Supporting Information

1. Figure S1. Overlay of co-crystal SAHA and re-docked SAHA bound in the HDAC2 (PDB entry 4LXZ) ligand binding pocket

2. Figure S2. Overlay of 12c and 12d bound in the HDAC2 (PDB entry 4LXZ) ligand binding pocket

3. Spectra data of compounds 7b–7B, 9b–9e, 10a–10b, 11b–11d and 12a–12b

4. The $^1$H and $^{13}$C NMR spectra of compounds 2, 3, 7a–7B, 9a–9e, 10a–10d, 11a–11d and 12a–12d
Figure S1. Overlay of co-crystal SAHA (blue carbon in stick representation) and re-docked SAHA (yellow carbon in stick representation) bound in the HDAC2 (PDB entry 4LXZ) ligand binding pocket.
Figure S2. Overlay of 12c (brown carbon in stick representation) and 12d (dark green carbon in stick representation) bound in the HDAC2 (PDB entry 4LXZ) ligand binding pocket
■ Spectra data of compounds 7b–7B

**N-(3-bromo-4-chlorophenyl)-6-methoxy-2-methylquinolin-4-amine** (7b). White solid; Yield: 35.9 %; HPLC purity: 99.3 % ($t_R = 22.27$ min); mp: 251-252 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 7.81-7.85 (m, 2H, H-5 and H-8), 7.77 (d, $J = 2.4$ Hz, 1H, Ph-H), 7.66 (d, $J = 8.6$ Hz, 1H, Ph-H), 7.46 (dd, $J = 2.4$, 8.6 Hz, 1H, Ph-H), 7.43 (dd, $J = 2.4$, 9.2 Hz, 1H, H-7), 6.92 (s, 1H, H-3), 3.94 (s, 3H, OCH$_3$), 2.52 (s, 3H, CH$_3$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 157.3 (C-2), 155.0 (C-6), 151.8 (C-4), 149.6 (C-9), 140.4 (C-1’), 131.6 (C-8), 128.7 (Ph-C), 128.2 (Ph-C), 126.4 (C-7), 124.0 (Ph-C), 123.5 (Ph-C), 122.5 (Ph-C), 118.9 (C-10), 102.7 (C-3), 102.3 (C-5), 56.5 (OCH$_3$), 22.8 (CH$_3$). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{17}$H$_{15}$BrClN$_2$O, 377.0051, found, 377.0049.

**N-(4-chloro-3-fluorophenyl)-6-methoxy-2-methylquinolin-4-amine** (7c). White solid; Yield: 41.1 %; HPLC purity: 99.4 % ($t_R = 20.93$ min); mp: 296-297 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 10.70 (br. s., 1H, NH), 8.16 (s, 1H, H-5), 8.00 (d, $J = 9.2$ Hz, 1H, H-8), 7.75 (t, $J = 8.5$ Hz, 1H, Ph-H), 7.60-7.66 (m, 2H), 7.39 (d, $J = 7.5$ Hz, 1H, Ph-H), 6.92 (s, 1H, H-3), 3.98 (s, 3H, OCH$_3$), 2.62 (s, 3H, CH$_3$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 158.8 (d, $J = 245.4$ Hz, 1C, C-F), 158.1 (C-2), 153.4 (C-6), 152.9 (C-4), 139.0 (d, $J = 9.9$ Hz, 1C, C-1’), 134.6 (C-9), 131.9 (C-8), 125.3 (C-7), 122.7 (Ph-C), 122.3 (Ph-C), 118.2 (C-10), 117.4 (d, $J = 16.5$ Hz, 1C, C-4’), 114.1 (d, $J = 23.1$ Hz, 1C, C-2’), 103.4 (C-3), 101.5 (C-5), 56.9 (OCH$_3$), 20.3 (CH$_3$). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{17}$H$_{15}$ClFN$_2$O, 317.0851, found, 317.0850.

**N-(4-chloro-3-methylphenyl)-6-methoxy-2-methylquinolin-4-amine** (7d). White solid; Yield: 40.1 %; HPLC purity: 99.2 % ($t_R = 21.97$ min); mp: 282-283 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 10.46 (br. s., 1H, NH), 8.14 (d, $J = 2.2$ Hz, 1H, H-5), 7.98 (d, $J = 9.2$ Hz, 1H, H-8), 7.58-7.60 (m, 1H, H-7), 7.57 (d, $J = 8.4$ Hz, 1H, Ph-H), 7.46 (d, $J = 2.4$ Hz, 1H, Ph-H), 7.33 (dd, $J = 2.4$, 8.4 Hz, 1H, Ph-H), 6.72 (s, 1H, H-3), 3.97 (s, 3H, OCH$_3$), 2.58 (s, 3H, 11-CH$_3$), 2.39 (s, 3H, 13-CH$_3$); $^{13}$C NMR (150 MHz, DMSO-
δ 158.0 (C-2), 153.3 (C-6), 153.0 (C-4), 137.6 (C-9), 137.2 (C-1’), 135.1 (Ph-C), 131.4 (C-8), 130.6 (Ph-C), 128.1 (Ph-C), 125.0 (C-7), 124.7 (Ph-C), 122.7 (Ph-C), 118.0 (C-10), 103.1 (C-3), 100.8 (C-5), 56.8 (O-CH$_3$), 20.6 (11-CH$_3$), 20.2 (13-CH$_3$).

ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{18}$H$_{18}$ClN$_2$O$^+$, 313.1102, found, 313.1101.

$N$-(4-chloro-3-methoxyphenyl)-6-methoxy-2-methylquinolin-4-amine (7e). White solid; Yield: 35.1 %; HPLC purity: 99.5 % ($t_R = 20.50$ min); mp: 253-255 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): δ 7.76 (d, $J = 9.0$ Hz, 1H, H-8), 7.73 (d, $J = 2.4$ Hz, 1H, H-5), 7.44 (d, $J = 8.4$ Hz, 1H, Ph-H), 7.36 (dd, $J = 2.6$, 9.2 Hz, 1H, H-7), 7.12 (d, $J = 2.4$ Hz, 1H, Ph-H), 6.97 (dd, $J = 2.2$, 8.4 Hz, 1H, Ph-H), 6.92 (s, 1H, H-3), 3.93 (s, 3H, 4’-OCH$_3$), 3.87 (s, 3H, 6-OCH$_3$), 2.47 (s, 3H, 11-CH$_3$). $^{13}$C NMR (150 MHz, DMSO-d$_6$): δ 156.7 (C-2), 156.0 (Ph-C), 155.5 (C-6), 147.8 (C-4), 143.1 (C-9), 141.3 (C-1’), 130.7 (C-8), 129.1 (C-7), 122.0 (Ph-C), 119.3 (C-10), 115.8 (Ph-C), 115.3 (Ph-C), 107.6 (Ph-C), 103.0 (C-3), 101.7 (C-5), 56.5 (6-OCH$_3$), 56.2 (4’-OCH$_3$), 24.5 (C-11). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{18}$H$_{18}$ClN$_2$O$^+$, 329.1051, found, 329.1047.

$N$-(3,4-dichlorophenyl)-6-ethoxy-2-methylquinolin-4-amine (7f). White solid; Yield: 33.4 %; HPLC purity: 99.1 % ($t_R = 23.02$ min); mp: 221-223 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): δ 7.75 (d, $J = 8.8$ Hz, 1H, H-8), 7.59-7.66 (m, 2H), 7.55 (s, 1H, Ph-H), 7.32-7.40 (m, 2H), 6.96 (s, 1H, H-3), 4.18 (d, $J = 6.6$ Hz, 2H, OCH$_2$CH$_3$), 2.47 (s, 3H, 11-CH$_3$), 1.41 (t, $J = 6.8$ Hz, 3H, OCH$_2$CH$_3$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): δ 156.1 (C-2), 156.0 (C-6), 146.6 (C-4), 143.5 (C-9), 141.9 (C-1’), 132.0 (Ph-C), 131.6 (C-8), 129.6 (Ph-C), 124.7 (C-7), 123.2 (Ph-C), 122.1 (Ph-C), 121.6 (Ph-C), 119.6 (C-10), 103.8 (C-3), 102.3 (C-5), 64.1 (OCH$_2$CH$_3$), 24.7 (C-11), 15.1 (OCH$_2$CH$_3$). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{18}$H$_{17}$Cl$_2$N$_2$O$^+$, 347.0712, found, 347.0711.

$N$-(3-bromo-4-chlorophenyl)-6-ethoxy-2-methylquinolin-4-amine (7g). White solid; Yield: 50.2 %; HPLC purity: 98.5 % ($t_R = 23.28$ min); mp: 243-245 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): δ 8.91 (br. s., 1H, NH), 7.74 (d, $J = 9.2$ Hz, 1H, H-8), 7.67 (s, 1H, H-5), 7.57-7.63 (m, 2H, Ph-H), 7.40 (d, $J = 7.3$ Hz, 1H, Ph-H), 7.33 (d, $J = 7.7$ Hz, 1H, H-7), 6.95 (s, 1H, H-3), 4.17 (q, $J = 6.7$ Hz, 2H, OCH$_2$CH$_3$), 2.47 (s, 3H, 11-CH$_3$), 1.41 (t, $J = 6.8$ Hz, 3H, OCH$_2$CH$_3$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): δ 156.3 (C-2), 155.9 (C-6), 146.3 (C-4), 144.1 (C-9), 142.0 (C-1’), 131.3 (C-8), 129.9 (Ph-C), 126.5
N-(4-chloro-3-fluorophenyl)-6-ethoxy-2-methylquinolin-4-amine (7h). White solid; Yield: 79.4 %; HPLC purity: 98.5 % ($t_R = 21.98$ min); mp: 247-248 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 7.76 (d, $J = 9.2$ Hz, 1H, H-8), 7.67 (d, $J = 2.6$ Hz, 1H, H-5), 7.58 (t, $J = 8.6$ Hz, 1H, Ph-H), 7.33-7.41 (m, 2H), 7.23 (dd, $J = 2.0$, 8.6 Hz, 1H, Ph-H), 6.99 (s, 1H, H-3), 4.18 (q, $J = 7.0$ Hz, 2H, OCH$_2$CH$_3$), 2.49 (s, 3H, 11-CH$_3$), 1.41 (t, $J = 7.0$ Hz, 3H, OCH$_2$CH$_3$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 158.8 (d, $J = 245.4$ Hz, 1C, C-F), 156.1 (C-2), 155.9 (C-6), 147.2 (C-4), 142.1 (d, $J = 9.9$ Hz, 1C, C-1’), 131.5 (C-8), 128.8 (C-7), 122.4 (C-5’), 119.5 (C-10), 119.0 (C-6’), 113.3 (d, $J = 17.6$ Hz, 1C, C-4’), 110.1 (d, $J = 24.2$ Hz, 1C, C-2’), 130.3 (Ph-C), 130.3 (C-8), 129.9 (Ph-C), 126.9 (Ph-C), 125.6 (Ph-C), 123.5 (Ph-C), 118.5 (C-10), 103.0 (C-3), 101.5 (C-5), 64.2 (OCH$_2$CH$_3$), 24.3 (C-11), 15.1 (OCH$_2$CH$_3$). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{18}$H$_{17}$BrClN$_2$O$^+$, 391.0207, found, 391.0207.

N-(4-chloro-3-methylphenyl)-6-ethoxy-2-methylquinolin-4-amine (7i). White solid; Yield: 81.8 %; HPLC purity: 98.5 % ($t_R = 22.85$ min); mp: 207-209 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 7.91 (s, 1H, H-5), 7.85 (d, $J = 9.2$ Hz, 1H, H-8), 7.50 (d, $J = 8.4$ Hz, 1H, Ph-H), 7.45 (d, $J = 9.0$ Hz, 1H, H-7), 7.40 (d, $J = 1.8$ Hz, 1H, Ph-H), 7.27 (dd, $J = 2.2$, 8.4 Hz, 1H, Ph-H), 6.76 (s, 1H, H-3), 4.21 (q, $J = 7.0$ Hz, 2H, OCH$_2$CH$_3$), 2.51 (s, 3H, 11-CH$_3$), 2.37 (s, 3H, 14-CH$_3$), 1.42 (t, $J = 7.0$ Hz, 3H, OCH$_2$CH$_3$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 156.6 (C-2), 154.5 (C-6), 150.7 (C-4), 138.4 (C-9), 137.3 (Ph-C), 130.3 (Ph-C), 129.9 (Ph-C), 126.9 (Ph-C), 125.6 (C-7), 123.8 (Ph-C), 123.5 (Ph-C), 118.5 (C-10), 103.0 (C-3), 101.5 (C-5), 64.5 (OCH$_2$CH$_3$), 22.4 (C-11), 20.2 (14-CH$_3$), 15.0 (OCH$_2$CH$_3$). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{19}$H$_{20}$ClN$_2$O$^+$, 327.1259, found, 327.1249.

N-(4-chloro-3-methoxyphenyl)-6-ethoxy-2-methylquinolin-4-amine (7j). White solid; Yield: 52.2 %; HPLC purity: 98.5 % ($t_R = 21.77$ min); mp: 206-208 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 8.72 (s, 1H, NH), 7.71 (d, $J = 9.2$ Hz, 1H, H-8), 7.64 (d, $J = 2.4$ Hz, 1H, H-5), 7.41 (d, $J = 8.4$ Hz, 1H, Ph-H), 7.30 (dd, $J = 2.5$, 9.1 Hz, 1H, H-7), 7.08 (d, $J = 1.5$ Hz, 1H, Ph-H), 6.92-6.96 (m, 2H), 4.18 (q, $J = 7.0$ Hz, 2H, OCH$_2$CH$_3$), 3.86 (s, 3H, 14-CH$_3$), 2.44 (s, 3H, 11-CH$_3$), 1.41 (t, $J = 6.9$ Hz, 3H, OCH$_2$CH$_3$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 156.5 (C-2), 155.7 (C-3’), 155.5 (C-6), 146.7 (C-4),
144.7 (C-9), 141.9 (C-1’), 130.6 (Ph-C), 130.4 (C-8), 121.5 (C-7), 119.5 (C-10), 115.1 (Ph-C), 114.7 (Ph-C), 107.0 (Ph-C), 103.3 (C-3), 102.1 (C-5), 64.0 (OCH<sub>2</sub>CH<sub>3</sub>), 56.5 (14-CH<sub>3</sub>), 25.3 (C-11), 15.1 (OCH<sub>2</sub>CH<sub>3</sub>). ESI-HRMS (+): m/z [M+H]<sup>+</sup> calculated for C<sub>19</sub>H<sub>20</sub>ClN<sub>2</sub>O<sub>2</sub>+, 343.1208, found, 343.1203.

**N-(4-chloro-3-nitrophenyl)-6-ethoxy-2-methylquinolin-4-amine (7k).** White solid; Yield: 85.7 %; HPLC purity: 98.7 % (t<sub>R</sub> = 21.13 min); mp: 264-266 ºC. <sup>1</sup>H NMR (600 MHz, DMSO-d<sub>6</sub>): δ 10.80 (br. s., 1H, NH), 8.22 (d, J = 2.6 Hz, 1H, H-5), 8.14 (d, J = 2.4 Hz, 1H, Ph-H), 8.01 (d, J = 9.2 Hz, 1H, H-8), 7.93 (d, J = 8.8 Hz, 1H, Ph-H), 7.65 (dd, J = 2.6, 9.2 Hz, 1H, H-7), 7.02 (s, 1H, H-3), 4.27 (q, J = 7.0 Hz, 2H, OCH<sub>2</sub>CH<sub>3</sub>), 2.63 (s, 3H, 11-CH<sub>3</sub>), 1.43 (t, J = 7.0 Hz, 3H, OCH<sub>2</sub>CH<sub>3</sub>); <sup>13</sup>C NMR (150 MHz, DMSO-d<sub>6</sub>): δ 160.0 (C-NO<sub>2</sub>), 157.5 (C-2), 153.4 (C-6), 152.8 (C-4), 148.5 (C-9), 138.5 (C-1’), 134.2 (Ph-C), 133.3 (Ph-C), 130.5 (C-8), 125.8 (C-7), 122.4 (Ph-C), 118.3 (C-10), 103.9 (C-3), 101.7 (C-5), 64.9 (OCH<sub>2</sub>CH<sub>3</sub>), 20.1 (C-11), 14.9 (OCH<sub>2</sub>CH<sub>3</sub>). ESI-HRMS (+): m/z [M+H]<sup>+</sup> calculated for C<sub>18</sub>H<sub>17</sub>ClN<sub>3</sub>O<sub>3</sub>+, 358.0953, found, 358.0949.

2-chloro-5-((6-methoxy-2-methylquinolin-4-yl)amino)benzoic acid (7l). White solid; Yield: 45.3 %; HPLC purity: 91.9 % (t<sub>R</sub> = 20.88 min); mp: 216-217 ºC. <sup>1</sup>H NMR (600 MHz, DMSO-d<sub>6</sub>): δ 7.72 (d, J = 2.9 Hz, 1H, H-5), 7.24 (d, J = 8.8 Hz, 1H, H-5), 6.91 (d, J = 8.4 Hz, 1H, Ph-H), 6.88 (d, J = 2.8 Hz, 1H, Ph-H), 6.86 (dd, J = 3.0, 8.9 Hz, 1H, H-7), 6.65 (dd, J = 2.8, 8.4 Hz, 1H, Ph-H), 5.97 (s, 1H, H-3), 4.03 (q, J = 6.9 Hz, 2H, OCH<sub>2</sub>CH<sub>3</sub>), 2.04 (s, 3H, 11-CH<sub>3</sub>), 1.34 (t, J = 6.9 Hz, 3H, OCH<sub>2</sub>CH<sub>3</sub>); <sup>13</sup>C NMR (150 MHz, DMSO-d<sub>6</sub>): δ 171.8 (C=O), 157.1 (C-2), 155.2 (C-6), 155.0 (C-4), 152.7 (C-9), 145.4 (C-1’), 143.5 (Ph-C), 129.0 (C-8), 127.5 (Ph-C), 125.3 (C-7), 122.6 (Ph-C), 122.0 (Ph-C), 118.6 (C-10), 117.1 (Ph-C), 105.0 (C-3), 97.0 (C-5), 63.3 (OCH<sub>2</sub>CH<sub>3</sub>), 25.1 (C-11), 15.4 (OCH<sub>2</sub>CH<sub>3</sub>). ESI-HRMS (-): m/z [M-H]− calculated for C<sub>19</sub>H<sub>17</sub>ClN<sub>3</sub>O<sub>3</sub>−, 355.8055, found, 355.8055.

**Butyl 2-chloro-5-((6-ethoxy-2-methylquinolin-4-yl)amino)benzoate (7m).** White solid; Yield: 41.0 %; HPLC purity: 96.1 % (t<sub>R</sub> = 24.55 min); mp: 151-153 ºC. <sup>1</sup>H NMR (600 MHz, DMSO-d<sub>6</sub>): δ 8.87 (br. s., 1H, NH), 7.74 (d, J = 9.0 Hz, 1H, H-8), 7.72 (d, J = 2.2 Hz, 1H, H-5), 7.61 (d, J = 2.8 Hz, 1H, Ph-H), 7.55-7.58 (m, 1H, Ph-H), 7.52-7.55 (m, 1H, Ph-H), 7.32 (dd, J = 2.7, 9.1 Hz, 1H, H-7), 6.95 (s, 1H, H-3), 4.30 (t, J = 6.4 Hz, 2H, 14-CH<sub>2</sub>), 4.17 (q, J = 7.0 Hz, 2H, OCH<sub>2</sub>CH<sub>3</sub>), 2.45 (s, 3H, 11-CH<sub>3</sub>), 1.65-
1.72 (m, 2H), 1.38-1.46 (m, 5H), 0.92 (t, \( J = 7.4 \) Hz, 3H, 17-CH\_3); \(^{13}\)C NMR (150 MHz, DMSO-d\(_6\)): \( \delta \) 165.3 (C=O), 156.5 (C-2), 155.8 (C-6), 146.0 (C-4), 144.8 (C-9), 141.0 (C-1'), 132.1 (Ph-C), 131.1 (C-8), 130.5 (Ph-C), 125.5 (Ph-C), 125.0 (C-7), 123.4 (Ph-C), 121.7 (Ph-C), 119.7 (C-10), 103.7 (C-3), 102.1 (C-5), 65.5 (C-14), 64.0 (OCH\_2CH\_3), 30.6 (C-15), 25.2 (C-11), 19.2 (C-16), 15.1 (OCH\_2CH\_3), 14.0 (C-17). ESI-HRMS (+): \( m/z \) [M+H]\(^+\) calculated for C\(_{21}\)H\(_{26}\)ClN\(_2\)O\(_3\), 413.1626, found, 413.1626.

2-chloro-5-((6-ethoxy-2-methylquinolin-4-yl)amino)-N-hydroxybenzamide (7n). White solid; Yield: 45.3 %; HPLC purity: 90.9 % (\( t_R = 16.91 \) min); mp: 166-167 ºC. \(^1\)H NMR (600 MHz, DMSO-d\(_6\)): \( \delta \) 11.05 (br. s., 1H, CONH-OH), 9.30 (br. s., 1H, CO-NH-OH), 8.87 (br. s., 1H, NH), 7.74 (d, \( J = 9.0 \) Hz, 1H, H-8), 7.63 (d, \( J = 2.6 \) Hz, 1H, H-5), 7.51 (d, \( J = 8.6 \) Hz, 1H, Ph-H), 7.43 (dd, \( J = 2.6, 8.6 \) Hz, 1H, Ph-H), 7.33 (dd, \( J = 2.6, 9.2 \) Hz, 1H, H-7), 7.31 (d, \( J = 2.6 \) Hz, 1H, Ph-H), 6.94 (s, 1H, H-3), 4.17 (q, \( J = 7.0 \) Hz, 2H, OCH\_2CH\_3), 2.46 (s, 3H, 11-CH\_3), 1.41 (t, \( J = 7.0 \) Hz, 3H, OCH\_2CH\_3); \(^{13}\)C NMR (150 MHz, DMSO-d\(_6\)): \( \delta \) 163.5 (C=O), 156.3 (C-2), 155.8 (C-6), 146.6 (C-4), 144.2 (C-9), 140.5 (C-1'), 135.7 (Ph-C), 131.1 (C-8), 130.0 (Ph-C), 124.2 (C-7), 123.9 (Ph-C), 122.2 (Ph-C), 121.8 (Ph-C), 119.6 (C-10), 103.2 (C-3), 102.2 (C-5), 64.1 (OCH\_2CH\_3), 25.0 (C-11), 15.1 (OCH\_2CH\_3). ESI-HRMS (+): \( m/z \) [M+H]\(^+\) calculated for C\(_{19}\)H\(_{19}\)ClN\(_2\)O\(_3\), 372.1109, found, 372.1101.

N-(3,4-dichlorophenyl)-6-isopropoxy-2-methylquinolin-4-amine (7o). White solid; Yield: 58.1 %; HPLC purity: 97.2 % (\( t_R = 23.47 \) min); mp: 241-243 ºC. \(^1\)H NMR (600 MHz, DMSO-d\(_6\)): \( \delta \) 8.80 (br. s., 1H, NH), 7.74 (d, \( J = 9.2 \) Hz, 1H, H-8), 7.63 (d, \( J = 2.8 \) Hz, 1H, Ph-H), 7.60 (d, \( J = 8.7 \) Hz, 1H, Ph-H), 7.51 (d, \( J = 2.3, 8.7 \) Hz, 1H, Ph-H), 7.34 (dd, \( J = 2.6, 9.2 \) Hz, 1H, H-7), 7.31 (dd, \( J = 2.6, 9.2 \) Hz, 1H, H-3), 4.77-4.84 (m, 1H, OCH(CH\_3)\(_2\)), 2.46 (s, 3H, 11-CH\_3), 1.34 (s, 3H, OCH(CH\_3)\(_2\)), 1.33 (s, 3H, OCH(CH\_3)\(_2\)); \(^{13}\)C NMR (150 MHz, DMSO-d\(_6\)): \( \delta \) 156.6 (C-2), 154.6 (C-6), 145.8 (C-4), 144.6 (C-9), 142.3 (C-1'), 132.0 (Ph-C), 131.5 (C-8), 130.6 (Ph-C), 124.2 (C-7), 122.8 (Ph-C), 122.3 (Ph-C), 121.3 (Ph-C), 119.9 (C-10), 104.2 (C-3), 103.8 (C-5), 70.1 (OCH(CH\_3)\(_2\)), 25.2 (C-11), 22.3 (s, 2C, OCH(CH\_3)\(_2\)). ESI-HRMS (+): \( m/z \) [M+H]\(^+\) calculated for C\(_{19}\)H\(_{19}\)Cl\(_2\)N\(_2\)O\(_3\), 361.0869, found, 361.0871.

N-(3-bromo-4-chlorophenyl)-6-isopropoxy-2-methylquinolin-4-amine (7p). White solid; Yield: 68.6 %; HPLC purity: 96.9 % (\( t_R = 23.70 \) min); mp: 235-237 ºC. \(^1\)H NMR (600 MHz, DMSO-d\(_6\)): \( \delta \) 8.84 (br. s., 1H, NH), 7.74 (d, \( J = 9.2 \) Hz, 1H, H-8), 7.65 (d,
$J = 2.4$ Hz, 1H, H-5), 7.62 (d, $J = 2.6$ Hz, 1H, Ph-H), 7.60 (d, $J = 8.6$ Hz, 1H, Ph-H), 7.39 (dd, $J = 2.5$, 8.7 Hz, 1H, Ph-H), 7.31 (dd, $J = 2.6$, 9.0 Hz, 1H, H-7), 6.94 (s, 1H, H-3), 4.77-4.84 (m, 1H, OCH(CH$_3$)$_2$), 2.46 (s, 3H, 11-CH$_3$), 1.34 (s, 3H, OCH(CH$_3$)$_2$), 1.33 (s, 3H, OCH(CH$_3$)$_2$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 156.4 (C-2), 154.7 (C-6), 146.1 (C-4), 144.2 (C-9), 142.1 (C-1’), 131.3 (C-8), 130.2 (Ph-C), 126.4 (Ph-C), 126.1 (C-7), 122.5 (Ph-C), 122.3 (Ph-C), 121.9 (Ph-C), 119.8 (C-10), 103.9 (C-3), 103.8 (C-5), 70.1 (OCH(CH$_3$)$_2$), 25.1 (C-11), 22.3 (s, 2C, OCH(CH$_3$)$_2$). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{19}$H$_{19}$BrClN$_2$O$, 405.0364$, found, 405.0368.

$N$-(4-chloro-3-fluorophenyl)-6-isopropoxy-2-methylquinolin-4-amine (7q). White solid; Yield: 77.0 %; HPLC purity: 98.3 % ($t_R = 22.50$ min); mp: 239-241 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 8.86 (br. s., 1H, NH), 7.74 (d, $J = 9.2$ Hz, 1H, H-8), 7.62 (d, $J = 2.6$ Hz, 1H, H-5), 7.55 (t, $J = 8.6$ Hz, 1H, Ph-H), 7.29- 7.36 (m, 2H, H-2’ and H-7), 7.20 (dd, $J = 2.2$, 8.6 Hz, 1H, Ph-H), 6.99 (s, 1H, H-3), 4.77-4.84 (m, 1H, OCH(CH$_3$)$_2$), 2.47 (s, 3H, 11-CH$_3$), 1.34 (s, 3H, OCH(CH$_3$)$_2$), 1.33 (s, 3H, OCH(CH$_3$)$_2$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 158.8 (d, $J = 245.4$ Hz, 1C, C-F), 156.5 (C-2), 154.7 (C-6), 146.0 (C-4), 144.2 (C-9), 142.7 (C-1’), 131.4 (C-8), 130.2 (C-7), 122.4 (Ph-C), 119.9 (C-10), 118.4 (Ph-C), 112.5 (d, $J = 17.6$ Hz, 1C, C-4’), 109.6 (d, $J = 23.1$ Hz, 1C, C-2’), 104.2 (C-3), 104.0 (C-5), 70.1 (OCH(CH$_3$)$_2$), 25.0 (C-11), 22.3 (s, 2C, OCH(CH$_3$)$_2$). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{19}$H$_{19}$ClFN$_2$O$^+$, 345.1164, found, 345.1161.

$N$-(4-chloro-3-methylphenyl)-6-isopropoxy-2-methylquinolin-4-amine (7r). White solid; Yield: 35.0 %; HPLC purity: 98.3 % ($t_R = 23.36$ min); mp: 222-224 ºC. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 8.78 (br. s., 1H, NH), 7.72 (d, $J = 9.2$ Hz, 1H, H-8), 7.70 (d, $J = 2.2$ Hz, 1H, H-5), 7.43 (d, $J = 8.6$ Hz, 1H, Ph-H), 7.32 (d, $J = 2.2$ Hz, 1H, Ph-H), 7.30 (dd, $J = 2.5$, 9.1 Hz, 1H, H-7), 7.21 (dd, $J = 2.4$, 8.4 Hz, 1H, Ph-H), 6.80 (s, 1H, H-3), 4.78-4.86 (m, 1H, OCH(CH$_3$)$_2$), 2.43 (s, 3H, 11-CH$_3$), 2.35 (s, 3H, 15-CH$_3$), 1.34 (s, 3H, OCH(CH$_3$)$_2$), 1.33 (s, 3H, OCH(CH$_3$)$_2$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 156.2 (C-2), 154.6 (C-6), 147.3 (C-4), 143.8 (C-9), 140.2 (C-1’), 136.9 (Ph-C), 130.0 (C-8), 129.9 (Ph-C), 127.8 (Ph-C), 125.3 (C-7), 122.4 (Ph-C), 121.8 (Ph-C), 119.4 (C-10), 103.8 (C-3), 102.5 (C-5), 70.0 (OCH(CH$_3$)$_2$), 24.9 (C-11), 22.3 (s, 2C, OCH(CH$_3$)$_2$), 20.2 (C-15). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{20}$H$_{22}$ClN$_2$O$^+$, 341.1415, found, 341.1412.
**N-(4-chloro-3-methoxyphenyl)-6-isopropoxy-2-methylquinolin-4-amine (7s).**

White solid; Yield: 67.7 %; HPLC purity: 95.1 % ($t_R = 22.37$ min); mp: 254-255 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 8.70 (s, 1H, NH), 7.72 (d, $J = 9.2$ Hz, 1H, H-8), 7.66 (d, $J = 2.4$ Hz, 1H, H-5), 7.41 (d, $J = 8.4$ Hz, 1H, Ph-H), 7.29 (dd, $J = 2.5$, 9.2 Hz, 1H, H-7), 7.08 (d, $J = 2.2$ Hz, 1H, Ph-H), 6.94 (dd, $J = 2.2$, 8.4 Hz, 1H, Ph-H), 6.92 (s, 1H, H-3), 4.77-4.87 (m, 1H, OCH(CH$_3$)$_2$), 3.86 (s, 3H, OCH$_3$), 2.44 (s, 3H, 11-CH$_3$), 1.35 (s, 3H, OCH(CH$_3$)$_2$), 1.34 (s, 3H, OCH(CH$_3$)$_2$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 156.6 (C-2), 155.5 (C-3’), 154.5 (C-6), 146.6 (C-4), 144.7 (C-9), 141.9 (C-1’), 130.6 (C-8), 130.1 (C-7), 122.1 (Ph-C), 119.6 (C-10), 115.1 (Ph-C), 114.7 (Ph-C), 107.0 (Ph-C), 103.9 (C-3), 103.2 (C-5), 70.0 (OCH(CH$_3$)$_2$), 56.5 (OCH$_3$), 25.3 (C-11), 22.3 (s, 2C, OCH(CH$_3$)$_2$). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{20}$H$_{22}$ClN$_2$O$_2^+$, 357.1364, found, 357.1365.

**N-(4-chloro-3-nitrophenyl)-6-isopropoxy-2-methylquinolin-4-amine (7t).**

White solid; Yield: 70.6 %; HPLC purity: 98.6 % ($t_R = 21.95$ min); mp: 251-253 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 7.94 (d, $J = 2.6$ Hz, 1H, Ph-H), 7.77 (d, $J = 9.0$ Hz, 1H, H-8), 7.72 (d, $J = 8.8$ Hz, 1H, Ph-H), 7.64 (dd, $J = 2.8$, 8.8 Hz, 1H, Ph-H), 7.62 (d, $J = 2.6$ Hz, 1H, H-5), 7.35 (dd, $J = 2.6$, 9.2 Hz, 1H, H-7), 7.06 (s, 1H, H-3), 4.77-4.87 (m, 1H, OCH(CH$_3$)$_2$), 2.49 (s, 3H, 11-CH$_3$), 1.35 (s, 3H, OCH(CH$_3$)$_2$), 1.34 (s, 3H, OCH(CH$_3$)$_2$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 156.5 (C-2), 154.8 (C-6), 148.5 (C-3’), 144.2 (C-9), 142.3 (C-1’), 132.7 (Ph-C), 130.3 (C-8), 125.5 (C-7), 122.6 (Ph-C), 120.1 (C-10), 117.3 (Ph-C), 117.1 (Ph-C), 104.9 (C-3), 103.9 (C-5), 70.1 (OCH(CH$_3$)$_2$), 25.0 (C-11), 22.3 (s, 2C, OCH(CH$_3$)$_2$). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{19}$H$_{19}$ClN$_3$O$_3^+$, 372.1109, found, 372.1112.

**2-chloro-5-((6-isopropoxy-2-methylquinolin-4-yl)amino)benzoic acid (7u).**

White solid; Yield: 57.3 %; HPLC purity: 90.3 % ($t_R = 21.88$ min); mp: 265-267 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 14.70 (br. s., 1H, COOH), 10.78 (s, 1H, NH), 8.23 (d, $J = 2.2$ Hz, 1H, Ph-H), 8.05 (d, $J = 9.2$ Hz, 1H, H-8), 7.88 (d, $J = 2.4$ Hz, 1H, H-5), 7.70-7.73 (m, 1H, Ph-H), 7.67-7.70 (m, 1H, Ph-H), 7.60 (dd, $J = 2.2$, 9.2 Hz, 1H, H-7), 6.80 (s, 1H, H-3), 4.95-5.05 (m, 1H, OCH(CH$_3$)$_2$), 2.62 (s, 3H, 11-CH$_3$), 1.37 (s, 3H, OCH(CH$_3$)$_2$), 1.36 (s, 3H, OCH(CH$_3$)$_2$); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 166.4 (COOH), 156.4 (C-2), 153.4 (C-6), 153.0 (C-4), 137.2 (C-9), 133.7 (Ph-C), 133.0 (Ph-C), 132.6 (Ph-C), 129.8 (C-8), 129.7 (Ph-C), 128.0 (Ph-C), 126.3 (C-7), 122.0 (Ph-C),
Butyl 2-chloro-5-((6-isopropoxy-2-methylquinolin-4-yl)amino)benzoate (7v). White solid; Yield: 44.7 %; HPLC purity: 94.9 % ($t_R = 24.98$ min); mp: 192-194 ºC.  

$^1$H NMR (600 MHz, DMSO-$d_6$): $\delta$ 7.77 (d, $J = 9.2$ Hz, 1H, H-8), 7.72-7.6 (m, 2H), 7.56-7.59 (m, 2H), 7.34 (dd, $J = 2.5, 9.1$ Hz, 1H, H-7), 6.92 (s, 1H, H-3), 4.80-4.89 (m, 1H, OCH(CH$_3$)$_2$), 4.29 (t, $J = 6.4$ Hz, 2H, 15-CH$_2$), 2.47 (s, 3H, 11-CH$_3$), 1.65-1.72 (m, 2H), 1.38-1.46 (m, 2H), 1.34 (s, 3H, OCH(CH$_3$)$_2$), 1.33 (s, 3H, OCH(CH$_3$)$_2$), 0.92 (t, $J = 7.4$ Hz, 3H, 18-CH$_3$); $^{13}$C NMR (150 MHz, DMSO-$d_6$): $\delta$ 165.3 (C=O), 156.0 (C-2), 154.8 (C-6), 147.0 (C-4), 142.8 (C-9), 140.6 (C-1’), 132.2 (Ph-C), 131.3 (C-8), 129.4 (Ph-C), 126.2 (Ph-C), 125.6 (C-7), 124.0 (Ph-C), 122.9 (Ph-C), 119.7 (C-10), 104.1 (C-3), 103.3 (C-5), 70.1 (OCH(CH$_3$)$_2$), 65.5 (COO-CH$_2$), 30.6, 24.5 (C-11). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{20}$H$_{20}$ClN$_2$O$_3^+$, 371.1157, found, 371.1158.

N-(2,4-dichlorophenyl)-6-methoxy-2-methylquinolin-4-amine (7w). White solid; Yield: 35.9 %; HPLC purity: 98.5 % ($t_R = 21.41$ min); mp: 256-257 ºC.  

$^1$H NMR (600 MHz, DMSO-$d_6$): $\delta$ 8.01 (s, 1H, H-5), 7.91 (d, $J = 9.2$ Hz, 1H, H-8), 7.89 (d, $J = 2.4$ Hz, 1H, Ph-H), 7.59-7.63 (m, 1H, Ph-H), 7.55-7.58 (m, 1H, Ph-H), 7.53 (dd, $J = 2.3, 9.1$ Hz, 1H, H-7), 6.22 (s, 1H, H-3), 3.95 (s, 3H, OCH$_3$), 2.51 (s, 3H, 11-CH$_3$); $^{13}$C NMR (150 MHz, DMSO-$d_6$): $\delta$ 157.6 (C-2), 154.0 (C-6), 152.0 (C-4), 137.4 (C-9), 135.5 (C-1’), 132.7 (Ph-C), 132.4 (Ph-C), 131.0 (C-8), 130.7 (Ph-C), 129.4 (Ph-C), 124.8 (C-7), 124.1 (Ph-C), 118.0 (C-10), 102.7 (C-3), 101.7 (C-5), 56.6 (OCH$_3$), 21.7 (C-11). ESI-HRMS (+): $m/z$ [M+H]$^+$ calculated for C$_{17}$H$_{15}$ClN$_2$O, 333.0556, found, 333.0553.

6-ethoxy-N-(4-fluoro-2-methylphenyl)-2-methylquinolin-4-amine (7x). White solid; Yield: 32.4 %; HPLC purity: 92.3 % ($t_R = 20.73$ min); mp: 197-199 ºC.  

$^1$H NMR (600 MHz, DMSO-$d_6$): $\delta$ 10.17 (br. s., 1H, NH), 8.15 (d, $J = 2.2$ Hz, 1H, H-5), 7.96 (d, $J = 9.4$ Hz, 1H, H-8), 7.55 (dd, $J = 2.6, 9.2$ Hz, 1H, H-7), 7.38 (dd, $J = 5.5, 8.6$ Hz, 1H, Ph-H), 7.35 (dd, $J = 2.8, 9.6$ Hz, 1H, Ph-H), 7.22 (td, $J = 2.9, 8.4$ Hz, 1H, Ph-H), 6.04 (s, 1H, H-3), 4.25 (q, $J = 7.0$ Hz, 2H, OCH$_2$CH$_3$), 2.51 (s, 3H, 11-CH$_3$), 2.20 (s, 3H, 14-CH$_3$), 1.42 (t, $J = 7.0$ Hz, 3H, OCH$_2$CH$_3$); $^{13}$C NMR (150 MHz, DMSO-$d_6$): $\delta$ 162.2
(d, J = 244.3 Hz, 1C, C-F), 156.9 (C-2), 153.6 (C-6), 153.3 (C-4), 138.8 (d, J = 8.8 Hz, 1C, C-2'), 133.2 (C-8), 130.3 (d, J = 8.8 Hz, 1C, C-6'), 124.4 (C-7), 123.8 (C-1'), 118.4 (d, J = 22.0 Hz, 1C, C-3'), 117.6 (C-10), 114.7 (d, J = 9.9 Hz, 1C, C-5'), 103.6 (C-3), 100.0 (C-5), 64.7 (OCH\textsubscript{2}CH\textsubscript{3}), 21.2 (11-CH\textsubscript{3}), 18.0 (14-CH\textsubscript{3}), 15.0 (OCH\textsubscript{2}CH\textsubscript{3}).

ESI-HRMS (+): m/z [M+H]\textsuperscript{+} calculated for C\textsubscript{19}H\textsubscript{20}FN\textsubscript{2}O\textsubscript{2}, 311.1554, found, 311.1557.

4-((6-ethoxy-2-methylquinolin-4-yl)amino)-N-hydroxybenzamide (7y). White solid; Yield: 30.9 %; HPLC purity: 90.3 % (t\textsubscript{R} = 19.28 min); mp: 216-218 ºC.

\[ \text{1H NMR (600 MHz, DMSO-d}_6\text{): } \delta 11.32 (\text{br. s., 1H, CONH-OH}), 7.99-8.08 (\text{m, 2H}), 7.94 (d, J = 9.2 Hz, 1H, H-8), 7.90-7.93 (\text{m, 1H}), 7.51-7.59 (\text{m, 3H}), 7.01 (s, 1H, CO\text{NH-OH}), 6.89 (s, 1H, H-3), 4.25 (q, J = 7.0 Hz, 2H, OCH\textsubscript{2}CH\textsubscript{3}), 2.58 (s, 3H, 11-CH\textsubscript{3}), 1.43 (t, J = 7.0 Hz, 3H, OCH\textsubscript{2}CH\textsubscript{3}); \]

\[ \text{13C NMR (150 MHz, DMSO-d}_6\text{): } \delta 167.3 (C=O), 156.7 (C-2), 156.5 (C-6), 155.2 (C-1'), 154.6 (C-4), 144.8 (C-9), 131.4 (3C), 128.9 (C-7), 121.5 (2C), 119.5 (C-10), 119.0 (Ph-C), 103.1 (C-3), 102.9 (C-5), 64.4 (OCH\textsubscript{2}CH\textsubscript{3}), 23.2 (11-CH\textsubscript{3}), 15.0 (OCH\textsubscript{2}CH\textsubscript{3}). \]

ESI-HRMS (+): m/z [M-H]\textsuperscript{-} calculated for C\textsubscript{19}H\textsubscript{18}N\textsubscript{3}O\textsubscript{3}, 336.1354, found, 336.1356.

N-(3,4-dimethoxyphenyl)-6-isopropoxy-2-methylquinolin-4-amine (7z). White solid; Yield: 41.0 %; HPLC purity: 94.4 % (t\textsubscript{R} = 20.05 min); mp: 242-243 ºC.

\[ \text{1H NMR (600 MHz, DMSO-d}_6\text{): } \delta 8.50 (\text{br. s., 1H, NH}), 7.70 (d, J = 2.6 Hz, 1H, H-5), 7.67 (d, J = 9.0 Hz, 1H, H-8), 7.24 (dd, J = 2.6, 9.2 Hz, 1H, H-7), 7.01 (d, J = 8.4 Hz, 1H, Ph-H), 6.92 (d, J = 2.4 Hz, 1H, Ph-H), 6.87 (dd, J = 2.3, 8.4 Hz, 1H, Ph-H), 6.60 (s, 1H, H-3), 4.79-4.86 (m, 1H, CH(CH\textsubscript{3})\textsubscript{2}), 3.79 (s, 3H, OCH\textsubscript{3}), 3.77 (s, 3H, OCH\textsubscript{3}), 2.37 (s, 3H, 11-CH\textsubscript{3}), 1.34 (s, 3H, CH(CH\textsubscript{3})\textsubscript{2}), 1.33 (s, 3H CH(CH\textsubscript{3})\textsubscript{2}); \]

\[ \text{13C NMR (150 MHz, DMSO-d}_6\text{): } \delta 156.4 (C-2), 154.3 (C-6), 149.8 (Ph-C), 148.4 (C-4), 146.2 (C-9), 144.4 (Ph-C), 134.1 (Ph-C), 130.4 (C-8), 122.0 (C-7), 118.9 (C-10), 116.2 (Ph-C), 112.9 (Ph-C), 109.2 (Ph-C), 103.6 (C-3), 101.1 (C-5), 69.9 (CH(CH\textsubscript{3})\textsubscript{2}), 56.2 (OCH\textsubscript{3}), 56.0 (OCH\textsubscript{3}), 25.3 (11-CH\textsubscript{3}), 22.4 (s, 2C, CH(CH\textsubscript{3})\textsubscript{2}). \]

ESI-HRMS (+): m/z [M-H]\textsuperscript{-} calculated for C\textsubscript{21}H\textsubscript{25}N\textsubscript{3}O\textsubscript{3}, 353.1860, found, 353.1856.

N-(5,6-dichloropyridin-3-yl)-6-methoxy-2-methylquinolin-4-amine (7A). White solid; Yield: 28.9 %; HPLC purity: 97.9 % (t\textsubscript{R} = 19.22 min); mp: 242-243 ºC. \[ \text{1H NMR (600 MHz, DMSO-d}_6\text{): } \delta 8.49 (s, 1H, H-2'), 8.16 (s, 1H, H-4'), 7.84 (d, J = 9.4 Hz, 1H, H-8), 7.82 (s, 1H, H-5), 7.46 (d, J = 8.6 Hz, 1H, H-7), 7.03 (s, 1H, H-3), 3.94 (s, 3H, OCH\textsubscript{2}CH\textsubscript{3}); \]

\[ \text{13C NMR (150 MHz, DMSO-d}_6\text{): } \delta 156.4 (C-2), 154.3 (C-6), 149.8 (Ph-C), 148.4 (C-4), 146.2 (C-9), 144.4 (Ph-C), 134.1 (Ph-C), 130.4 (C-8), 122.0 (C-7), 118.9 (C-10), 116.2 (Ph-C), 112.9 (Ph-C), 109.2 (Ph-C), 103.6 (C-3), 101.1 (C-5), 69.9 (CH(CH\textsubscript{3})\textsubscript{2}), 56.2 (OCH\textsubscript{3}), 56.0 (OCH\textsubscript{3}), 25.3 (11-CH\textsubscript{3}), 22.4 (s, 2C, CH(CH\textsubscript{3})\textsubscript{2}). \]

ESI-HRMS (+): m/z [M-H]\textsuperscript{-} calculated for C\textsubscript{23}H\textsubscript{25}N\textsubscript{2}O\textsubscript{3}, 353.1860, found, 353.1865.
OCH₃), 2.54 (s, 3H, CH₃); ¹³C NMR (150 MHz, DMSO-d₆): δ 157.1 (C-2), 155.7 (C-6), 147.8 (C-4), 141.8 (C-9), 141.3 (C-3’), 138.8 (C-6’), 132.2 (C-2’), 131.0 (C-5’), 129.6 (C-8), 128.0 (C-7), 122.8 (C-4’), 119.5 (C-10), 103.9 (C-3), 102.0 (C-5), 56.3 (OCH₃), 23.7 (CH₃). ESI-HRMS (+): m/z [M+H]+ calculated for C₁₆H₁₄Cl₂N₃O⁺, 334.0508, found, 334.0505.

N-(5,6-dichloropyridin-3-yl)-6-ethoxy-2-methylquinolin-4-amine (7B). White solid; Yield: 25.7 %; HPLC purity: 94.4 % (tₑ = 20.56 min); mp: 243-245 ºC. ¹H NMR (600 MHz, CD₃OD): δ 8.39 (d, J = 2.4 Hz, 1H, H-2’), 8.09 (d, J = 2.4 Hz, 1H, H-4’), 7.75 (d, J = 9.2 Hz, 1H, H-8), 7.74 (d, J = 2.6 Hz, 1H, H-5), 7.52 (dd, J = 2.6, 9.2 Hz, 1H, H-7), 6.83 (s, 1H, H-3), 4.17 (q, J = 7.0 Hz, 2H, OCH₂CH₃), 2.55 (s, 3H, CH₃), 1.40 (t, J = 7.0 Hz, 3H, OCH₂CH₃); ¹³C NMR (150 MHz, CD₃OD): δ 158.2 (C-2), 153.4 (C-6), 153.2 (C-4), 145.8 (C-9), 143.7 (C-3’), 135.2 (C-6’), 135.2 (C-2’), 134.5 (C-5’), 130.7 (C-8), 125.5 (C-7), 121.7 (C-4’), 118.2 (C-10), 101.9 (C-3), 101.2 (C-5), 64.3 (OCH₂CH₃), 19.0 (CH₃), 13.5 (OCH₂CH₃). ESI-HRMS (+): m/z [M+H]+ calculated for C₁₇H₁₆Cl₂N₃O⁺, 348.0665, found, 348.0662.

■ Spectra data of compounds 9b–9e

6-butoxy-N-(3,4-dichlorophenyl)-2-methylquinolin-4-amine (9b). White solid; Yield: 46.2 %; HPLC purity: 94.6 % (tₑ = 24.96 min); mp: 179-181 ºC. ¹H NMR (600 MHz, DMSO-d₆): δ 8.89 (br. s., 1H, NH), 7.74 (d, J = 9.0 Hz, 1H, H-8), 7.60-7.63 (m, 2H), 7.54 (d, J = 2.4 Hz, 1H, Ph-H), 7.35 (dd, J = 2.5, 8.7 Hz, 1H, Ph-H), 7.33 (dd, J = 2.6, 9.2 Hz, 1H, H-7), 6.96 (s, 1H, H-3), 4.11 (t, J = 6.5 Hz, 2H, 12-CH₂), 2.47 (s, 3H, 11-CH₃), 1.75-1.80 (m, 2H, 13-CH₂), 1.49 (sxt, J = 7.4 Hz, 2H, 14-CH₂), 0.97 (t, J = 7.3 Hz, 3H, 15-CH₃); ¹³C NMR (150 MHz, DMSO-d₆): δ 156.1 (C-2), 156.1 (C-6), 146.7 (C-4), 143.6 (C-9), 141.9 (C-1’), 132.0 (Ph-C), 131.6 (Ph-C), 129.5 (C-8), 124.7 (C-7), 123.2 (Ph-C), 122.1 (Ph-C), 121.7 (Ph-C), 119.6 (C-10), 103.8 (C-3), 102.3 (C-5), 68.2 (C-12), 31.2 (C-13), 24.7 (C-11), 19.3 (C-14), 14.2 (C-15). ESI-HRMS (+): m/z [M+H]+ calculated for C₂₀H₂₁Cl₂N₂O⁺, 375.1025, found, 375.1021.
**N-(3,4-dichlorophenyl)-2-methyl-6-(pentyloxy)quinolin-4-amine (9c).** White solid; Yield: 55.0 %; HPLC purity: 98.6 % ($t_R = 25.89$ min); mp: 189-191 °C. $^1$H NMR (600 MHz, DMSO-$d_6$): δ 8.85 (br. s., 1H, NH), 7.73 (d, $J = 9.2$ Hz, 1H, H-8), 7.58-7.62 (m, 2H), 7.53 (d, $J = 2.4$ Hz, 1H, Ph-C), 7.35 (dd, $J = 2.5$, 8.7 Hz, 1H, Ph-C), 7.32 (dd, $J = 2.6$, 9.2 Hz, 1H, H-7), 6.96 (s, 1H, H-3), 4.10 (t, $J = 6.5$ Hz, 2H, 12-CH$_2$), 2.46 (s, 3H, 11-CH$_3$), 1.76-1.82 (m, 2H, 13-CH$_2$), 1.42-1.48 (m, 2H, 14-CH$_2$), 1.34-1.41 (m, 2H, 15-CH$_2$), 0.91 (t, $J = 7.2$ Hz, 3H, 16-CH$_3$); $^{13}$C NMR (150 MHz, DMSO-$d_6$): δ 156.4 (C-2), 156.0 (C-6), 146.2 (C-4), 144.3 (C-9), 142.2 (C-1’), 132.0 (Ph-C), 131.5 (Ph-C), 130.1 (C-8), 124.4 (C-7), 122.9 (Ph-C), 121.8 (Ph-C), 121.4 (Ph-C), 119.8 (C-10), 104.1 (C-3), 102.2 (C-5), 68.4 (C-12), 28.9 (C-13), 28.3 (C-14), 25.0 (C-11), 22.4 (C-15), 14.4 (C-16). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{21}$H$_{23}$Cl$_2$N$_2$O$_2^+$, 389.1182, found, 389.1178.

**N-(3,4-dichlorophenyl)-6-(hexyloxy)-2-methylquinolin-4-amine (9d).** White solid; Yield: 50.2 %; HPLC purity: 98.3 % ($t_R = 26.68$ min); mp: 173-174 °C. $^1$H NMR (600 MHz, DMSO-$d_6$): δ 8.81 (br. s., 1H, NH), 7.73 (d, $J = 9.0$ Hz, 1H, H-8), 7.60 (d, $J = 8.8$ Hz, 1H, Ph-H), 7.58 (d, $J = 2.4$ Hz, 1H, H-5), 7.52 (d, $J = 2.2$ Hz, 1H, Ph-H), 7.34 (dd, $J = 2.3$, 8.7 Hz, 1H, Ph-H), 7.32 (dd, $J = 2.5$, 9.1 Hz, 1H, H-7), 6.97 (s, 1H, H-3), 4.09 (t, $J = 6.4$ Hz, 2H, 12-CH$_2$), 2.46 (s, 3H, 11-CH$_3$), 1.76-1.81 (m, 2H, 13-CH$_2$), 1.46 (quin, $J = 7.3$ Hz, 2H, 14-CH$_2$), 1.31-1.36 (m, 4H), 0.87-0.90 (m, 3H, 17-CH$_3$); $^{13}$C NMR (150 MHz, DMSO-$d_6$): δ 156.6 (C-2), 156.0 (C-6), 146.2 (C-4), 144.3 (C-9), 142.2 (C-1’), 132.0 (Ph-C), 131.5 (Ph-C), 130.1 (C-8), 124.4 (C-7), 122.9 (Ph-C), 121.8 (Ph-C), 121.4 (Ph-C), 119.8 (C-10), 104.1 (C-3), 102.2 (C-5), 68.4 (C-12), 28.9 (C-13), 28.3 (C-14), 25.0 (C-11), 22.4 (C-15), 14.4 (C-16). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{22}$H$_{25}$Cl$_2$N$_2$O$_2^+$, 403.1338, found, 403.1337.

**N-(3,4-dichlorophenyl)-6-(heptyloxy)-2-methylquinolin-4-amine (9e).** White solid; Yield: 50.2 %; HPLC purity: 98.8 % ($t_R = 27.34$ min); mp: 153-155 °C. $^1$H NMR (600 MHz, DMSO-$d_6$): δ 8.81 (br. s., 1H, NH), 7.73 (d, $J = 9.0$ Hz, 1H, H-8), 7.55-7.63 (m, 2H), 7.52 (s, 1H, Ph-H), 7.29-7.37 (m, 2H), 6.97 (s, 1H, H-3), 4.04-4.14 (m, 2H), 2.46 (s, 3H, 11-CH$_3$), 1.75-1.82 (m, 2H), 1.41-1.49 (m, 2H), 1.32-1.39 (m, 2H), 1.24-1.31 (m, 4H), 0.83-0.90 (m, 3H); $^{13}$C NMR (150 MHz, DMSO-$d_6$): δ 156.5 (C-2), 156.0 (C-6), 145.8 (C-4), 144.8 (C-9), 142.3 (C-1’), 132.0 (Ph-C), 131.5 (Ph-C), 130.5 (C-8), 124.2 (C-7), 122.7 (Ph-C), 121.7 (Ph-C), 121.2 (Ph-C), 119.8 (C-10), 104.3 (C-3), 102.1 (C-5), 68.4 (C-12), 31.5 (C-15), 29.1 (C-13), 25.8 (C-14), 25.3 (C-11), 22.6 (C-16), 14.4 (C-17). ESI-HRMS (+): m/z [M+H]$^+$ calculated for C$_{22}$H$_{25}$Cl$_2$N$_2$O$_2^+$, 403.1338, found, 403.1337.
102.1 (C-5), 68.4 (C-12), 31.7, 29.2, 28.9, 26.0, 25.3 (C-11), 22.5 (C-17), 14.4 (C-18).
ESI-HRMS (+): m/z [M+H]^+ calculated for C_{23}H_{27}Cl_2N_2O^+, 417.1495, found, 417.1492.

### Spectra data of compounds 10a~10b

**Ethyl 4-((4-((3,4-dichlorophenyl)amino)-2-methylquinolin-6-yl)oxy)butanoate (10a).** White solid; Yield: 37.6 %; HPLC purity: 95.0 % (t_R = 23.59 min); mp: 266-267 ºC. ^1H NMR (600 MHz, CDCl_3): δ 7.88 (d, J = 9.2 Hz, 1H, H-8), 7.40-7.45 (m, 3H), 7.27-7.30 (m, 1H), 7.21 (dd, J = 2.6, 8.6 Hz, 1H, Ph-H), 6.97 (s, 1H, H-3), 4.18 (q, J = 7.2 Hz, 2H, OCH_2CH_3), 4.06-4.11 (m, 2H), 2.58 (s, 3H, 11-CH_3), 2.48-2.52 (m, 2H), 2.11-2.18 (m, 2H), 1.28 (t, J = 7.2 Hz, 3H, OCH_2CH_3); ^13C NMR (150 MHz, CDCl_3): δ 173.8 (C=O), 156.8 (C-2), 155.8 (C-6), 145.6 (C-4), 144.5 (C-9), 140.7 (C-1’), 133.2 (Ph-C), 131.0 (C-8), 130.5 (Ph-C), 126.2 (C-7), 122.8 (Ph-C), 122.0 (Ph-C), 120.2 (Ph-C), 119.3 (C-10), 104.0 (C-3), 99.9 (C-5), 66.8 (C-12), 60.9 (OCH_2CH_3), 30.1 (C-14), 25.2 (C-13), 23.3 (C-11), 14.2 (OCH_2CH_3). ESI-HRMS (+): m/z [M+H]^+ calculated for C_{22}H_{23}Cl_2N_3O_3^+, 433.1080, found, 433.1079.

**Methyl 5-((4-((3,4-dichlorophenyl)amino)-2-methylquinolin-6-yl)oxy)pentanoate (10b).** White solid; Yield: 33.9 %; HPLC purity: 93.1 % (t_R = 23.78 min); mp: 166-167 ºC. ^1H NMR (600 MHz, CDCl_3): δ 7.88 (d, J = 9.0 Hz, 1H, H-8), 7.43 (d, J = 8.6 Hz, 1H, Ph-H), 7.40 (d, J = 2.6 Hz, 1H, H-5), 7.29 (dd, J = 2.9, 9.2 Hz, 1H, H-7), 7.19 (d, J = 2.8 Hz, 1H, Ph-H), 7.17 (dd, J = 2.6, 8.6 Hz, 1H, Ph-H), 6.94 (s, 1H, H-3), 3.90-3.97 (m, 2H, 12-CH_2), 3.69 (s, 3H, COO-CH_3), 2.57 (s, 3H, 11-CH_3), 2.38-2.44 (m, 2H), 1.80-1.83 (m, 2H), 1.72-1.78 (m, 2H); ^13C NMR (150 MHz, CDCl_3): δ 174.3 (C=O), 156.8 (C-2), 156.1 (C-6), 145.6 (C-4), 144.6 (C-9), 140.8 (C-1’), 133.2 (Ph-C), 131.0 (C-8), 130.3 (Ph-C), 126.4 (C-7), 122.9 (Ph-C), 122.0 (Ph-C), 120.7 (Ph-C), 119.6 (C-10), 104.5 (C-3), 100.2 (C-5), 67.6 (C-12), 51.7 (COO-CH_3), 33.5, 28.2, 25.1, 21.4 (C-11). ESI-HRMS (+): m/z [M+H]^+ calculated for C_{22}H_{23}Cl_2N_3O_3^+, 433.1080, found, 433.1077.
Spectra data of compounds 11b~11d

5-((4-((3,4-dichlorophenyl)amino)-2-methylquinolin-6-yl)oxy)pentanoic acid (11b). White solid; Yield: 90.5 %; HPLC purity: 95.6 % ($t_R = 22.57$ min); mp: 217-218 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 7.71 (d, $J = 9.2$ Hz, 1H, H-8), 7.69 (d, $J = 2.4$ Hz, 1H, H-5), 7.60 (d, $J = 2.6$ Hz, 1H, Ph-H), 7.56 (d, $J = 8.8$ Hz, 1H, Ph-H), 7.39 (dd, $J = 2.5$, 8.7 Hz, 1H, Ph-H), 7.28 (dd, $J = 2.6$, 9.2 Hz, 1H, H-7), 6.95 (s, 1H, H-3), 4.10 (t, $J = 6.7$ Hz, 2H, 12-CH$_2$), 2.44 (s, 3H, 11-CH$_3$), 2.09 (t, $J = 7.2$ Hz, 2H), 1.76 (quin, $J = 7.0$ Hz, 2H); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 177.2 (C=O), 156.4 (C-2), 155.8 (C-6), 146.1 (C-4), 144.6 (C-9), 142.5 (C-1’), 131.9 (Ph-C), 131.3 (C-8), 130.2 (Ph-C), 123.9 (C-7), 122.8 (Ph-C), 121.9 (Ph-C), 121.2 (Ph-C), 119.9 (C-10), 103.9 (C-3), 102.3 (C-5), 68.2 (C-12), 37.1 (CH$_2$-COOH), 28.6, 25.2, 22.7 (C-11). ESI-HRMS (-): m/z [M-H$^-$] calculated for C$_{21}$H$_{19}$Cl$_2$N$_2$O$_3^-$, 417.0778, found, 417.0774.

6-((4-((3,4-dichlorophenyl)amino)-2-methylquinolin-6-yl)oxy)hexanoic acid (11c). White solid; Yield: 91.0 %; HPLC purity: 93.5 % ($t_R = 23.16$ min); mp: 165-167 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 7.78 (d, $J = 9.2$ Hz, 1H, H-8), 7.70 (s, 1H, H-5), 7.64 (d, $J = 8.6$ Hz, 1H, Ph-H), 7.59 (d, $J = 2.4$ Hz, 1H, Ph-H), 7.36-7.40 (m, 2H), 6.93 (s, 1H, H-3), 4.12 (t, $J = 6.4$ Hz, 2H, 12-CH$_2$), 2.49 (s, 3H, 11-CH$_3$), 2.25 (t, $J = 7.3$ Hz, 2H), 1.77-1.83 (m, 2H), 1.59 (quin, $J = 7.5$ Hz, 2H), 1.44-1.51 (m, 2H); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 174.9 (C=O), 156.3 (C-2), 155.8 (C-6), 147.2 (C-4), 141.6 (C-9), 132.1 (C-3’), 131.6 (C-8), 130.8 (C-5’), 125.2 (C-7), 123.7 (Ph-C), 122.5 (Ph-C), 122.1 (Ph-C), 119.5 (C-10), 103.6 (C-3), 102.5 (C-5), 68.4 (C-12), 34.1 (CH$_2$-COOH), 28.9, 25.7, 24.8, 24.2 (C-11). ESI-HRMS (-): m/z [M-H$^-$] calculated for C$_{22}$H$_{21}$Cl$_2$N$_2$O$_3^-$, 431.0935, found, 431.0929.

7-((4-((3,4-dichlorophenyl)amino)-2-methylquinolin-6-yl)oxy)heptanoic acid (11d). White solid; Yield: 87.8 %; HPLC purity: 97.2 % ($t_R = 24.19$ min); mp: 246-247 °C. $^1$H NMR (600 MHz, DMSO-d$_6$): $\delta$ 7.72 (d, $J = 9.0$ Hz, 1H, H-8), 7.65 (d, $J = 2.6$ Hz, 1H, H-5), 7.58 (d, $J = 8.6$ Hz, 1H, Ph-H), 7.56 (d, $J = 2.6$ Hz, 1H, Ph-H), 7.36 (dd, $J = 2.6$, 8.6 Hz, 1H, Ph-H), 7.30 (dd, $J = 2.6$, 9.2 Hz, 1H, H-7), 6.95 (s, 1H, H-3), 4.10 (t, $J = 6.4$ Hz, 2H, 12-CH$_2$), 2.45 (s, 3H, 11-CH$_3$), 2.16 (t, $J = 7.3$ Hz, 2H), 1.73-1.81 (m, 2H), 1.52 (quin, $J = 7.4$ Hz, 2H), 1.44 (quin, $J = 7.5$ Hz, 2H), 1.31-1.38 (m, 2H); $^{13}$C NMR (150 MHz, DMSO-d$_6$): $\delta$ 175.7 (C=O), 156.5 (C-2), 155.9 (C-6), 146.0 (C-4), 160.3 (C-3), 131.9 (Ph-C), 131.3 (C-8), 130.2 (Ph-C), 123.9 (C-7), 122.8 (Ph-C), 121.9 (Ph-C), 121.2 (Ph-C), 119.9 (C-10), 103.9 (C-3), 102.3 (C-5), 68.2 (C-12), 37.1 (CH$_2$-COOH), 28.6, 25.2, 22.7 (C-11).
144.6 (C-9), 142.4 (C-1’), 131.9 (Ph-C), 131.4 (C-8), 130.3 (Ph-C), 124.1 (C-7), 122.7 (Ph-C), 121.8 (Ph-C), 121.2 (Ph-C), 119.9 (C-10), 104.1 (C-3), 102.3 (C-5), 68.4 (C-12), 35.0 (CH₂-COOH), 29.0, 28.9, 25.8, 25.3, 25.2 (C-11). ESI-HRMS (-): m/z [M-H]⁻ calculated for C₂₃H₂₃Cl₂N₂O₃, 445.1091, found, 445.1087.

Spectra data of compounds 12a~12b

4-((4-((3,4-dichlorophenyl)amino)-2-methylquinolin-6-yl)oxy)-N-hydroxybutanamide (12a). White solid; Yield: 35.5 %; HPLC purity: 90.6 % (tR = 20.75 min); mp: 177-178 °C. ¹H NMR (600 MHz, CD₃OD): δ 7.68 (d, J = 9.4 Hz, 1H, H-8), 7.61 (d, J = 1.7 Hz, 1H, H-5), 7.48-7.51 (m, 2H, Ph-H), 7.37 (dd, J = 2.2, 9.2 Hz, 1H, H-7), 7.28 (dd, J = 2.1, 8.5 Hz, 1H, Ph-H), 6.77 (s, 1H, H-3), 4.09 (t, J = 6.1 Hz, 2H, 12-CH₂), 2.46 (s, 3H, 11-CH₃), 2.25 (t, J = 7.2 Hz, 2H, 14-CH₂), 2.07 (quin, J = 6.6 Hz, 2H, 13-CH₂); ¹³C NMR (150 MHz, CD₃OD): δ 170.9 (C=O), 157.1 (C-2), 154.6 (C-6), 150.6 (C-4), 139.1 (C-9), 138.7 (C-1’), 132.9 (Ph-C), 131.1 (C-8), 128.2 (Ph-C), 125.1 (C-7), 124.6 (Ph-C), 123.8 (Ph-C), 123.1 (Ph-C), 118.6 (C-10), 101.7 (C-3), 101.5 (C-5), 67.4 (C-12), 28.8 (C-14), 24.8 (C-13), 20.8 (C-11). ESI-HRMS (-): m/z [M-H]⁻ calculated for C₂₀H₁₈Cl₂N₂O₃, 418.0731, found, 418.0728.

5-((4-((3,4-dichlorophenyl)amino)-2-methylquinolin-6-yl)oxy)-N-hydroxypentanamide (12b). White solid; Yield: 50.2 %; HPLC purity: 91.3 % (tR = 21.36 min); mp: 168-170 °C. ¹H NMR (600 MHz, CD₃OD): δ 7.82 (d, J = 9.2 Hz, 1H, H-8), 7.80 (d, J = 2.4 Hz, 1H, H-5), 7.64-7.68 (m, 2H, Ph-H), 7.54 (dd, J = 2.4, 9.2 Hz, 1H, H-7), 7.43 (dd, J = 2.4, 8.6 Hz, 1H, Ph-H), 6.86 (s, 1H, H-3), 4.21 (t, J = 6.1 Hz, 2H, 12-CH₂), 2.61 (s, 3H, 11-CH₃), 2.23 (t, J = 7.1 Hz, 2H), 1.84-1.95 (m, 4H); ¹³C NMR (150 MHz, CD₃OD): δ 171.2 (C=O), 157.6 (C-2), 153.7 (C-6), 152.0 (C-4), 138.5 (C-9), 136.6 (C-1’), 133.0 (Ph-C), 131.3 (C-8), 129.2 (Ph-C), 125.9 (C-7), 124.5 (Ph-C), 123.9 (Ph-C), 123.1 (Ph-C), 118.3 (C-10), 101.8 (C-3), 101.1 (C-5), 68.1 (C-12), 32.0 (C-15), 28.1 (C-13), 22.0 (C-14), 19.9 (C-11). ESI-HRMS (-): m/z [M-H]⁻ calculated for C₂₁H₂₀Cl₂N₂O₃, 432.0887, found, 432.0882.
The $^1$H and $^{13}$C NMR spectra of compounds 2, 3, 7a~7B, 9a~9e, 10a~10d, 11a~11d and 12a~12d
The $^1$H-NMR Spectra of compound 3

The $^{13}$C-NMR Spectra of compound 3
The $^1$H-NMR Spectra of compound 7a / AV6

The $^{13}$C-NMR Spectra of compound 7a / AV6
The $^1$H-NMR Spectra of compound 7b

The $^{13}$C-NMR Spectra of compound 7b
The $^1$H-NMR Spectra of compound 7c

The $^{13}$C-NMR Spectra of compound 7c
The $^1$H-NMR Spectra of compound 7d

The $^{13}$C-NMR Spectra of compound 7d
The $^1$H-NMR Spectra of compound 7e

The $^{13}$C-NMR Spectra of compound 7e
The \textsuperscript{1}H-NMR Spectra of compound 7f

The \textsuperscript{13}C-NMR Spectra of compound 7f
The $^1$H-NMR Spectra of compound 7g

The $^{13}$C-NMR Spectra of compound 7g
The $^1$H-NMR Spectra of compound $7h$

The $^{13}$C-NMR Spectra of compound $7h$
The $^1$H-NMR Spectra of compound 7i

The $^{13}$C-NMR Spectra of compound 7i
The $^1$H-NMR Spectra of compound 7j

The $^{13}$C-NMR Spectra of compound 7j
The $^1$H-NMR Spectra of compound 7k

The $^{13}$C-NMR Spectra of compound 7k
The $^1$H-NMR Spectra of compound 71

The $^{13}$C-NMR Spectra of compound 71
The $^1$H-NMR Spectra of compound 7m

The $^{13}$C-NMR Spectra of compound 7m
The $^1$H-NMR Spectra of compound 7n

The $^{13}$C-NMR Spectra of compound 7n
The $^1$H-NMR Spectra of compound 7o

The $^{13}$C-NMR Spectra of compound 7o
The $^1$H-NMR Spectra of compound 7p

The $^{13}$C-NMR Spectra of compound 7p
The $^1$H-NMR Spectra of compound 7q

The $^{13}$C-NMR Spectra of compound 7q
The $^1$H-NMR Spectra of compound $7r$

The $^{13}$C-NMR Spectra of compound $7r$
The $^1$H-NMR Spectra of compound 7s

The $^{13}$C-NMR Spectra of compound 7s
The $^1$H-NMR Spectra of compound 7t

The $^{13}$C-NMR Spectra of compound 7t
The \( ^1H \)-NMR Spectra of compound \( 7u \)

The \( ^13C \)-NMR Spectra of compound \( 7u \)
The $^1$H-NMR Spectra of compound 7v

The $^{13}$C-NMR Spectra of compound 7v
The $^1$H-NMR Spectra of compound 7w

The $^{13}$C-NMR Spectra of compound 7w
The $^1$H-NMR Spectra of compound 7x

The $^{13}$C-NMR Spectra of compound 7x
The $^1\text{H}$-NMR Spectra of compound 7y

The $^{13}\text{C}$-NMR Spectra of compound 7y
The $^1$H-NMR Spectra of compound 7z

The $^{13}$C-NMR Spectra of compound 7z
The $^1\text{H}$-NMR Spectra of compound 7A

The $^{13}\text{C}$-NMR Spectra of compound 7A
The $^1$H-NMR Spectra of compound 7B

The $^{13}$C-NMR Spectra of compound 7B
The $^1$H-NMR Spectra of compound 9a

The $^{13}$C-NMR Spectra of compound 9a
The $^1$H-NMR Spectra of compound 9b

The $^{13}$C-NMR Spectra of compound 9b
The $^1$H-NMR Spectra of compound 9c

The $^{13}$C-NMR Spectra of compound 9c
The $^1$H-NMR Spectra of compound 9d

The $^{13}$C-NMR Spectra of compound 9d
The $^1$H-NMR Spectra of compound 9e

The $^{13}$C-NMR Spectra of compound 9e
The $^1$H-NMR Spectra of compound 10a

The $^{13}$C-NMR Spectra of compound 10a
The $^1$H-NMR Spectra of compound 10b

The $^{13}$C-NMR Spectra of compound 10b
The $^1$H-NMR Spectra of compound 10c

The $^{13}$C-NMR Spectra of compound 10c
The $^1$H-NMR Spectra of compound 10d

The $^{13}$C-NMR Spectra of compound 10d
The $^1$H-NMR Spectra of compound 11a

The $^{13}$C-NMR Spectra of compound 11a
The $^1$H-NMR Spectra of compound 11b

The $^{13}$C-NMR Spectra of compound 11b
The $^1$H-NMR Spectra of compound 11c

The $^{13}$C-NMR Spectra of compound 11c
The $^1$H-NMR Spectra of compound 11d

The $^{13}$C-NMR Spectra of compound 11d
The $^1$H-NMR Spectra of compound 12a

The $^{13}$C-NMR Spectra of compound 12a
The $^1$H-NMR Spectra of compound 12b

The $^{13}$C-NMR Spectra of compound 12b
The $^1$H-NMR Spectra of compound 12c

The $^{13}$C-NMR Spectra of compound 12c
The $^1$H-NMR Spectra of compound 12d

The $^{13}$C-NMR Spectra of compound 12d