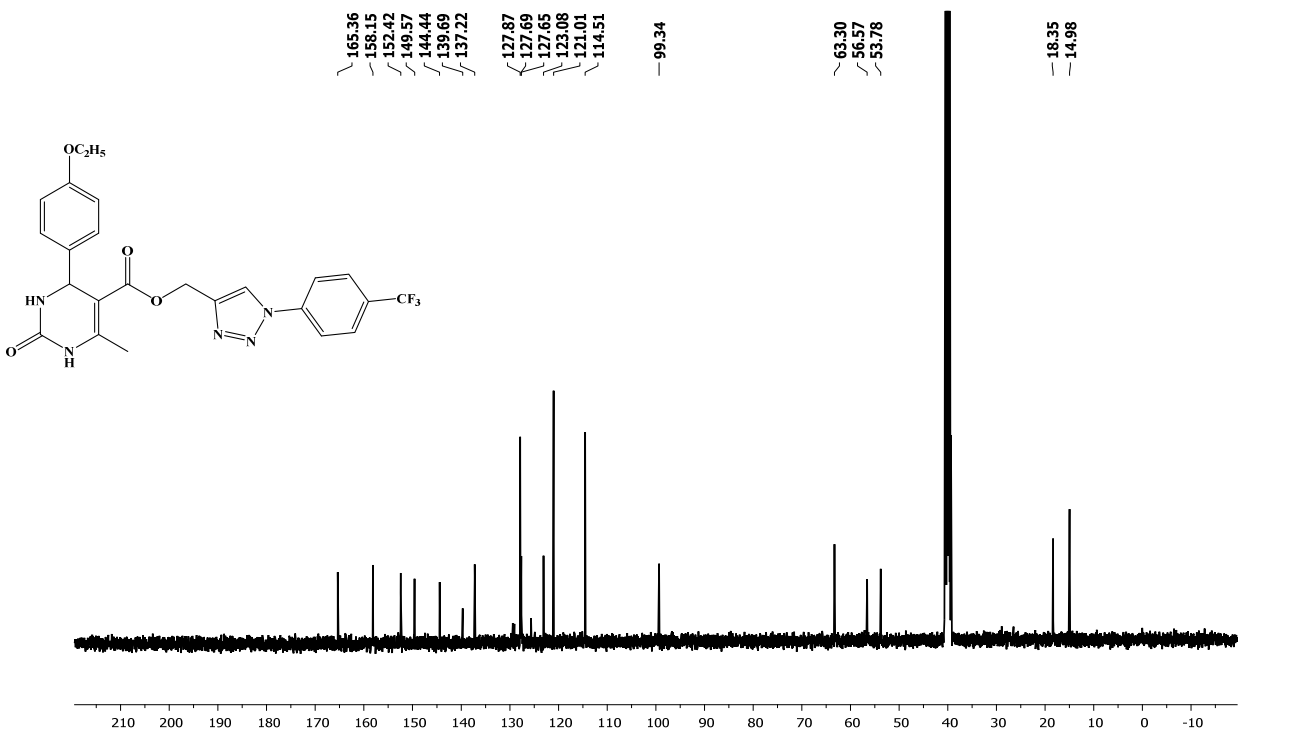
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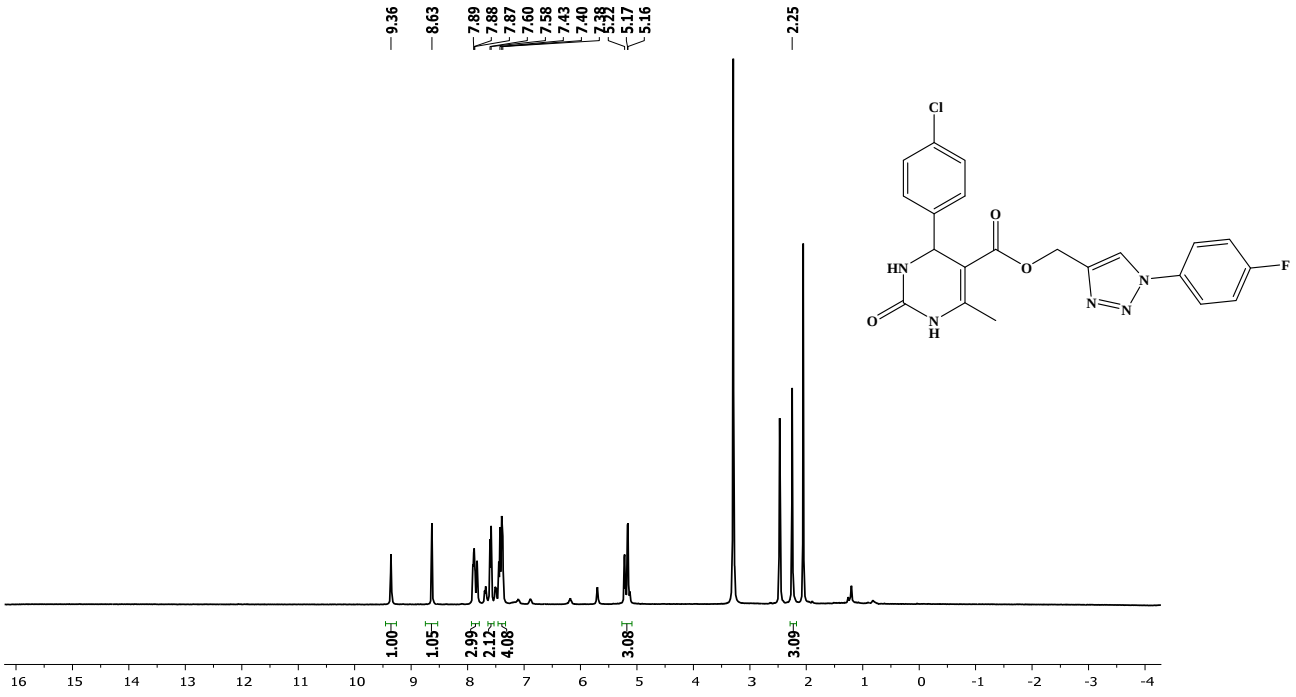
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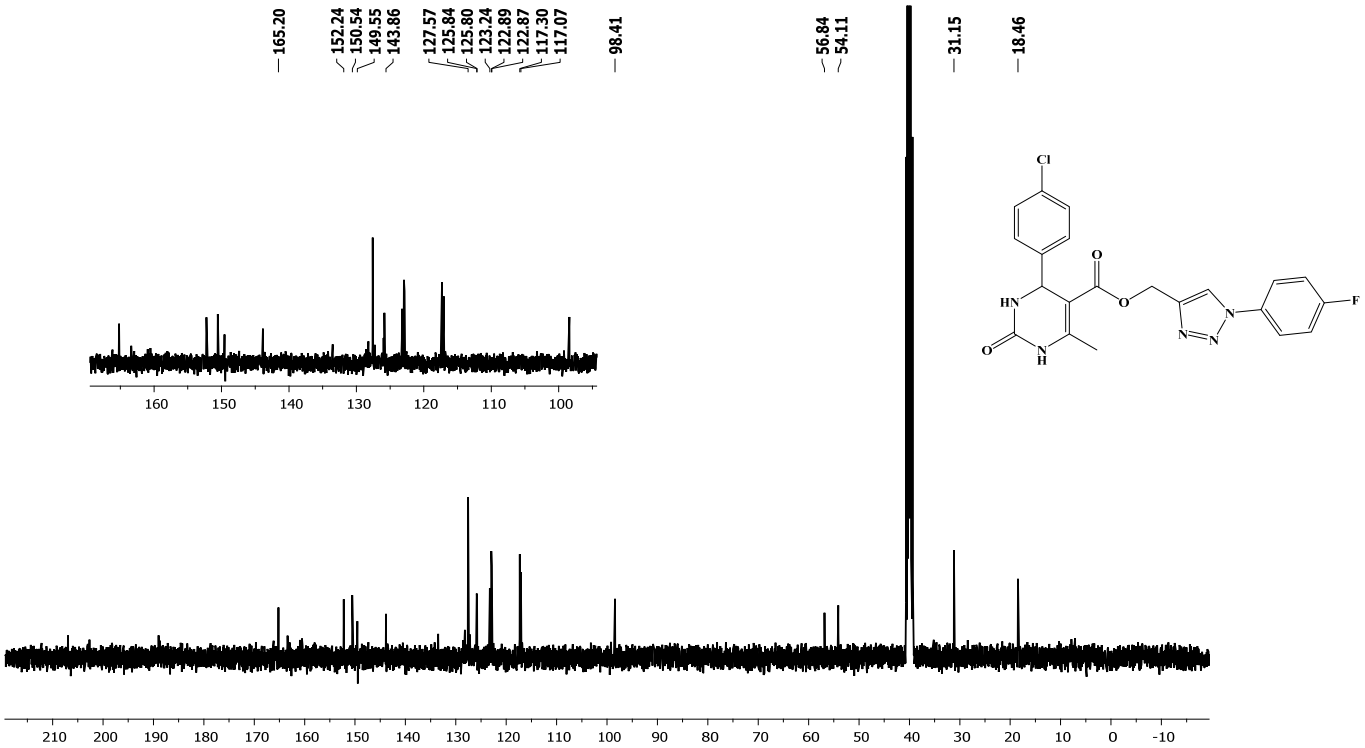
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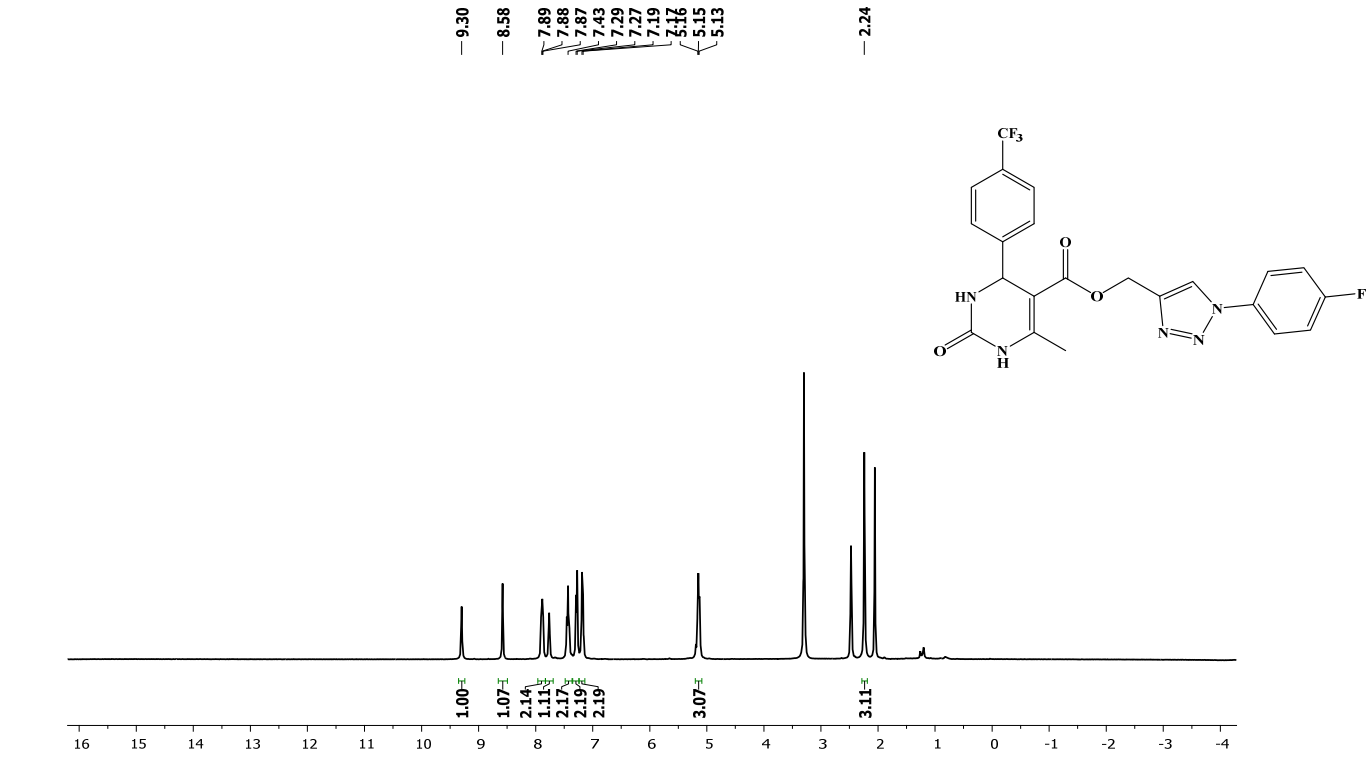
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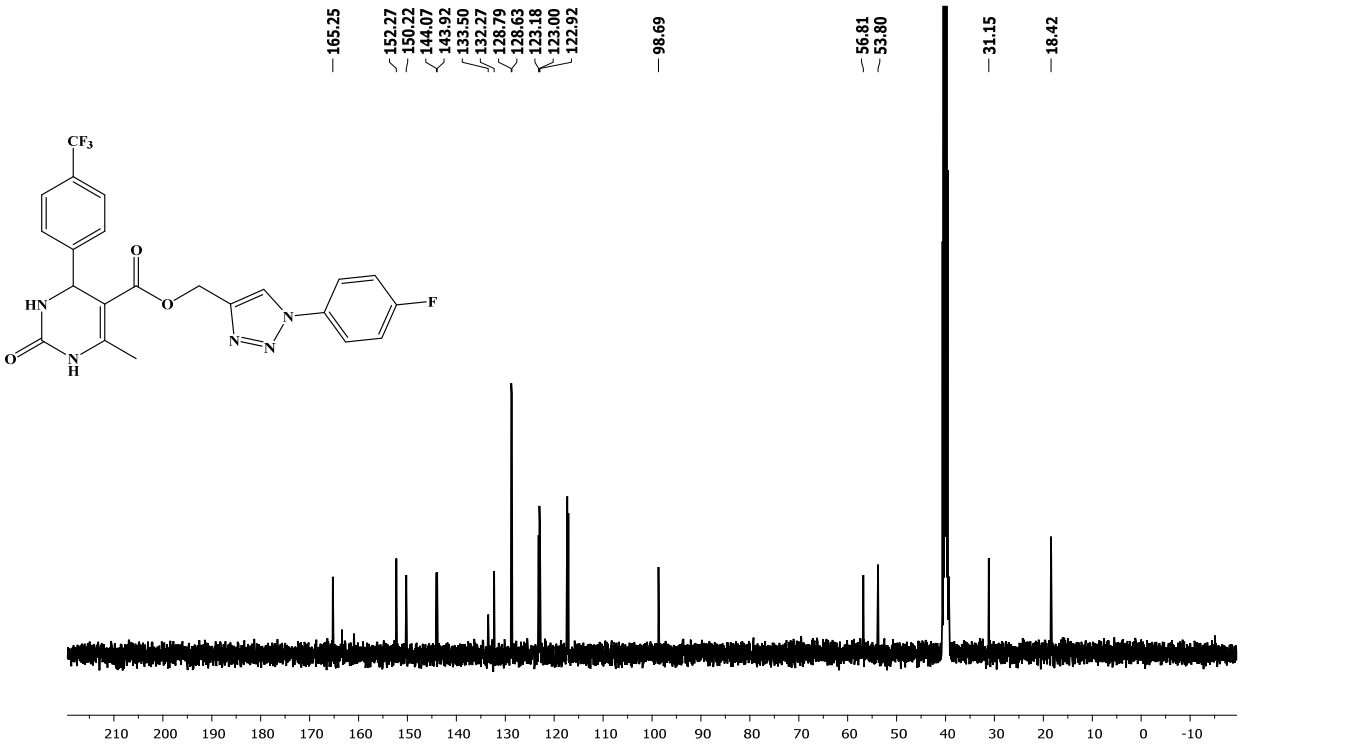
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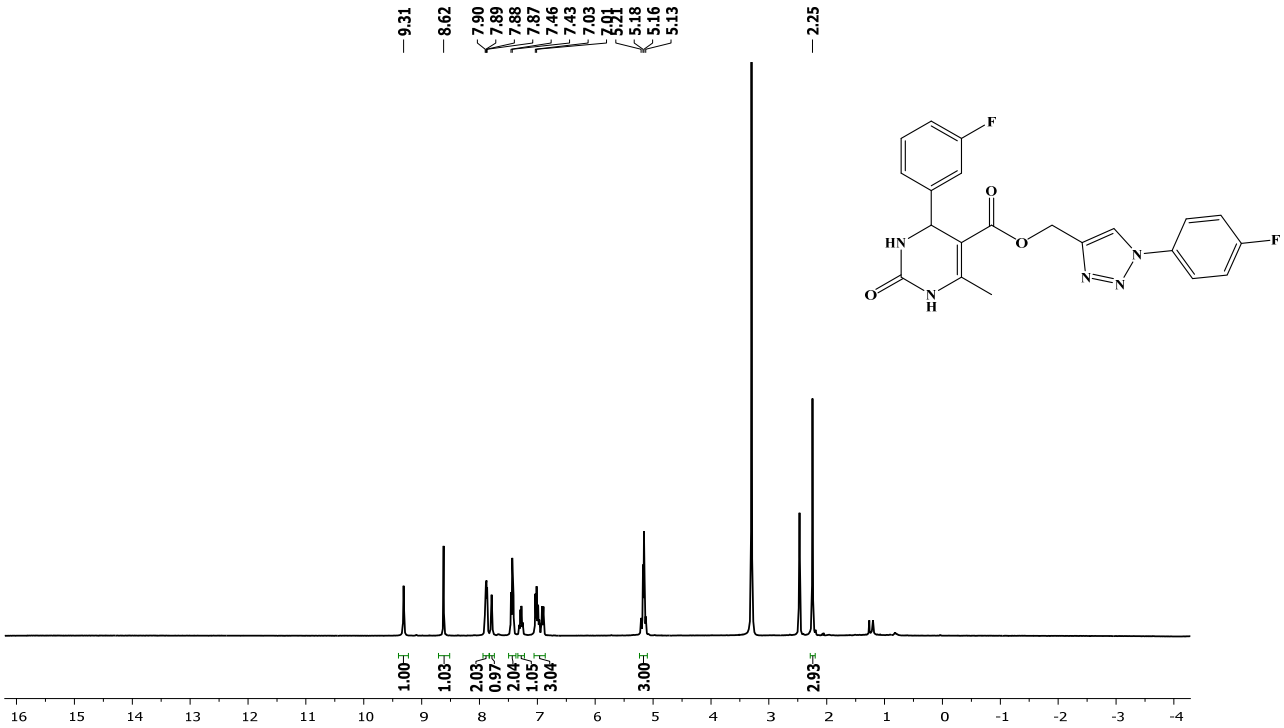
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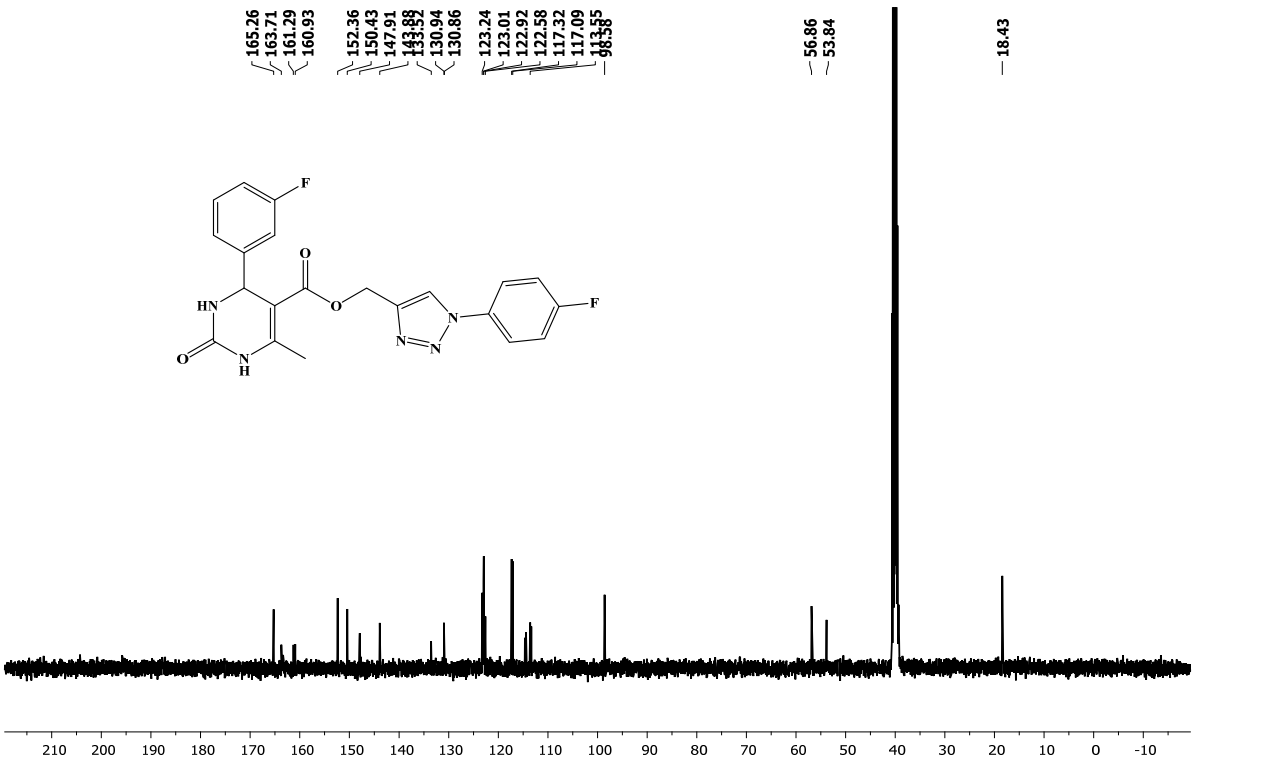
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