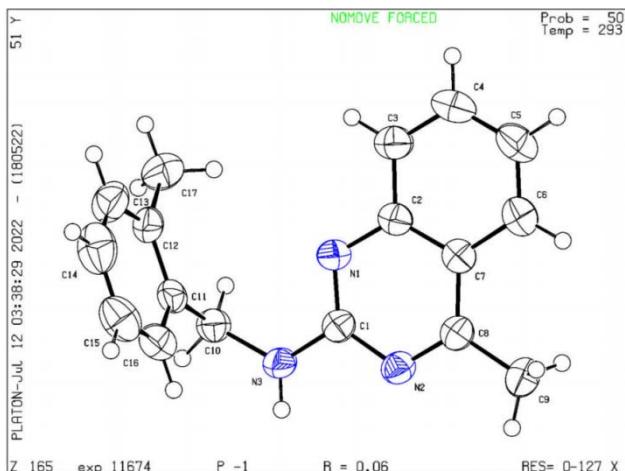


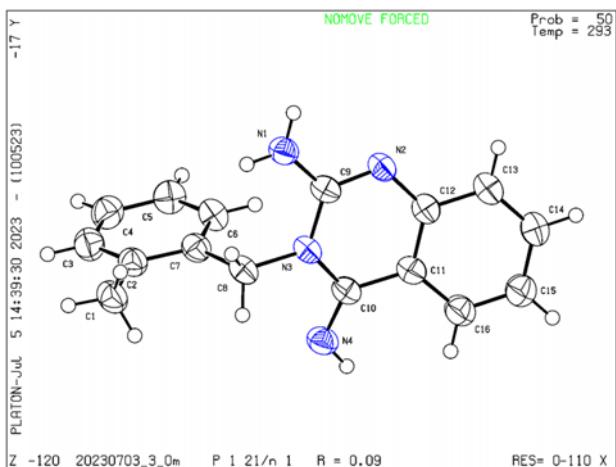
## The Crystallographic Data



The purified compound **3aa** is dissolved in a mixed solvent of acetonitrile, CHCl<sub>3</sub>, EtOAc and EtOH, placed in a dark cabinet to slowly evaporate. After several days, a white bulk crystal is obtained. The X-ray crystal-structure determinations were obtained on a Bruker APEX DUO CCD system.

**Table S1.** The crystallographic data of **3aa** (CCDC: 2294005).

Identification code	exp_11674
Empirical formula	C <sub>17</sub> H <sub>17</sub> N <sub>3</sub>
Formula weight	263.33
Temperature	293(2)
Crystal system	triclinic
Space group	P-1
Unit cell dimensions	a = 7.6755(14) Å α = 88.372(14)° . b = 8.2355(15) Å β = 72.051(16)° . c = 11.482(2) Å γ = 85.342(15)° .
Volume	688.2(2) Å <sup>3</sup>
Z	2
ρ <sub>calc</sub> g/cm <sup>3</sup>	1.271
μ /mm <sup>-1</sup>	0.077
F (000)	280.0
Crystal size	0.2 × 0.12 × 0.09 mm <sup>3</sup>
Radiation	Mo Kα (λ = 0.71073)
2θ range for data collection/°	4.962 to 54
Index ranges	-9 ≤ h ≤ 9, -10 ≤ k ≤ 10, -14 ≤ l ≤ 14
Reflections collected	5825
Independent reflections	2941[R <sub>int</sub> = 0.0370, R <sub>sigma</sub> = 0.0657]
Data / restraints / parameters	2941/0/183
Goodness-of-fit on F <sup>2</sup>	1.029
Final R indices [I>2sigma(I)]	R <sub>1</sub> = 0.0598, wR <sub>2</sub> = 0.1290
R indices (all data)	R <sub>1</sub> = 0.1004, wR <sub>2</sub> = 0.1571
Largest diff. peak and hole	0.15 and -0.24 e.Å <sup>-3</sup>



The purified compound **5ab** is dissolved in a mixed solvent of acetonitrile, CHCl<sub>3</sub>, EtOAc and EtOH, placed in a dark cabinet to slowly evaporate. After several days, a white bulk crystal is obtained. The X-ray crystal-structure determinations were obtained on a Bruker APEX DUO CCD system.

**Table S2.** The crystallographic data of **5ab** (CCDC: 2294029).

Identification code	20230703_3_0m
Empirical formula	C <sub>16</sub> H <sub>16</sub> N <sub>4</sub>
Formula weight	264.33
Temperature	293.30
Crystal system	monoclinic
Space group	P2 <sub>1</sub> /n
Unit cell dimensions	a = 11.3243(5) Å α = 90° . b = 9.3817(4) Å β = 108.821(2)° . c = 13.5342(6) Å γ = 90° .
Volume	1361.01(10) Å <sup>3</sup>
Z	4
ρ <sub>calc</sub> g/cm <sup>3</sup>	1.290
μ /mm-1	0.080
F (000)	560.0
Crystal size	0.2 × 0.14 × 0.12 mm <sup>3</sup>
Radiation	Mo Kα (λ = 0.71073)
2θ range for data collection/°	5.382 to 52.718
Index ranges	-14 ≤ h ≤ 13, 0 ≤ k ≤ 11, 0 ≤ l ≤ 16
Reflections collected	2729
Independent reflections	2729[R <sub>int</sub> = ?, R <sub>sigma</sub> = 0.0559]
Data / restraints / parameters	2729/0/183
Goodness-of-fit on F <sup>2</sup>	1.080
Final R indices [I>2σ(I)]	R <sub>1</sub> = 0.0942, wR <sub>2</sub> = 0.2251
R indices (all data)	R <sub>1</sub> = 0.1218, wR <sub>2</sub> = 0.2544
Largest diff. peak and hole	0.34 and -0.42 e.Å <sup>-3</sup>