

Supplementary Material:
Ammonium Salts of 5-(3-Chromenyl)-5*H*-chromeno[2,3-*b*]pyridines

Yuliya E. Ryzhkova, Artem N. Fakhrutdinov and Michail N. Elinson

NMR, IR and MS spectra for compounds 5a-d

Figure S1. ^1H NMR spectrum of diethylammonium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5a** in $\text{DMSO}-d_6$.

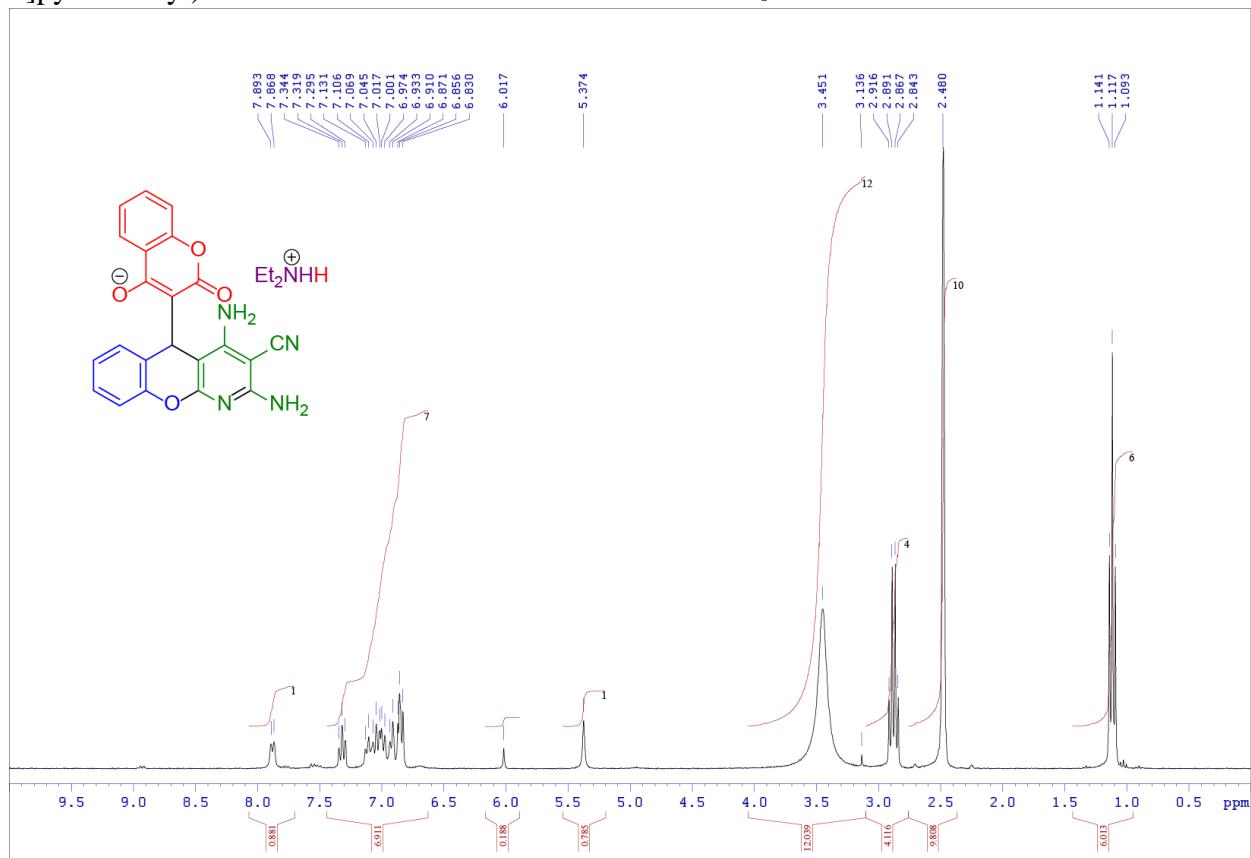


Figure S2. ^{13}C NMR spectrum of diethylammonium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5a** in $\text{DMSO}-d_6$.

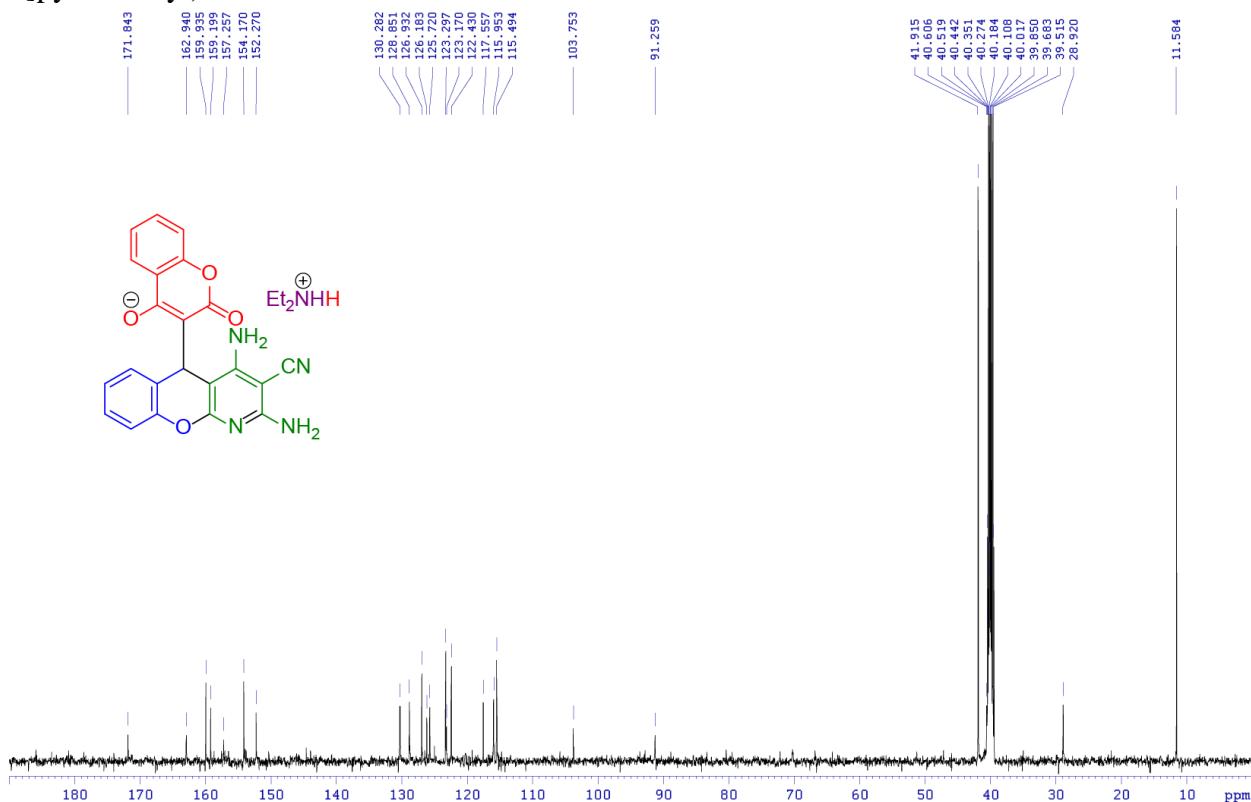
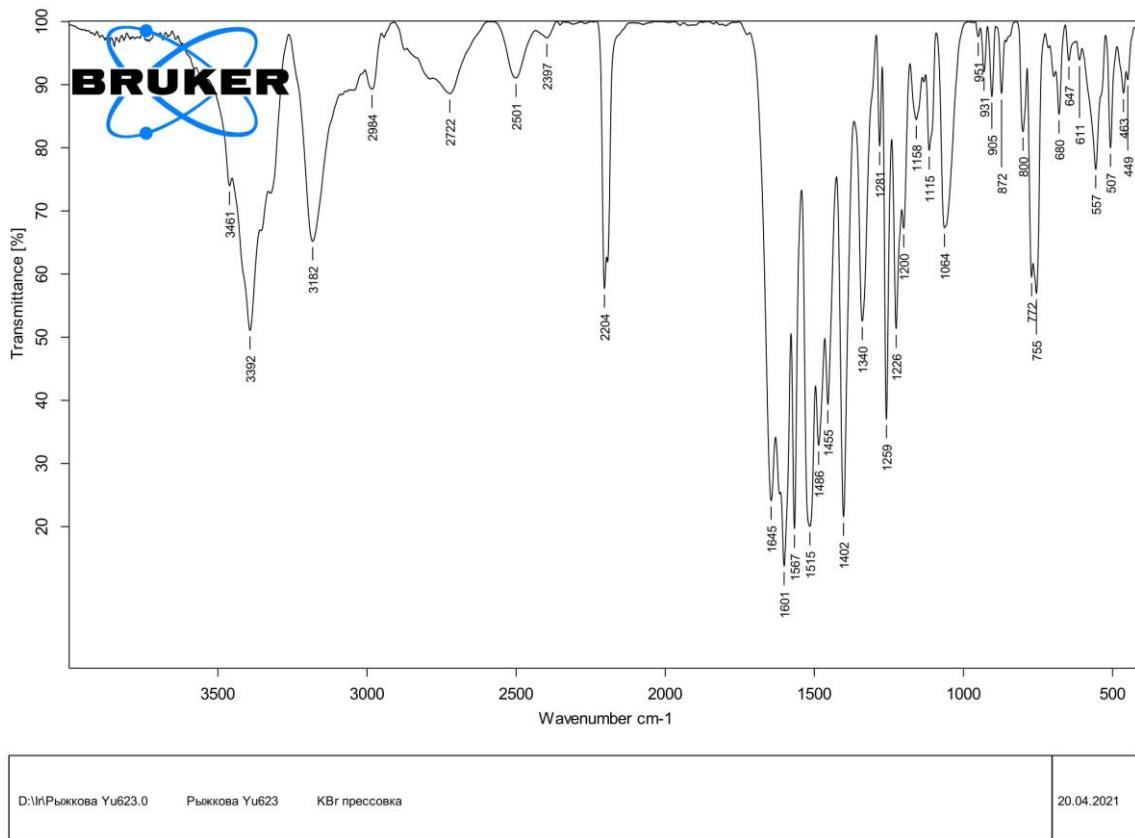


Figure S3. IR spectrum of diethylammonium 3-(2,4-diamino-3-cyano-5H-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5a** (KBr pellets).



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Figure S4. MS (EI) spectrum of diethylammonium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5a**.

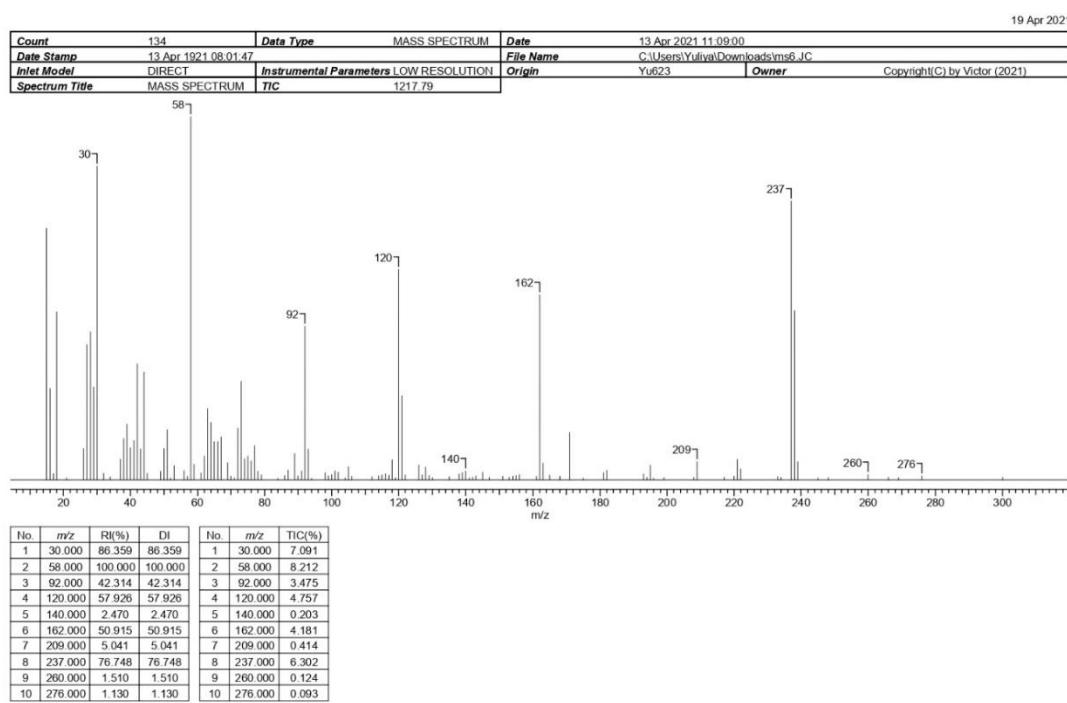


Figure S5. ^1H NMR spectrum of triethylammonium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5b** in $\text{DMSO}-d_6$.

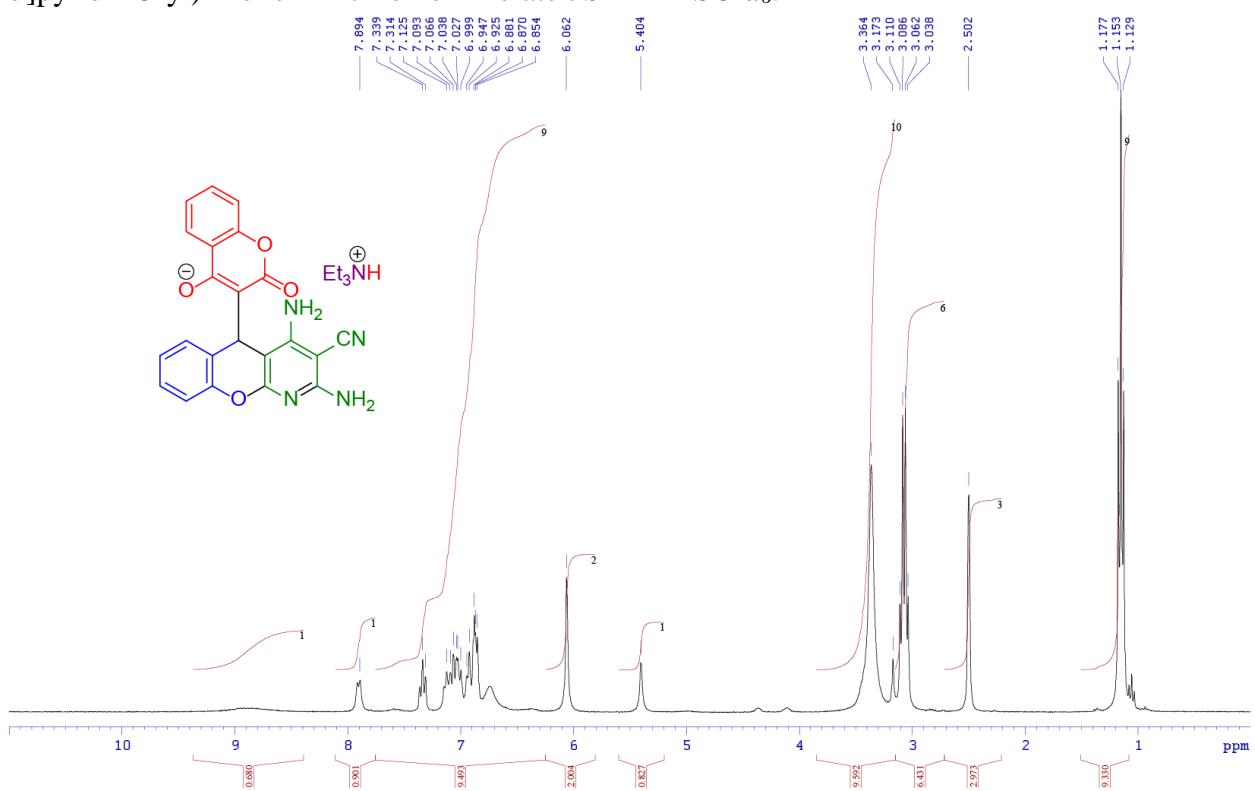


Figure S6. ^{13}C NMR spectrum of triethylammonium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5b** in $\text{DMSO}-d_6$.

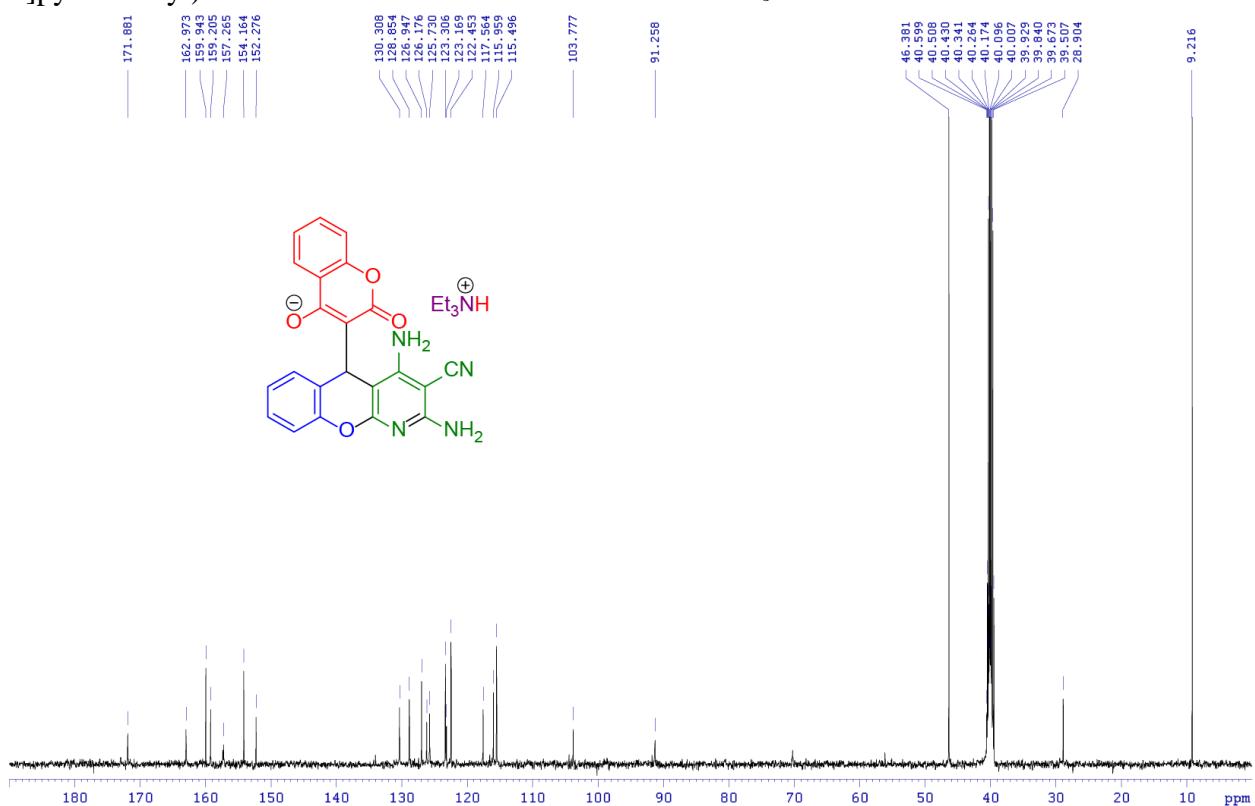
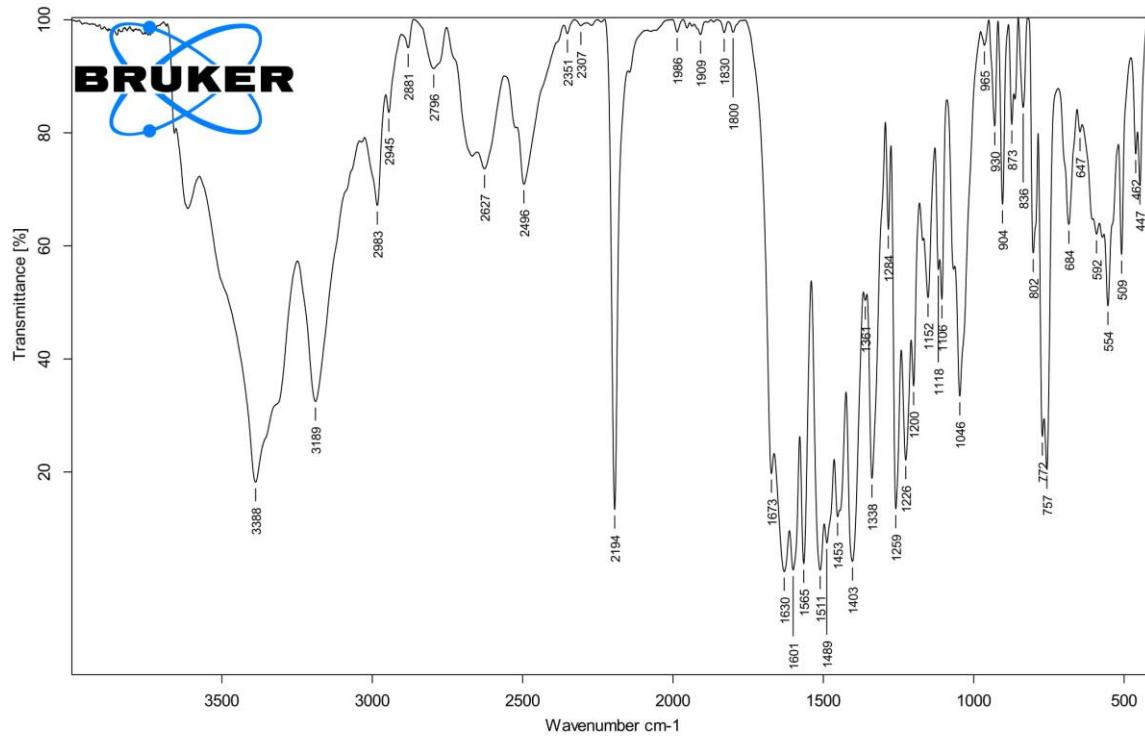


Figure S7. IR spectrum of triethylammonium 3-(2,4-diamino-3-cyano-5H-chromeno[2,3-b]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5b** (KBr pellets).



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Figure S8. MS (EI) spectrum of triethylammonium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-b]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5b**.

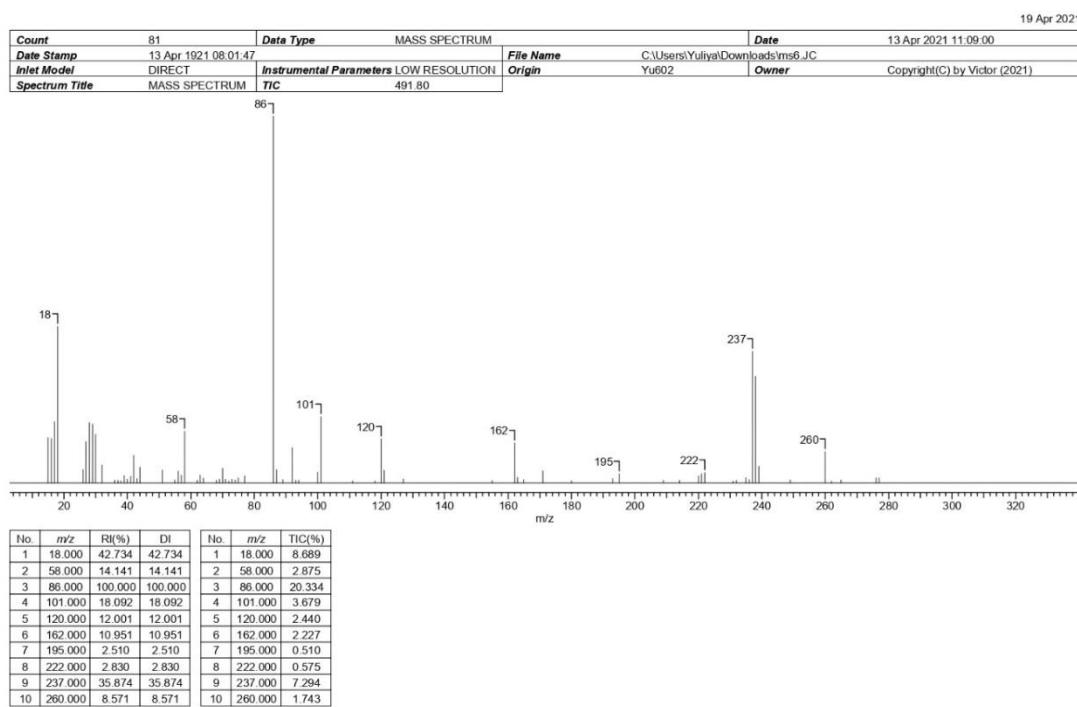


Figure S9. ^1H NMR spectrum of piperidin-1-ium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5c** in $\text{DMSO}-d_6$.

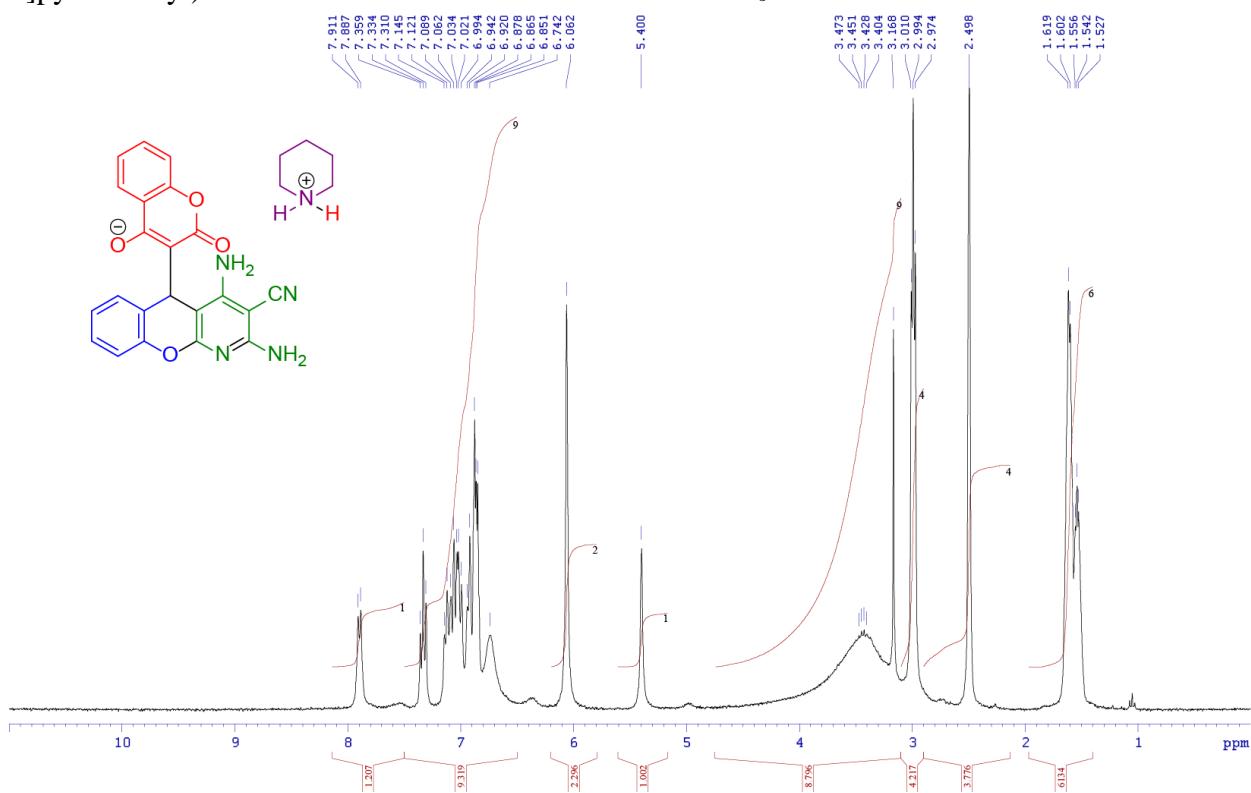


Figure S10. ^{13}C NMR spectrum of piperidin-1-ium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5c** in $\text{DMSO}-d_6$.

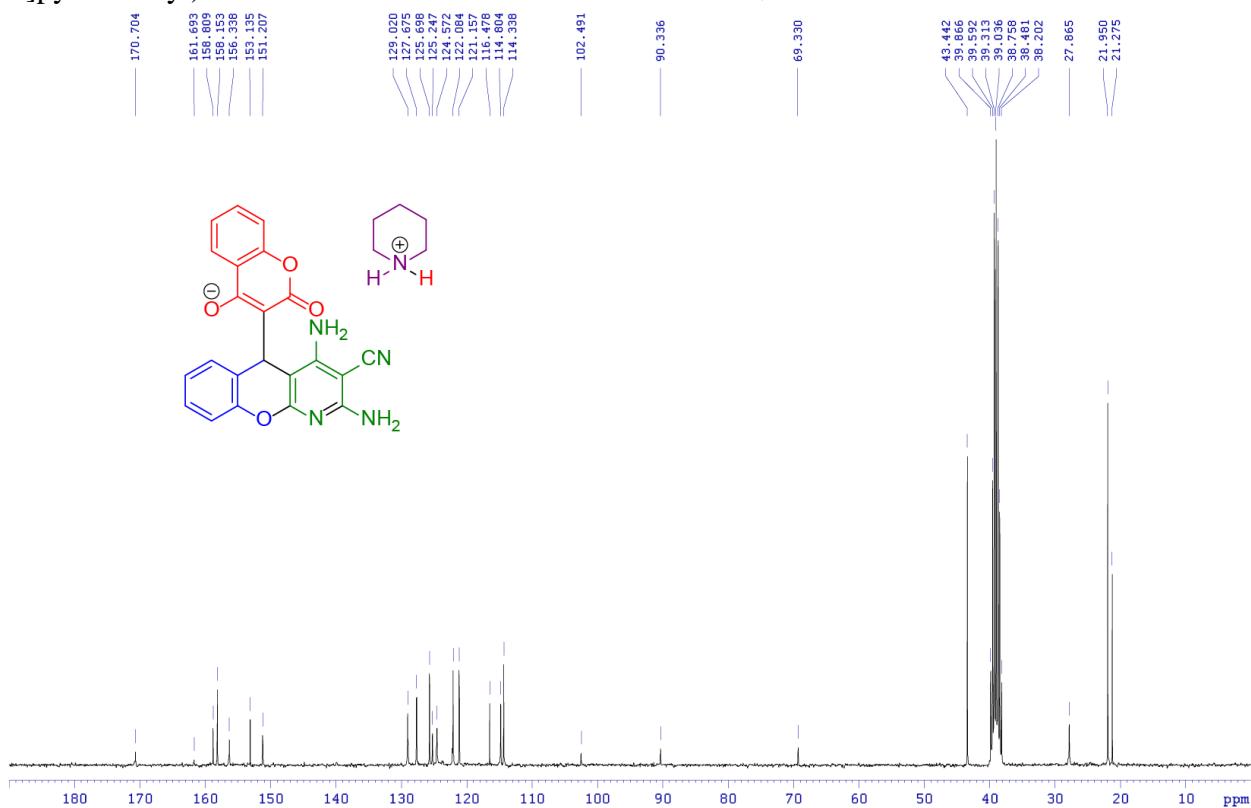
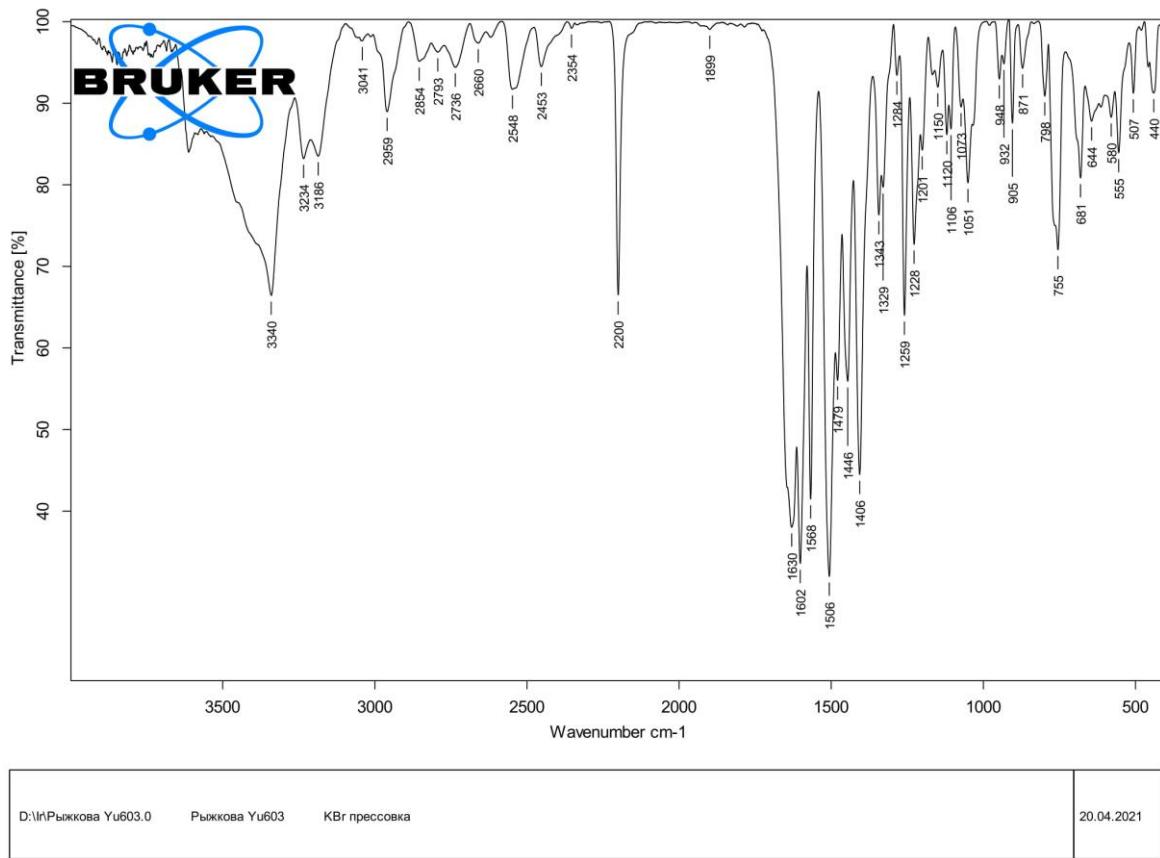


Figure S11. IR spectrum of piperidin-1-ium 3-(2,4-diamino-3-cyano-5H-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5c** (KBr pellets).



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Figure S12. MS (EI) spectrum of piperidin-1-ium 3-(2,4-diamino-3-cyano-5H-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5c**.

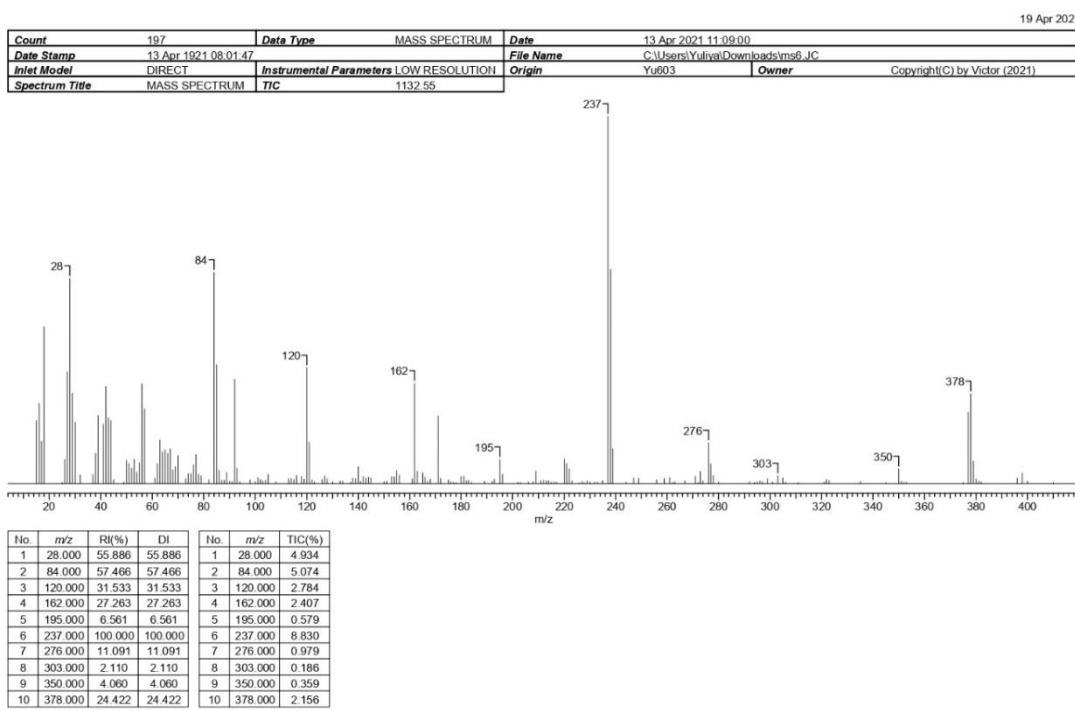


Figure S13. ^1H NMR spectrum of morpholin-4-ium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5d** in $\text{DMSO}-d_6$.

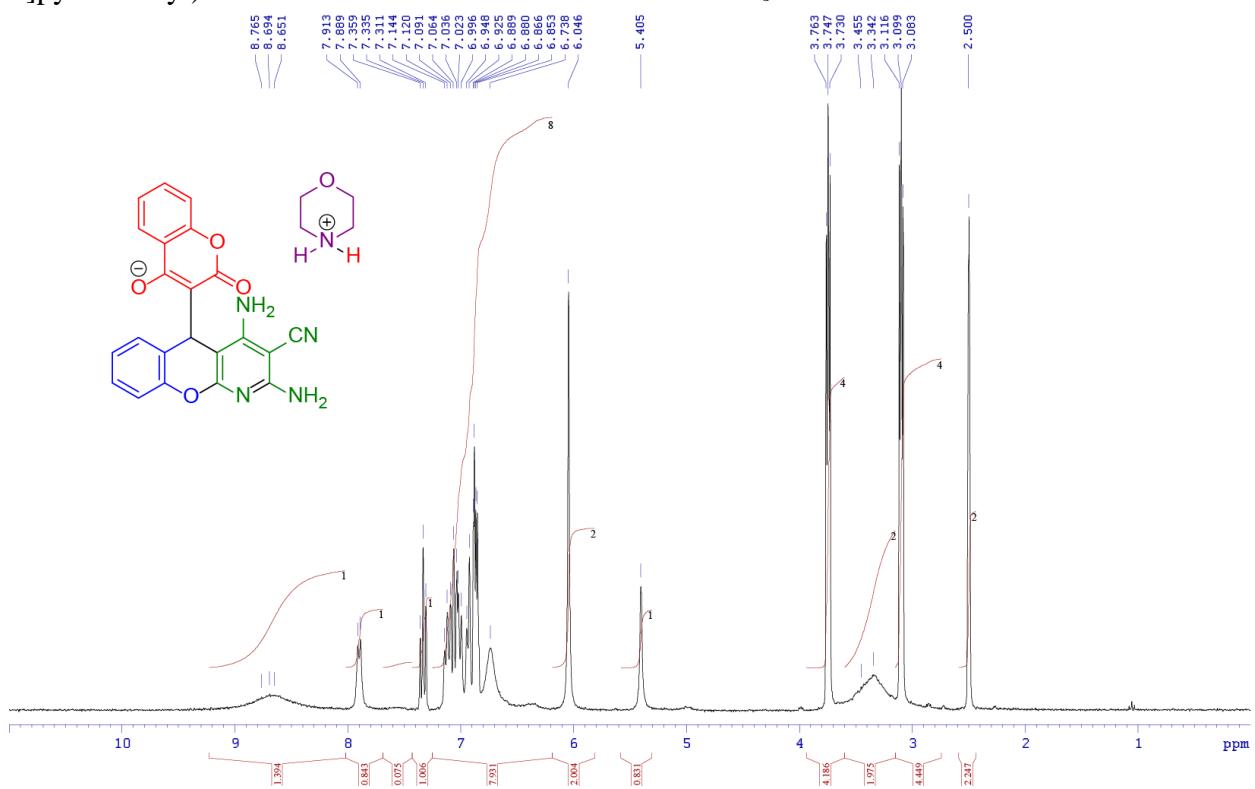


Figure S14. ^{13}C NMR spectrum of morpholin-4-ium 3-(2,4-diamino-3-cyano-5*H*-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5d** in $\text{DMSO}-d_6$.

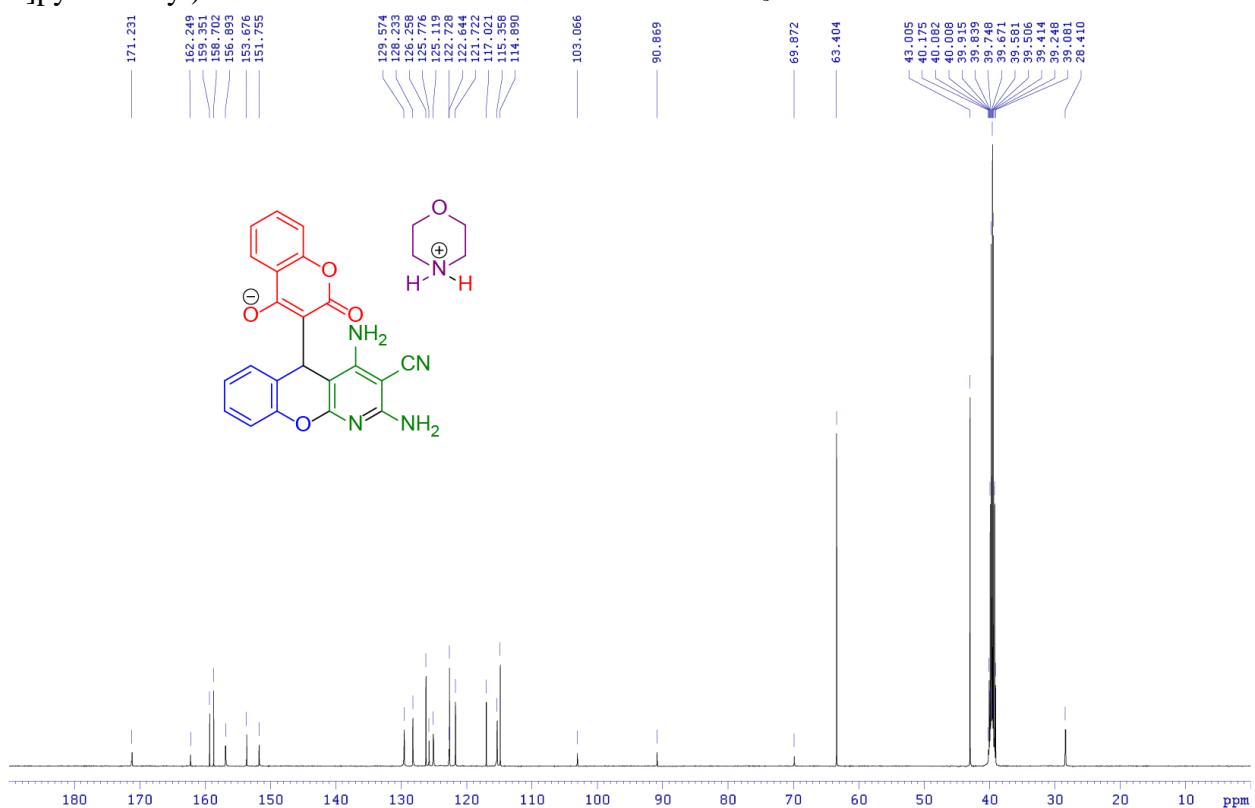
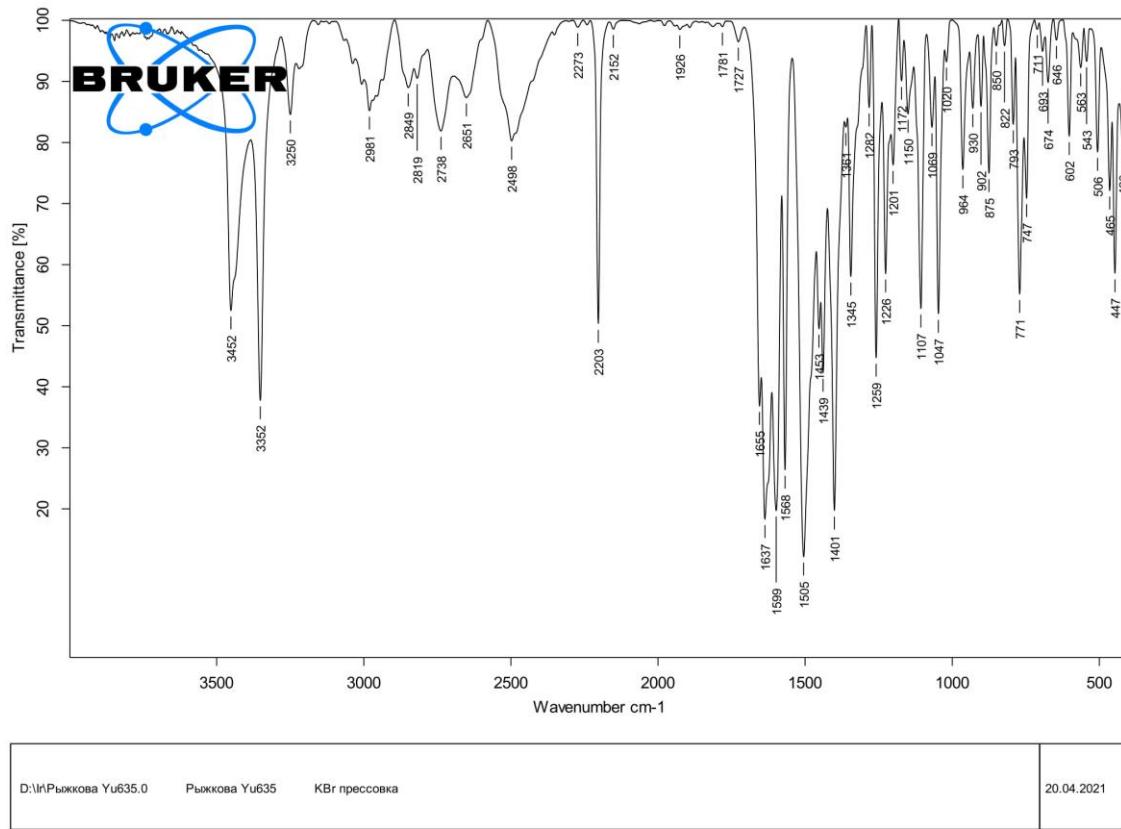


Figure S15. IR spectrum of morpholin-4-ium 3-(2,4-diamino-3-cyano-5H-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5d** (KBr pellets).



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Figure S16. MS (EI) spectrum of morpholin-4-ium 3-(2,4-diamino-3-cyano-5H-chromeno[2,3-*b*]pyridin-5-yl)-2-oxo-2*H*-chromen-4-olate **5d**.

