

Supplementary Material

Design and synthesis of novel thiazole–benzimidazole hybrids as antimicrobial agents

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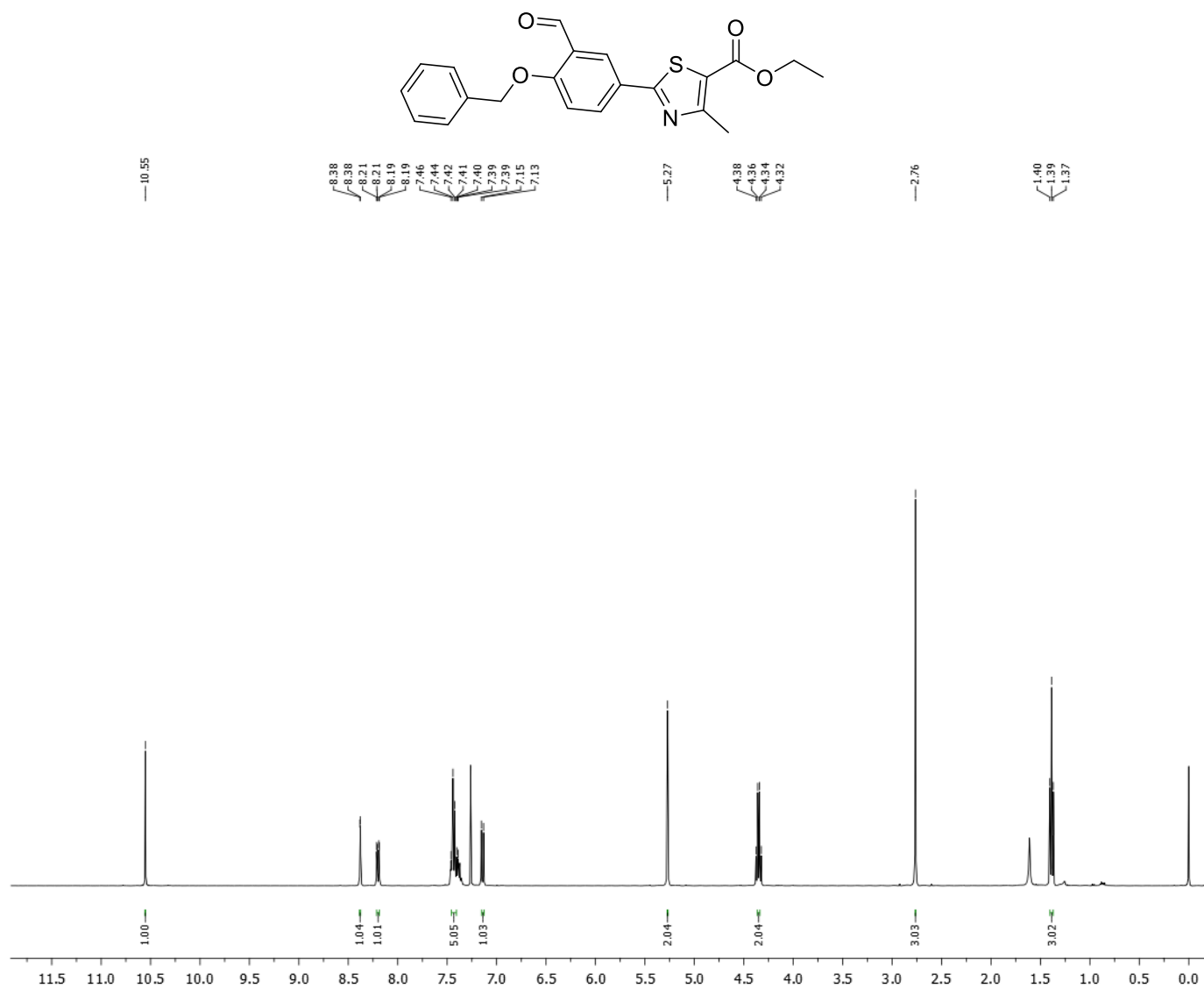
^bGeethanjali College of Engineering and Technology, Cheeryal, Keesara, Medchal, 501301, Telangana, India

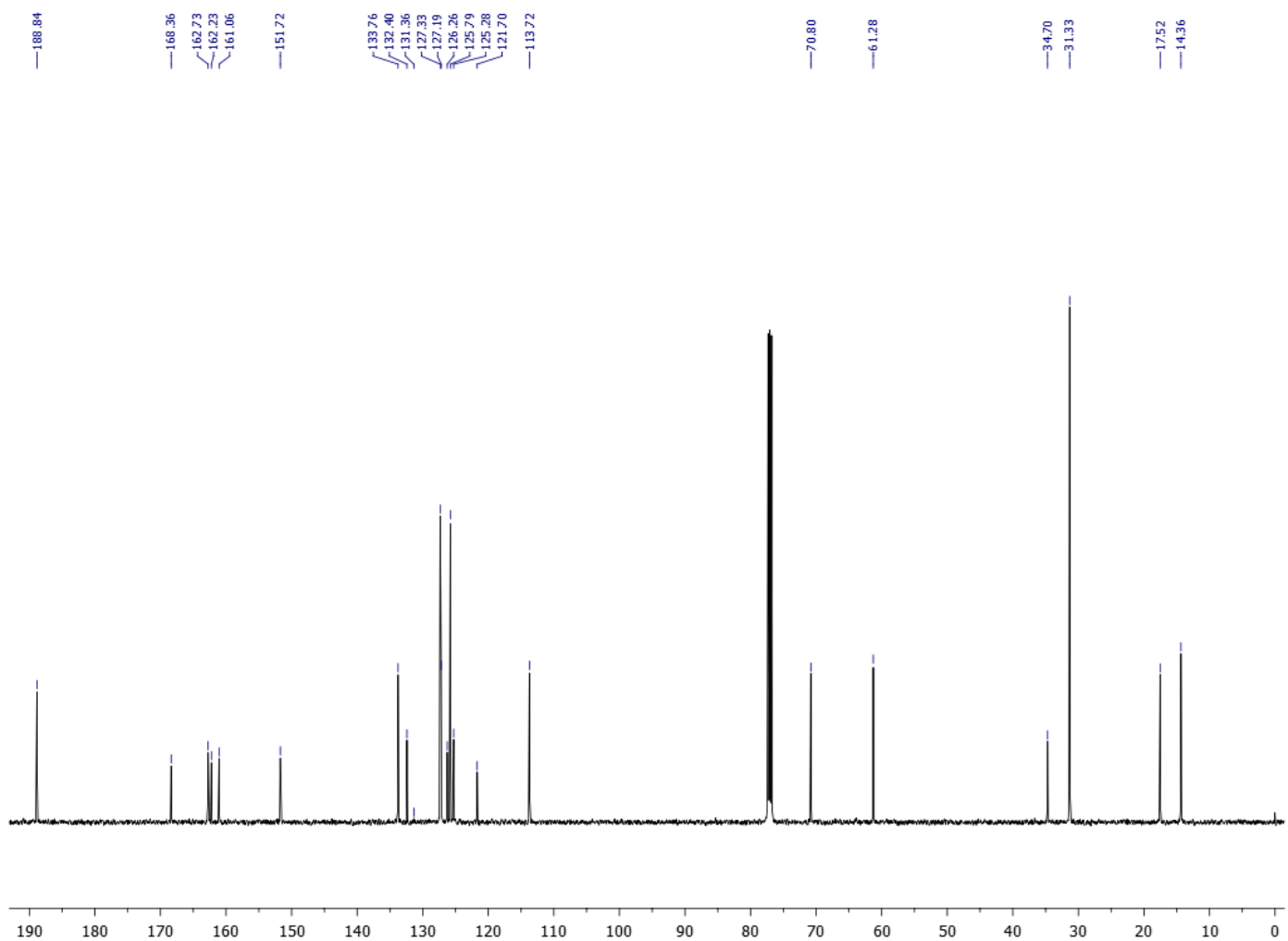
^cDepartment of Sciences and Humanities, Matrusri Engineering College, Saidabad, Hyderabad, 500059, Telangana, India

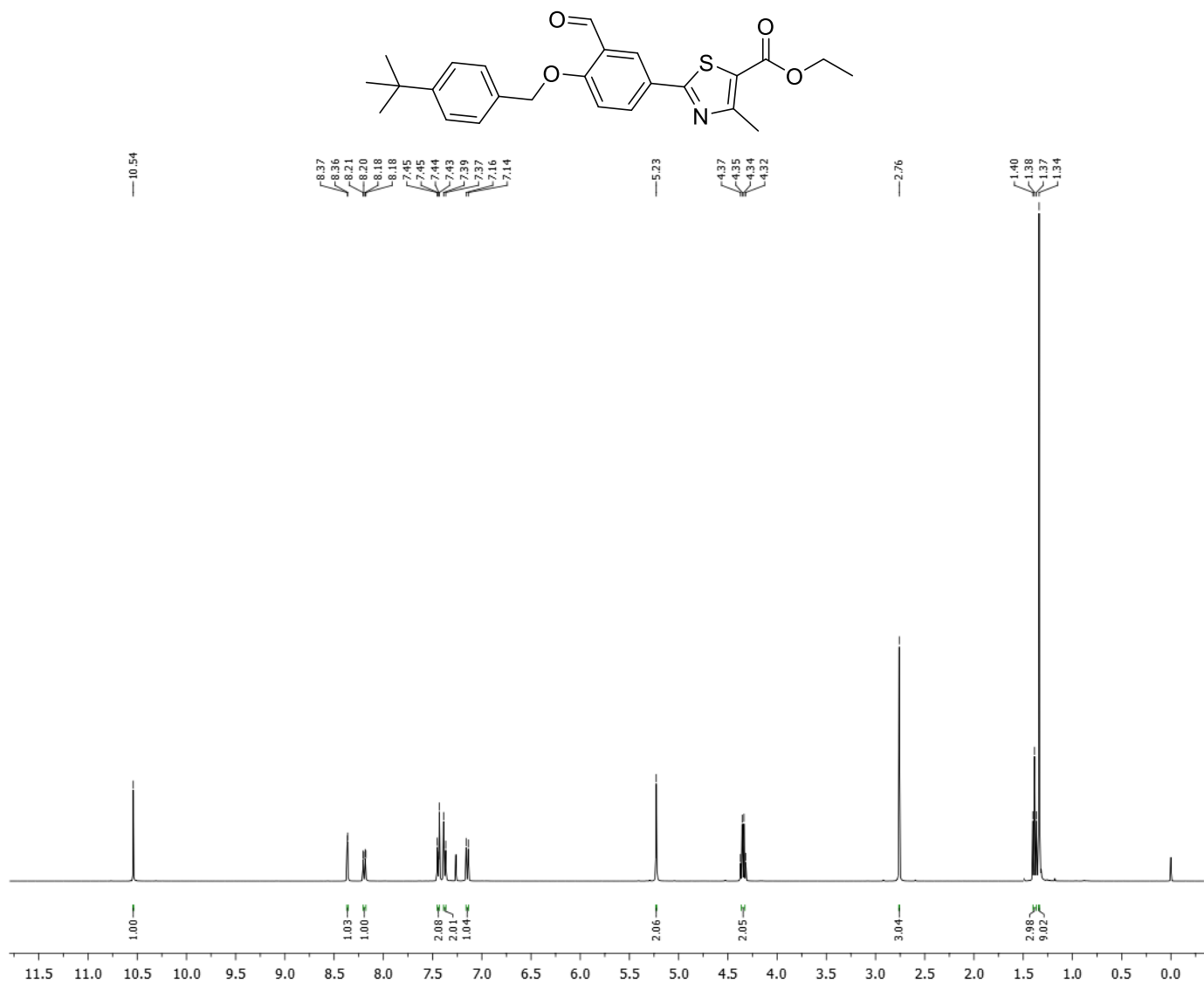
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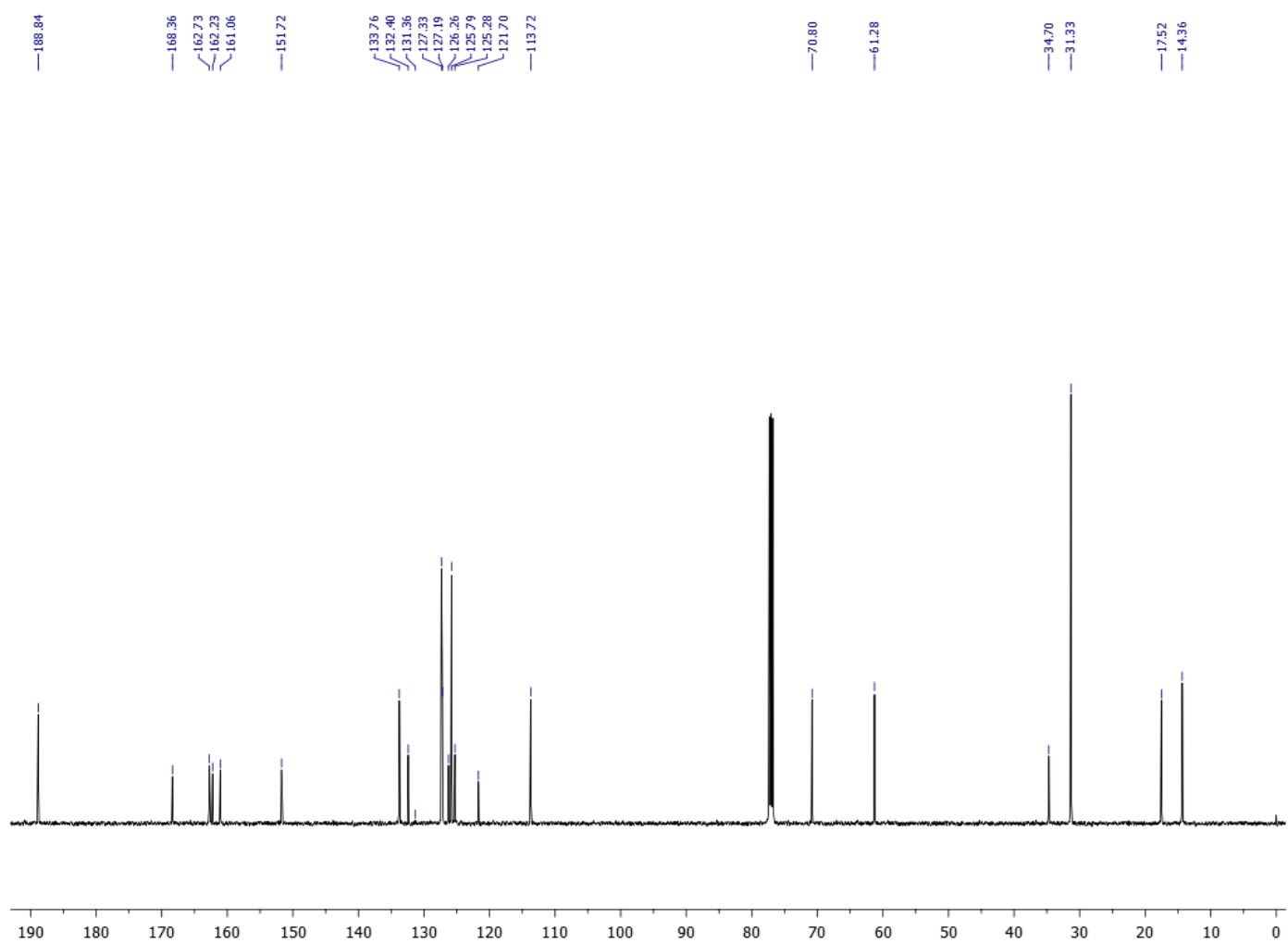
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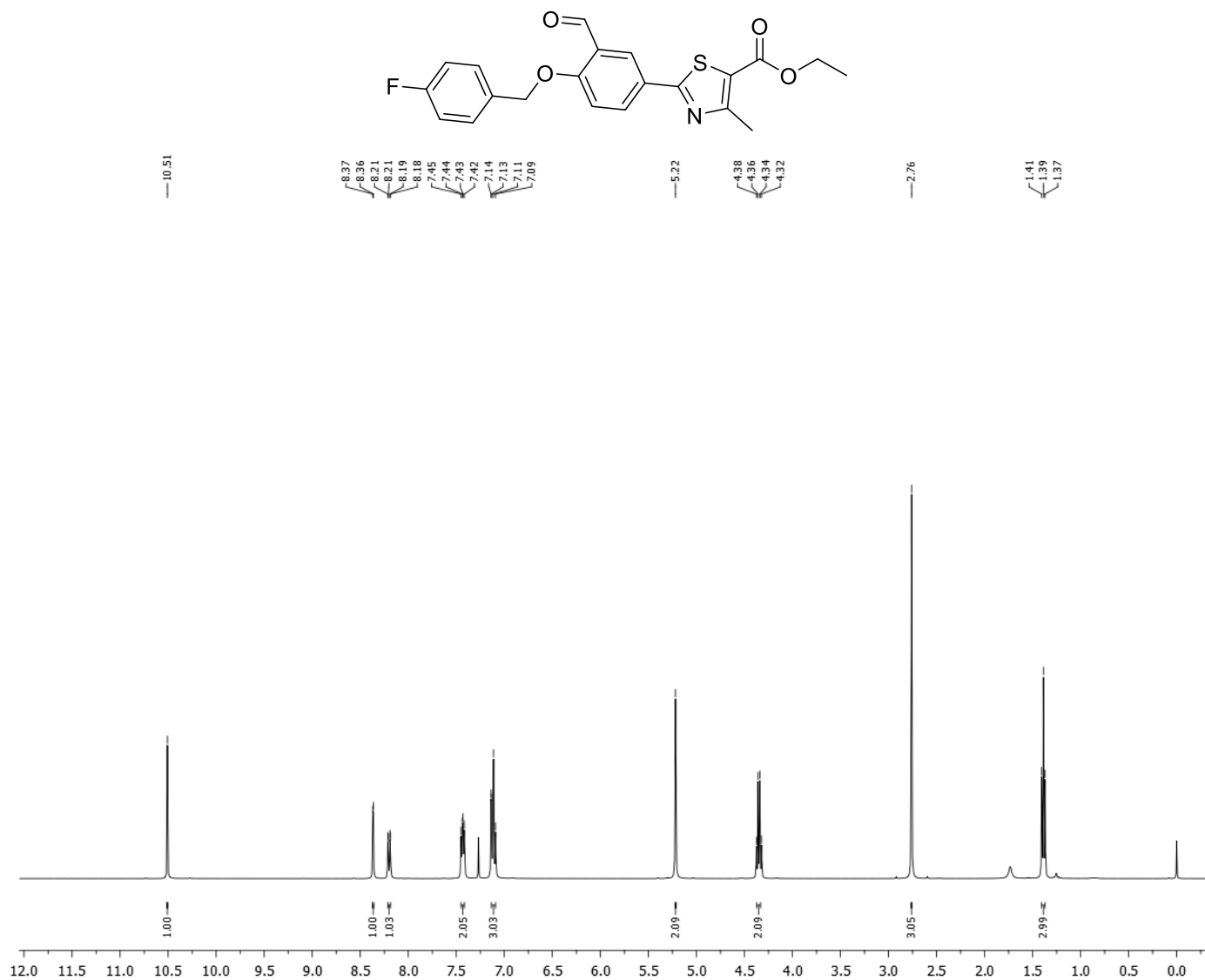
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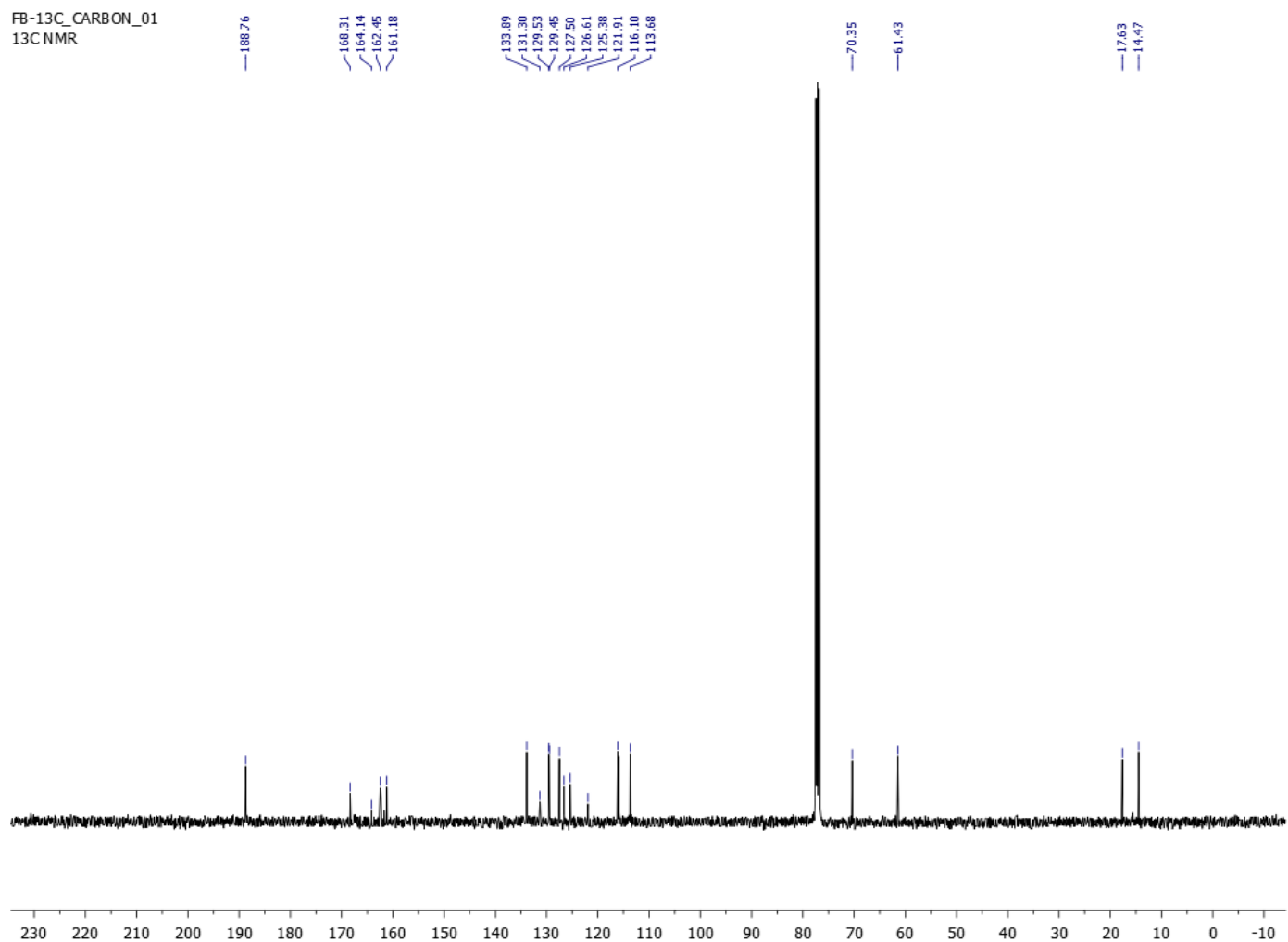
¹H NMR of Ethyl 2-(4-(benzyloxy)-3-formylphenyl)-4-methylthiazole-5-carboxylate (3a)**(Intermediate)**

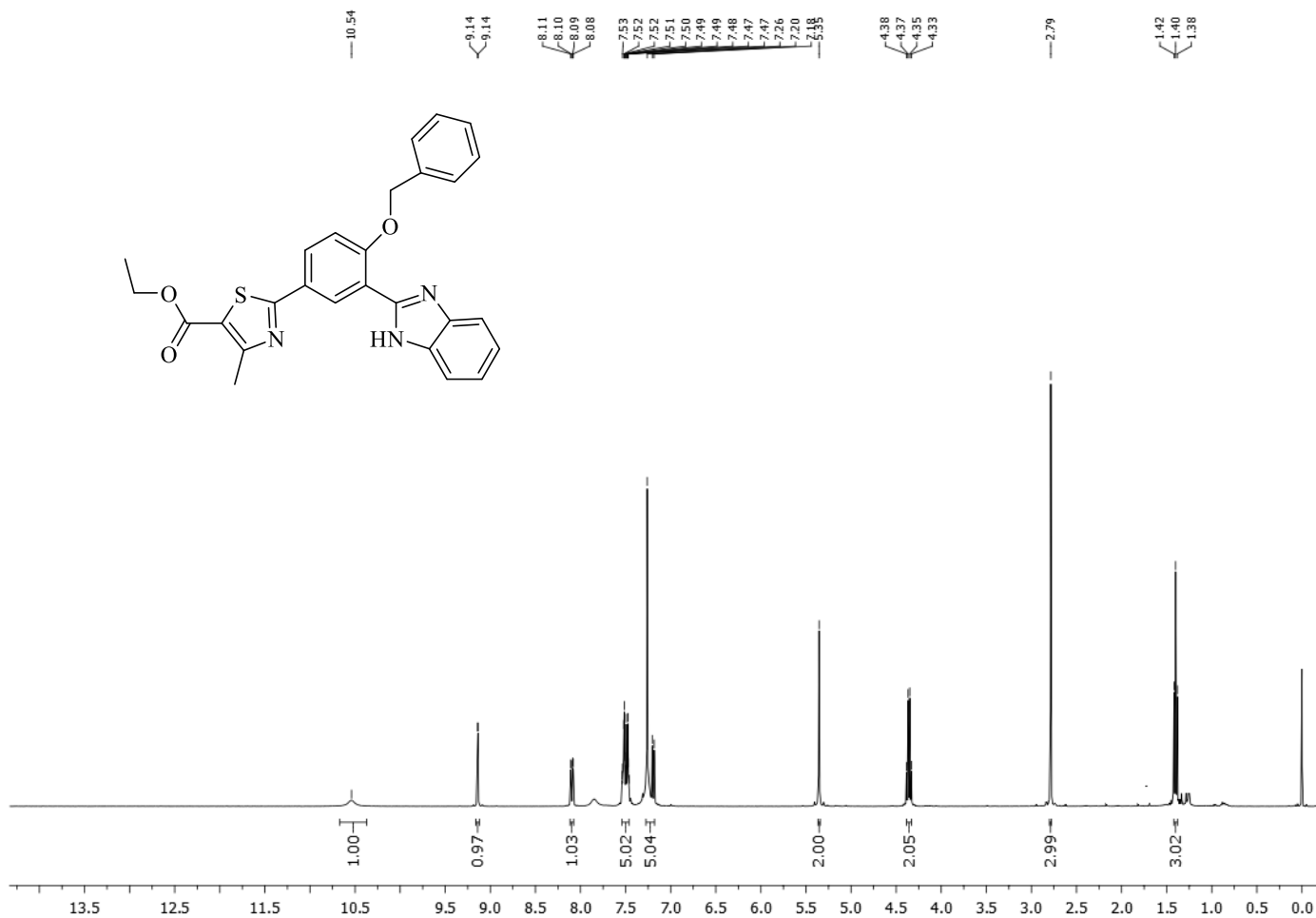
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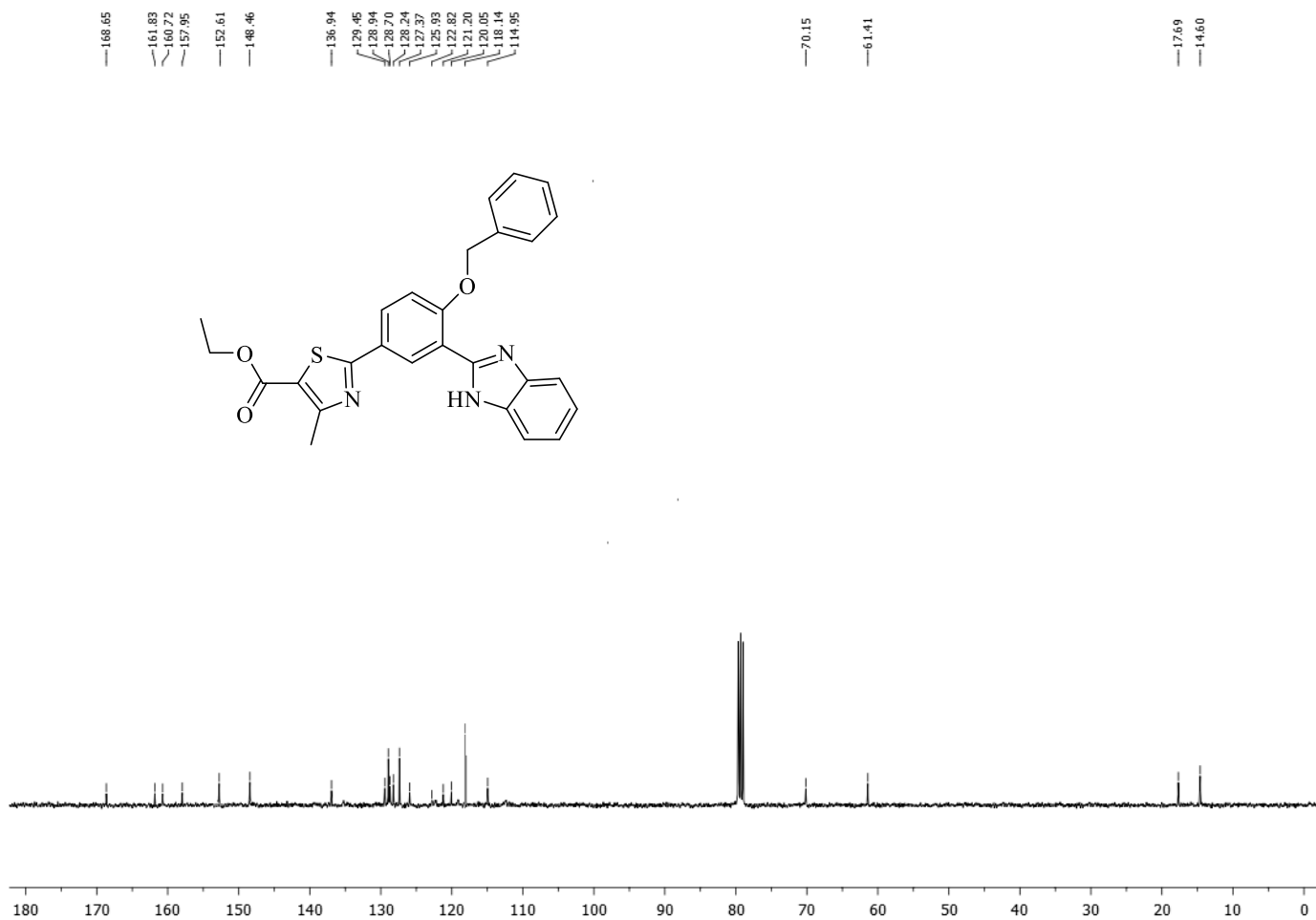
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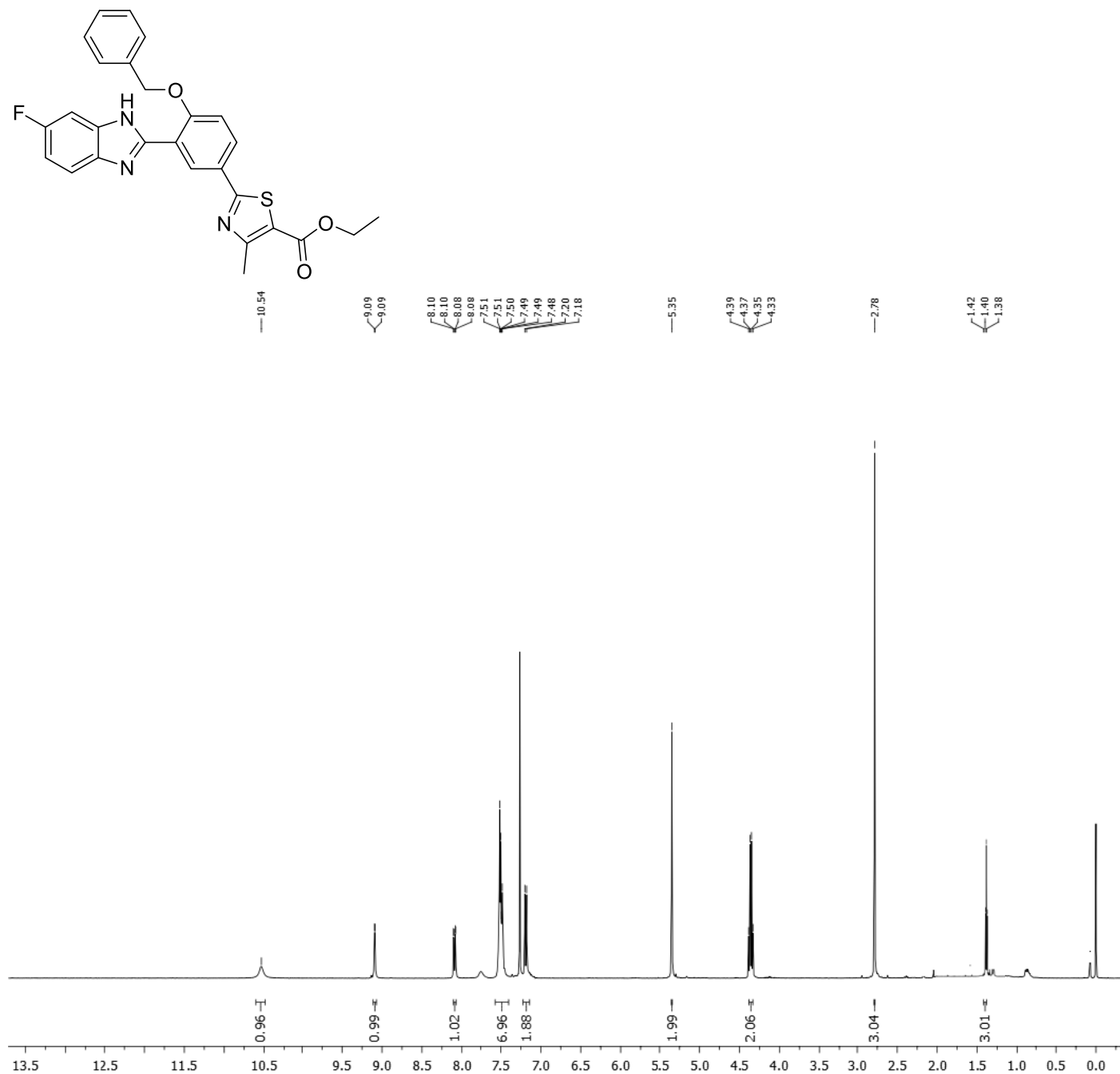
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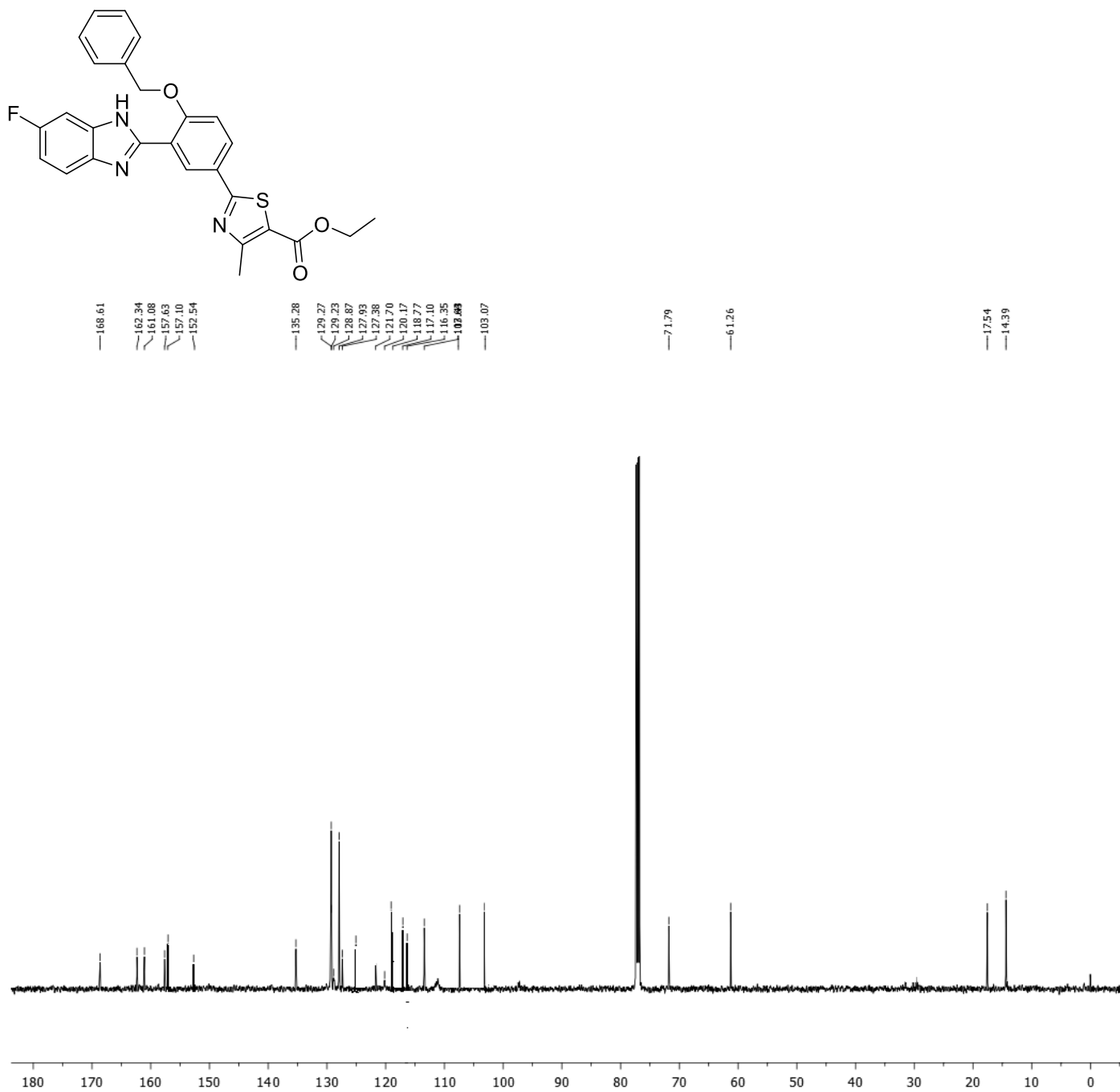
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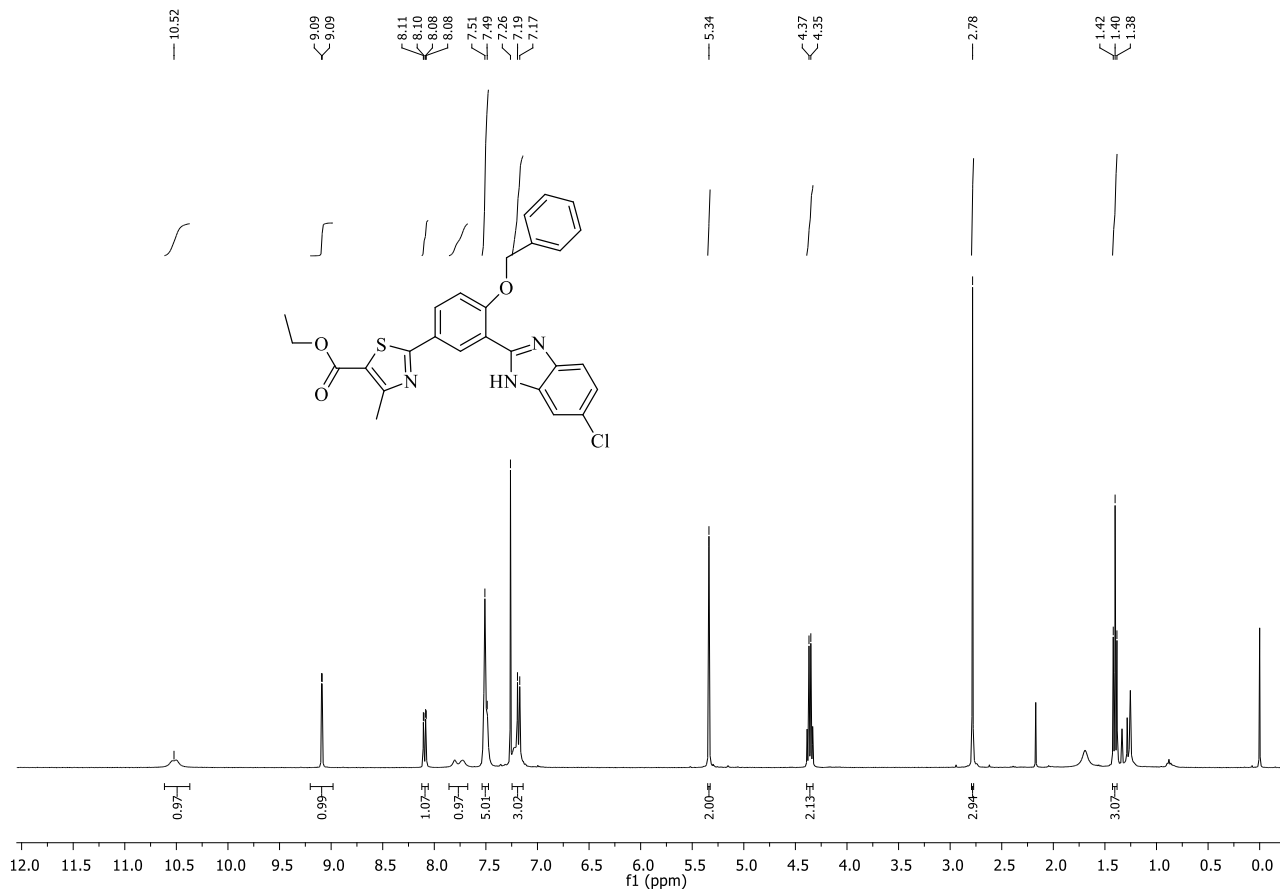
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13C NMR

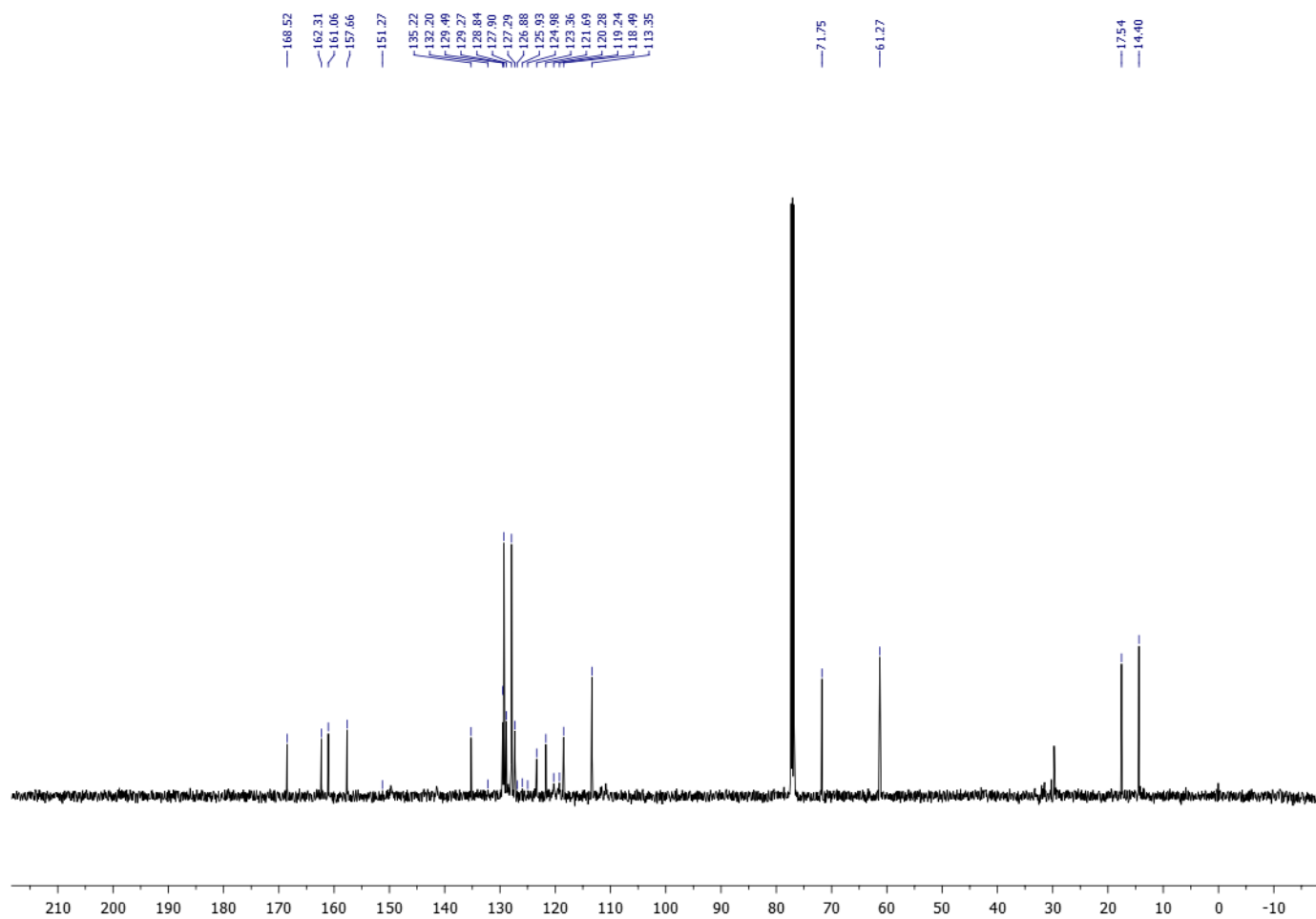
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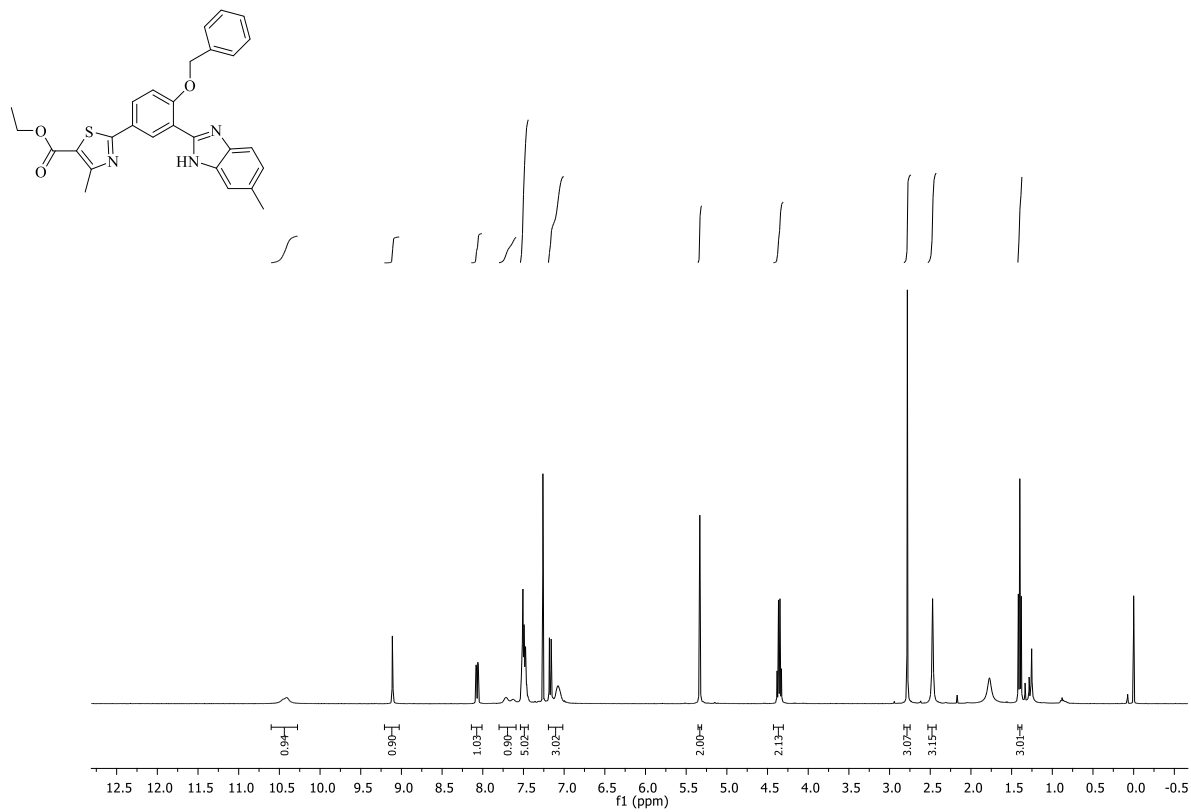
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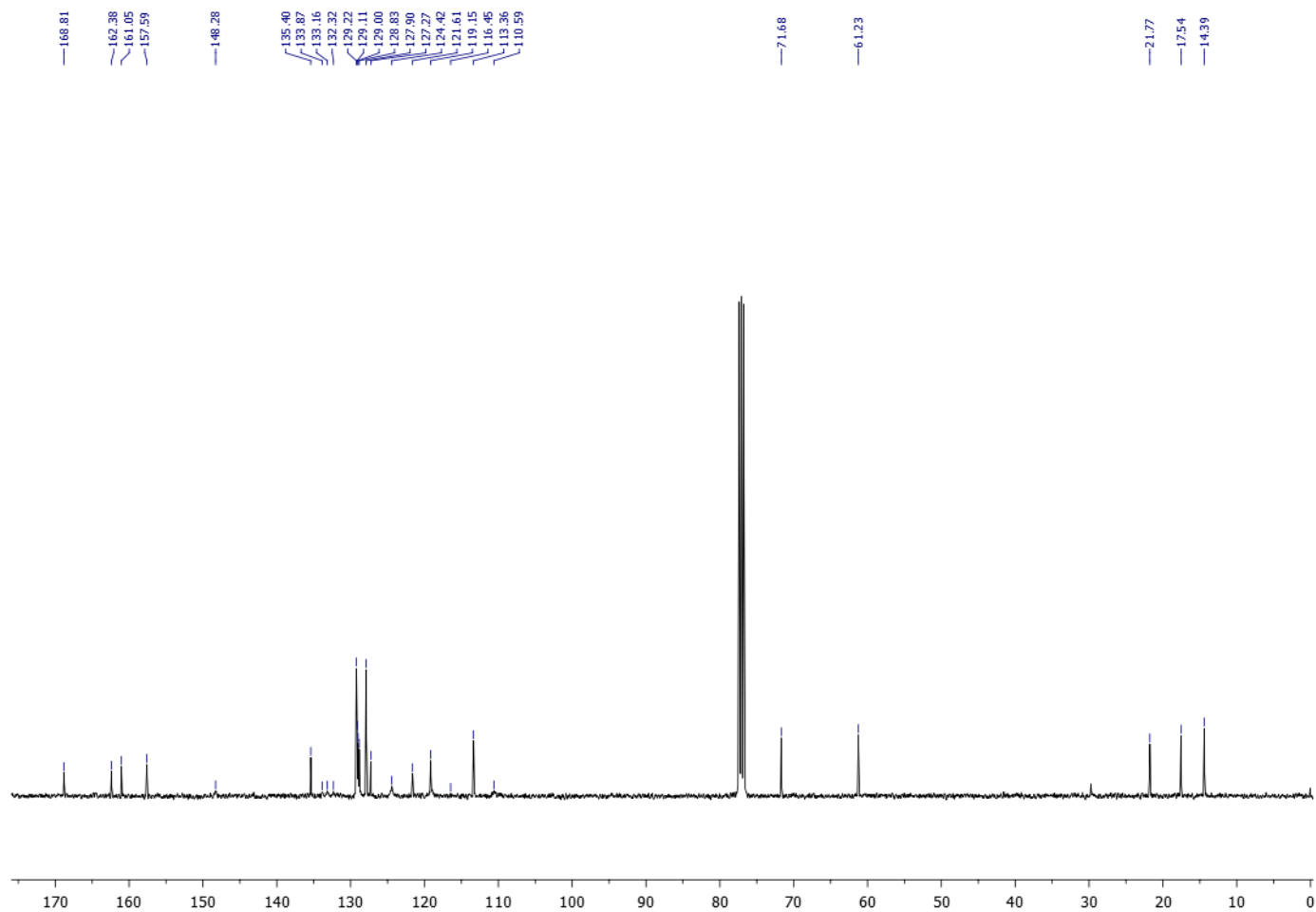
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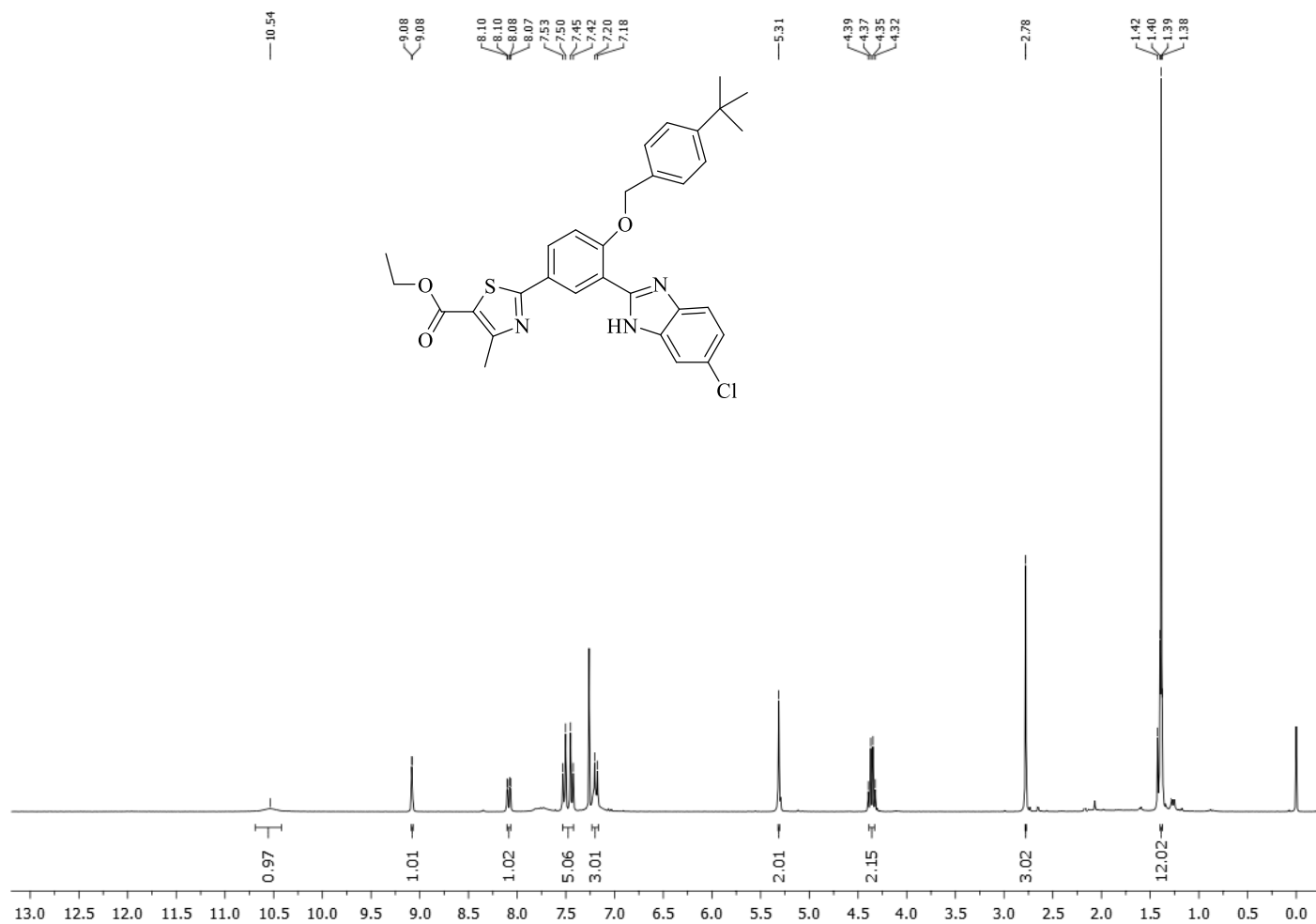
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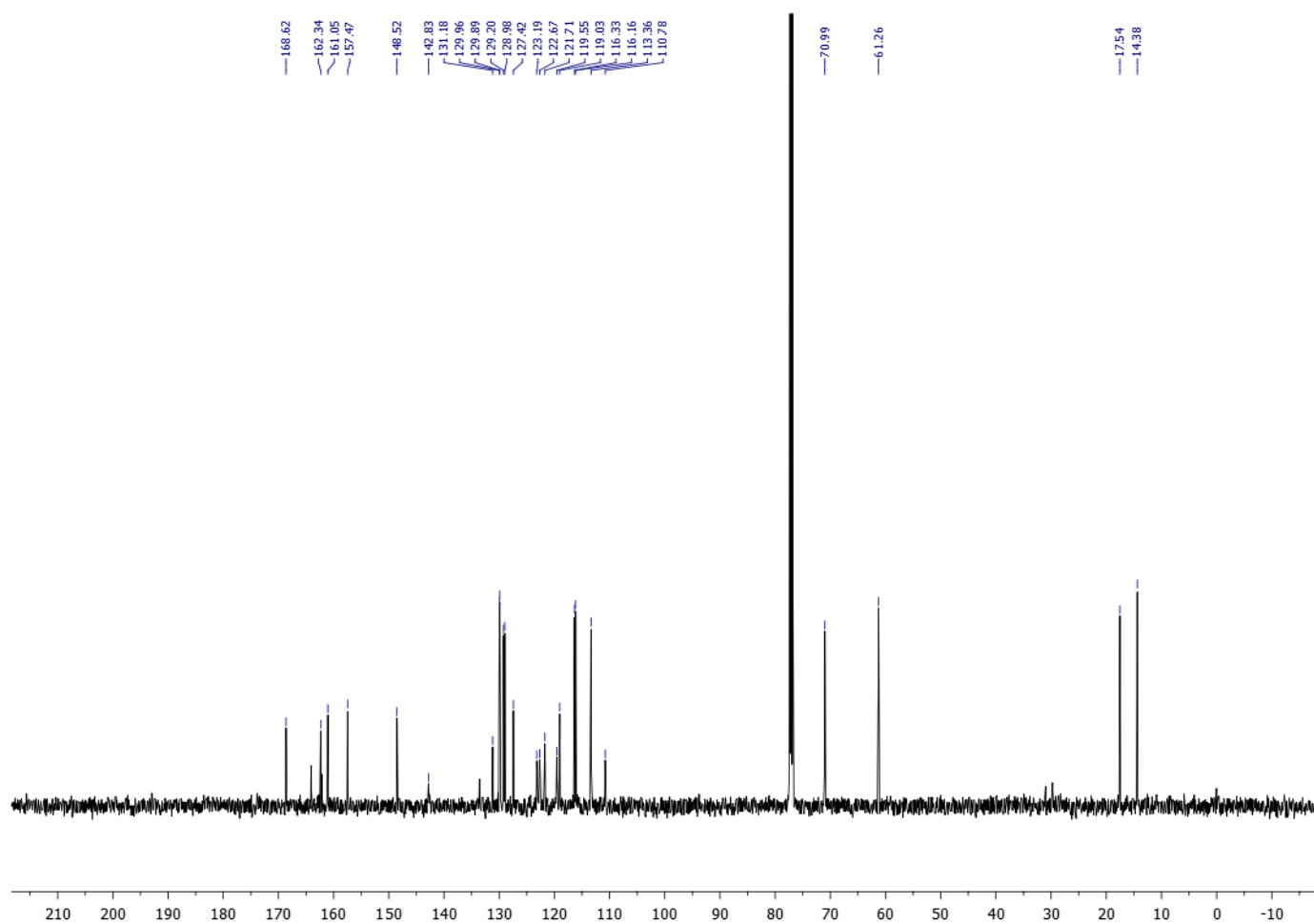
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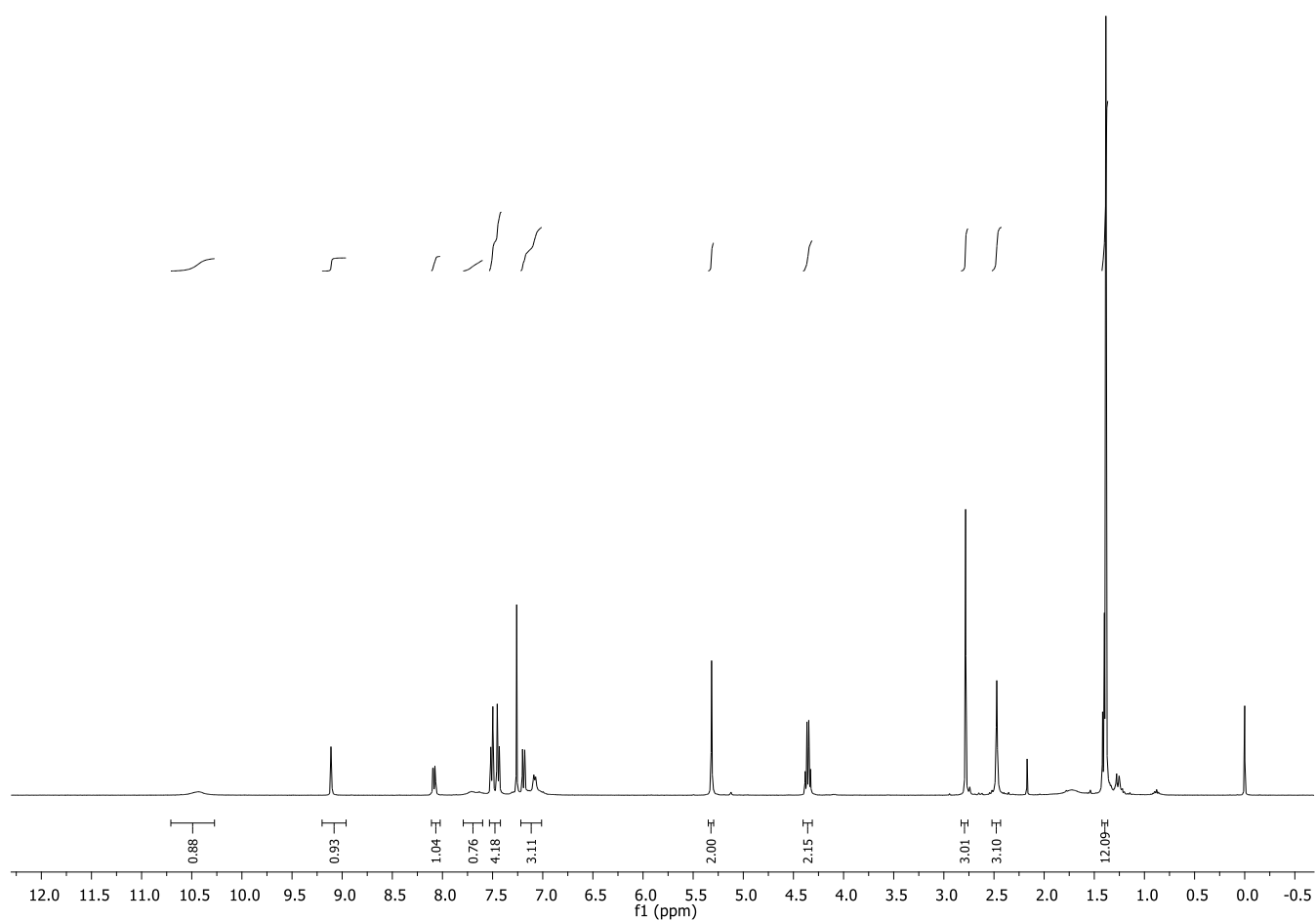
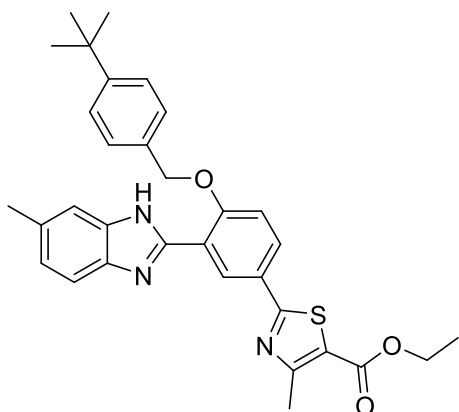
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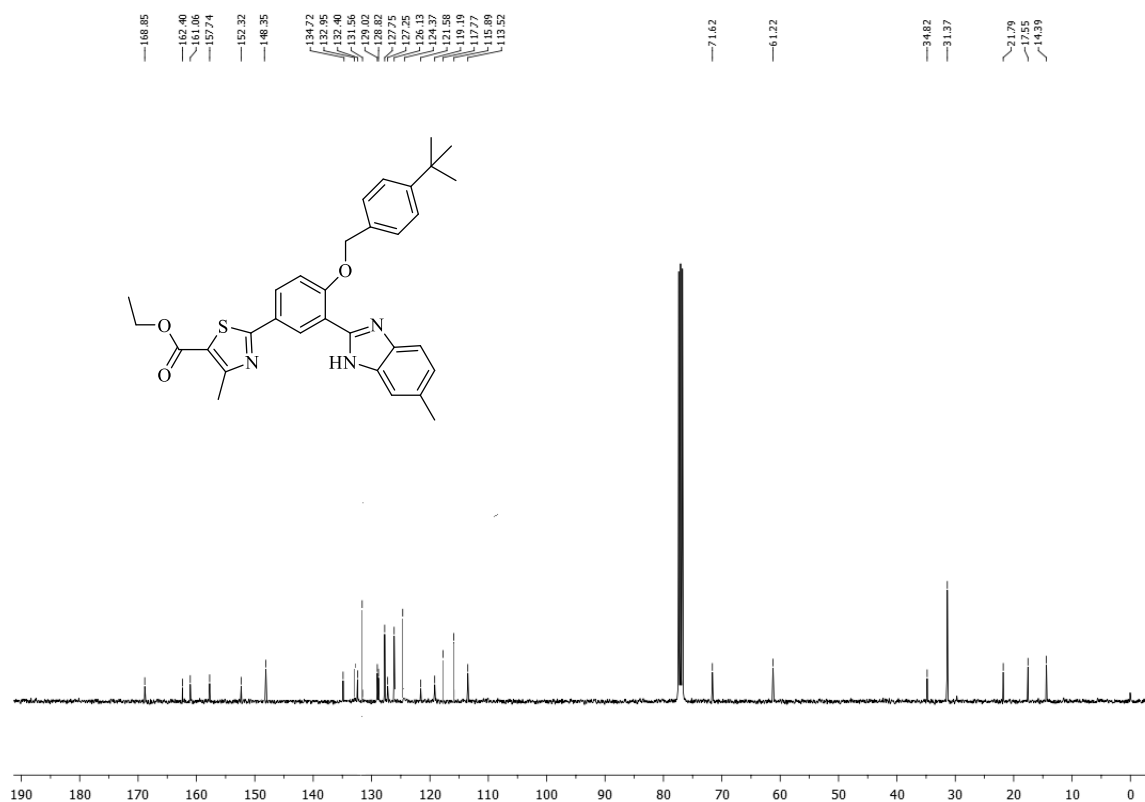
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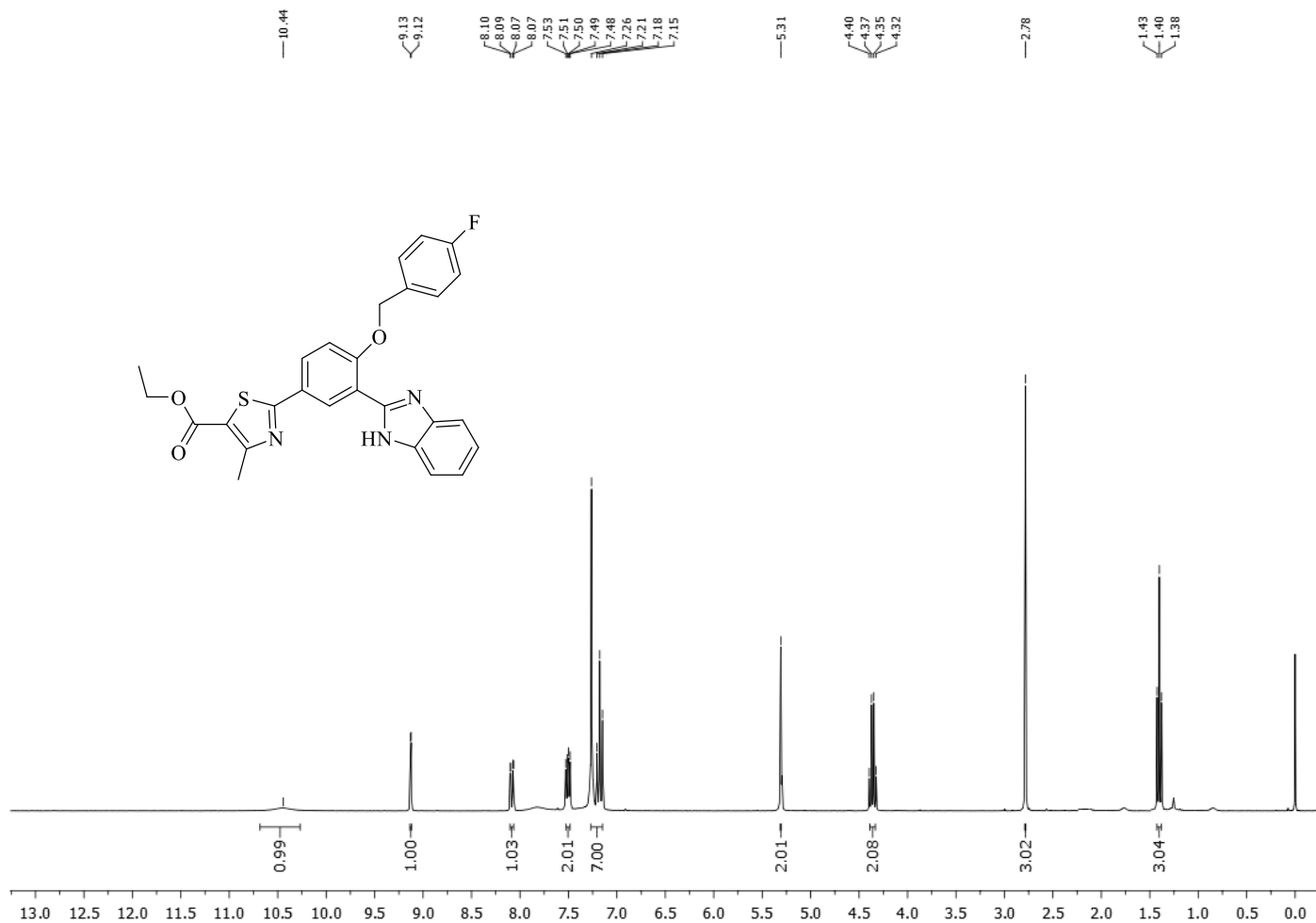
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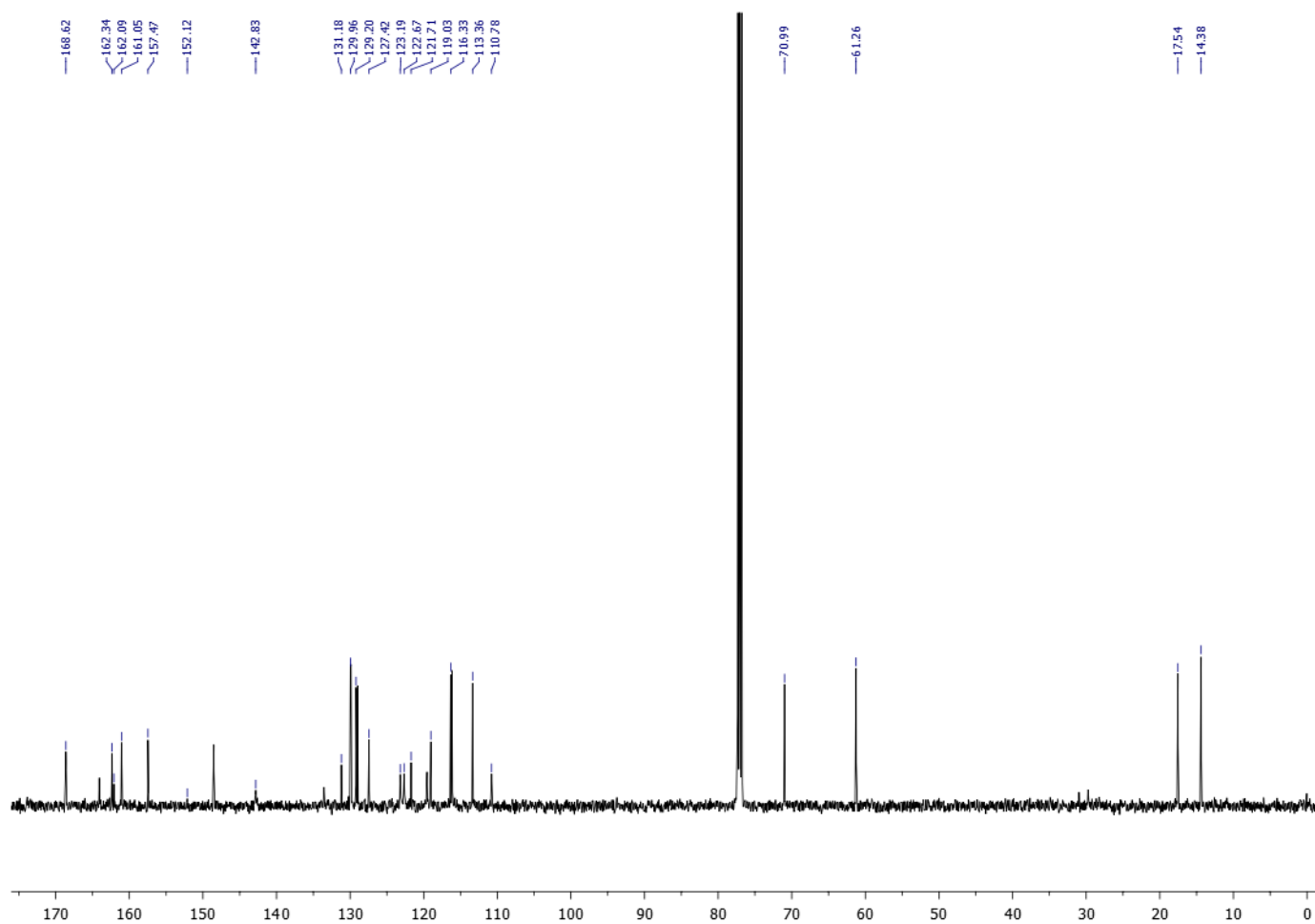
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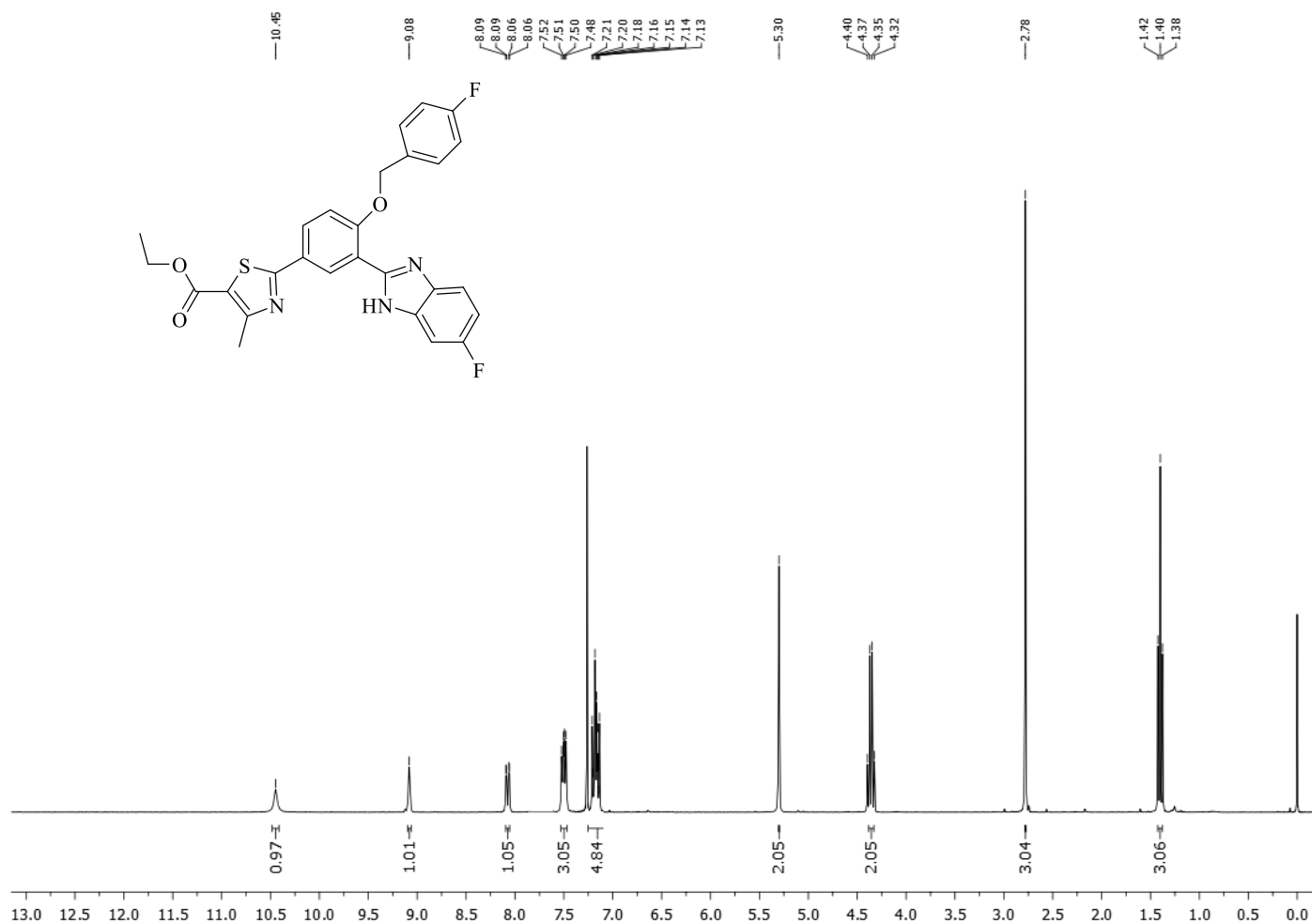
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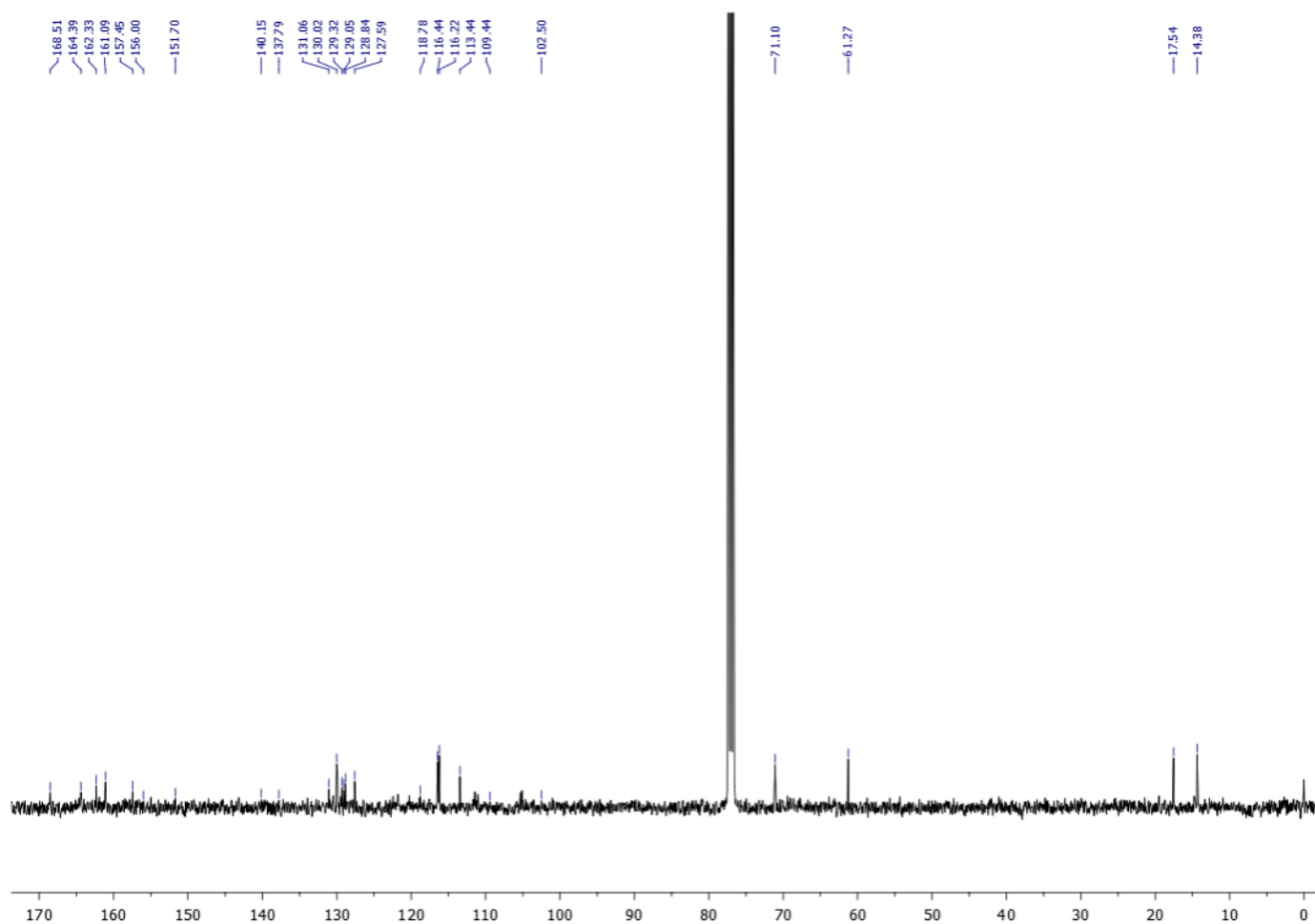
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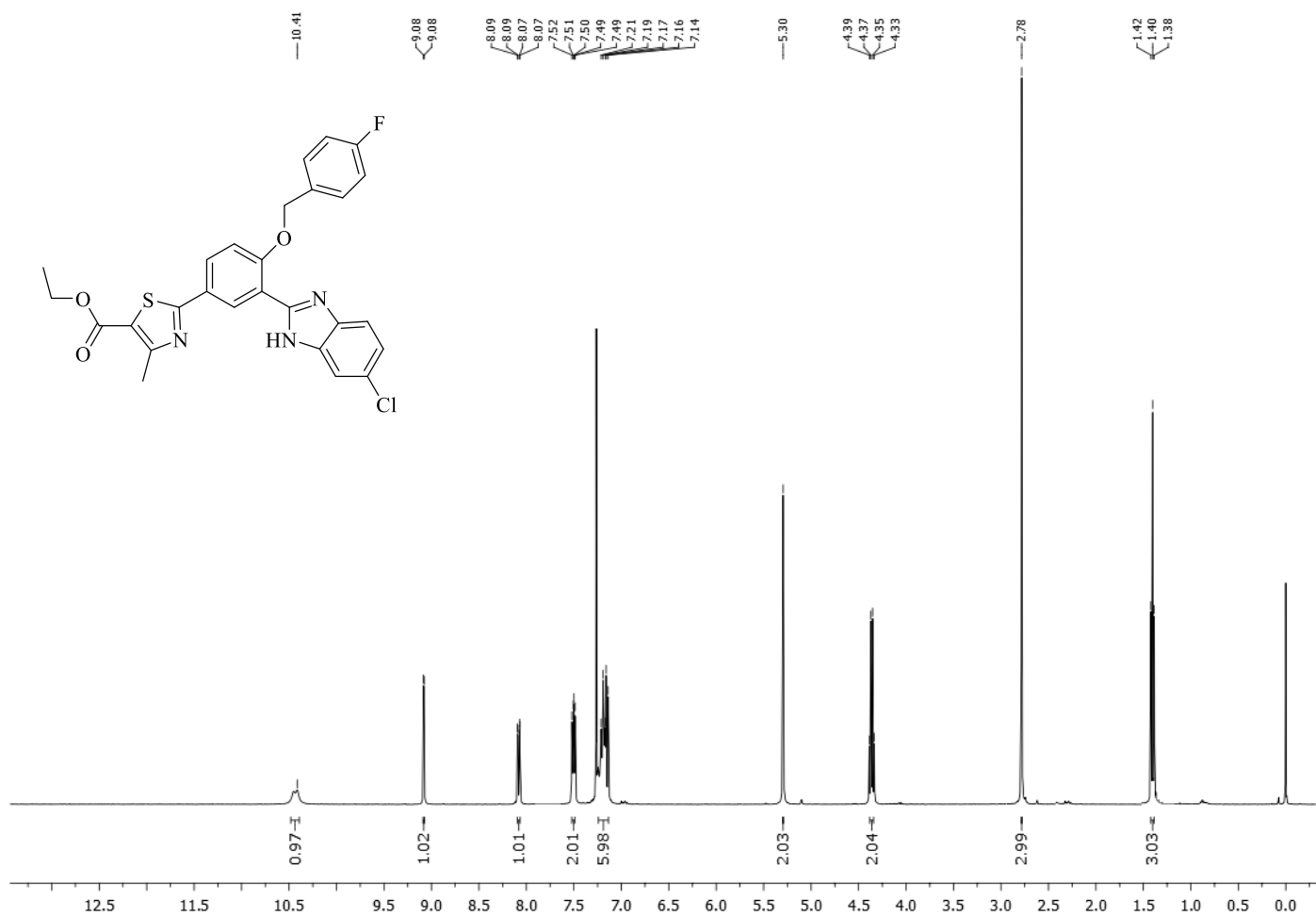
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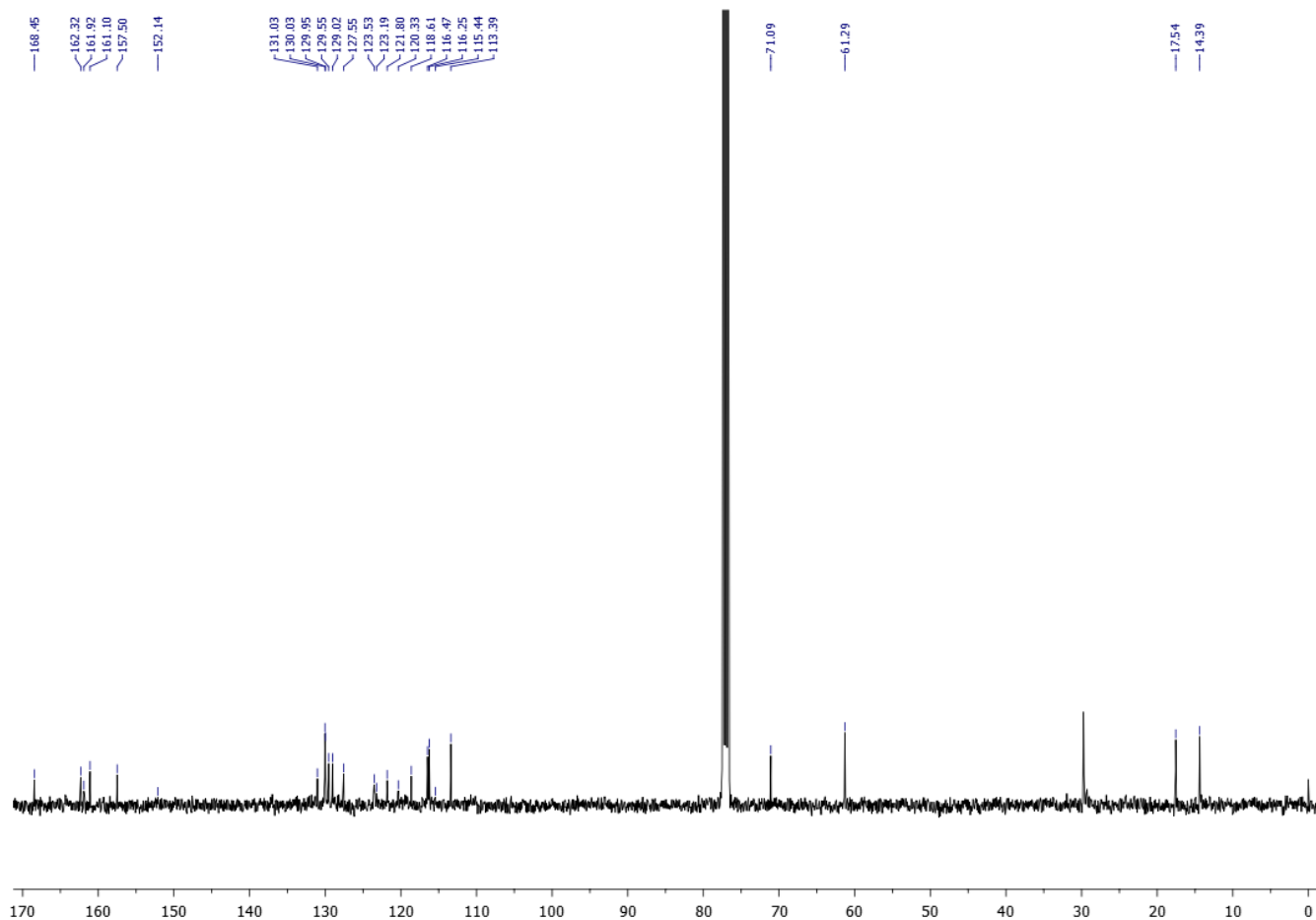
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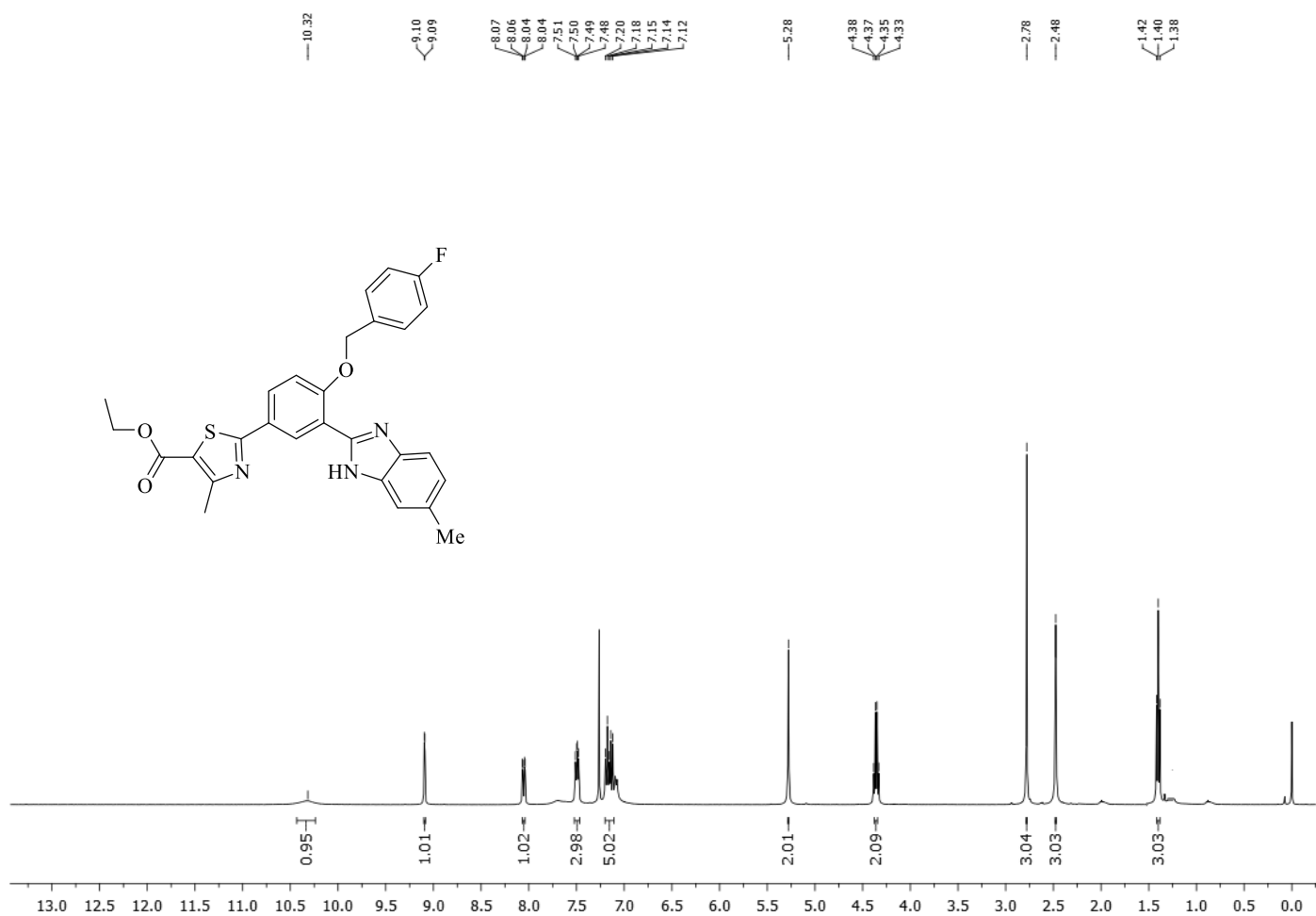
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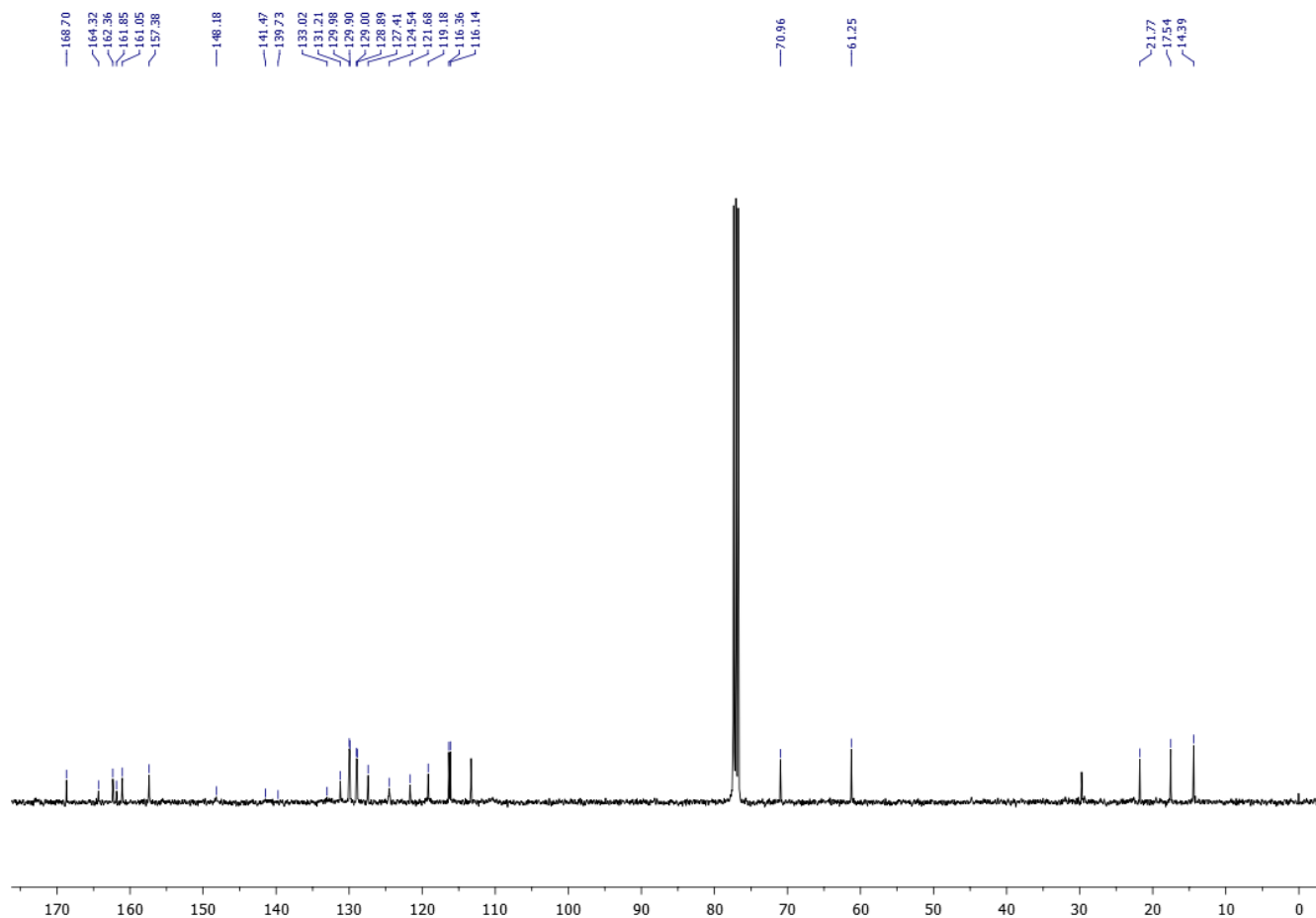
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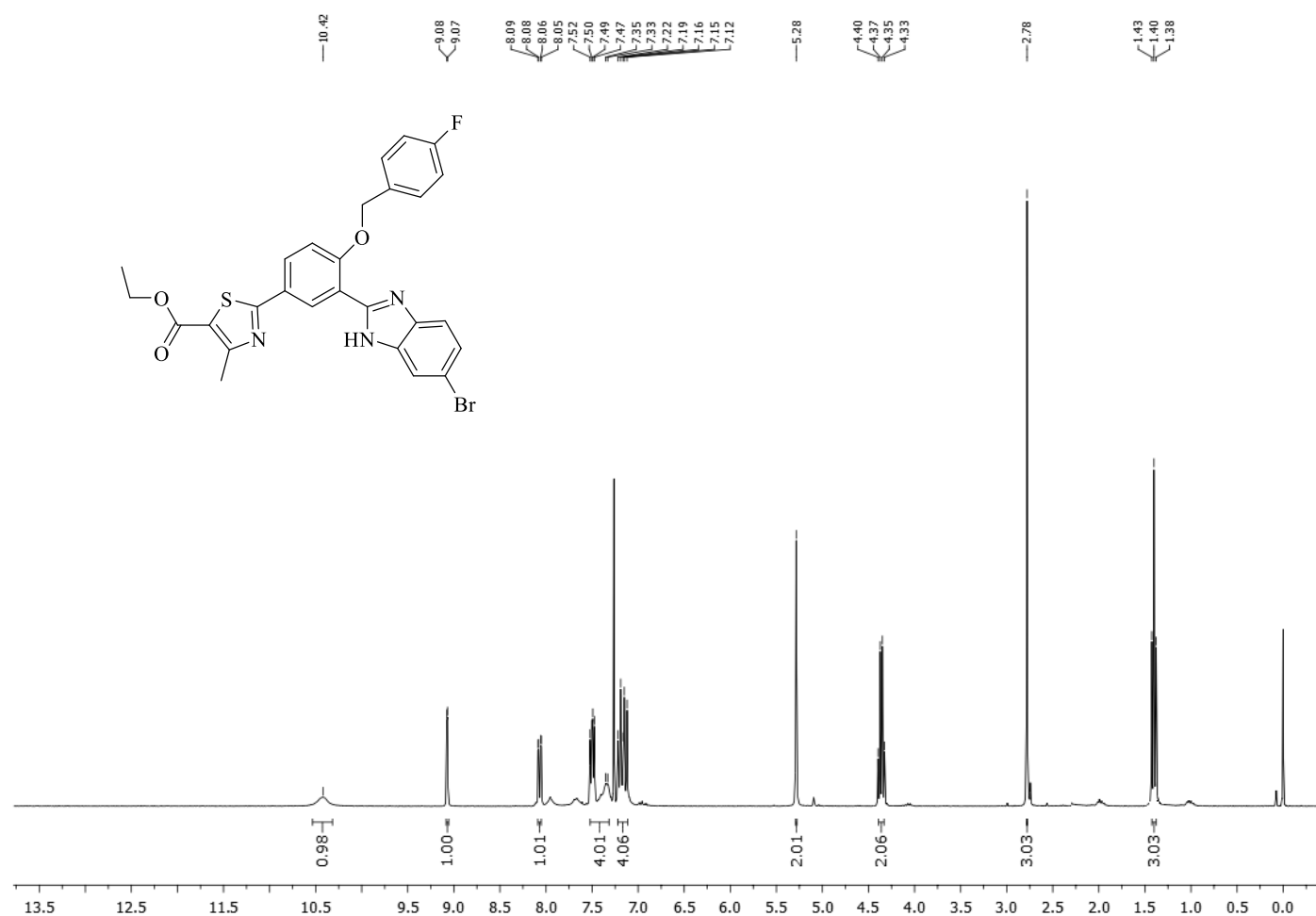
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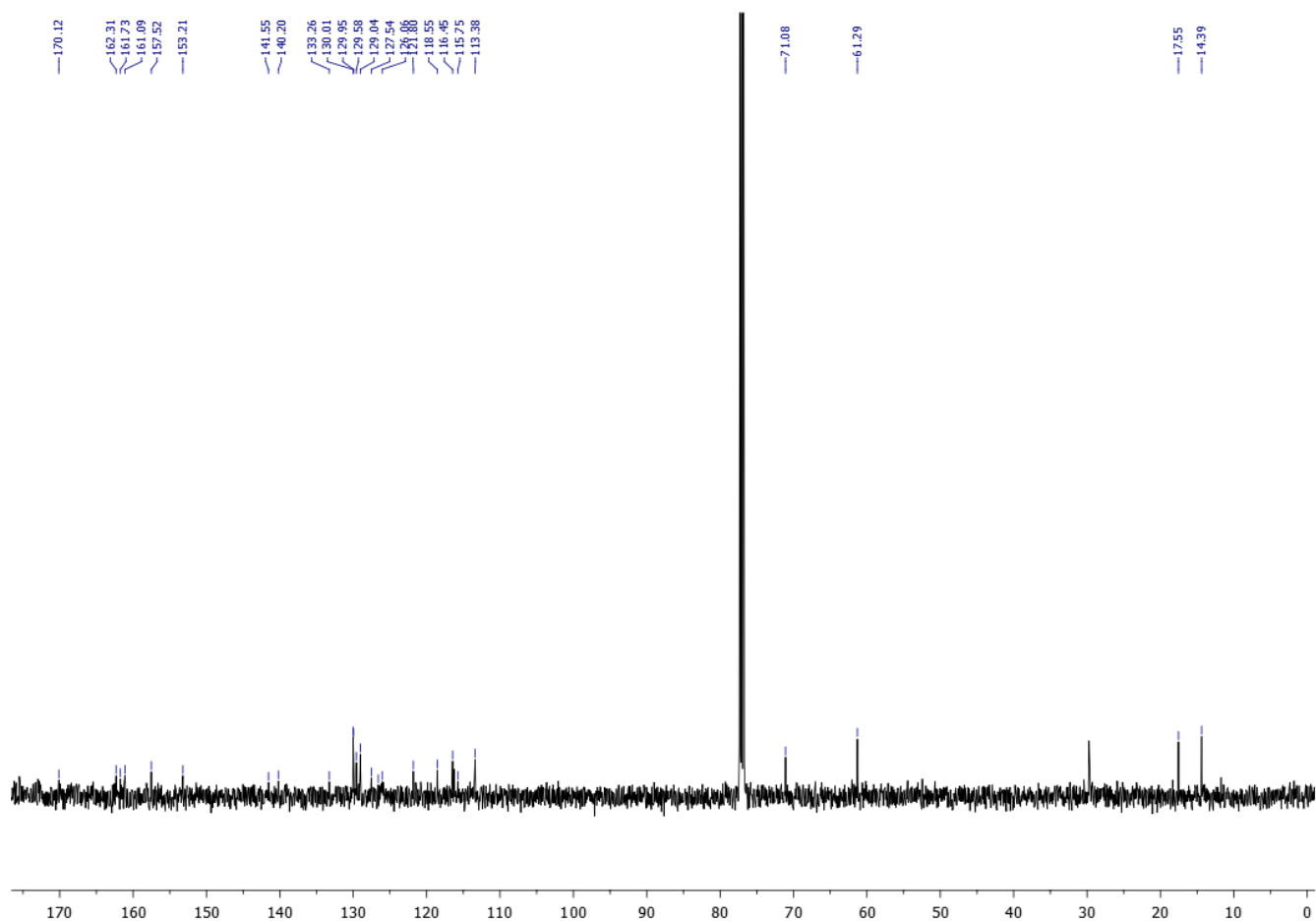
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^{13}C NMR of Ethyl 2-(3-(6-chloro-1*H*-benzo[*d*]imidazol-2-yl)-((4-fluorobenzyl)oxy)phenyl)-4-methylthiazole-5-carboxylate (5i)

¹H NMR of Ethyl 2-(4-((4-fluorobenzyl)oxy)-3-(6-methyl-1*H*-benzo[*d*]imidazol-2-yl)phenyl)-4-methylthiazole-5-carboxylate (5j)

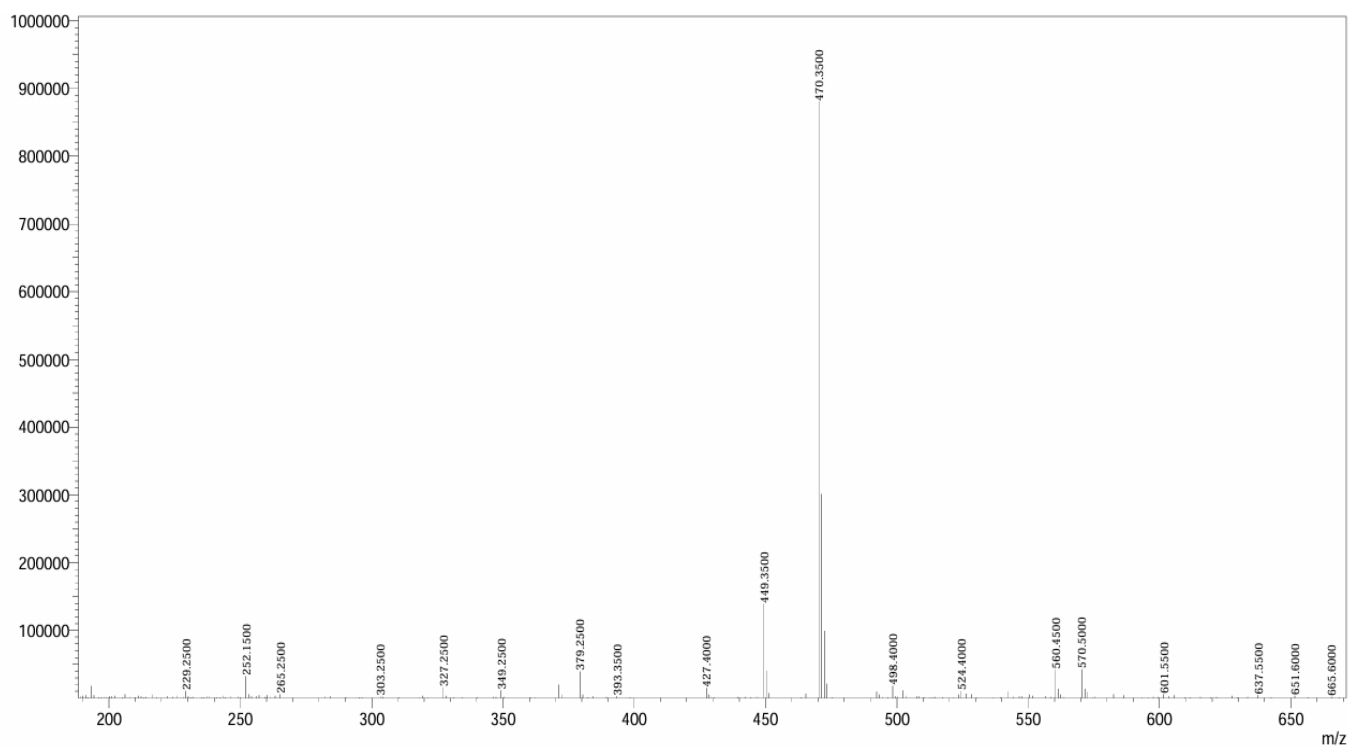
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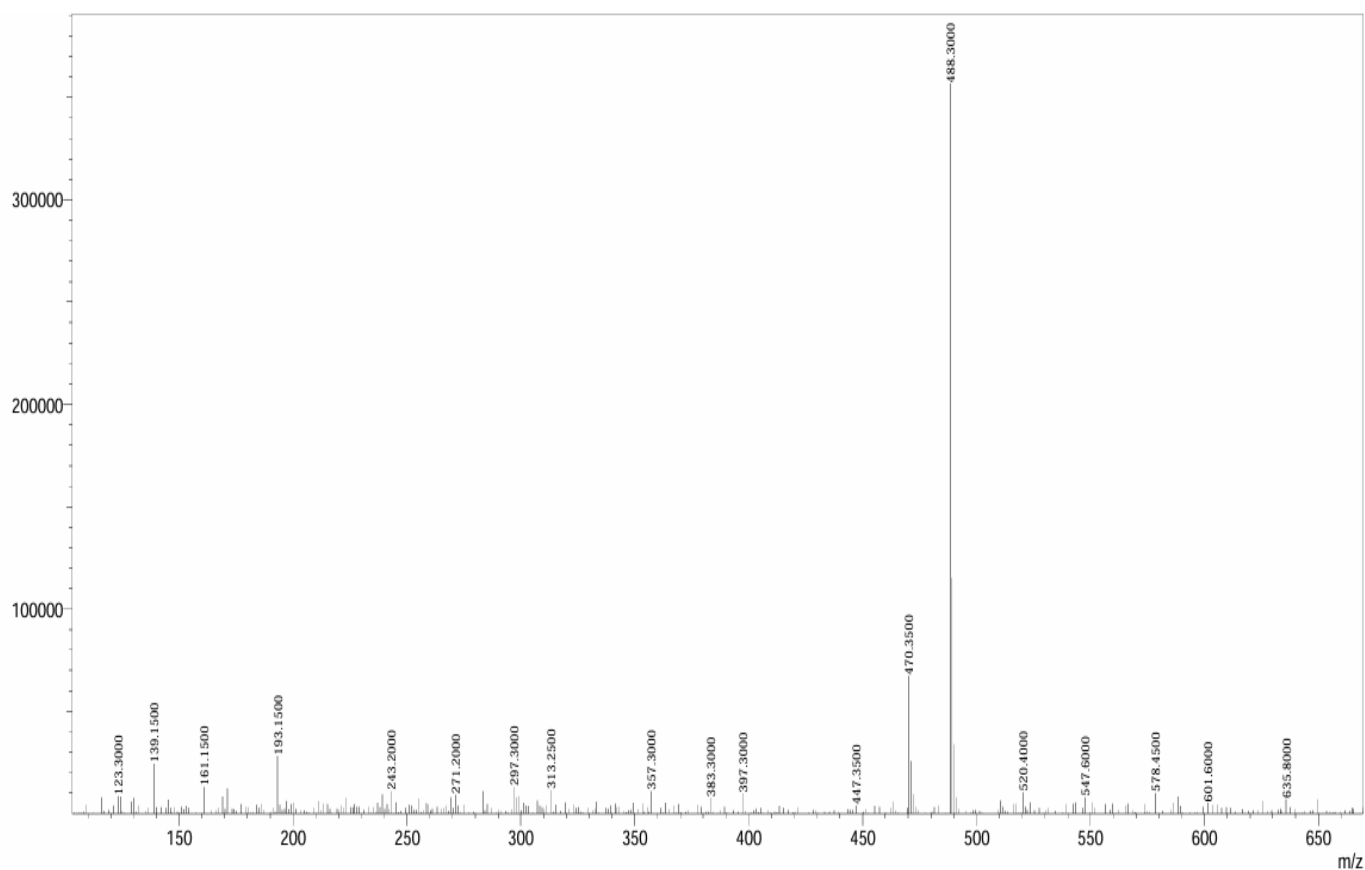
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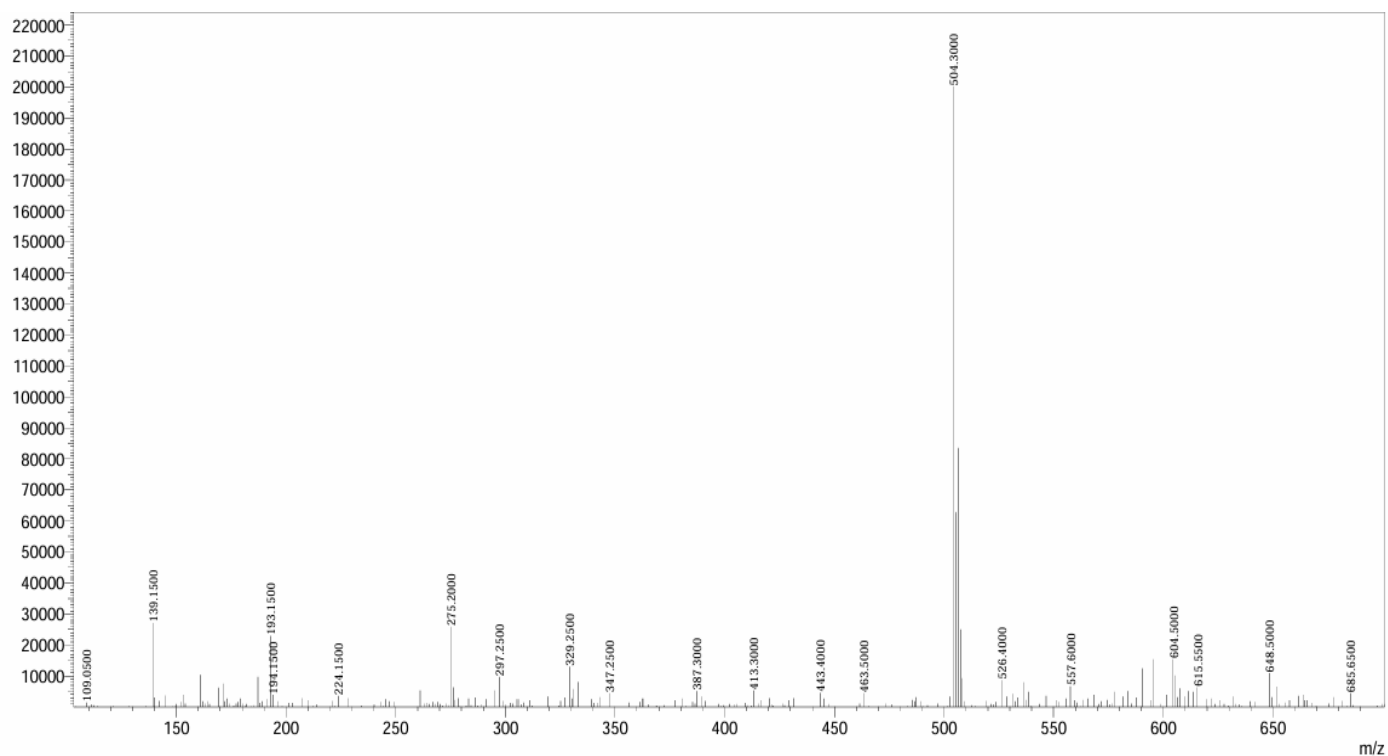
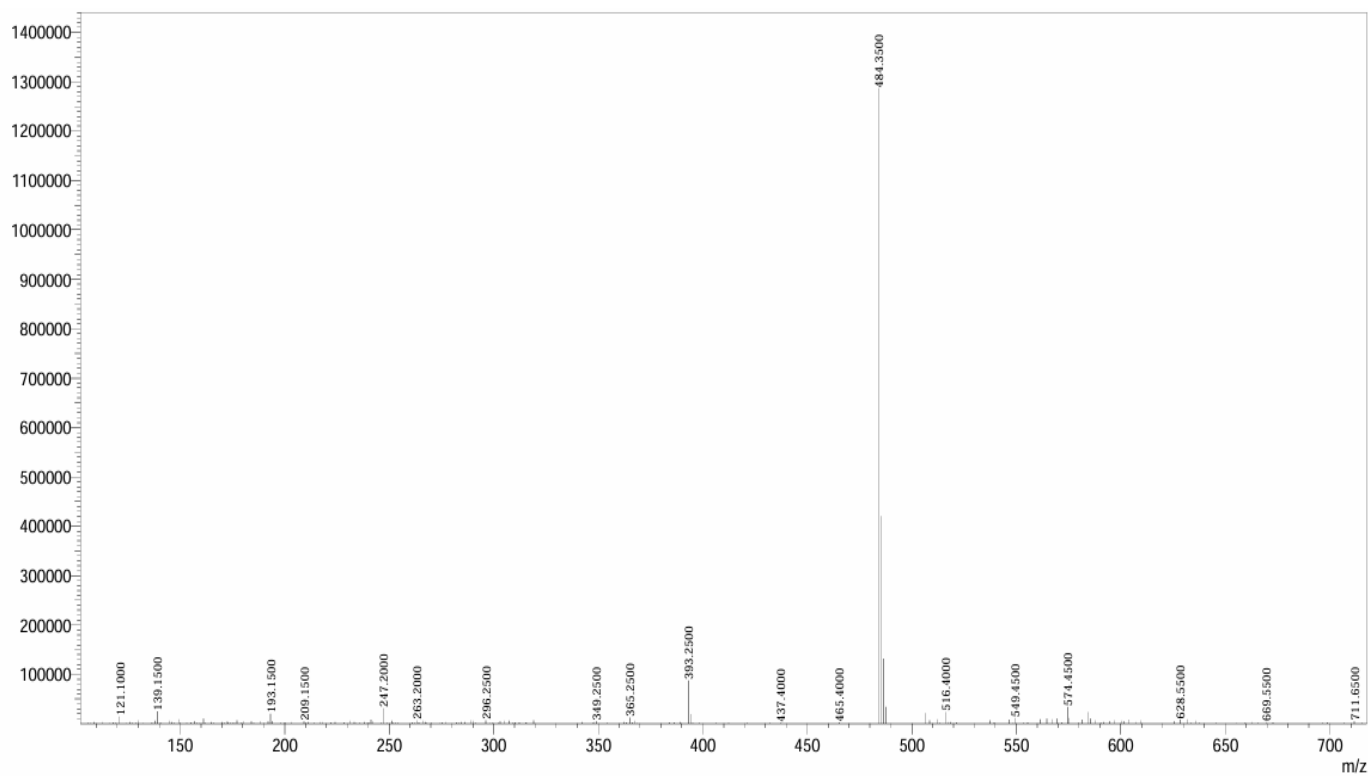
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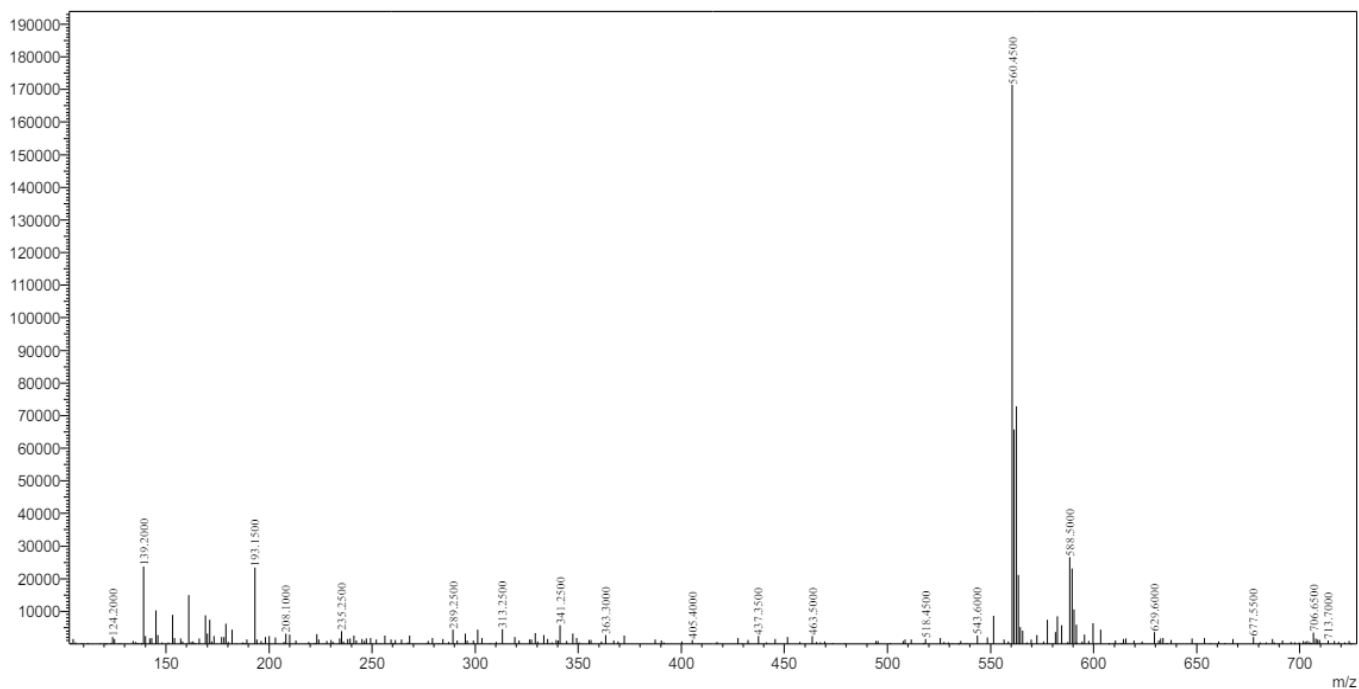
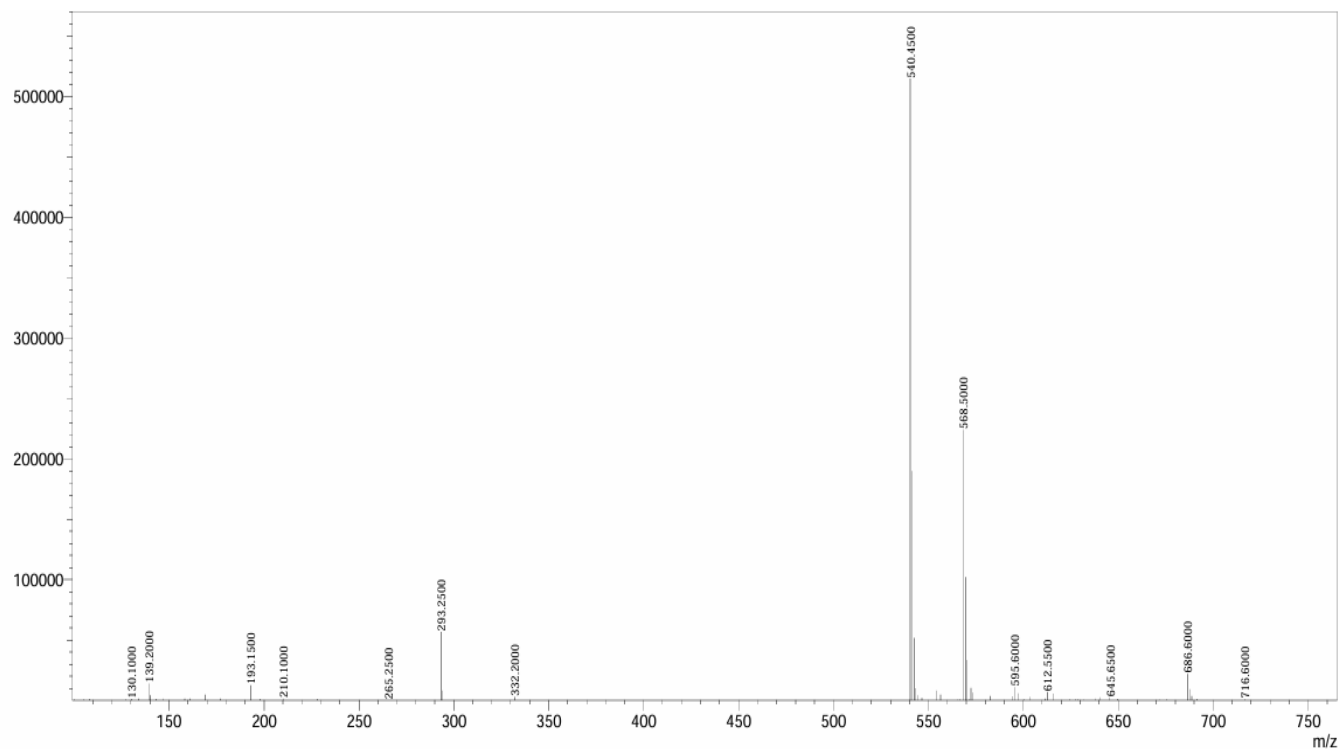
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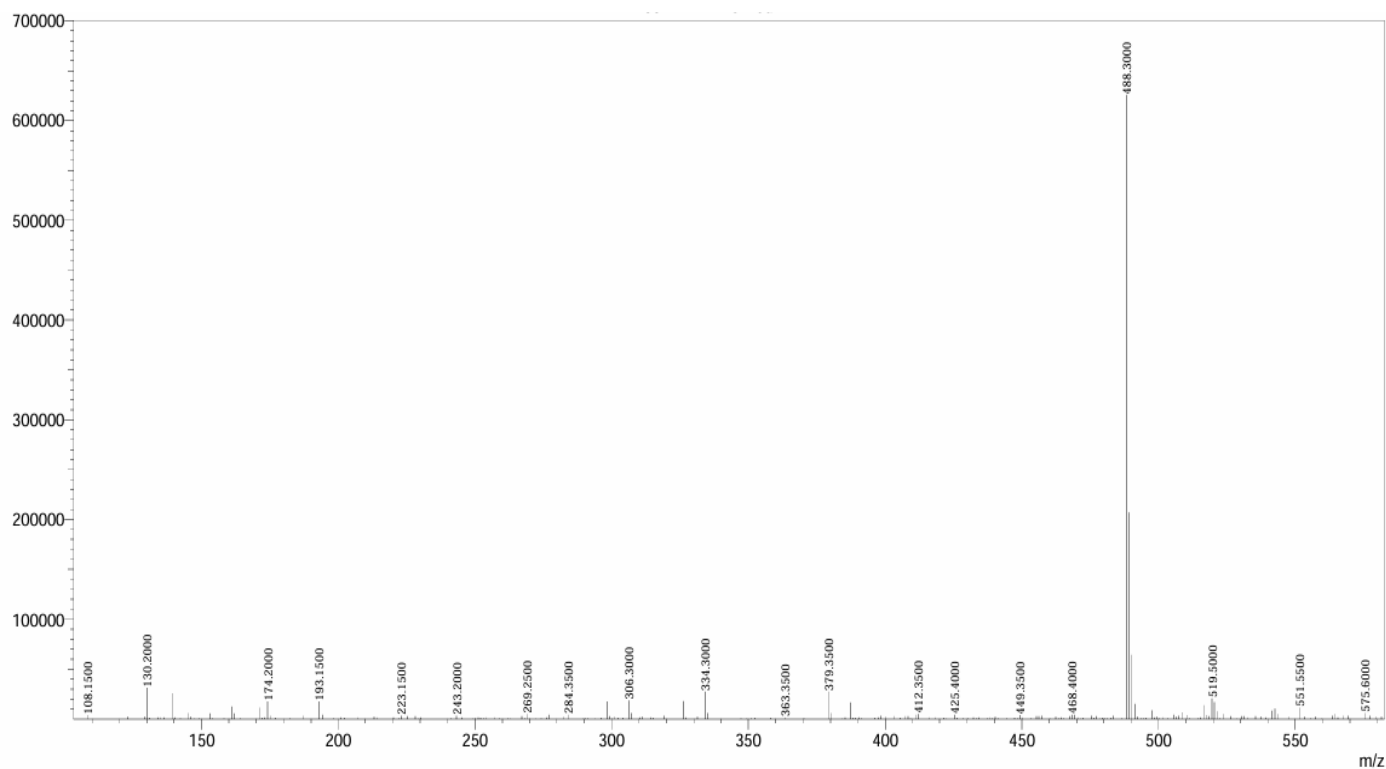
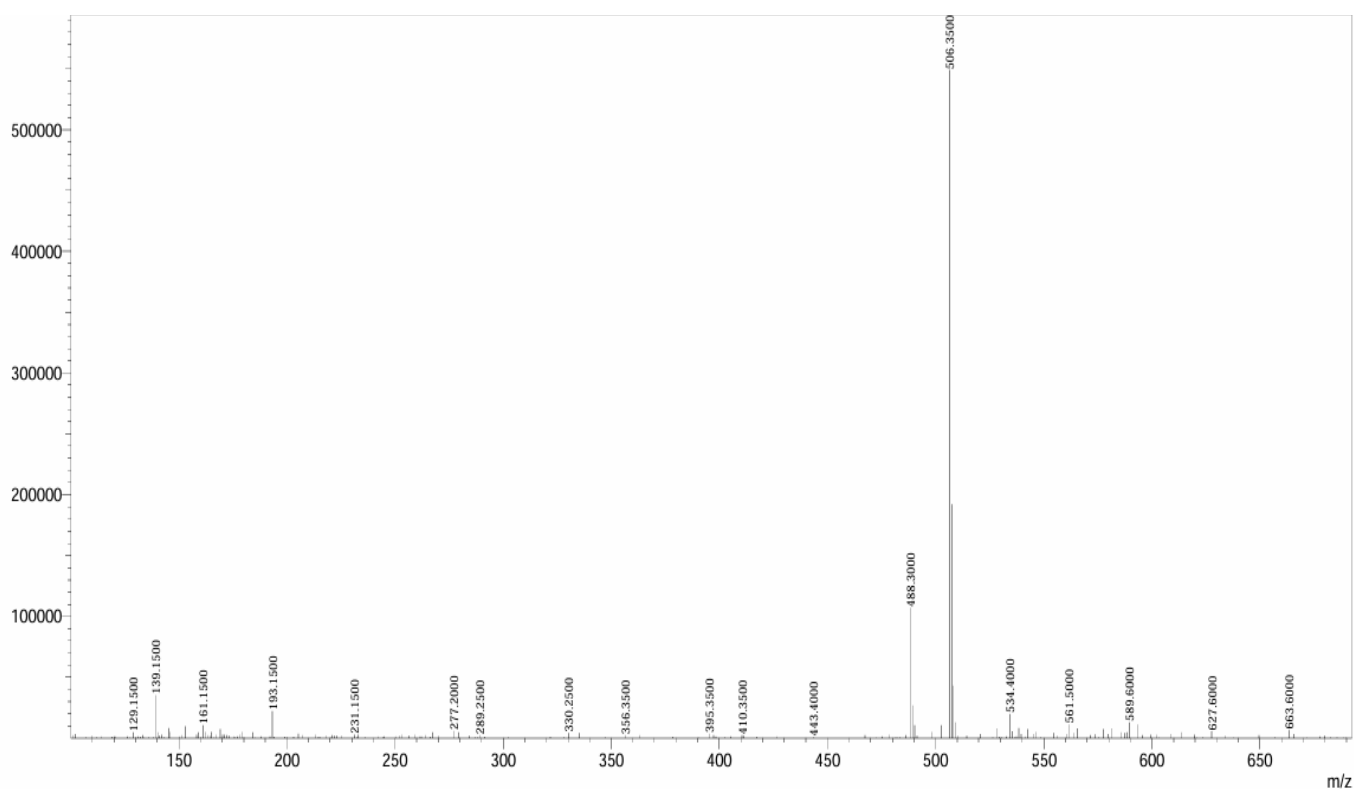


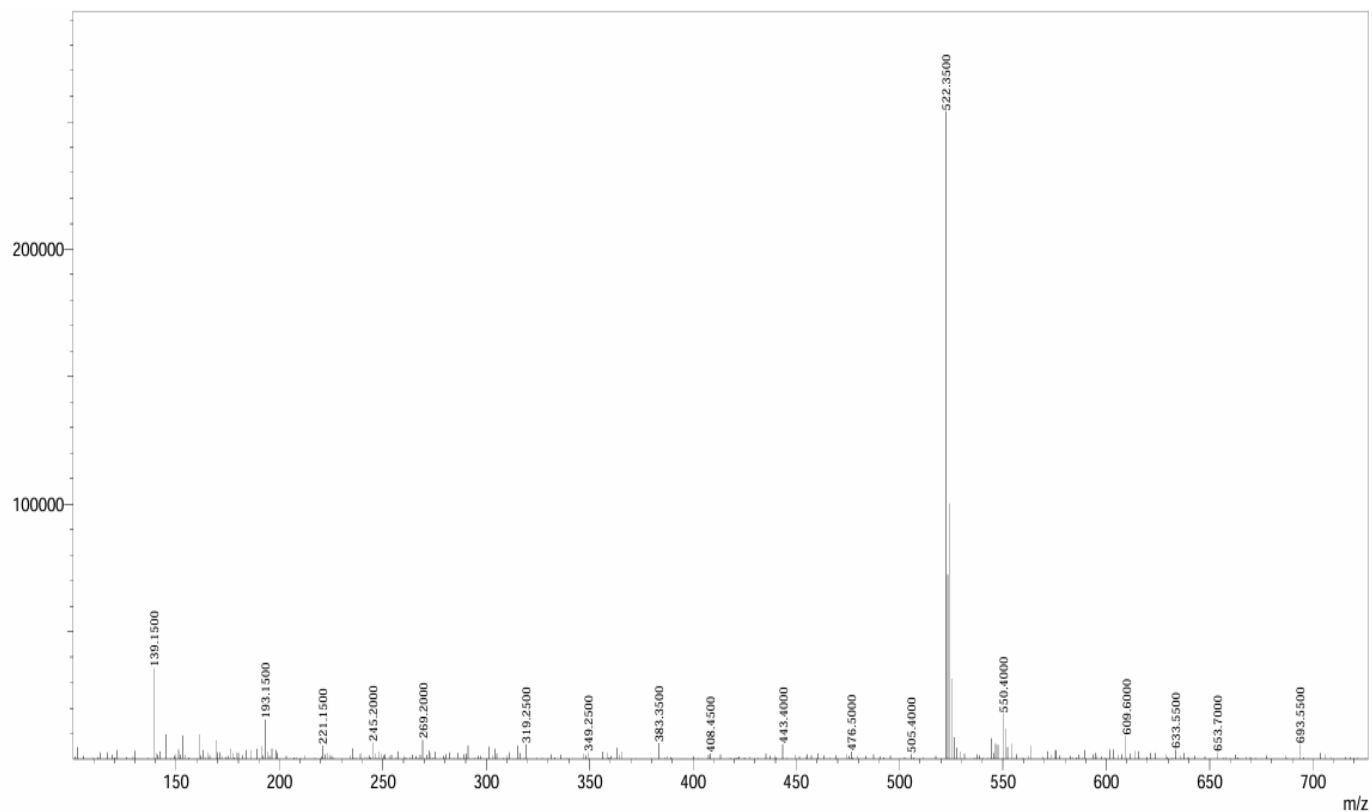
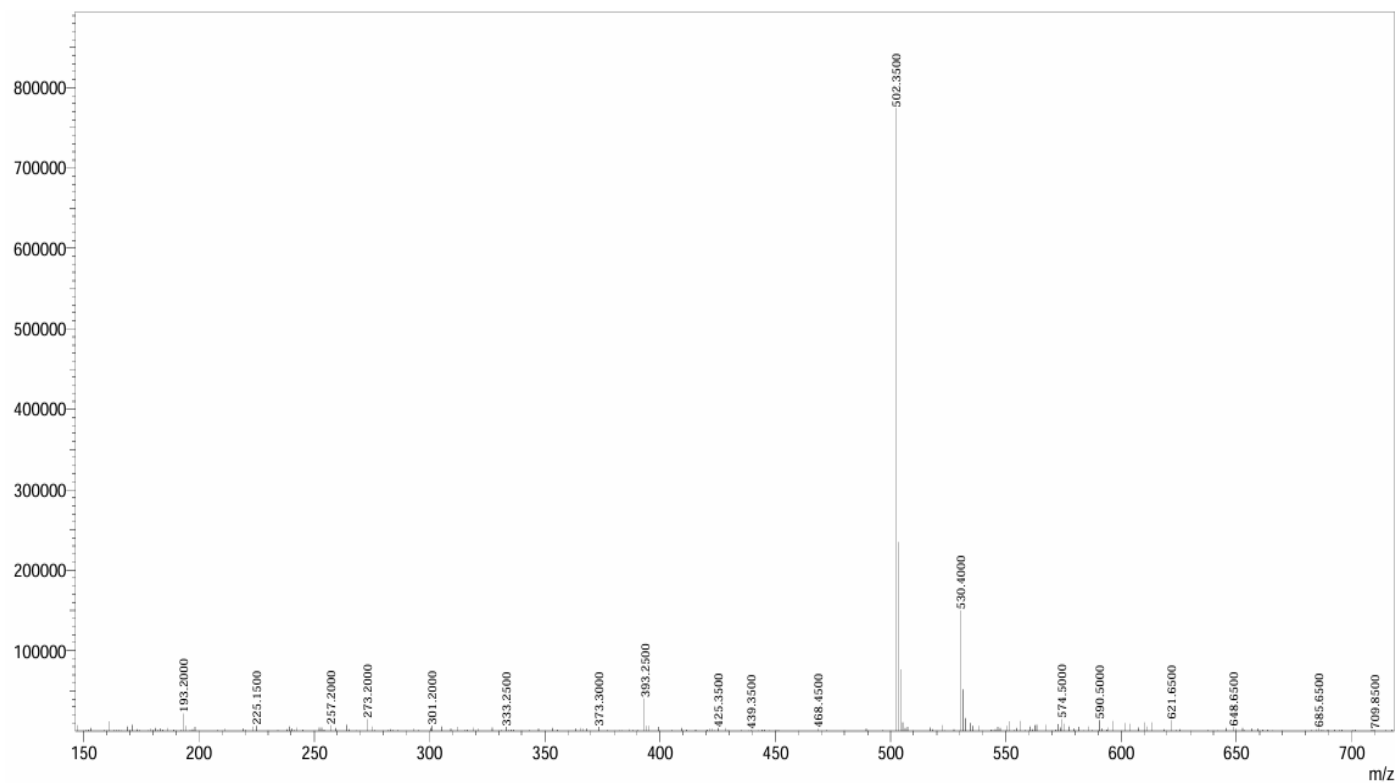
Ethyl 2-(4-(benzyloxy)-3-(6-fluoro-1H-benzo[d]imidazol-2-yl)phenyl)-4-methylthiazole-5-carboxylate (5b)



Ethyl 2-(4-(benzyloxy)-3-(6-chloro-1*H*-benzo[*d*]imidazol-2-yl)phenyl)-4-methylthiazole-5-carboxylate (5c)**ethyl 2-(4-(benzyloxy)-3-(6-methyl-1*H*-benzo[*d*]imidazol-2-yl)phenyl)-4-methylthiazole-5-carboxylate (5d)**

Ethyl 2-(4-((4-(tert-butyl)benzyl)oxy)-3-(6-chloro-1H-benzo[d]imidazol-2-yl)phenyl)-4-methylthiazole-5-carboxylate (5e)**Ethyl 2-(4-((4-(tert-butyl)benzyl)oxy)-3-(6-methyl-1H-benzo[d]imidazol-2-yl)phenyl)-4-methylthiazole-5-carboxylate (5f)**

Ethyl 2-(3-(1H-benzo[d]imidazol-2-yl)-4-((4-fluorobenzyl)oxy)phenyl)-4-methylthiazole-5-carboxylate (5g)**Ethyl 2-(3-(6-fluoro-1H-benzo[d]imidazol-2-yl)-4-((4-fluorobenzyl)oxy)phenyl)-4-methylthiazole-5-carboxylate (5h)**

Ethyl 2-(3-(6-chloro-1*H*-benzo[*d*]imidazol-2-yl)-4-((fluorobenzyl)oxy)phenyl)-4-methylthiazole-5-carboxylate (5i)**Ethyl 2-(4-((4-fluorobenzyl)oxy)-3-(6-methyl-1*H*-benzo[*d*]imidazol-2-yl)phenyl)-4-methylthiazole-5-carboxylate (5J)**

Ethyl 2-(3-(6-bromo-1*H*-benzo[*d*]imidazol-2-yl)-4-((fluorobenzyl)oxy)phenyl)-4-methylthiazole-5-carboxylate 5k