**Supplementary Information**

A Three-step Process to Isolate Large Quantities of Bioactive Sesquiterpene Lactones from *Cichorium intybus* L. Roots and Semi-synthesis of Chicory STLs Standards

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(3) Joint Laboratory University of Lille – Florimond-Desprez CHIC41Health, France

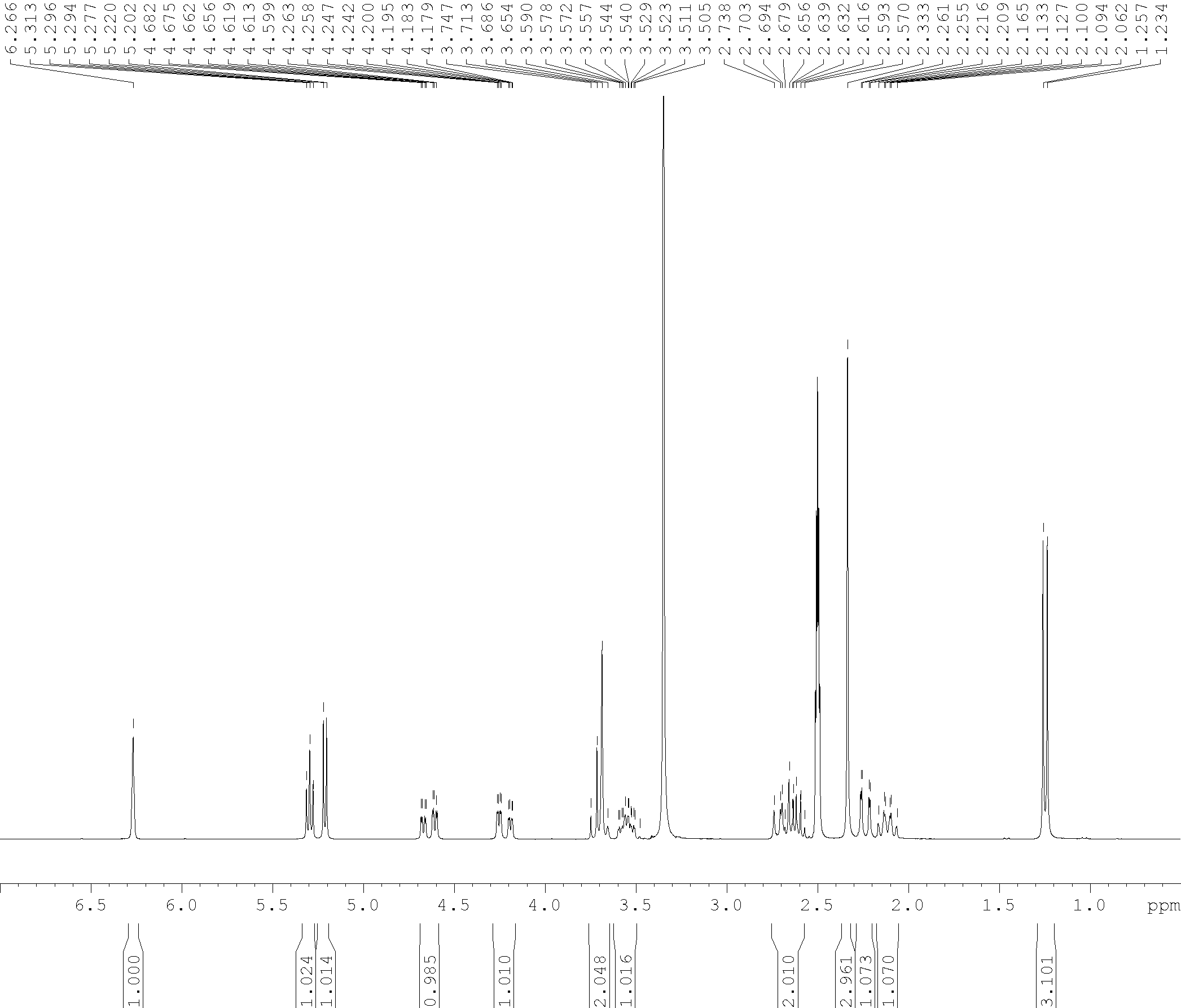
(4) Unité de Catalyse et de Chimie du Solide (UCCS), Université de Lille, CNRS, Centrale Lille, Université d’Artois, UMR 8181—UCCS, F-59000 Lille, France

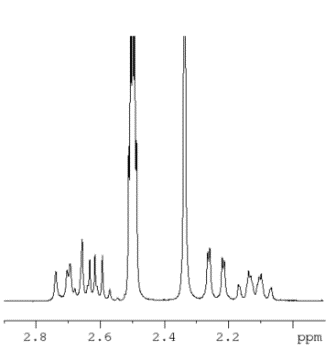
Correspondence: philippe.hance@univ-lille.fr

† These authors contributed equally to this work.

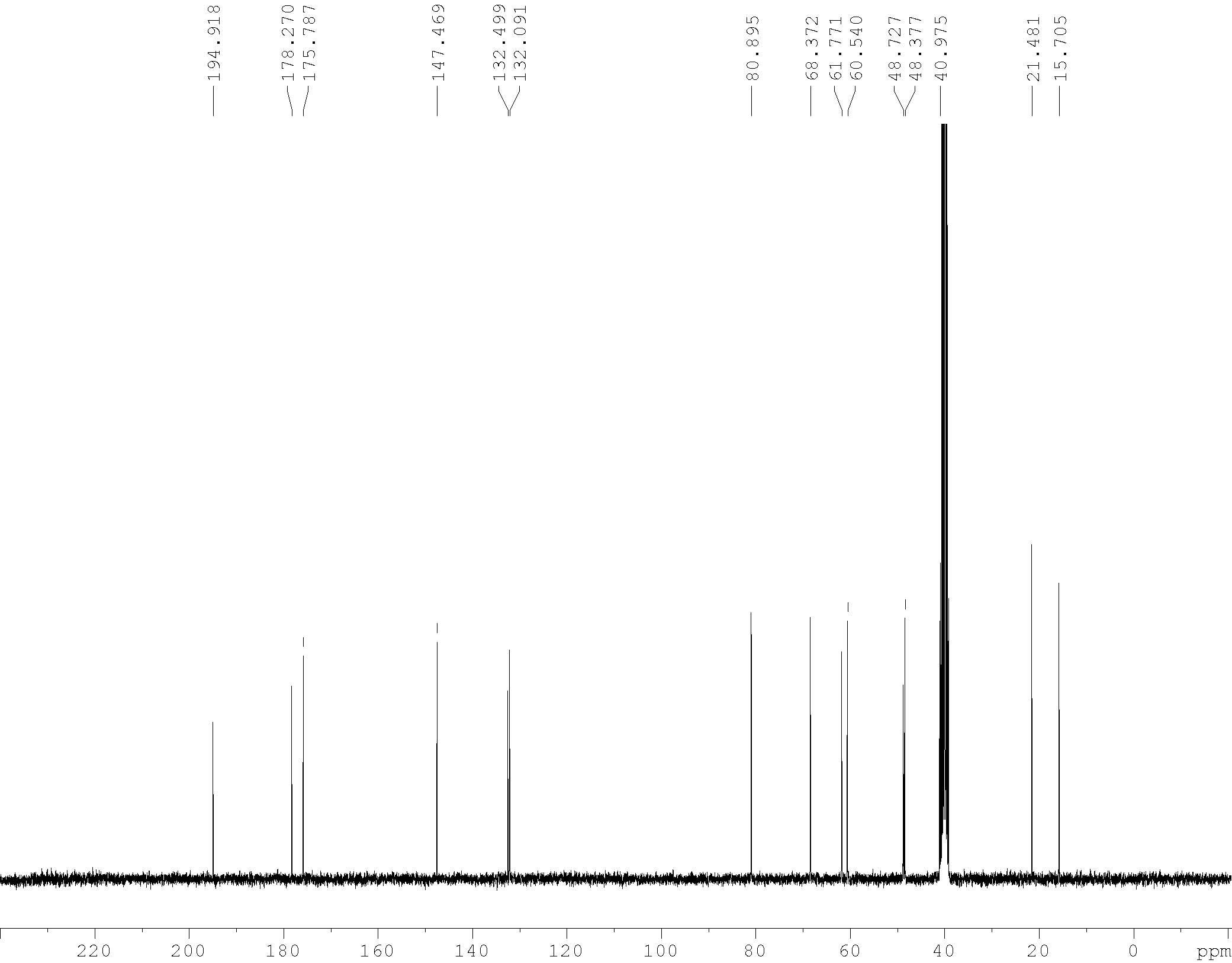
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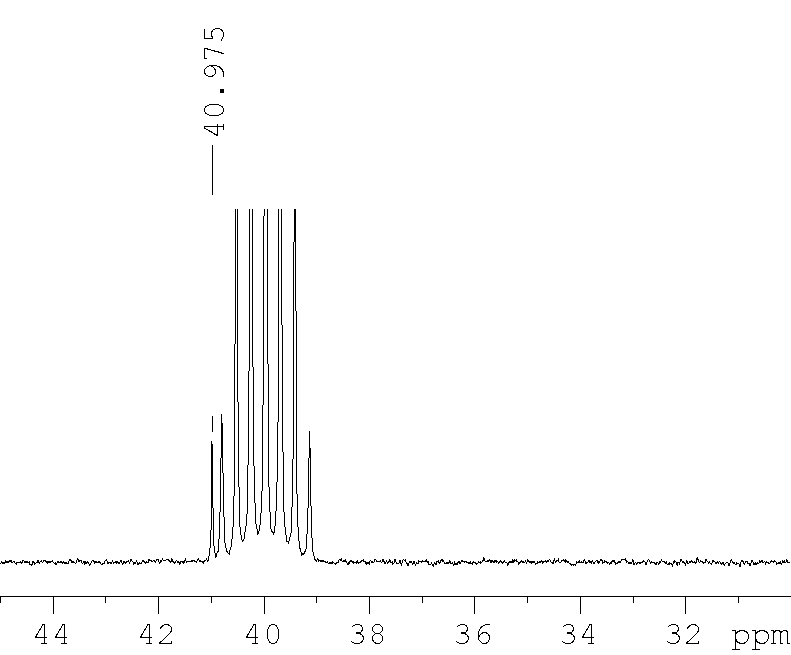
**11β,13-dihydrolactucin (DHLc)**,1H NMR (300 MHz, DMSO)

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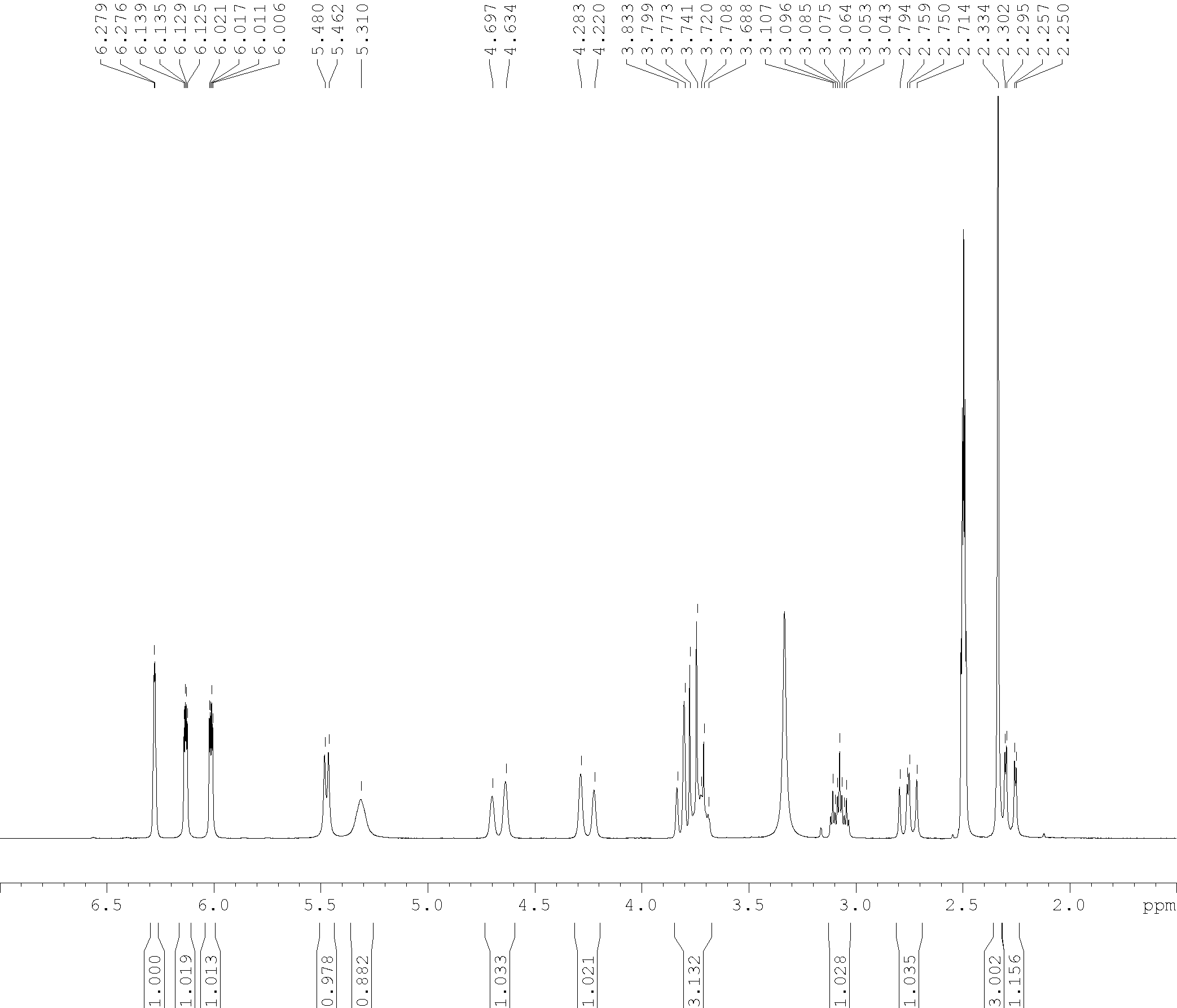
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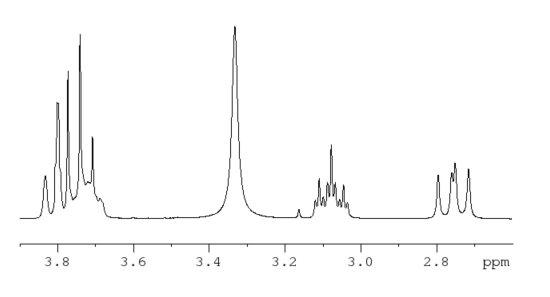
**11β,13-dihydrolactucin (DHLc)**, 13C NMR (75 MHz, DMSO)

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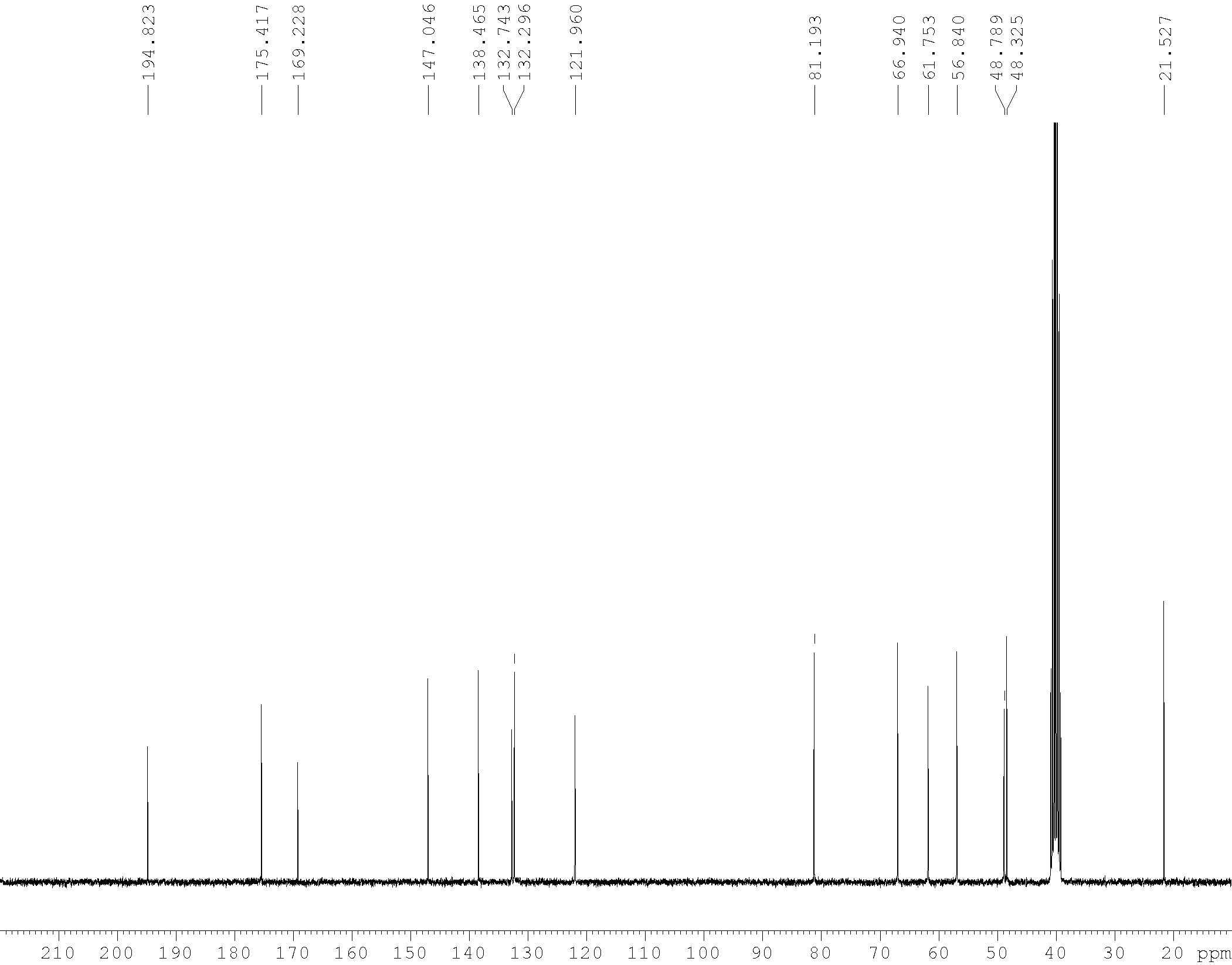
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**Lactucin (Lc)**,1H NMR (300 MHz, DMSO)

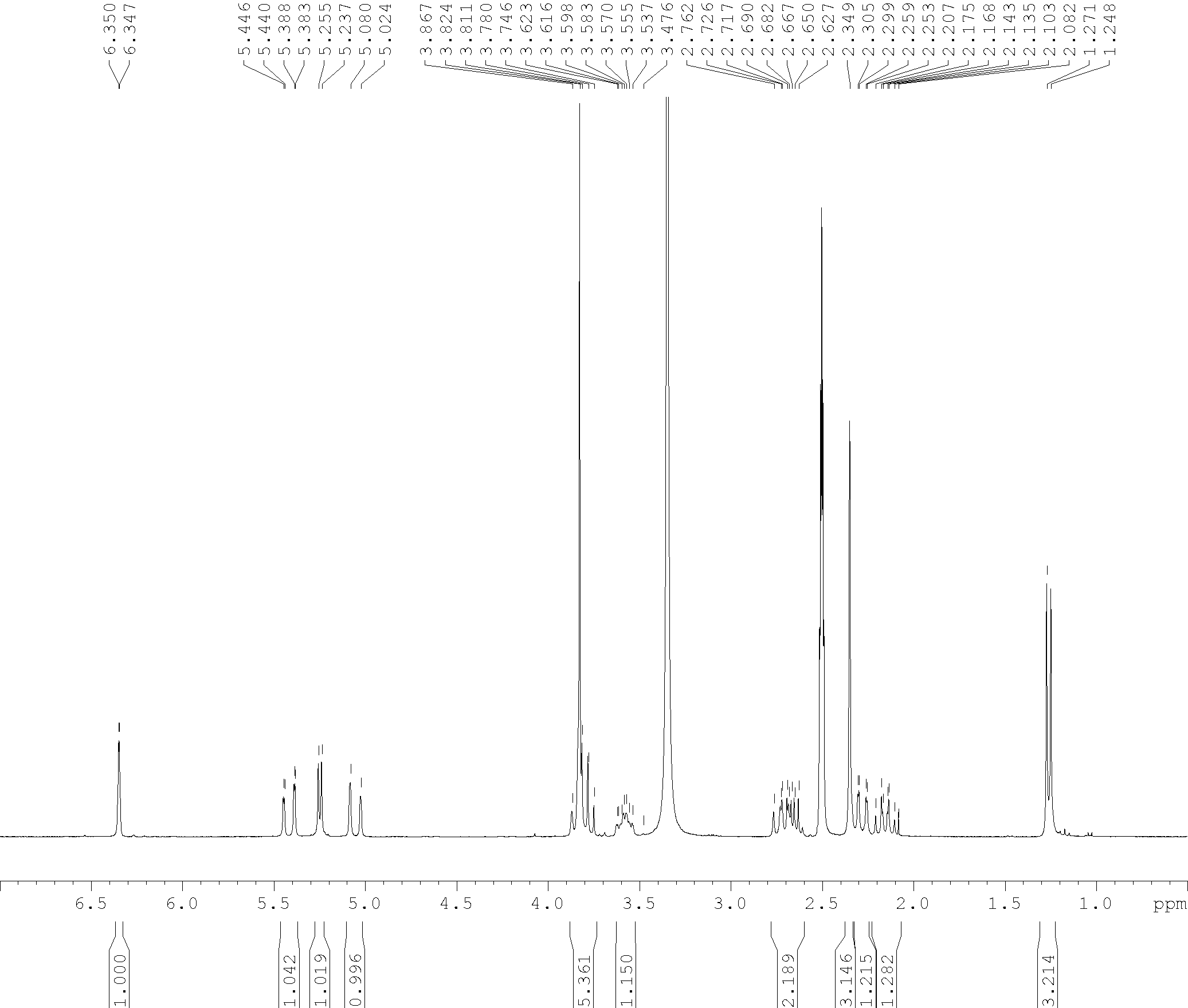
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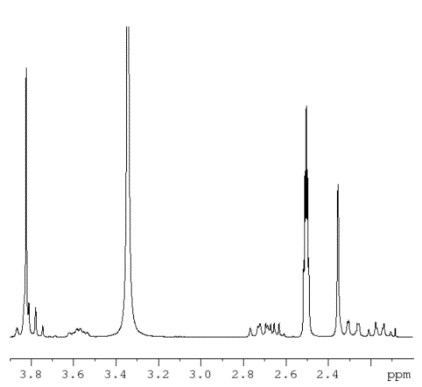
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**Lactucin (DHLc)**,13C NMR (75 MHz, DMSO)

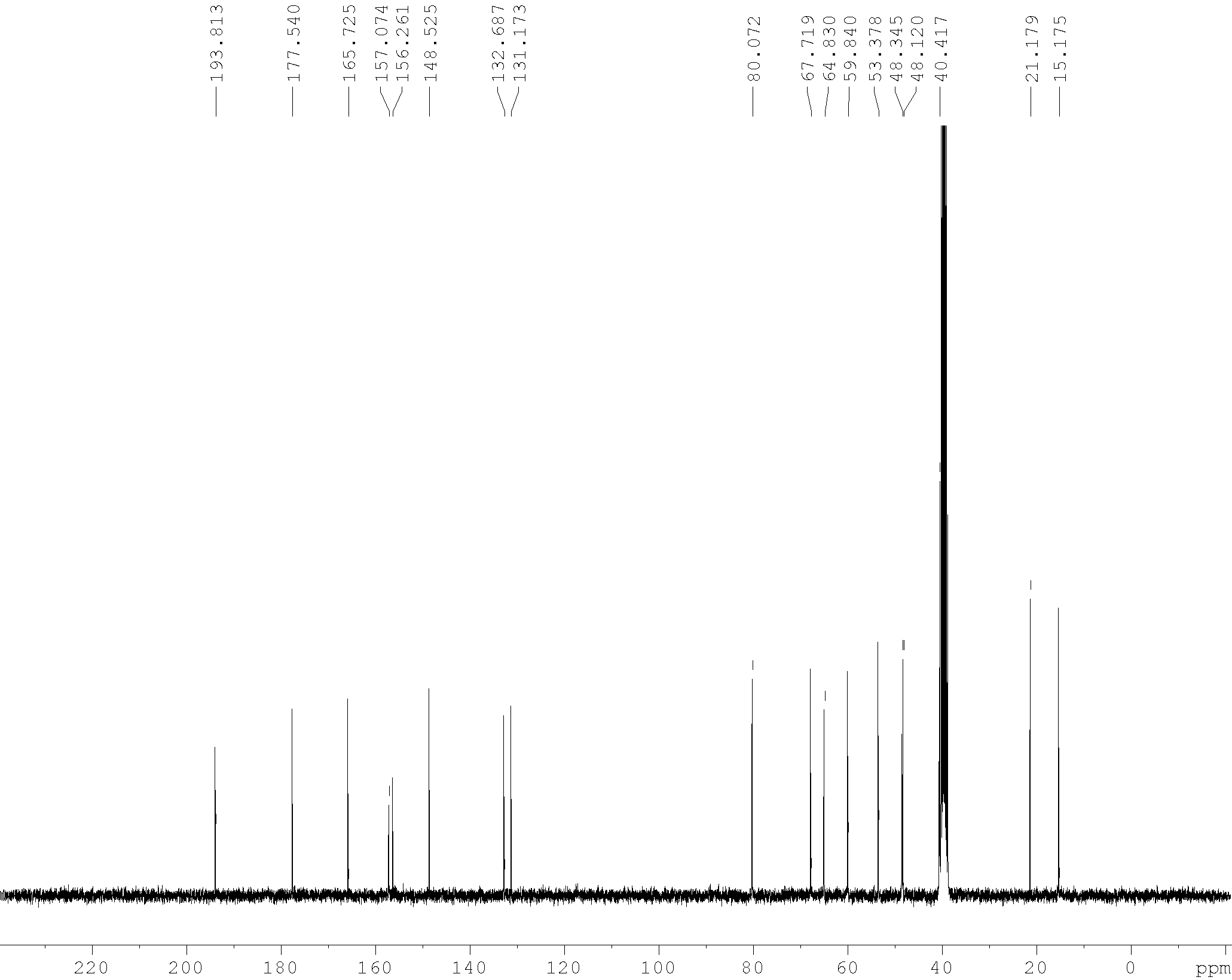
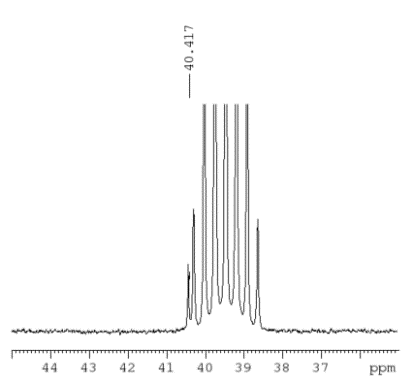
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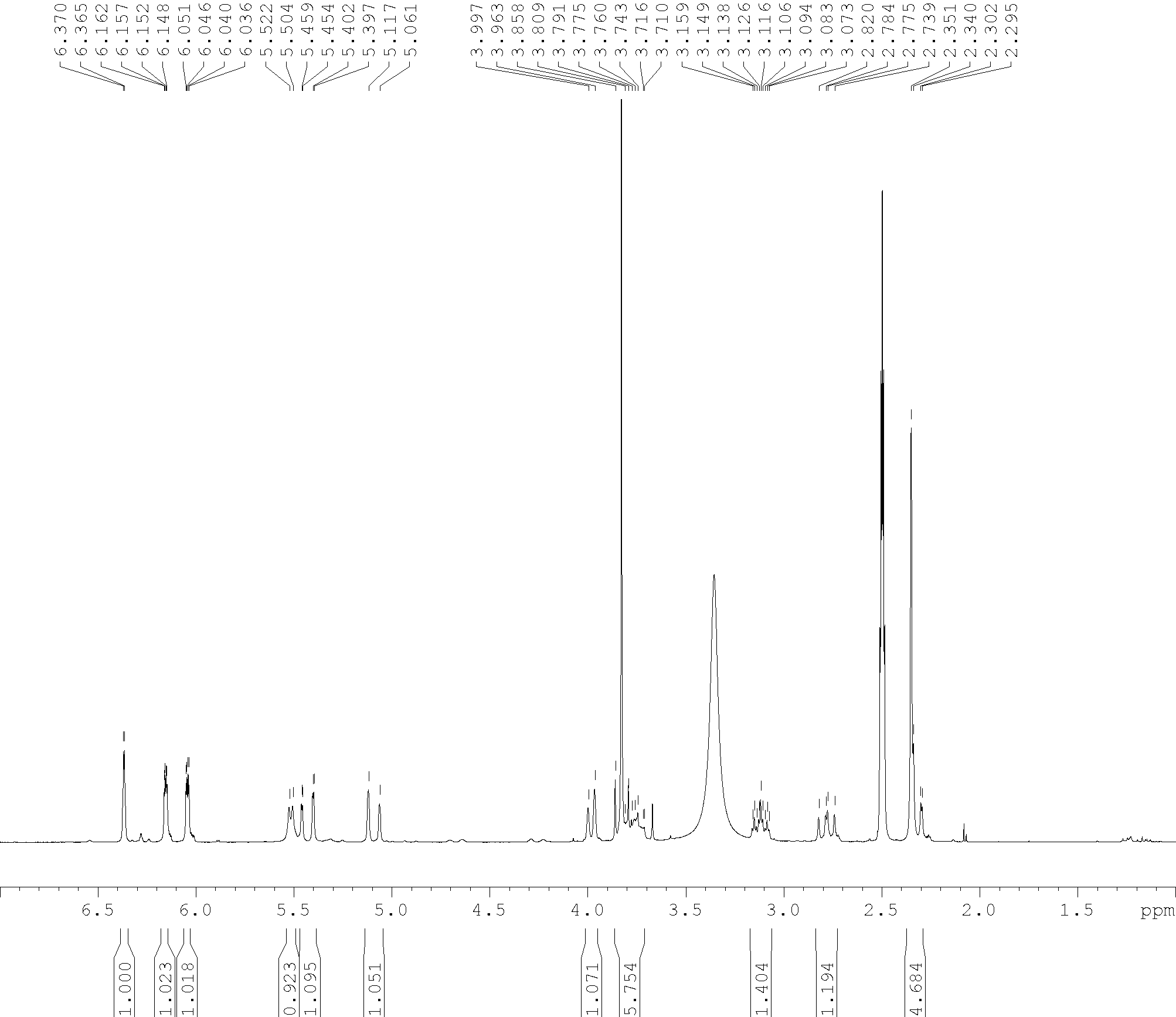
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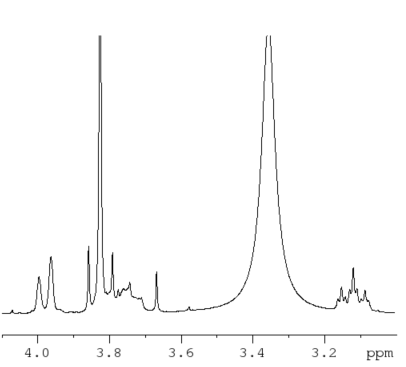
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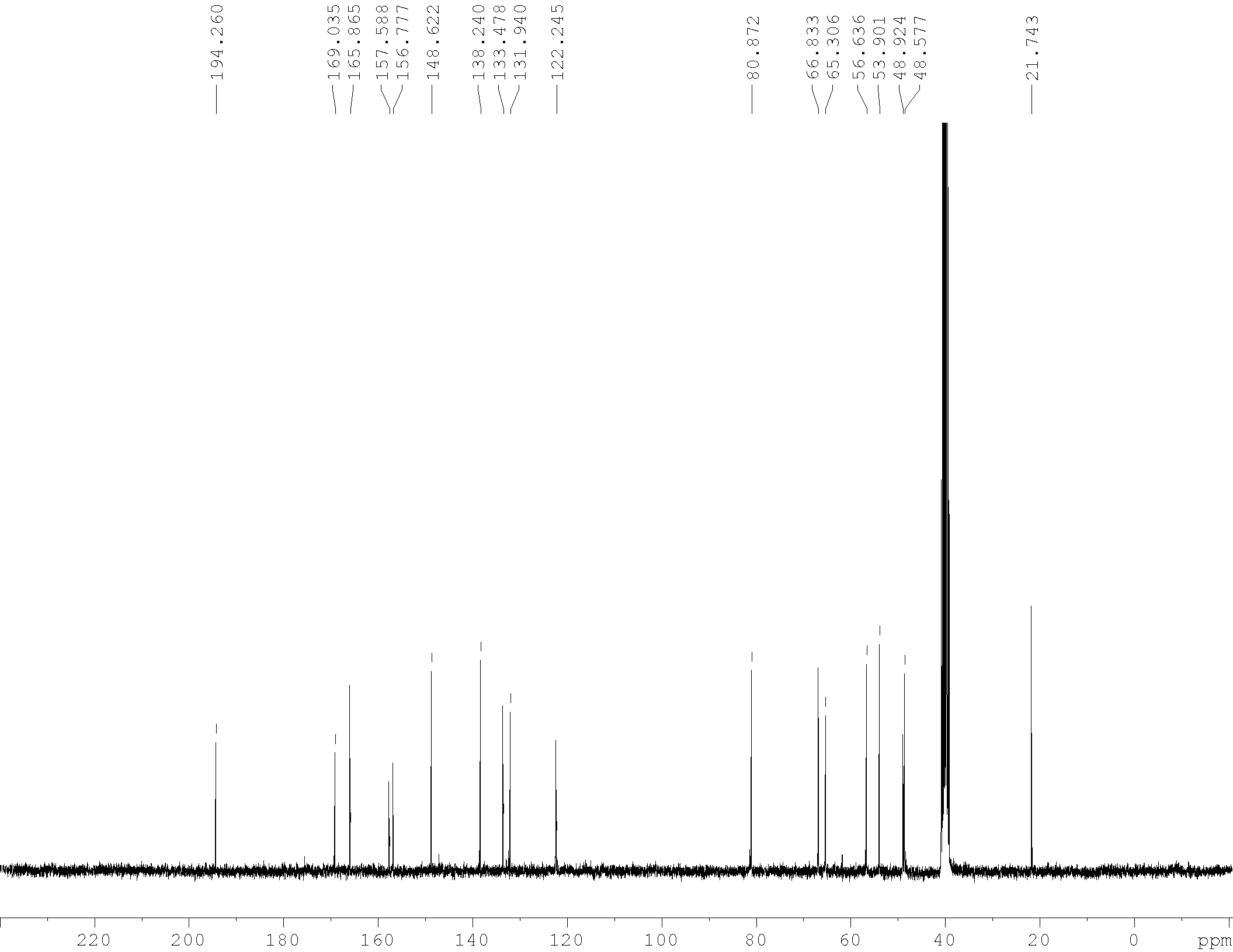
**DHLc-Me-oxalate**,13C NMR (75 MHz, DMSO)

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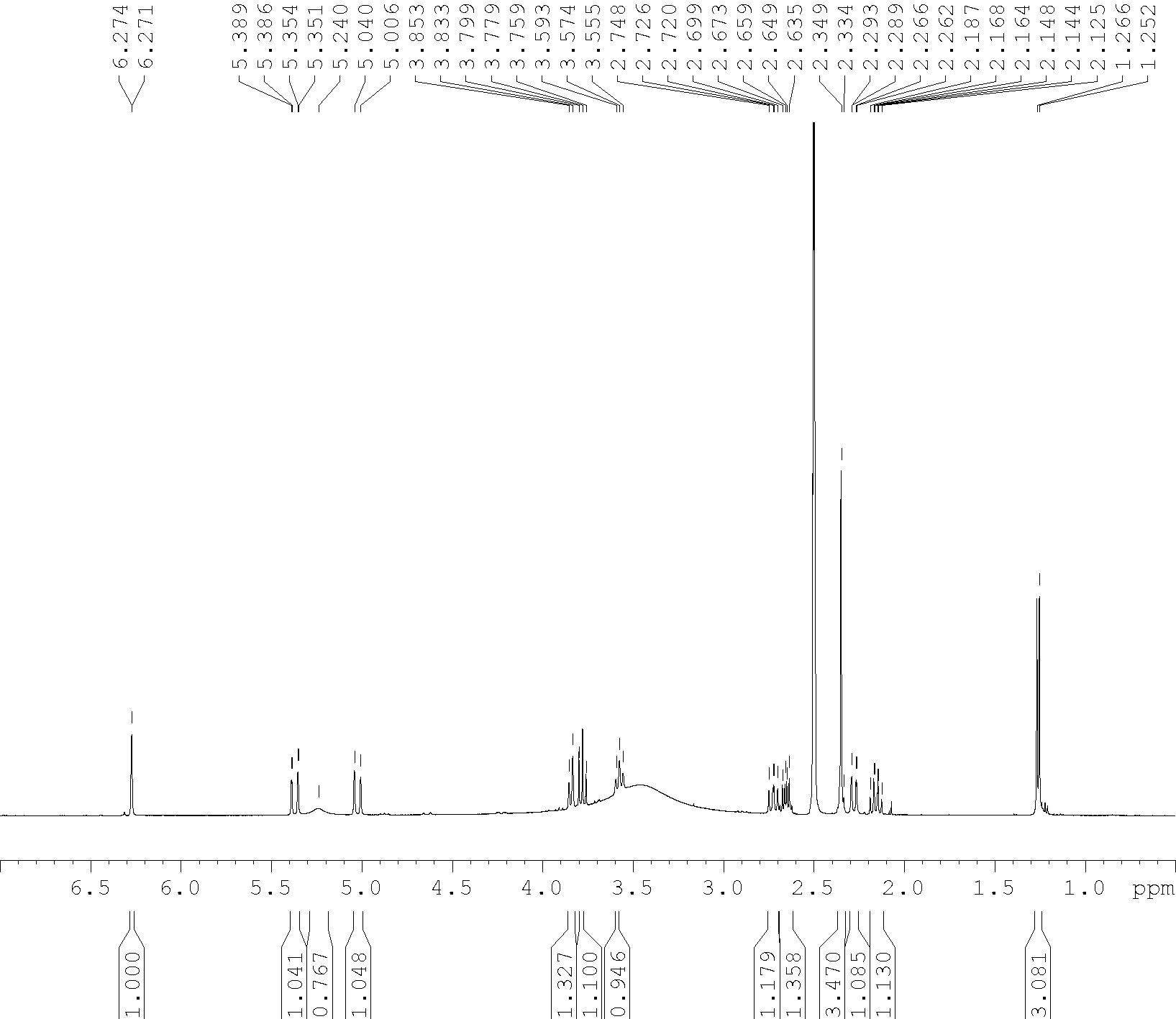
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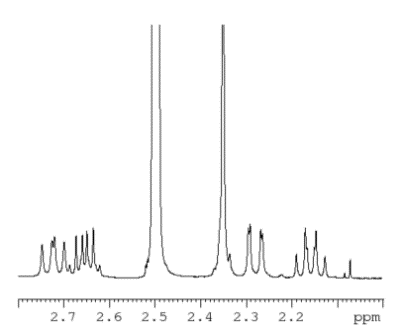
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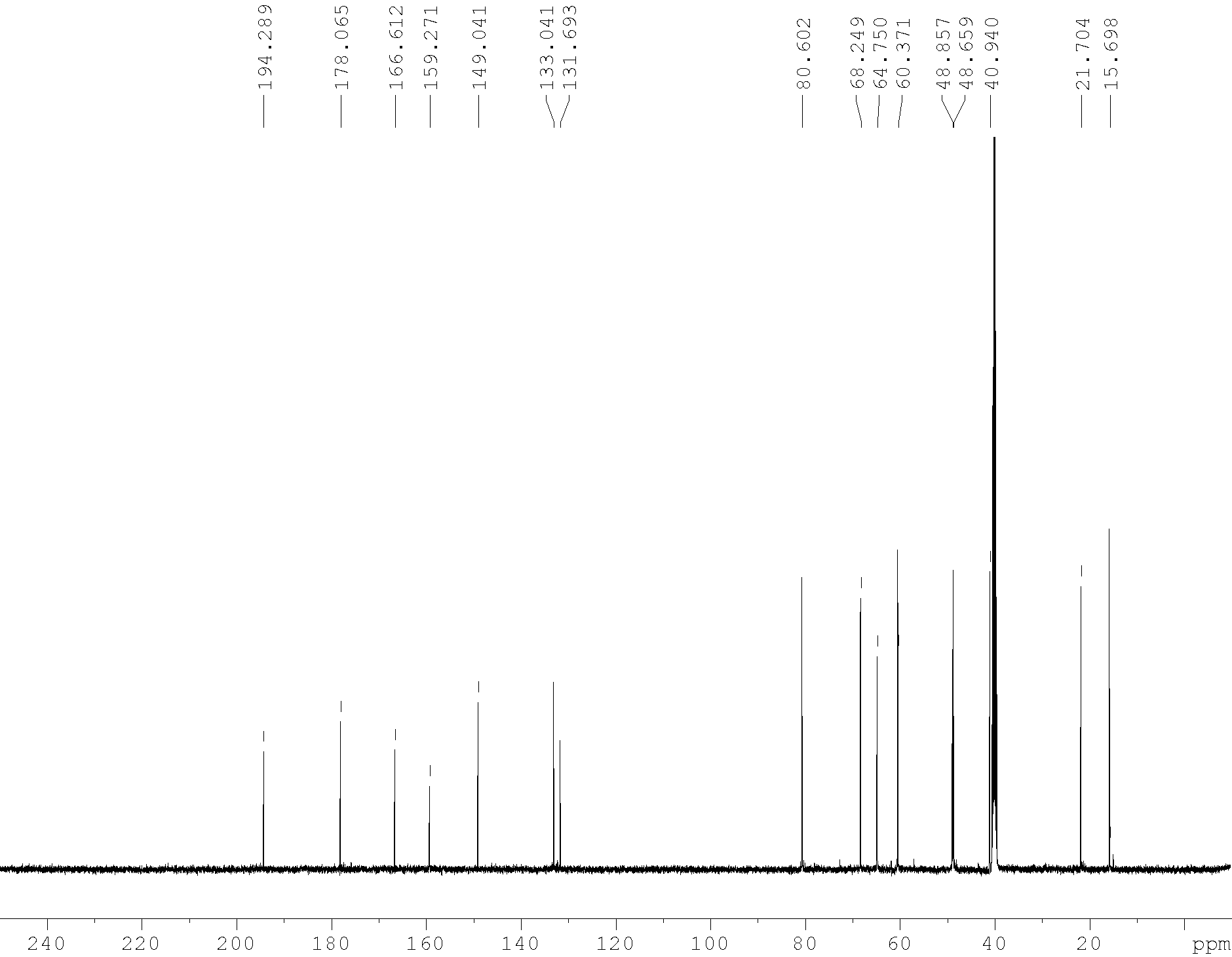
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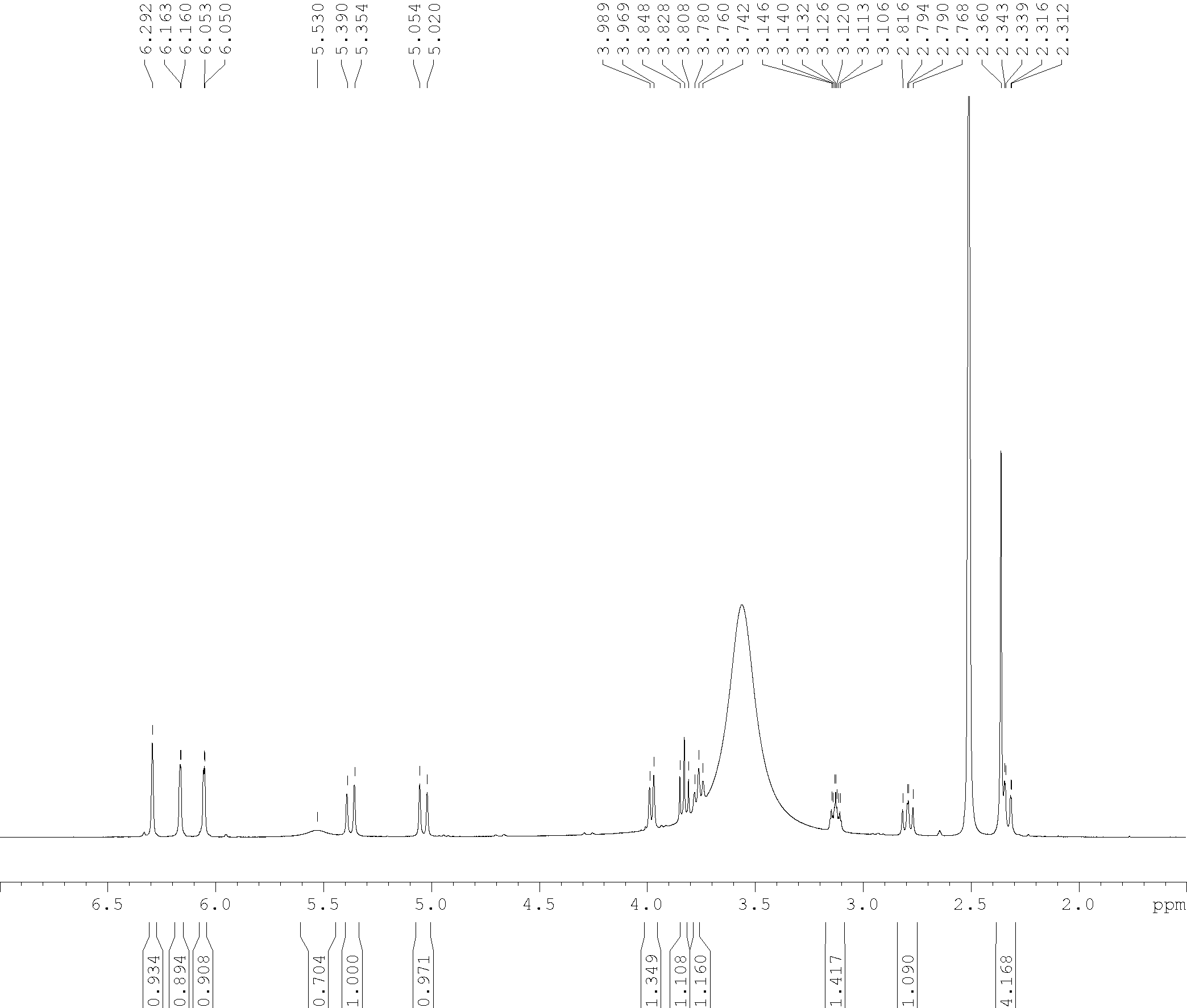




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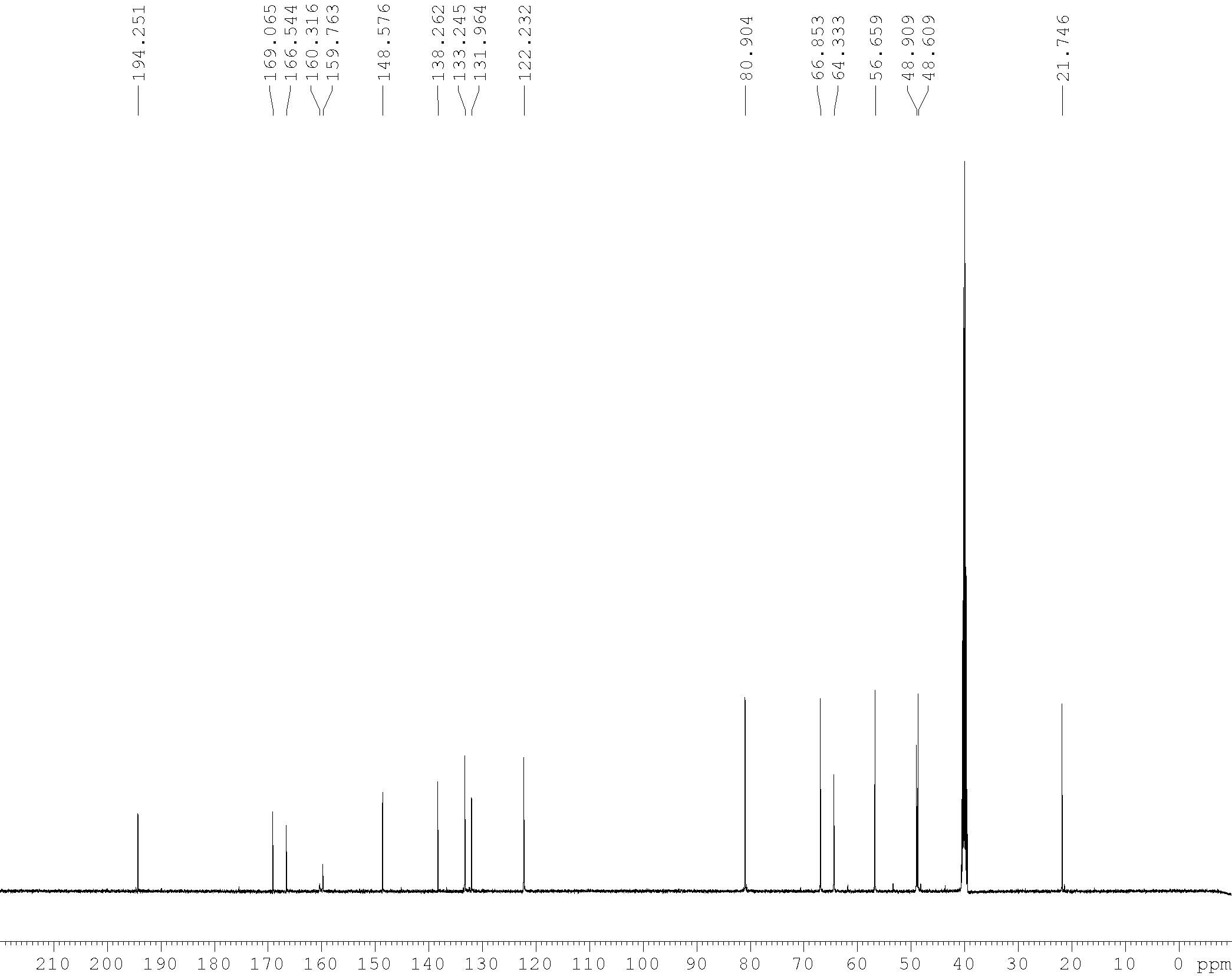


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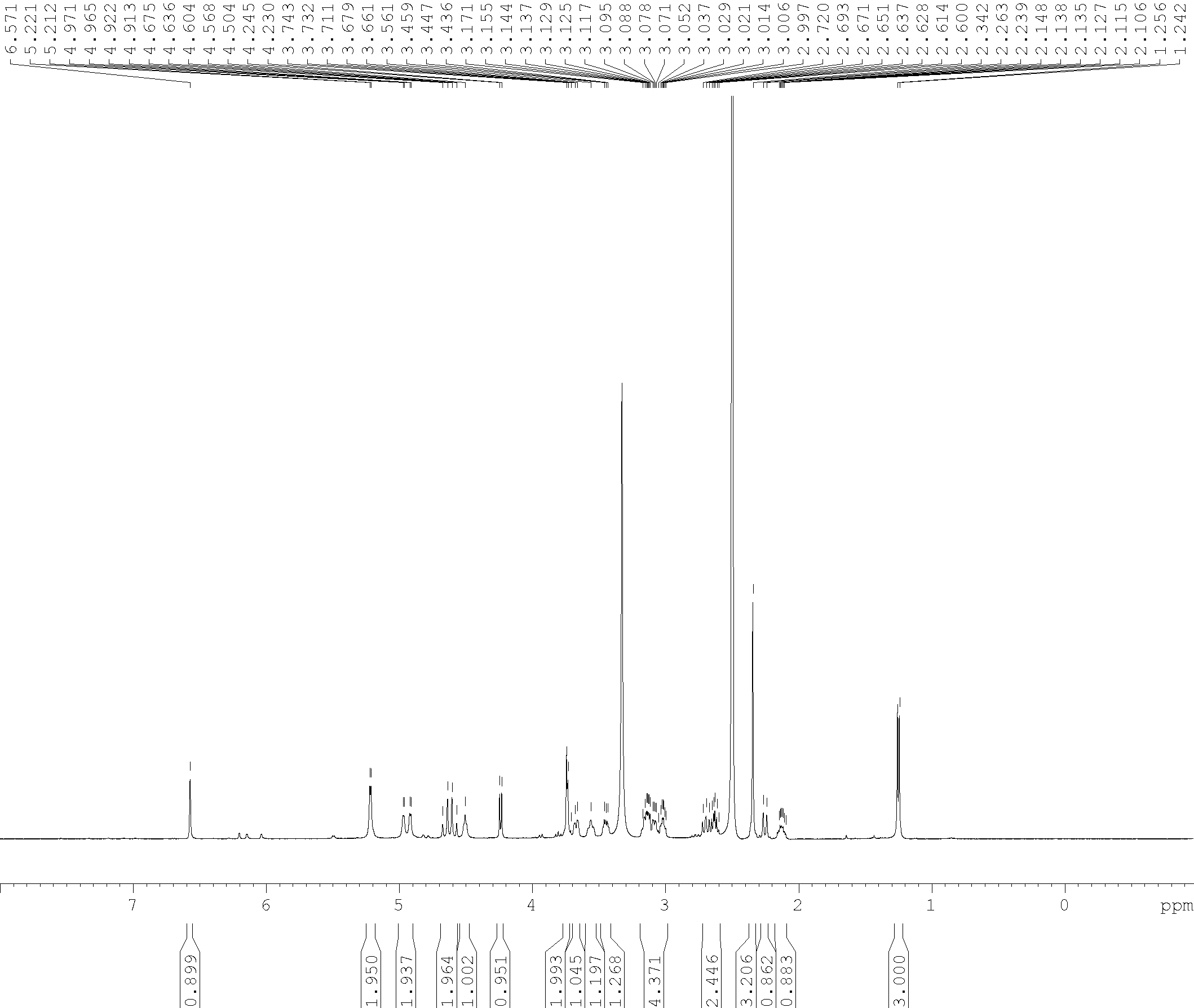
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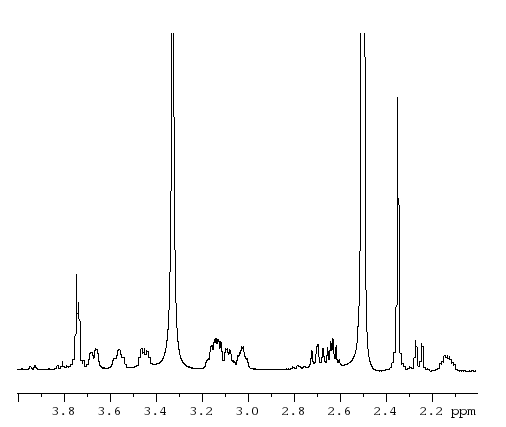


**Lc-oxalate**,13C NMR (75 MHz, DMSO)

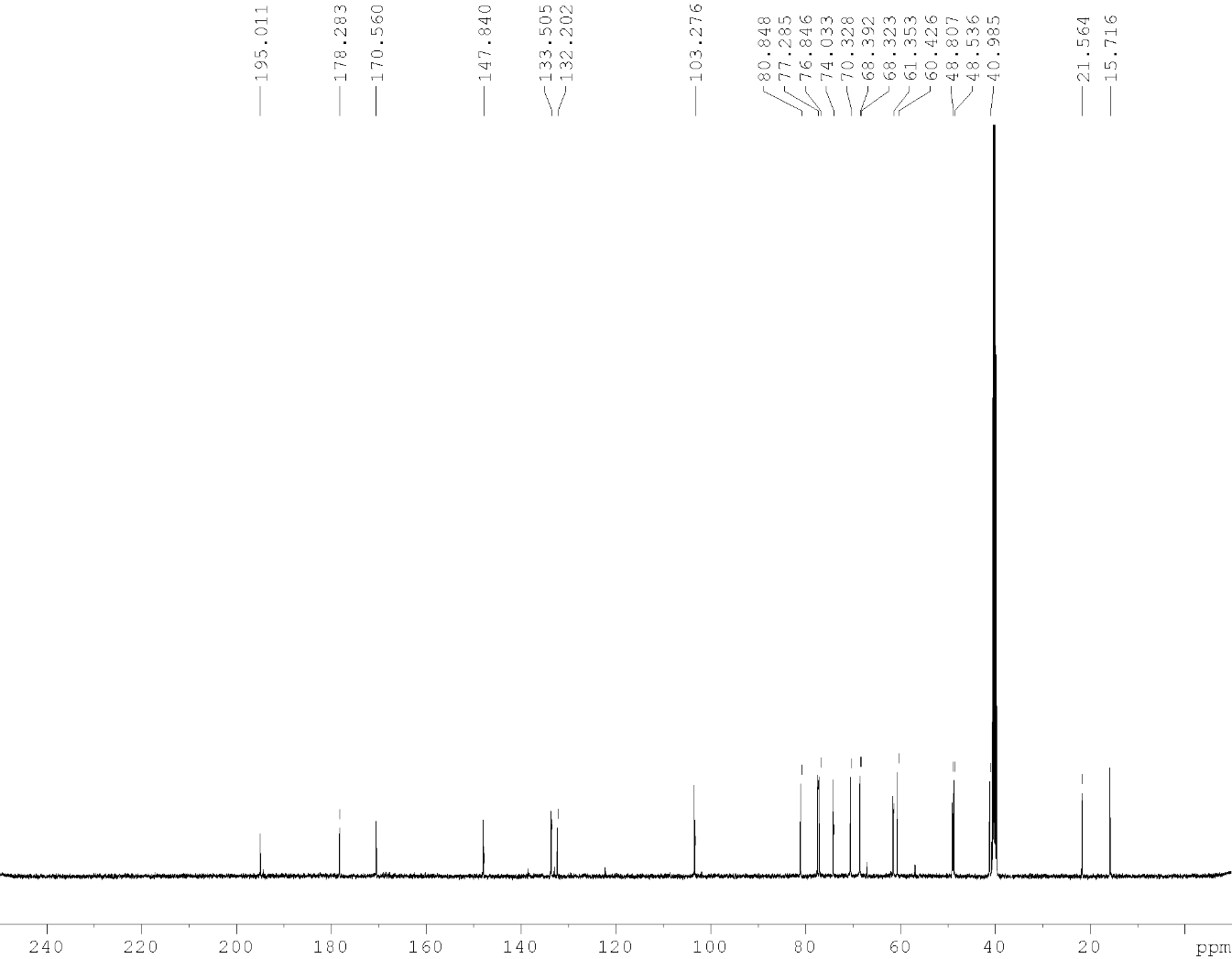
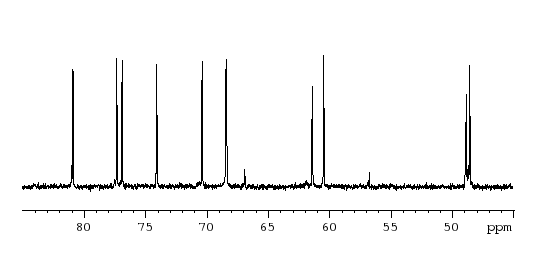
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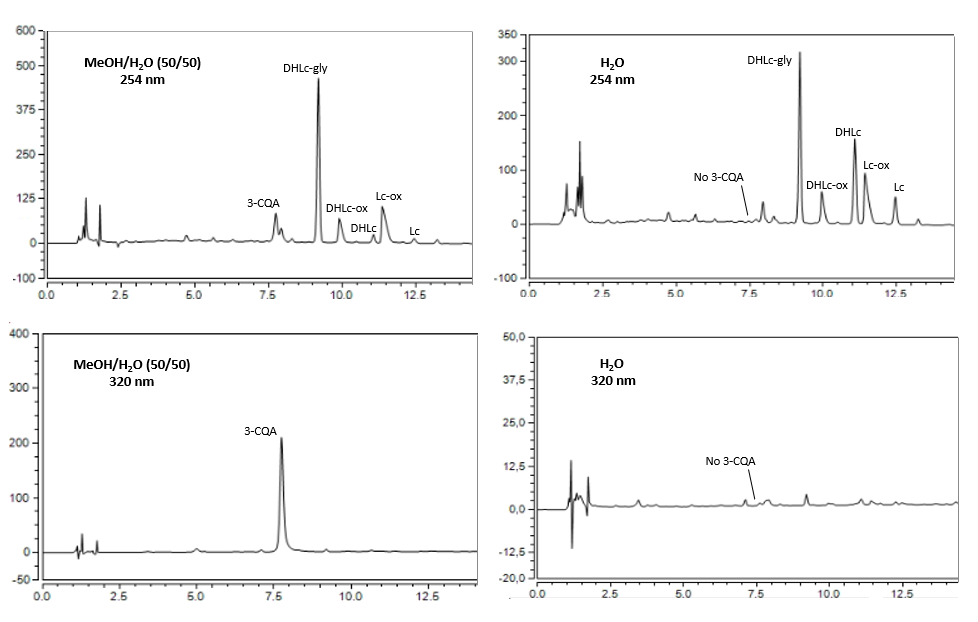
**DHLc-glycoside**,1H NMR (300 MHz, DMSO)

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**DHLc-glycoside**, 13C NMR (75 MHz, DMSO)

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**Supplementary Figure S1.** HPLC profiles (254 and 320 nm) of a water/methanol 50/50 and pure water extracts and different content in 3-CQA.

DHLc-gly

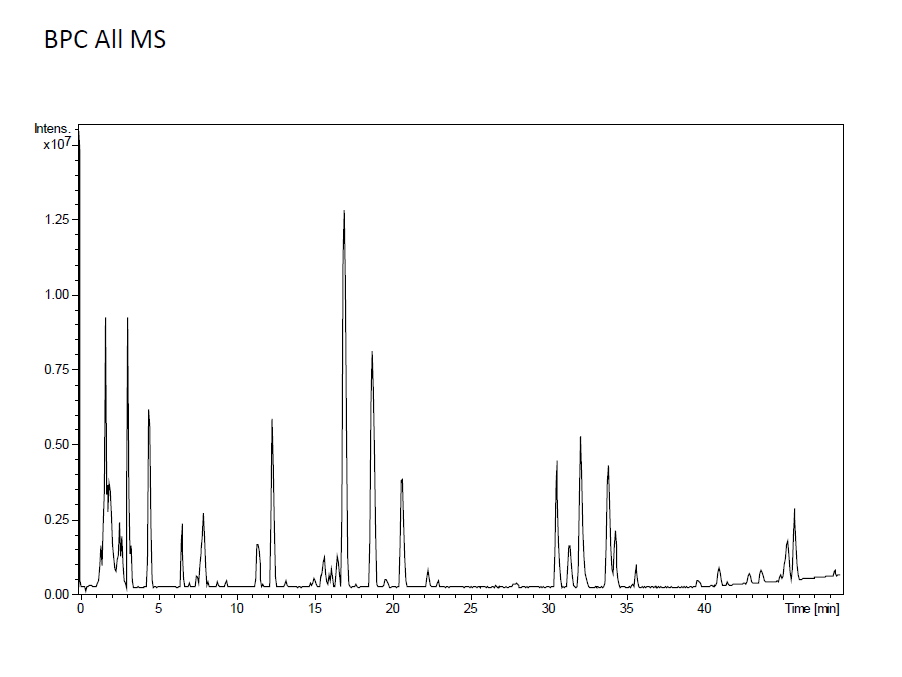
DHLc-ox

DHLc

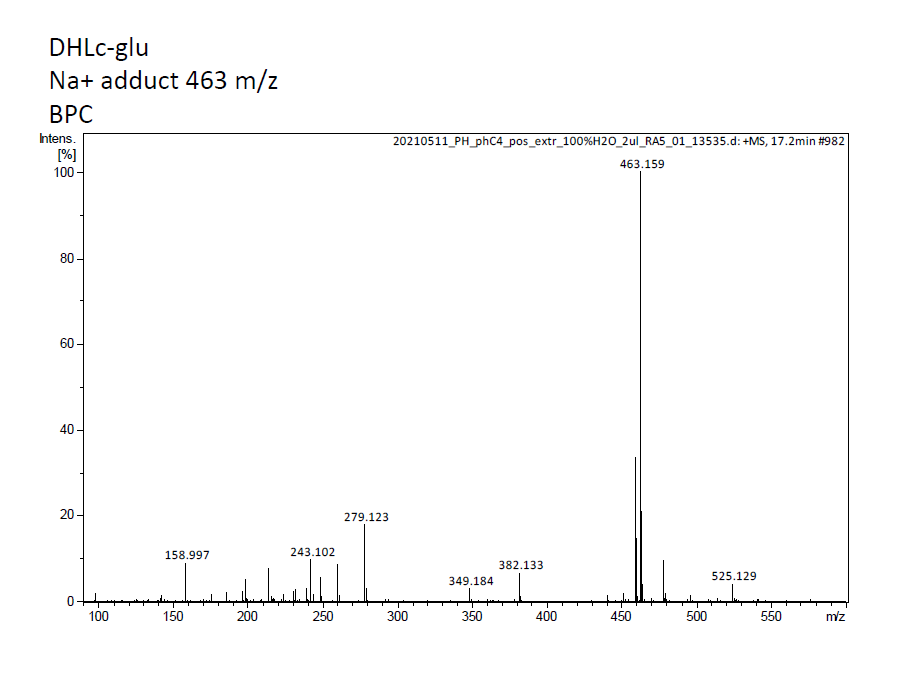
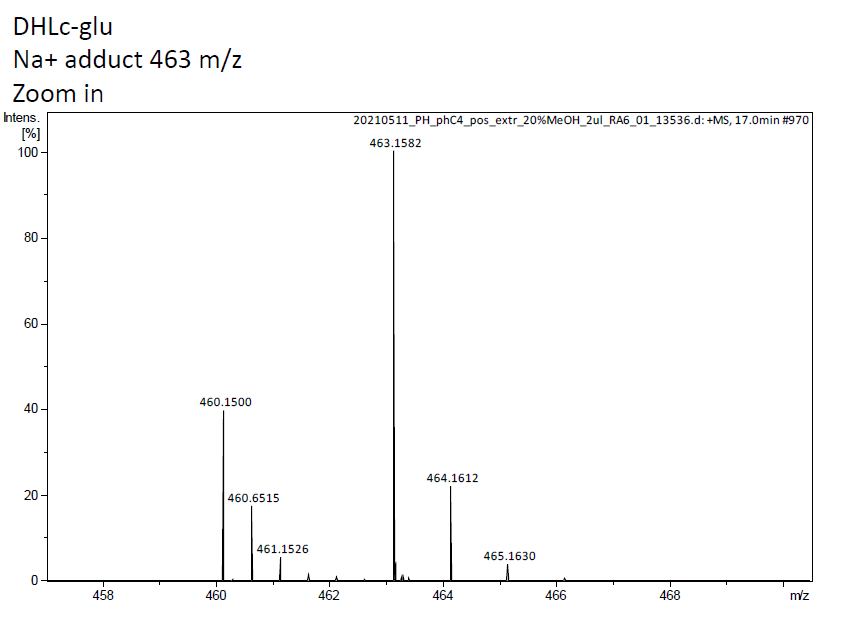
Lc-ox

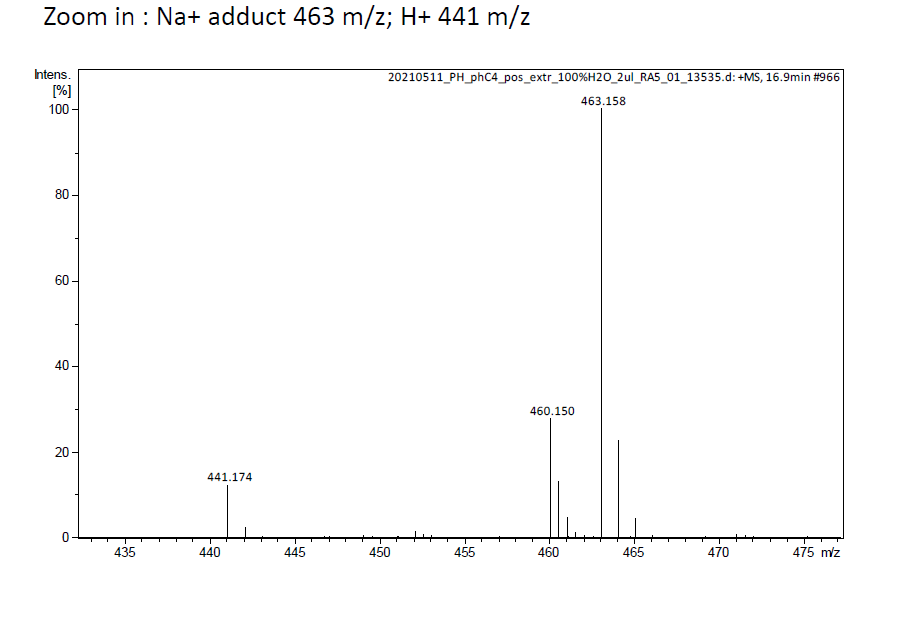
Lc

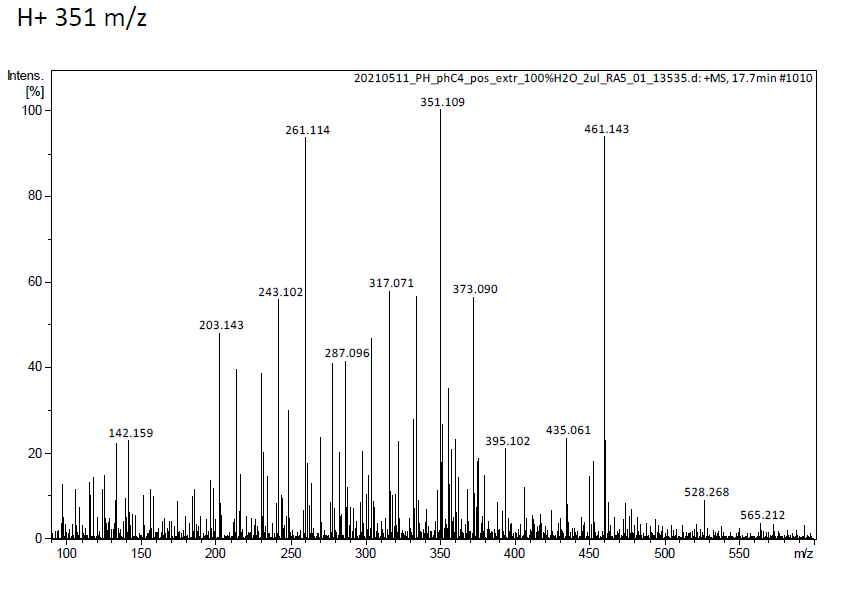
**LC-QTOF-HRMS (+) Analysis of STLs**

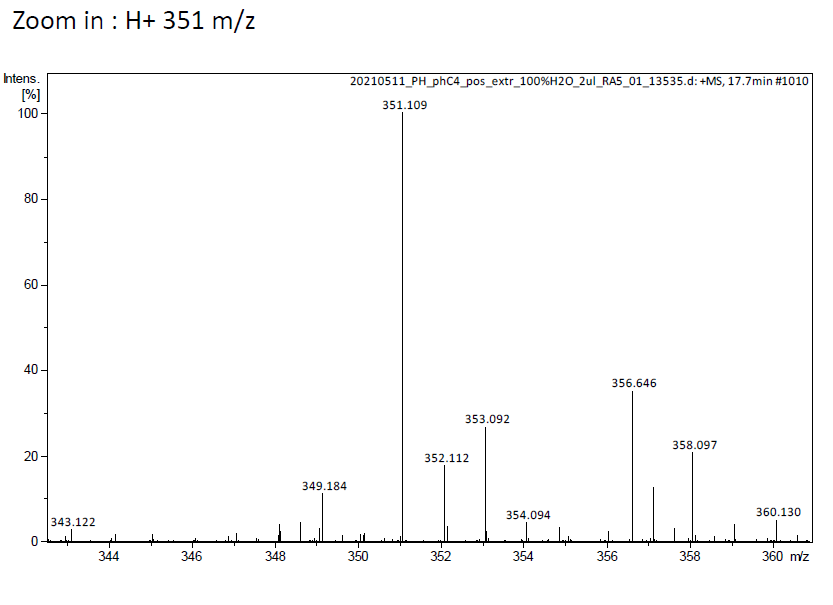


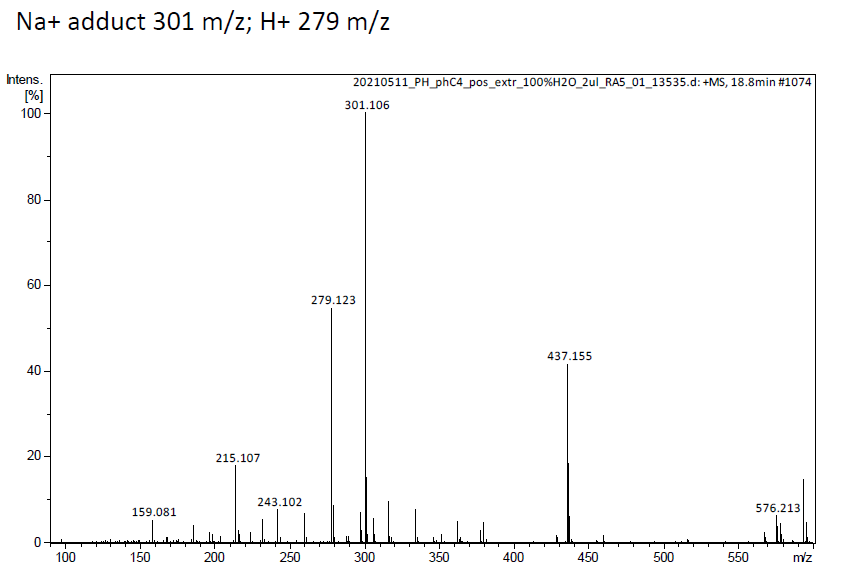
**Supplementary Figure S2.** Base peak chromatogram (BPC, All − MS) of a water chicory extract obtained in the positive mode.

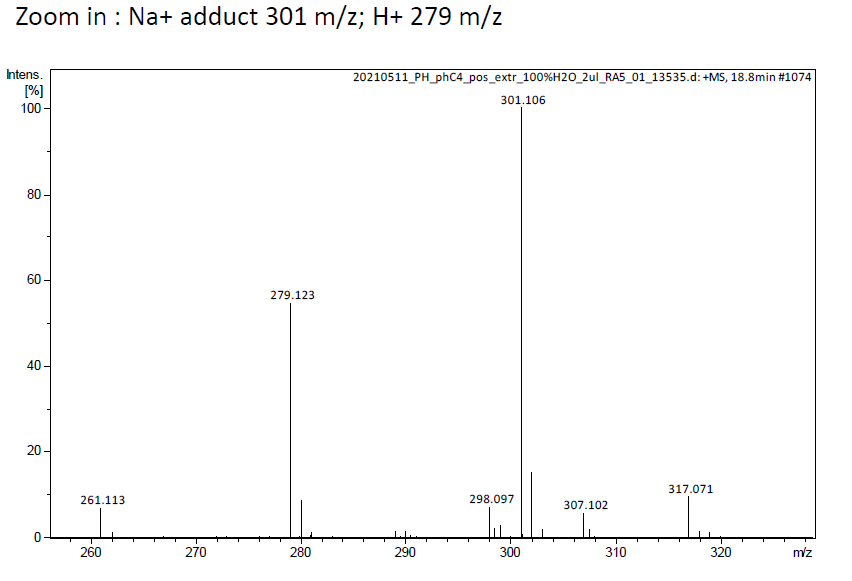
**DHLc-gly**

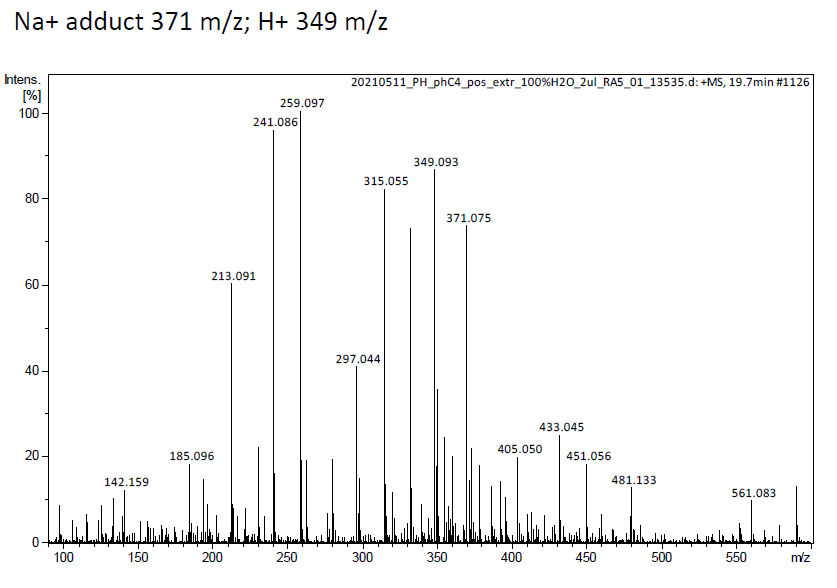


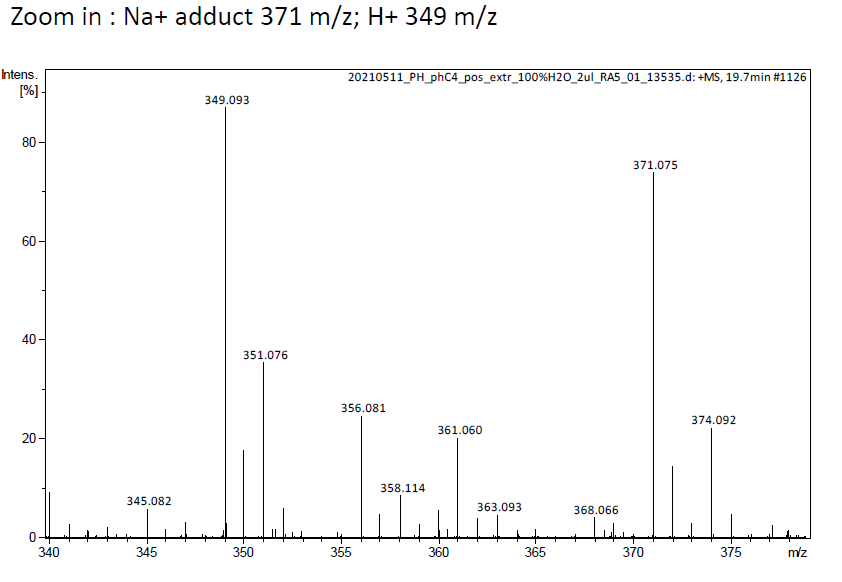
**DHLc-ox**

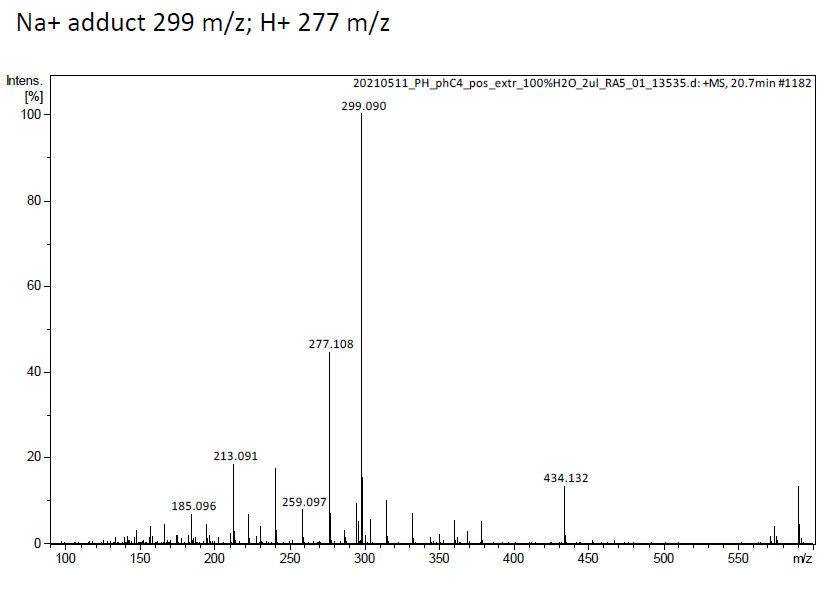
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**DHLc**

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**Lc-ox**

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**Lc**

