

SYNTHESIS OF SALACINOL-*d*₄ AS AN INTERNAL STANDARD FOR MASS-SPECTROMETRIC QUANTITATION OF SALACINOL, A POTENT α -GLUCOSIDASE INHIBITOR FOUND IN A TRADITIONAL AYURVEDIC MEDICINE “SALACIA”

Genzoh Tanabe,^{1,2,*} Sanami Teramae,¹ Yousuke Kunikata,¹ Shinsuke Marumoto,³ Shuhei Okugawa,² Fumihiro Ishikawa,¹ Weiya Xie,⁴ Toshio Morikawa,² and Osamu Muraoka²

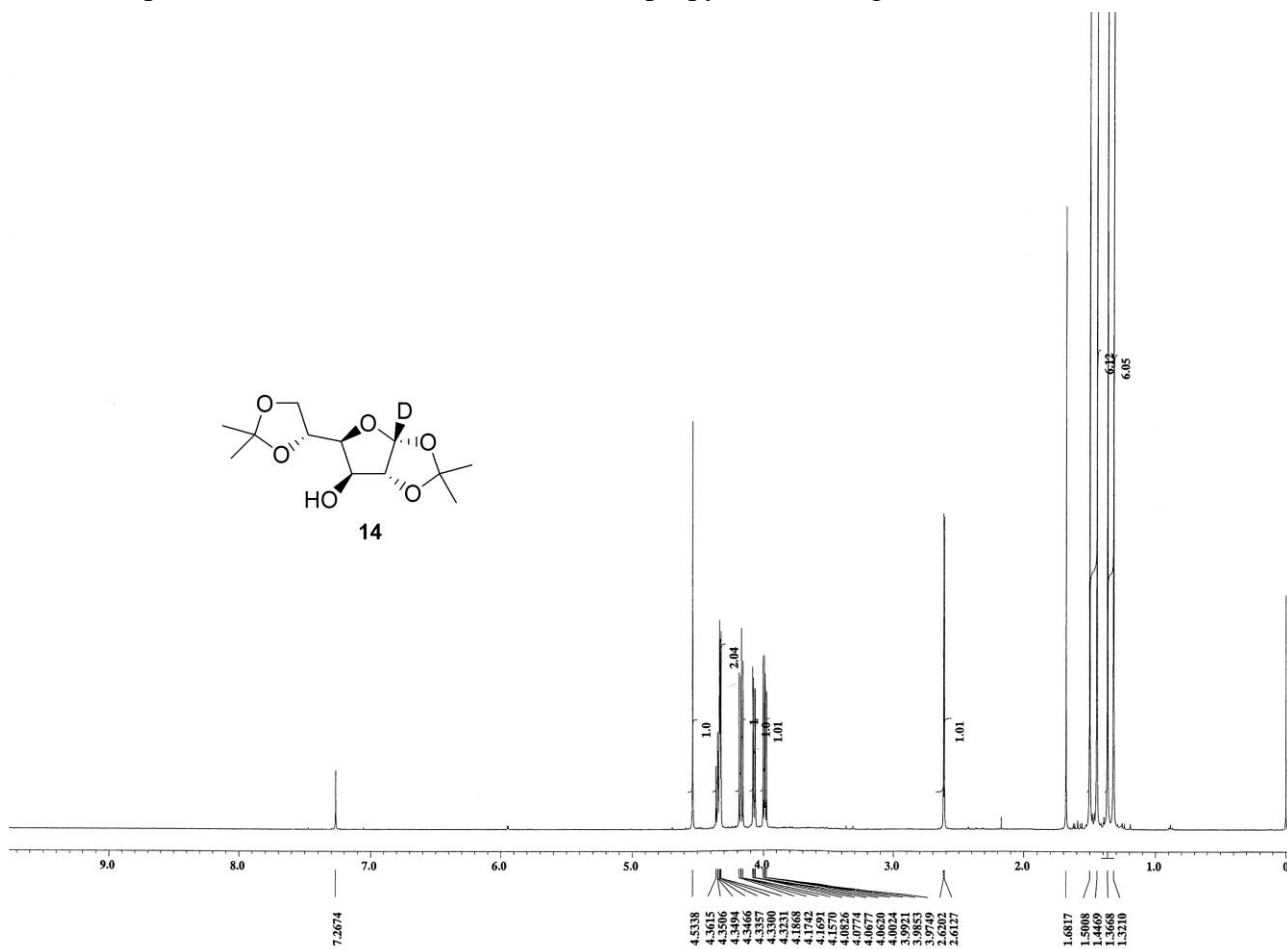
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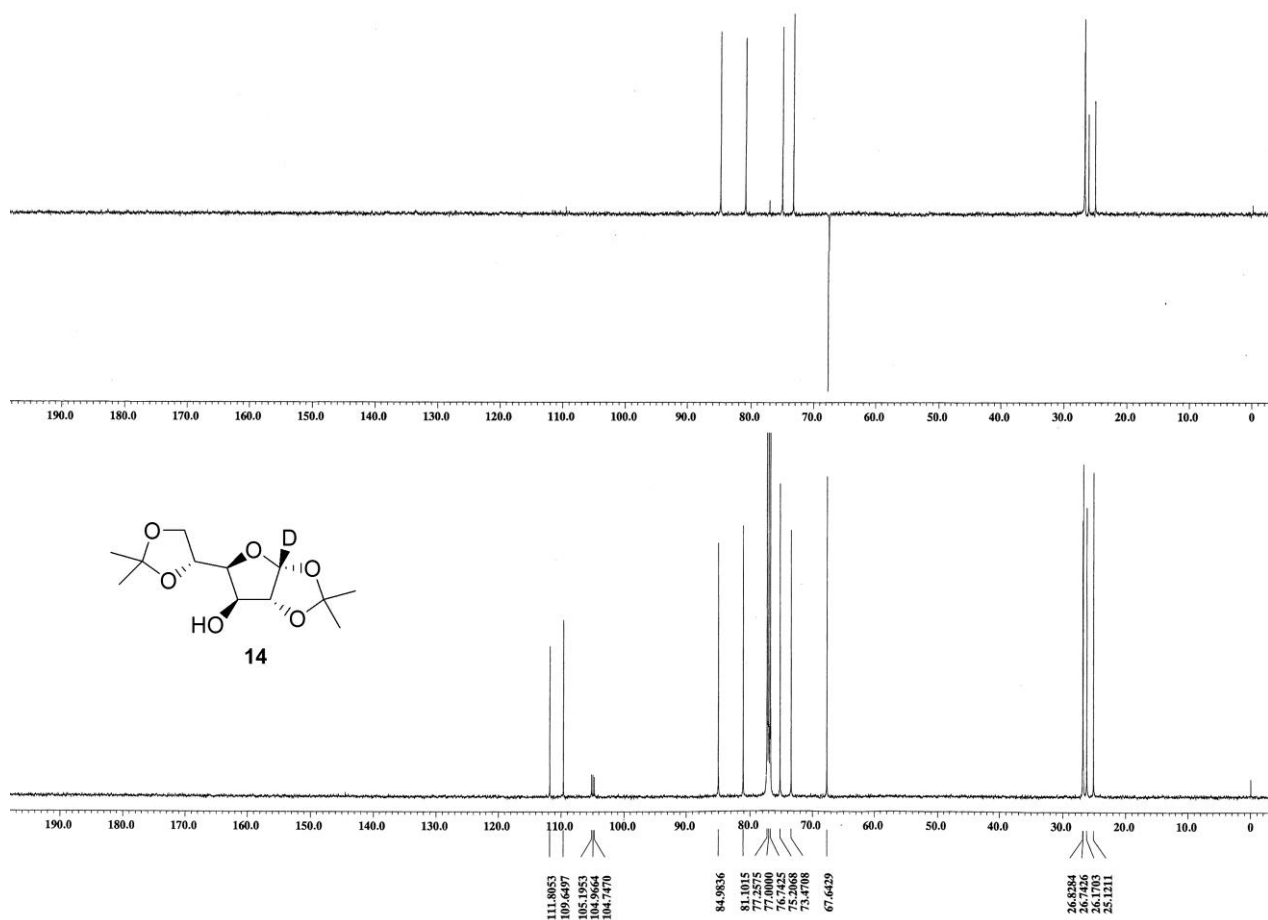
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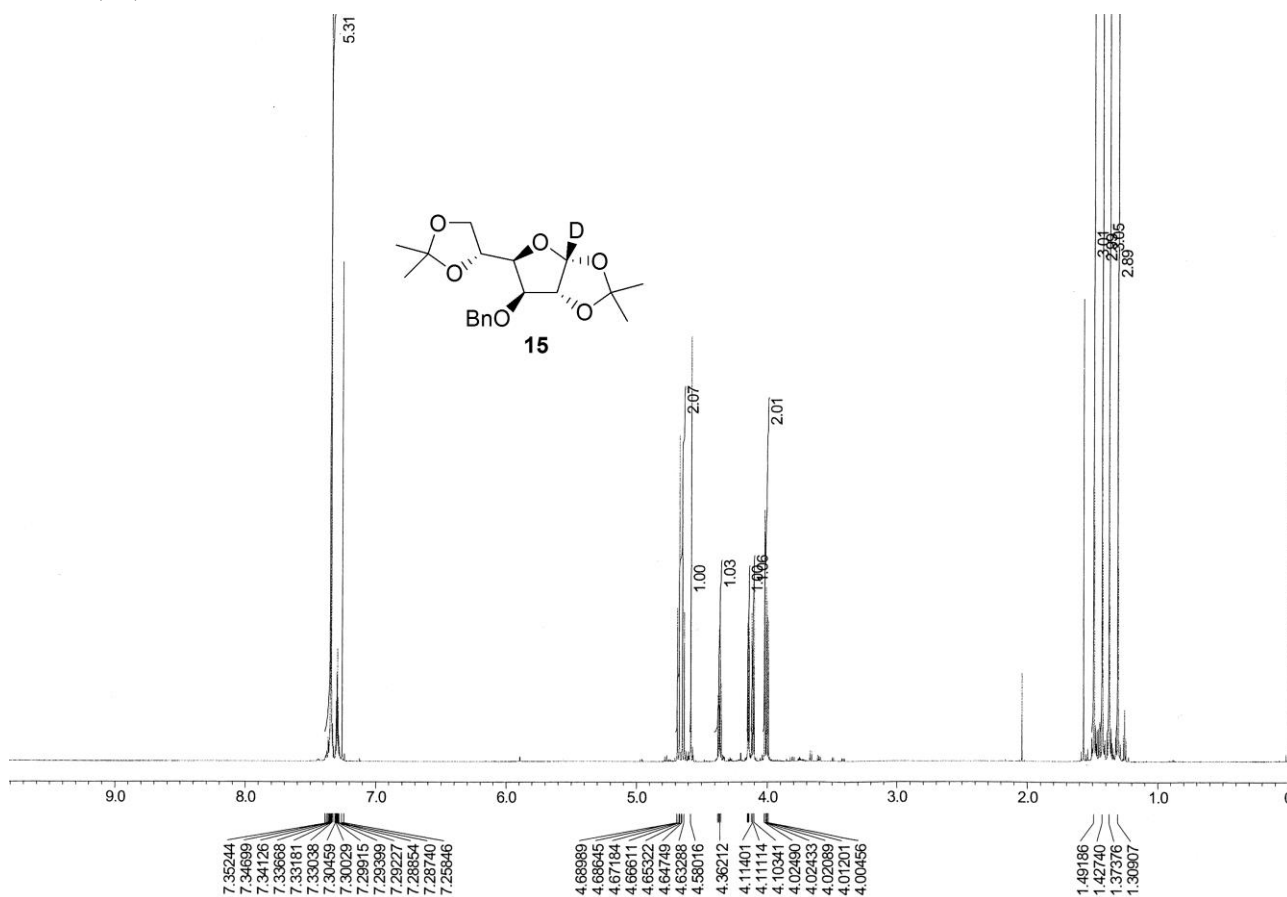
^1H NMR spectrum (in CDCl_3) of 1,2:5,6-di-*O*-isopropylidene- α -D-glucofuranose-1-*C-d* (**14**)



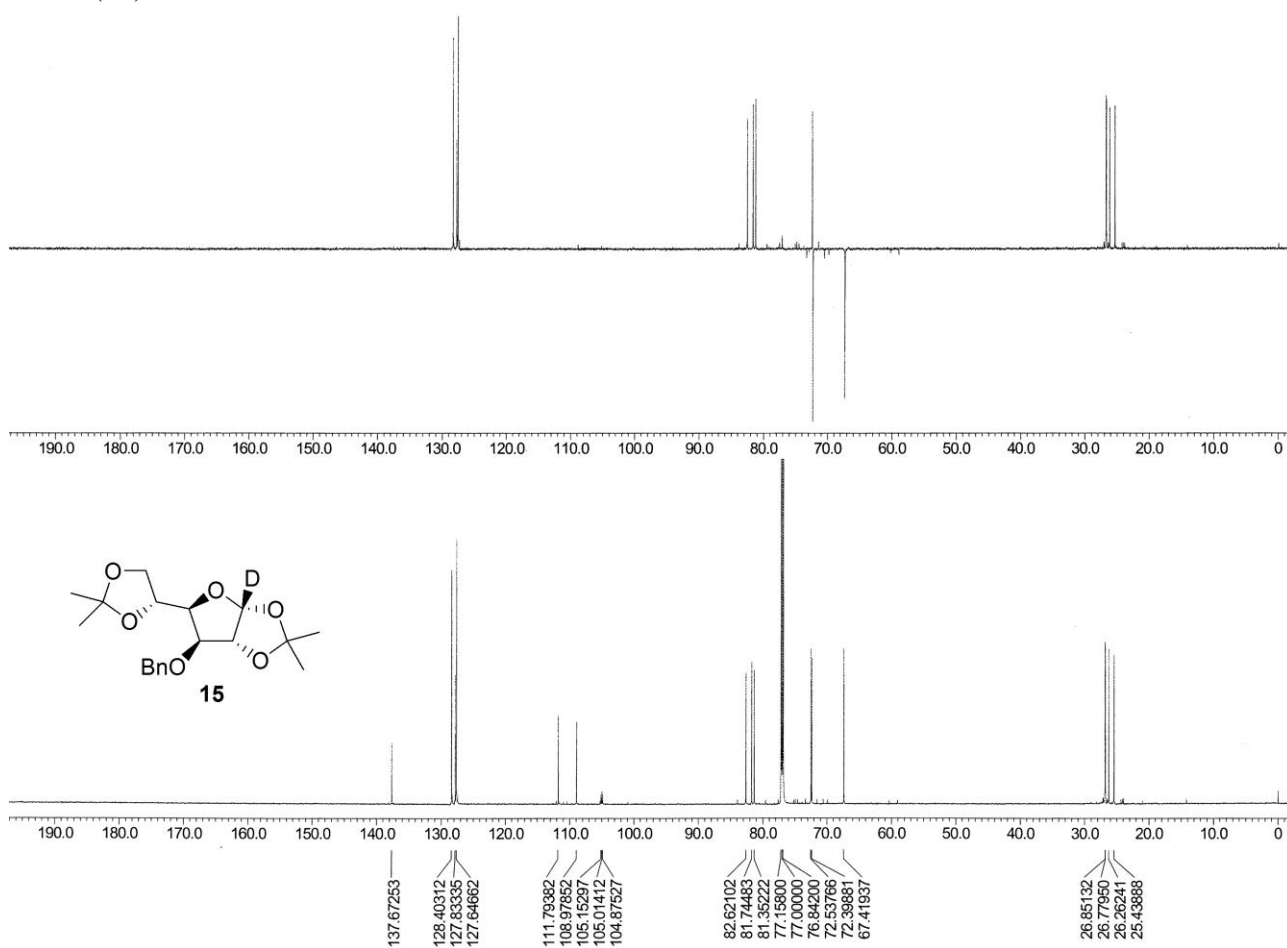
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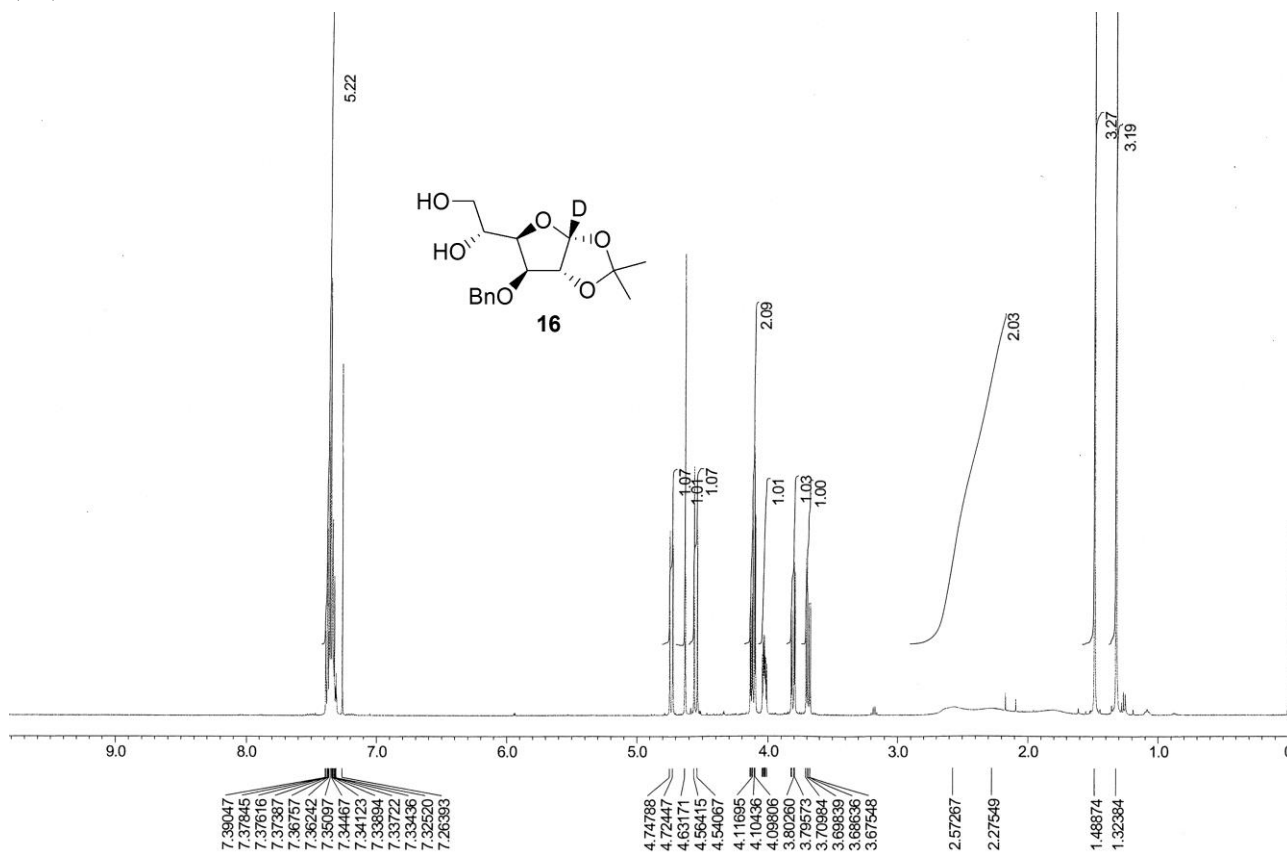
^1H NMR spectrum (in CDCl_3) of 3-*O*-benzyl-1,2:5,6-di-*O*-isopropylidene- α -D-glucopyranose-1-*C-d* (**15**)



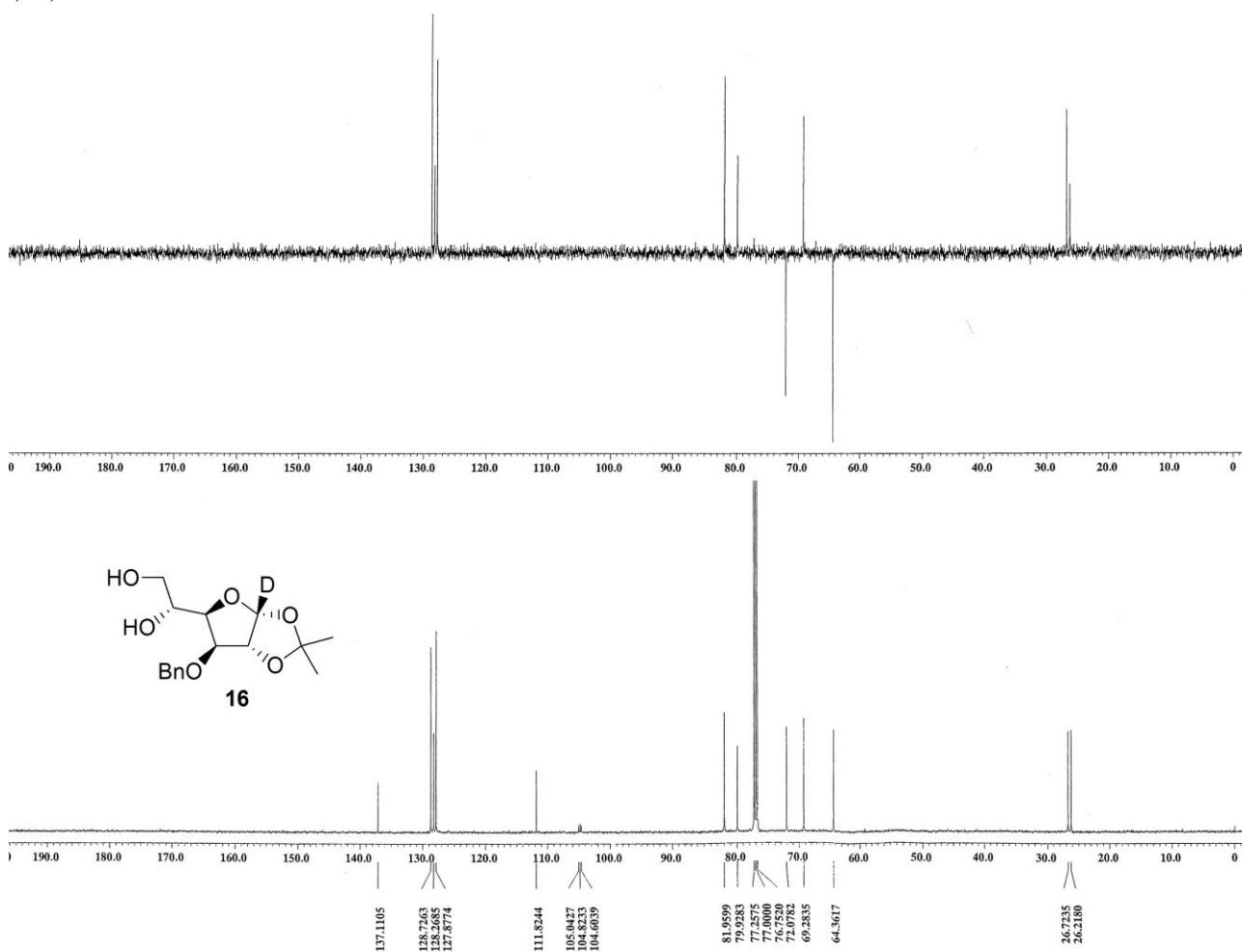
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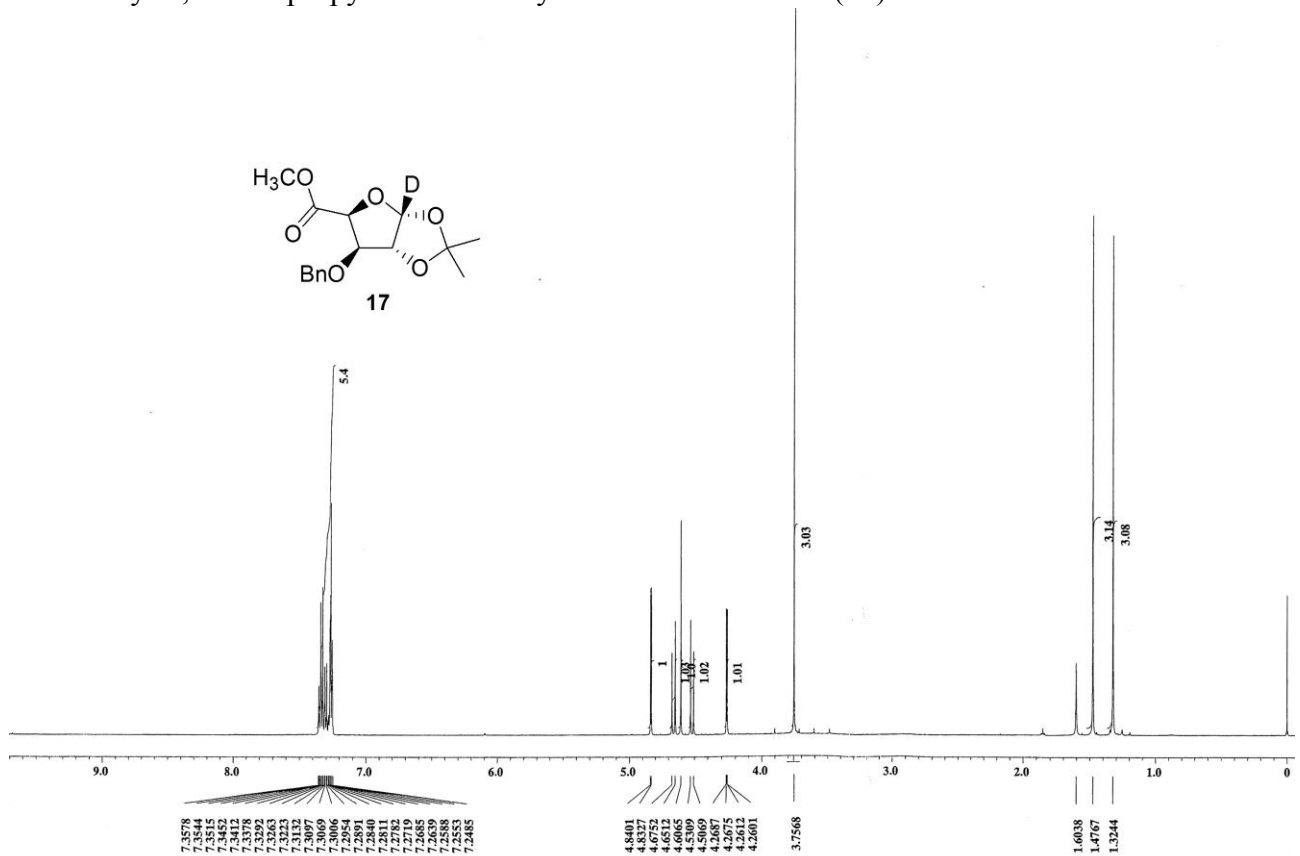
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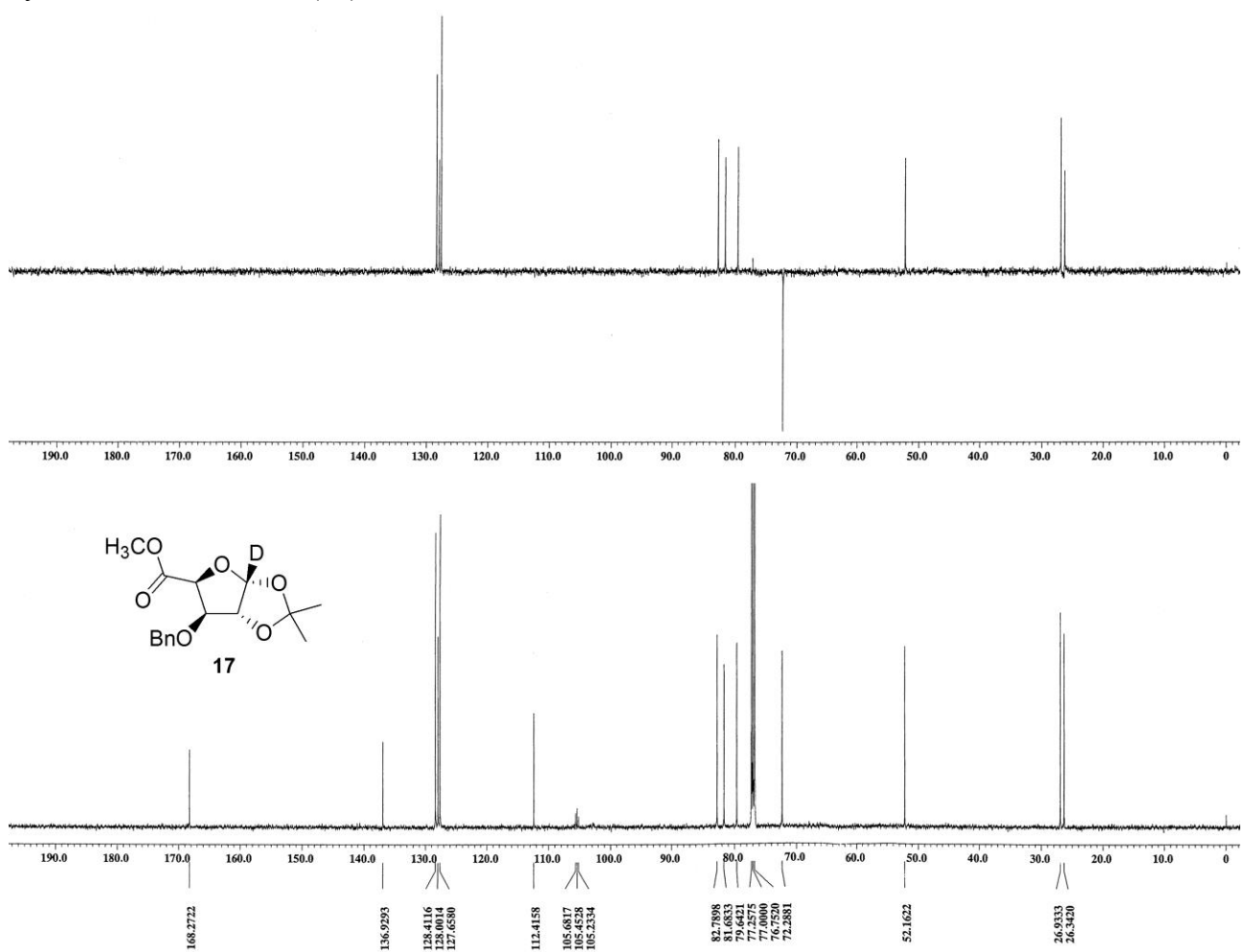
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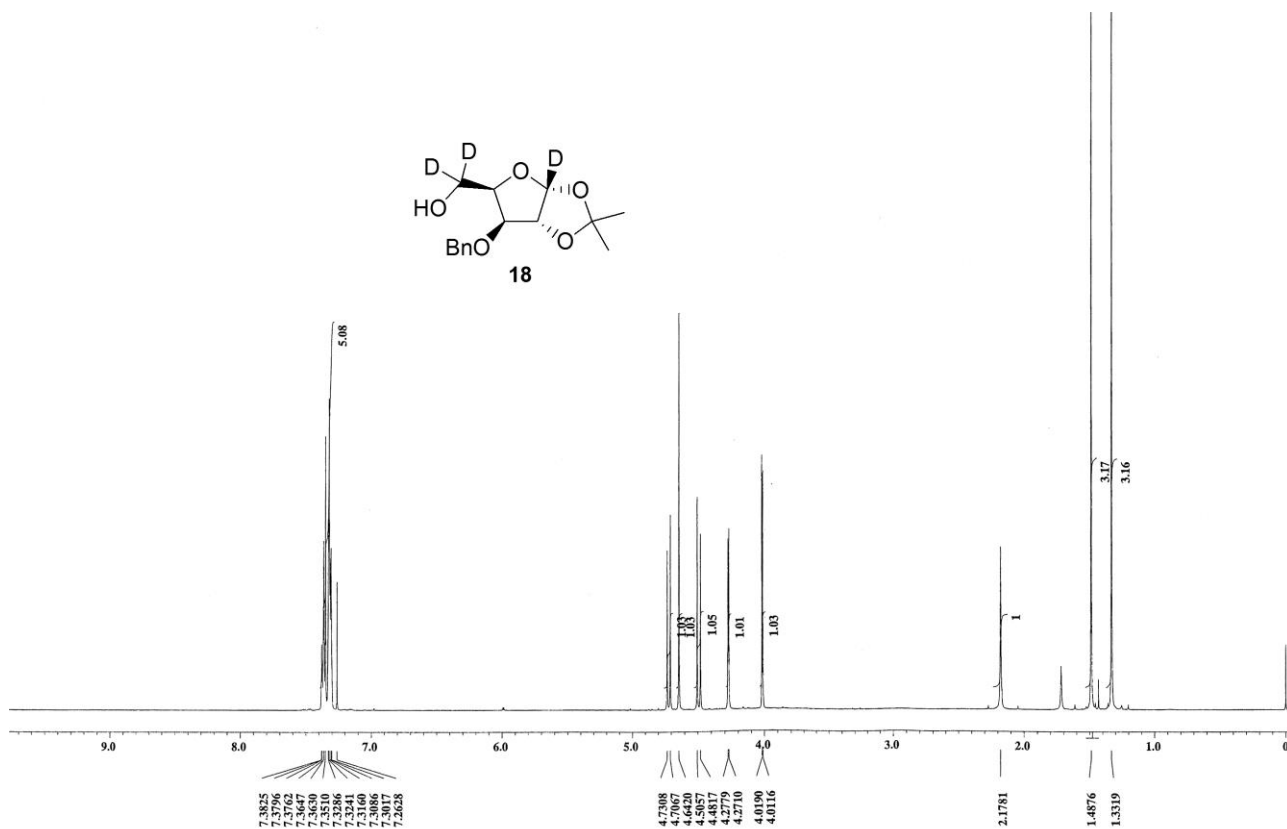
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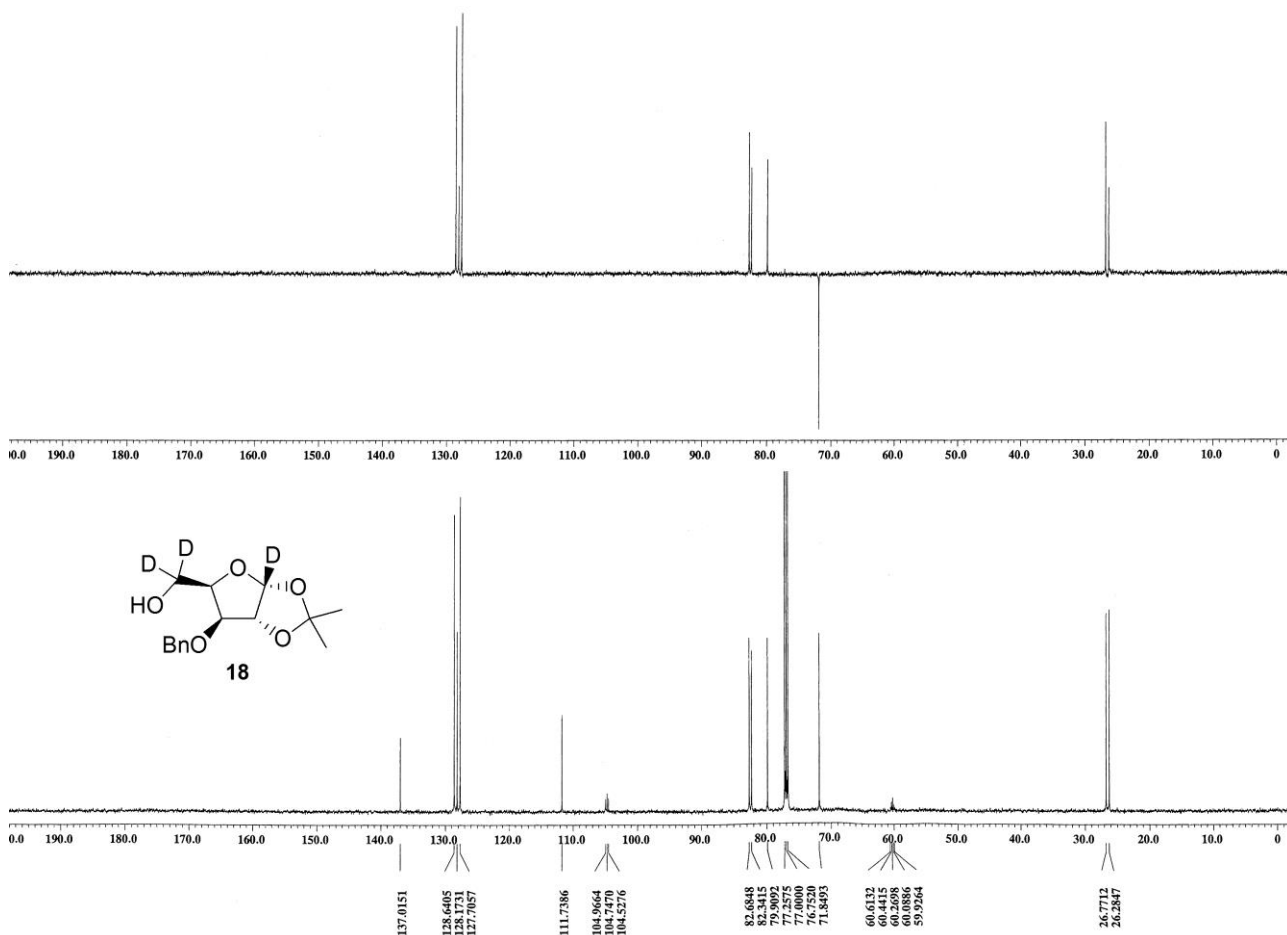
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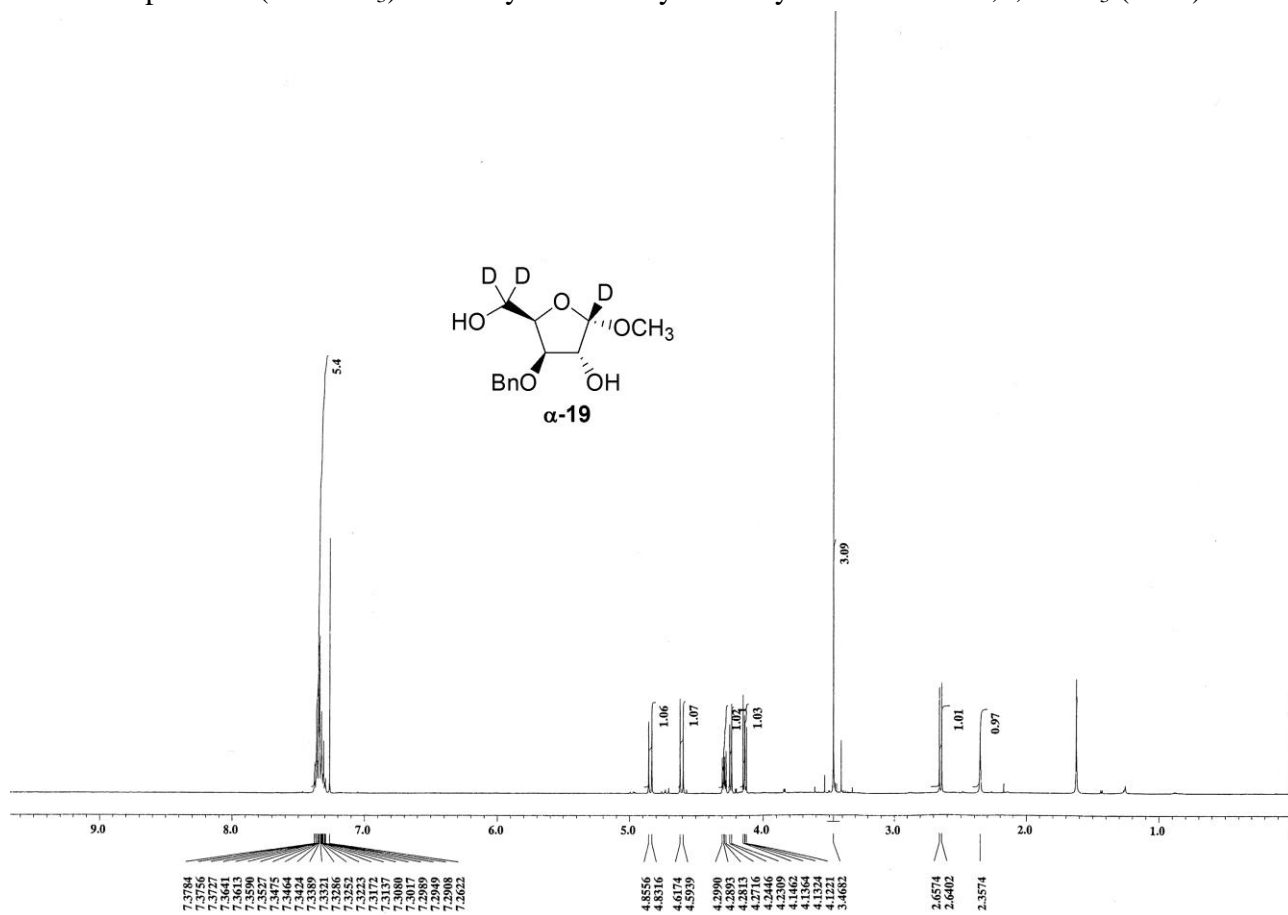
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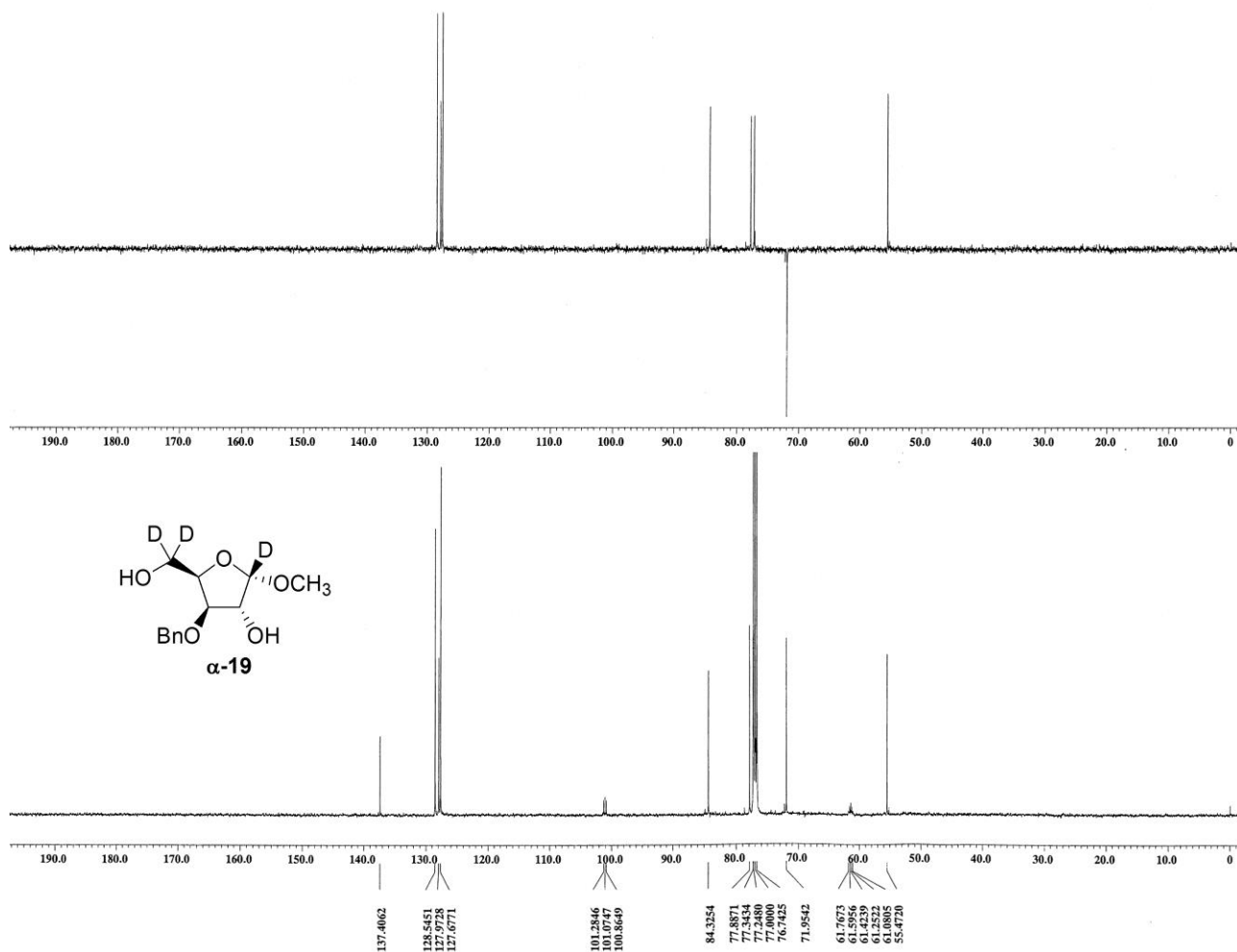
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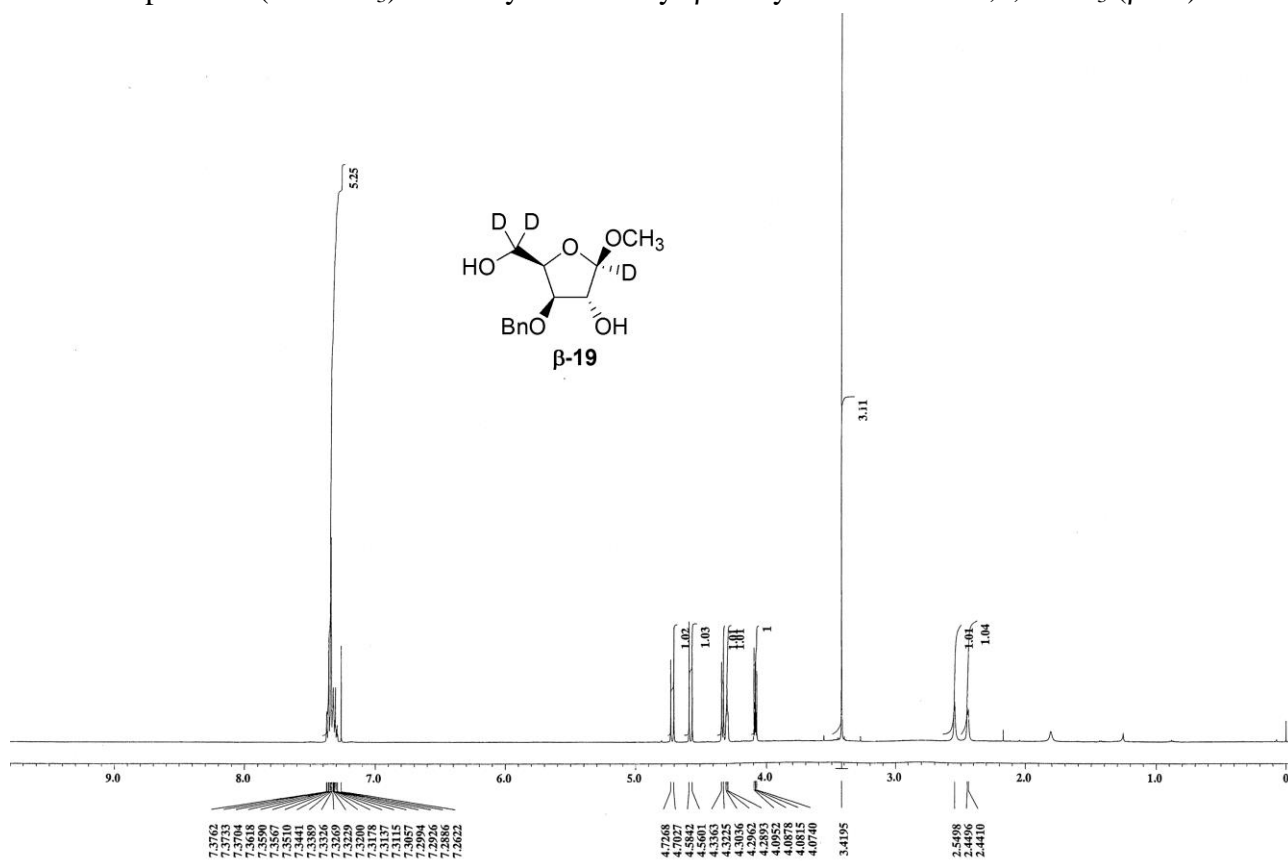
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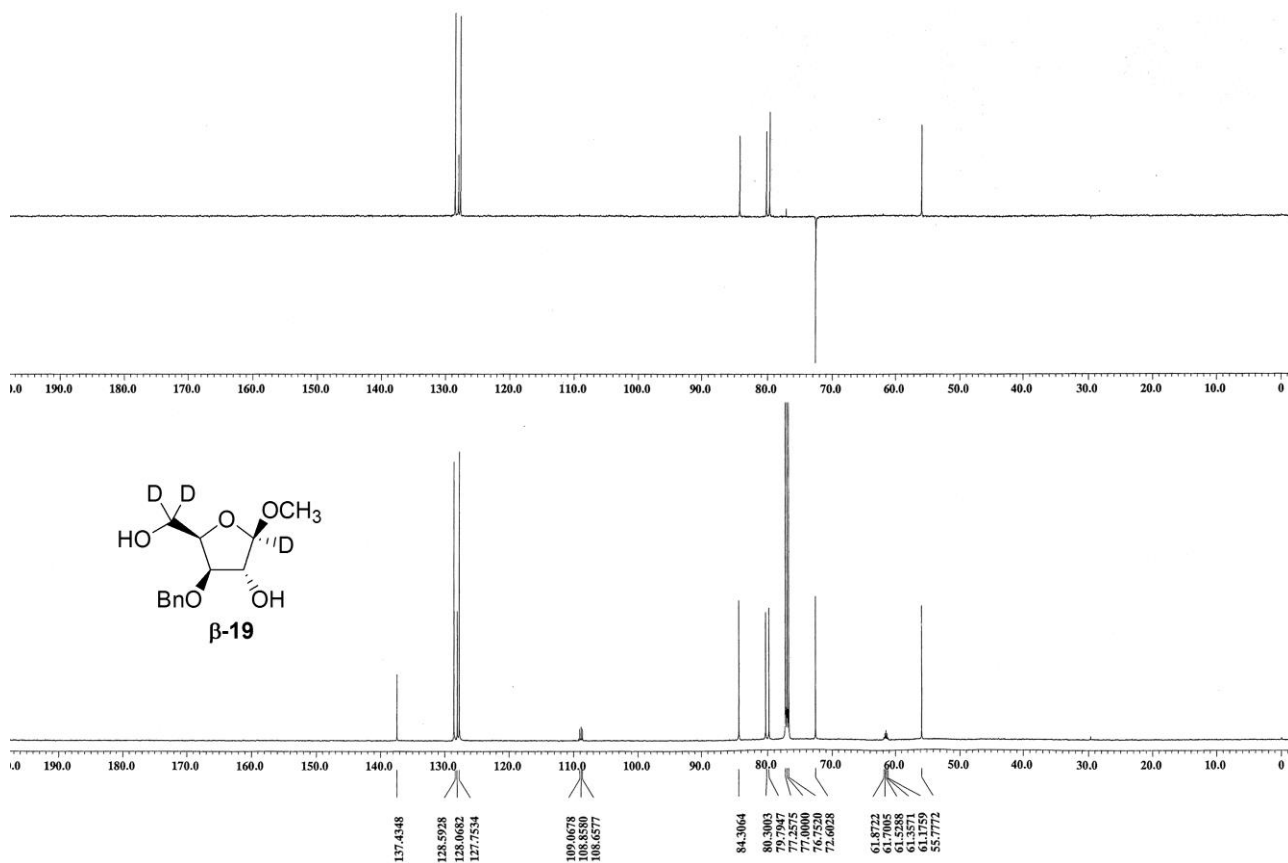
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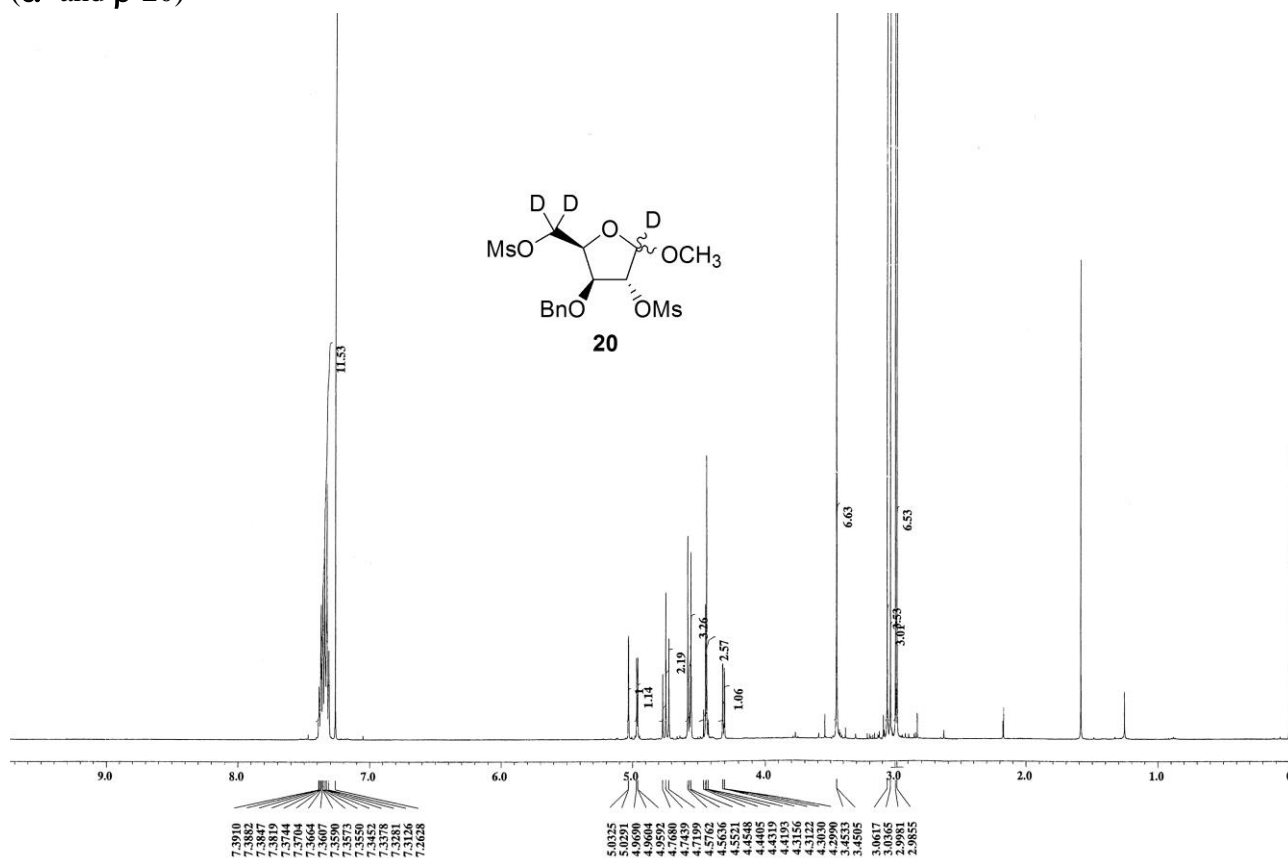
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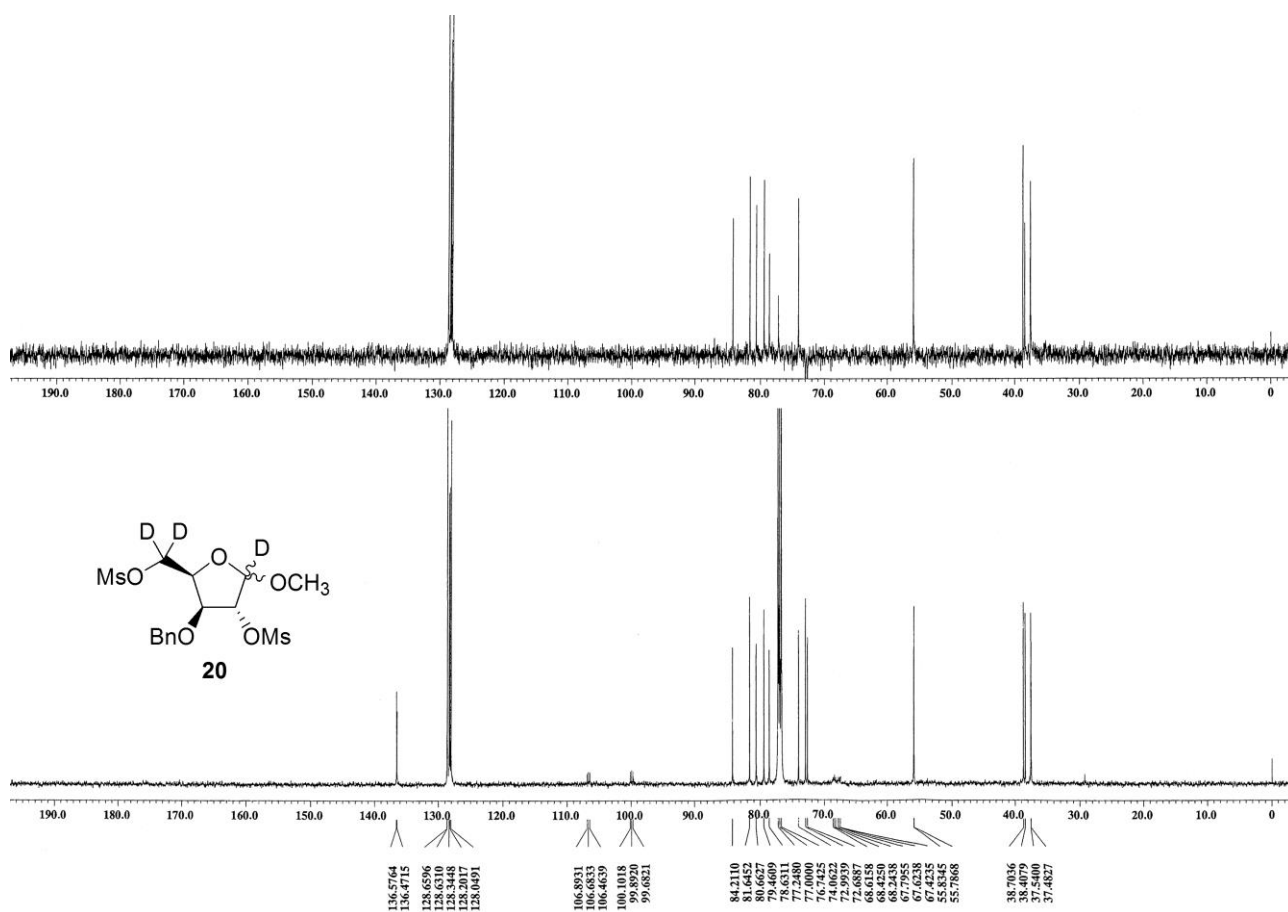
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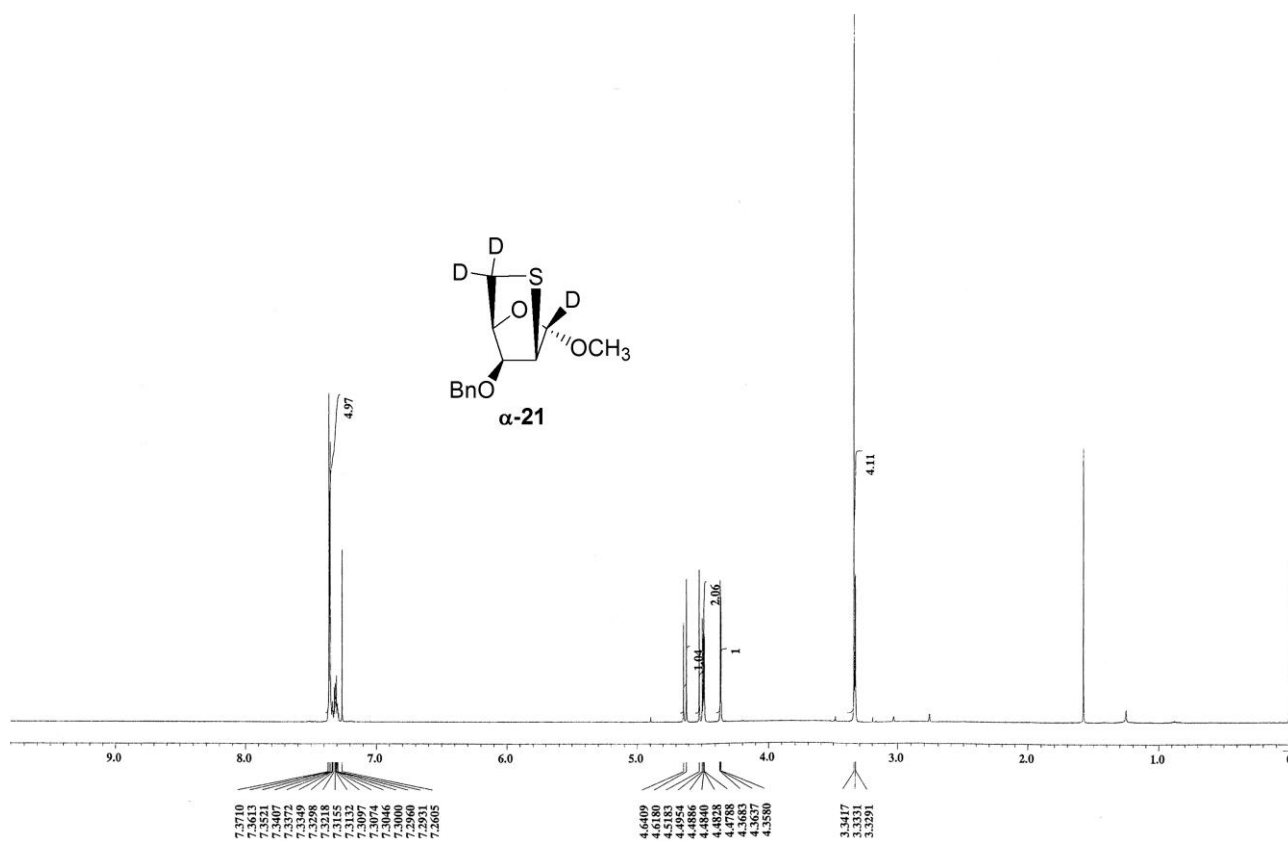
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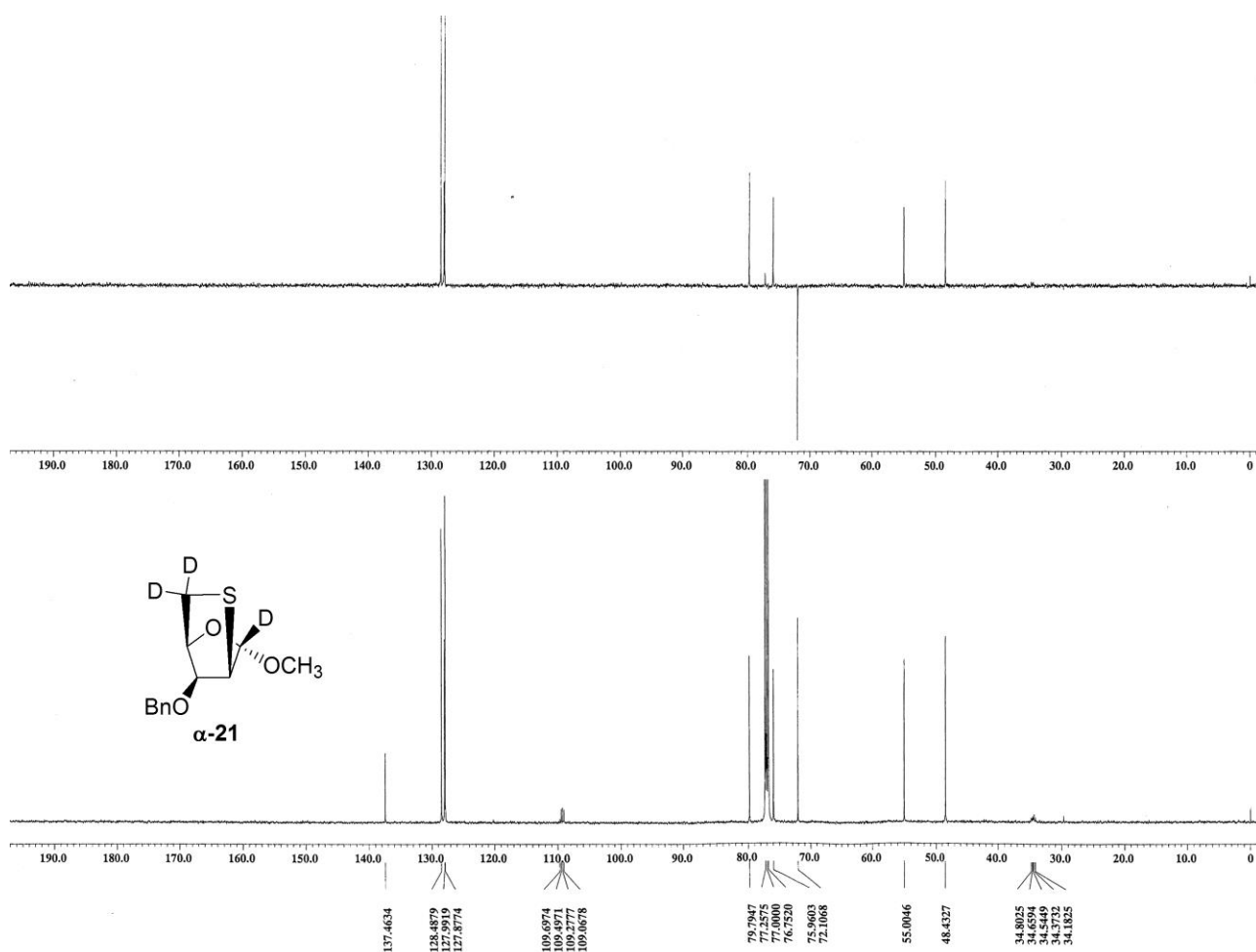
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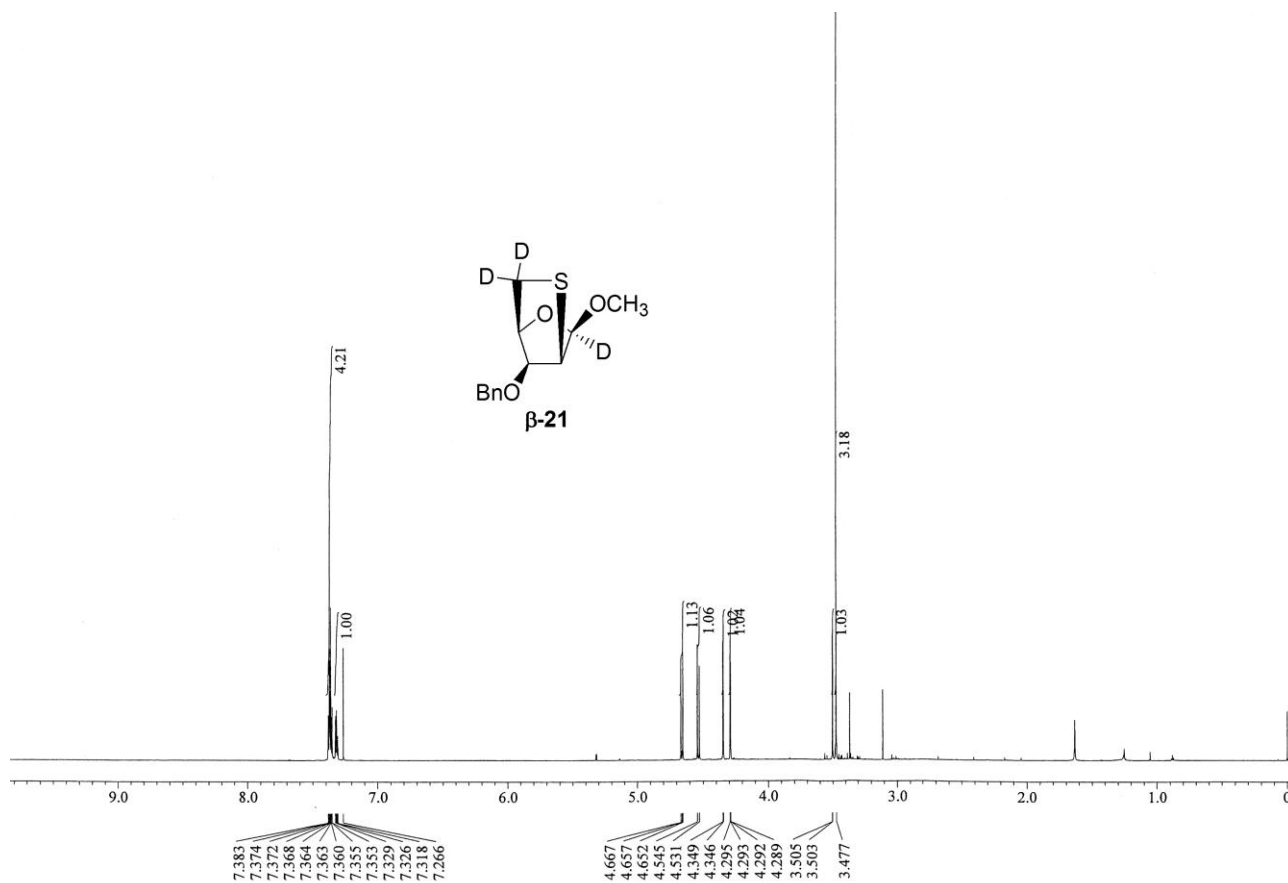
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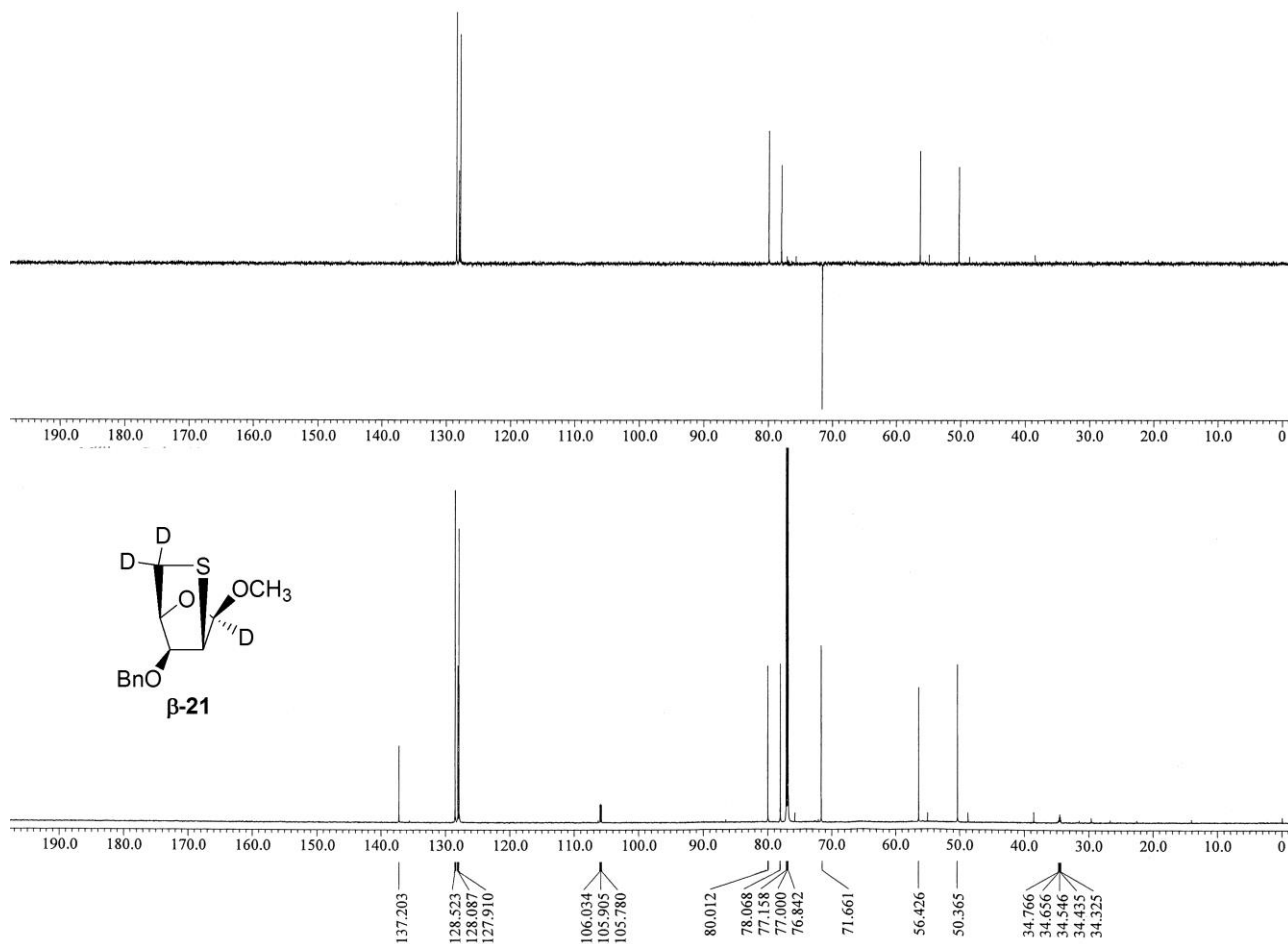
¹³C NMR spectrum (in CDCl₃) of 2,5-dideoxy-2,5-epithio-3-*O*-benzyl- α -D-lyxofuranoside-1,1,5-*C*-d₃ (α -21)



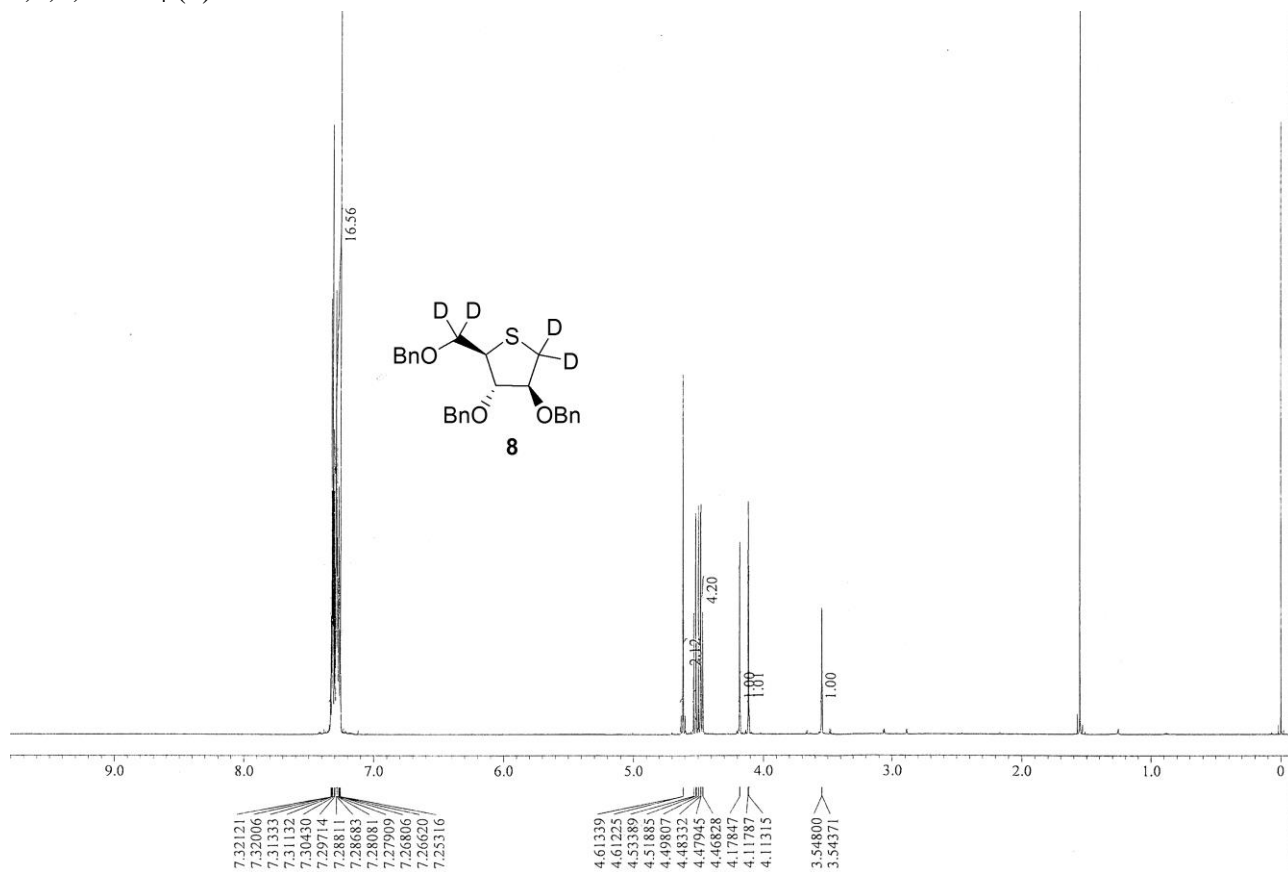
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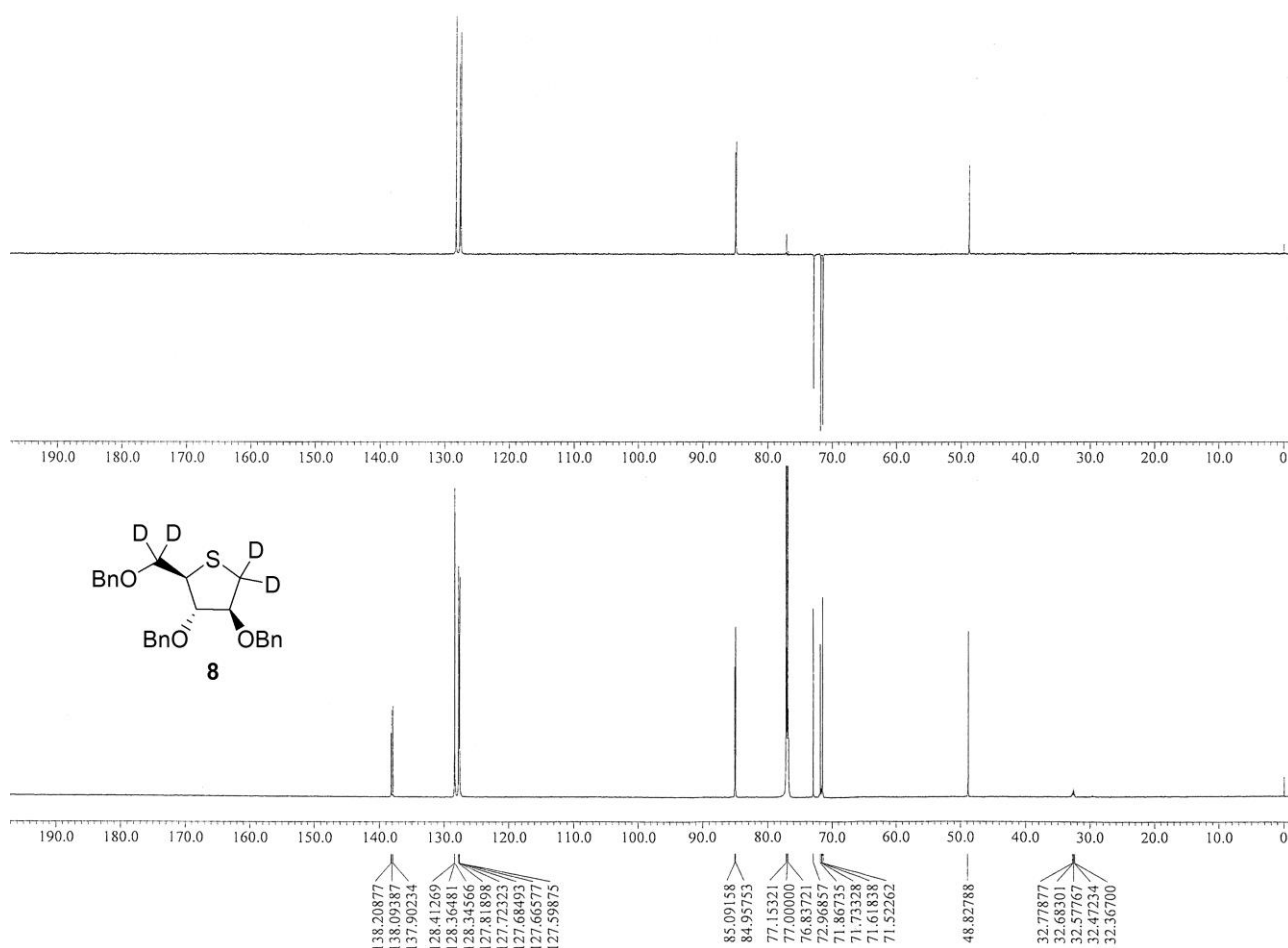
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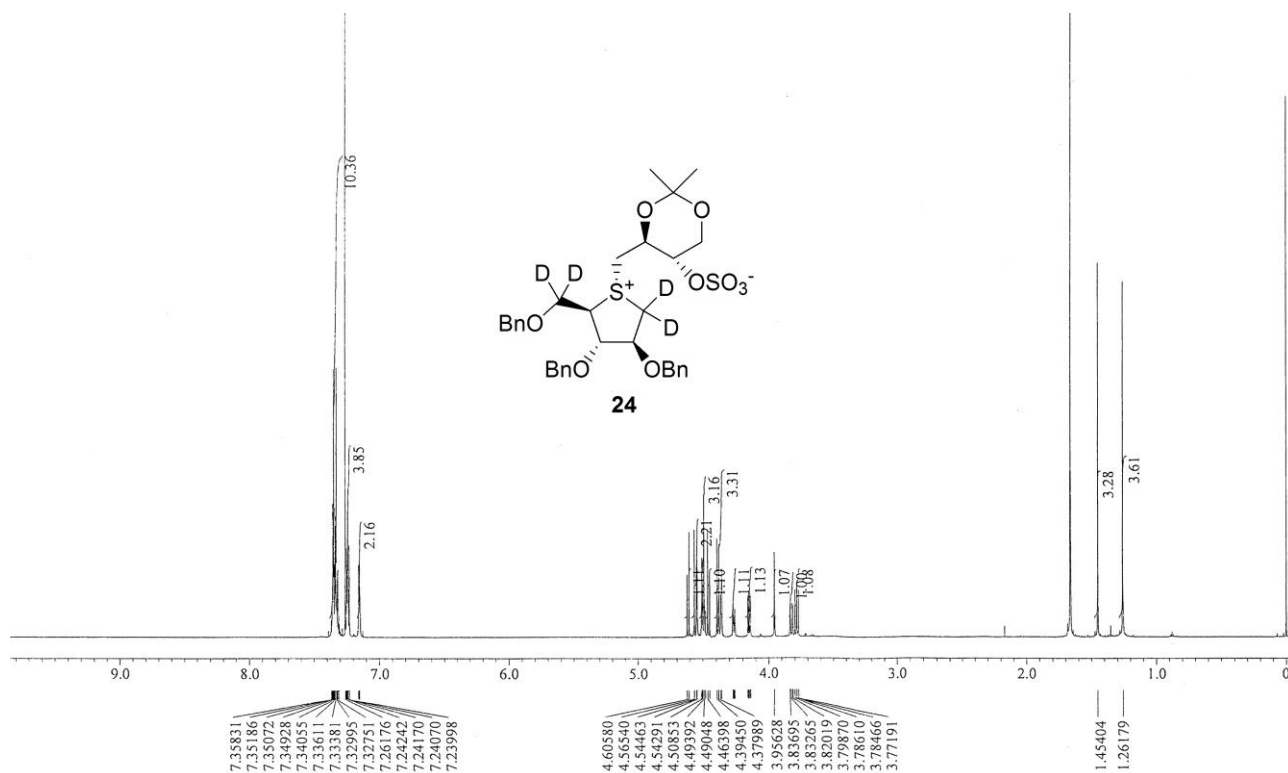
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¹³C NMR spectrum (in CDCl₃) of 2,3,5-tri-*O*-benzyl-1,4-dideoxy-1,4-epithio-D-arabinitol-1,1,5,5-*C*-d₄ (**8**)



^1H NMR spectrum (in CDCl_3) of 2,3,5-tri-*O*-benzyl-1,4-dideoxy-1,4- $\{(S)\text{-}[4\text{-deoxy-1,3-}O\text{-isopropylidene-3-sulfoxy-D-erythritol-1-yl]episulfoniumylidene}\}$ -D-arabinitol-1,1,5,5- $C\text{-}d_4$ (**24**)



^{13}C NMR spectrum (in CDCl_3) of 2,3,5-tri-*O*-benzyl-1,4-dideoxy-1,4- $\{(S)\text{-}[4\text{-deoxy-1,3-}O\text{-isopropylidene-3-sulfoxy-D-erythritol-1-yl]episulfoniumylidene}\}$ -D-arabinitol-1,1,5,5- $C\text{-}d_4$ (**24**)

