

Supporting Information

RCM Approaches Toward the Diastereoselective Synthesis of Vicinal *trans*-Diaminocyclitols from *L*-Serine

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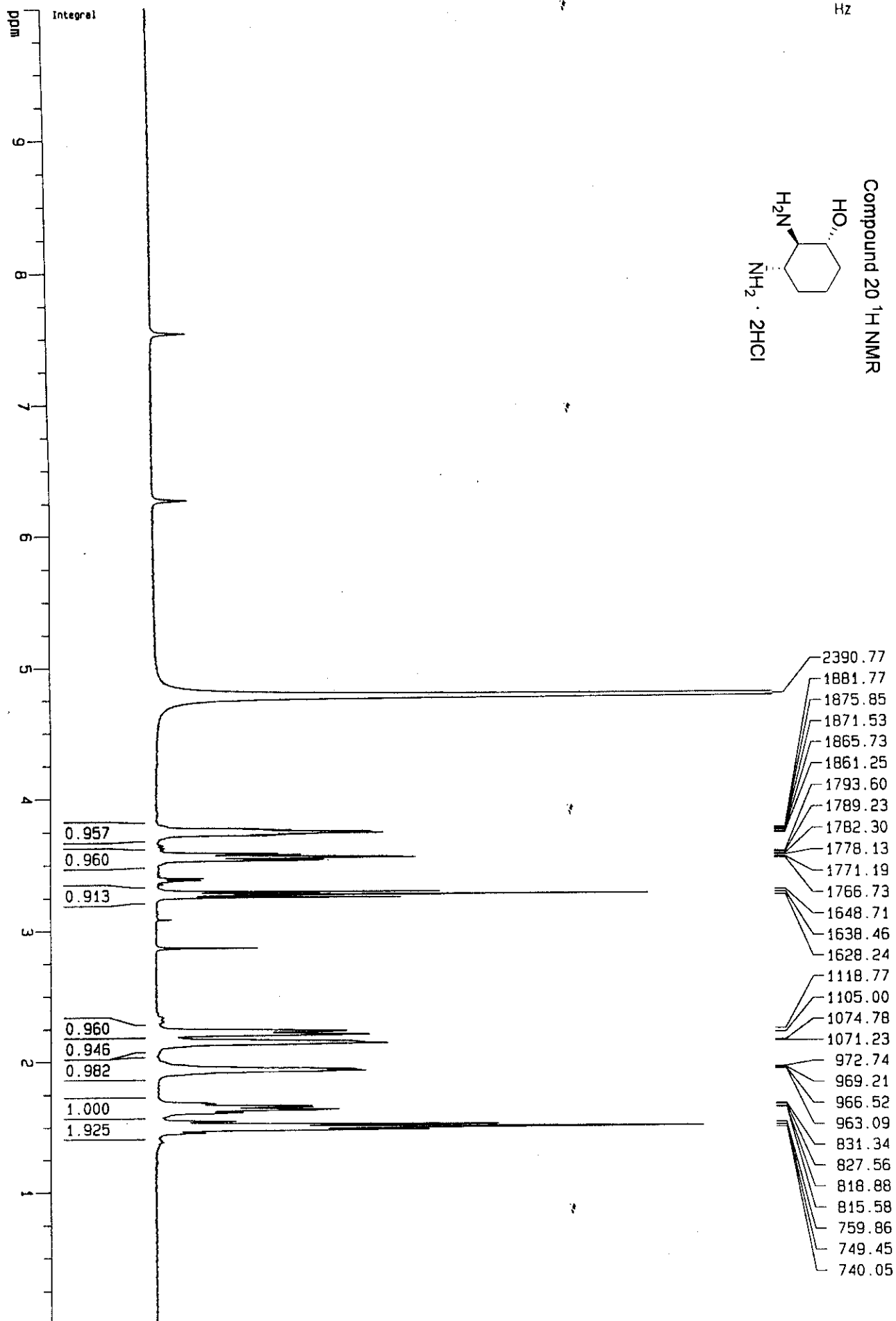
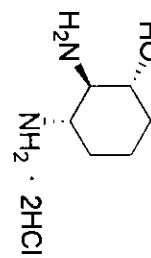
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copies of compounds **1-3**, **20** and **28** (From page S-3 to page S-17).

General Experimental Section

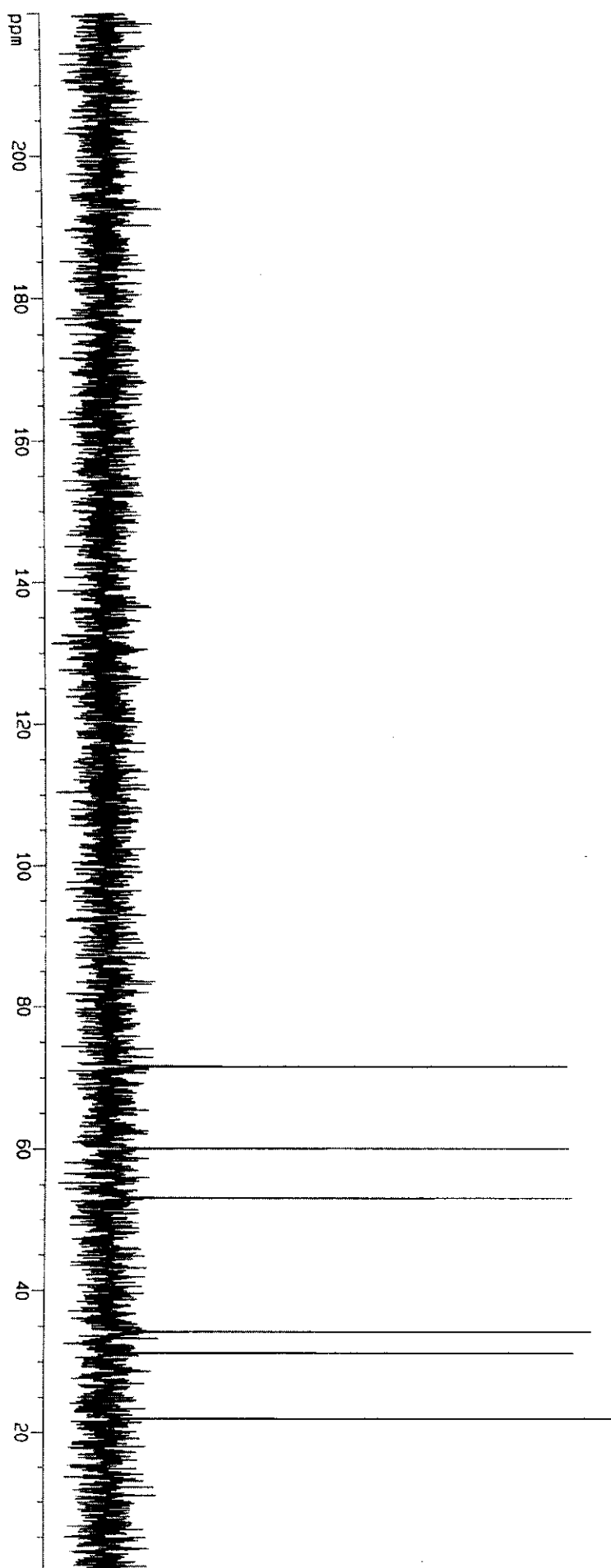
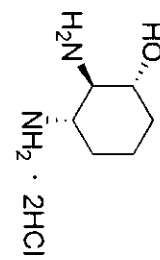
All reactions were carried out under argon or nitrogen in oven-dried glassware using standard gastight syringes, cannulas, and septa. Solvents and reagents were purified and dried by standard methods prior to use. Optical rotations were measured at room temperature. IR spectra were recorded on an FT-IR instrument. ^1H NMR spectra were recorded at 300 MHz and are reported in parts per million (δ) downfield relative to TMS as internal standard, and ^{13}C NMR spectra were recorded at 75 MHz and assigned in parts per million (δ). Flash column chromatographies were performed on silica gel (10-40 μm) using mixtures of petroleum ether and ethyl acetate as the eluents.

Hz

Compound 20 ^1H NMR

ppm

Compound 20 ^{13}C NMR



71.6049

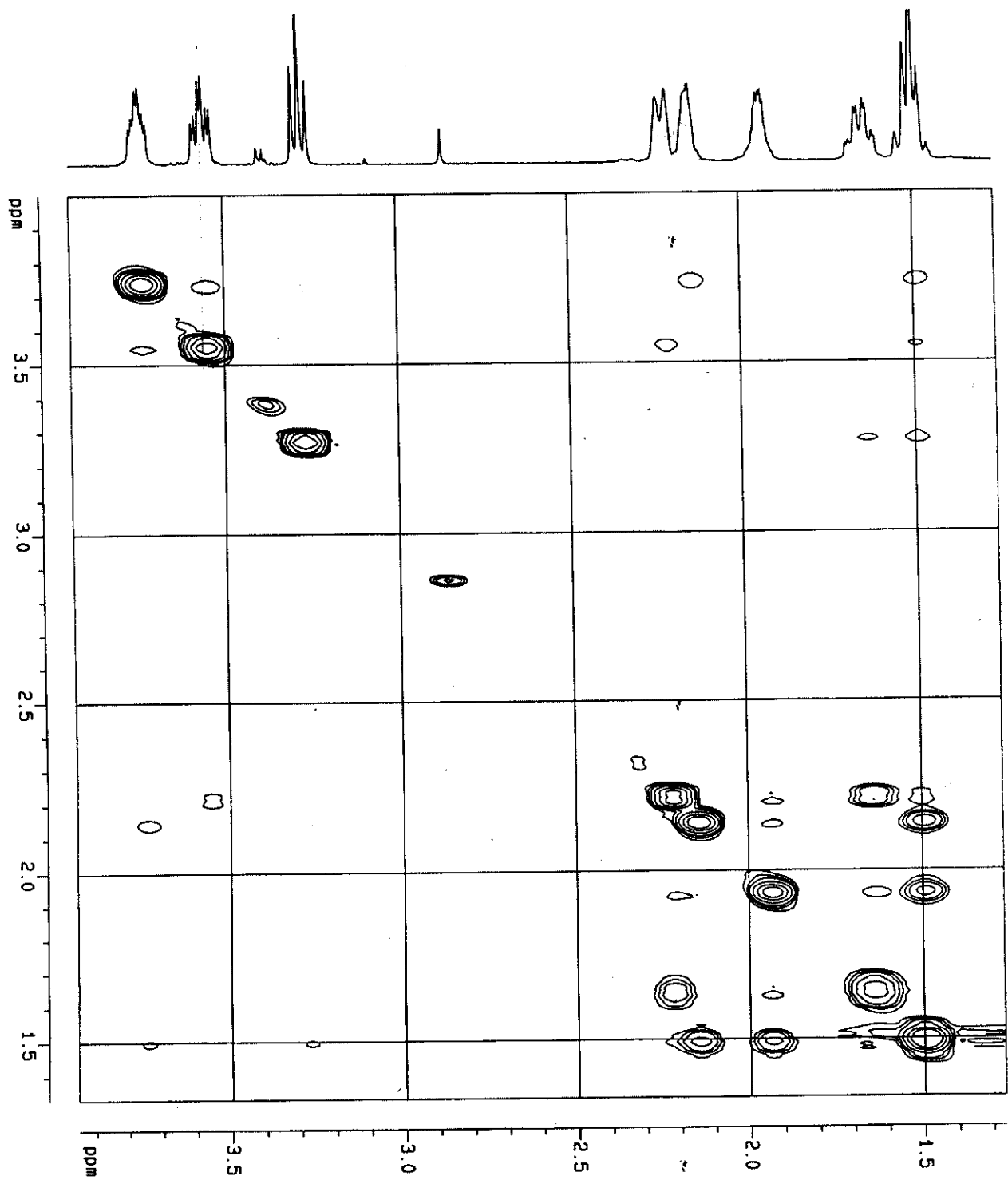
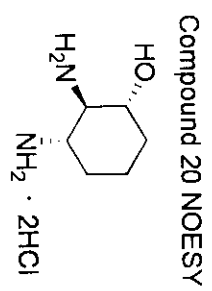
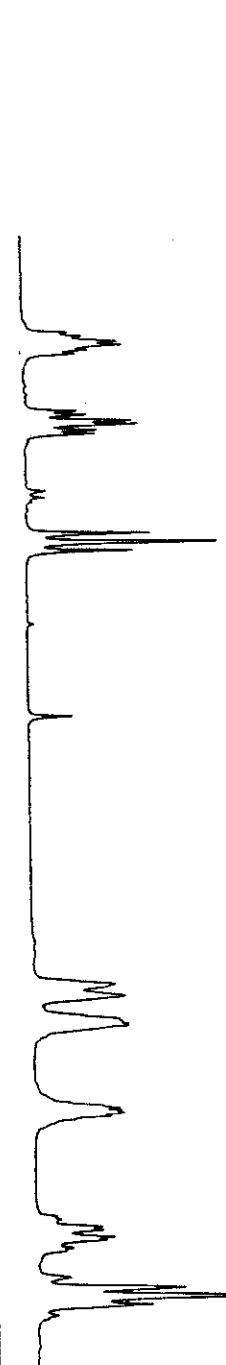
60.1298

53.0785

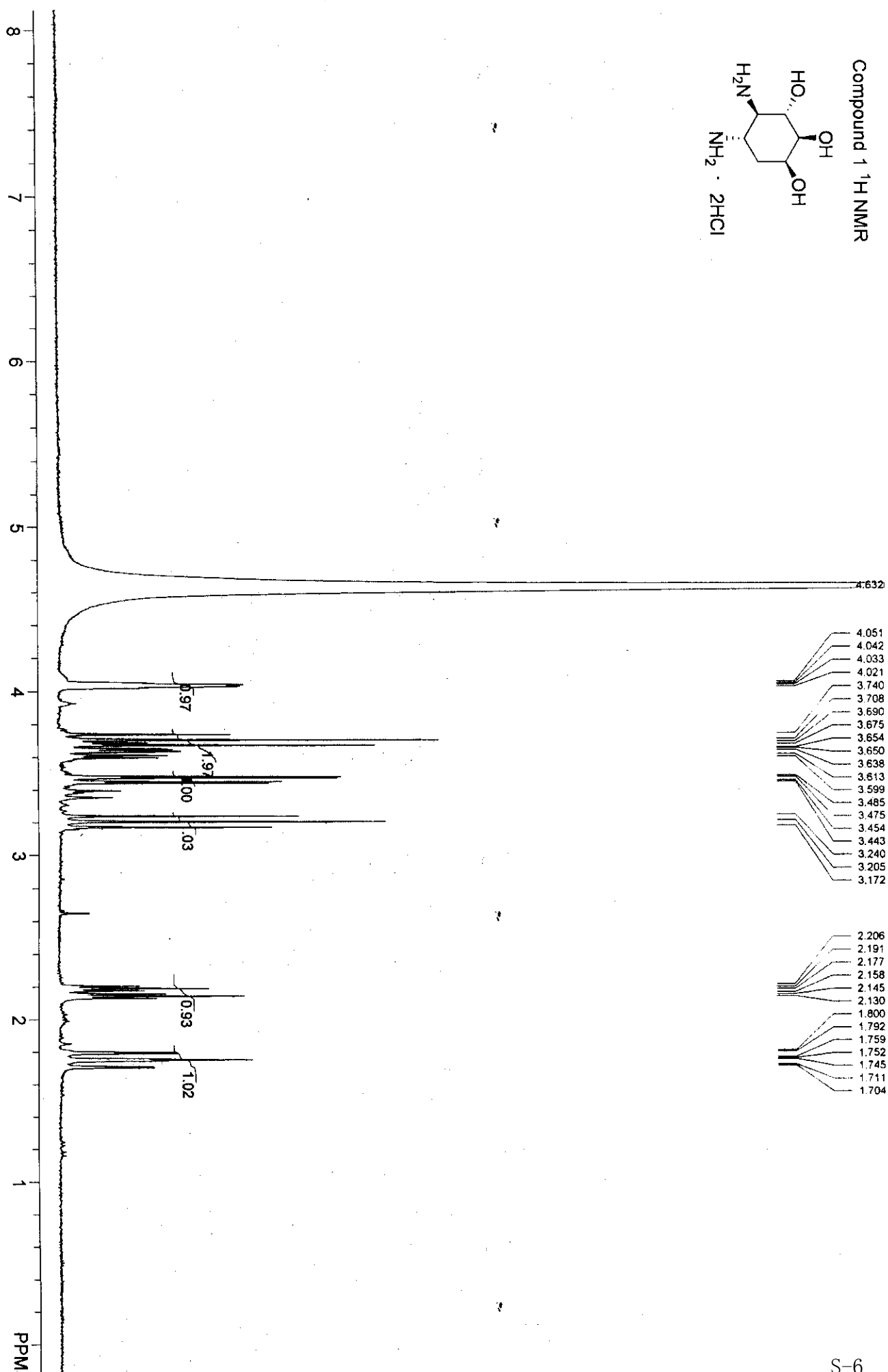
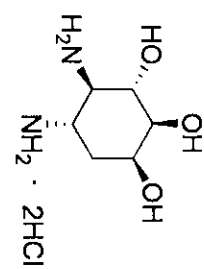
34.1662

31.1915

21.9743

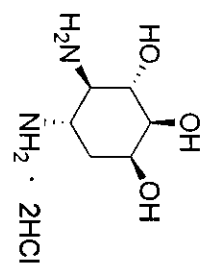


Compound 1 ^1H NMR

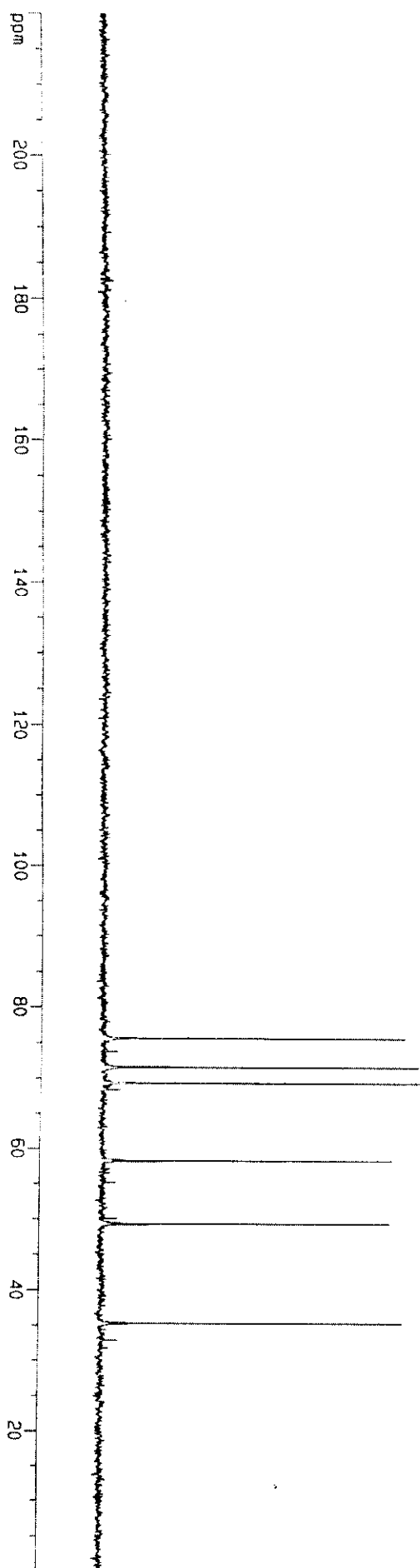


ppm

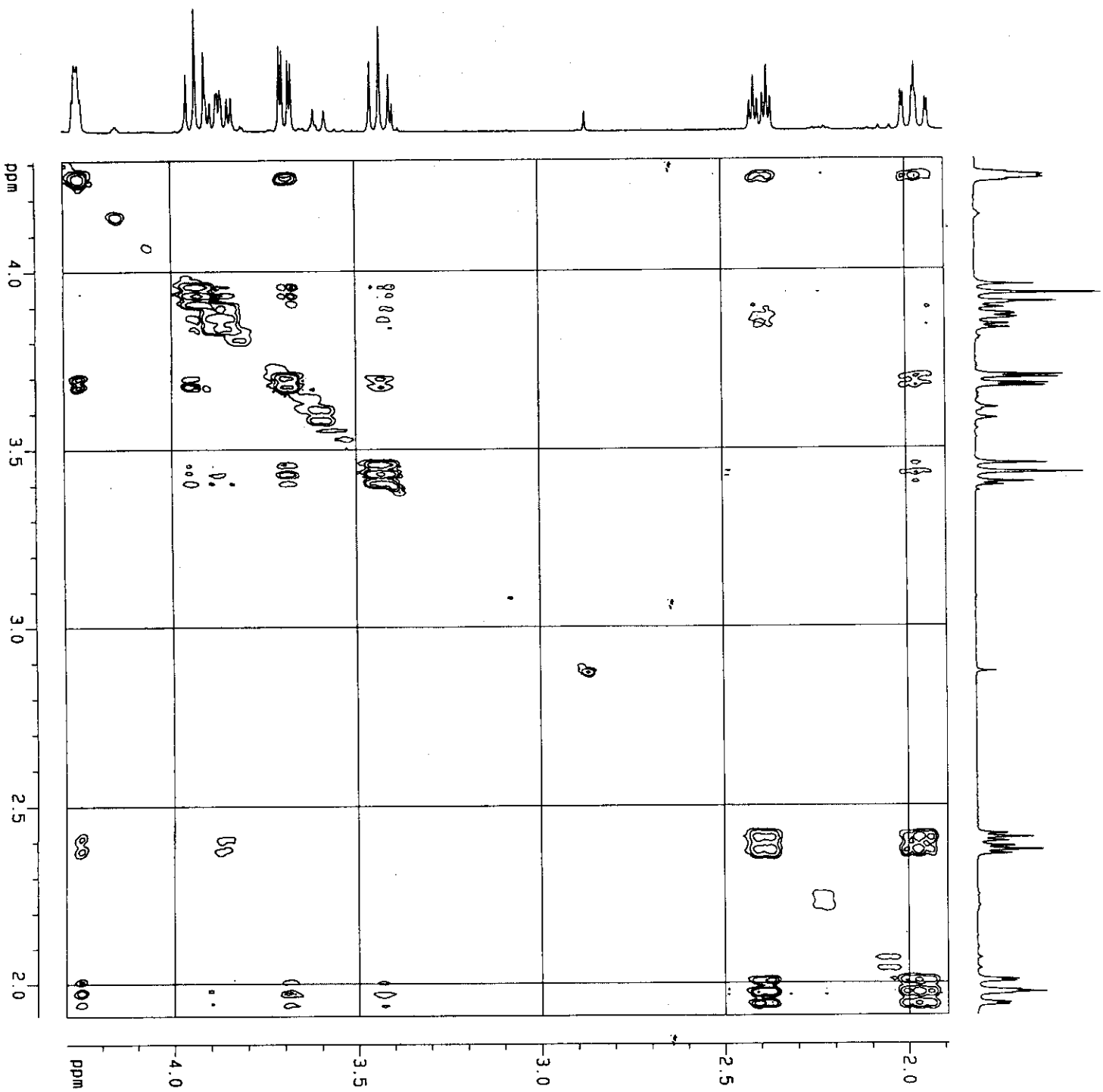
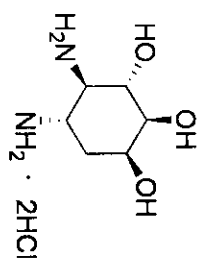
Compound 1 ^{13}C NMR



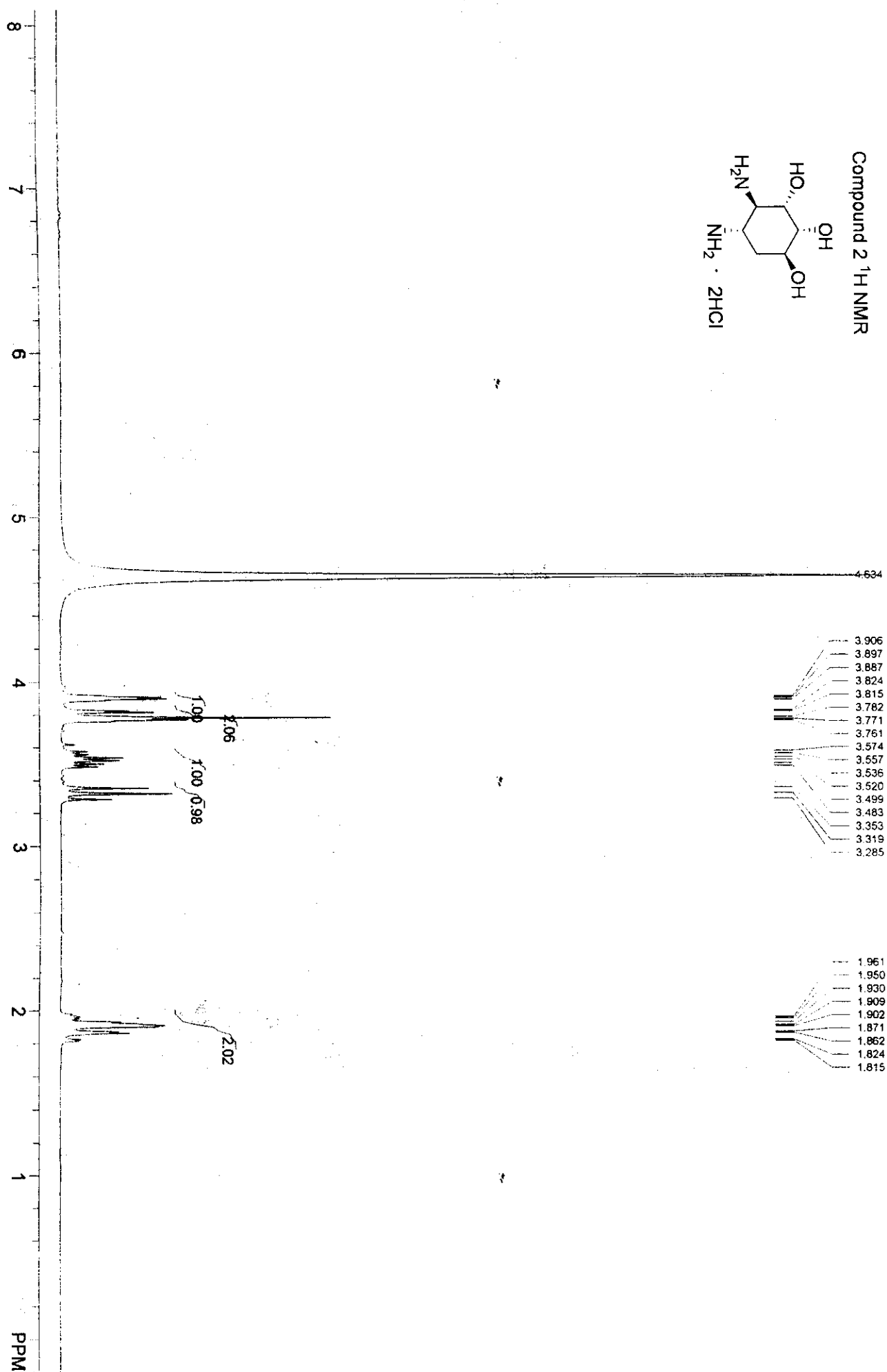
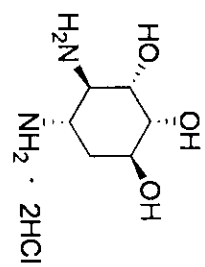
75.6167
71.5617
69.3729
58.2980
49.3190
35.2990



Compound 1 NOESY

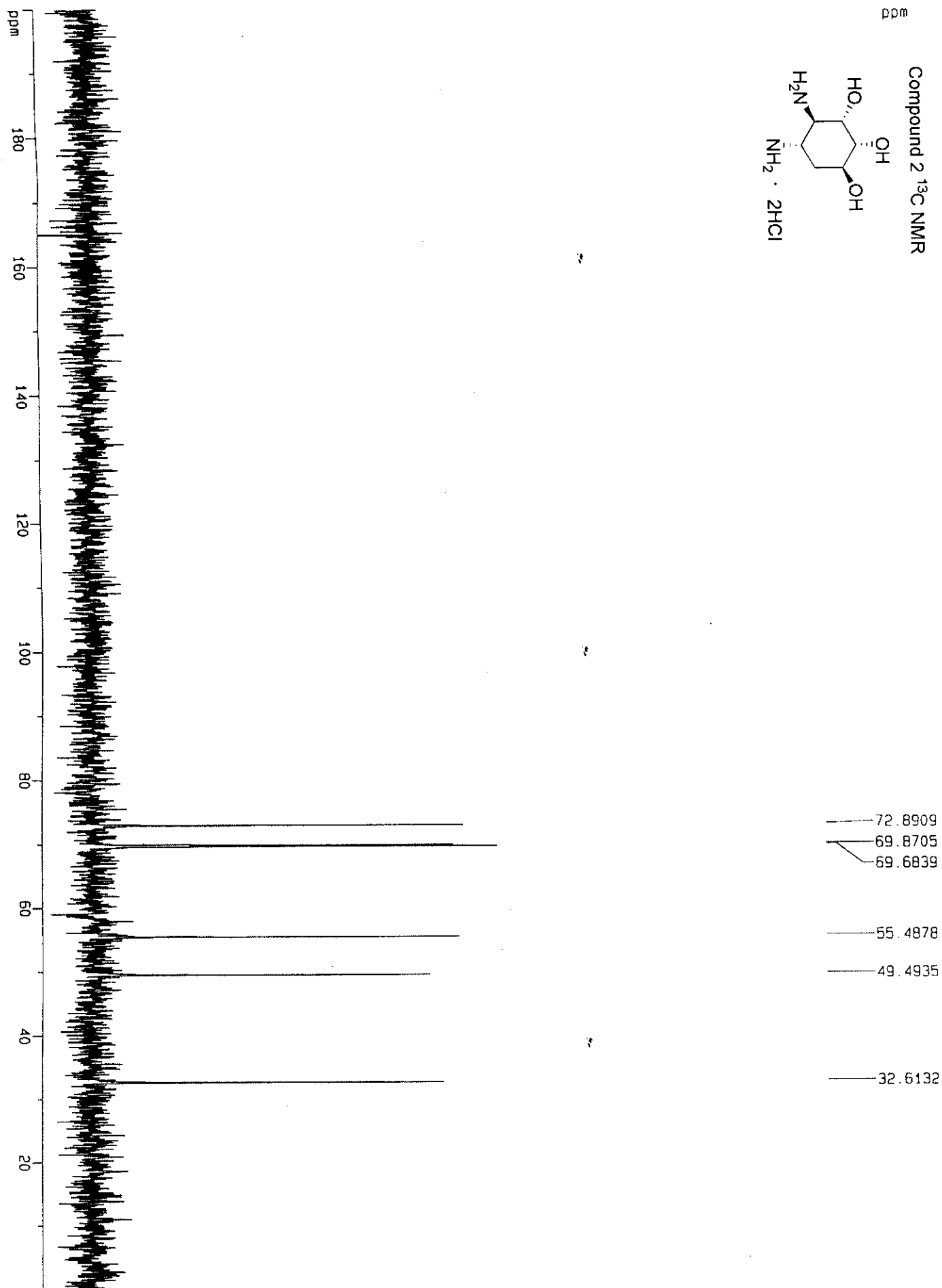
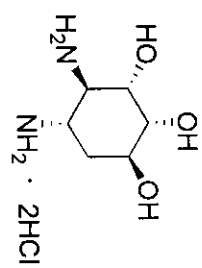


Compound 2 ^1H NMR

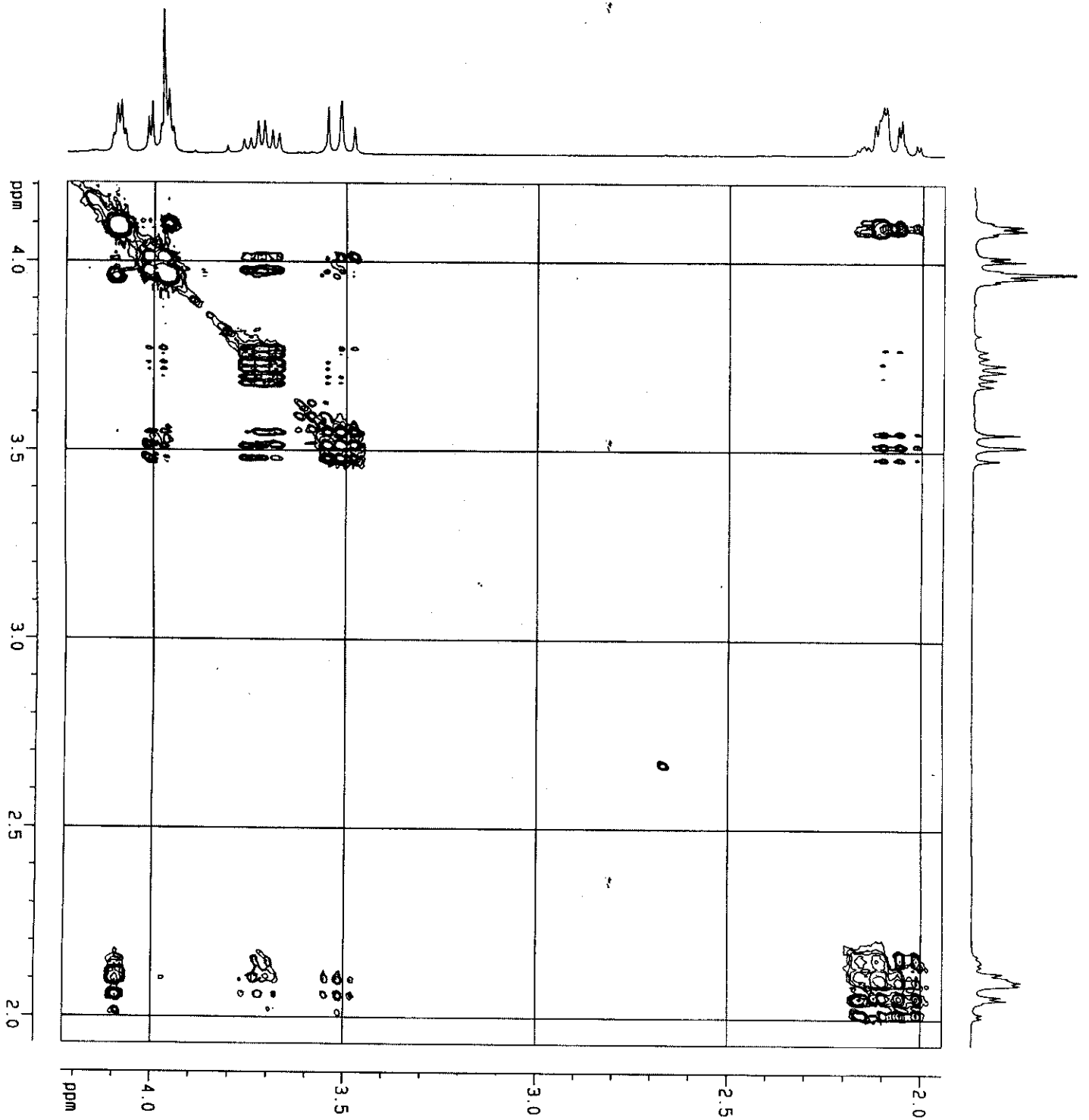
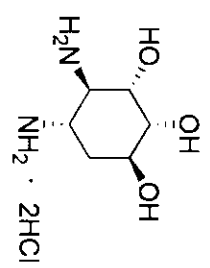


ppm

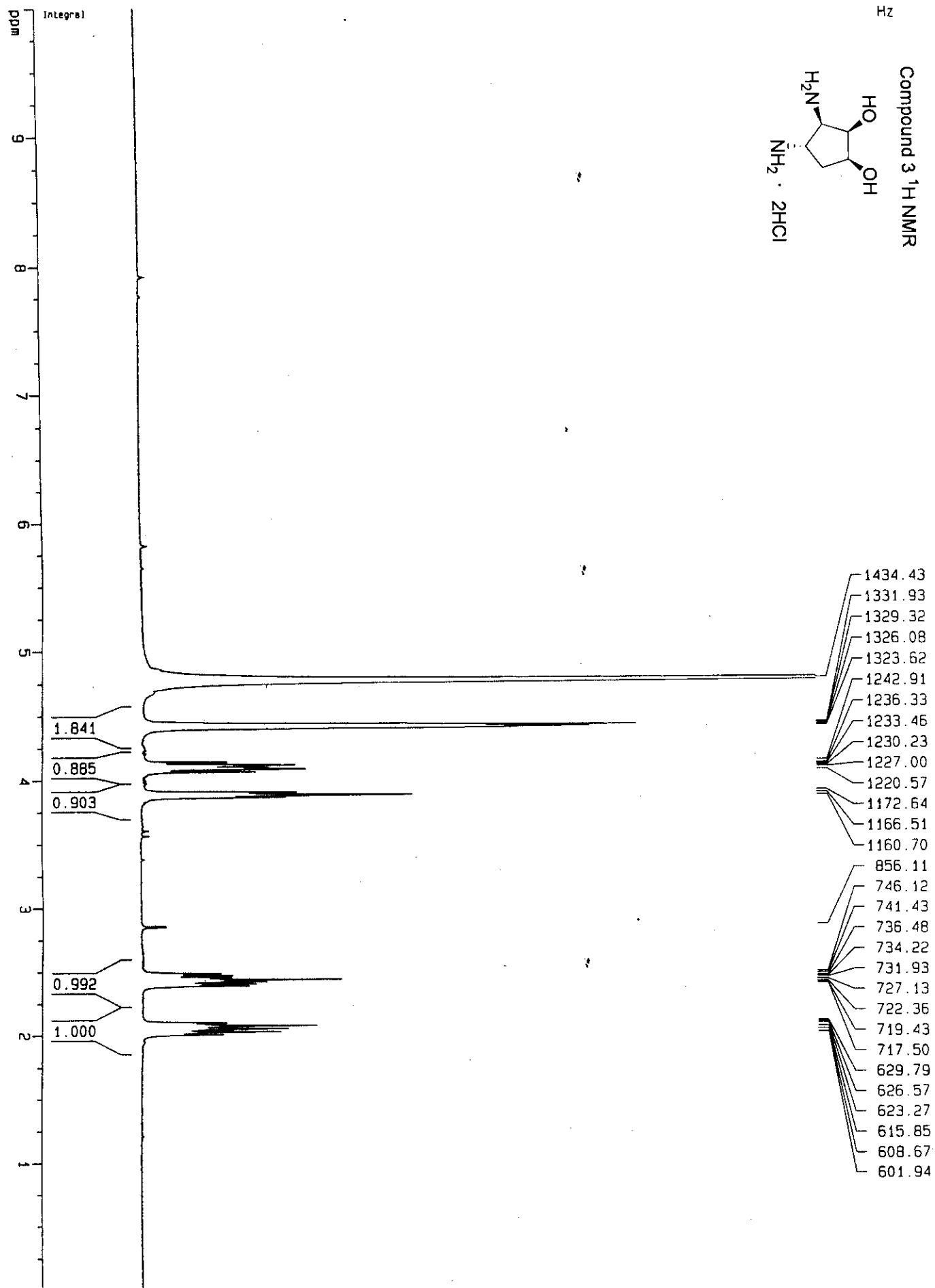
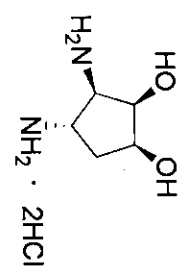
Compound 2 ^{13}C NMR



Compound 2 NOESY

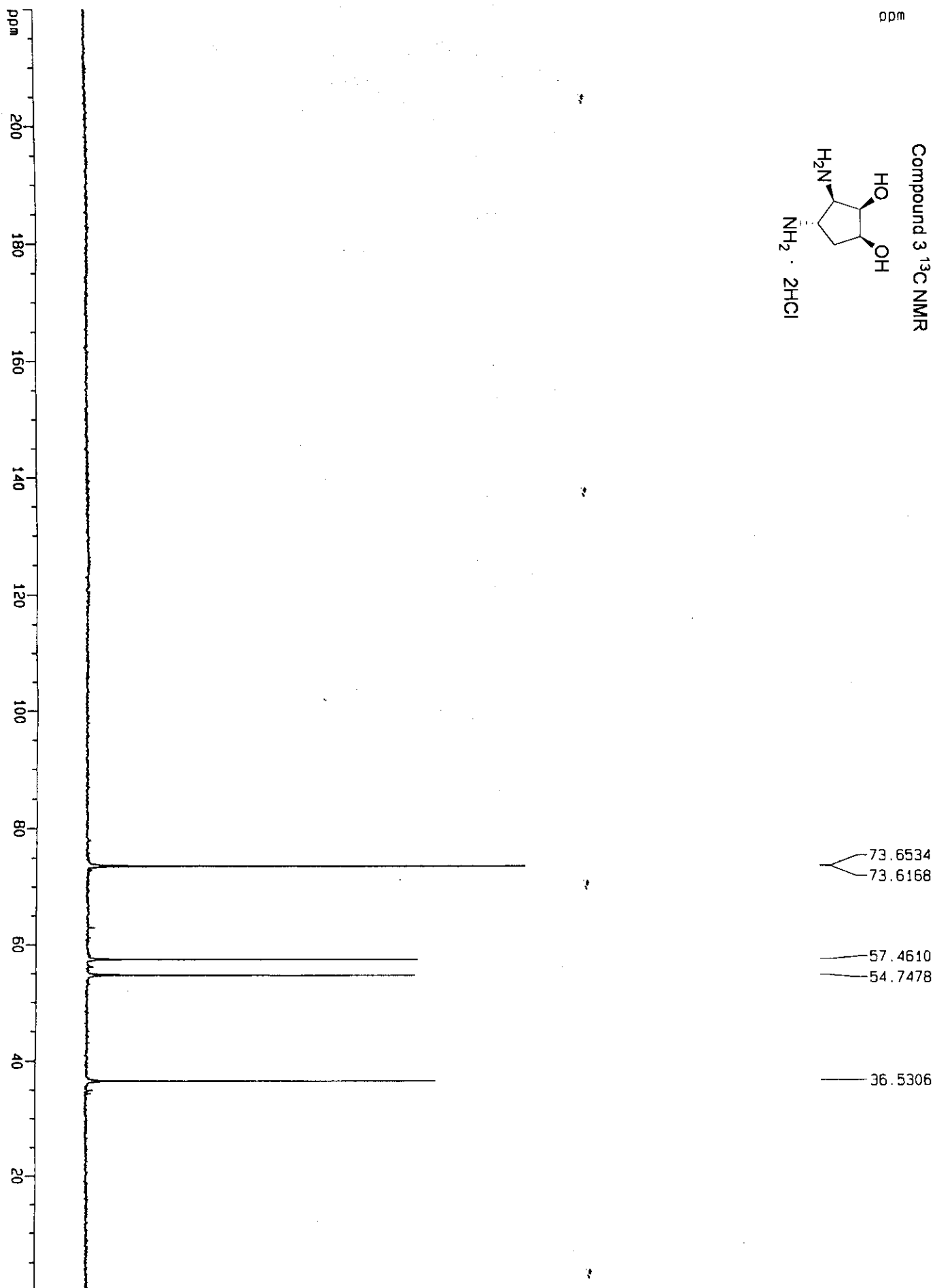
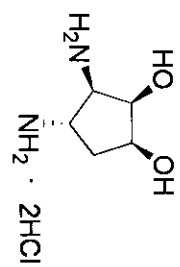


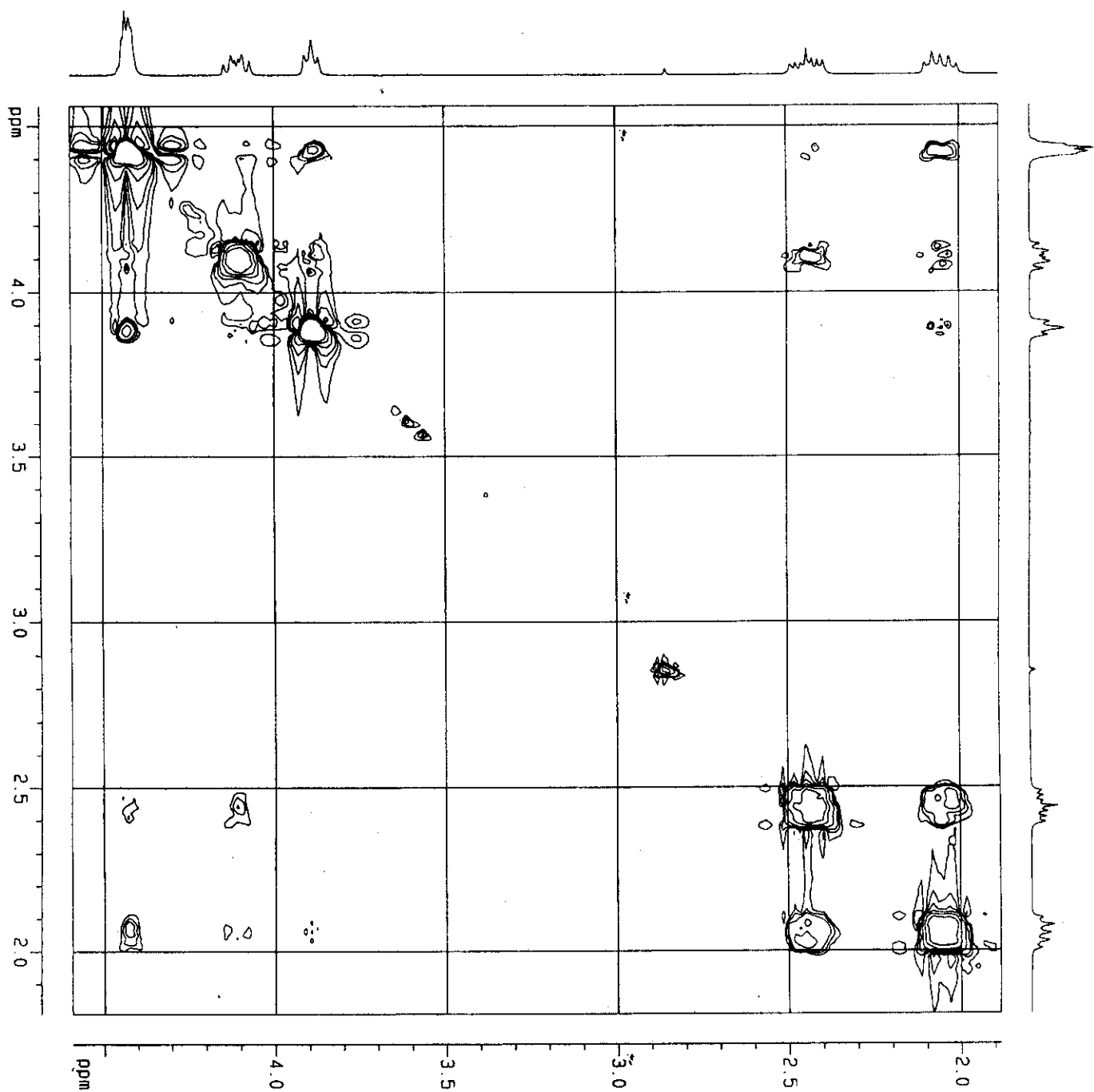
Hz

Compound 3 ^1H NMR

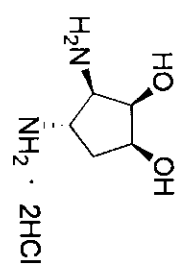
ppm

Compound 3 ^{13}C NMR

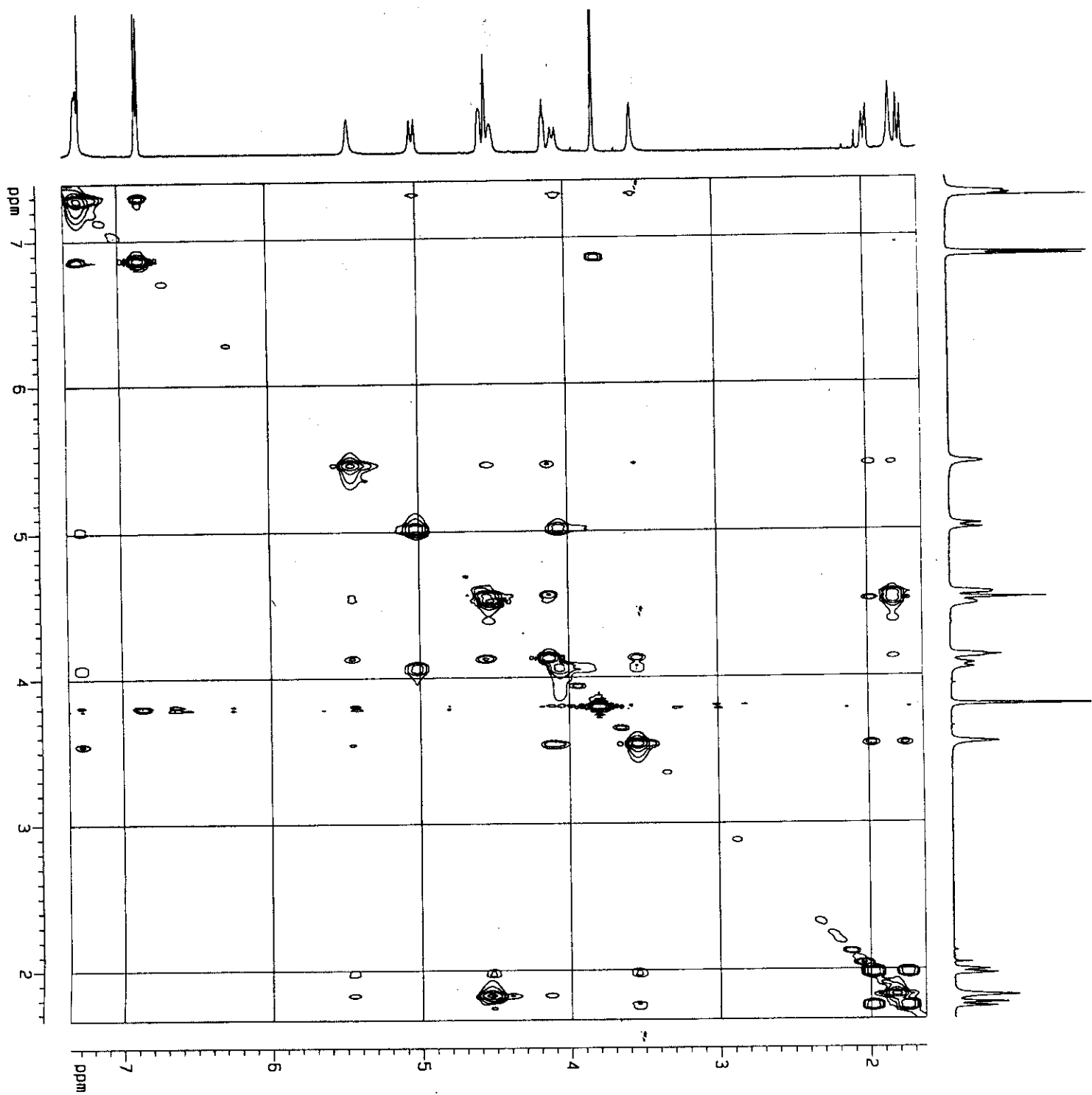
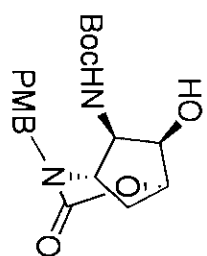




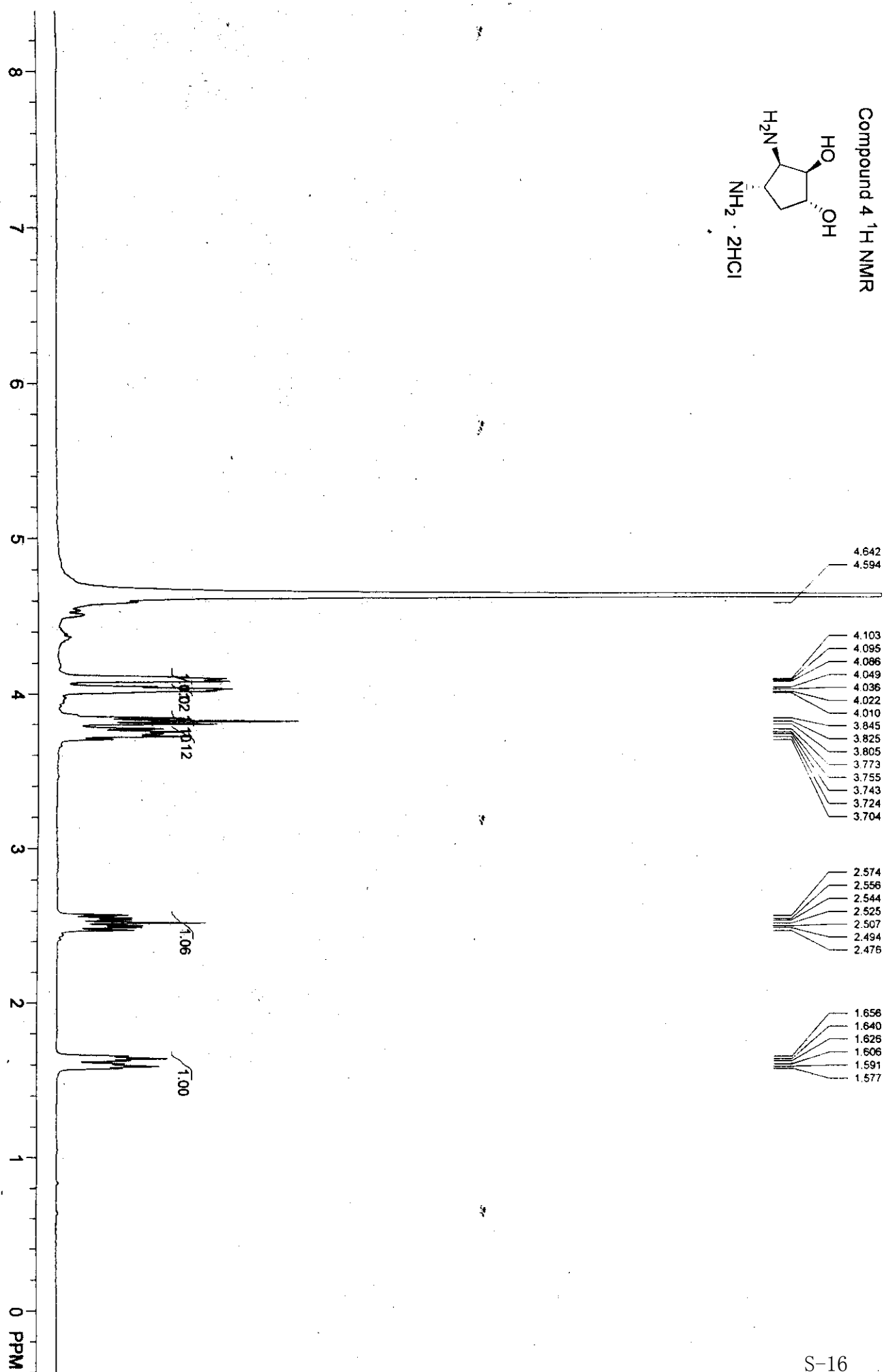
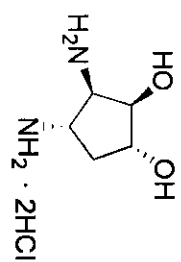
Compound 3 NOESY



Compound 28 NOESY



Compound 4 ^1H NMR



ppm

Compound 4 ^{13}C NMR

