Supplementary Information

Organocatalyzed aza-Payne-type rearrangement of epoxy amines and carbon dioxide to efficient construction of oxazolidiones

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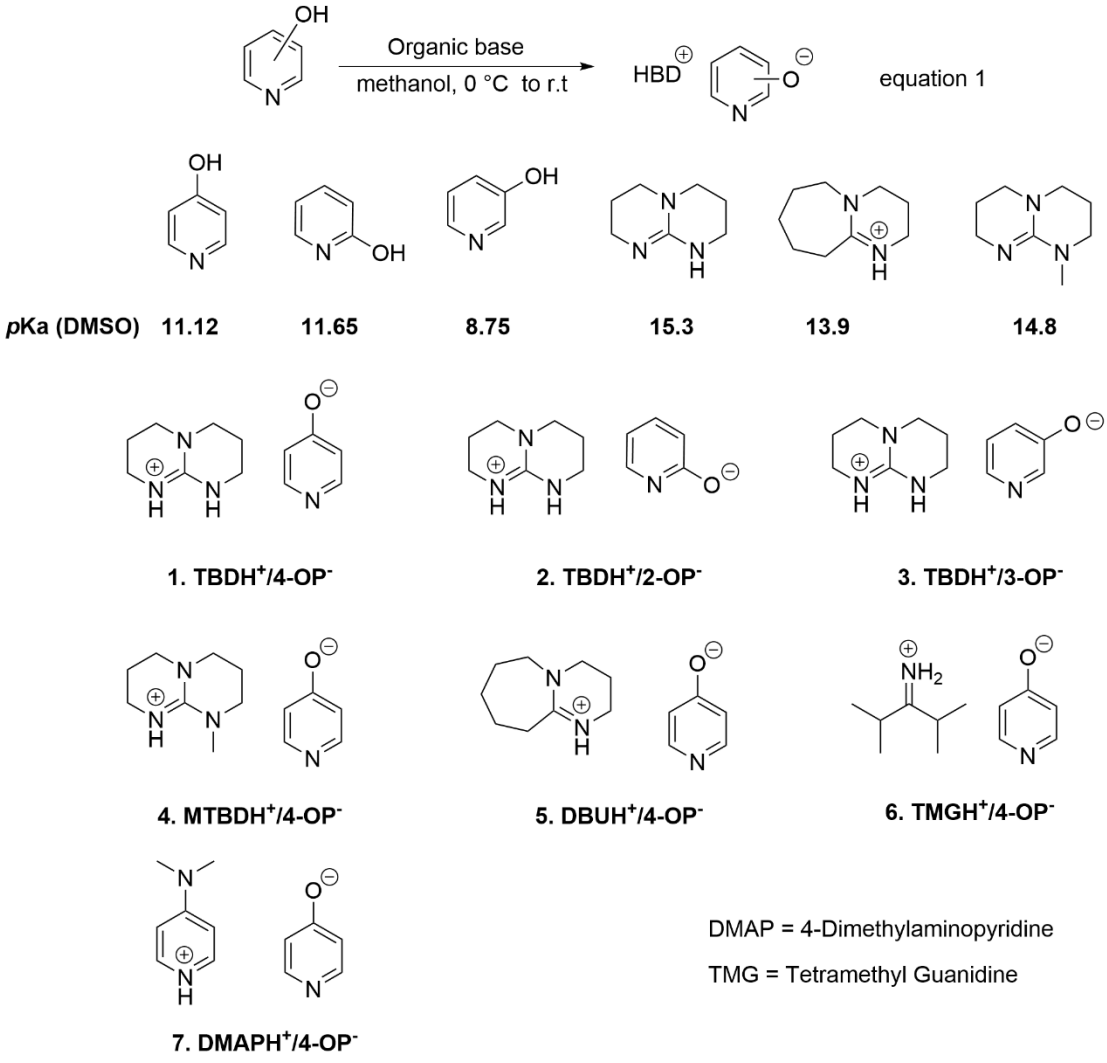
1. General information

Materials. CO_2 was supplied by Nanjing Shangyuan Industrial Gas Factory with a purity of 99.99%. All starting materials were purchased from Energy chemical and Aladdin. Organic base and hydroxypyridine with different substituents were supplied by Sinopharm Chemical Reagent Co. All the other reagents were purchased from Aldrich and used without further purification.

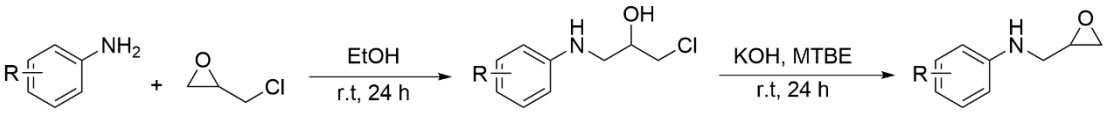
Characterizations. ^{1}H and ^{13}C NMR spectra were recorded on a Bruker Avance 400 and 101 MHz NMR spectrometer in $CDCl_3$, or DMSO-d_6 as stated deuterated solvents. Chemical shifts δ are reported in parts per million (ppm) relative to a residual undeuterated solvent as an internal reference (^{1}H δ 7.26 for $CDCl_3$, δ 2.50 for DMSO-d_6, ^{13}C δ 77.16 for $CDCl_3$, δ 39.52 for DMSO-d_6). Conversions and selectivity of epoxy amines were determined by ^{1}H NMR spectroscopy. All NMR experiments were performed at room temperature.

2. Synthesis and characterization of catalysts 1-11 and epoxy amines

The synthesis of catalysts **1**−**11** was carried out following previously reported protocols [1].



Scheme S1. Catalysts **1**–**7** were prepared by neutralizing the organic base and hydroxypyridine, where the bases were TBD, MTBD, DBU, DMAP, and TMG.



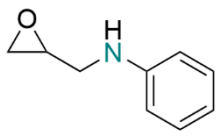
Scheme S2 General procedure for the preparation of epoxy amines.

Following reported procedures [2], In a 250 mL round-bottom flask, epichlorohydrin (40 mmol, 1.0 equiv.), aniline (44 mmol, 1.1 equiv.), and ethanol (120

mL) were combined and stirred at room temperature for 24 hours. The reaction progress was monitored using TLC, and if the reaction was slow, the temperature was slightly increased. After completion, the solvent was removed, and the resulting alcoholamine intermediate was purified via silica gel column chromatography (PE/EA = 50:1 to 10:1). The purified and dried alcoholamine intermediate (1.0 equiv.) was then dissolved in methyl tert-butyl ether (MTBE, 120 mL), and potassium hydroxide (2.0 equiv.) was added. The two-phase mixture was vigorously stirred for 24 hours or more, monitoring the reaction by TLC. After completion, the mixture was filtered, and pure epoxidized amines (**1a**–**1n**) were obtained through silica gel column chromatography (PE/EA = 50:1 to 10:1). For some substrates, the reaction could be filtered directly after the second step to remove the KOH solids.

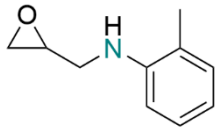
3. Characterization data of epoxy amines

N-(oxiran-2-ylmethyl)aniline **(1a)** [3]



^{1}H NMR (400 MHz, $CDCl_3$) δ 7.24 – 7.16 (m, 2H), 6.78 – 6.72 (m, 1H), 6.68 – 6.63 (m, 2H), 3.98 – 3.79(m, 1H) 3.58 – 3.51 (m, 1H), 3.27 – 3.18 (m, 2H), 2.83 (dd, J = 5.8, 3.0 Hz 1H), 2.70 (dd, J = 5.1, 2.3 Hz, 1H).

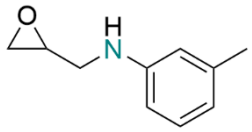
2-methyl-N-(oxiran-2-ylmethyl)aniline **(1b)** [3]



^{1}H NMR (400 MHz, $CDCl_3$) δ 7.14 (td, J = 7.7, 1.6 Hz, 1H), 7.08 (d, J = 7.3 Hz, 1H), 6.75

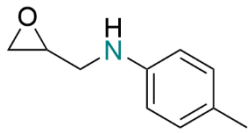
– 6.62 (m, 2H), 3.93 – 3.70 (m, 1H), 3.65 – 3.55 (m, 1H), 3.31 (d, J = 5.0 Hz, 1H), 3.28 – 3.21 (m, 1H), 2.85 (dd, J = 5.9, 2.9 Hz, 1H), 2.72 (dd, J = 5.1, 2.3 Hz, 1H), 2.17 (s, 3H,).

3-methyl-N-(oxiran-2-ylmethyl)aniline **(1c)** [3]



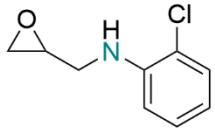
^{1}H NMR (400 MHz, $CDCl_3$) δ 7.24 – 7.15 (m, 4H), 4.71 (ddt, J = 9.6, 6.7, 3.4 Hz, 1H), 3.95 – 3.78 (m, 3H), 3.66 (d, J = 12.4 Hz, 1H), 2.55 (s, 1H), 2.24 (s, 3H).

4-methyl-N-(oxiran-2-ylmethyl)aniline **(1d)** [3]



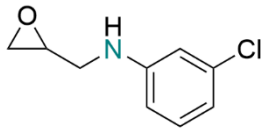
^{1}H NMR (400 MHz, $CDCl_3$) δ 7.14 (td, J = 7.7, 1.6 Hz, 1H), 7.08 (d, J = 7.3 Hz, 1H), 6.75 – 6.62 (m, 2H), 3.93 – 3.70 (m, 1H), 3.65 – 3.55 (m, 1H), 3.31 (d, J = 5.0 Hz, 1H), 2.85 (dd, J = 5.9, 2.9 Hz, 1H), 2.72 (dd, J = 5.1, 2.3 Hz, 1H), 2.17 (s, 3H).

2-chloro-N-(oxiran-2-ylmethyl)aniline **(1e)** [4]



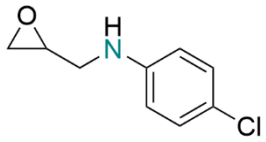
1H NMR (400 MHz, $CDCl_3$) δ 7.32 7.25 (m, 1H), 7.21 – 7.14 (m, 1H), 6.78 – 6.65 (m, 2H), 4.56 (t, J = 6.1 Hz, 1H), 3.66 – 3.55 (m, 1H), 3.38 – 3.28 (m, 1H), 3.24 (p, J = 3.4 Hz, 1H), 2.86 (dd, J = 4.4, 2.7 Hz, 1H), 2.72 (dd, J = 4.9, 2.7 Hz, 1H).

3-chloro-N-(oxiran-2-ylmethyl)aniline **(1f)** [3]



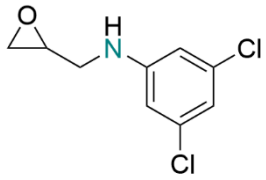
^{1}H NMR (400 MHz, $CDCl_3$) δ 7.08 (t, J = 8.0, 1H), 6.69 (dd, J = 7.6, 2.0 Hz, 1H), 6.61 (t, J = 2.2 Hz, 1H), 6.50 (dd, J = 8.1, 2.3 Hz, 1H), 4.13 – 3.82 (m, 1H), 3.57-3.49 (m, 1H), 3.24 – 3.15 (m, 2H), 2.82 (t, J = 4.3 Hz, 1H), 2.68 (dd, J = 4.8, 2.4 Hz, 1H).

4-chloro-N-(oxiran-2-ylmethyl)aniline **(1g)** [3]



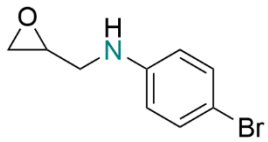
^{1}H NMR (400 MHz, $CDCl_3$) δ 7.18 – 7.08 (m, 2H), 6.63 – 6.52 (m, 2H), 3.93 – 3.88 (s, 1H), 3.57 – 3.48 (m, 1H), 3.23 – 3.13 (m, 2H), 2.82 (dd, J = 5.6, 3.1 Hz, 1H), 2.67 (dd, J = 4.8, 2.3 Hz, 1H).

3,5-dichloro-N-(oxiran-2-ylmethyl)aniline **(1h)**



^{1}H NMR (400 MHz, $CDCl_3$) δ 6.68 (t, J = 1.8 Hz, 1H), 6.48 (d, J = 1.7 Hz, 2H), 4.09 (t, J = 5.8 Hz, 1H), 3.58 – 3.48 (m, 1H), 3.22 – 3.09 (m, 2H), 2.83 (t, J = 4.3 Hz,1H), 2.66 (dd, J = 4.9, 2.4 Hz, 1H). ^{13}C NMR (101 MHz, $CDCl_3$) δ 149.57, 135.60, 117.60, 111.18, 50.64, 45.25, 44.63. HRMS (ESI–TOF) m/z: $[M+K]^+$ Calcd for $C_9H_9Cl_2NOK$ 256.1702; Found 256.1779.

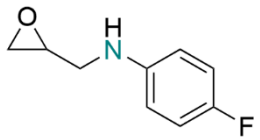
4-bromo-N-(oxiran-2-ylmethyl)aniline **(1i)** [3]



^{1}H NMR (400 MHz, $CDCl_3$) δ 7.23 – 7.09 (m, 2H), 6.54 – 6.37 (m, 2H), 3.84 (s, 1H),

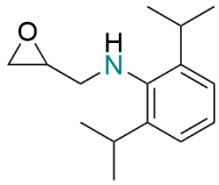
3.51 – 3.41 (m, 1H), 3.22 – 3.07 (m, 2H), 2.75 (t, J = 4.3 Hz, 1H), 2.61 (dd, J = 4.8, 2.3 Hz, 1H).

4-fluoro-N-(oxiran-2-ylmethyl)aniline **(1j)** [3]



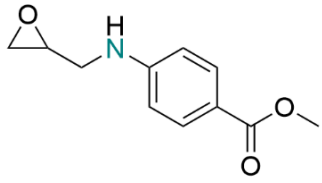
^{1}H NMR (400 MHz, $CDCl_3$) δ 6.97 – 6.80 (m, 2H), 6.66 – 6.53 (m, 2H), 3.51 (dd, J = 13.4, 2.5 Hz, 1H), 3.22 – 3.11 (m, 2H), 2.82 (dd, J = 4.9, 3.9 Hz, 1H), 2.69 (dd, J = 4.8, 2.6 Hz, 1H).

2,6-diisopropyl-N-(oxiran-2-ylmethyl)aniline **(1k)** [4]



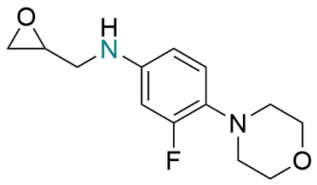
^{1}H NMR (400 MHz, $CDCl_3$) δ 7.12 (s, 3H), 4.21 – 4.11 (m, 1H), 3.77 – 3.63 (m, 2H), 3.30 (hept, J = 6.8 Hz, 3H), 3.12 (dd, J = 12.4, 3.8 Hz, 1H), 3.00 (dd, J = 12.4, 7.3 Hz, 1H), 1.25 (d, J = 6.8 Hz, 12H).

Methyl 4-((oxiran-2-ylmethyl)amino)benzoate **(1l)** [5]



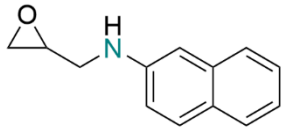
^{1}H NMR (400 MHz, $CDCl_3$) δ 7.91 – 7.83 (m, 2H), 6.63 – 6.55 (m, 2H), 3.85 (s, 3H), 3.61 (dd, J = 14.1, 2.9 Hz, 1H), 3.29 (dd, J = 14.2, 5.0 Hz, 1H), 3.21 (ddt, J = 5.0, 4.0, 2.8 Hz, 1H), 2.83 (dd, J = 4.8, 4.0 Hz, 1H), 2.67 (dd, J = 4.8, 2.6 Hz, 1H), 1.62 (s, 1H).

3-fluoro-4-morpholino-N-(oxiran-2-ylmethyl)aniline **(1m)** [5]



^{1}H NMR (400 MHz, $CDCl_3$) δ 6.82 (dd, J = 9.7, 8.3 Hz, 1H), 6.46 – 6.32 (m, 2H), 3.84 (p, J = 6.1, 5.2 Hz, 5H), 3.49 (d, J = 13.3 Hz, 1H), 3.19 – 3.10 (m, 2H), 2.95 (t, J = 4.6 Hz, 4H), 2.80 (dd, J = 4.9, 4.0 Hz, 1H), 2.67 (dd, J = 4.9, 2.5 Hz, 1H).

N-(oxiran-2-ylmethyl)naphthalen-2-amine **(1n)** [5]



^{1}H NMR (400 MHz, $CDCl_3$) δ 7.69 (dd, J = 8.1, 1.2 Hz, 1H), 7.67 – 7.62 (m, 2H), 7.38 (ddd, J = 8.2, 6.8, 1.3 Hz, 1H), 7.22 (ddd, J = 8.1, 6.8, 1.2 Hz, 1H), 6.91 (dd, J = 8.8, 2.4 Hz, 1H), 6.86 (d, J = 2.4 Hz, 1H), 3.66 (dd, J = 13.9, 2.9 Hz, 1H), 3.39 – 3.33 (m, 1H), 3.29 (ddt, J = 5.2, 3.9, 2.7 Hz, 1H), 2.85 (dd, J = 4.9, 3.9 Hz, 1H), 2.74 (dd, J = 4.9, 2.7 Hz, 1H).

4. Coupling reactions between epoxy amines and CO_2

General procedure: All operations were performed under an argon atmosphere following standard Schlenk techniques, including pre-dewatering and deoxygenation. Epoxy amine (0.5 mmol, 1.0 equiv) and the catalyst (0.05 equiv) were dissolved in anhydrous DMF (0.5 mL, 1.0 M). A 10 mL Schlenk reaction tube was thoroughly heated to displace residual gases, followed by vacuum evacuation. The reaction tube was then purged with carbon dioxide for one minute. This gas exchange process was repeated twice, ensuring a full CO_2

atmosphere inside the reaction tube. The prepared solution of epoxy amine and catalyst dissolved in DMF was added to the reaction tube, and a carbon dioxide-filled gas bag was attached. The reaction mixture was heated in a preheated stirrer at 80 °C for 1–2 hours. After the reaction was complete, the tube was cooled to room temperature, and the reaction mixture was purified by column chromatography (PE/EA = 1:1) to isolate the corresponding oxazolidinones (**2a**–**2n**).

Gram-scale synthesis of 2a

Following the standard procedure for preparing oxazolidinones through the reaction of carbon dioxide with epoxidized amines, 4.8 g of oxazolidinone **2a** was synthesized from substrate **1a** in just 2 hours with a yield exceeding 99%. This result demonstrates that the catalytic system can efficiently and rapidly convert various epoxidized aryl amines into their corresponding oxazolidinones with very high yields. It also highlights the system's significant potential for broader applications in diverse areas of synthesis.

Table S1: The relationship between the time and conversion of **1a** in the presence of catalyst **TBDH$^+$/4-OP$^-$**

Entry	Time (minutes)	Conv. [b] /[%]	Sel. [b] /[%]	Yield. [b] /[%]
1	10	20	>99	20
2	20	39	>99	39
3	30	46	>99	46

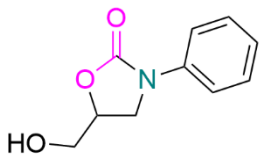
4	40	69	>99	69
5	50	75	>99	75
6	60	84	>99	84
7	70	93	>99	93
8	80	96	>99	96
9	90	>99	>99	>99

[a] Reaction conditions: **1a** (3.73 g, 25 mmol) CO_2 (0.1 MPa), 5 mol% of catalyst **TBDH$^+$/4-OP$^-$**, 80 °C.

[b] Determined by by ^{1}H NMR spectroscopy ($CDCl_3$) using tetraethylsilane as internal standard.

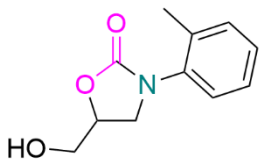
Spectral data for oxazolidinones

5-(hydroxymethyl)-3-phenyloxazolidin-2-one **(2a)** [3]



White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.51 – 7.44 (m, 2H), 7.36 – 7.26 (m, 2H), 7.08 (ddt, J =8.5, 7.3, 1.1 Hz, 1H), 4.68 (ddd, J =8.8, 7.1, 4.2, 3.3 Hz, 1H), 4.03 – 3.87 (m, 3H), 3.70 (ddd, J =12.5, 6.8, 4.1 Hz, 1H), 2.21 (t, J = 6.5 Hz, 1H). ^{13}C NMR (101 MHz, $CDCl_3$) δ 154.74, 138.09, 129.11, 124.22, 118.32, 72.80, 62.88, 46.35.

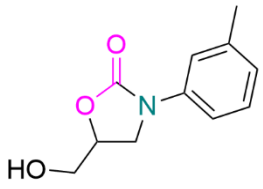
5-(hydroxymethyl)-3-(o-tolyl)oxazolidin-2-one **(2b)** [3]



White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.24 – 7.15 (m, 4H), 4.71 (ddt, J =9.6, 6.7, 3.4 Hz, 1H), 3.95 – 3.78 (m, 3H), 3.66 (d, J = 12.4 Hz, 1H), 2.55 (s, 1H), 2.24 (s, 3H). ^{13}C NMR (101 MHz, $CDCl_3$) δ 156.65, 136.22, 135.89, 131.47, 128.46, 127.11, 126.92,

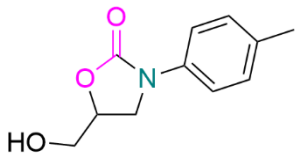
74.07, 62.97, 49.02, 17.90.

5-(hydroxymethyl)-3-(m-tolyl)oxazolidin-2-one **(2c)** [3]



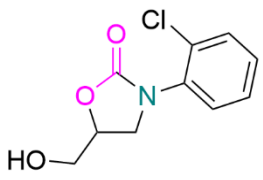
White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.23 – 7.08 (m, 2H), 6.84 (d, J = 7.4 Hz, 1H), 4.60 (tt, J = 7.6, 3.5 Hz, 1H), 3.87 (ddd, J = 18.0, 13.6, 5.9 Hz, 3H), 3.62 (dd, J = 12.3, 3.9 Hz, 1H), 2.63 (s, 1H), 2.24 (s, 3H). ^{13}C NMR (101 MHz, $CDCl_3$) δ 155.03, 139.15, 138.13, 129.00, 125.17, 119.24, 115.63, 73.02, 62.92, 46.60, 21.75.

5-(hydroxymethyl)-3-(p-tolyl)oxazolidin-2-one **(2d)** [3]



White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.39 – 7.29 (m, 2H), 7.11 (d, J = 8.2 Hz, 2H), 4.67 (ddt, J = 9.0, 7.2, 3.7 Hz, 1H), 4.01 – 3.85 (m, 3H), 3.70 (dd, J = 12.5, 4.3 Hz, 1H), 2.26 (s, 3H), 1.57 (s, 1H). ^{13}C NMR (101 MHz, $CDCl_3$) δ 137.22, 132.06, 119.71, 117.05, 72.74, 62.76, 46.17.

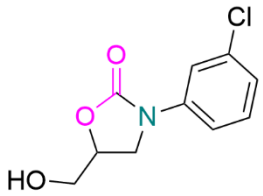
3-(2-chlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one (**2e**) [4]



White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.46 – 7.40 (m, 1H), 7.39 – 7.34 (m, 1H), 7.33 – 7.23 (m, 2H), 4.82 – 4.70 (m, 1H), 3.98 (dd, J = 8.7, 6.4 Hz, 1H), 3.89 (dd, J = 12.6, 3.4 Hz, 1H), 3.84 (dd, J = 8.5, 6.4 Hz, 1H), 3.71 (dd, J = 12.6, 4.4 Hz, 1H), 3.27 (s,

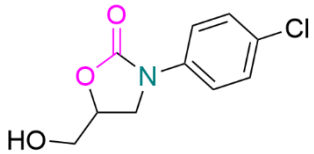
1H). ^{13}C NMR (101 MHz, $CDCl_3$) δ 156.8, 134.7, 132.5, 130.6, 129.7, 129.6, 128.1, 74.6, 62.9, 48.3.

3-(3-chlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one **(2f)** [3]



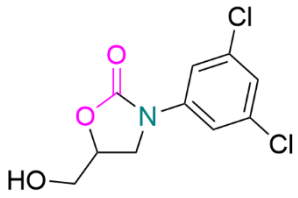
White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.57 (t, J = 2.1 Hz, 1H), 7.40 (dd, J = 8.4, 2.2 Hz, 1H), 7.30 – 7.22 (m, 1H), 7.08 (dd, J = 7.9, 1.9 Hz, 1H), 4.72 (tt, J = 7.4, 3.4 Hz,1H), 3.97 (td, J = 9.5, 9.0, 3.7 Hz,3H), 3.72 (dd, J = 12.7, 3.7 Hz, 1H), 2.74 (s, 1H).

(4-chlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one **(2g)** [3]



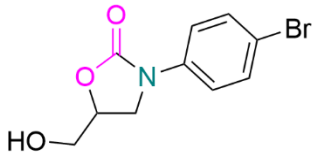
White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.53 – 7.45 (m, 2H), 7.37 – 7.29 (m, 2H), 4.75 (ddt, J = 8.8, 7.0, 3.5 Hz, 1H), 4.06 – 3.94 (m, 3H), 3.76 (dd, J = 12.7, 3.9 Hz, 1H), 2.09 (s, 1H).

3-(3,5-dichlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one **(2h)** [4]



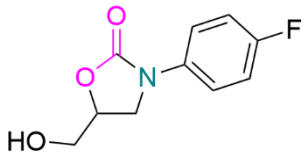
Brown oil. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.50 (d, J = 1.8 Hz, 2H), 7.12 (t, J = 1.8 Hz, 1H), 4.76 (dq, J = 8.6, 3.5 Hz, 1H), 4.06 – 3.94 (m, 3H), 3.75 (dd, J = 12.7,3.6 Hz, 1H). ^{13}C NMR (101 MHz, $CDCl_3$) δ 154.37, 140.02, 135.63, 124.12, 116.44, 73.09, 62.67, 46.17. HRMS (ESI-TOF) m/z: $[M^+H]^+$ calcd for $C_{10}H_{10}Cl_2NO_3$ 263.0973; Found 263.0987.

(4-bromophenyl)-5-(hydroxymethyl)oxazolidin-2-one **(2i)** [3]



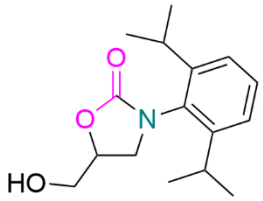
White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.52 – 7.41 (m, 4H), 4.75 (ddt, J = 8.7, 7.0, 3.6 Hz, 1H), 4.06 – 3.93 (m, 3H), 3.76 (dd, J = 12.6, 3.9 Hz, 1H), 1.81 (s, 1H).

(4-fluorophenyl)-5-(hydroxymethyl)oxazolidin-2-one **(2j)** [3]



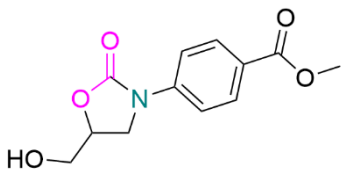
Brown oil. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.50 (s, 2H), 7.07 (s, 2H), 4.75 (s, 1H), 3.99 (d, J = 11.1 Hz, 3H), 3.76 (d, J = 12.4 Hz, 1H), 2.26 (s, 1H).

3-(2,6-diisopropylphenyl)-5-(hydroxymethyl)oxazolidin-2-one **(2k)** [4]



White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.35 (t, J = 7.7 Hz, 1H), 7.21 (d, J = 7.7 Hz, 2H), 4.83 (ddt, J = 9.8, 6.9, 3.5 Hz, 1H), 4.07 – 3.99 (m, 1H), 3.83 – 3.73 (m, 3H), 3.02 (dp, J = 20.4, 6.9 Hz, 2H), 1.25 (dd, J = 7.1, 1.3 Hz, 12H).

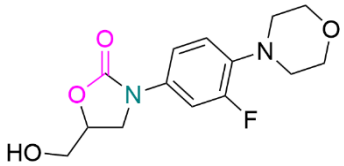
Methyl 4-(5-(hydroxymethyl)-2-oxooxazolidin-3-yl)benzoate **(2l)** [5]



White solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 8.01 – 7.95 (m, 2H), 7.75 – 7.69 (m, 2H), 5.23 (t, J = 5.6 Hz, 1H), 4.74 (ddt, J = 9.5, 6.3, 3.6 Hz, 1H), 4.14 (t, J = 9.1 Hz, 1H), 3.88

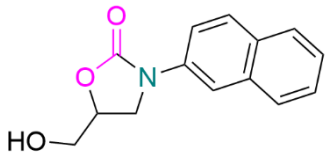
(dd, J = 9.0, 6.1 Hz, 1H), 3.84 (s, 3H), 3.69 (ddd, J = 12.4, 5.5, 3.3 Hz, 1H), 3.57 (ddd, J = 12.4, 5.8, 3.9 Hz, 1H).

3-(3-fluoro-4-morpholinophenyl)-5-(hydroxymethyl)oxazolidin-2-one **(2m)** [5]



Red solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.41 (dd, J = 14.4, 2.6 Hz, 1H), 7.08 (dd, J = 8.9, 2.7 Hz, 1H), 6.89 (t, J = 9.1 Hz, 1H), 4.69 (ddt, J = 10.2, 7.3, 3.5 Hz, 1H), 3.96 – 3.89 (m, 3H), 3.87 – 3.80 (m, 4H), 3.70 (dd, J = 12.6, 3.9 Hz, 1H), 3.05 – 2.98 (m, 4H).

5-(hydroxymethyl)-3-(naphthalen-2-yl)oxazolidine-2-one **(2n)** [5]



Red solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.03 (dd, J = 9.0, 2.3 Hz, 1H), 7.94 (d, J = 9.1 Hz, 1H), 7.91 – 7.83 (m, 3H), 7.47 (ddd, J = 28.0, 8.0, 6.9, 1.4 Hz, 2H), 5.25 (t, J = 5.7 Hz 1H), 4.76 (ddt, J = 9.7, 6.2, 3.8 Hz, 1H), 4.21 (t, J = 9.0 Hz, 1H), 3.98 (dd, J = 8.9, 6.3 Hz, 1H), 3.72 (dt, J = 12.5, 4.2 Hz, 1H), 3.61 (dt, J = 12.3, 4.5 Hz, 1H).

5. ^{1}H and ^{13}C and NMR spectra (Figure S1 – Figure S40)

NMR spectra of epoxy amines

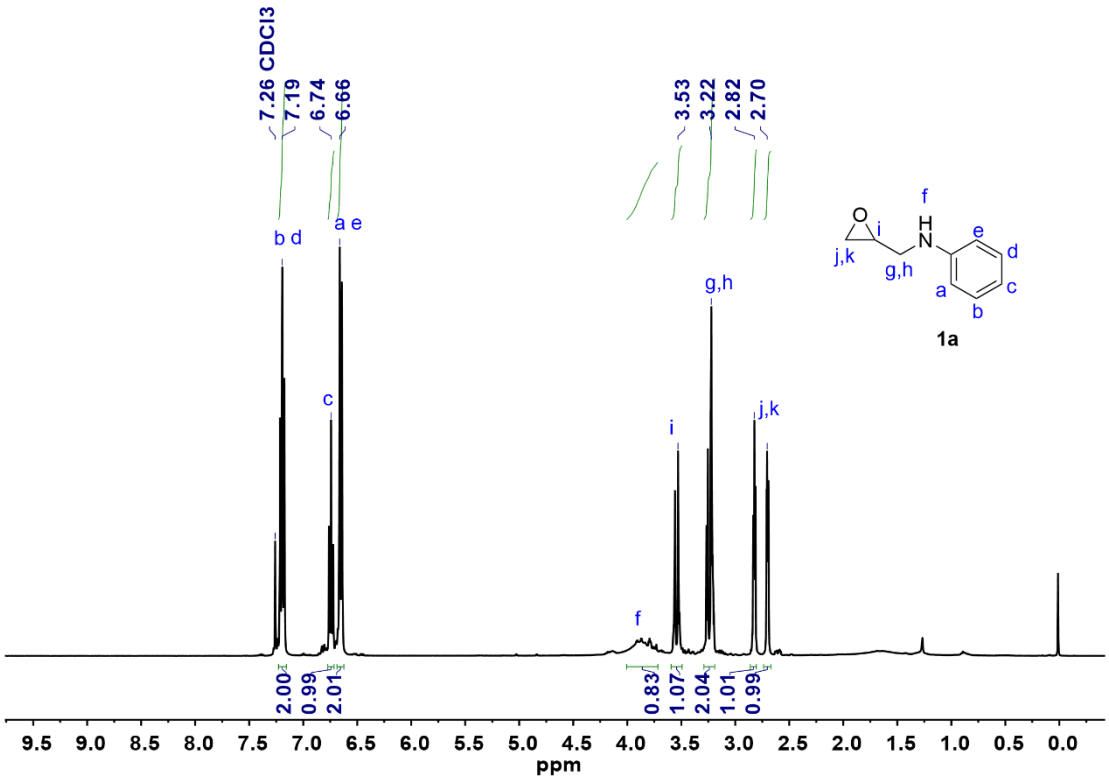


Figure S1. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***N-(oxiran-2-ylmethyl)aniline*** **(1a)**

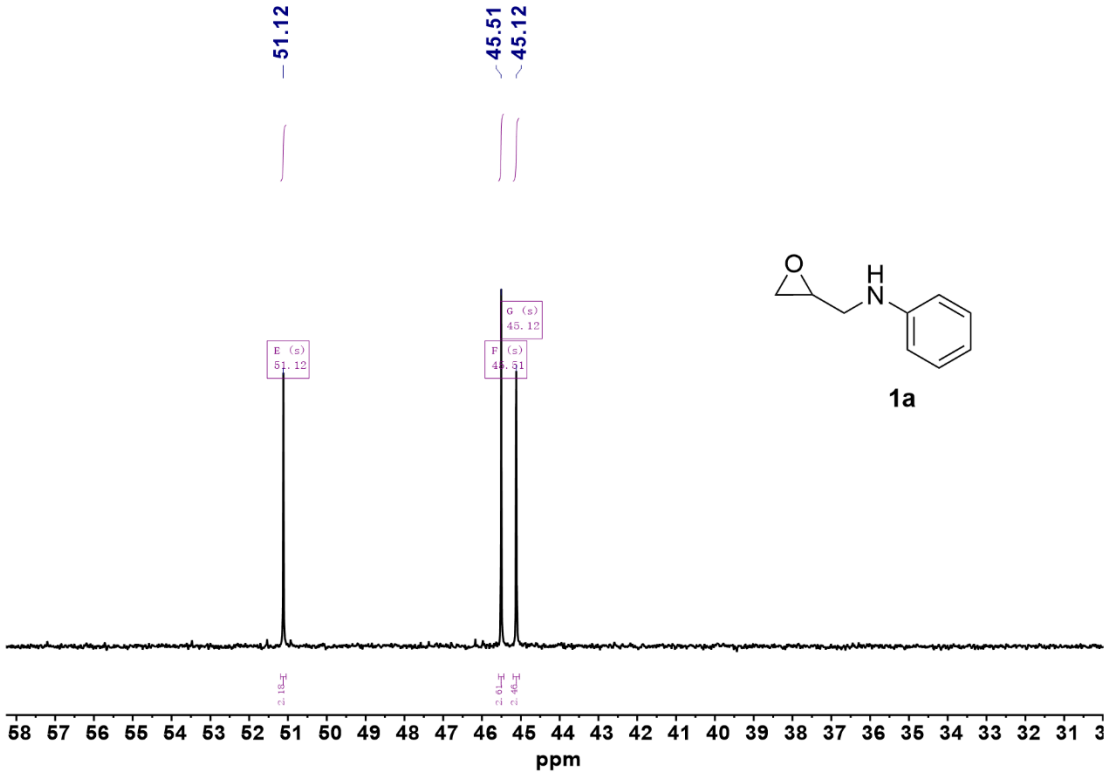


Figure S2. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***N-(oxiran-2-ylmethyl)aniline*** (**1a**)

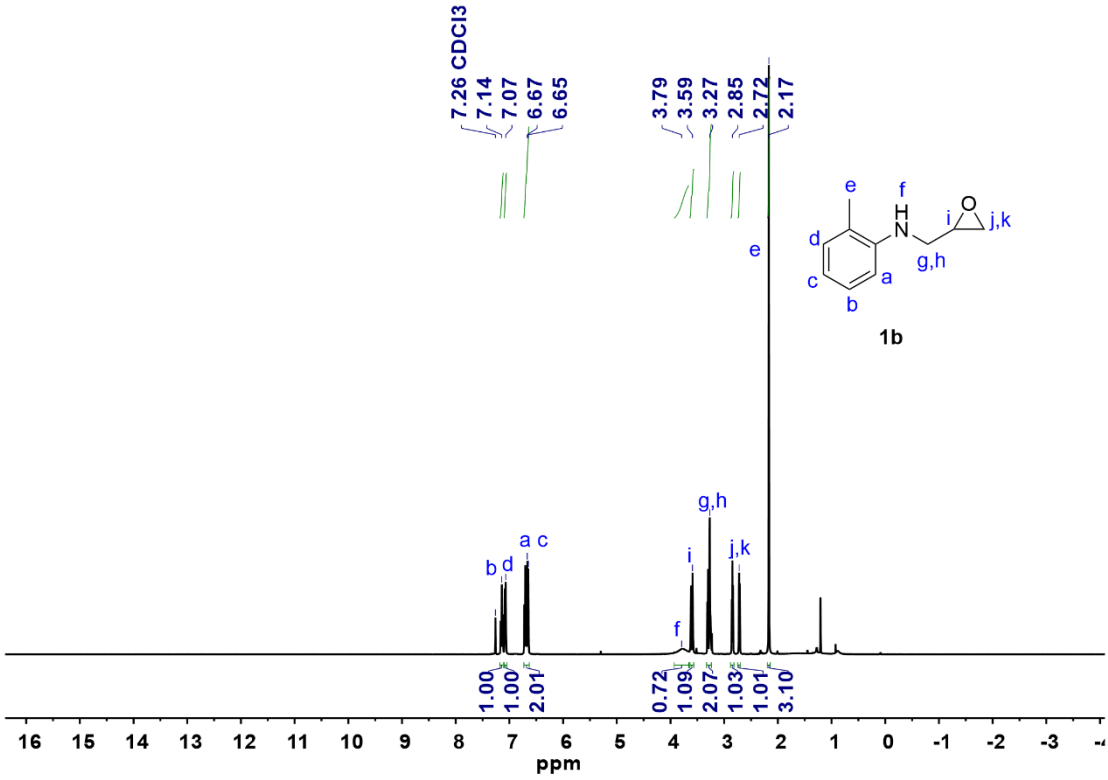


Figure S3. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***2-methyl-N-(oxiran-2-ylmethyl)aniline*** **(1b)**

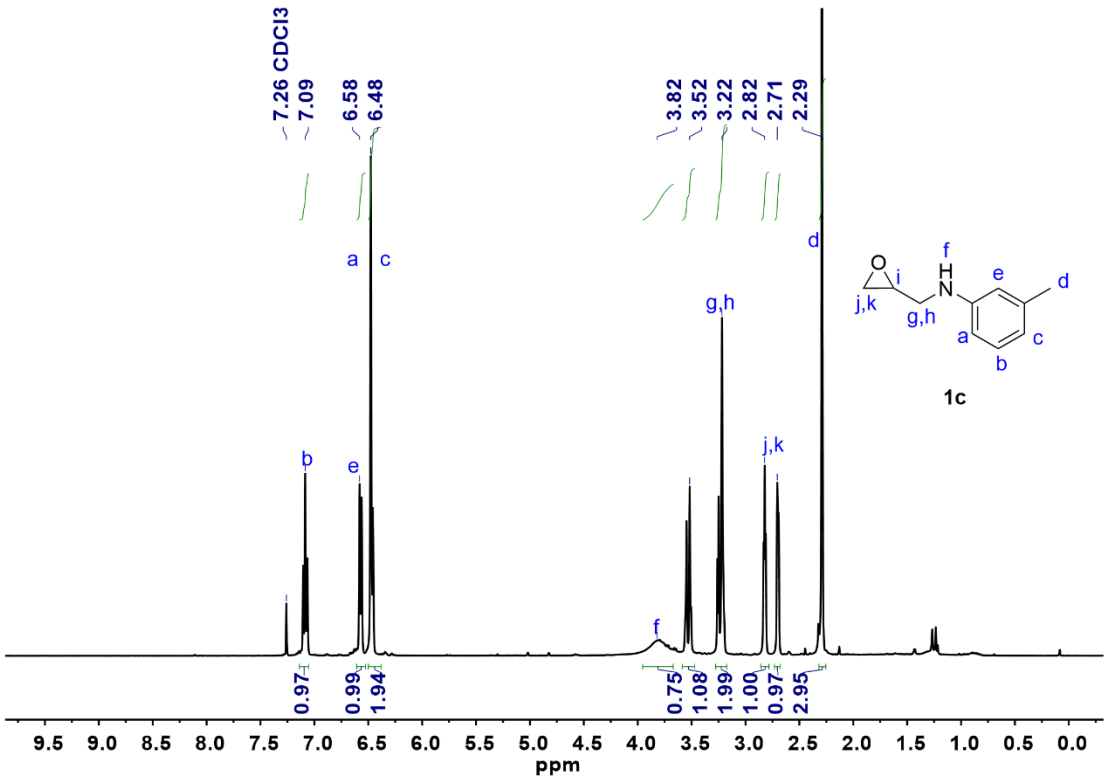


Figure S4. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3-methyl-N-(oxiran-2-ylmethyl)aniline*** **(1c)**

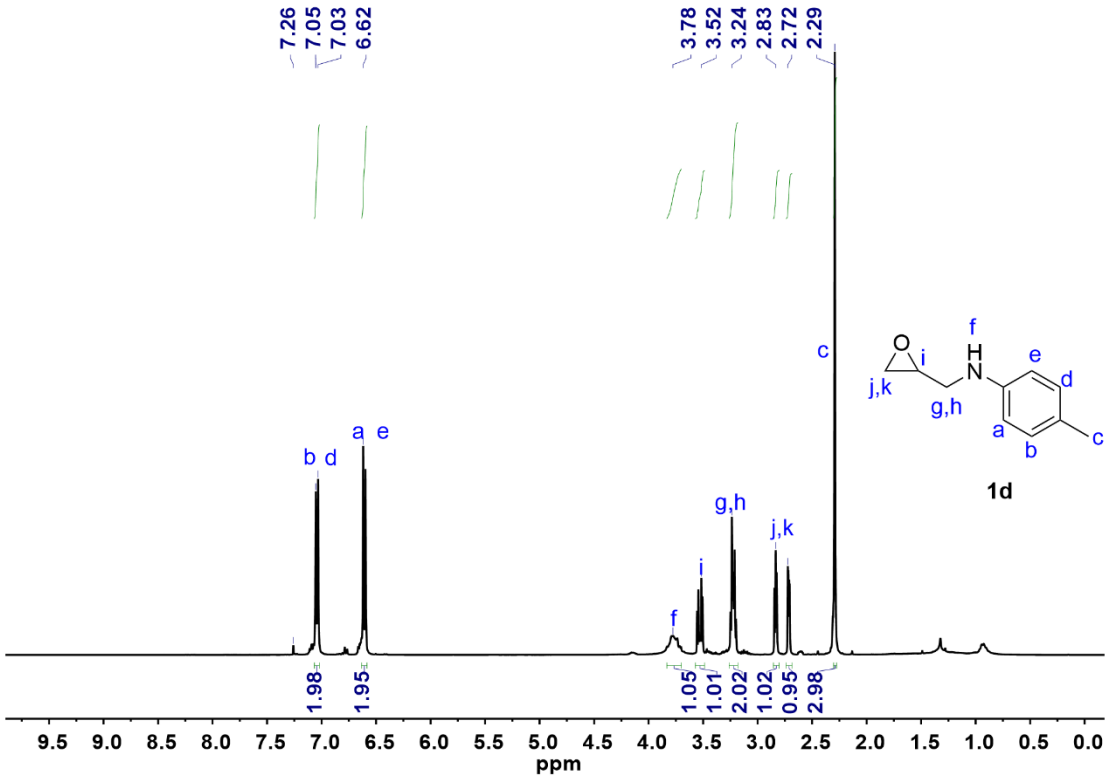


Figure S5 ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***4-methyl-N-(oxiran-2-ylmethyl)aniline*** **(1d)**

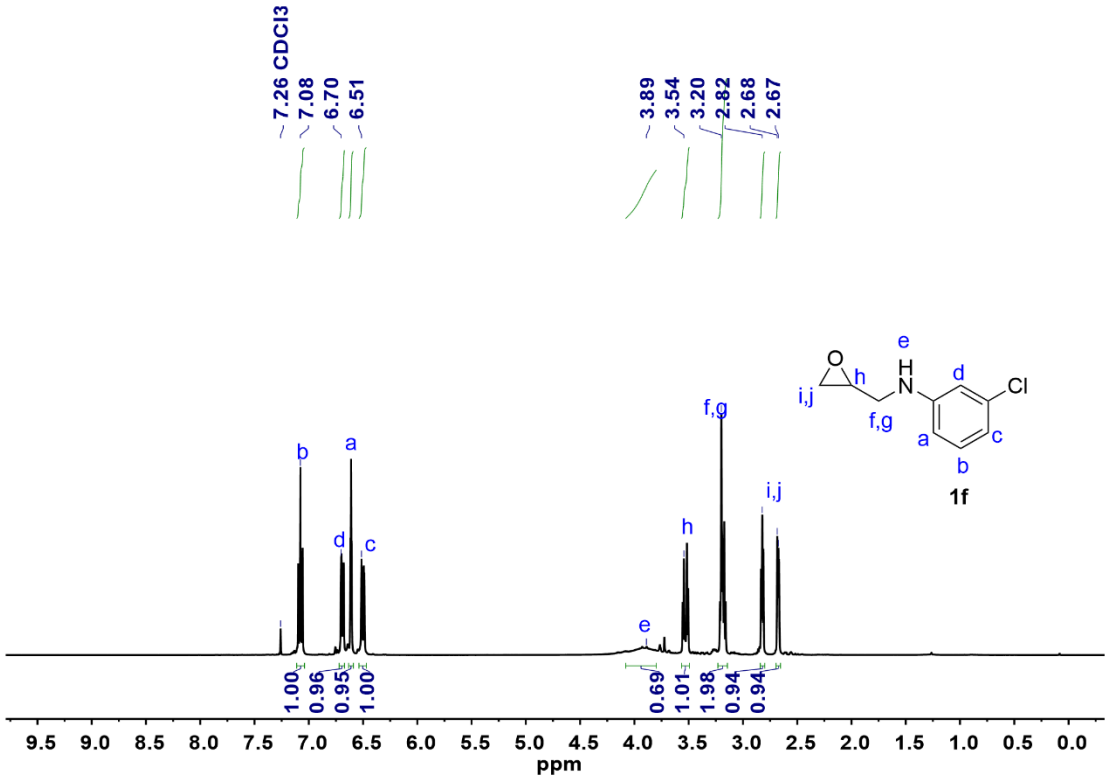


Figure S6 ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3-chloro-N-(oxiran-2-ylmethyl)aniline*** (**1f**)

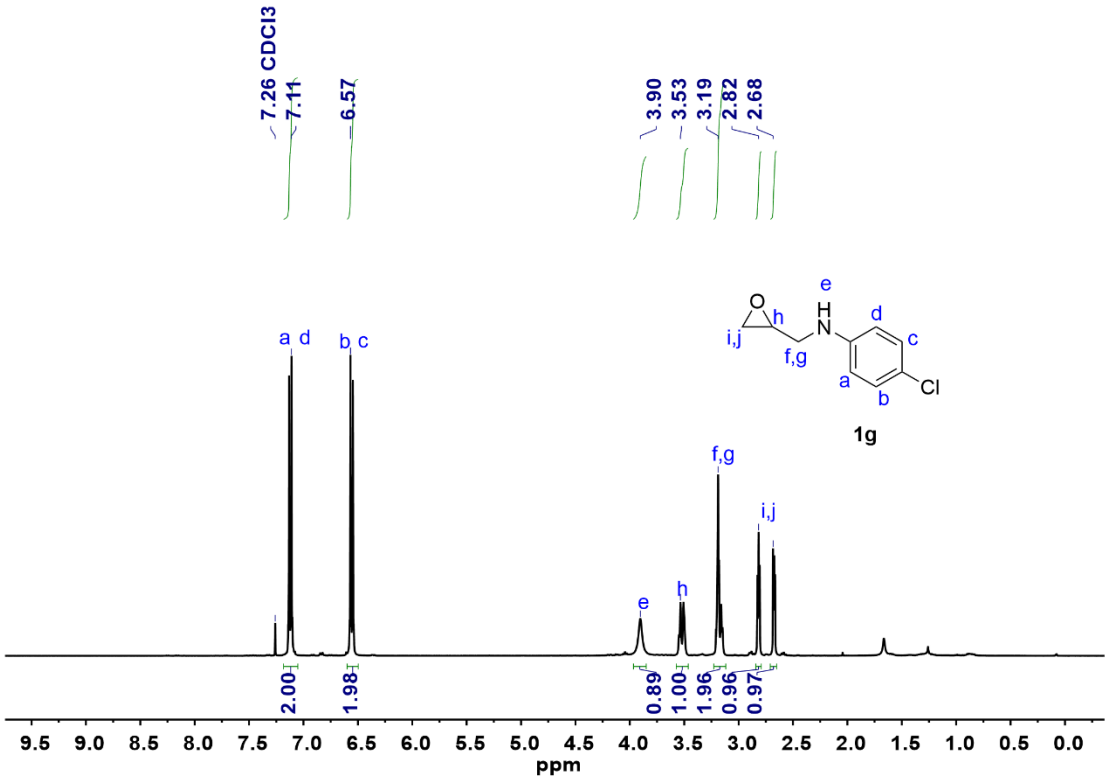


Figure S7 ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***4-chloro-N-(oxiran-2-ylmethyl)aniline*** (**1g**)

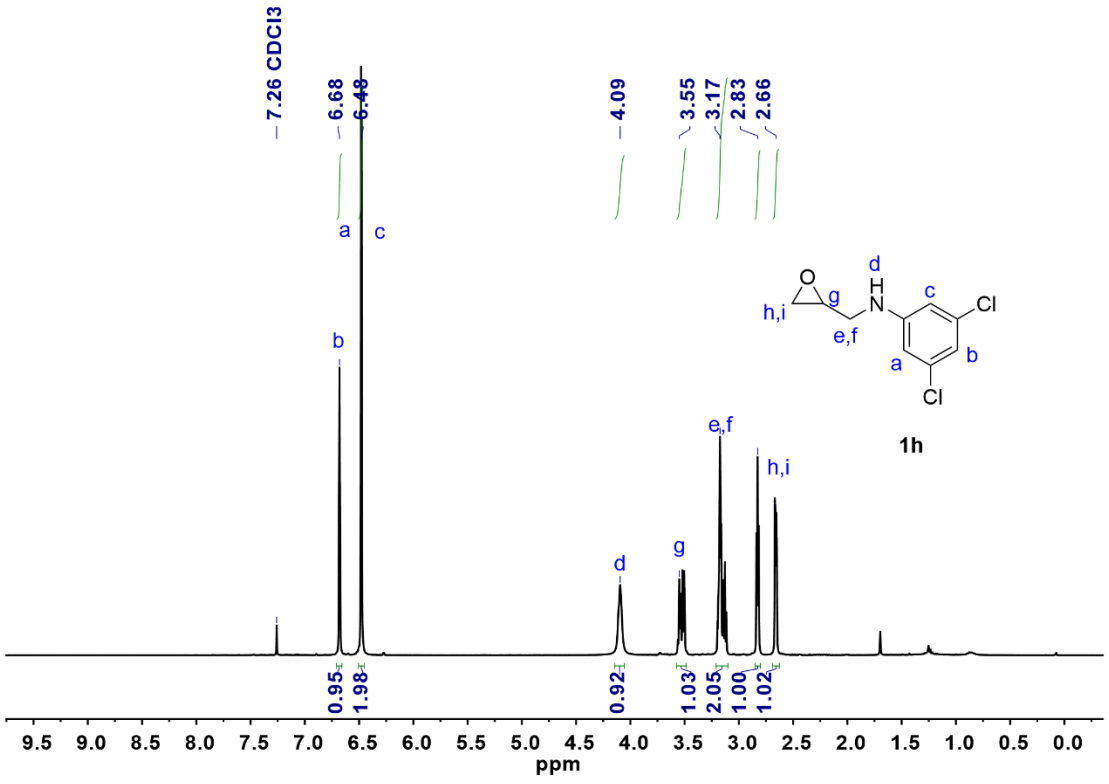


Figure S8. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3,5-dichloro-N-(oxiran-2-ylmethyl)aniline*** **(1h)**

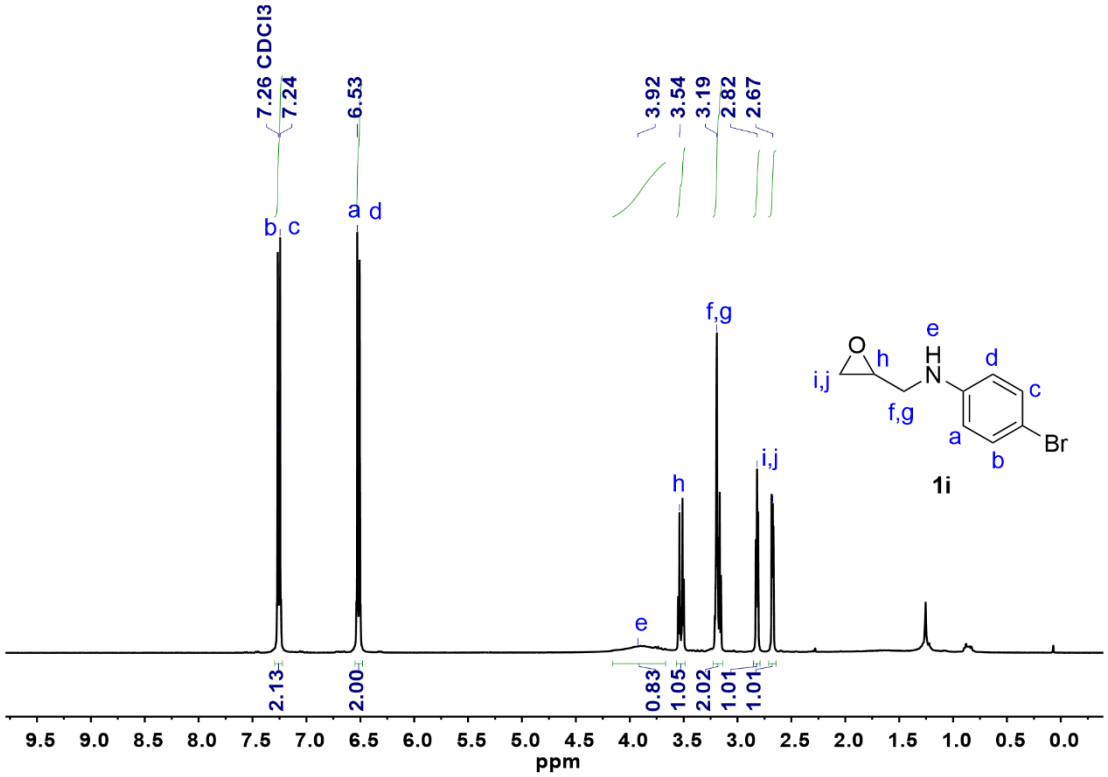


Figure S9. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***4-bromo-N-(oxiran-2-ylmethyl)aniline*** **(1i)**

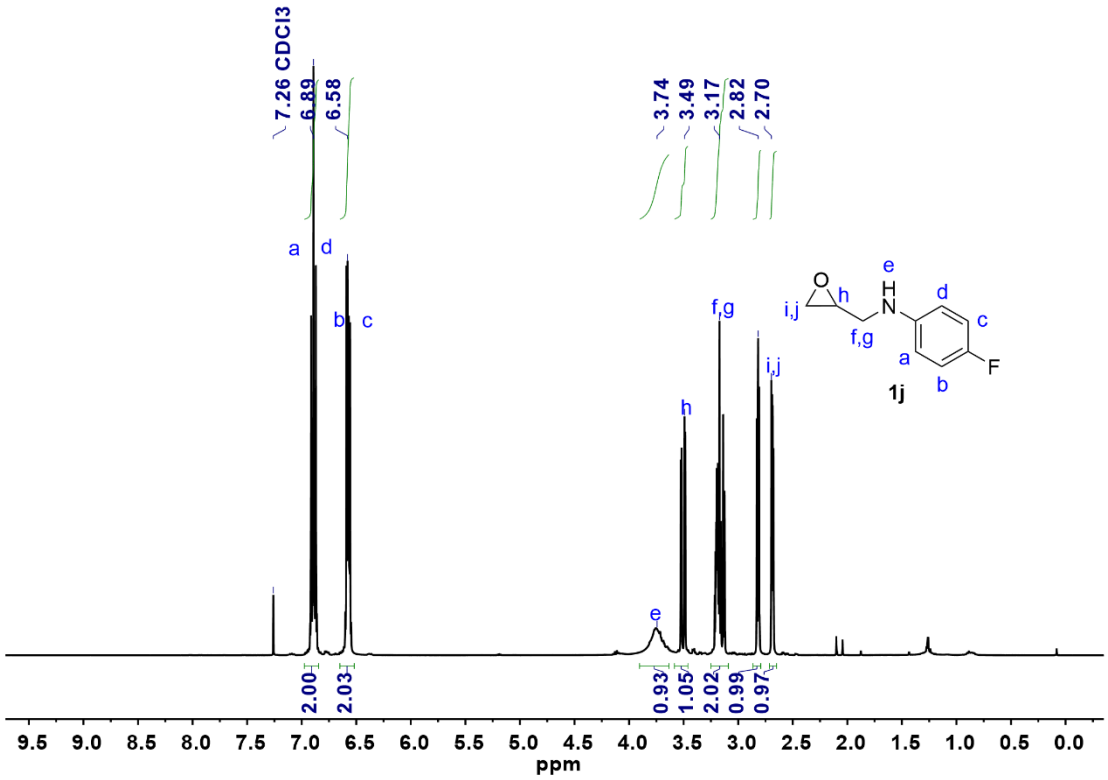


Figure S10. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***4-fluoro-N-(oxiran-2-ylmethyl)aniline*** **(1j)**

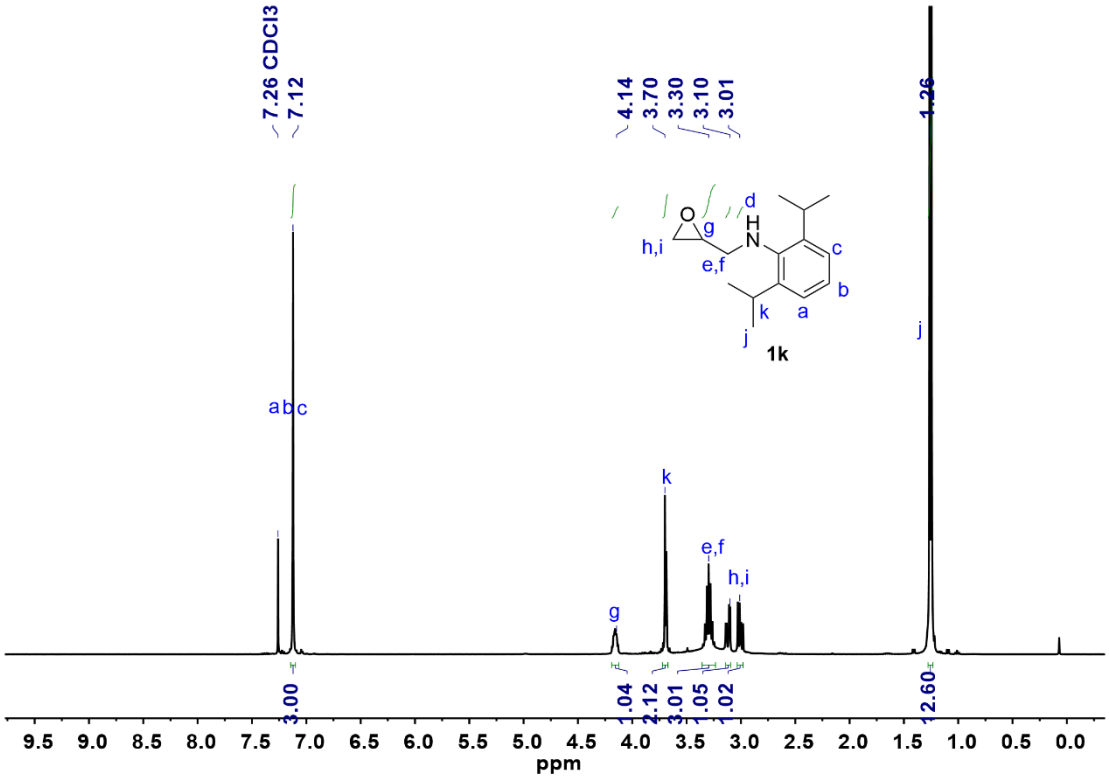


Figure S11. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***2,6-diisopropyl-N-(oxiran-2-ylmethyl)aniline*** **(1k)**

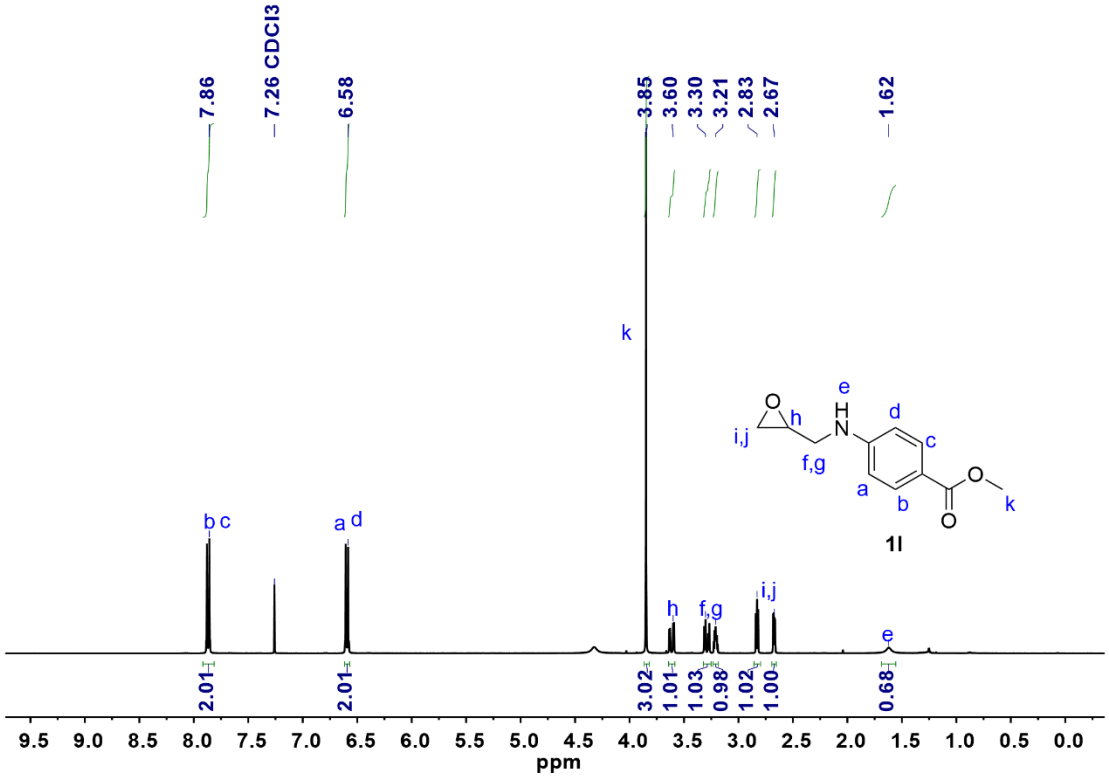


Figure S12. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***Methyl 4-((oxiran-2-ylmethyl)amino)benzoate*** **(1l)**

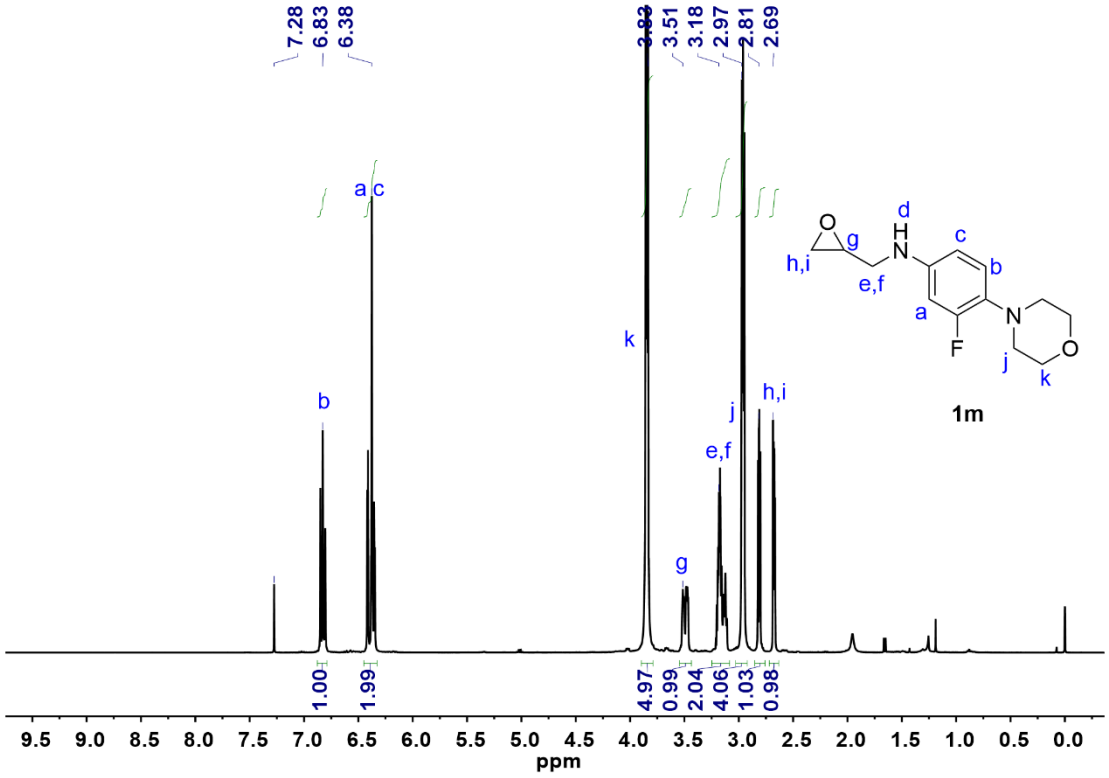


Figure S13. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3-fluoro-4-morpholino-N-(oxiran-2-ylmethyl)aniline*** **(1m)**

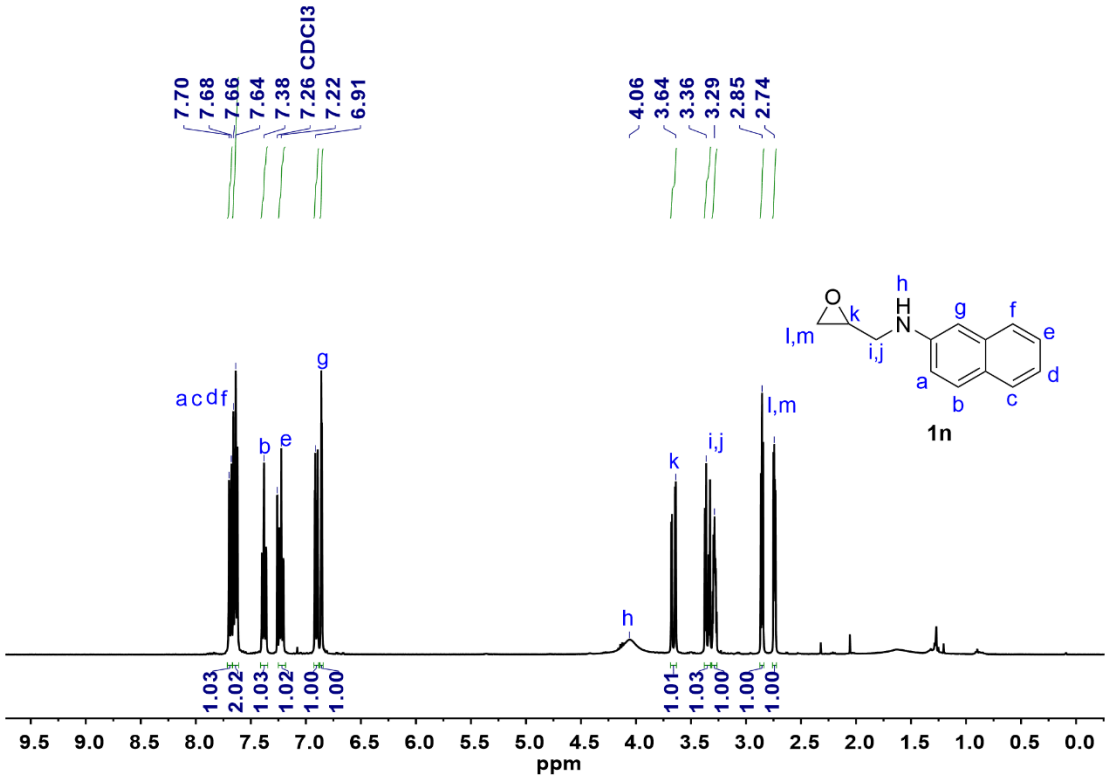


Figure S14. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***N-(oxiran-2-ylmethyl)naphthalen-2-amine*** **(1n)**

NMR spectra of oxazolidinones

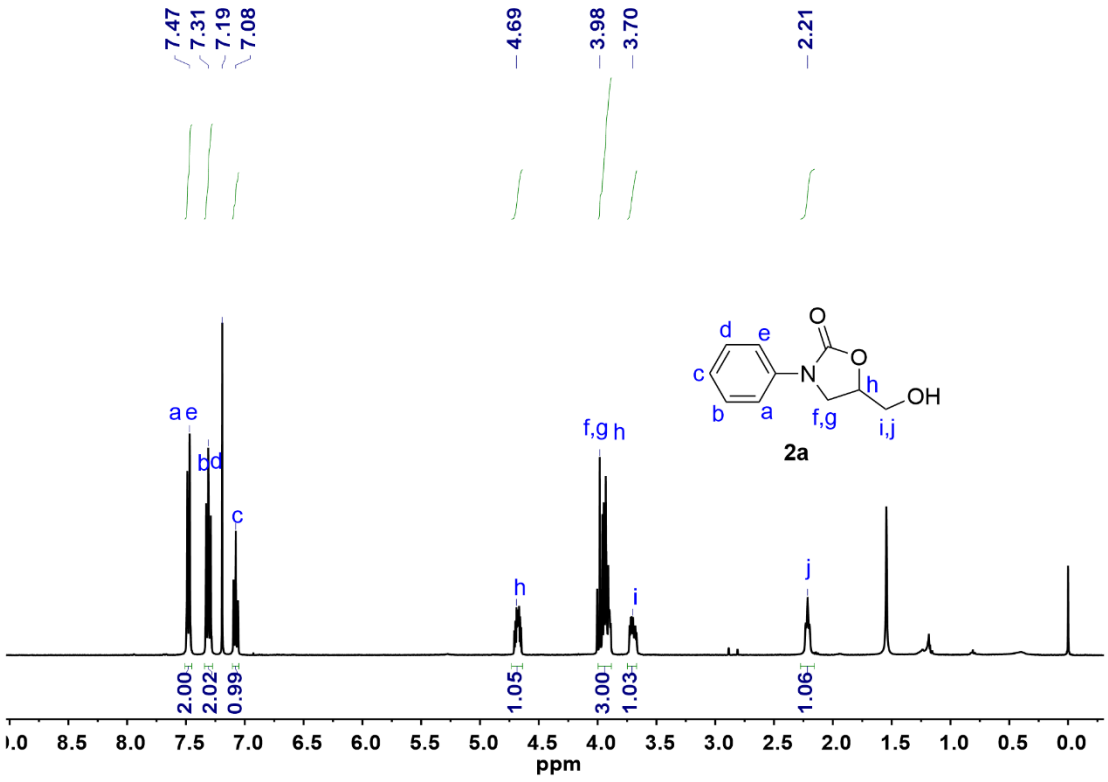


Figure S15. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***5-(hydroxymethyl)-3-phenyloxazolidin-2-one*** **(2a)**

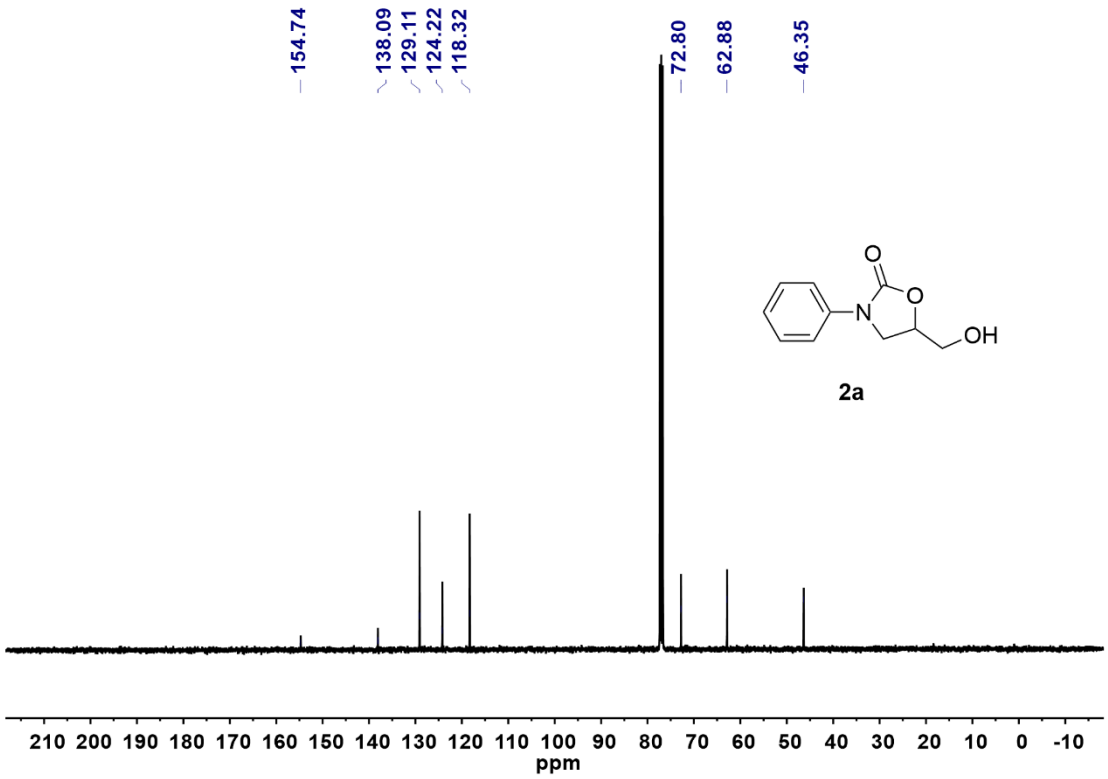


Figure S16. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***5-(hydroxymethyl)-3-phenyloxazolidin-2-one*** **(2a)**

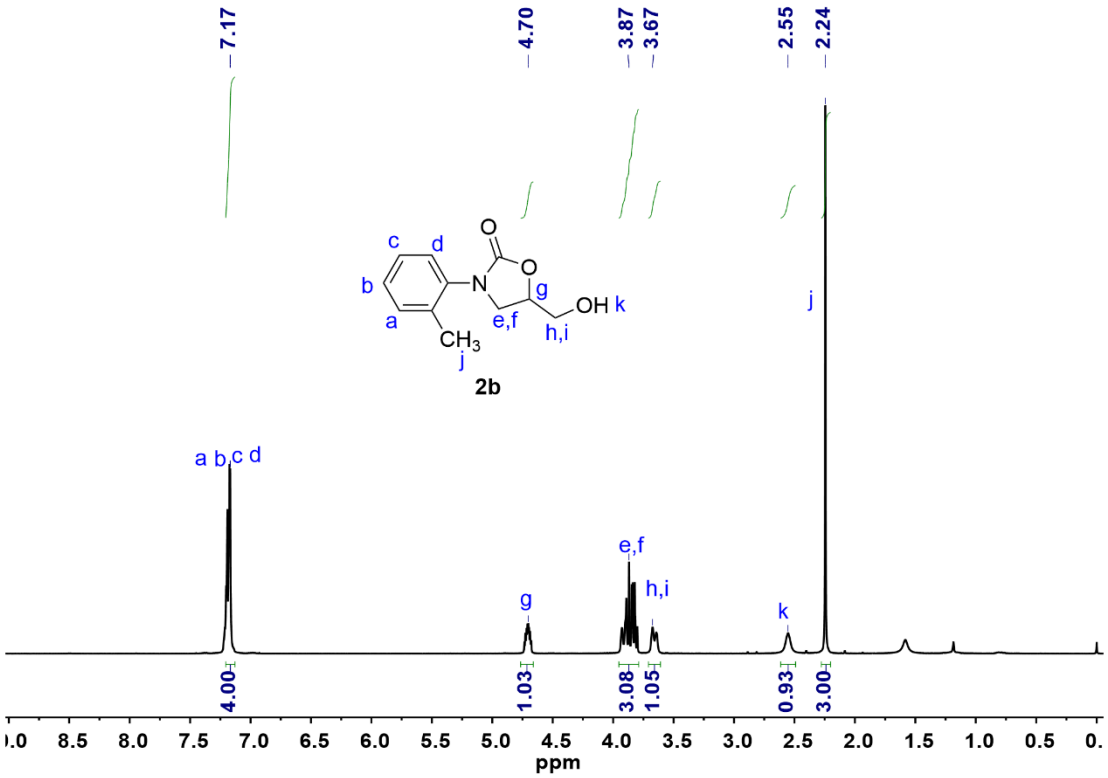


Figure S17. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***5-(hydroxymethyl)-3-(o-tolyl)oxazolidin-2-one*** **(2b)**

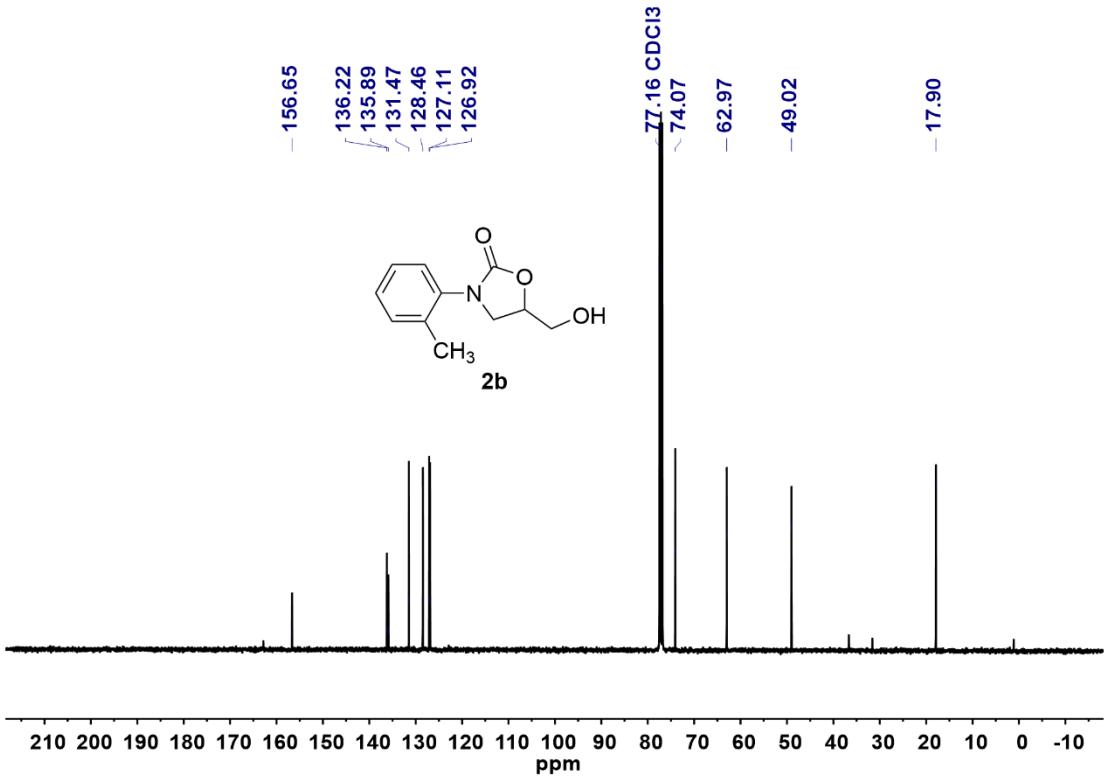


Figure S18. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***5-(hydroxymethyl)-3-(o-tolyl)oxazolidin-2-one*** **(2b)**

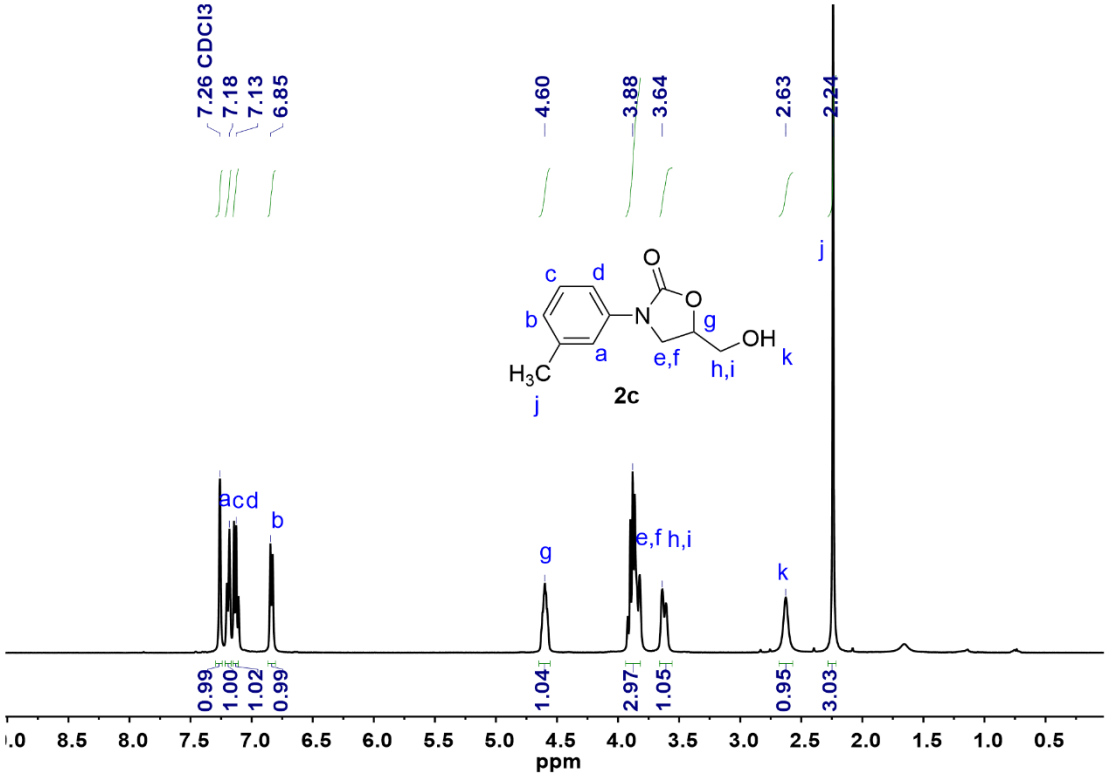


Figure S19. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***5-(hydroxymethyl)-3-(m-tolyl)oxazolidin-2-one*** **(2c)**

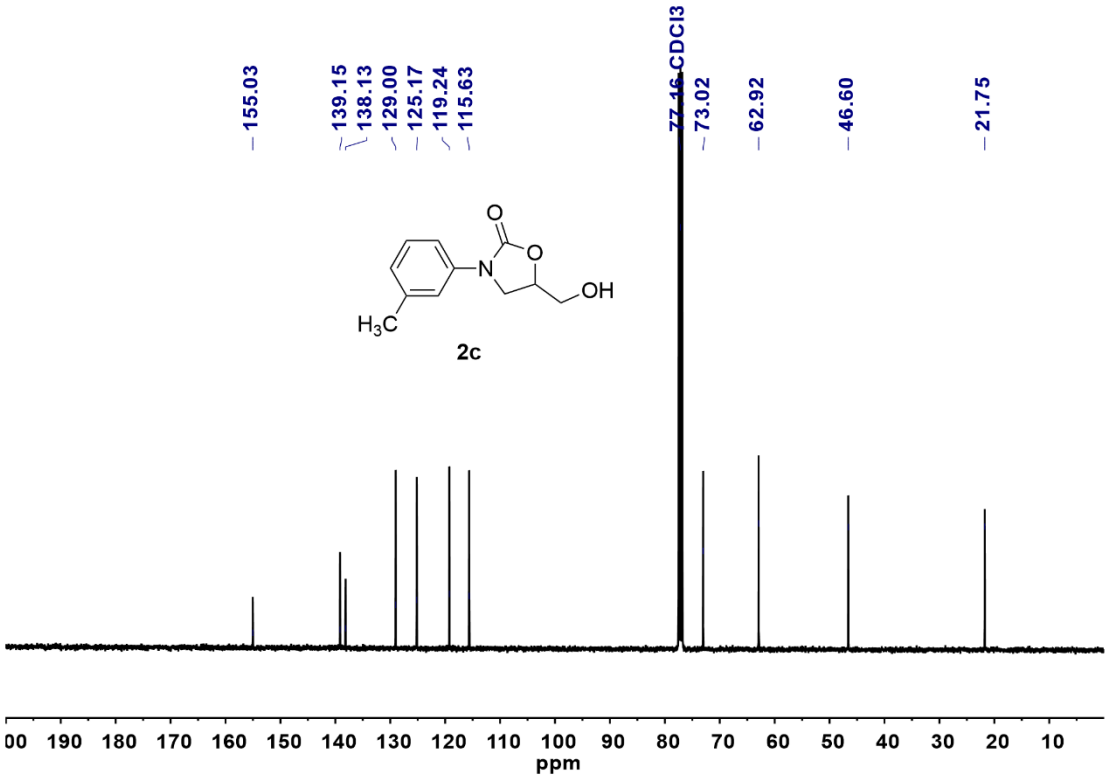


Figure S20. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***5-(hydroxymethyl)-3-(m-tolyl)oxazolidin-2-one*** **(2c)**

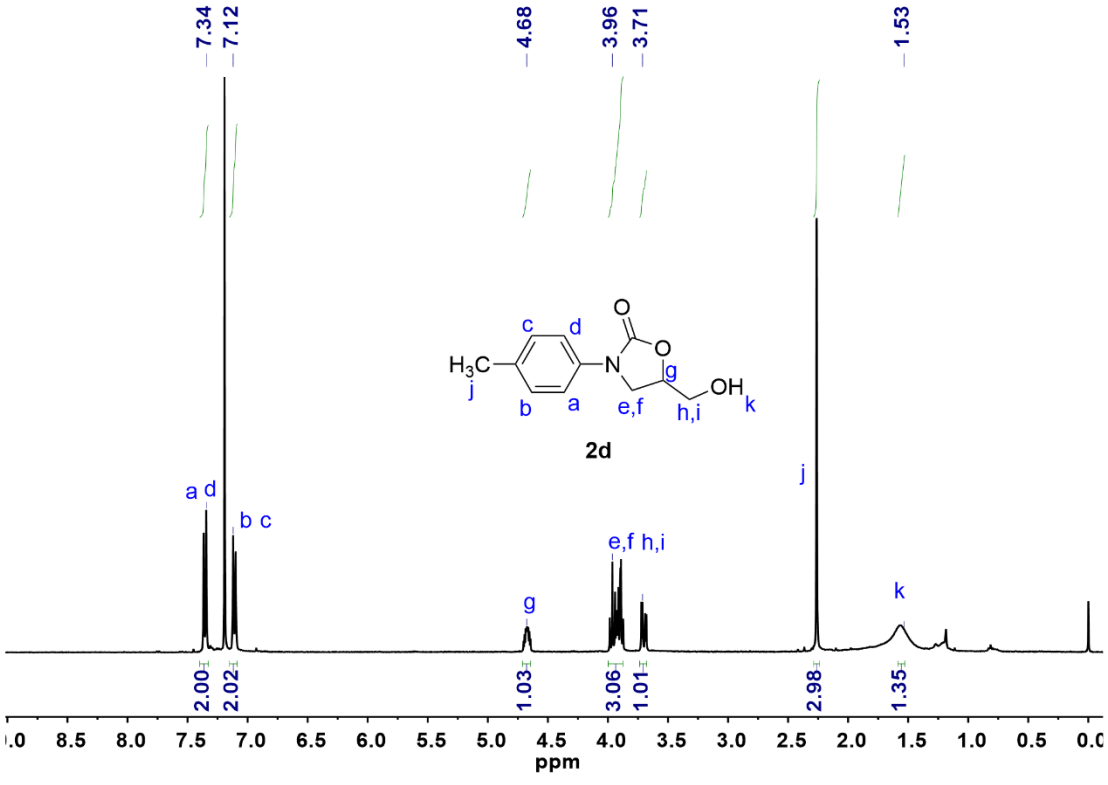


Figure S21. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***5-(hydroxymethyl)-3-(p-tolyl)oxazolidin-2-one*** **(2d)**

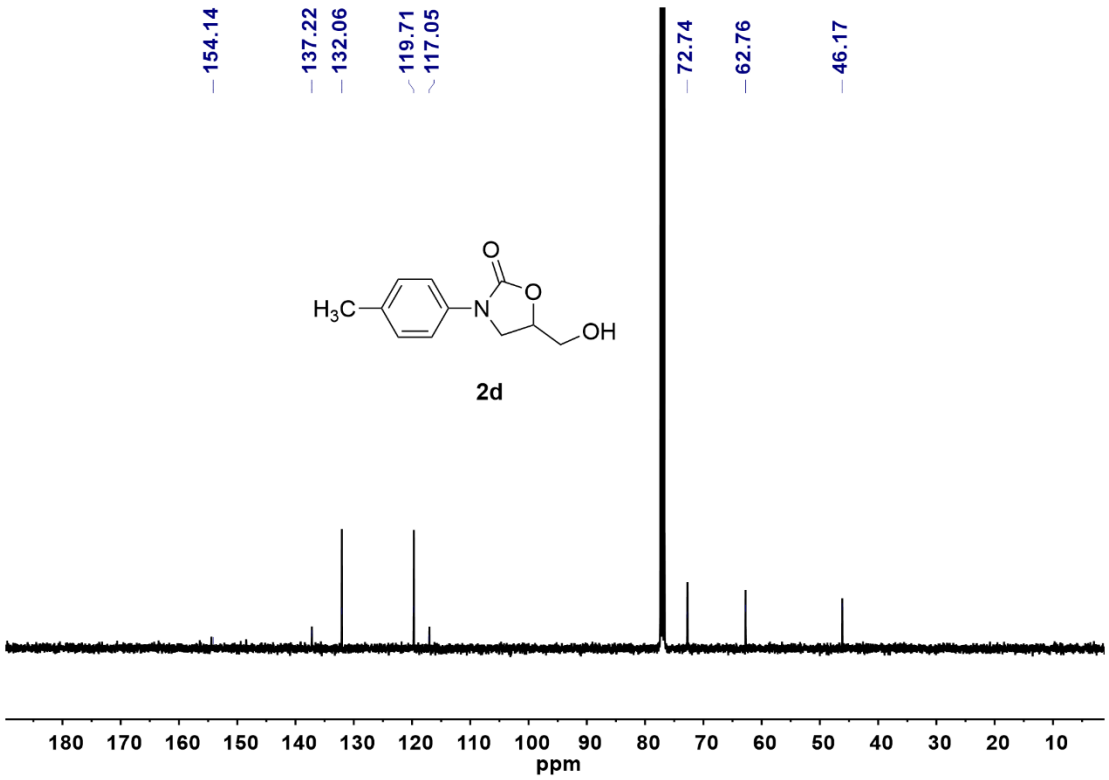
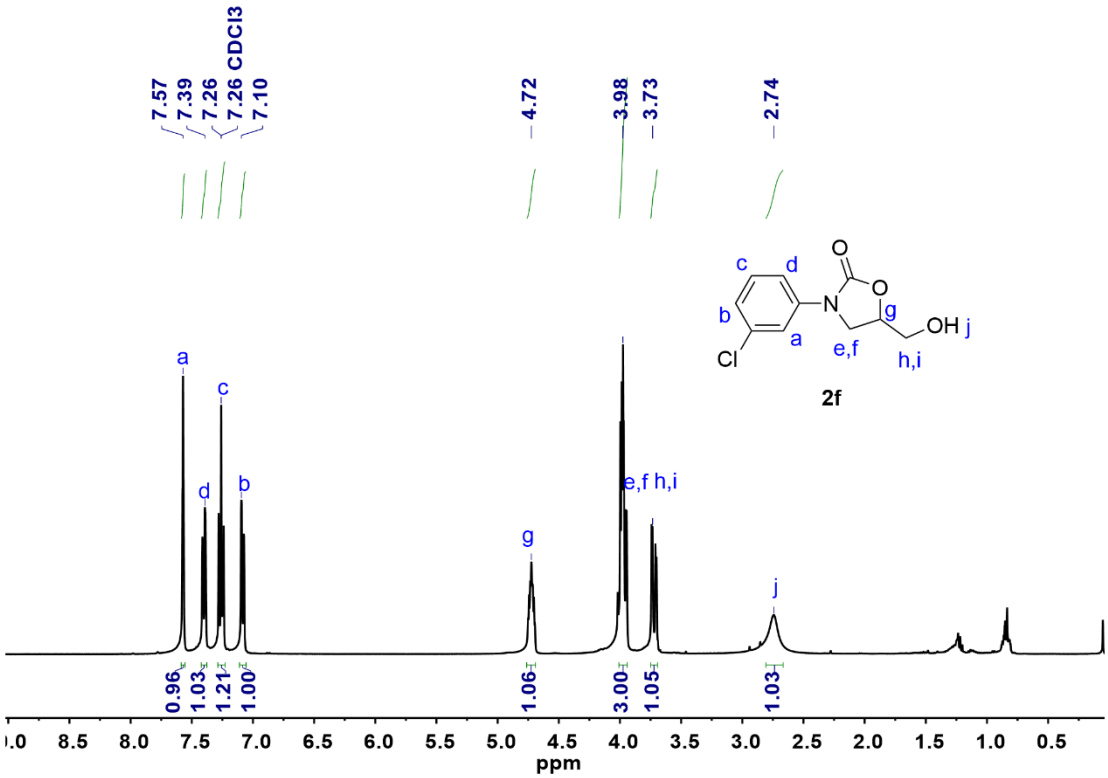


Figure S22. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***5-(hydroxymethyl)-3-(p-tolyl)oxazolidin-2-one*** **(2d)**

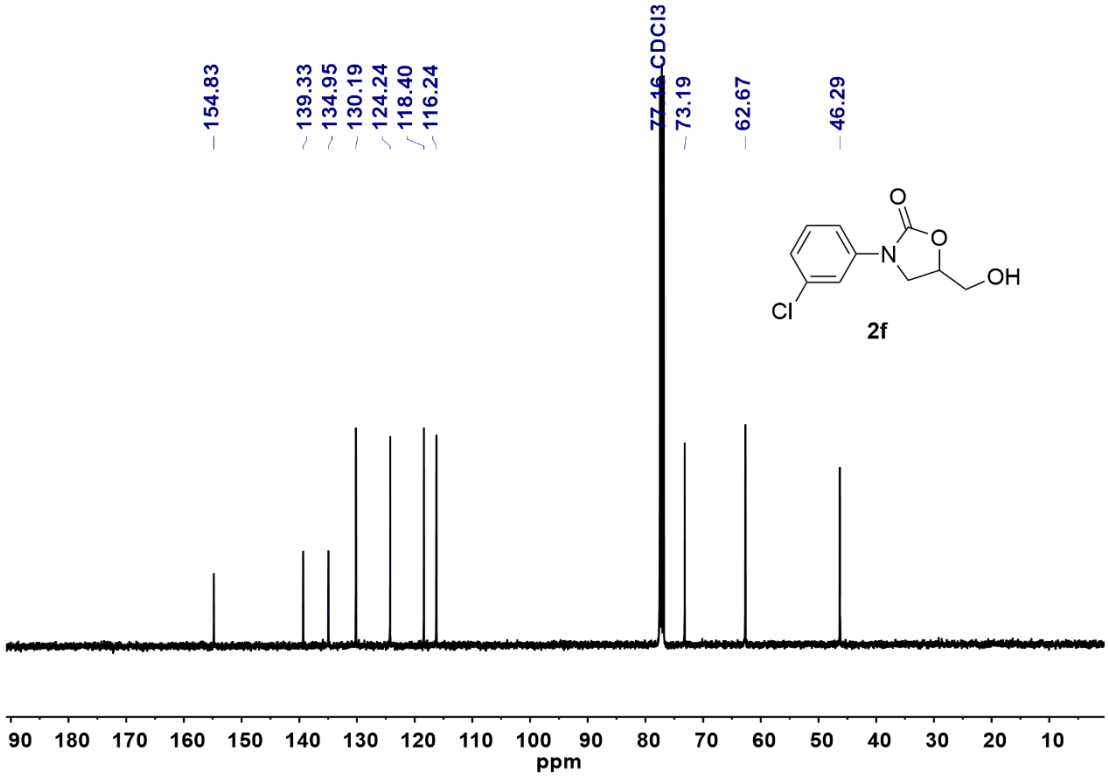


339

340 Figure S23. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3-(3-chlorophenyl)-5-***

341 ***(hydroxymethyl)oxazolidin-2-one*** **(2f)**

342



343

Figure S24. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***3-(3-chlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2f)**

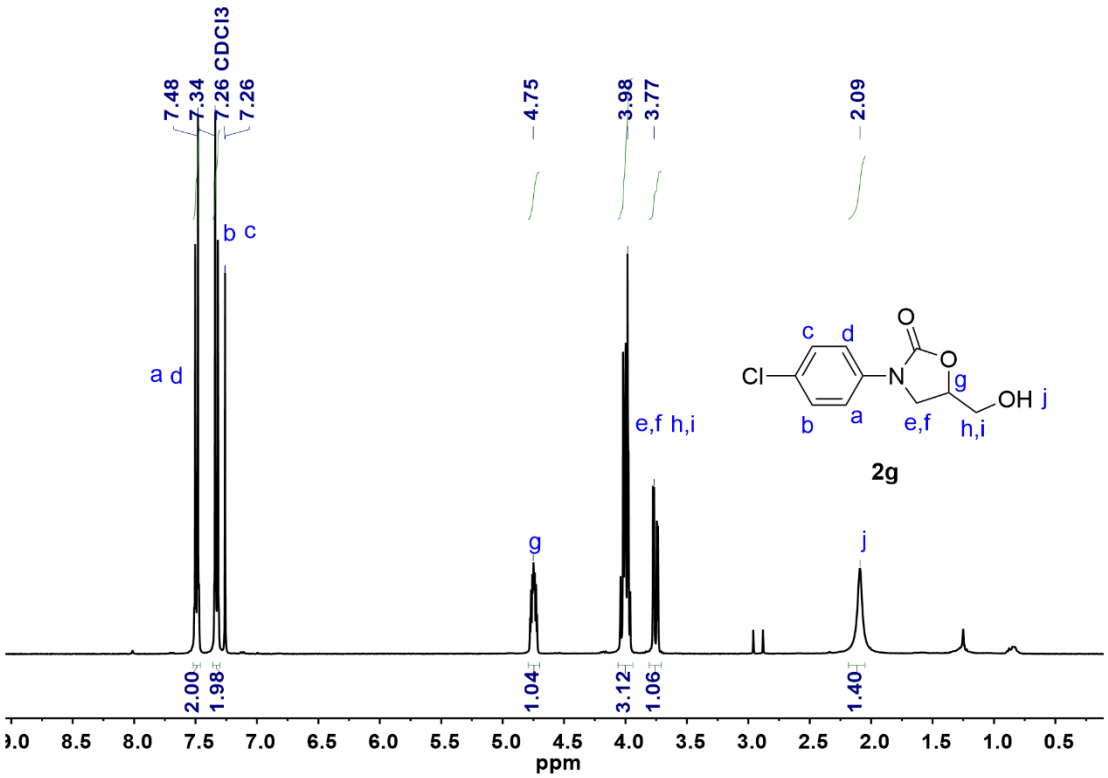


Figure S25. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***(4-chlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2g)**

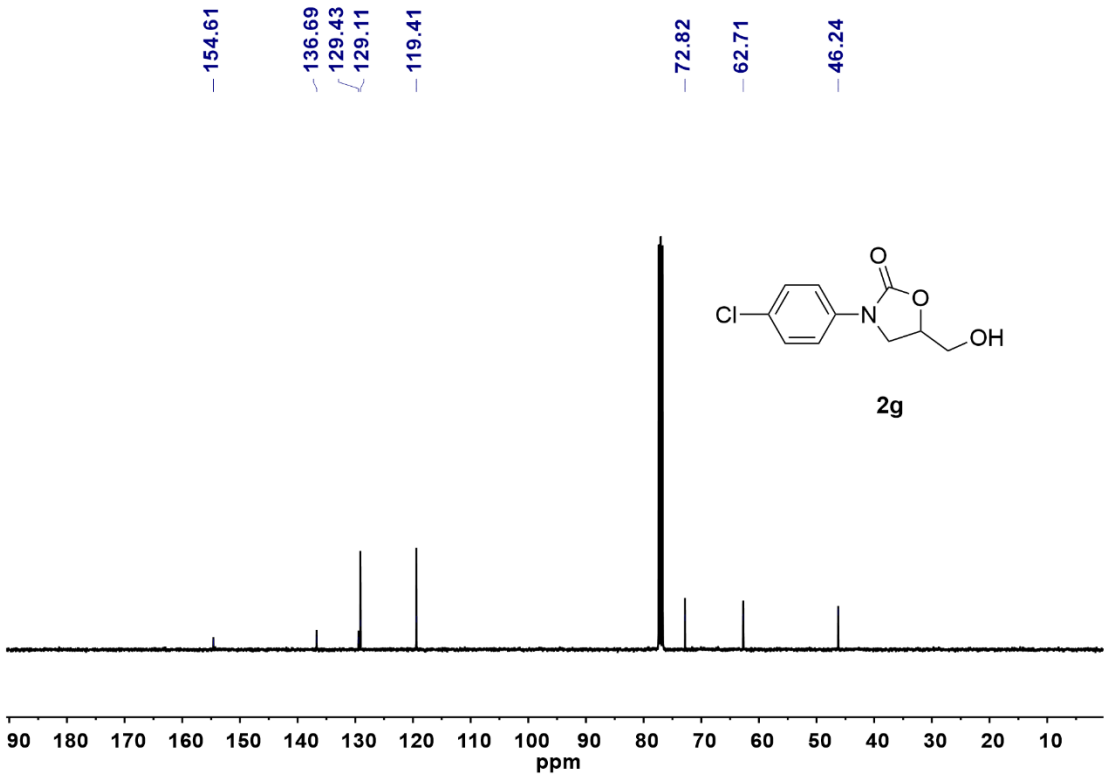


Figure S26. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***(4-chlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2g)**

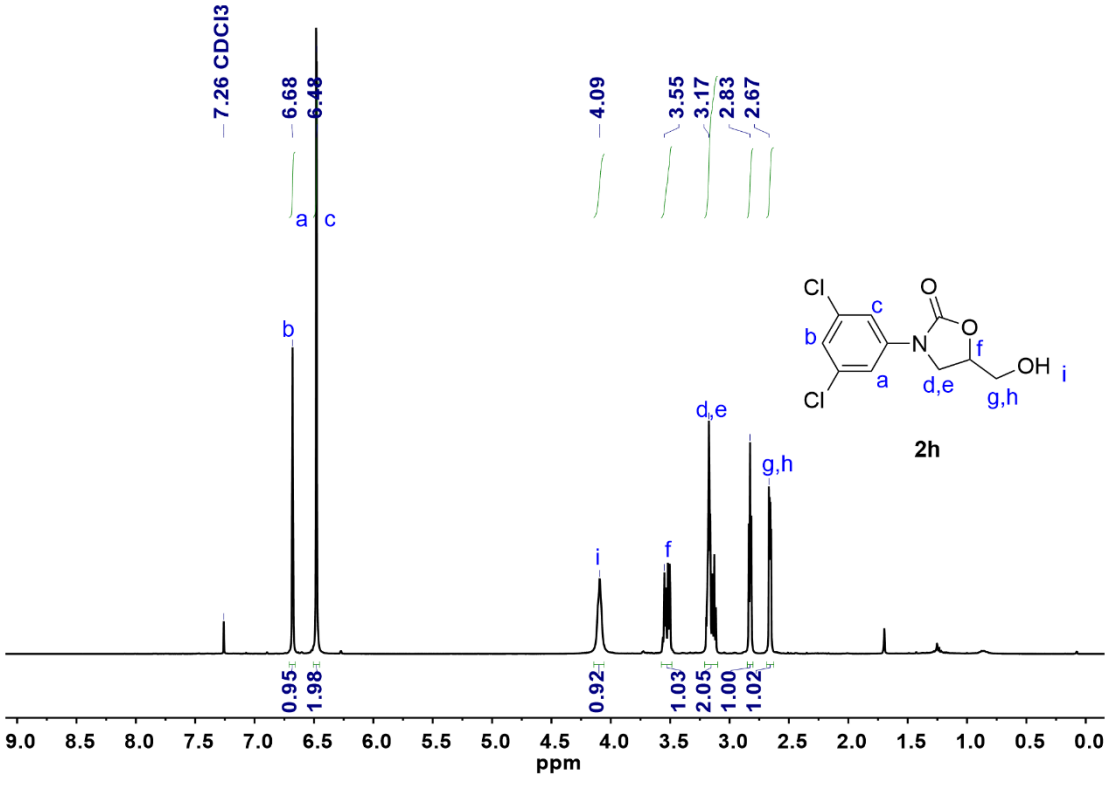


Figure S27. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3-(3,5-dichlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2h)**

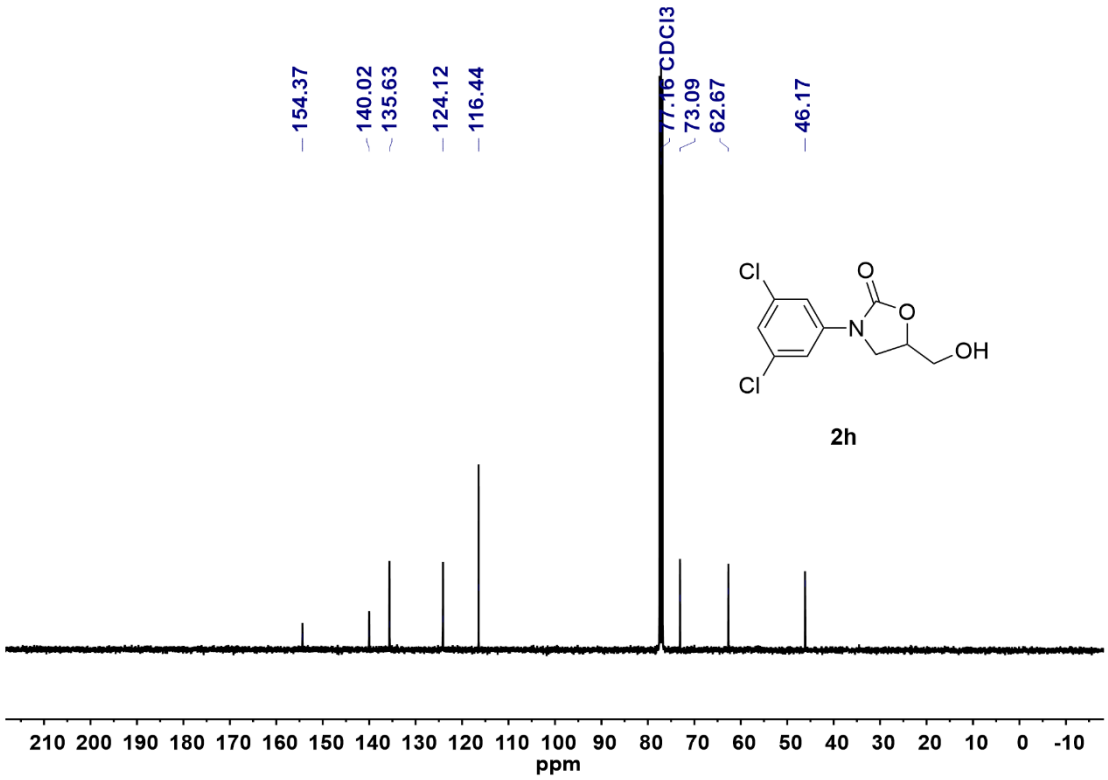


Figure S28. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***3-(3,5-dichlorophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2h)**

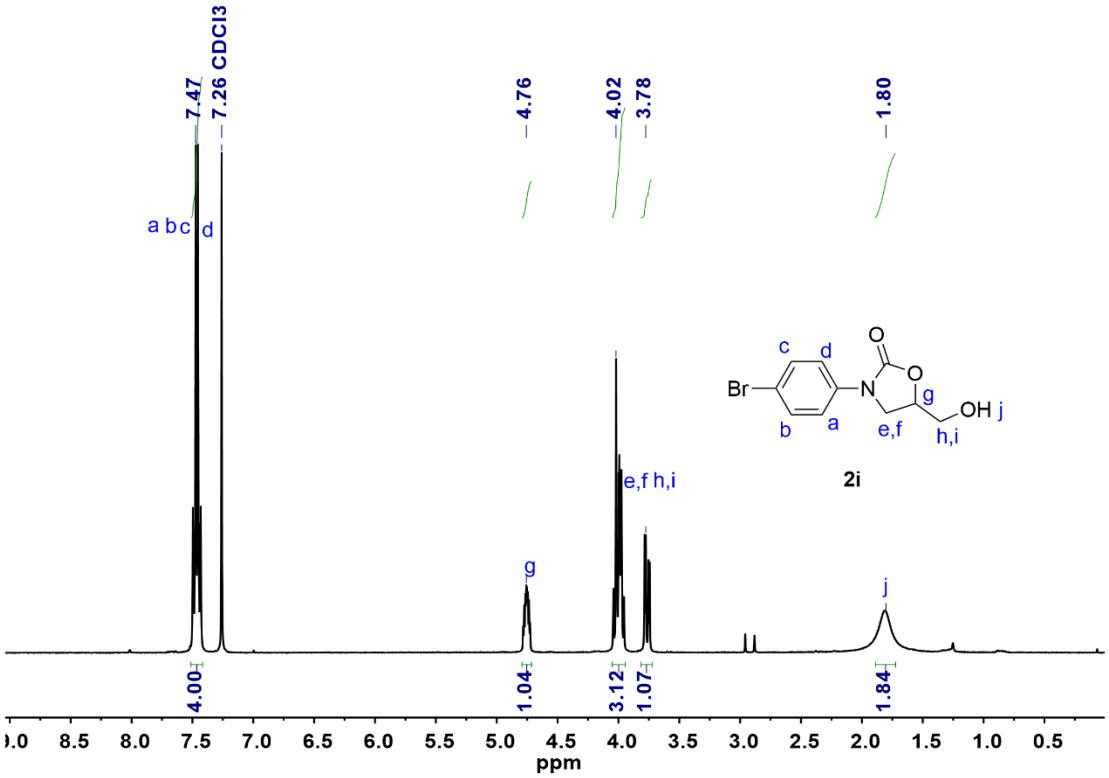


Figure S29. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***4-bromo-N-(oxiran-2-ylmethyl)aniline*** **(2i)**

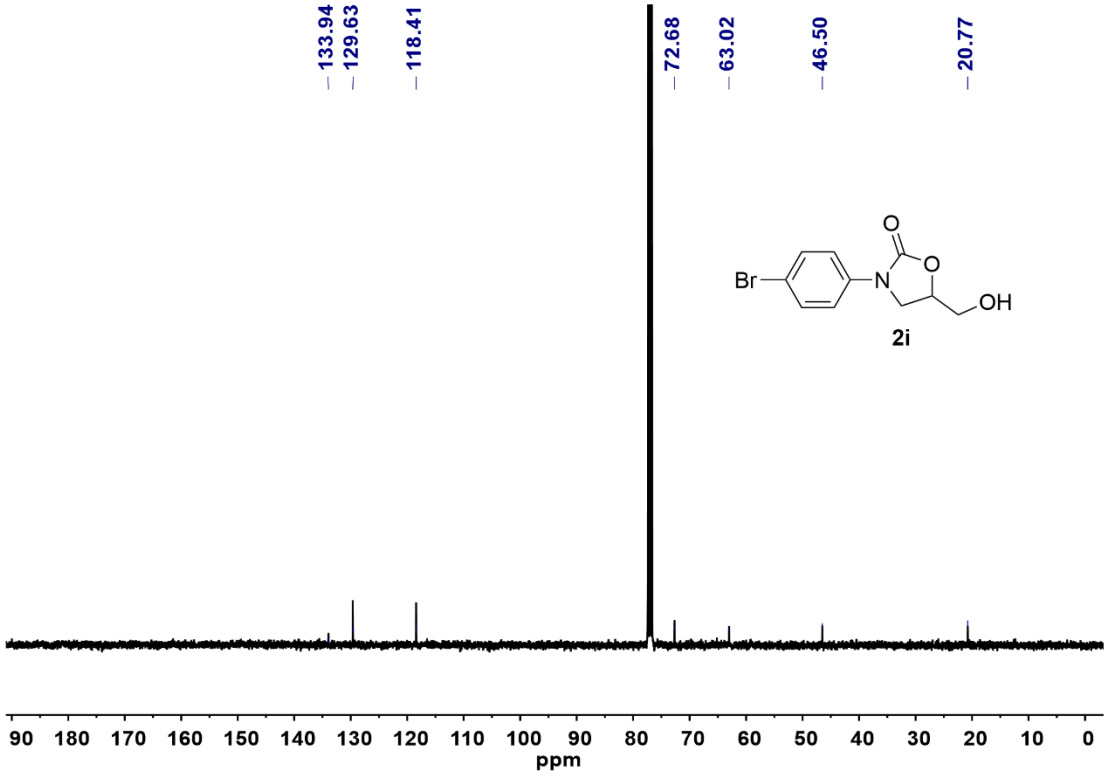


Figure S30. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***4-bromo-N-(oxiran-2-ylmethyl)aniline*** **(2i)**

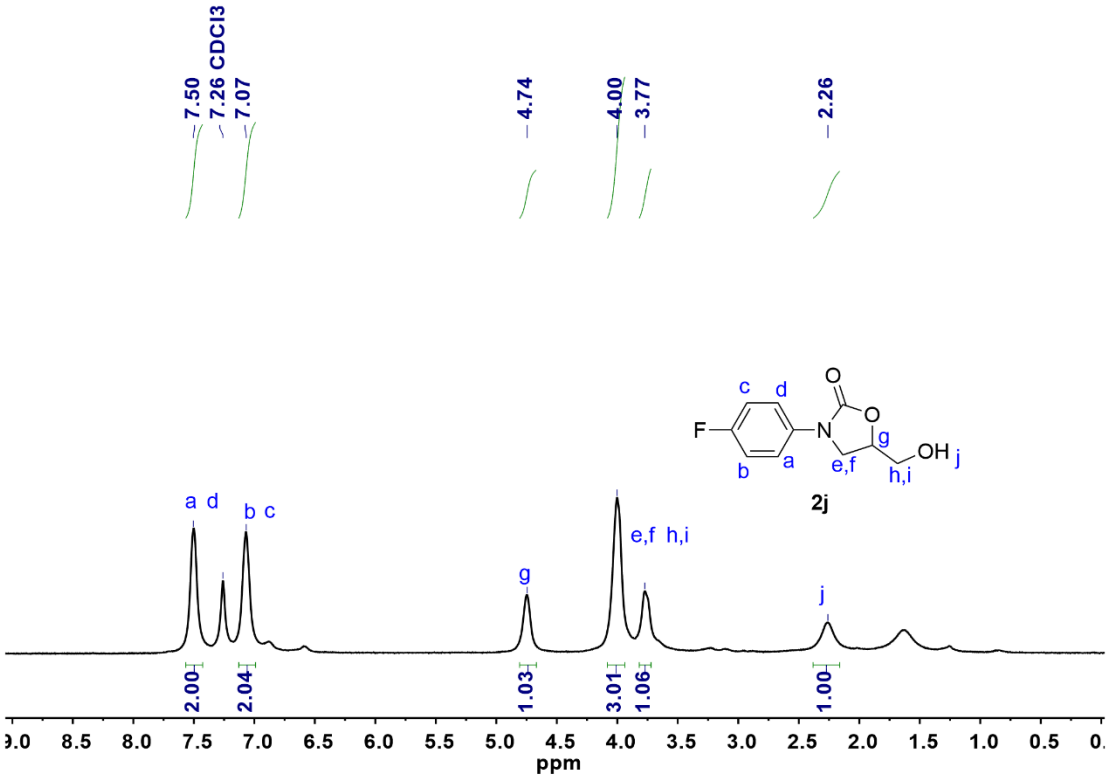


Figure S31. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***(4-fluorophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2j)**

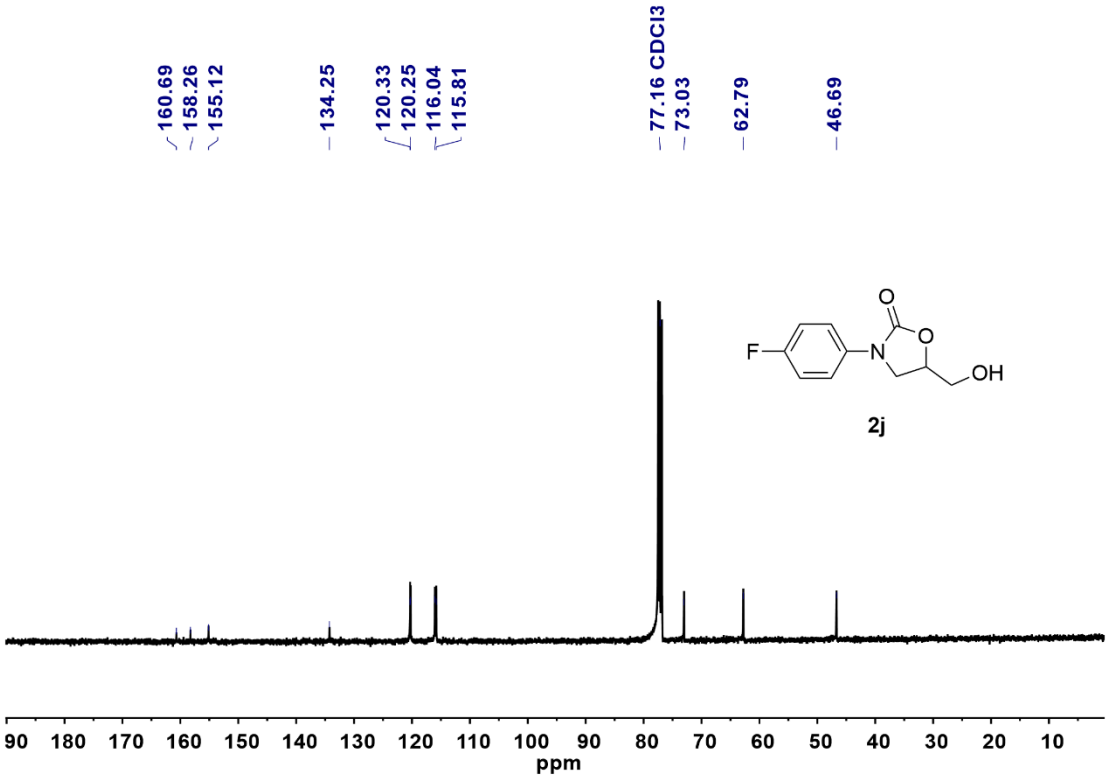


Figure S32. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***(4-fluorophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2j)**

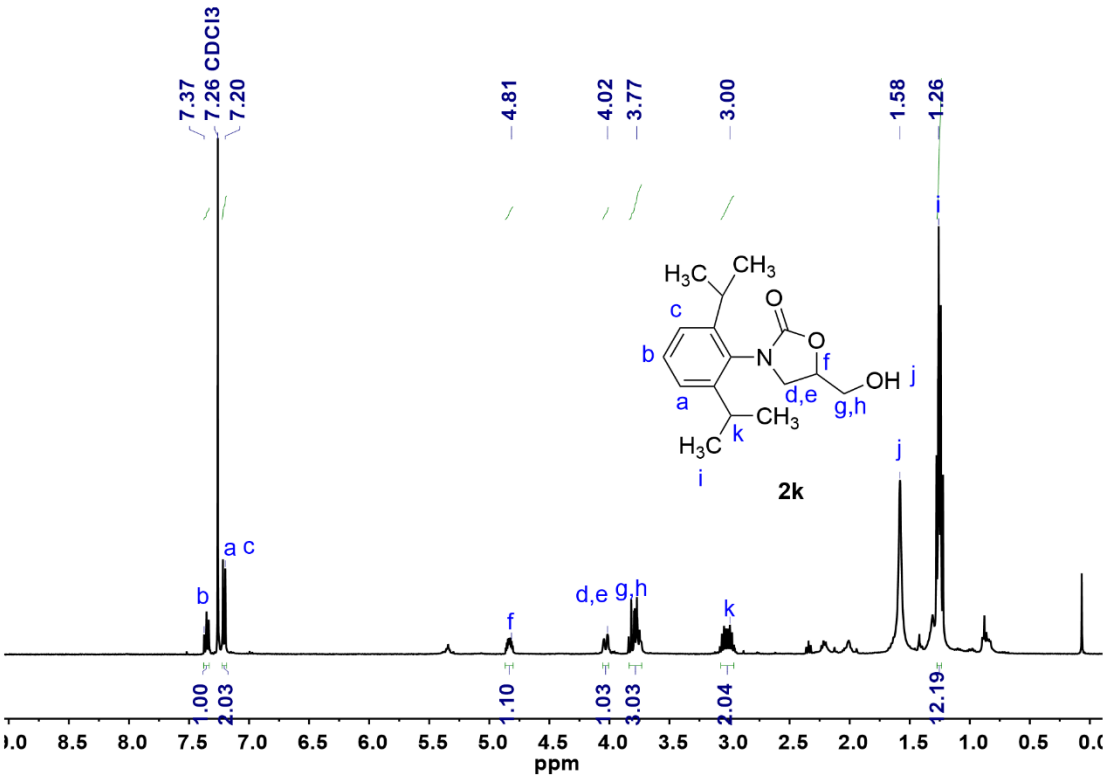
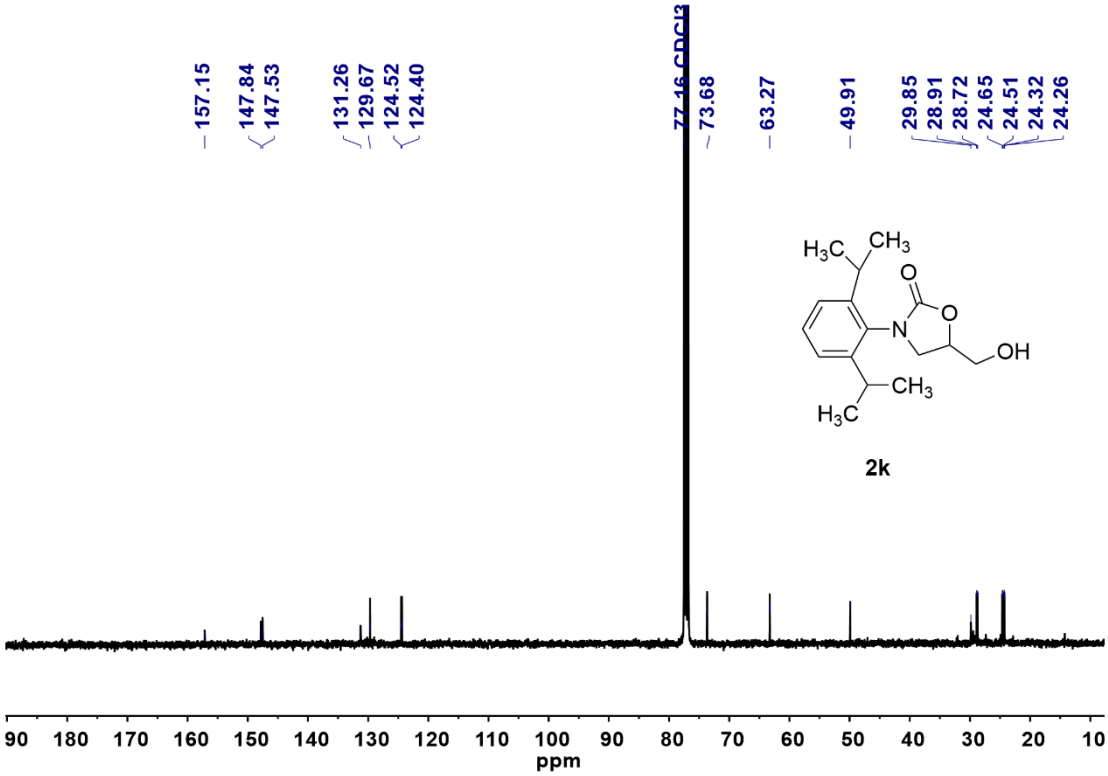


Figure S33. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3-(2,6-diisopropylphenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2k)**



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383 Figure S34. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***3-(2,6-diisopropylphenyl)-5-***

384 ***(hydroxymethyl)oxazolidin-2-one*** **(2k)**

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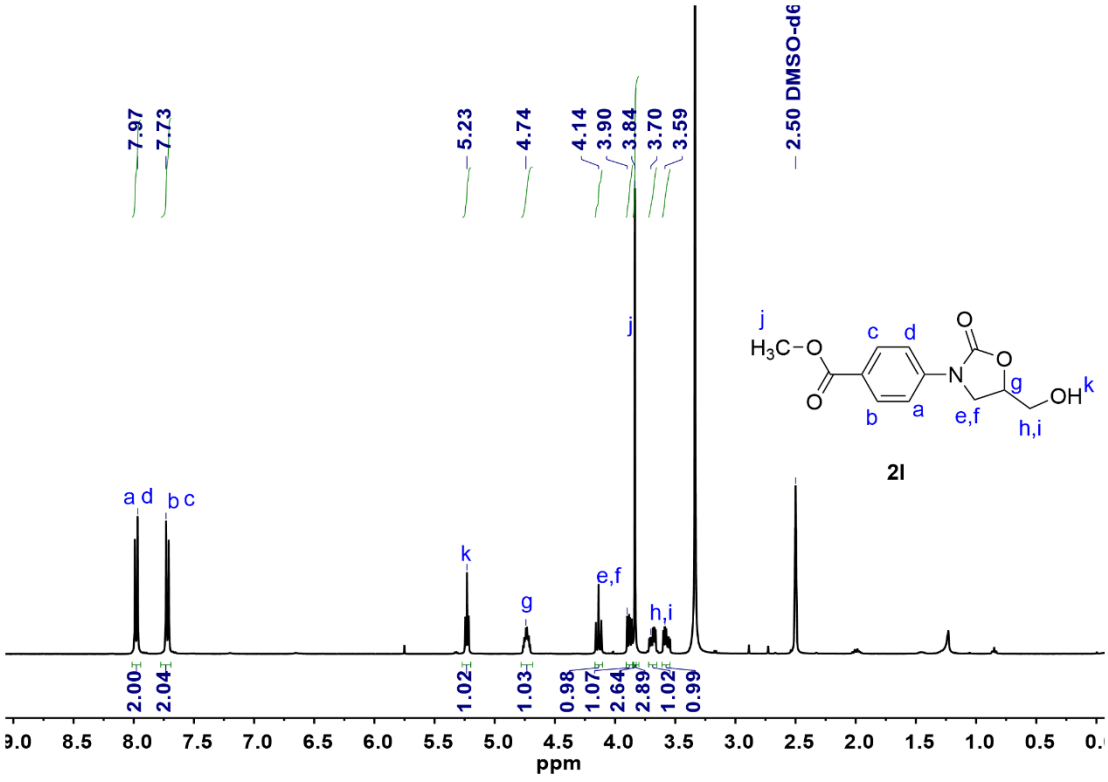

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Figure S35. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***Methyl 4-(5-(hydroxymethyl)-2-oxooxazolidin-3-yl)benzoate*** **(2l)**

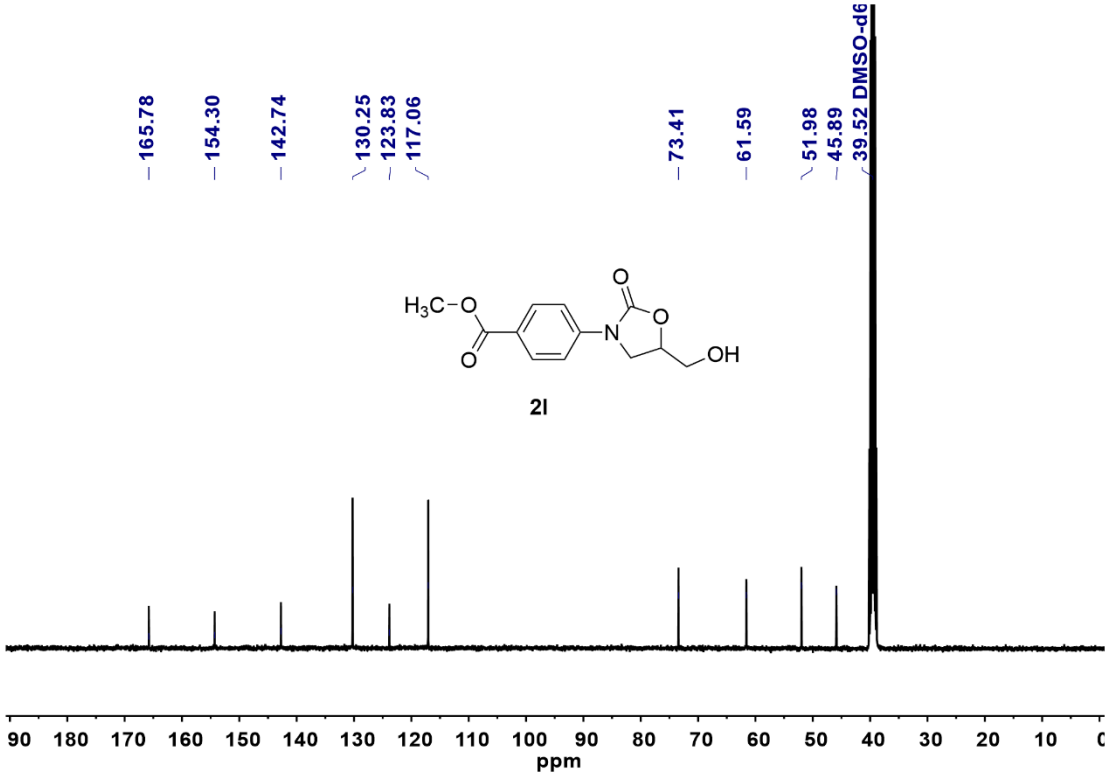
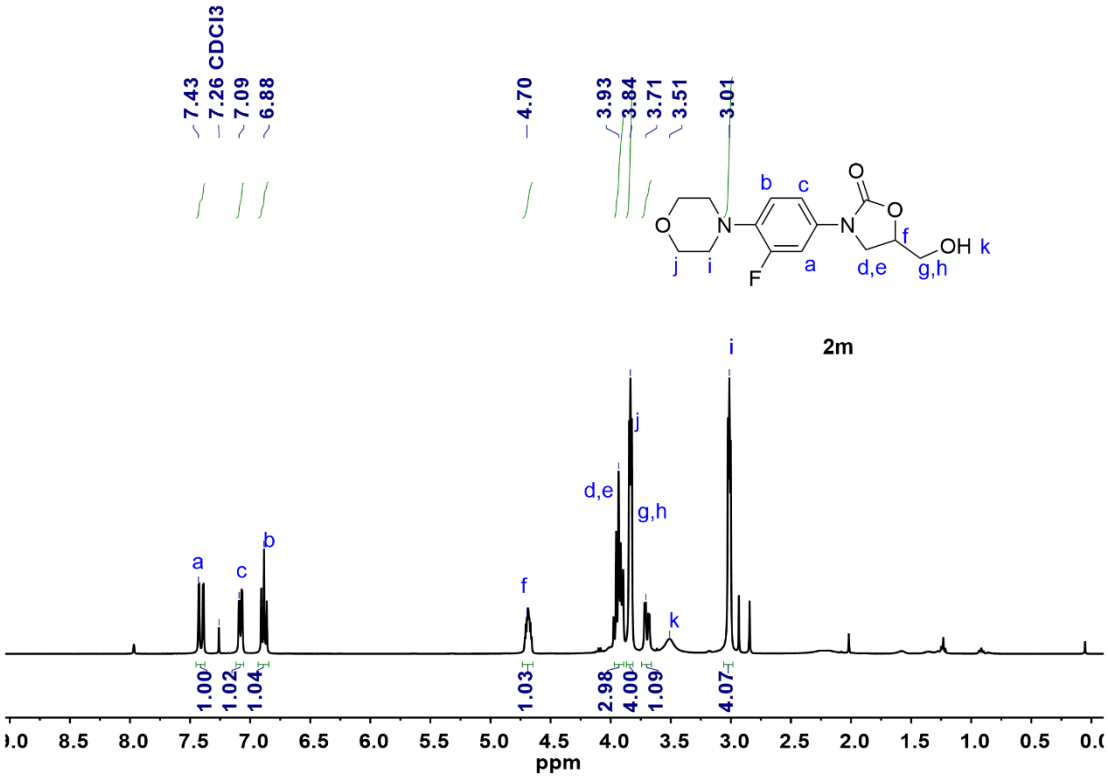


Figure S36. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***Methyl 4-(5-(hydroxymethyl)-2-oxooxazolidin-3-yl)benzoate*** **(2l)**



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395 Figure S37. ^{1}H NMR spectrum ($CDCl_3$, 400 MHz) of ***3-(3-fluoro-4-morpholinophenyl)-5-***

396 ***(hydroxymethyl)oxazolidin-2-one*** **(2m)**

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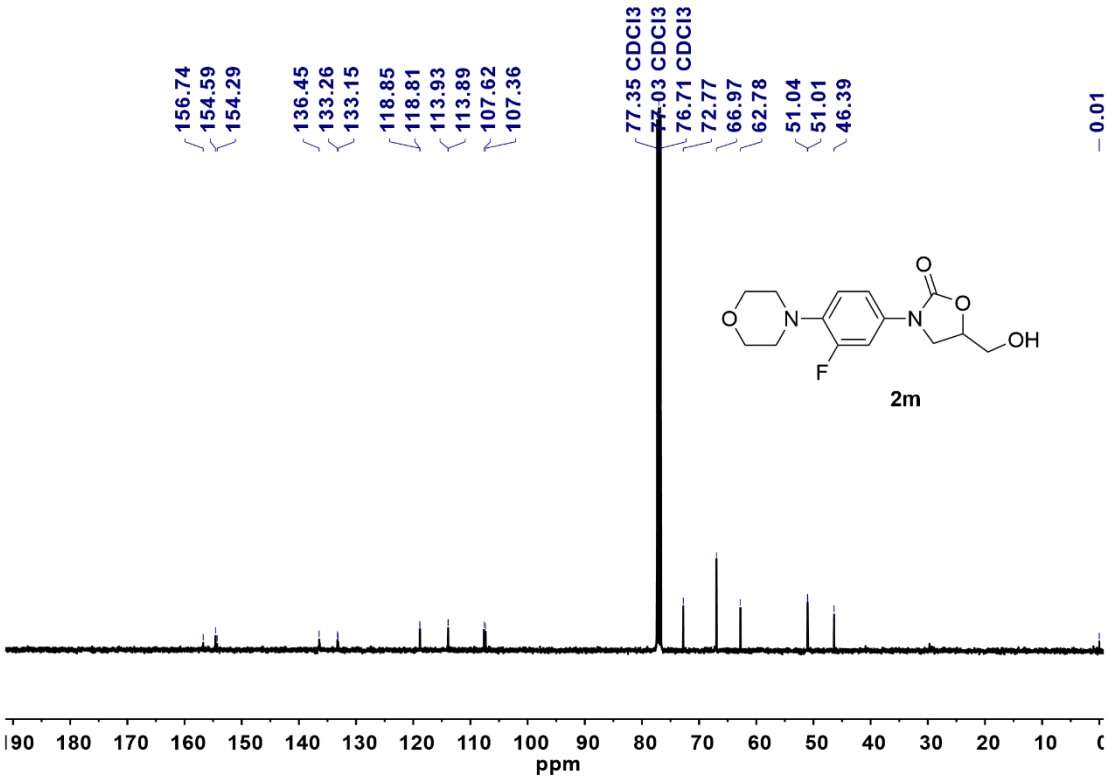

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Figure S38. ^{13}C NMR spectrum ($CDCl_3$, 101 MHz) of ***3-(3-fluoro-4-morpholinophenyl)-5-(hydroxymethyl)oxazolidin-2-one*** **(2m)**

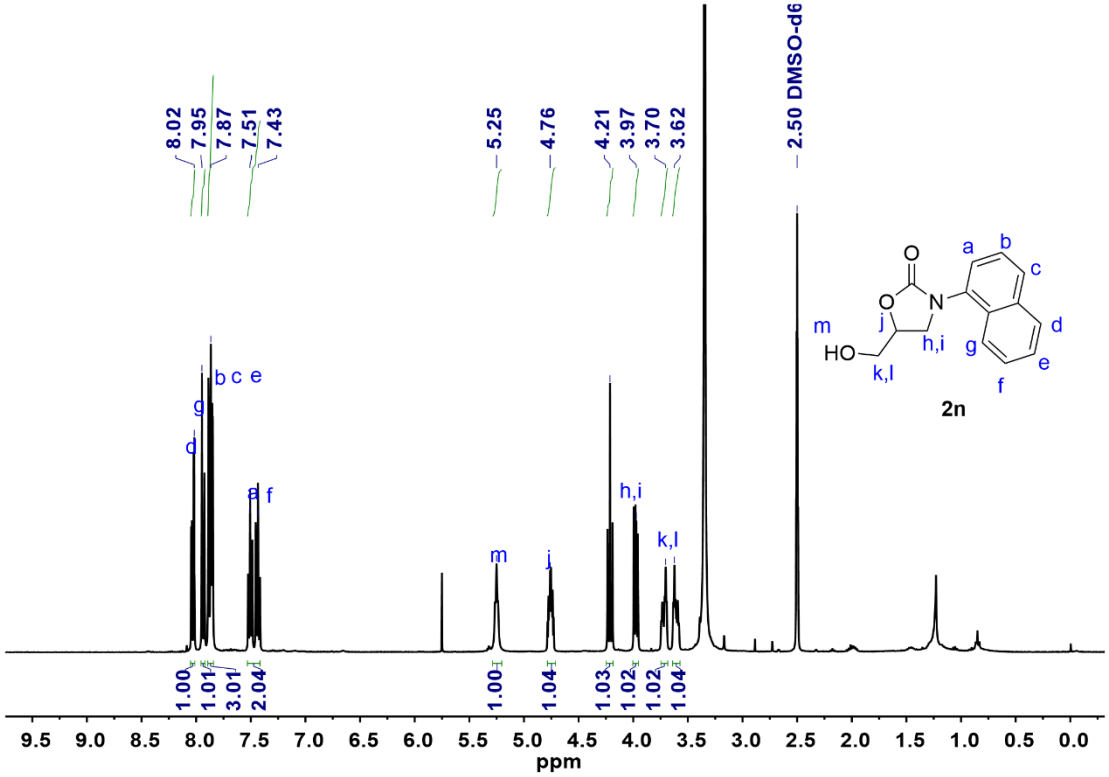
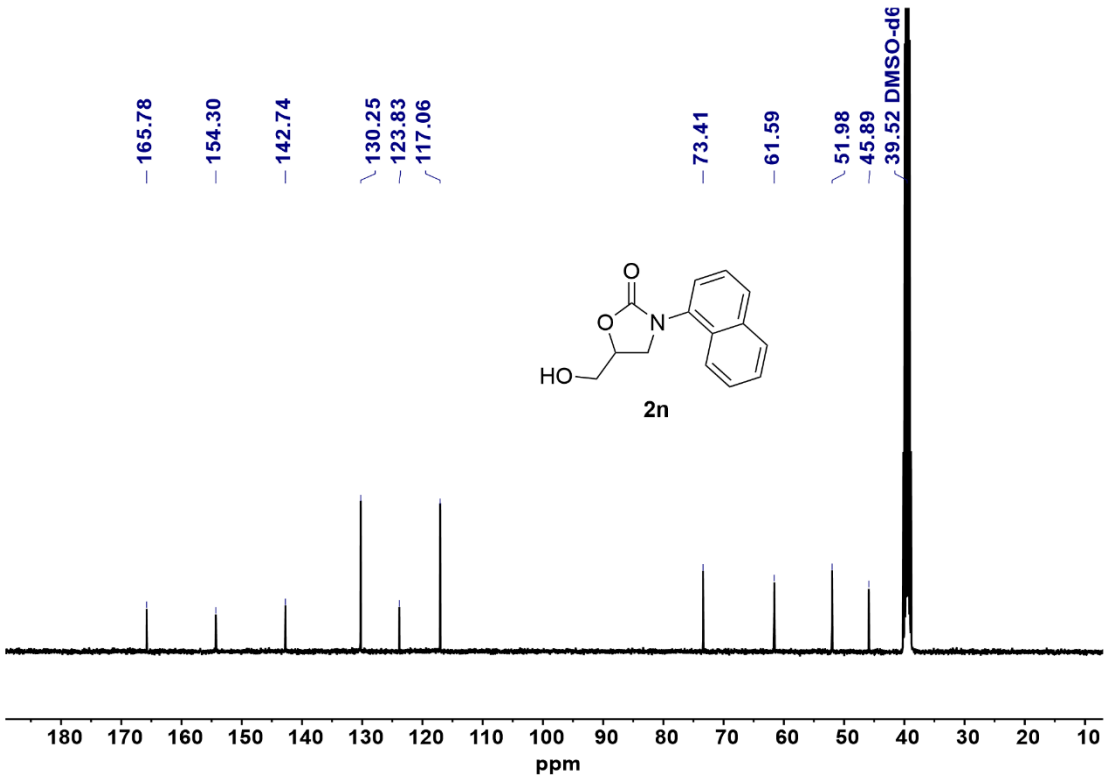


Figure S39. ^{1}H NMR spectrum (DMSO-d_6, 400 MHz) of ***5-(hydroxymethyl)-3-(naphthalen-2-yl)oxazolidine-2-one*** **(2n)**



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407 Figure S40. ^{13}C NMR spectrum (DMSO-d_6, 101 MHz) of ***5-(hydroxymethyl)-3-(naphthalen-2-***

408 ***yl)oxazolidine-2-one*** **(2n)**

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