

Domino Aldol-S_NAr-Dehydration Sequence for [3+3] Annulations to Prepare Quinolin-2(1*H*)-ones and 1,8-Naphthyridin-2(1*H*)-ones

Kwabena Fobi, Ebenezer Ametsetor and Richard A. Bunce *

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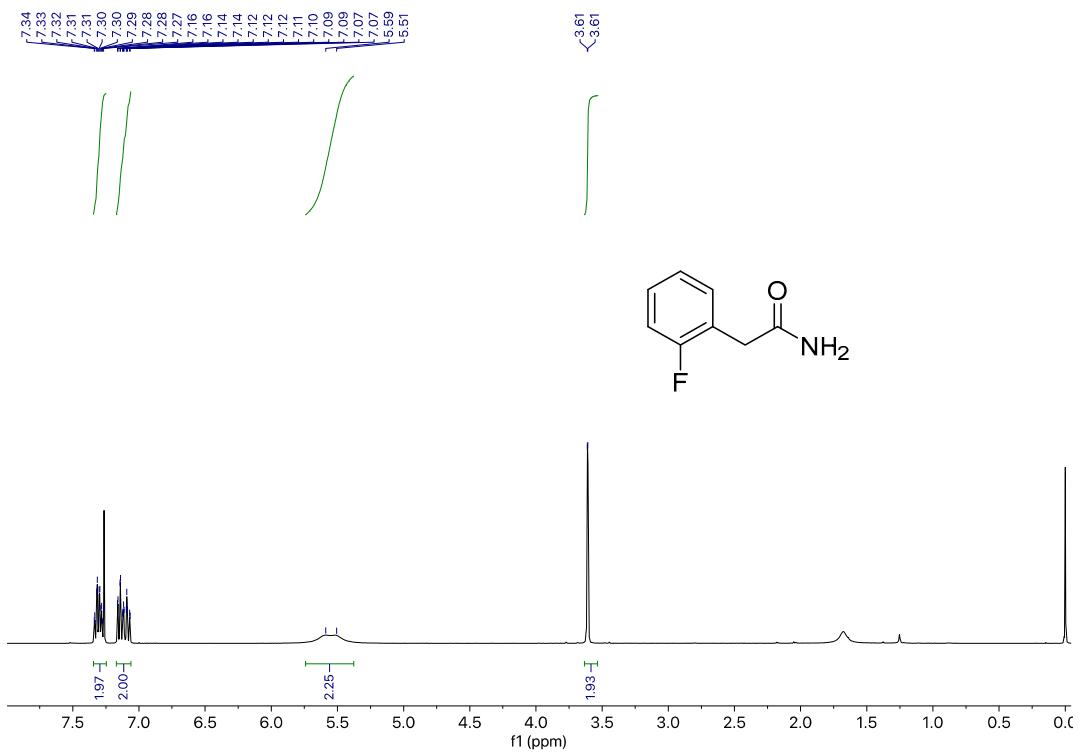
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Supplementary Information

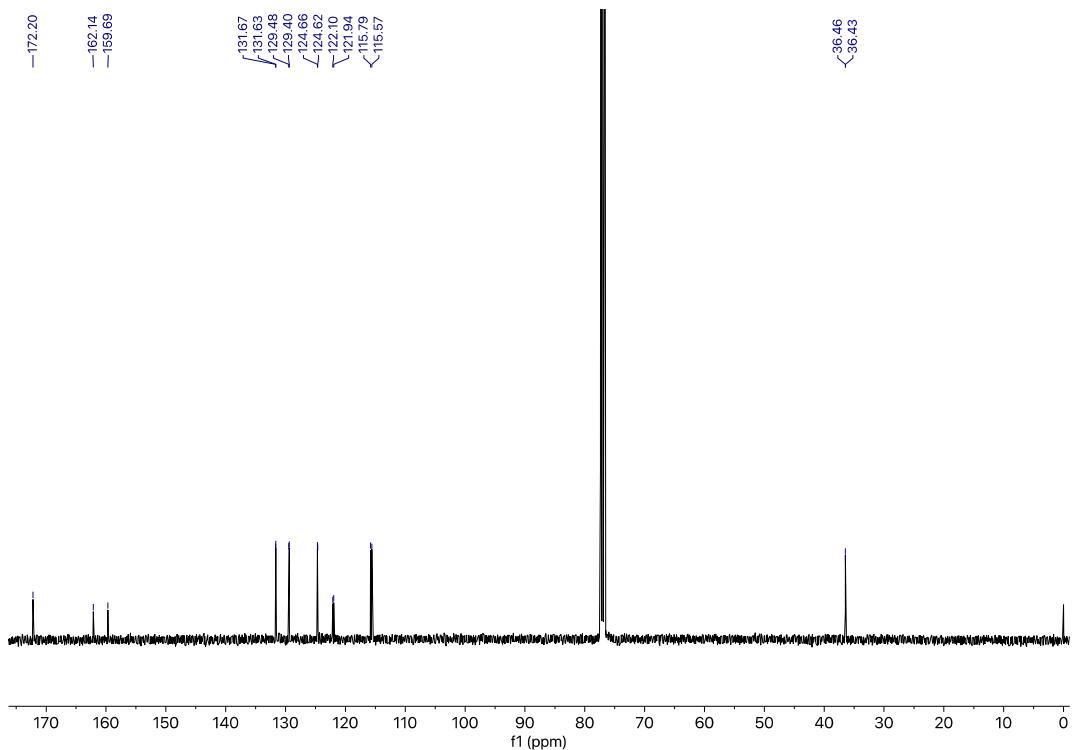
Compound	page
¹ H NMR for 2-(2-Fluorophenyl)acetamide (14)	3
¹³ C NMR for 2-(2-Fluorophenyl)acetamide (14)	3
¹ H NMR for 2-(4-Chlorophenyl)acetamide (15)	4
¹³ C NMR for 2-(4-Chlorophenyl)acetamide (15)	4
¹ H NMR for 2-(2,5-Dimethylphenyl)acetamide (16)	5
¹³ C NMR for 2-(2,5-Dimethylphenyl)acetamide (16)	5
¹ H NMR for 6-Nitro-3-phenylquinolin-2(1 <i>H</i>)-one (17)	6
¹³ C NMR for 6-Nitro-3-phenylquinolin-2(1 <i>H</i>)-one (17)	6
¹ H NMR for 6-Nitro-3-(phenylsulfonyl)quinolin-2(1 <i>H</i>)-one (18)	7
¹³ C NMR for 6-Nitro-3-(phenylsulfonyl)quinolin-2(1 <i>H</i>)-one (18)	7
¹ H NMR for 3-Carbethoxy-6-nitroquinolin-2(1 <i>H</i>)-one (19)	8
¹³ C NMR for 3-Carbethoxy-6-nitroquinolin-2(1 <i>H</i>)-one (19)	8
¹ H NMR for 3-(4-Methoxyphenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (20)	9
¹³ C NMR for 3-(4-Methoxyphenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (20)	9
¹ H NMR for 3-(2-Fluorophenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (21)	10
¹³ C NMR for 3-(2-Fluorophenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (21)	10
¹ H NMR for 3-(4-Chlorophenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (22)	11
¹³ C NMR for 3-(4-Chlorophenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (22)	11
¹ H NMR for 3-(2,5-Dimethylphenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (23)	12
¹³ C NMR for 3-(2,5-Dimethylphenyl)-6-nitroquinolin-2(1 <i>H</i>)-one (23)	12
¹ H NMR for 6-Cyano-3-phenylquinolin-2(1 <i>H</i>)-one (24)	13
¹³ C NMR for 6-Cyano-3-phenylquinolin-2(1 <i>H</i>)-one (24)	13
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¹³ C NMR for 6-Cyano-3-(phenylsulfonyl)quinolin-2(1 <i>H</i>)-one (25)	14

¹ H NMR for 6-Carbomethoxy-3-phenylquinolin-2(1 <i>H</i>)-one (26)	15
¹³ C NMR for 6-Carbomethoxy-3-phenylquinolin-2(1 <i>H</i>)-one (26)	15
¹ H NMR for 6-Carbomethoxy-3-(phenylsulfonyl)quinolin-2(1 <i>H</i>)-one (27)	16
¹³ C NMR for 6-Carbomethoxy-3-(phenylsulfonyl)quinolin-2(1 <i>H</i>)-one (27).....	16
¹ H NMR for 3-Phenyl-6-(trifluoromethyl)quinolin-2(1 <i>H</i>)-one (28).....	17
¹³ C NMR for 3-Phenyl-6-(trifluoromethyl)quinolin-2(1 <i>H</i>)-one (28).....	17
¹ H NMR for 3-(Phenylsulfonyl)-6-(trifluoromethyl)quinolin-2(1 <i>H</i>)-one (29).....	18
¹³ C NMR for 3-(Phenylsulfonyl)-6-(trifluoromethyl)quinolin-2(1 <i>H</i>)-one (29).....	18
¹ H NMR for 3-Phenyl-1,8-naphthyridin-2(1 <i>H</i>)-one (30)	19
¹³ C NMR for 3-Phenyl-1,8-naphthyridin-2(1 <i>H</i>)-one (30)	19
¹ H NMR for 3-(Phenylsulfonyl)-1,8-naphthyridin-2(1 <i>H</i>)-one (31)	20
¹³ C NMR for 3-(Phenylsulfonyl)-1,8-naphthyridin-2(1 <i>H</i>)-one (31)	20

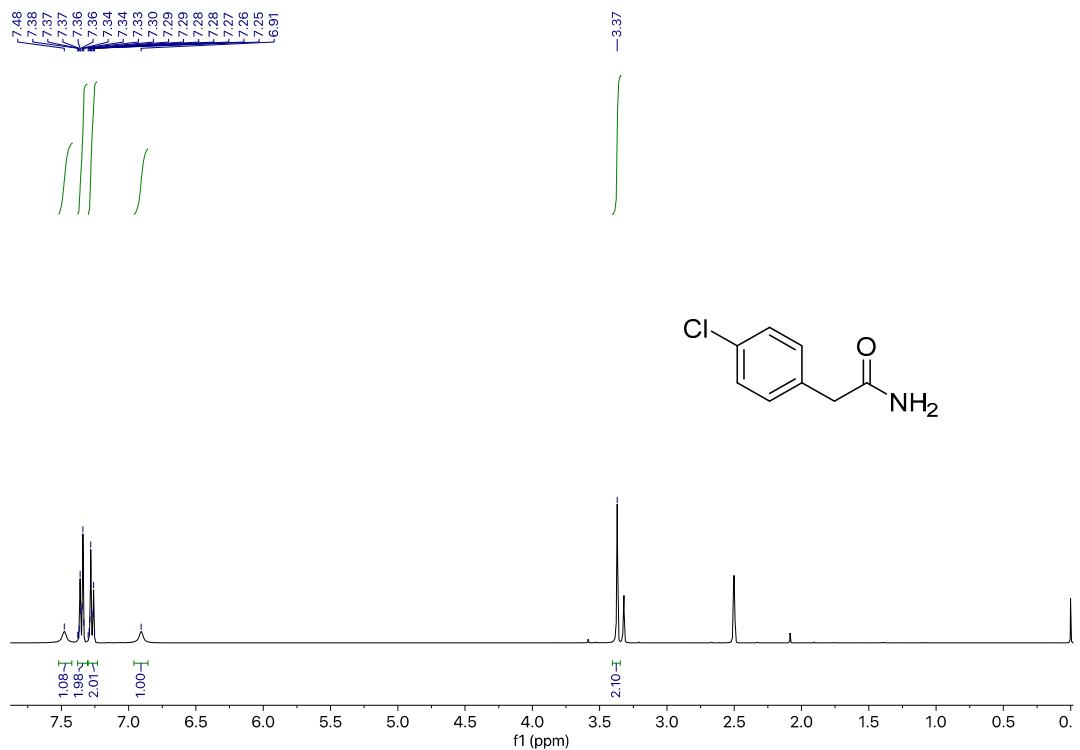
¹H NMR for 2-(2-Fluorophenyl)acetamide (14)



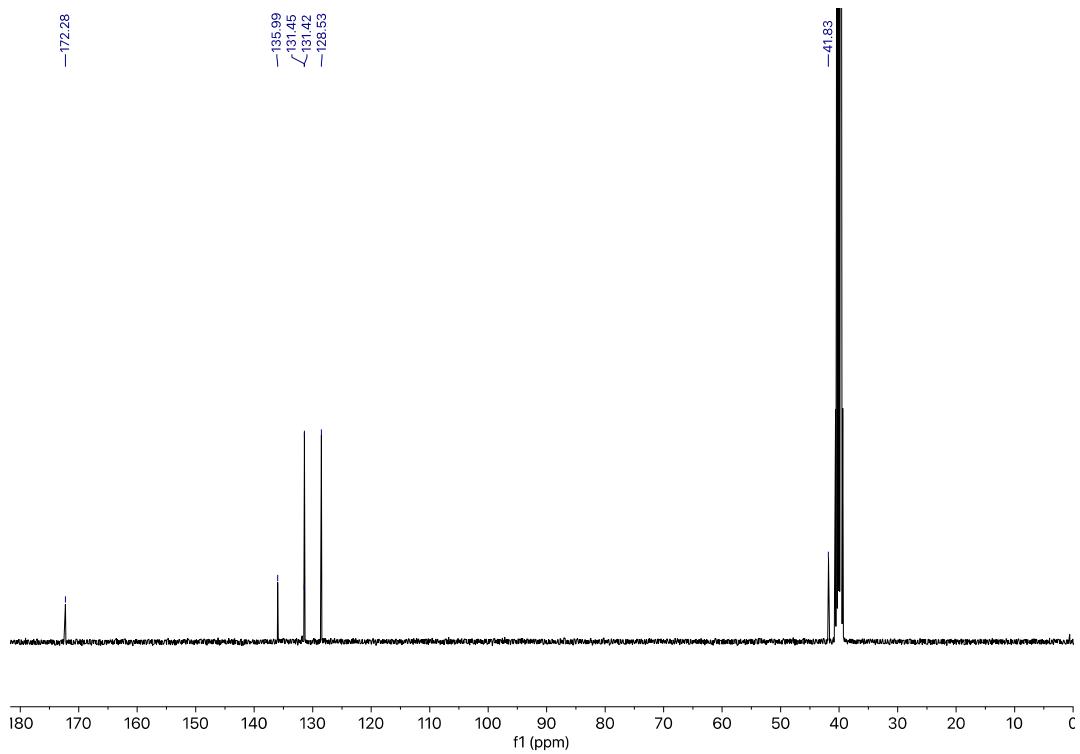
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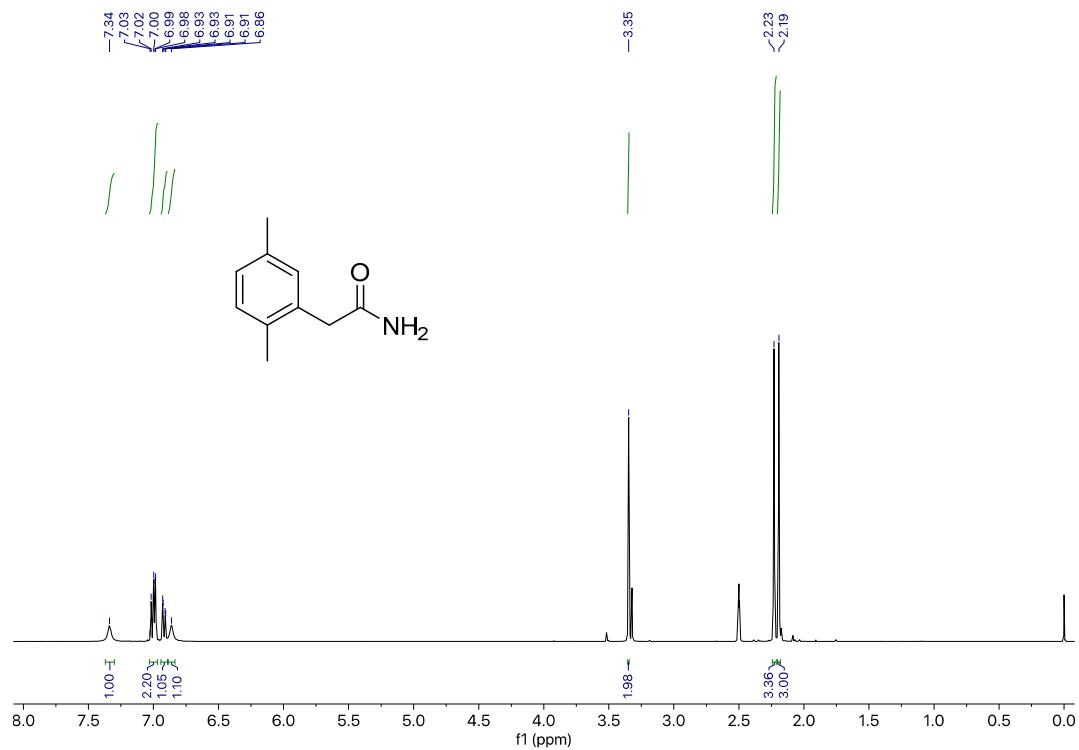
¹H NMR for 2-(4-Chlorophenyl)acetamide (15)



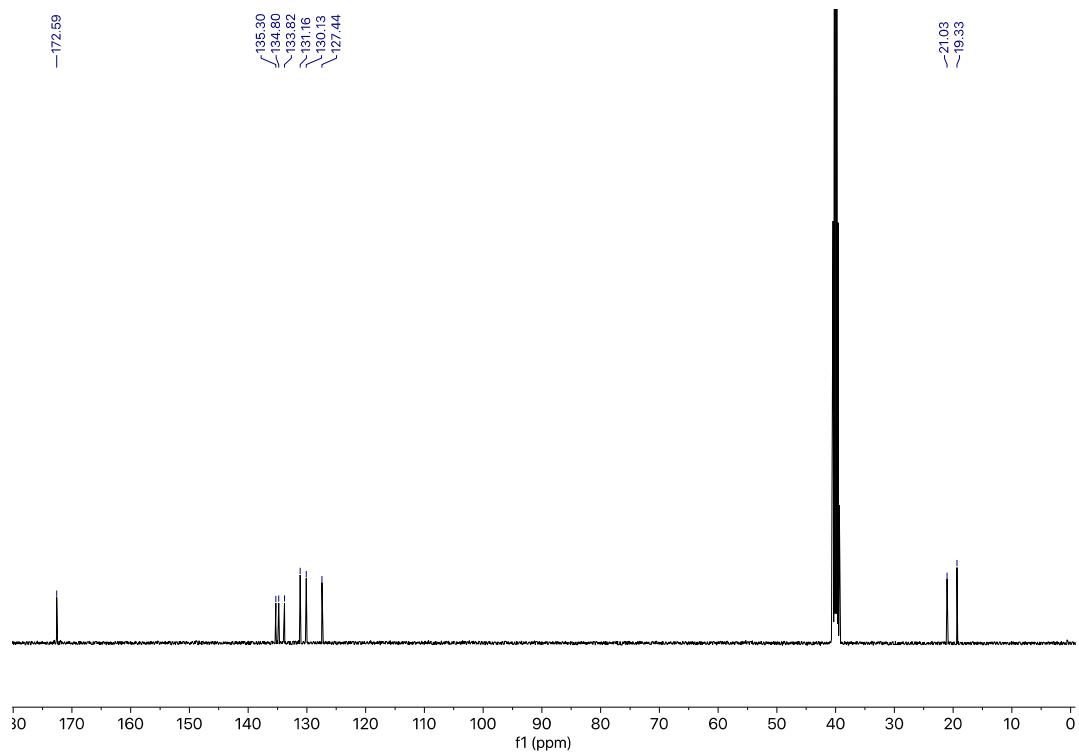
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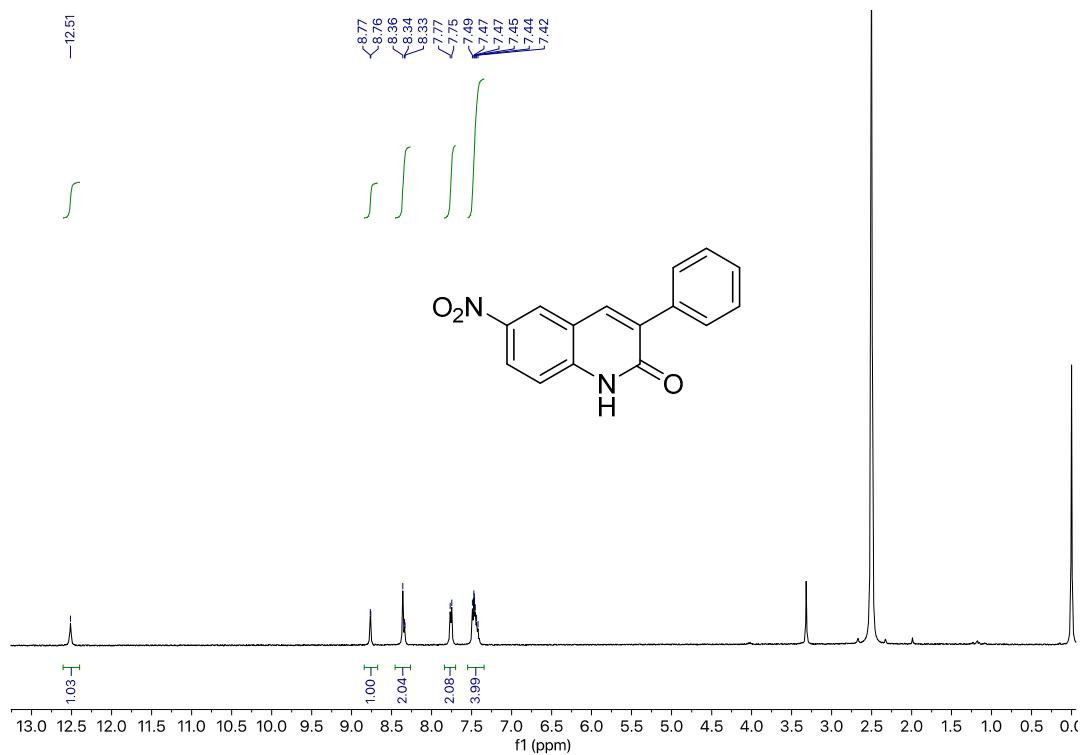
¹H NMR for 2-(2,5-Dimethylphenyl)acetamide (16)



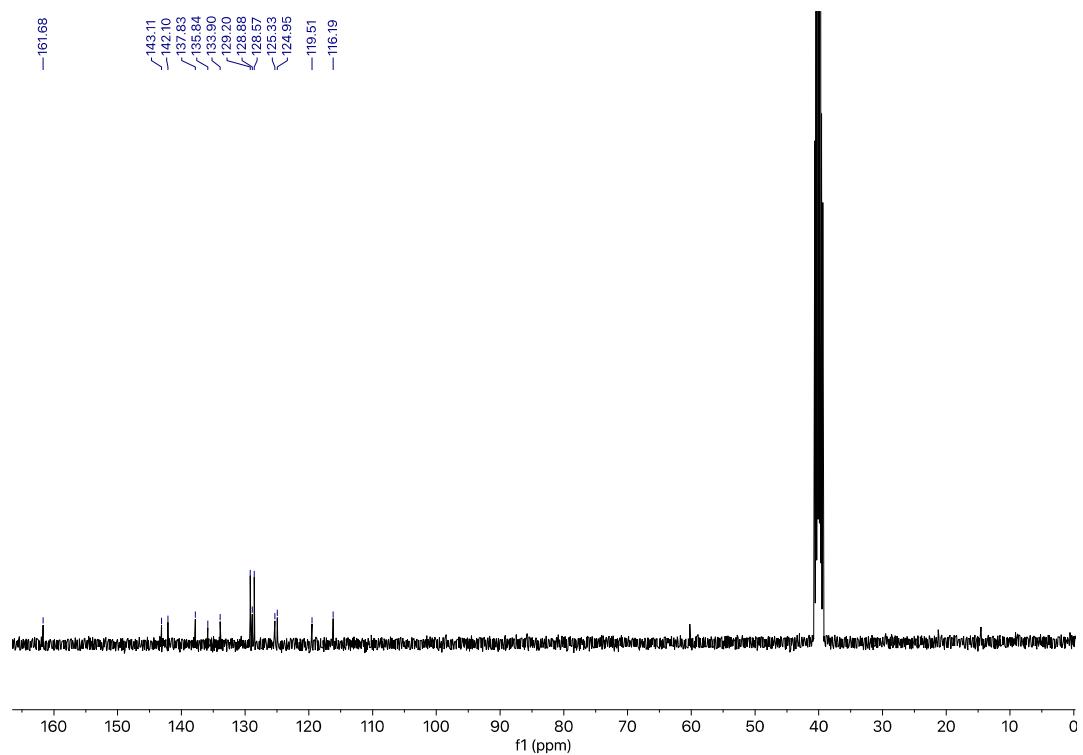
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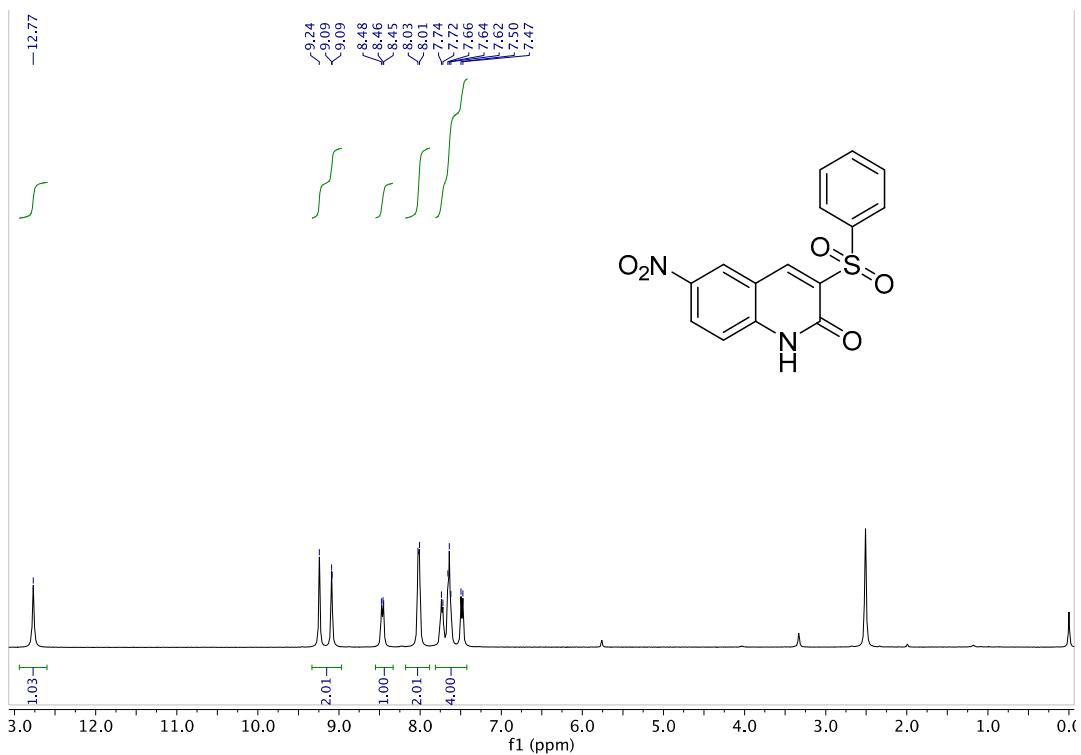
¹H NMR for 6-Nitro-3-phenylquinolin-2(1H)-one (17)



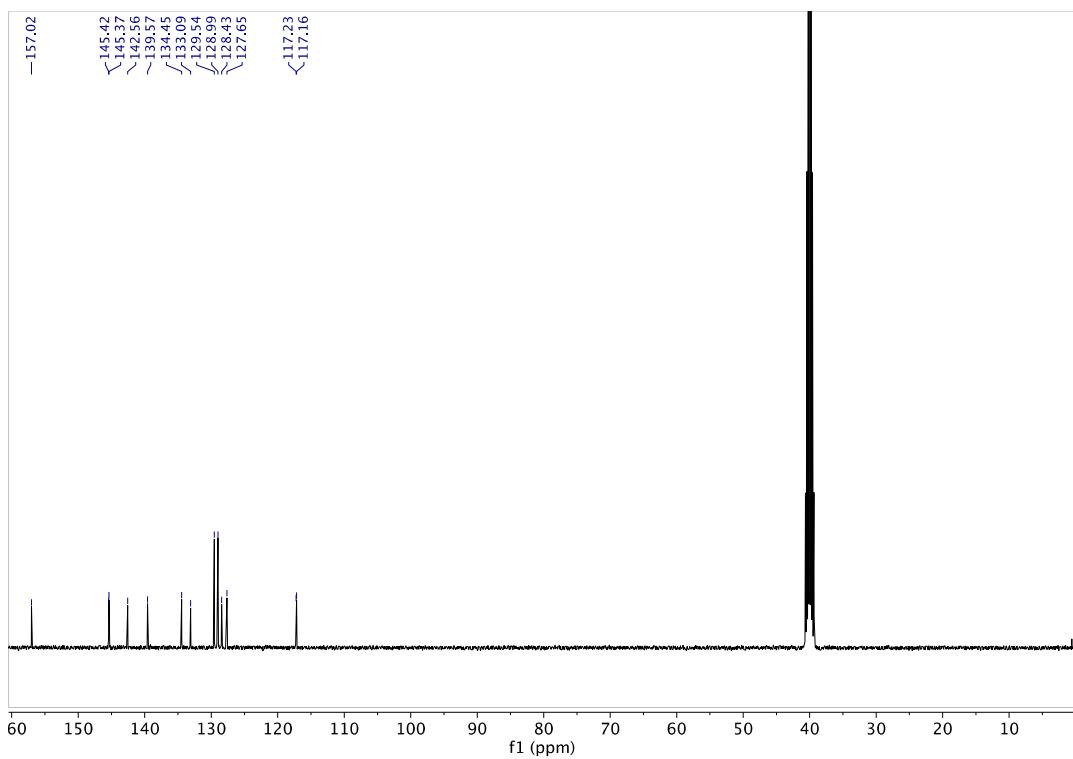
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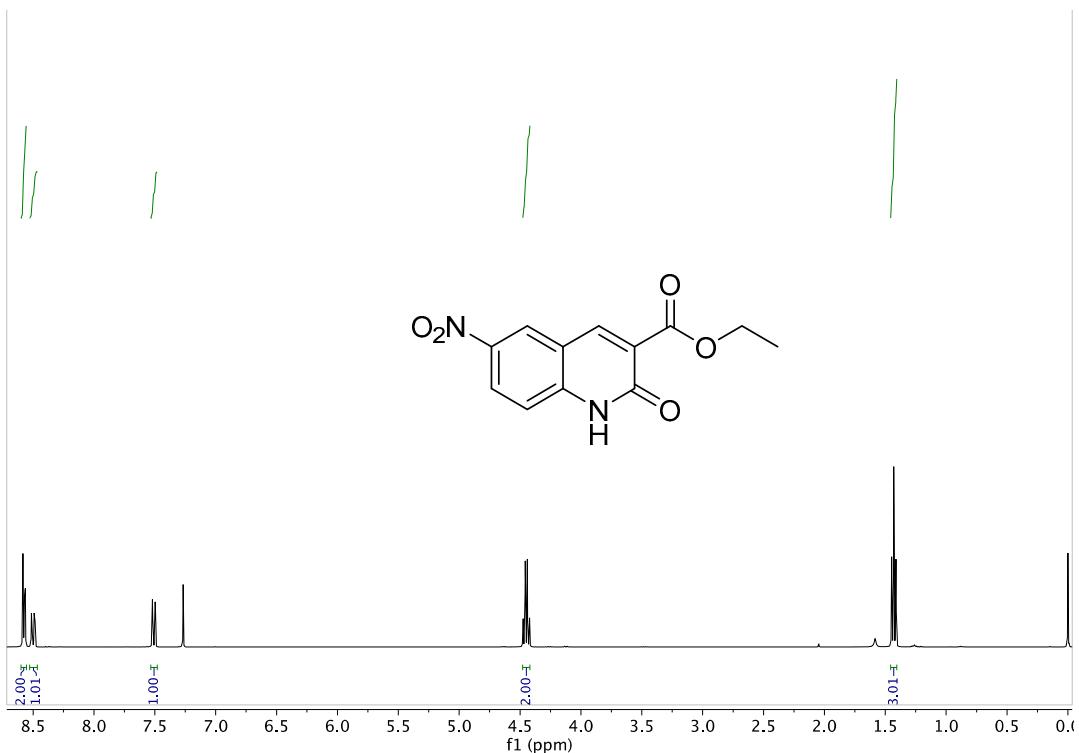
¹H NMR for 6-Nitro-3-(phenylsulfonyl)quinolin-2(1H)-one (18)



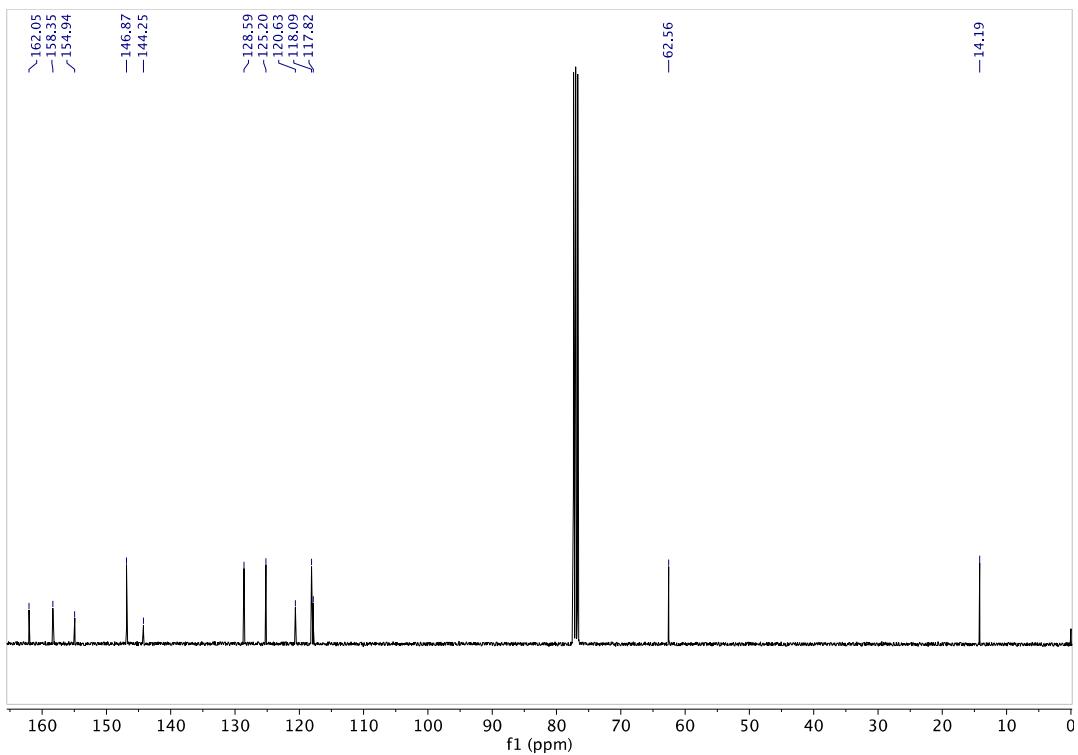
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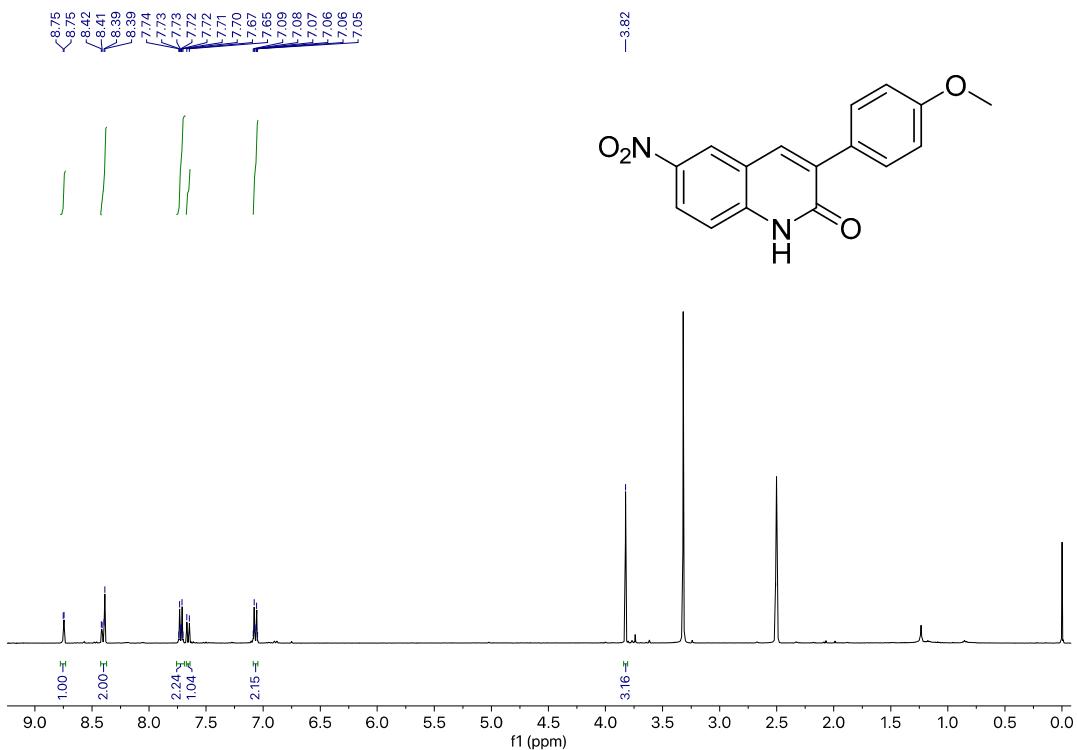
¹H NMR for 3-Carbethoxy-6-nitroquinolin-2(1H)-one (19)



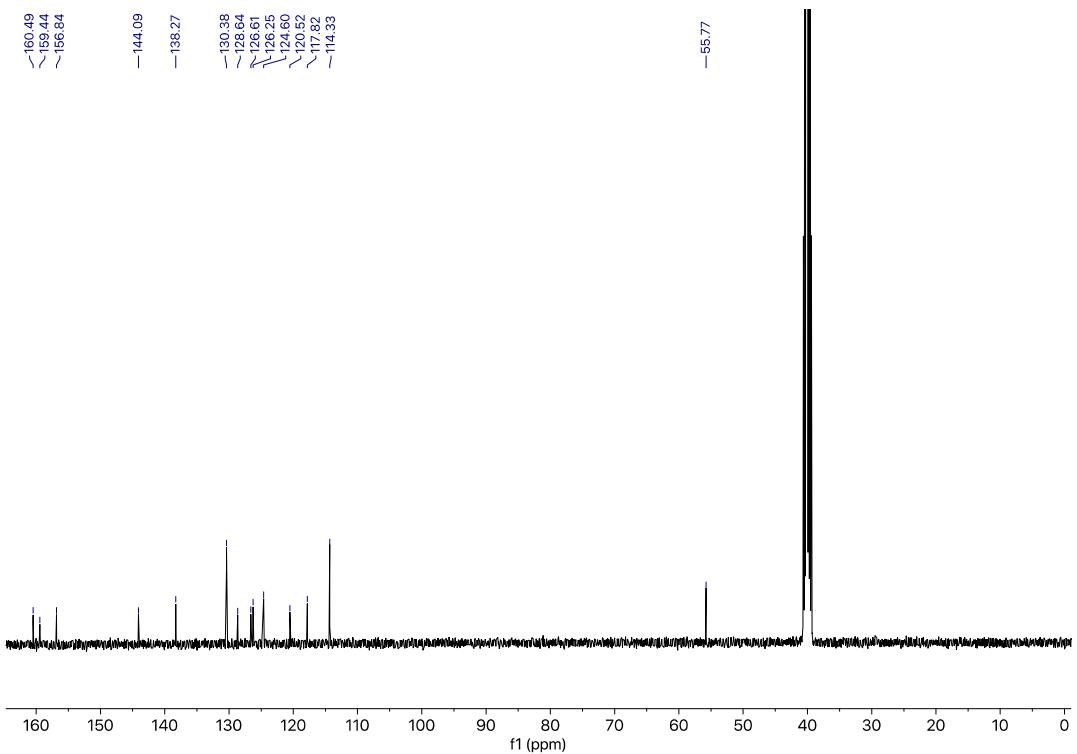
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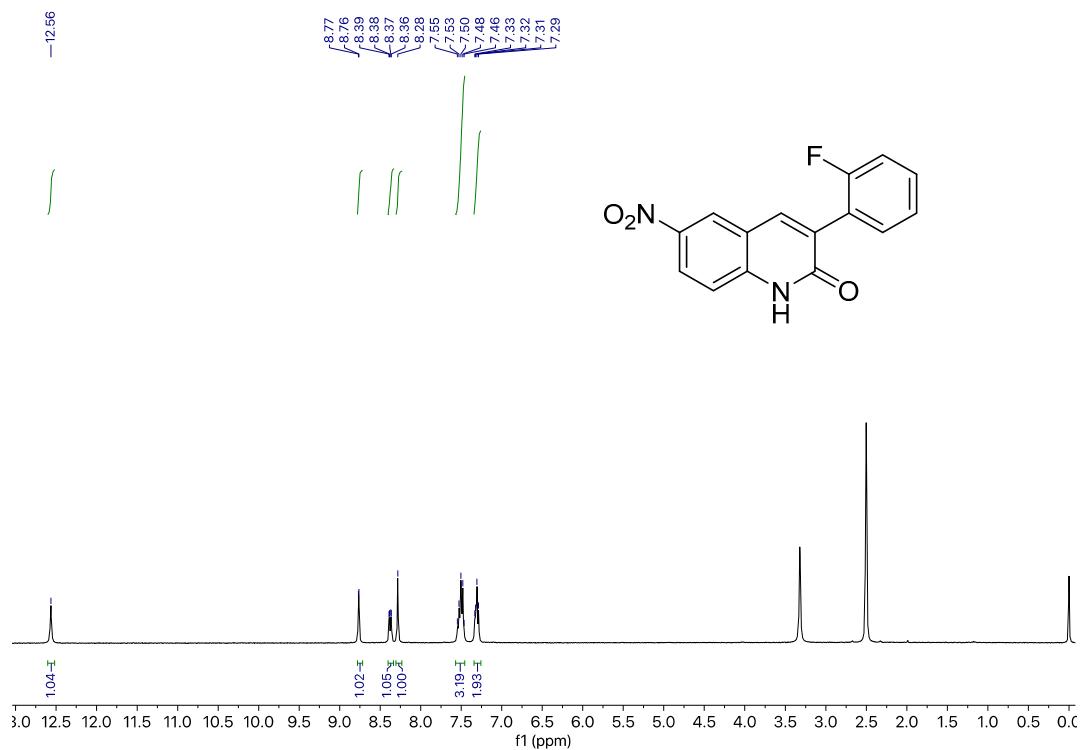
¹H NMR for 3-(4-Methoxyphenyl)-6-nitroquinolin-2(1H)-one (20)



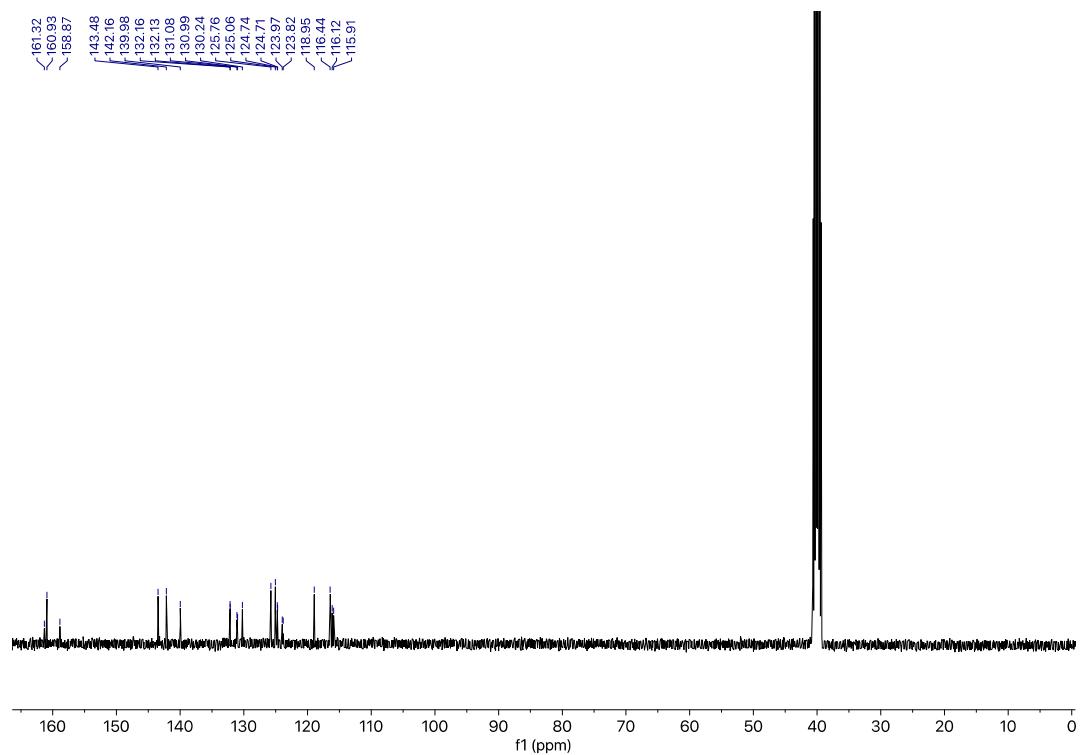
¹³C NMR for 3-(4-Methoxyphenyl)-6-nitroquinolin-2(1H)-one (20)



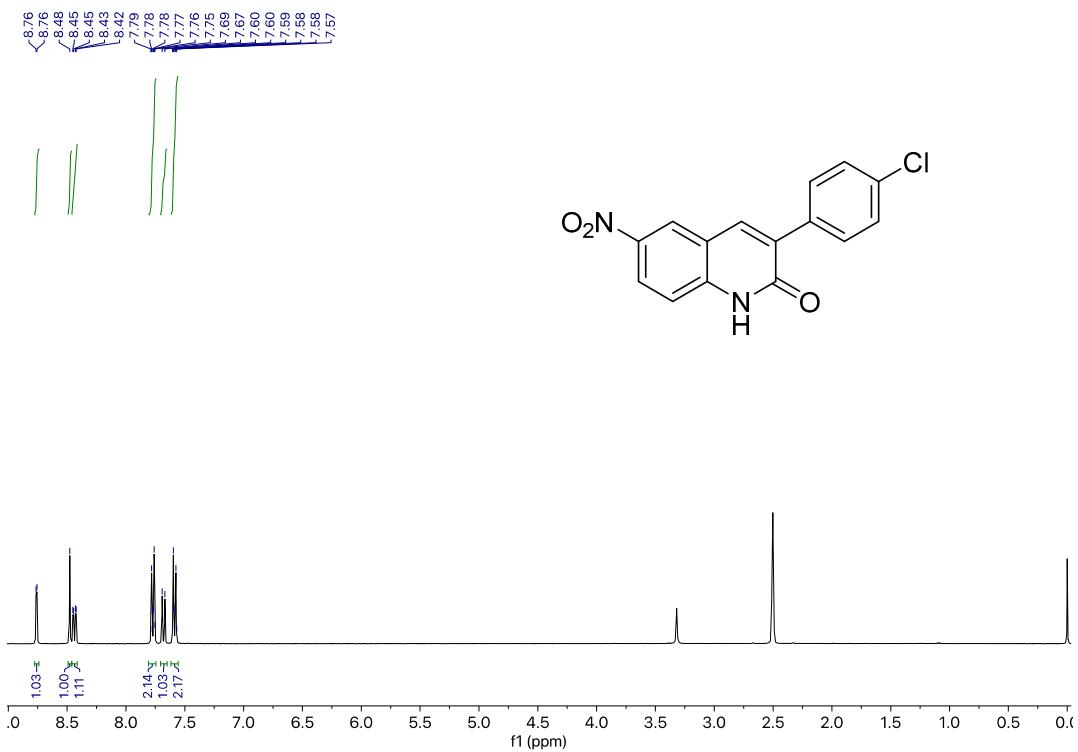
¹H NMR for 3-(2-Fluorophenyl)-6-nitroquinolin-2(1H)-one (21)



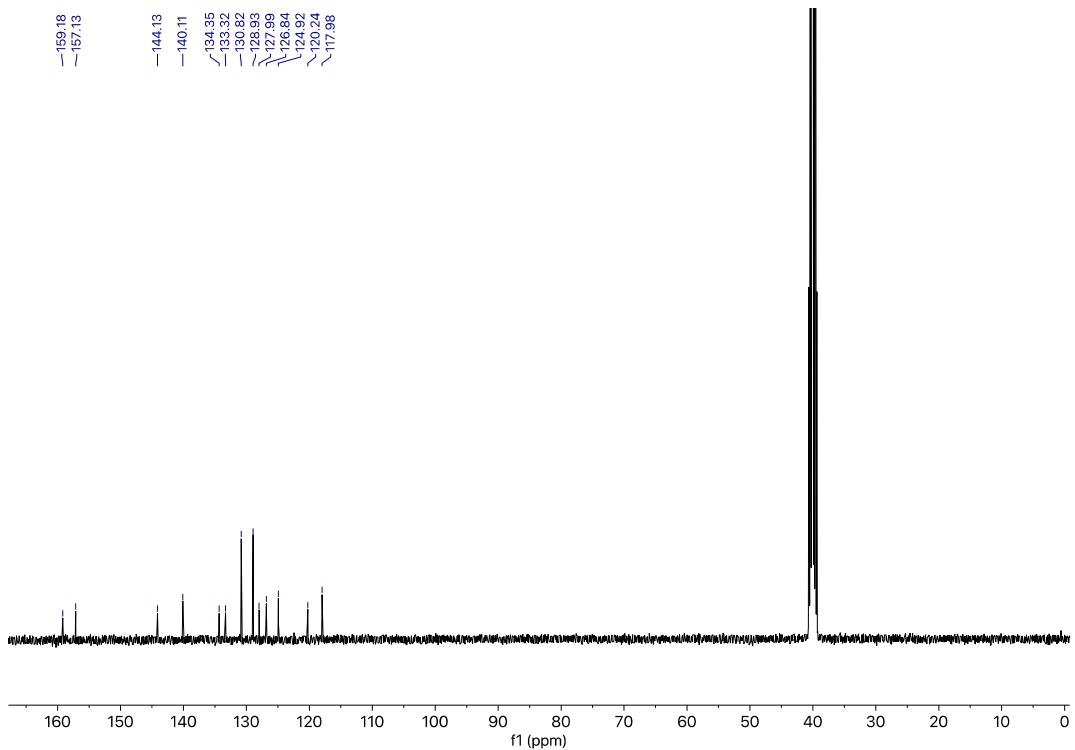
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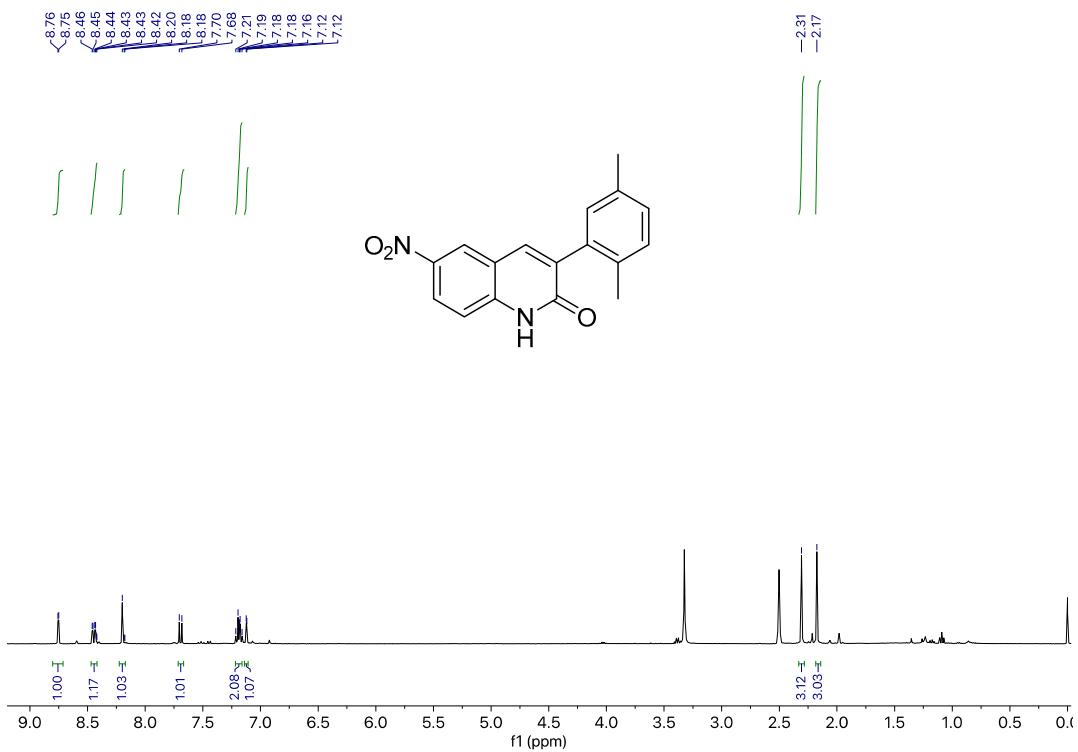
¹H NMR for 3-(4-Chlorophenyl)-6-nitroquinolin-2(1H)-one (22)



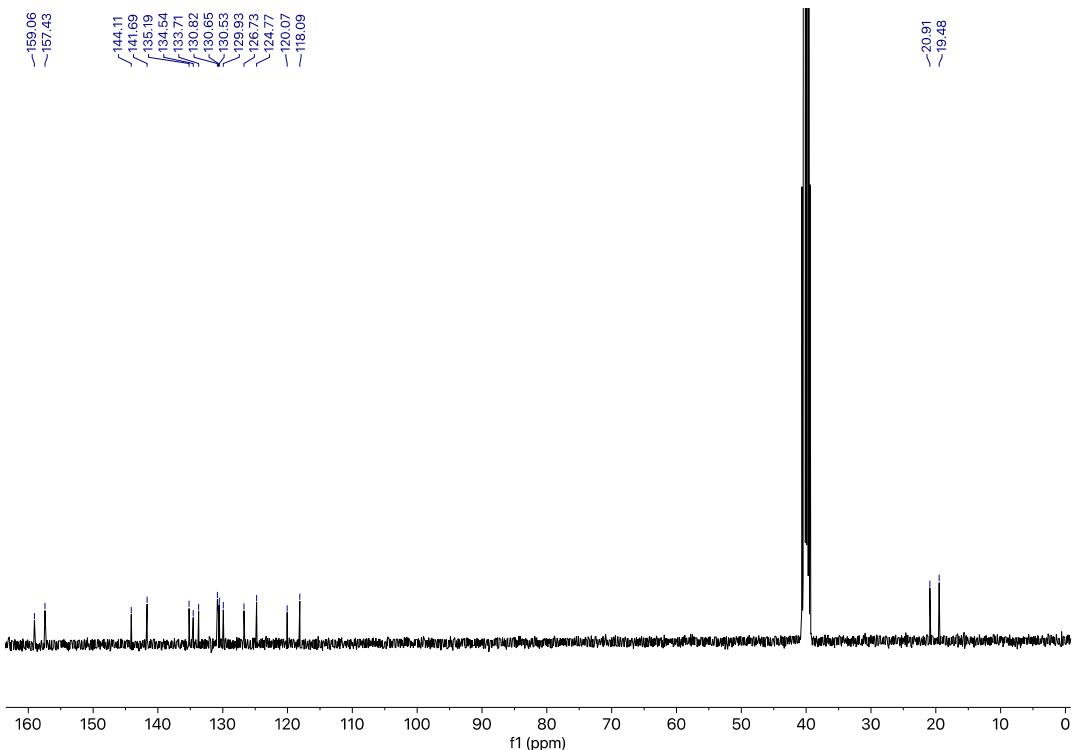
¹³C NMR for 3-(4-Chlorophenyl)-6-nitroquinolin-2(1H)-one (22)



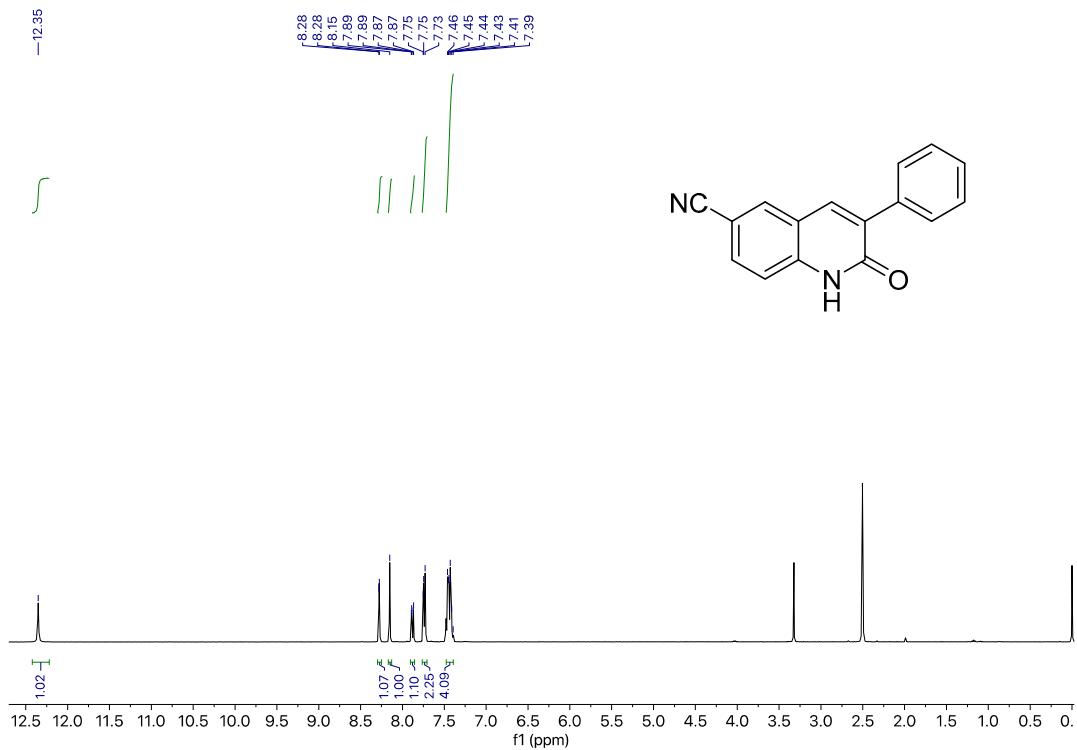
¹H NMR for 3-(2,5-Dimethylphenyl)-6-nitroquinolin-2(1H)-one (23)



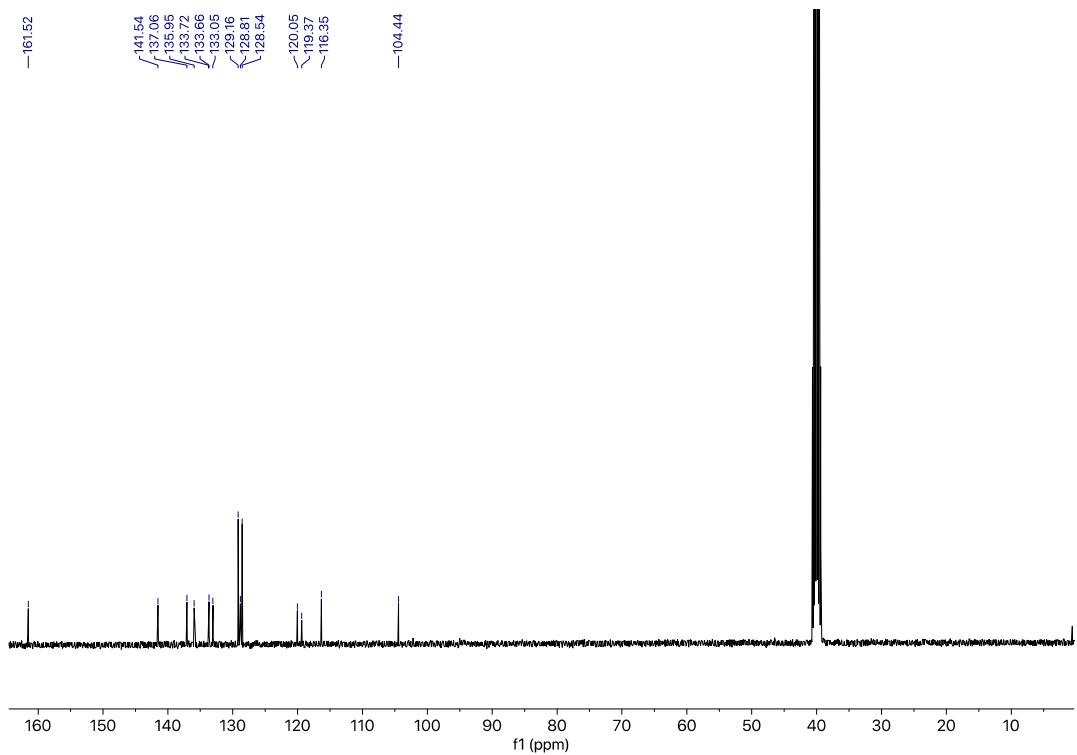
¹³C NMR for 3-(2,5-Dimethylphenyl)-6-nitroquinolin-2(1H)-one (23)



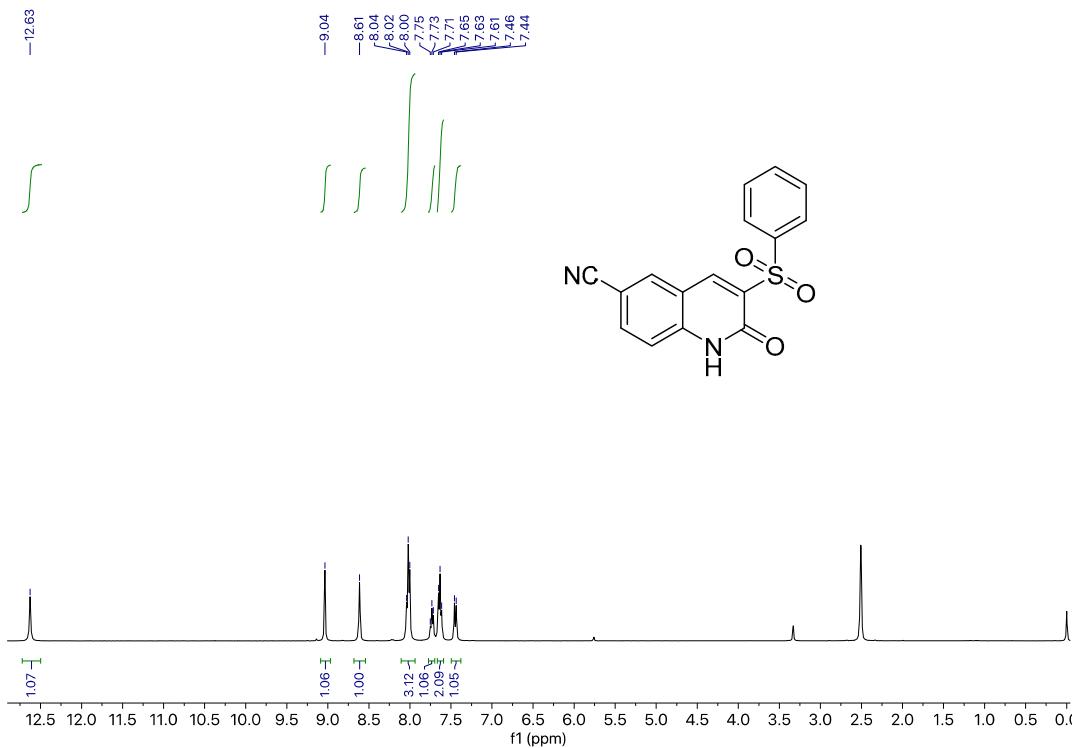
¹H NMR for 2-6-Cyano-3-phenylquinolin-2(1H)-one (24)



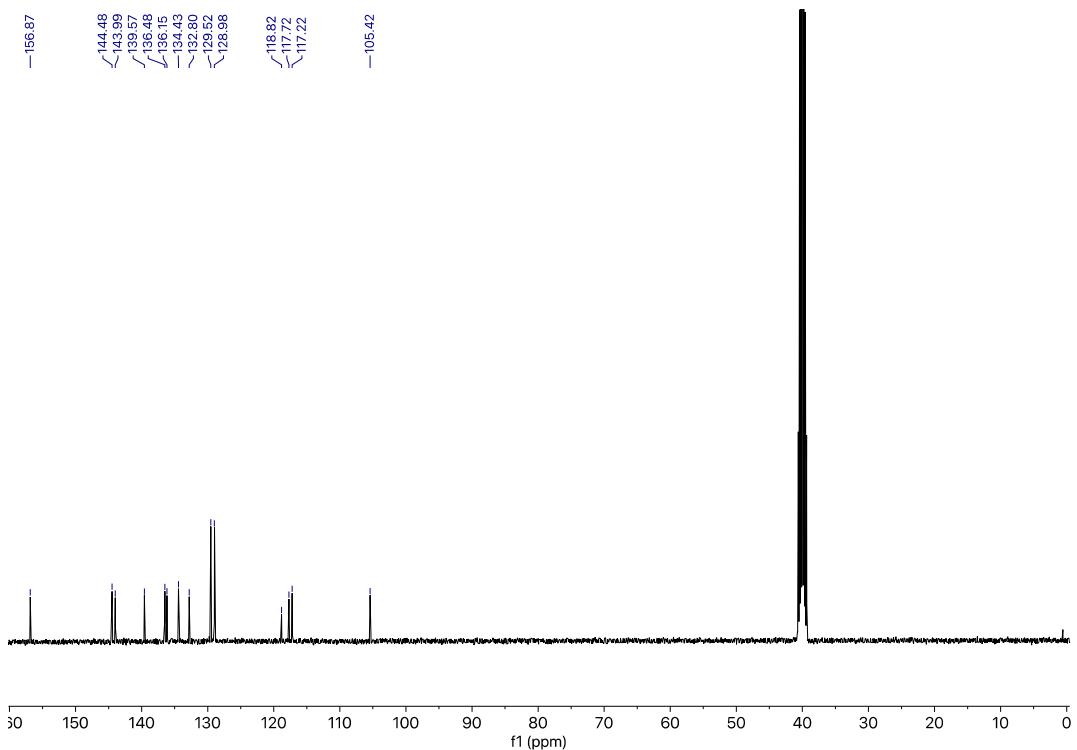
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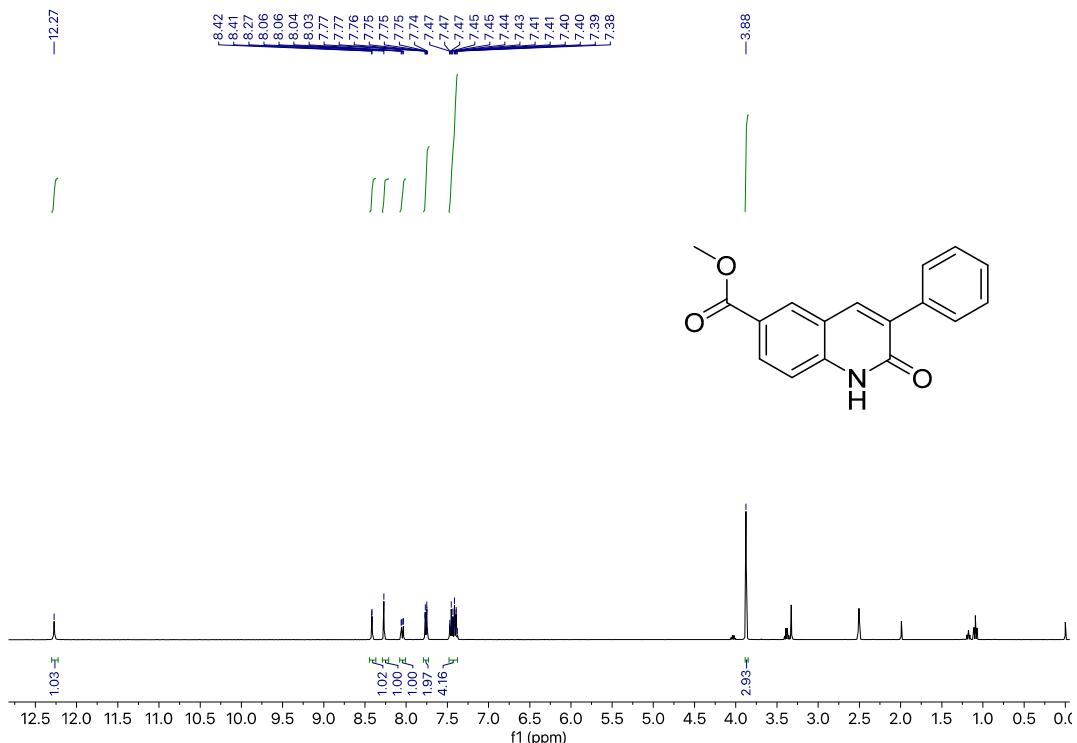
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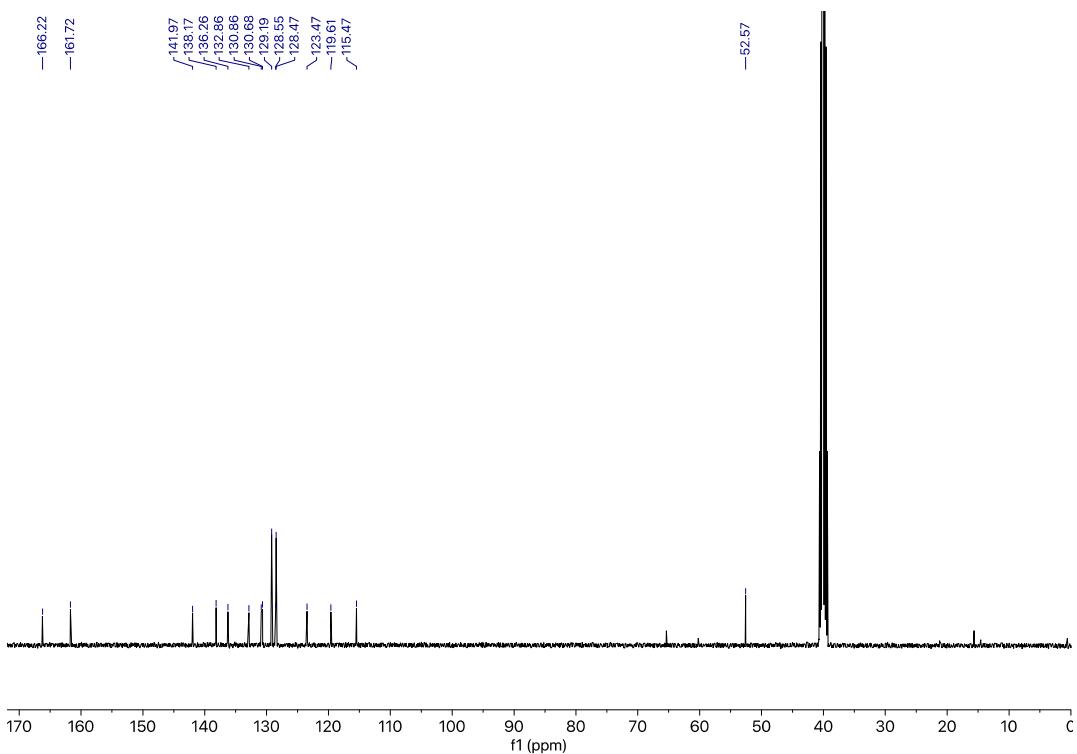
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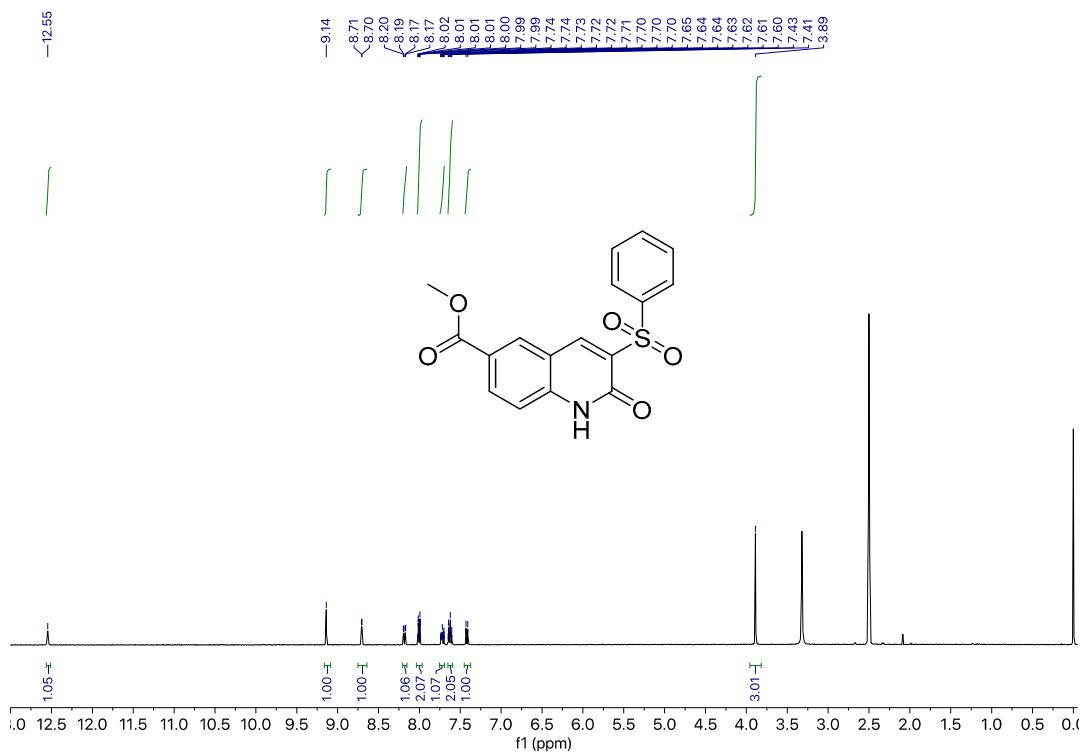
¹H NMR for 6-Carbomethoxy-3-phenylquinolin-2(1H)-one (26)



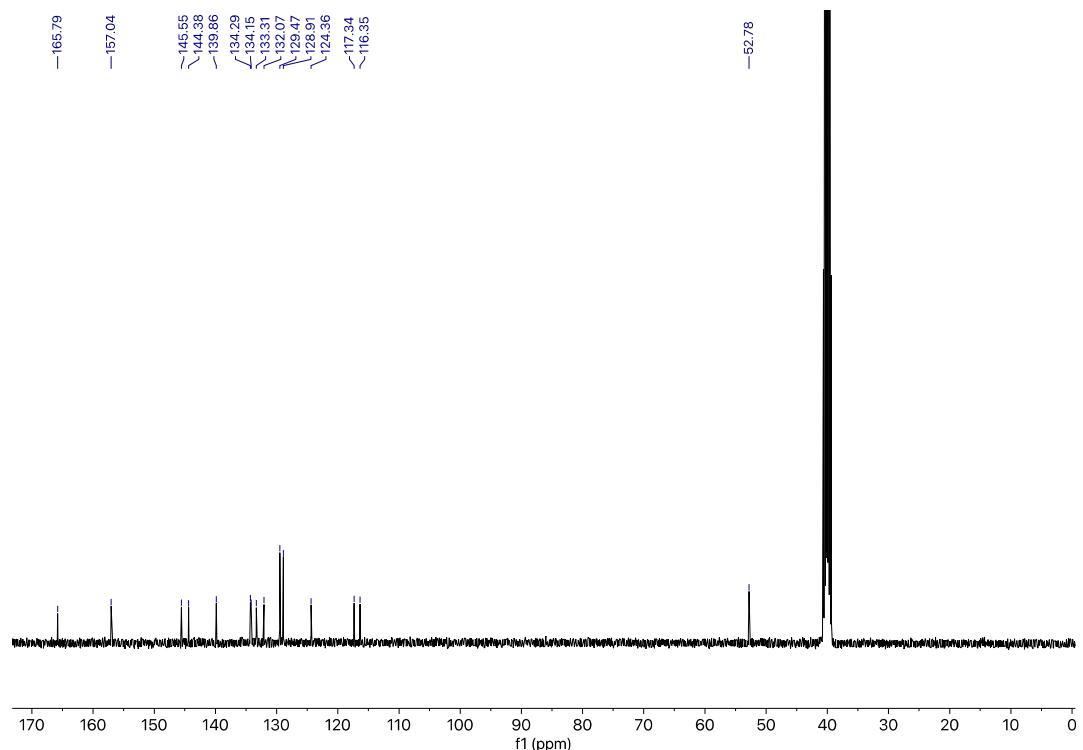
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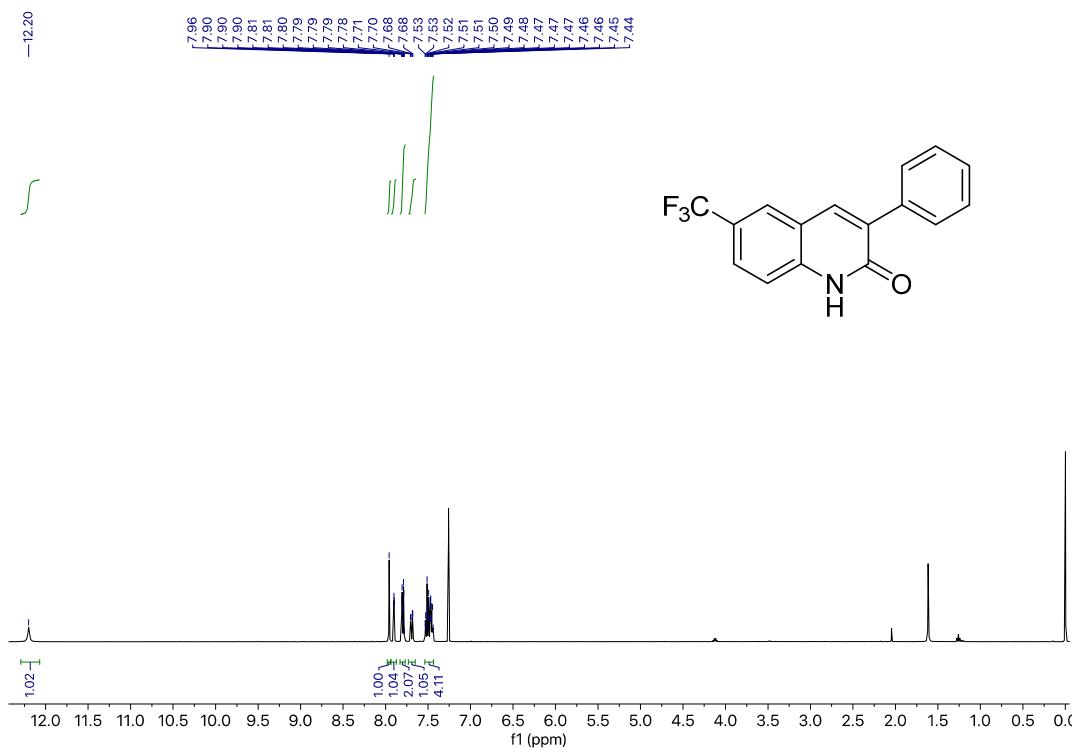
¹H NMR for 6-Carbomethoxy-3-(phenylsulfonyl)quinolin-2(1H)-one (27)



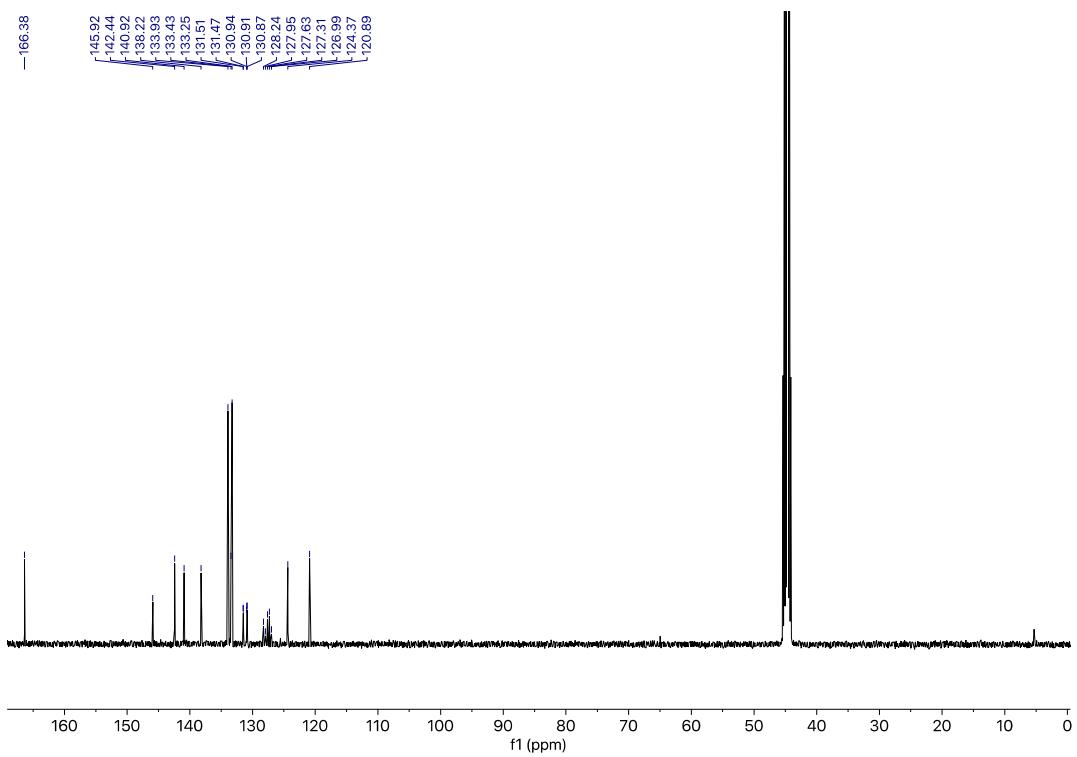
¹³C NMR for 6-Carbomethoxy-3-(phenylsulfonyl)quinolin-2(1H)-one (27)



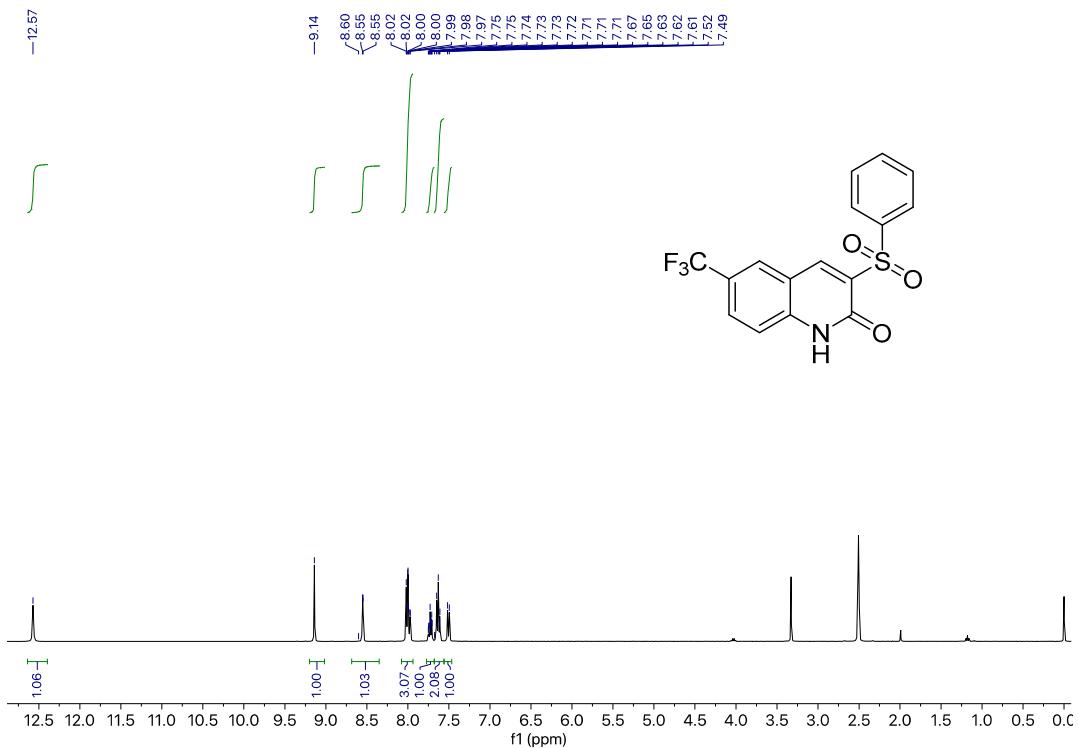
¹H NMR for 3-Phenyl-6-(trifluoromethyl)quinolin-2(1H)-one (28)



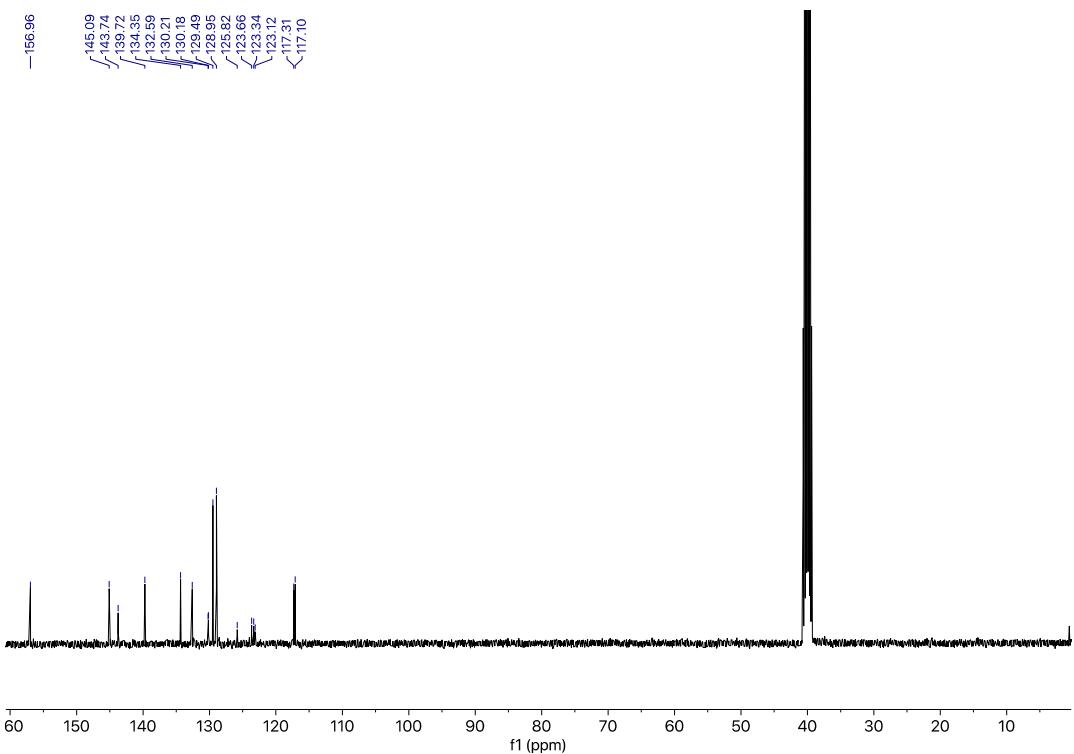
¹³C NMR for 3-Phenyl-6-(trifluoromethyl)quinolin-2(1H)-one (28)



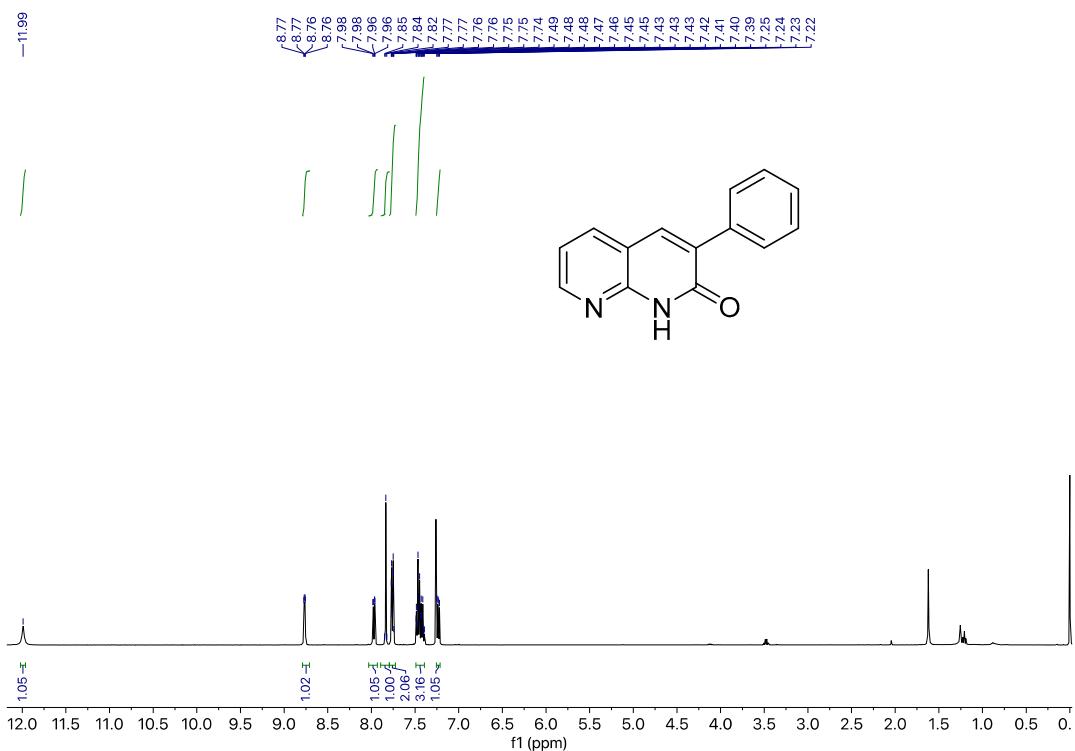
¹H NMR for 3-(Phenylsulfonyl)-6-(trifluoromethyl)quinolin-2(1H)-one (29)



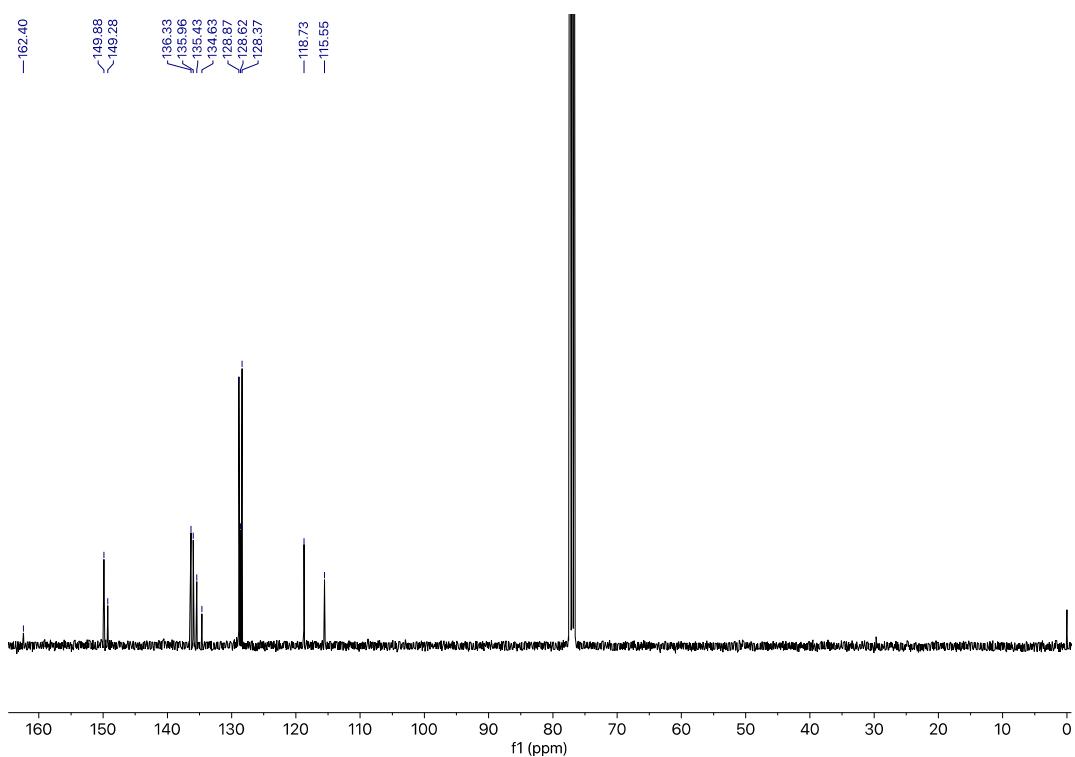
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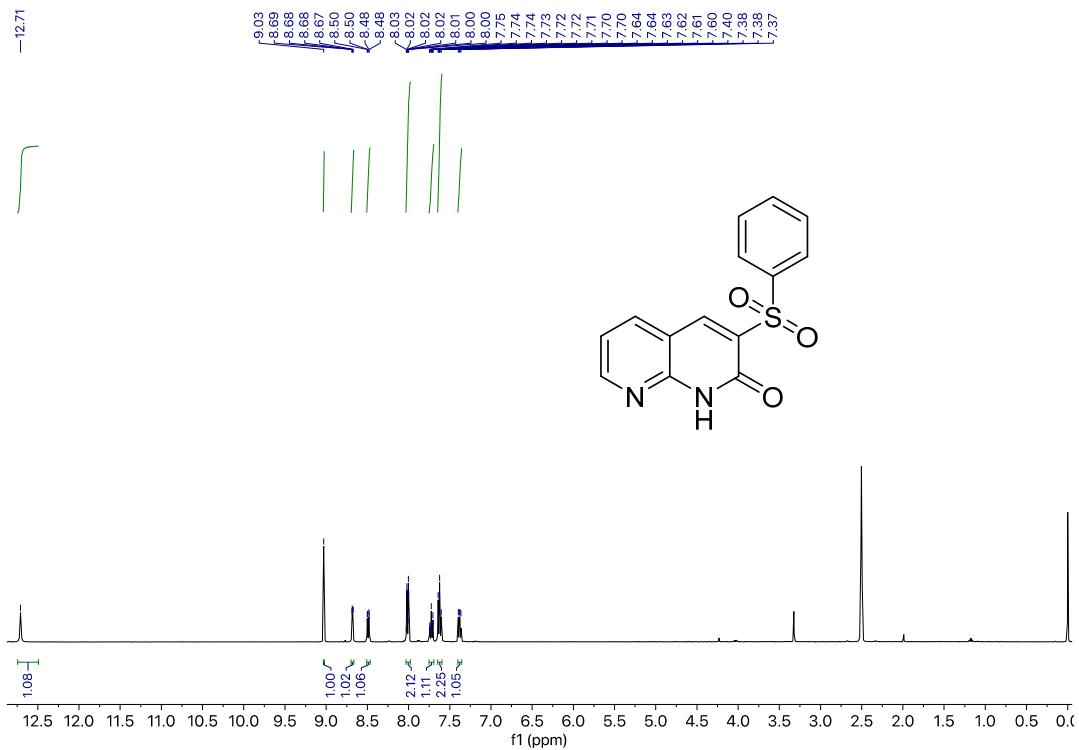
¹H NMR for 3-Phenyl-1,8-naphthyridin-2(1H)-one (30)



¹³C NMR for 3-Phenyl-1,8-naphthyridin-2(1H)-one (30)



¹H NMR for 3-(Phenylsulfonyl)-1,8-naphthyridin-2(1H)-one (31)



¹³C NMR for 3-(Phenylsulfonyl)-1,8-naphthyridin-2(1H)-one (31)

