

Supplementary Data

7-Acetamido-1,8-naphthyridin-4 (1H)-one: Brown solid. Yield: 84%; mp: 298-299 °C. IR (KBr, cm^{-1}): 3331 ($\nu_{\text{N-H}}$); 2953 ($\nu_{\text{C-H}}$); 1674 ($\nu_{\text{C=O}}$); 1611 ($\nu_{\text{C=O}}$); 1516; 1306; 1196; 835; 598. ^1H NMR: (CDCl_3 , 300 MHz, δ ppm): 2.14 (s, 3H, $-\text{CH}_3$); 6.02 (d, $J=7,6$ Hz, 1H, CH_{AR}); 7.80 (d, $J=7,6$ Hz, 1H, CH_{AR}); 8.03 (d, $J=8,8$ Hz, 1H, CH_{AR}); 8.37 (d, $J=8,4$ Hz, 1H, CH_{AR}); 10.69 (s, 1H, $-\text{NH}$); 11.64 (d, $J=4,8$ Hz, 1H, $-\text{NH}$). ^{13}C NMR: (CDCl_3 , 75 MHz, δ ppm): 24.91 ($-\text{CH}_3$); 110.50; 111.09; 117.53; 137.68; 140.47; 150.20; 154.78; 170.76 ($-\text{C}=\text{O}$); 177.59 ($-\text{C}=\text{O}$).

3-Trifluoromethyl-N-(5-chloro-1,8-naphthyridin-2-yl)-benzenesulfonamide: Light yellow solid. Yield: 53%, mp: 222.2-224 °C. IR (ATR/FTIR, cm^{-1}): 3265 ($\nu_{\text{N-H}}$), 3066 ($\nu_{\text{C-H}}$), 1645 ($\nu_{\text{N-H}}$), 1600, 1534, 1468 and 1410 ($\nu_{\text{C=C}}$), 1323 ($\nu_{\text{S=O}}$), 1122 ($\nu_{\text{S=O}}$), 1100 ($\nu_{\text{Ar-Cl}}$), 826 ($\nu_{\text{C-H}}$). ^1H NMR ($\text{DMSO-}d_6$, 300 MHz, δ ppm): 7.33 (d, $J=9.72$ Hz, 1 H, CH_{AR}); 7.50 (d, $J=5.14$ Hz, 1 H, CH_{AR}); 7.71-7.78 (m, 1 H, CH_{AR}); 7.88-7.93 (m, 1 H, CH_{AR}); 8.19-8.27 (m, 2H, CH_{AR}); 8.30 (d, $J=9.72$ Hz, 1 H, CH_{AR}); 8.59 (d, $J=5.14$ Hz, 1 H, CH_{AR}); 11.47 (s, 1 H, N-H). ^{13}C NMR ($\text{DMSO-}d_6$, 75 MHz, δ ppm): 107.83; 112.65; 112.88; 113.26; 121.36; 121.97; 124.67; 125.58; 129.51; 129.94; 130.37; 130.81; 131.29; 133.65; 136.65; 137.50; 140.86; 144.10; 149.05; 154.98; 172.95. ^{19}F NMR ($\text{DMSO-}d_6$, 282 MHz, δ ppm): -58.5 ($\nu_{\text{Ar-CF}_3}$). HR-MS (ESI, TOF): $\text{C}_{15}\text{H}_9\text{N}_3\text{O}_2\text{SClF}_3$, theoretical $[\text{M}]^+$ $m/z=388.0130$; experimental $[\text{M}]^+$ $m/z=388.0129$.