

Supporting information

Design, Synthesis and Biological Evaluation of (2',5' and 3'5' -linked) cGAMP Analogs that Activate Stimulator of Interferon Genes (STING)

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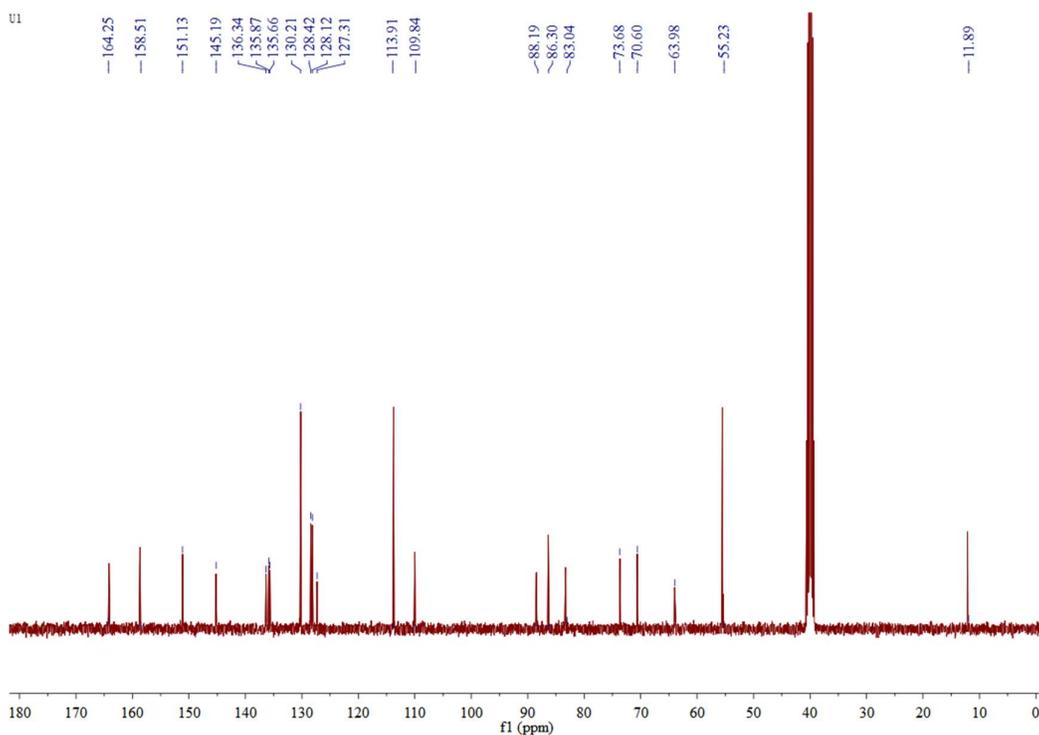
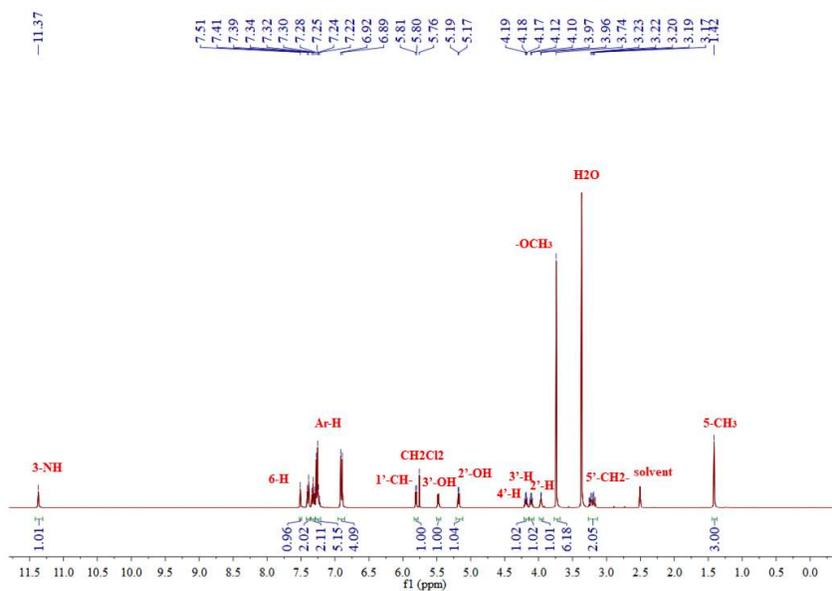
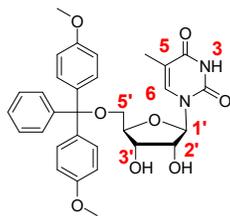
¹ Department of Chemical Biology, School of Pharmaceutical Sciences, Peking University, Beijing 100191, China

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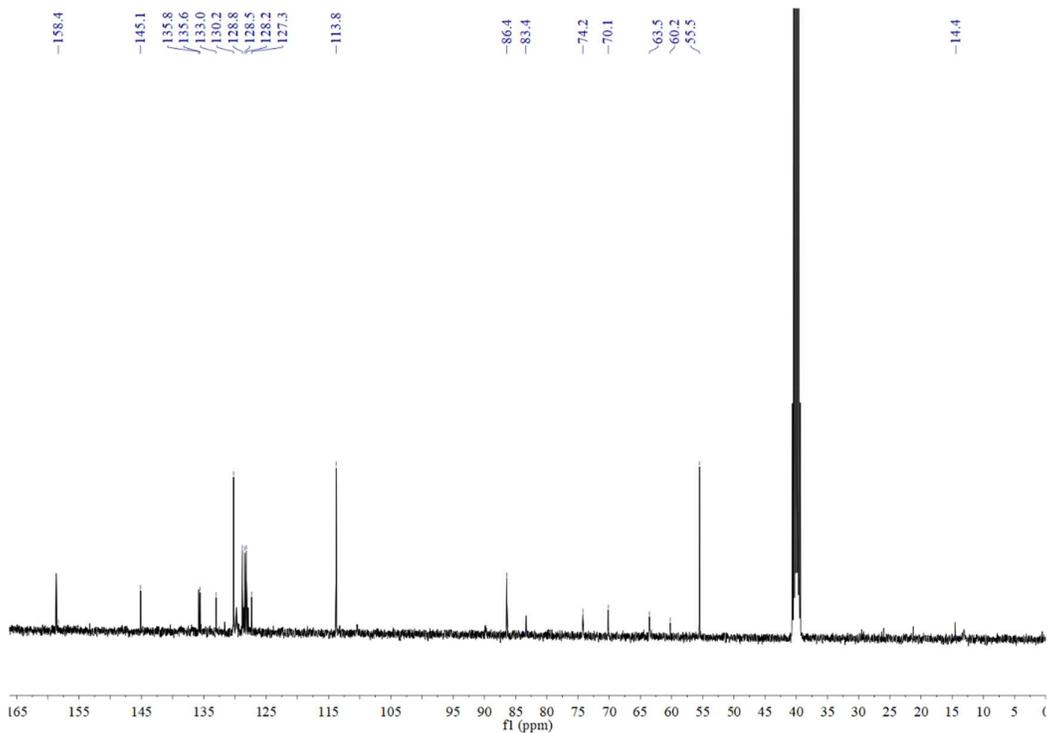
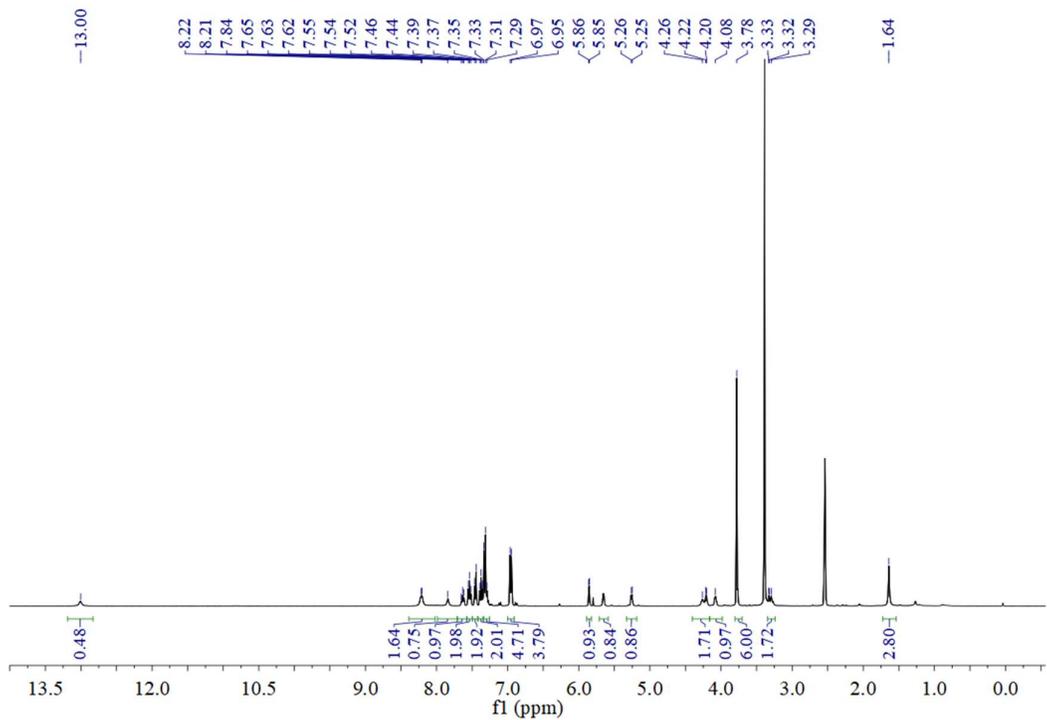
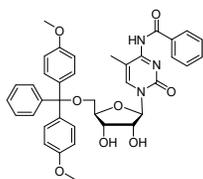
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$^1\text{H-NMR}$, $^{13}\text{C-NMR}$ and $^{31}\text{P-NMR}$ spectra

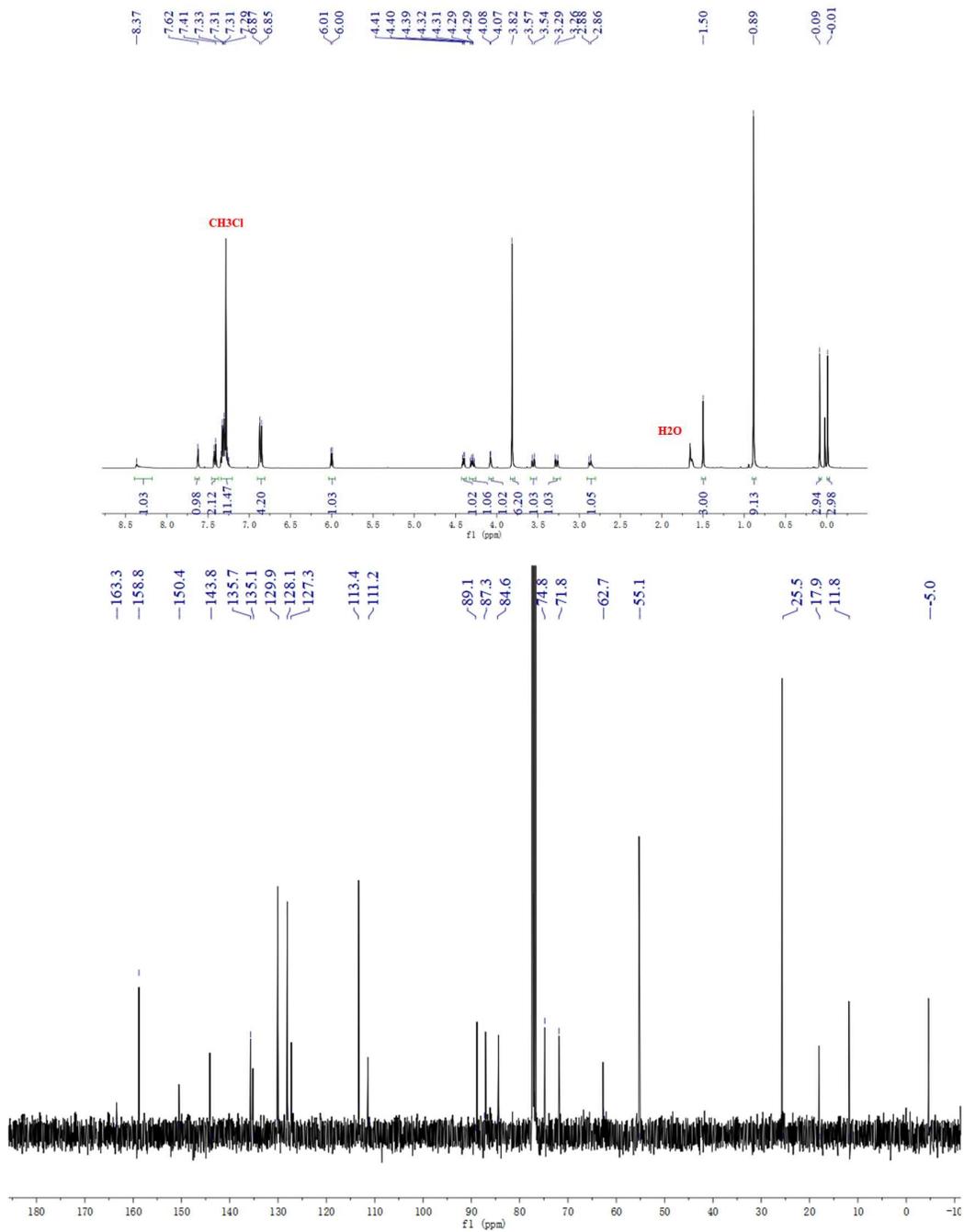
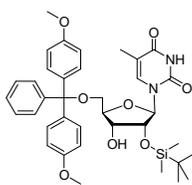
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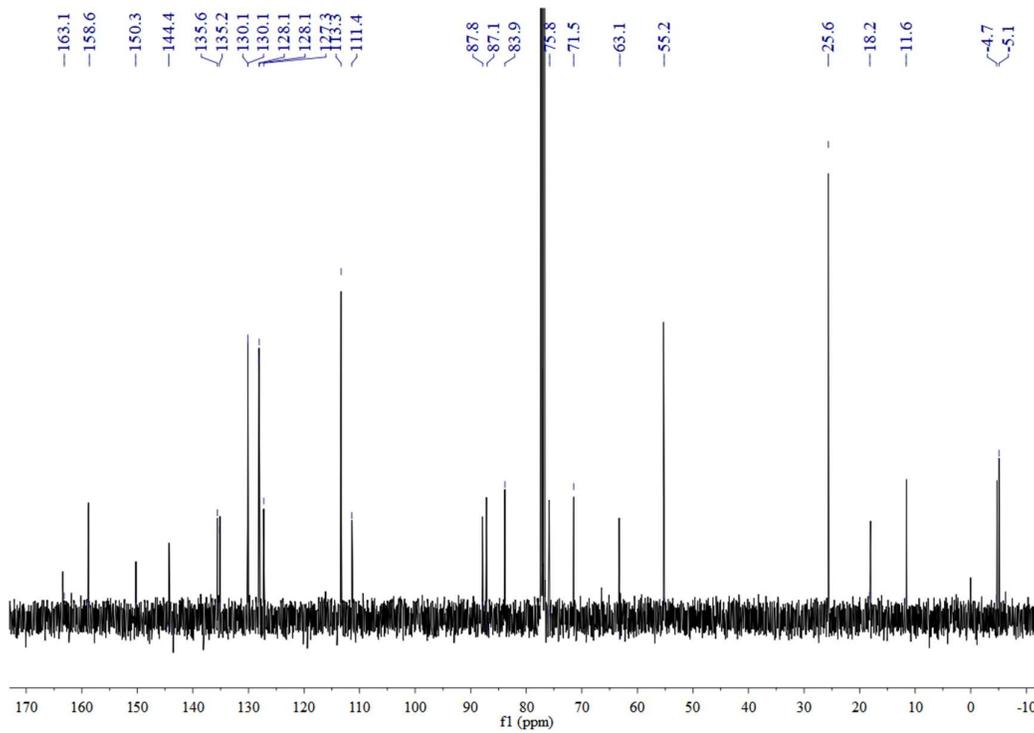
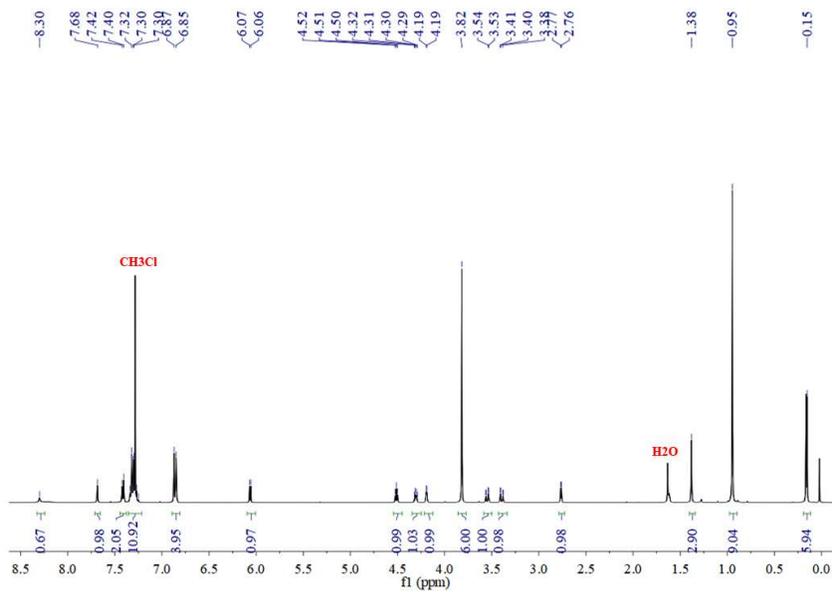
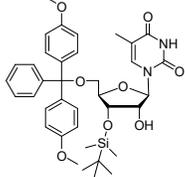
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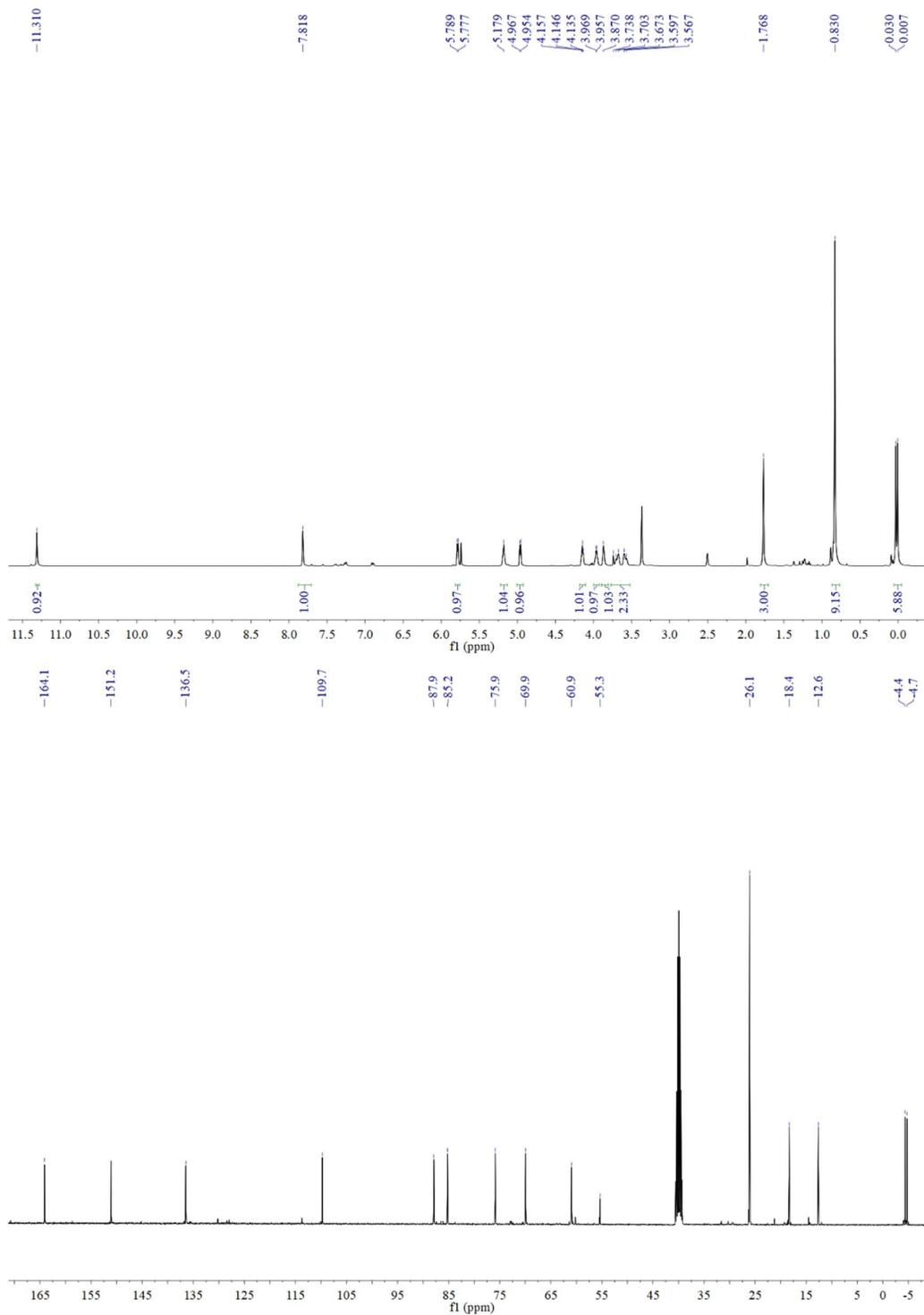
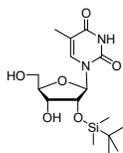
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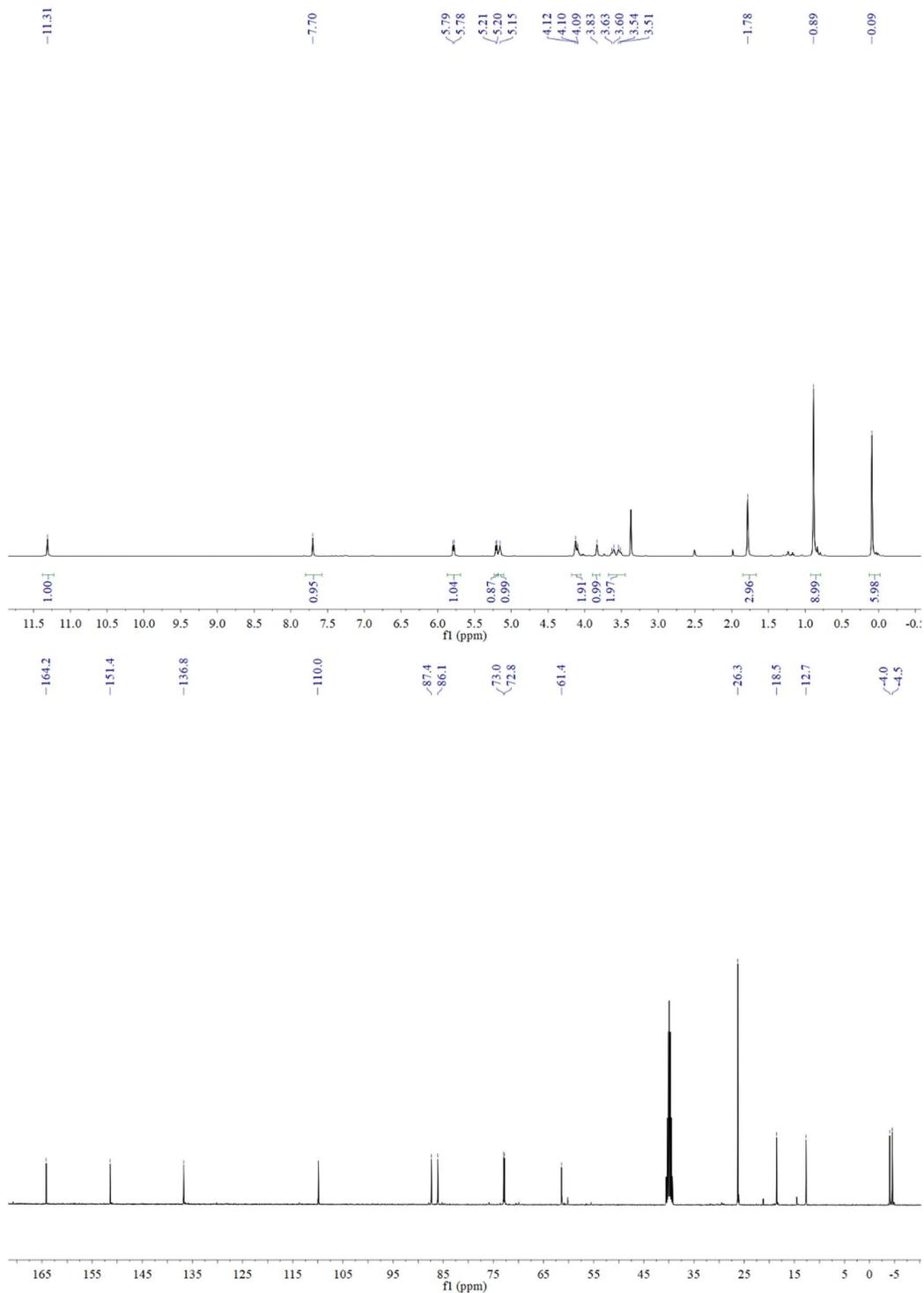
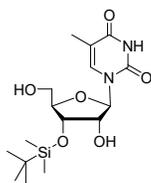
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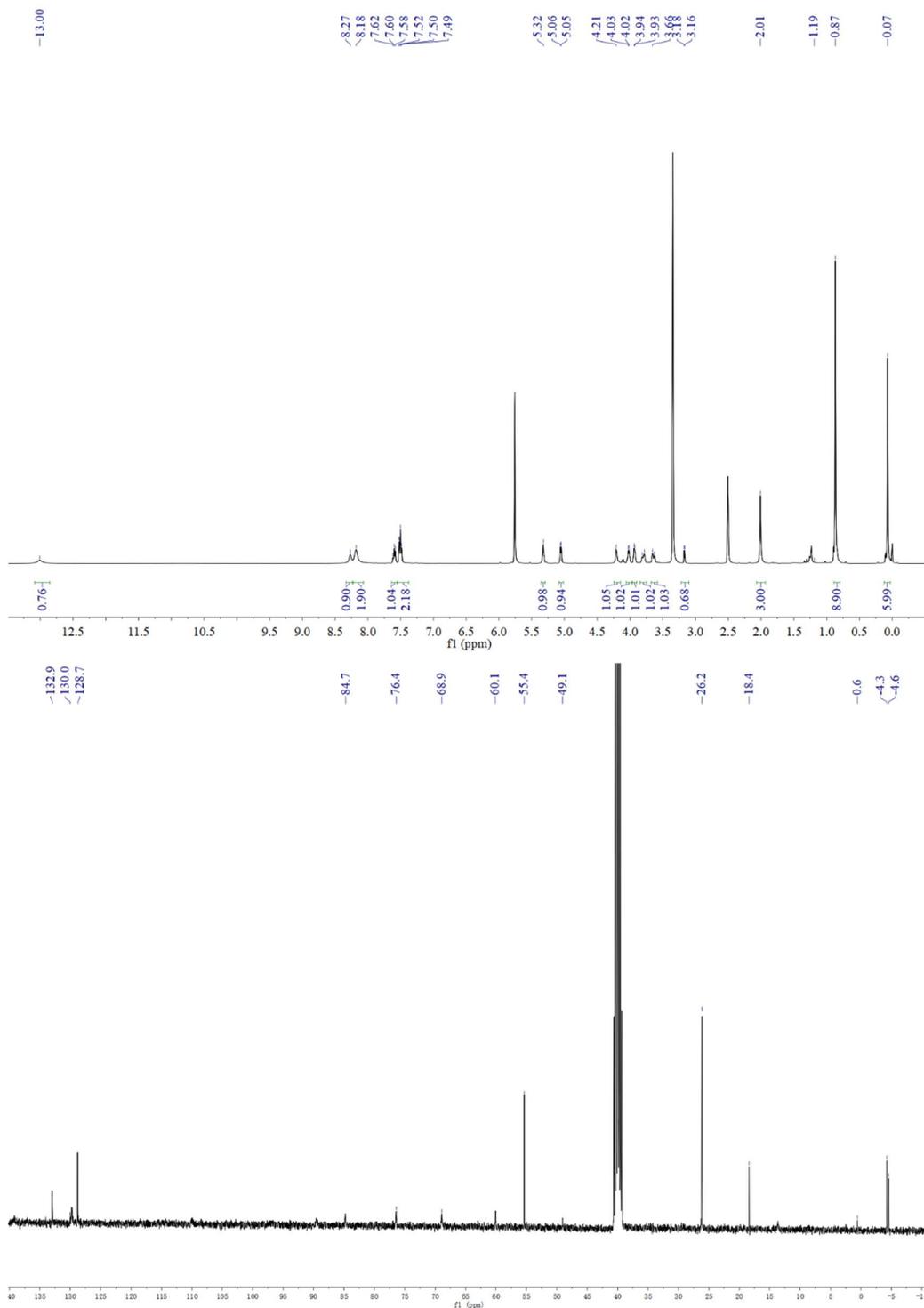
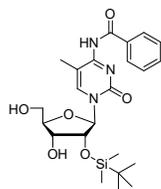
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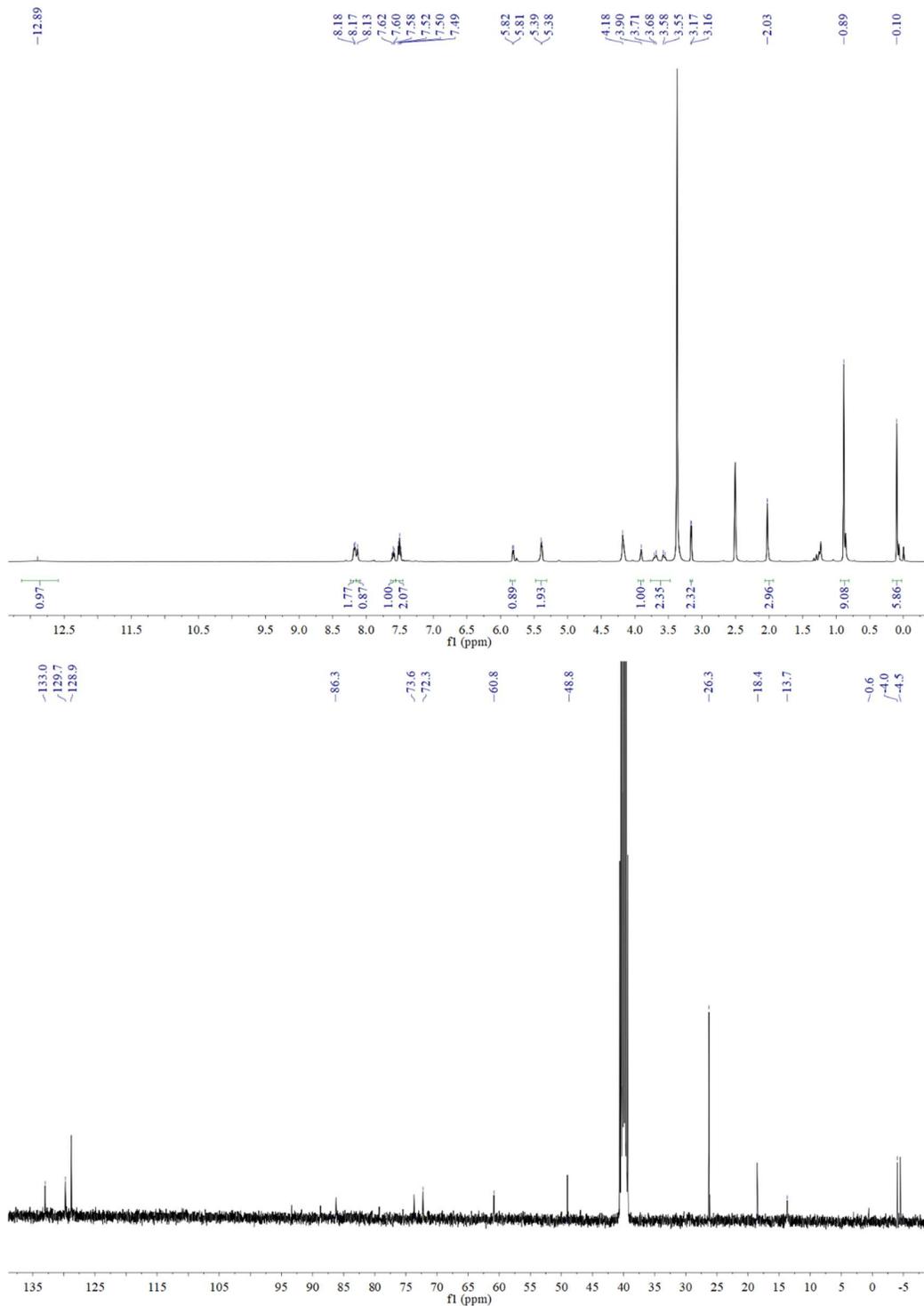
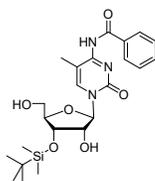
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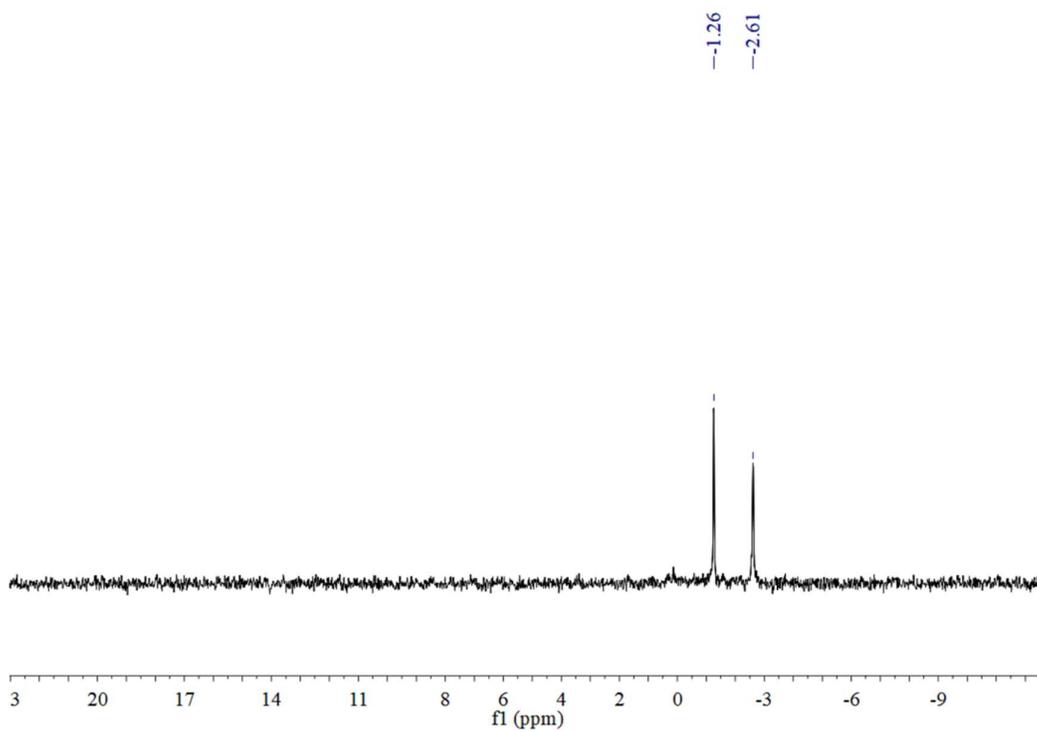
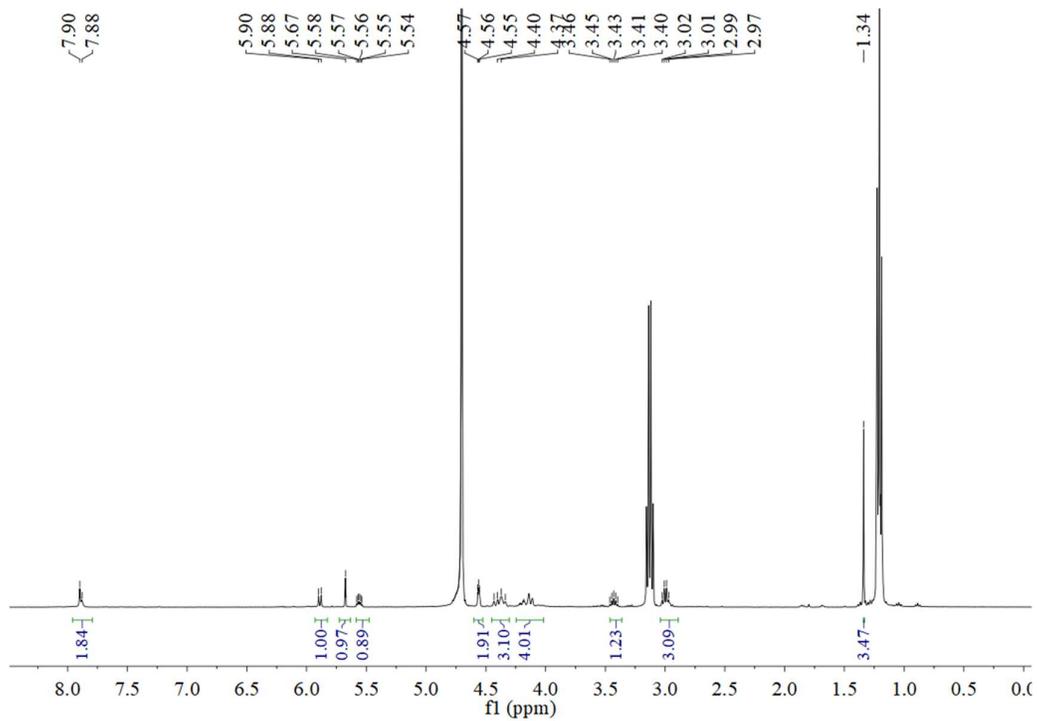
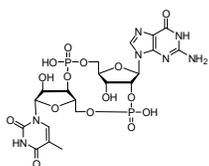
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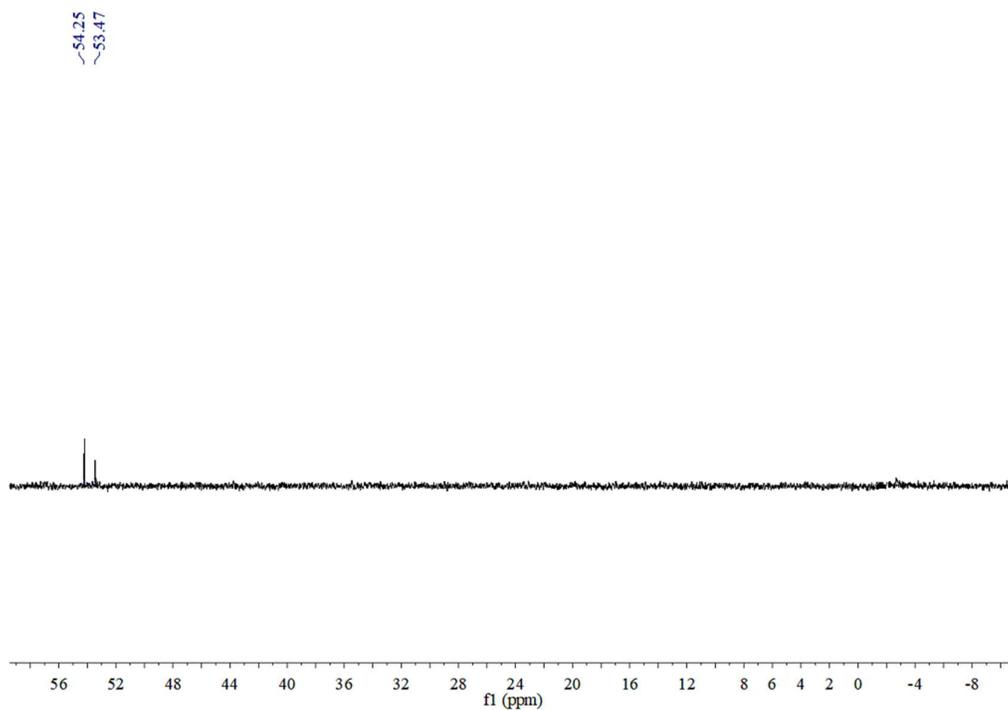
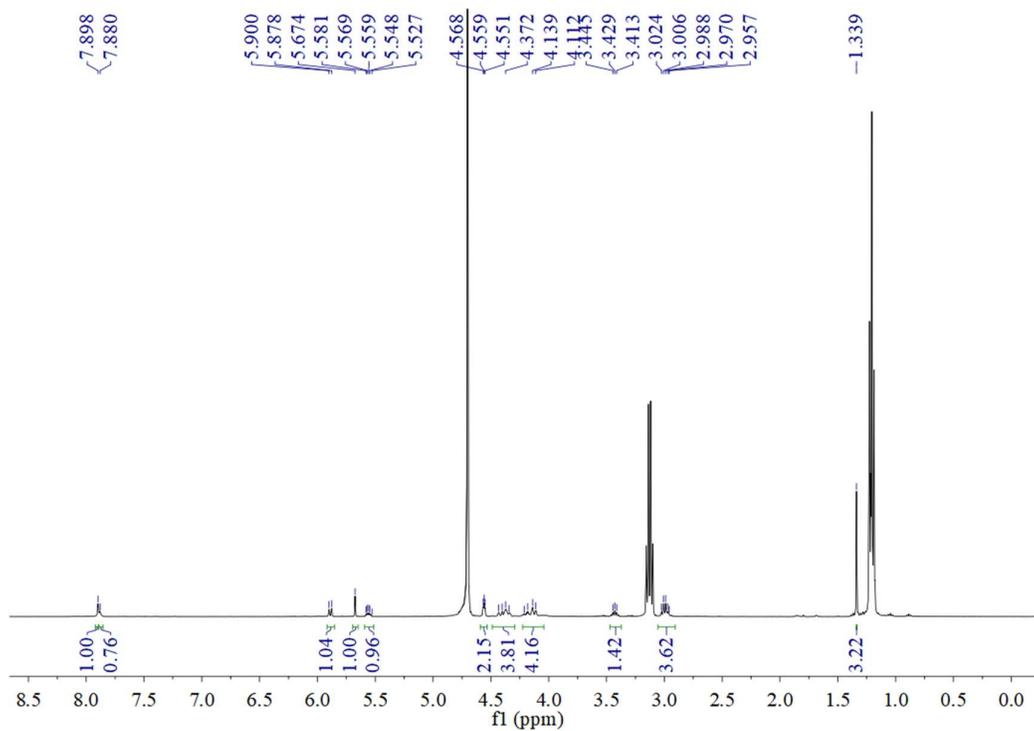
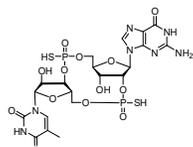
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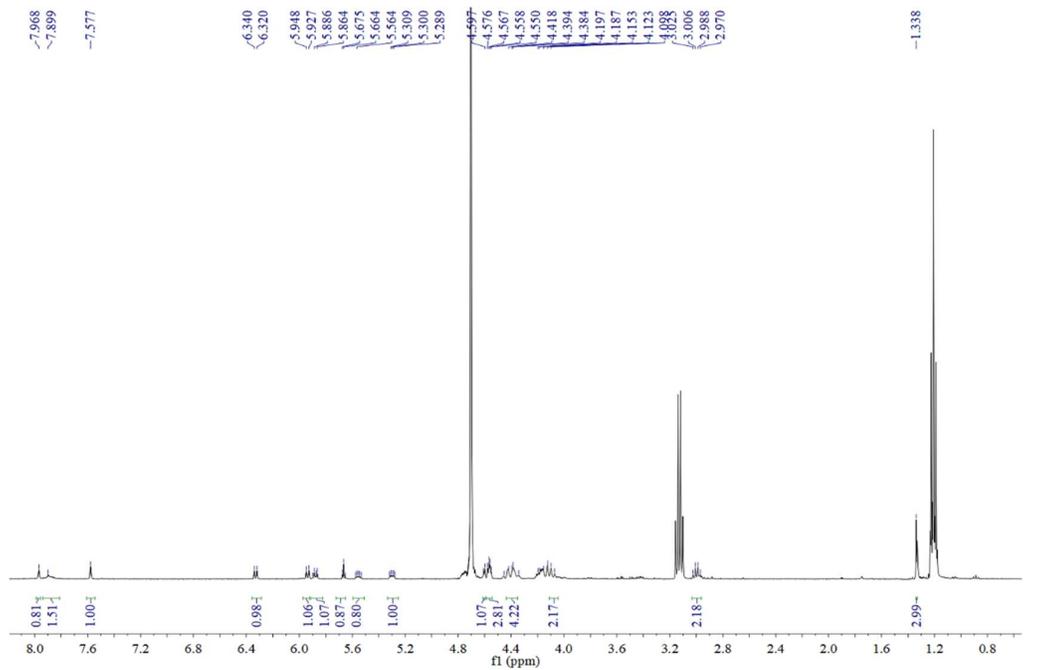
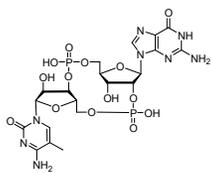
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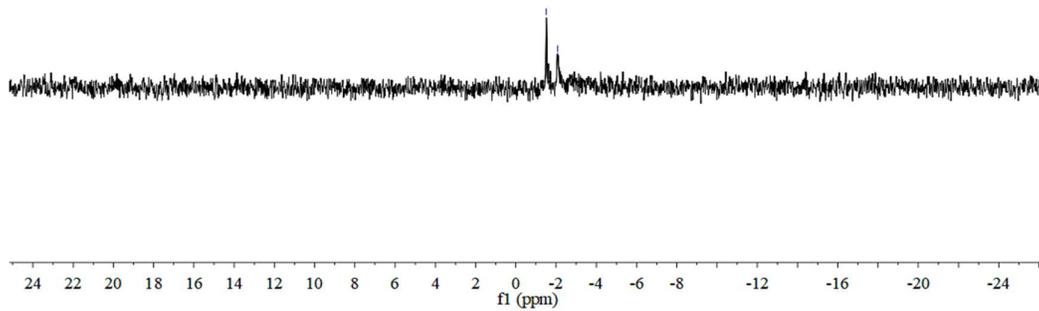
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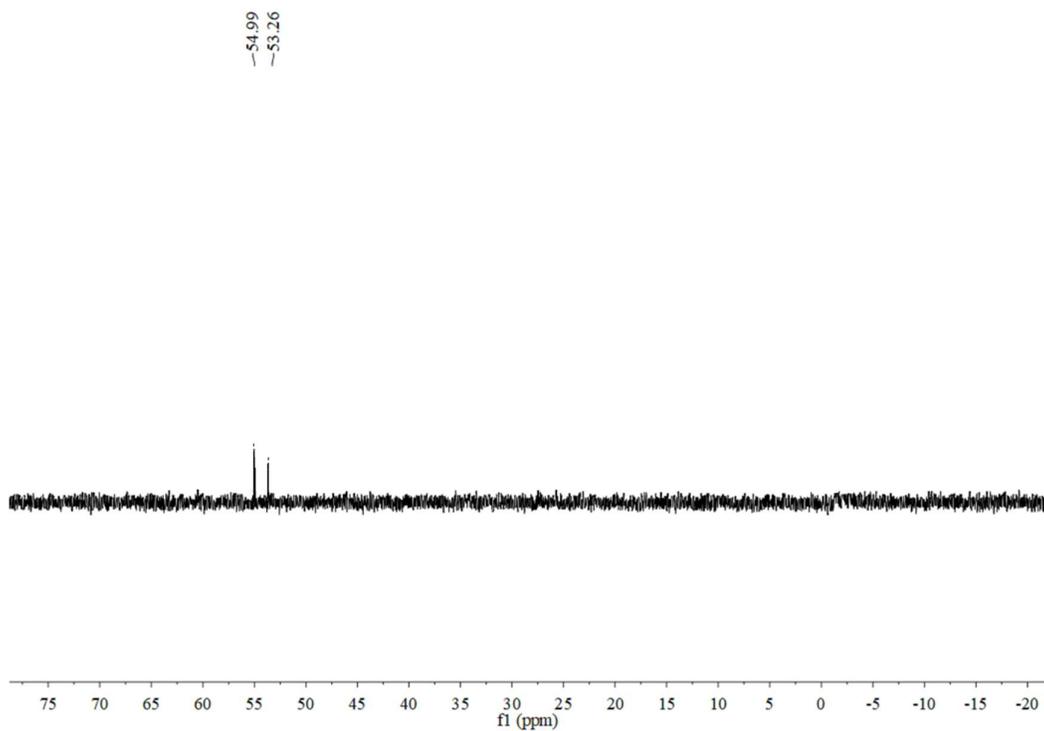
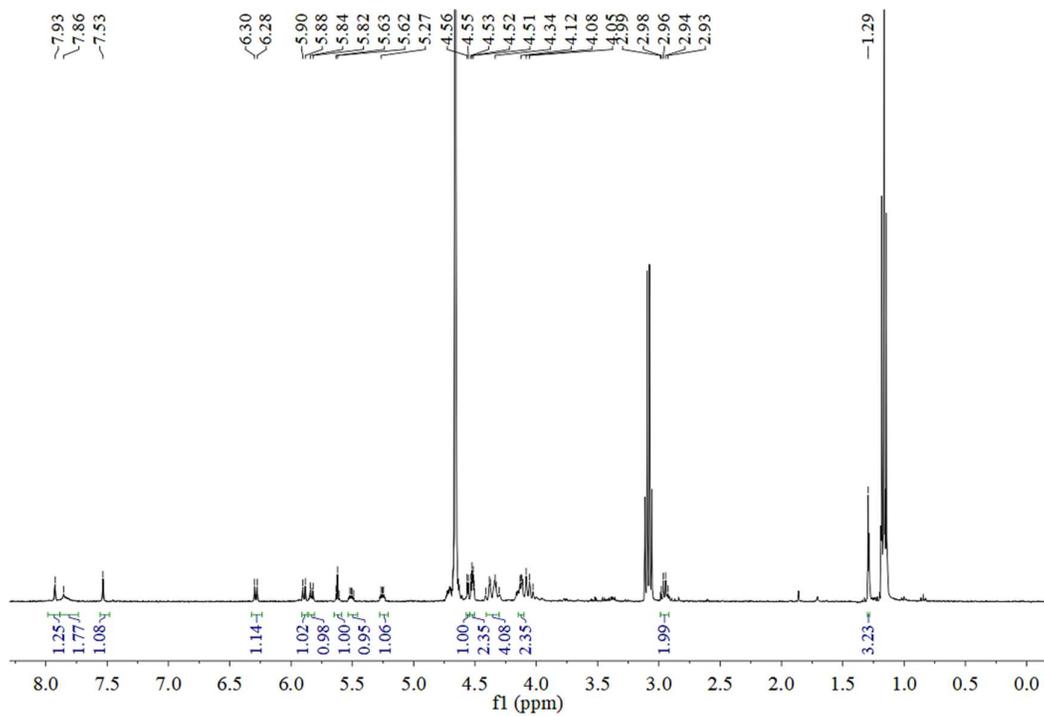
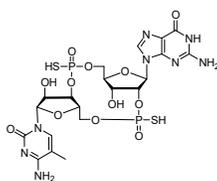
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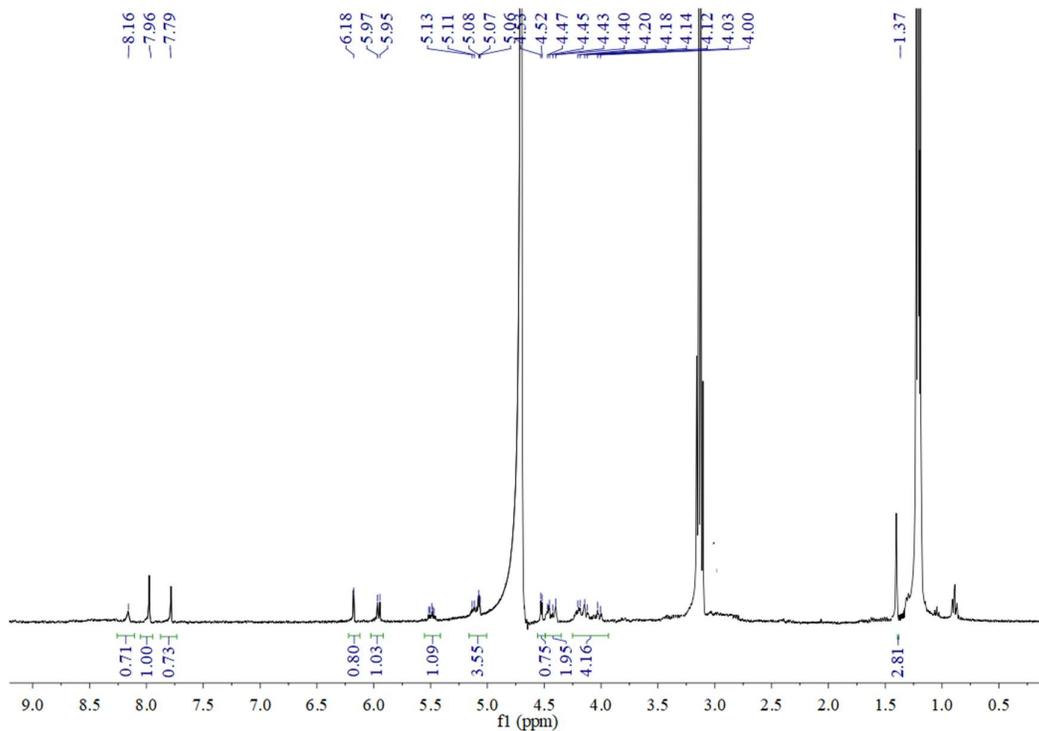
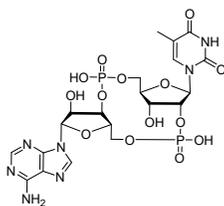
~1.52
~2.07



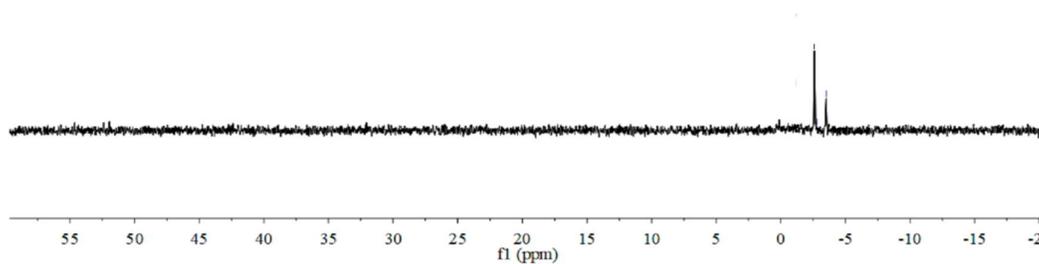
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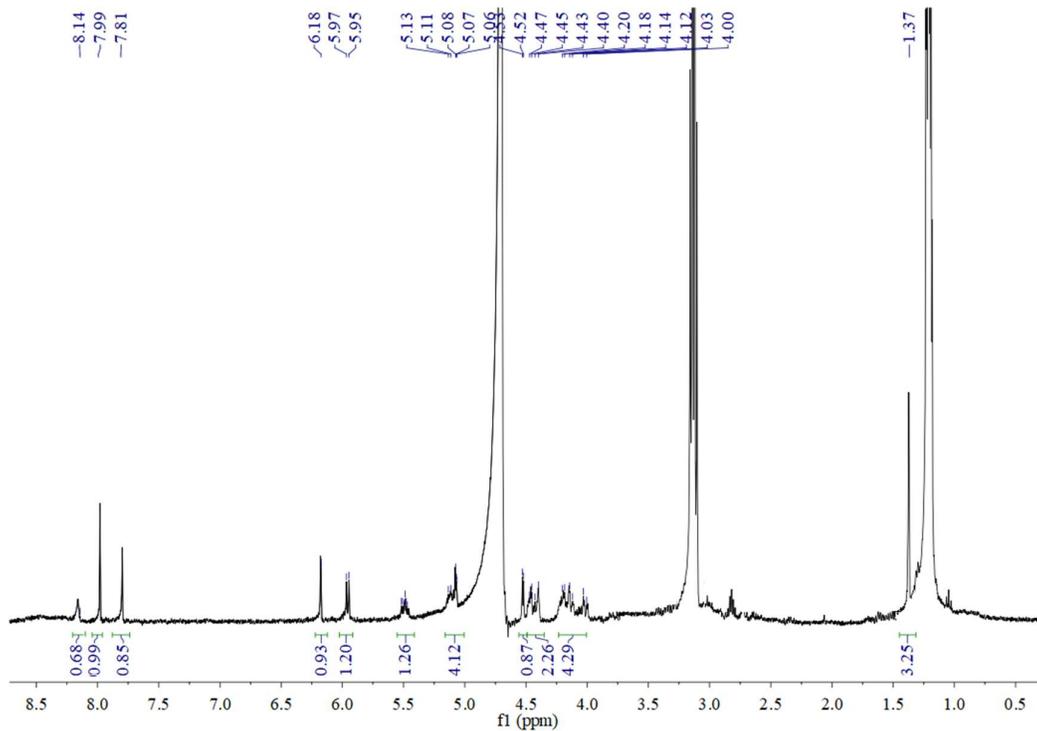
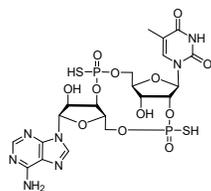
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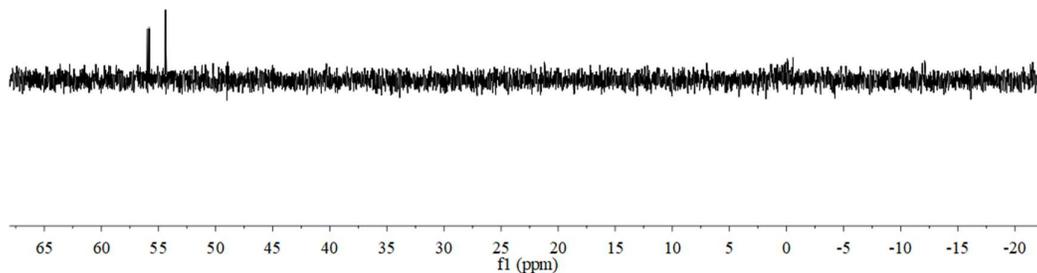
~2.81
~3.51



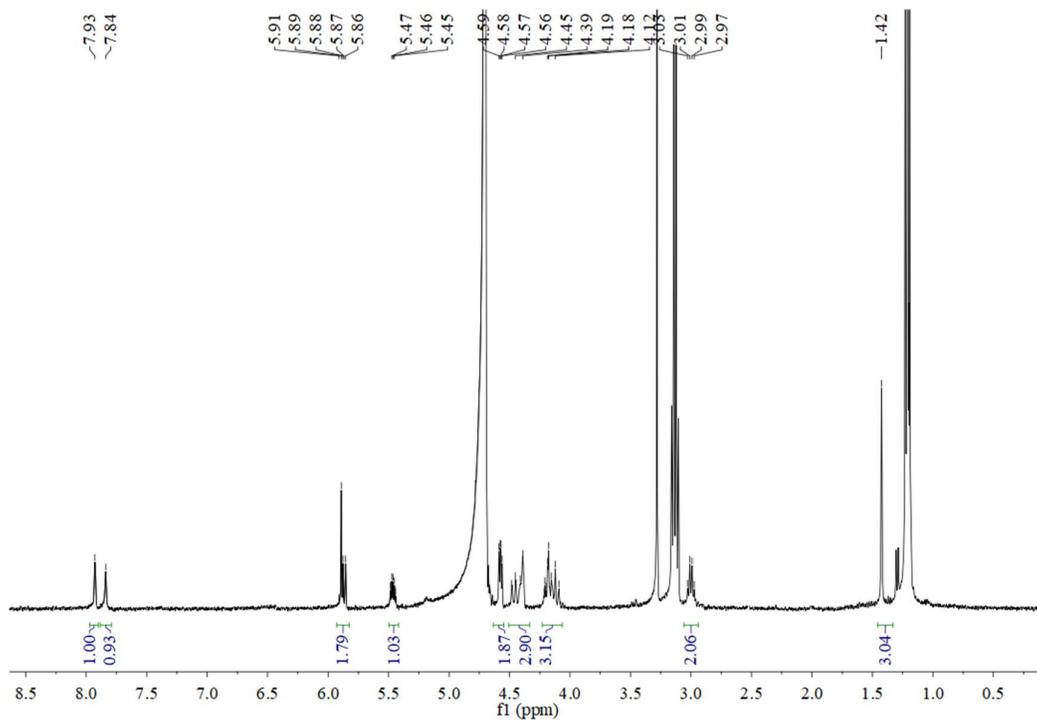
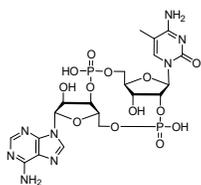
12b:



~55.56
~54.56



12c:



1.87
2.93

