

SUPPORTING INFORMATION

A Second Generation Synthesis of Roseophilin and Chromophore Analogs

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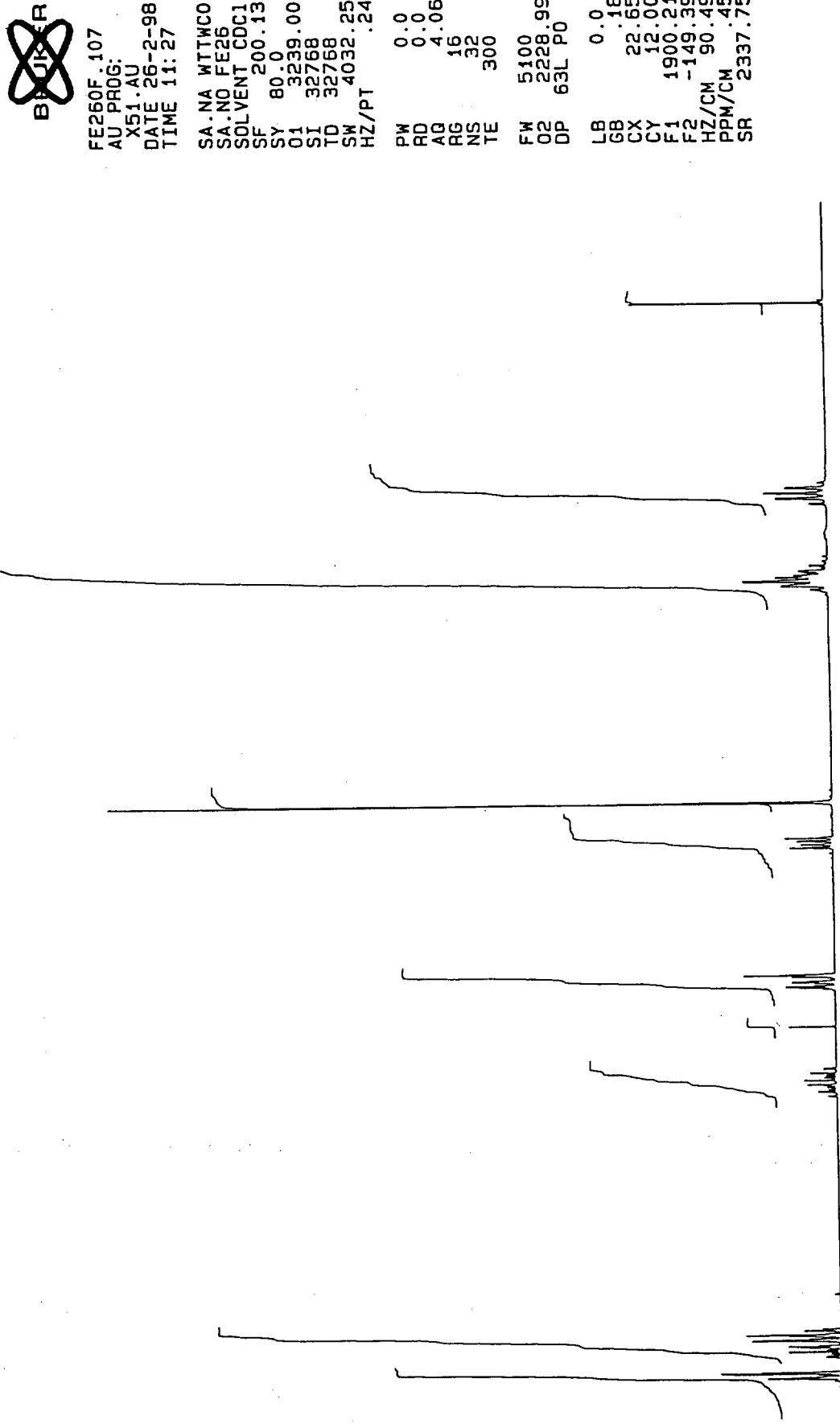
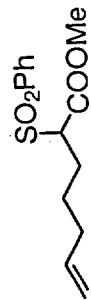
Instrumentation and Spectra Formats. NMR: Spectra were recorded on a Bruker AC 200, AMX 300, DPX 300, AMX 400 or DMX 600 spectrometer in CDCl_3 unless stated otherwise. Chemical shifts (δ) are given in ppm relative to TMS, coupling constants (J) in Hz. The multiplicity in the ^{13}C NMR spectra refers to the geminal protons (DEPT). IR: Nicolet FT-7199, wavenumbers in cm^{-1} . MS: Finnigan MAT 8200 (70 eV); HR-MS: Finnigan MAT SSQ 7000 (70 eV).

Table 1. Characteristic Infrared Absorptions of New Compounds (cm⁻¹)

Product	IR
6	3079, 2956, 2930, 2899, 2858, 2740, 2710, 1653, 1642, 1472, 1463, 1444, 1405, 1390, 1362, 1257, 1086, 1006, 939, 912, 838, 814, 777, 710, 669
7	3071, 2953, 2933, 2864, 1743, 1641, 1585, 1448, 1436, 1325, 1311, 1274, 1201, 1149, 1084, 999, 916, 761, 724, 689, 594, 536
<i>(E)</i> - 8	3536, 3074, 2953, 2929, 2857, 1739, 1641, 1585, 1472, 1462, 1447, 1389, 1361, 1308, 1253, 1233, 1179, 1145, 1079, 1005, 912, 837, 778, 758, 721, 691, 669, 611, 570, 537
<i>(Z)</i> - 8	3534, 3075, 2953, 2930, 2857, 1740, 1641, 1585, 1472, 1462, 1447, 1390, 1361, 1319, 1308, 1253, 1231, 1180, 1145, 1079, 999, 911, 838, 778, 758, 722, 691, 670, 611, 570, 537
9	3532, 3065, 2953, 2930, 2856, 1739, 1584, 1472, 1462, 1447, 1389, 1374, 1361, 1308, 1249, 1180, 1142, 1101, 1079, 1048, 1006, 977, 939, 838, 778, 758, 721, 691, 669, 618, 571, 541
14·HCl	3416, 3117, 1564, 1491, 1463, 1377, 1275, 1186, 1056, 1036, 995, 943, 865, 769
15·HCl	3432, 3113, 1606, 1567, 1489, 1371, 1279, 1032, 939, 868, 768
21a	3115, 2948, 2869, 1464, 1292, 1146, 1066, 1010, 884, 726, 688
21b	2949, 2870, 1493, 1464, 1292, 1140, 1016, 979, 883, 729, 687
24	2954, 2896, 1658, 1412, 1249, 1102, 1081, 860, 837, 744

Table 2. MS Data (EI) of New Compounds

Product	<i>m/z</i> (rel. intensity)
6	225 (11), 183 (23), 143 (79), 133 (15), 113 (12), 105 (15), 91 (25), 79 (12), 75 (100), 73 (43), 67 (25), 59 (16), 57 (10), 55 (16), 41 (28).
7	282 (0.2, [M ⁺]), 214 (20), 143 (10), 141 (74), 140 (100), 125 (15), 111 (13), 109 (99), 108 (31), 87 (16), 81 (98), 80 (25), 79 (19), 78 (17), 77 (92), 68 (21), 67 (34), 55 (56).
(E)-8	507 (17), 475 (12), 365 (13), 348 (10), 347 (33), 315 (14), 213 (11), 201 (10), 200 (15), 199 (100), 135 (45), 133 (10), 131 (10), 125 (18), 105 (11), 97 (10), 93 (13), 91 (18), 89 (18), 81 (15), 79 (18), 77 (24), 75 (77), 73 (90), 69 (26), 67 (18), 59 (11), 57 (11), 55 (30), 41 (38), 29 (11).
(Z)-8	507 (21), 365 (14), 348 (13), 347 (41), 315 (14), 291 (13), 213 (11), 201 (10), 200 (15), 199 (100), 135 (44), 133 (12), 131 (11), 125 (17), 105 (13), 97 (13), 93 (15), 91 (20), 89 (18), 81 (16), 79 (20), 77 (27), 75 (87), 73 (89), 69 (27), 67 (21), 59 (11), 57 (12), 55 (28), 41 (43), 29 (11).
9	480 (12), 479 (35), 337 (19), 320 (22), 319 (88), 263 (13), 245 (13), 231 (12), 217 (11), 213 (17), 203 (10), 201 (11), 200 (15), 199 (100), 186 (12), 185 (71), 136 (10), 135 (67), 131 (12), 125 (18), 119 (13), 117 (10), 105 (17), 93 (16), 91 (24), 89 (23), 81 (16), 79 (26), 77 (26), 75 (89), 73 (99), 67 (27), 59 (13), 57 (11), 55 (20), 41 (26), 29 (11).
21a	290 (24), 289 (100, [M ⁺]), 247 (22), 246 (99), 115 (12), 95 (15), 87 (10), 73 (13), 59 (23).
21b	325 (27), 324 (17), 323 (71, [M ⁺]), 288 (17), 282 (38), 281 (22), 280 (100), 115 (42), 113 (10), 112 (21), 105 (11), 87 (34), 73 (44), 59 (63), 45 (12).
24	239 (3, [M ⁺]), 211 (17), 196 (15), 167 (14), 166 (96), 138 (30), 123 (54), 122 (25), 73 (100), 43 (19).



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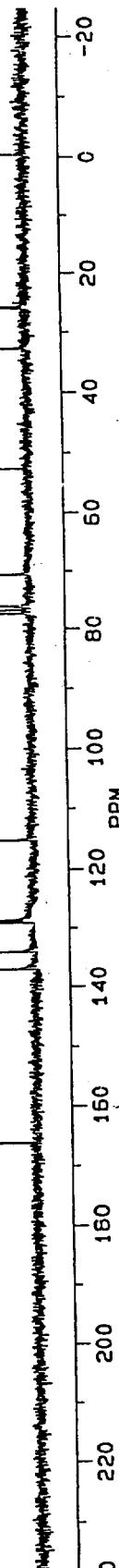
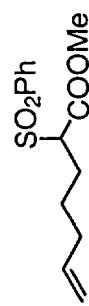
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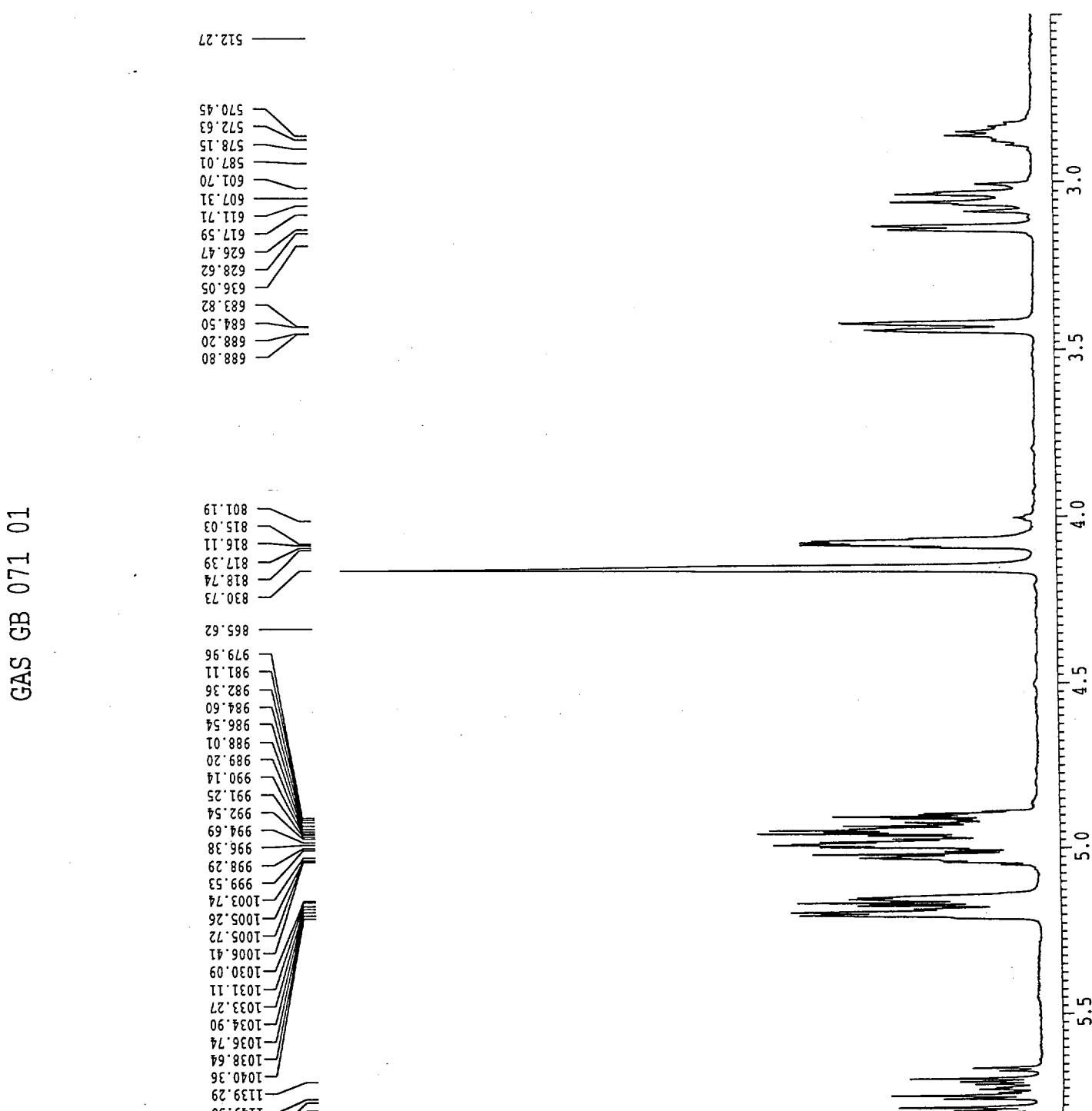
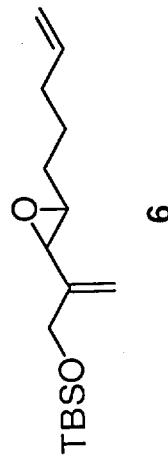
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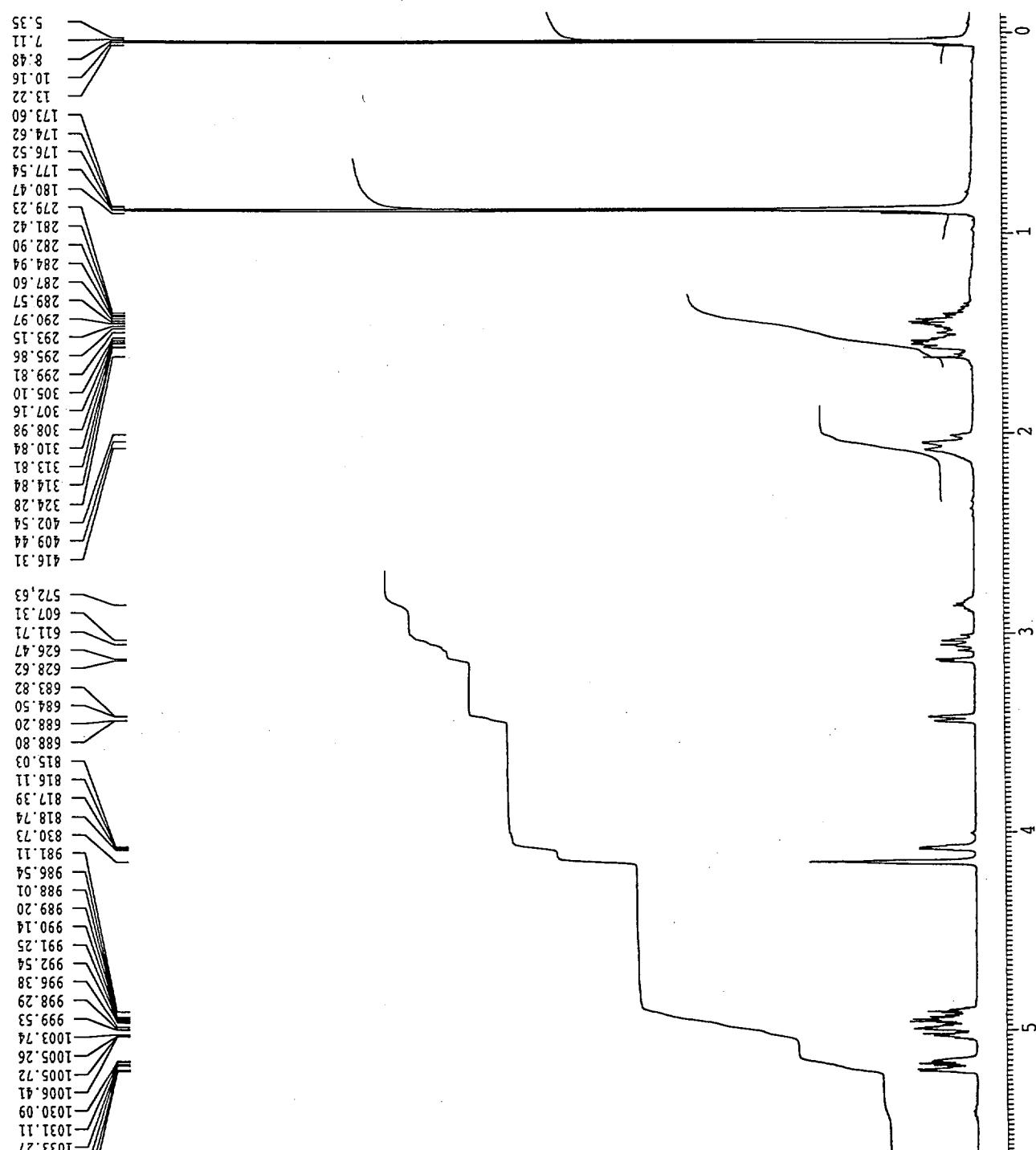
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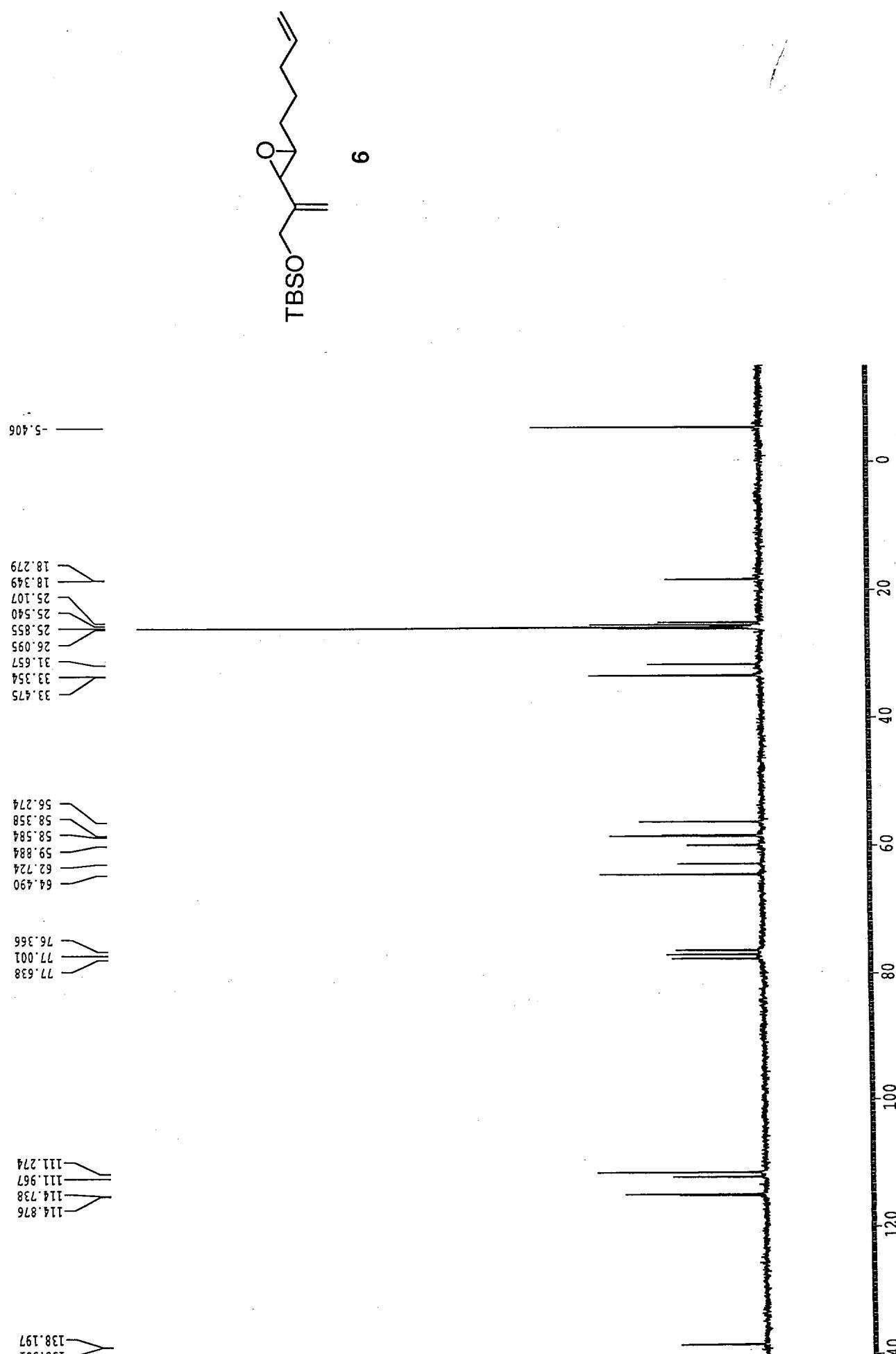




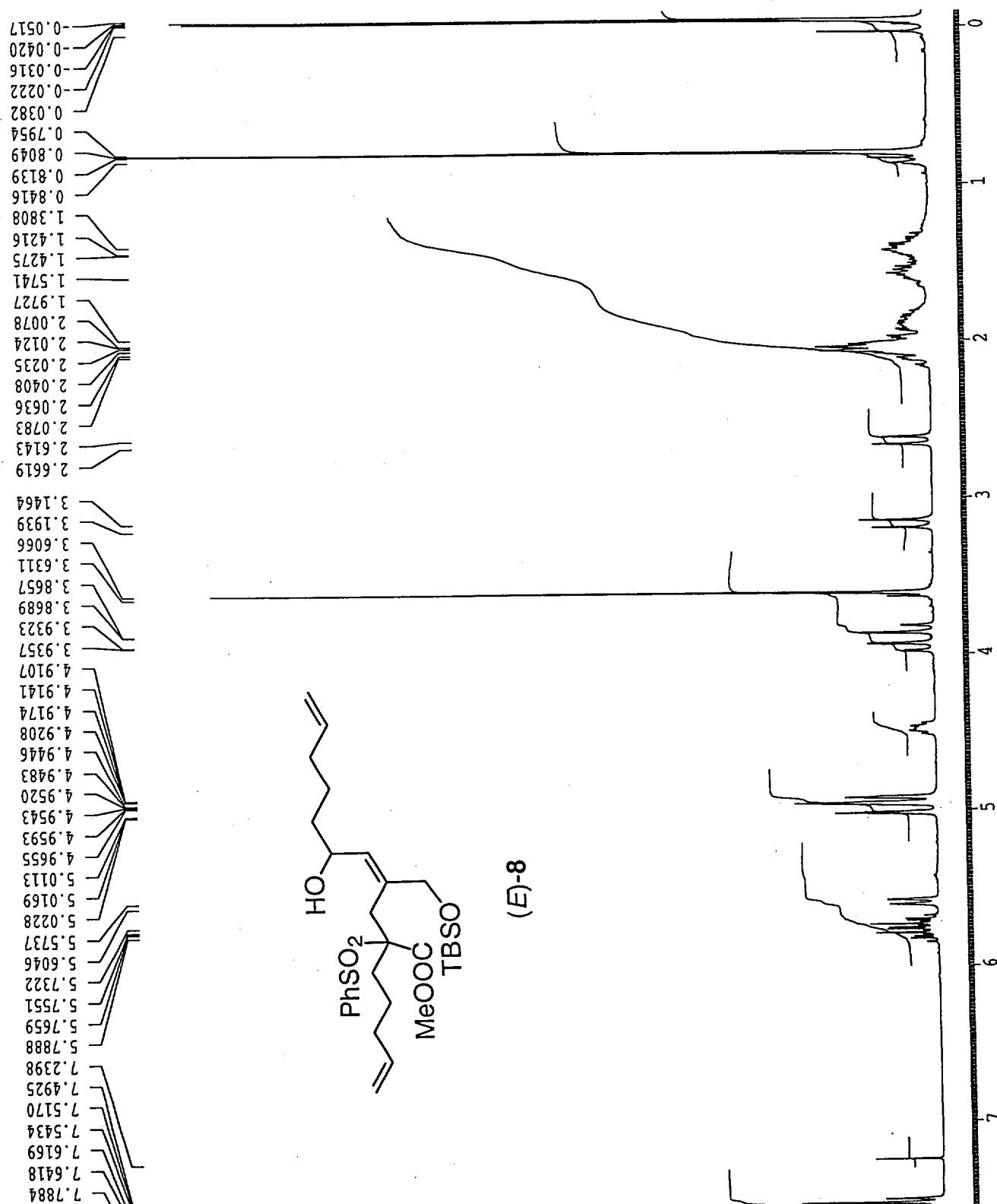
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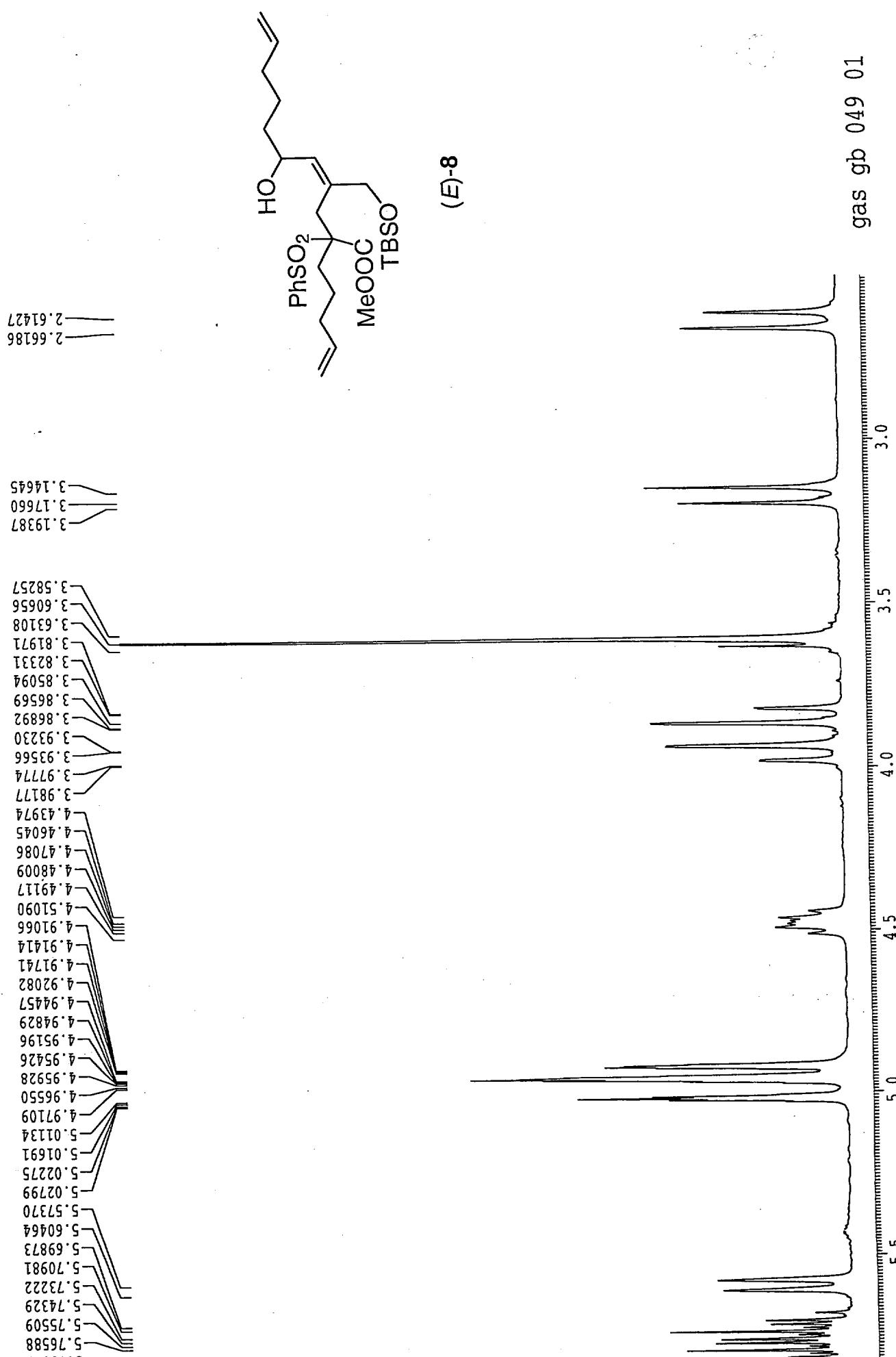


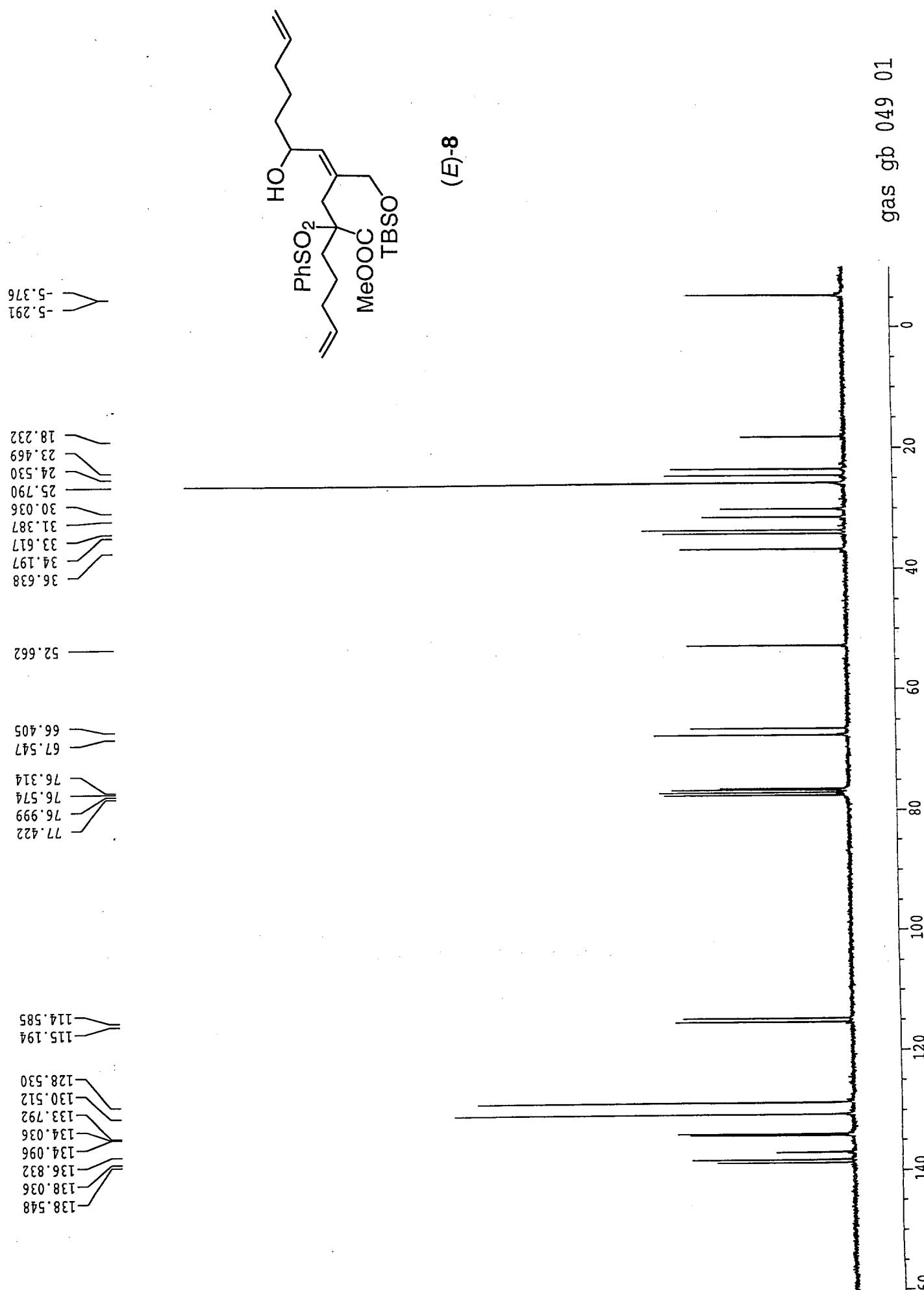
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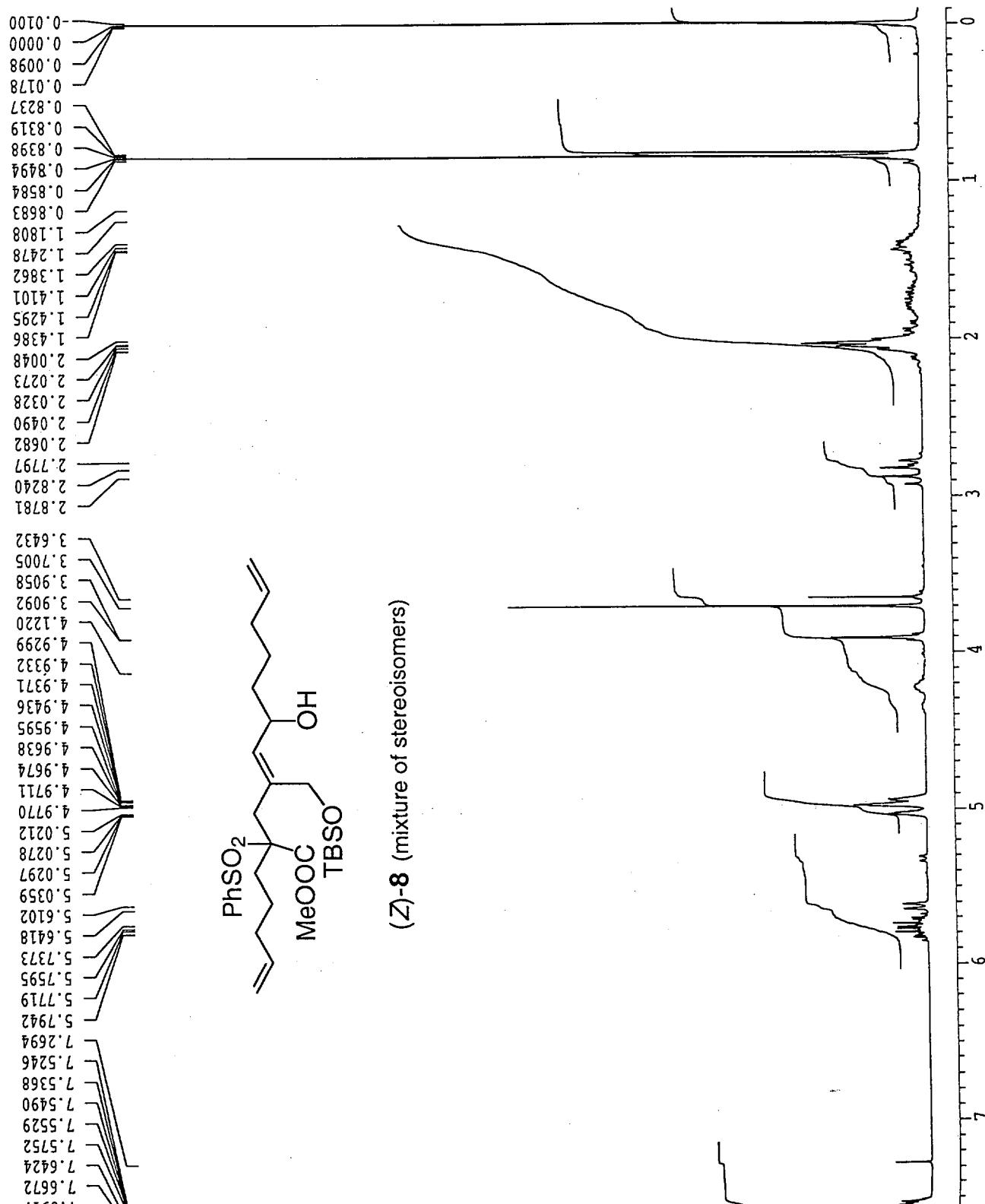


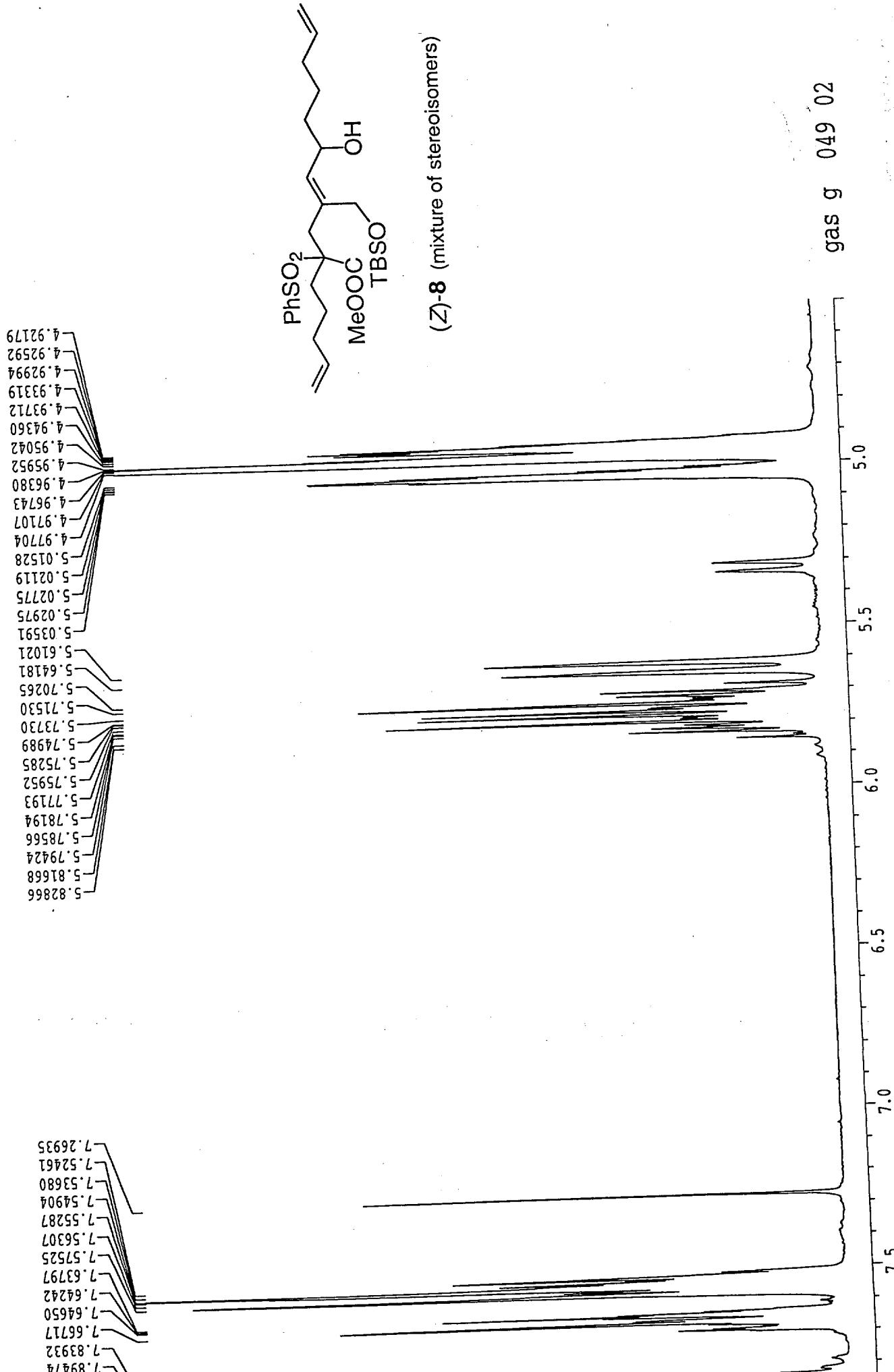
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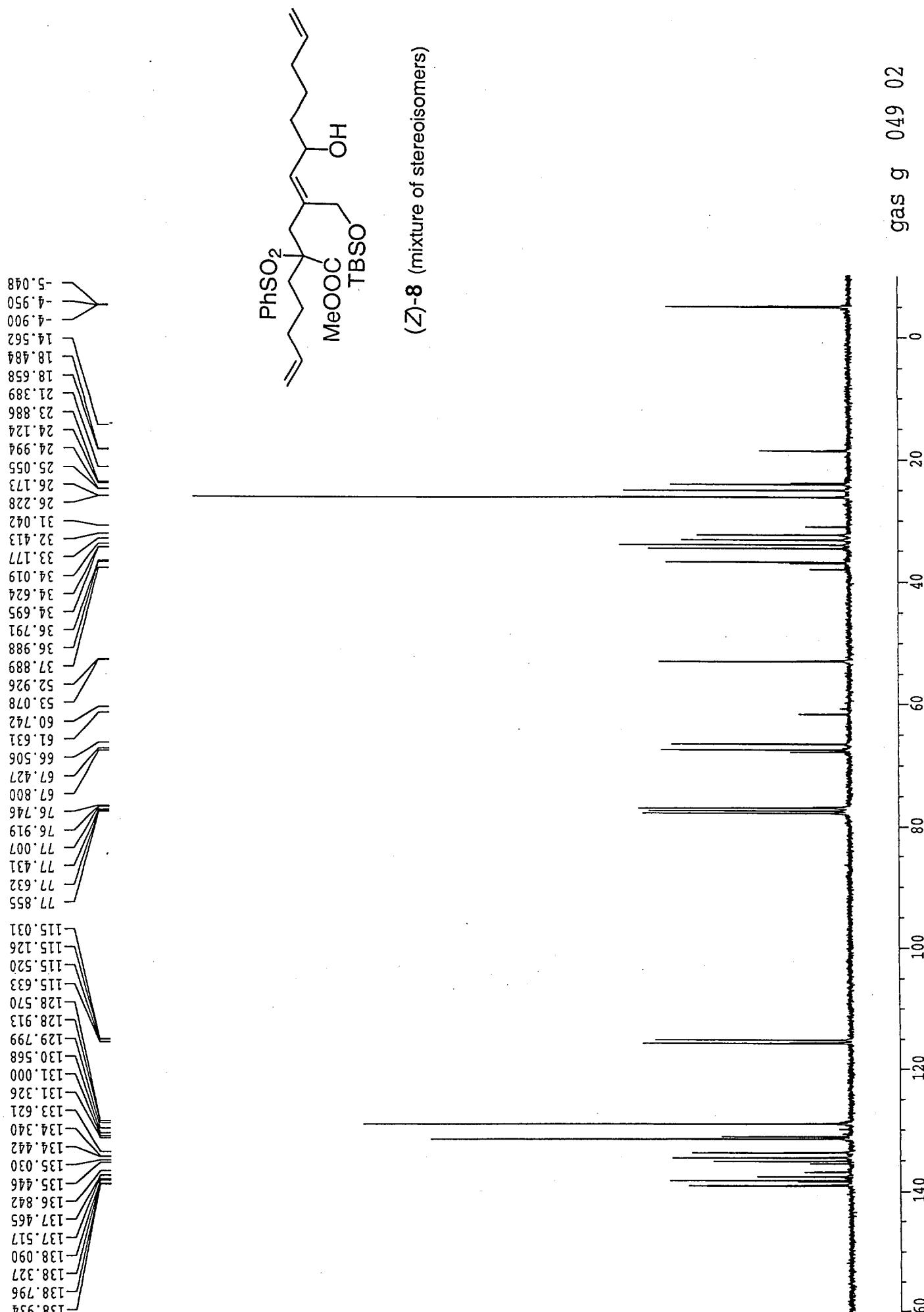


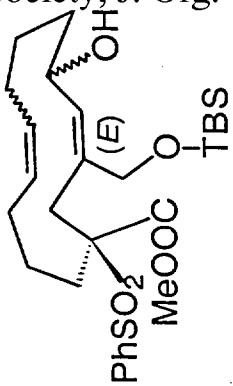




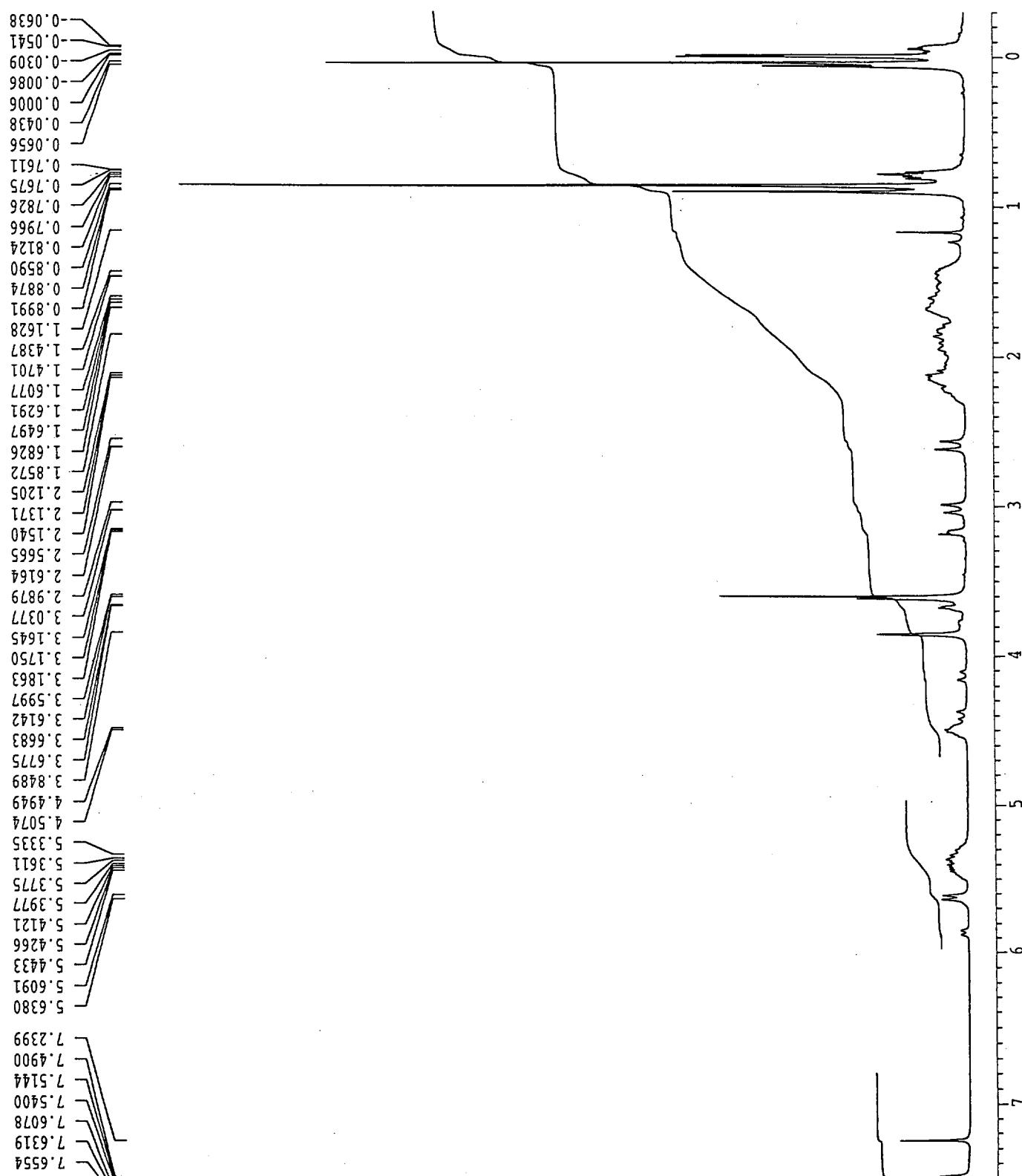


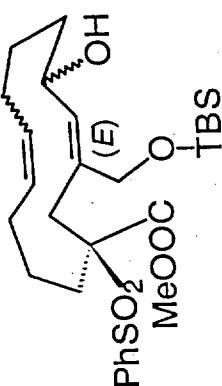




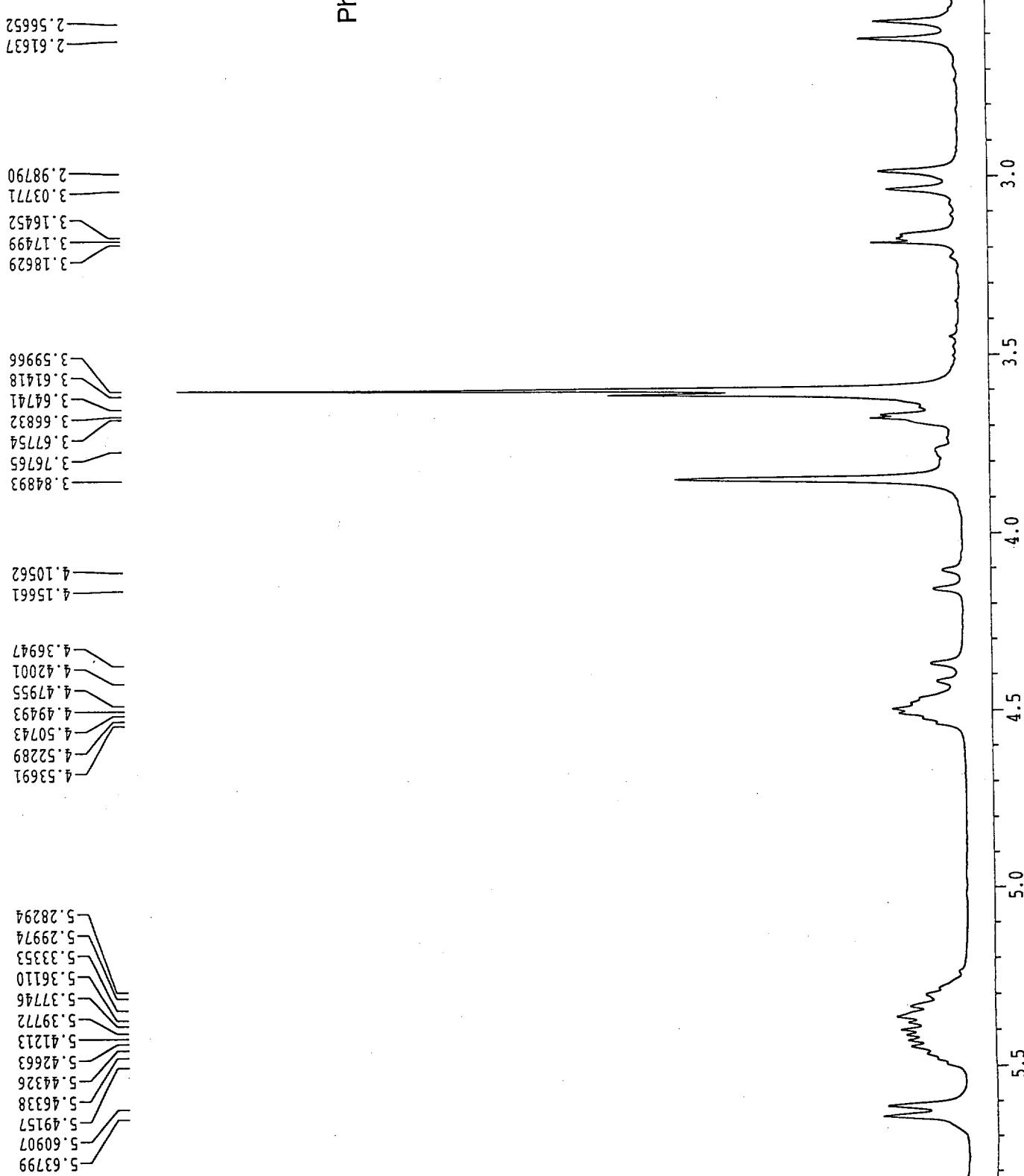


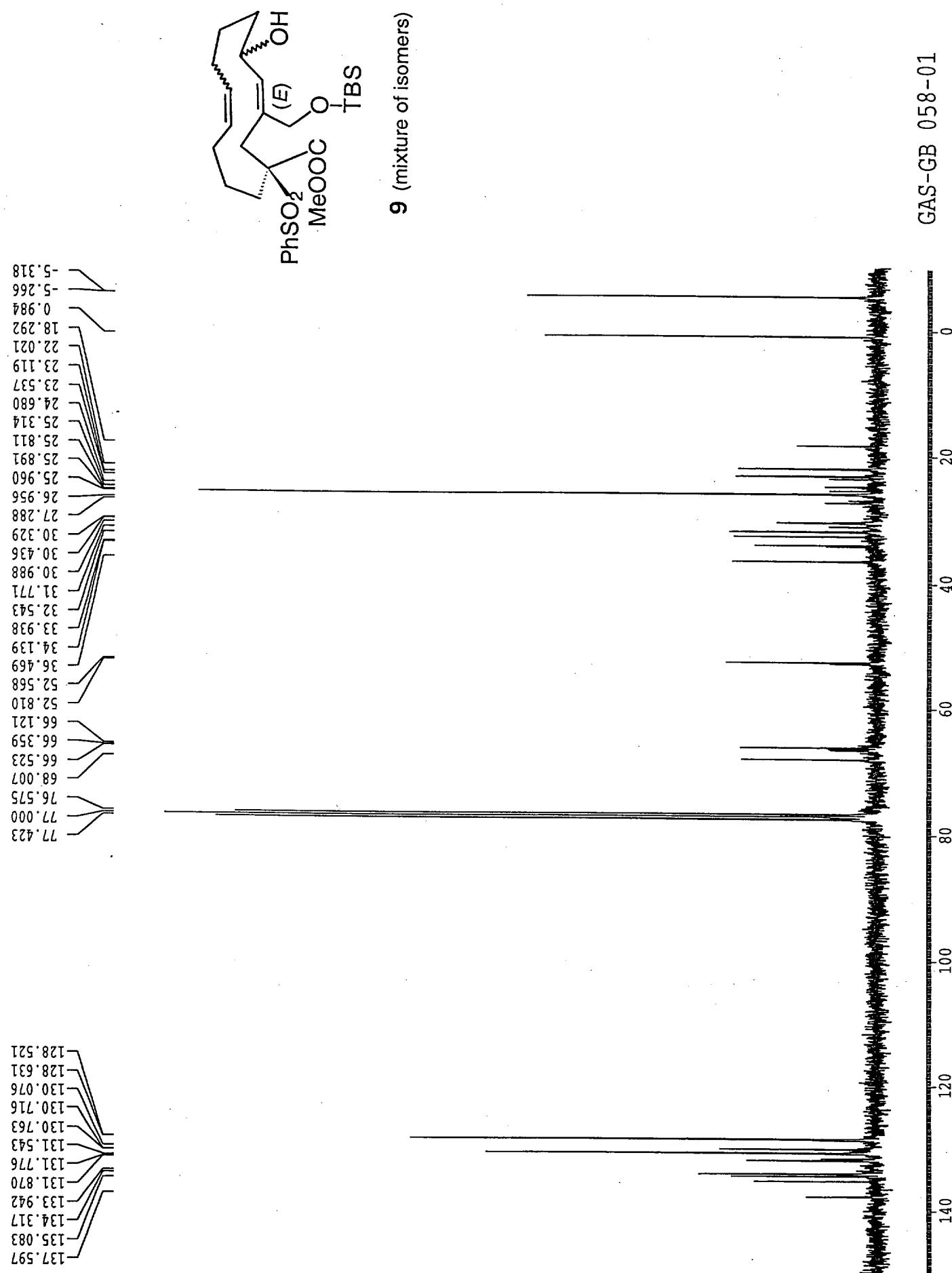
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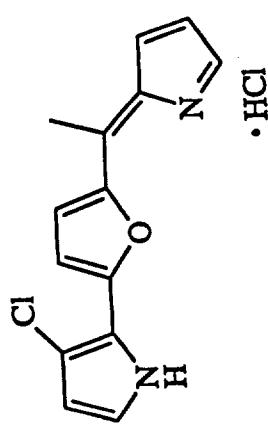




9 (mixture of isomers)





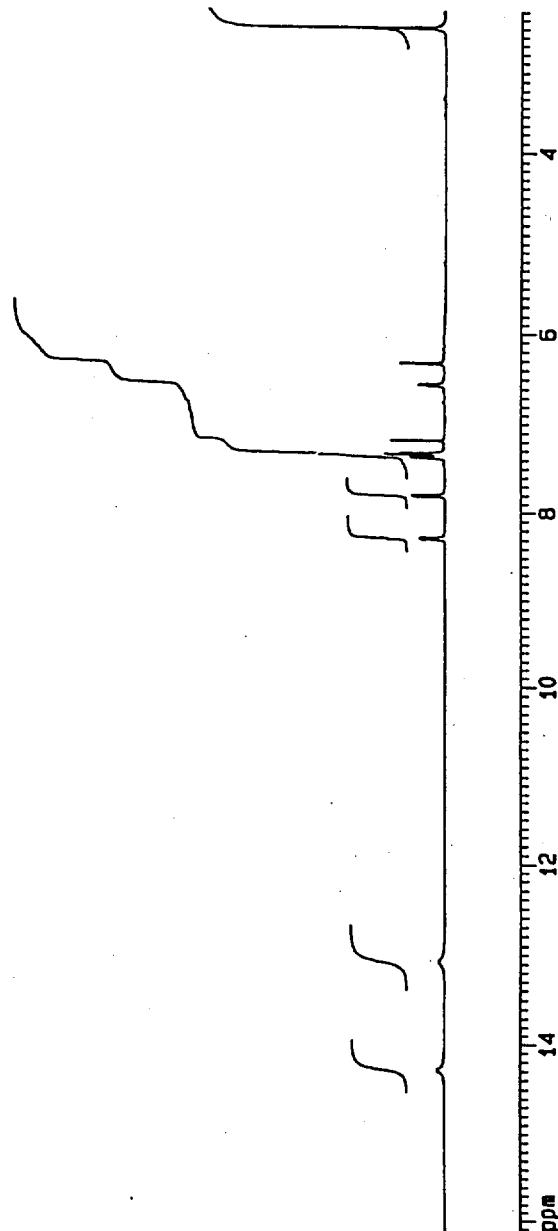


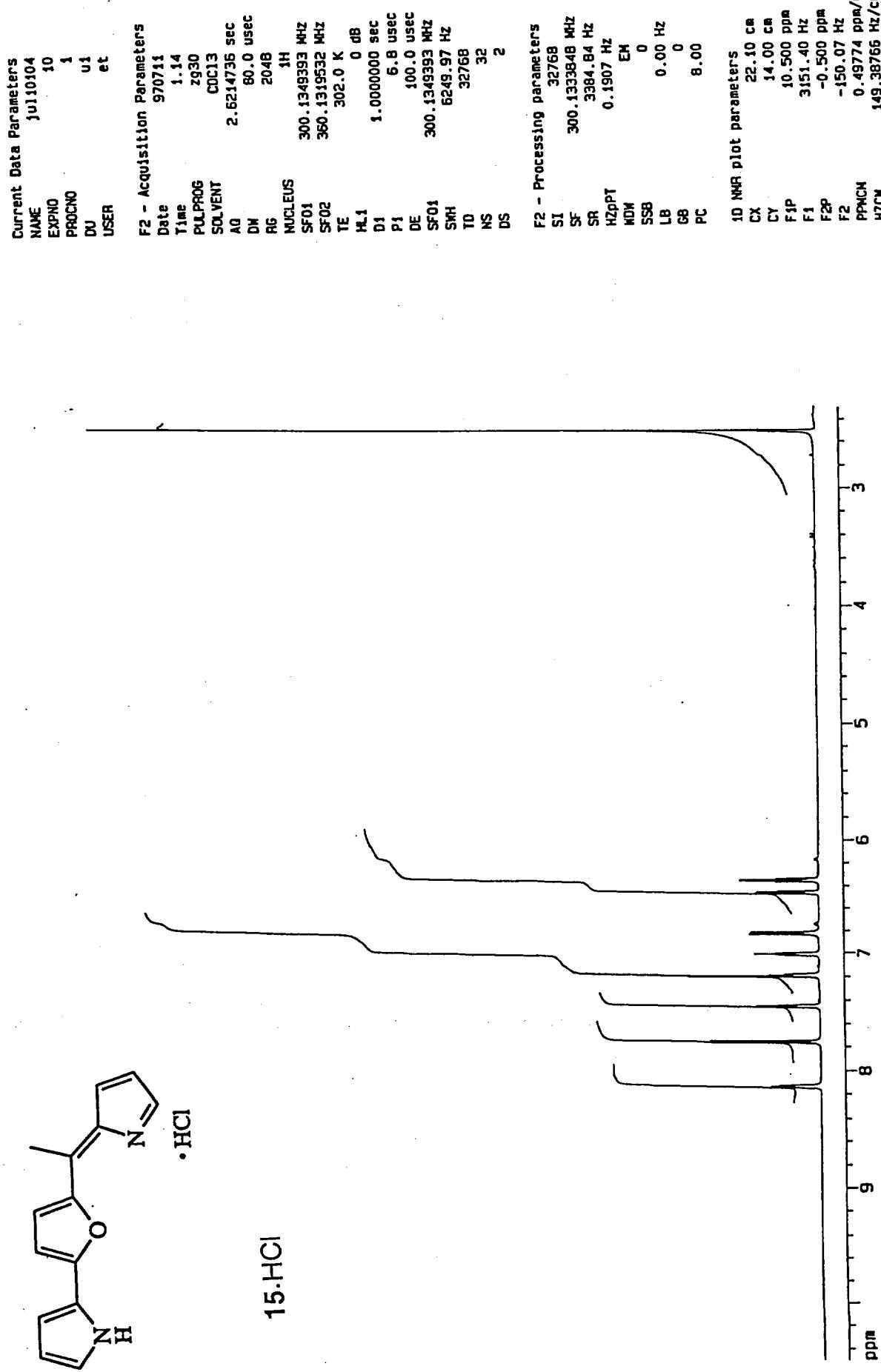
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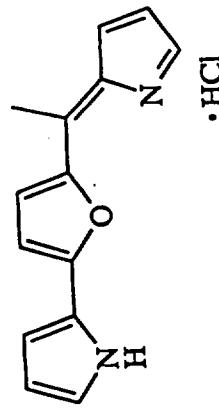
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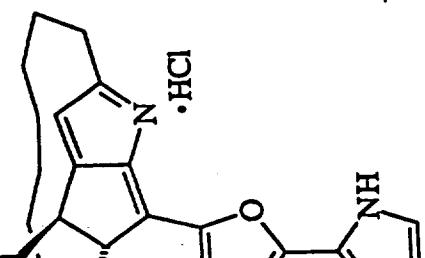
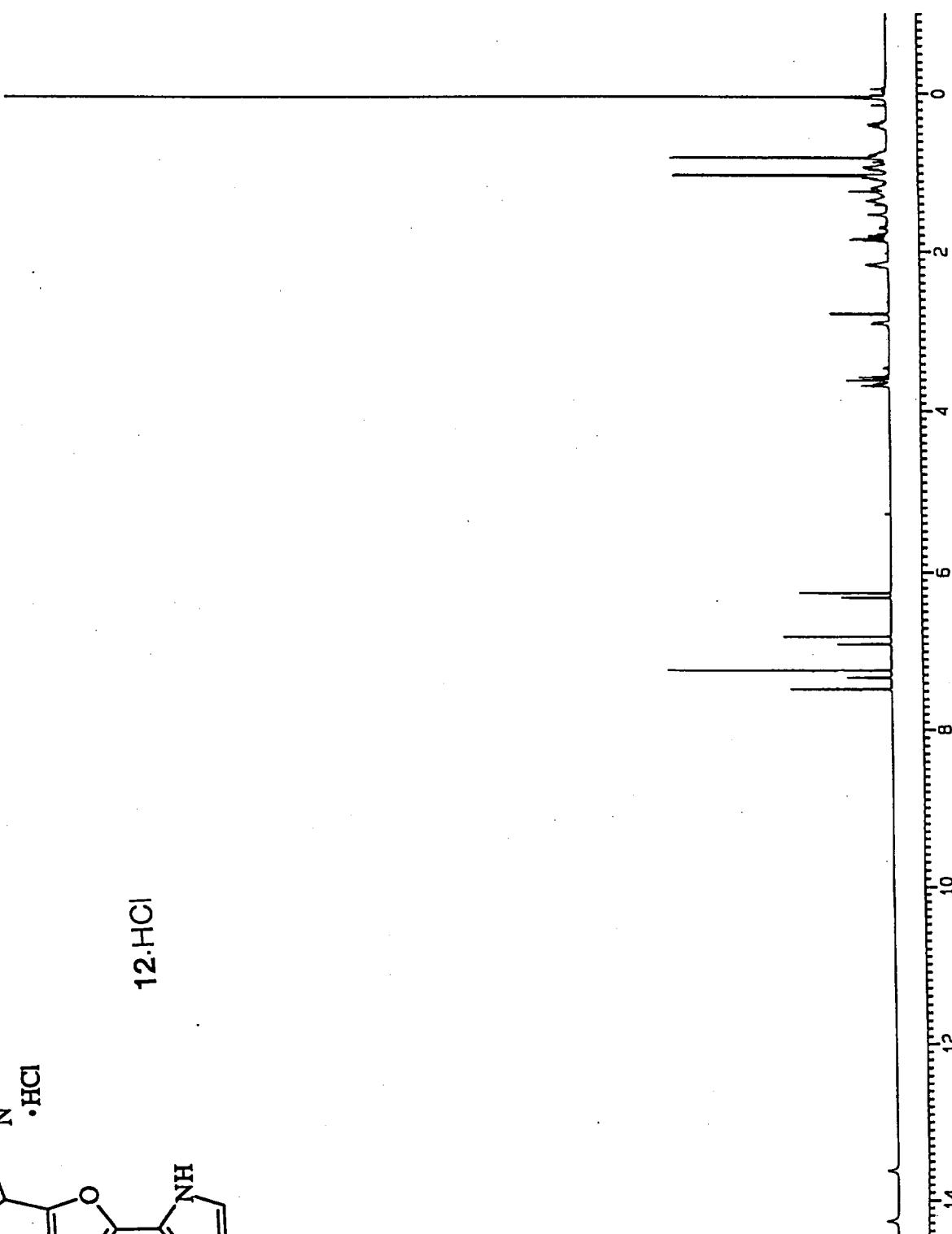


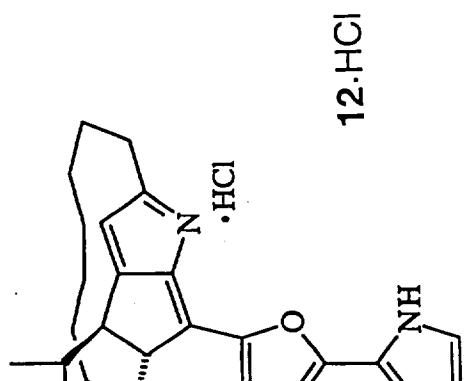
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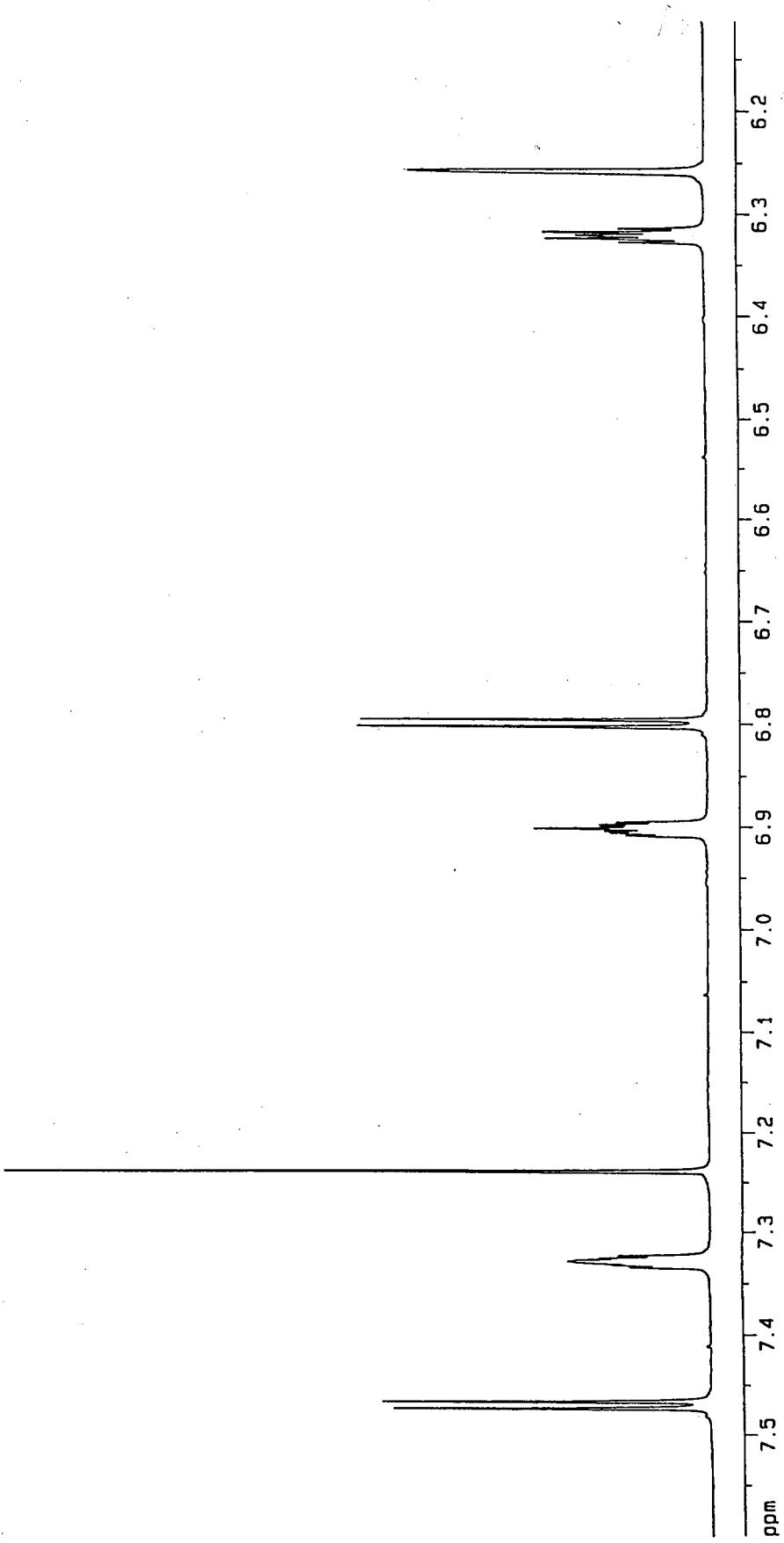
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12.



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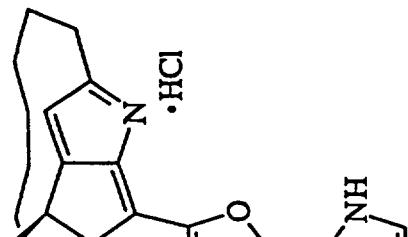
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