

## SUPPLEMENTARY INFORMATION

### Phytochemistry of *Verbascum* species growing in Iraqi Kurdistan and Bioactive Iridoids from the Flowers of *Verbascum calvum*

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#### NMR spectra of aucubin (43)

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#### NMR spectra of ajugol (42)

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#### Tumor cell viability test (MTS assay) of residues B'

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V. calvum fl. n.7 in methanol 111 del 31-01-2012

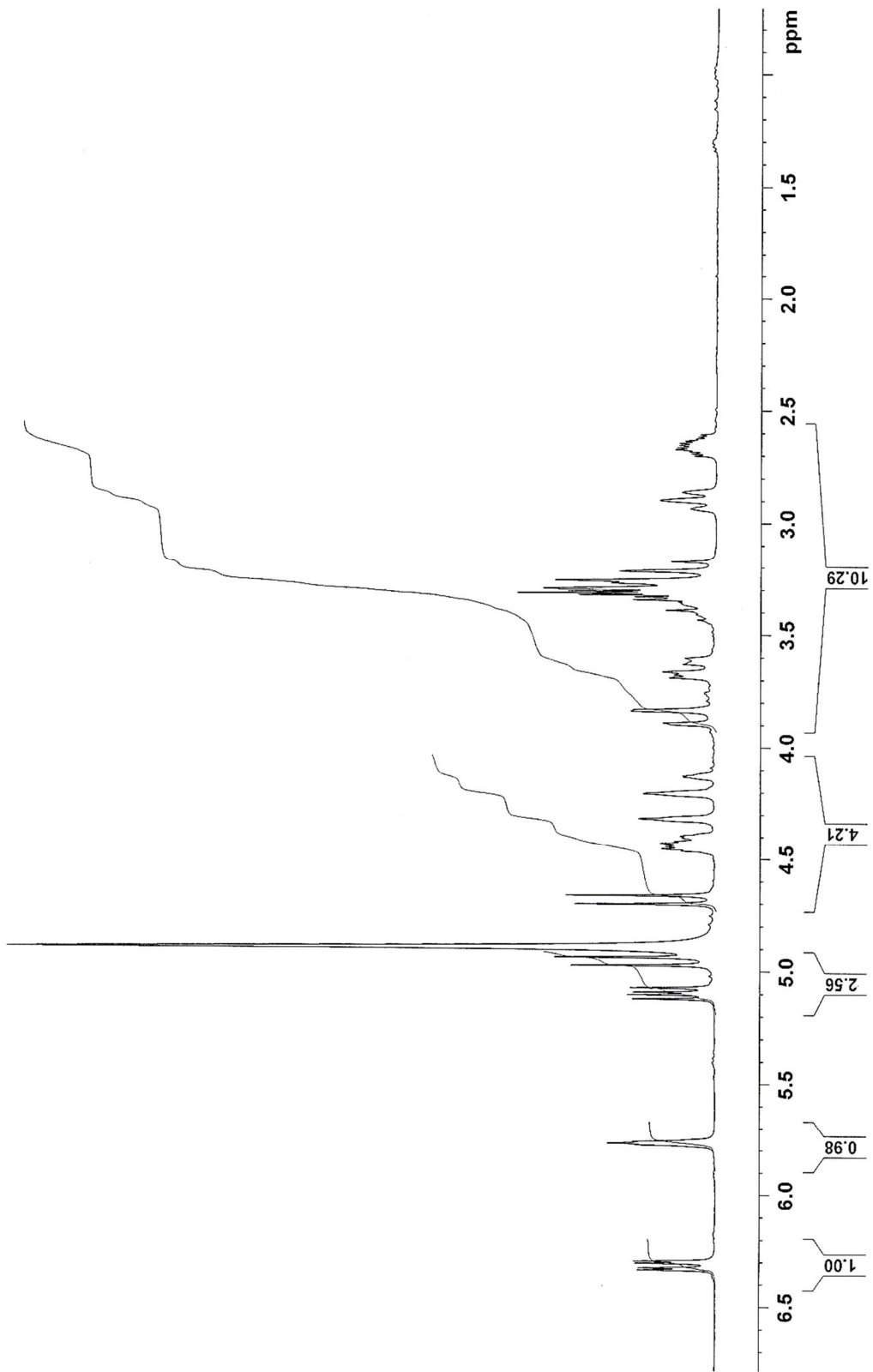


Figure 1S. <sup>1</sup>H-NMR spectrum (200 MHz) of aucubin (in CD<sub>3</sub>OD).

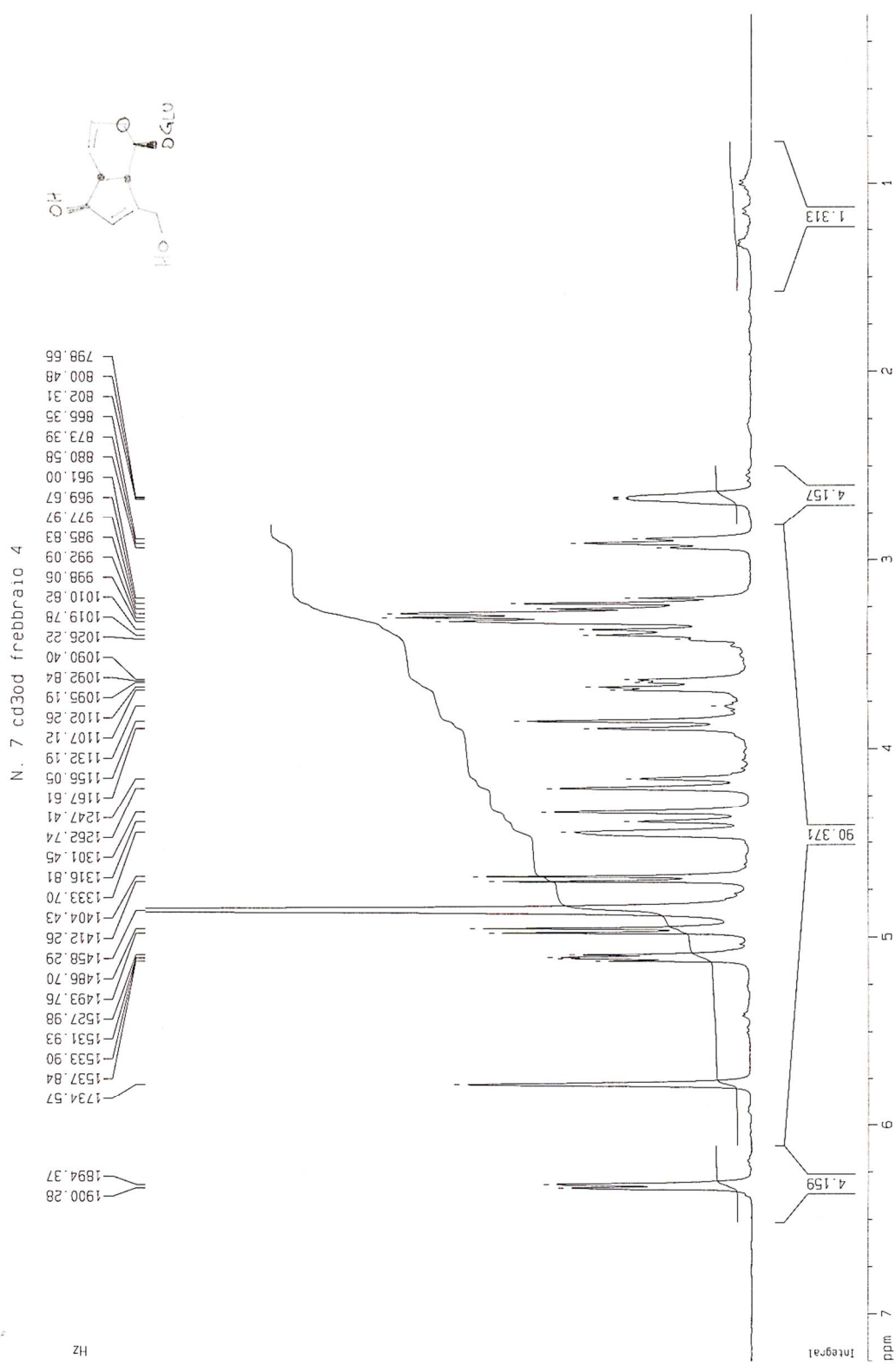


Figure 2S. <sup>1</sup>H-NMR spectrum (300 MHz) of aucubin (in CD<sub>3</sub>OD).

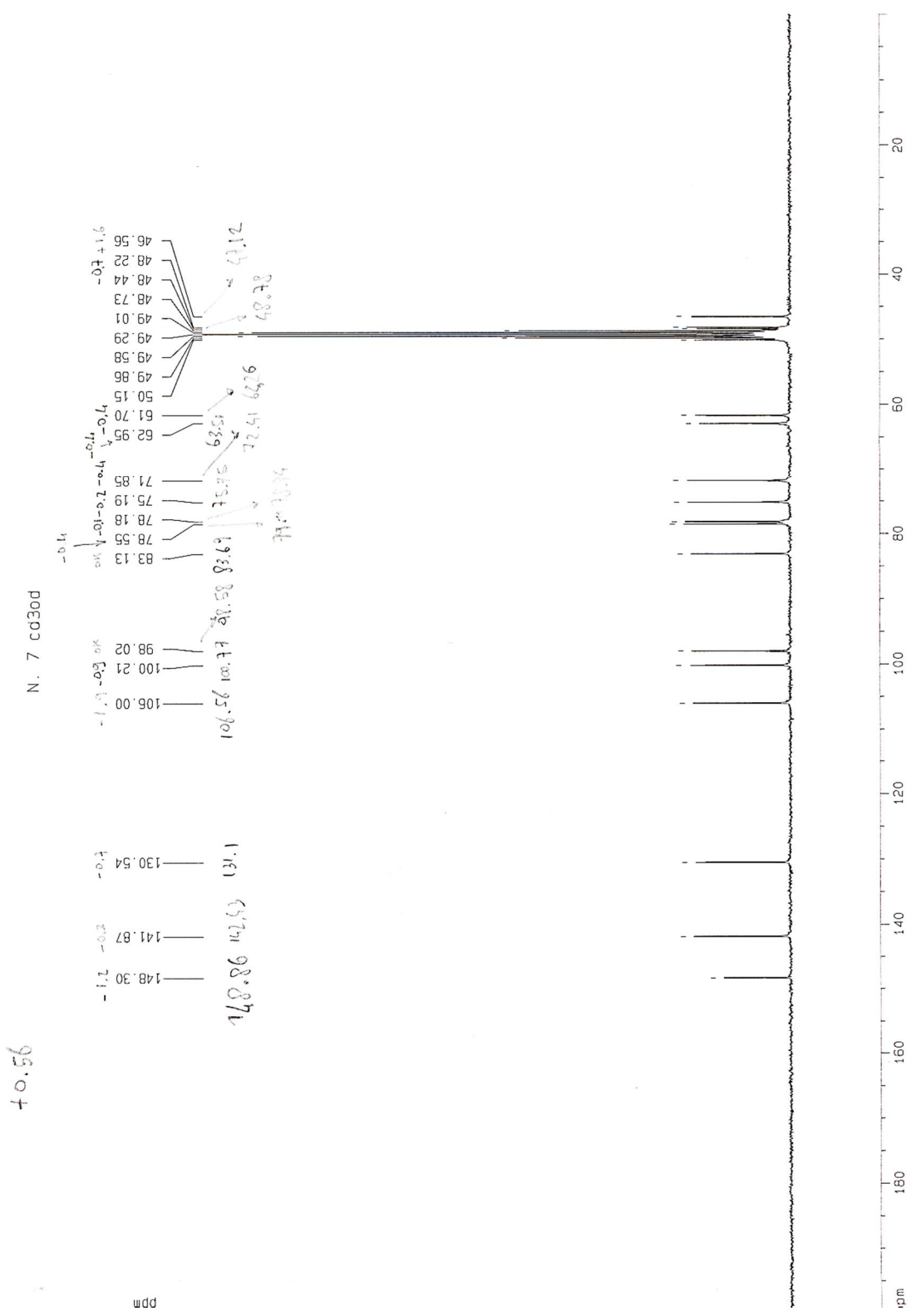


Figure 3S. <sup>13</sup>C-NMR spectrum (75 MHz) of aucubin (in CD<sub>3</sub>OD).

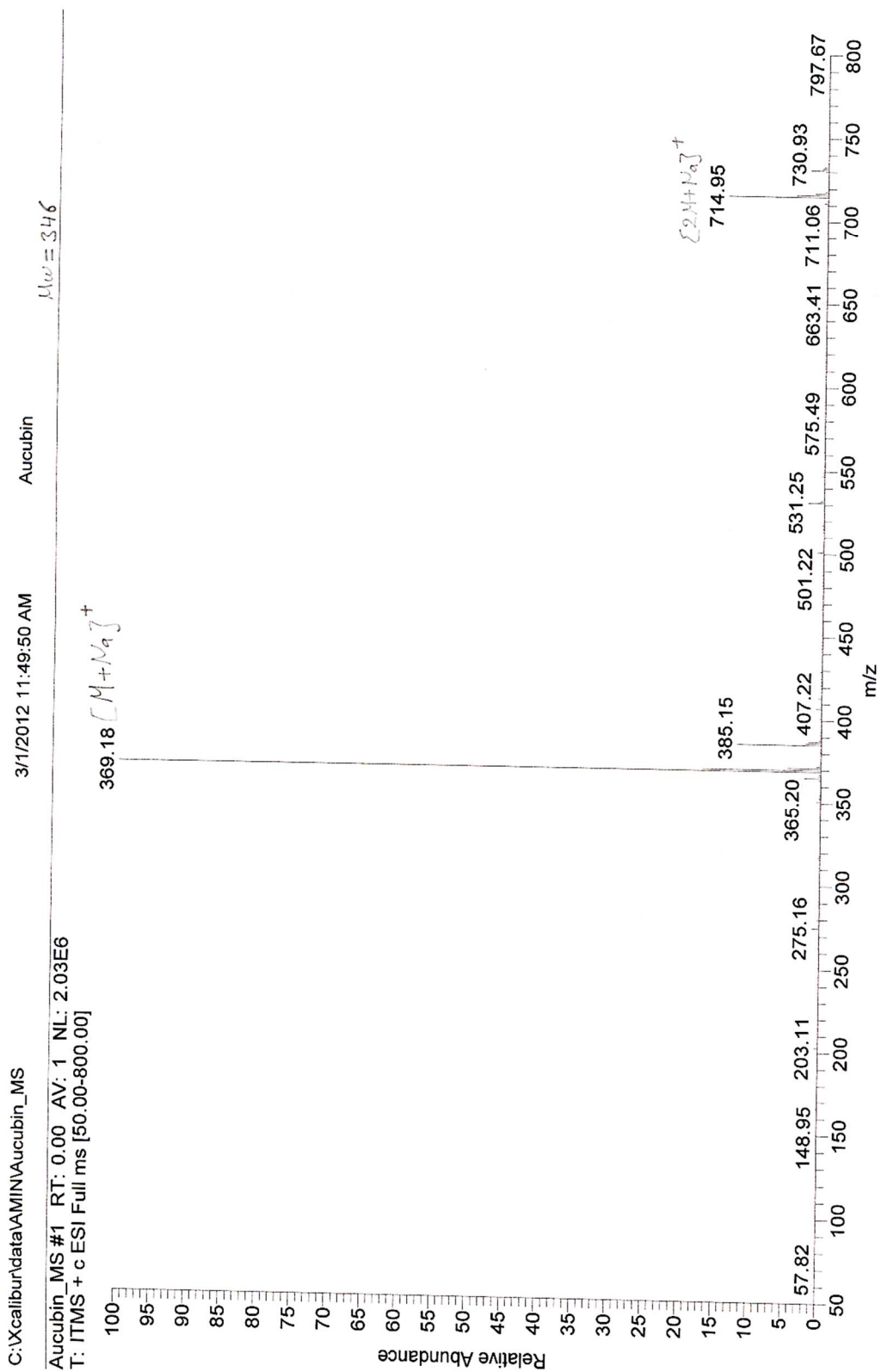


Figure 4S. LC-MS of aucubin in methanol.

V. calvum fl. n.7 in methanol 111 del 31-01-2012

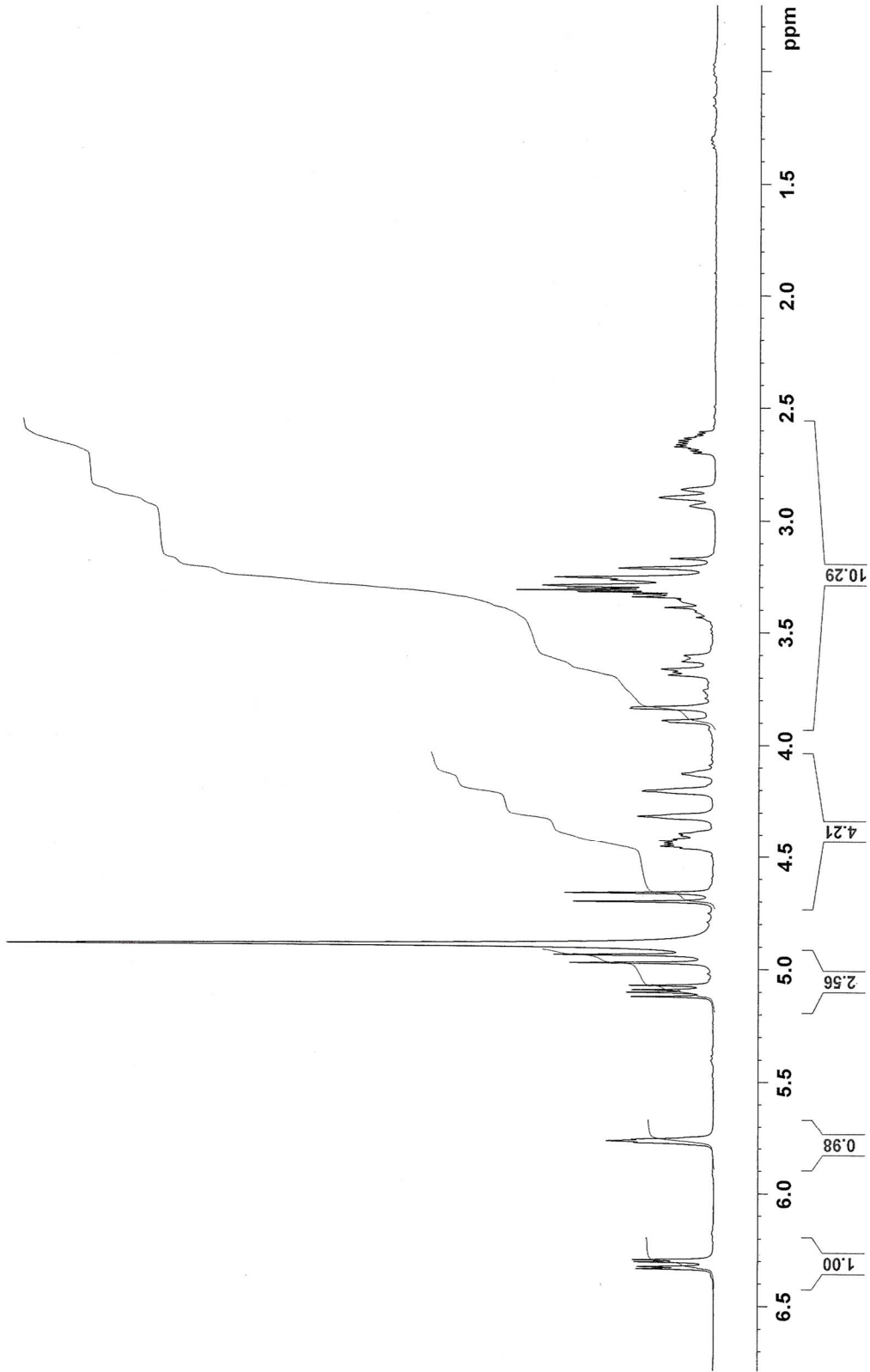


Figure 5S. <sup>1</sup>H-NMR spectrum (200 MHz) of ajugol (in CD<sub>3</sub>OD).

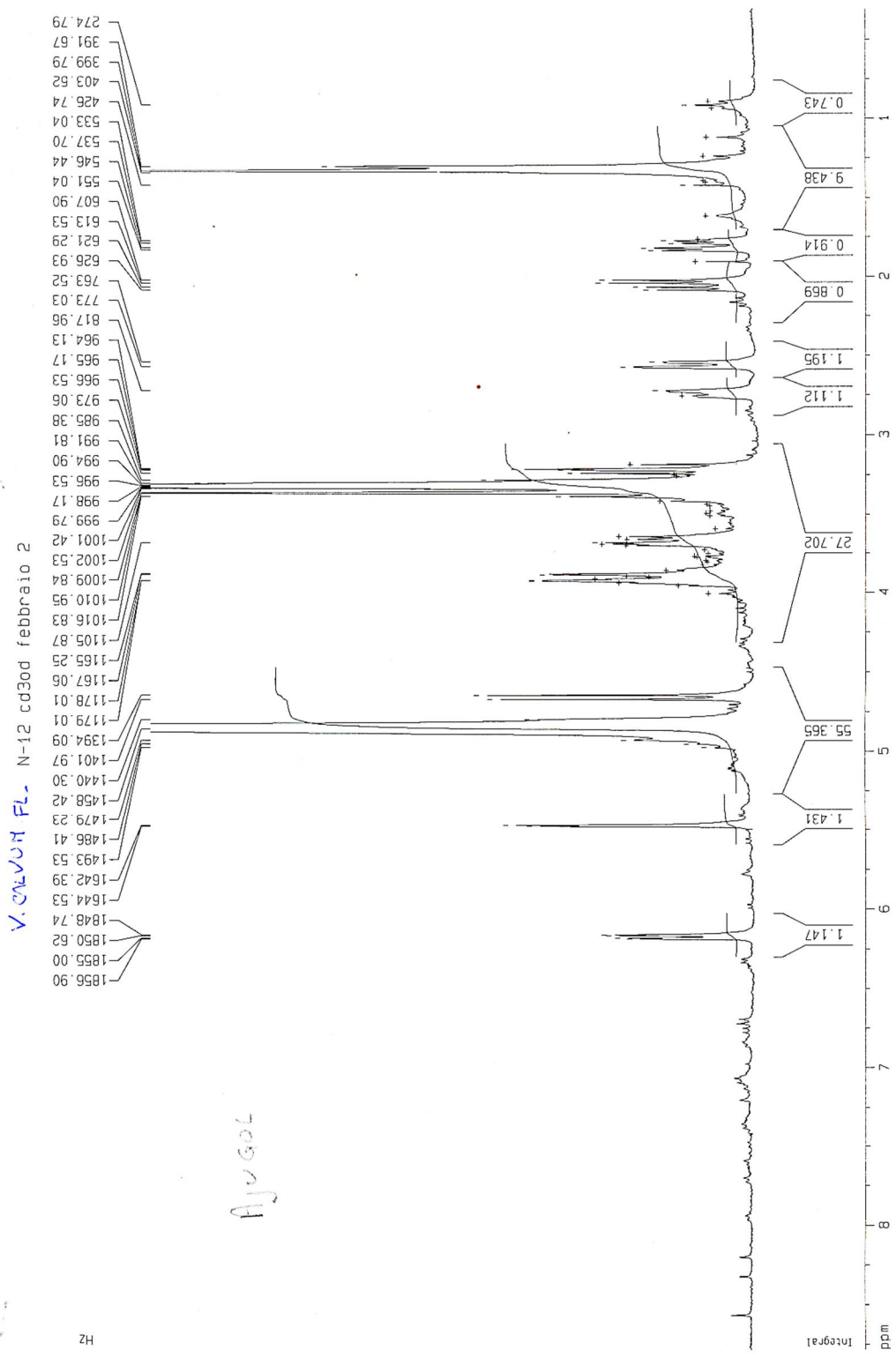


Figure 6S. <sup>1</sup>H-NMR spectrum (300 MHz) of ajugol (in CD<sub>3</sub>OD).

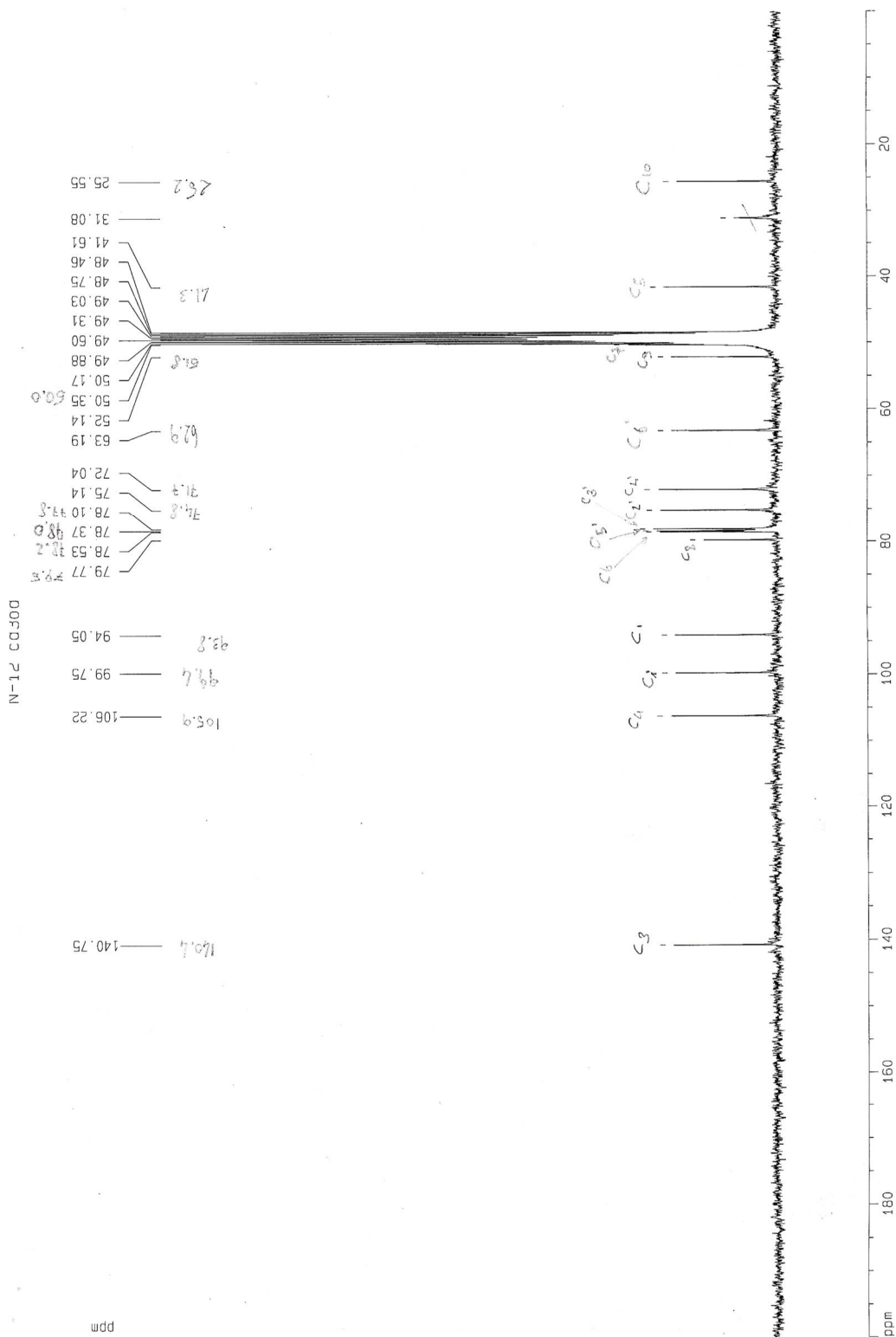
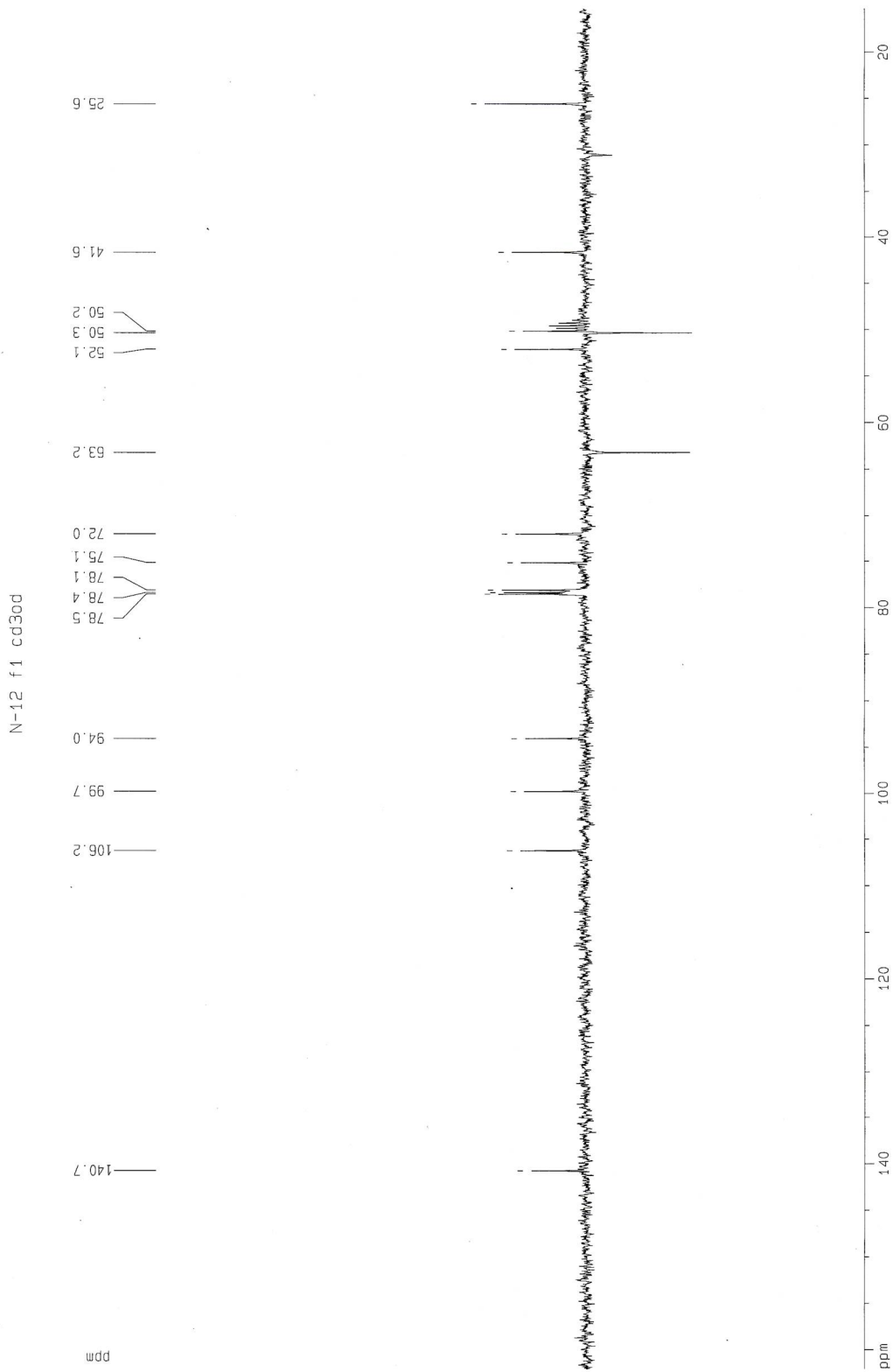


Figure 7S. <sup>13</sup>C-NMR spectrum (75 MHz) of ajujol in (CD<sub>3</sub>OD).





**Figure 8S.** DEPT spectrum (75 MHz) of ajugol in (CD<sub>3</sub>OD).

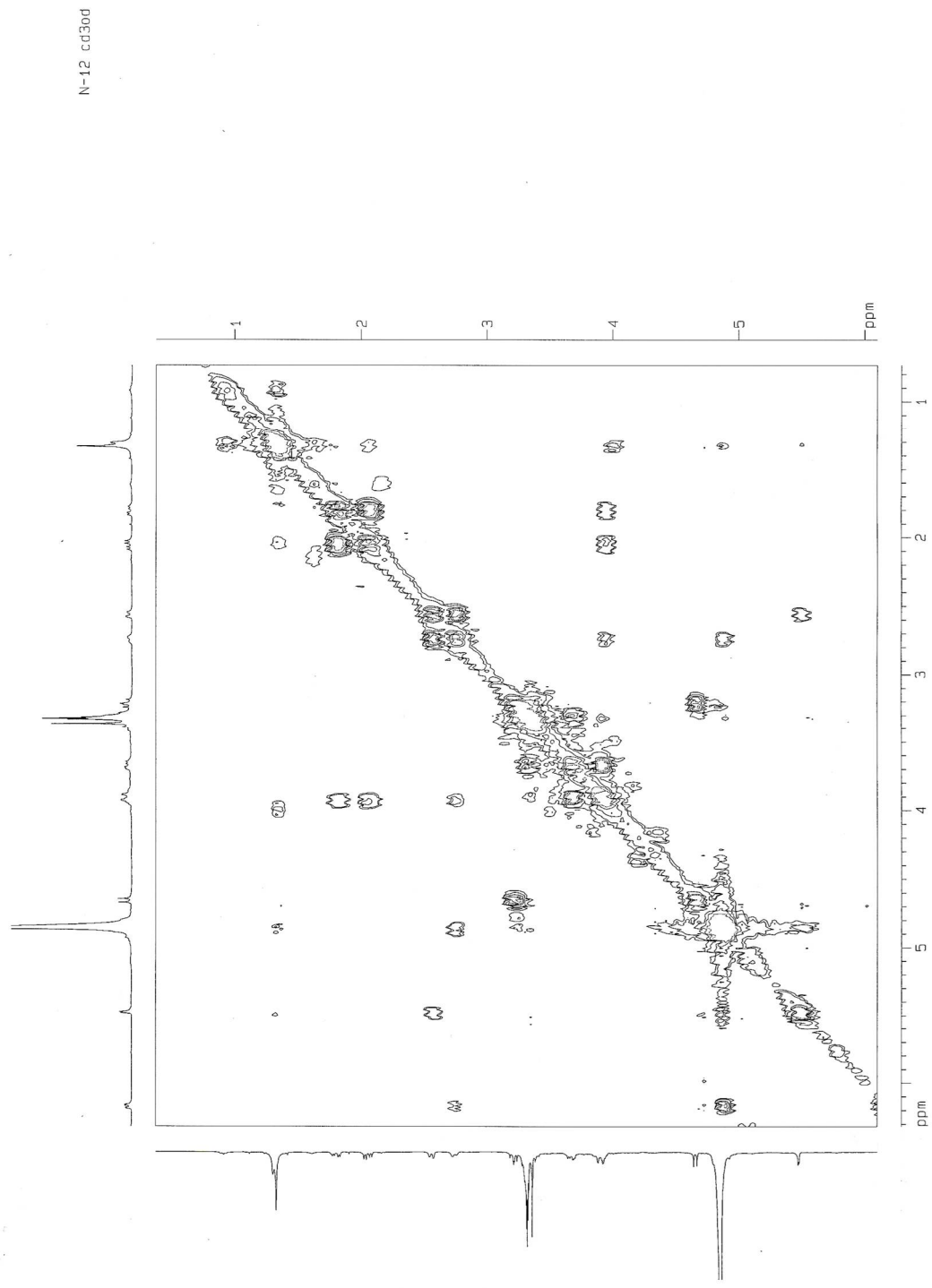


Figure 9S. COSY spectrum (300 MHz) of ajugol (in CD<sub>3</sub>OD).

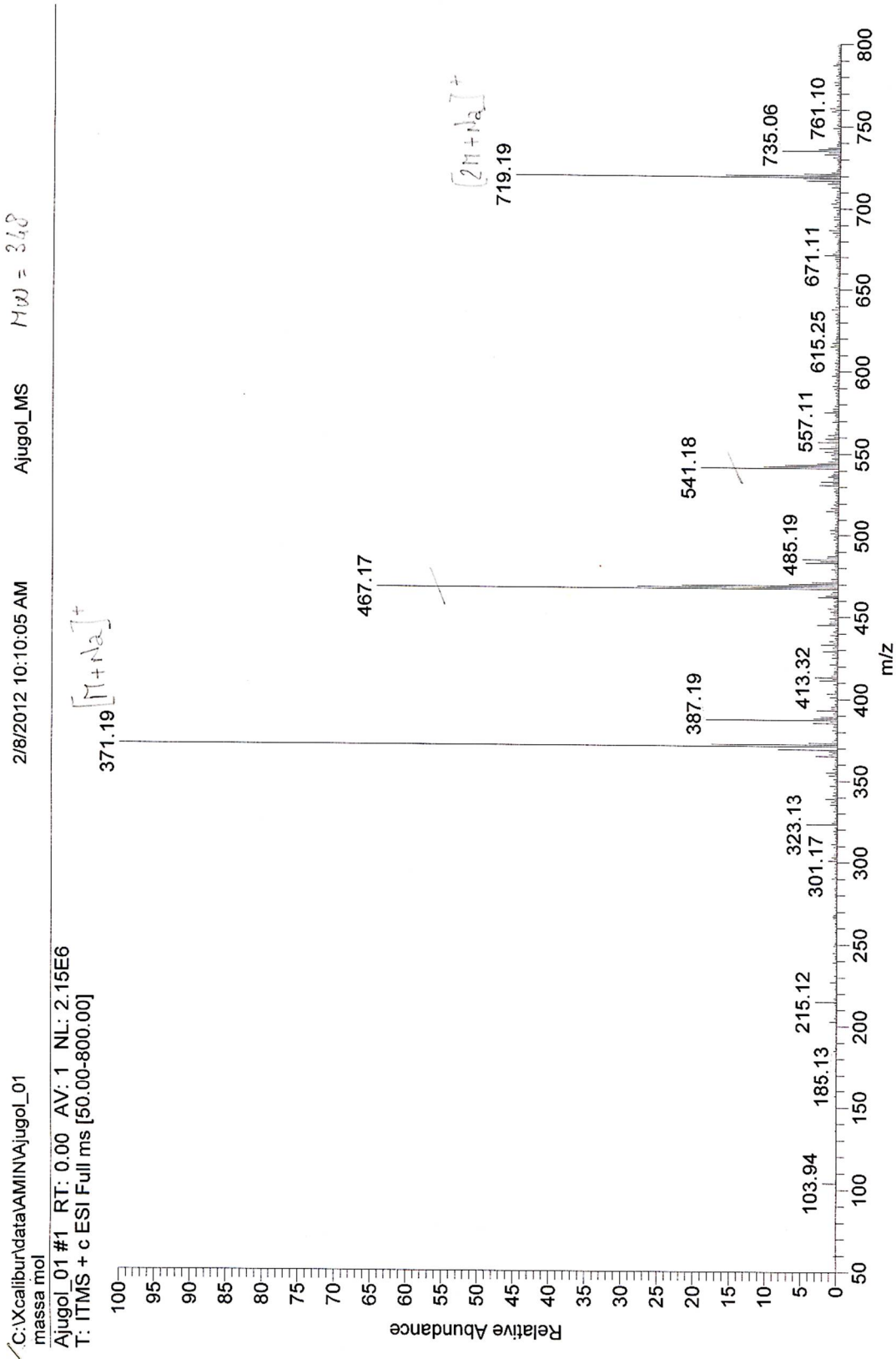
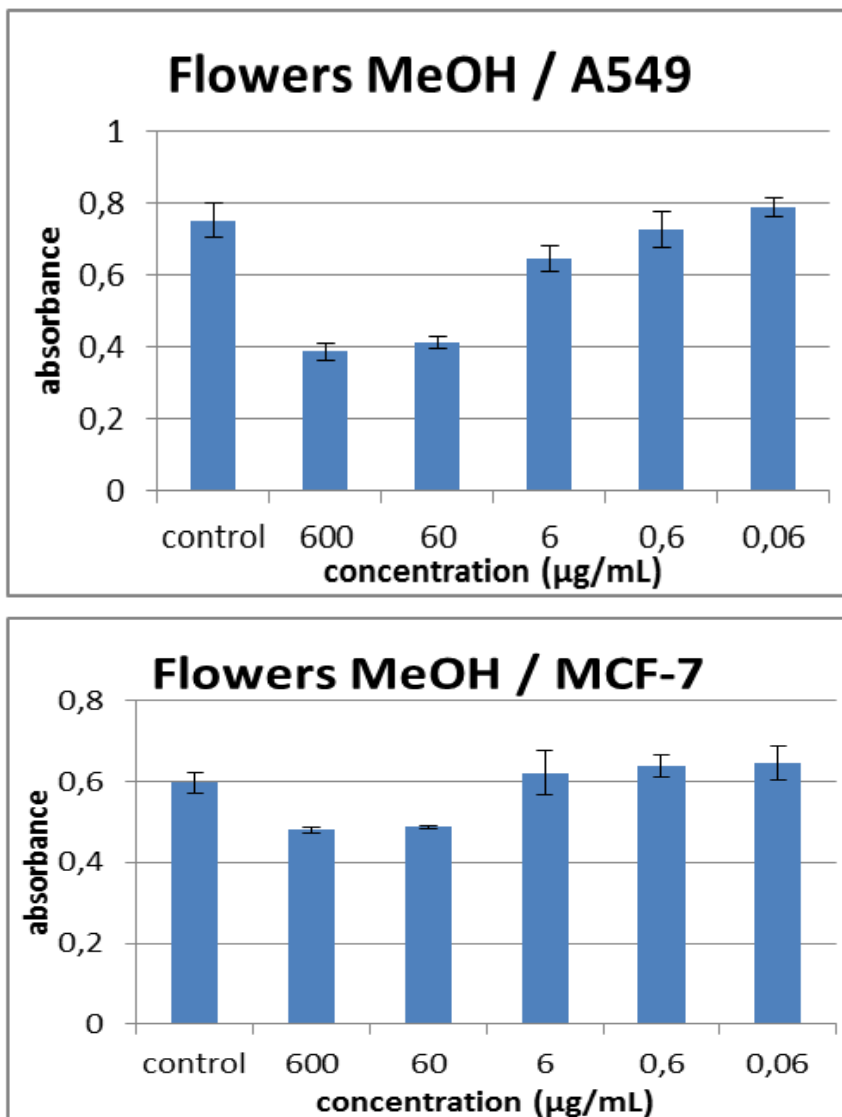


Figure 10S. LC-MS of ajugol in methanol.



**Figure 11S.** Antiproliferative activity of extract B' against A549 and MCF-7 tumor cell lines (MTS assay). The percentages of growth inhibition of tumor cells (treated with different concentration of extract B'), compared to the control, are calculated from the absorbances at 490 nm.