Supporting information

Surface-Tethered Iterative Carbohydrate Synthesis (STICS): A Spacer Study

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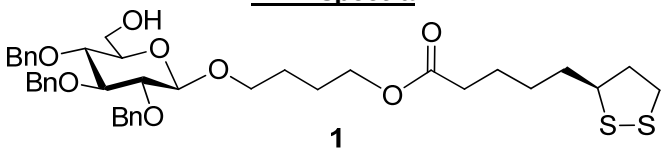
General remarks

Column chromatography was performed on silica gel 60 (70-230 mesh), reactions were monitored by TLC on Kieselgel 60 F_{254}. The compounds were detected by examination under UV light and by charring with 10% sulfuric acid in methanol. Solvents were removed under reduced pressure at < 40 ^{o}C. CH_2Cl_2 and $ClCH_2CH_2Cl$ were distilled from CaH_2 directly prior to application. Anhydrous DMF was used as is. Methanol was dried by refluxing with magnesium methoxide, distilled and stored under argon. Pyridine and acetonitrile were dried by refluxing with CaH_2 and then distilled and stored over molecular sieves (3 Å). Molecular sieves (3 Å or 4 Å), used for reactions, were crushed and activated *in vacuo* at 390 °C during 8 h in the first instance and then for 2-3 h at 390 °C directly prior to application. DOWEX MONOSPHERE 650C (H) was washed three times with MeOH and stored under MeOH. Racemic lipoic acid, also known as (±)-1,2-dithiolane-3-pentanoic acid, 6,8-dithiooctanoic acid, DL-α-lipoic acid, DL-6,8-thioctic acid, was used as is. ^{1}H-n.m.r. spectra were recorded in $CDCl_3$ at 300 MHz, ^{13}C-NMR spectra were recorded in $CDCl_3$ at 75 MHz unless otherwise noted. HRMS determinations were made with the use of a Mass Spectrometer with ion-trap detection.

NMR spectra



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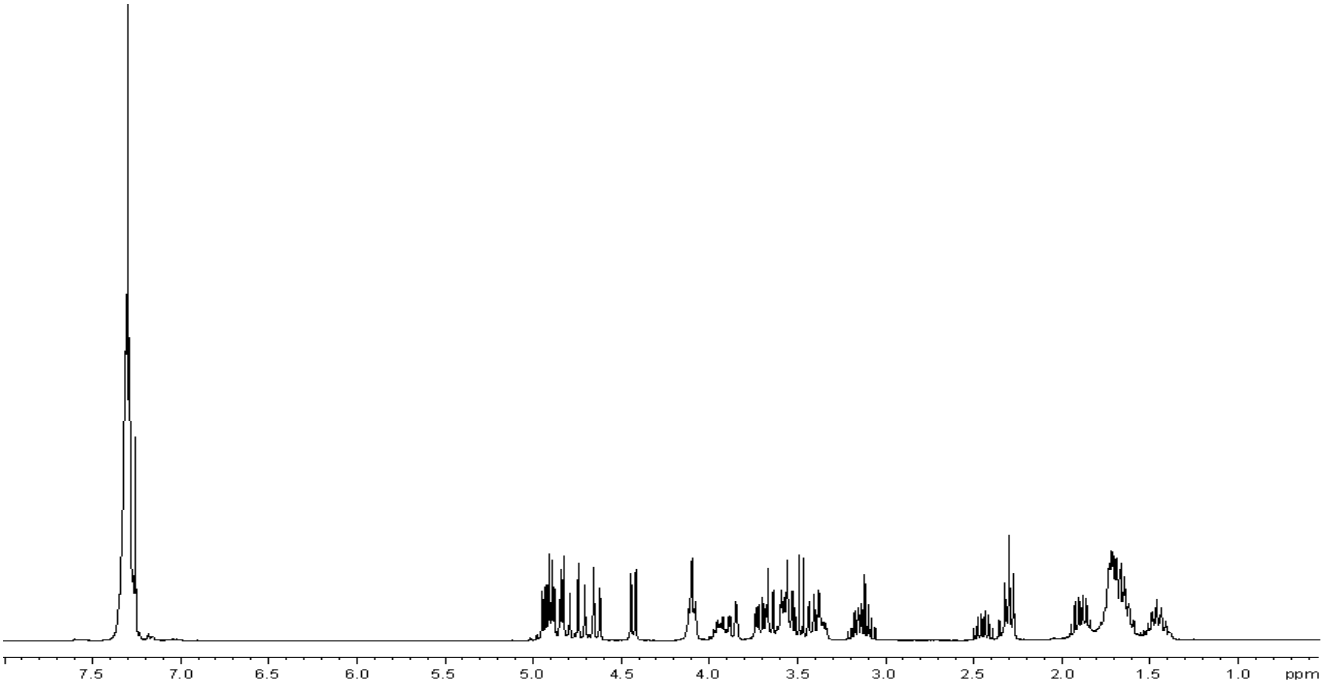

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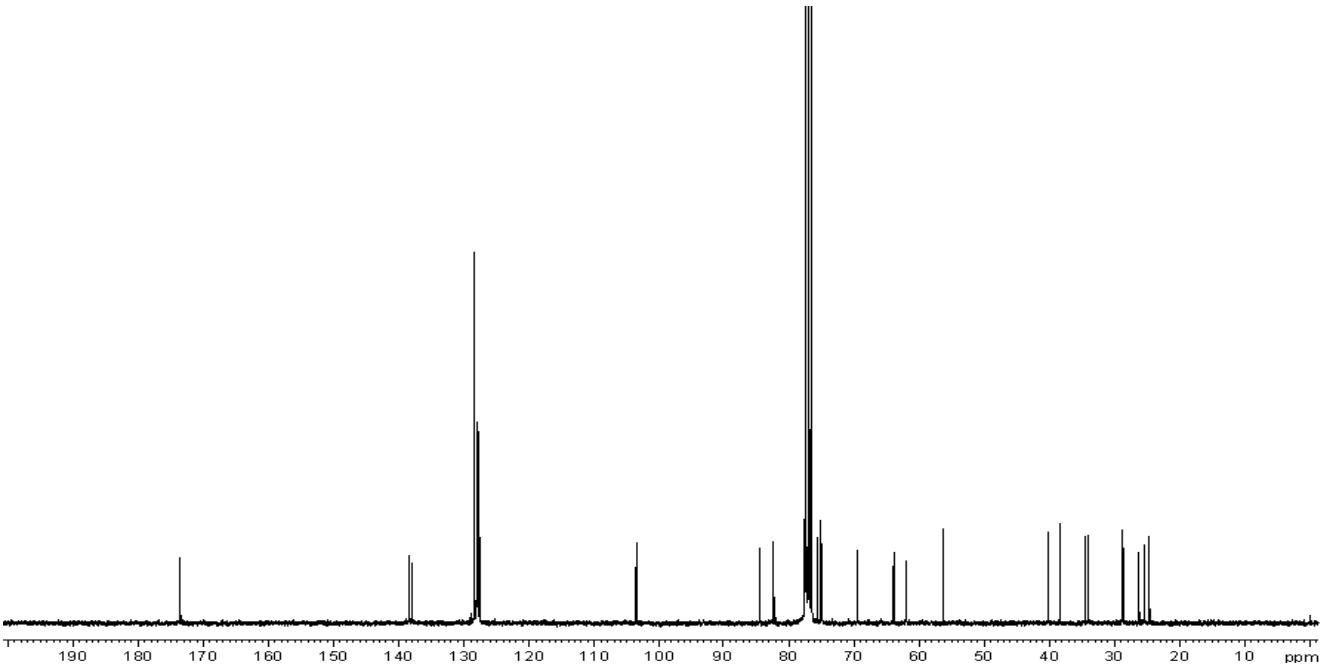

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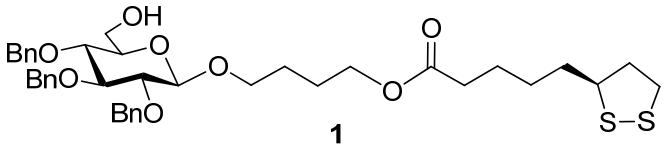

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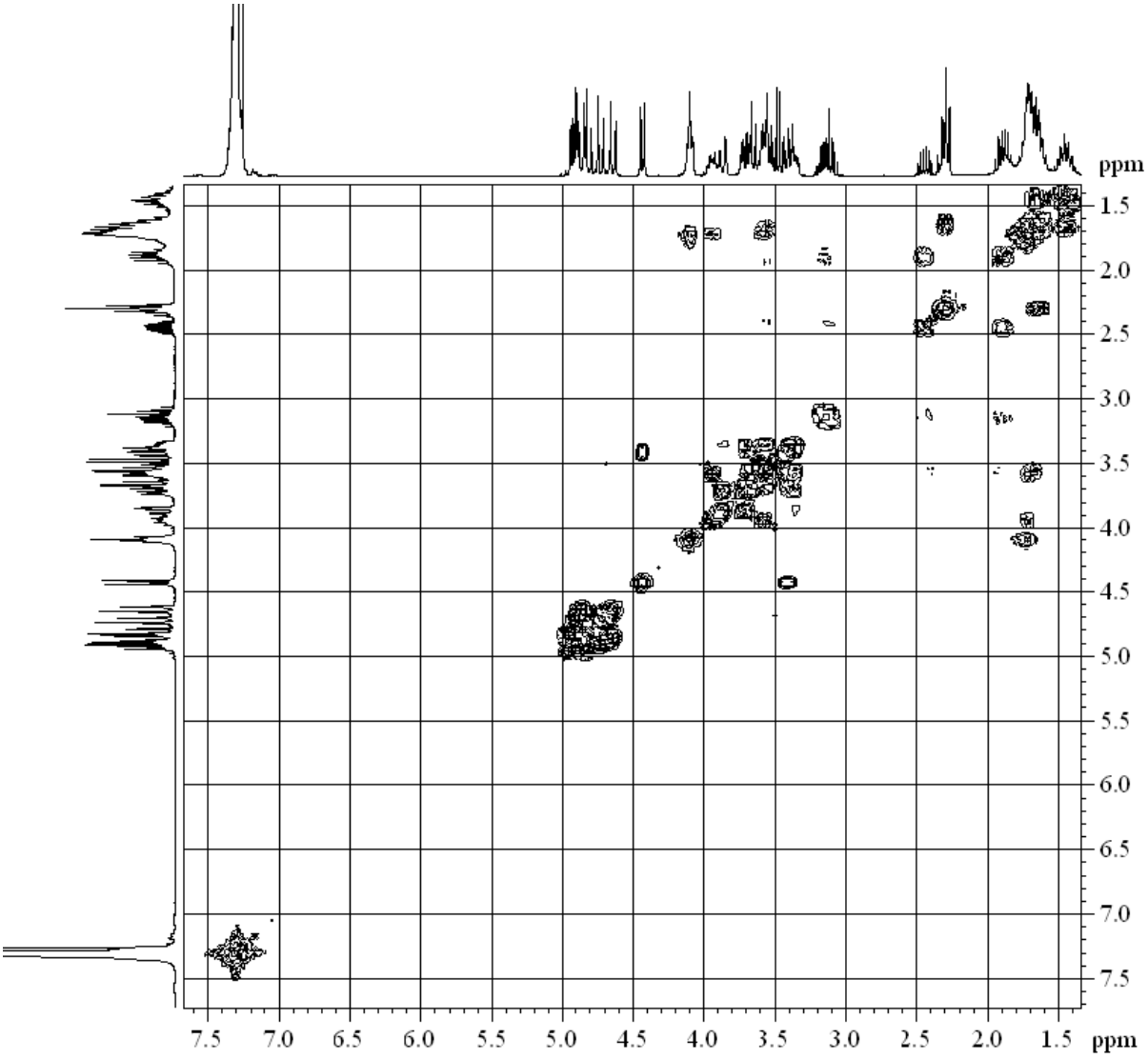

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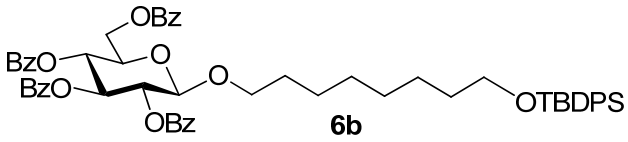

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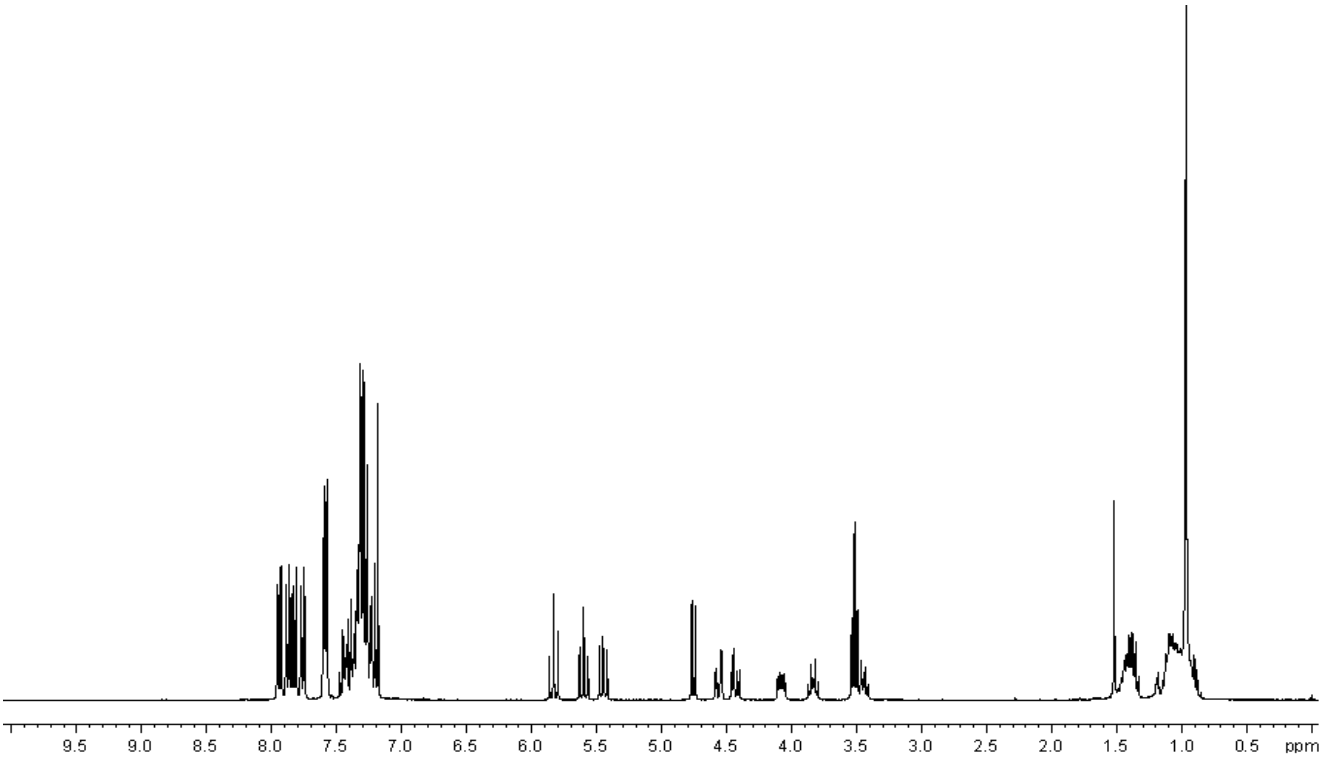

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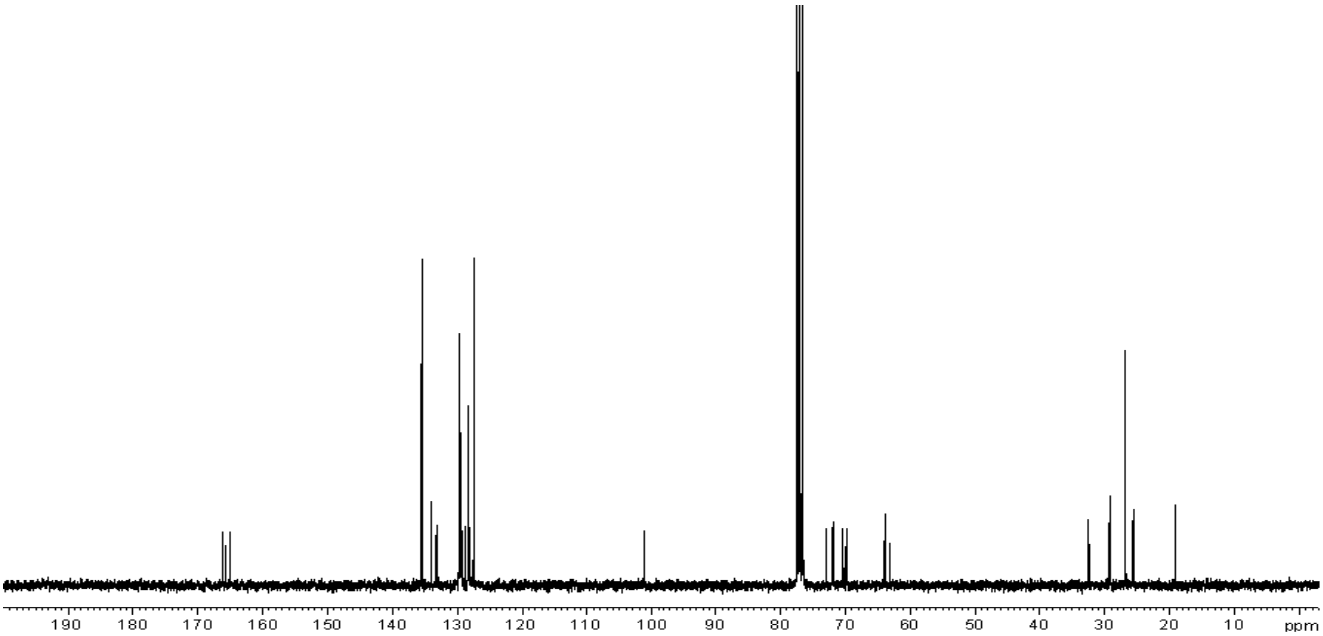

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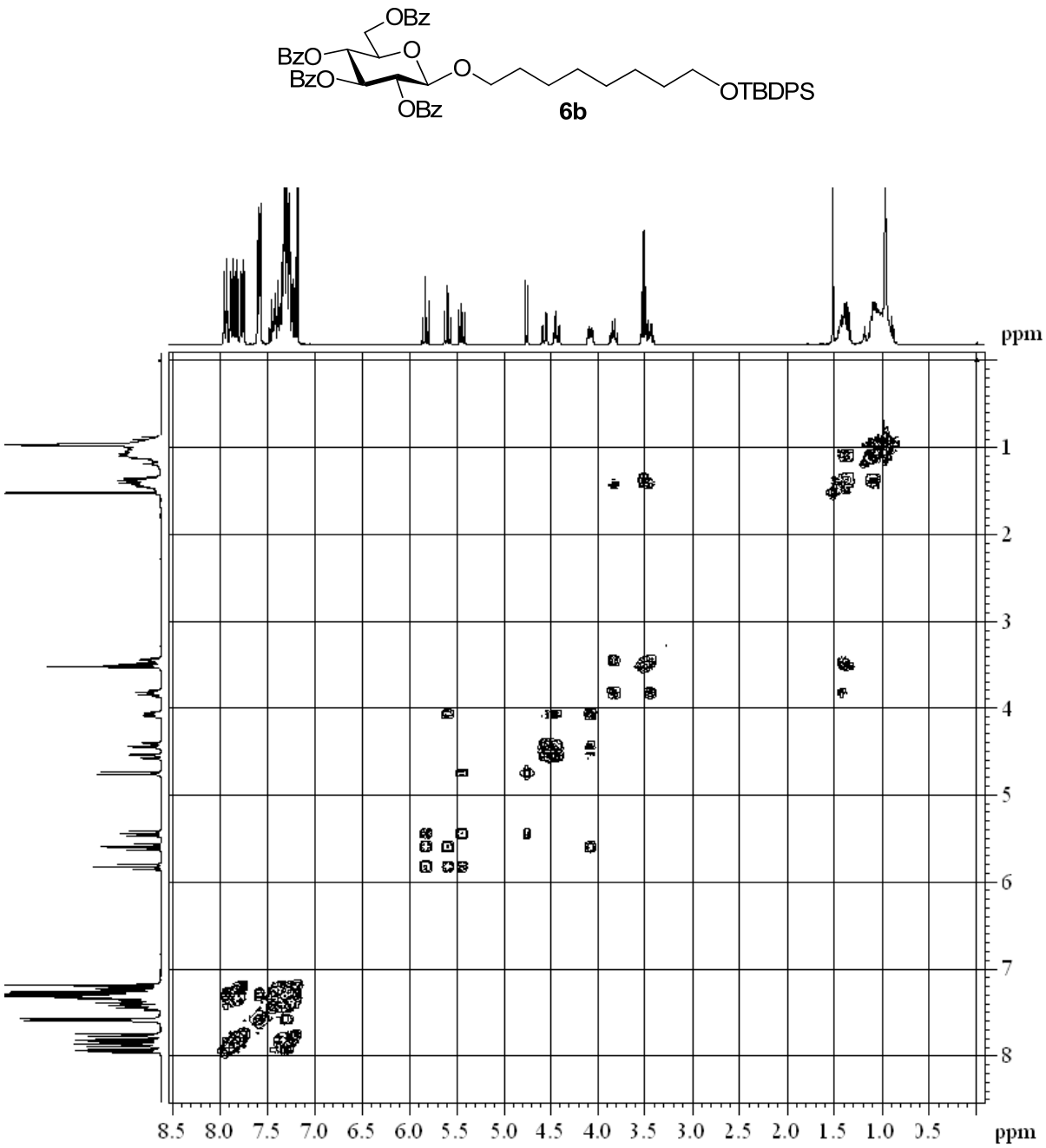

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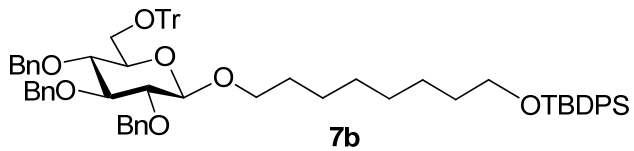

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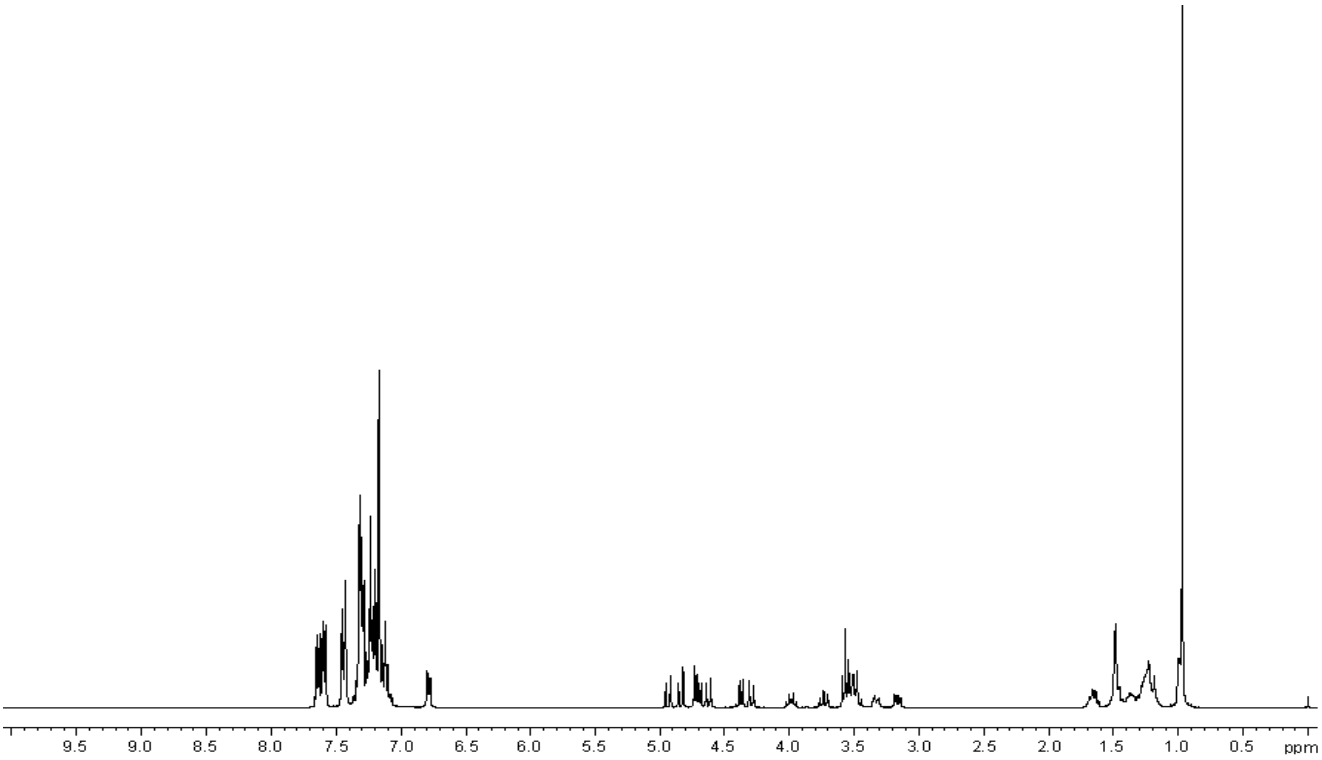

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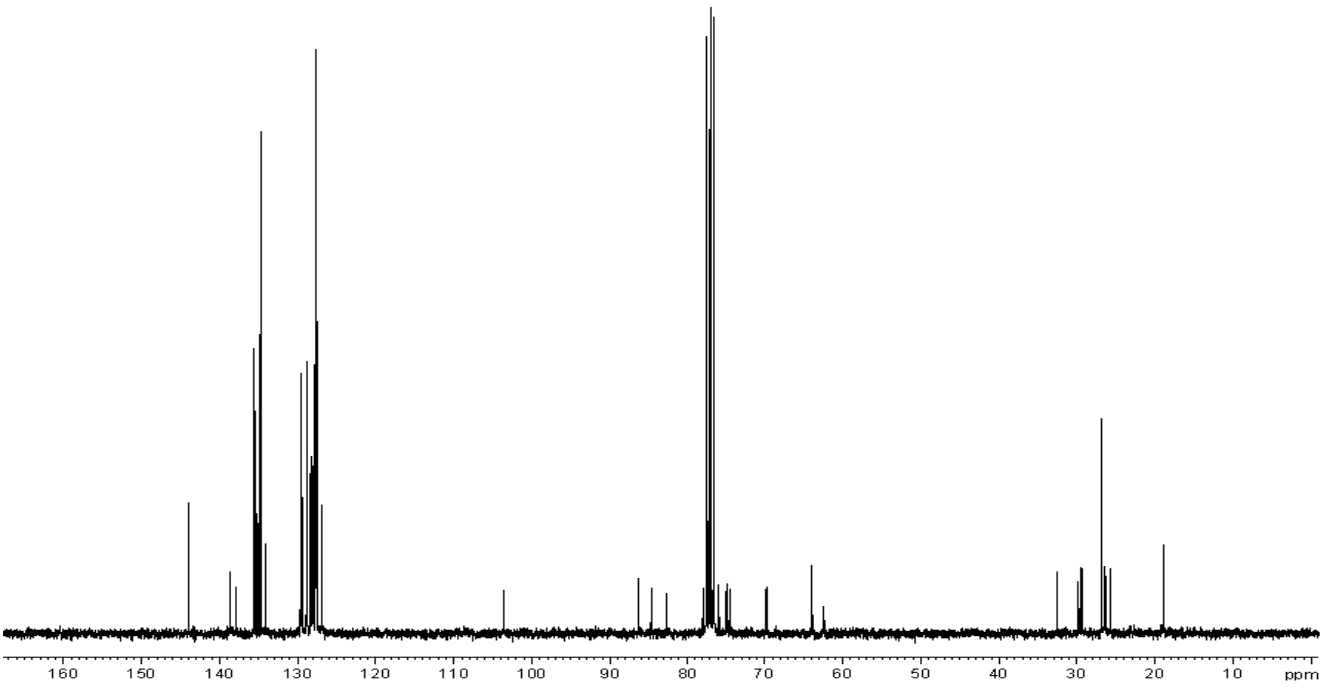

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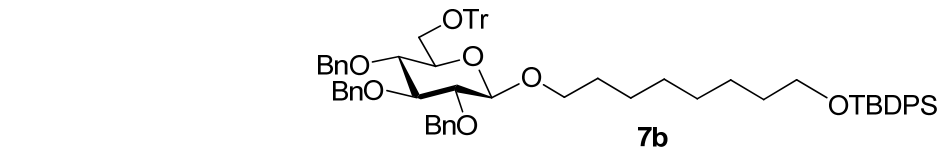

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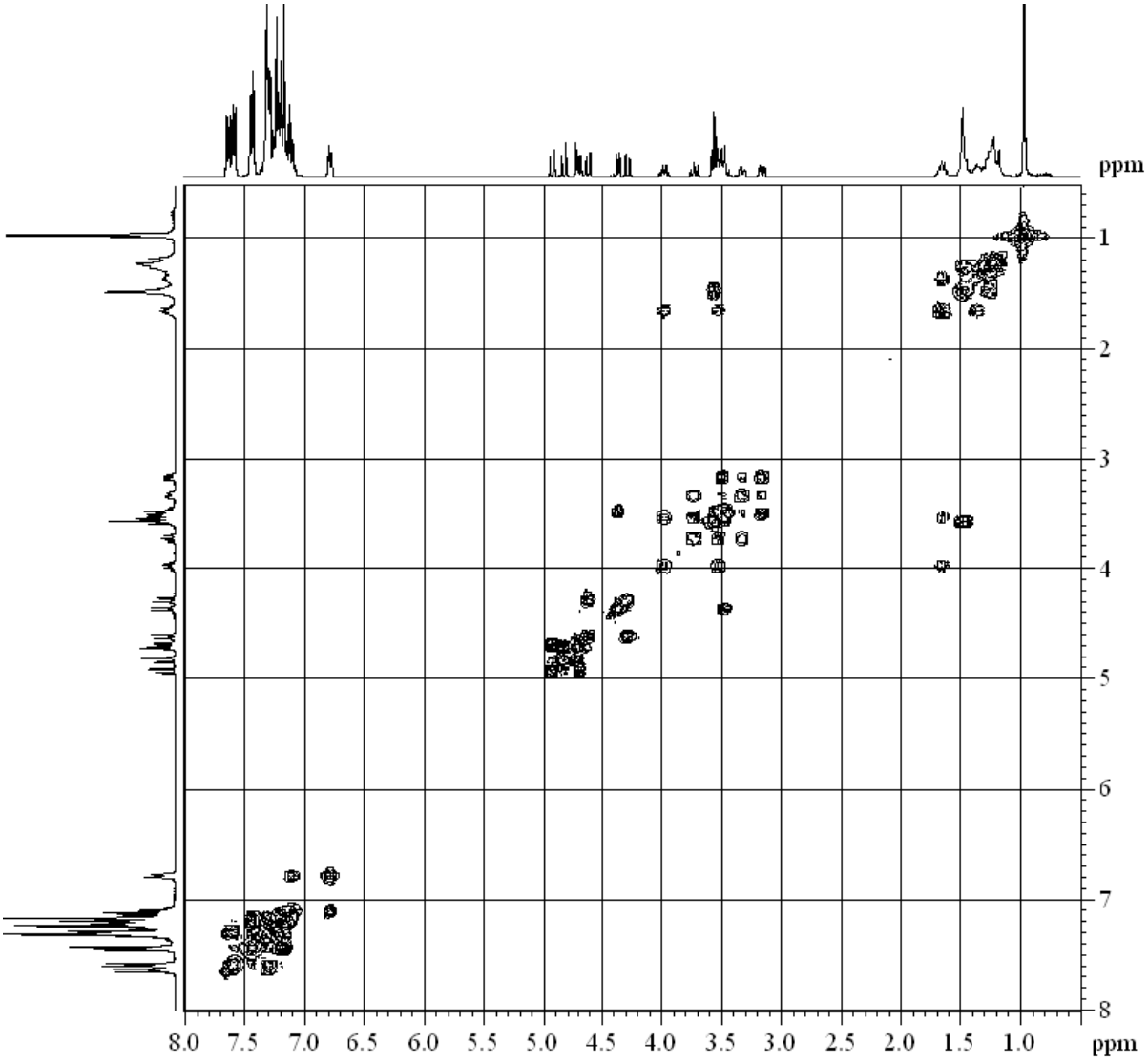

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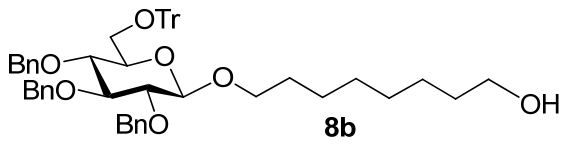

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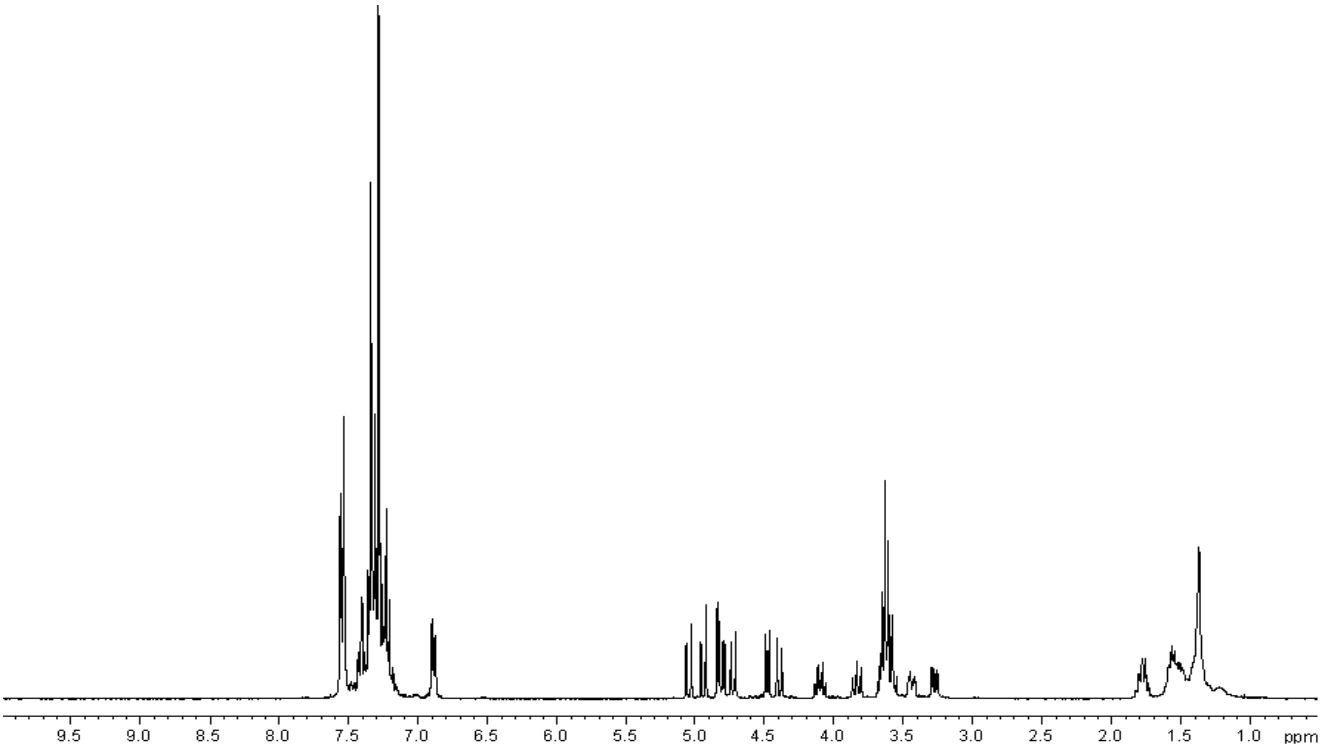

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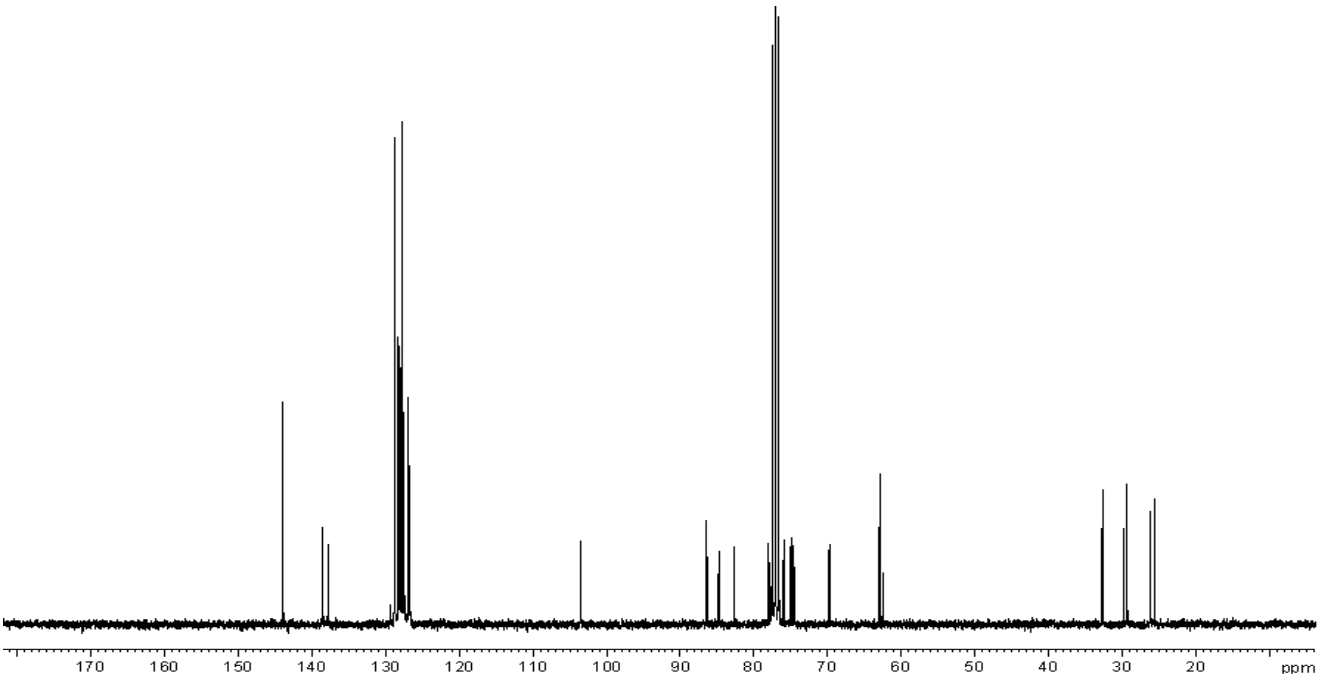

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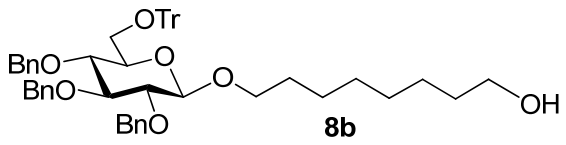

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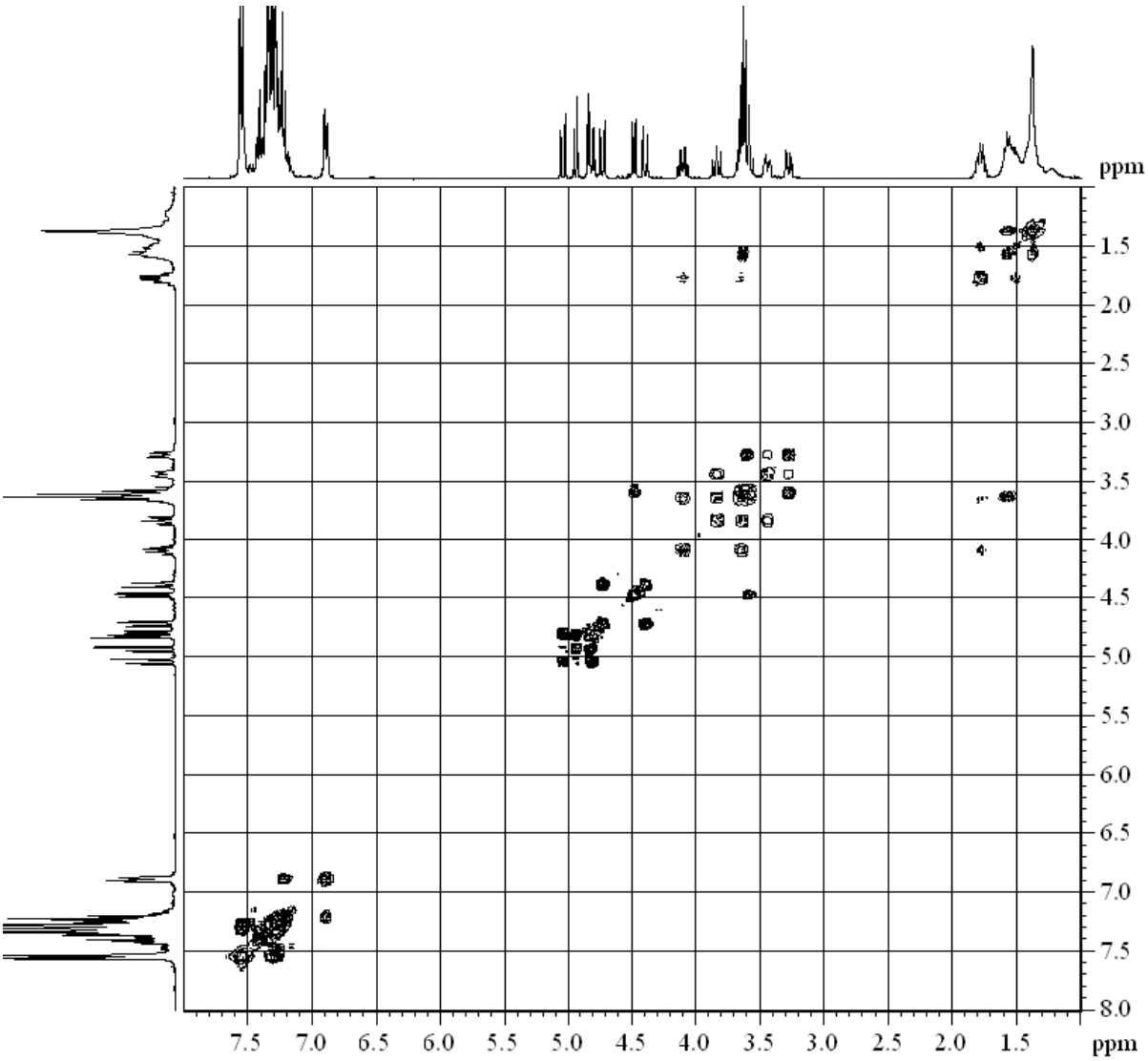

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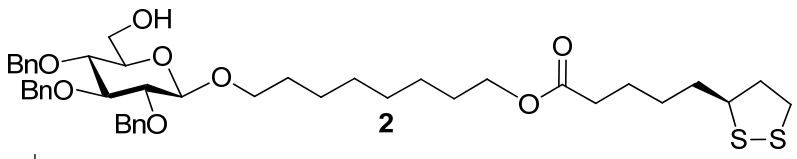

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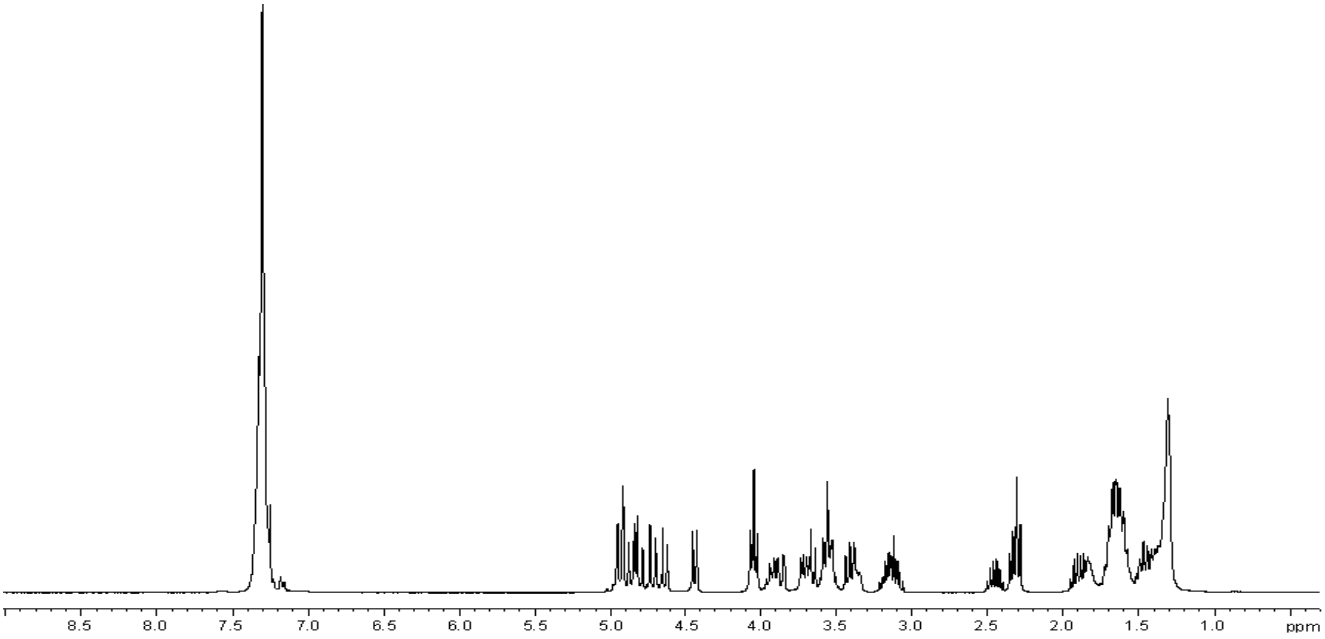

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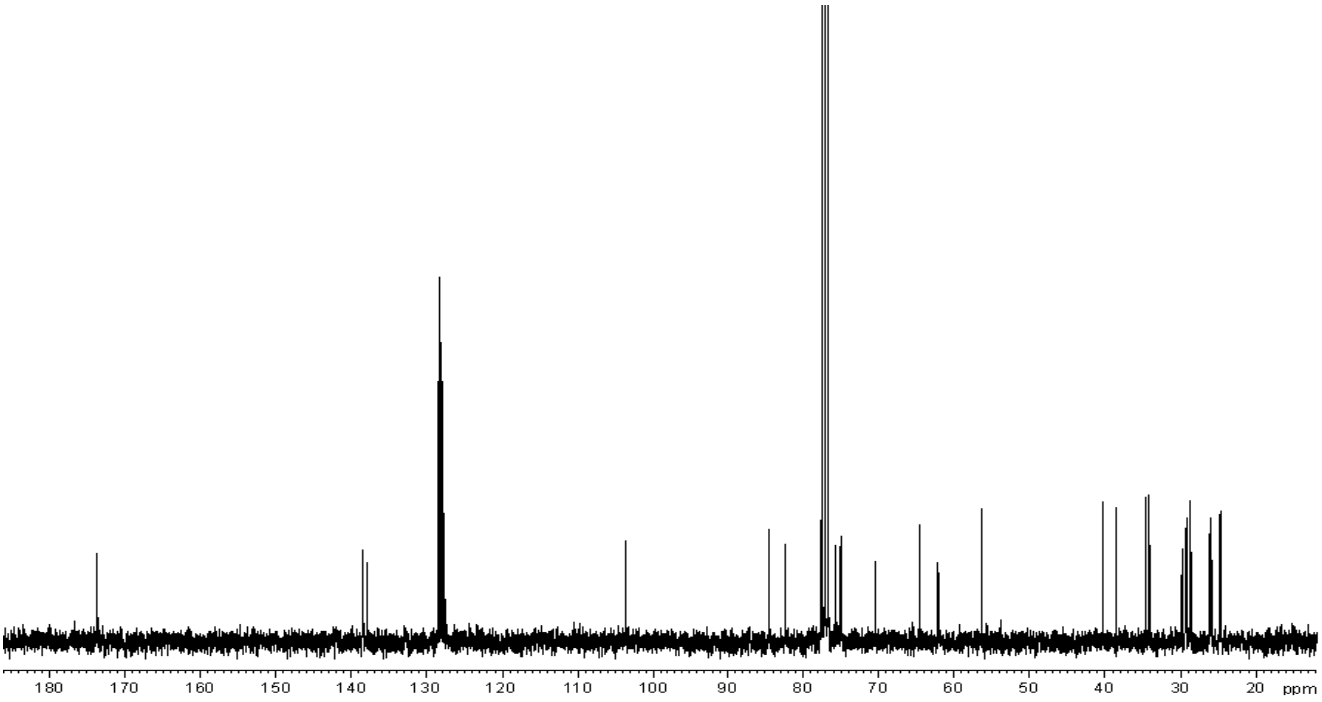

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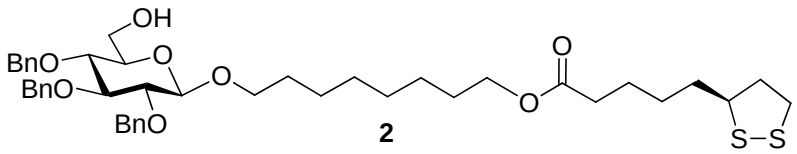

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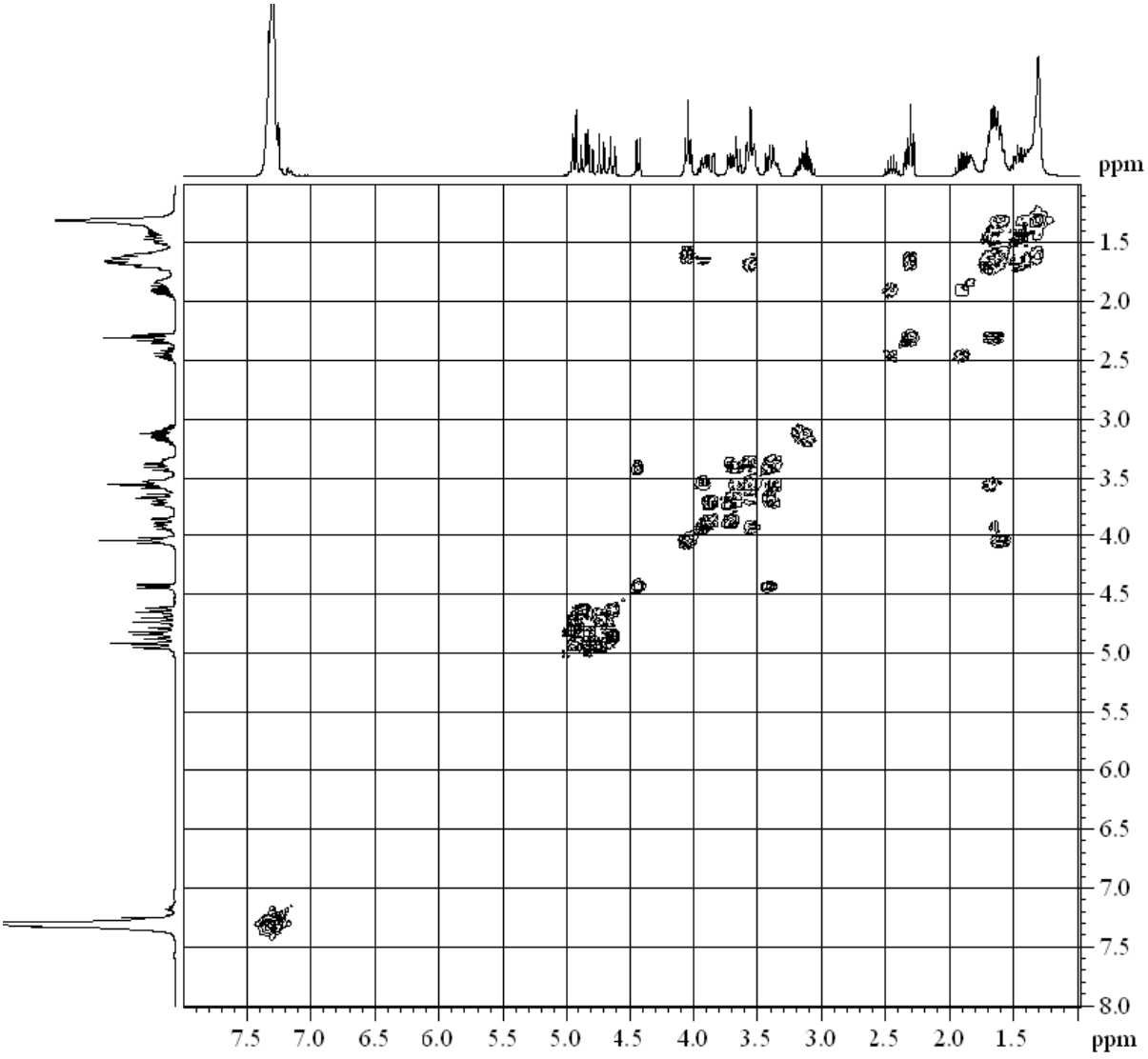

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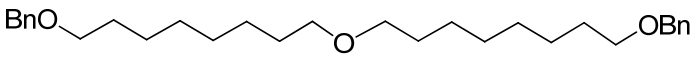

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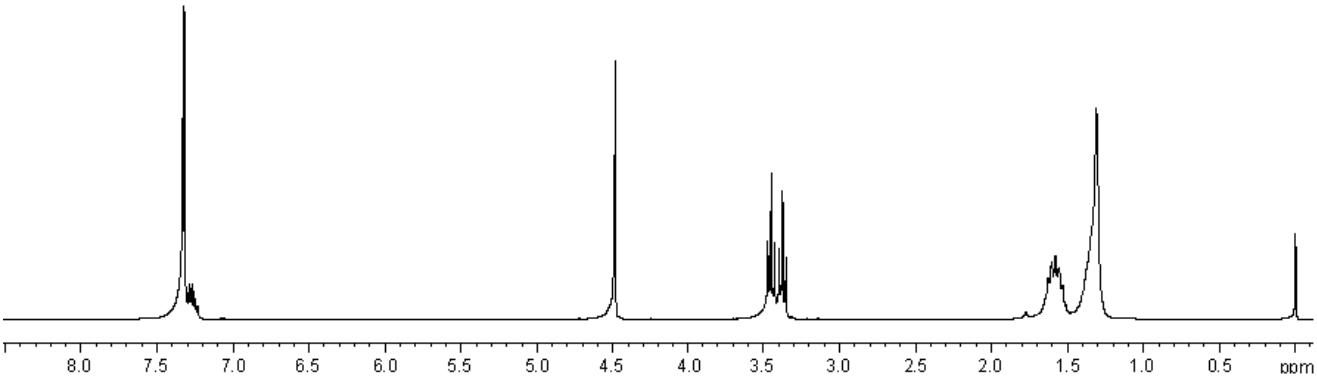

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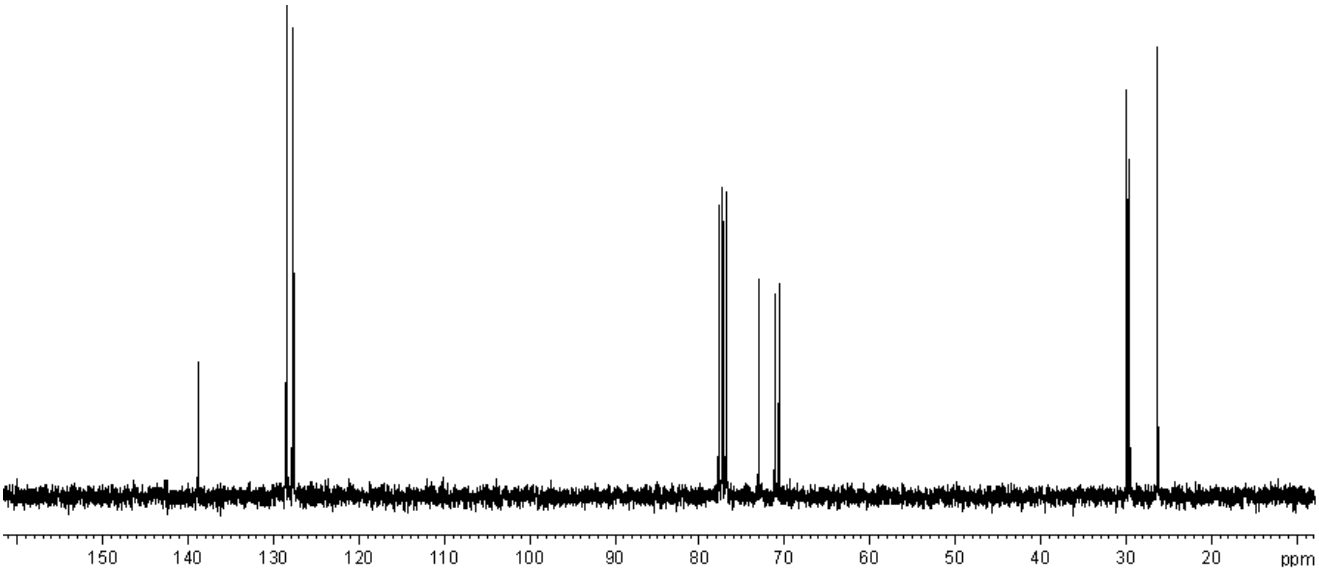

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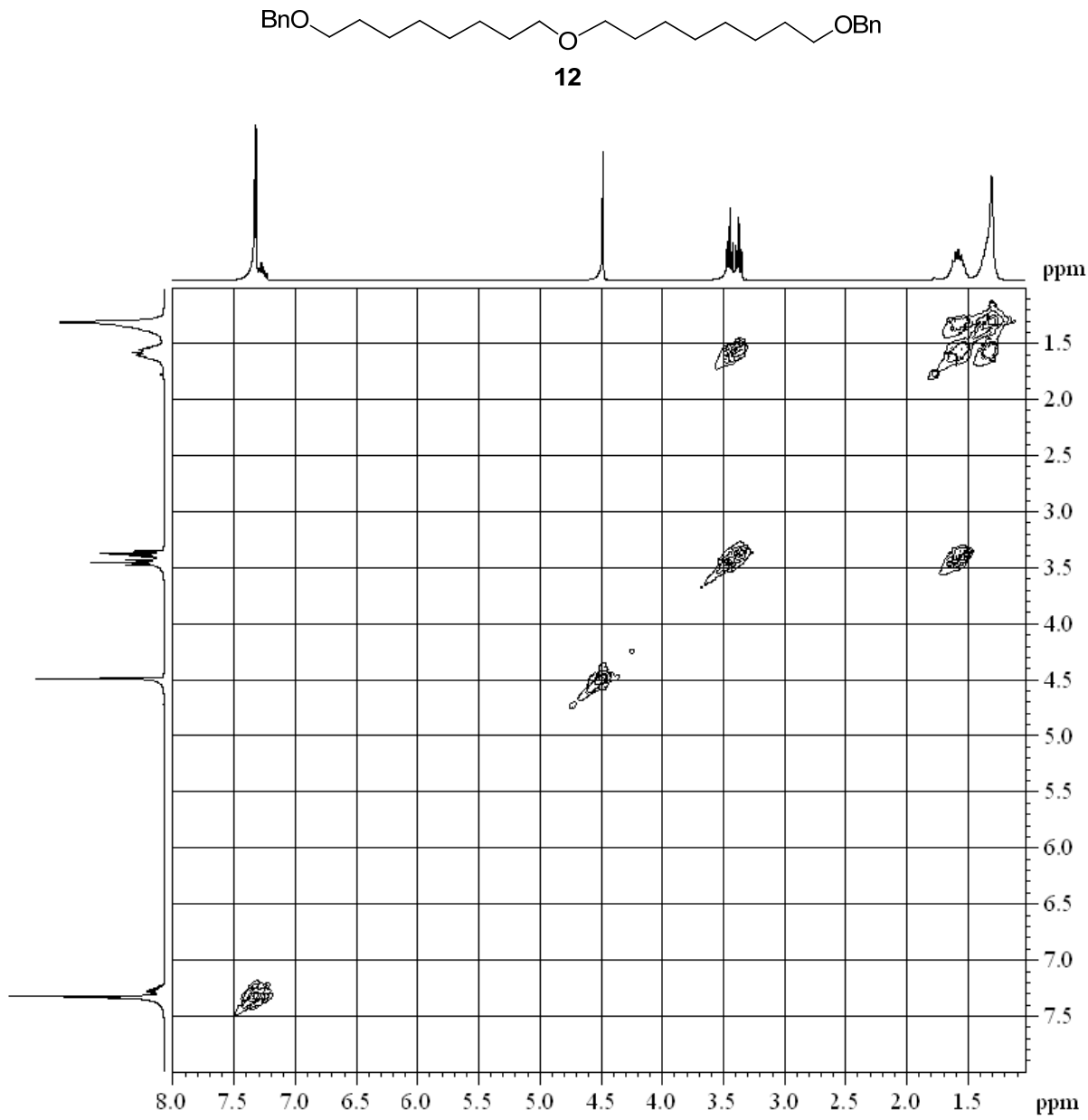

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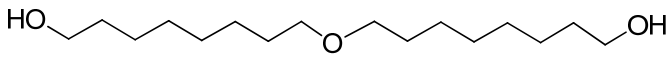

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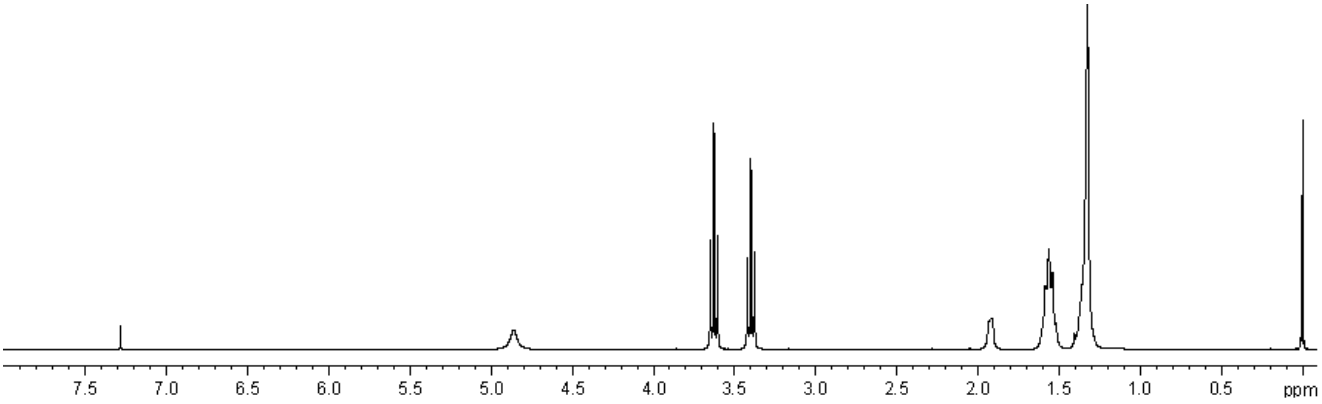

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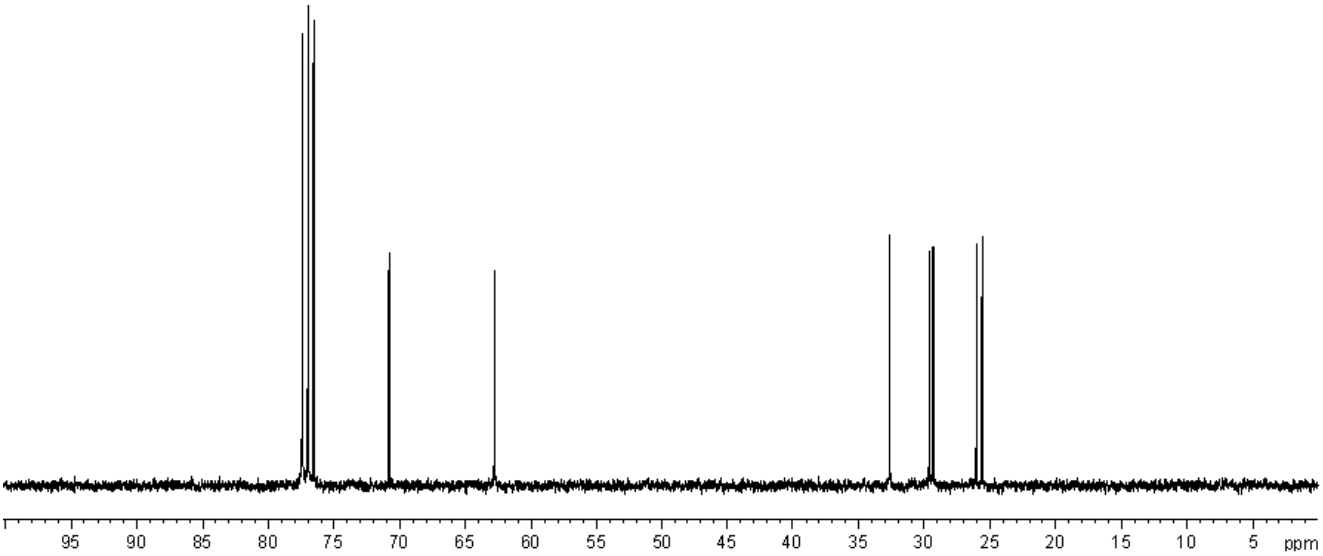

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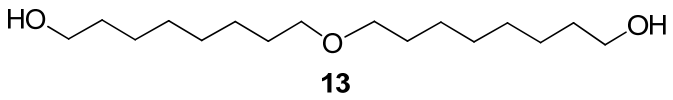

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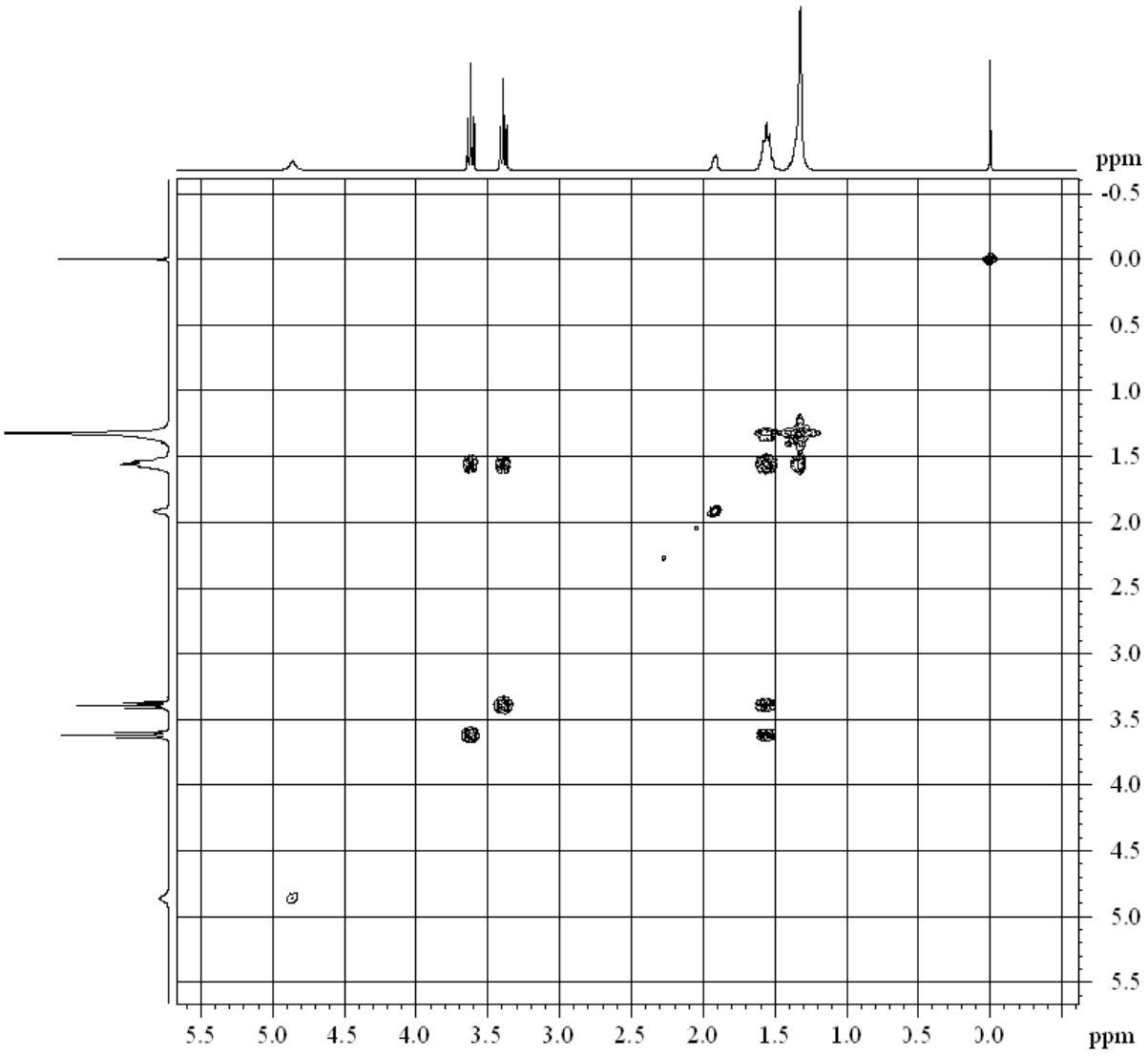

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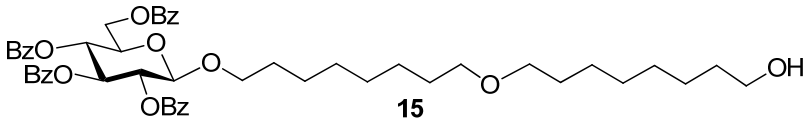

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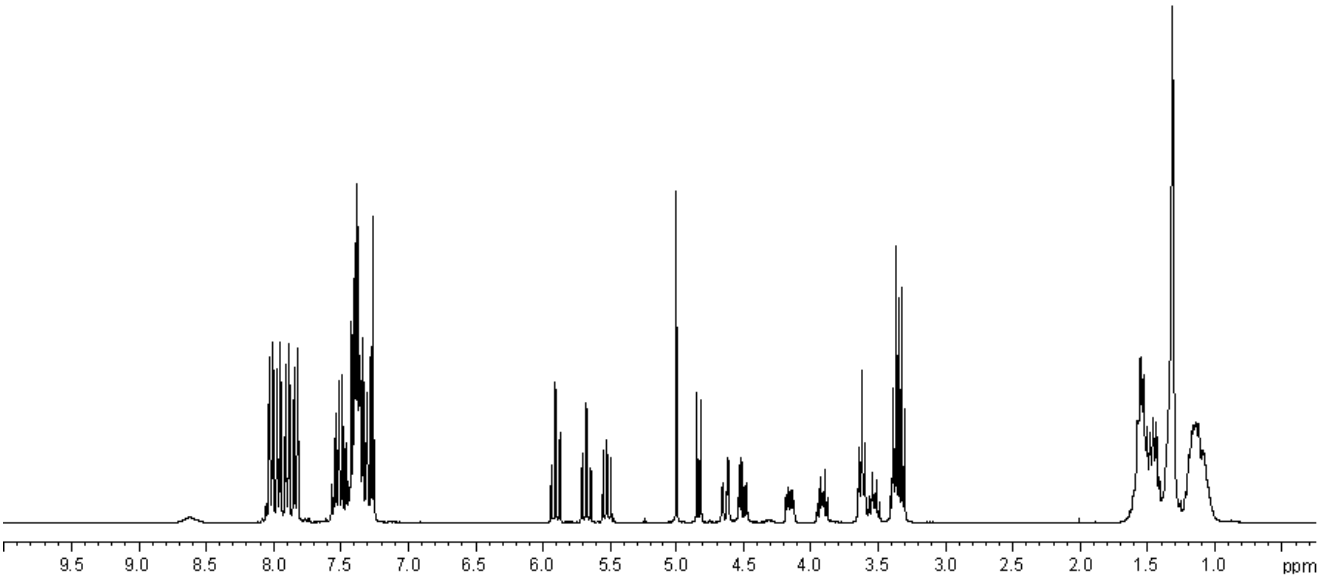

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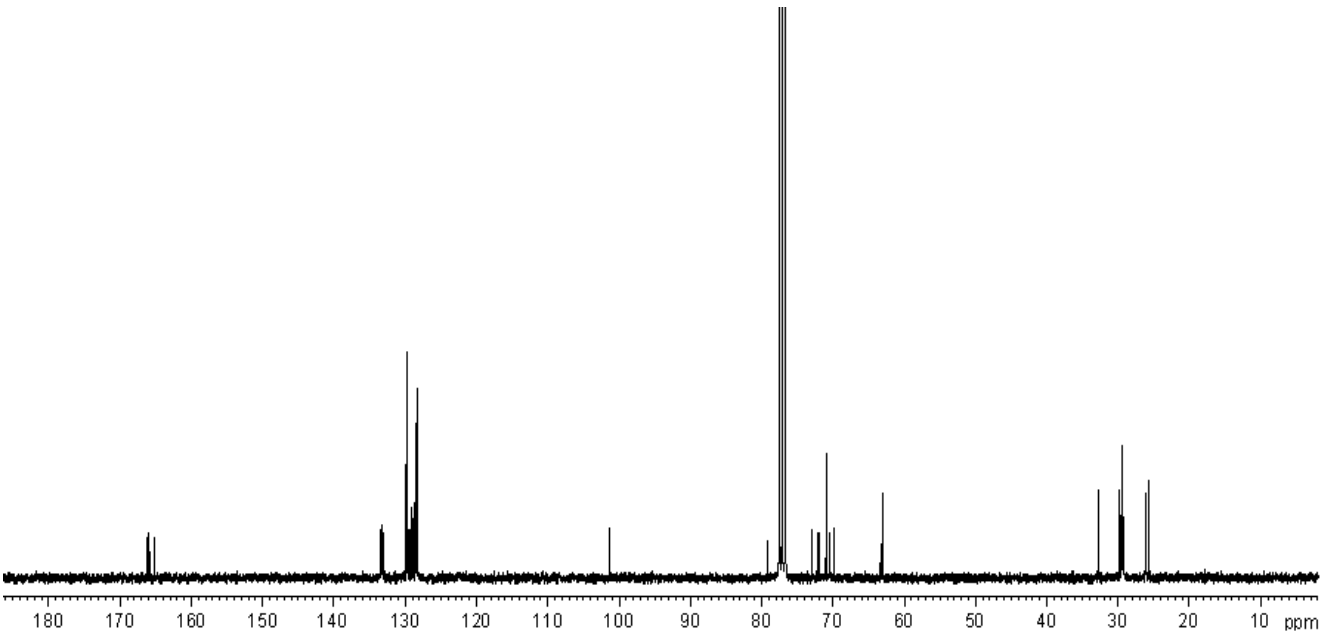

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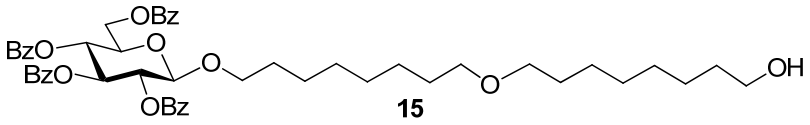

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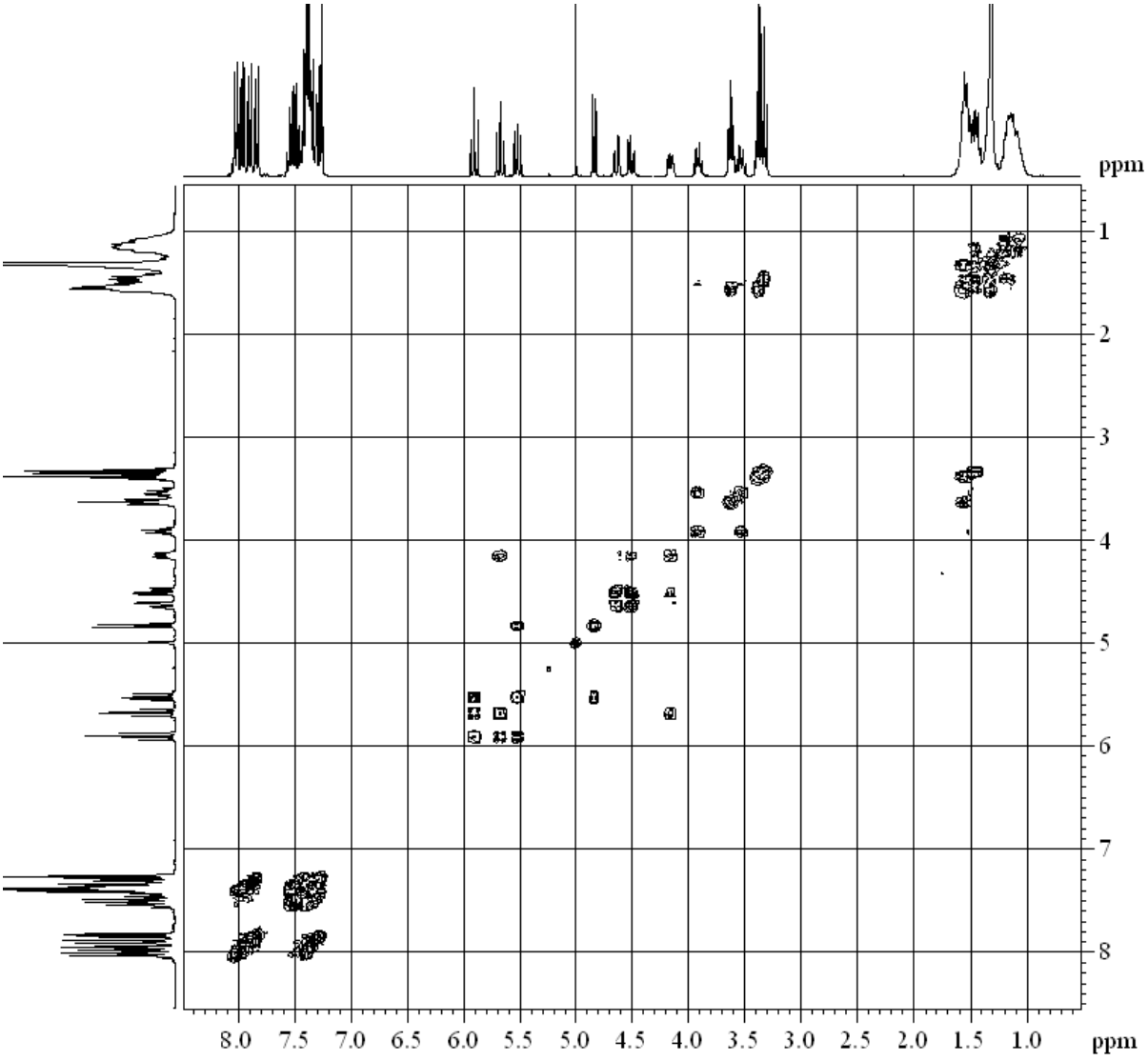

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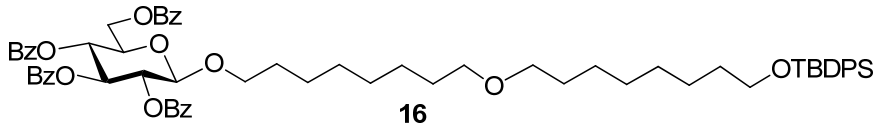

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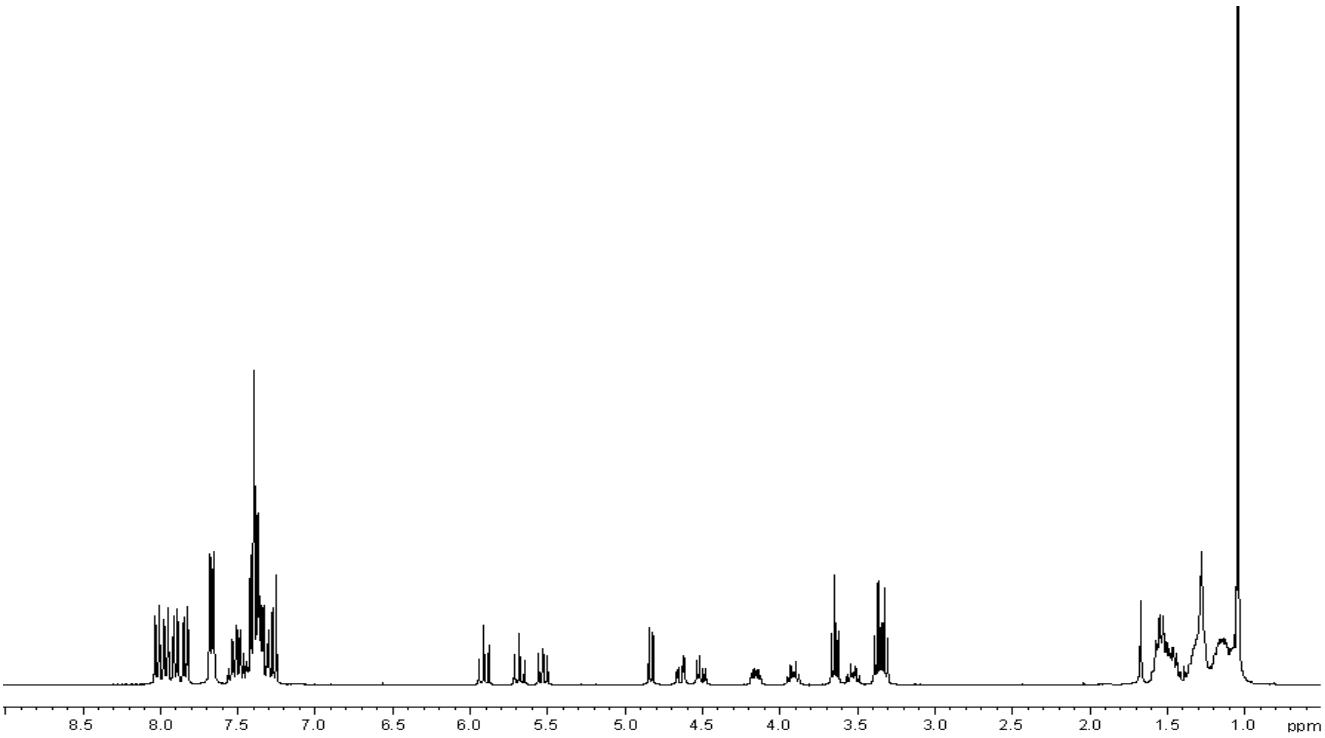

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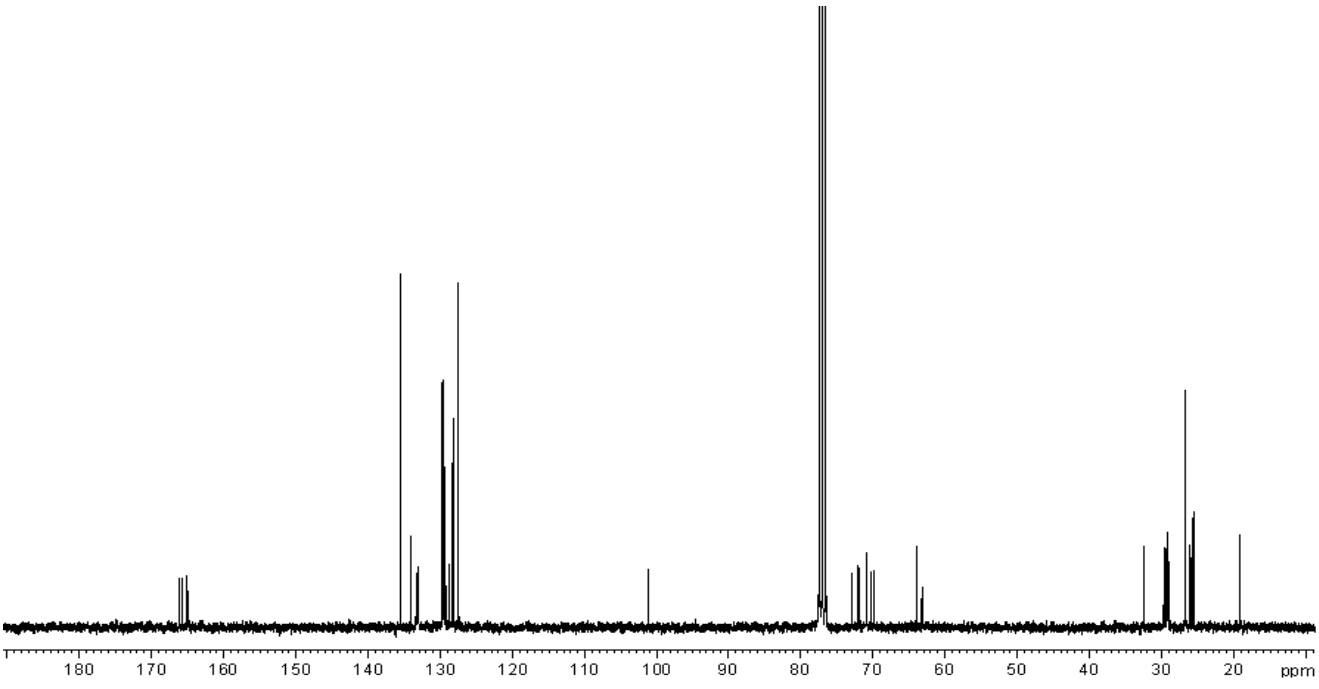

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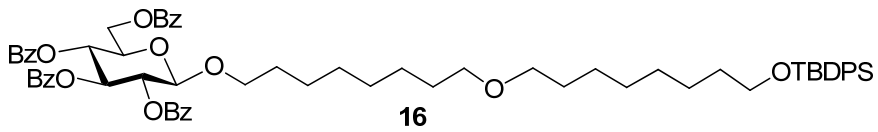

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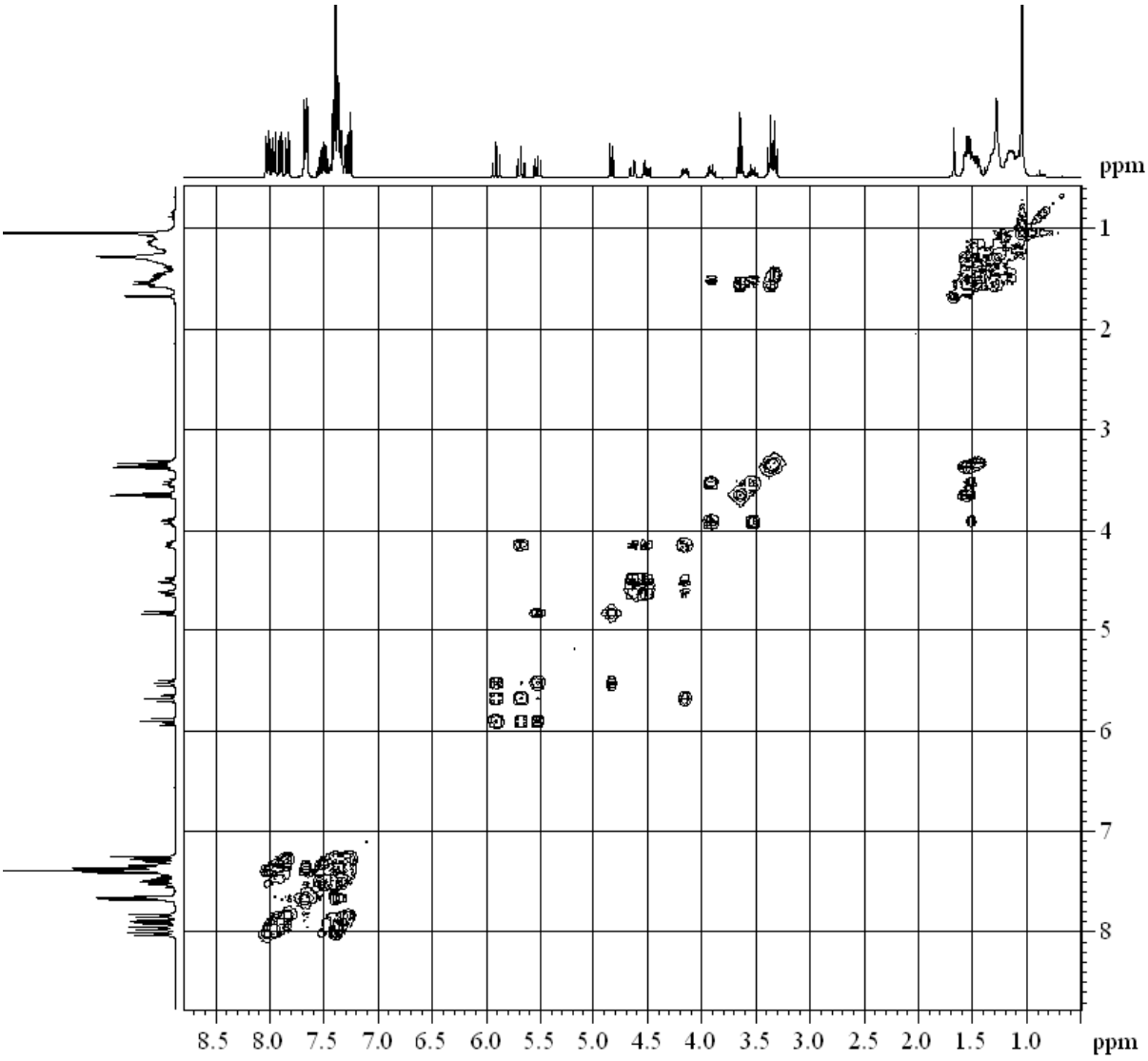

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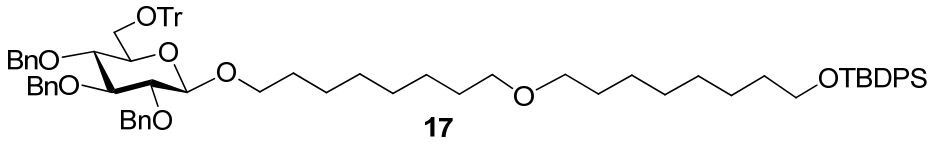

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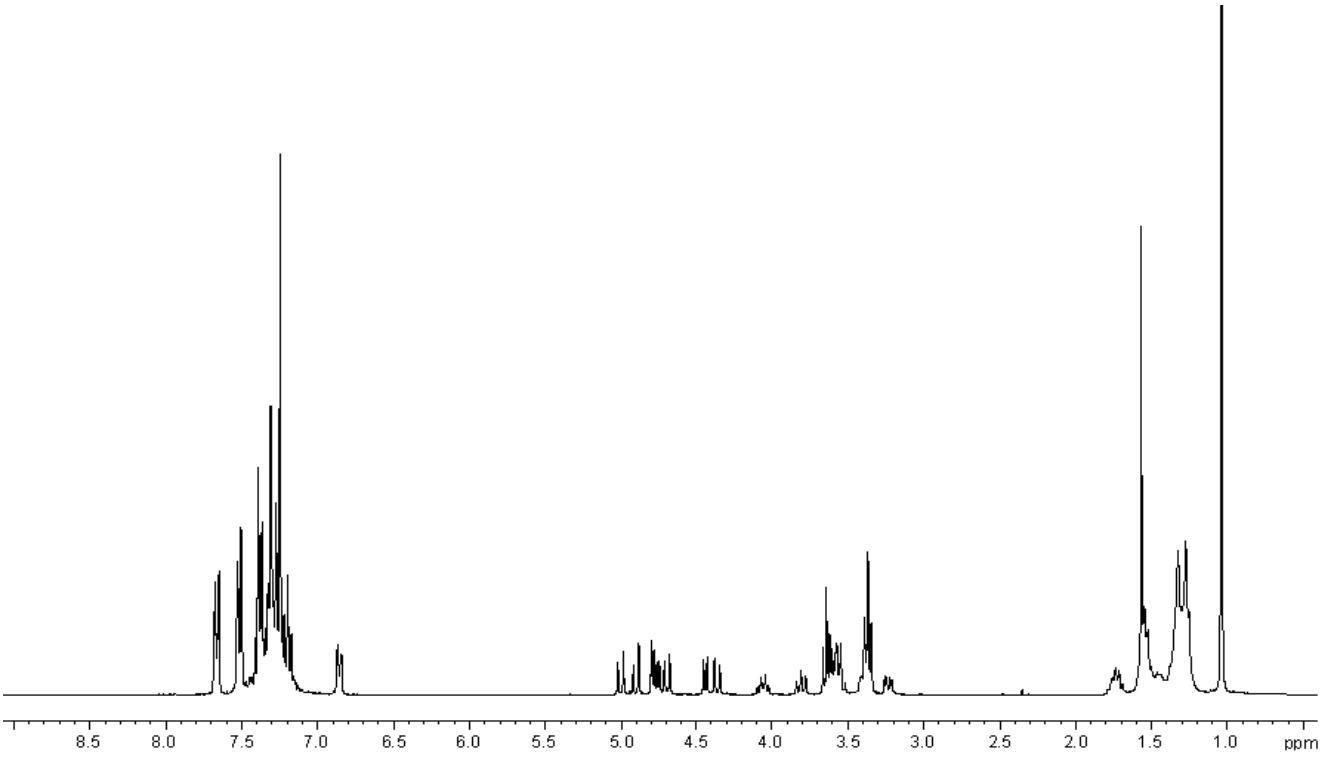

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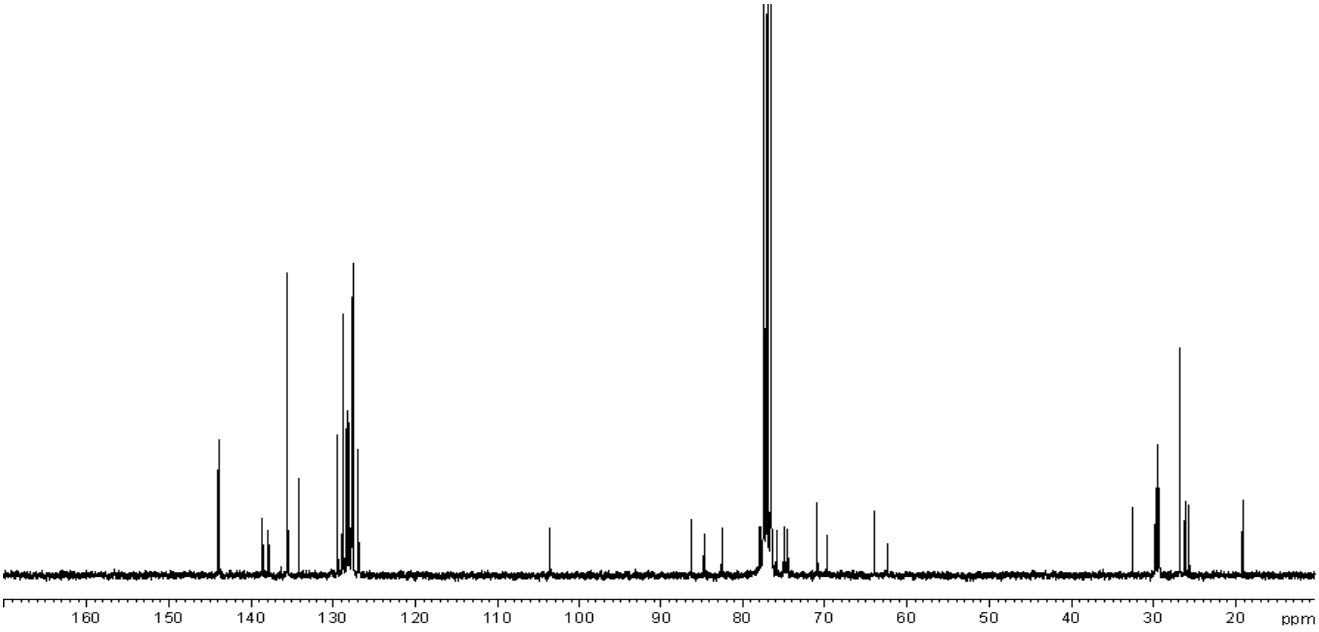

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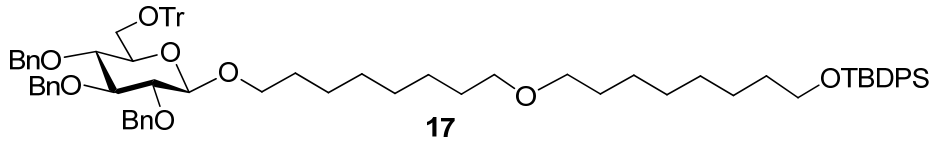

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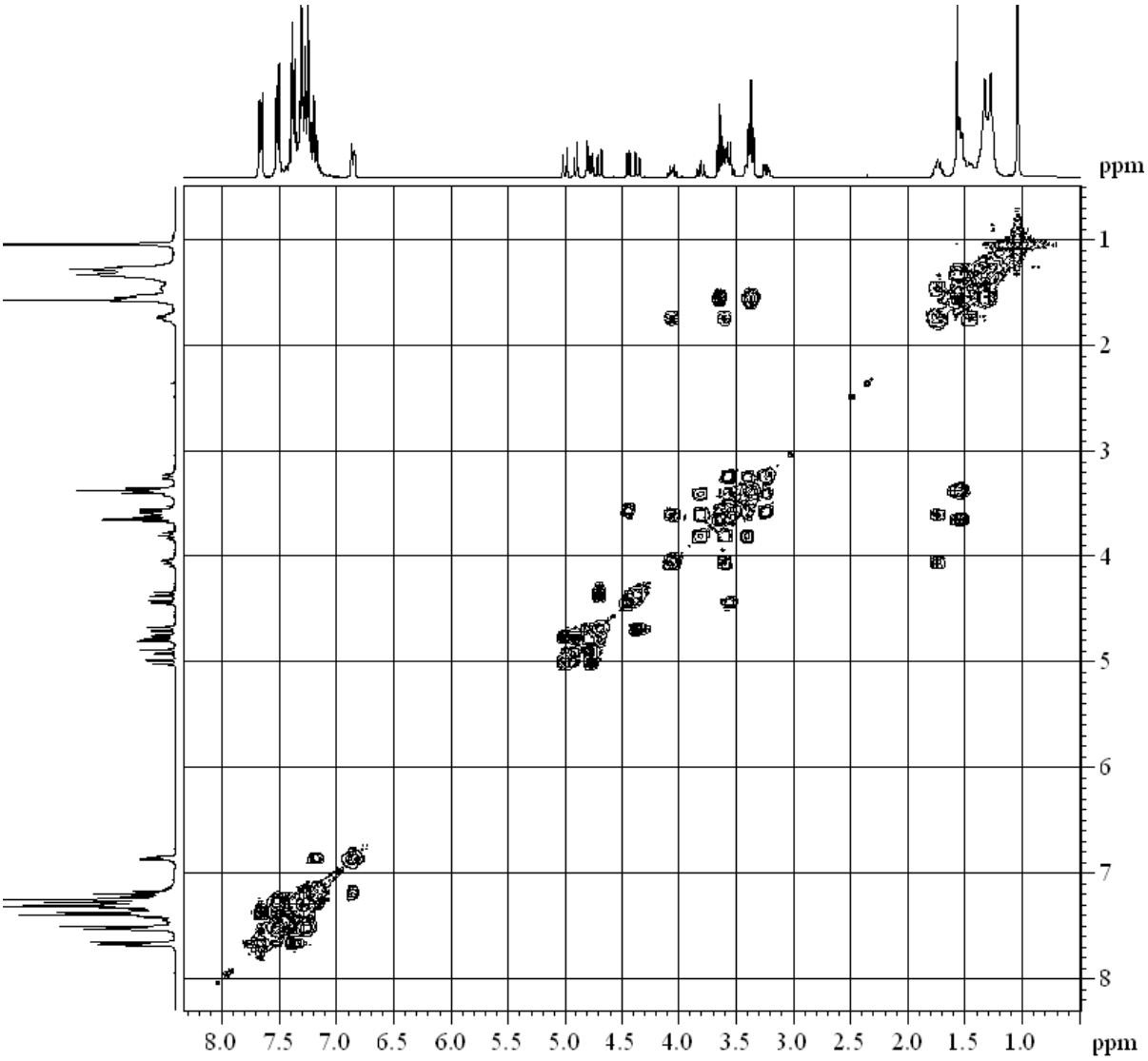

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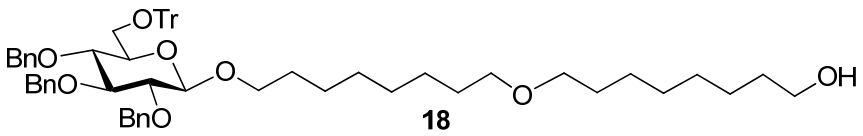

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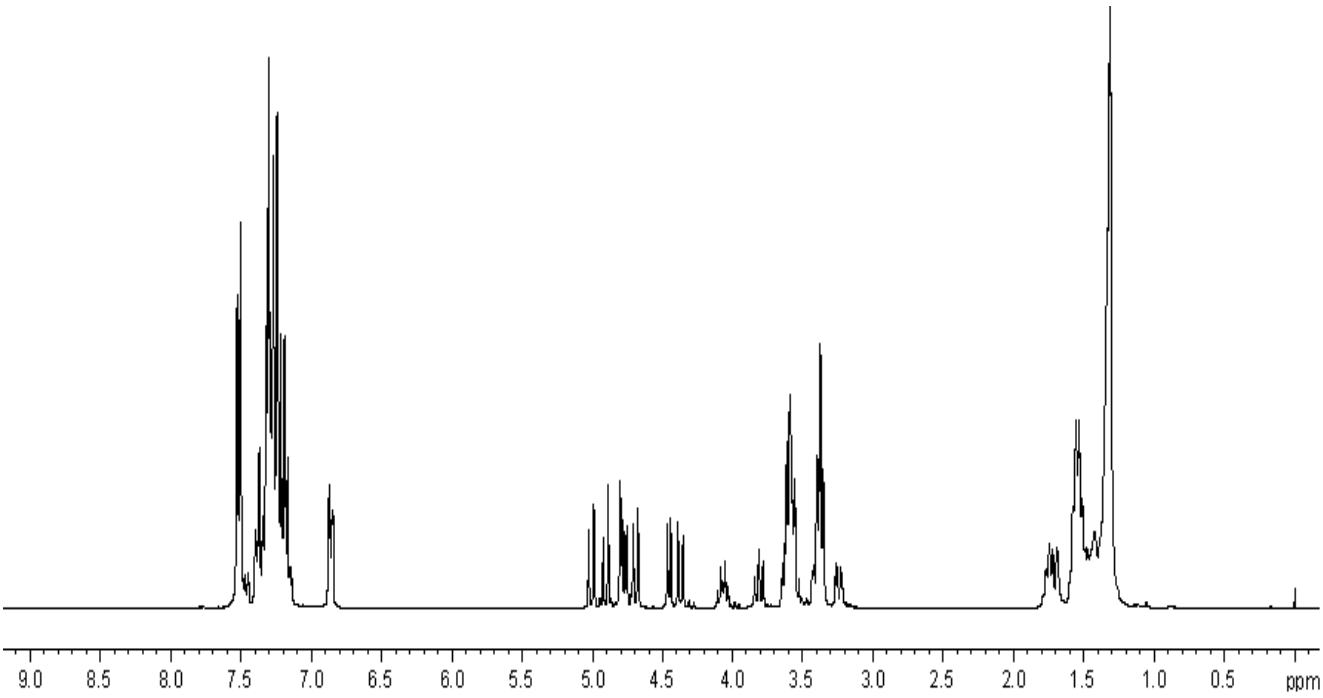

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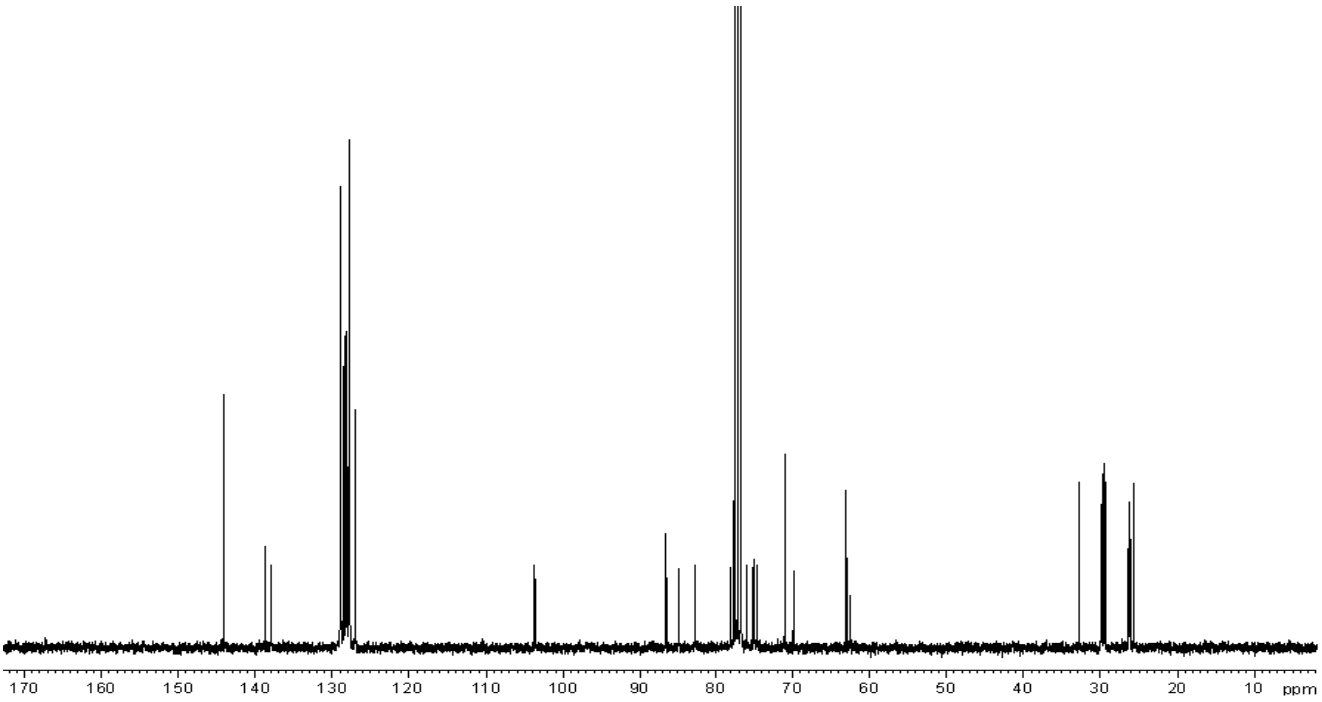
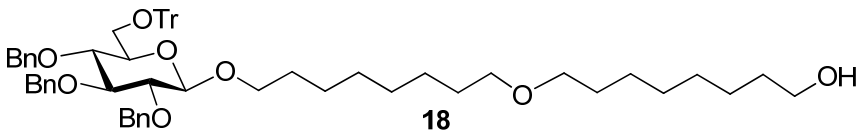


$CDCl_3$ at 75 MHz



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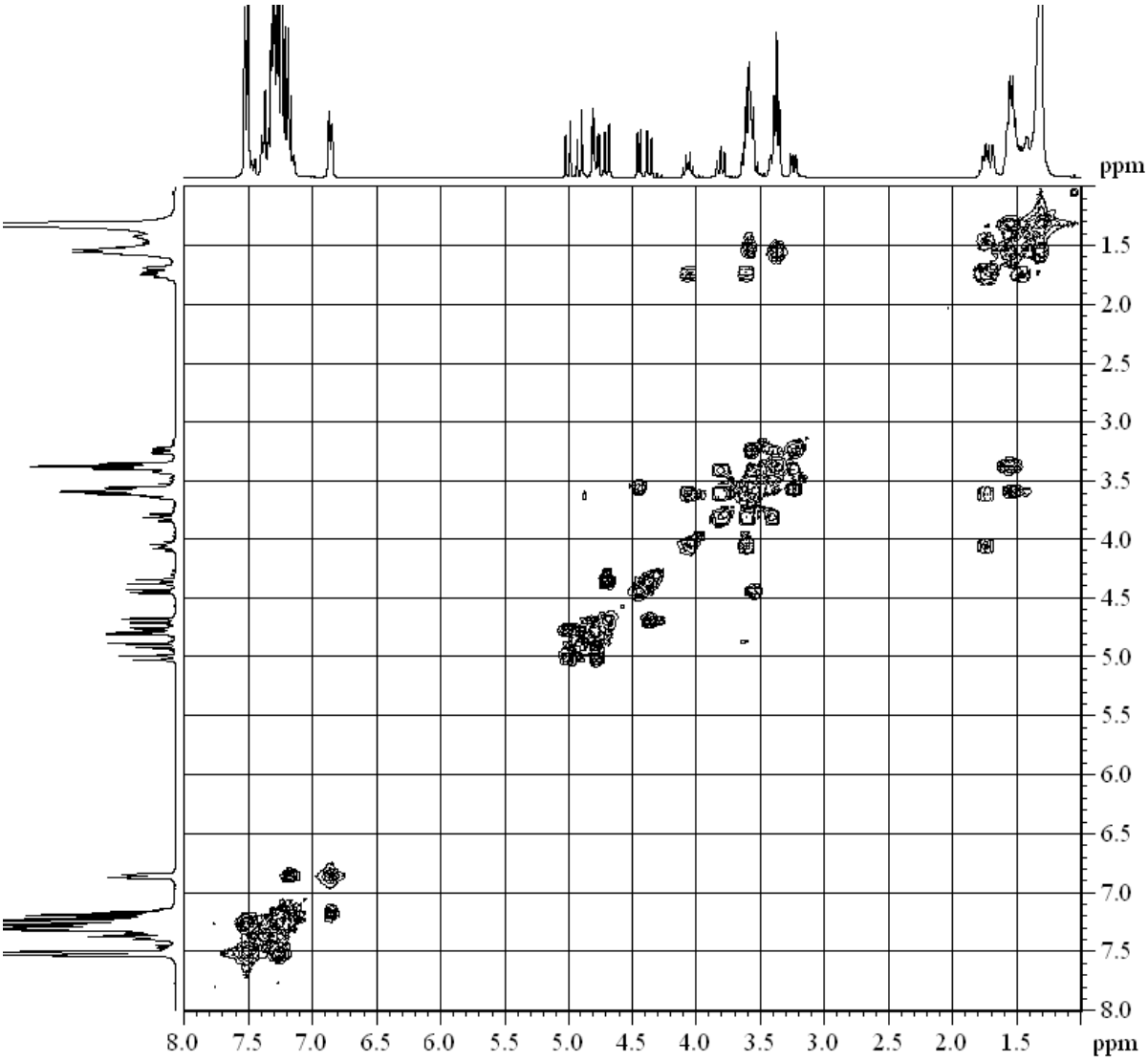
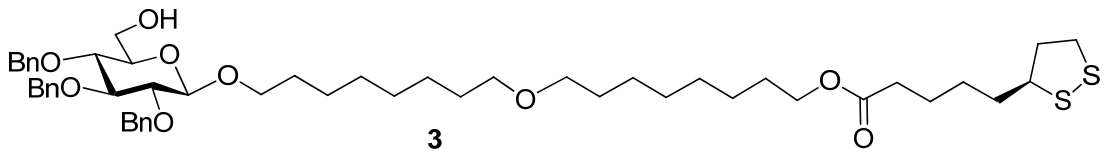


$CDCl_3$ at 300 MHz



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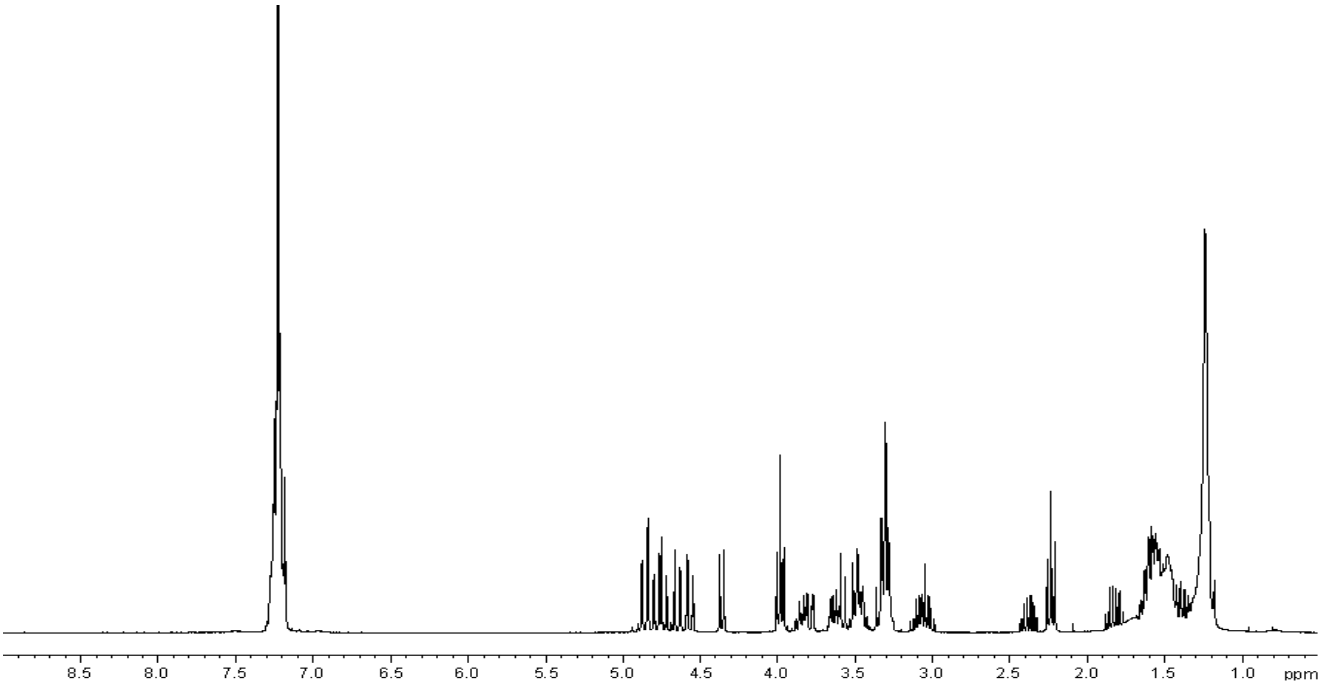
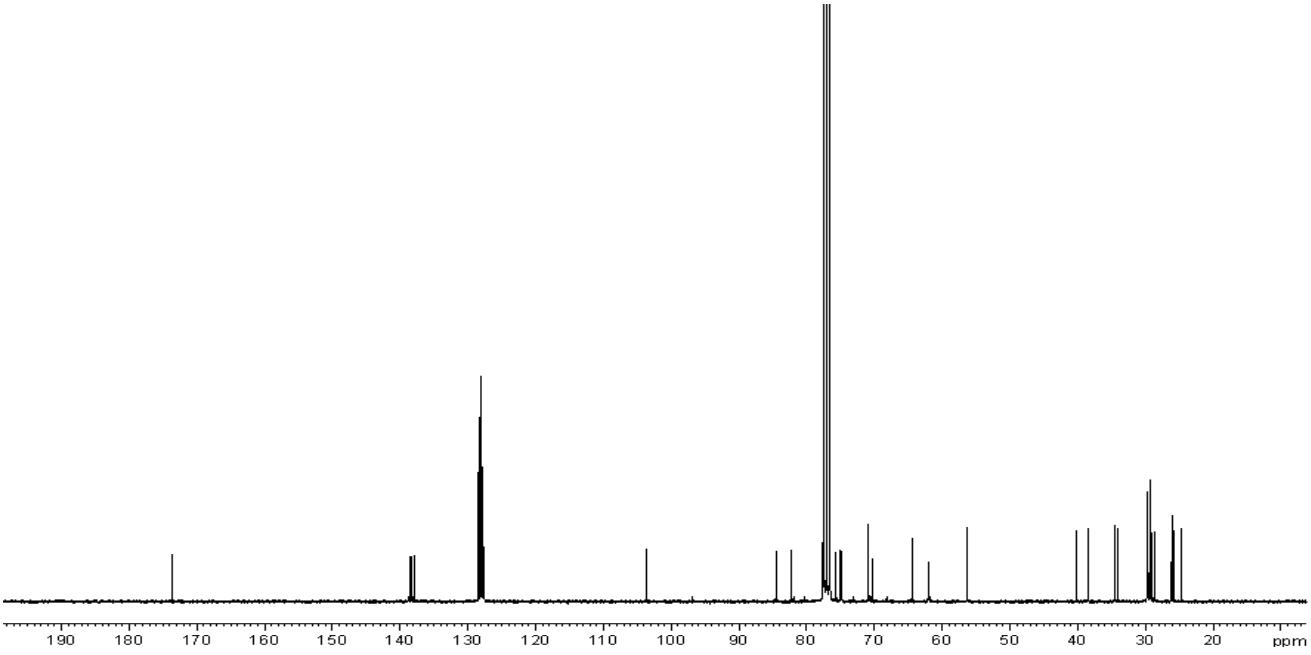
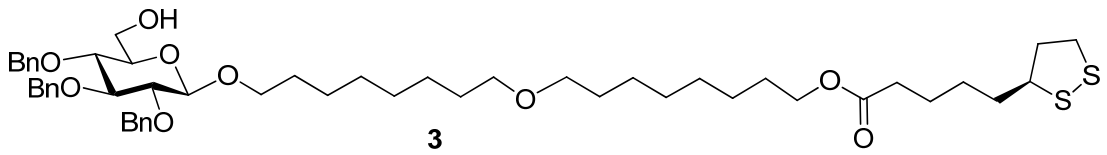


$CDCl_3$ at 300 MHz



$CDCl_3$ at 75 MHz



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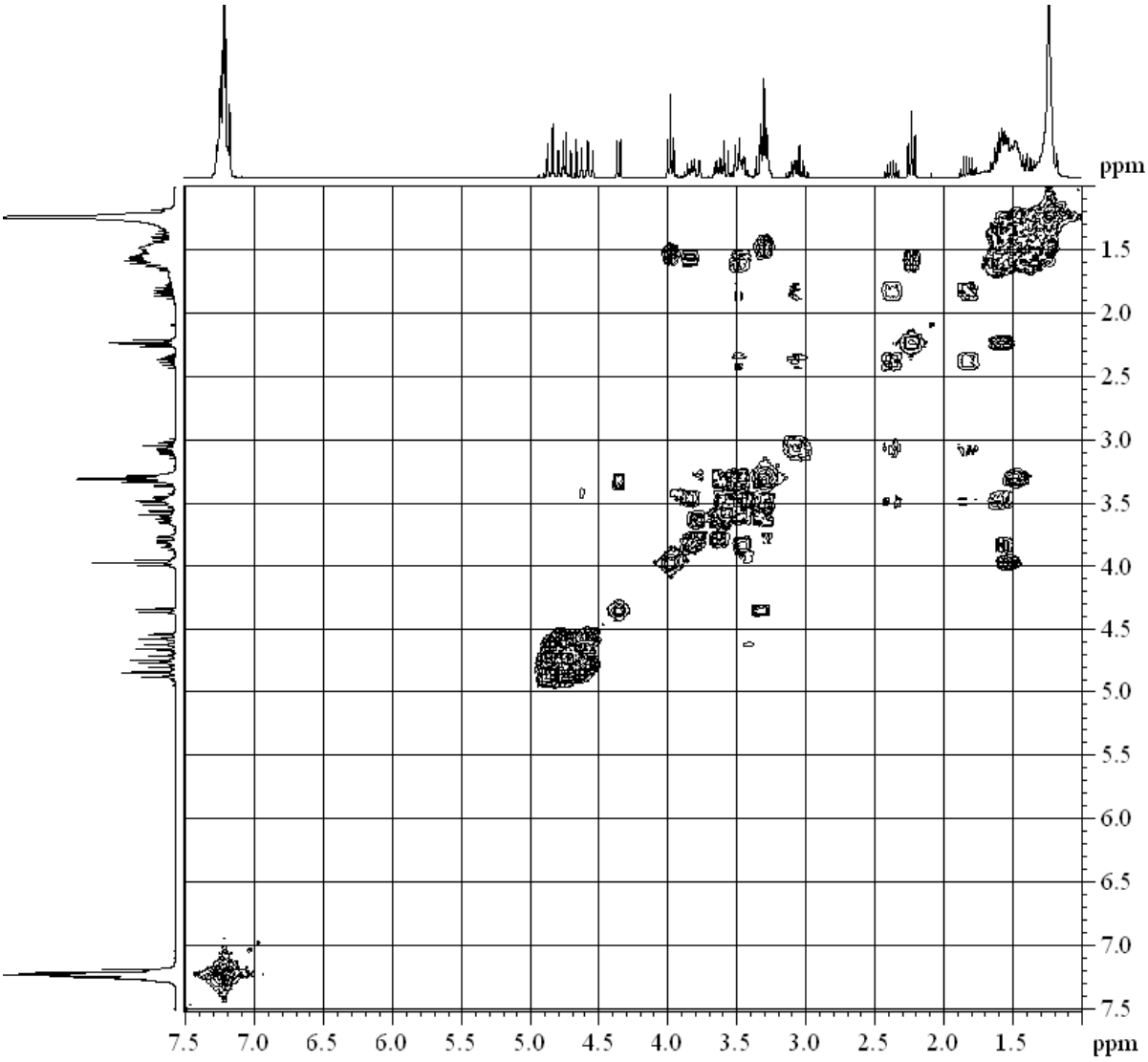
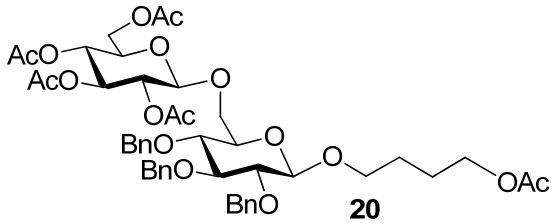


$CDCl_3$ at 300 MHz



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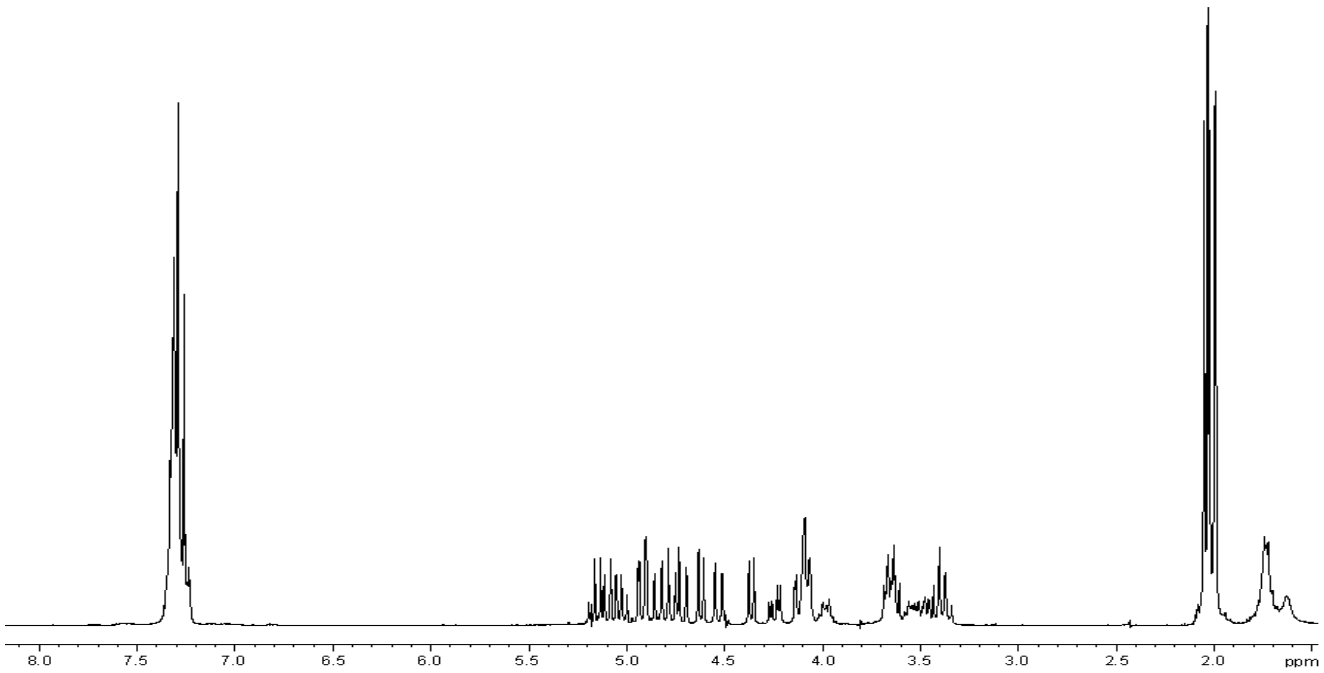
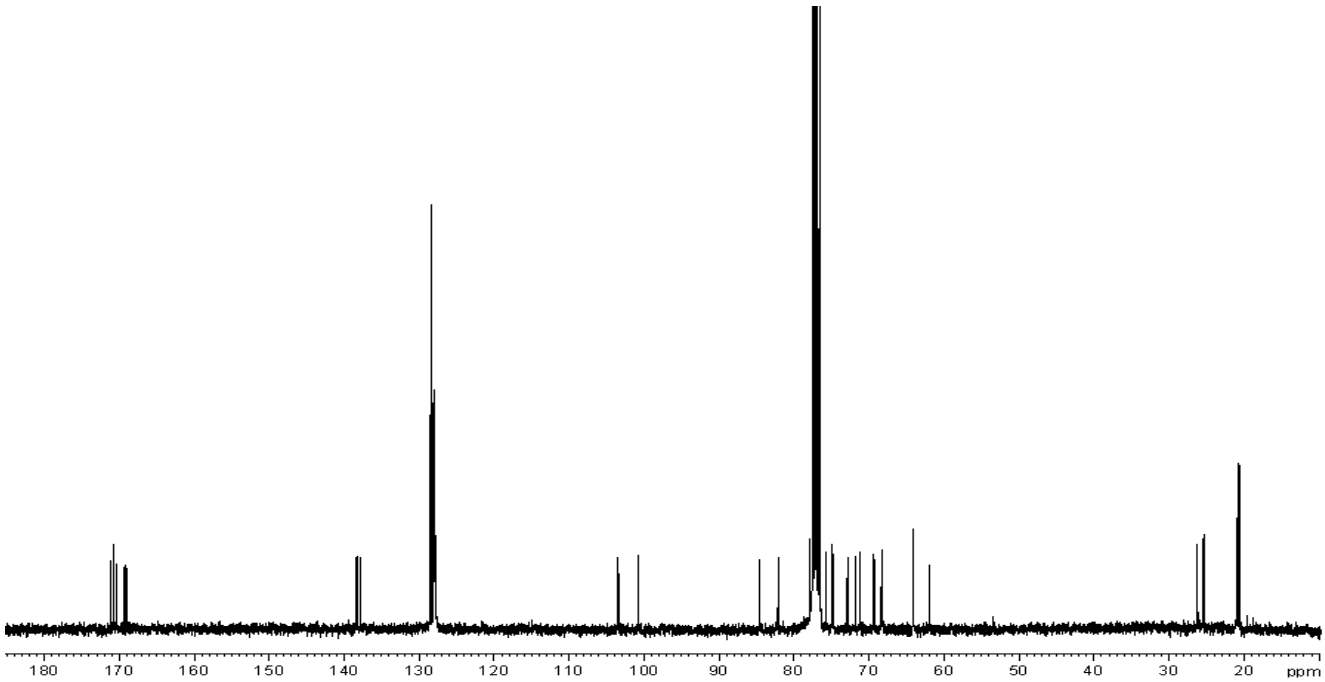
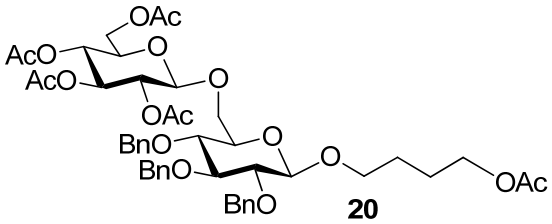


$CDCl_3$ at 300 MHz



$CDCl_3$ at 75 MHz



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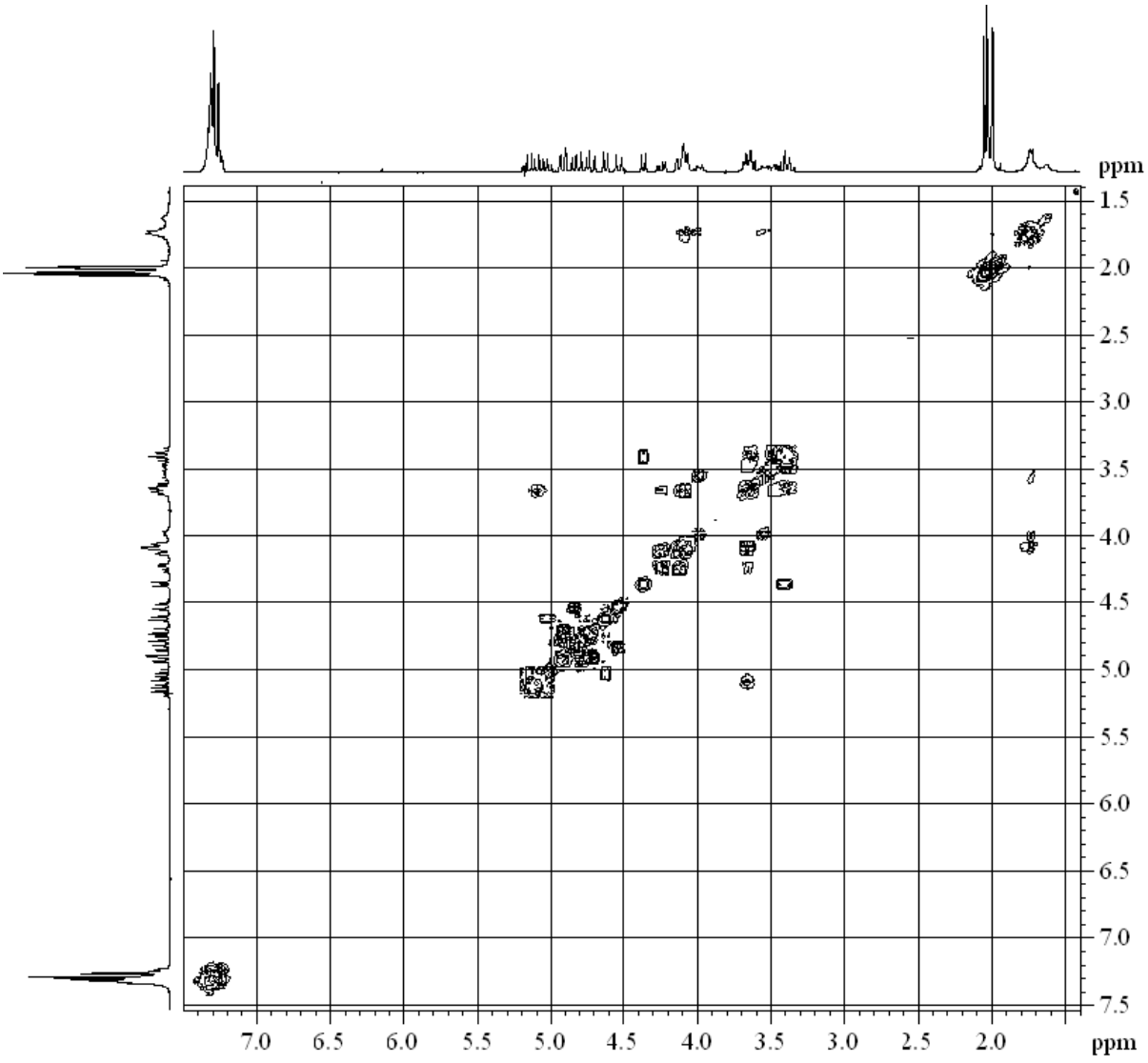
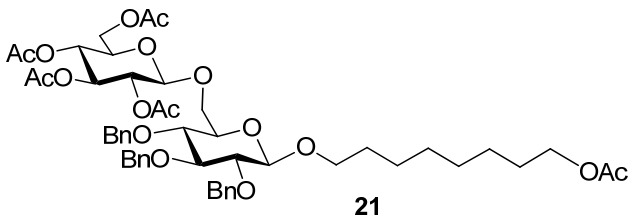


$CDCl_3$ at 300 MHz



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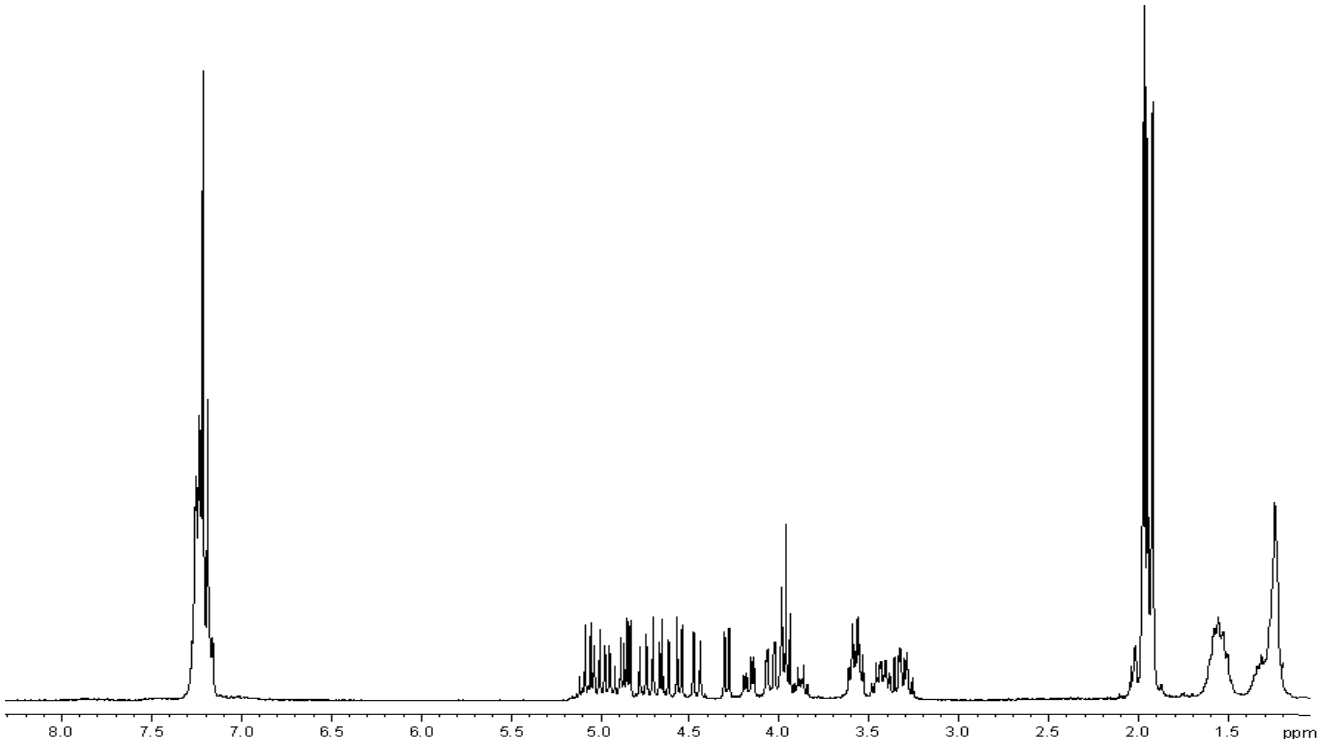
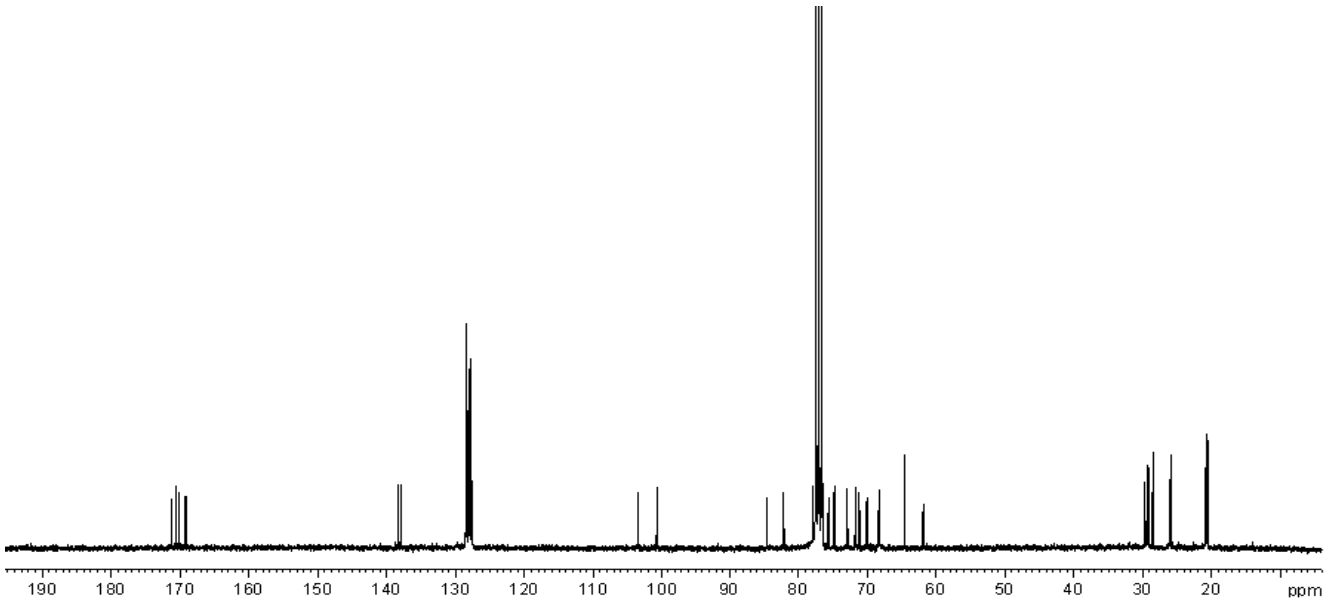
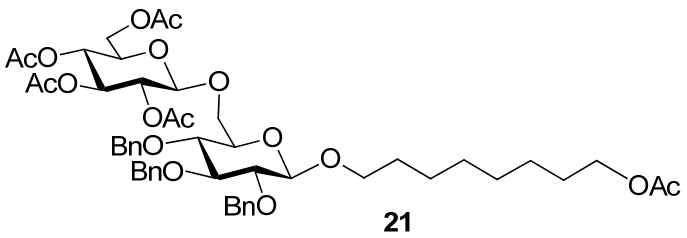


$CDCl_3$ at 300 MHz



$CDCl_3$ at 75 MHz



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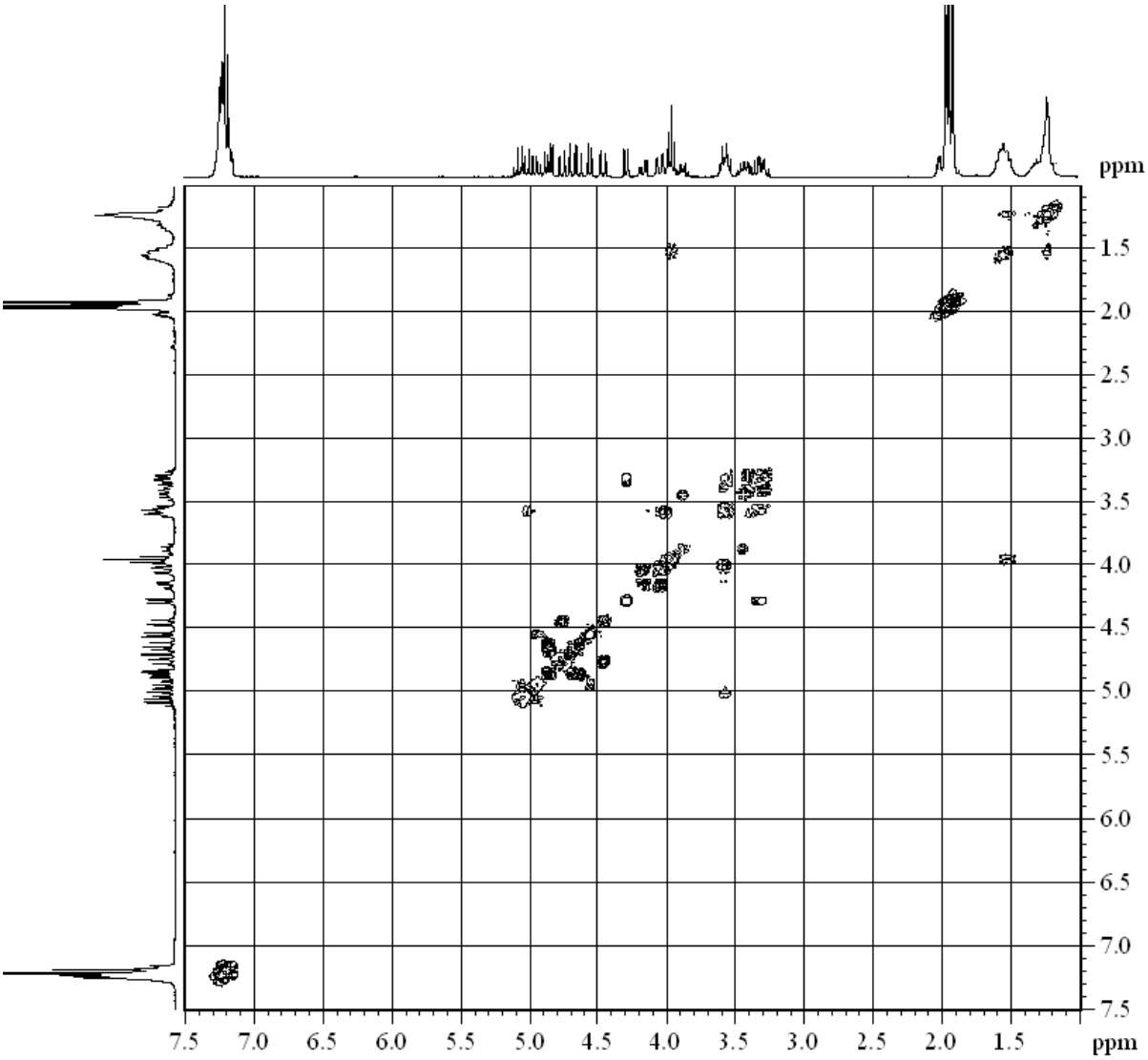
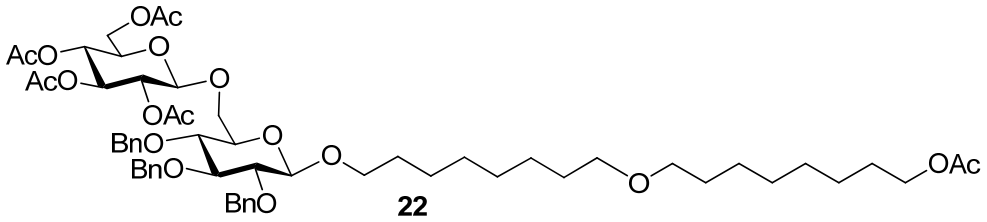


$CDCl_3$ at 300 MHz



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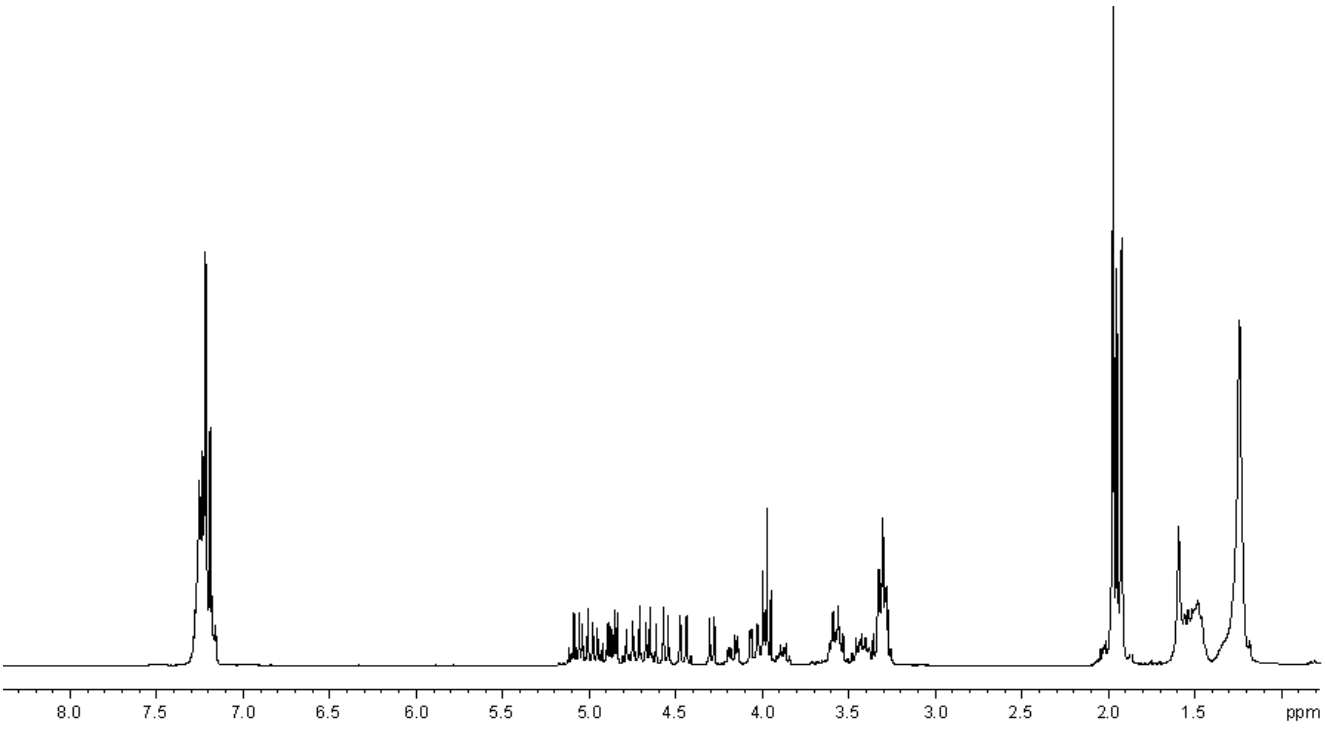
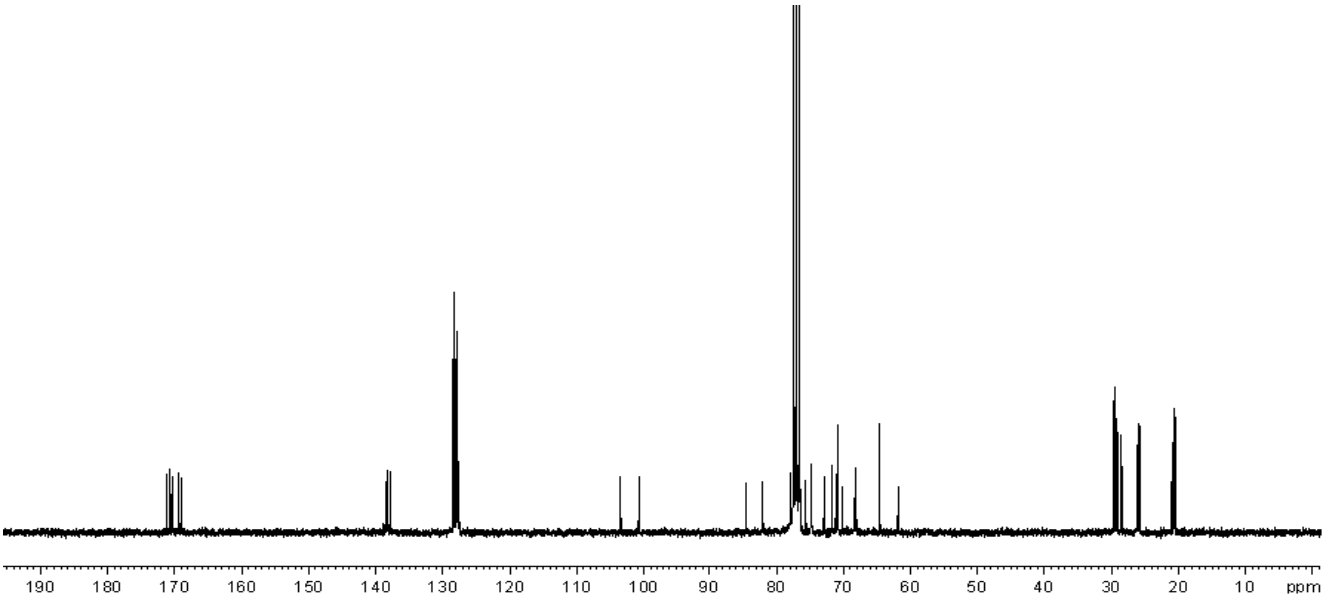
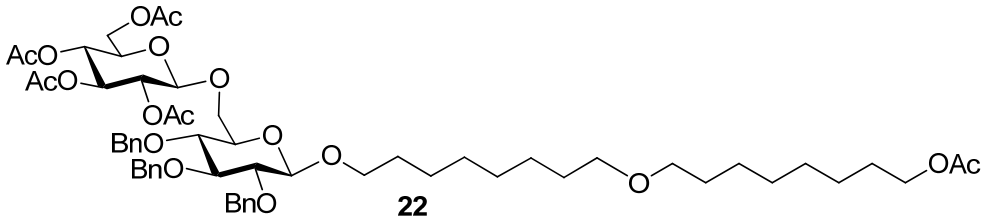


$CDCl_3$ at 300 MHz



$CDCl_3$ at 75 MHz



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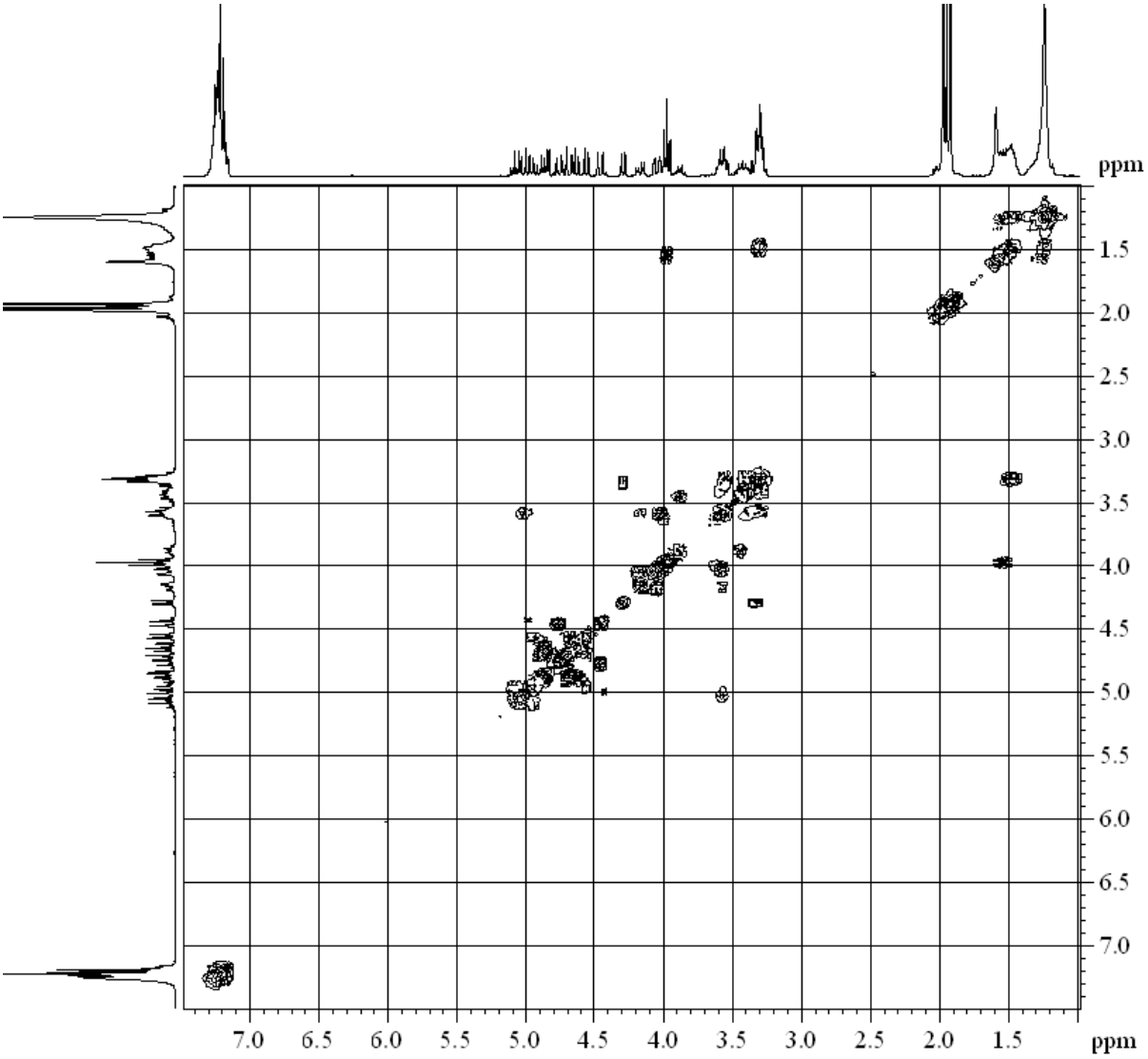

$CDCl_3$ at 300 MHz