

## SUPPORTING INFORMATION

### Efficient Syntheses of *alpha*- and *beta*-C-Nucleosides and the Origin of Anomeric Selectivity

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<sup>†</sup> Dedicated to the memory of Professor Qi-Zhuo Wang (1922-2018).

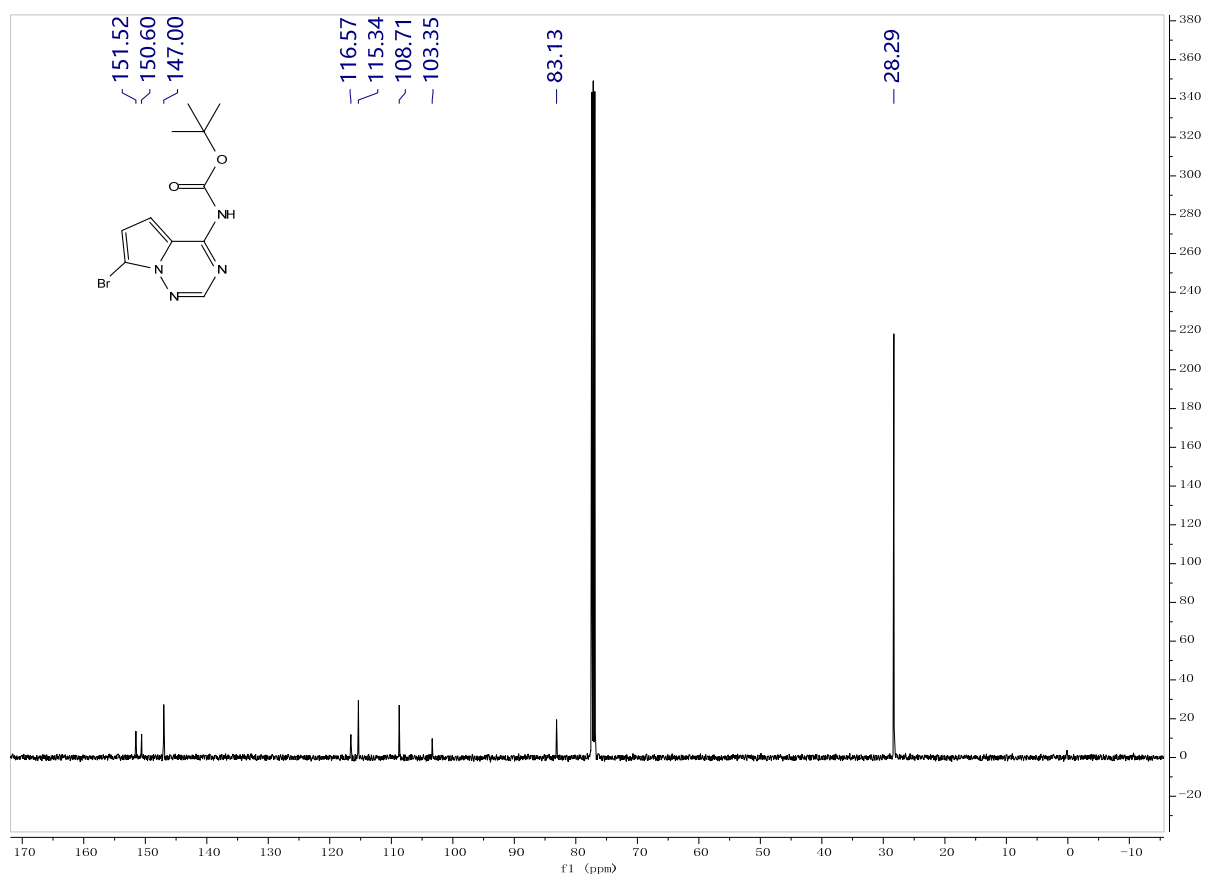
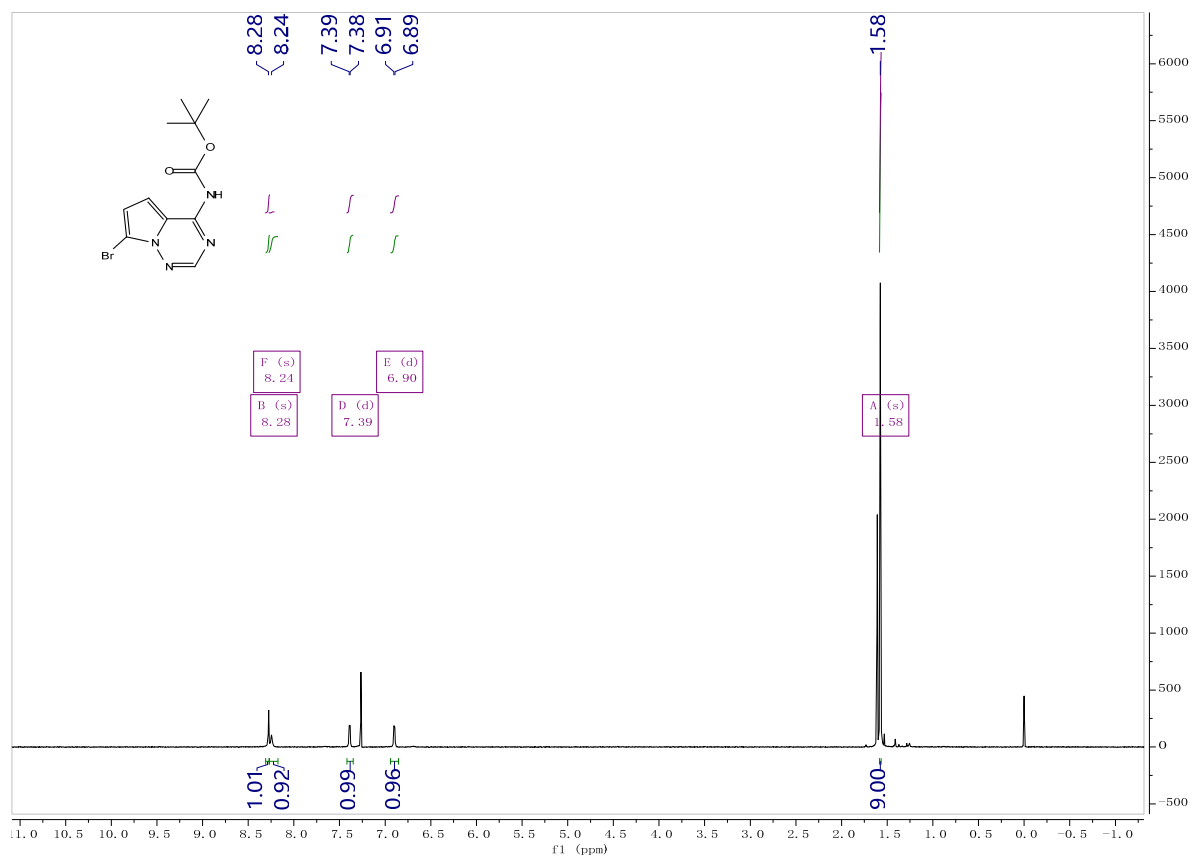
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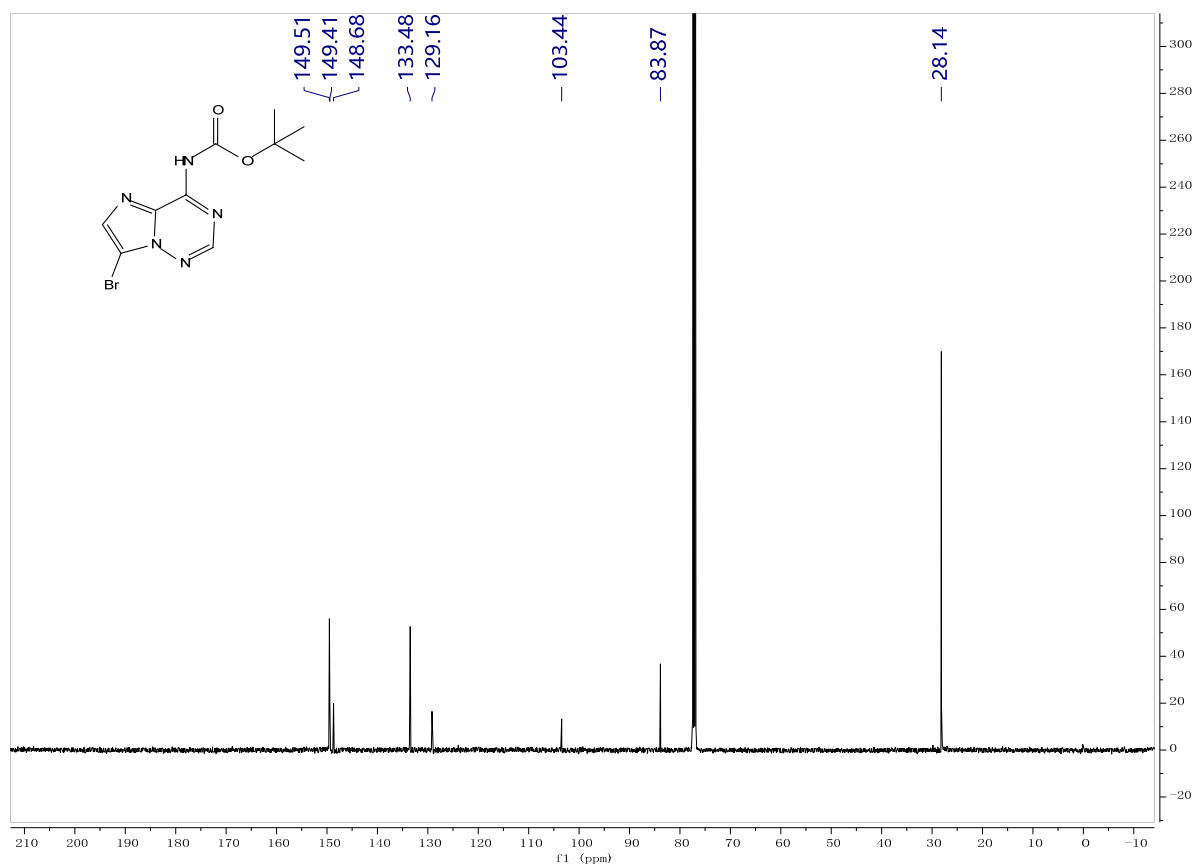
#### Table of Contents

1. Copies of NMR spectra	2-22
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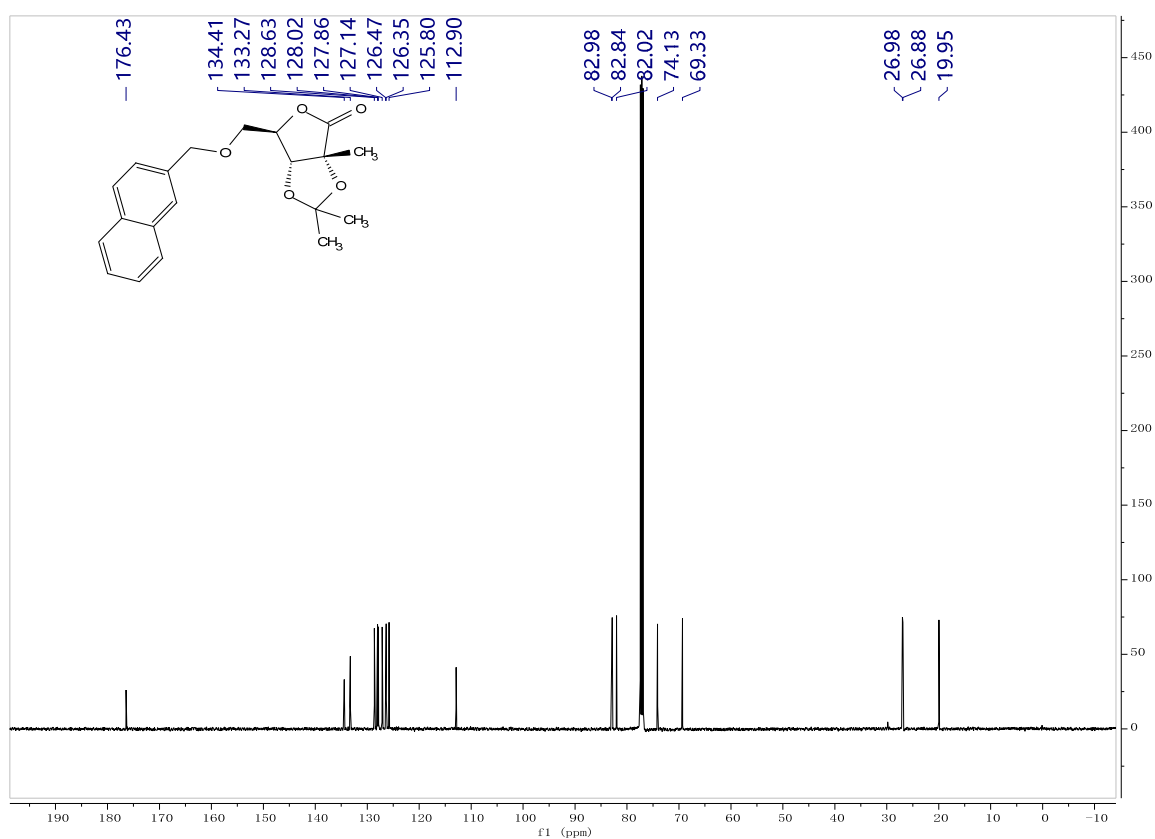
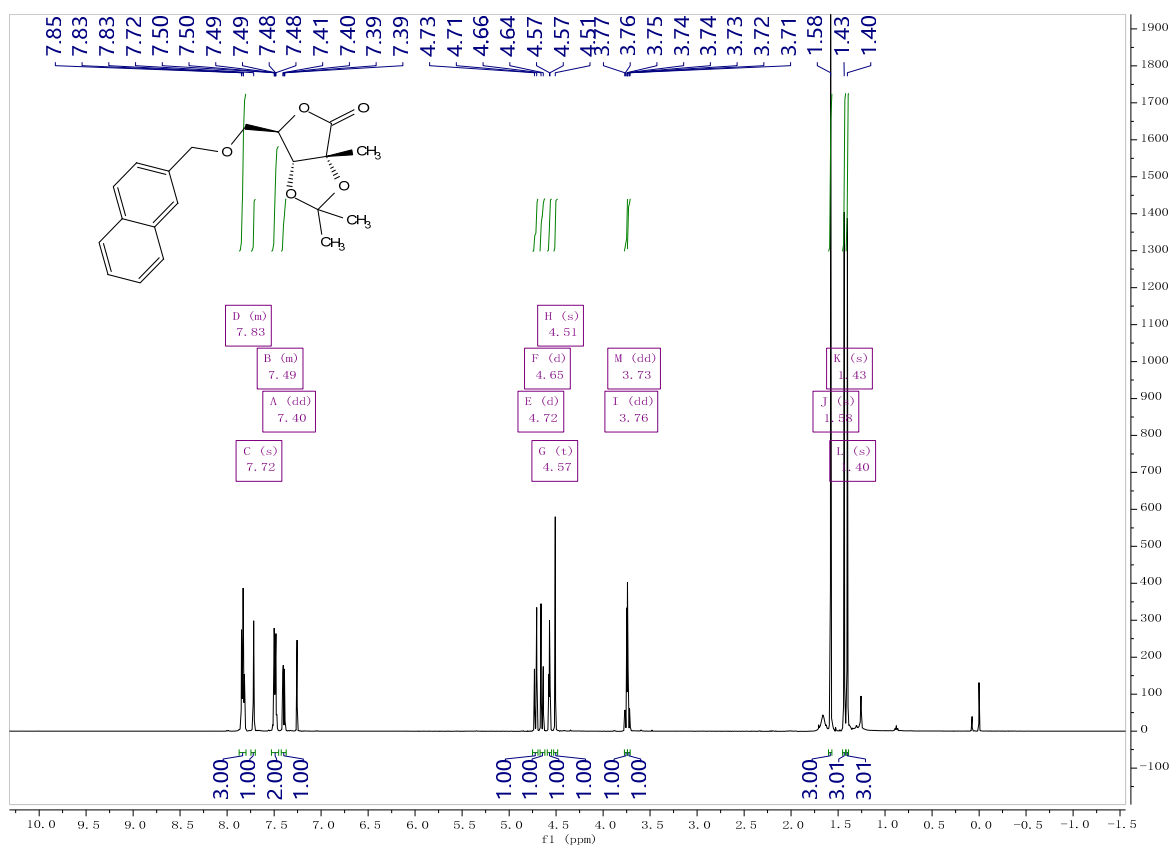
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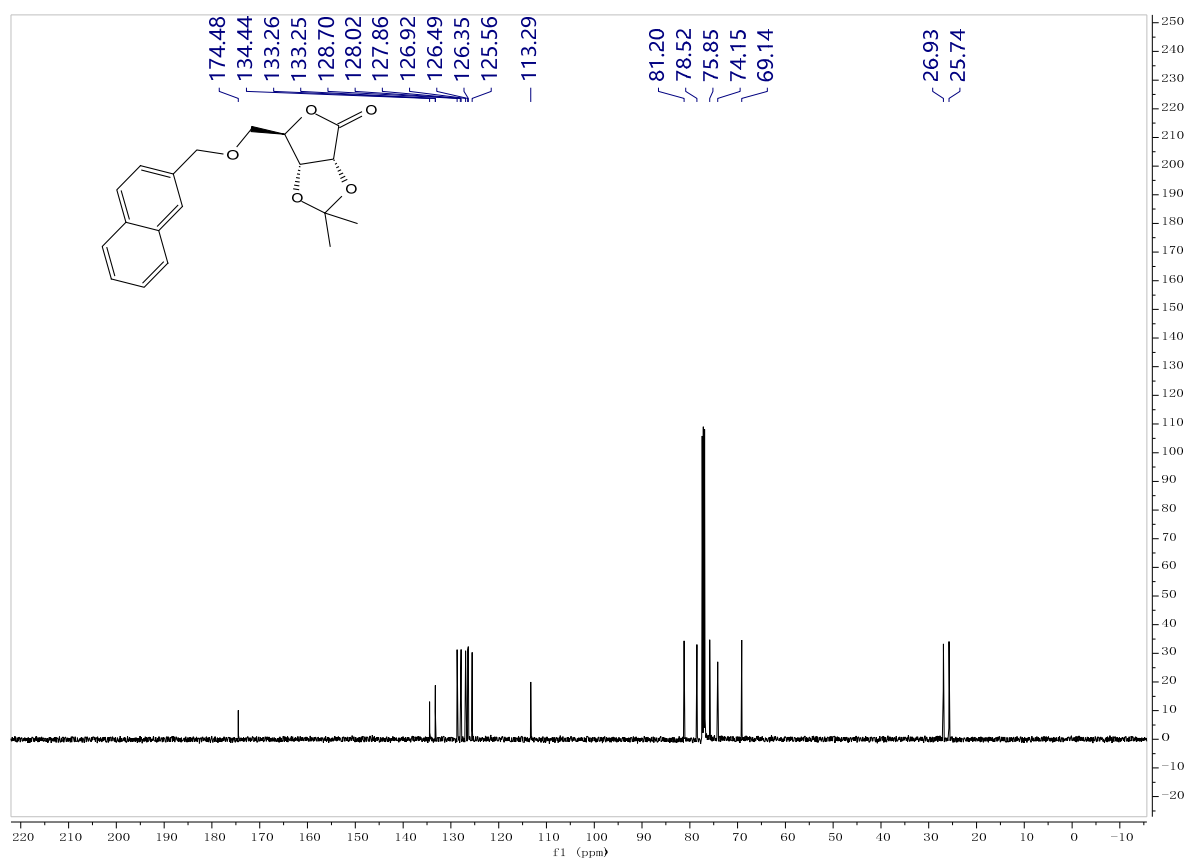
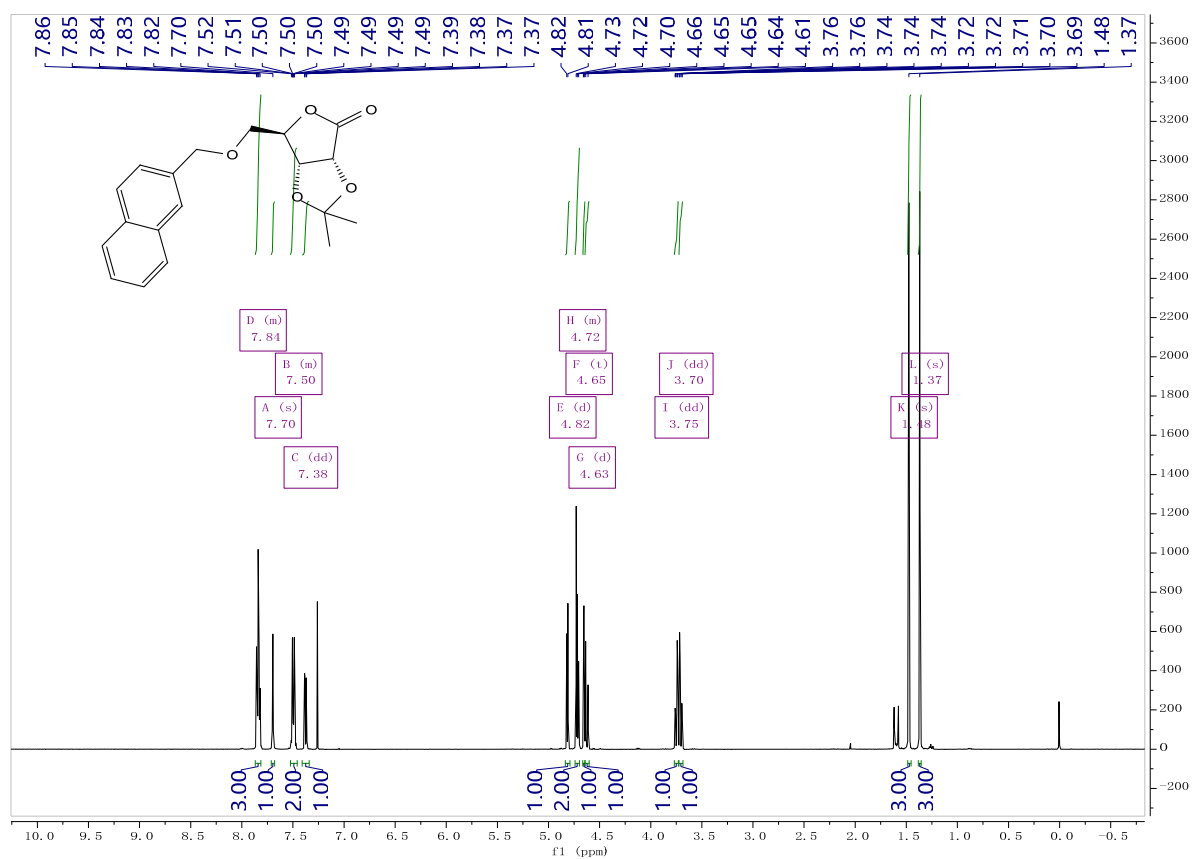
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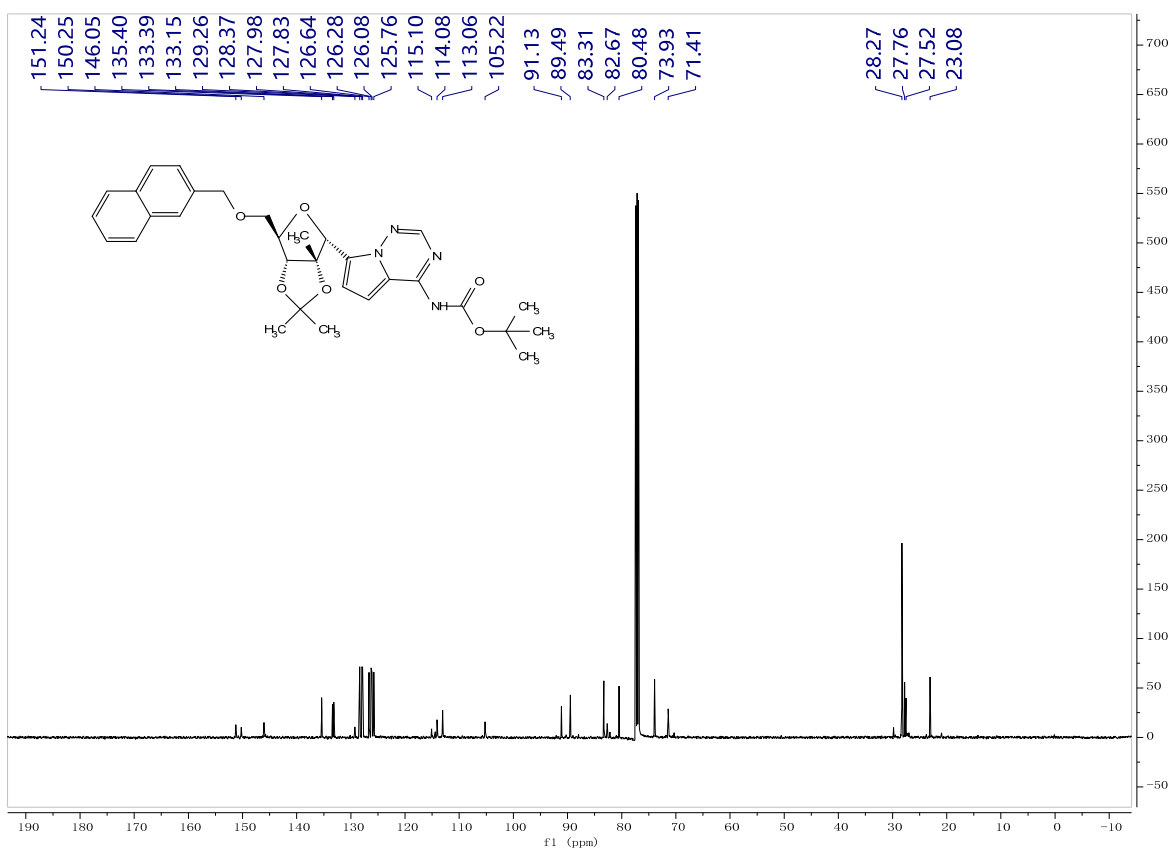
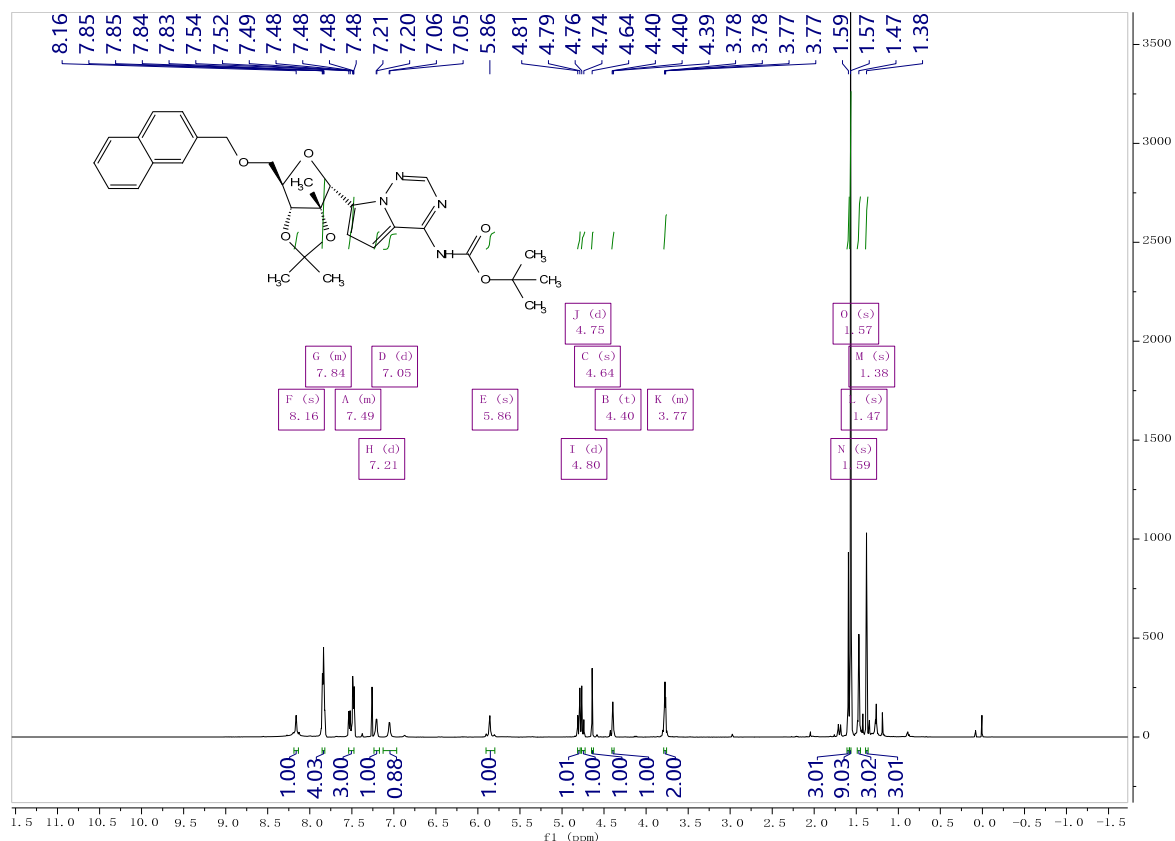
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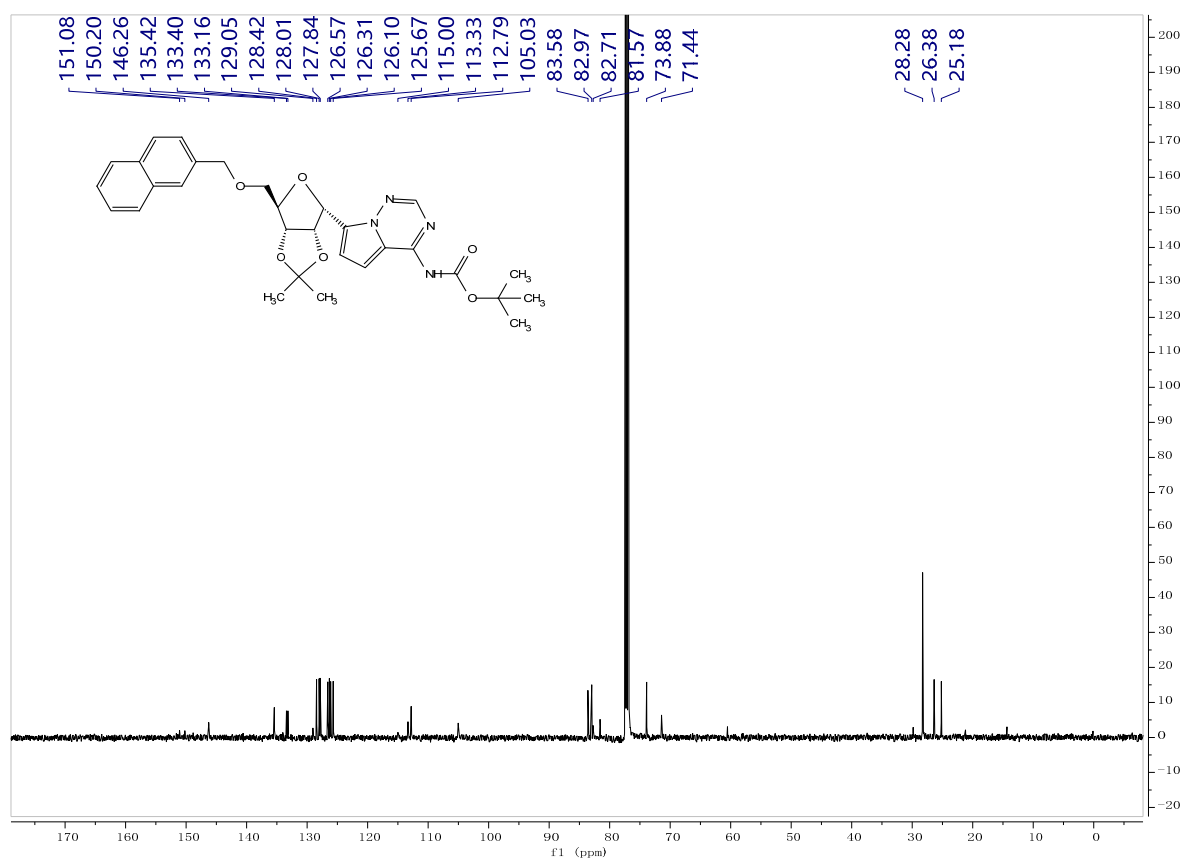
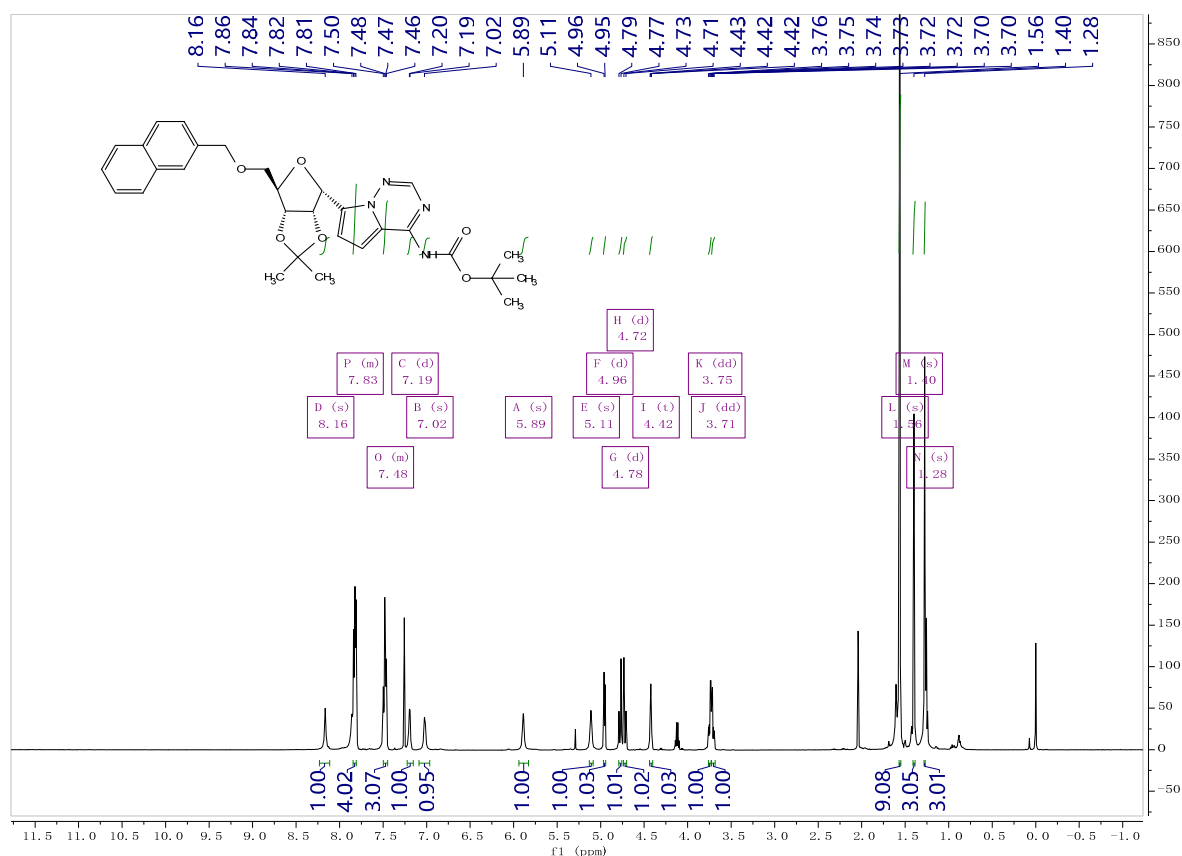
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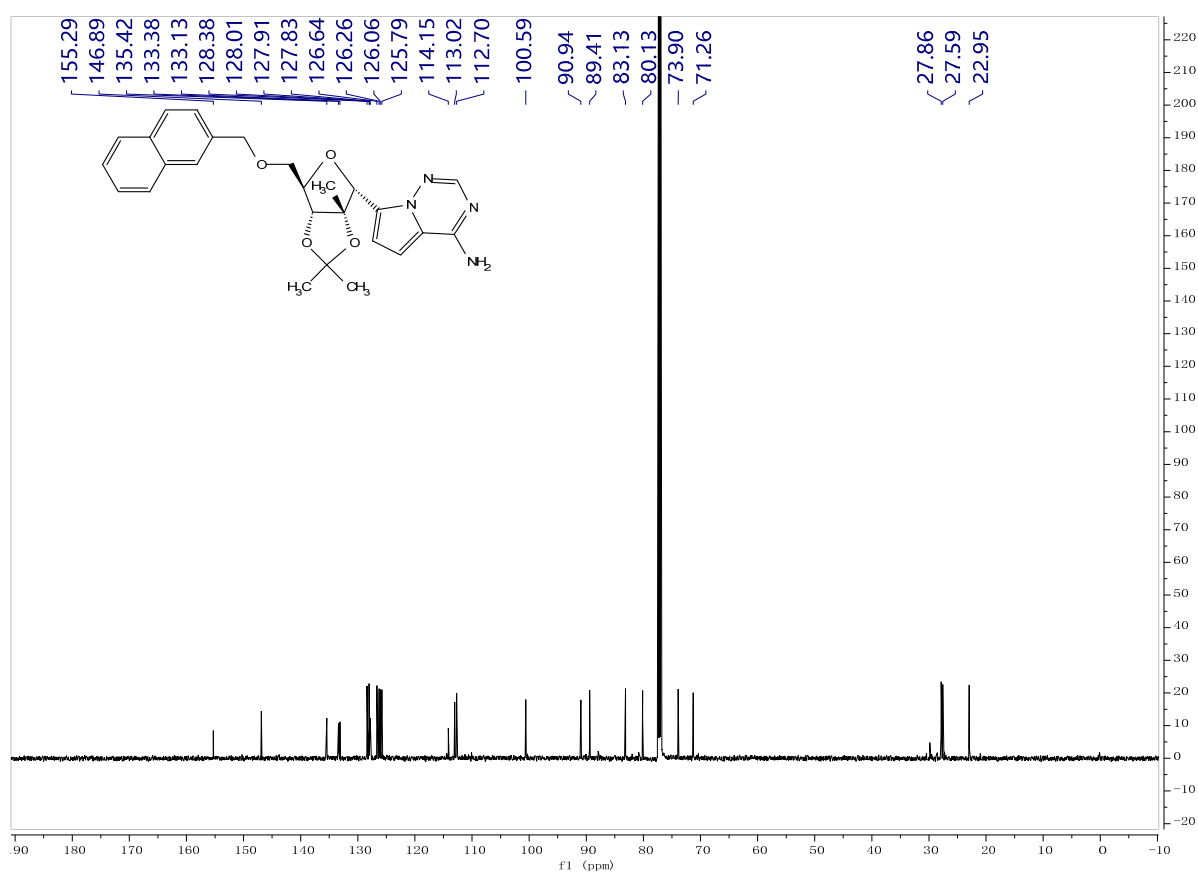
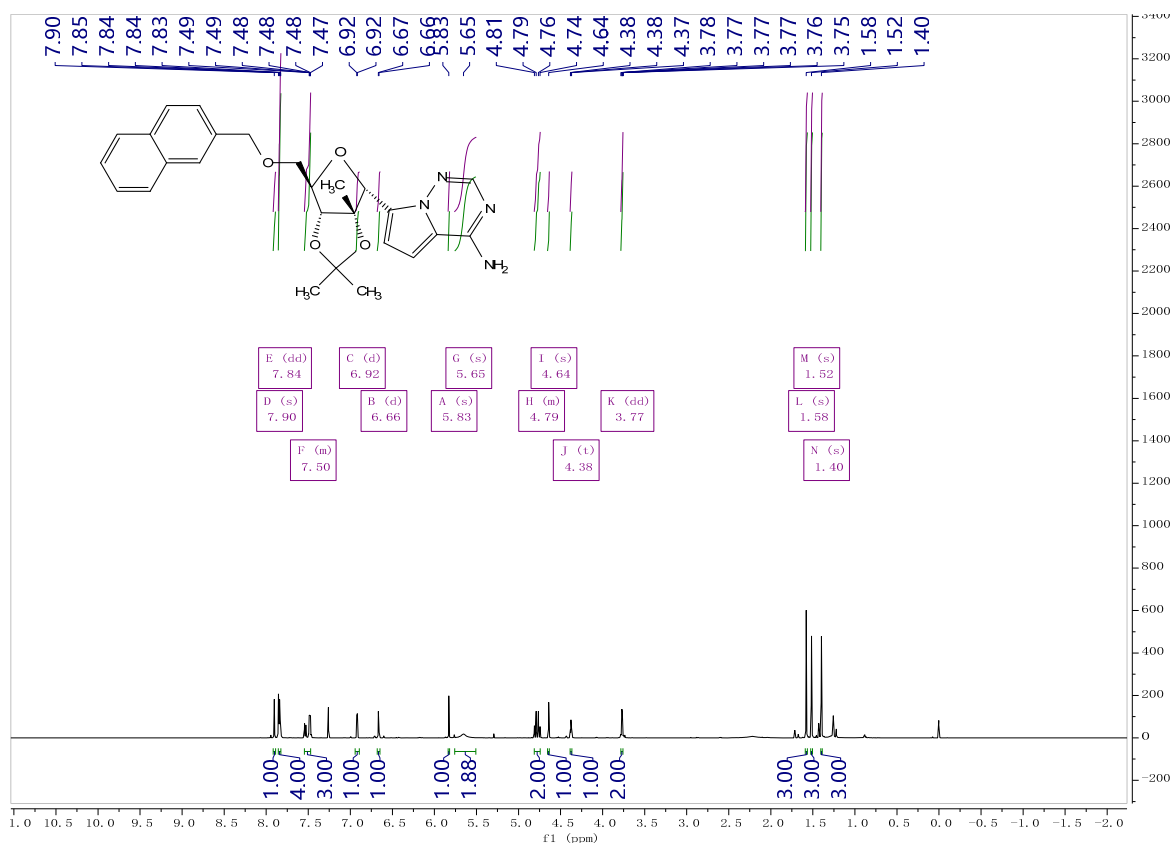
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# Compound 21b

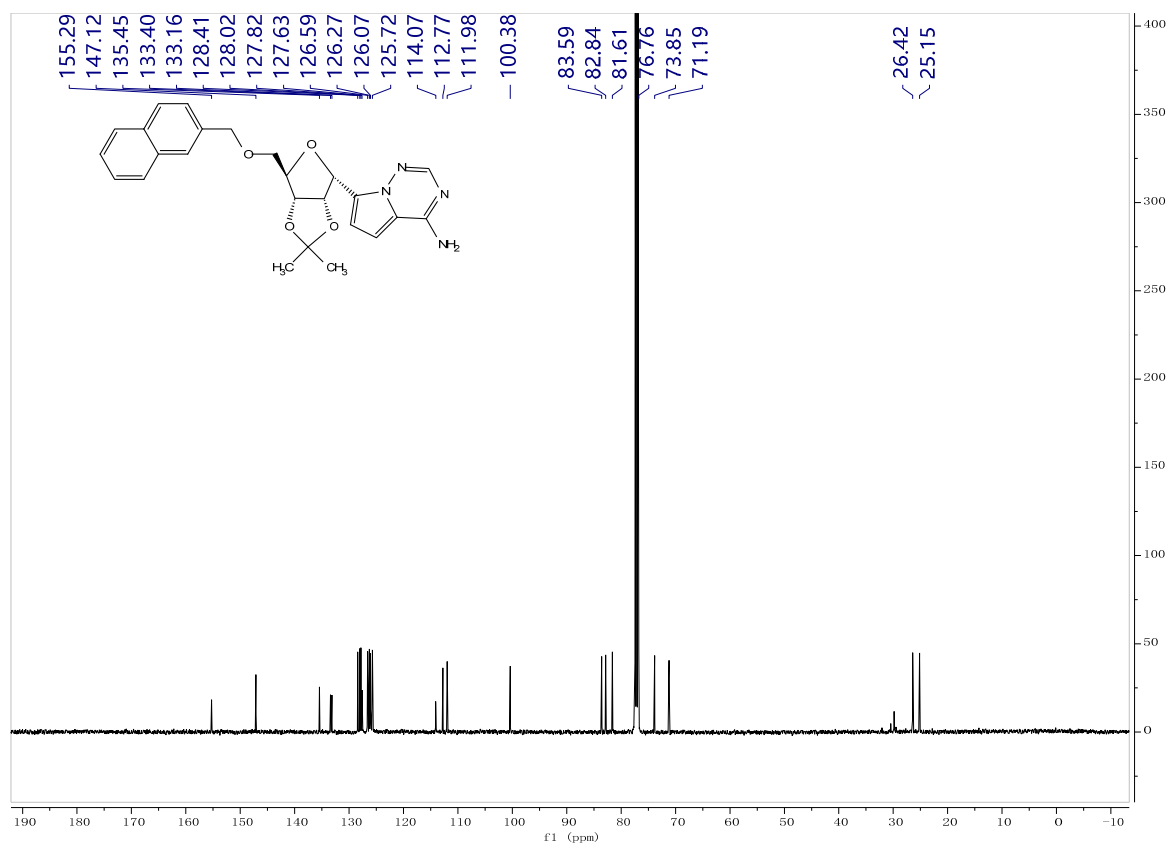
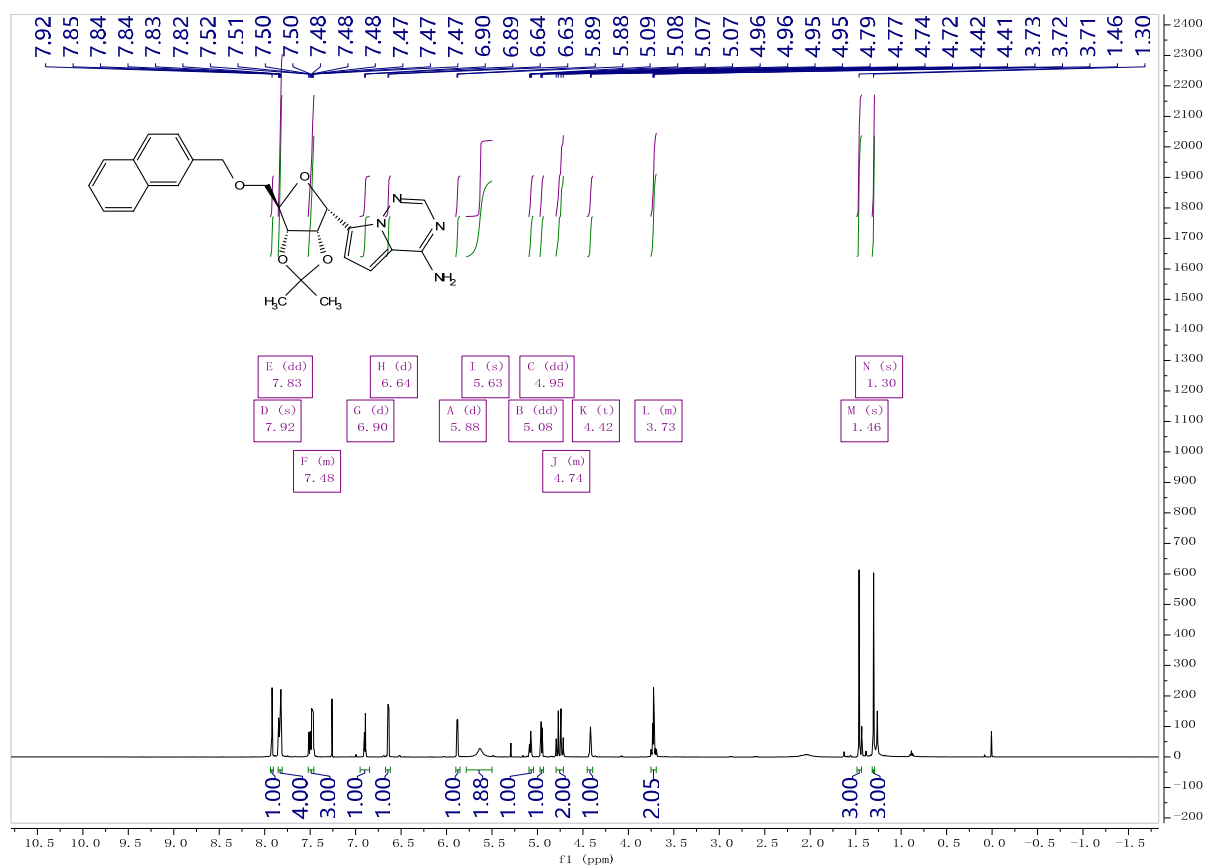


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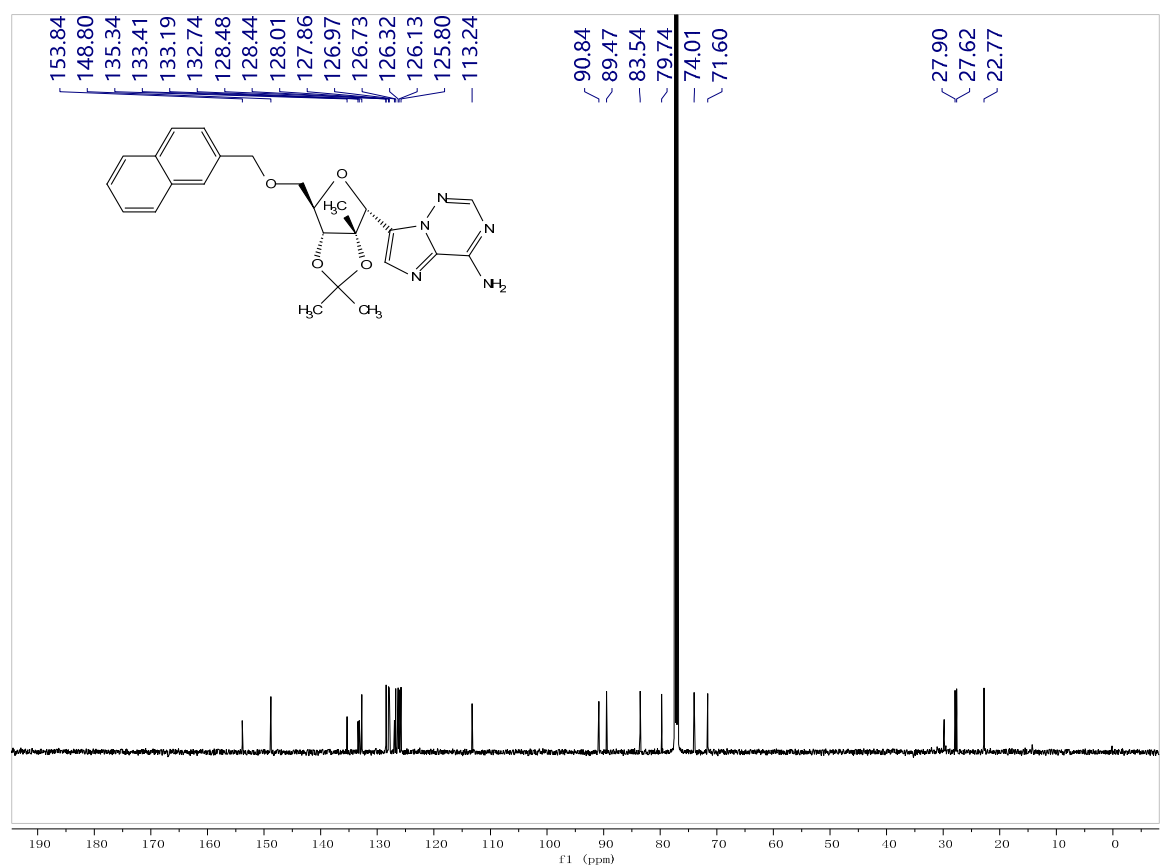
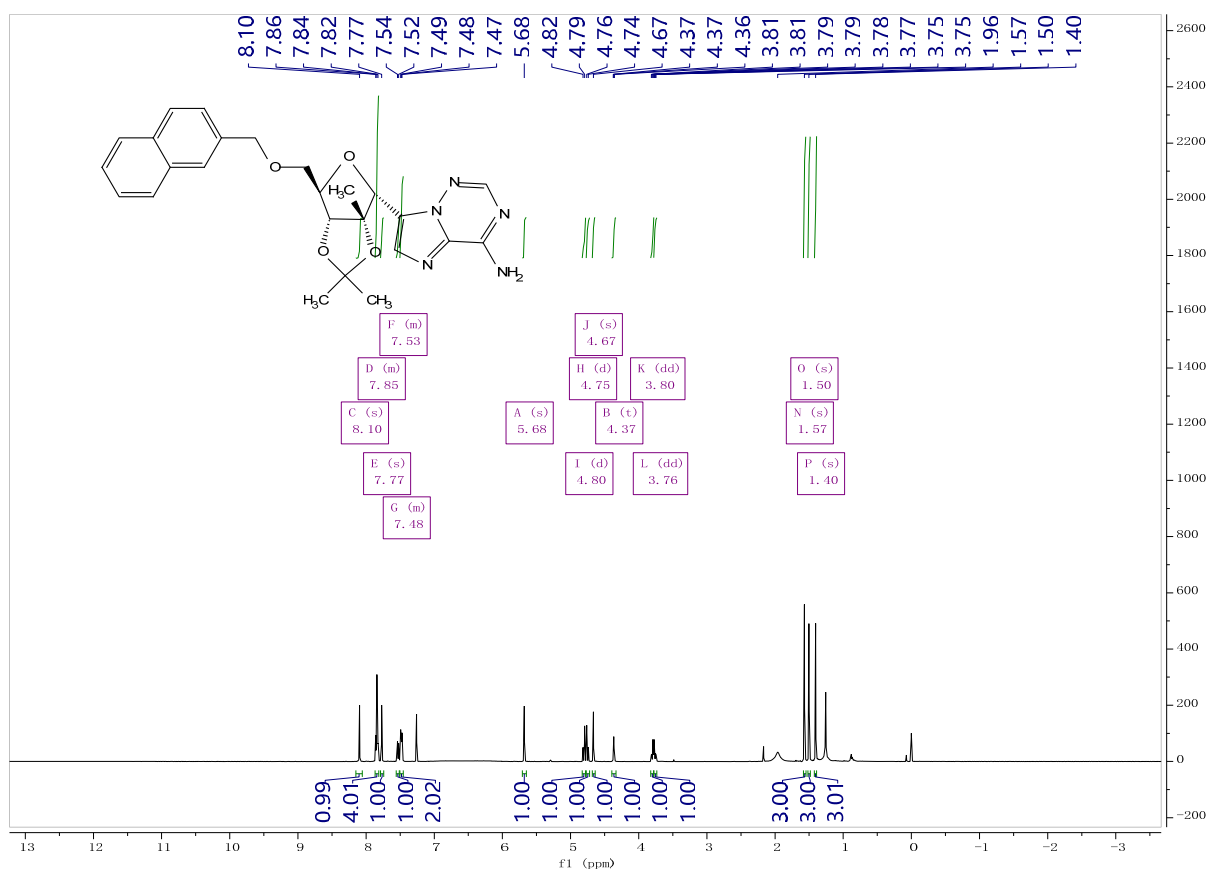




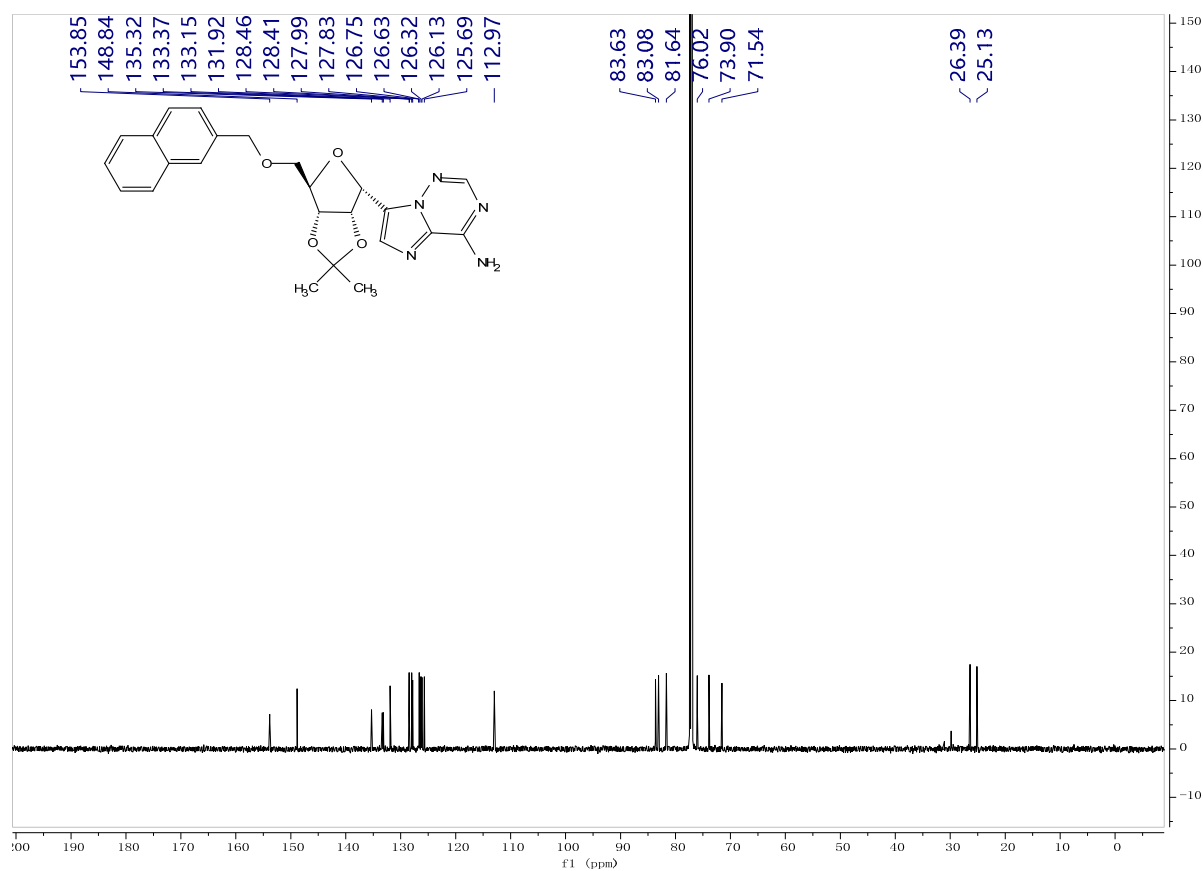
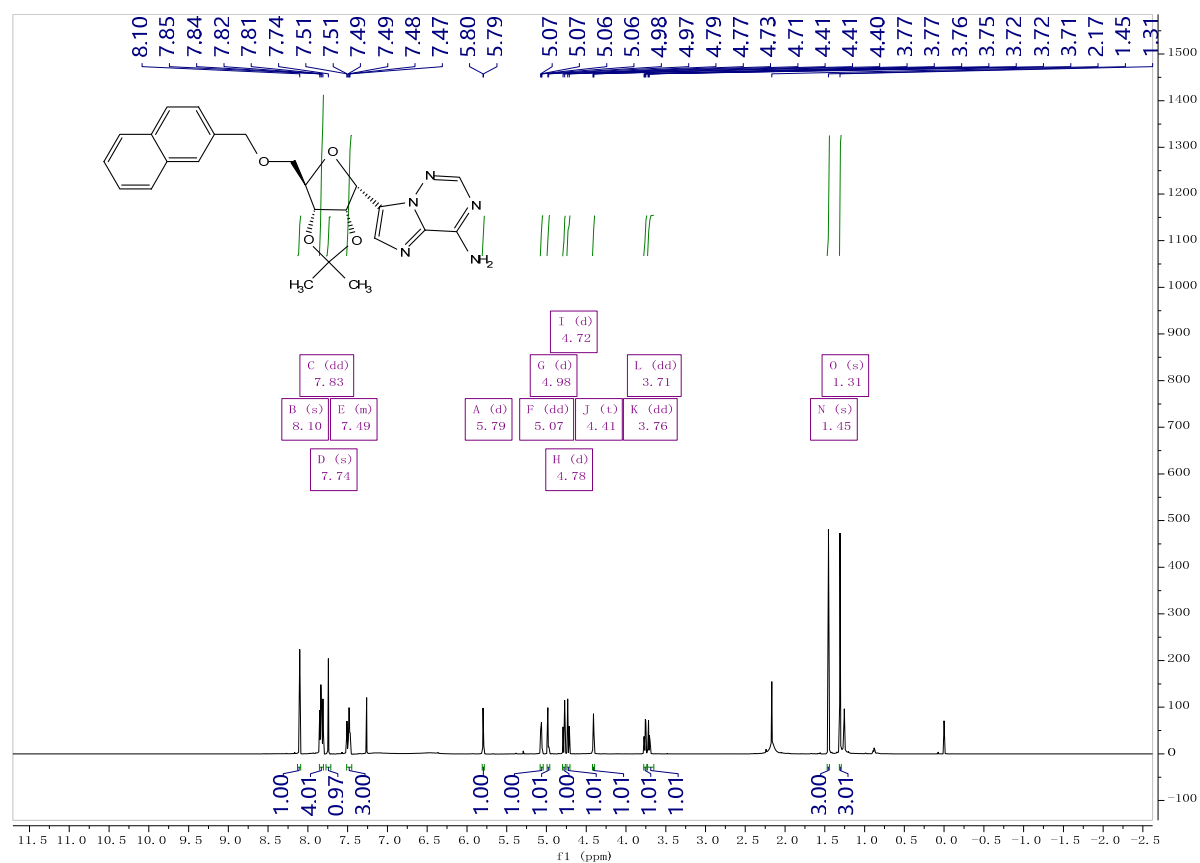
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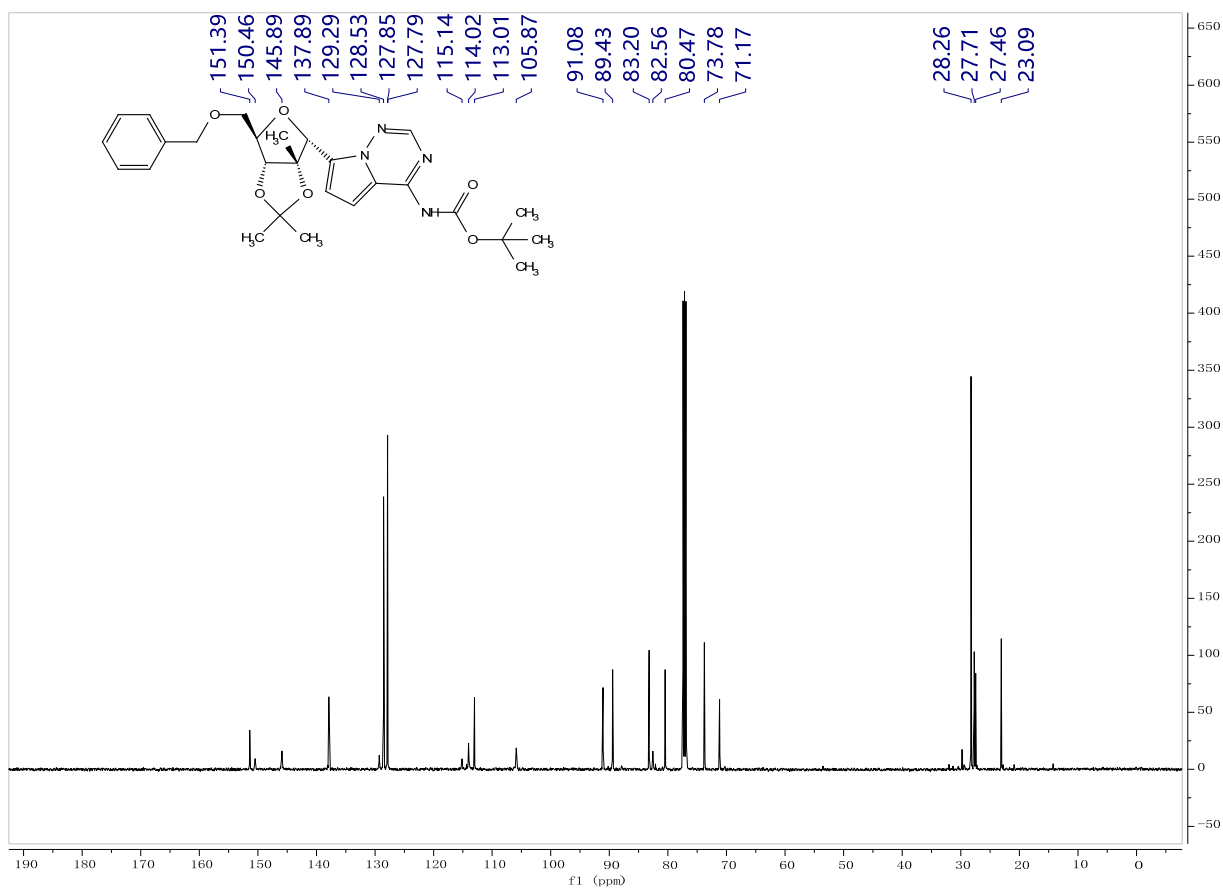
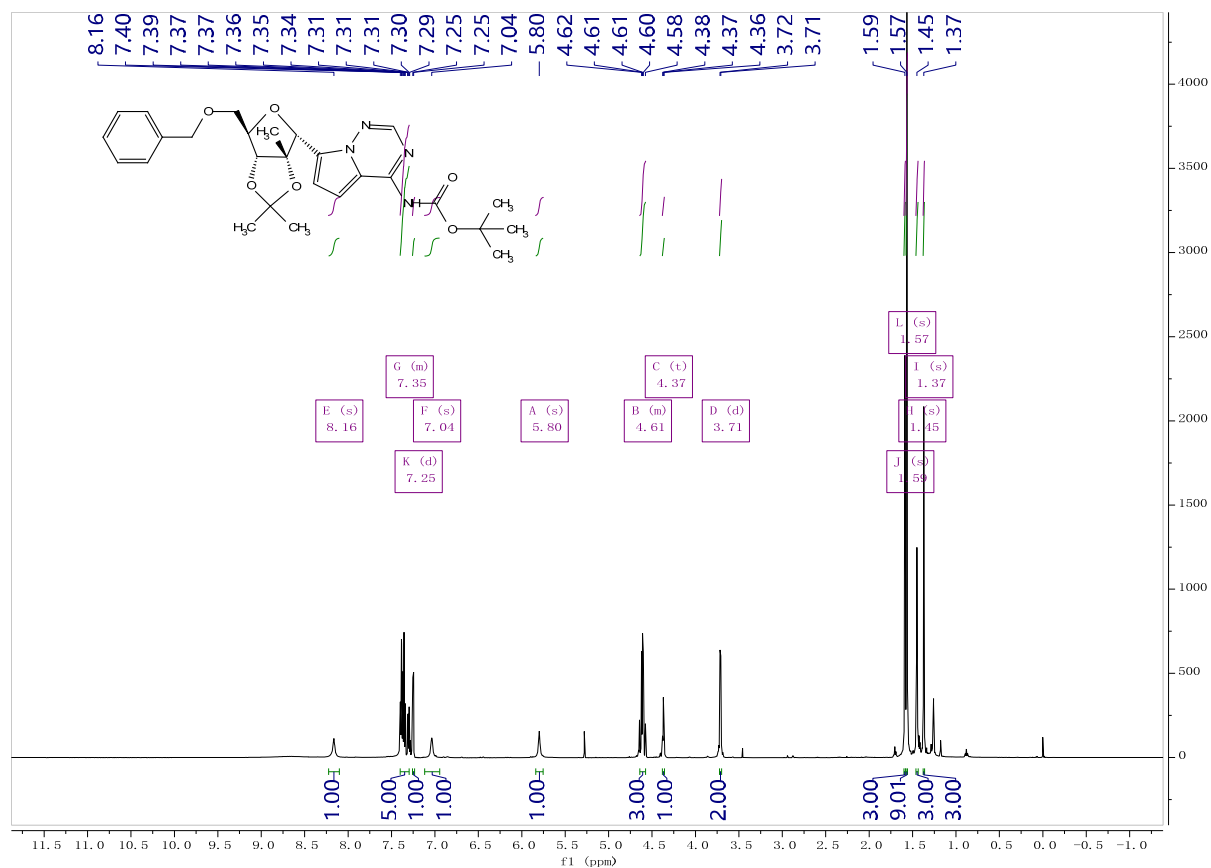
Compound **24a**



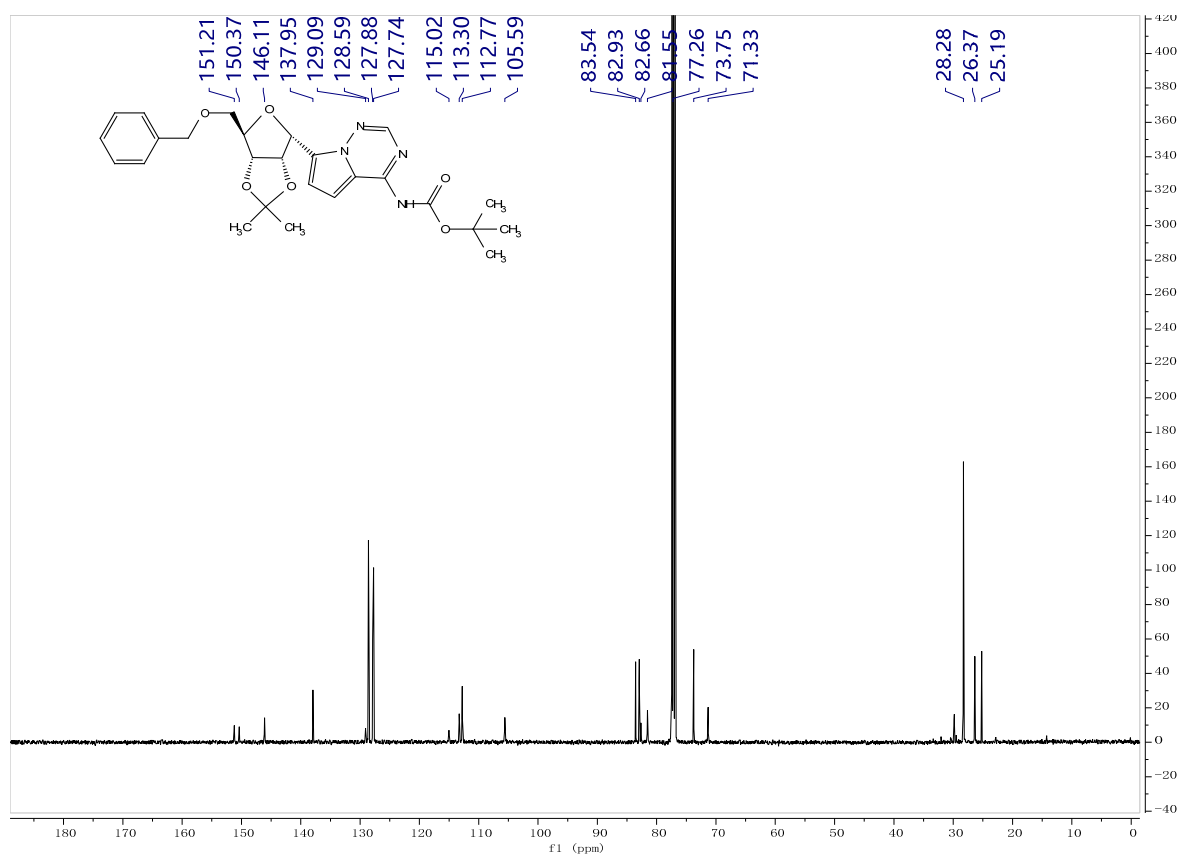
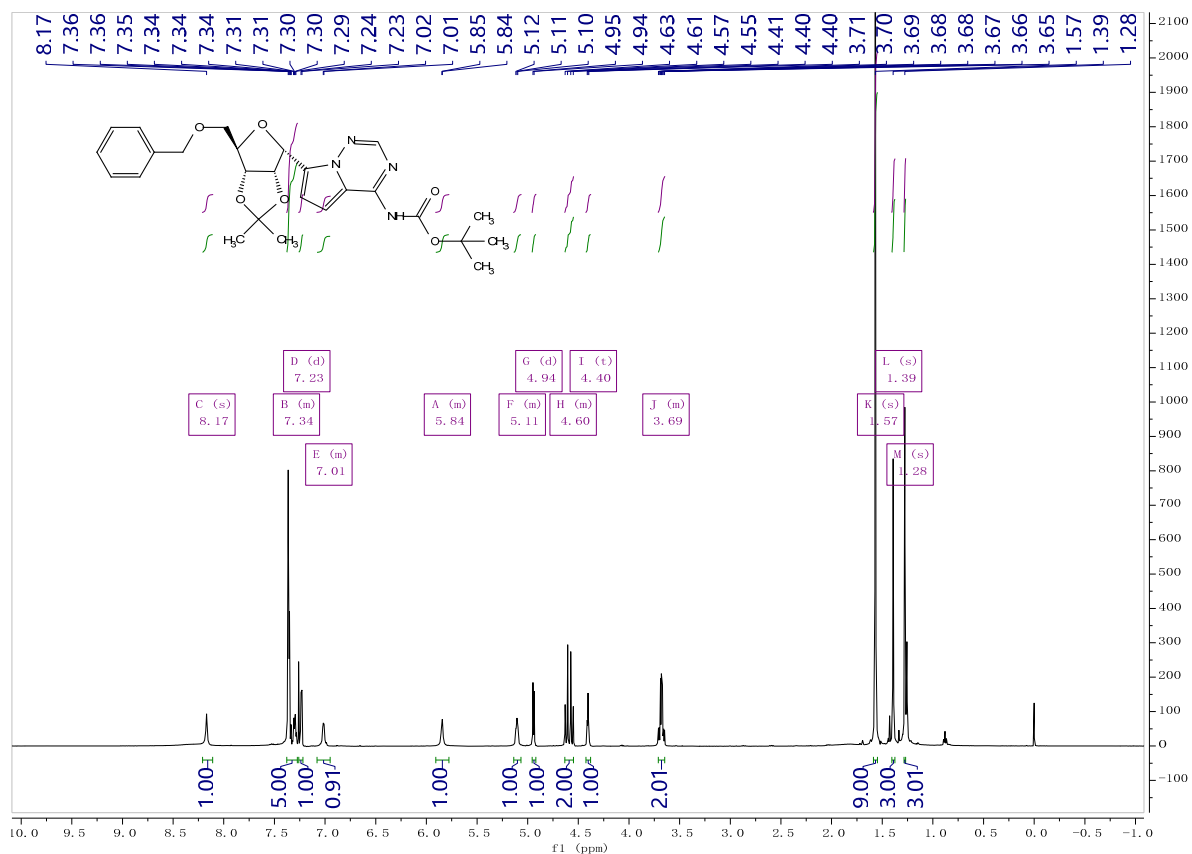
# Compound 24b



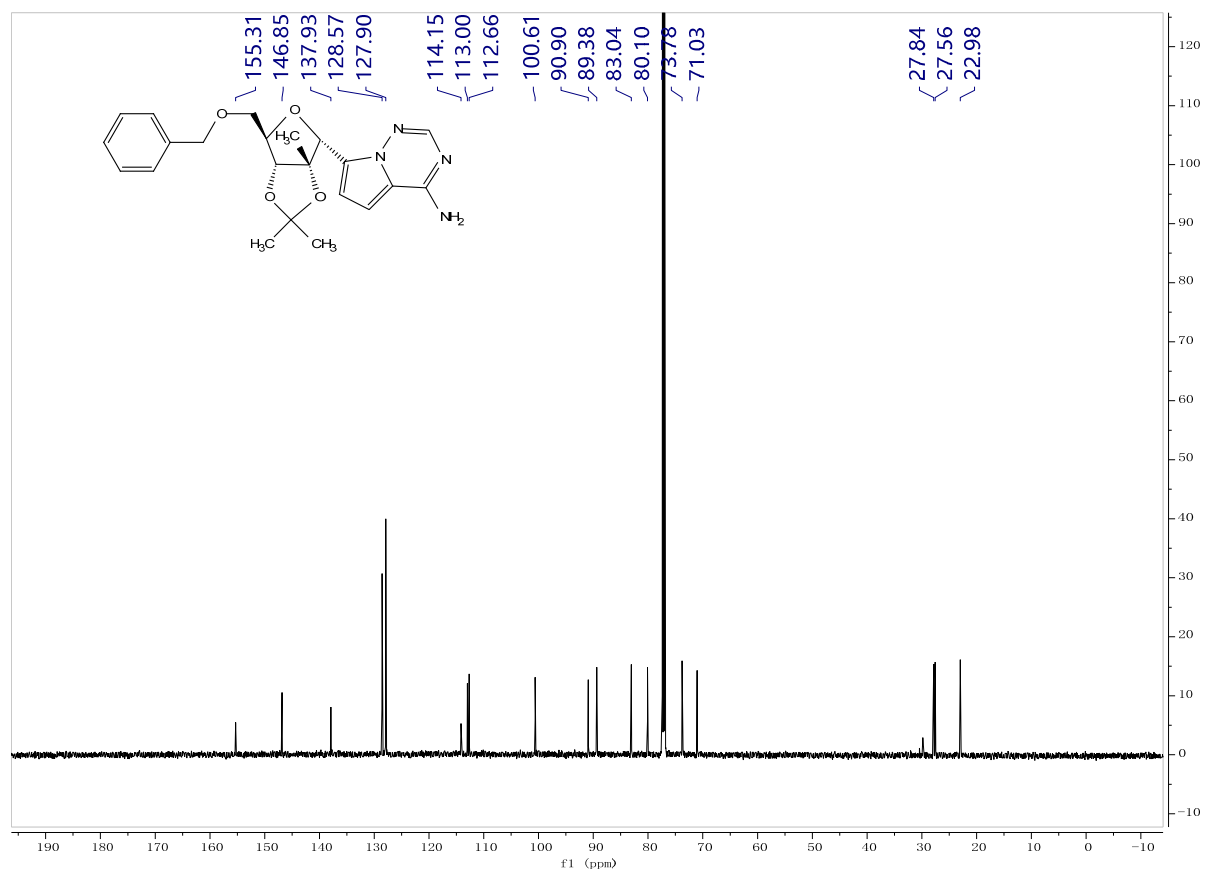
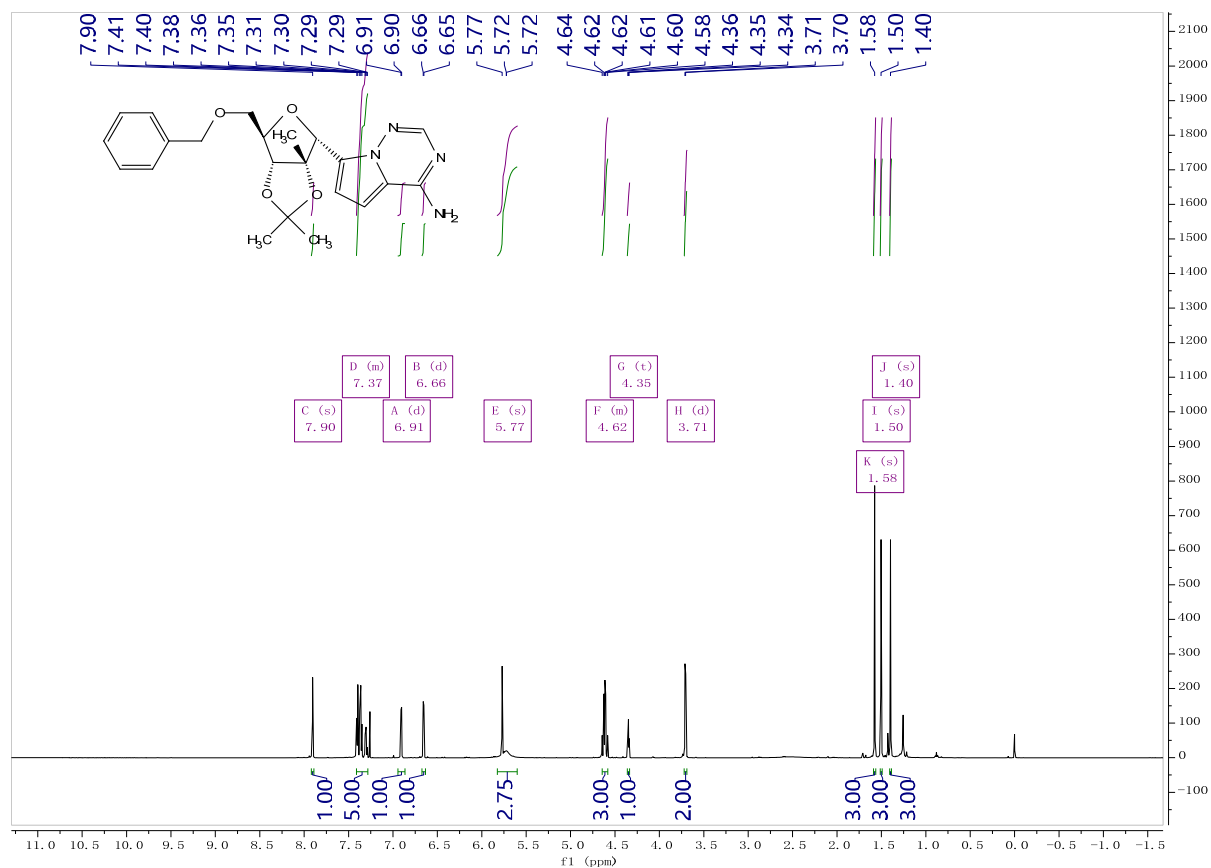
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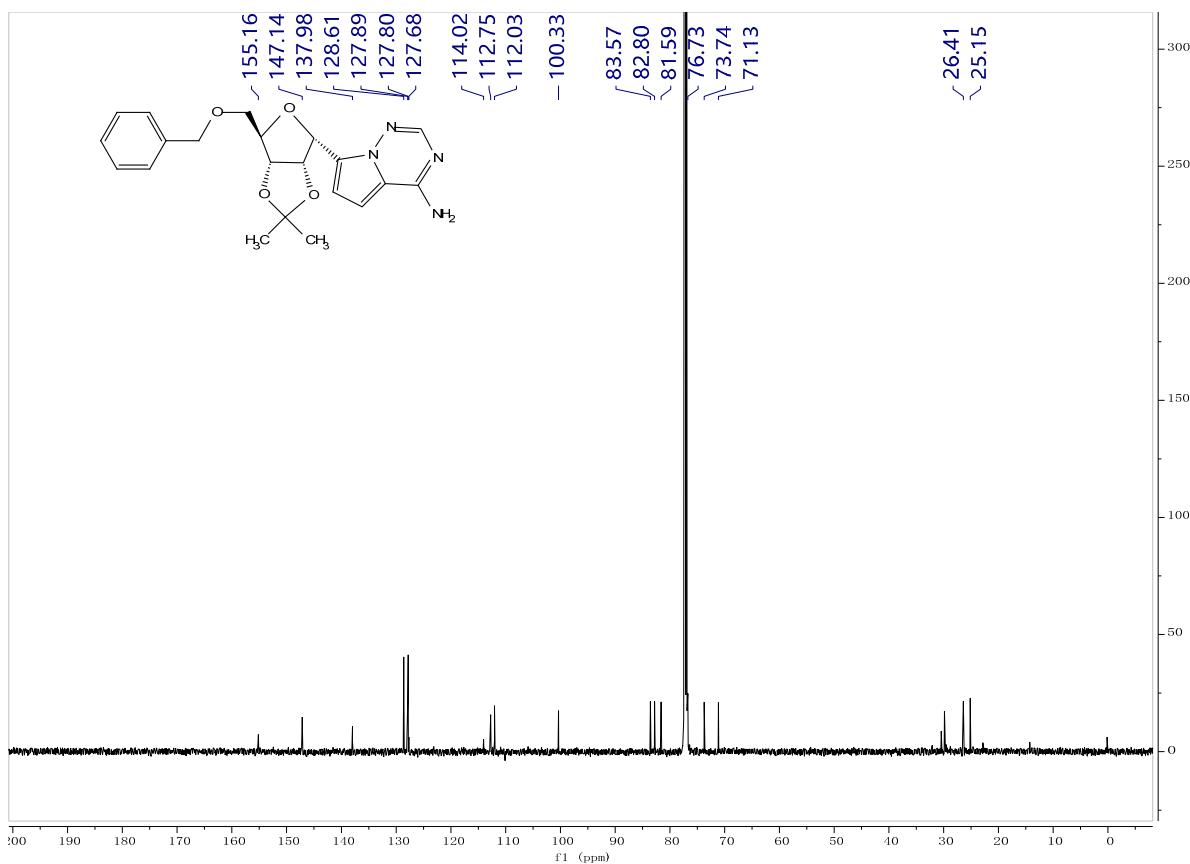
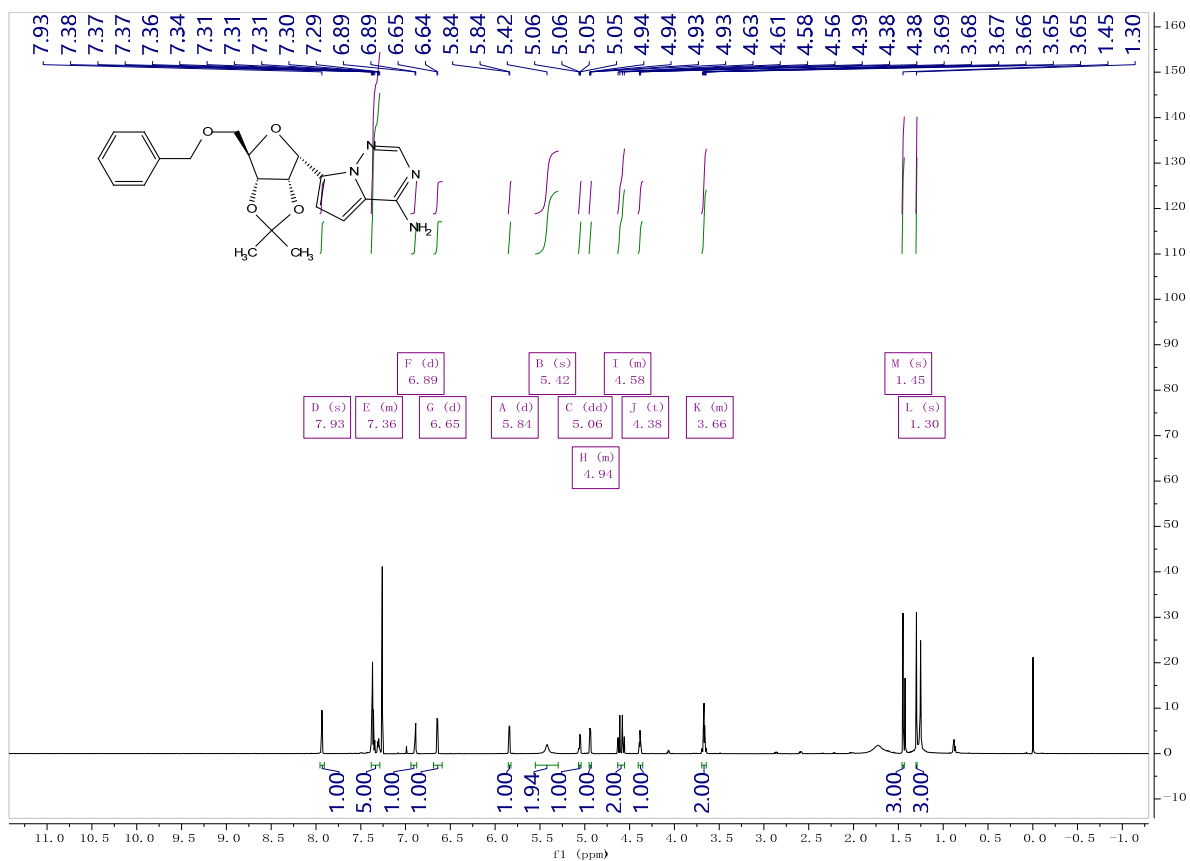
# Compound 26b



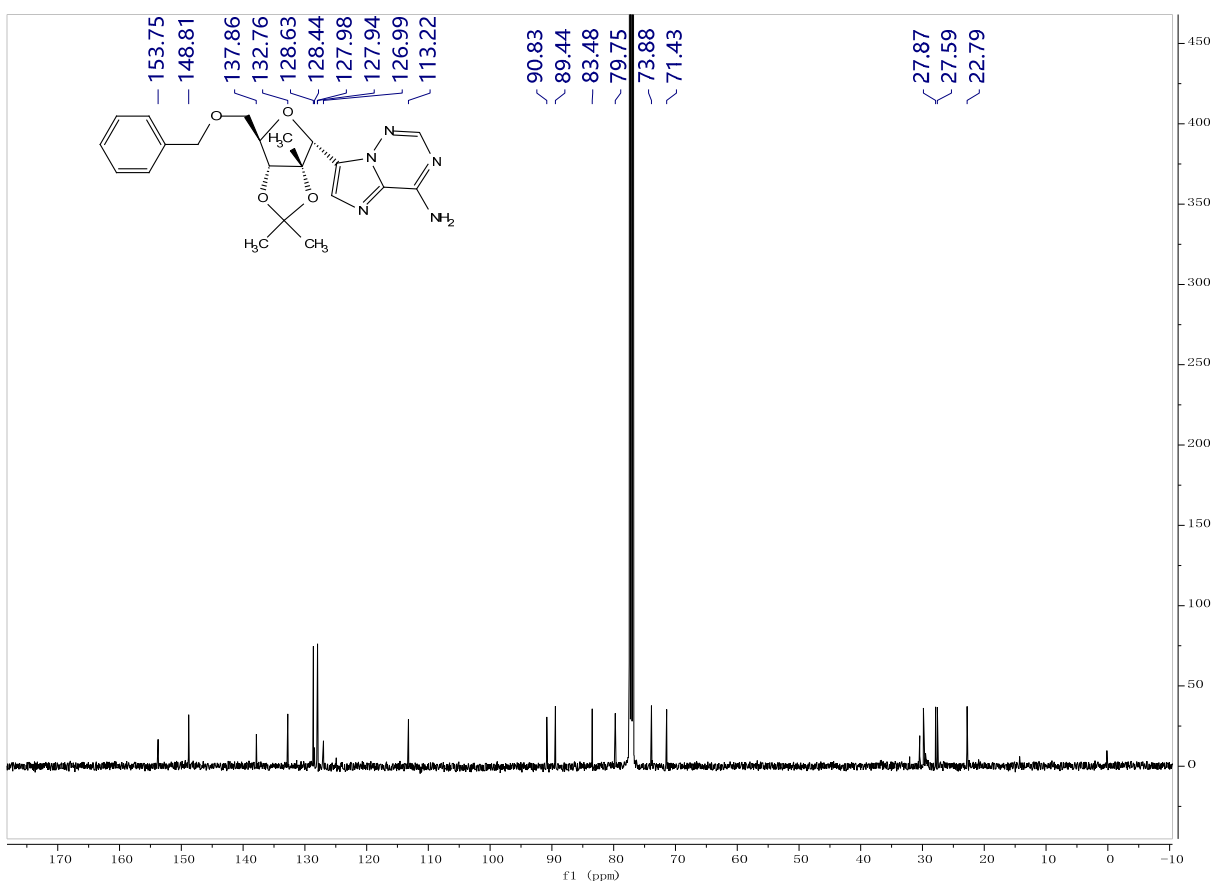
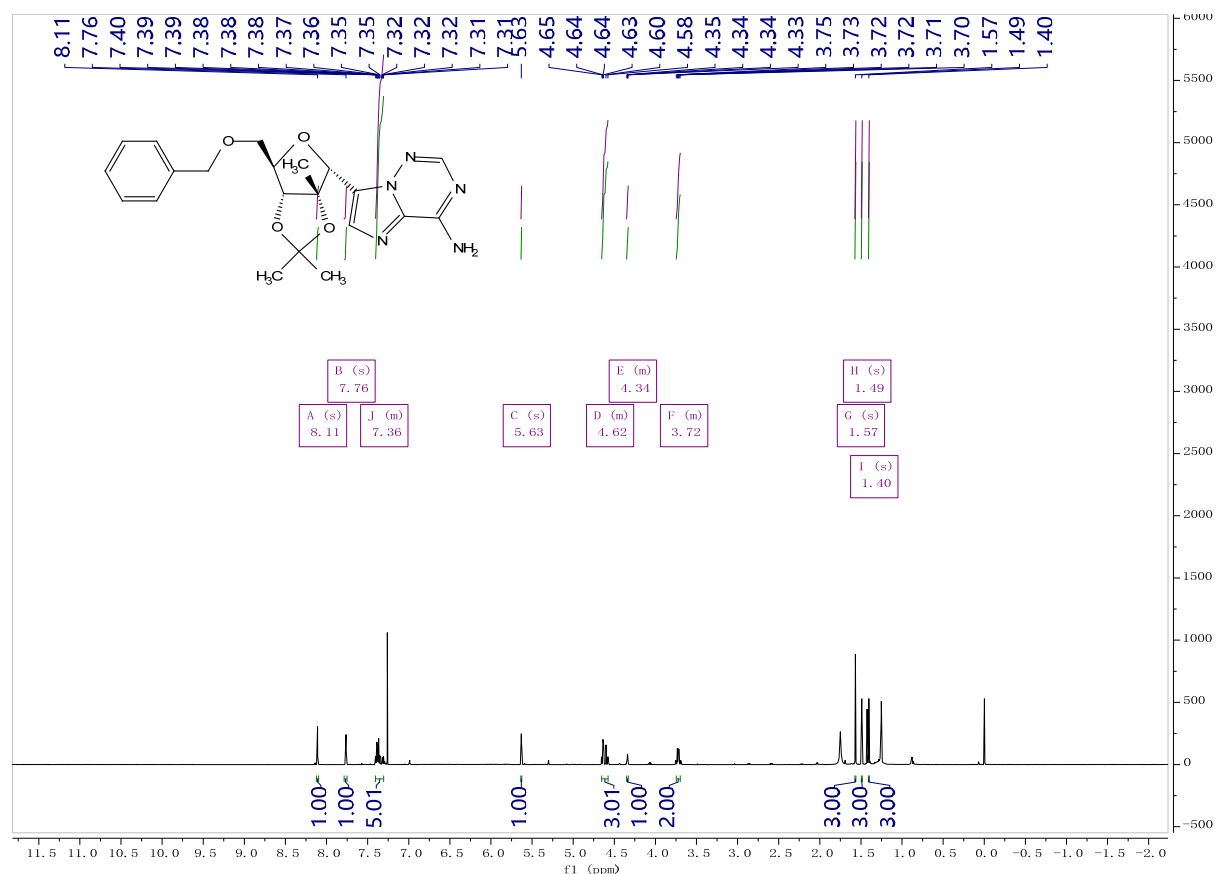
# Compound 27a



# Compound 27b



# Compound 29a



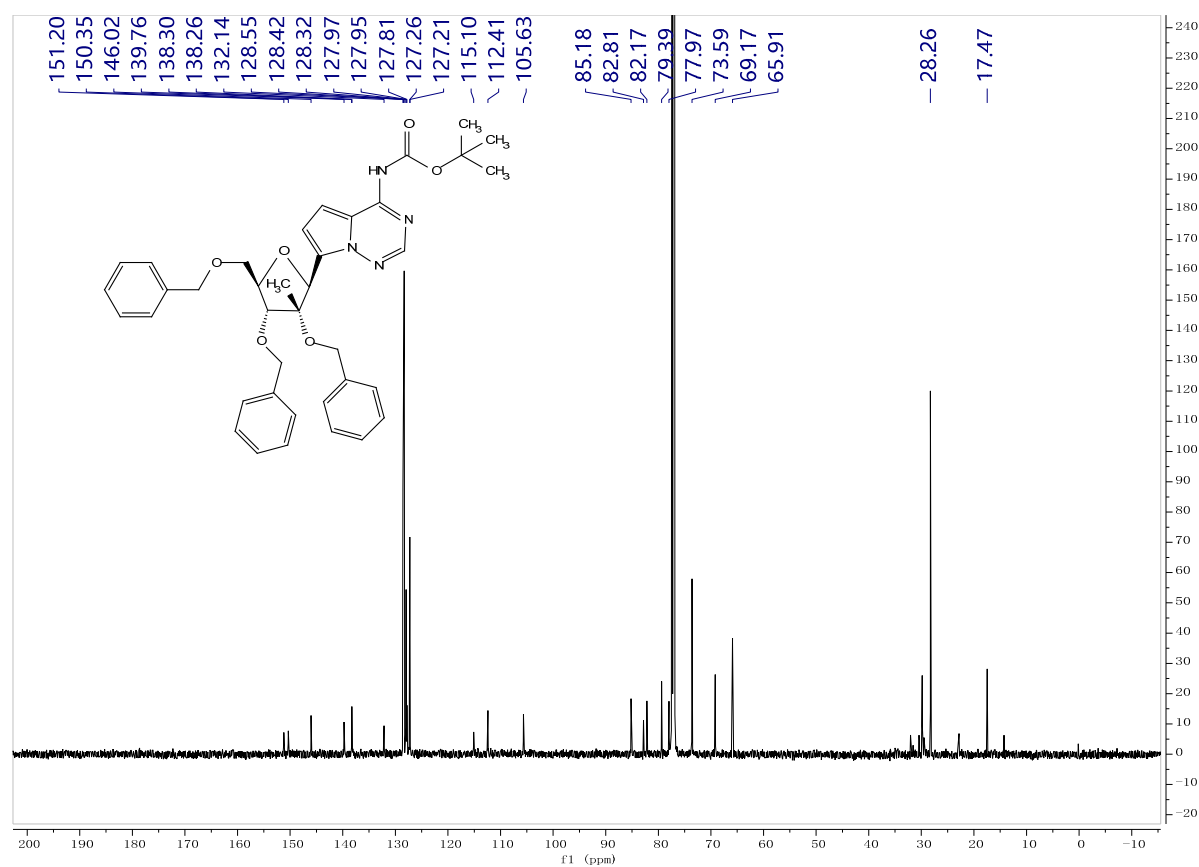
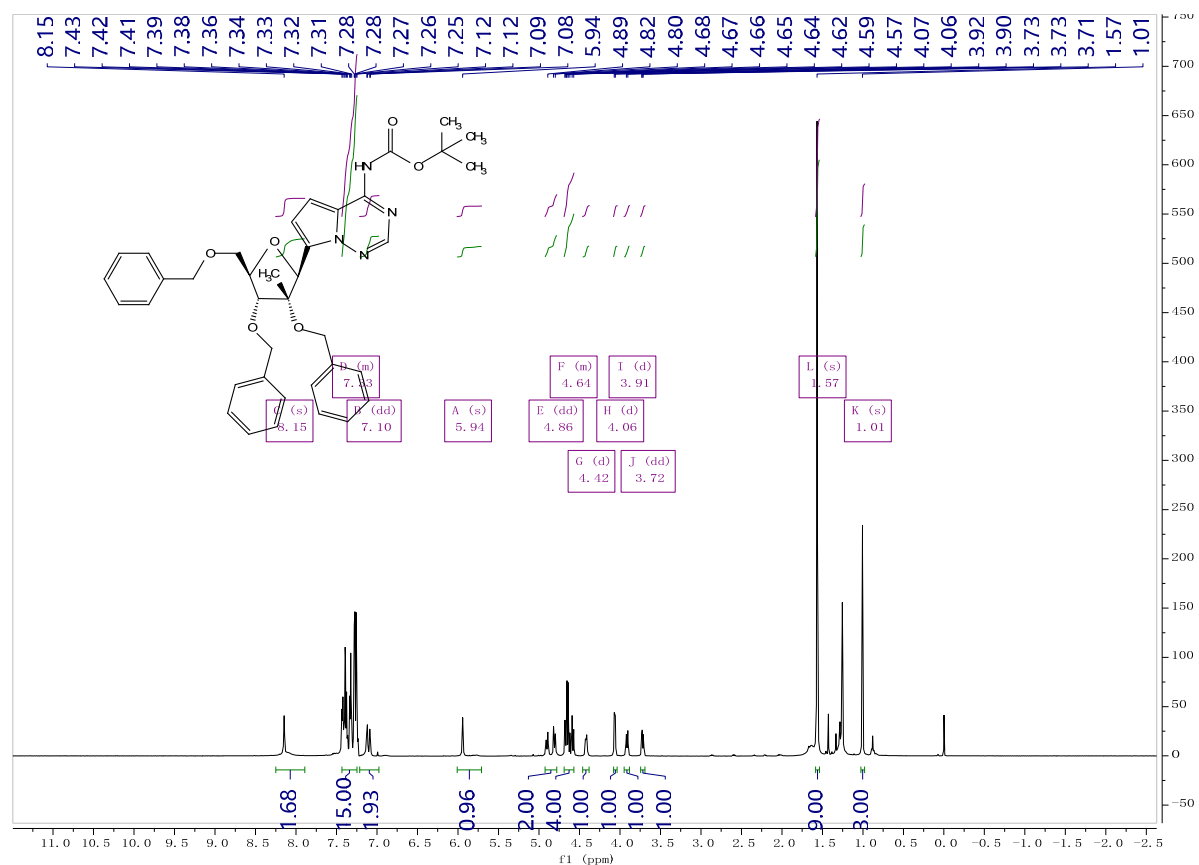


Chemical structure of compound 10 is shown. The structure is a purine derivative with a benzyl group, a methyl group, and a dimethylamino group. The peaks are assigned to various protons in the molecule. The x-axis is labeled 'f1 (ppm)' and ranges from 11.5 to -1.5. The y-axis is labeled 'Intensity' and ranges from 0 to 500. The peaks are labeled with their chemical shifts and integrations. The integrations are: 1.00, 1.00, 5.00, 1.00, 1.00, 2.00, 1.00, 1.00, 3.00, 3.00.

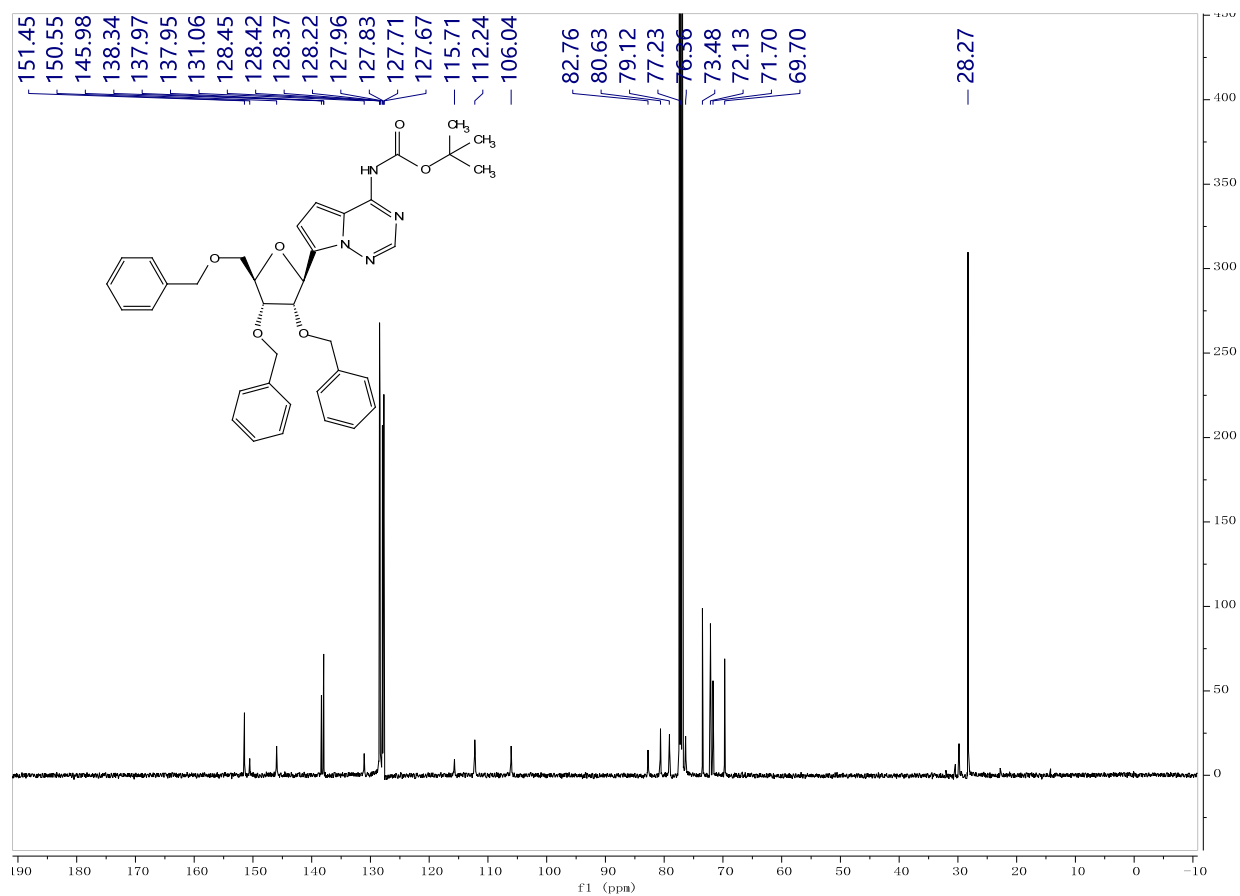
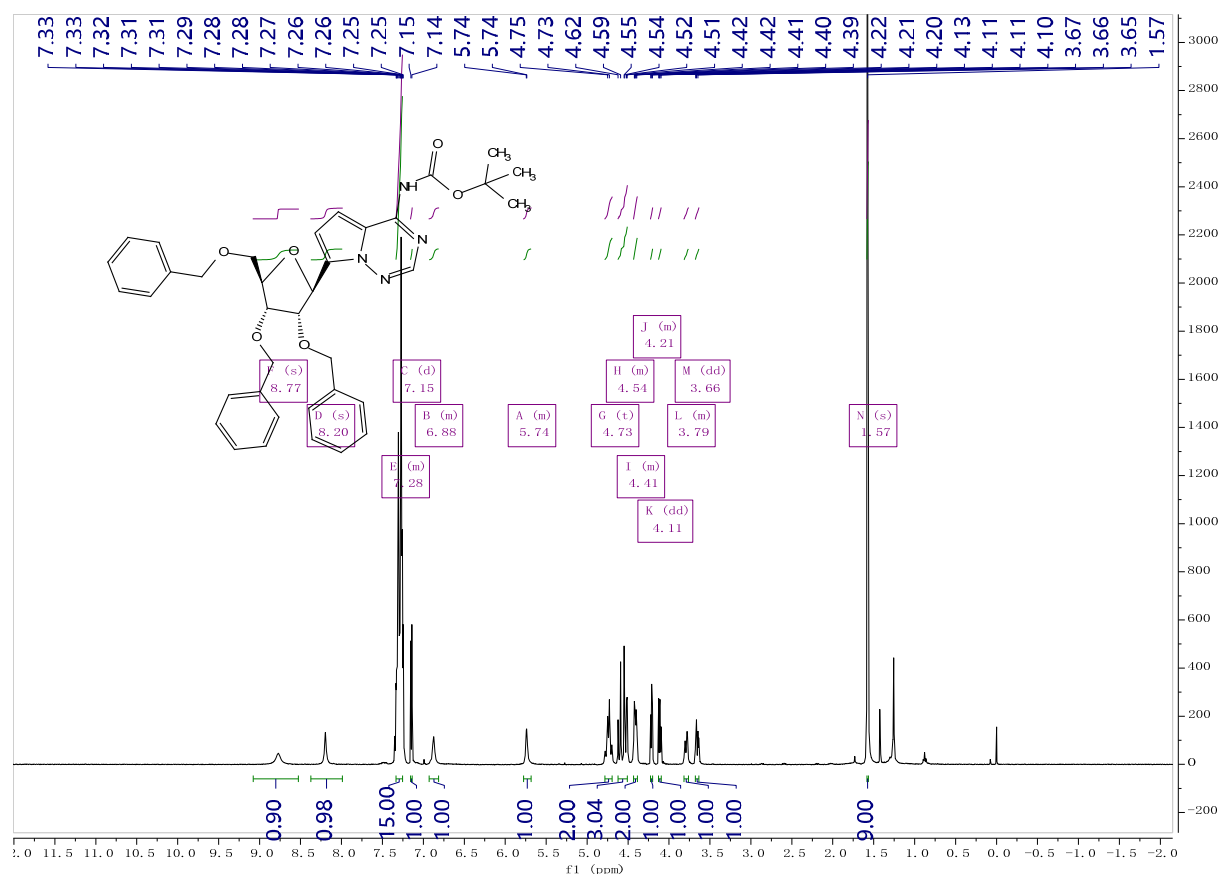
Label	Chemical Shift (ppm)	Integration
A (s)	8.12	1.00
B (s)	7.74	1.00
C (d)	5.76	1.00
D (m)	7.35	5.00
E (dd)	5.06	1.00
F (d)	4.97	1.00
G (m)	4.60	2.00
H (t)	4.39	1.00
I (dd)	3.71	1.00
J (dd)	3.67	3.00
K (s)	1.45	3.00
L (s)	1.31	3.00



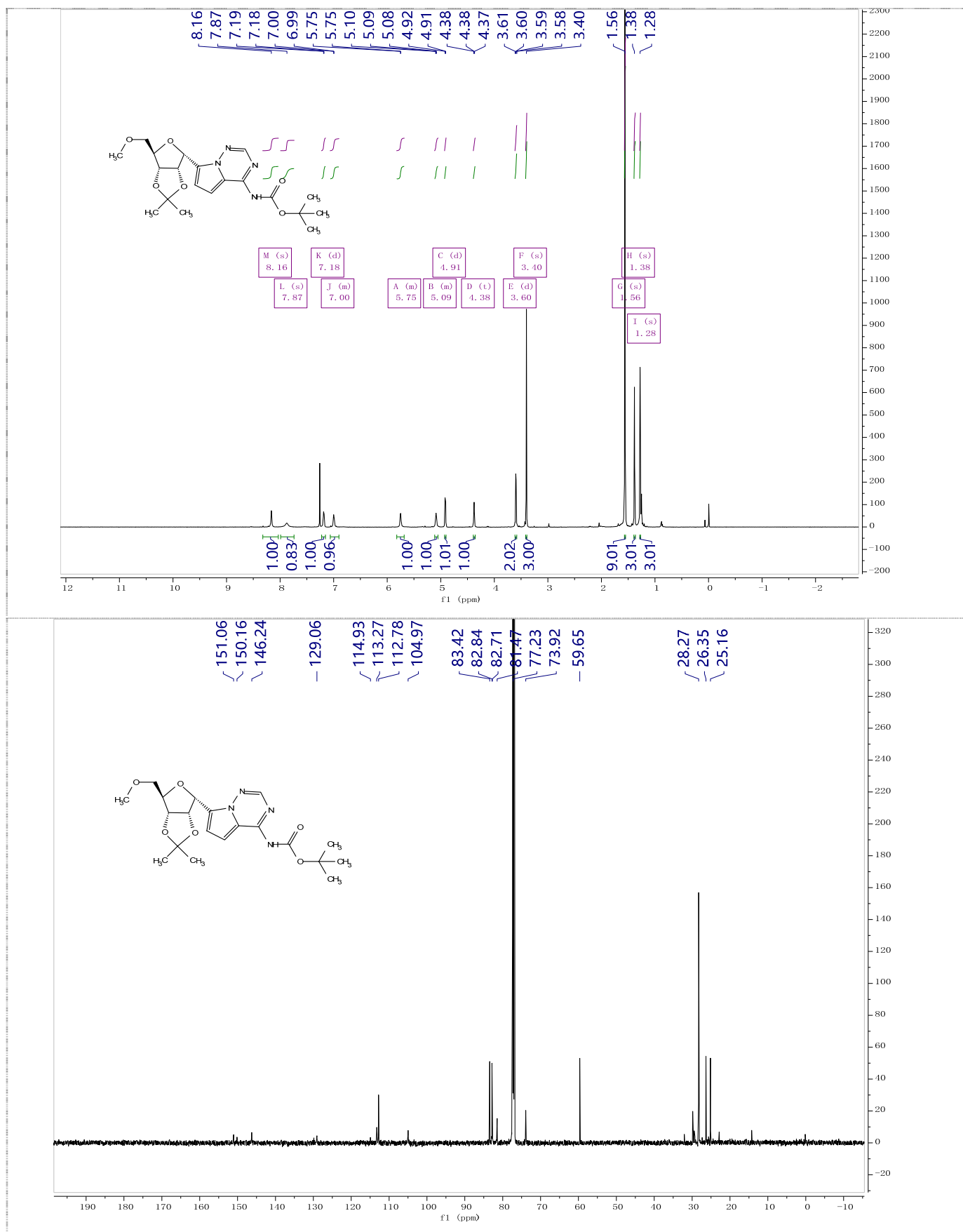
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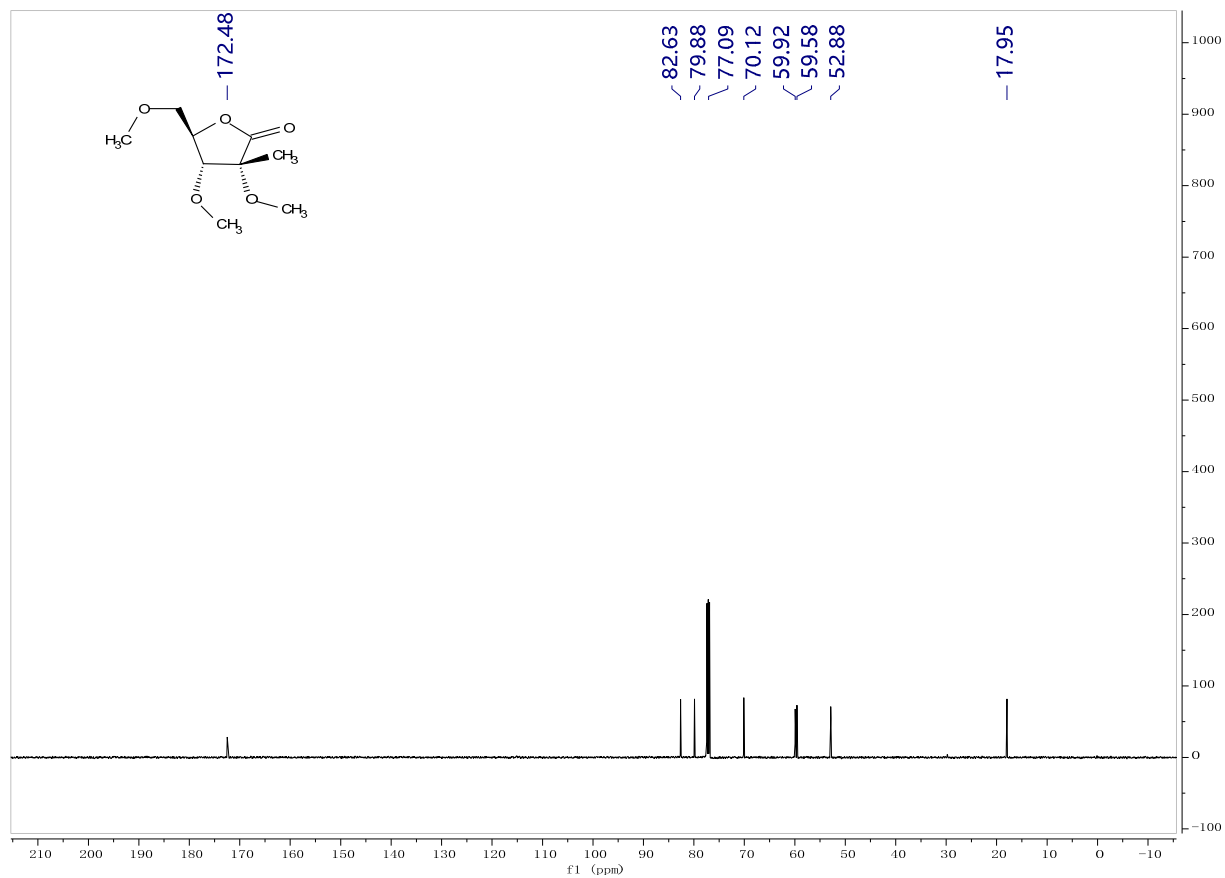
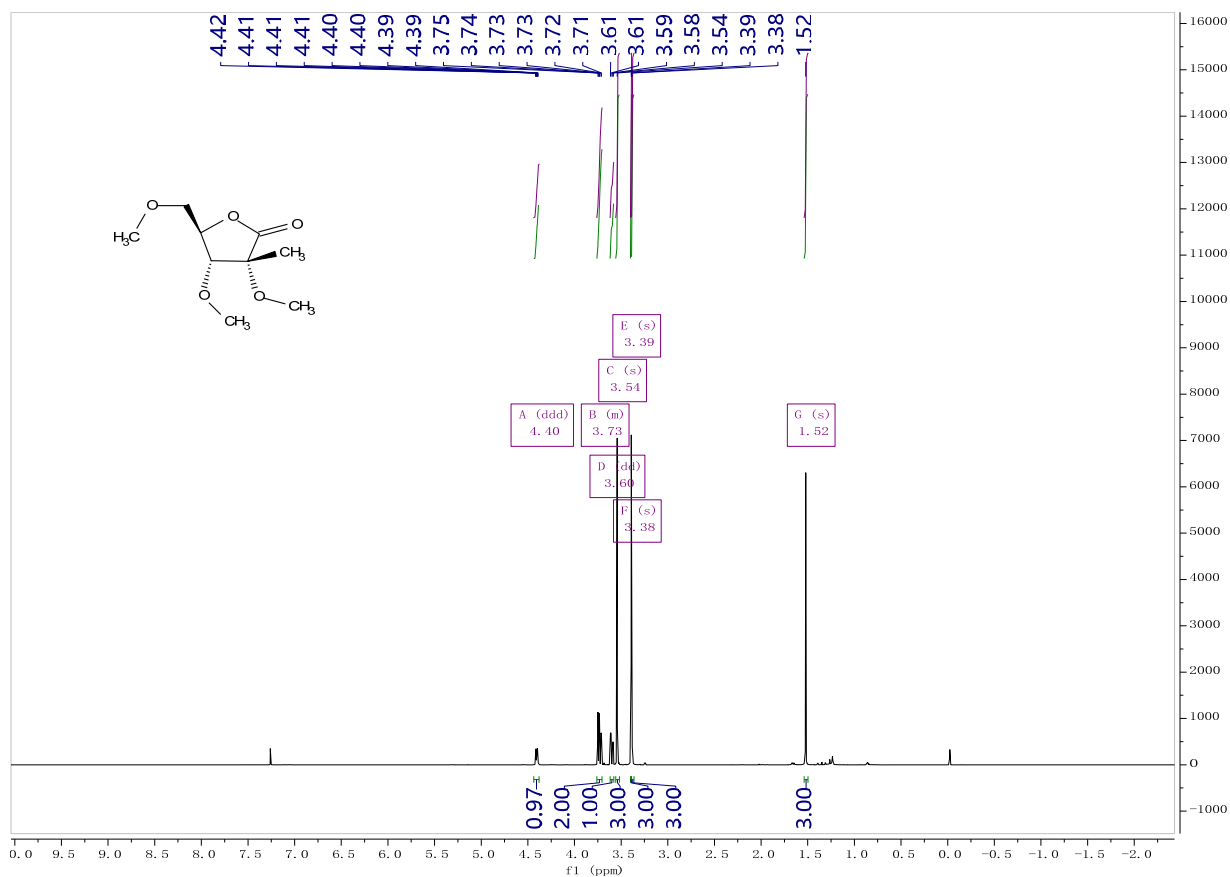
# Compound 31b



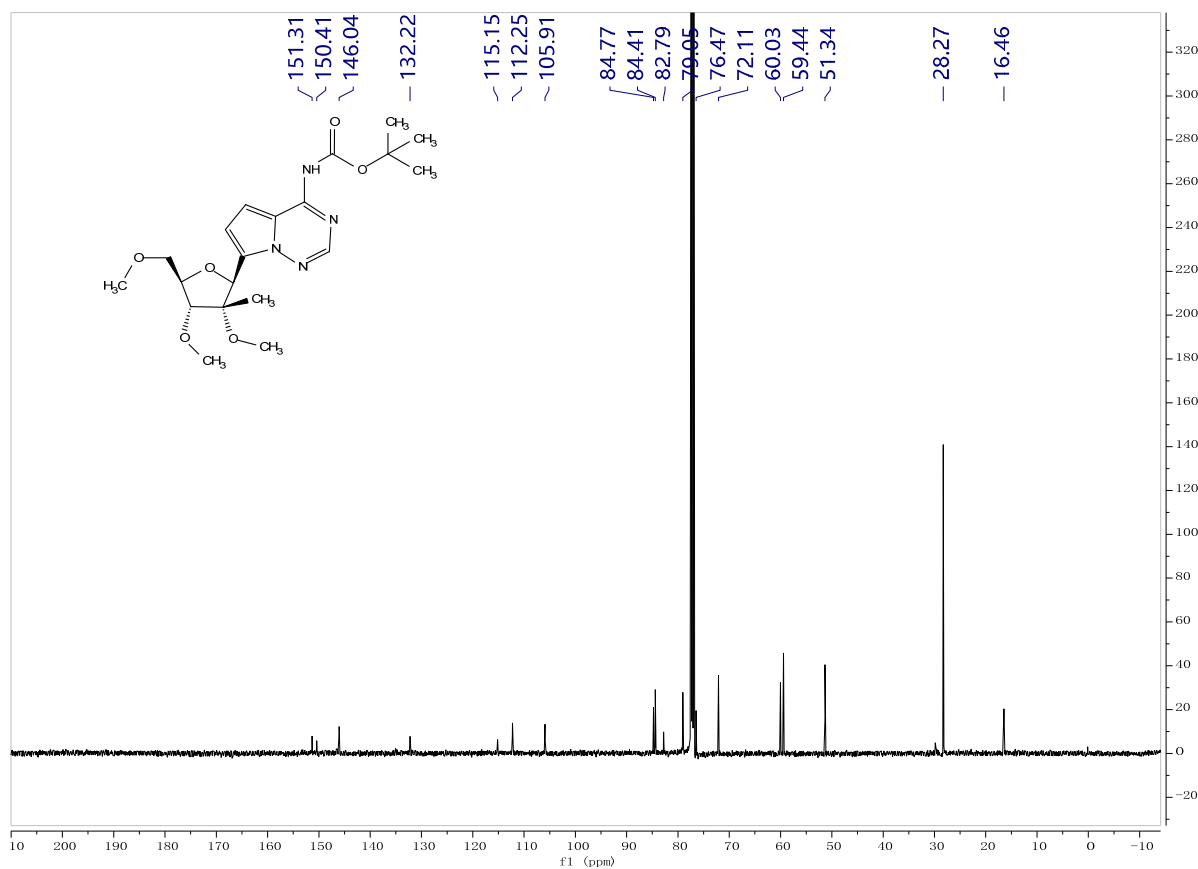
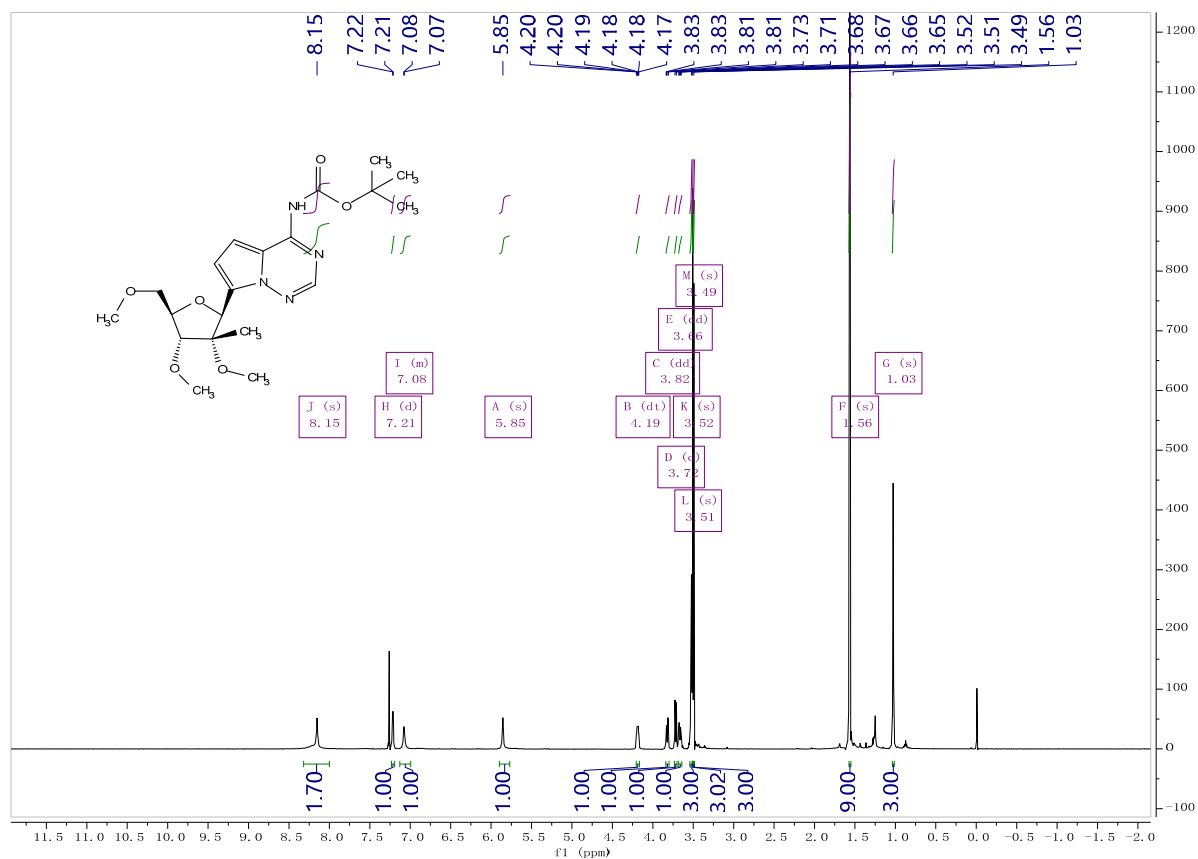
# Compound 37



# Compound 38



# Compound 40



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