



Supporting Information

Synthesis, Biological, and Computational Evaluation of Antagonistic, Chiral Hydrobenzoin Esters of Arecaidine Targeting mAChR M1

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Content:

Exemplary competitive binding curves on human mAChR M1 (Figure S1)

UV-HPLC chromatograms (Figure S2, Figure S3)

NMR spectra (Figure S4, Figure S5, Figure S6)

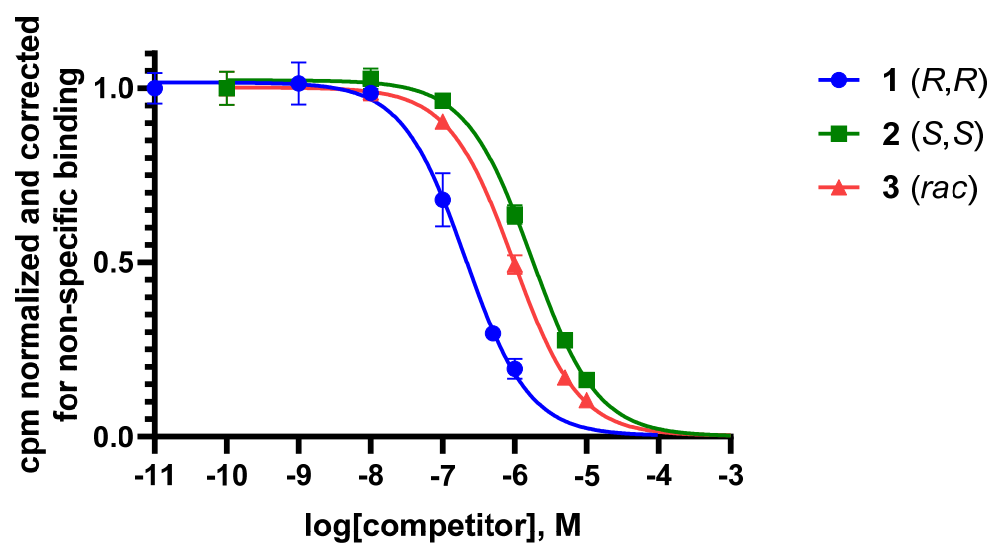


Figure 1. Exemplary competitive binding curves of 1, 2, and 3 on human mAChR M1 expressed on cell membranes of stably transfected CHO cells using [*N*-methyl-³H]scopolamine methyl chloride. Values at 10⁻¹¹ M and 10⁻¹⁰ M represent full binding in absence of competitor.

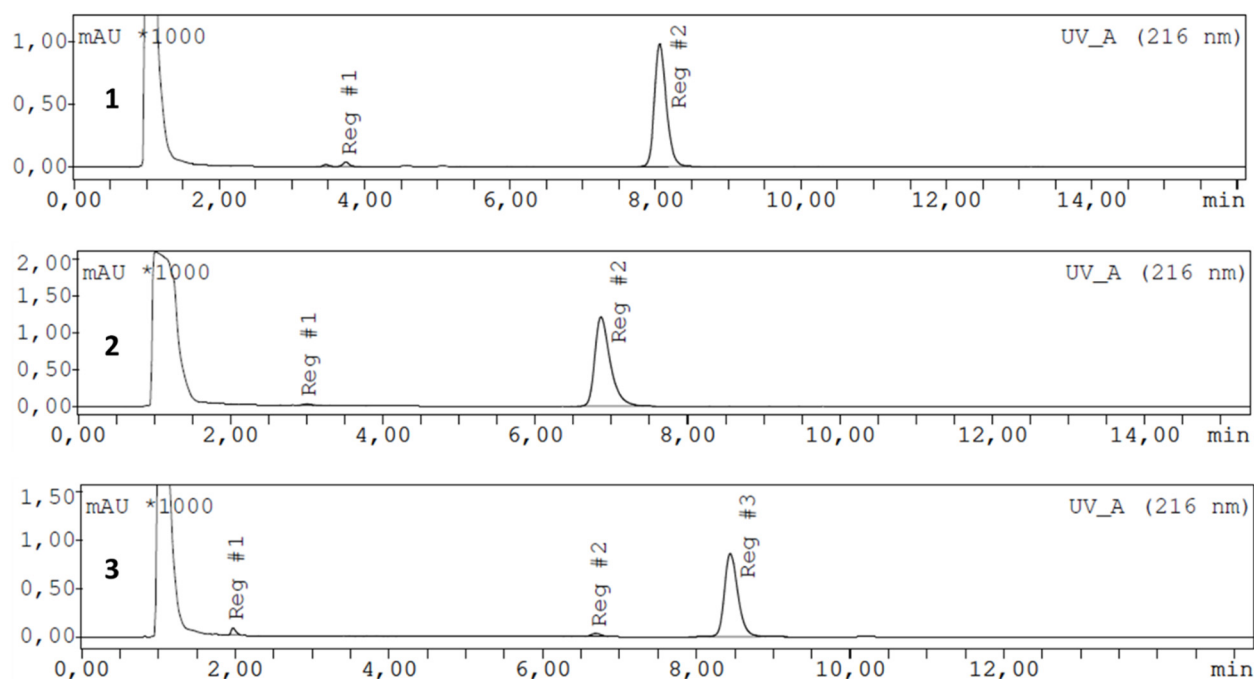


Figure 2. Isocratic HPLC chromatograms of compounds 1–3. 35–40% ACN in 25 mM $\text{NH}_4\text{H}_2\text{PO}_4$ buffer pH 9.3 at a flow of 1 mL/min.

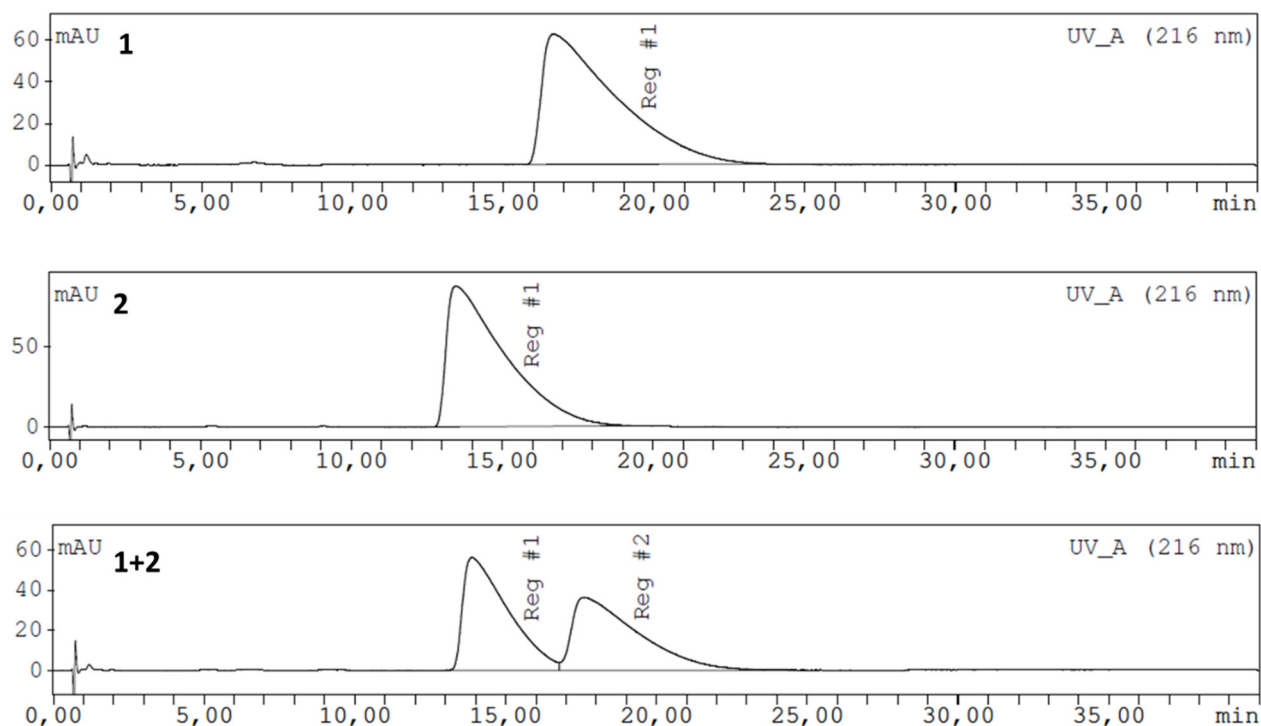
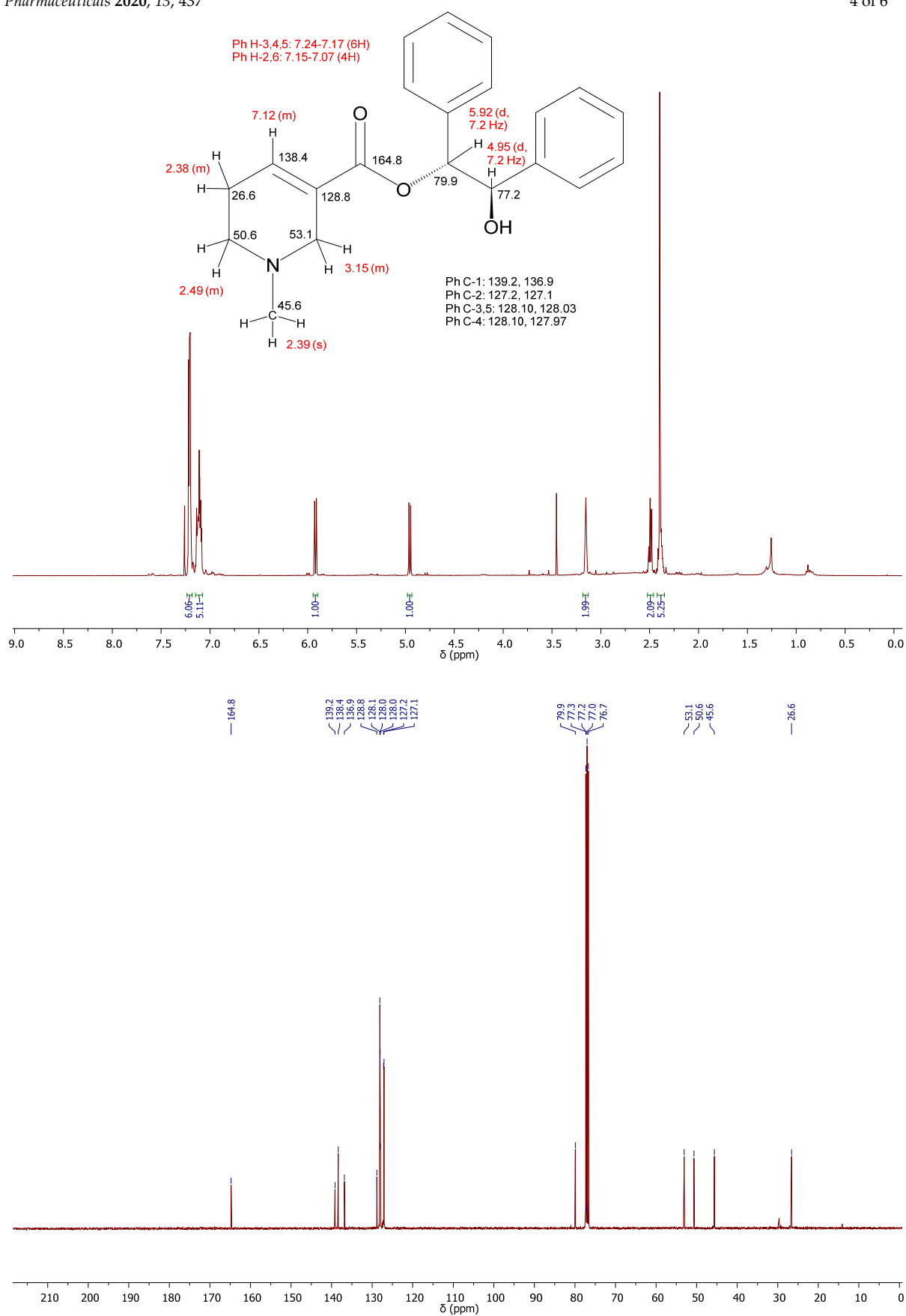
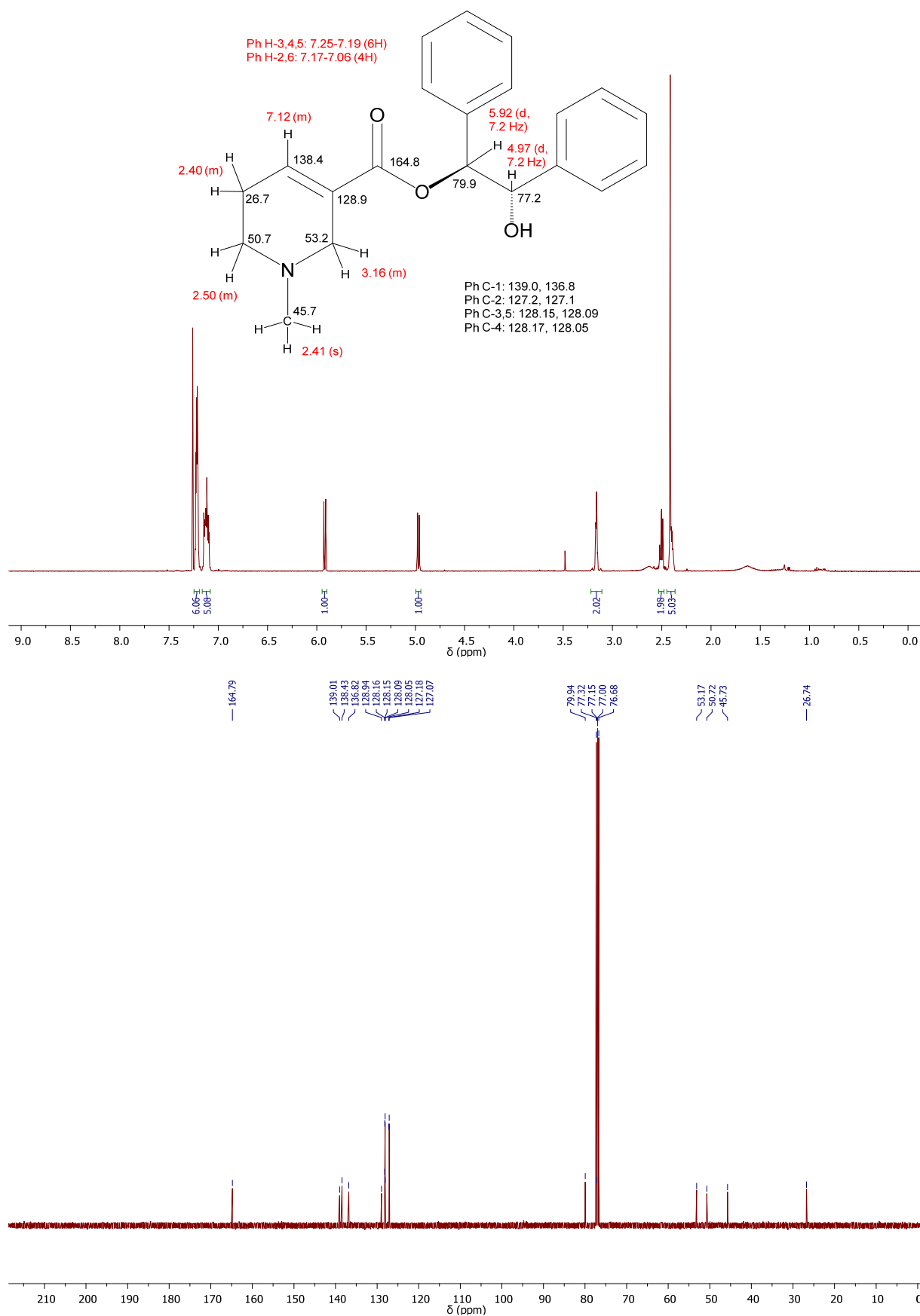
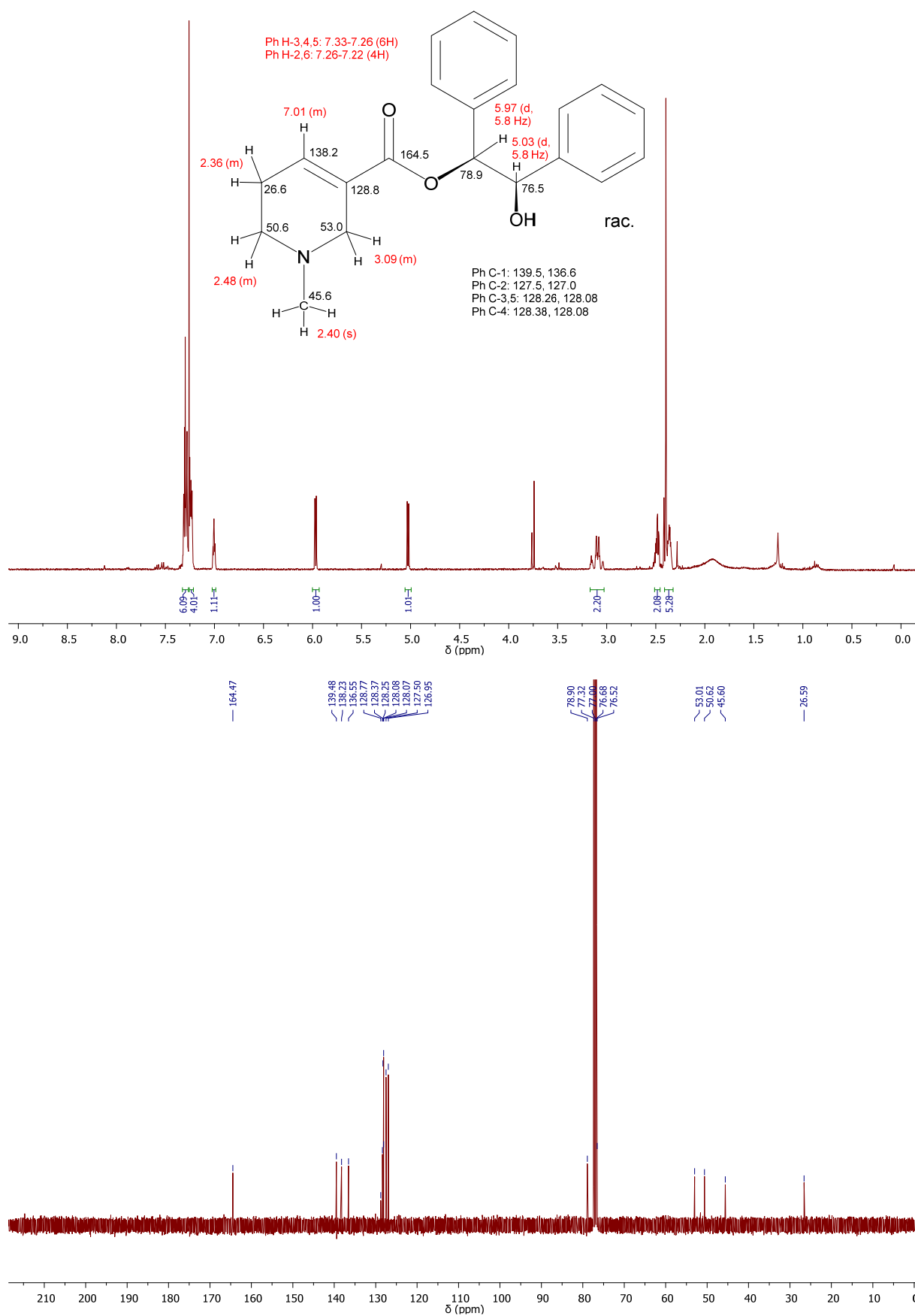


Figure 3. Chiral chromatography using a an AGP 0.3 cmØ × 5 cm 5 µM column operated with 2% IPA in 10 mM NH_4Ac pH 5.8 at a flow of 0.5 mL/min.

**Figure 4.** ^1H - and ^{13}C -NMR spectrum of **1**.

Figure 5. ^1H - and ^{13}C -NMR spectrum of 2.

Figure 6. ¹H- and ¹³C-NMR spectrum of 3.