

Supplementary Materials

The Synergistic Effect of N2 and N7 Modifications on the Inhibitory Efficacy of mRNA Cap Analogues

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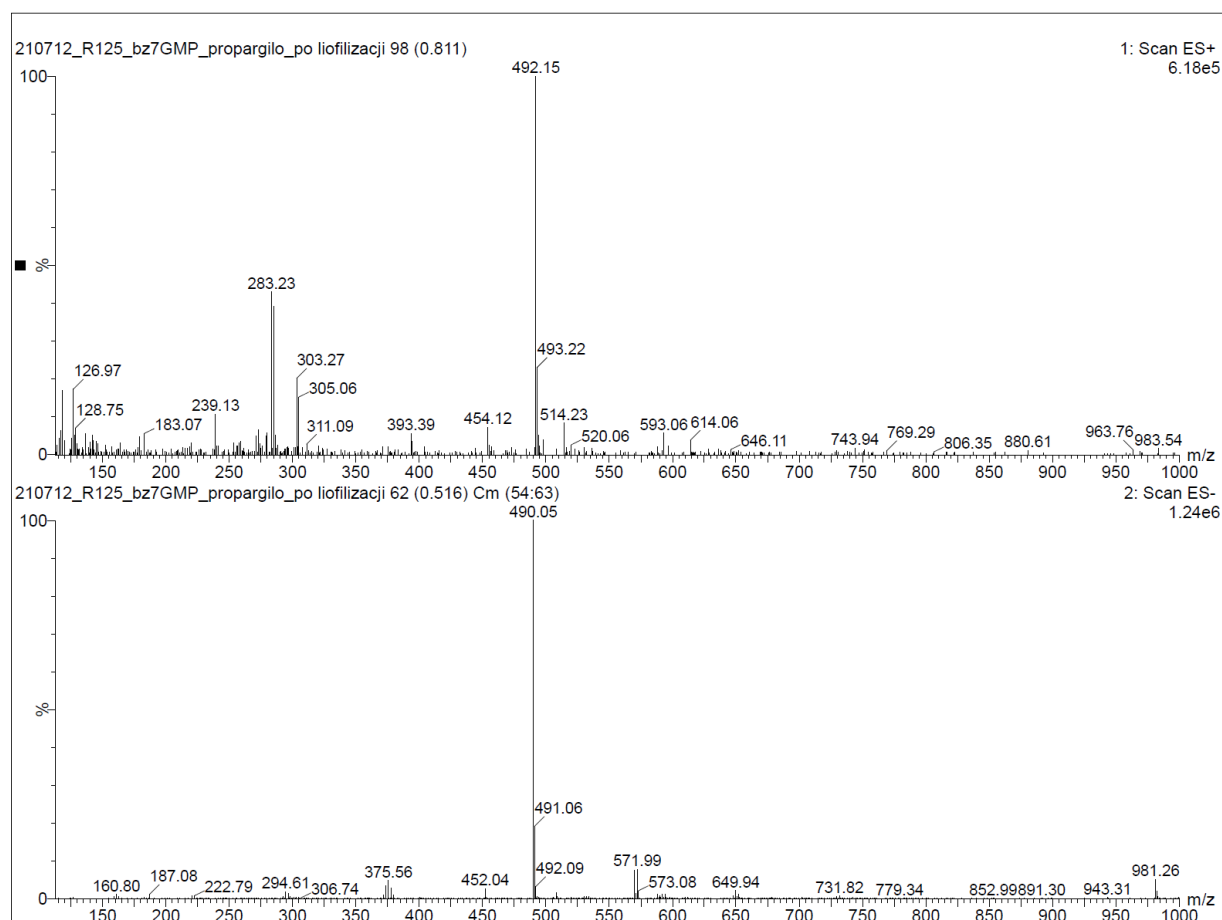
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The intermediate products

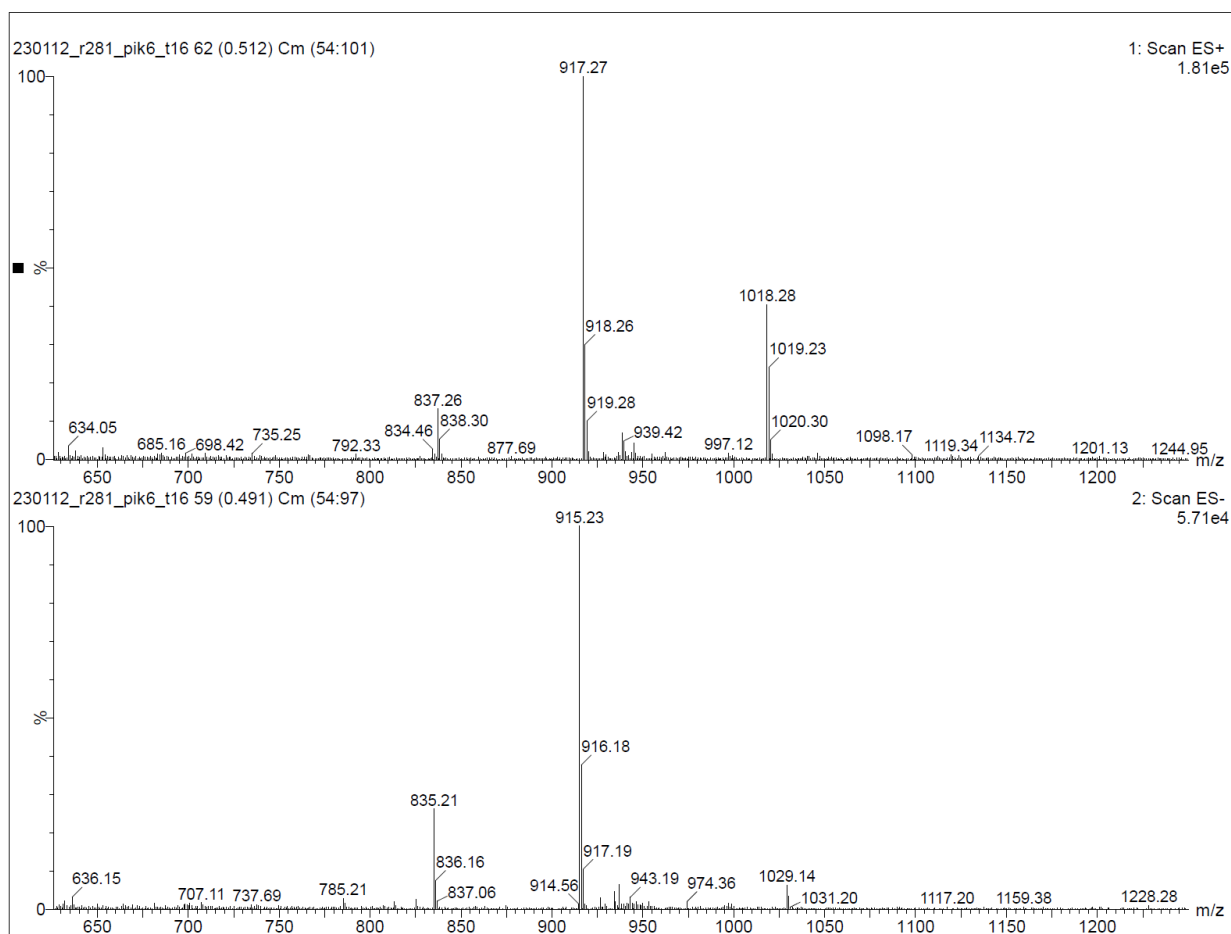
N2-(prop-2-yn)-7-benzylguanosine 5'-monophosphate (a)

MS (ES+ and ES-)



P1-N2-(prop-2-yn)-7-benzylguanosine-P3-guanosine 5',5'-triphosphate (b)

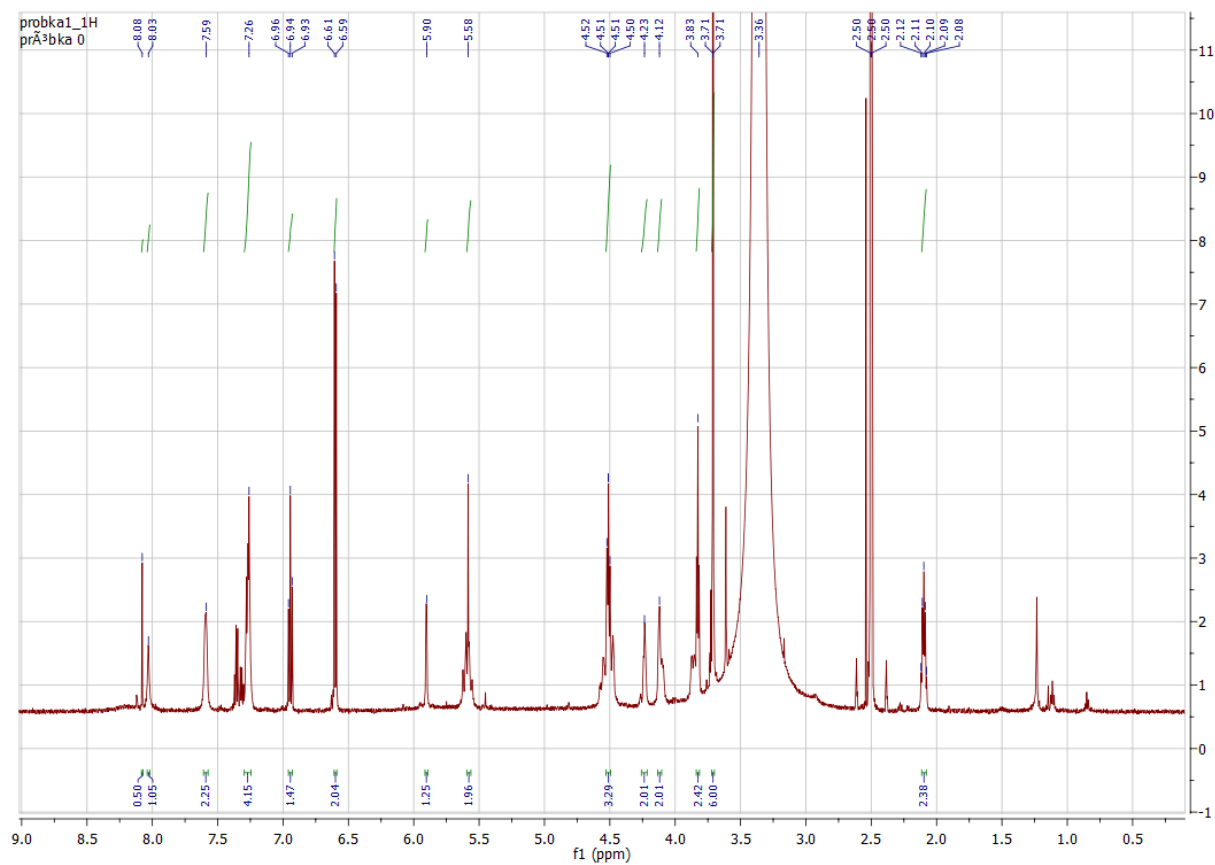
MS (ES+ and ES-)



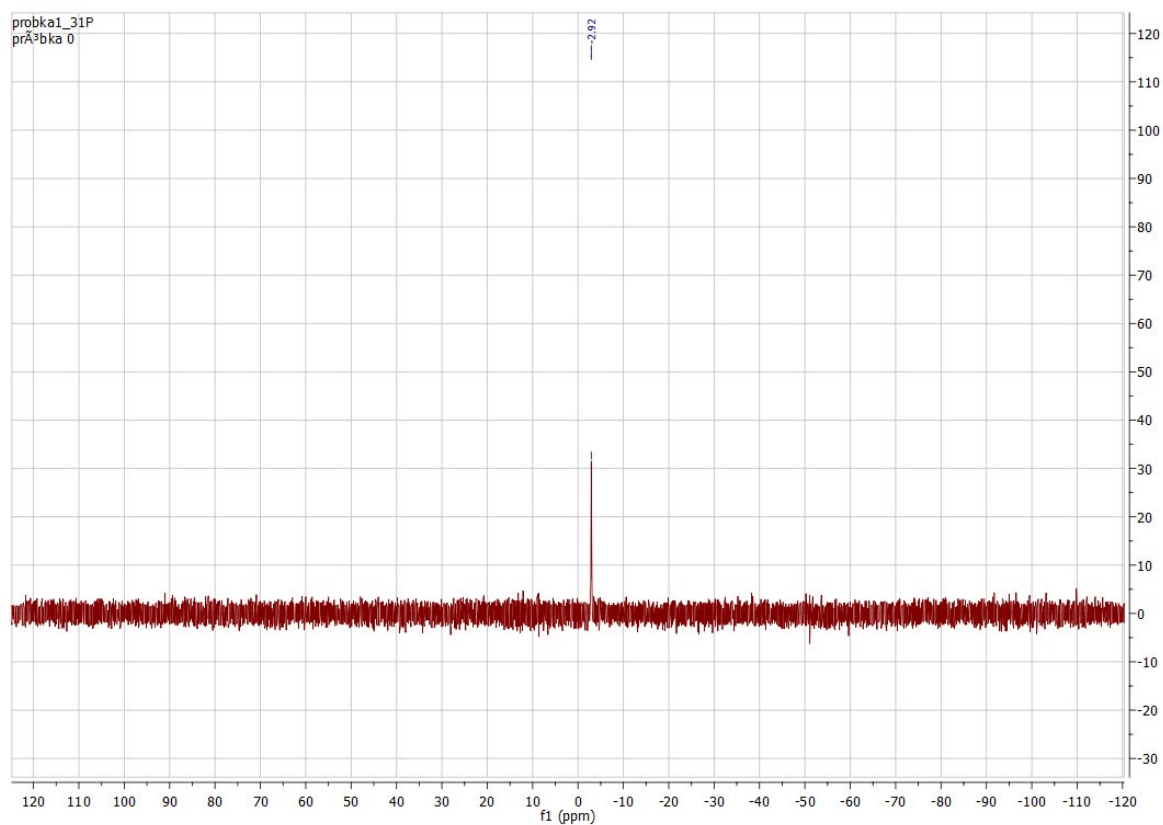
The final products:

N2-{1-[2-(2,6-dimethoxyphenoxy)propyl]-1H-1,2,3-triazol-4-yl}methylene-7-benzylguanosine 5'-monophosphate (3)

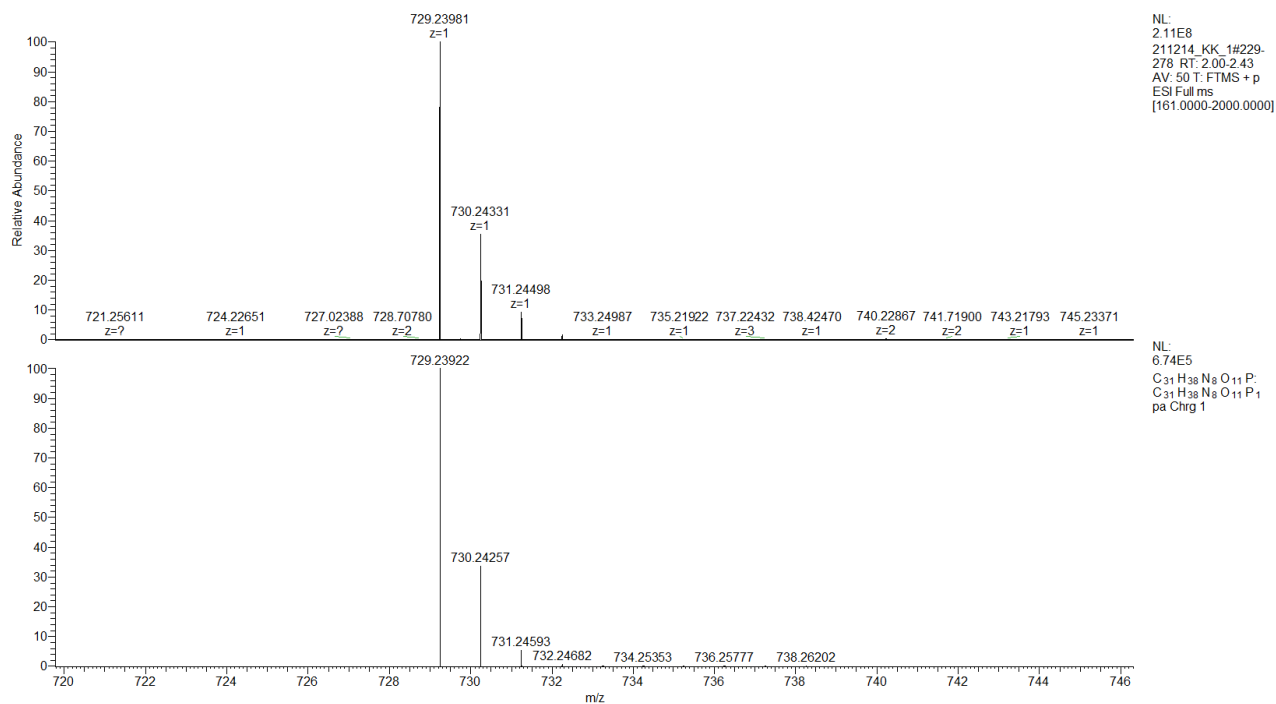
¹H NMR



^{31}P NMR

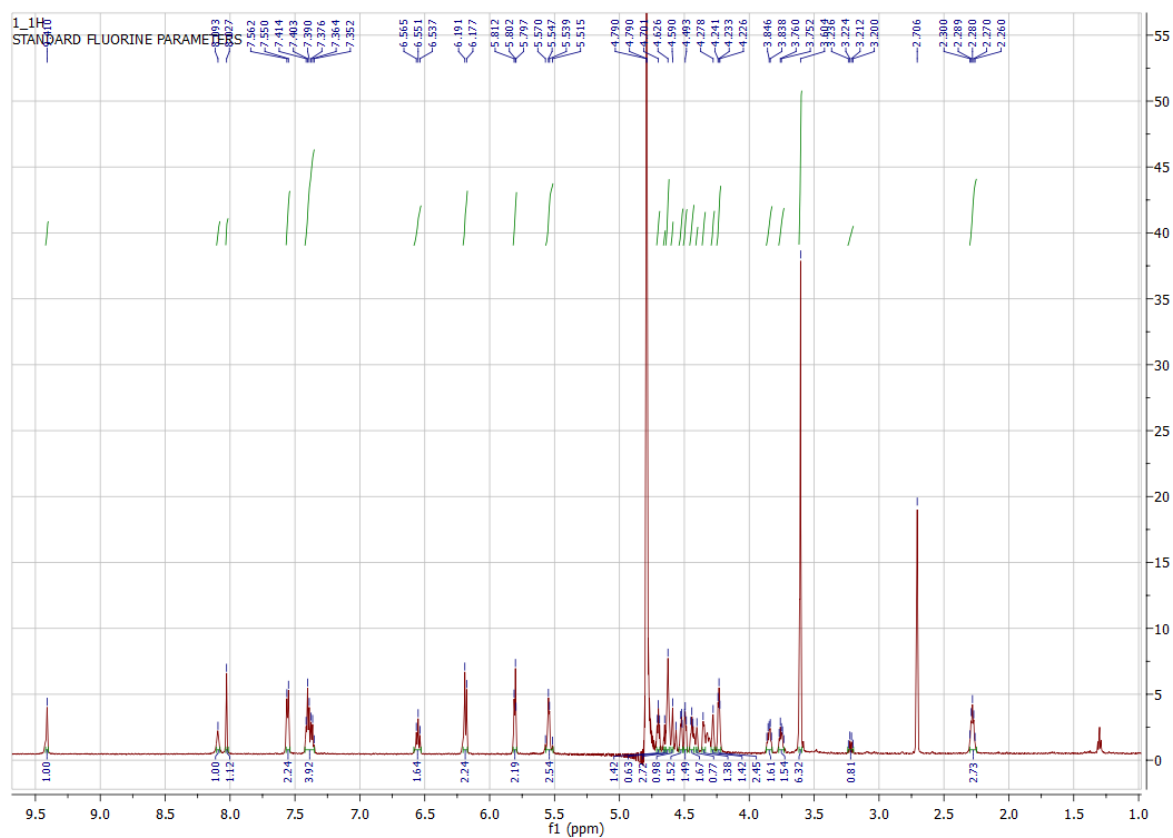


HRMS (ES+)

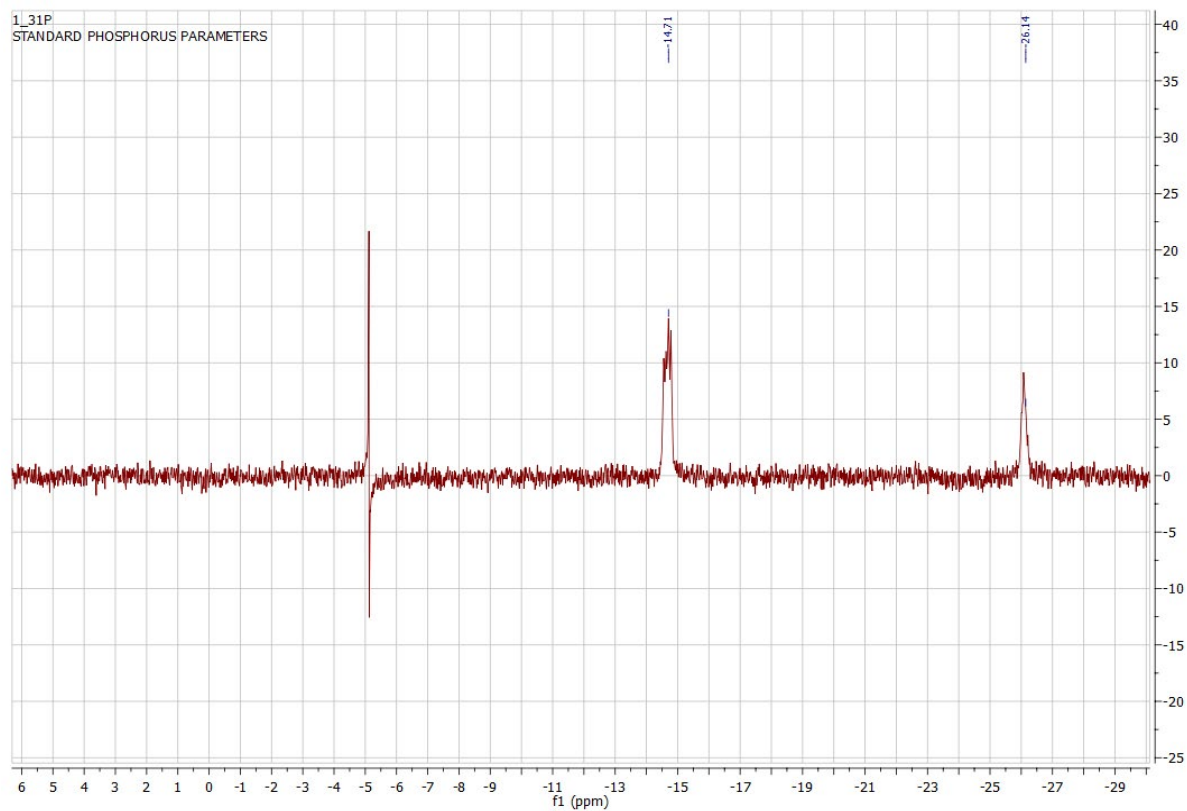


P1-N2-{1-[2-(2,6-dimethoxyphenoxy)propyl]-1H-1,2,3-triazol-4-yl}methylene-7-benzylguanosine-P3-guanosine 5',5'-triphosphate (4)

¹H NMR



³¹P NMR



HRMS (ES+)

