Supplementary note

Synthesis of 3021 and 3027 (CZM)

8,8’-Disulfanediylbis(N-(thiazol-2-yl)quinoline-3-carboxamide) (3021). To a solution of 8,8’-disulfanediylbis(quinoline-3-carboxylic acid) (0.2 g, 0.98 mmol) in DMF (10 mL) was added HATU (0.56 g, 1.46 mmol) and Et₃N (0.204 mL, 1.46 mmol). The mixture was stirred at 60° C for ~15 min under a nitrogen atmosphere. To this solution was added thiazol-2-amine (0.146 mmol) and the solution was stirred for an additional 12 h. After 12 h, the reaction mixture was diluted with H₂O, which resulted in the formation of a precipitate. The precipitate was isolated through vacuum filtration to afford final product. Yield = 0.12 g (43%). ¹H NMR (400 MHz, DMSO-d₆): δ 9.51 (s, 1H), 9.15 (s, 1H), 7.98 (d, J = 8.0 Hz, 1H), 7.88 (d, J = 8.0 Hz, 1H), 7.64-7.59 (m, 2H), 7.32 (d, J = 2.4 Hz, 1H). HR-ESI-MS calcd for [C₂₆H₁₆N₆O₂S₄Na]⁺: 595.0110; Found: 595.0103.

8,8’-Disulfanediylbis(N-(2-(thiazol-2-yl)ethyl)quinoline-3-carboxamide) (3027, capzimin). To a solution of 8,8’-disulfanediylbis(quinoline-3-carboxylic acid) (0.2 g, 0.98 mmol) in DMF (10 mL) was added CDI (0.24 g, 1.46 mmol). The mixture was stirred at room temperature for ~15 min under a nitrogen atmosphere. To this solution was added 2-(thiazol-2-yl)ethan-1-amine (0.146 mmol) and the solution was stirred for an additional 12 h. After 12 h, the reaction mixture was diluted with H₂O, which resulted in the formation of a precipitate. The precipitate was isolated through vacuum filtration to afford final product. Yield = 0.18 g (57%). ¹H NMR (400 MHz, DMSO-d₆): δ 9.33 (s, 1H), 9.11 (t, J = 5.2 Hz, 1H), 8.86 (s, 1H), 7.95 (d, J = 8 Hz, 1H), 7.84 (d, J = 8 Hz, 1H), 7.74 (d, J = 3.2 Hz, 1H), 7.62-7.58 (m, 2H), 3.74 (q, 2H), 3.34 (t, 2H). HR-ESI-MS calcd for [C₃₀H₂₅N₆O₂S₄]⁺: 629.0916; Found: 629.0913.