Supporting Information

Transition-metal-free dibenzoxazepinone synthesis by hypervalent iodine-mediated chemoselective arylocyclizations of *N*-functionalized salicylamides

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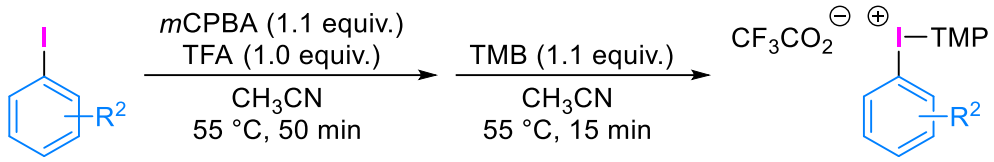
1. General Information

Experiment and materials: All commercially available reagents were used as received unless otherwise noted. The diaryliodonium salts were synthesized according to procedures described below. All reactions that required heating were conducted with aluminum block. All electrochemical experiments were conducted with ElectraSyn 2.0 and standard equipment. Flash column chromatography and analytical TLC were carried out on Merck Silica gel 60 (230-400 mesh) and Merck Silica gel F_{254} plates (0.25 mm), respectively. The spots and bands were detected by UV irradiation (254 or 365 nm) or by staining with 3% *p*-anisaldehyde followed by heating.

Analysis: Melting points were measured using a Büchi B 545 apparatus and are uncorrected. ^{1}H, ^{13}C and ^{19}F nuclear magnetic resonance (NMR) spectra were recorded on a JEOL JMN-400 spectrometer operating at 400 MHz (^{1}H NMR), 100 MHz (^{13}C NMR) and 376 MHz (^{19}F NMR) in $CDCl_3$ or DMSO-d_6 at 25 °C. The chemical shifts in ^{1}H NMR, ^{13}C NMR, and ^{19}F NMR spectrum were recorded relative to residual solvent peaks ($CDCl_3$: δ 7.26 or tetramethylsilane: δ 0.00 or DMSO-d_6: δ 2.50 for ^{1}H NMR, $CDCl_3$: δ 77.0 or DMSO-d_6: δ 39.5 for ^{13}C NMR, and 4-fluorotoluene: δ −121.0 for ^{19}F NMR). The data are reported as follows: chemical shift in ppm (δ), multiplicity (s = singlet, d = doublet, t = triplet, q = quartet and m = multiplet), coupling constant (Hz), and integration. Infrared spectra (IR) were obtained using a Hitachi 270-50 spectrometer; absorptions are reported in reciprocal centimeters (cm^{-1}) for strong and structurally important peaks. High resolution mass spectra (HRMS) were obtained using a JMS-T100LP AccuTOF^{TM} LC-Express.

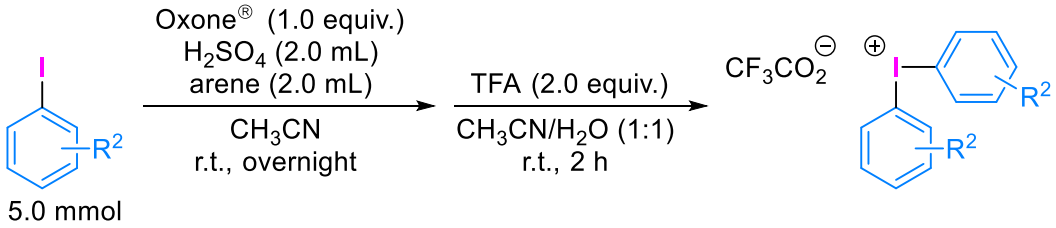
2. Preparation of diaryliodonium salts

A; The synthesis of aryl(TMP)iodonium trifluoroacetates



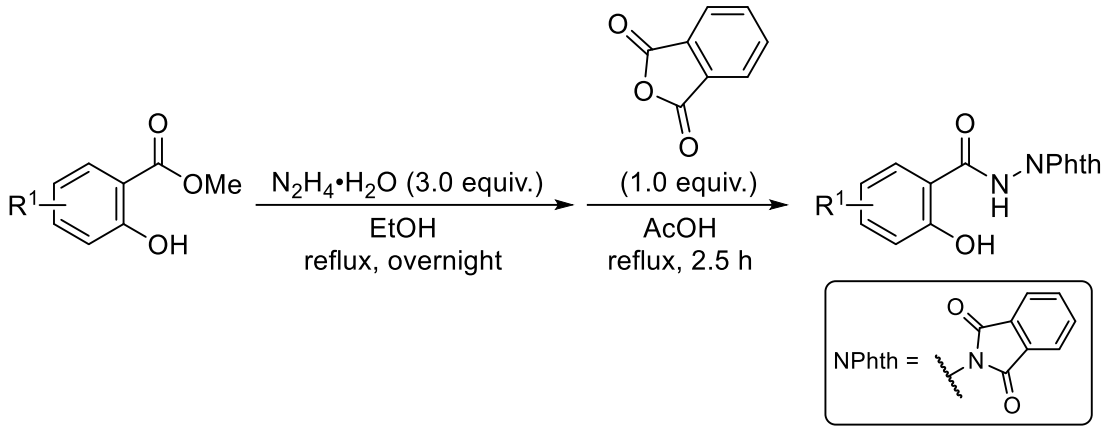
Aryl(TMP)iodonium trifluoroacetates were prepared according to the previously reported procedure.[S1] Iodoarene (2.0–10 mmol) was dissolved in acetonitrile (1.0 M), and ca. 70% wet *m*-chloroperbenzoic acid (*m*CPBA, 1.1 equiv.) and trifluoroacetic acid (TFA, 1.0 equiv.) were added to the solution at room temperature. The reaction mixture was stirred at 55 °C for 50 min. 1,3,5-Trimethoxybenzene (TMB, 1.1 equiv.) was then added, and the reaction mixture was stirred at 55 °C for further 15 min. After cooling to room temperature, the volatiles were removed under reduced pressure. Addition of diethyl ether to the residue generated a precipitant, which was collected by filtration to afford the corresponding aryl(TMP)iodonium trifluoroacetate.

B; The synthesis of diaryliodonium trifluoroacetates



Symmetric diaryliodonium trifluoroacetates were prepared according to the previously reported procedure.[S2] Iodoarene (5.0 mmol) was dissolved in acetonitrile (10 mL, 0.5 M), and Oxone® (5.0 mmol, 1.0 equiv., 3074 mg), arene (2.0 mL), and sulfuric acid (2.0 mL) were added to the solution at room temperature. The reaction mixture was stirred overnight at room temperature, then TFA (10 mmol, 2.0 equiv., 0.77 mL) in H_2O (10 mL) was added to the reaction mixture. After stirring for 2 hours at room temperature, the resulting mixture was extracted with dichloromethane. The combined organic fractions were dried over solid Na_2SO_4, then all volatiles were removed in *vacuo*. Addition of diethyl ether to the residue generated a precipitant, which was collected by filtration to afford the corresponding diaryliodonium trifluoroacetate.

3. Preparation of *N*-NPhth salicylamides

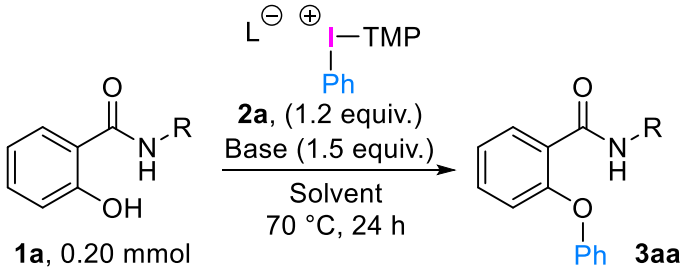


N-NPhth salicylamides were prepared according to the previously reported procedure.[S3] Salicylic acid methyl ester (5–10 mmol) was dissolved in ethanol (10–20 mL, 0.5 M), and hydrazine monohydrate (3.0 equiv.) was added to the solution at room temperature. The reaction mixture was then refluxed and stirred overnight. After cooling to room temperature, the resulting mixture was extracted with dichloromethane. The combined organic fractions were dried over solid Na_2SO_4, then all volatiles were removed in *vacuo*. The hydrazide product was used in the next step without further purification.

The hydrazide (1.0 equiv.) was dissolved in acetic acid (0.13 M), and phthalic anhydride (1.0 equiv.) was added to the solution at room temperature. The reaction mixture was refluxed and stirred for 2.5 hours. After cooling to room temperature, ice water was added to the resulting mixture to generate a precipitant, which was collected by filtration to afford the corresponding *N*-NPhth salicylamide.

4. *O*-Arylation with aryl(TMP)iodonium trifluoroacetates

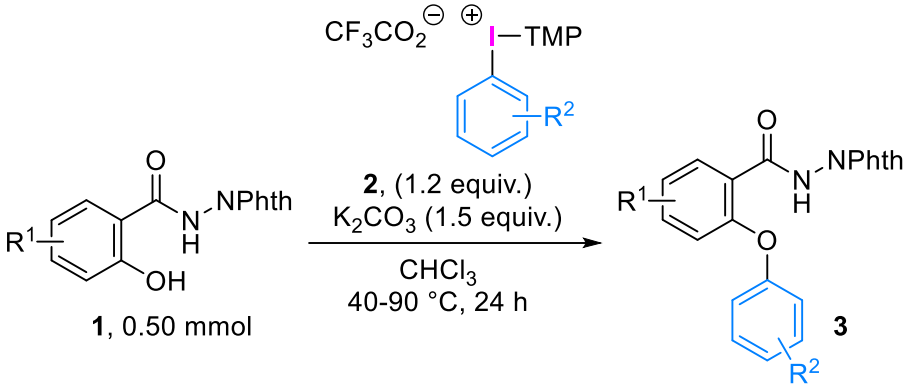
Table S1. Optimization of reaction conditions for *O*-arylation[a]



Entry	R	Base	Solvent	L	Yield (%)[b]
1	OMe	Na_2CO_3	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	42
2	O^{t}Bu	Na_2CO_3	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	0
3	NPhth	Na_2CO_3	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	41
4	NPhth	-	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	19
5	NPhth	$NaHCO_3$	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	40
6	NPhth	K_2CO_3	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	52
7	NPhth	Cs_2CO_3	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	49
8	NPhth	Et_3N	$(CH_2Cl)_2/H_2O$ (1:1)	OAc	39
9	NPhth	K_2CO_3	$(CH_2Cl)_2$	OAc	70
10	NPhth	K_2CO_3	H_2O	OAc	trace
11	NPhth	K_2CO_3	$CHCl_3$	OAc	74
12	NPhth	K_2CO_3	CH_3CN	OAc	39
13	NPhth	K_2CO_3	THF	OAc	25
14	NPhth	K_2CO_3	$PhCF_3$	OAc	20
15	NPhth	K_2CO_3	DMF	OAc	trace
16	NPhth	K_2CO_3	2Me-THF	OAc	trace
17	NPhth	K_2CO_3	MeOH	OAc	0
18[c]	NPhth	K_2CO_3	CPME	OAc	59
19	NPhth	K_2CO_3	$CHCl_3$	$OCOCF_3$	95(90)[d]
20	NPhth	K_2CO_3	$CHCl_3$	OTs	88

[a] Reaction conditions: **1a** (0.20 mmol), **2a** (1.2 equiv.), and Base (1.5 equiv.) in Solvent (2.0 mL) at 70 °C for 24 h. [b] Yields were determined by ^{1}H NMR. [c] The reaction was conducted at 100 °C. [d] Isolated yield.
TMP = 2,4,6-Trimethoxyphenyl. NPhth = Phthalimide. CPME = Cyclopentyl methyl ether

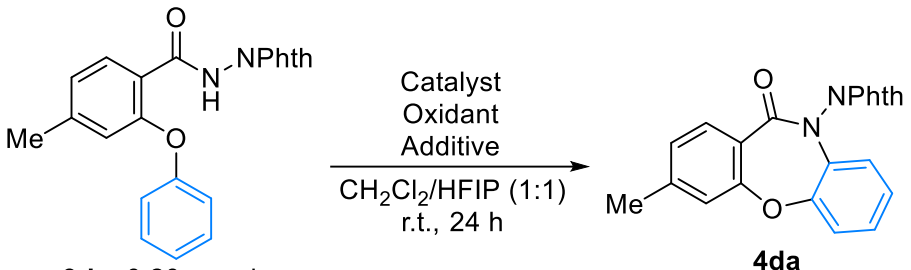
General procedure 1 (GP-1); *O*-Arylation of *N*-NPhth salicylamides



N-NPhth salicylamide (**1**, 0.50 mmol), aryl(TMP)iodonium trifluoroacetate (**2**, 0.60 mmol, 1.2 equiv.), and potassium carbonate (0.75 mmol, 1.5 equiv., 103.7 mg) were dissolved in chloroform (5.0 mL, 0.10 M) in a screw-capped test tube. The reaction mixture was stirred at 40-90 °C for 24 hours. The resulting solution was cooled to room temperature, and the insoluble materials were removed by cerite filtration with dichloromethane (30 mL). The filtrate was concentrated under reduced pressure, and the residue was purified by flash column chromatography to afford the *O*-arylation product **3**.

5. *N*-Arylation with *μ*-oxo hypervalent iodine catalysts

Table S2. Optimization of reaction conditions for *N*-arylation with *μ*-oxo hypervalent iodine catalysts[a]



3da, 0.20 mmol

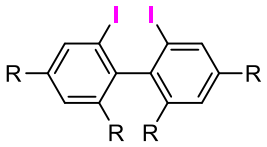
4da

Entry	Oxidant	Additive	Catalyst	Yield (%)[b]
1	*m*CPBA	TFA	A	79[c]
2	9% AcOOH	TFA	A	73
3	*m*CPBA	-	A	62
4	*m*CPBA	TFA	B	84
5	*m*CPBA	TFA	C	38
6	*m*CPBA	TFA	D	32
7	*m*CPBA	TFA	E	50

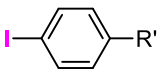
[a] Reaction conditions: **3da** (0.20 mmol), Catalyst (5 mol%), Oxidant (1.1 equiv.) and Additive (2.0 equiv.) in Solvent (2.0 mL) at room temperature for 24 h. [b] Yields were determined by ^{1}H NMR. [c] Isolated yield.

HFIP = 1,1,1,3,3,3-Hexafluoro-2-propanol

Catalyst

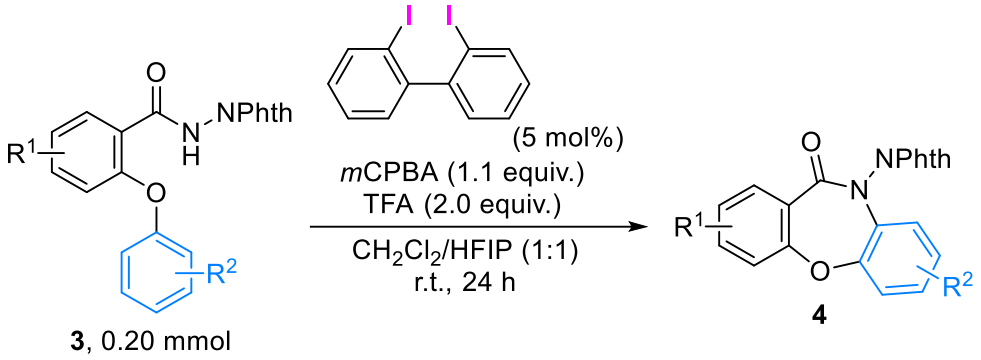


A; R = H
B; R = Me



C; R' = H
D; R' = Me
E; R' = OMe

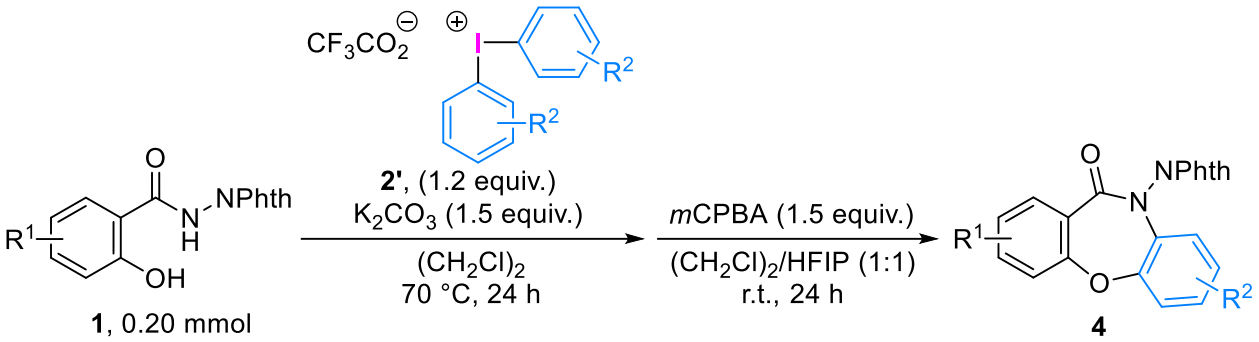
General procedure 2 (GP-2); *N*-Arylation of *O*-arylated salicylamides



O-Arylated salicylamide (**3**, 0.20 mmol), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), ca. 70% wet *m*CPBA (0.22 mmol, 1.1 equiv., 54.2 mg), and trifluoroacetic acid (TFA, 0.30 mmol, 2.0 equiv., 31 µL) were dissolved in dichloromethane–1,1,1,3,3,3-hexafluuoroisopropanol (HFIP) (1:1, 2.0 mL, 0.10 M) in a screw-capped test tube, and the mixture was stirred at room temperature for 24 hours. After removal of all volatiles in *vacuo*, the residue was treated with saturated $NaHCO_3$ aq. then extracted with dichloromethane (3 × 10 mL). The combined organic fractions were dried over solid Na_2SO_4. After evaporation of the solvent, the residue was purified by flash column chromatography to afford the dibenzoxazepinone product **4**.

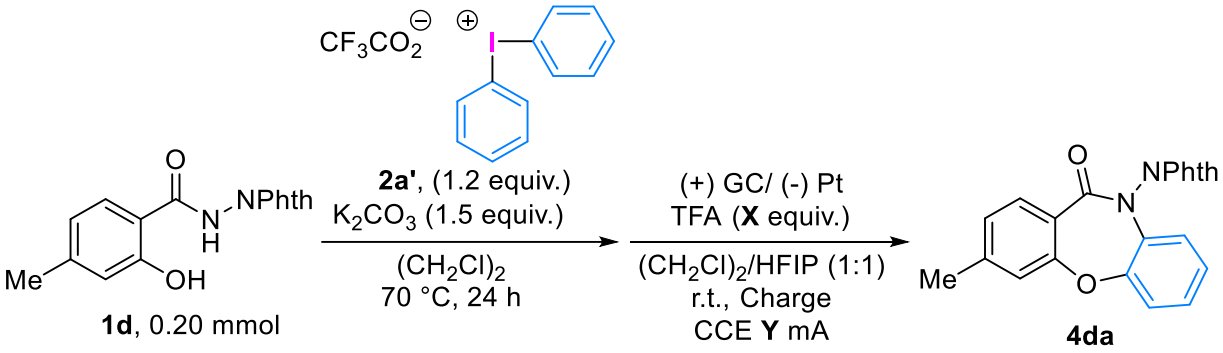
6. One-pot dibenzoxazepinone synthesis through chemical or electrolytic conditions

General procedure 3 (GP-3); One-pot dibenzoxazepinone synthesis (chemical conditions)



N-NPhth salicylamide (**1**, 0.20 mmol), symmetric diaryliodonium trifluoroacetate (**2'**, 0.24 mmol, 1.2 equiv.), and potassium carbonate (0.30 mmol, 1.5 equiv., 41.5 mg) were dissolved in dichloroethane (2.0 mL, 0.10 M) in a screw-capped test tube, and the mixture was stirred at 70 °C for 24 hours. After cooling to room temperature, ca. 70% wet *m*CPBA (0.30 mmol, 1.5 equiv., 74.0 mg) and HFIP (2.0 mL) were added to the reaction mixture, which was then stirred for 24 hours. The resulting reaction mixture was treated with saturated $NaHCO_3$ aq. then it was extracted with dichloromethane (3 × 10 mL). The combined organic fractions were dried over solid Na_2SO_4. After evaporation of the solvent, the residue was purified by flash column chromatography to afford the dibenzoxazepinone product **4**.

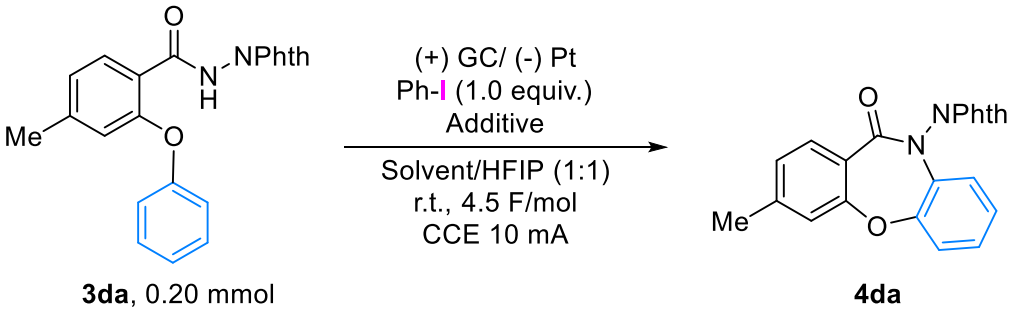
Table S3. Optimization of one-pot dibenzoxazepinones synthesis through electrolytic conditions



Entry	Charge	**X**	**Y**	Yield (%)[a]
1	2.7 F/mol	10	10	44
2	4.5 F/mol	10	10	61
3	5.6 F/mol	10	10	33
4	4.5 F/mol	5	10	50
5	4.5 F/mol	15	10	55
6	4.5 F/mol	10	7.5	57
7	4.5 F/mol	10	12.5	58

[a] Isolated yield.

Table S4. Other experiments of electrolytic conditions



Entry	Additive	Solvent	Yield (%)[d]
1[a]	CF_3CO_2H (10 equiv.), CF_3CO_2K (4.0 equiv.)	$(CH_2Cl)_2$	85
2[a,b]	CF_3CO_2H (10 equiv.), CF_3CO_2K (4.0 equiv.)	$(CH_2Cl)_2$	decomp.
3[a,c]	CF_3CO_2H (10 equiv.), CF_3CO_2K (4.0 equiv.)	$(CH_2Cl)_2$	14
4	CF_3CO_2H (10 equiv.), CF_3CO_2K (4.0 equiv.)	CH_3CN	39
5	CF_3CO_2H (10 equiv.)	$(CH_2Cl)_2$	0[e]

[a] Reaction time; 3 h. [b] Without Ph-I. [c] 4-MeOPh-I was used instead of Ph-I.
[d] Yields were determined by ^1H NMR. [e] Resistance too high.

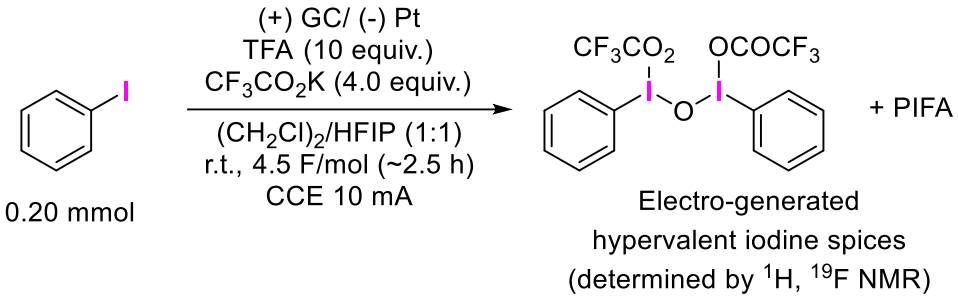
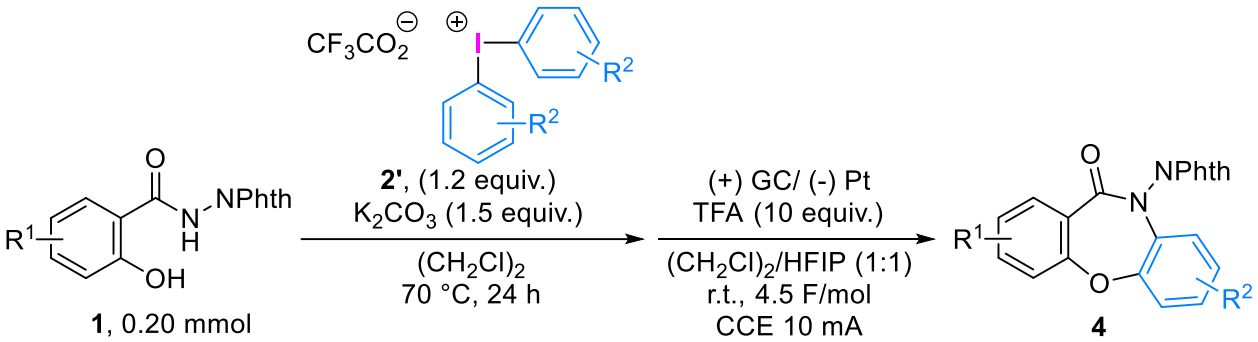


Fig S1. Electro-oxidation of iodobenzene

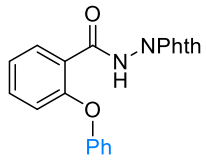
General procedure 4 (GP-4); One-pot dibenzoxazepinone synthesis (electrolytic conditions)



N-NPhth salicylamide (**1**, 0.20 mmol), symmetric diaryliodonium trifluoroacetate (**2'**, 0.24 mmol, 1.2 equiv.), and potassium carbonate (0.30 mmol, 1.5 equiv., 41.5 mg) were dissolved in dichloroethane (2.5 mL, 0.080 M) in a 10 mL glass vial. The reaction mixture was then stirred at 70 °C for 24 hours. After cooling to room temperature, TFA (2.0 mmol, 10 equiv., 153 µL) and HFIP (2.5 mL) were added to the glass vial. The vial cap was equipped with glassy carbon anode and platinum foil cathode. The vial was connected to ElectraSyn 2.0, and a constant current of 10 mA was applied to the reaction mixture by stirring at room temperature until 4.5 F/mol was passed. After electrolysis, all volatiles were removed in *vacuo*. The residue was then treated with saturated $NaHCO_3$ aq., and the resulting solution was extracted with dichloromethane (3 × 10 mL). The combined organic fractions were dried over solid Na_2SO_4. After evaporation of the solvent, the residue was purified by flash column chromatography to afford the dibenzoxazepinone product **4**.

7. Characterization data for products

N-(1,3-Dioxoisoindolin-2-yl)-2-phenoxybenzamide (3aa)



The title compound (**3aa**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.4 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 290.6 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.8 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 33:67) afforded **3aa** in 81% yield (145.8 mg) as a white amorphous solid.

Melting Point: 150.2–150.9 °C.

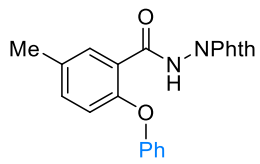
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.65 (s, 1H), 8.27 (dd, J = 8.0, 1.7 Hz, 1H), 7.92 (dd, J = 5.6, 3.2 Hz, 2H), 7.78 (dd, J = 5.4, 2.9 Hz, 2H), 7.47–7.41 (m, 3H), 7.27 (t, J = 7.6 Hz, 1H), 7.23-7.17 (m, 3H), 6.81 (dd, J = 8.3, 1.0 Hz, 1H).ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.3, 164.1, 157.0, 154.2, 134.6, 134.2, 132.9, 130.3, 130.2, 125.7, 123.9, 123.2, 121.1, 119.8, 116.9 ppm.

IR (KBr): 3357, 3062, 1739, 1682, 1602, 1473, 1224, 1119, 882, 706 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{15}O_4N_2^+$, 359.1026; found, 359.1024.

N-(1,3-Dioxoisoindolin-2-yl)-5-methyl-2-phenoxybenzamide (3ba)



The title compound (**3ba**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxy-5-methylbenzamide (**1b**, 0.50 mmol, 148.3 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 291.0 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.6 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 30:70) afforded **3ba** in 86% yield (160.0 mg) as a white amorphous solid.

Melting Point: 186.7–187.6 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 9.61 (s, 1H), 8.06 (d, J = 2.0 Hz, 1H), 7.92 (dd, J = 5.6, 3.2 Hz, 2H), 7.78 (dd, J = 5.6, 3.2 Hz, 2H), 7.45–7.41 (m, 2H), 7.27–7.18 (m, 4H), 6.72 (d, J = 8.3 Hz, 1H), 2.35

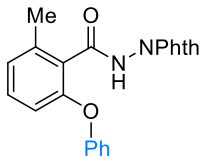
(s, 3H) ppm.

$^{13}C\{^{1}H\}$ NMR (100 MHz, $CDCl_3$): δ 165.2, 164.2, 154.8 (two peaks are overlapped), 134.8, 134.6, 133.0, 132.8, 130.2, 125.4, 123.9, 120.8, 119.7, 117.3, 20.4 ppm. (One carbon signal was not detected due to an occasion of overlapping.)

IR (KBr): 3352, 3060, 2925, 1736, 1680, 1485, 1283, 1119, 883, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{17}O_4N_2^+$, 373.1183; found, 373.1183.

N-(1,3-Dioxoisoindolin-2-yl)-2-methyl-6-phenoxybenzamide (3ca)



The title compound (**3ca**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxy-6-methylbenzamide (**1c**, 0.50 mmol, 148.5 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 291.4 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.2 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 33:67) afforded **3ca** in 57% yield (105.8 mg) as a white amorphous solid.

Melting Point: 193.0–193.8 °C.

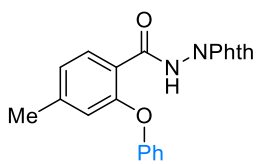
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.27 (s, 1H), 7.85 (dd, J = 5.6, 3.2 Hz, 2H), 7.75 (dd, J = 5.4, 2.9 Hz, 2H), 7.33 (dd, J = 8.5, 7.6 Hz, 2H), 7.20 (t, J = 7.8 Hz, 1H), 7.13–7.07 (m, 3H), 6.98 (d, J = 7.3 Hz, 1H), 6.72 (d, J = 8.3 Hz, 1H), 2.53 (s, 3H) ppm.

$^{13}C\{^{1}H\}$ NMR (100 MHz, $CDCl_3$): δ 165.7, 165.0, 156.6, 154.6, 140.0, 134.5, 131.2, 130.1, 129.8, 125.8, 124.6, 123.9, 123.8, 118.9, 116.0, 19.8 ppm.

IR (KBr): 3164, 2971, 1746, 1664, 1601, 1492, 1259, 1120, 903, 711 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{17}O_4N_2^+$, 373.1183; found, 373.1182.

N-(1,3-Dioxoisoindolin-2-yl)-4-methyl-2-phenoxybenzamide (3da)



The title compound (**3da**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxy-4-methylbenzamide (**1d**, 0.50 mmol, 148.4 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 290.4

mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.1 mg) at 70 °C for 36 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 33:67) afforded **3da** in 82% yield (152.9 mg) as a white amorphous solid.

Melting Point: 148.7–149.4 °C.

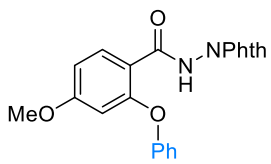
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.60 (s, 1H), 8.14 (d, J = 7.8 Hz, 1H), 7.89 (dd, J = 5.4, 2.9 Hz, 2H), 7.77 (dd, J = 5.4, 3.4 Hz, 2H), 7.43 (t, J = 8.0 Hz, 2H), 7.28–7.19 (m, 3H), 6.99 (d, J = 8.3 Hz, 1H), 6.58 (s, 1H), 2.28 (s, 3H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.3, 164.0, 156.8, 154.3, 145.4, 134.5, 132.7, 130.22, 130.17, 125.5, 124.2, 123.8, 121.0, 117.3, 117.2, 21.5 ppm.

IR (KBr): 3357, 3062, 2920, 1740, 1682, 1613, 1488, 1245, 882, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{17}O_4N_2^+$, 373.1183; found, 373.1184.

***N*-(1,3-Dioxoisoindolin-2-yl)-4-methoxy-2-phenoxybenzamide (3ea)**



The title compound (**3ea**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxy-4-methoxybenzamide (**1e**, 0.50 mmol, 156.2 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 290.4 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.6 mg) at 90 °C for 36 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 32:68) afforded **3ea** in 90% yield (175.2 mg) as a white amorphous solid.

Melting Point: 179.8–108.5 °C.

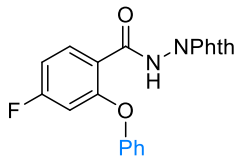
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.50 (s, 1H), 8.22 (d, J = 8.8 Hz, 1H), 7.91 (dd, J = 4.9, 3.4 Hz, 2H), 7.78 (dd, J = 5.4, 2.9 Hz, 2H), 7.45 (t, J = 7.6 Hz, 2H), 7.28 (t, J = 7.3 Hz, 1H), 7.23 (d, J = 7.8 Hz, 2H), 6.71 (dd, J = 8.8, 2.0 Hz, 1H), 6.26 (d, J = 2.4 Hz, 1H), 3.74 (s, 3H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.4, 164.3, 163.9, 158.6, 153.9, 134.6, 134.5, 130.3, 130.2, 125.8, 123.9, 121.3, 112.6, 108.4, 102.8, 55.6 ppm.

IR (KBr): 3357, 3061, 2941, 1741, 1678, 1607, 1489, 1257, 1204, 1035, 882, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{17}O_5N_2^+$, 389.1132; found, 389.1130.

_N_-(1,3-Dioxoisoindolin-2-yl)-4-fluoro-2-phenoxybenzamide (3fa)



The title compound (**3fa**) was synthesized according to the GP-1 using _N_-(1,3-dioxoisoindolin-2-yl)-4-fluoro-2-hydroxybenzamide (**1f**, 0.50 mmol, 150.3 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 290.9 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.7 mg) at 90 °C for 36 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 25:75) afforded **3fa** in 89% yield (167.2 mg) as a white amorphous solid.

Melting Point: 164.9–165.6 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 9.54 (s, 1H), 8.29 (dd, J = 8.8, 6.8 Hz, 1H), 7.92 (dd, J = 5.4, 2.9 Hz, 2H), 7.79 (dd, J = 5.4, 3.4 Hz, 2H), 7.48 (t, J = 7.8 Hz, 2H), 7.32 (t, J = 7.3 Hz, 1H), 7.26–7.23 (m, 2H), 6.91–6.86 (m, 1H), 6.47 (dd, J = 9.8, 2.4 Hz, 1H) ppm.

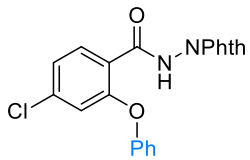
^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.9 (d, J = 255.7 Hz), 165.2, 163.2, 158.7 (d, J = 10.8 Hz), 153.4, 135.1 (d, J = 9.9 Hz), 134.6, 130.6, 130.2, 126.4, 124.0, 121.3, 115.9 (d, J = 2.5 Hz), 110.5 (d, J = 21.5 Hz), 104.0 (d, J = 26.5 Hz) ppm.

^{19}F NMR (379 MHz, $CDCl_3$): δ −104.6 (m) ppm.

IR (KBr): 3357, 3061, 1739, 1683, 1606, 1488, 1417, 1255, 1120, 983, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{14}O_4N_2F^+$, 377.0932; found, 377.0932.

4-Chloro-_N_-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (3ga)



The title compound (**3ga**) was synthesized according to the GP-1 using 4-chloro-_N_-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1g**, 0.50 mmol, 158.0 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 289.9 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.2 mg) at 90 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 25:75) afforded **3ga** in 80% yield (157.1 mg) as a white amorphous solid.

Melting Point: 152.4–153.0 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 9.57 (s, 1H), 8.20 (d, J = 8.3 Hz, 1H), 7.91 (dd, J = 5.4, 2.9 Hz, 2H),

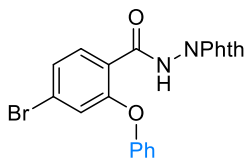
7.78 (dd, J = 5.6, 3.2 Hz, 2H), 7.48 (t, J = 8.0 Hz, 2H), 7.31 (t, J = 7.3 Hz, 1H), 7.24–7.22 (m, 2H), 7.16 (dd, J = 8.5, 1.7 Hz, 1H), 6.75 (d, J = 2.0 Hz, 1H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.1, 163.1, 157.5, 153.5, 134.0, 134.6, 134.0, 130.6, 130.1, 126.3, 123.9, 123.5, 121.2, 118.2, 116.7 ppm.

IR (KBr): 3358, 3089, 3063, 1740, 1684, 1598, 1469, 1225, 1122, 927, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{14}O_4N_2Cl^+$, 393.0637; found, 393.0634.

4-Bromo-*N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (3ha)



The title compound (**3ha**) was synthesized according to the GP-1 using 4-bromo-*N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1h**, 0.50 mmol, 180.8 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 290.4 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.7 mg) at 90 °C for 36 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 30:70) afforded **3ha** in 88% yield (191.7 mg) as a white amorphous solid.

Melting Point: 178.0–178.8 °C.

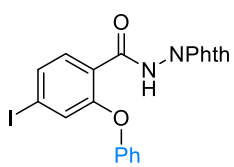
^1H NMR (400 MHz, $CDCl_3$): δ 9.54 (s, 1H), 8.12 (d, J = 8.3 Hz, 1H), 7.91 (dd, J = 5.6, 3.2 Hz, 2H), 7.78 (dd, J = 5.4, 2.9 Hz, 2H), 7.48 (t, J = 7.8 Hz, 2H), 7.34–7.30 (m, 2H), 7.22 (d, J = 7.3 Hz, 2H), 6.92 (d, J = 1.5 Hz, 1H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.2, 163.3, 157.3, 153.5, 140.0, 134.1, 130.6, 130.1, 128.3, 126.6, 126.3, 124.0, 121.2, 119.7, 118.7 ppm.

IR (KBr): 3357, 3064, 1739, 1685, 1594, 1468, 1399, 1222, 914, 709 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{14}O_4N_2Br^+$, 437.0131; found, 437.0132.

***N*-(1,3-Dioxoisoindolin-2-yl)-4-iodo-2-phenoxybenzamide (3ia)**



The title compound (**3ia**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxy-4-iodobenzamide (**1i**, 0.50 mmol, 202.8 mg), phenyl(TMP)iodonium trifluoroacetate (**2a**, 0.60 mmol, 1.2 equiv., 291.0 mg)

and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.1 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 30:70) afforded **3ia** in 63% yield (151.5 mg) as a white amorphous solid.

Melting Point: 211.3–211.9 °C.

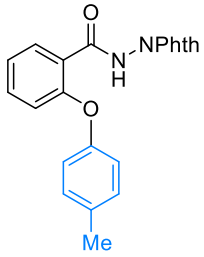
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.54 (s, 1H), 7.94 (d, J = 8.3 Hz, 1H), 7.91 (dd, J = 5.9, 2.9 Hz, 2H), 7.79 (dd, J = 5.4, 2.9 Hz, 2H), 7.54 (dd, J = 8.3, 1.5 Hz, 1H), 7.48 (t, J = 8.0 Hz, 2H), 7.31 (t, J = 7.6 Hz, 1H), 7.21 (d, J = 7.8 Hz, 2H), 7.11 (d, J = 1.5 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.1, 163.5, 156.8, 153.6, 134.7, 133.9, 132.6, 130.6, 130.1, 126.2, 125.7, 124.0, 121.1, 119.5, 100.6 ppm.

IR (KBr): 3357, 3062, 2925, 1737, 1688, 1583, 1468, 1390, 1218, 881, 707 cm^{-1}.

HRMS-DART (m/z): ([M + H]$^+$) calcd for $C_{21}H_{14}O_4N_2I^+$, 484.9993; found, 484.9992.

***N*-(1,3-Dioxoisoindolin-2-yl)-2-(*p*-tolyloxy)benzamide (3ab)**



The title compound (**3ab**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.1 mg), 4-methylphenyl(TMP)iodonium trifluoroacetate (**2b**, 0.60 mmol, 1.2 equiv., 299.5 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.7 mg) at 90 °C for 36 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 30:70) afforded **3ab** in 73% yield (136.2 mg) as a white amorphous solid.

Melting Point: 75.6–76.3 °C.

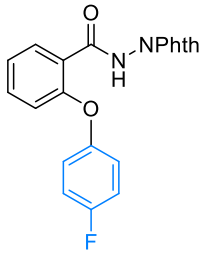
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.69 (s, 1H), 8.27 (dd, J = 7.8, 2.0 Hz, 1H), 7.93 (dd, J = 5.4, 2.9 Hz, 2H), 7.79 (dd, J = 5.4, 2.9 Hz, 2H), 7.43–7.39 (m, 1H), 7.24 (d, J = 8.5 Hz, 2H), 7.19–7.15 (m, 1H), 7.11 (d, J = 8.5 Hz, 2H), 6.79 (d, J = 7.8 Hz, 1H), 2.38 (s, 3H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.3, 164.1, 157.4, 151.9, 135.5, 134.6, 134.1, 132.9, 130.8, 130.3, 124.0, 122.9, 121.0, 119.6, 116.5, 20.8 ppm.

IR (KBr): 3354, 3060, 2924, 1736, 1684, 1603, 1507, 1472, 1287, 1227, 1119, 882, 708 cm^{-1}.

HRMS-DART (m/z): ([M + H]$^+$) calcd for $C_{22}H_{17}O_4N_2^+$, 373.1183; found, 373.1185.

_N_-(1,3-Dioxoisoindolin-2-yl)-2-(4-fluorophenoxy)benzamide (3ac)



The title compound (**3ac**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.0 mg), 4-fluorophenyl(TMP)iodonium trifluoroacetate (**2c**, 0.60 mmol, 1.2 equiv., 301.1 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.9 mg) at 90 °C for 36 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 25:75) afforded **3ac** in 60% yield (112.3 mg) as a white amorphous solid.

Melting Point: 73.8–74.8 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 9.60 (s, 1H), 8.25 (dd, J = 7.8, 1.5 Hz, 1H), 7.90 (dd, J = 5.6, 3.2 Hz, 2H), 7.78 (dd, J = 5.4, 2.9 Hz, 2H), 7.45–7.41 (m, 1H), 7.22–7.10 (m, 5H), 6.76 (d, J = 8.3 Hz, 1H) ppm.

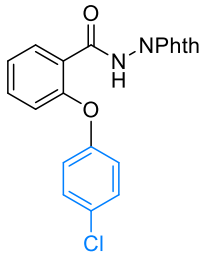
^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.2, 163.9, 160.0 (d, J = 245.0 Hz), 157.1, 150.0 (d, J = 3.3 Hz), 134.6, 134.2, 132.9, 130.1, 123.9, 123.3, 122.7 (d, J = 9.1 Hz), 119.8, 117.0 (d, J = 24.0 Hz), 116.4 ppm.

^{19}F NMR (379 MHz, $CDCl_3$): δ −118.9 ppm.

IR (KBr): 3363, 3073, 1738, 1680, 1601, 1504, 1410, 1211, 1120, 882, 707 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{14}O_4N_2F^+$, 377.0932; found, 377.0931.

2-(4-Chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ad)



The title compound (**3ad**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.3 mg), 4-chlorophenyl(TMP)iodonium trifluoroacetate (**2d**, 0.60 mmol, 1.2 equiv., 311.2 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.8 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 30:70) afforded **3ad** in 65% yield (127.2 mg) as a white amorphous solid.

Melting Point: 76.6–77.4 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 9.53 (s, 1H), 8.25 (dd, J = 7.8, 2.0 Hz, 1H), 7.90 (dd, J = 5.4, 2.9 Hz,

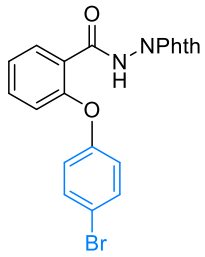
2H), 7.78 (dd, J = 5.6, 3.2 Hz, 2H), 7.44 (td, J = 7.9, 1.6 Hz, 1H), 7.39 (d, J = 8.8 Hz, 2H), 7.23–7.19 (m, 1H), 7.15 (d, J = 8.8 Hz, 2H), 6.79 (d, J = 8.3 Hz, 1H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.2, 163.8, 156.5, 152.9, 134.6, 134.2, 133.0, 130.9, 130.3, 130.1, 123.9, 123.6, 122.3, 120.1, 117.0 ppm.

IR (KBr): 3363, 3065, 1736, 1683, 1604, 1483, 1225, 1085, 882, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{14}O_4N_2Cl^+$, 393.0637; found, 393.0634.

2-(4-Bromophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ae)



The title compound (**3ae**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.2 mg), 4-bromophenyl(TMP)iodonium trifluoroacetate (**2e**, 0.60 mmol, 1.2 equiv., 337.0 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.4 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 28:72) afforded **3ae** in 87% yield (190.9 mg) as a white amorphous solid.

Melting Point: 127.4–128.0 °C.

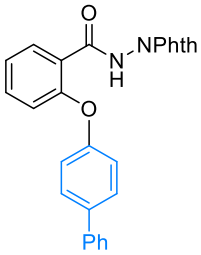
^1H NMR (400 MHz, $CDCl_3$): δ 9.49 (s, 1H), 8.26 (dd, J = 8.0, 1.7 Hz, 1H), 7.91 (dd, J = 5.6, 3.2 Hz, 2H), 7.79 (dd, J = 5.6, 3.2 Hz, 2H), 7.55 (d, J = 9.0 Hz, 2H), 7.47–7.43 (m, 1H), 7.24–7.20 (m, 1H), 7.10 (d, J = 9.0 Hz, 2H), 6.81 (d, J = 8.3 Hz, 1H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.2, 163.8, 156.4, 153.6, 134.6, 134.3, 133.4, 133.0, 130.2, 124.0, 123.7, 122.7, 120.2, 118.6, 117.0 ppm.

IR (KBr): 3357, 3062, 1739, 1683, 1477, 1408, 1227, 1067, 882, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{14}O_4N_2Br^+$, 437.0131; found, 437.0131.

2-([1,1'-Biphenyl]-4-yloxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3af)



The title compound (**3af**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 140.7 mg), 4-4'-biphenyl(TMP)iodonium trifluoroacetate (**2f**, 0.60 mmol, 1.2 equiv., 336.0 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.5 mg) at 90 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 33:67) afforded **3af** in 78% yield (168.0 mg) as a white amorphous solid.

Melting Point: 86.8–87.4 °C.

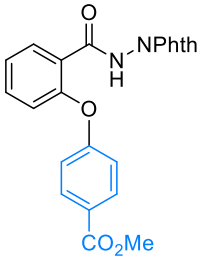
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.66 (s, 1H), 8.29 (dd, J = 7.8, 2.0 Hz, 1H), 7.92 (dd, J = 5.6, 3.2 Hz, 2H), 7.78 (dd, J = 5.4, 2.9 Hz, 2H), 7.65 (d, J = 8.8 Hz, 2H), 7.60–7.57 (m, 2H), 7.48–7.43 (m, 3H), 7.37 (tt, J = 7.3, 1.5 Hz, 1H), 7.29 (d, J = 8.8 Hz, 2H), 7.23–7.19 (m, 1H), 6.89 (d, J = 8.3 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.3, 164.0, 157.0, 153.7, 134.0, 138.8, 134.6, 134.2, 132.9, 130.2, 129.0, 128.9, 127.5, 127.0, 123.9, 123.3, 121.4, 119.9, 117.0 ppm.

IR (KBr): 3353, 3059, 3031, 1739, 1682, 1604, 1479, 1227, 882, 707 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{27}H_{19}O_4N_2^+$, 435.1339; found, 435.1338.

Methyl 4-(2-((1,3-dioxoisoindolin-2-yl)carbamoyl)phenoxy)benzoate (3ag)



The title compound (**3ag**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.2 mg), 4-methocycarbonylphenyl(TMP)iodonium trifluoroacetate (**2g**, 0.60 mmol, 1.2 equiv., 325.7 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.4 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 33:67) afforded **3ag** in 92% yield (191.4 mg) as a white amorphous solid.

Melting Point: 86.7–87.5 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 9.39 (s, 1H), 8.27 (dd, J = 7.8, 2.0 Hz, 1H), 8.11 (d, J = 8.8 Hz, 2H), 7.90 (dd, J = 5.6, 3.2 Hz, 2H), 7.78 (dd, J = 5.4, 3.4 Hz, 2H), 7.51–7.47 (m, 1H), 7.29–7.26 (m, 1H),

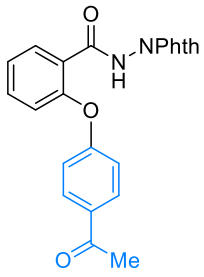
7.23 (d, J = 8.8 Hz, 2H), 6.88 (d, J = 7.8 Hz, 1H), 3.93 (s, 3H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 166.1, 165.1, 163.7, 158.6, 155.5, 134.6, 134.3, 133.0, 132.1, 130.1, 127.1, 124.3, 124.0, 120.9, 120.0, 118.1, 52.2 ppm.

IR (KBr): 3357, 2952, 1739, 1604, 1472, 1285, 1229, 1115, 882, 707 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{23}H_{17}O_6N_2^+$, 417.0181; found, 417.0182.

2-(4-Acetylphenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ah)



The title compound (**3ah**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.2 mg), 4-acetylphenyl(TMP)iodonium trifluoroacetate (**2h**, 0.60 mmol, 1.2 equiv., 315.7 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.3 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 50:50) afforded **3ah** in 78% yield (156.0 mg) as a white amorphous solid.

Melting Point: 91.7–92.5 °C.

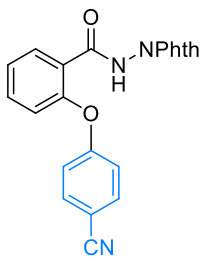
^1H NMR (400 MHz, $CDCl_3$): δ 9.42 (s, 1H), 8.24 (dd, J = 7.8, 1.5 Hz, 1H), 8.02 (d, J = 8.8 Hz, 2H), 7.87 (dd, J = 5.6, 3.2 Hz, 2H), 7.77 (dd, J = 5.4, 2.9 Hz, 2H), 7.48 (td, J = 7.8, 1.6 Hz, 1H), 7.27 (t, J = 7.8 Hz, 1H), 7.22 (d, J = 8.8 Hz, 2H), 6.87 (d, J = 8.3 Hz, 1H), 2.59 (s, 3H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 196.5, 165.1, 163.6, 158.8, 155.3, 134.6, 134.2, 134.0, 132.9, 130.8, 130.0, 124.4, 123.9, 121.1, 119.9, 118.4, 26.5 ppm.

IR (KBr): 3359, 3065, 1738, 1681, 1601, 1474, 1234, 1165, 883, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{23}H_{17}O_5N_2^+$, 401.1132; found, 401.1132.

2-(4-Cyanophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ai)



The title compound (**3aa**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.2 mg), 4-cyanophenyl(TMP)iodonium trifluoroacetate (**2i**, 0.60 mmol, 1.2 equiv., 305.4 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.5 mg) at 40 °C for 24 hours. Purification

by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 50:50) afforded **3ai** in 90% yield (172.1 mg) as a white amorphous solid.

Melting Point: 109.0–109.8 °C.

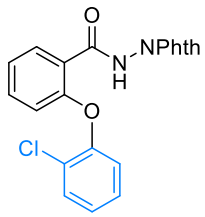
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.23 (s, 1H), 8.22 (dd, J = 7.8, 2.0 Hz, 1H), 7.87 (dd, J = 5.4, 2.9 Hz, 2H), 7.78 (dd, J = 5.4, 2.9 Hz, 2H), 7.69 (d, J = 8.8 Hz, 2H), 7.54–7.50 (m, 1H), 7.33–7.29 (m, 1H), 7.23 (d, J = 8.8 Hz, 2H), 6.90 (d, J = 8.3 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.0, 163.5, 158.9, 154.3, 134.7, 134.5, 134.4, 132.9, 130.0, 125.1, 123.9, 121.8, 120.2, 119.0, 118.2, 108.5 ppm.

IR (KBr): 3354, 3100, 3063, 2228, 1739, 1683, 1603, 1475, 1232, 1120, 882, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{14}O_4N_3^+$, 384.0979; found, 384.0978.

2-(2-Chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3aj)



The title compound (**3aj**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.0 mg), 2-chlorophenyl(TMP)iodonium trifluoroacetate (**2j**, 0.60 mmol, 1.2 equiv., 311.0 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 104.0 mg) at 90 °C for 36 hours. Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 28:72) afforded **3aj** in 88% yield (172.5 mg) as a white amorphous solid.

Melting Point: 68.1–68.9 °C.

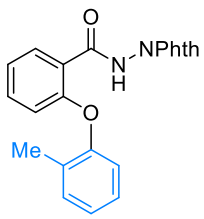
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.55 (s, 1H), 8.28 (dd, J = 8.0, 1.7 Hz, 1H), 7.93 (dd, J = 5.6, 3.2 Hz, 2H), 7.79 (dd, J = 5.4, 2.9 Hz, 2H), 7.53 (dd, J = 7.8, 1.5 Hz, 1H), 7.47–7.43 (m, 1H), 7.36 (td, J = 7.8, 2.0 Hz, 1H), 7.28–7.21 (m, 3H), 6.73 (d, J = 7.8 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.2, 163.9, 155.8, 149.8, 134.6, 134.2, 133.2, 131.2, 130.2, 128.5, 126.93, 126.86, 123.9, 123.6, 122.8, 119.9, 115.9 ppm.

IR (KBr): 3371, 3070, 1737, 1685, 1604, 1473, 1410, 1230, 1120, 882, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{14}O_4N_2Cl^+$, 393.0637; found, 393.0637.

***N*-(1,3-dioxoisoindolin-2-yl)-2-(*o*-tolyloxy)benzamide (3ak)**



The title compound (**3ak**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.3 mg), 2-methylphenyl(TMP)iodonium trifluoroacetate (**2k**, 0.60 mmol, 1.2 equiv., 298.6 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 103.5 mg) at 70 °C for 24 hours. Purification by flash column chromatography (SiO_2, AcOEt / hexane = 15:85 to 33:67) afforded **3ak** in 75% yield (140.4 mg) as a white amorphous solid.

Melting Point: 71.6–72.1 °C.

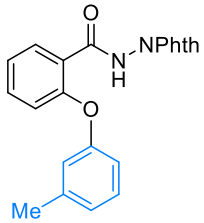
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.77 (s, 1H), 8.27 (dd, J = 8.0, 1.7 Hz, 1H), 7.89 (dd, J = 5.4, 2.9 Hz, 2H), 7.77 (dd, J = 5.4, 3.4 Hz, 2H), 7.38 (td, J = 7.9, 1.5 Hz, 1H), 7.30–7.12 (m, 5H), 6.63 (d, J = 8.8 Hz, 1H), 2.25 (s, 3H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.1, 164.1, 156.8, 151.6, 134.5, 134.1, 132.9, 131.9, 130.9, 130.1, 127.6, 126.2, 123.8, 122.6, 121.9, 118.9, 115.0, 16.1 ppm.

IR (KBr): 3360, 3067, 1741, 1681, 1602, 1470, 1233, 1112, 883, 707 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{17}O_4N_2^+$, 373.1183; found, 373.1184.

***N*-(1,3-Dioxoisoindolin-2-yl)-2-(*m*-tolyloxy)benzamide (3al)**



The title compound (**3al**) was synthesized according to the GP-1 using *N*-(1,3-dioxoisoindolin-2-yl)-2-hydroxybenzamide (**1a**, 0.50 mmol, 141.0 mg), 3-methylphenyl(TMP)iodonium trifluoroacetate (**2l**, 0.60 mmol, 1.2 equiv., 298.8 mg) and K_2CO_3 (0.75 mmol, 1.5 equiv., 105.3 mg). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 30:70) afforded **3al** in 62% yield (115.6 mg) as a white amorphous solid.

Melting Point: 162.0–162.8 °C.

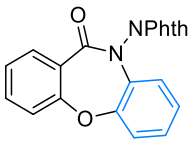
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.66 (s, 1H), 8.27 (dd, J = 7.8, 2.0 Hz, 1H), 7.92 (dd, J = 5.4, 2.9 Hz, 2H), 7.79 (dd, J = 5.6, 3.2 Hz, 2H), 7.45–7.41 (m, 1H), 7.32 (t, J = 7.8 Hz, 1H), 7.20–7.16 (m, 1H), 7.08 (d, J = 7.8 Hz, 1H), 7.04–7.01 (m, 2H), 6.82 (d, J = 8.3 Hz, 1H), 2.38 (s, 3H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.3, 164.1, 157.2, 154.1, 140.7, 134.6, 134.1, 132.9, 130.2, 130.0, 126.5, 123.9, 123.1, 121.7, 119.7, 118.1, 116.8, 21.3 ppm.

IR (KBr): 3357, 3062, 2919, 1738, 1684, 1603, 1472, 1247, 882, 708 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{17}O_4N_2^+$, 373.1183; found, 373.1182.

2-(11-Oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4aa)



The title compound (**4aa**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (**3aa**, 0.20 mmol, 72.1 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.3 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 20:80) afforded **4aa** in 80% yield (57.7 mg) as a white amorphous solid. This compound was also synthesized according to the GP-3 and GP-4.

Melting Point: 271.8–272.4 °C.

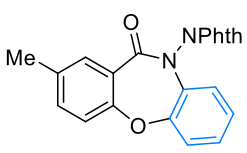
^1H NMR (400 MHz, $CDCl_3$): δ 8.00 (dd, J = 5.6, 3.2 Hz, 2H), 7.90 (dd, J = 7.8, 1.5 Hz, 1H), 7.85 (dd, J = 5.4, 2.9 Hz, 2H), 7.55 (td, J = 7.8, 1.5 Hz, 1H), 7.36–7.19 (m, 5H), 7.14 (td, J = 7.8, 1.5 Hz, 1H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.1, 163.9, 160.5, 152.4, 135.0, 134.8, 133.4, 132.6, 130.1, 127.7, 126.0, 125.5, 124.3, 123.9, 121.8, 120.7 ppm. (One carbon signal was not detected due to an occasion of overlapping.)

IR (KBr): 3070, 2924, 1745, 1683, 1496, 1452, 1325, 1288, 880, 712 cm^{-1}.

Spectral data of **4aa** are identical to the previously reported.[S4]

2-(2-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ba)



The title compound (**4ba**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-5-methyl-2-phenoxybenzamide (**3ba**, 0.20 mmol, 74.8 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.0 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.6 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 10:90 to 25:75) afforded **4ba** in 83% yield (61.4 mg) as a

white amorphous solid. This compound was also synthesized according to the GP-3 and GP-4.

Melting Point: 213.7–214.8 °C.

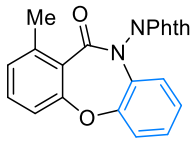
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.98 (dd, J = 5.6, 3.2 Hz, 2H), 7.84 (dd, J = 5.4, 2.9 Hz, 2H), 7.68 (d, J = 2.0 Hz, 1H), 7.32 (dt, J = 8.0, 1.8 Hz, 2H), 7.23–7.17 (m, 3H), 7.11 (td, J = 7.7, 1.6 Hz, 1H), 2.33 (s, 3H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.1, 164.1, 158.4, 152.6, 135.4, 135.3, 135.0, 133.5, 132.5, 130.1, 127.6, 125.9, 124.3, 123.4, 121.69, 121.66, 120.4, 20.5 ppm.

IR (KBr): 3065, 2924, 1745, 1675, 1613, 1488, 1229, 1113, 880, 713 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{15}O_4N_2^+$, 371.1026; found, 371.1027.

2-(1-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ca)



The title compound (**4ca**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-2-methyl-6-phenoxybenzamide (**3ca**, 0.20 mmol, 74.2 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.7 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 33:67) afforded **4ca** in 95% yield (70.4 mg) as a white amorphous solid.

Melting Point: 300.0–300.6 °C.

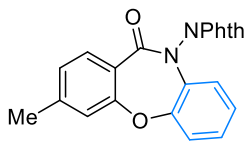
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.1, 2.7 Hz, 2H), 7.84 (dd, J = 5.4, 2.9 Hz, 2H), 7.37–7.31 (m, 2H), 7.22–7.19 (m, 2H), 7.17–7.08 (m, 3H), 2.47 (s, 3H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 164.0, 161.6, 153.6 (two peaks are overlapped), 142.7, 135.0, 133.5, 132.7, 130.1, 128.4, 127.6, 125.9, 124.3, 123.7, 121.9, 121.5, 118.0, 20.6 ppm.

IR (KBr): 3063, 2930, 1743, 1677, 1468, 1378, 1278, 1076, 880, 713 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{15}O_4N_2^+$, 371.1026; found, 371.1024.

2-(3-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4da)



The title compound (**4da**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-4-methyl-2-phenoxybenzamide (**3da**, 0.20 mmol, 74.8 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.2 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.7 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 10:90 to 25:75) afforded **4da** in 79% yield (58.4 mg) as a white amorphous solid. This compound was also synthesized according to the GP-3 and GP-4.

Melting Point: 236.7–237.8 °C.

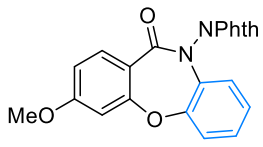
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.6, 3.2 Hz, 2H), 7.84 (dd, J = 5.6, 3.2 Hz, 2H), 7.78 (d, J = 8.3 Hz, 1H), 7.33 (dd, J = 8.0, 1.7 Hz, 1H), 7.24–7.18 (m, 2H), 7.14–7.10 (m, 2H), 7.07 (d, J = 7.8 Hz, 1H), 2.40 (s, 3H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.2, 163.9, 160.4, 152.3, 146.2, 135.0, 133.6, 132.4, 130.1, 127.5, 126.4, 125.9, 124.3, 121.74, 121.70, 121.0, 120.9, 21.5 ppm.

IR (KBr): 3064, 2924, 1743, 1677, 1619, 1495, 1323, 1140, 880, 714 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{15}O_4N_2^+$, 371.1026; found, 371.1029.

2-(3-Methoxy-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ea)



The title compound (**4ea**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-4-methoxy-2-phenoxybenzamide (**3ea**, 0.20 mmol, 77.5 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.2 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 10:90 to 25:75) afforded **4ea** in 46% yield (35.6 mg) as a white amorphous solid. This compound was also synthesized according to the GP-3 and GP-4.

Melting Point: 215.8–216.3 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.9, 2.9 Hz, 2H), 7.85–7.83 (m, 3H), 7.32 (dd, J = 8.0, 1.2 Hz, 1H), 7.24–7.18 (m, 2H), 7.13 (td, J = 7.8, 1.5 Hz, 1H), 6.80–6.77 (m, 2H), 3.87 (s, 3H) ppm.

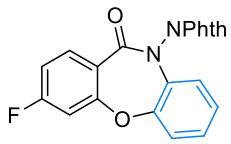
^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.3, 164.9, 163.5, 161.9, 151.9, 135.0, 134.0, 133.6, 130.1,

127.5, 126.0, 124.3, 121.7, 121.6, 115.8, 111.9, 105.4, 55.8 ppm.

IR (KBr): 3066, 2926, 1742, 1675, 1612, 1495, 1267, 1137, 1028, 880, 714 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{15}O_5N_2^+$, 387.0975; found, 387.0978.

2-(3-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4fa)



The title compound (**4fa**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-4-fluoro-2-phenoxybenzamide (**3fa**, 0.20 mmol, 75.3 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.4 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 10:90 to 23:77) afforded **4fa** in 85% yield (64.0 mg) as a white amorphous solid. This compound was also synthesized according to the GP-3.

Melting Point: 230.4–231.3 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.6, 3.2 Hz, 2H), 7.92 (dd, J = 8.8, 6.3 Hz, 1H), 7.85 (dd, J = 5.6, 3.2 Hz, 2H), 7.33 (dd, J = 7.8, 1.5 Hz, 1H), 7.26–7.14 (m, 3H), 7.04–6.96 (m, 2H) ppm.

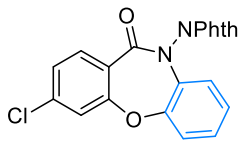
^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 166.2 (d, J = 256.6 Hz), 165.0, 162.9, 161.7 (d, J = 11.6 Hz), 151.8, 135.0, 134.6, 134.5, 133.2, 130.0, 127.8, 126.3, 124.3, 121.8 (d, J = 13.2 Hz), 120.2 (d, J = 3.3 Hz), 113.2 (d, J = 21.5 Hz), 108.4 (d, J = 24.8 Hz) ppm.

^{19}F NMR (379 MHz, $CDCl_3$): δ −104.7 (m) ppm.

IR (KBr): 3077, 1742, 1683, 1606, 1495, 1426, 1266, 1127, 976, 879, 714 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{12}O_4N_2F^+$, 375.0776; found, 375.0776.

2-(3-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ga)



The title compound (**4ga**) was synthesized according to the GP-2 using 4-chloro-*N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (**3ga**, 0.20 mmol, 78.6 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.0 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.3 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 10:90 to 22:78) afforded **4ga** in 86% yield (67.0 mg) as a

white amorphous solid. This compound was also synthesized according to the GP-3.

Melting Point: 243.6–244.1 °C.

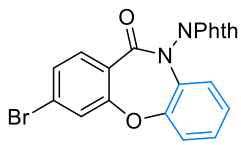
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.4, 2.9 Hz, 2H), 7.86–7.84 (m, 3H), 7.34–7.33 (m, 2H), 7.28–7.21 (m, 3H), 7.16 (td, J = 7.7, 1.3 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.0, 163.0, 160.7, 151.9, 140.4, 135.1, 133.6, 133.2, 130.0, 127.8, 126.4, 126.0, 124.4, 122.4, 121.9, 121.8, 121.2 ppm.

IR (KBr): 3091, 1746, 1681, 1603, 1496, 1284, 1135, 937, 880, 713 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{12}O_4N_2Cl^+$, 391.0480; found, 391.0477.

2-(3-Bromo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ha)



The title compound (**4ha**) was synthesized according to the GP-2 using 4-bromo-*N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (**3ha**, 0.20 mmol, 87.6 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.3 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by trituration (chloroform/hexane = 1:5, 6 mL) afforded **4ha** in 84% yield (73.2 mg) as an off-white solid. This compound was also synthesized according to the GP-3.

Melting Point: 252.2–252.9 °C.

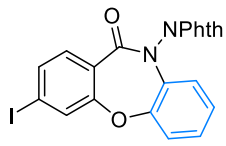
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.4, 2.9 Hz, 2H), 7.85 (dd, J = 5.6, 3.2 Hz, 2H), 7.77 (d, J = 8.3 Hz, 1H), 7.51 (d, J = 2.0 Hz, 1H), 7.41 (dd, J = 8.3, 2.0 Hz, 1H), 7.35–7.33 (m, 1H), 7.26–7.21 (m, 2H), 7.16 (td, J = 7.6, 1.3 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.0, 163.2, 160.5, 151.9, 135.1, 133.7, 133.1, 130.0, 129.0, 128.5, 127.9, 126.4, 124.4, 124.2, 122.9, 121.9, 121.8 ppm.

IR (KBr): 3089, 1744, 1683, 1591, 1495, 1402, 1283, 1136, 880, 714 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{12}O_4N_2Br^+$, 434.9975; found, 434.9974.

2-(3-Iodo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ia)



The title compound (**4ia**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-4-iodo-2-phenoxybenzamide (**3ia**, 0.20 mmol, 97.0 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.0 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 55.4 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 10:90 to 33:67) afforded **4ia** in 54% yield (51.7 mg) as a white amorphous solid. This compound was also synthesized according to the GP-3.

Melting Point: 245.9–246.8 °C.

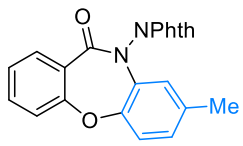
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.00 (dd, J = 5.4, 2.9 Hz, 2H), 7.86 (dd, J = 5.4, 2.9 Hz, 2H), 7.73 (d, J = 1.5 Hz, 1H), 7.64–7.58 (m, 2H), 7.35–7.33 (m, 1H), 7.25–7.21 (m, 2H), 7.18–7.14 (m, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.0, 163.4, 160.1, 152.0, 135.1, 134.9, 133.5, 133.2, 130.0, 127.9, 126.4, 124.4, 123.6, 121.9, 121.8, 100.7 ppm. (One carbon signal was not detected due to an occasion of overlapping.)

IR (KBr): 3087, 1743, 1683, 1586, 1495, 1395, 1283, 880, 712 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{12}O_4N_2I^+$, 482.9836; found, 482.9837.

2-(8-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ab)



The title compound (**4ab**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-2-(*p*-tolyloxy)benzamide (**3ab**, 0.20 mmol, 74.5 mg), 2,2'-diiodo-1,1'-biphenyl (0.020 mmol, 10 mol%, 8.0 mg), *m*CPBA (0.30 mmol, 1.5 equiv., 74.4 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 25:75) afforded **4ab** in 44% yield (32.5 mg) as a white amorphous solid.

Melting Point: 209.2–210.2 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 8.00 (dd, J = 5.4, 2.9 Hz, 2H), 7.89 (dd, J = 7.8, 1.5 Hz, 1H), 7.85 (dd, J = 5.6, 3.2 Hz, 2H), 7.55–7.51 (m, 1H), 7.29–7.21 (m, 3H), 7.01–6.99 (m, 2H), 2.24 (s, 3H)

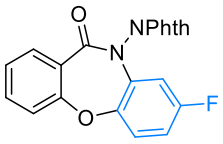
ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.1, 164.0, 160.6, 150.3, 136.0, 135.0, 134.7, 132.9, 132.6, 130.1, 128.3, 125.4, 124.3, 124.0, 121.9, 121.4, 120.6, 20.9 ppm.

IR (KBr): 3069, 2925, 1747, 1672, 1506, 1453, 1307, 1217, 1121, 883, 712 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{15}O_4N_2^+$, 371.1026; found, 371.1024.

2-(8-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ac)



The title compound (**4ac**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-2-(4-fluorophenoxy)benzamide (**3ac**, 0.20 mmol, 75.0 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.6 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 5:95 to 25:75) afforded **4ac** in 36% yield (27.0 mg) as a white amorphous solid.

Melting Point: 280.0–280.6 °C.

^1H NMR (400 MHz, $CDCl_3$): δ 8.01 (dd, J = 5.6, 3.2 Hz, 2H), 7.90 (dd, J = 7.8, 1.5 Hz, 1H), 7.87 (dd, J = 5.6, 3.2 Hz, 2H), 7.59–7.55 (m, 1H), 7.32–7.26 (m, 3H), 6.97–6.89 (m, 2H) ppm.

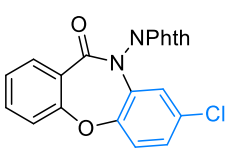
$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.0, 162.3 (d, J = 257.4 Hz), 160.3, 158.5, 148.4 (d, J = 3.3 Hz), 135.2, 135.0, 134.5 (d, J = 10.8 Hz), 132.7, 130.0, 125.7, 124.5, 123.6, 122.8 (d, J = 9.1 Hz), 120.6, 114.2 (d, J = 23.2 Hz), 109.0 (d, J = 27.3 Hz) ppm.

^{19}F NMR (379 MHz, $CDCl_3$): δ −117.2 ppm.

IR (KBr): 3085, 1746, 1683, 1503, 1545, 1307, 1248, 1186, 882, 716 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{12}O_4N_2F^+$, 375.0776; found, 375.0778.

2-(8-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ad)



The title compound (**4ad**) was synthesized according to the GP-2 using 2-(4-chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (**3ad**, 0.20 mmol, 78.7 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22

mmol, 1.1 equiv., 55.4 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 25:75) afforded **4ad** in 69% yield (54.1 mg) as a white amorphous solid. This compound was also synthesized according to the GP-3 and GP-4.

Melting Point: 231.6–232.7 °C.

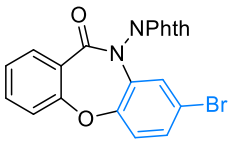
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.01 (dd, J = 5.4, 2.9 Hz, 2H), 7.91–7.86 (m, 3H), 7.56 (td, J = 7.7, 1.8 Hz, 1H), 7.30–7.26 (m, 3H), 7.22 (d, J = 2.4 Hz, 1H), 7.17 (dd, J = 8.8, 2.4 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.0, 163.5, 160.1, 150.9, 135.2, 135.0, 134.5, 132.7, 131.2, 130.0, 127.6, 125.8, 124.5, 123.5, 122.9, 121.8, 120.6 ppm.

IR (KBr): 3105, 1744, 1685, 1490, 1454, 1382, 1306, 1117, 881, 714 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{12}O_4N_2Cl^+$, 391.0480; found, 391.0478.

2-(8-Bromo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ae)



The title compound (**4ae**) was synthesized according to the GP-2 using 2-(4-bromophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (**3ae**, 0.20 mmol, 87.9 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.3 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 10:90 to 25:75) afforded **4ae** in 72% yield (62.9 mg) as a white amorphous solid. This compound was also synthesized according to the GP-3 and GP-4.

Melting Point: 234.6–235.6 °C.

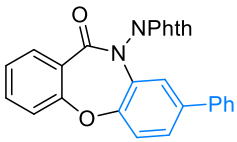
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.01 (dd, J = 5.4, 2.9 Hz, 2H), 7.90–7.86 (m, 3H), 7.56 (td, J = 7.7, 1.6 Hz, 1H), 7.36–7.26 (m, 4H), 7.22 (d, J = 8.3 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.0, 163.5, 160.1, 151.4, 135.2, 135.0, 134.7, 132.7, 130.6, 130.0, 125.8, 124.7, 124.5, 123.5, 123.3, 120.6, 118.5 ppm.

IR (KBr): 3103, 2923, 1738, 1685, 1487, 1383, 1304, 1217, 1119, 883, 713 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{21}H_{12}O_4N_2Br^+$, 434.9975; found, 434.9976.

2-(11-Oxo-8-phenyldibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4af)



The title compound (**4af**) was synthesized according to the GP-2 using 2-([1,1'-biphenyl]-4-yloxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (**3af**, 0.20 mmol, 86.5 mg), 2,2'-diiodo-1,1'-biphenyl (0.020 mmol, 10 mol%, 8.1 mg), *m*CPBA (0.30 mmol, 1.5 equiv., 74.1 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 25:75) afforded **4af** in 24% yield (20.7 mg) as a white amorphous solid.

Melting Point: 218.0–218.8 °C.

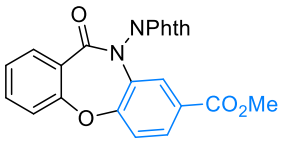
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.6, 3.2 Hz, 2H), 7.93 (dd, J = 7.8, 2.0 Hz, 1H), 7.84 (dd, J = 5.6, 3.2 Hz, 2H), 7.57 (td, J = 7.7, 1.5 Hz, 1H), 7.45–7.26 (m, 10H) ppm.

^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.2, 163.9, 160.5, 151.8, 139.7, 139.5, 135.0, 134.8, 133.7, 132.7, 130.1, 128.8, 127.7, 127.1, 126.4, 125.6, 124.4, 123.9, 122.0, 120.7, 120.5 ppm.

IR (KBr): 3061, 3033, 2925, 1746, 1677, 1604, 1485, 1307, 1077, 881, 709 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{27}H_{17}O_4N_2^+$, 433.1183; found, 433.1186.

Methyl 10-(1,3-dioxoisoindolin-2-yl)-11-oxo-10,11-dihydrodibenzo[*b*,*f*][1,4]oxazepine-8-carboxylate (4ag)



The title compound (**4ag**) was synthesized according to the GP-2 using methyl 4-(2-((1,3-dioxoisoindolin-2-yl)carbamoyl)phenoxy)benzoate (**3ag**, 0.20 mmol, 83.7 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.1 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.3 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 15:85 to 25:75) afforded **4ag** in 86% yield (71.8 mg) as a white amorphous solid.

Melting Point: 199.6–200.2 °C.

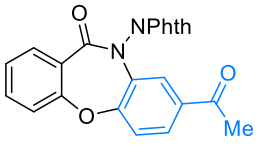
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.01 (dd, J = 5.4, 2.9 Hz, 2H), 7.92–7.89 (m, 3H), 7.87 (dd, J = 5.6, 3.2 Hz, 2H), 7.57 (ddd, J = 8.8, 6.8, 1.5 Hz, 1H), 7.41 (d, J = 8.3 Hz, 1H), 7.33–7.27 (m, 2H), 3.84 (s, 3H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 165.4, 165.0, 163.5, 159.7, 155.6, 135.1, 135.0, 133.7, 132.7, 130.0, 129.1, 128.3, 125.9, 124.5, 123.5, 123.3, 122.0, 120.7, 52.4 ppm.

IR (KBr): 3079, 2953, 1747, 1685, 1604, 1454, 1318, 1245, 880, 714 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{23}H_{15}O_6N_2^+$, 415.0925; found, 415.0927.

2-(8-Acetyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ah)



The title compound (**4ah**) was synthesized according to the GP-2 using 2-(4-acetylphenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (**3ah**, 0.20 mmol, 80.8 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.0 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 55.0 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 45:55) afforded **4ah** in 79% yield (63.7 mg) as a white amorphous solid.

Melting Point: 190.7–191.4 °C.

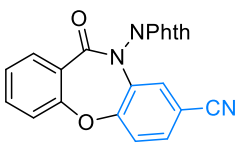
^1H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.6, 3.2 Hz, 2H), 7.89 (dd, J = 7.8, 2.0 Hz, 1H), 7.86 (dd, J = 5.6, 3.2 Hz, 2H), 7.83 (d, J = 2.0 Hz, 1H), 7.81 (dd, J = 8.3, 2.0 Hz, 1H), 7.59–7.55 (m, 1H), 7.42 (d, J = 8.3 Hz, 1H), 7.32–7.26 (m, 2H), 2.51 (s, 3H) ppm.

$^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 195.7, 165.1, 163.4, 159.5, 155.5, 135.1, 135.0, 133.9, 132.6, 129.9 (two peaks are overlapped), 127.9, 125.9, 124.4, 123.4, 122.1, 121.9, 120.6, 26.4 ppm.

IR (KBr): 3070, 1746, 1685, 1454, 1314, 1238, 1078, 880, 709 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{23}H_{15}O_5N_2^+$, 399.0975; found, 399.0975.

10-(1,3-Dioxoisoindolin-2-yl)-11-oxo-10,11-dihydrodibenzo[*b*,*f*][1,4]oxazepine-8-carbonitrile (4ai)



The title compound (**4ai**) was synthesized according to the GP-2 using 2-(4-cyanophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (**3ai**, 0.20 mmol, 76.7 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.2 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.6 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by trituration

(chloroform/hexane = 1:5, 6 mL) afforded **4ai** in 86% yield (65.7 mg) as an off-white solid.

Melting Point: 315.9–316.5 °C.

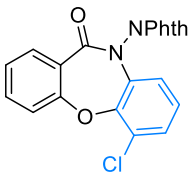
^{1}H NMR (400 MHz, DMSO-*d*$_6$): δ 8.12 (d, J = 2.0 Hz, 1H), 8.10 (dd, J = 5.9, 2.9 Hz, 2H), 8.04 (dd, J = 5.4, 3.4 Hz, 2H), 7.86 (dd, J = 8.3, 2.0 Hz, 1H), 7.82–7.75 (m, 3H), 7.59 (d, J = 7.8 Hz, 1H), 7.47–7.43 (m, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, DMSO-*d*$_6$): δ 164.8, 162.8, 158.6, 153.9, 136.3, 135.7, 133.8, 132.4, 132.1, 129.7, 126.8, 126.3, 124.3, 123.4, 122.6, 121.1, 117.4, 109.7 ppm.

IR (KBr): 3080, 2232, 1746, 1684, 1500, 1454, 1308, 1251, 881, 722 cm^{-1}.

HRMS-DART (m/z): ([M + H]$^+$) calcd for $C_{22}H_{12}O_4N_3^+$, 382.0822; found, 382.0820.

2-(6-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4aj)



The title compound (**4aj**) was synthesized according to the GP-2 using 2-(2-chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (**3aj**, 0.20 mmol, 78.5 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.0 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.7 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 µL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 5:95 to 22:78) afforded **4aj** in 68% yield (53.3 mg) as a white amorphous solid.

Melting Point: 207.4–208.3 °C.

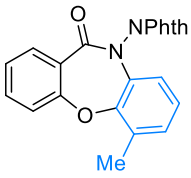
^{1}H NMR (400 MHz, CDCl$_3$): δ 8.00 (dd, J = 5.6, 3.2 Hz, 2H), 7.91 (dd, J = 7.6, 1.7 Hz, 1H), 7.86 (dd, J = 5.4, 2.9 Hz, 2H), 7.59 (td, J = 7.7, 1.6 Hz, 1H), 7.52 (dd, J = 8.3, 1.0 Hz, 1H), 7.32–7.28 (m, 2H), 7.15 (dd, J = 8.3, 1.5 Hz, 1H), 7.06 (t, J = 8.3 Hz, 1H) ppm.

^{13}C{^{1}H} NMR (100 MHz, CDCl$_3$): δ 165.0, 163.5, 159.9, 148.2, 135.2, 135.1, 134.9, 132.6, 130.0, 128.1, 127.5, 125.94, 125.85, 124.4, 123.8, 121.5, 120.2 ppm.

IR (KBr): 3081, 2926, 1746, 1684, 1606, 1453, 1323, 1122, 1044, 880, 713 cm^{-1}.

HRMS-DART (m/z): ([M + H]$^+$) calcd for $C_{21}H_{12}O_4N_2Cl^+$, 391.0480; found, 391.0480.

2-(6-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ak)



The title compound (**4ak**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-2-(*o*-tolyloxy)benzamide (**3ak**, 0.20 mmol, 74.8 mg), 2,2'-diiodo-1,1'-biphenyl (0.020 mmol, 10 mol%, 8.2 mg), *m*CPBA (0.30 mmol, 1.5 equiv., 73.8 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 25:75) afforded **4ak** in 65% yield (48.4 mg) as a white amorphous solid.

Melting Point: 210.3–211.2 °C.

^{1}H NMR (400 MHz, $CDCl_3$): δ 7.99 (dd, J = 5.6, 3.2 Hz, 2H), 7.91 (dd, J = 7.8, 2.0 Hz, 1H), 7.84 (dd, J = 5.4, 2.9 Hz, 2H), 7.57–7.53 (m, 1H), 7.35–7.33 (m, 1H), 7.26 (td, J = 7.6, 1.3 Hz, 1H), 7.09–7.07 (m, 2H), 7.02–6.98 (m, 1H), 2.55 (s, 3H) ppm.

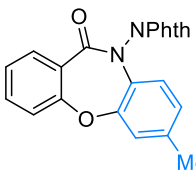
^{13}C{^{1}H} NMR (100 MHz, $CDCl_3$): δ 165.1, 164.0, 160.5, 150.8, 135.0, 134.5, 133.5, 132.7, 131.3, 130.1, 129.0, 125.4, 125.2, 124.3, 120.9, 119.5, 16.5 ppm. (One carbon signal was not detected due to an occasion of overlapping.)

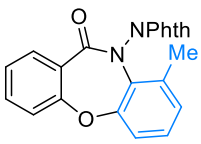
IR (KBr): 3071, 2923, 1741, 1682, 1605, 1454, 1330, 1079, 880, 712 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{15}O_4N_2^+$, 371.1026; found, 371.1029.

2-(7-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4al)

2-(9-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4al')





The title compound (**4al**/**4al'**) was synthesized according to the GP-2 using *N*-(1,3-dioxoisoindolin-2-yl)-2-(m-tolyloxy)benzamide (**3al**, 0.20 mmol, 74.1 mg), 2,2'-diiodo-1,1'-biphenyl (0.010 mmol, 5 mol%, 4.2 mg), *m*CPBA (0.22 mmol, 1.1 equiv., 54.2 mg) and TFA (0.40 mmol, 2.0 equiv., 30.6 μL). Purification by flash column chromatography (SiO_2, AcOEt/hexane = 20:80 to 25:75) afforded **4al**/**4al'** in 54% yield (39.7 mg) as a white amorphous solid.

^{1}H NMR (400 MHz, $CDCl_3$): δ 8.03–7.88 (m, 4H), 7.86–7.79 (m, 6H), 7.56–7.47 (m, 2H), 7.30–7.10 (m, 8H), 7.00 (d, J = 7.8 Hz, 1H), 6.93 (dd, J = 8.3, 1.5 Hz, 1H), 2.32 (s, 3H), 2.31 (s, 3H) ppm.

$^{13}C\{^{1}H\}$ NMR (100 MHz, $CDCl_3$): δ 165.6, 165.0, 164.0, 161.3, 160.5, 156.5, 152.3, 138.2, 134.9, 134.8, 134.6, 134.4, 134.0, 132.6, 131.6, 131.5, 130.7, 130.1, 128.8, 128.2, 126.6, 125.6, 125.4, 125.2, 124.34, 124.27, 124.0, 123.9, 122.0, 121.5, 120.6, 120.3, 119.3, 20.7, 19.4 ppm. (Two carbon signals were not detected due to an occasion of overlapping.)

IR (KBr): 3063, 2927, 1742, 1684, 1605, 1455, 1321, 1217, 880, 717 cm^{-1}.

HRMS-DART (m/z): ($[M + H]^+$) calcd for $C_{22}H_{15}O_4N_2^+$, 371.1026; found, 371.1027.

8. References

S1. V. Carreras, A. H. Sandtorv and D. R. Stuart, *J. Org. Chem.*, 2017, **82**, 1279.

S2. N. Soldatova, P. Postnikov, O. Kukurina, V. V. Zhdankin, A. Yoshimura, T. Wirth and M. S. Yusubov, *Beilstein J. Org. Chem.*, 2018, **14**, 849.

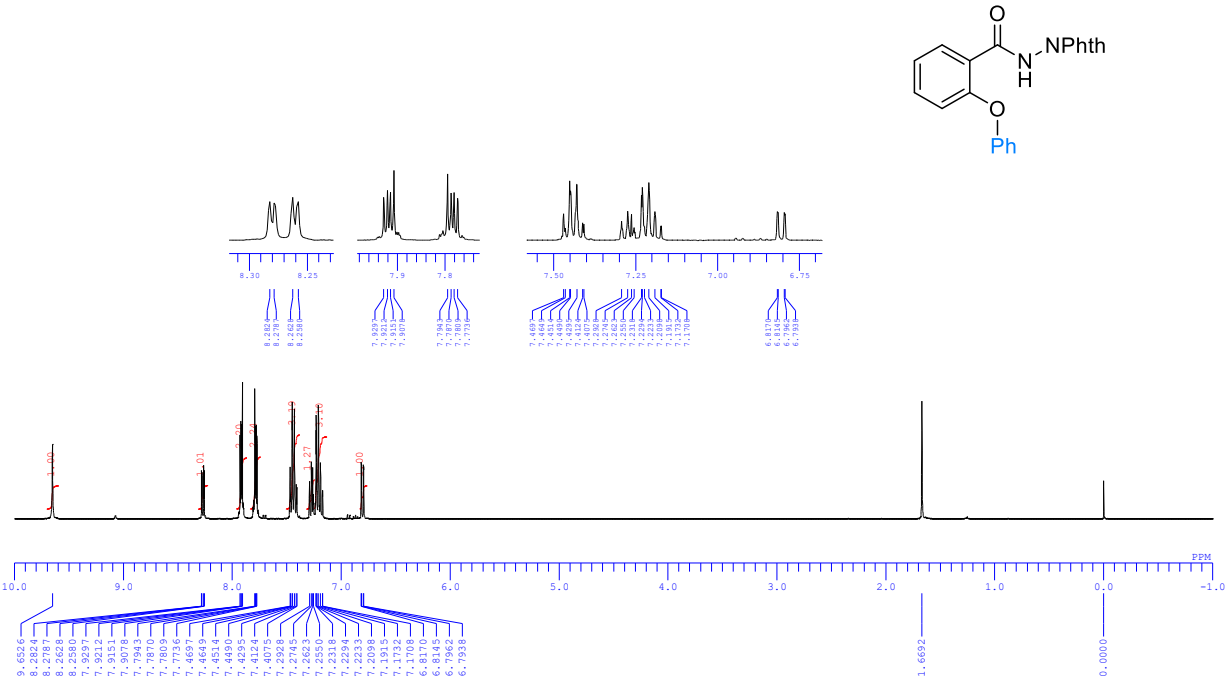
S3. N. Ghareb, H. A. Elshihawy, M. M. Abdel-Daim and M. A. Helal, *Bioorg. Med. Chem. Lett.*, 2017, **27**, 2377.

S4. H. Sasa, S. Hamatani, M. Hirashima, N. Takenaga, T. Hanasaki and T. Dohi, *Chemistry*, 2023, **5**, 2155.

9. NMR Charts

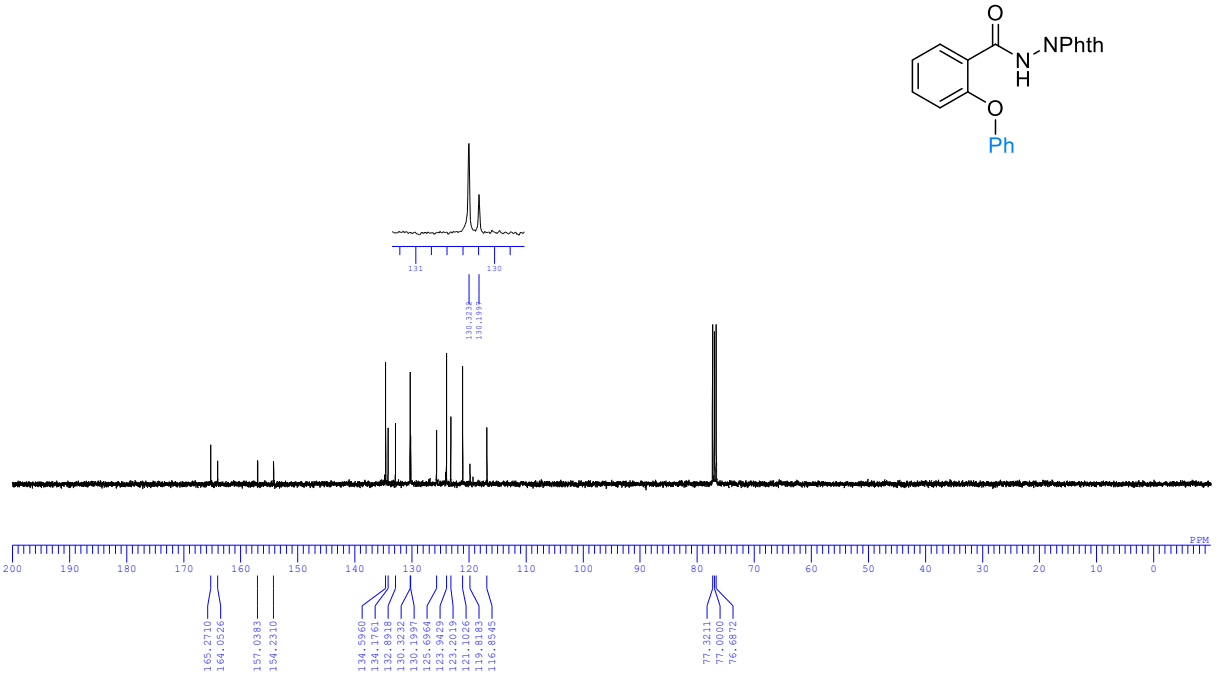
N-(1,3-Dioxoisoindolin-2-yl)-2-phenoxybenzamide (3aa)

^{1}H NMR (400 MHz, $CDCl_3$)



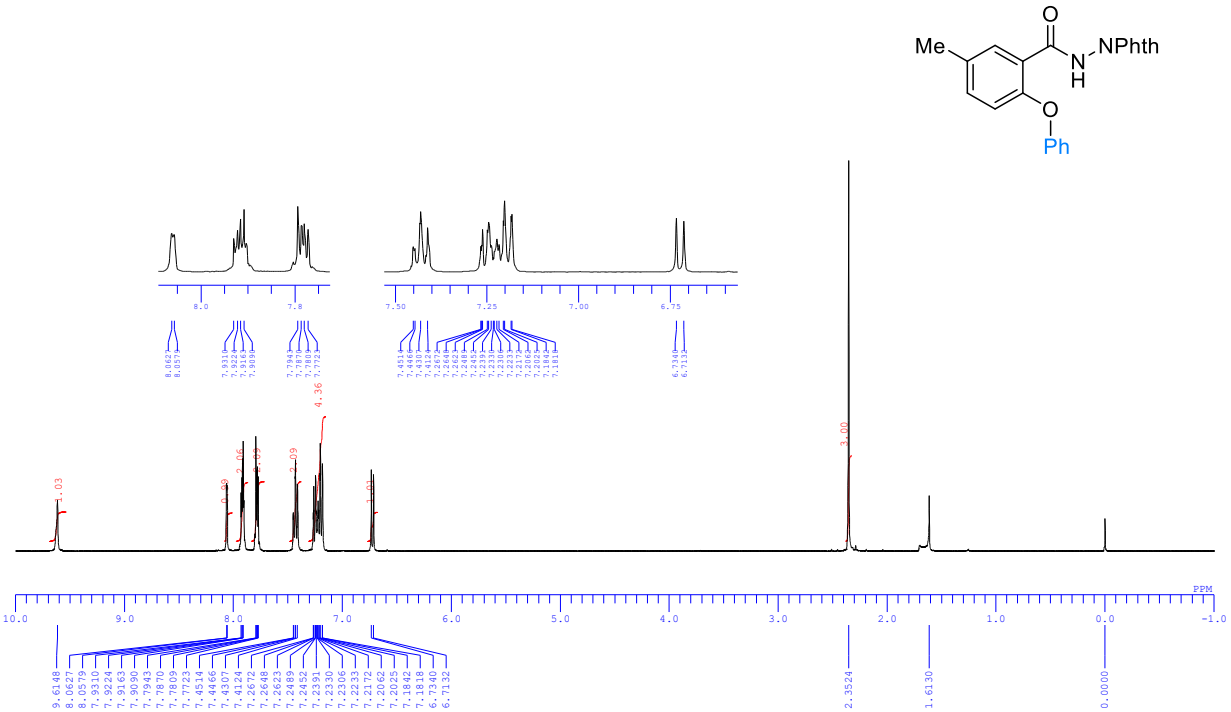
N-(1,3-Dioxoisoindolin-2-yl)-2-phenoxybenzamide (3aa)

^{13}C NMR (100 MHz, $CDCl_3$)



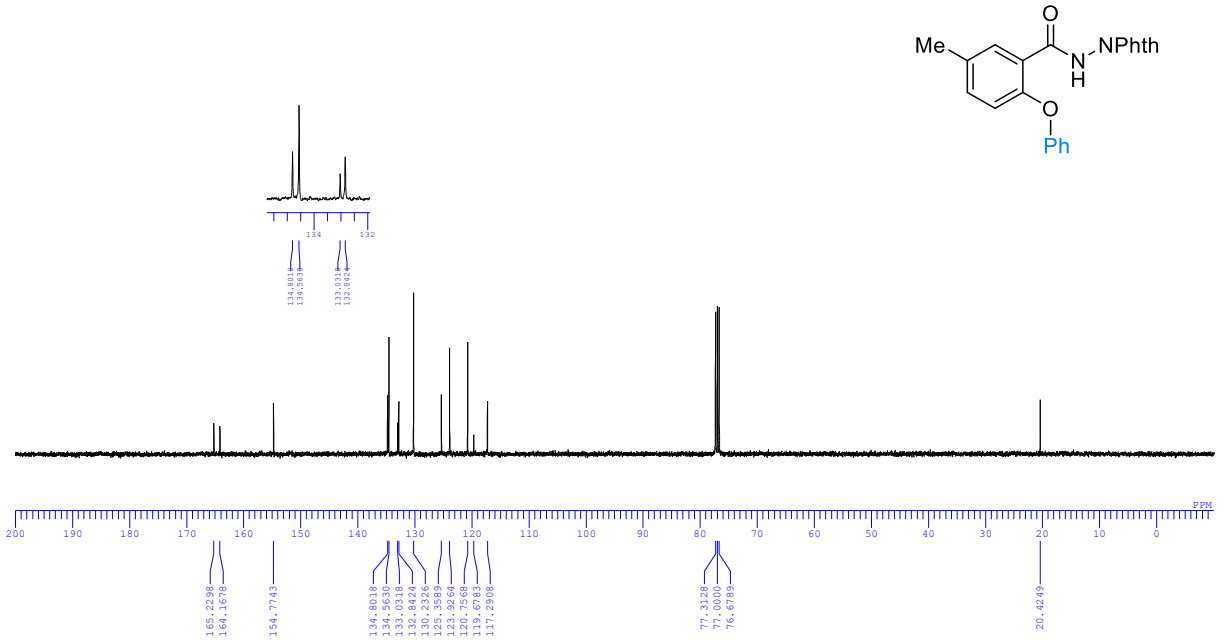
***N*-(1,3-Dioxoisoindolin-2-yl)-5-methyl-2-phenoxybenzamide (3ba)**

^{1}H NMR (400 MHz, $CDCl_3$)



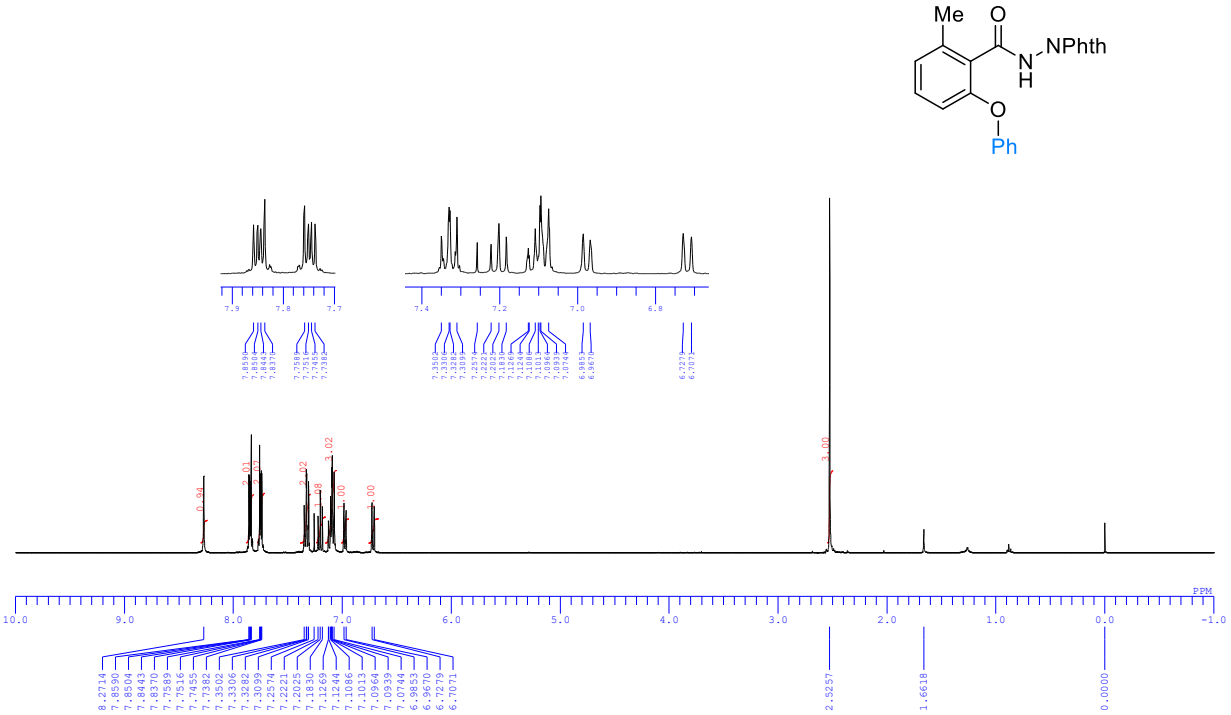
***N*-(1,3-Dioxoisoindolin-2-yl)-5-methyl-2-phenoxybenzamide (3ba)**

^{13}C NMR (100 MHz, $CDCl_3$)



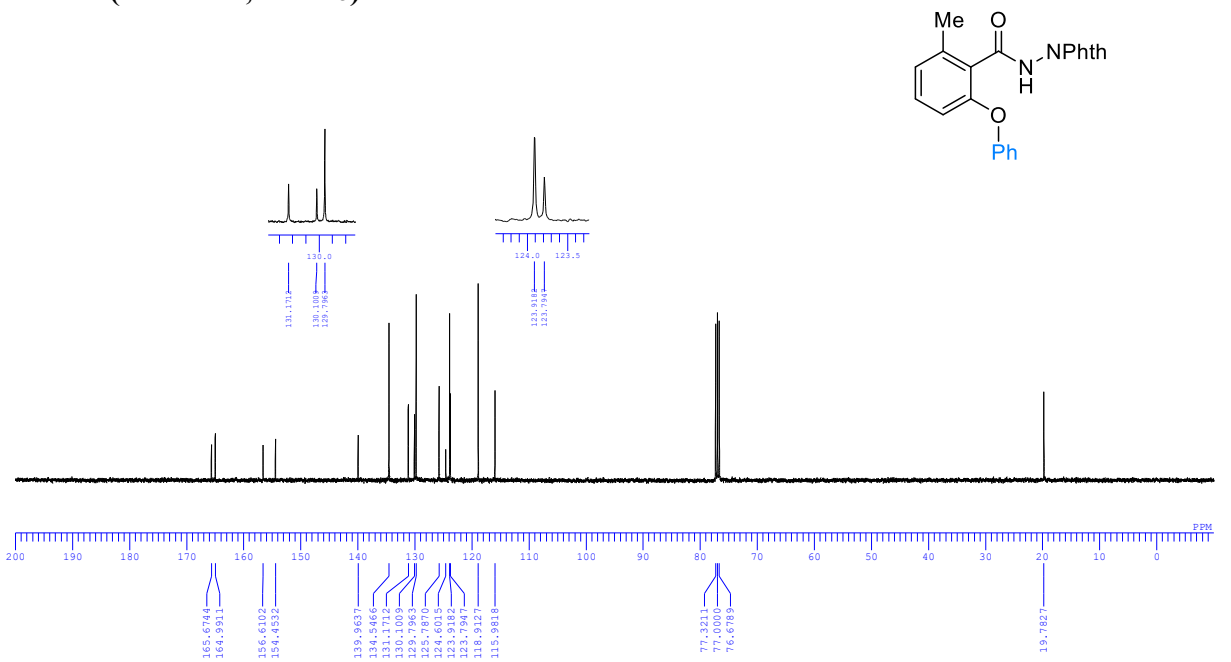
N-(1,3-Dioxoisoindolin-2-yl)-2-methyl-6-phenoxybenzamide (3ca)

^{1}H NMR (400 MHz, $CDCl_3$)



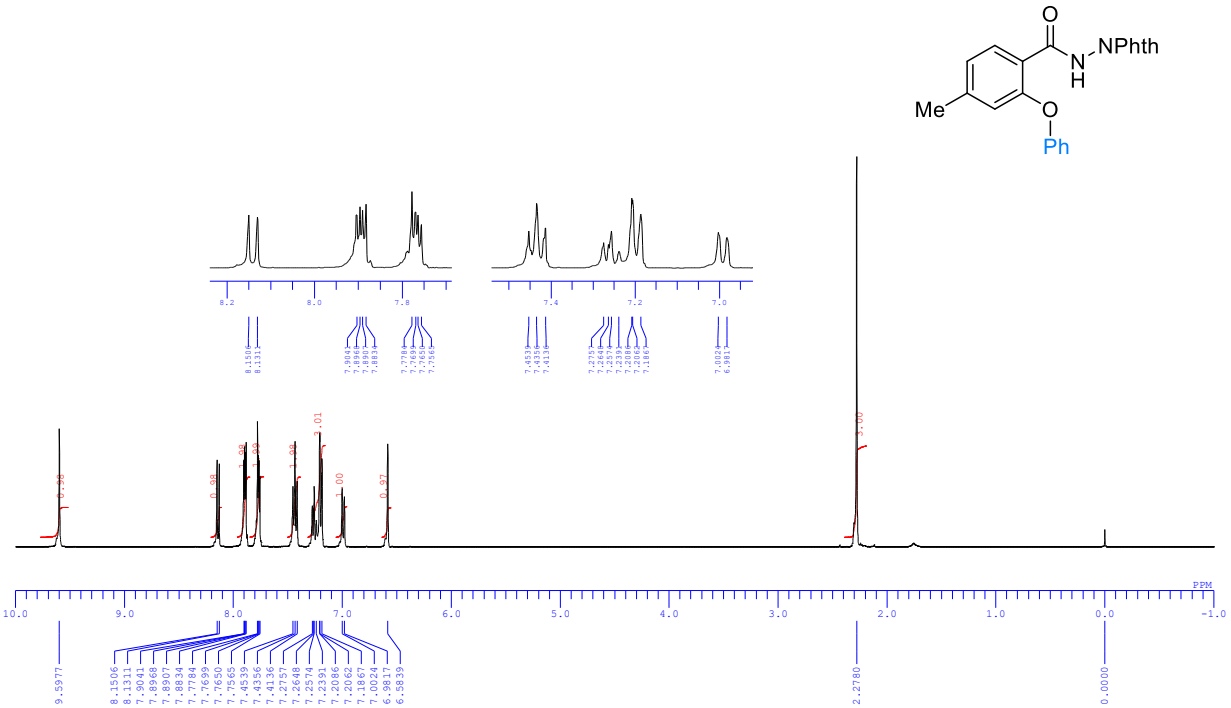
N-(1,3-Dioxoisoindolin-2-yl)-2-methyl-6-phenoxybenzamide (3ca)

^{13}C NMR (100 MHz, $CDCl_3$)



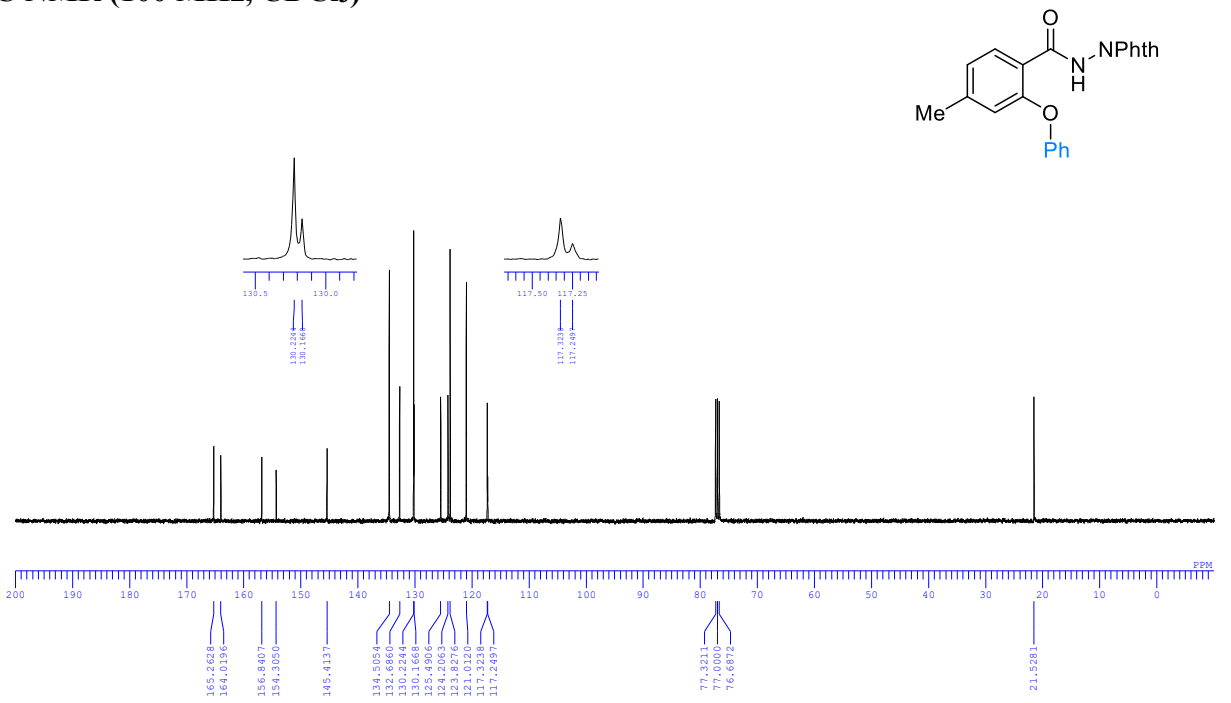
N-(1,3-Dioxoisoindolin-2-yl)-4-methyl-2-phenoxybenzamide (3da)

^{1}H NMR (400 MHz, $CDCl_3$)



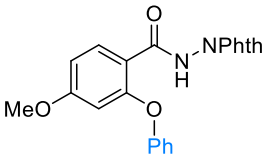
N-(1,3-Dioxoisoindolin-2-yl)-4-methyl-2-phenoxybenzamide (3da)

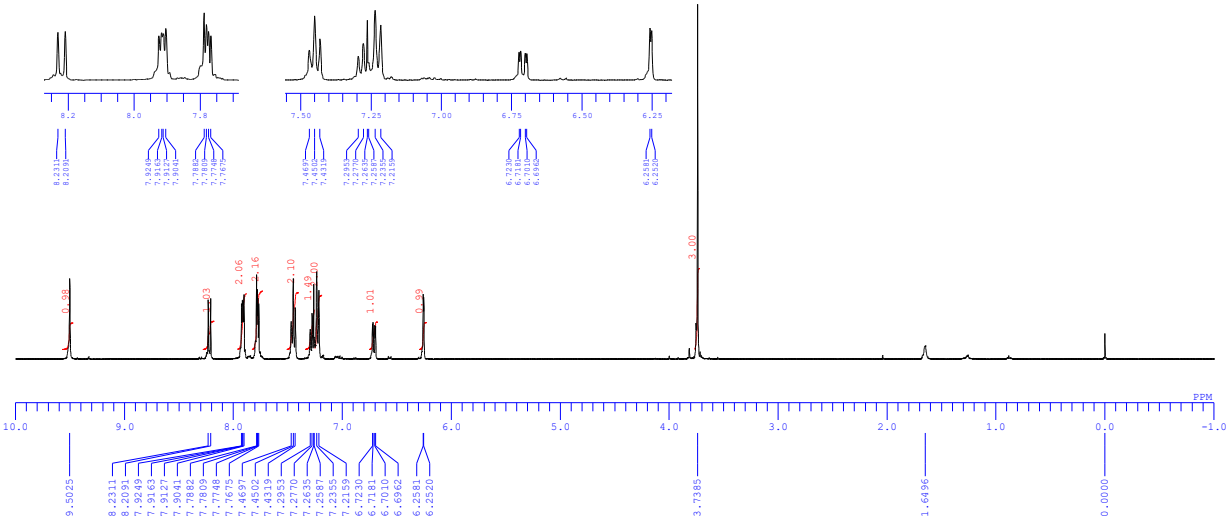
^{13}C NMR (100 MHz, $CDCl_3$)



N-(1,3-Dioxoisoindolin-2-yl)-4-methoxy-2-phenoxybenzamide (3ea)

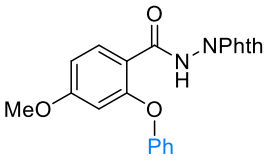
^{1}H NMR (400 MHz, $CDCl_3$)

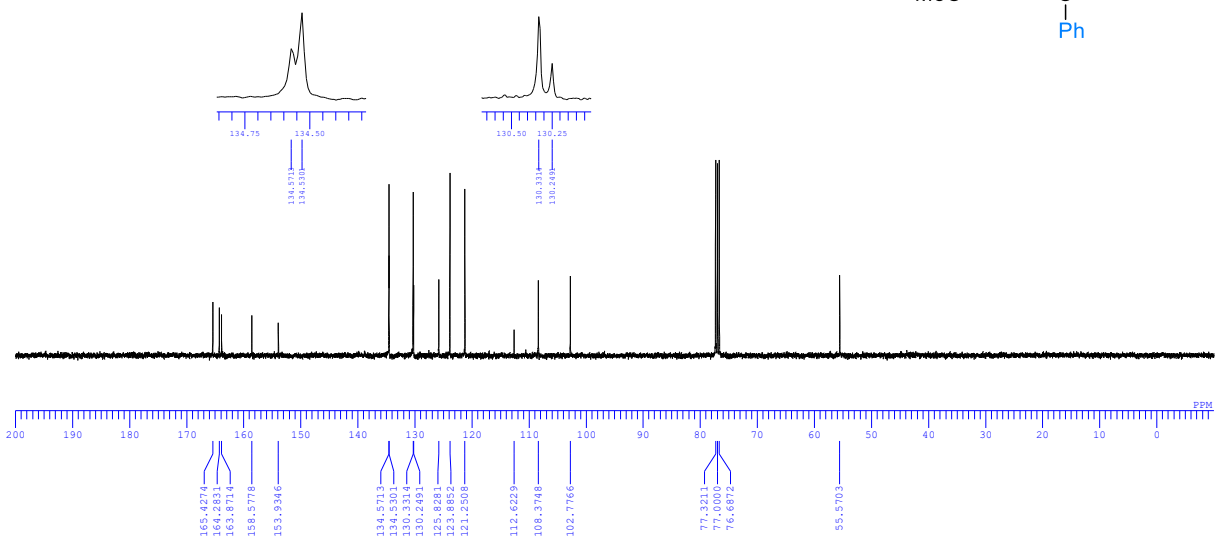




N-(1,3-Dioxoisoindolin-2-yl)-4-methoxy-2-phenoxybenzamide (3ea)

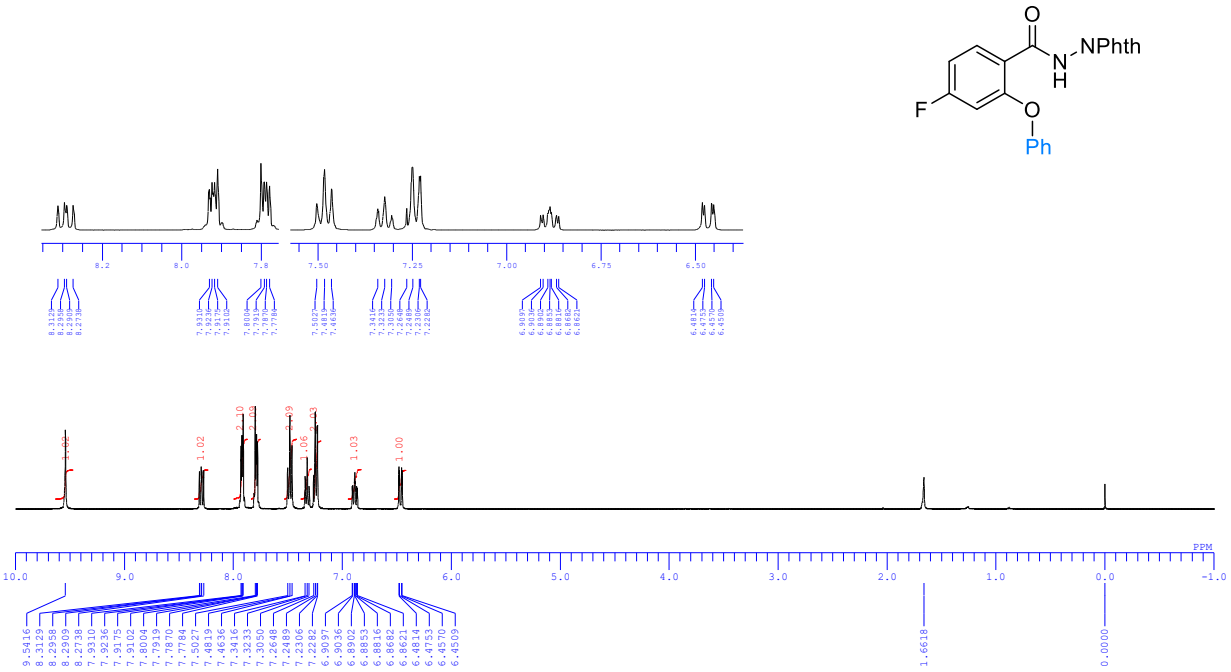
^{13}C NMR (100 MHz, $CDCl_3$)





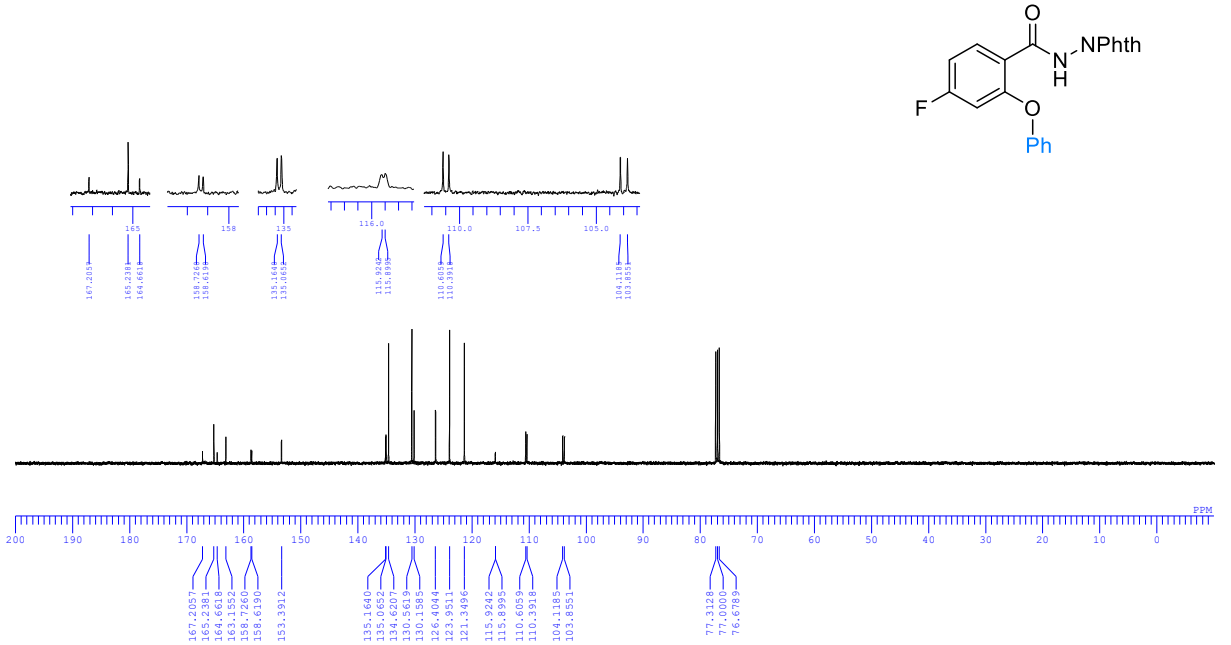
N-(1,3-Dioxoisoindolin-2-yl)-4-fluoro-2-phenoxybenzamide (3fa)

^{1}H NMR (400 MHz, $CDCl_3$)



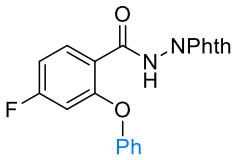
N-(1,3-Dioxoisoindolin-2-yl)-4-fluoro-2-phenoxybenzamide (3fa)

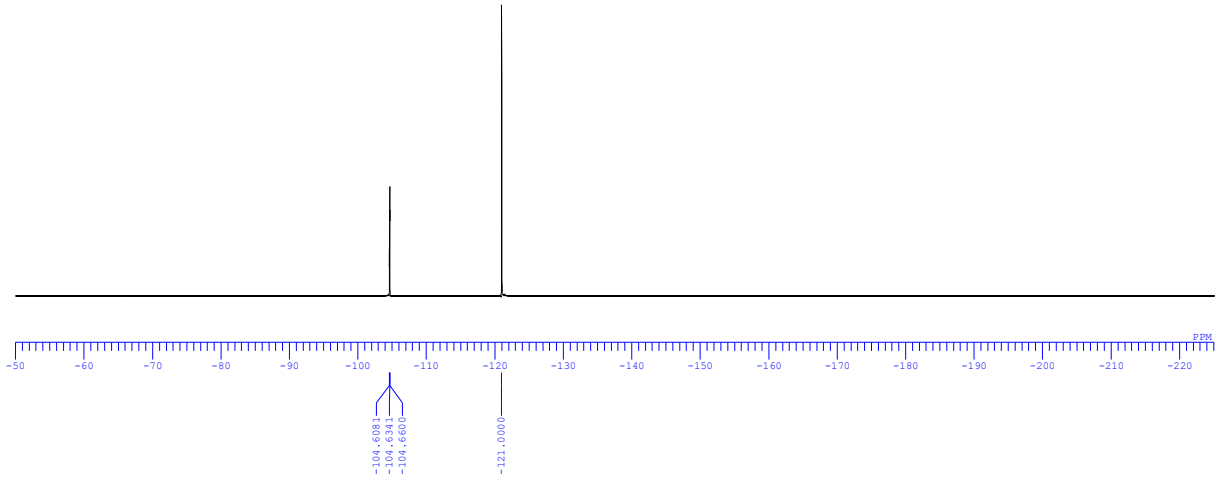
^{13}C NMR (100 MHz, $CDCl_3$)



N-(1,3-Dioxoisoindolin-2-yl)-4-fluoro-2-phenoxybenzamide (3fa)

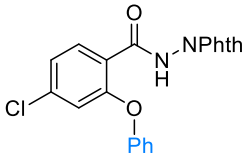
^{19}F NMR (376 MHz, $CDCl_3$)

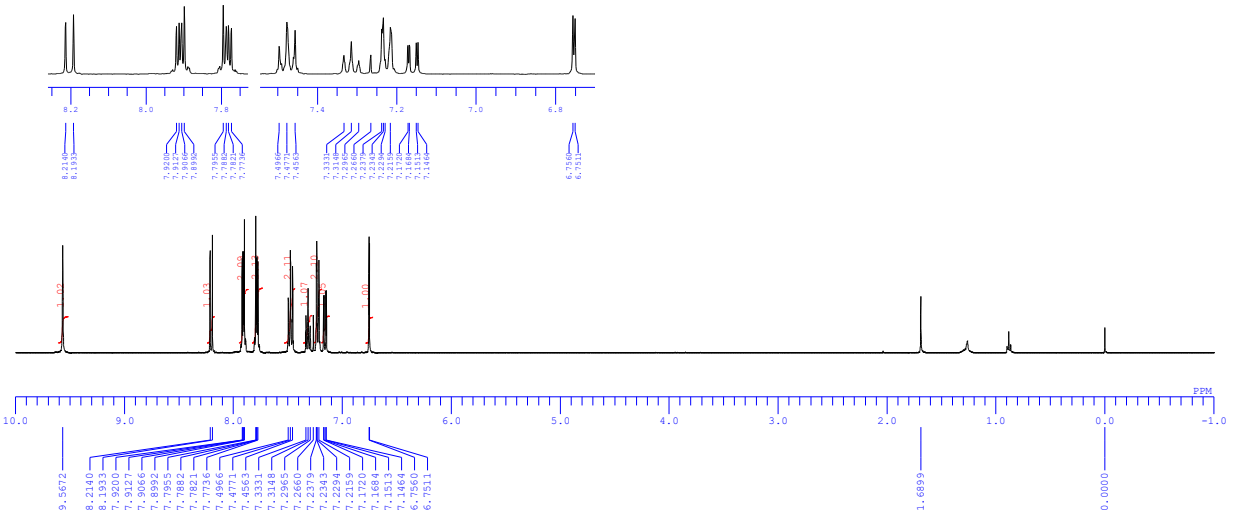




4-Chloro-*N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (3ga)

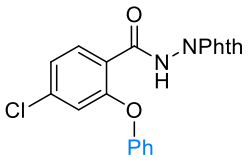
^{1}H NMR (400 MHz, $CDCl_3$)

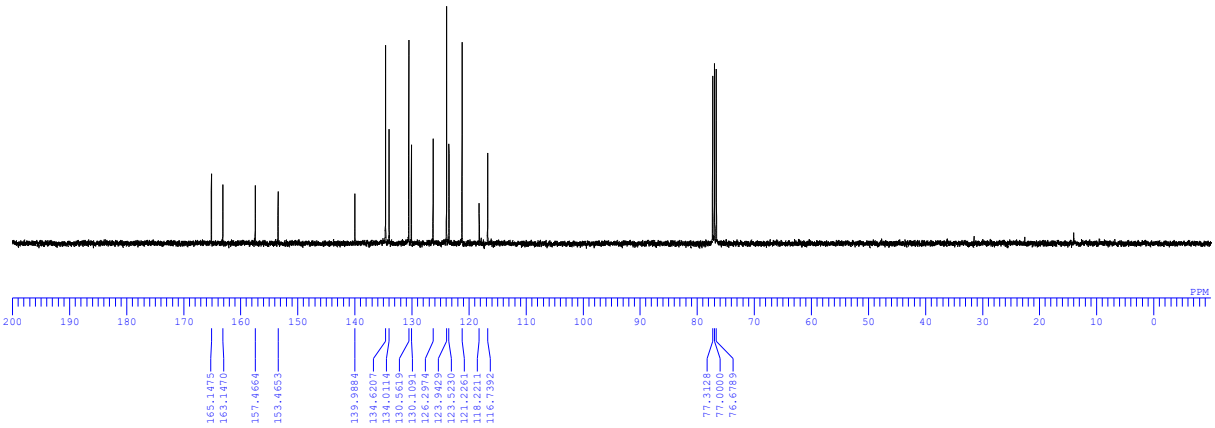




4-Chloro-*N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (3ga)

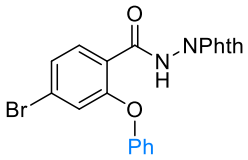
^{13}C NMR (100 MHz, $CDCl_3$)

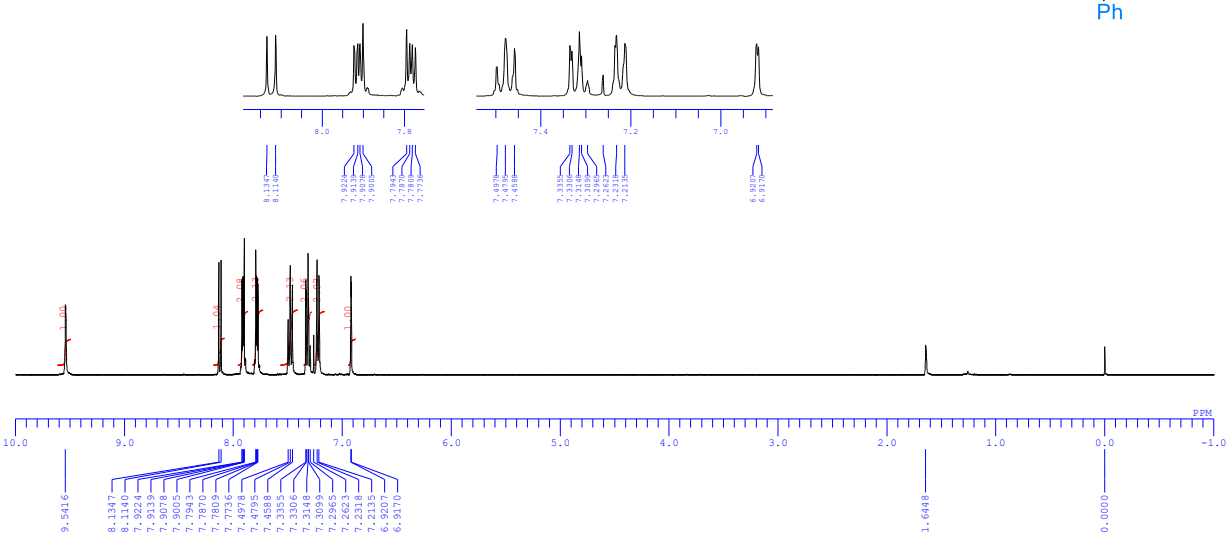




4-Bromo-*N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (3ha)

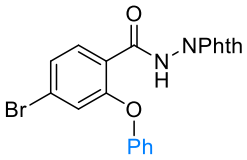
^{1}H NMR (400 MHz, $CDCl_3$)

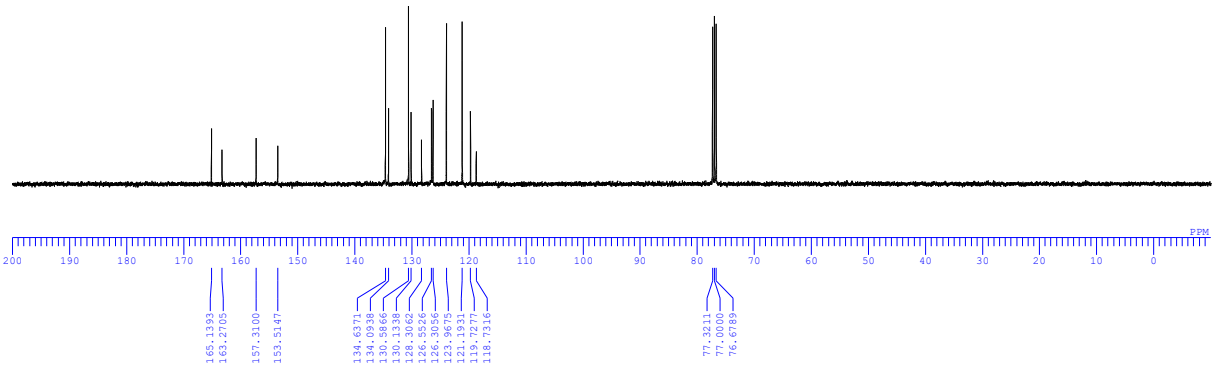




4-Bromo-*N*-(1,3-dioxoisoindolin-2-yl)-2-phenoxybenzamide (3ha)

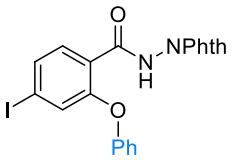
^{13}C NMR (100 MHz, $CDCl_3$)

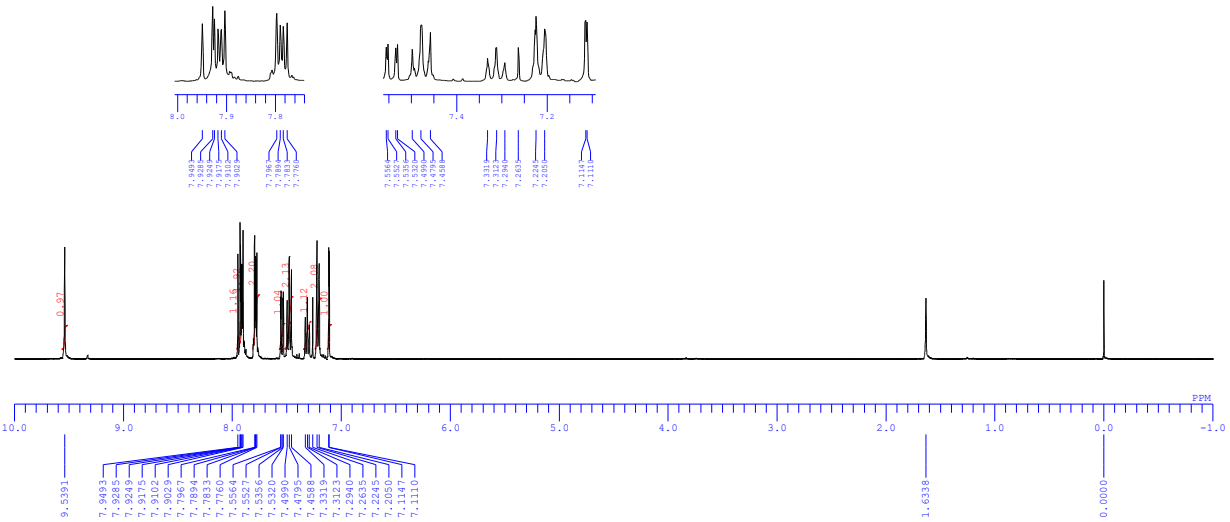




***N*-(1,3-Dioxoisoindolin-2-yl)-4-iodo-2-phenoxybenzamide (3ia)**

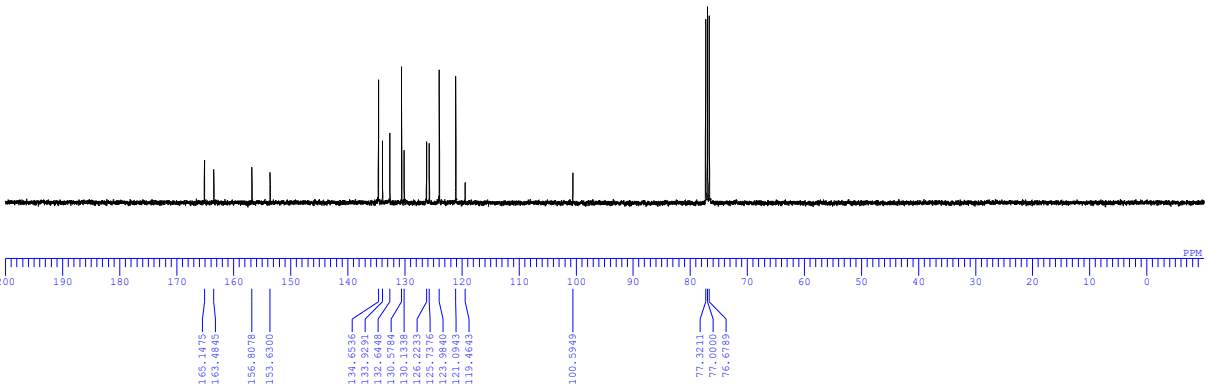
^{1}H NMR (400 MHz, $CDCl_3$)





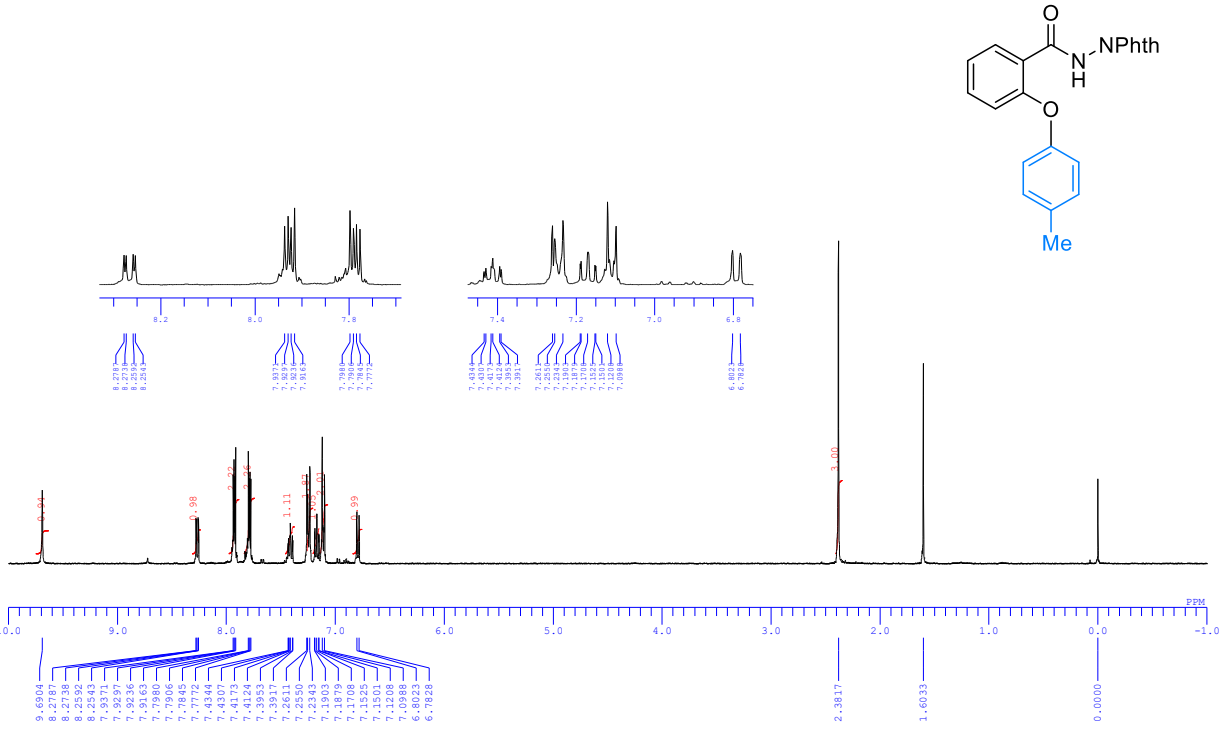
N-(1,3-Dioxoisoindolin-2-yl)-4-iodo-2-phenoxybenzamide (3ia)

^{13}C NMR (100 MHz, $CDCl_3$)



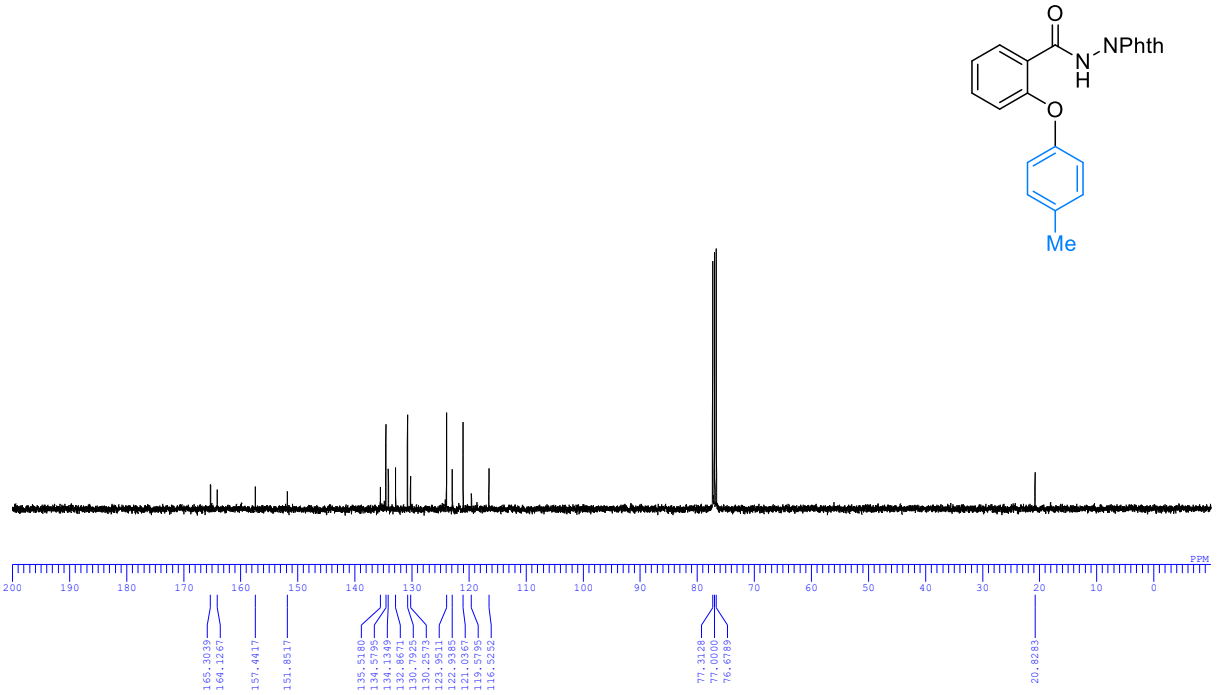
N-(1,3-Dioxoisoindolin-2-yl)-2-(*p*-tolyloxy)benzamide (3ab)

^{1}H NMR (400 MHz, $CDCl_3$)



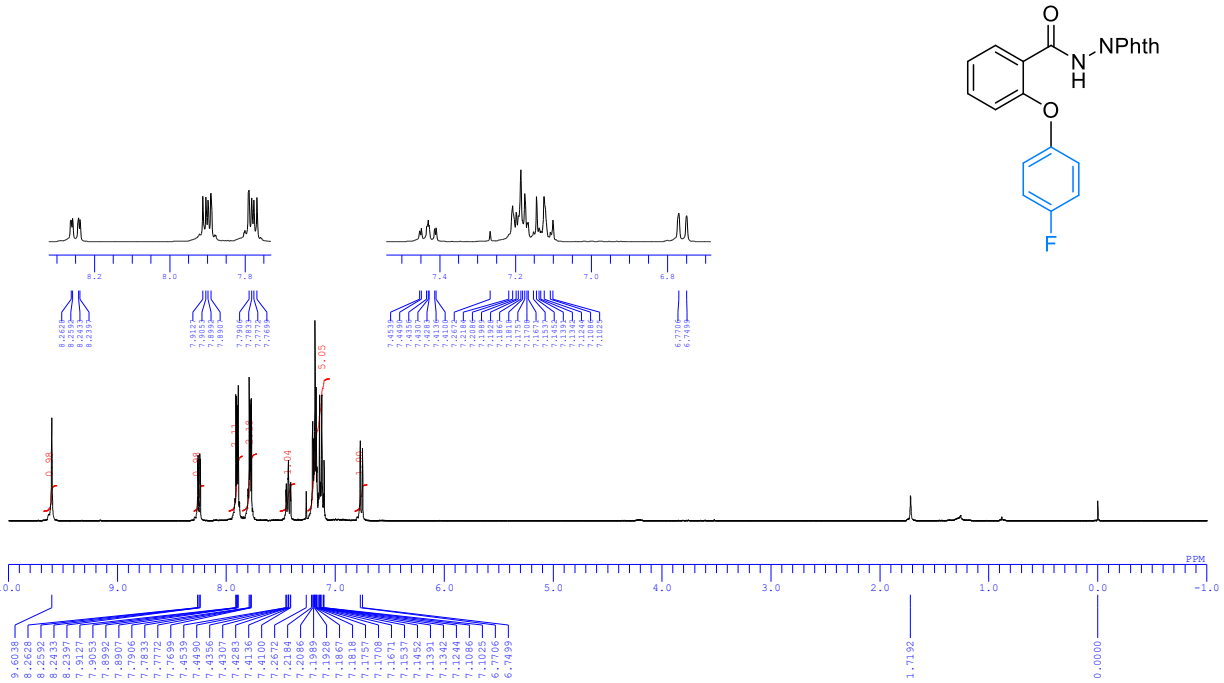
N-(1,3-Dioxoisoindolin-2-yl)-2-(*p*-tolyloxy)benzamide (3ab)

^{13}C NMR (100 MHz, $CDCl_3$)



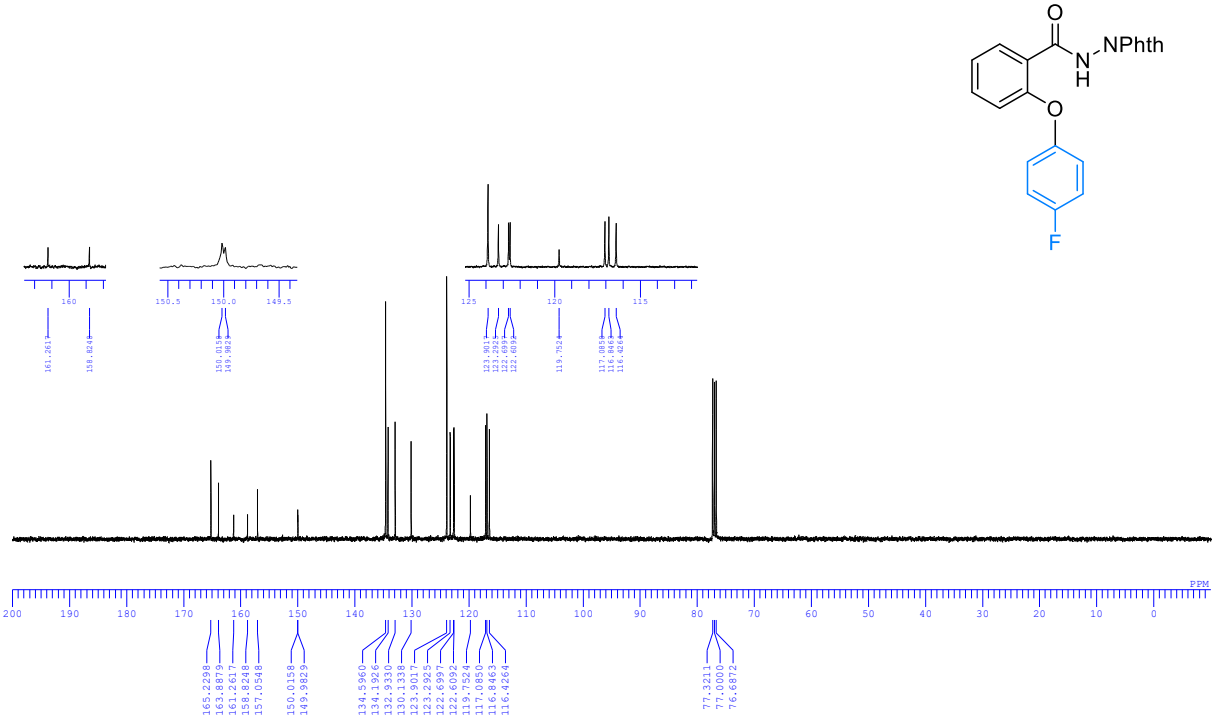
N-(1,3-Dioxoisoindolin-2-yl)-2-(4-fluorophenoxy)benzamide (3ac)

^{1}H NMR (400 MHz, $CDCl_3$)



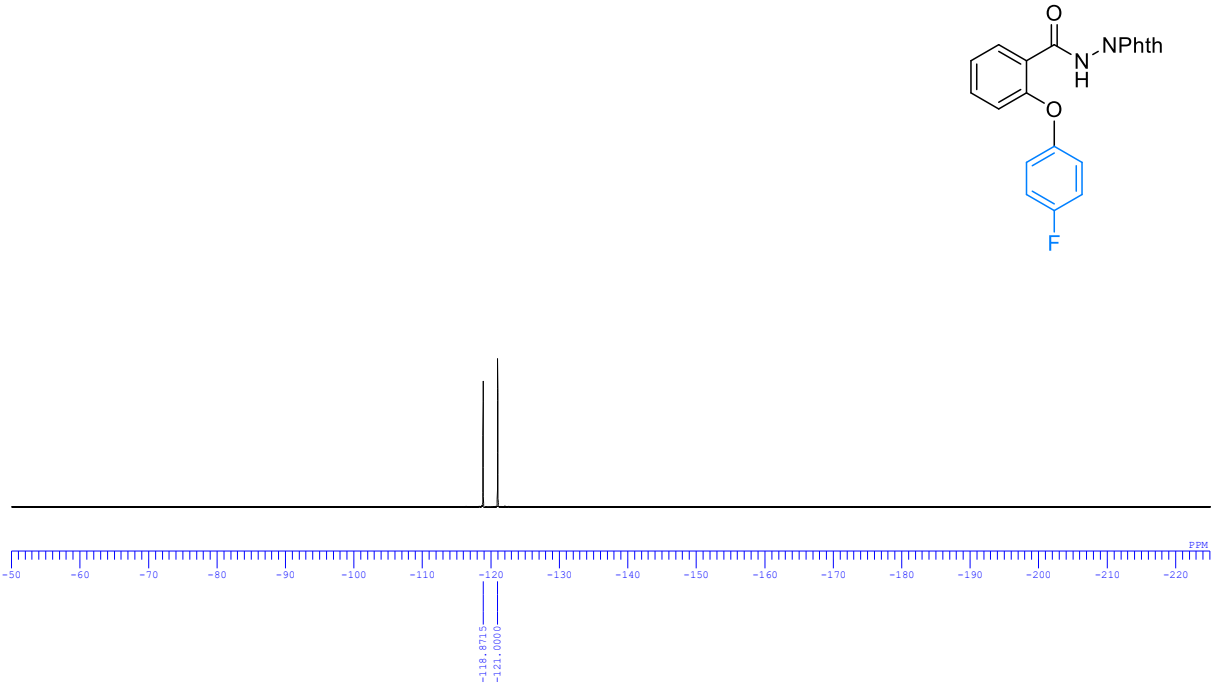
N-(1,3-Dioxoisoindolin-2-yl)-2-(4-fluorophenoxy)benzamide (3ac)

^{13}C NMR (100 MHz, $CDCl_3$)



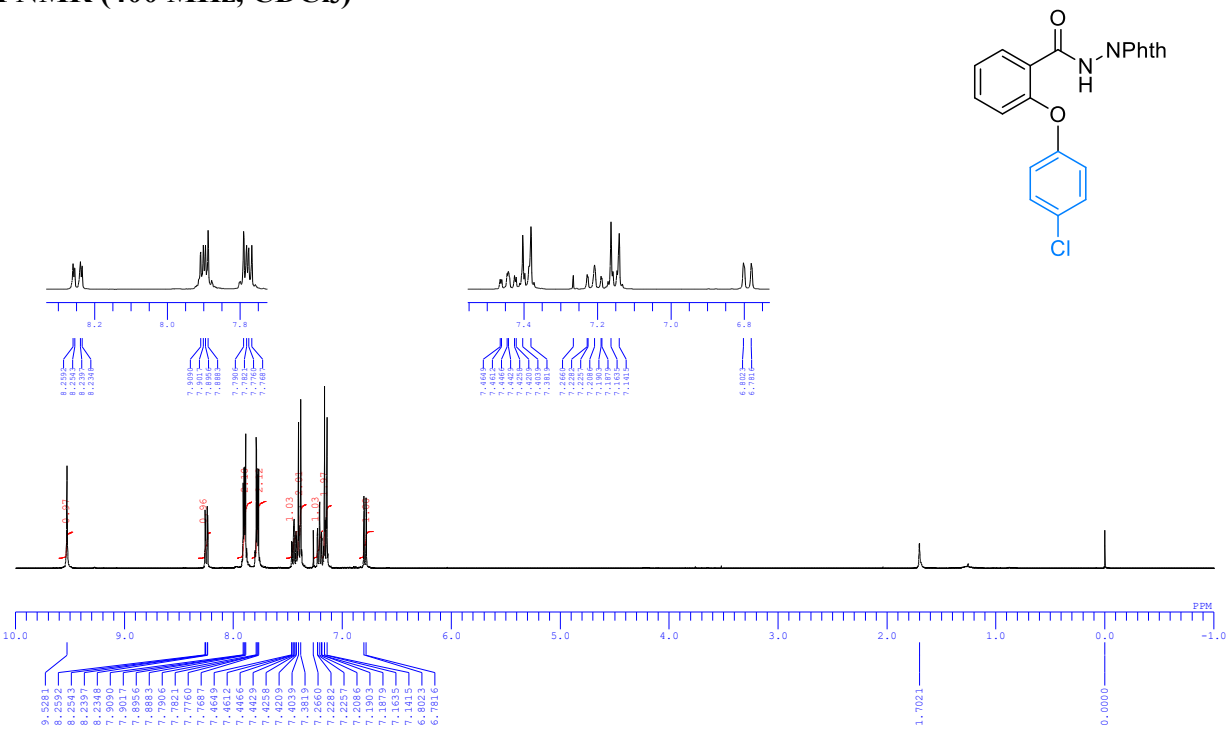
N-(1,3-Dioxoisoindolin-2-yl)-2-(4-fluorophenoxy)benzamide (3ac)

^{19}F NMR (376 MHz, $CDCl_3$)



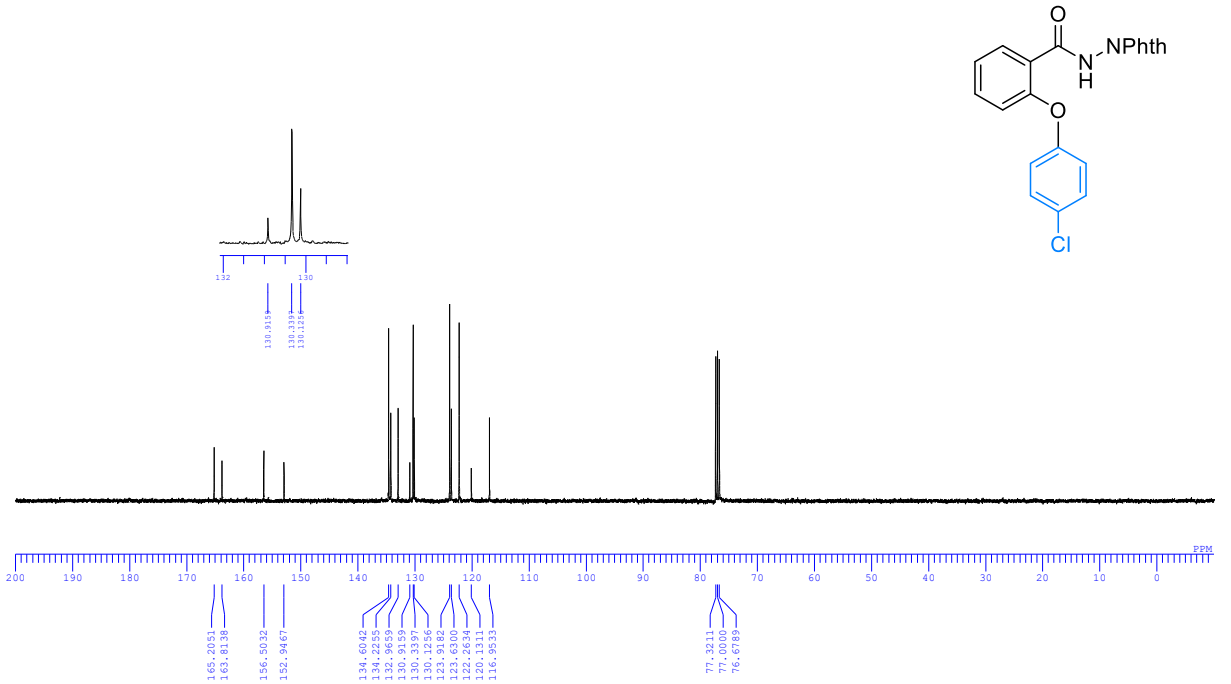
2-(4-Chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ad)

^{1}H NMR (400 MHz, $CDCl_3$)



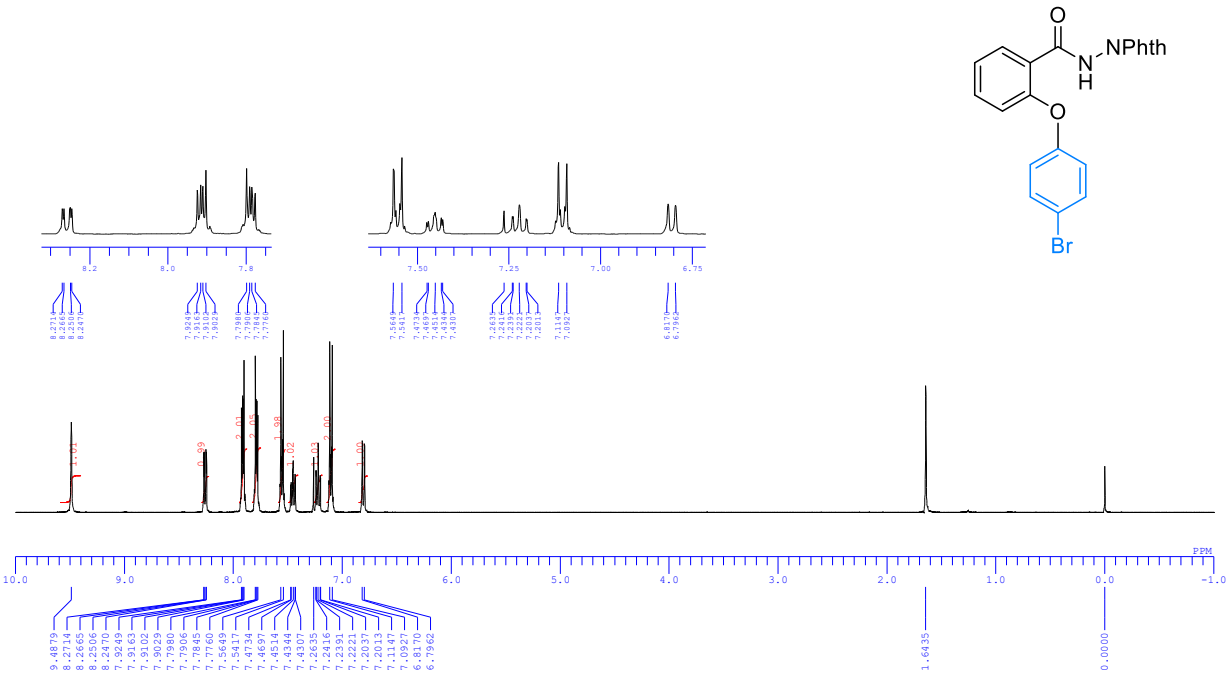
2-(4-Chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ad)

^{13}C NMR (100 MHz, $CDCl_3$)



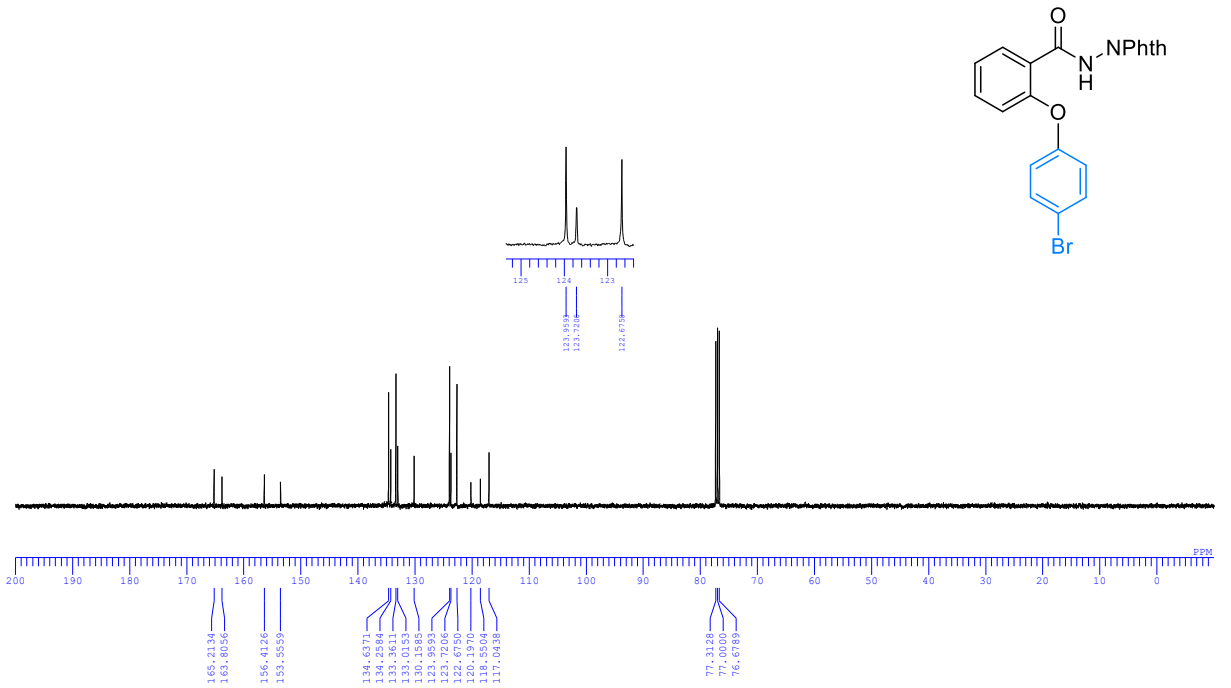
2-(4-Bromophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ae)

^{1}H NMR (400 MHz, $CDCl_3$)



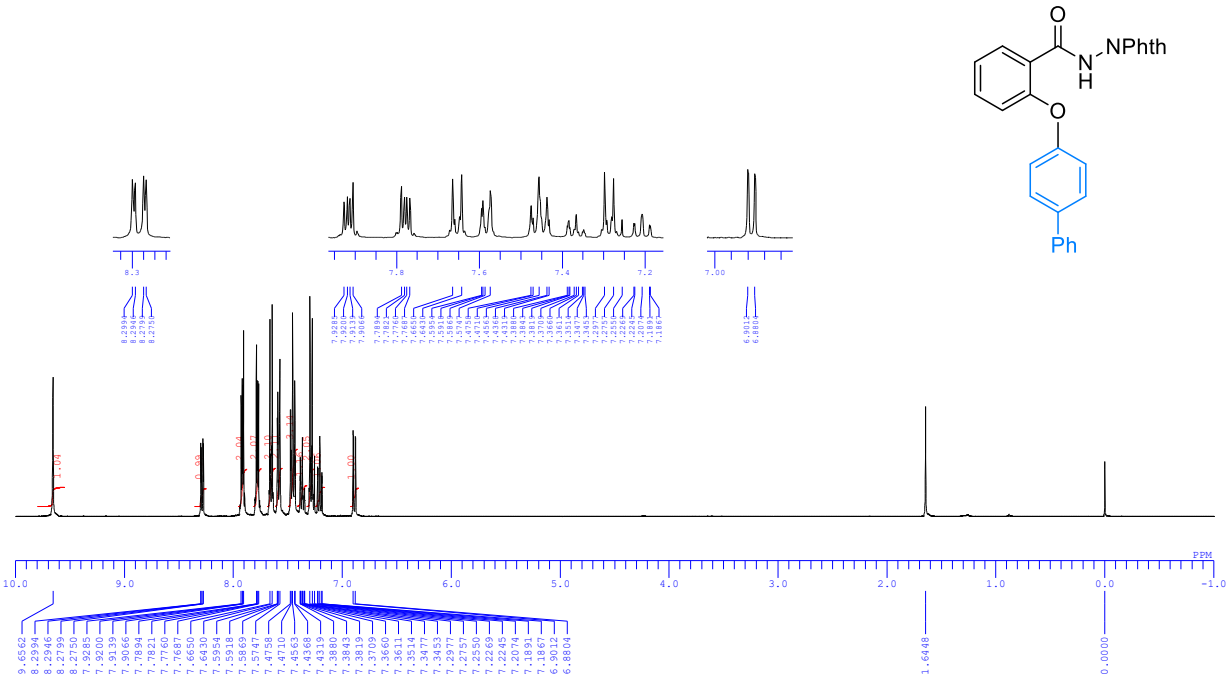
2-(4-Bromophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ae)

^{13}C NMR (100 MHz, $CDCl_3$)



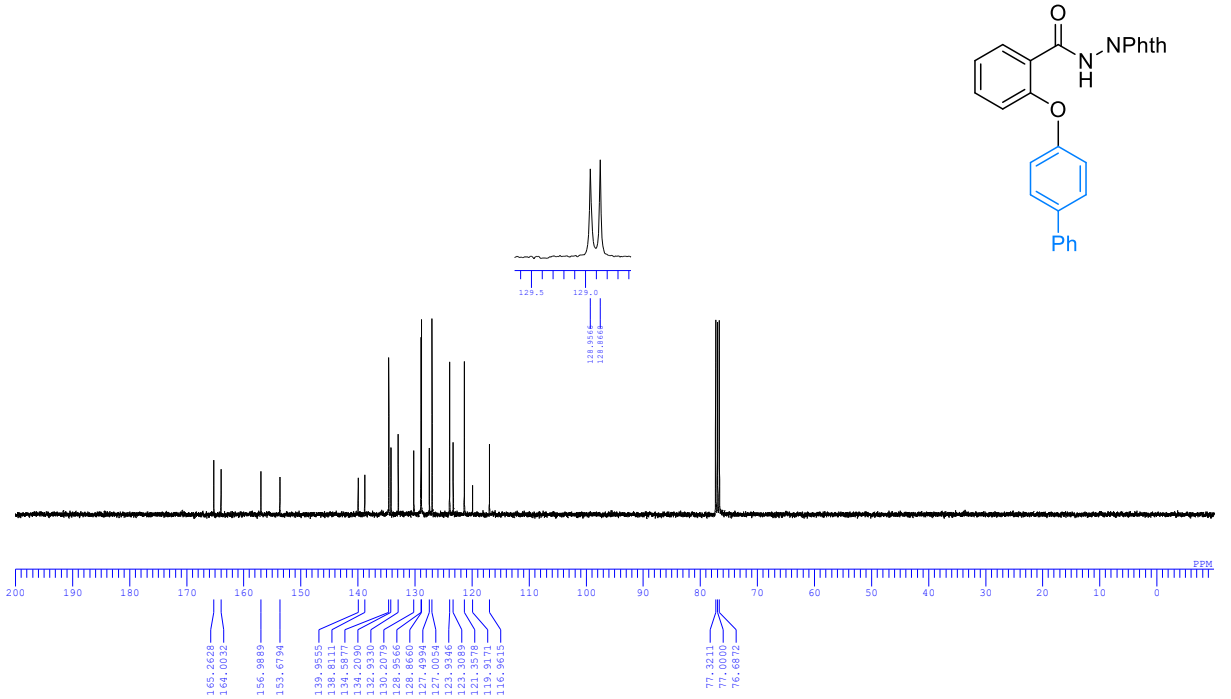
2-([1,1'-Biphenyl]-4-yloxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3af)

^{1}H NMR (400 MHz, $CDCl_3$)



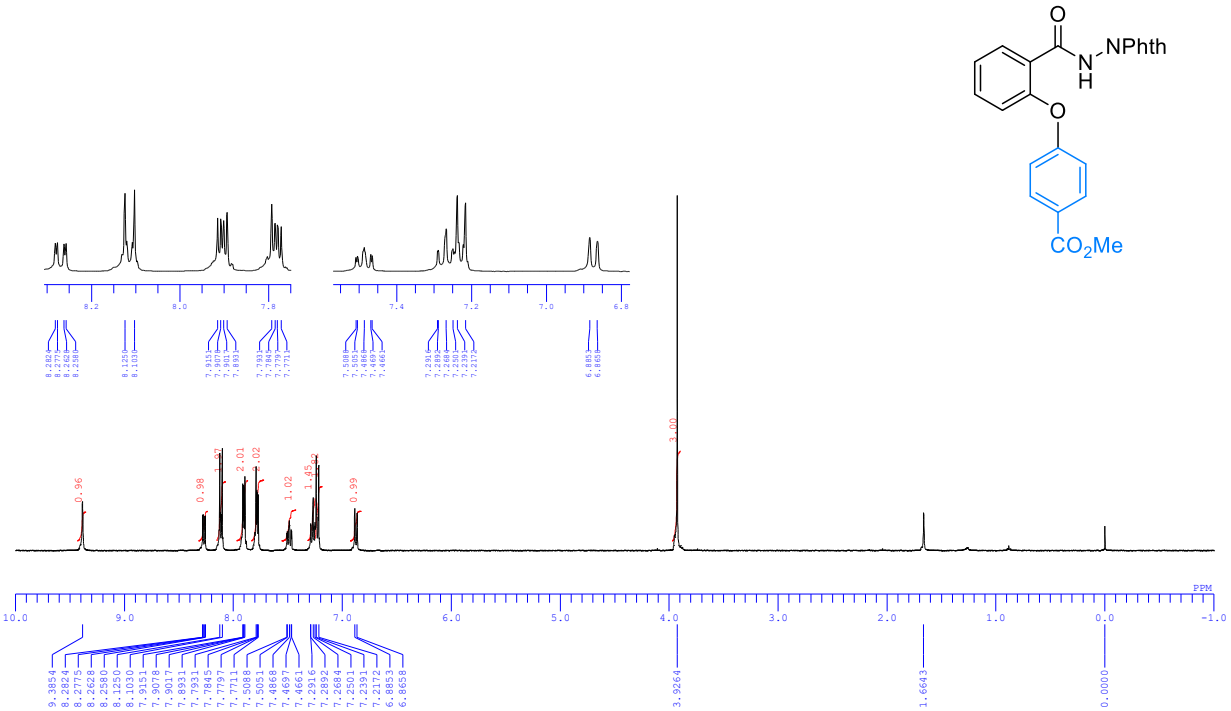
2-([1,1'-Biphenyl]-4-yloxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3af)

^{13}C NMR (100 MHz, $CDCl_3$)



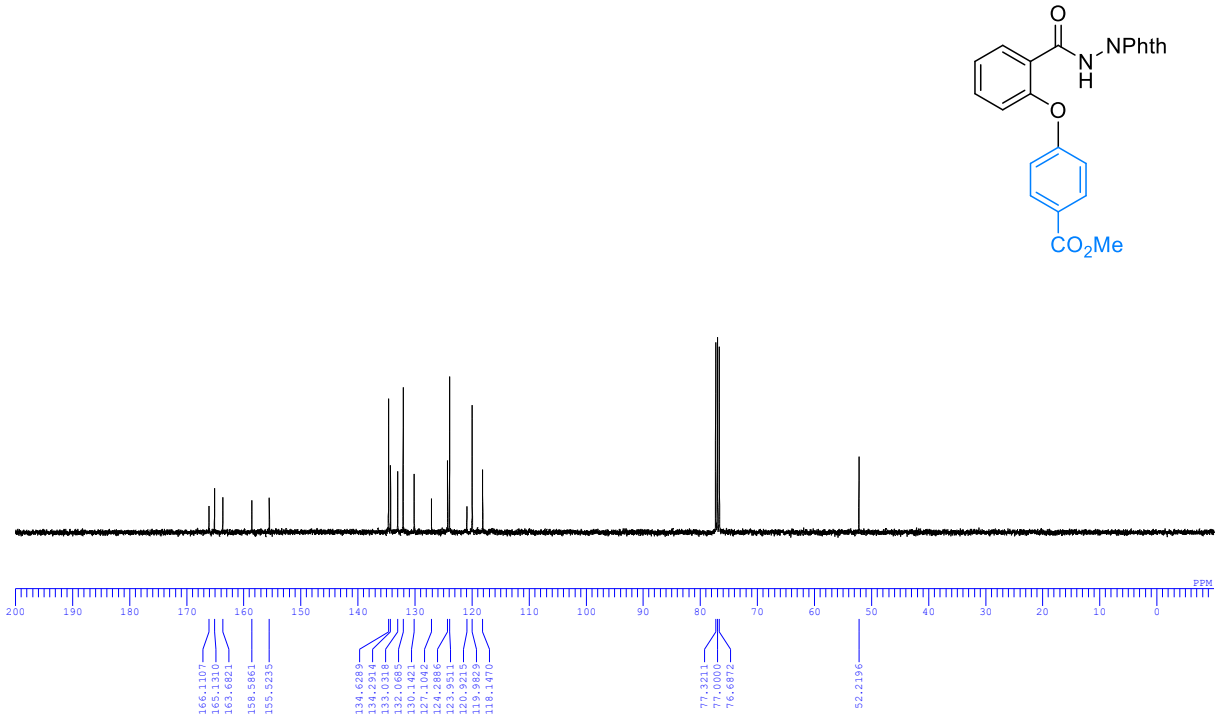
Methyl 4-(2-((1,3-dioxoisoindolin-2-yl)carbamoyl)phenoxy)benzoate (3ag)

^{1}H NMR (400 MHz, $CDCl_3$)



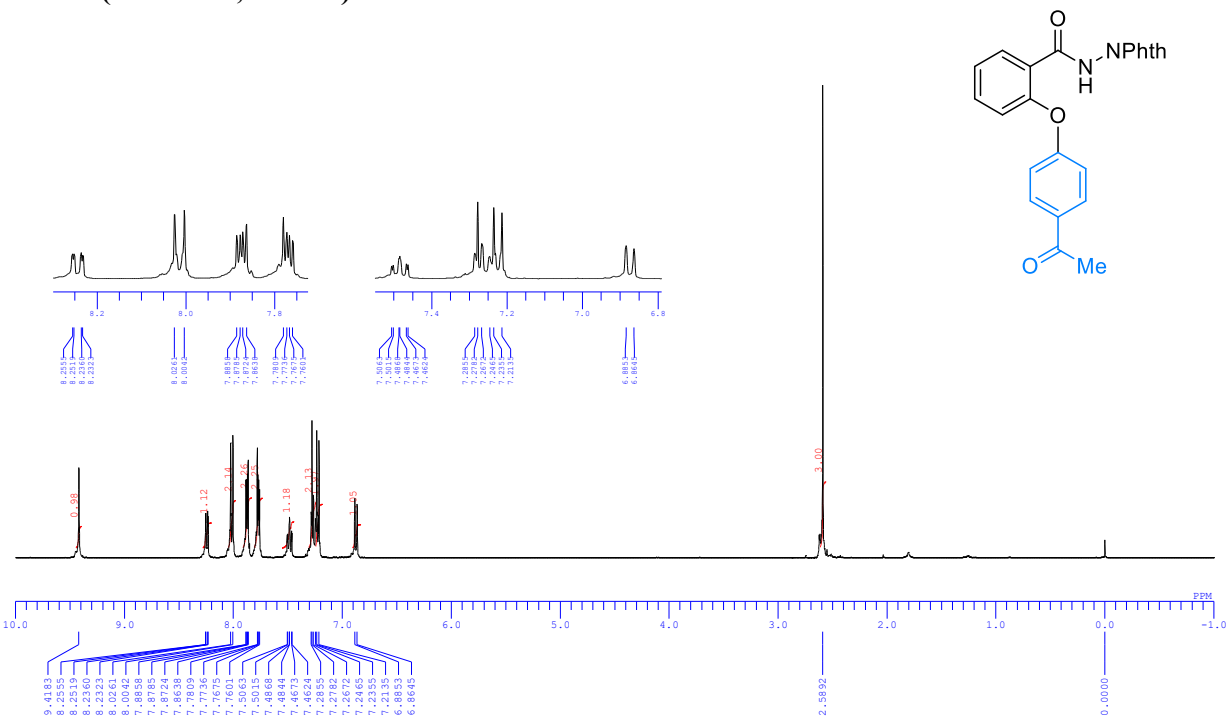
Methyl 4-(2-((1,3-dioxoisoindolin-2-yl)carbamoyl)phenoxy)benzoate (3ag)

^{13}C NMR (100 MHz, $CDCl_3$)



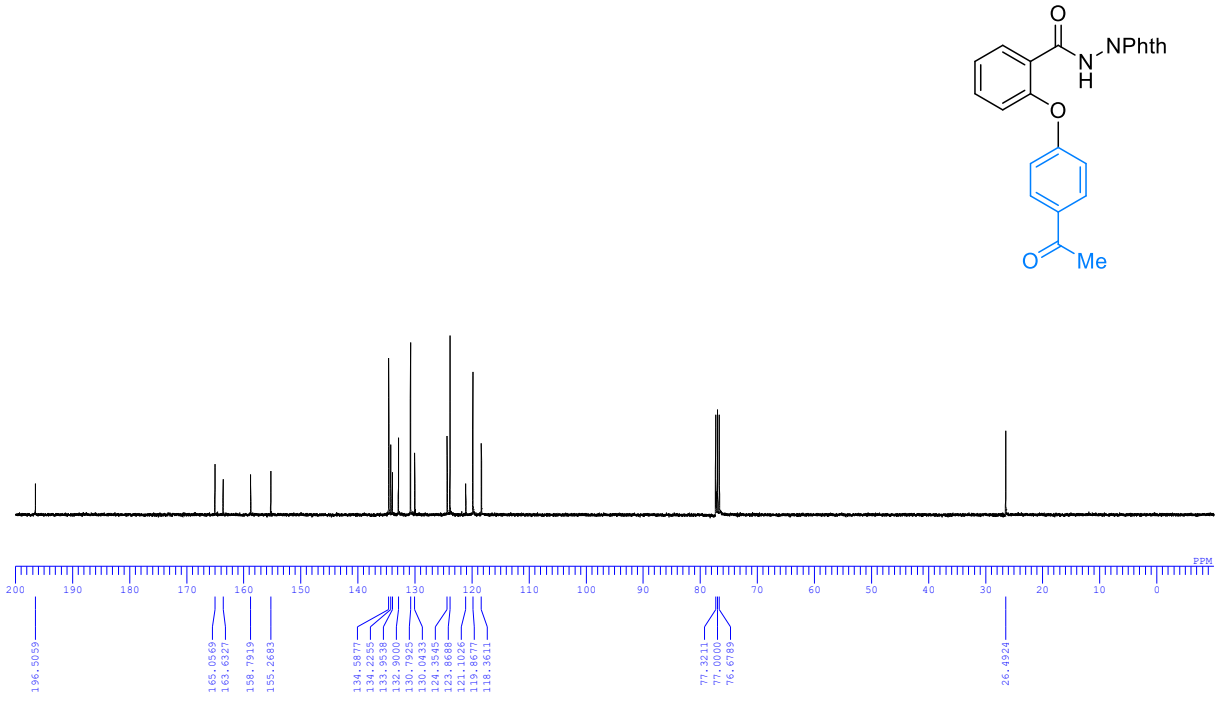
2-(4-Acetylphenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ah)

^{1}H NMR (400 MHz, $CDCl_3$)



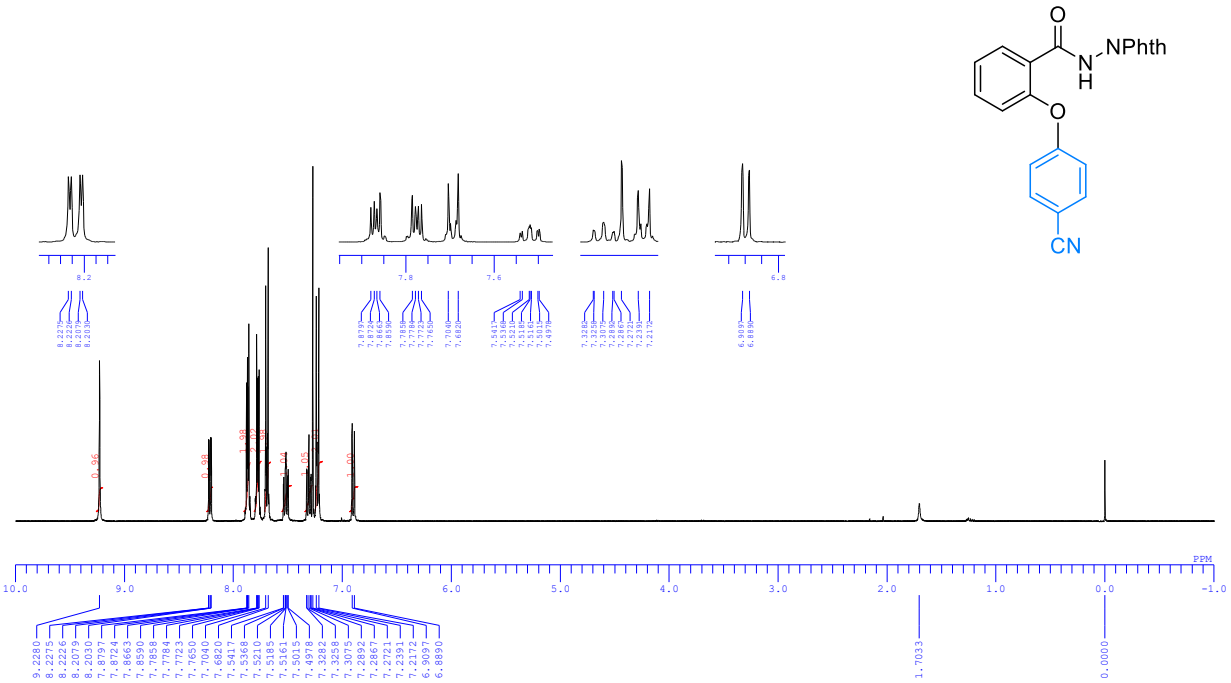
2-(4-Acetylphenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ah)

^{13}C NMR (100 MHz, $CDCl_3$)



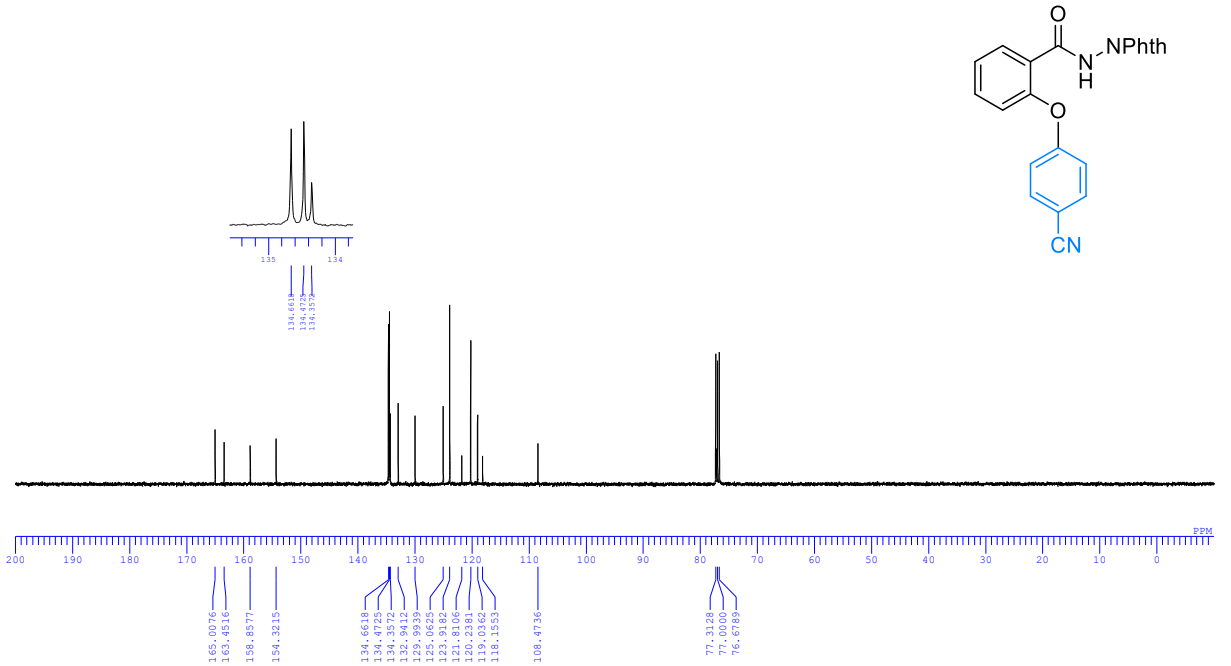
2-(4-Cyanophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ai)

^{1}H NMR (400 MHz, $CDCl_3$)



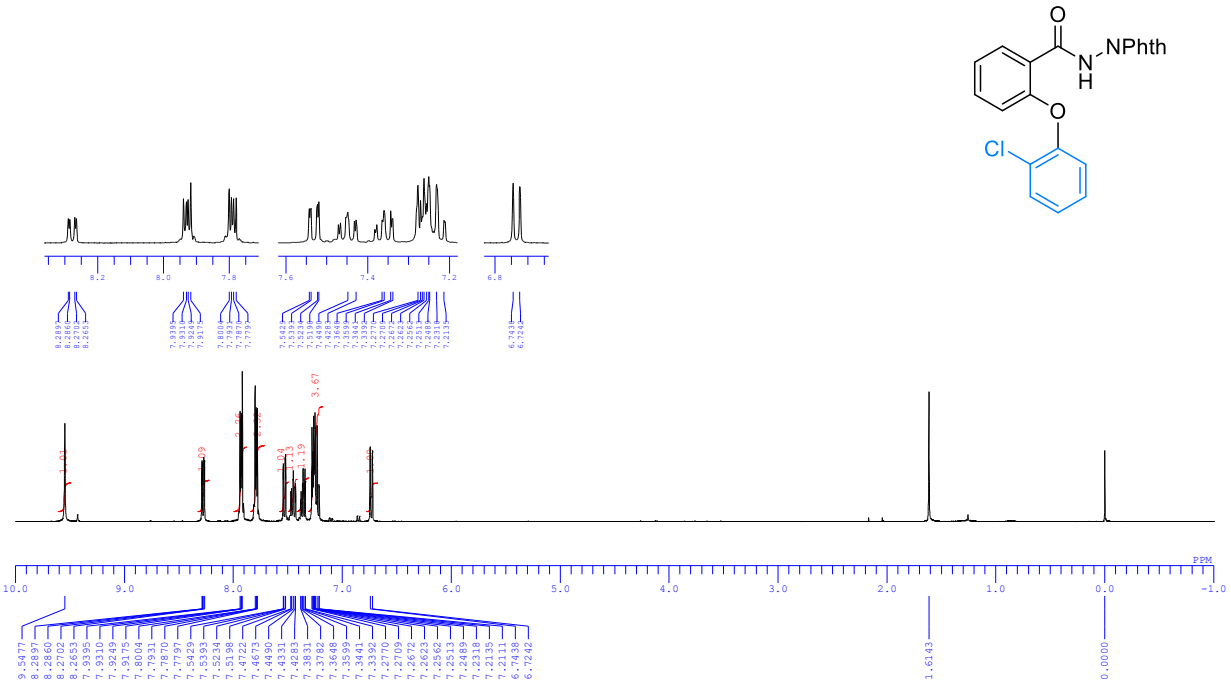
2-(4-Cyanophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3ai)

^{13}C NMR (100 MHz, $CDCl_3$)



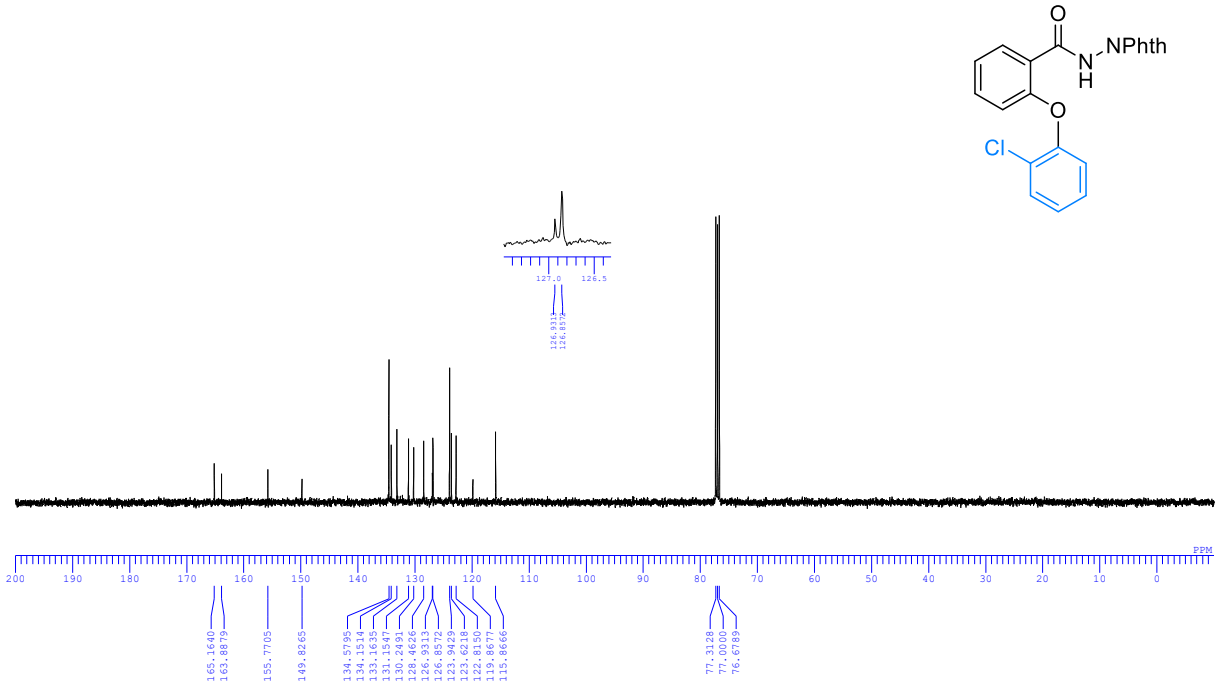
2-(2-Chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3aj)

^{1}H NMR (400 MHz, $CDCl_3$)



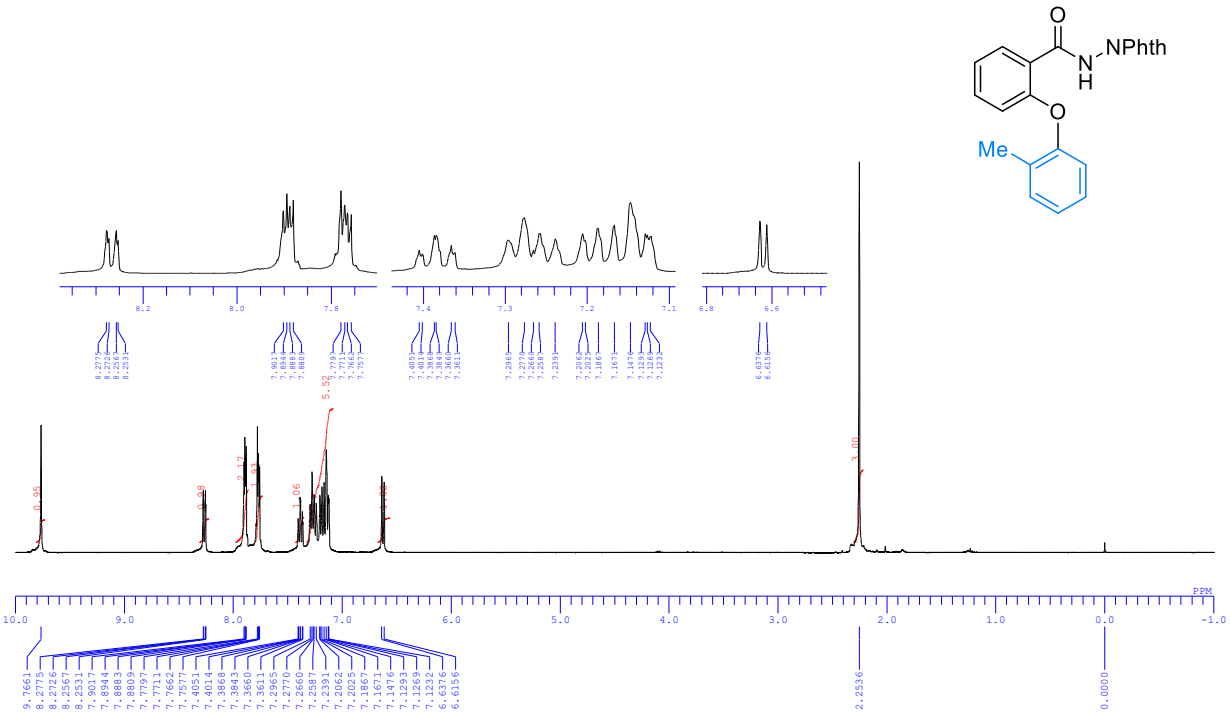
2-(2-Chlorophenoxy)-*N*-(1,3-dioxoisoindolin-2-yl)benzamide (3aj)

^{13}C NMR (100 MHz, $CDCl_3$)



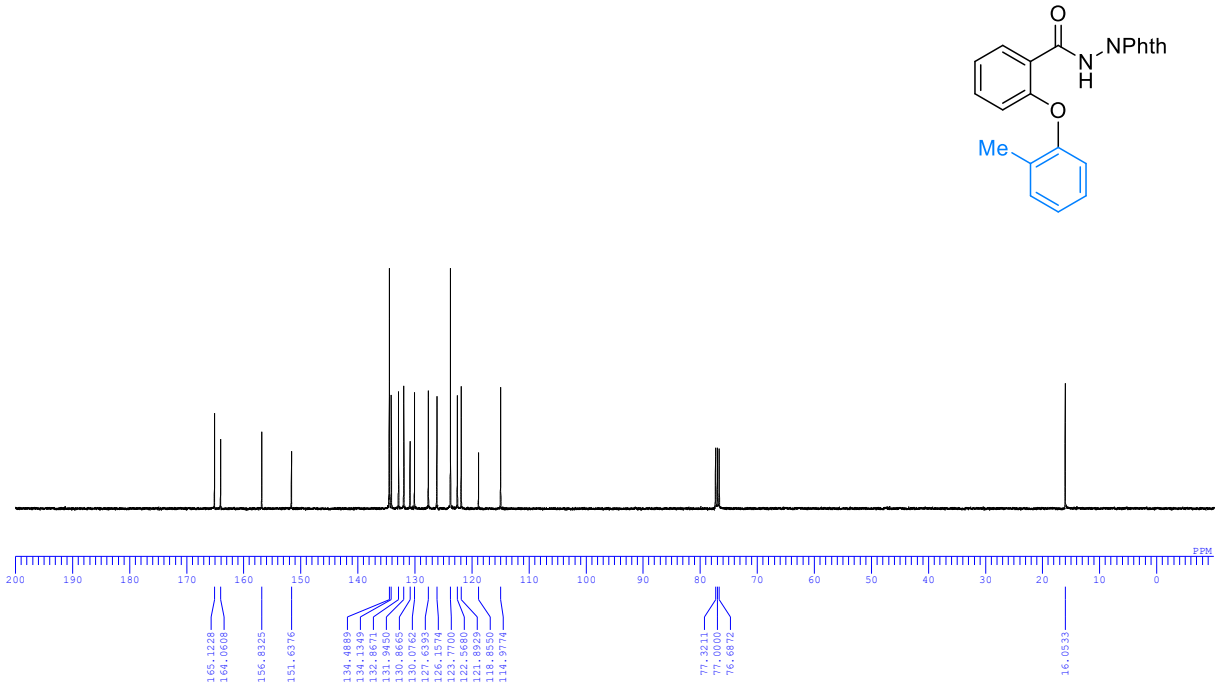
N-(1,3-dioxoisoindolin-2-yl)-2-(*o*-tolyloxy)benzamide (3ak)

^{1}H NMR (400 MHz, $CDCl_3$)



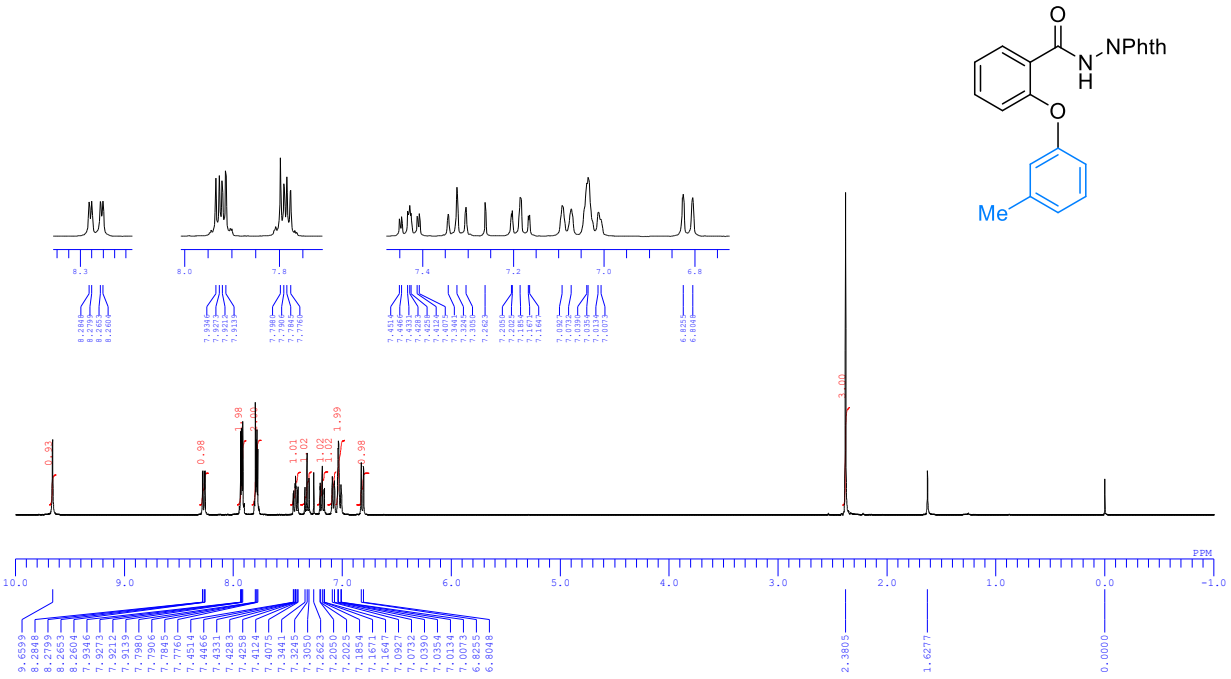
N-(1,3-dioxoisoindolin-2-yl)-2-(*o*-tolyloxy)benzamide (3ak)

^{13}C NMR (100 MHz, $CDCl_3$)



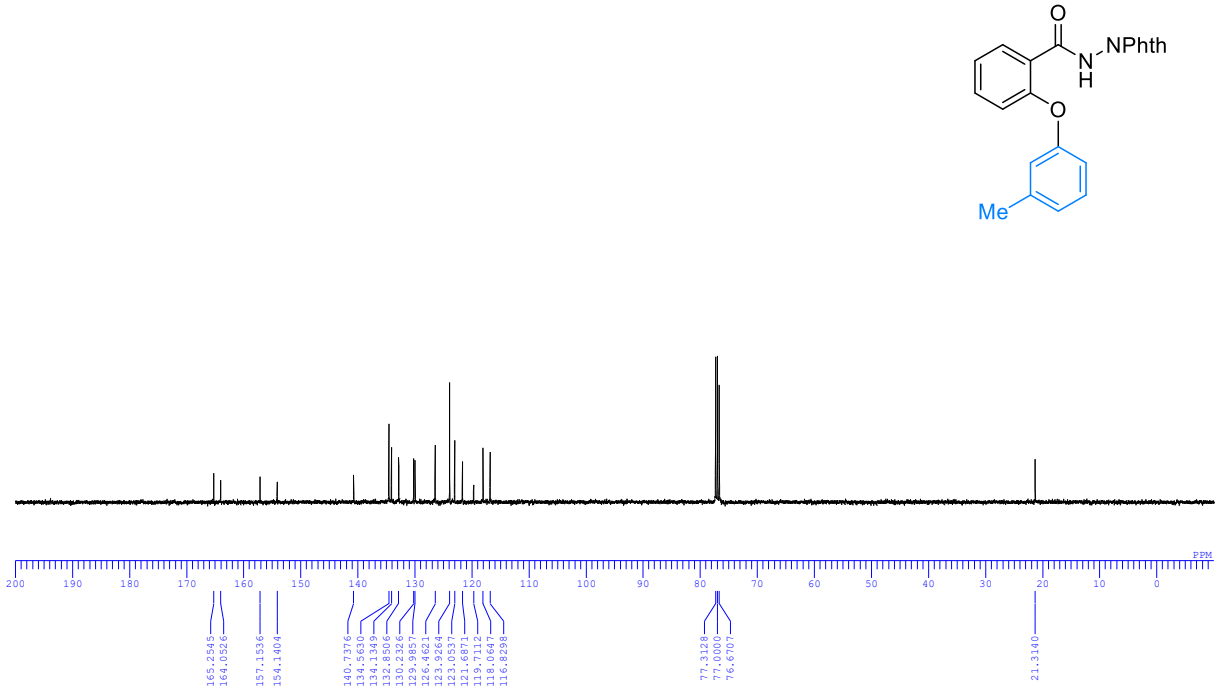
N-(1,3-Dioxoisoindolin-2-yl)-2-(*m*-tolyloxy)benzamide (3al)

^{1}H NMR (400 MHz, $CDCl_3$)



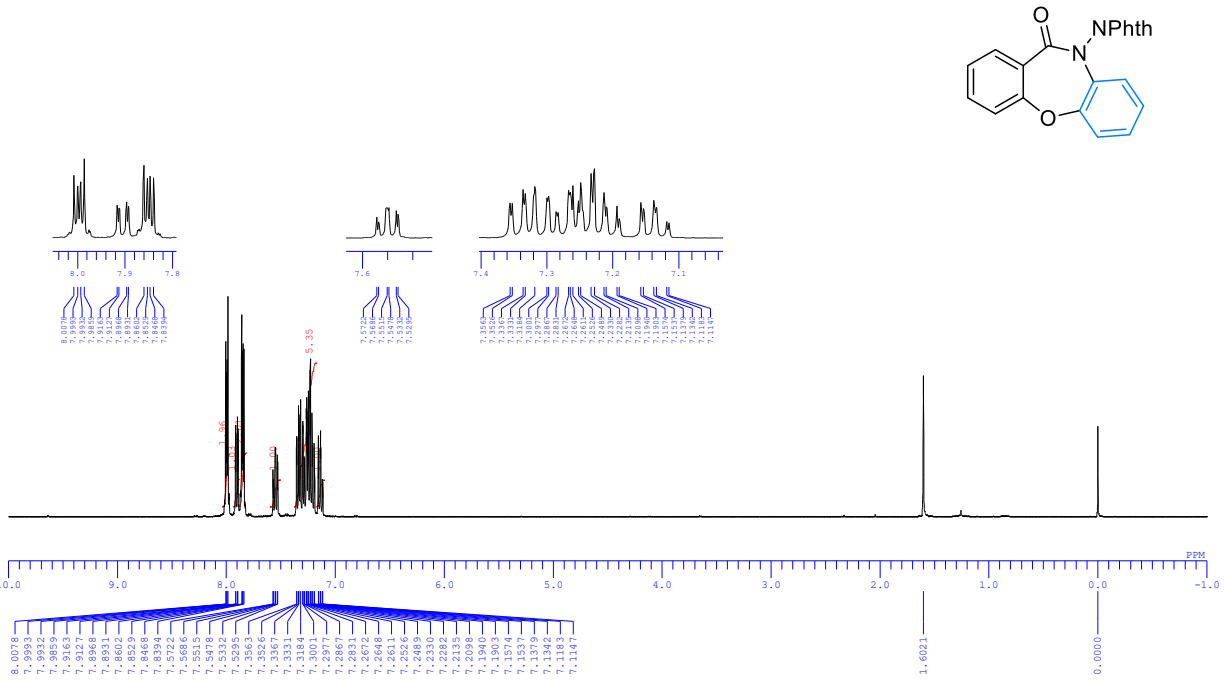
N-(1,3-Dioxoisoindolin-2-yl)-2-(*m*-tolyloxy)benzamide (3al)

^{13}C NMR (100 MHz, $CDCl_3$)



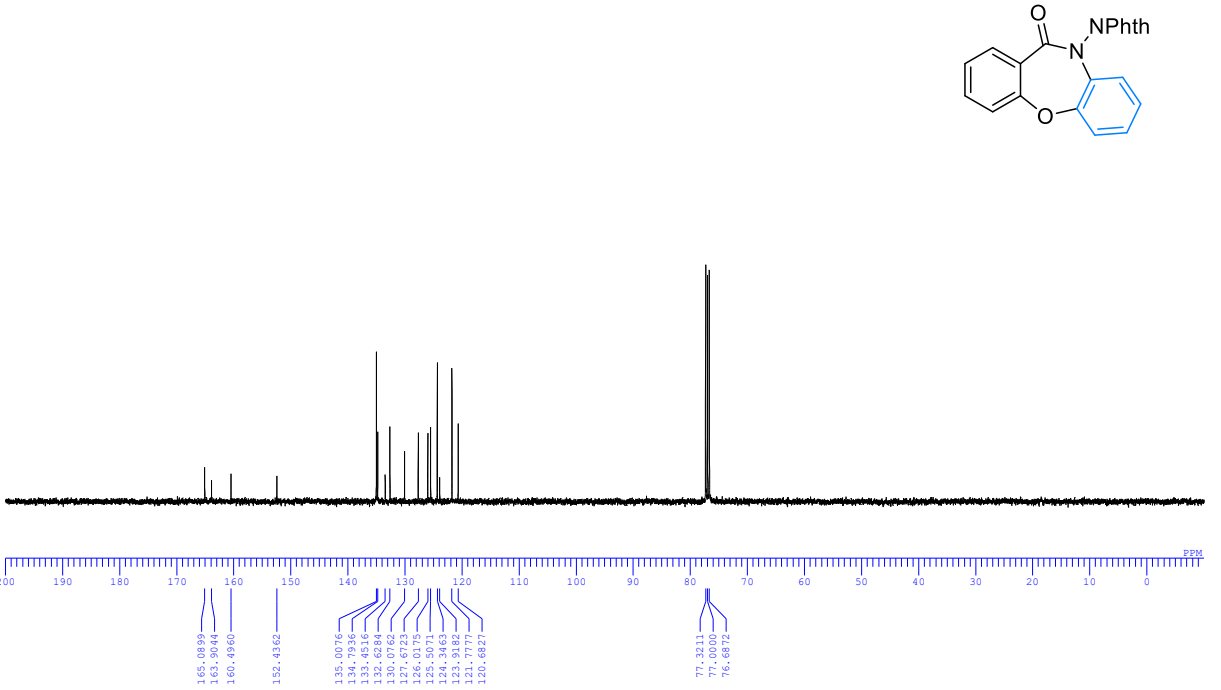
2-(11-Oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4aa)

^{1}H NMR (400 MHz, $CDCl_3$)



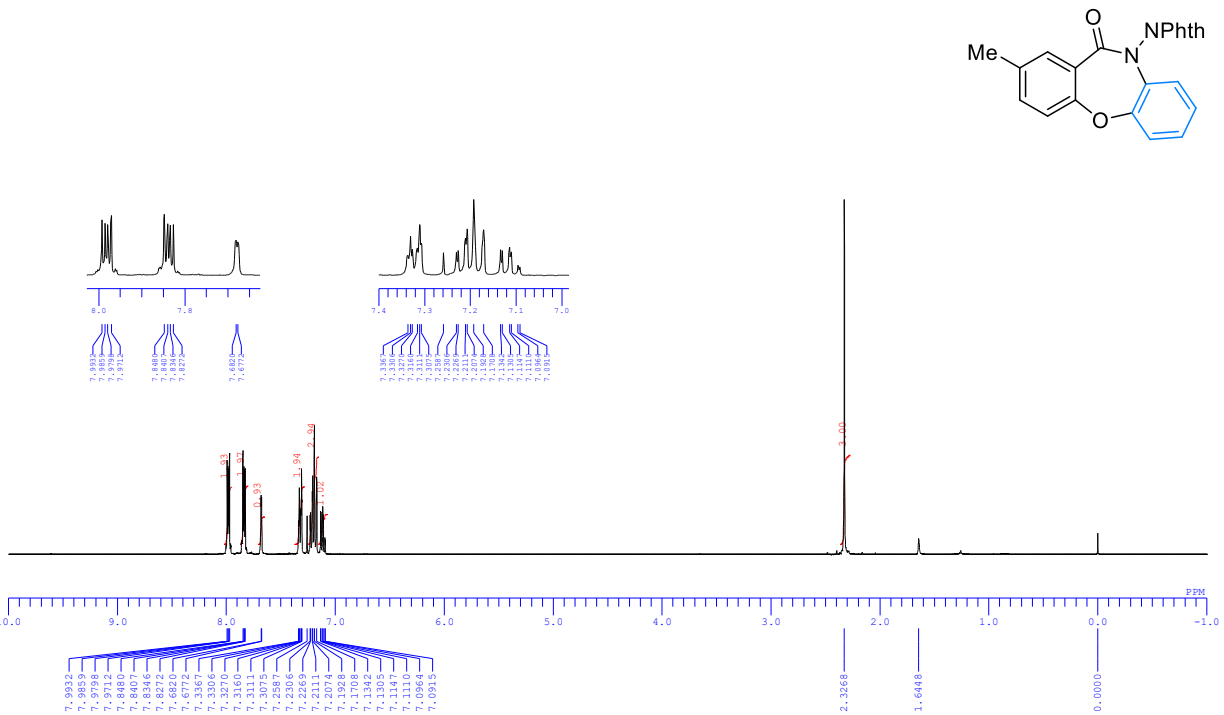
2-(11-Oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4aa)

^{13}C NMR (100 MHz, $CDCl_3$)



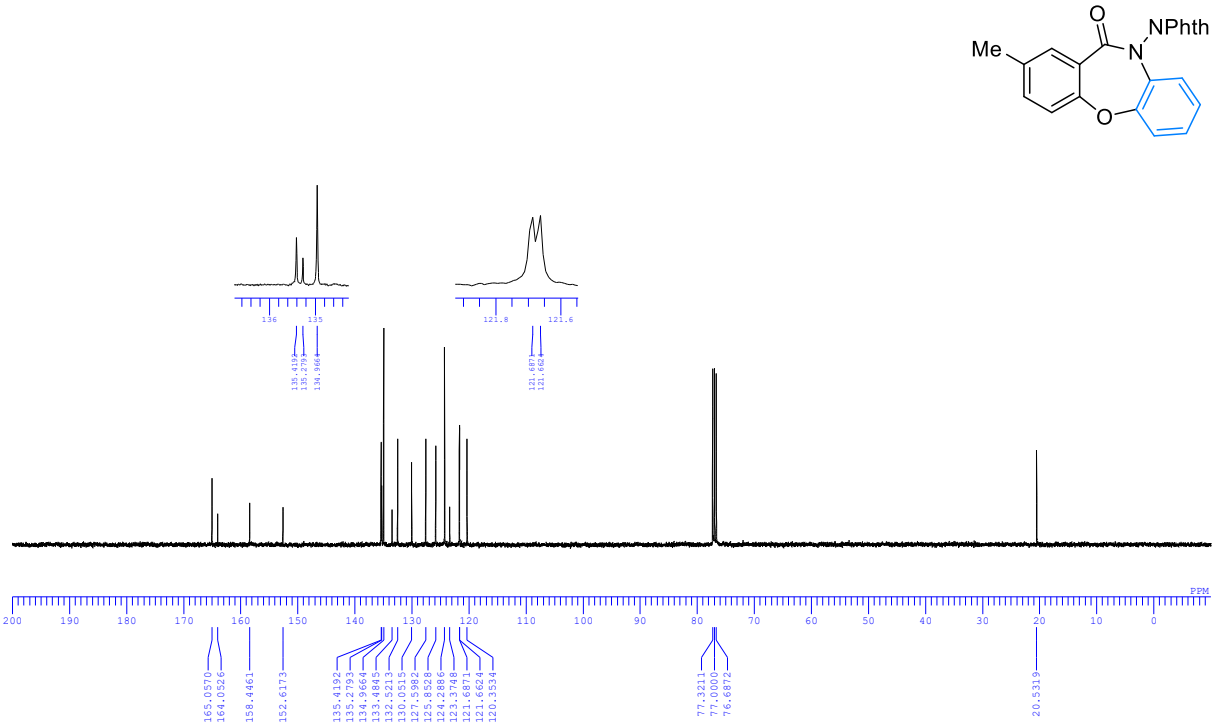
2-(2-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ba)

^{1}H NMR (400 MHz, $CDCl_3$)



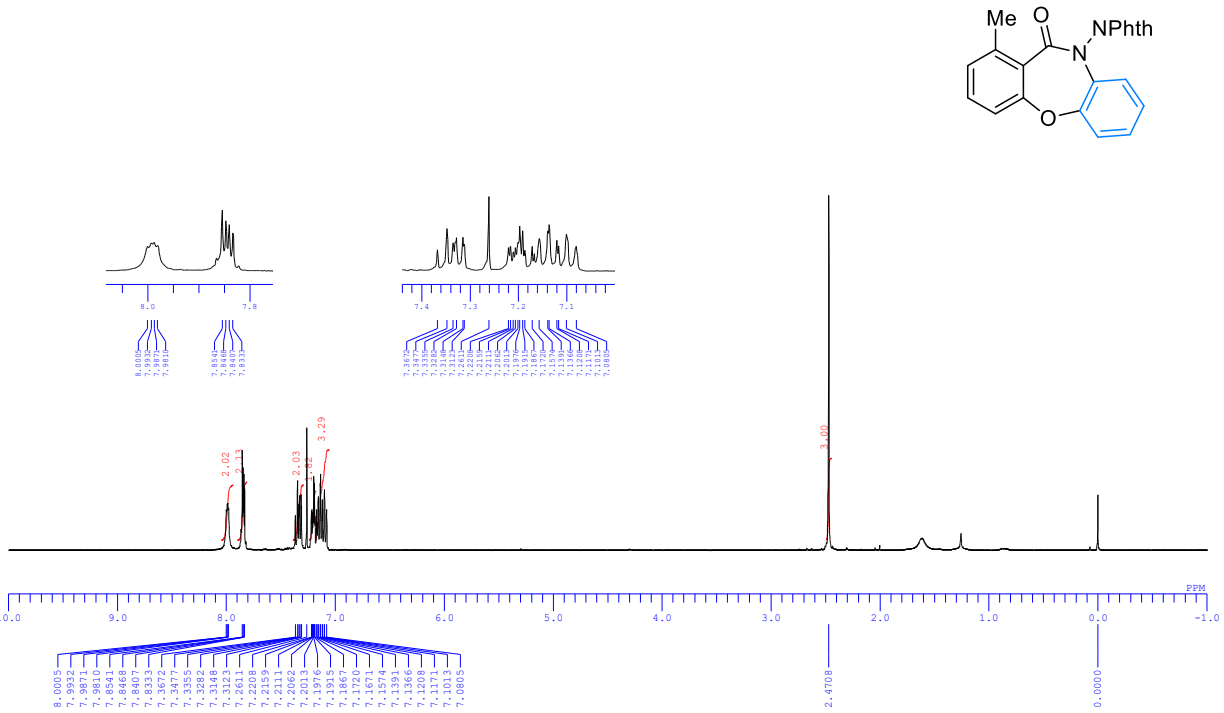
2-(2-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ba)

^{13}C NMR (100 MHz, $CDCl_3$)



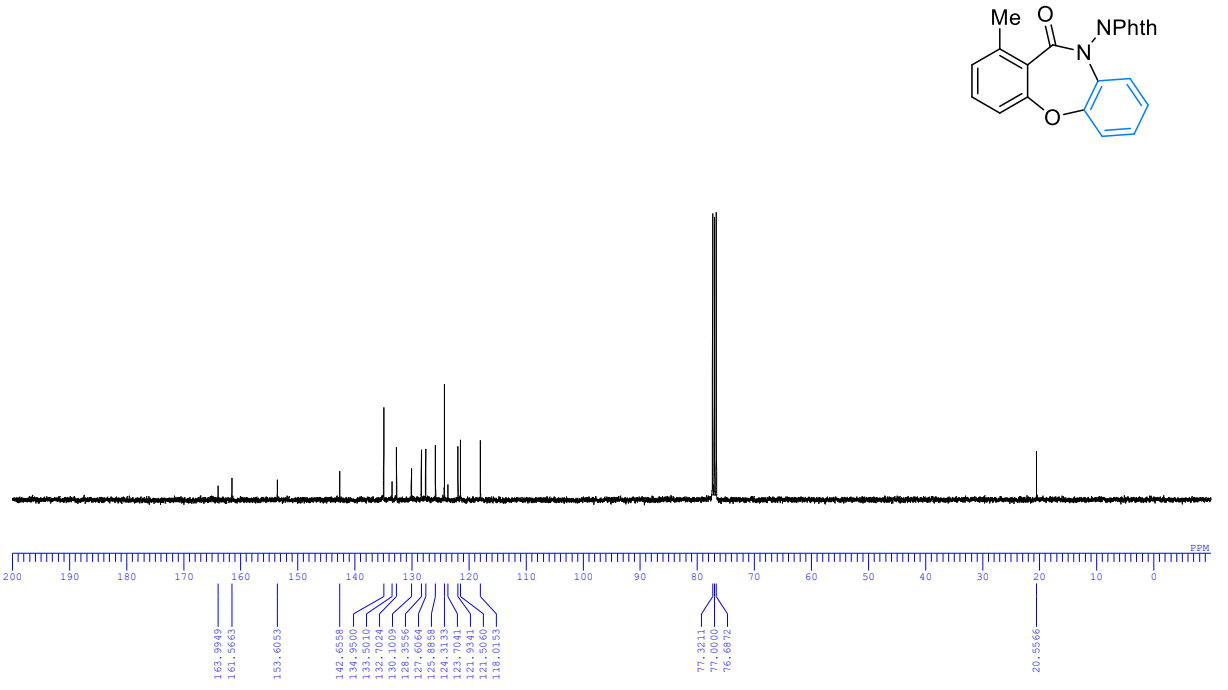
2-(1-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ca)

^{1}H NMR (400 MHz, $CDCl_3$)



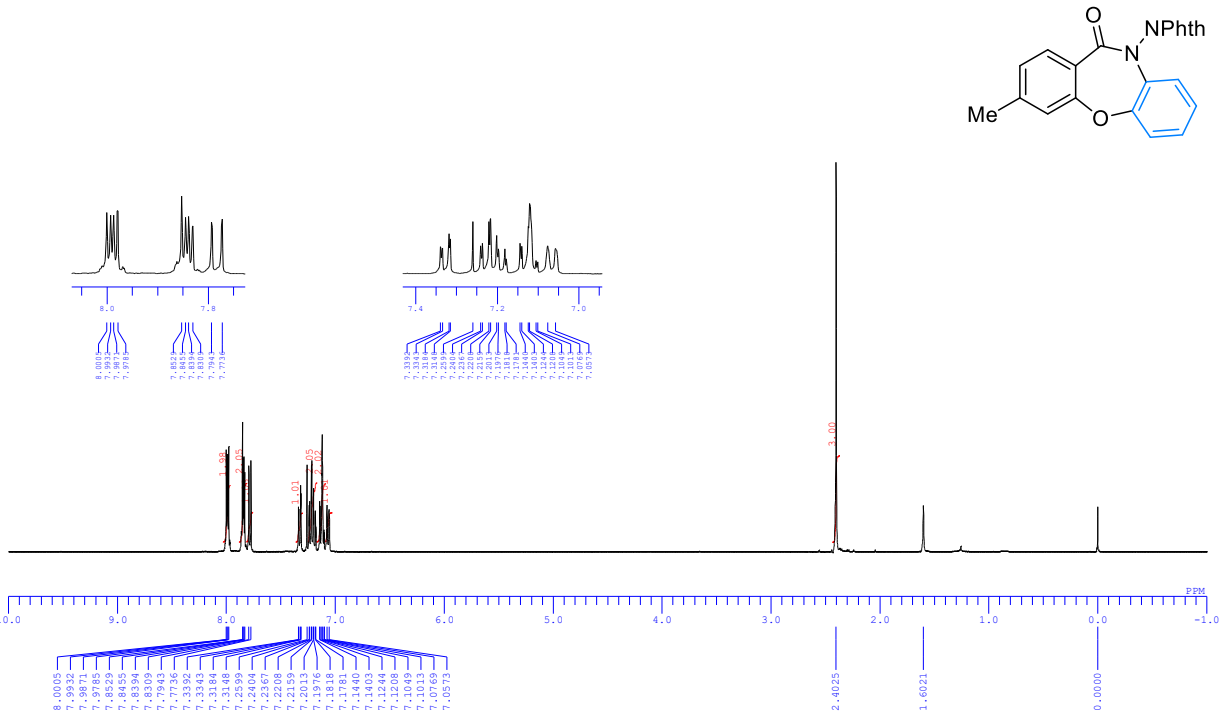
2-(1-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ca)

^{13}C NMR (100 MHz, $CDCl_3$)



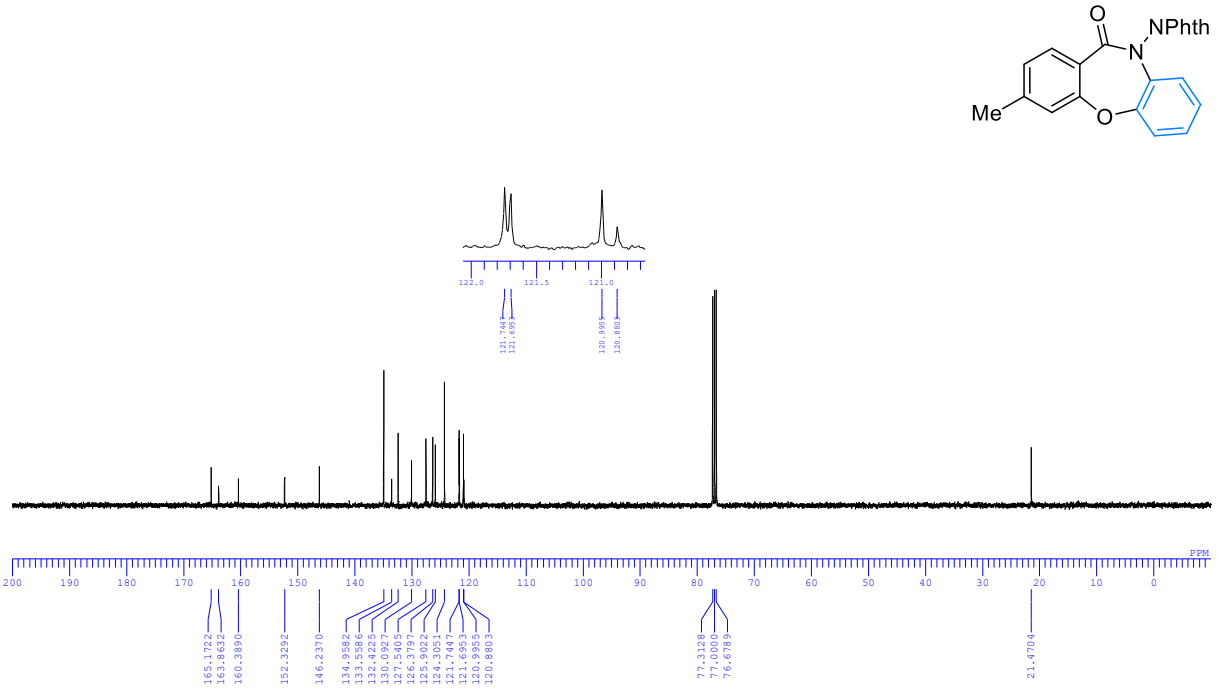
2-(3-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4da)

^{1}H NMR (400 MHz, $CDCl_3$)



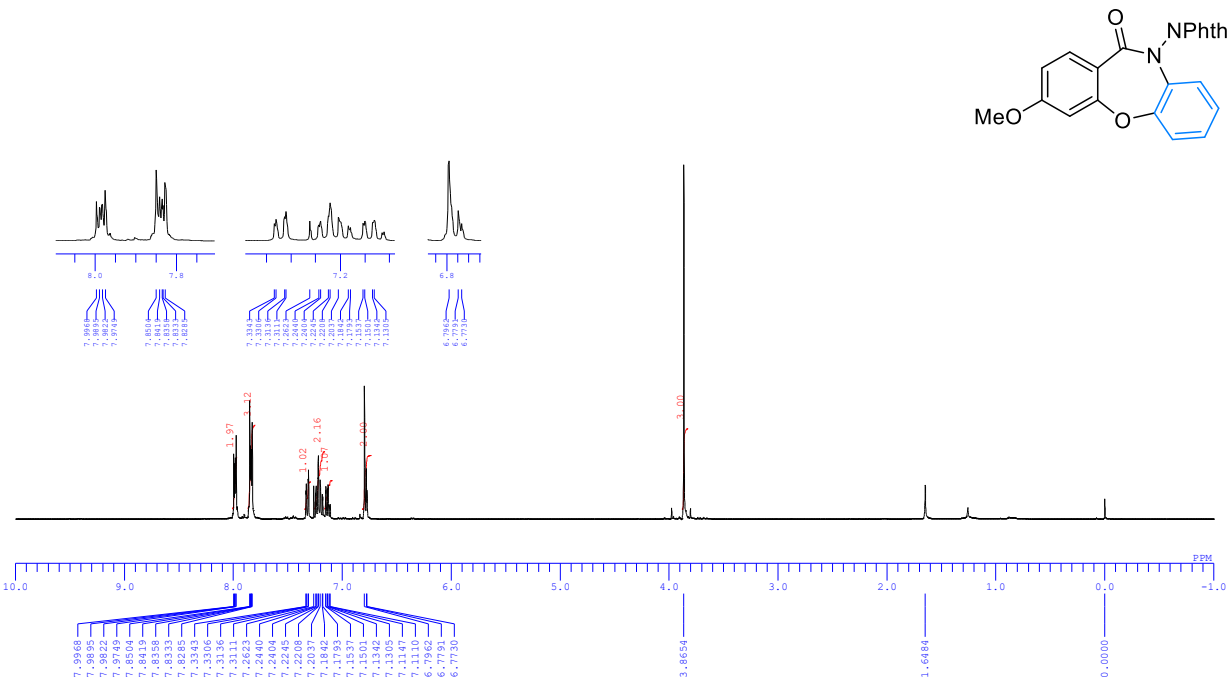
2-(3-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4da)

^{13}C NMR (100 MHz, $CDCl_3$)



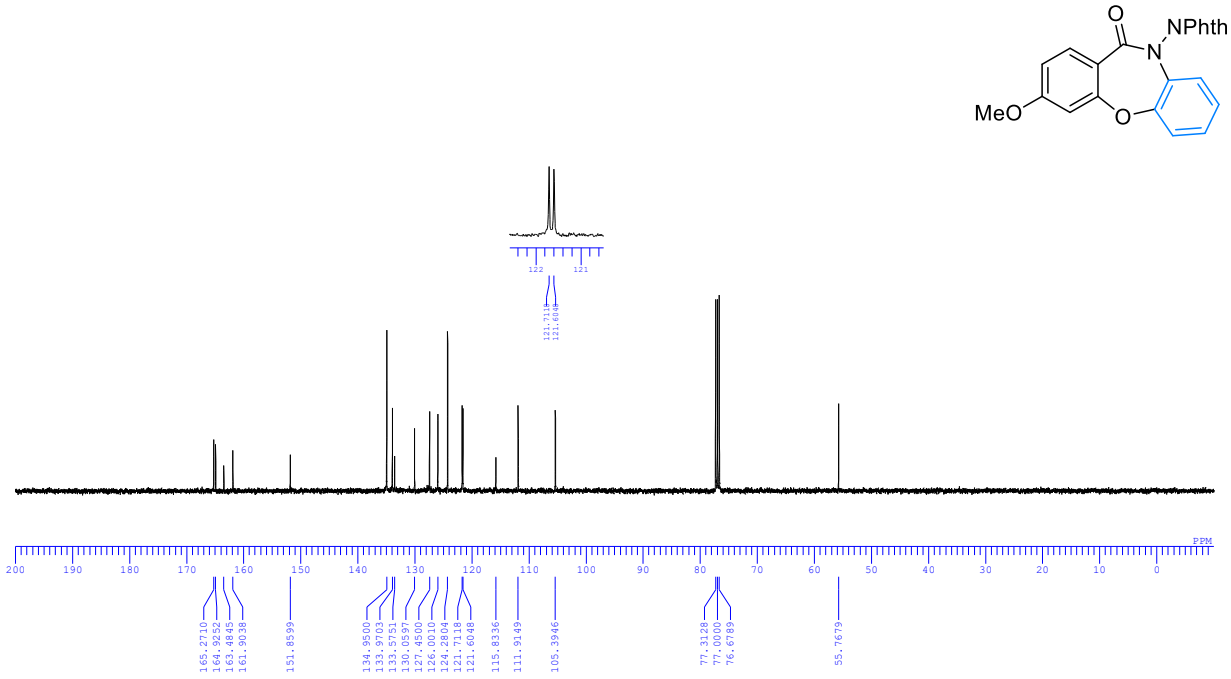
2-(3-Methoxy-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ea)

^{1}H NMR (400 MHz, $CDCl_3$)



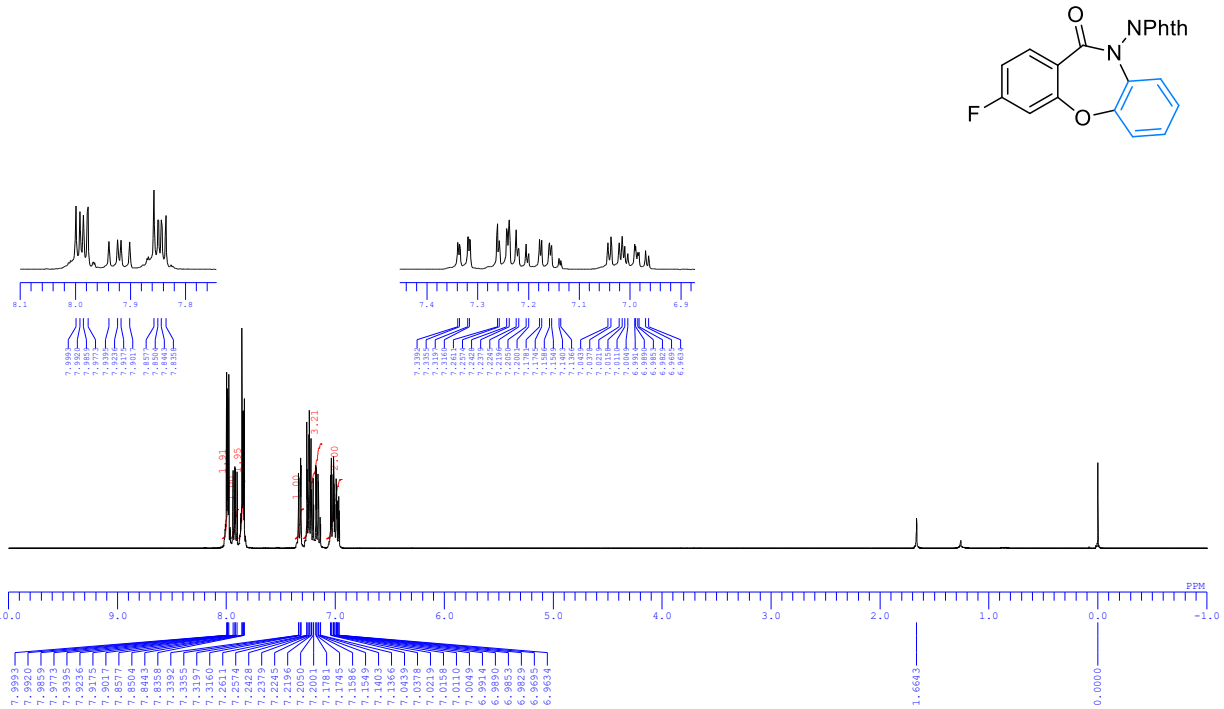
2-(3-Methoxy-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ea)

^{13}C NMR (100 MHz, $CDCl_3$)



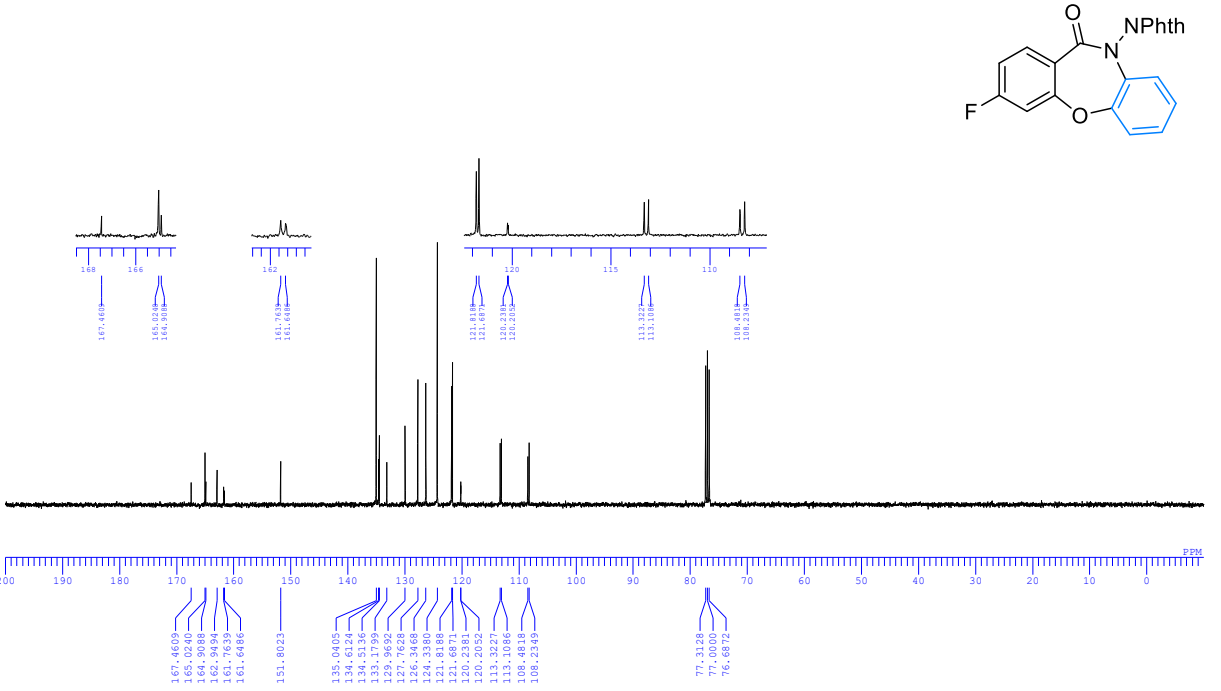
2-(3-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4fa)

^{1}H NMR (400 MHz, $CDCl_3$)



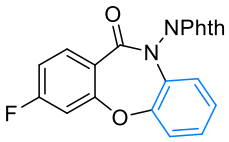
2-(3-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4fa)

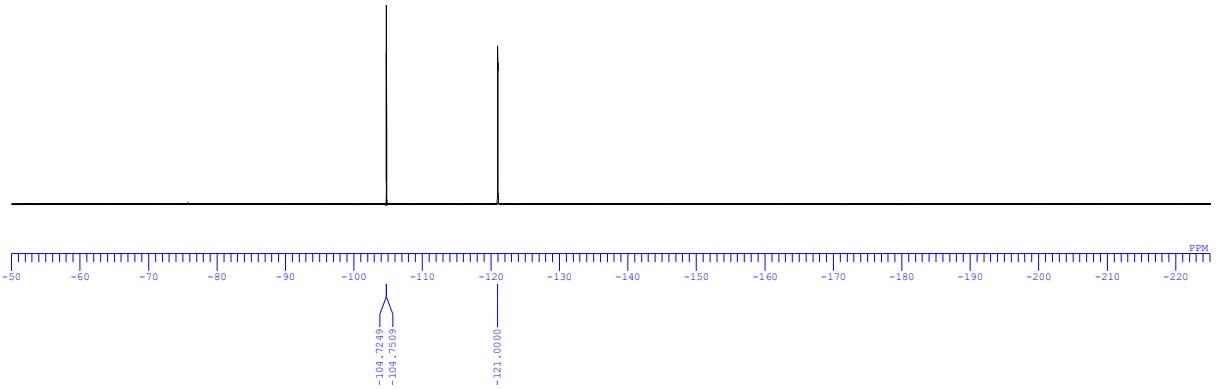
^{13}C NMR (100 MHz, $CDCl_3$)



2-(3-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4fa)

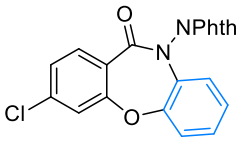
^{19}F NMR (376 MHz, $CDCl_3$)

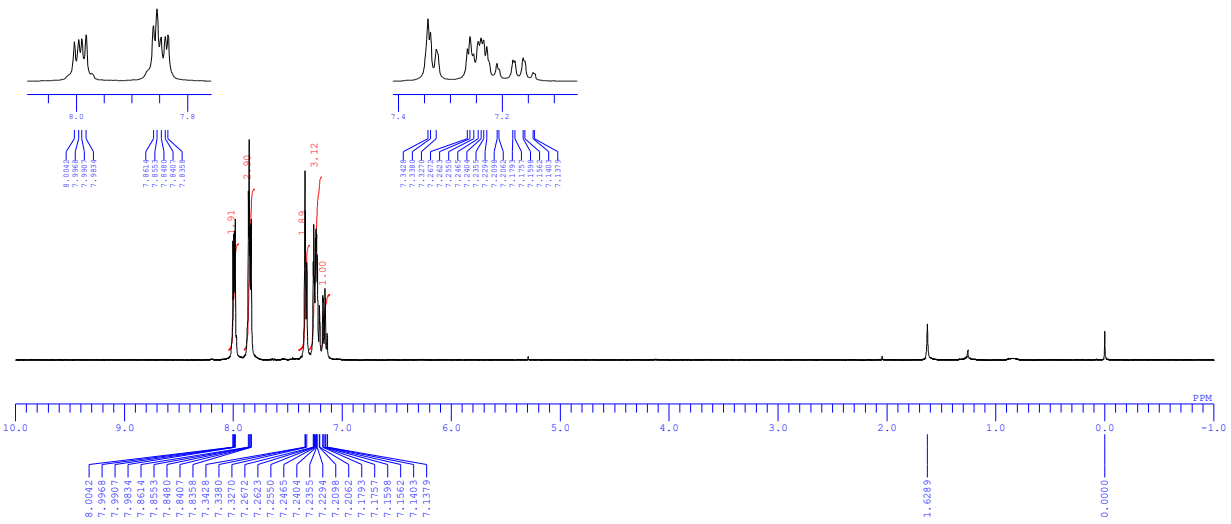




2-(3-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ga)

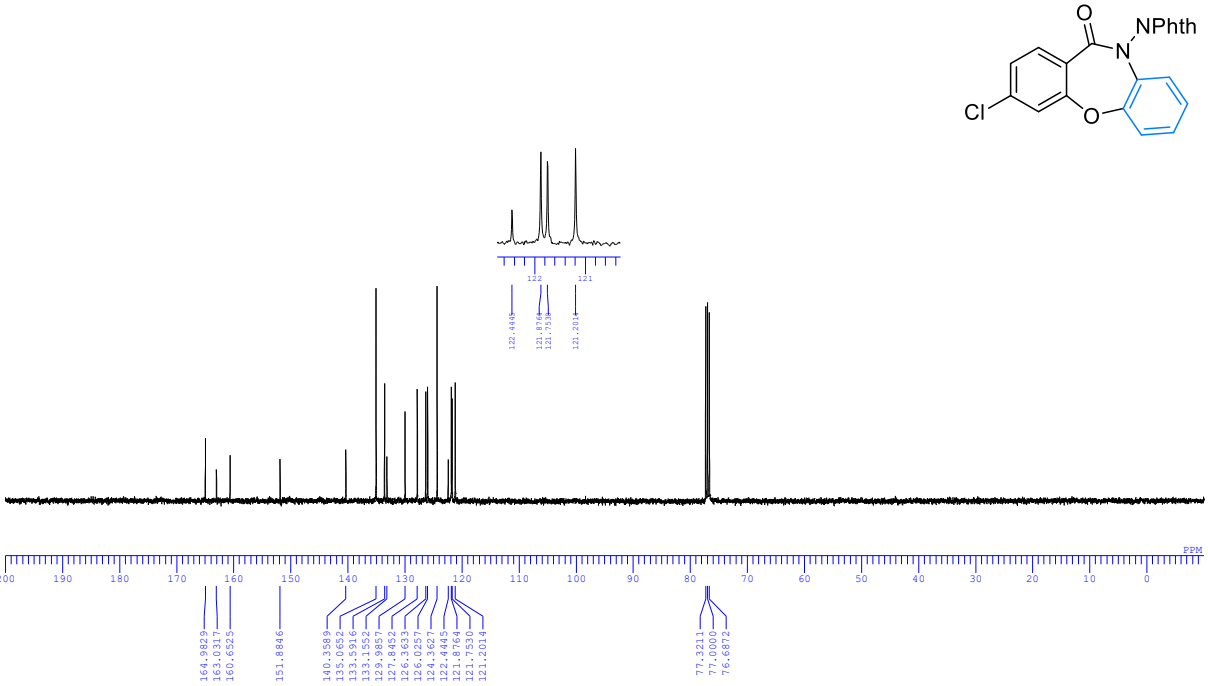
^{1}H NMR (400 MHz, $CDCl_3$)





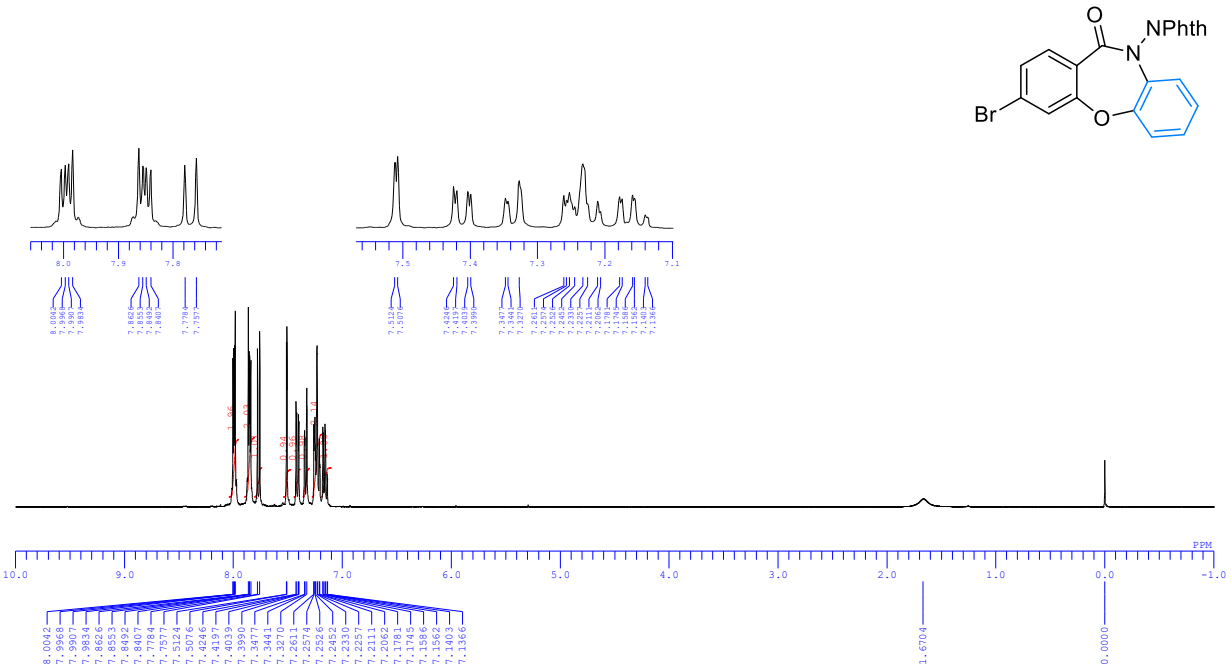
2-(3-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ga)

^{13}C NMR (100 MHz, $CDCl_3$)



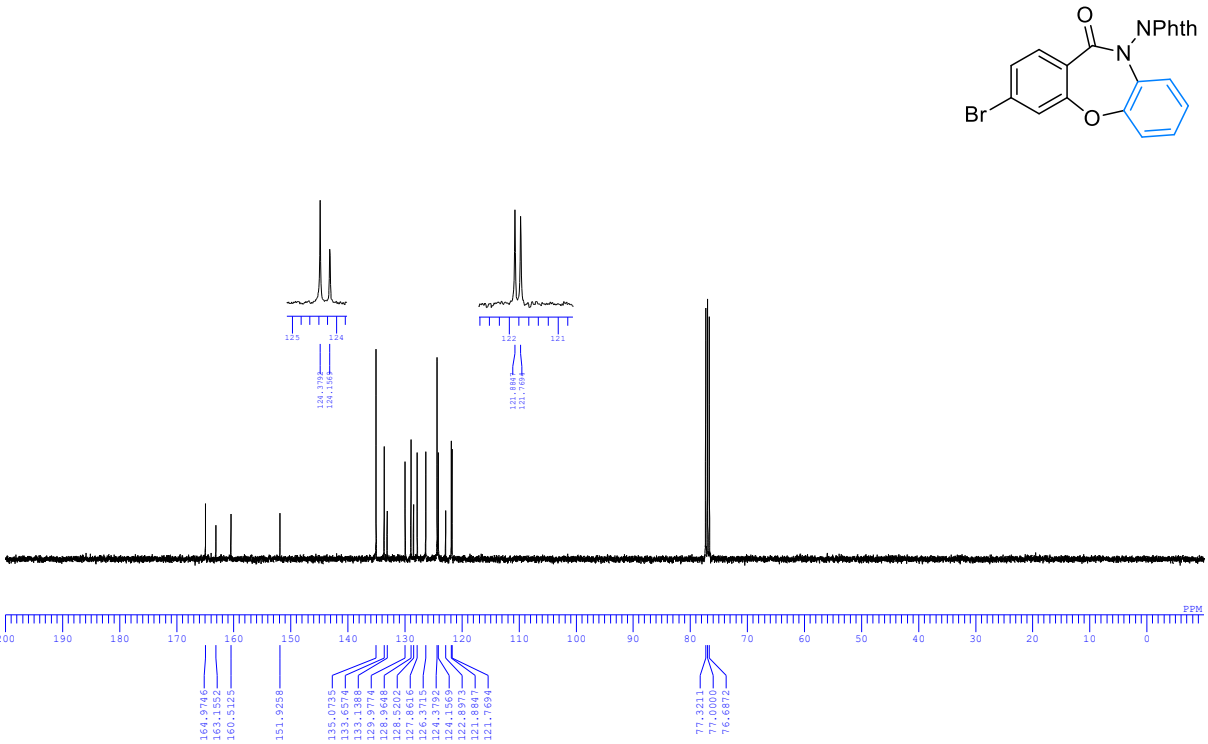
2-(3-Bromo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ha)

^{1}H NMR (400 MHz, $CDCl_3$)



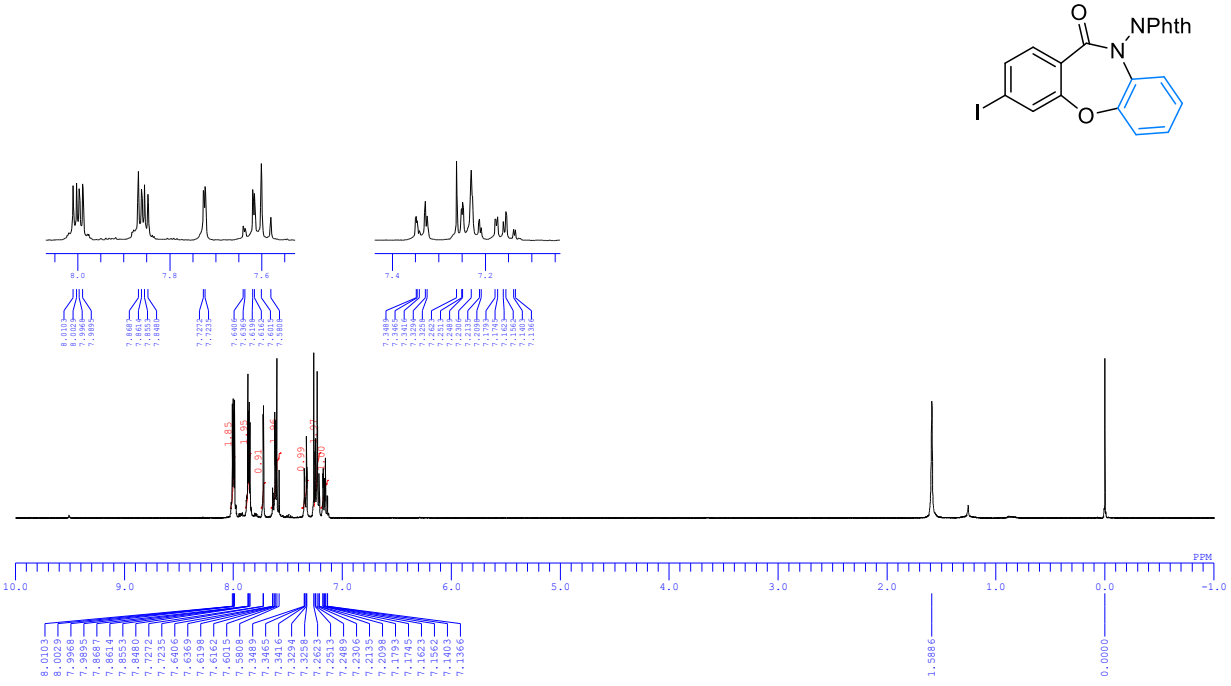
2-(3-Bromo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ha)

^{13}C NMR (100 MHz, $CDCl_3$)



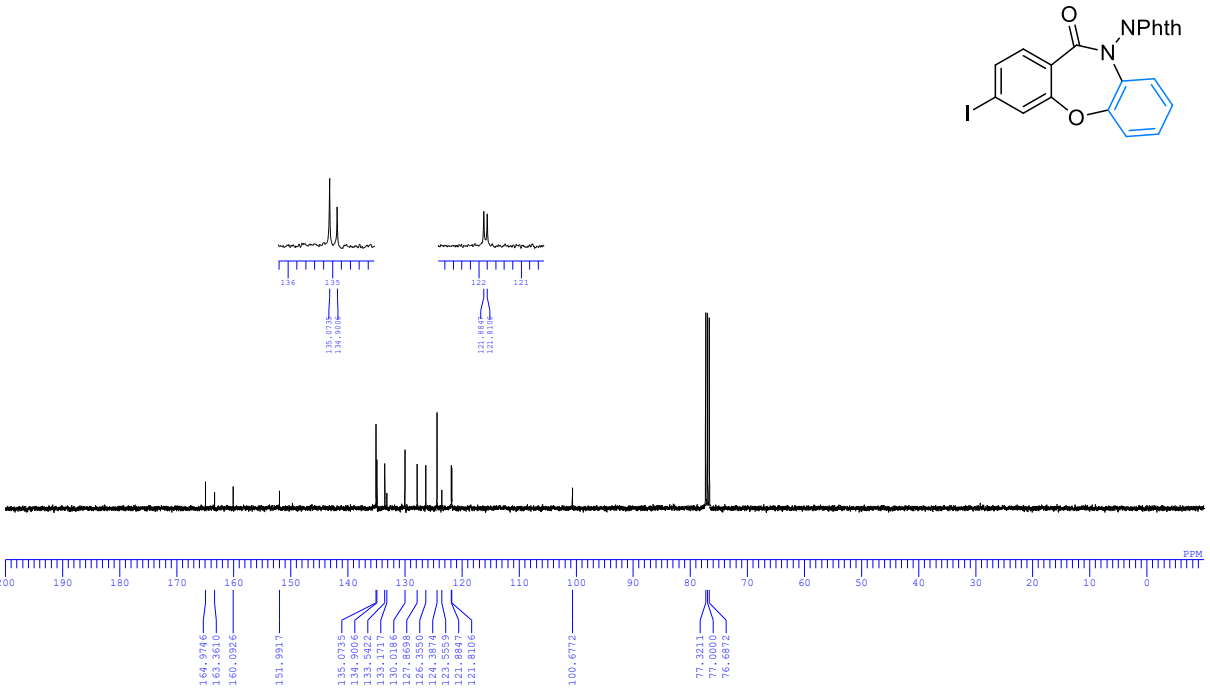
2-(3-Iodo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ia)

^{1}H NMR (400 MHz, $CDCl_3$)



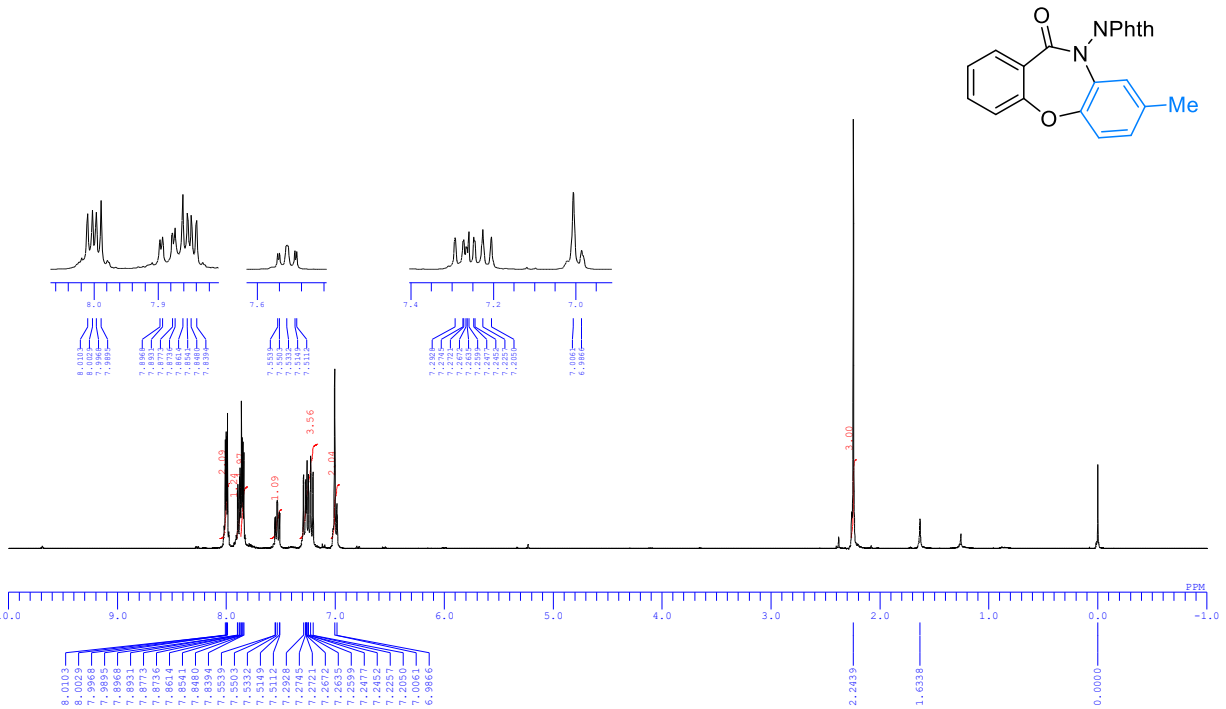
2-(3-Iodo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ia)

^{13}C NMR (100 MHz, $CDCl_3$)



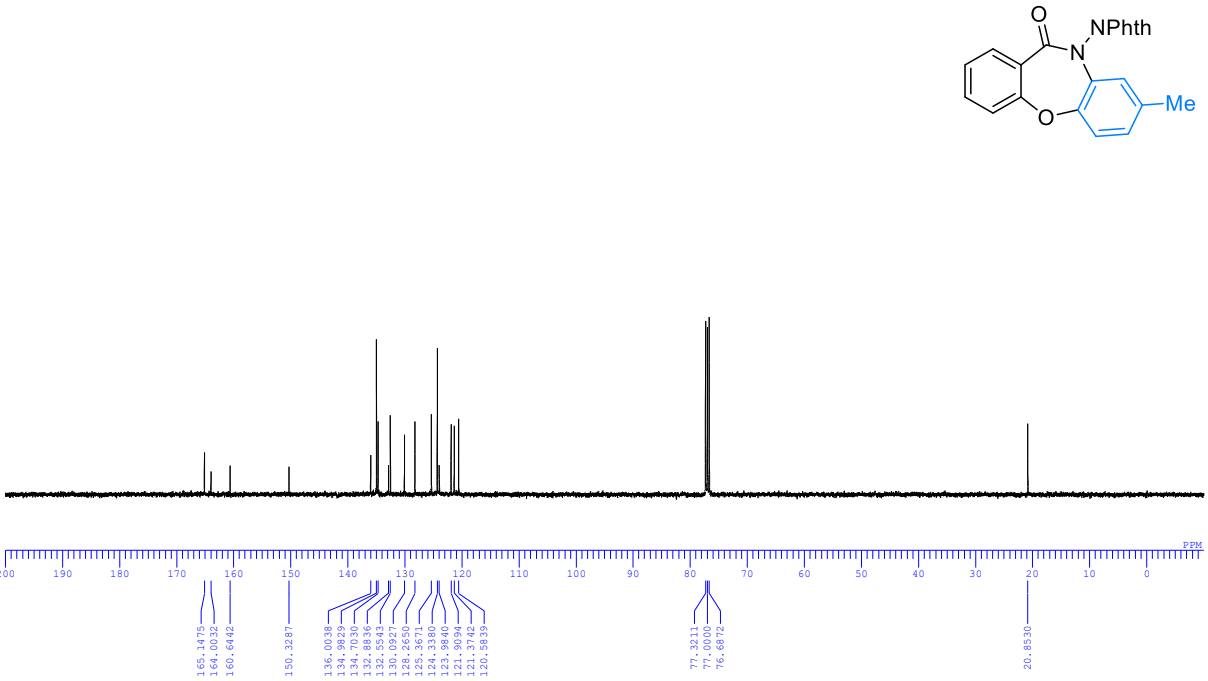
2-(8-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ab)

^{1}H NMR (400 MHz, $CDCl_3$)



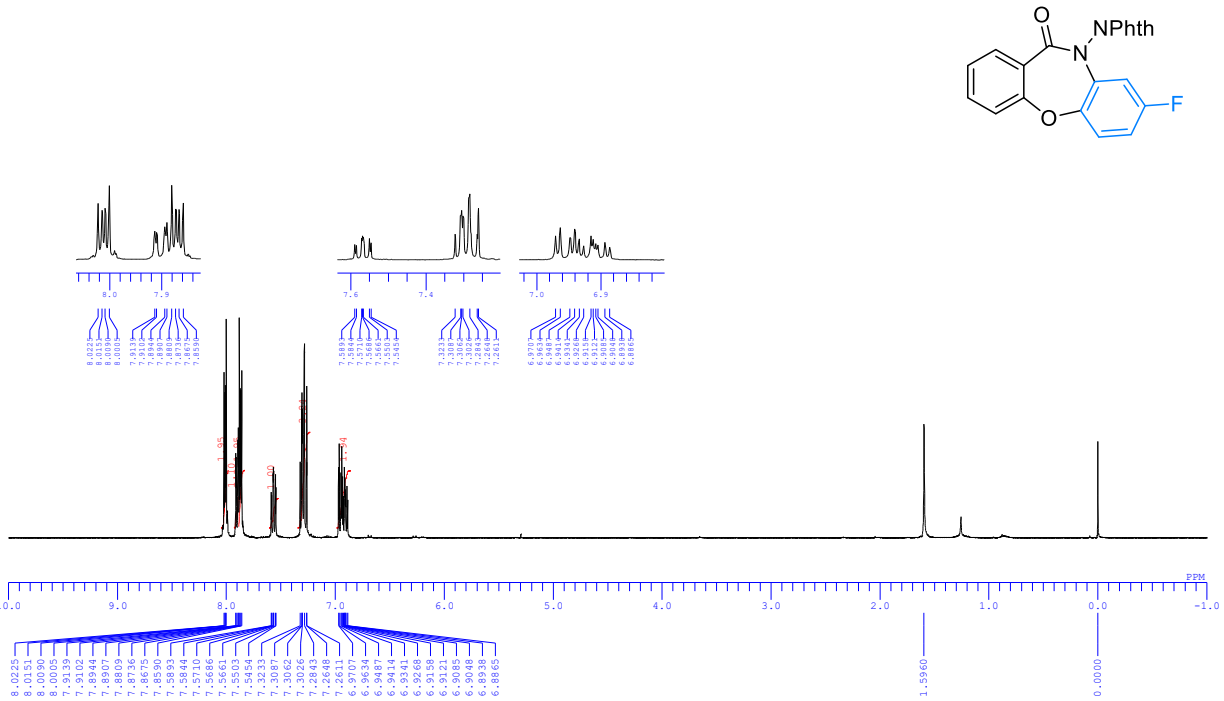
2-(8-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ab)

^{13}C NMR (100 MHz, $CDCl_3$)



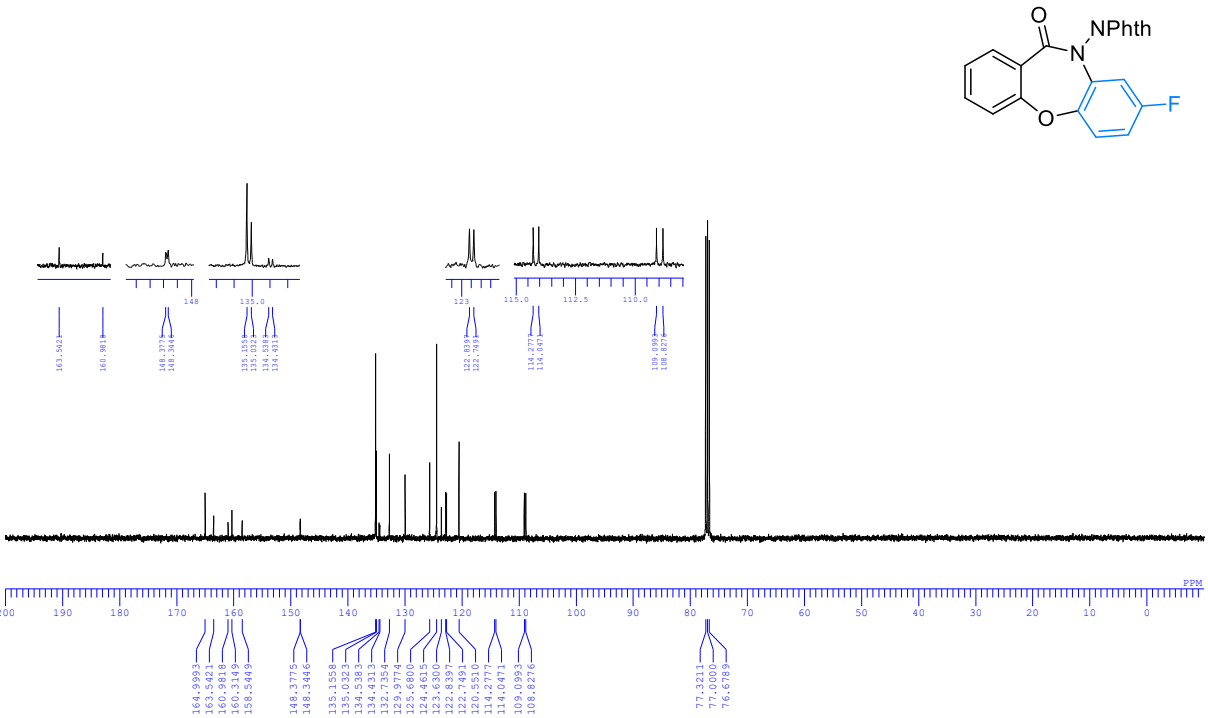
2-(8-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ac)

^{1}H NMR (400 MHz, $CDCl_3$)



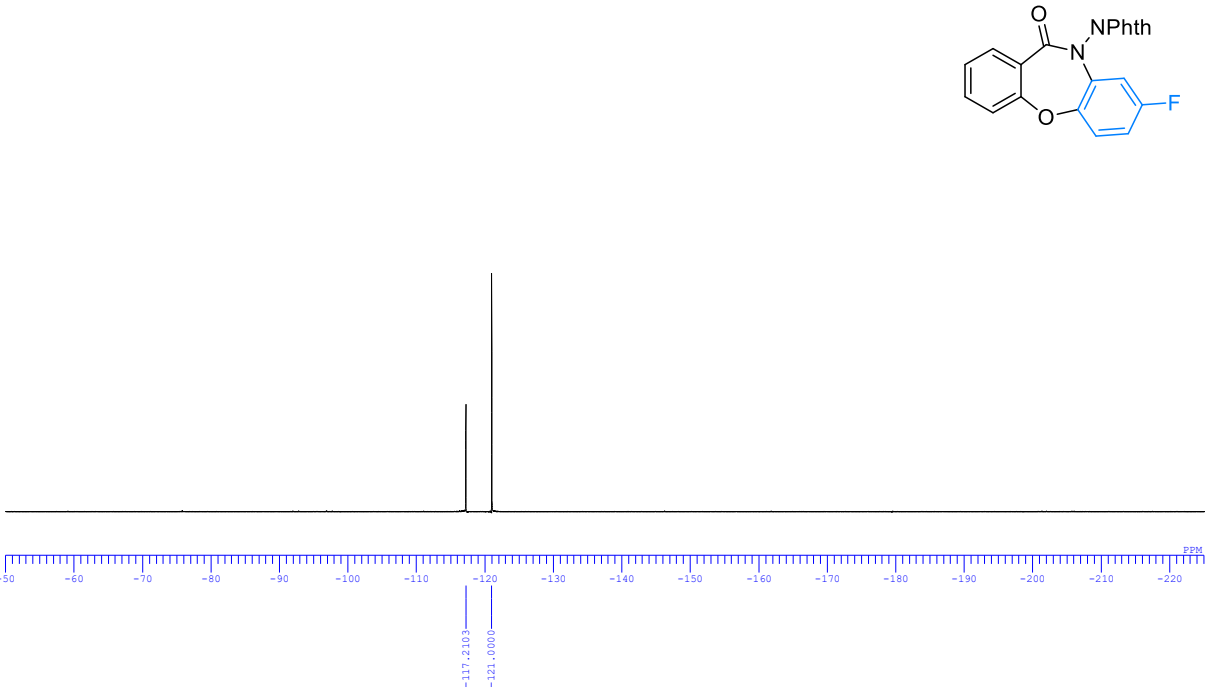
2-(8-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ac)

^{13}C NMR (100 MHz, $CDCl_3$)



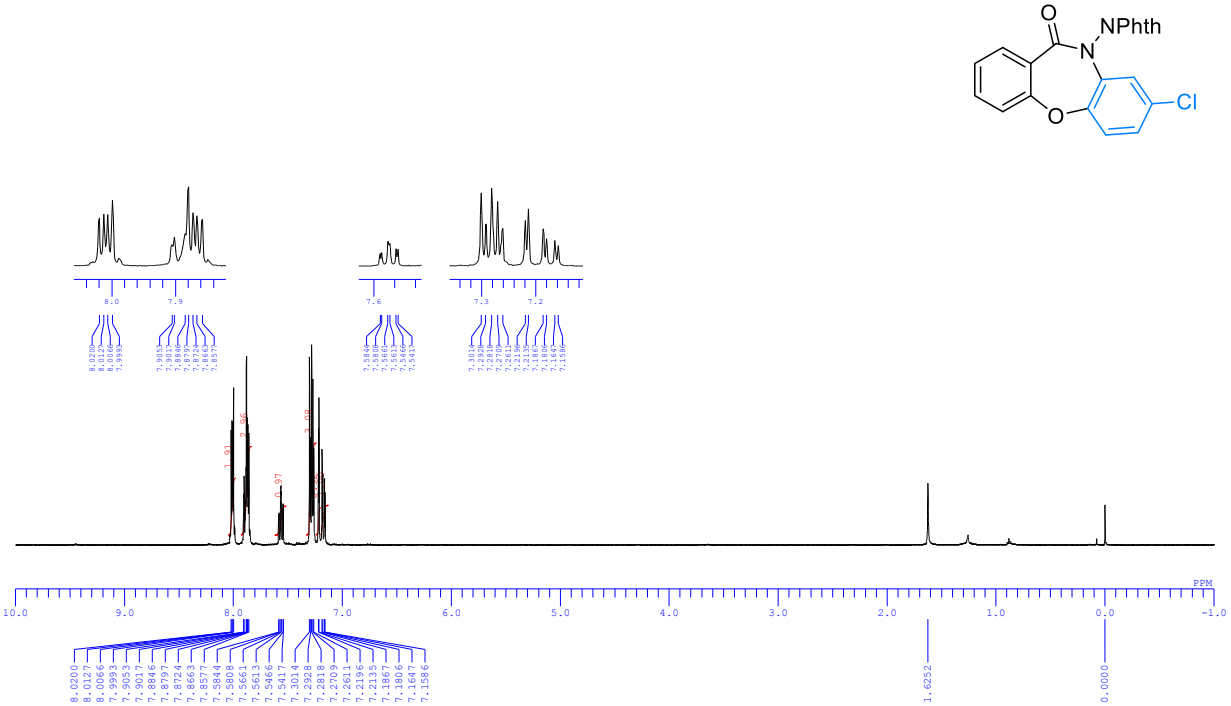
2-(8-Fluoro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ac)

^{19}F NMR (376 MHz, $CDCl_3$)



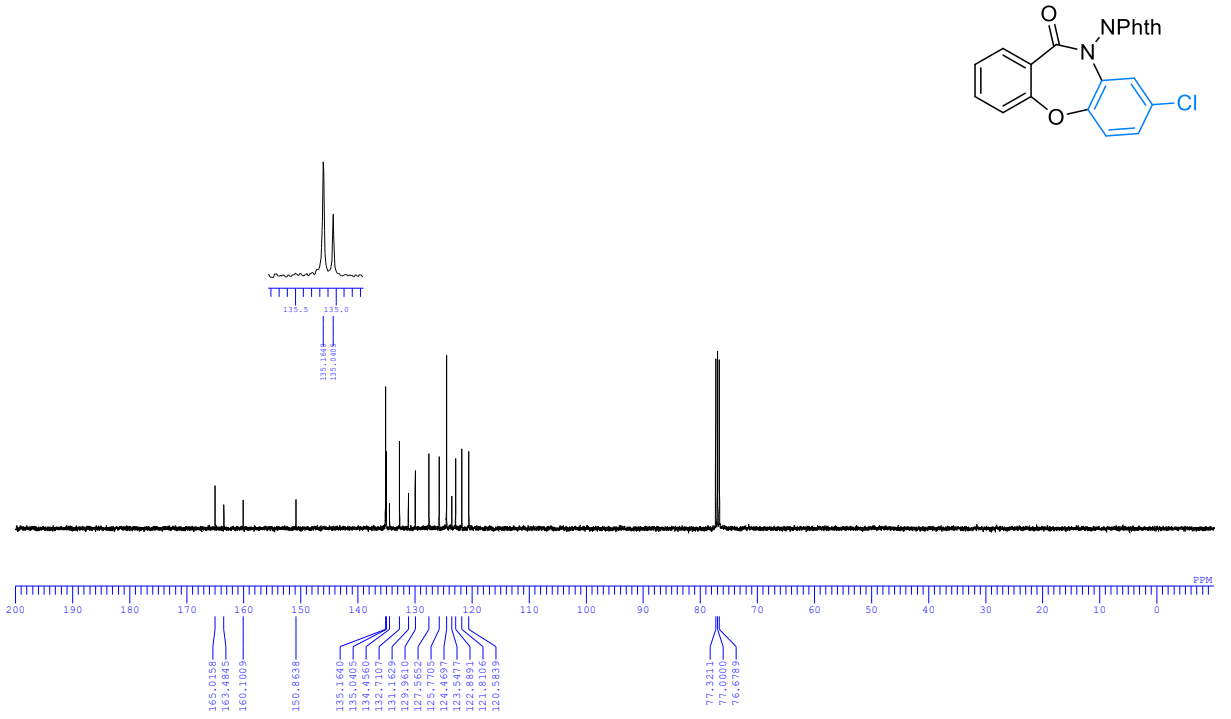
2-(8-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ad)

^{1}H NMR (400 MHz, $CDCl_3$)



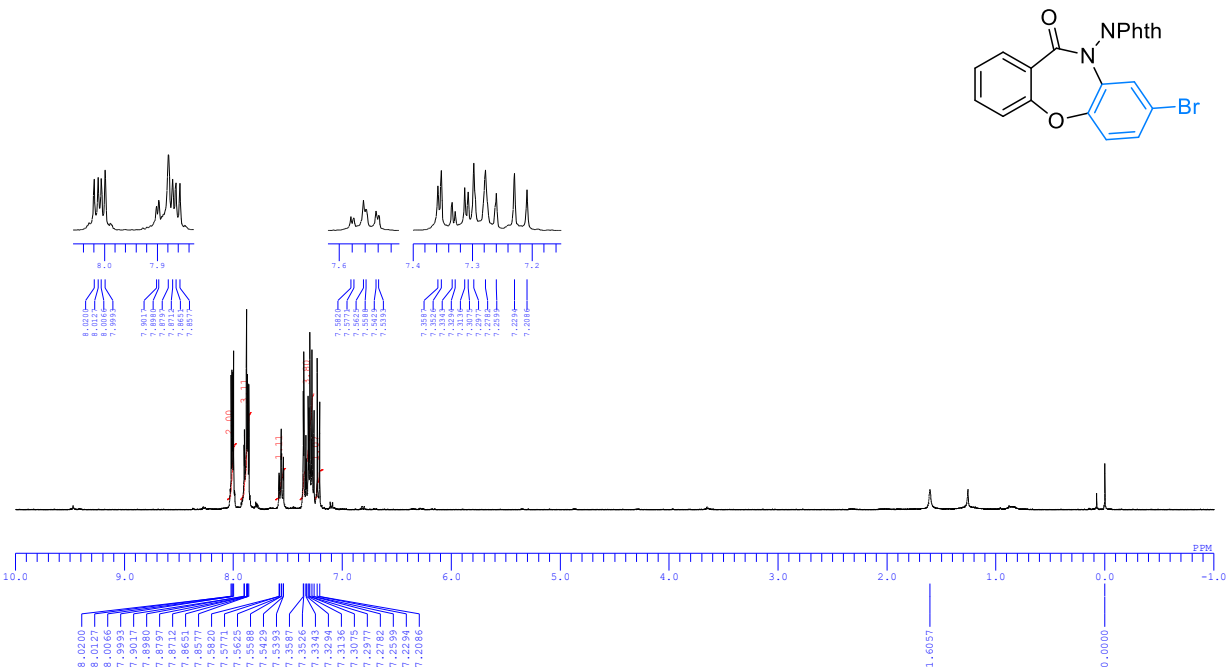
2-(8-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ad)

^{13}C NMR (100 MHz, $CDCl_3$)



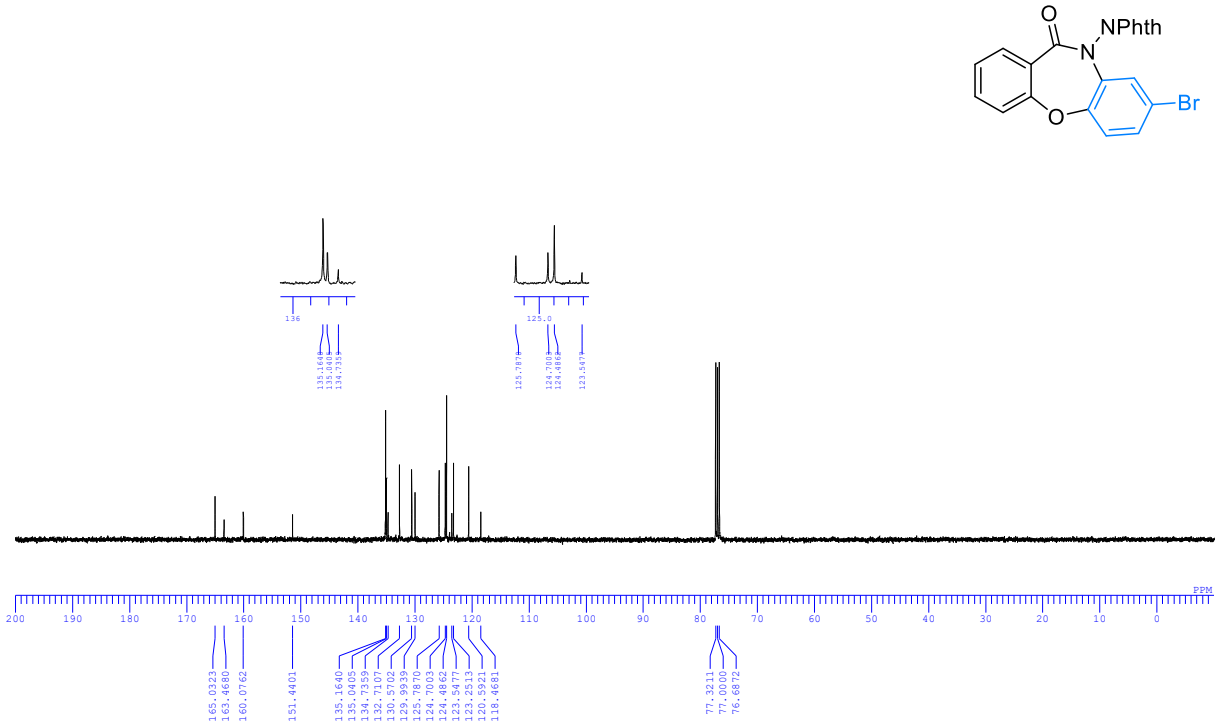
2-(8-Bromo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ae)

^{1}H NMR (400 MHz, $CDCl_3$)



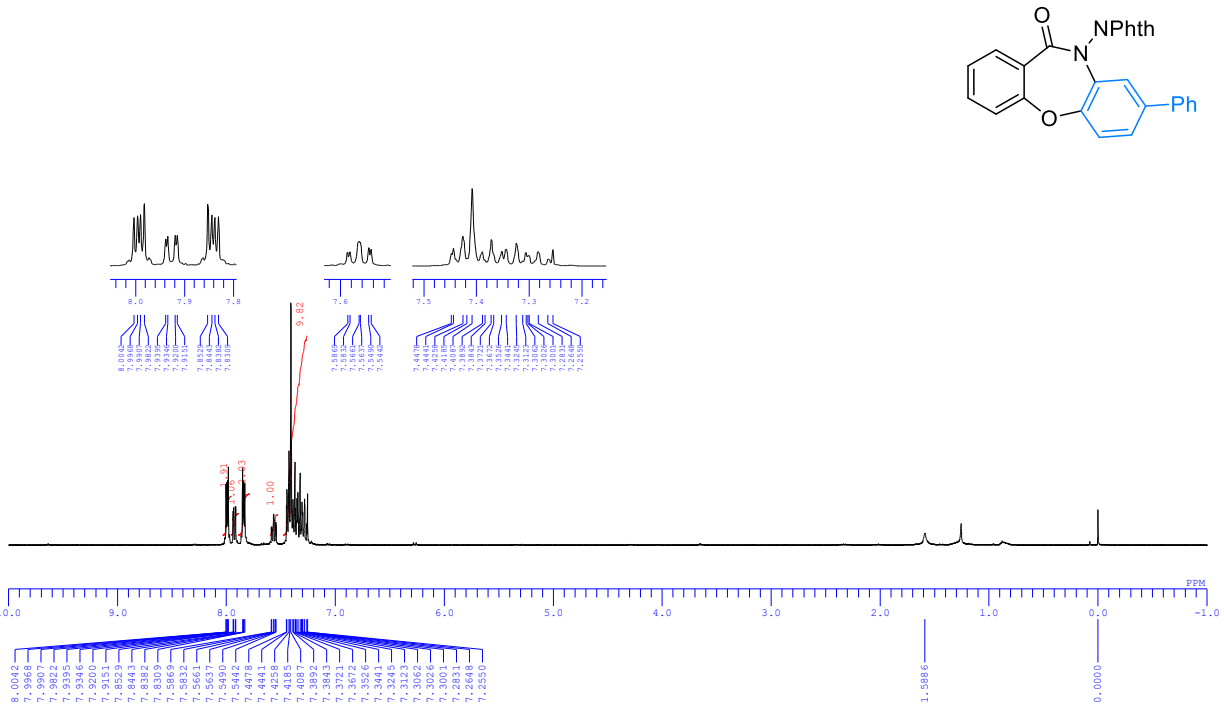
2-(8-Bromo-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ae)

^{13}C NMR (100 MHz, $CDCl_3$)



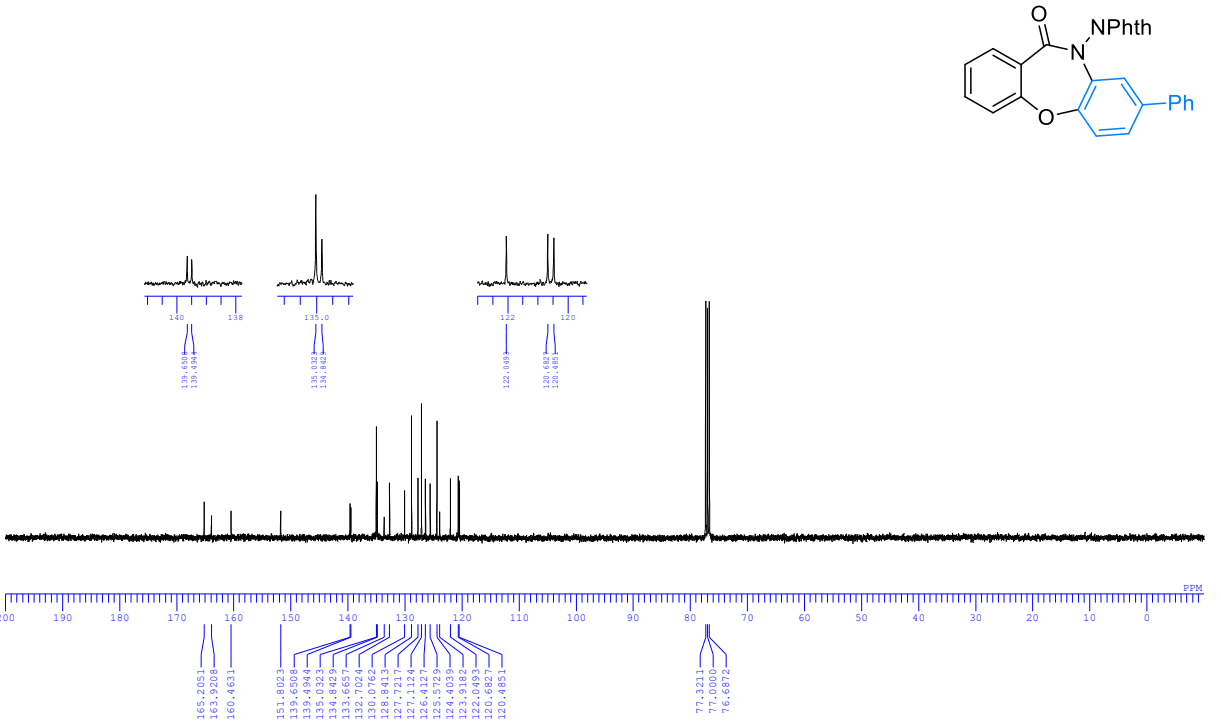
2-(11-Oxo-8-phenyldibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4af)

^{1}H NMR (400 MHz, $CDCl_3$)



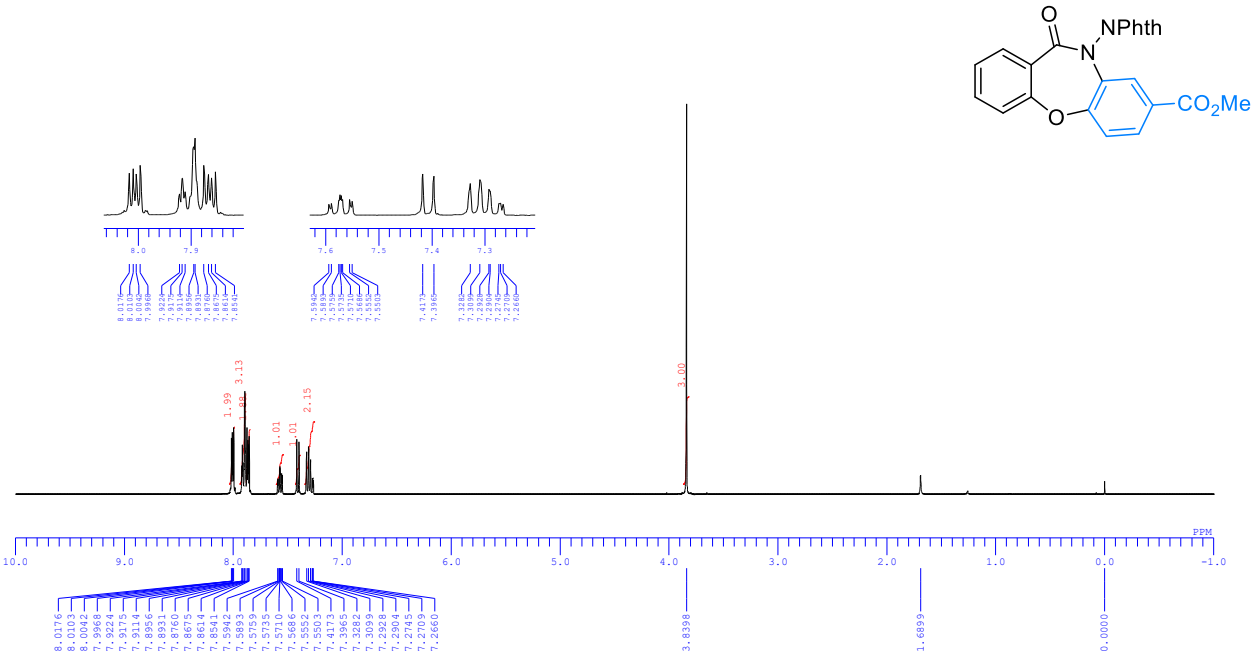
2-(11-Oxo-8-phenyldibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4af)

^{13}C NMR (100 MHz, $CDCl_3$)



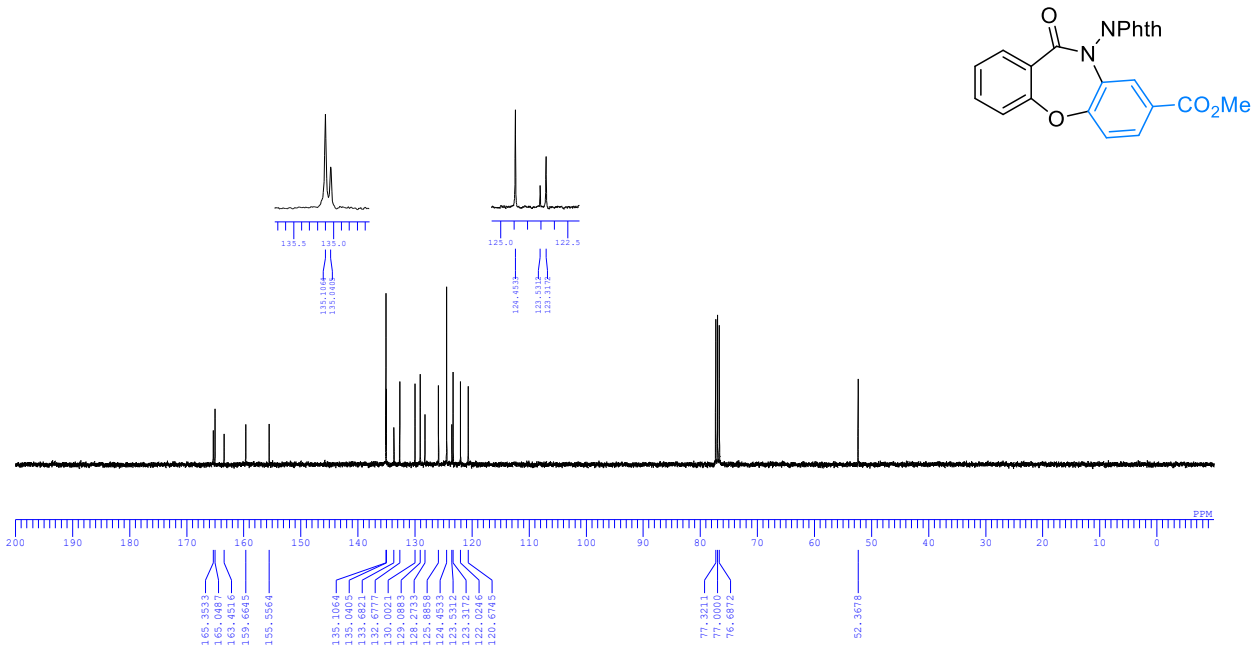
Methyl 10-(1,3-dioxoisoindolin-2-yl)-11-oxo-10,11-dihydrodibenzo[*b*,*f*][1,4]oxazepine-8-carboxylate (4ag)

^{1}H NMR (400 MHz, $CDCl_3$)



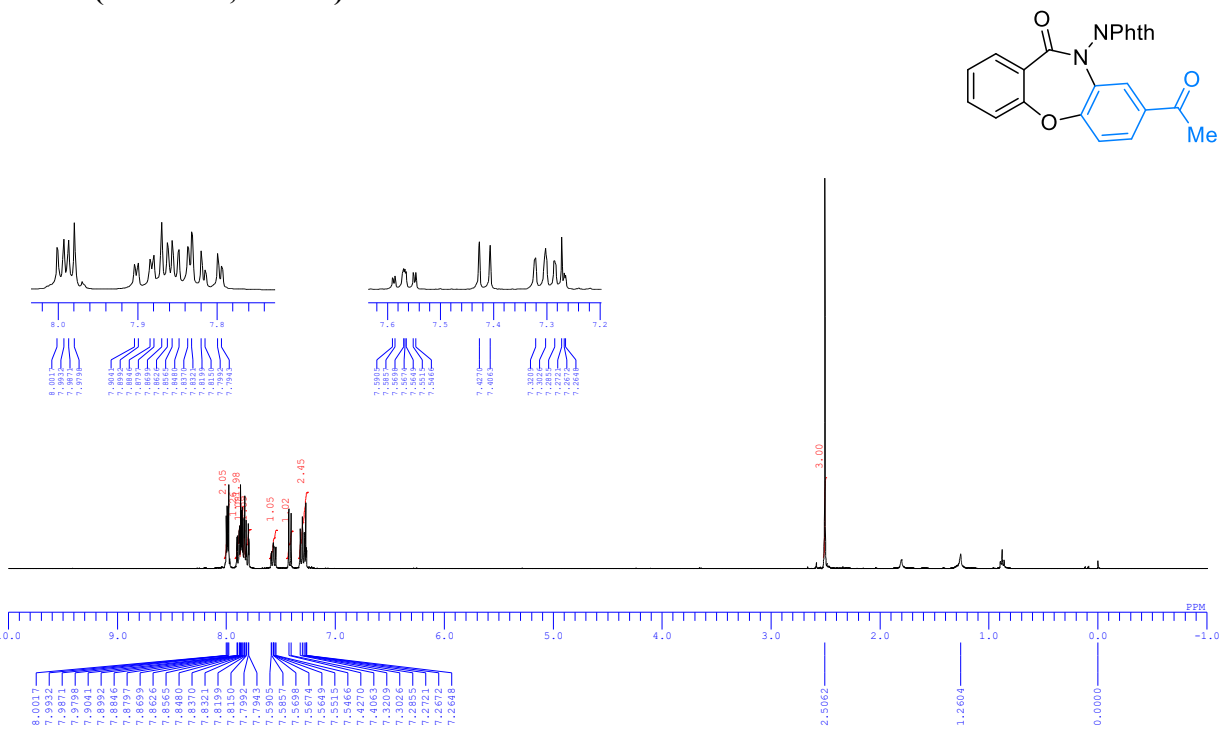
Methyl 10-(1,3-dioxoisoindolin-2-yl)-11-oxo-10,11-dihydrodibenzo[*b*,*f*][1,4]oxazepine-8-carboxylate (4ag)

^{13}C NMR (100 MHz, $CDCl_3$)



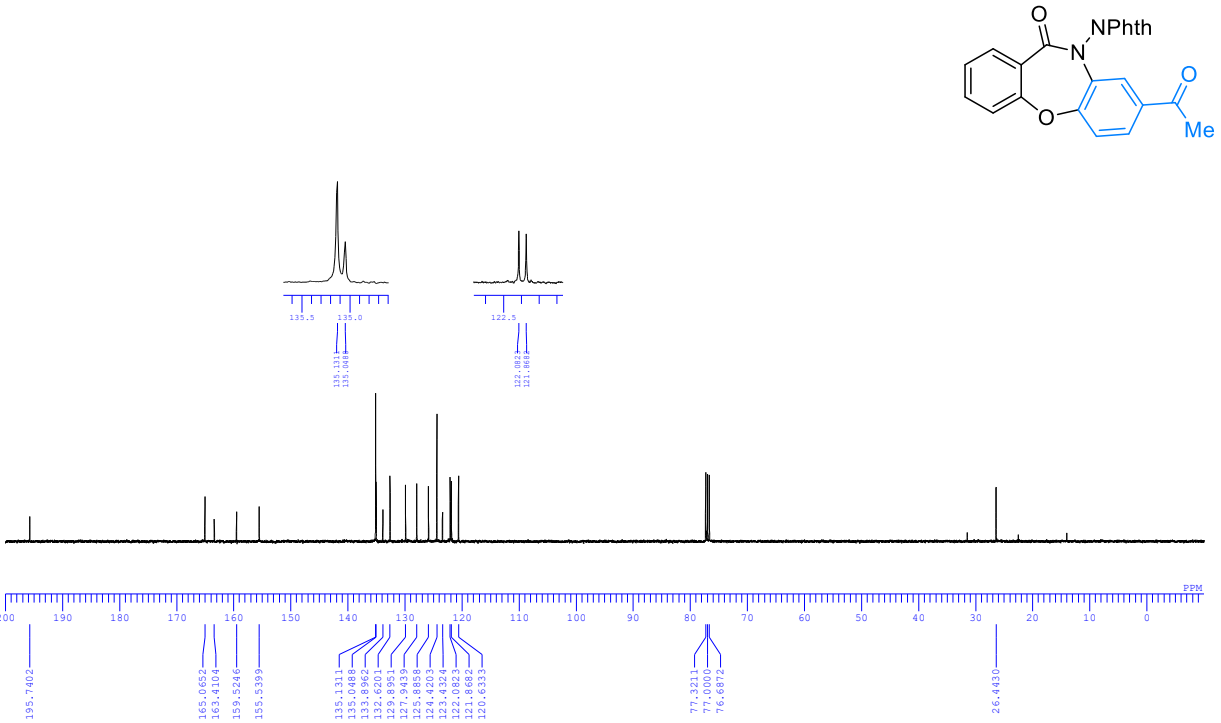
2-(8-Acetyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ah)

^{1}H NMR (400 MHz, $CDCl_3$)



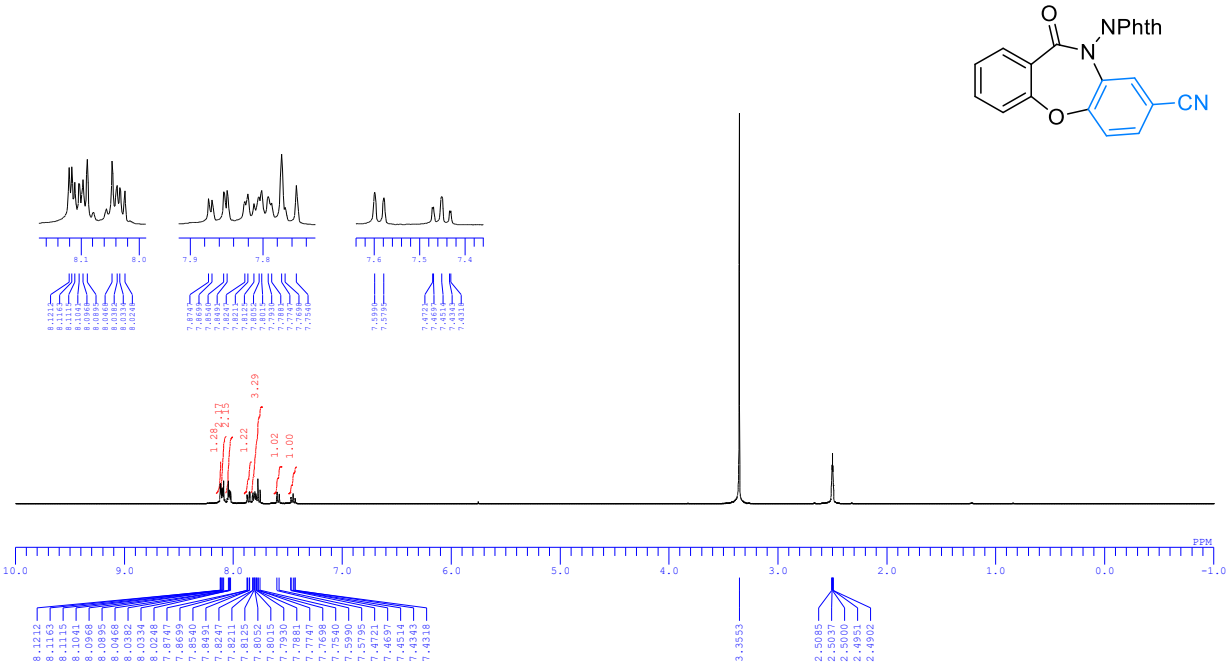
2-(8-Acetyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ah)

^{13}C NMR (100 MHz, $CDCl_3$)



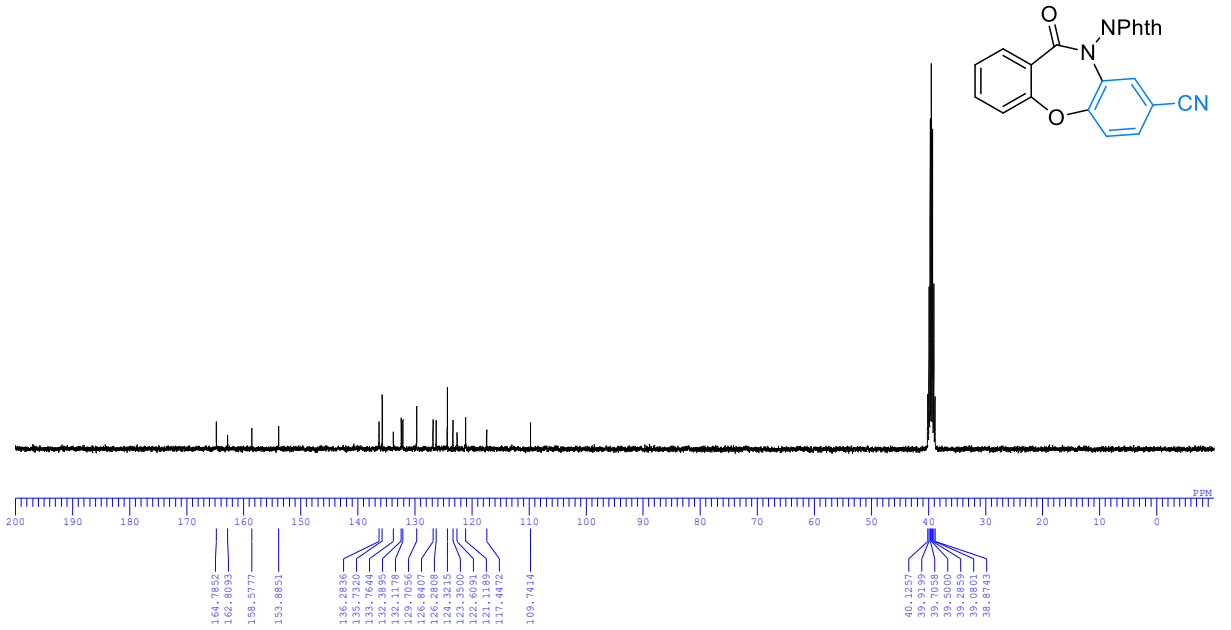
10-(1,3-Dioxoisoindolin-2-yl)-11-oxo-10,11-dihydrodibenzo[*b*,*f*][1,4]oxazepine-8-carbonitrile (4ai)

^{1}H NMR (400 MHz, DMSO-*d*6)



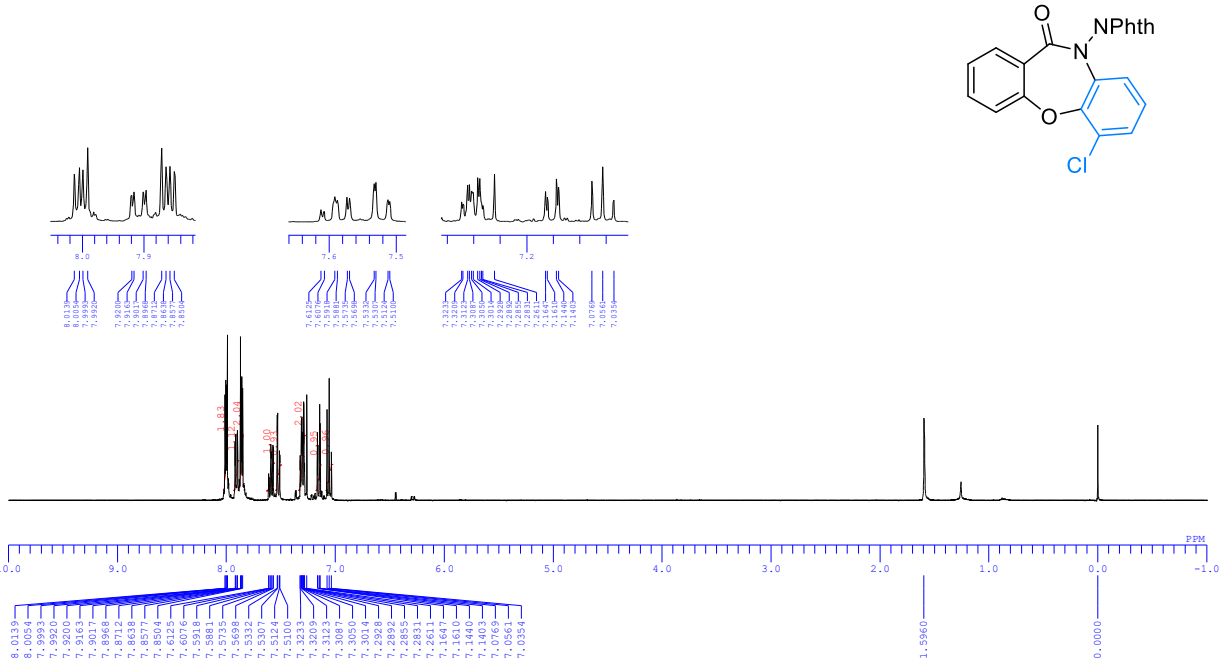
10-(1,3-Dioxoisoindolin-2-yl)-11-oxo-10,11-dihydrodibenzo[*b*,*f*][1,4]oxazepine-8-carbonitrile (4ai)

^{13}C NMR (100 MHz, DMSO-*d*6)



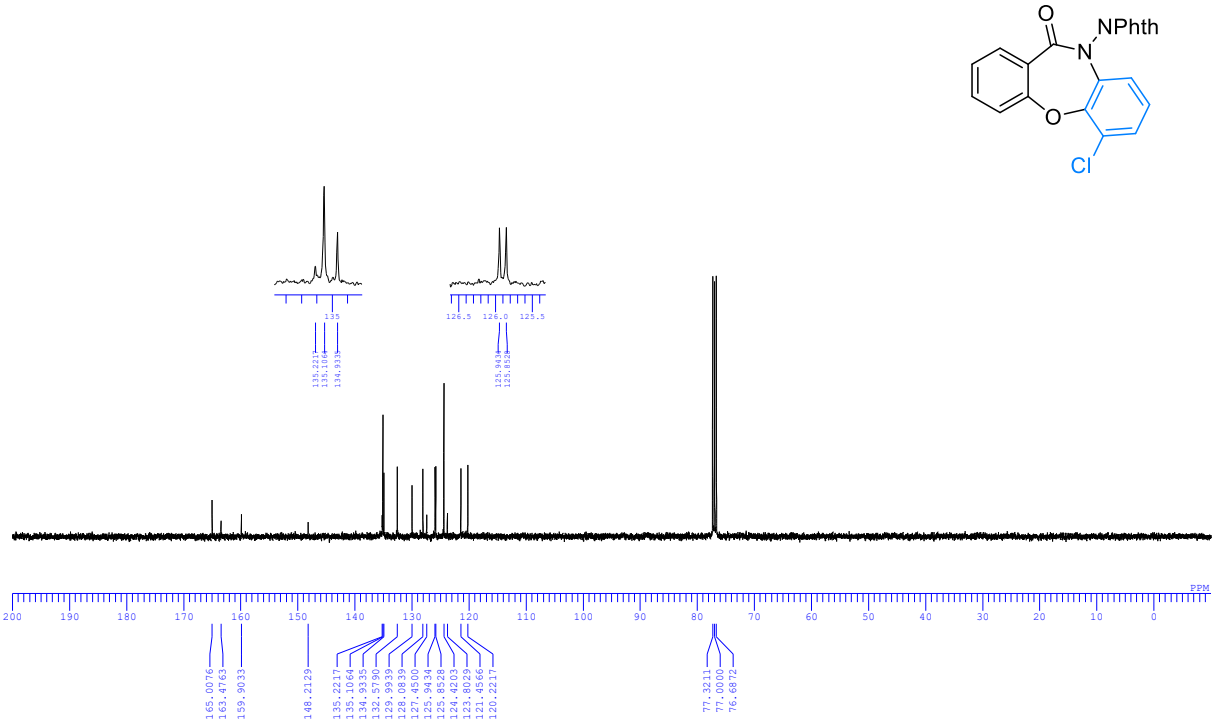
2-(6-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4aj)

^{1}H NMR (400 MHz, $CDCl_3$)



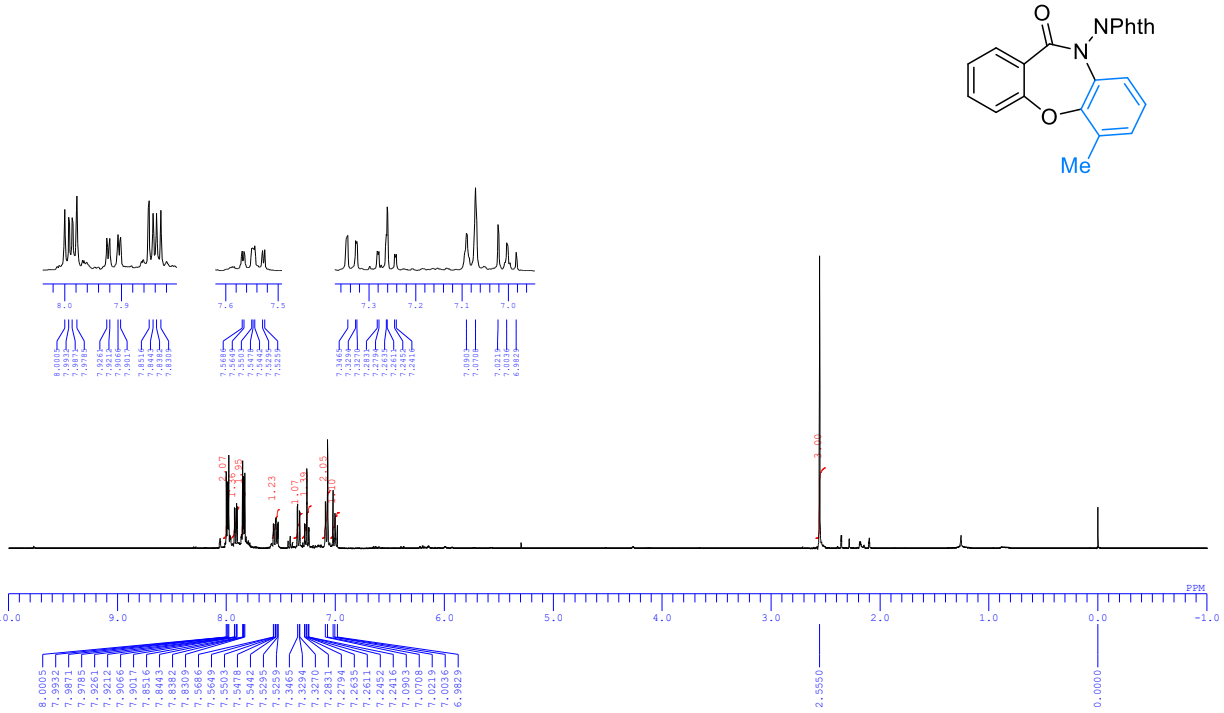
2-(6-Chloro-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4aj)

^{13}C NMR (100 MHz, $CDCl_3$)



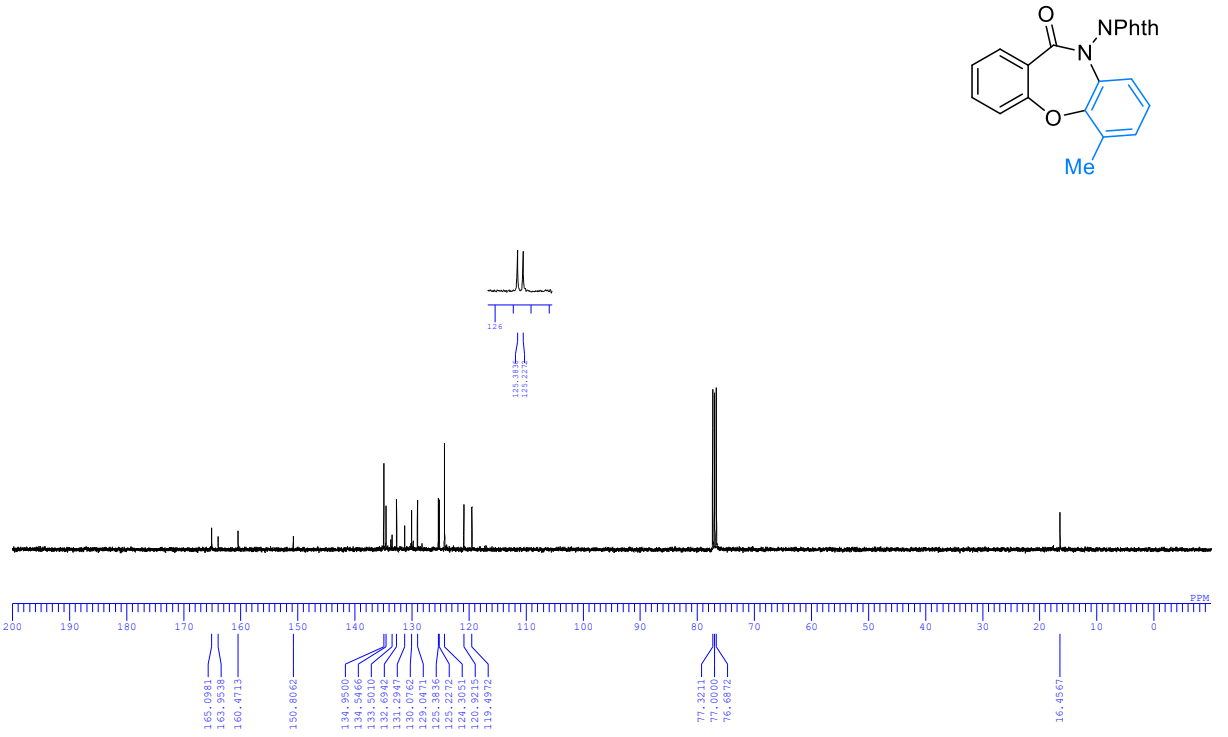
2-(6-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ak)

^{1}H NMR (400 MHz, $CDCl_3$)



2-(6-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4ak)

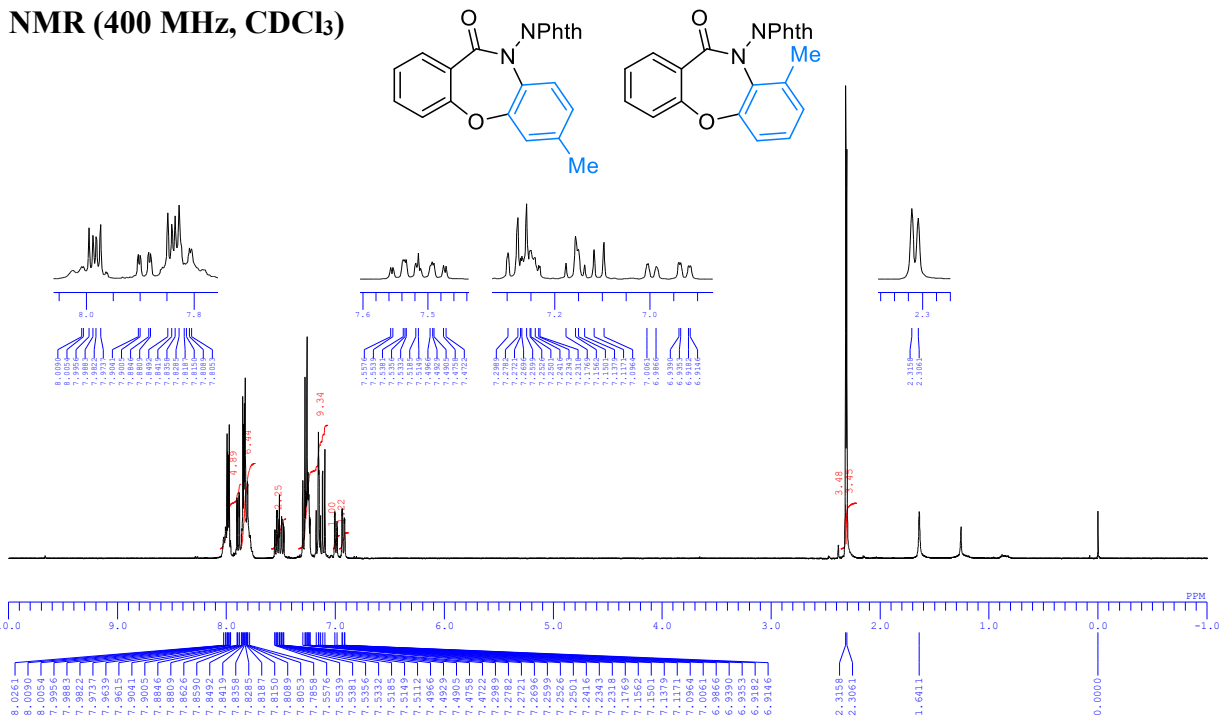
^{13}C NMR (100 MHz, $CDCl_3$)



2-(7-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4al)

2-(9-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4al')

^{1}H NMR (400 MHz, $CDCl_3$)



2-(7-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4al)

2-(9-Methyl-11-oxodibenzo[*b*,*f*][1,4]oxazepin-10(11H)-yl)isoindoline-1,3-dione (4al')

^{13}C NMR (100 MHz, $CDCl_3$)