## SUPPLEMENTARY INFORMATION

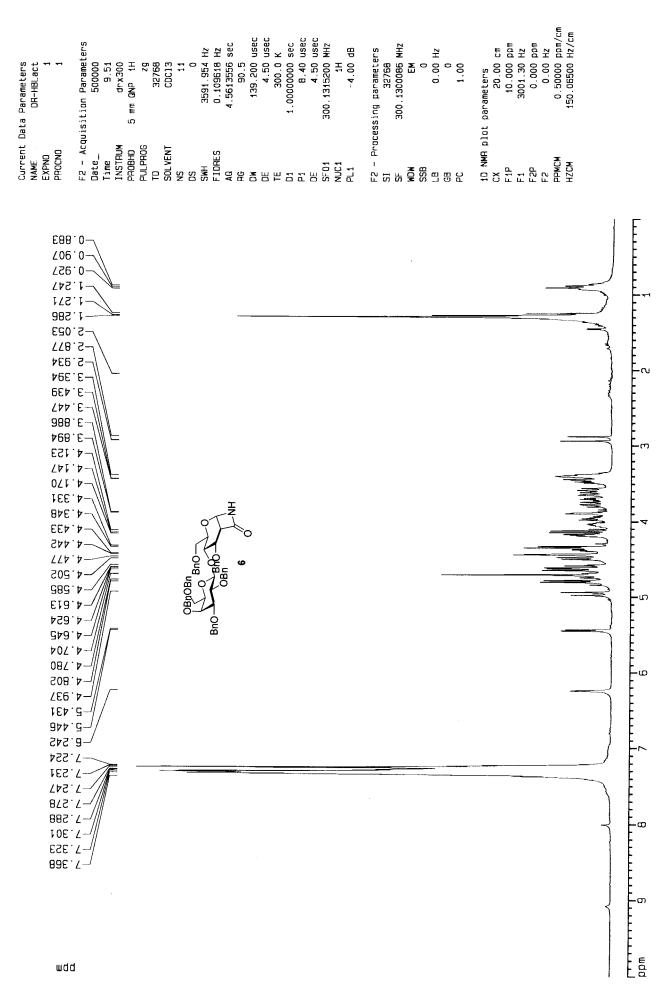
## 1-Oxabicyclic **b**-lactams as new inhibitors of elongating MPT-a key enzyme responsible for assembly of cell-surface phosphoglycans of *Leishmania* parasite

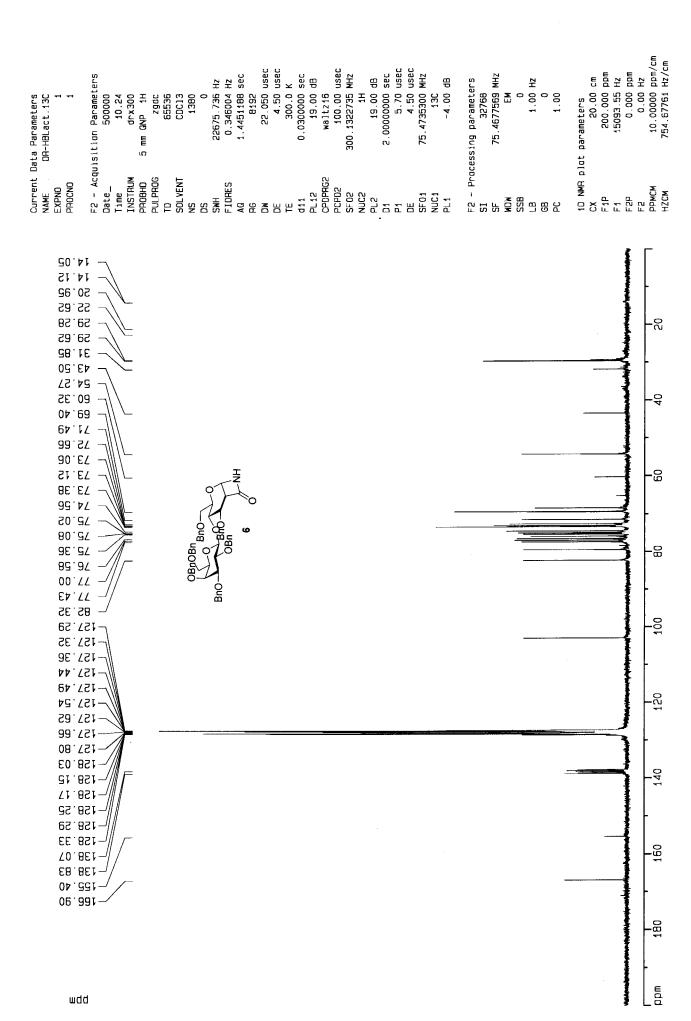
Dipali Ruhela, Patrali Chatterjee and Ram A. Vishwakarma\* Bio-organic Chemistry Lab, National Institute of Immunology, JNU Complex, New Delhi 10067, India

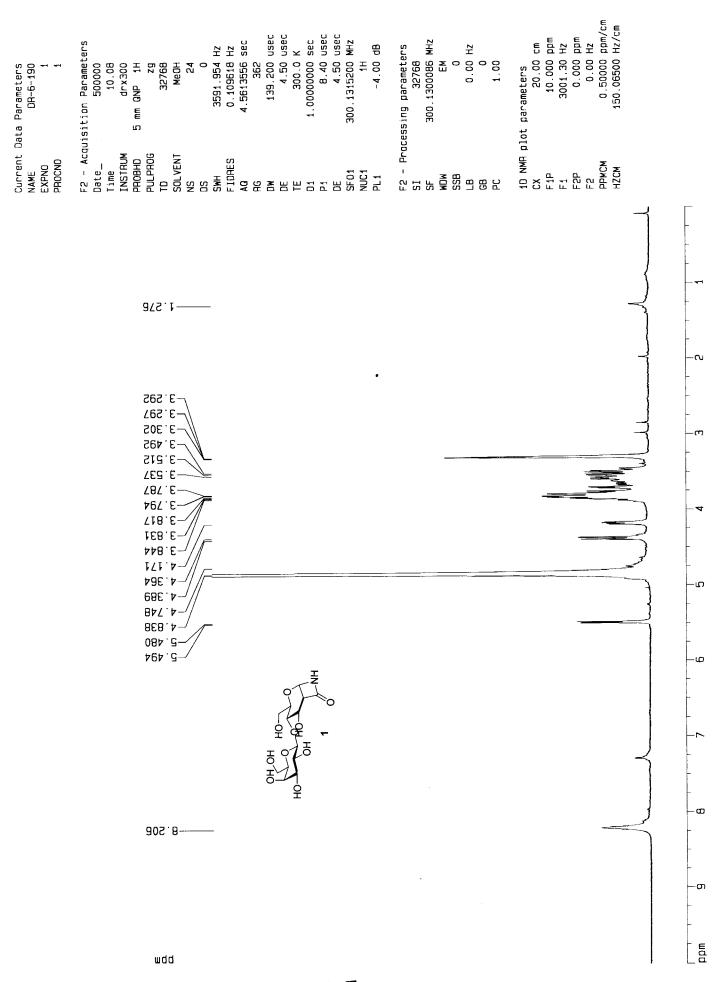
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## **General Experimental Methods**

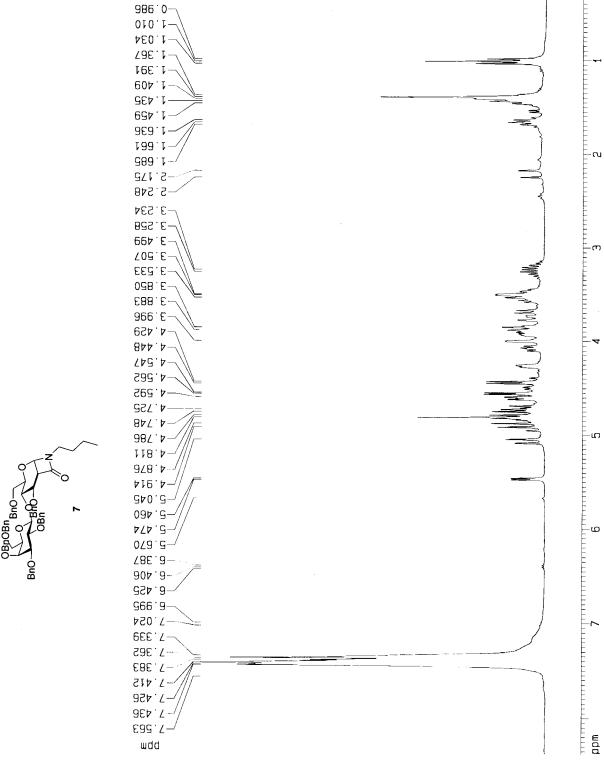
Solvents were purified according to the standard procedures, and reagents used were of highest purity available. The NMR spectra (H, 13C, 31P, 2D 1H-1H COSY and 1H-13C) HETCOR, HMQC and HMBC) were recorded on a 300 MHz spectrometer (Bruker, Avance series) fitted with pulse-field gradient probe, and trimethylsilane (TMS) or residual resonance of deuterated solvent were used as internal reference. For <sup>31</sup>P NMR spectra, phosphoric acid was used as external reference. 13C NMR spectra were broadband <sup>1</sup>H decoupled or inverse HMQC experiments. Chemical shifts are expressed in ppm and coupling constants J in Hz. Where appropriate, signal assignments were made by DEPT, <sup>1</sup>H-<sup>1</sup>H COSY and <sup>1</sup>H-<sup>13</sup>C HETCOR experiments. Low and high resolution mass spectra were recorded on Platform-II or LCT spectrometer (Micromass-Waters) respectively using acetonitrile-water (1:1) mobile phase. Optical rotations were measured at ambient temperature with a digital Perkin-Elmer 141 polarimeter. Thin layer chromatography was performed on Merck Kieselgel 60 F<sub>254</sub> plates, compounds visualized either by viewing with a UV lamp (254 nm), or by dipping into ammoniummolybdate/ceric-sulfate developing reagent followed by heating. Silica column chromatography was carried out with silica gel 60 (60-120 mesh).

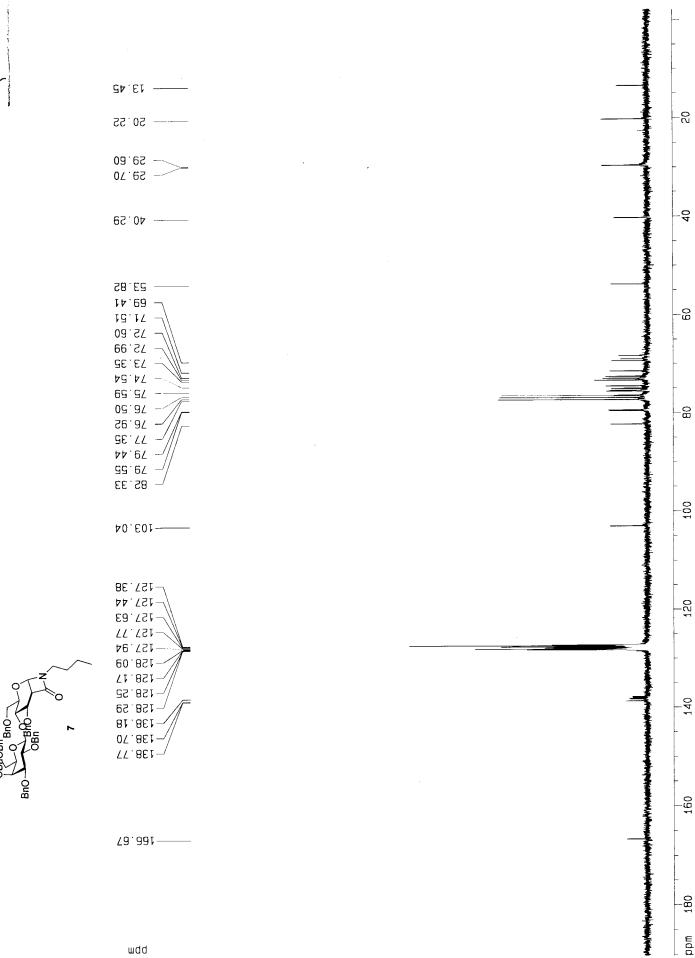


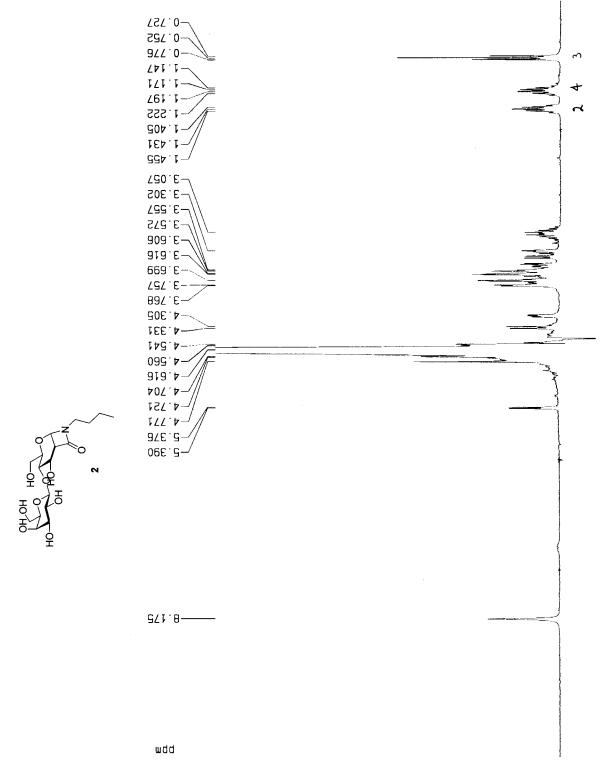




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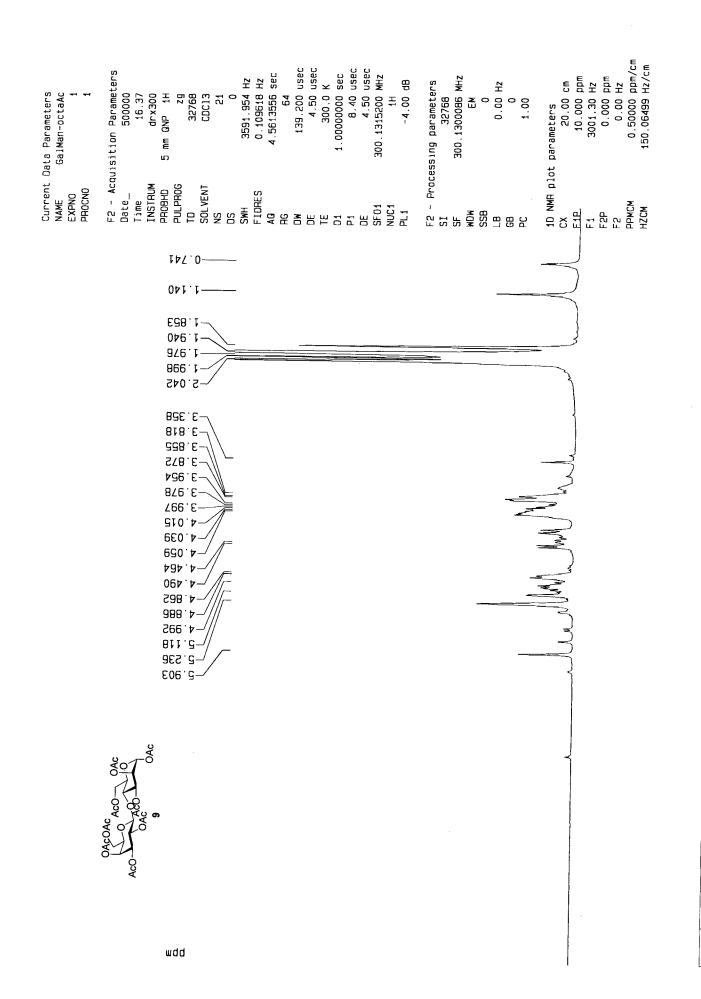
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-20.000 ppm -1509.36 Hz 11.00000 ppm/cm 830.14532 Hz/cm 9195.2 22.050 usec 4.50 usec 19.00 dB 2.00000000 sec 5.70 usec 100.00 usec 300.1322735 MHz 4.50 usec 75.4735300 MHz F2 - Acquisition Parameters 22675.736 Hz 0.346004 Hz 0.0300000 sec 1.4451188 sec 19.00 dB 13C -4.00 dB 300.0 K Current Data Parameters
NAME DR-6-192.13C
EXPNO 1
PROCNO 1 drx300 16.55 D20 10000 5 mm GNP 1H waltz16 INSTRUM PROBHD PULPROG TD SOLVENT CPDPRG2 PCPD2 SF02 NUC2 PL2 P1 OE SF01 NUC1 PL1 15.72 19.61 77.85 99.04 52.84 20 96:09 61.19 84.78 09.89 98.07 70.92 S1. 67 68. 17 71. 87 88. 27 100 et.Eot-150 EB1691-

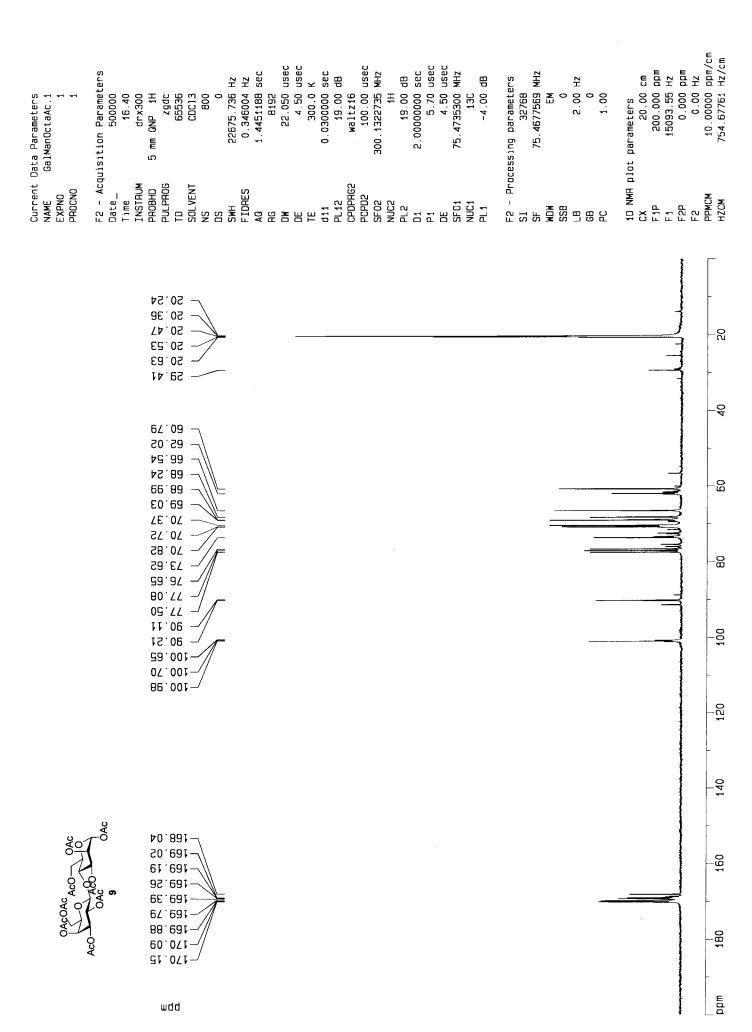
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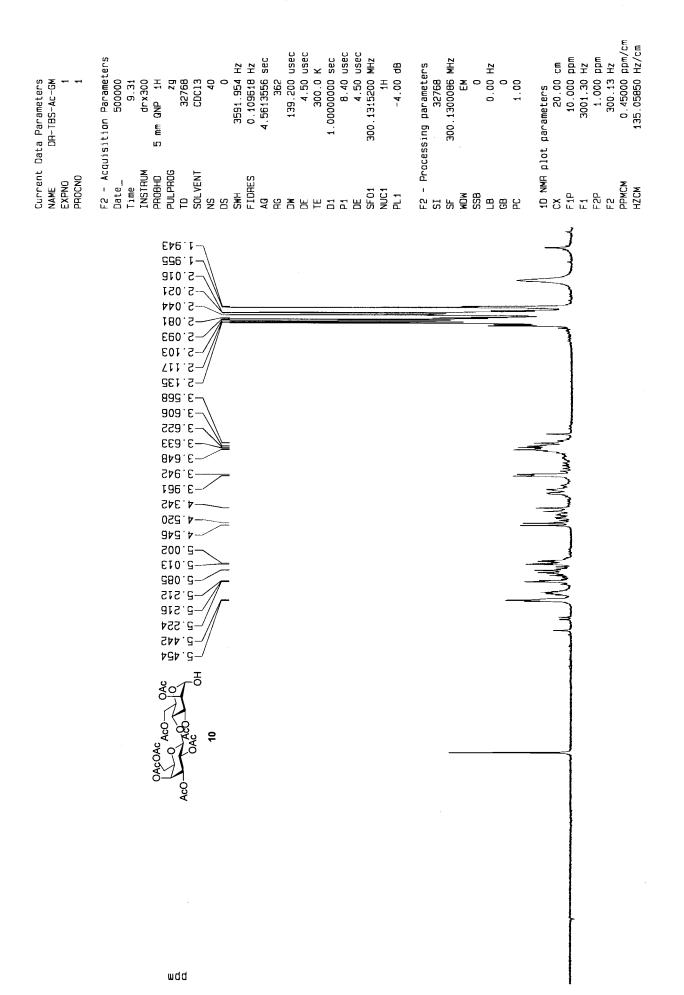


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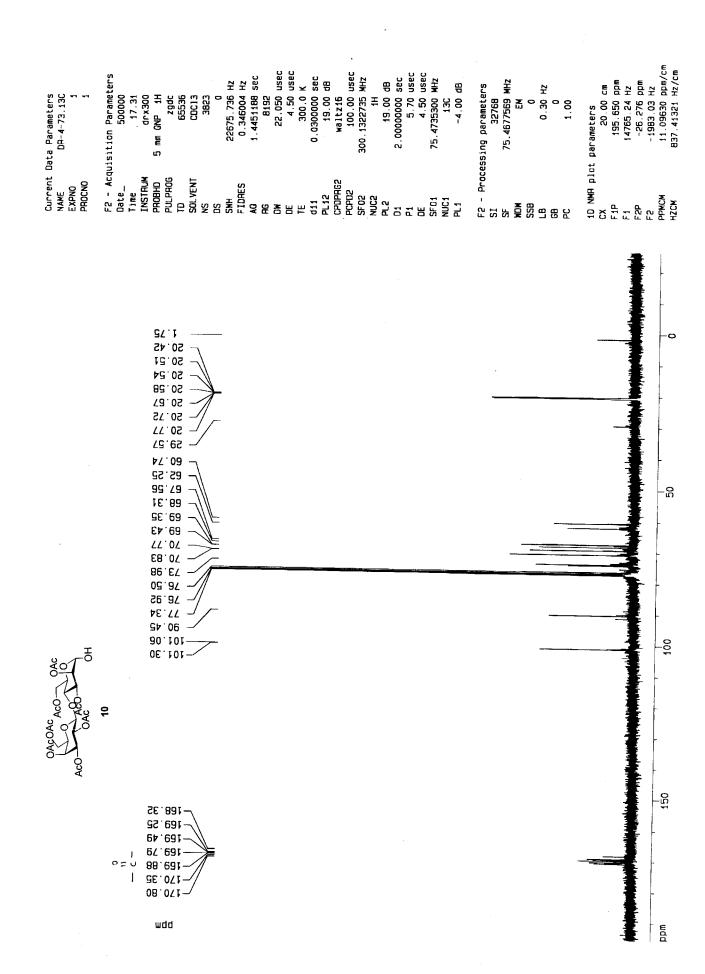


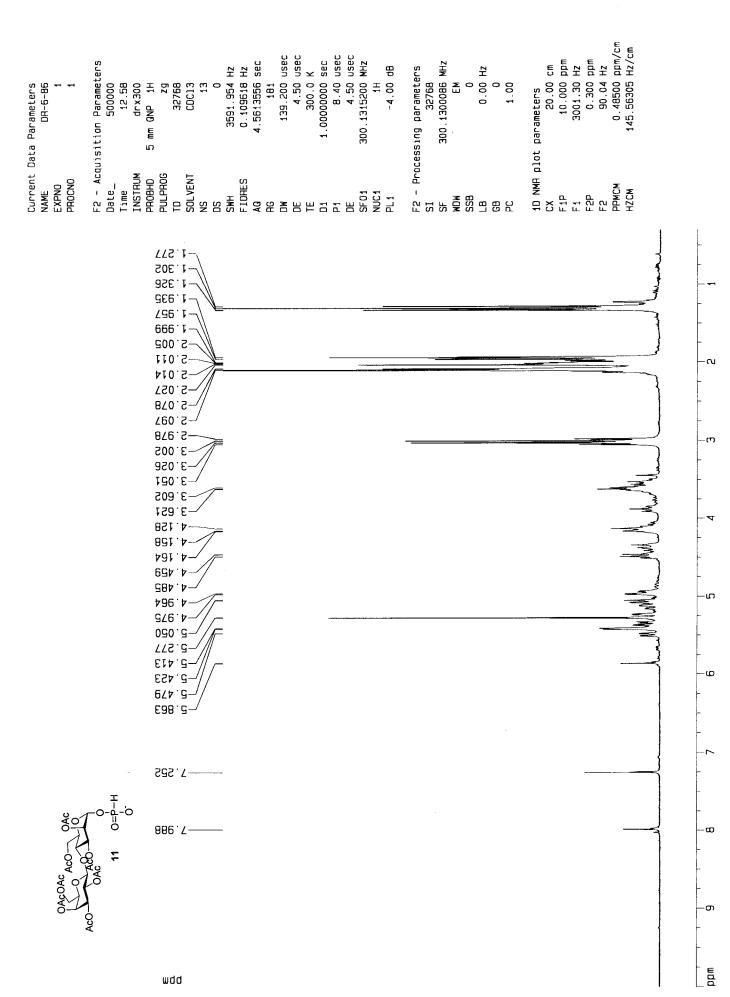
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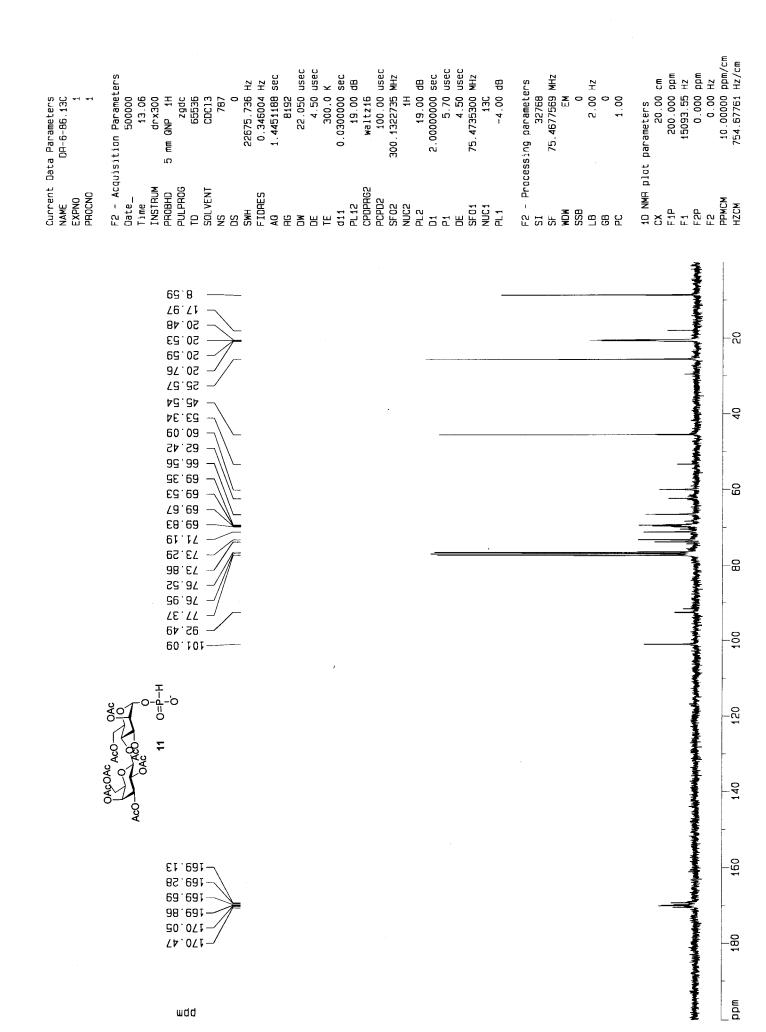
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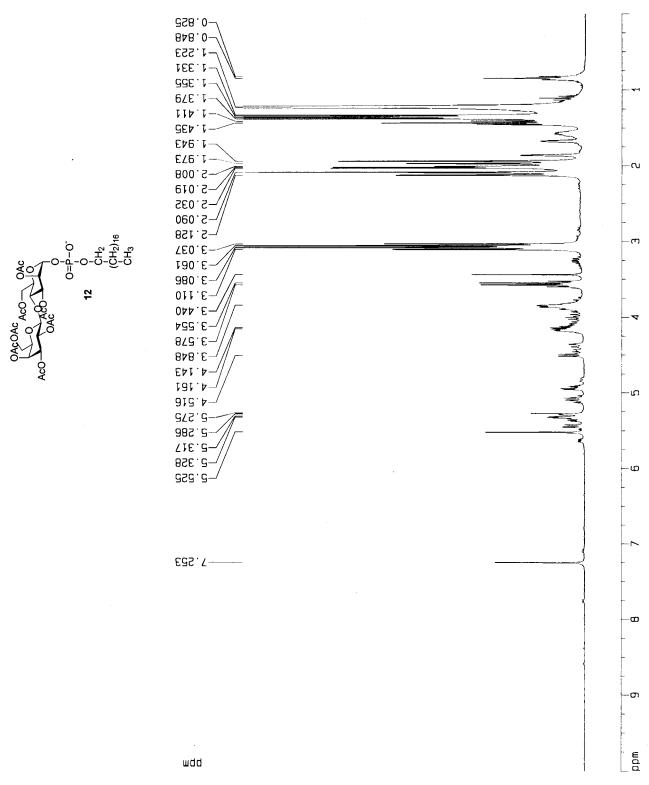
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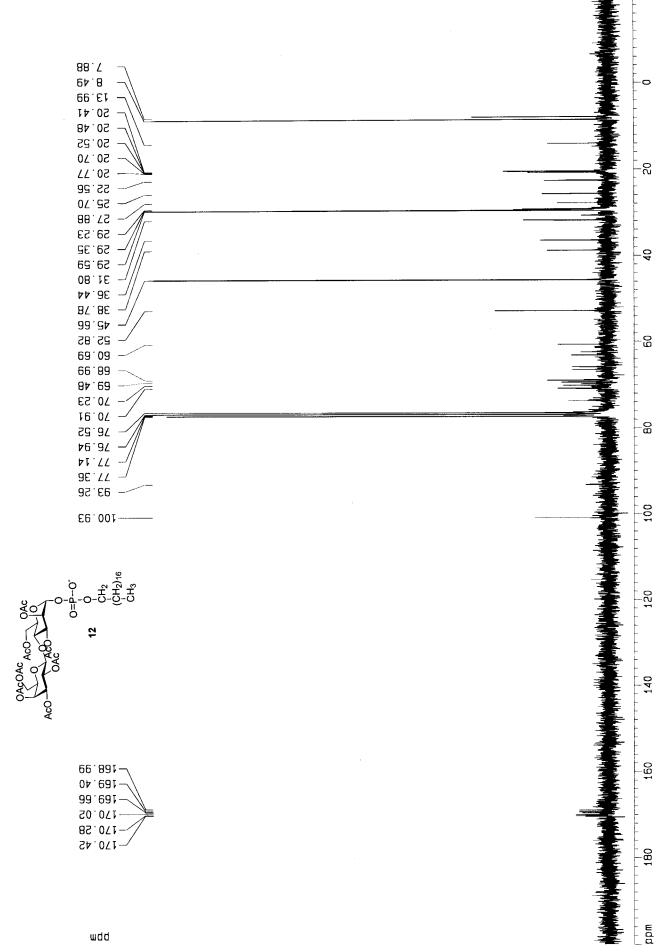
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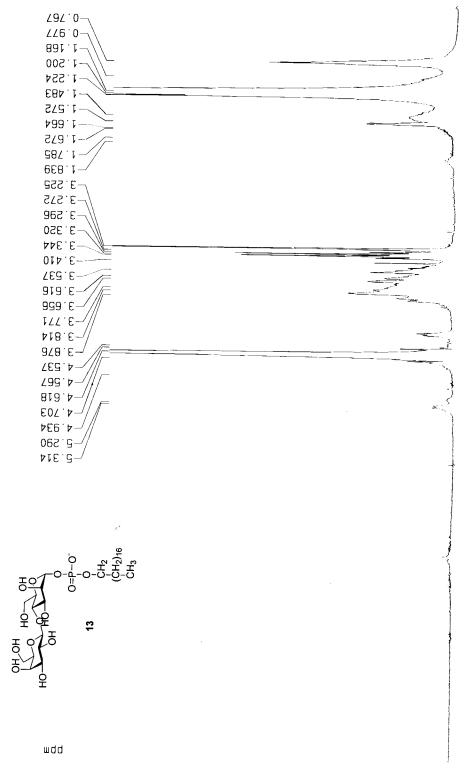












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10.00000 ppm/cm 754.67761 Hz/cm 22.050 usec 4.50 usec F2 - Processing parameters SI 32768 SF 75.4677569 MHz 100.00 usec 5.70 Usec 4.50 usec 19.00 dB waltz16 2.00000000 sec 0.000 ppm 0.00 Hz 1.4451188 sec 0.0300000 sec 300.1322735 MHz 75.4735300 MHz F2 - Acquisition Parameters 22675.736 Hz 0.346004 Hz 75.4677569 MHz 200.000 ppm 19.00 dB -4.00 dB 20.00 cm 15093.55 Hz 300.0 K Current Data Parameters NAME RAV.13C EXPNO 2 PROCNO 1 1D NMA plot parameters CX 20.00 F1P 200.000 F1 15093.55 H F2P 0.000 F2 0.00 H PPMCM 10.00000 p CDC13 8192 11.53 drx300 5 mm GNP 1H PULPR0G CPDPR62 PCPD2 TD SOLVENT PROBHO FIDRES P1 OE SF01 **7**9 ° 9

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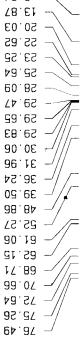
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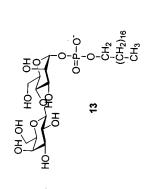
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