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Supporting Information

Crystal data for 7: C₂₄H₃₁NO₃S, f.w. 413.56, Monoclinic, space group C2, $a = 22.762(3)$ Å, $b = 10.848(1)$ Å, $c = 9.947(1)$ Å, $\beta = 96.90(1)^\circ$, $V = 2437.96(40)$ Å³, $Z = 4$, $D_c = 1.127$ g/cm³, $\mu = 1.351$ mm⁻¹, $F(000) = 888$.

Data collection: X-ray diffraction data were collected from a colourless prismatic crystal of **7** (size 0.15 x 0.2 x 0.1), with graphite monochromated Cu-K α radiation ($\lambda = 1.5418$ Å) on a Siemens P4 diffractometer (θ - 2θ scan technique). 2667 reflections were collected ($3.91 < \theta < 67.46$; $+h, +k, +l$ and $-h, -k, -l$), 2495 unique; 3 standard reflections, measured every 100 reflections, showed no significant decay. Data were corrected for Lorentz and polarization effects and an empirical absorption correction was applied.

Structure analysis and refinement: the structure was solved by direct methods using SIR92 (Altomare, A.; Cascarano, G.; Guagliardi, A. *J. Appl. Cryst.* **1993**, *26*, 343) and refined by full-matrix least squares on F² using SHELXL97 (Sheldrick, G. *SHELXL97, Program for crystal structure refinement*; University of Göttingen, Germany, 1997). Non hydrogen atoms were refined anisotropically. The N-bonded hydrogen was located by difference-Fourier technique and refined, while all the others have been included at calculated positions and refined with group temperature factors. Final values of the residual R1 for reflections with $I > 2\sigma$ and for all reflections were respectively 0.041 and 0.045. The highest peak and hole in the final difference-Fourier map were 0.195 and -0.189 eÅ³. The refined value of Flack's parameter (Flack, H. D. *Acta Cryst.* **1983**, *A 39*, 876-880) was 0.03(2).

A view of **7** is shown in Figure S1 and selected molecular dimensions are reported in Table S1. Bond lengths and angles fall in the expected range (Allen, F. M.; Kennard, O.; Watson, D. G.; Brammer, L.; Orpen, A. G.; Taylor, R. J. *J. Chem. Soc., Perkin Trans. 2* **1987**, S1-S19). The hydrogen atom found by Fourier-difference map indicates a planar geometry on N, as commonly found in amides. Consistent with the sp² hybridization on C2, the conformation around C2—C3 bond is skew. An intermolecular hydrogen bond is found between the amidic hydrogen and the S-bonded oxygen, which probably play a significant role in the crystal packing (O---H 1.968(1) Å; O---H—N 163.0(2)°).

Table S1

Bond lengths (Å)		Bond angles (°)	
S(1)-O(1)	1.498 (3)	C(1)-C(2)-C(3)	125.1 (5)
S(1)-C(41)	1.794 (4)	O(1)-S(1)-C(41)	106.90 (16)
S(1)-C(4)	1.837 (3)	O(1)-S(1)-C(4)	107.85 (15)
C(1)-C(2)	1.292 (6)	C(41)-S(1)-C(4)	98.11 (15)
C(2)-C(3)	1.494 (6)	C(9)-N(1)-C(5)	122.4 (3)
N(1)-C(9)	1.339 (4)	C(9)-O(2)-C(10)	115.2 (3)
N(1)-C(5)	1.451 (4)	Torsion angles (°)	
O(2)-C(10)	1.446 (4)	C(1)-C(2)-C(3)-C(4)	119.2 (4)
O(2)-C(9)	1.355 (4)	C(2)-C(3)-C(4)-C(5)	-39.6 (4)
		C(2)-C(3)-C(4)-S(1)	85.4 (3)

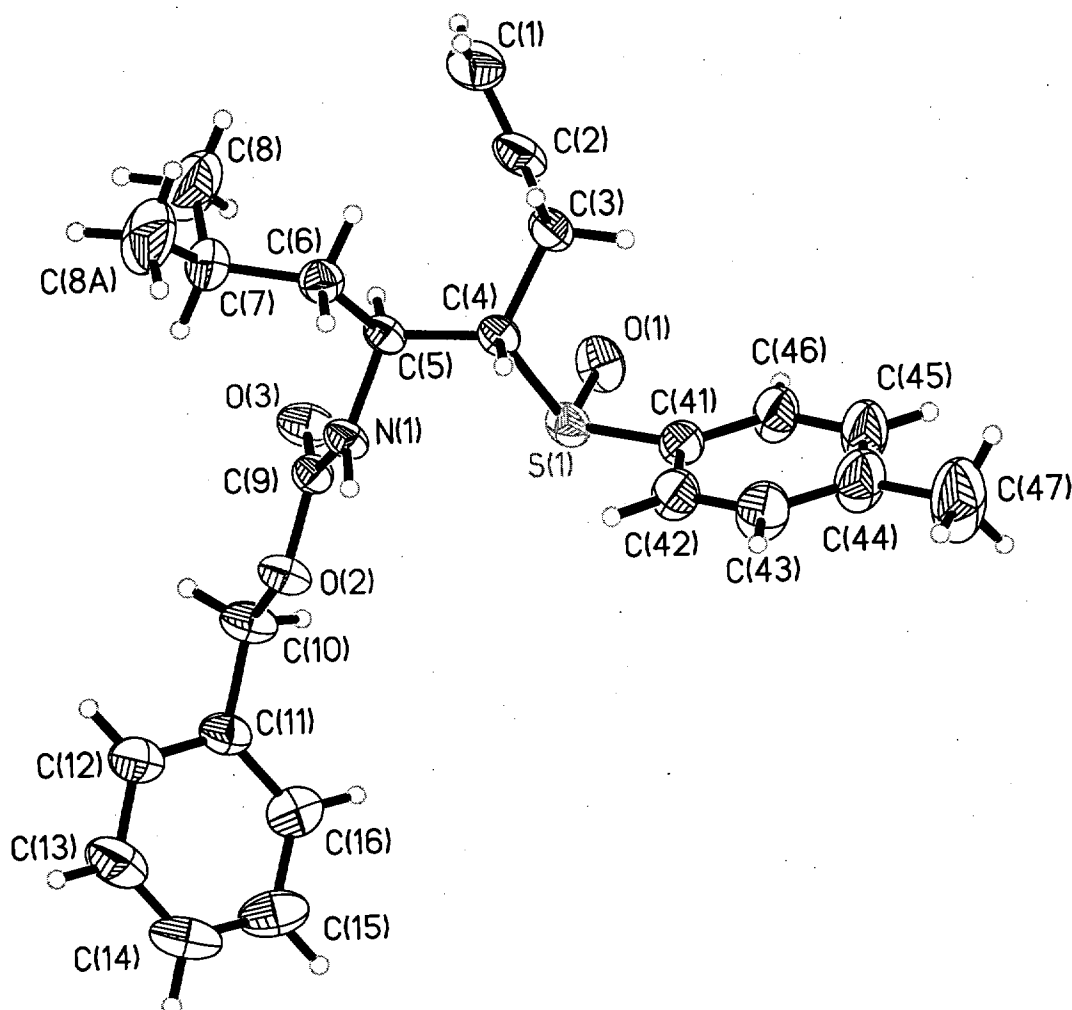
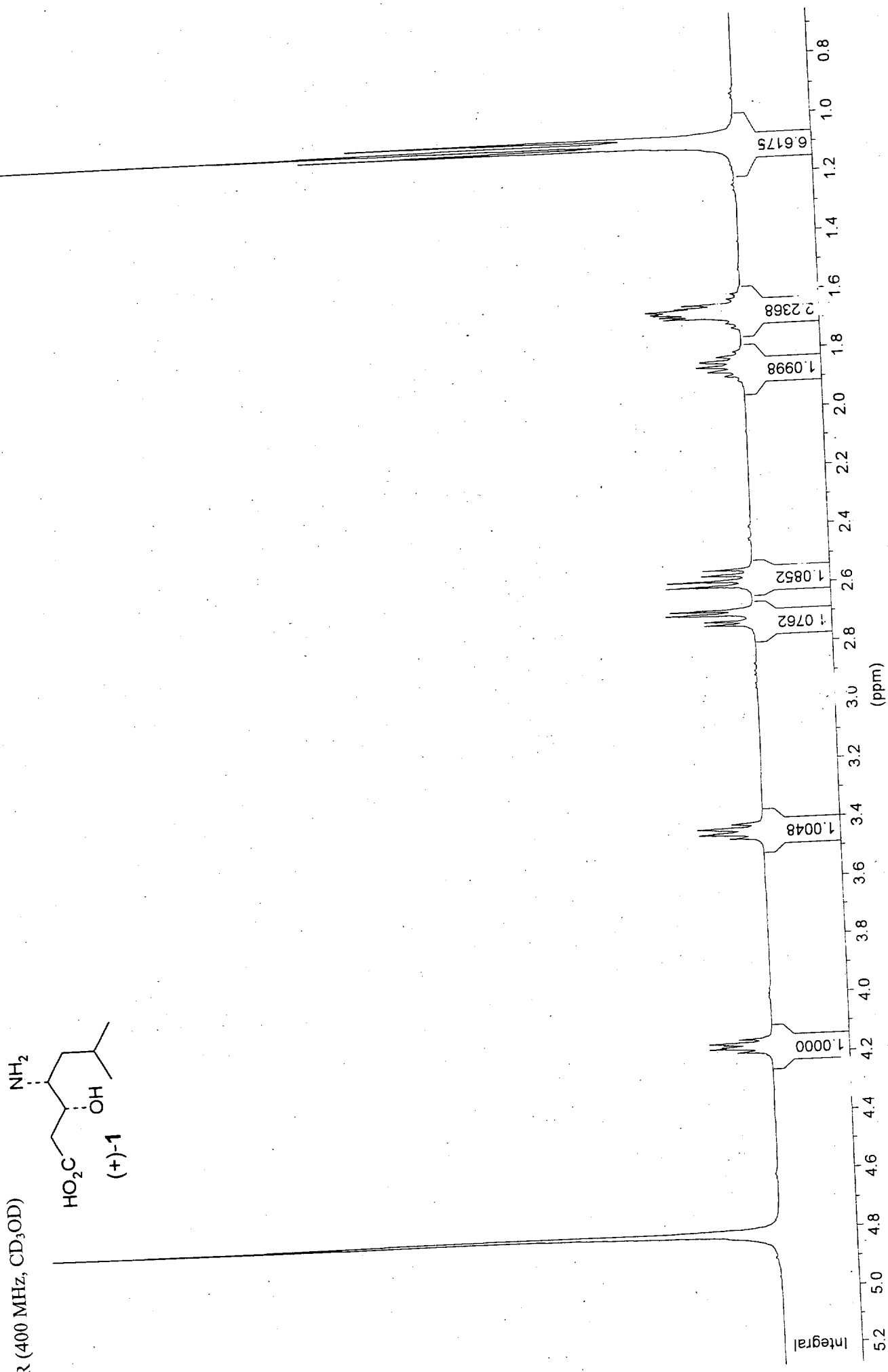
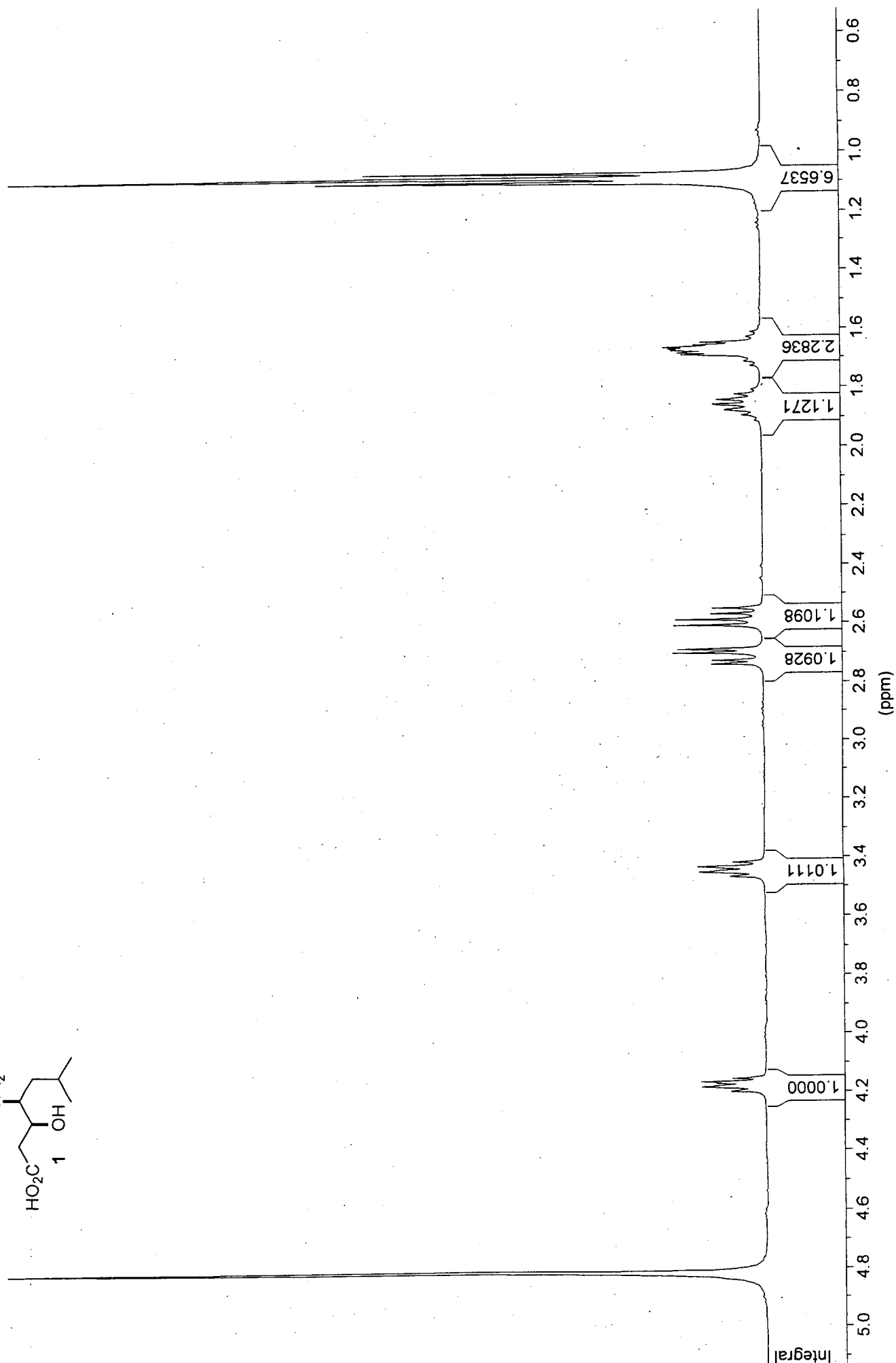
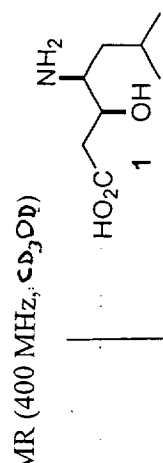
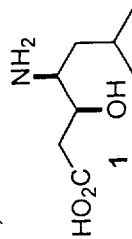


Figure S1. ORTEP view of 7 showing the absolute configuration and the atomic labelling scheme. 30% Thermal ellipsoid for non-hydrogen atoms are shown.

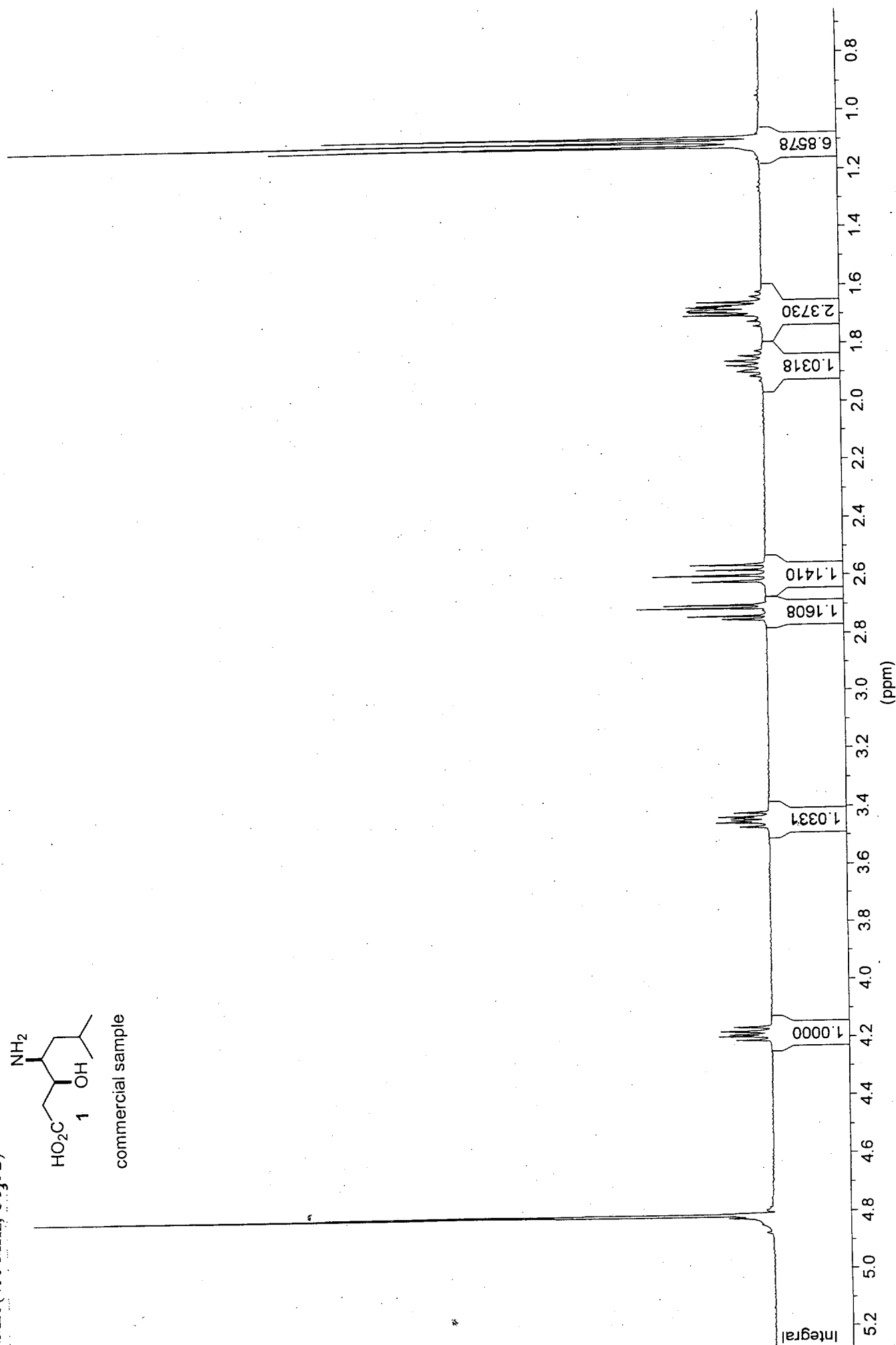




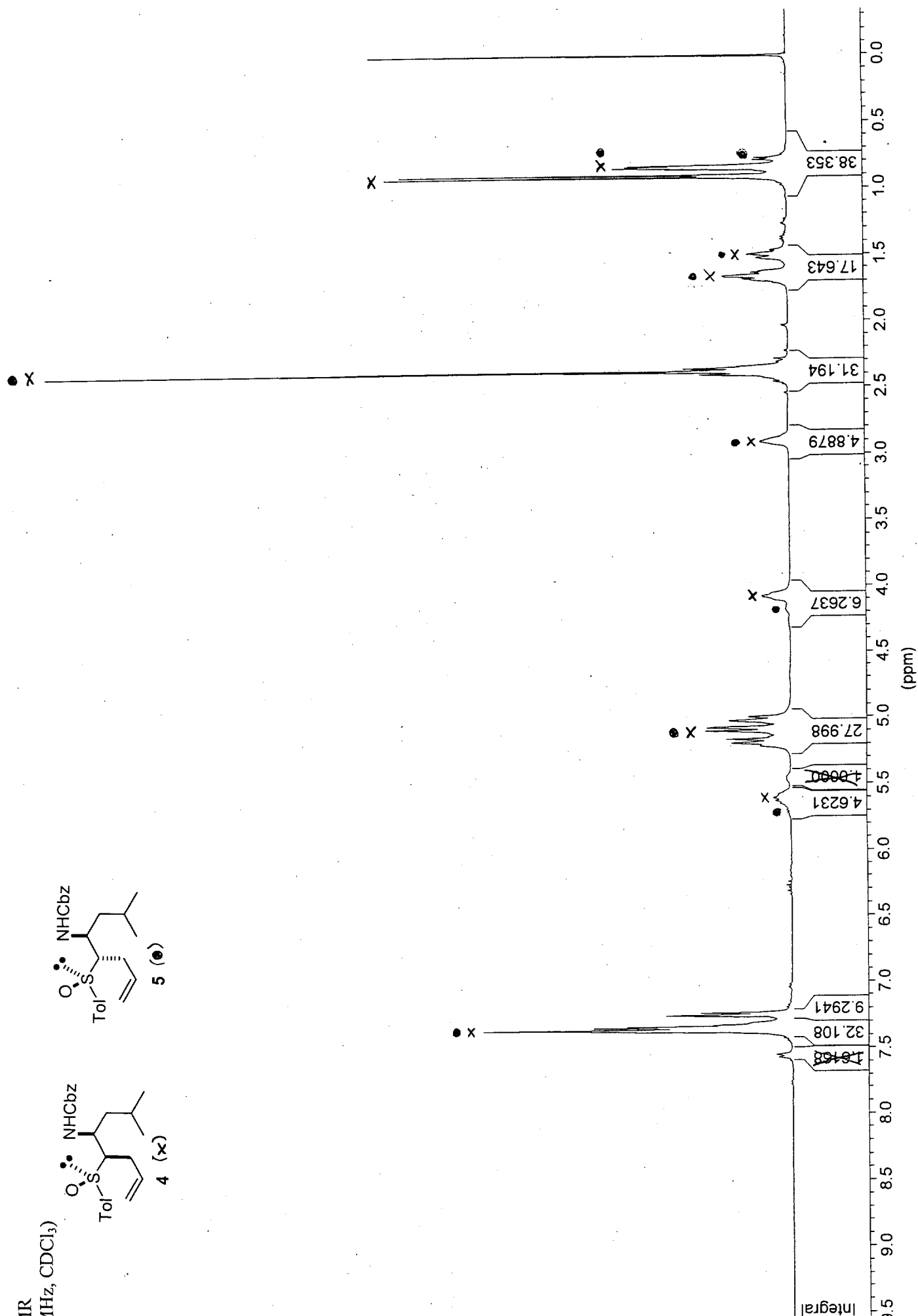
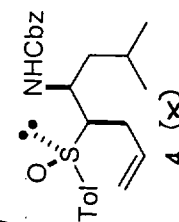
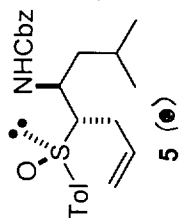
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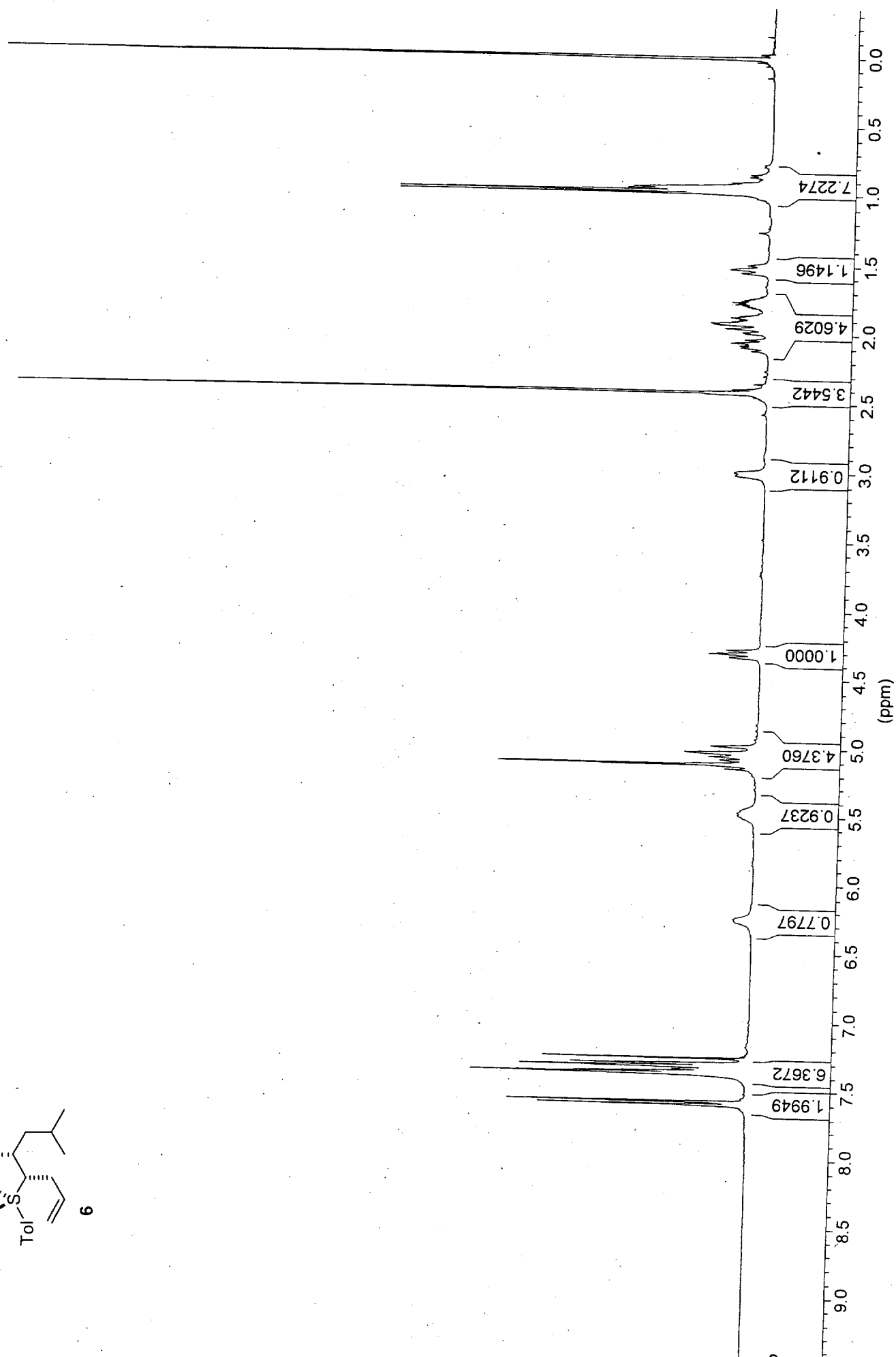
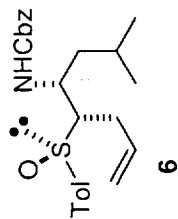


commercial sample

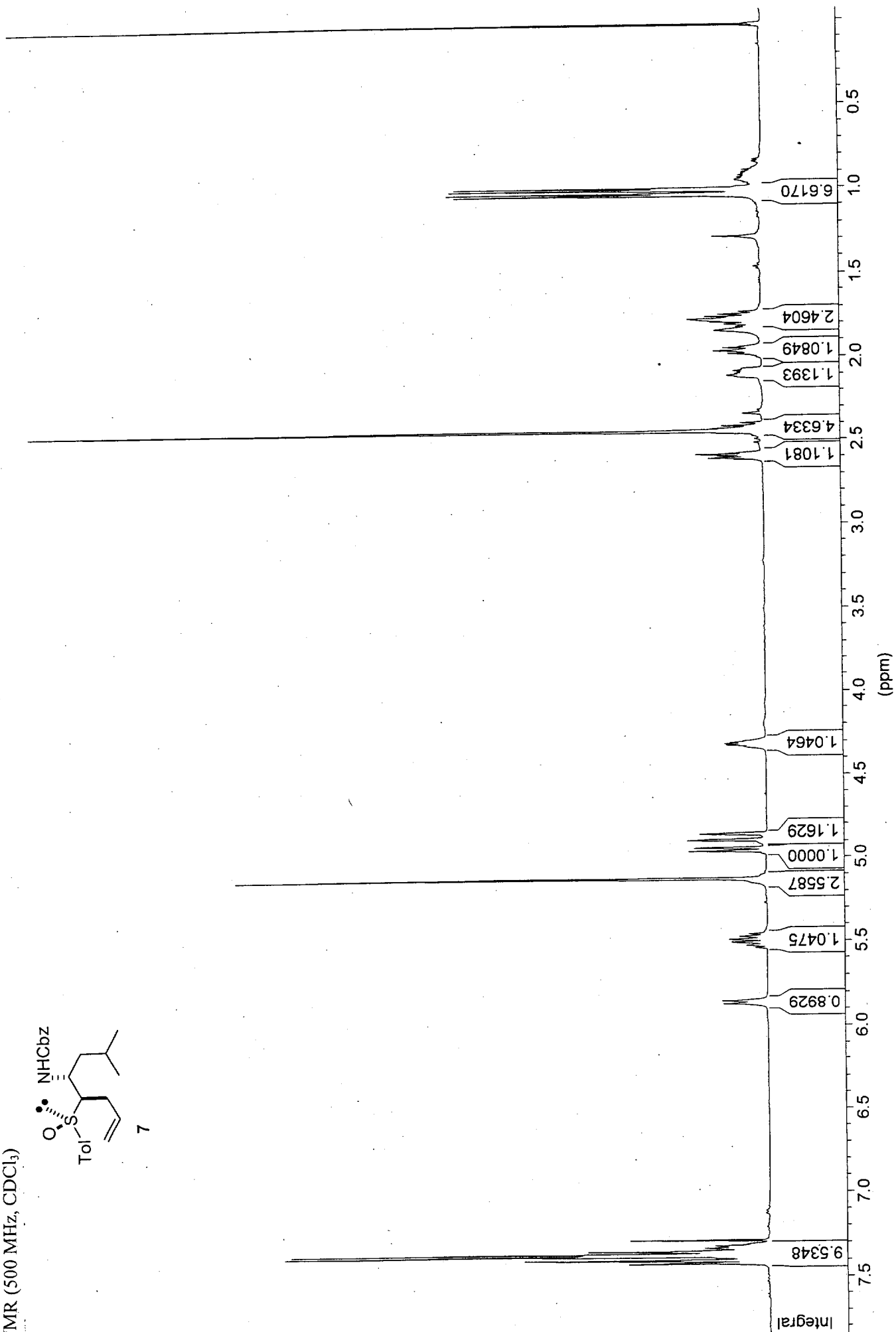
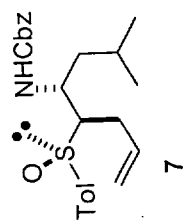


IR
(MHz, CDCl₃)

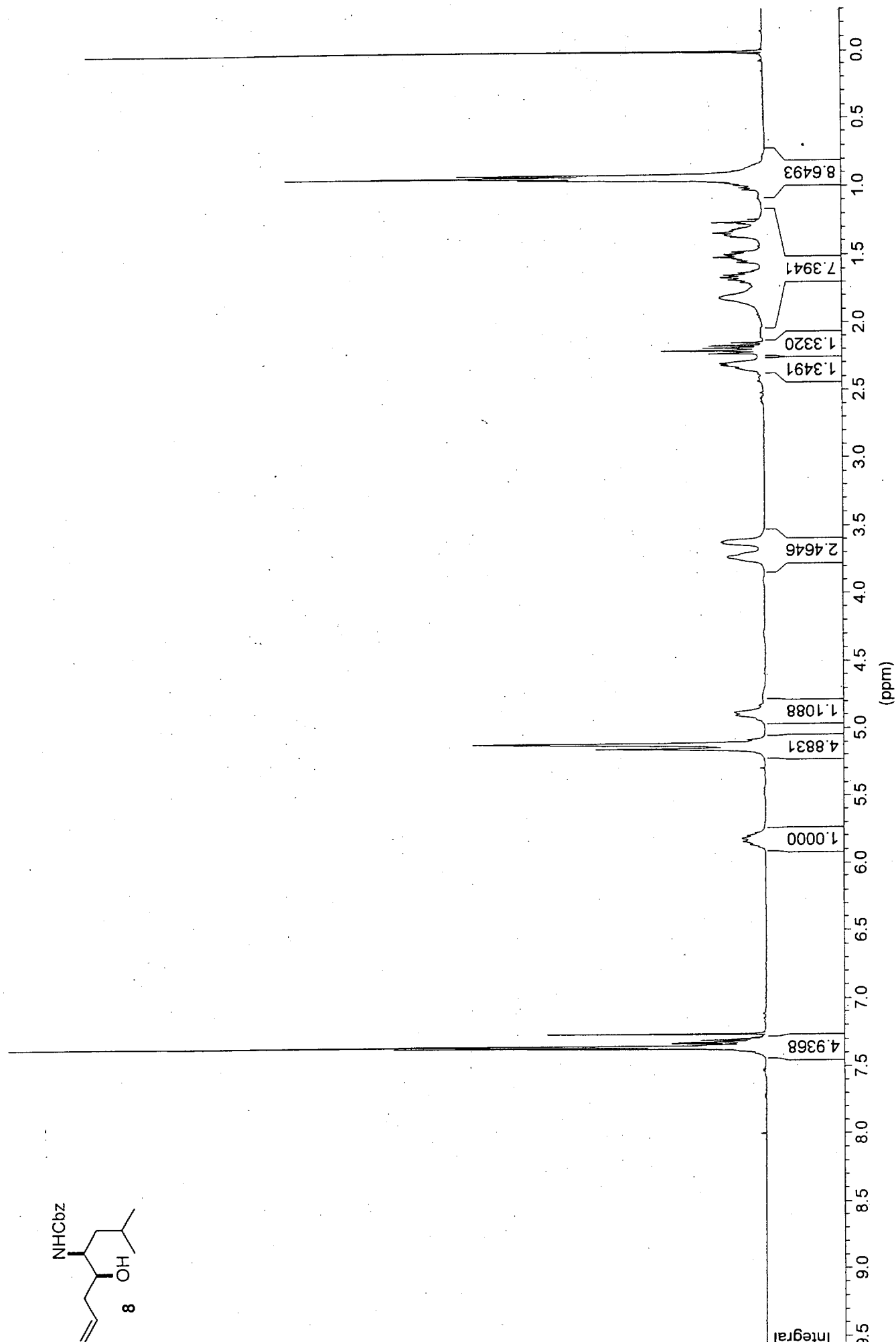
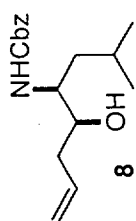


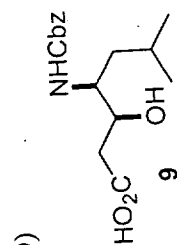


MR (500 MHz, CDCl₃)

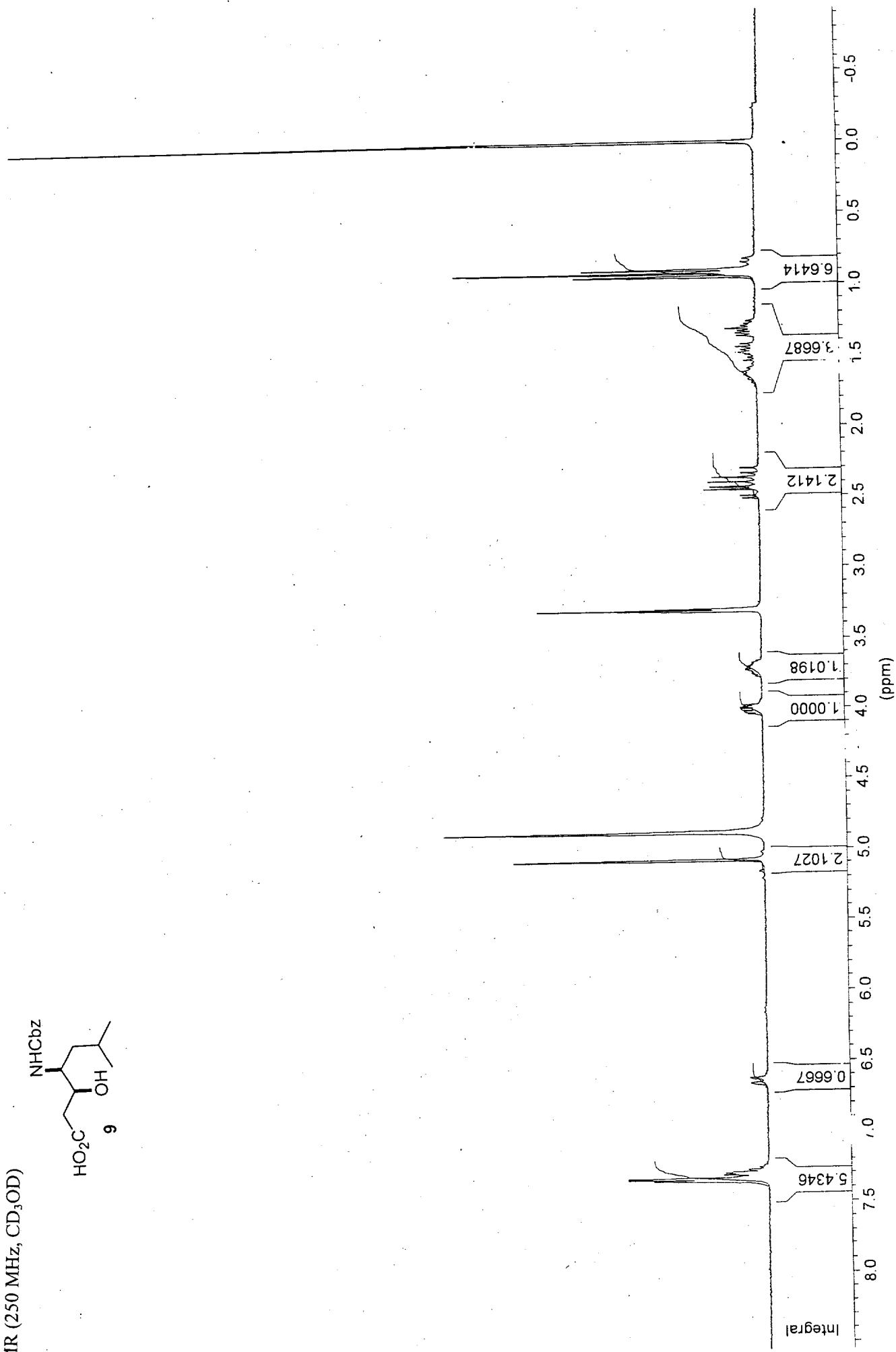


¹HMR (400 MHz, CDCl₃)





IR (250 MHz, CD_3OD)



¹H NMR (500 MHz, CD₃OD)

