

# Supporting Information

## ULTRAFAST AND DIASTEREOSELECTIVE SYNTHESIS OF 3-SPIROCYCLOPROPYL-2-OXINDOLES BEARING THREE CONTINUOUS ALL-CARBON QUATERNARY CENTERS

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**Table S1.** X-ray crystallographic data for **3w**

|                                       |   |
|---------------------------------------|---|
| compound name                         | <b>3w</b>   |
| chemical formula                      | C <sub>19</sub> H <sub>10</sub> N <sub>4</sub> O <sub>2</sub> |
| formula mass                          | 326.31  |
| crystal system                        | Triclinic   |
| space group                           | P-1   |
| a/Å                                   | 7.6960(15)  |
| b/Å                                   | 8.6280(17)  |
| c/Å                                   | 12.310(3)   |
| α/°                                   | 78.27(3)  |
| β/°                                   | 76.32(3)  |
| γ/°                                   | 70.37(3)  |
| V/Å <sup>3</sup>                      | 741.2(3)  |
| ρ <sub>calc</sub> /g cm <sup>-3</sup> | 1.462   |
| T/K                                   | 293   |
| Z                                     | 2   |
| radiation type                        | MoK <sub>α</sub>  |
| μ /mm <sup>-1</sup>                   | 0.099   |
| no. of reflections measured           | 2944  |
| no. of independent reflections        | 2724  |
| no of reflection (I > 2σ(I))          | 1987  |
| R <sub>int</sub>                      | 0.0912  |
| R <sub>1</sub> (I > 2σ(I))            | 0.0498  |
| wR(F <sup>2</sup> ) (I > 2σ(I))       | 0.1374  |
| R <sub>1</sub> (all data)             | 0.0716  |
| wR(F <sup>2</sup> ) (all data)        | 0.1527  |
| CCDC deposition number                | 1587297   |

Copies of NMR spectra of the products:

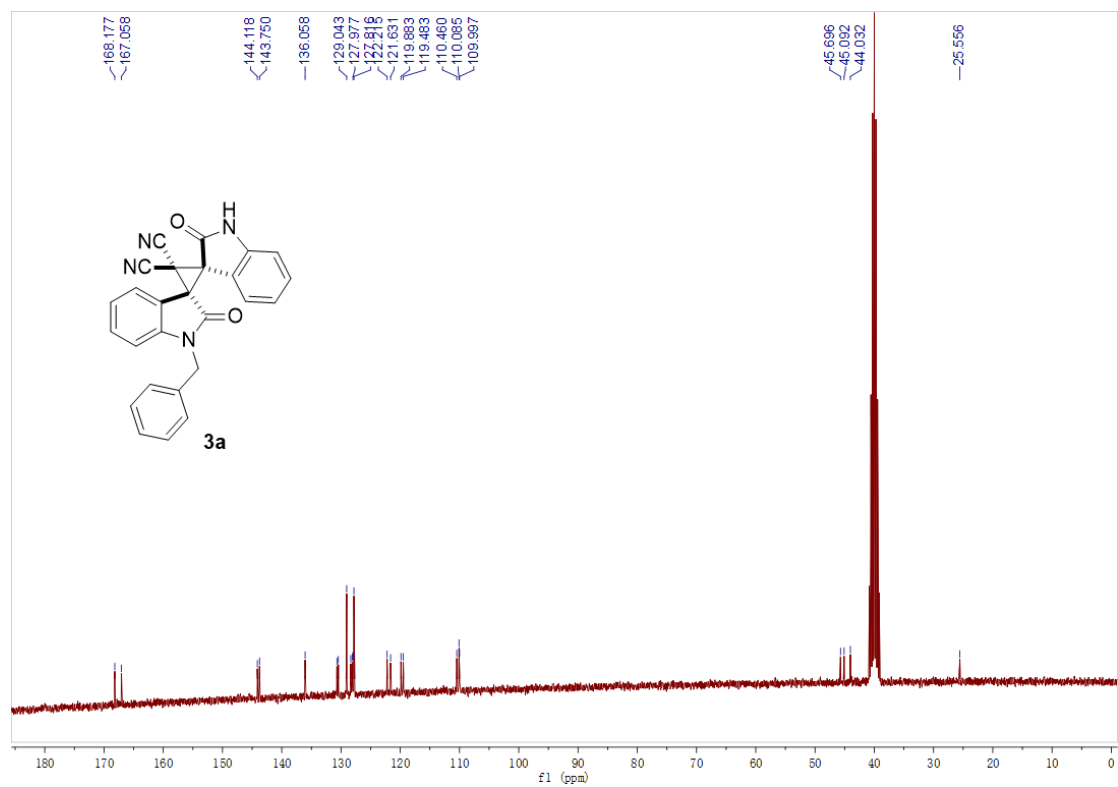
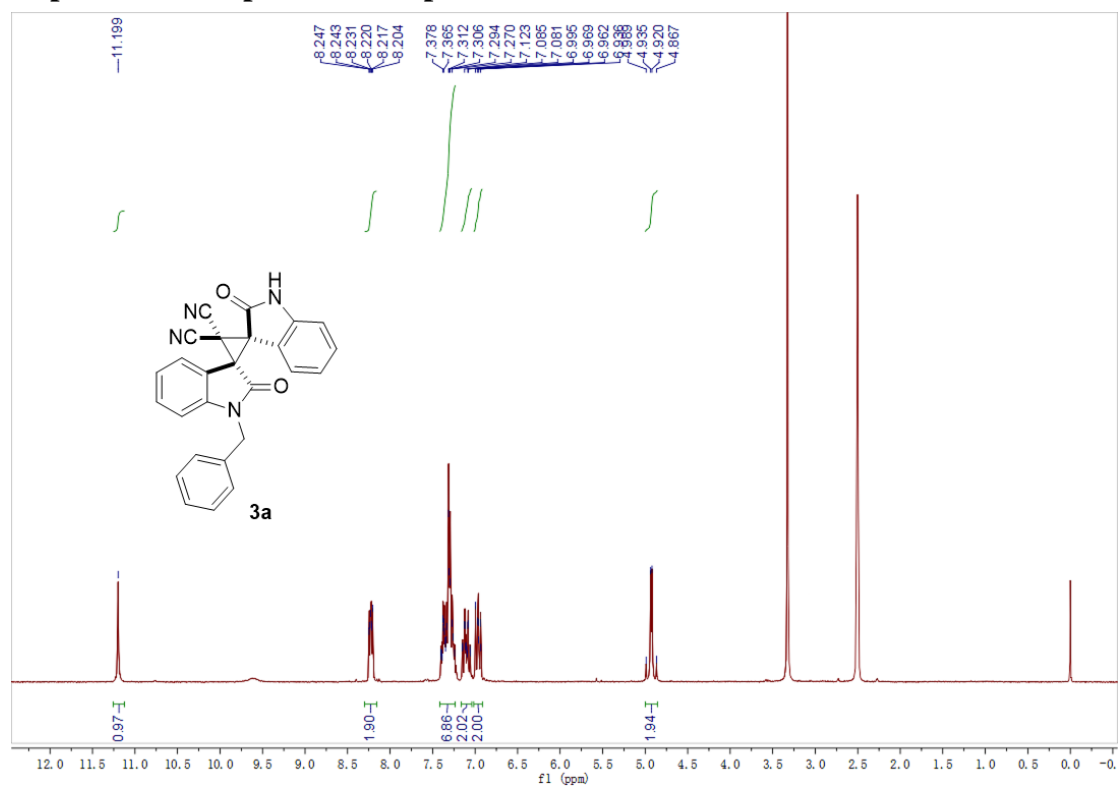


Figure S1. <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of 3a

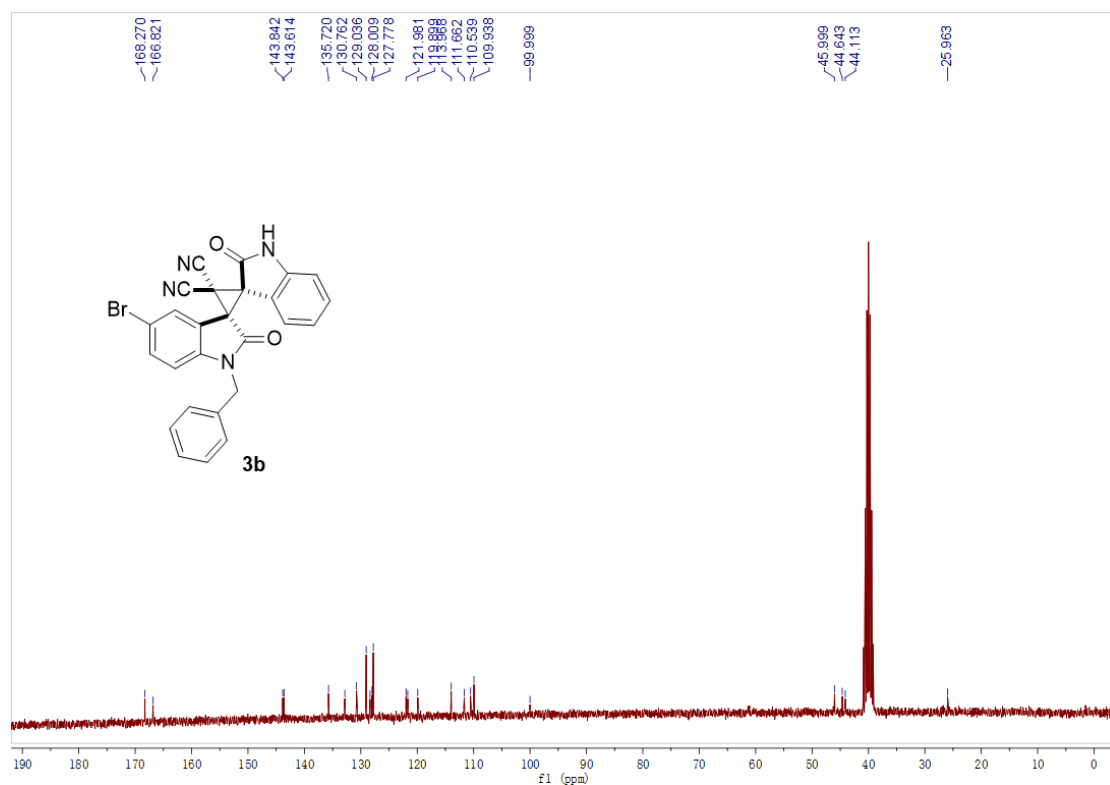
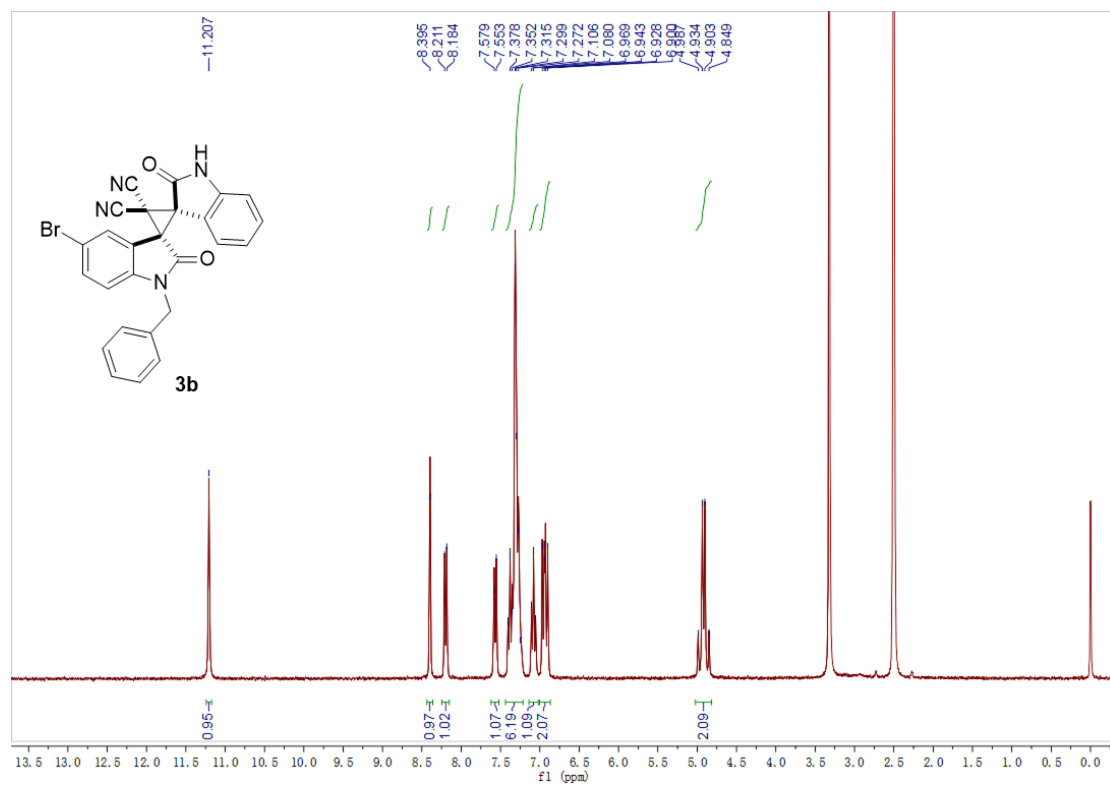
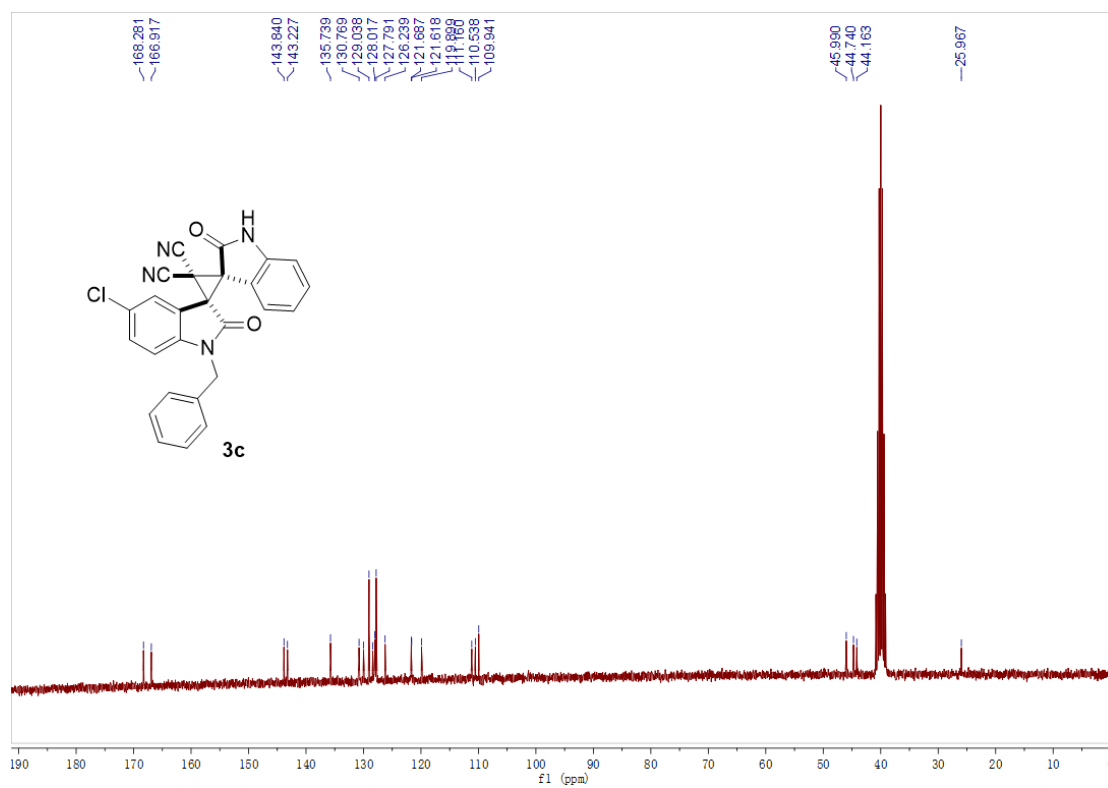
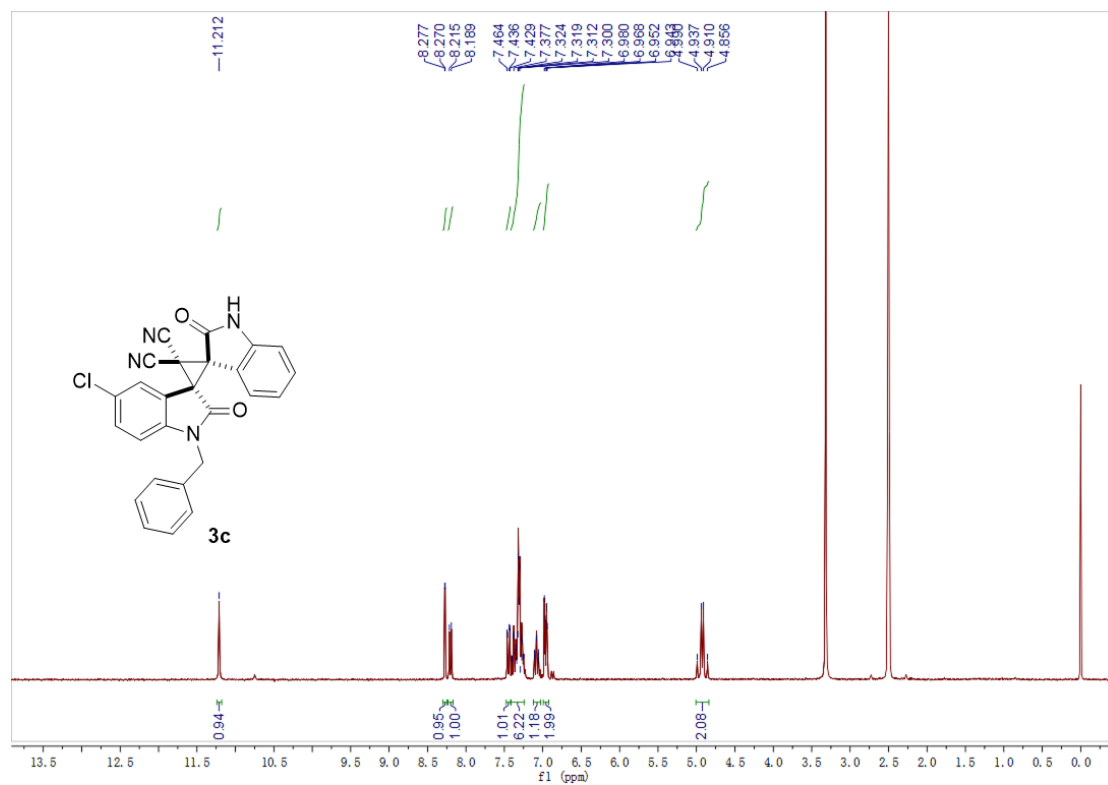
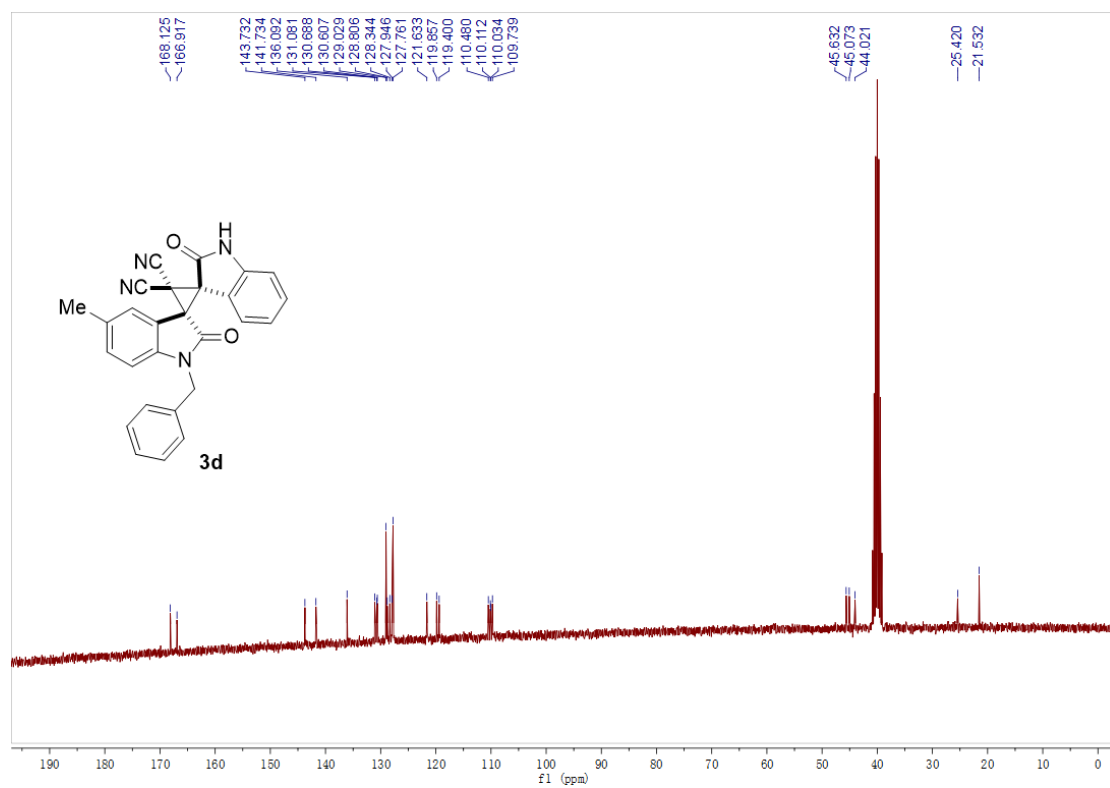
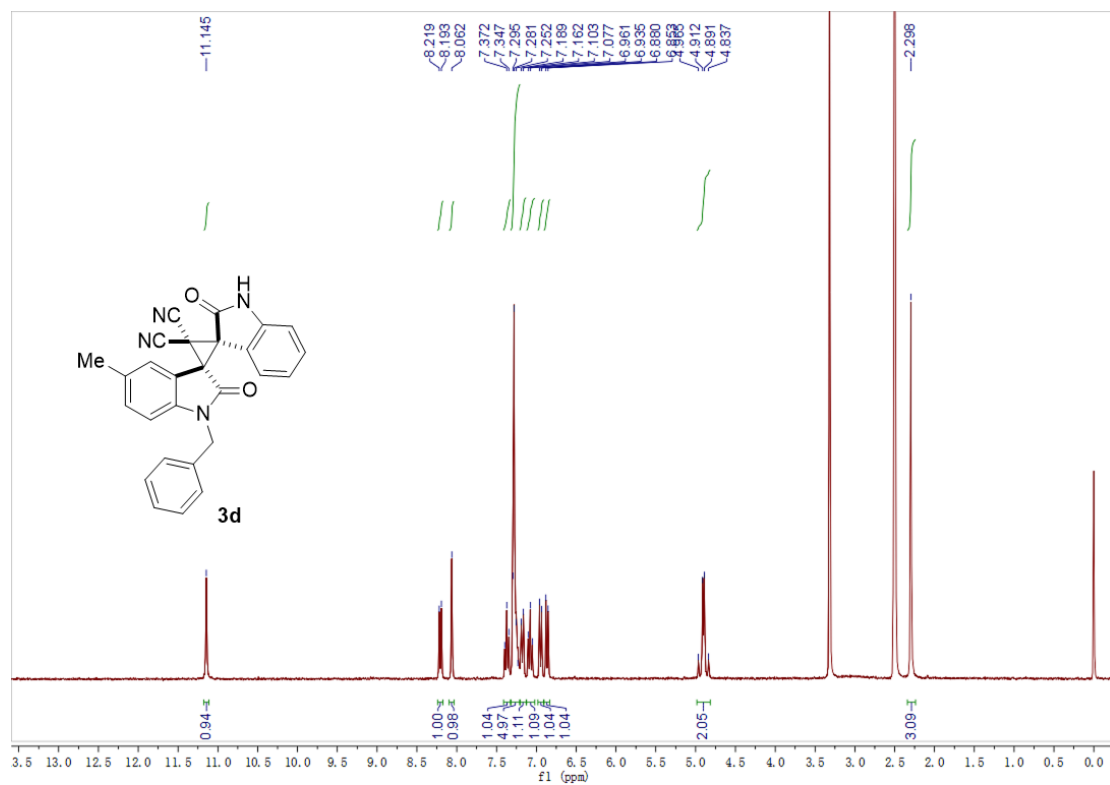


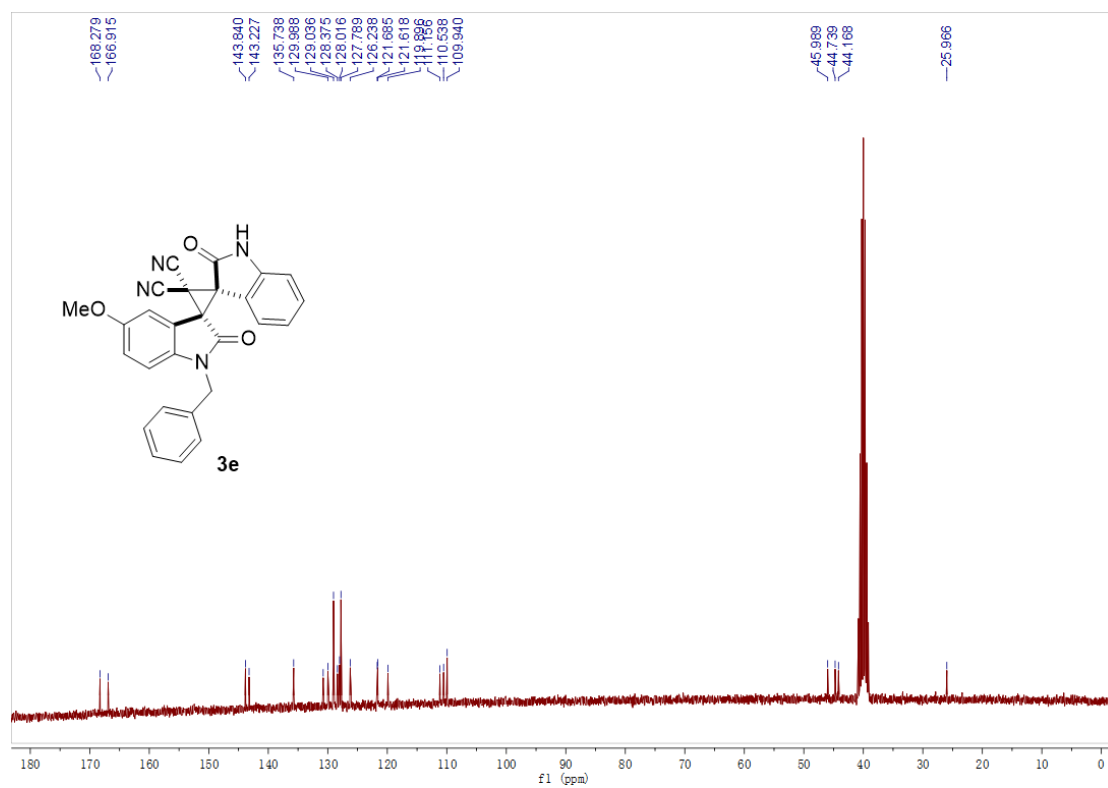
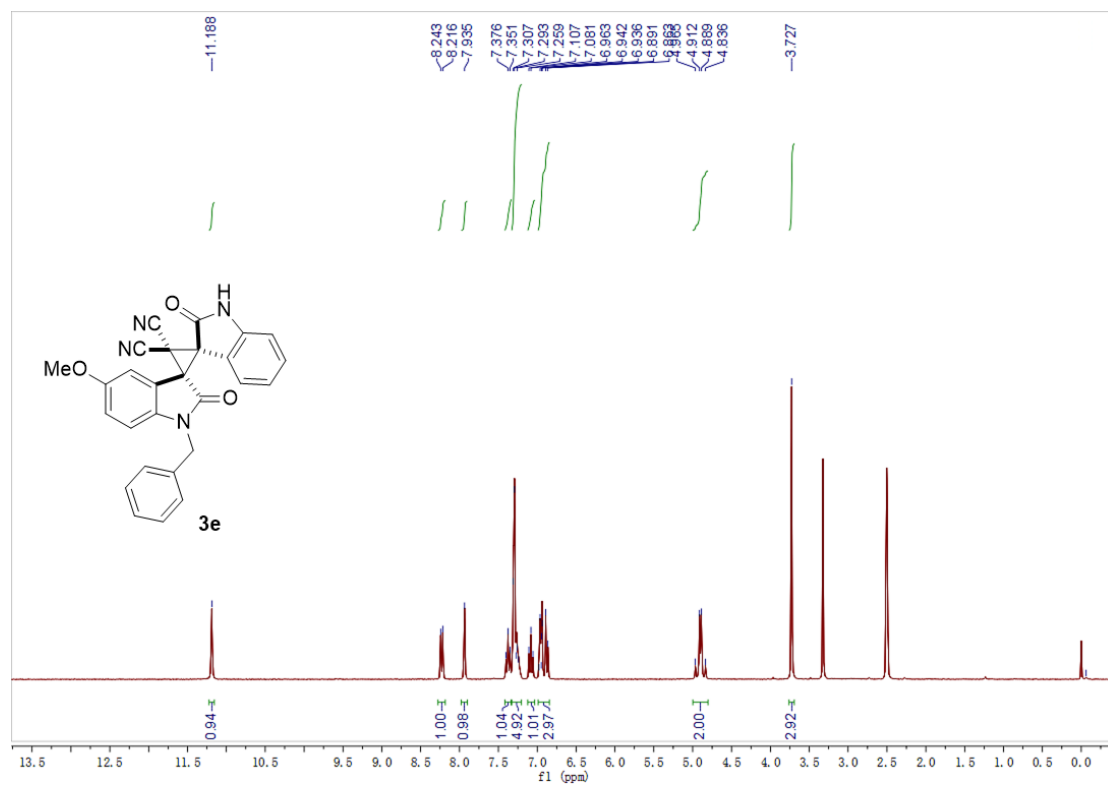
Figure S2.  $^1\text{H}$  (top) and  $^{13}\text{C}$  (bottom) NMRs of **3b**



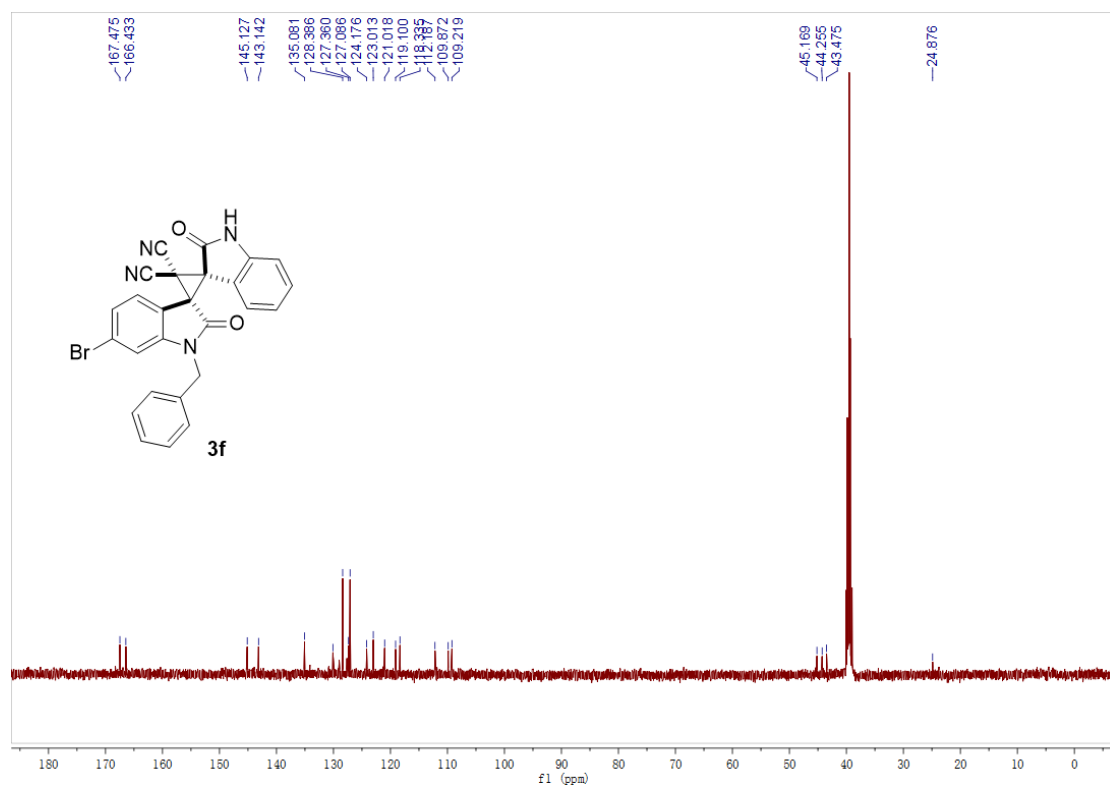
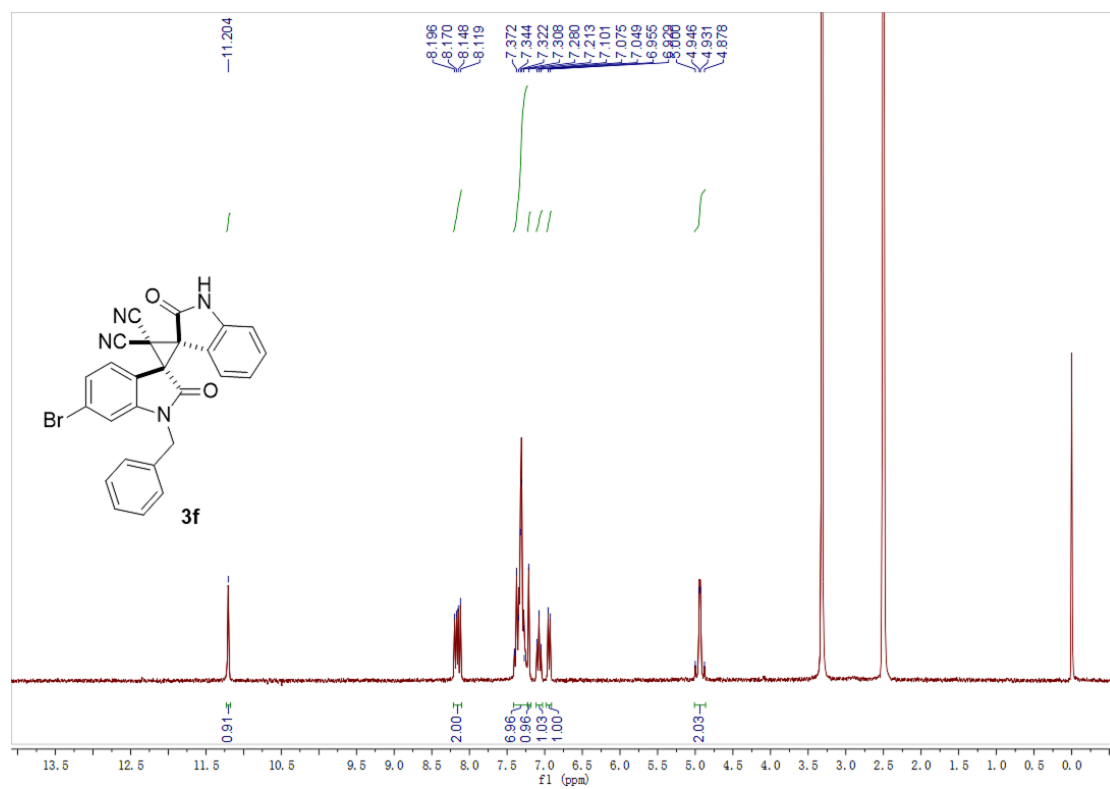
**Figure S3.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3c**



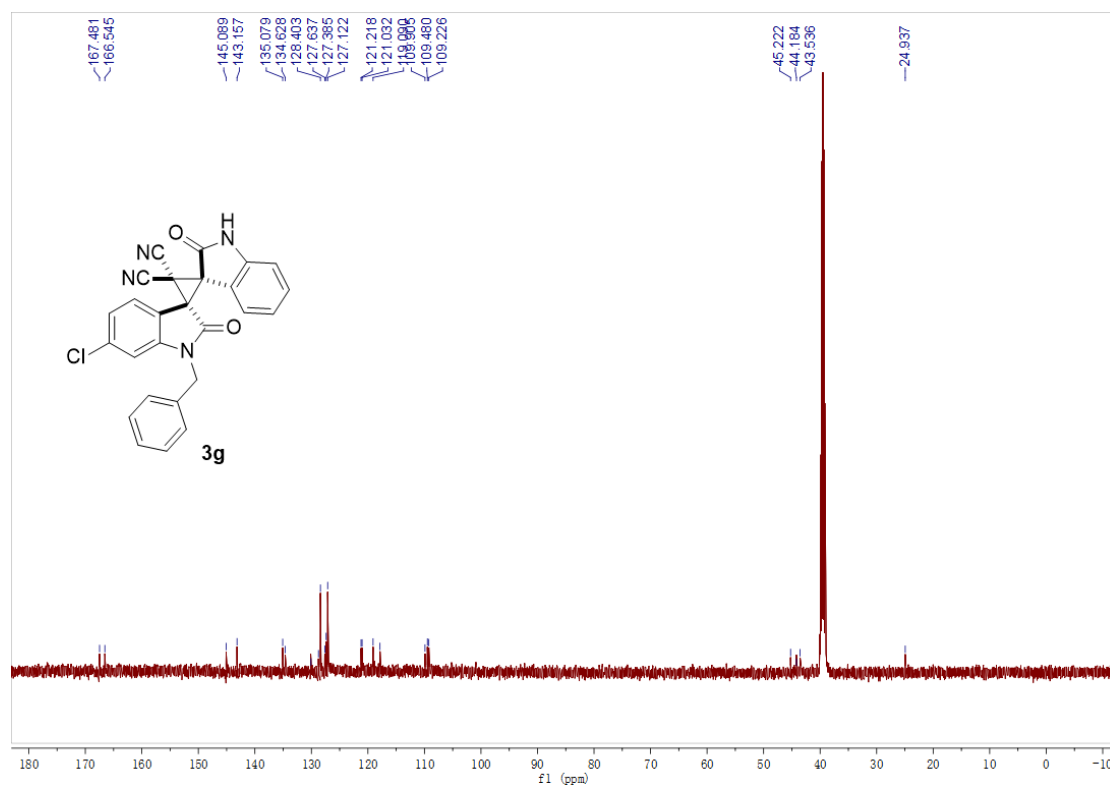
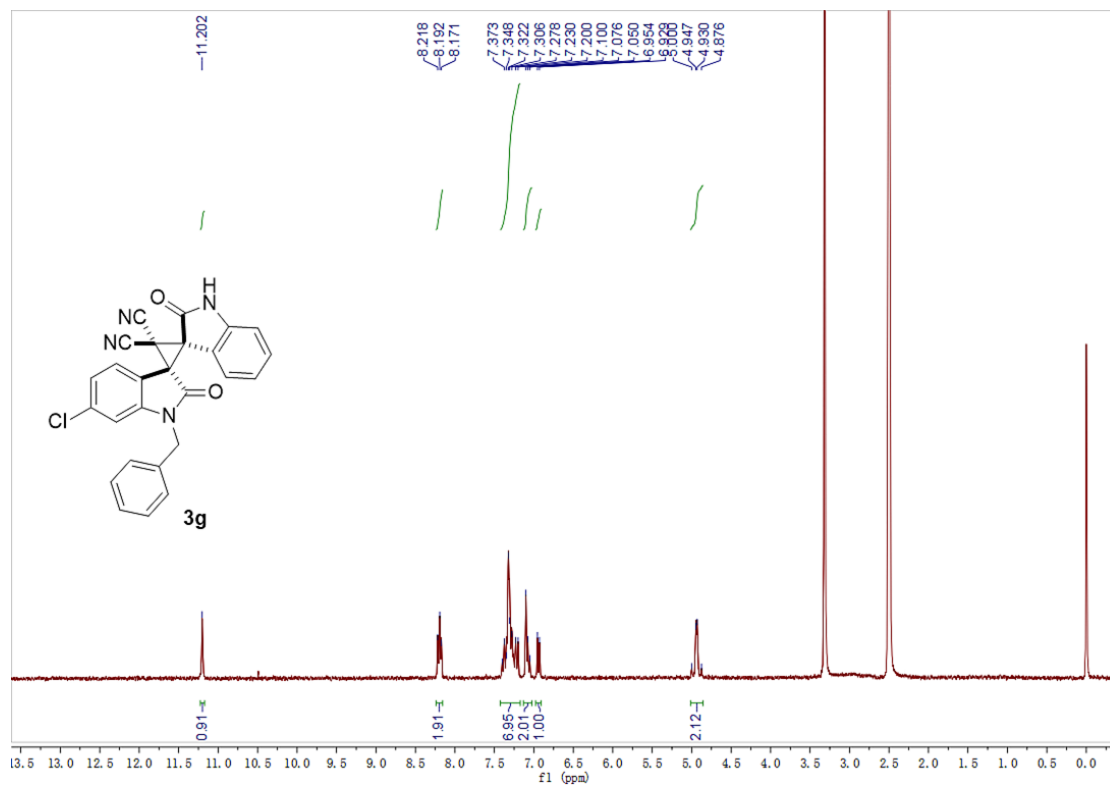
**Figure S4.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3d**



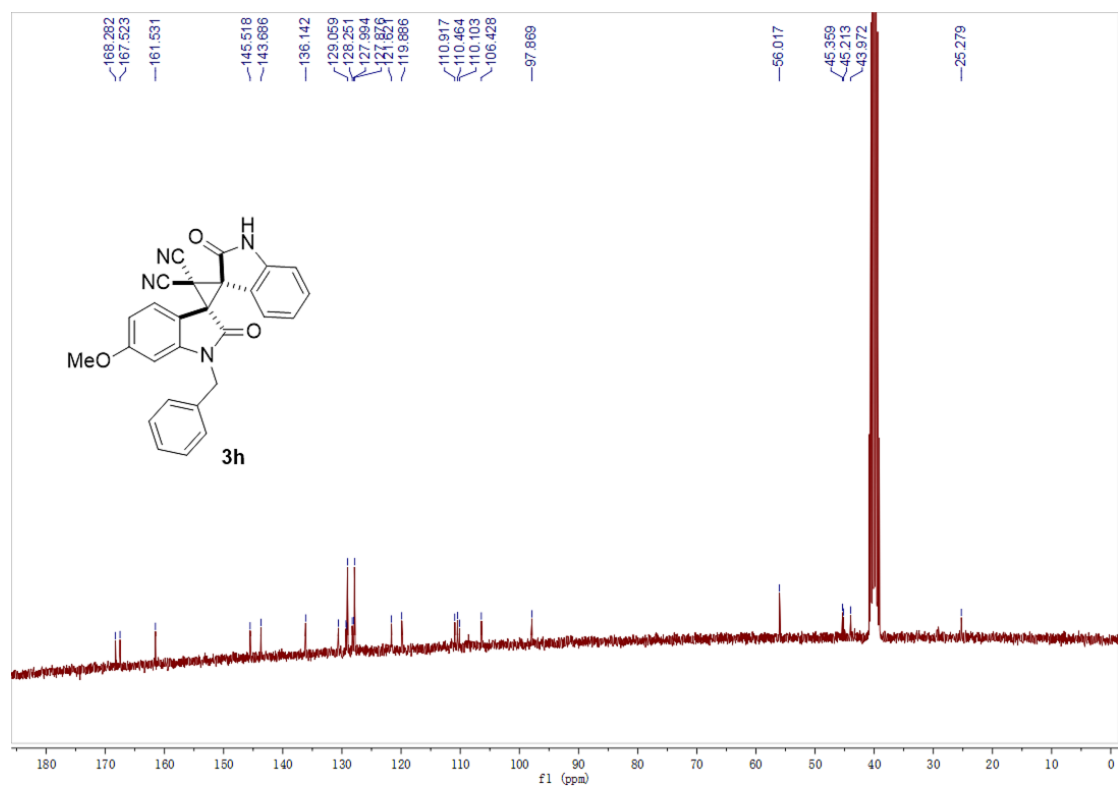
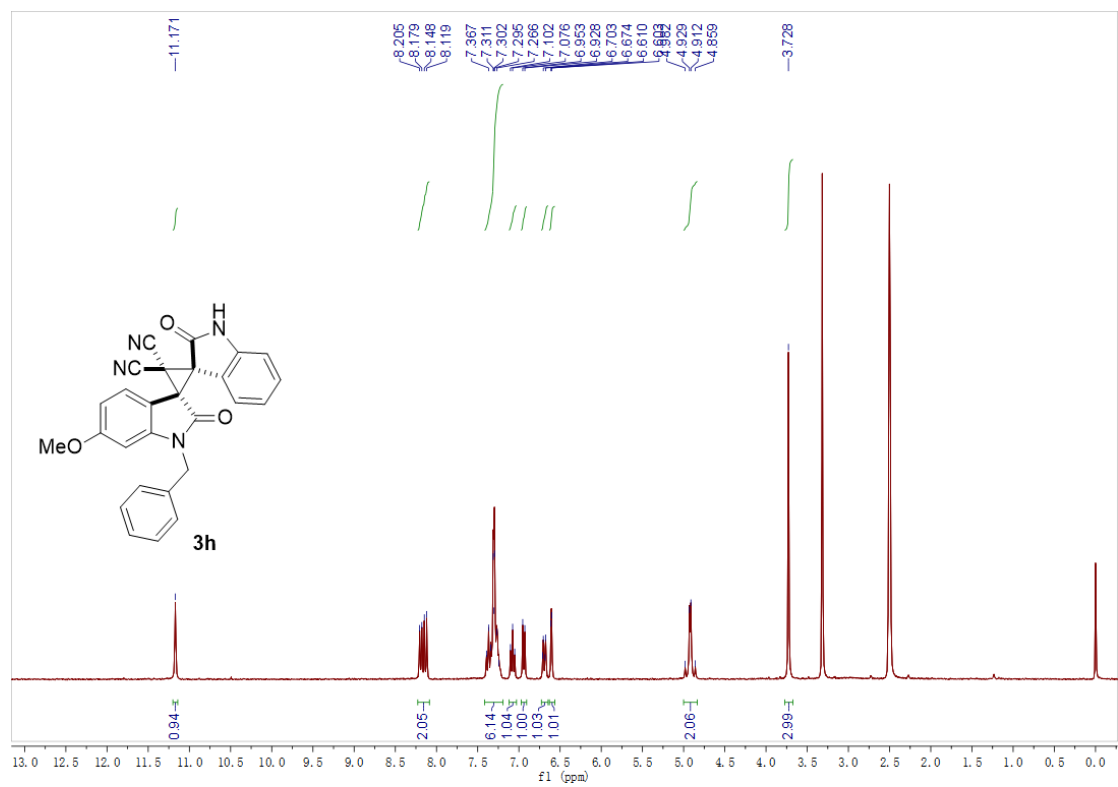
**Figure S5.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3e**



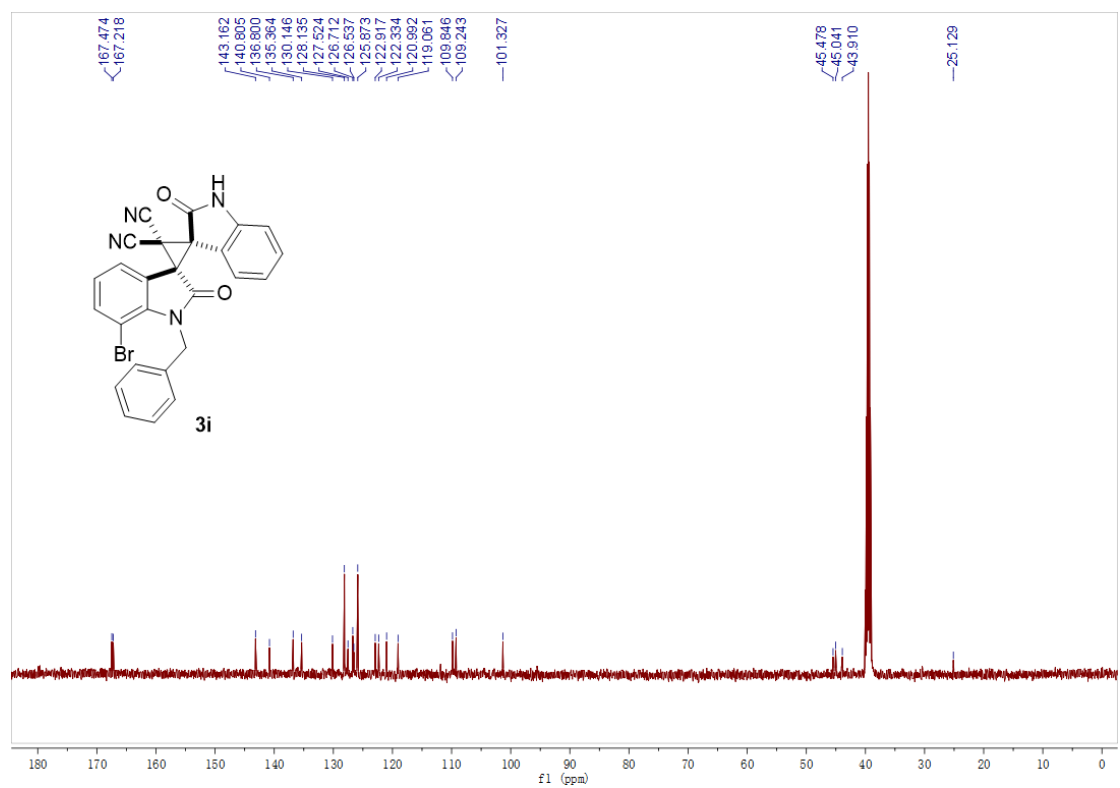
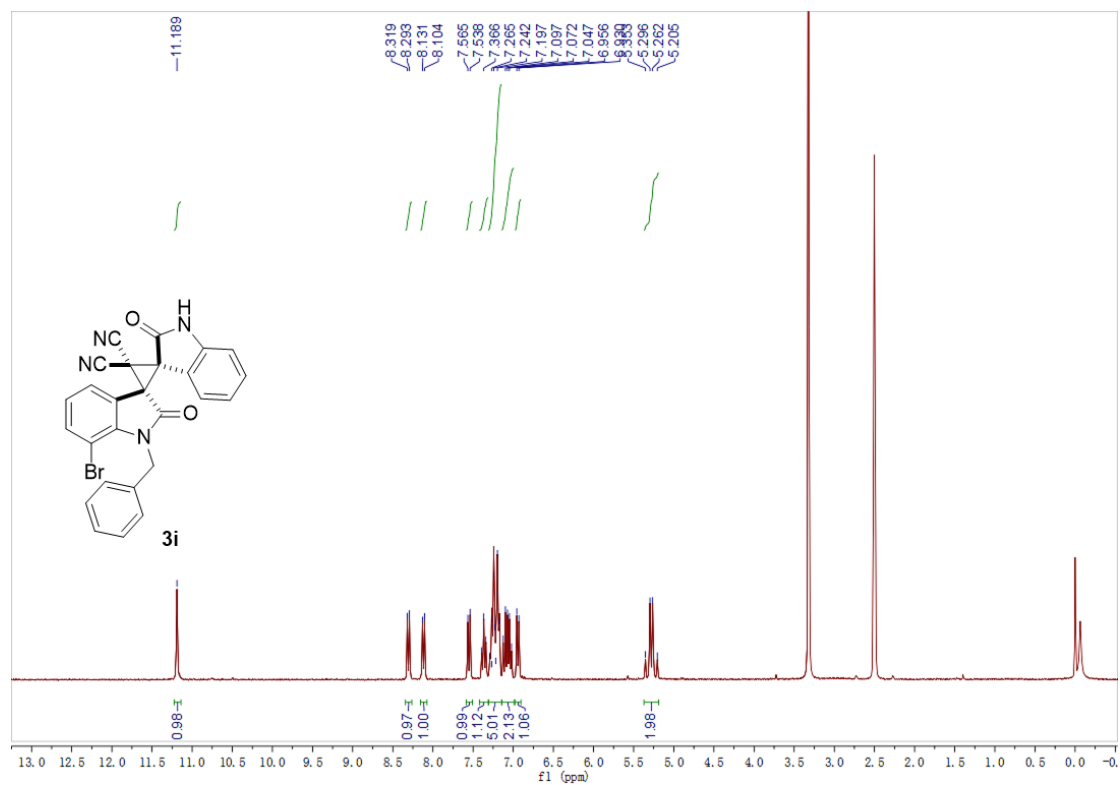
**Figure S6.**  $^1\text{H}$  (top) and  $^{13}\text{C}$  (bottom) NMRs of **3f**



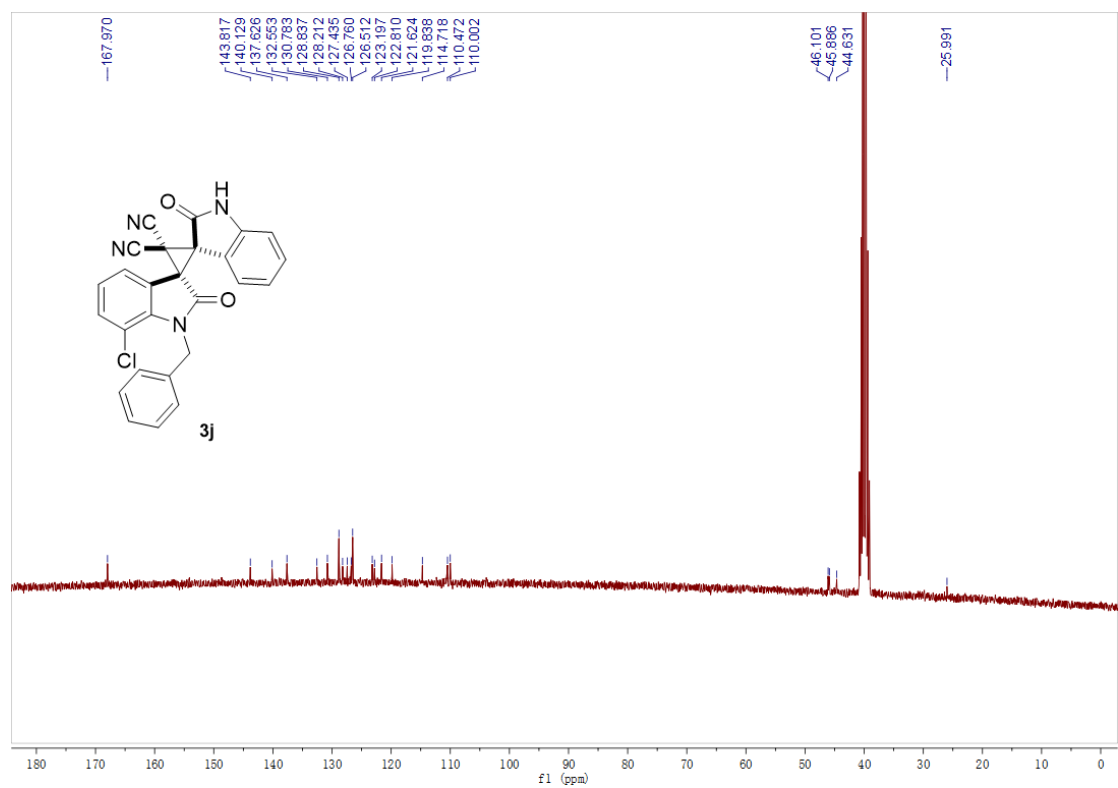
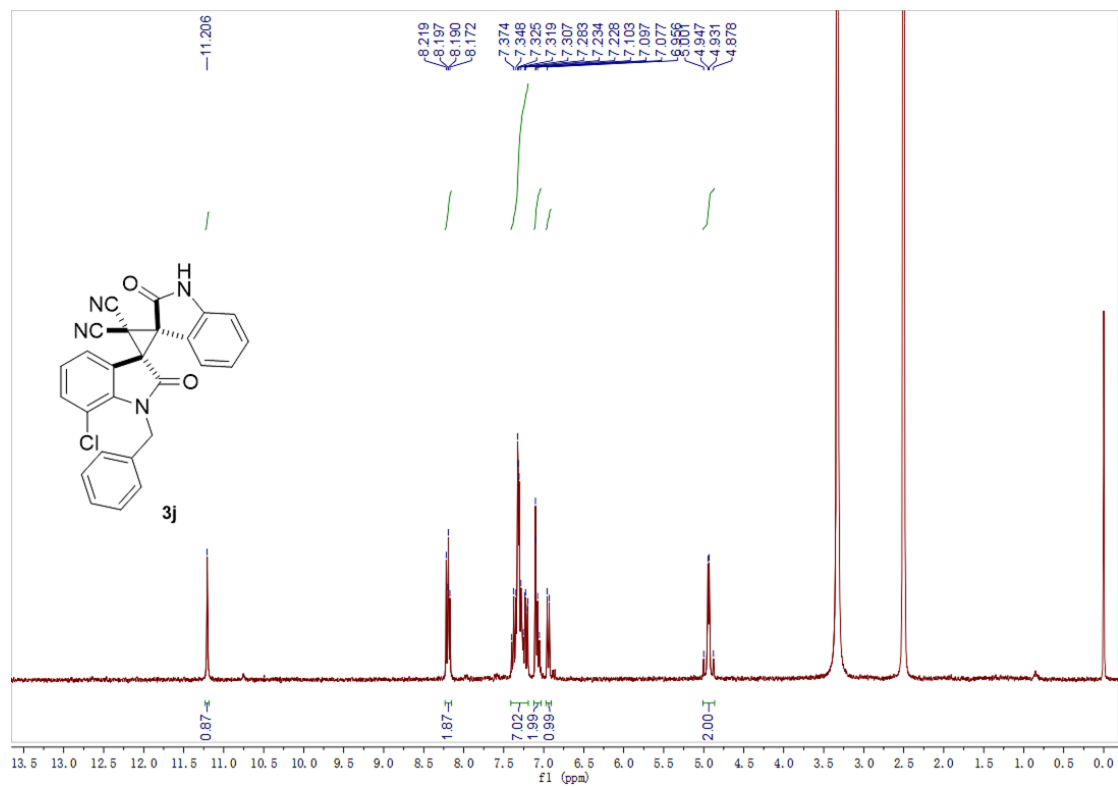
**Figure S7.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3g**



**Figure S8.**  $^1\text{H}$  (top) and  $^{13}\text{C}$  (bottom) NMRs of **3h**



**Figure S9.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3i**



**Figure S10.**  $^1\text{H}$  (top) and  $^{13}\text{C}$  (bottom) NMRs of **3j**

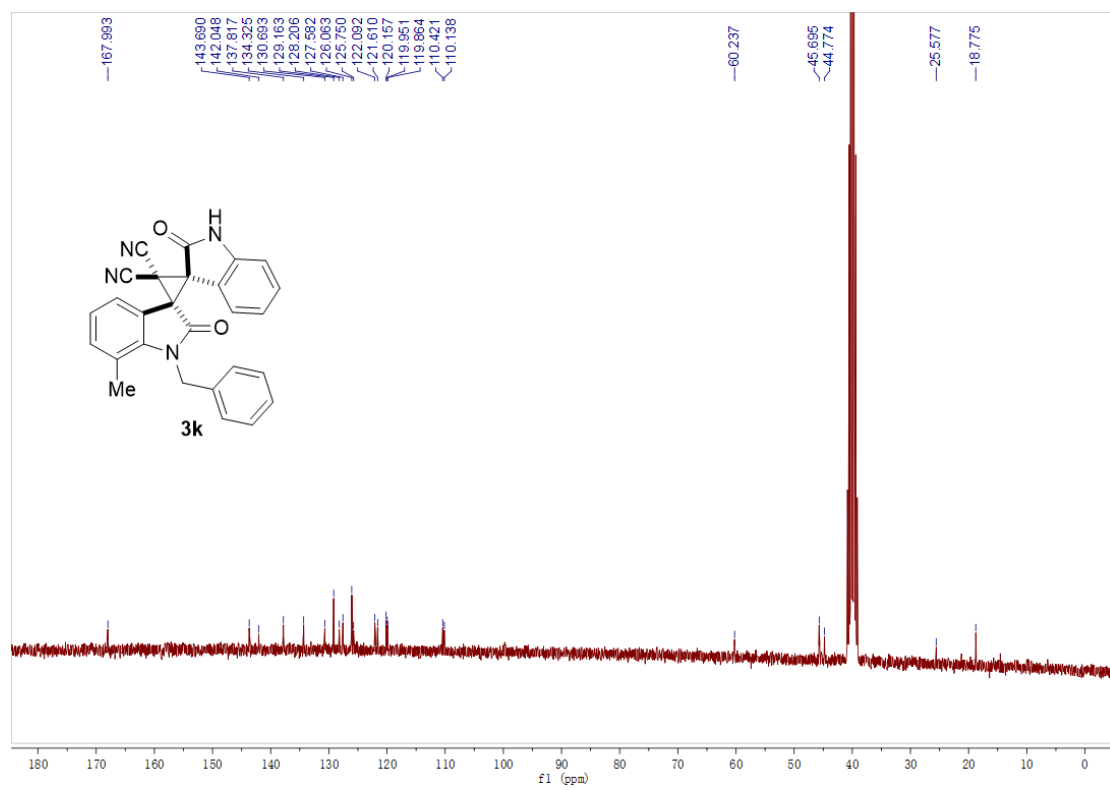
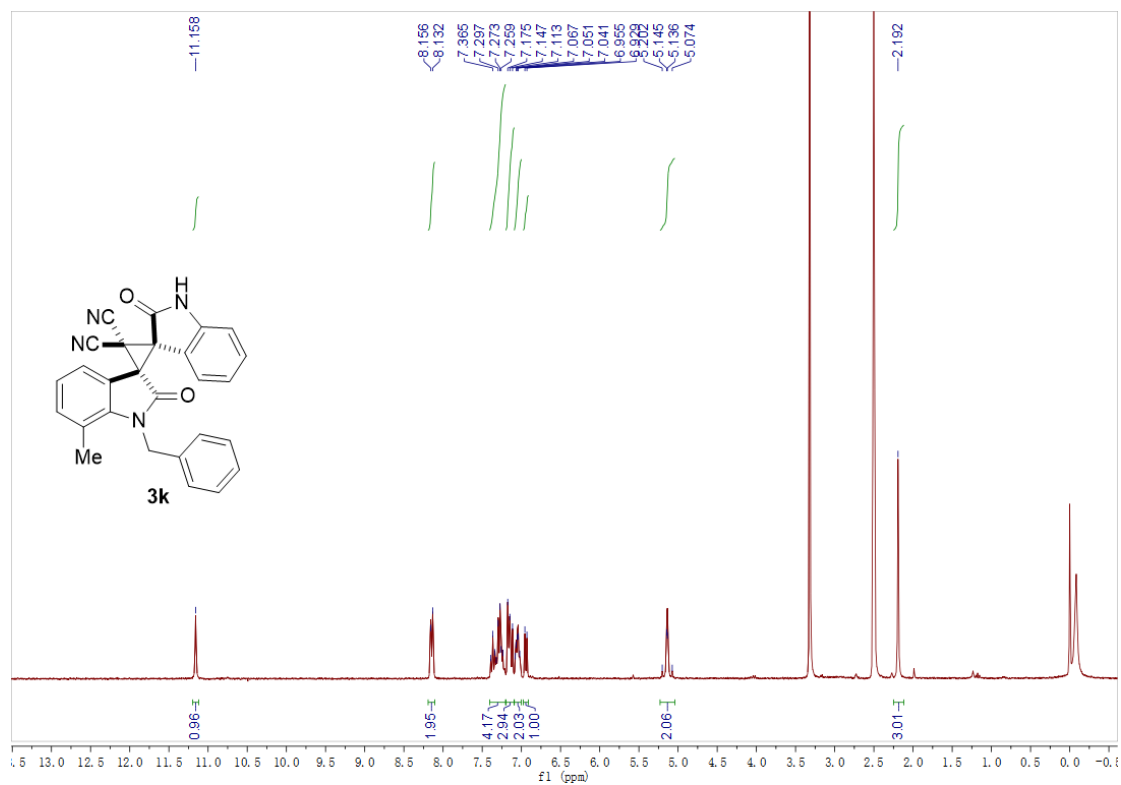


Figure S11. <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3k**

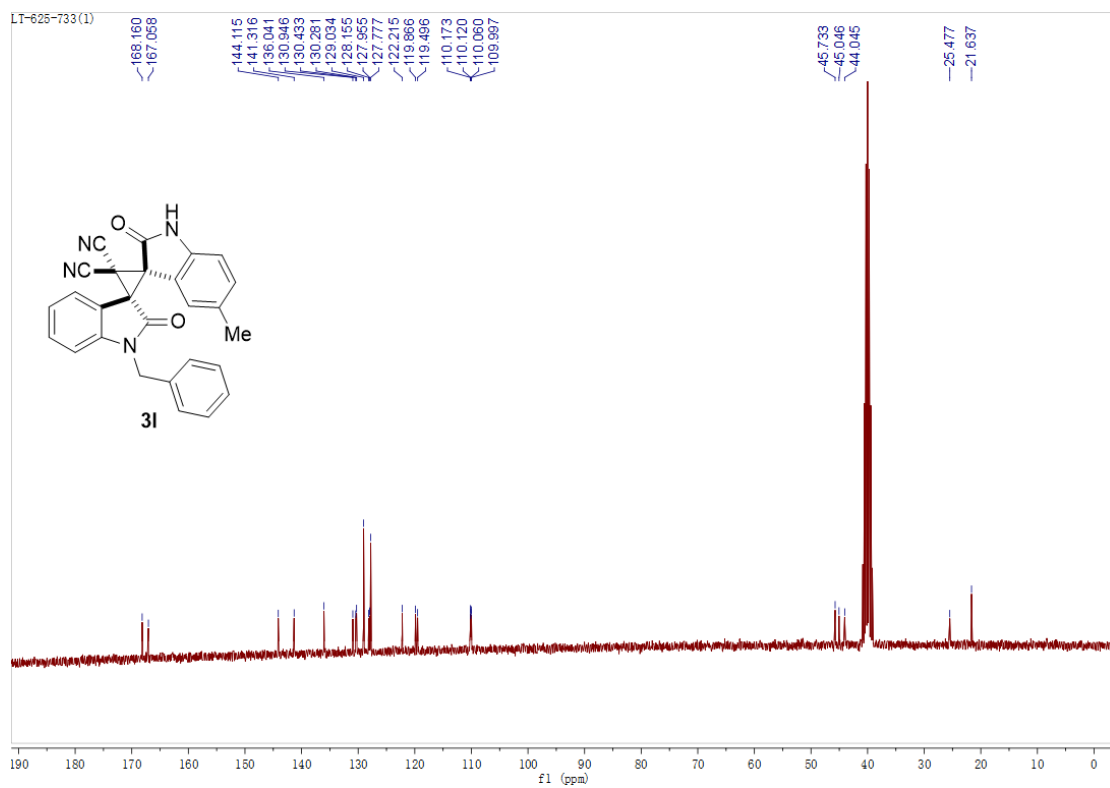
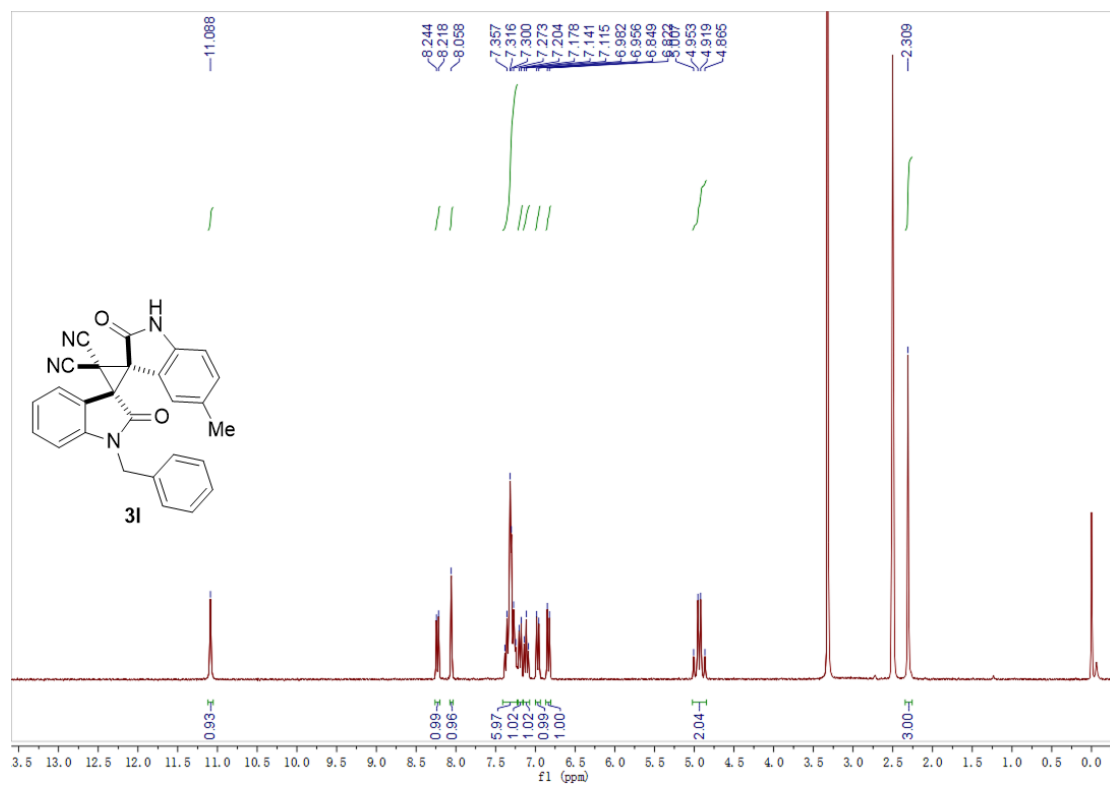


Figure S12. <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3l**

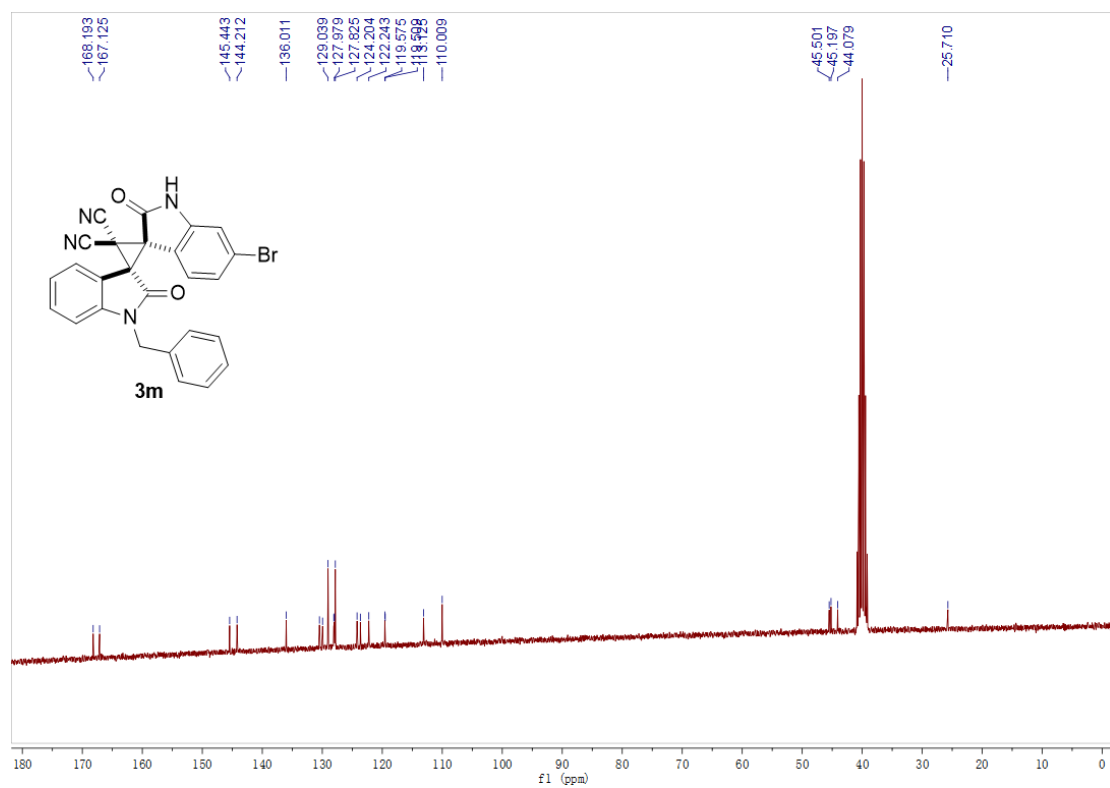
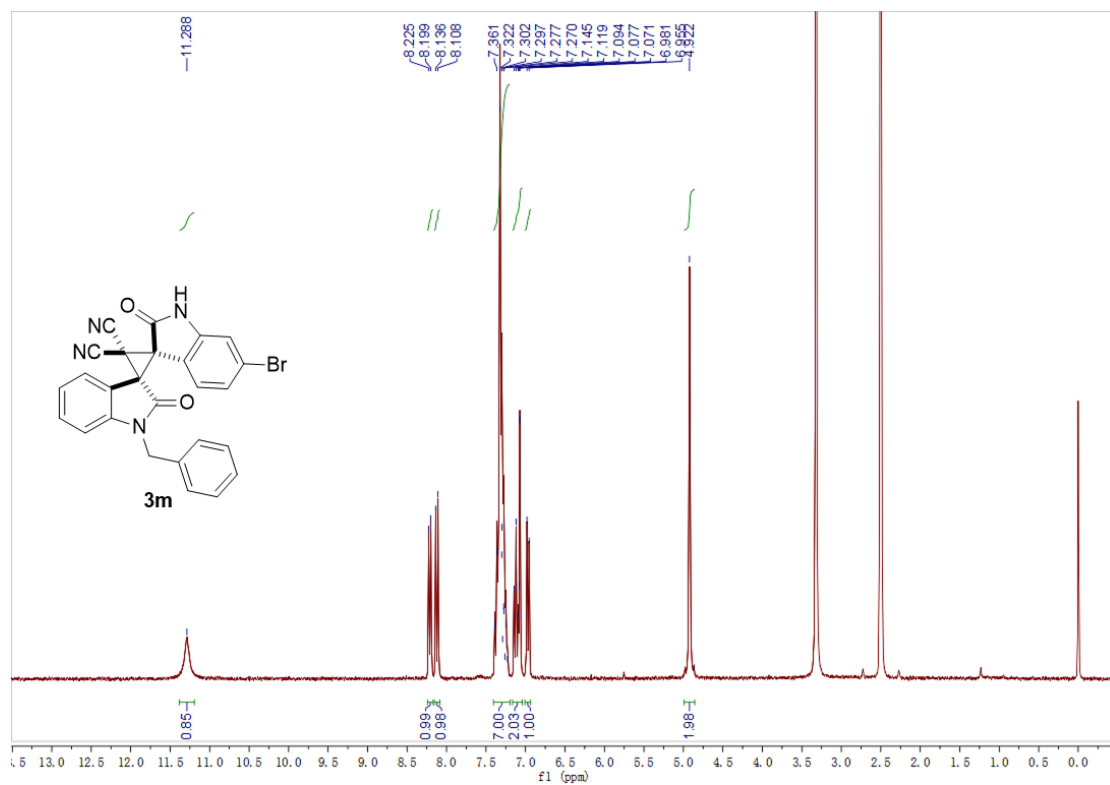
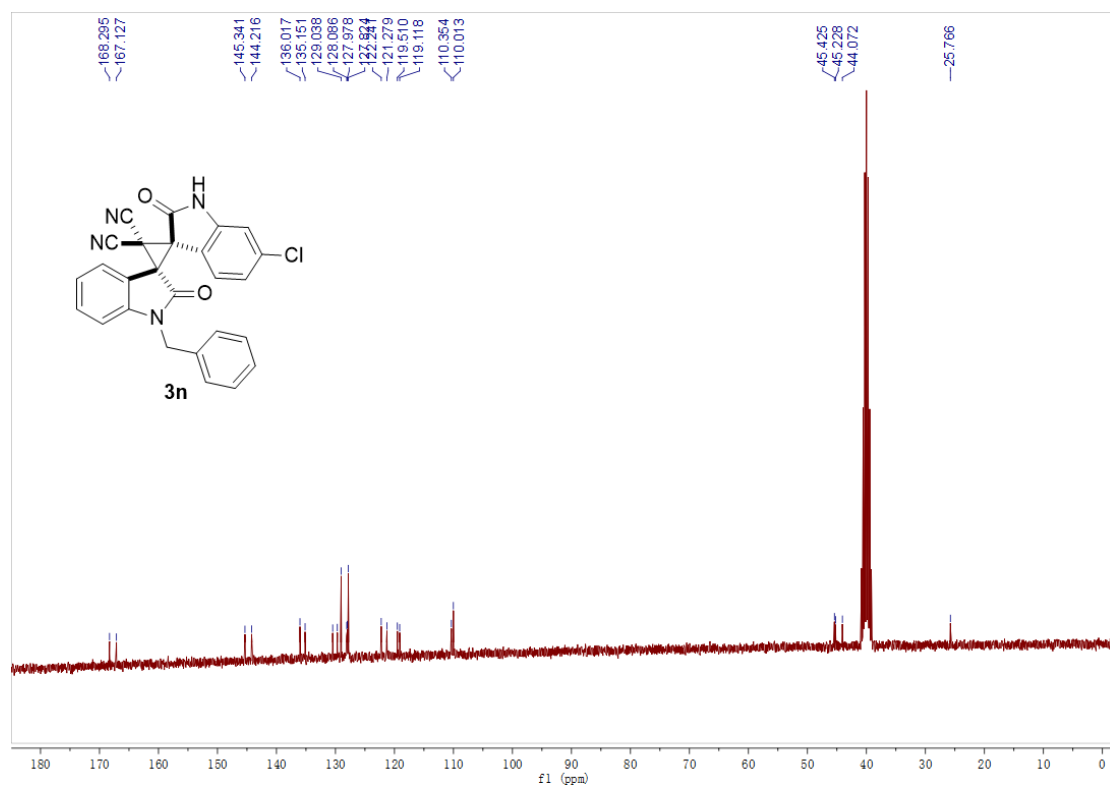
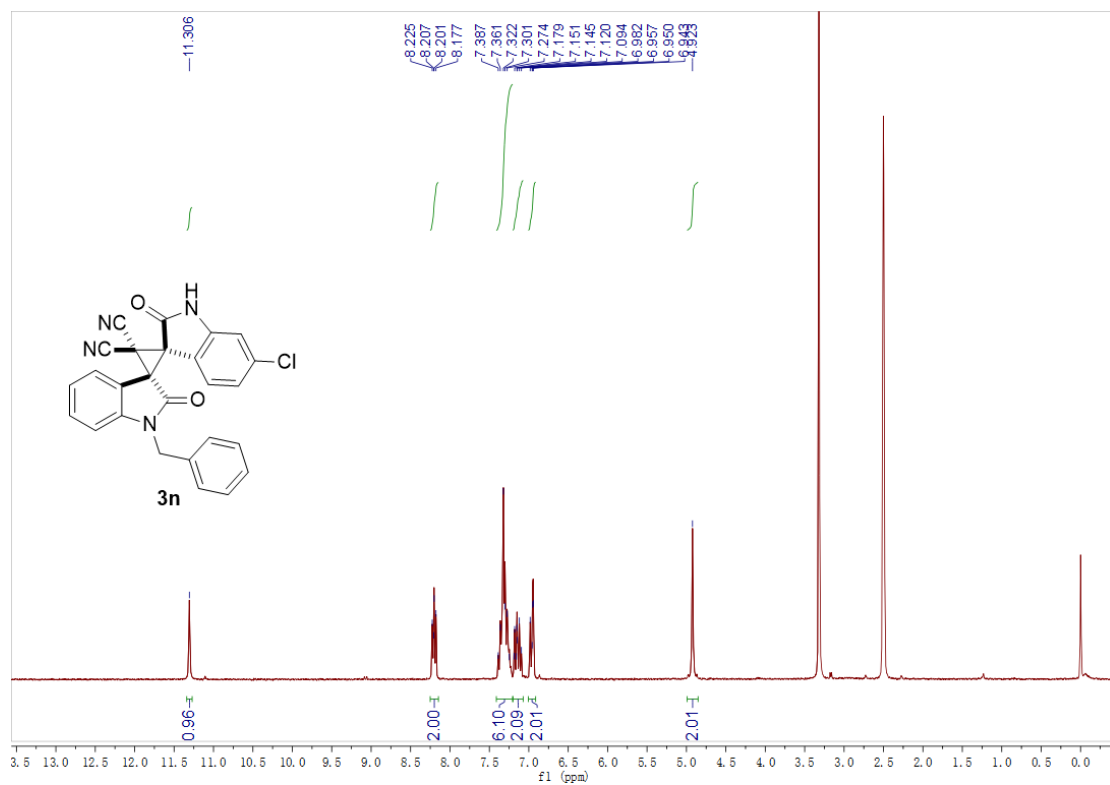


Figure S13. <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3m**



**Figure S14.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3n**

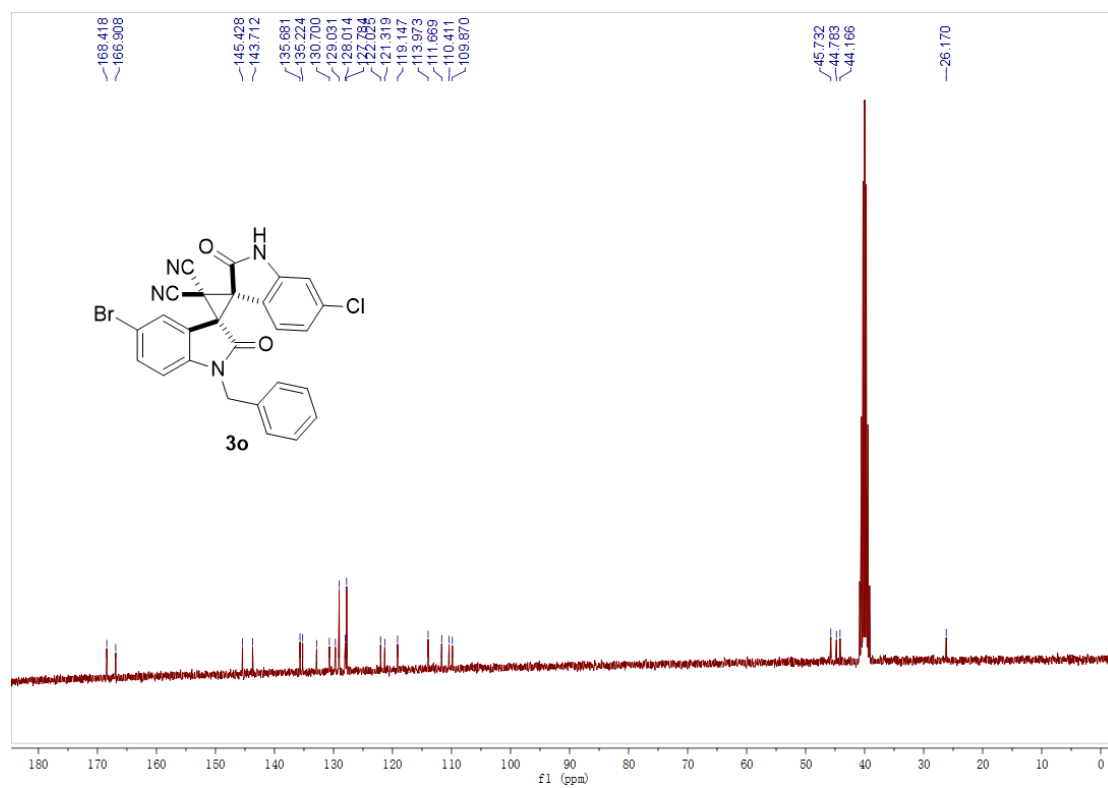
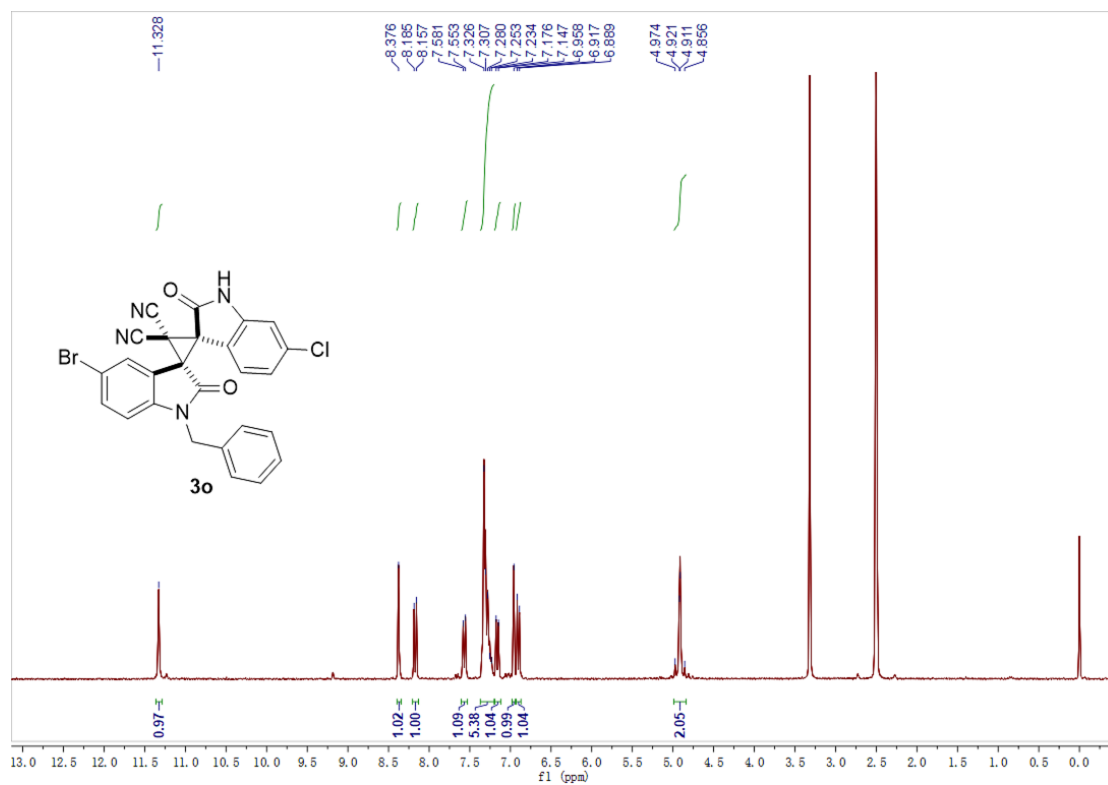


Figure S15. <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3o**

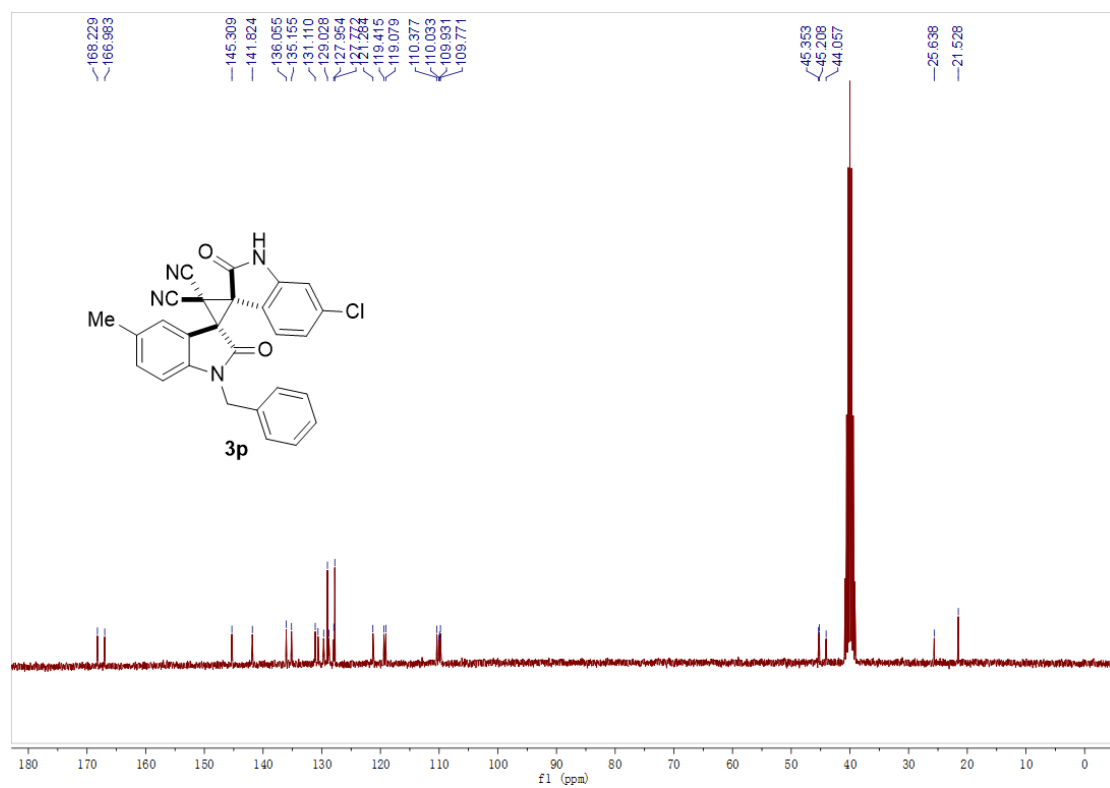
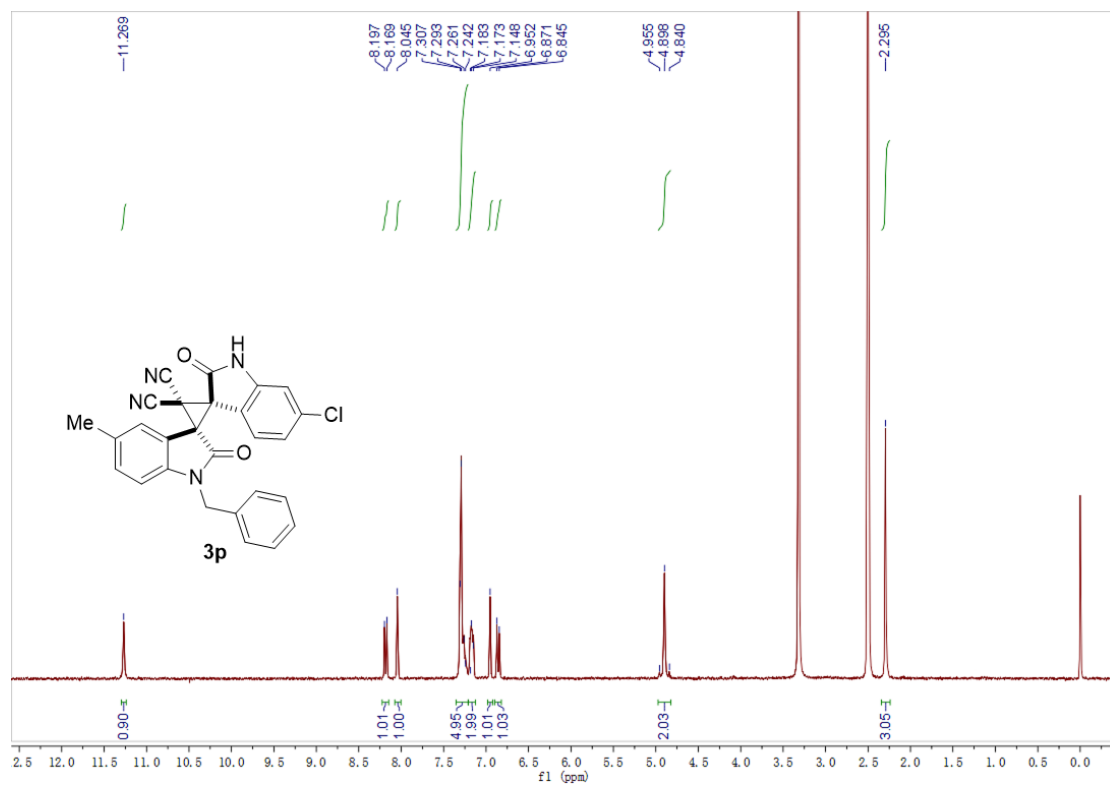


Figure S16. <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3p**

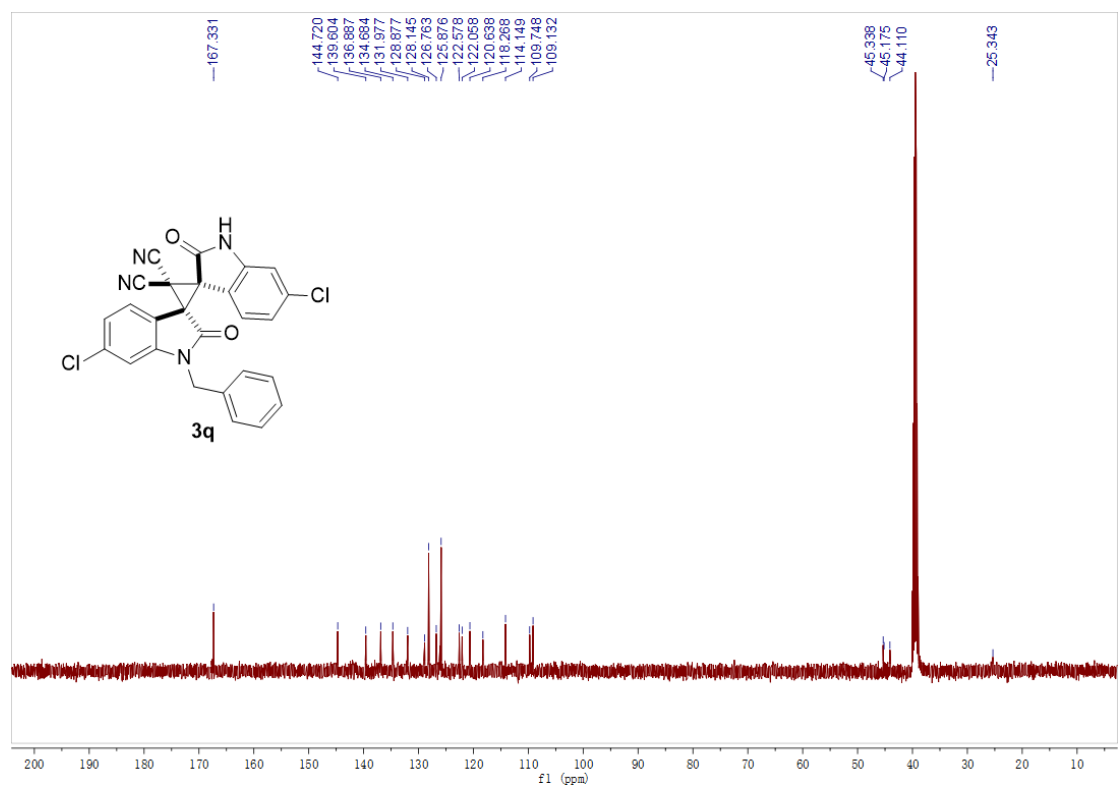
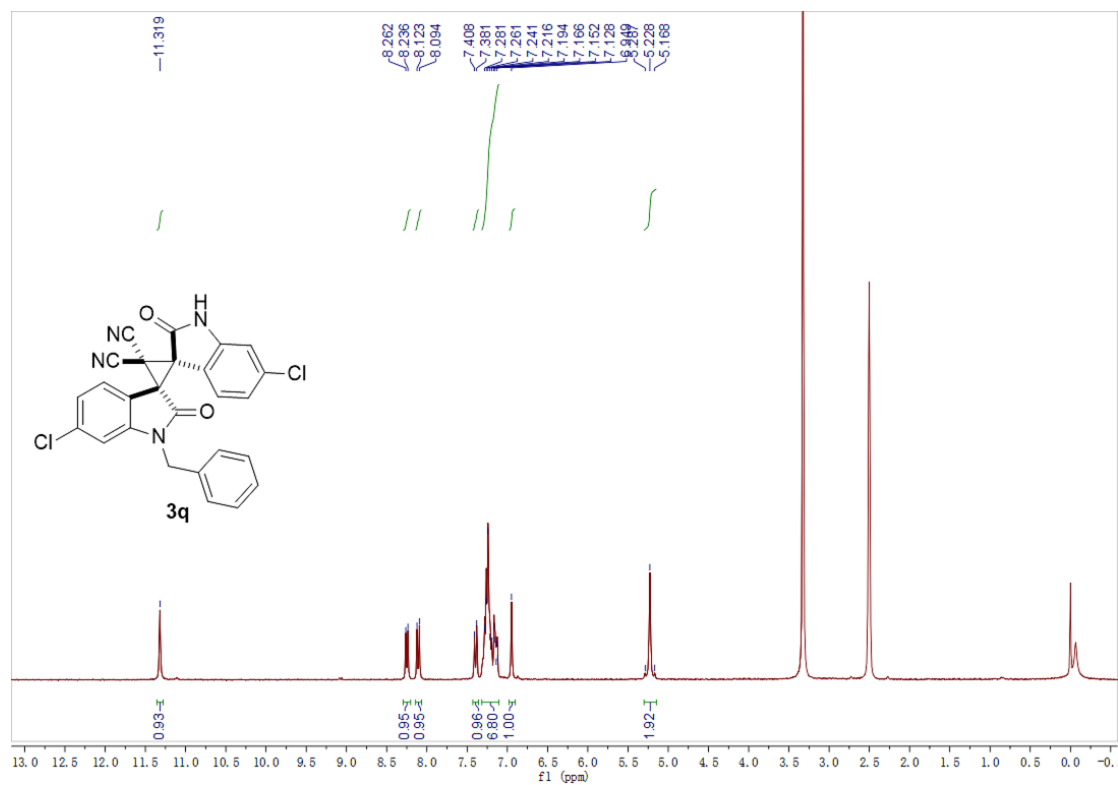
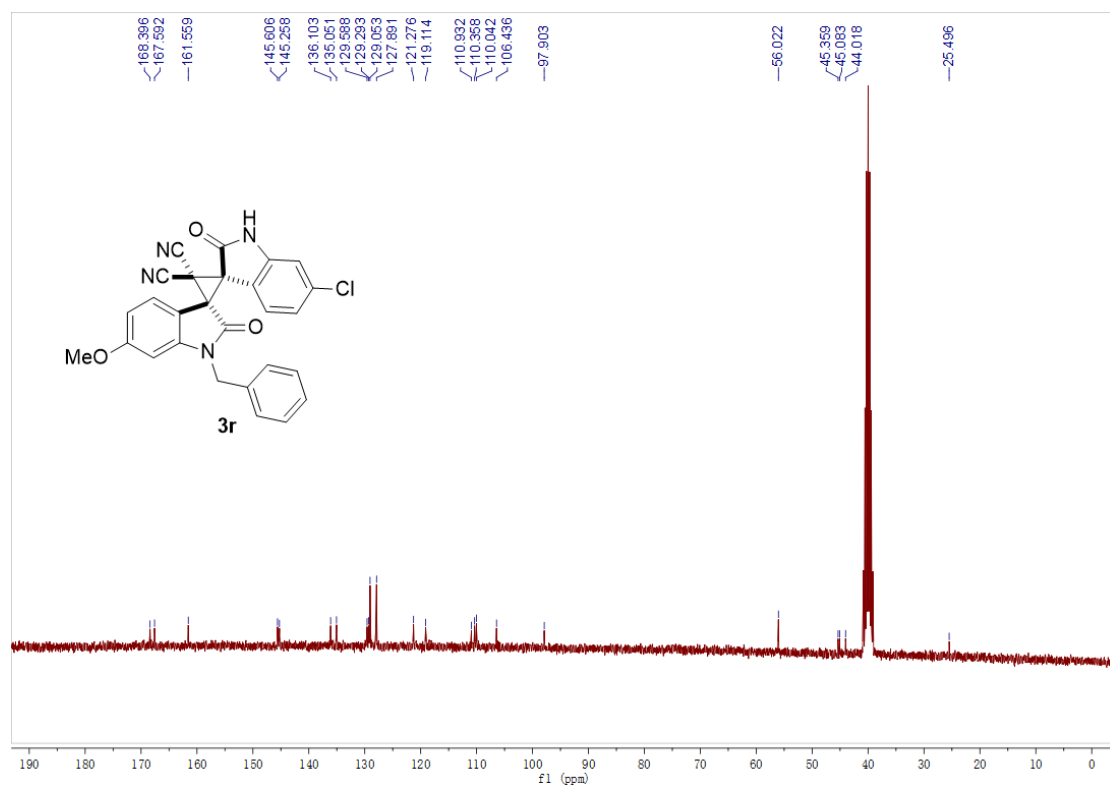
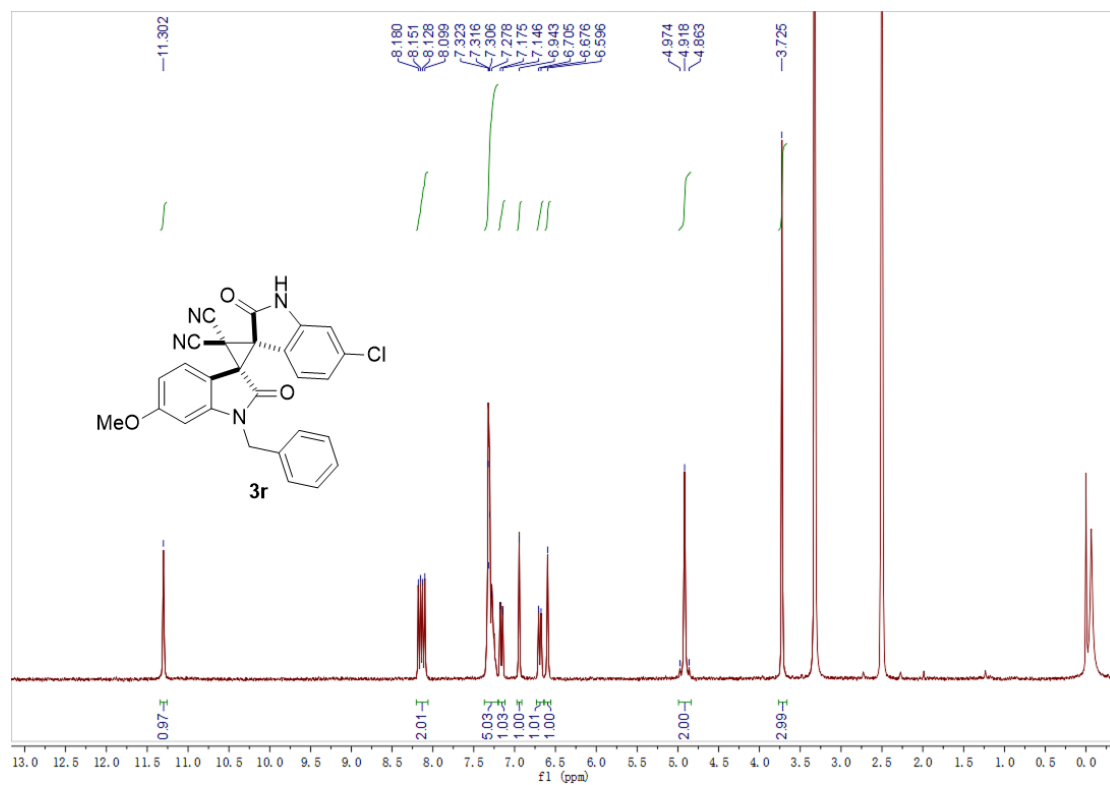
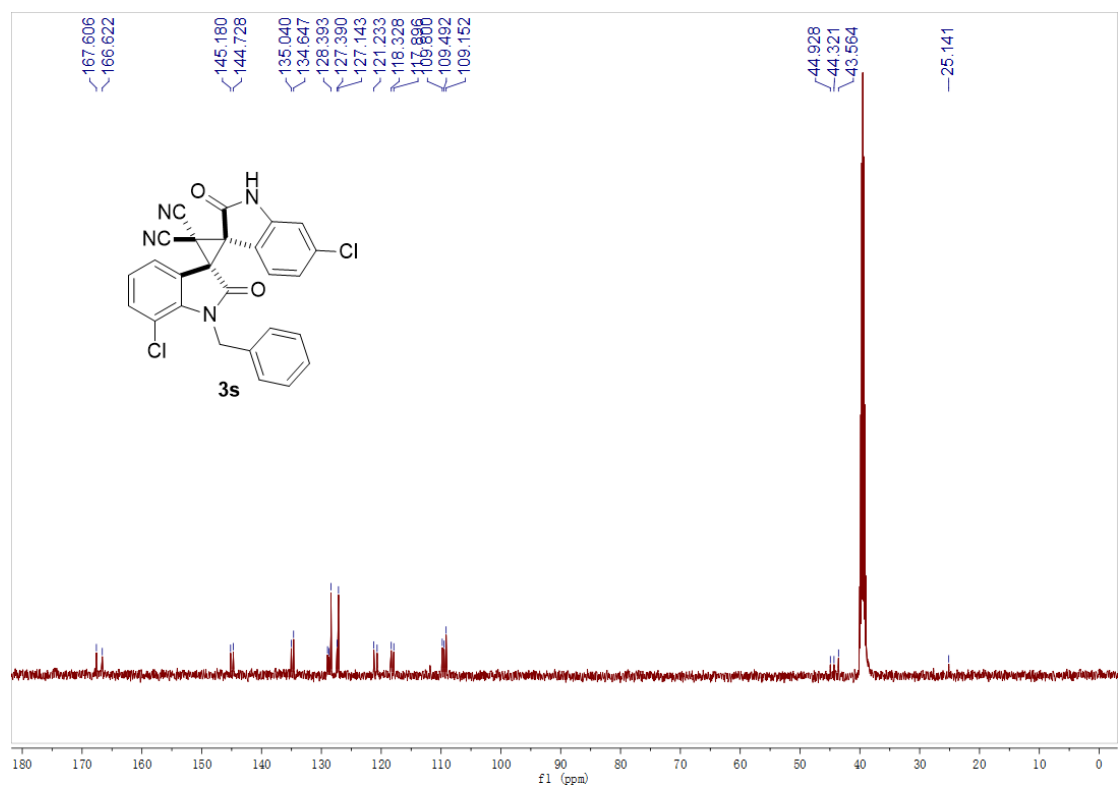
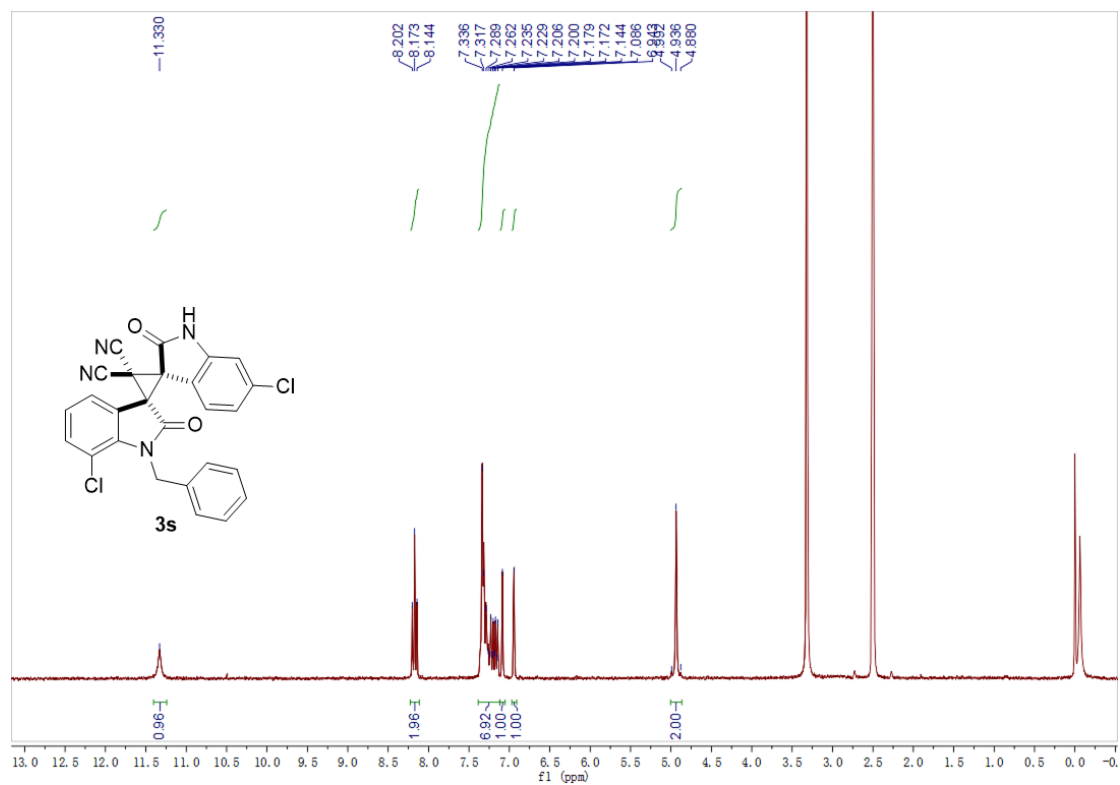


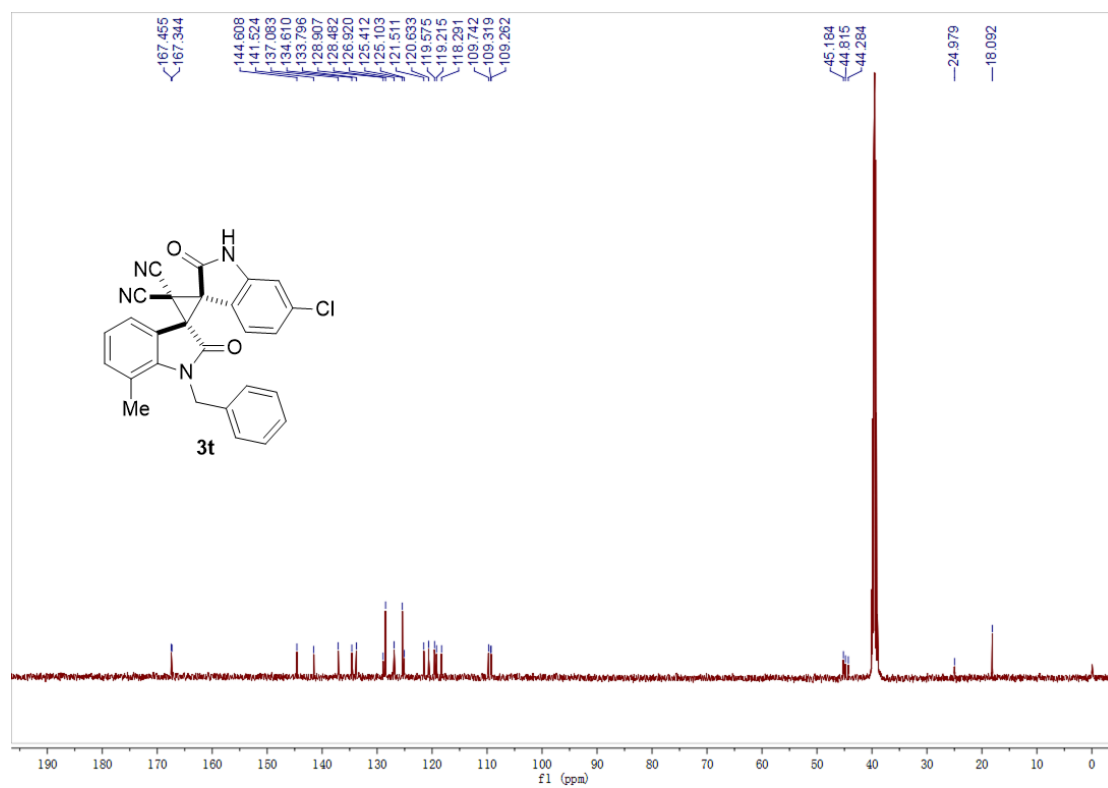
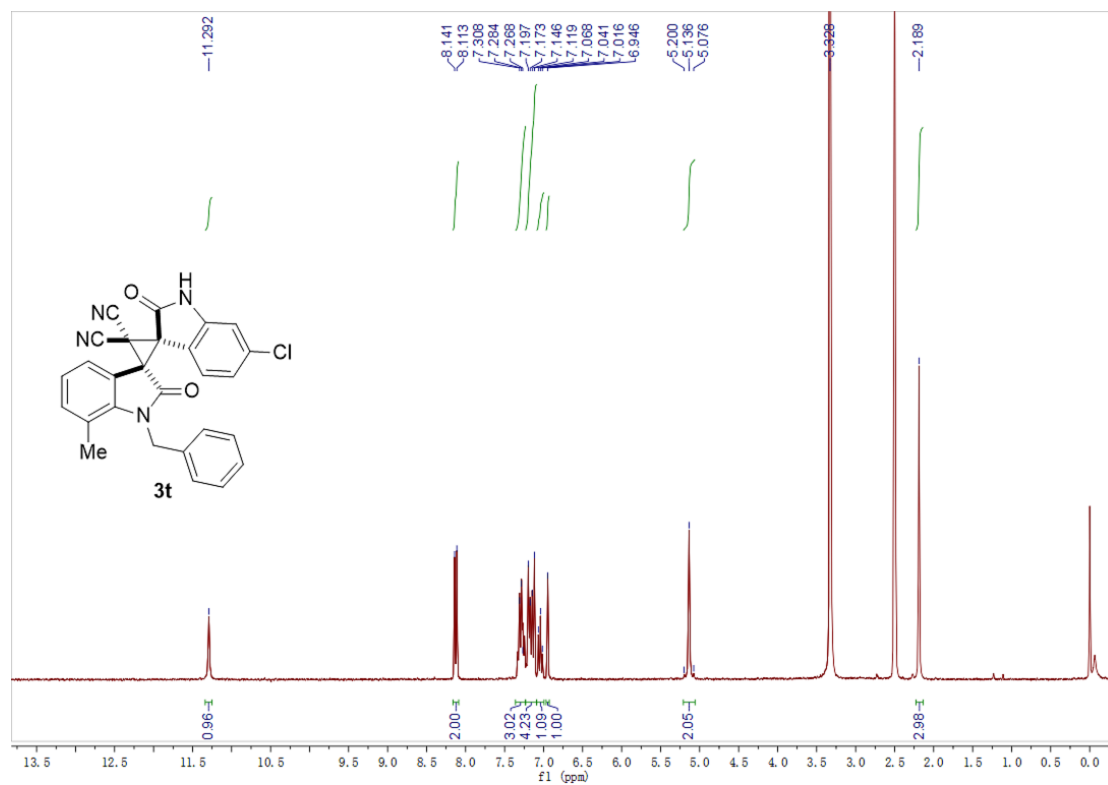
Figure S17.  $^1\text{H}$  (top) and  $^{13}\text{C}$  (bottom) NMRs of **3q**



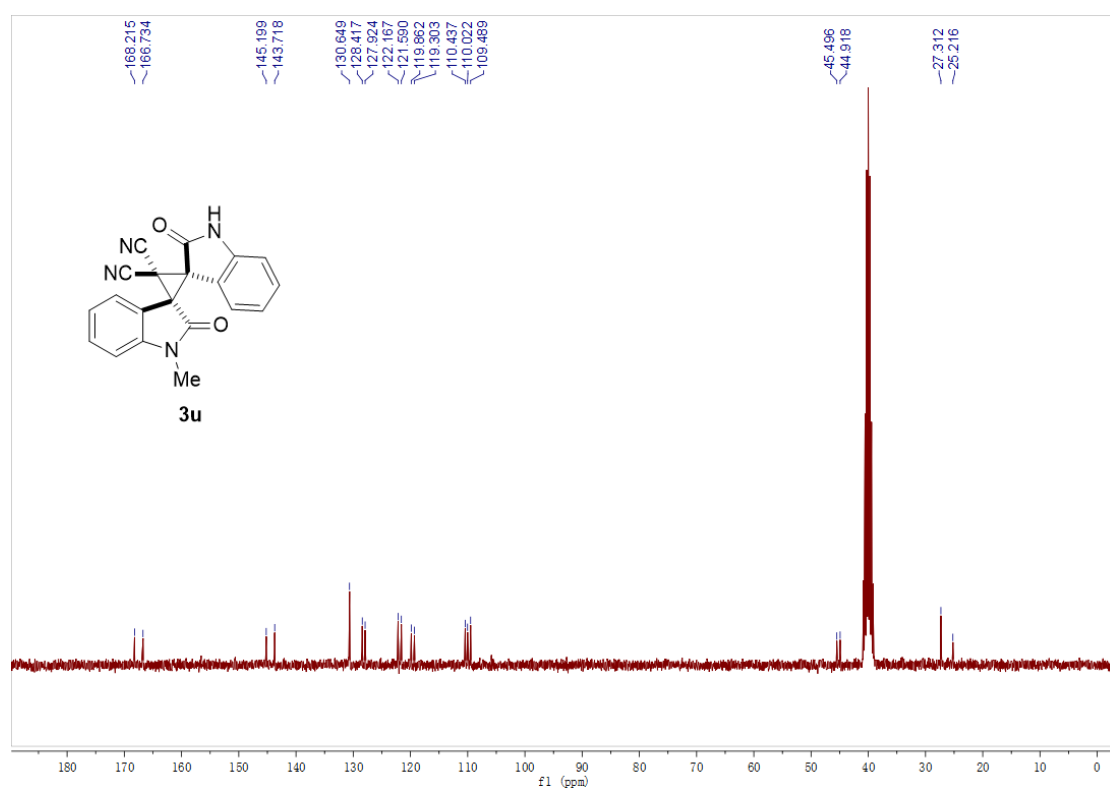
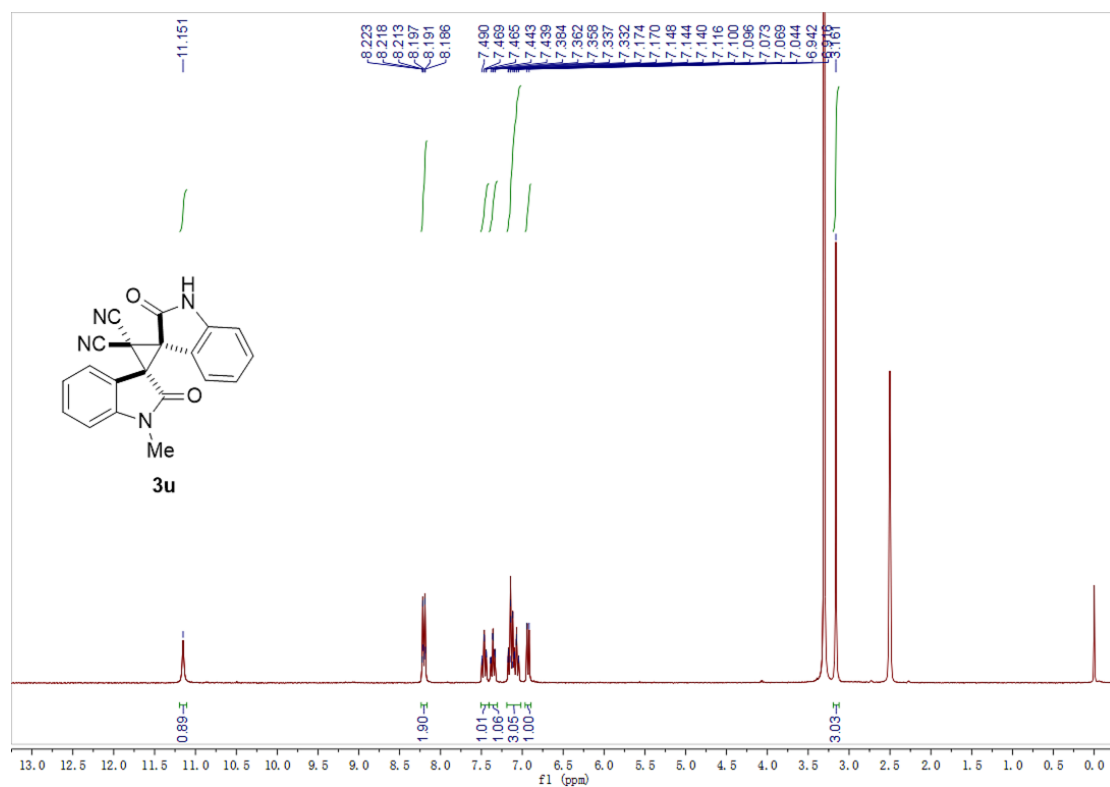
**Figure S18.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3r**



**Figure S19.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3s**



**Figure S20.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3t**



**Figure S21.** <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3u**

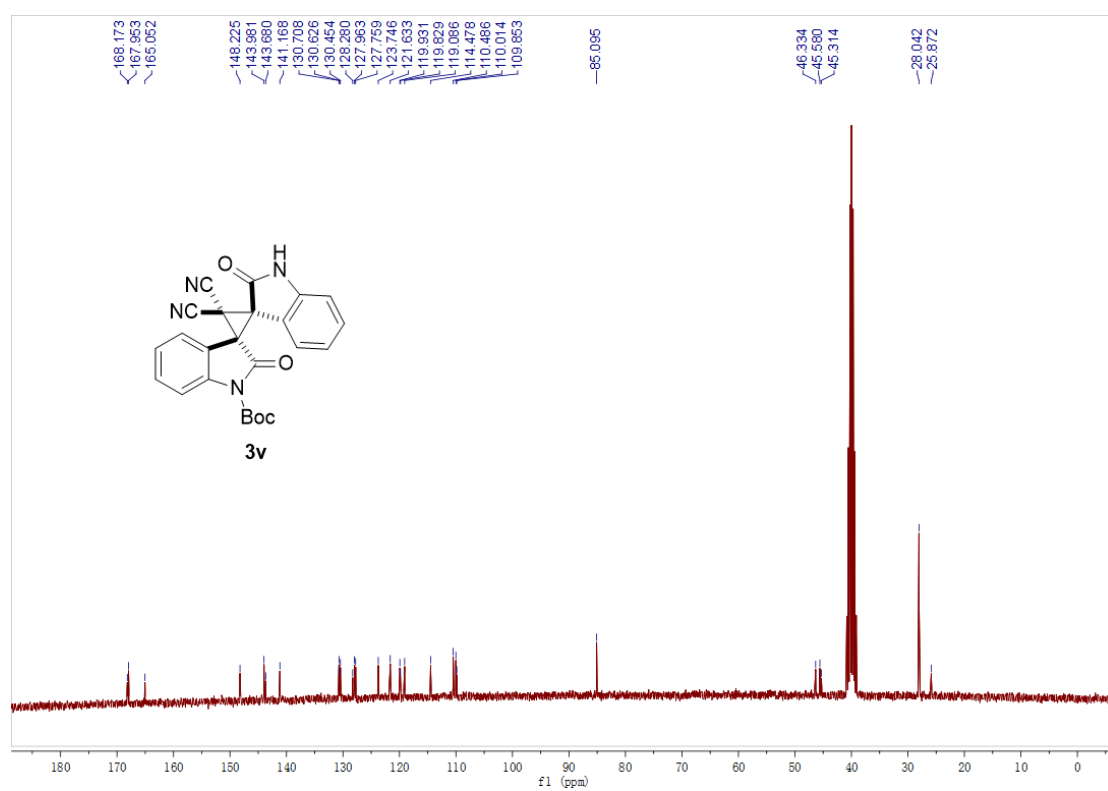
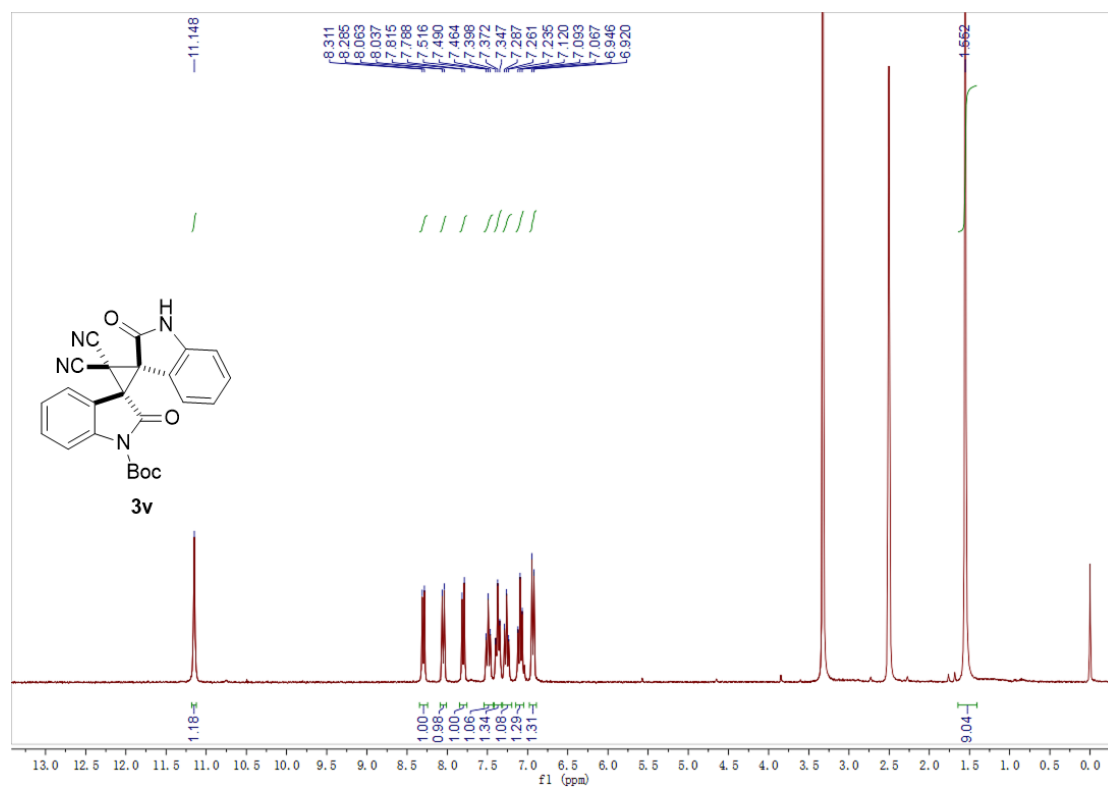


Figure S22.  $^1\text{H}$  (top) and  $^{13}\text{C}$  (bottom) NMRs of **3v**

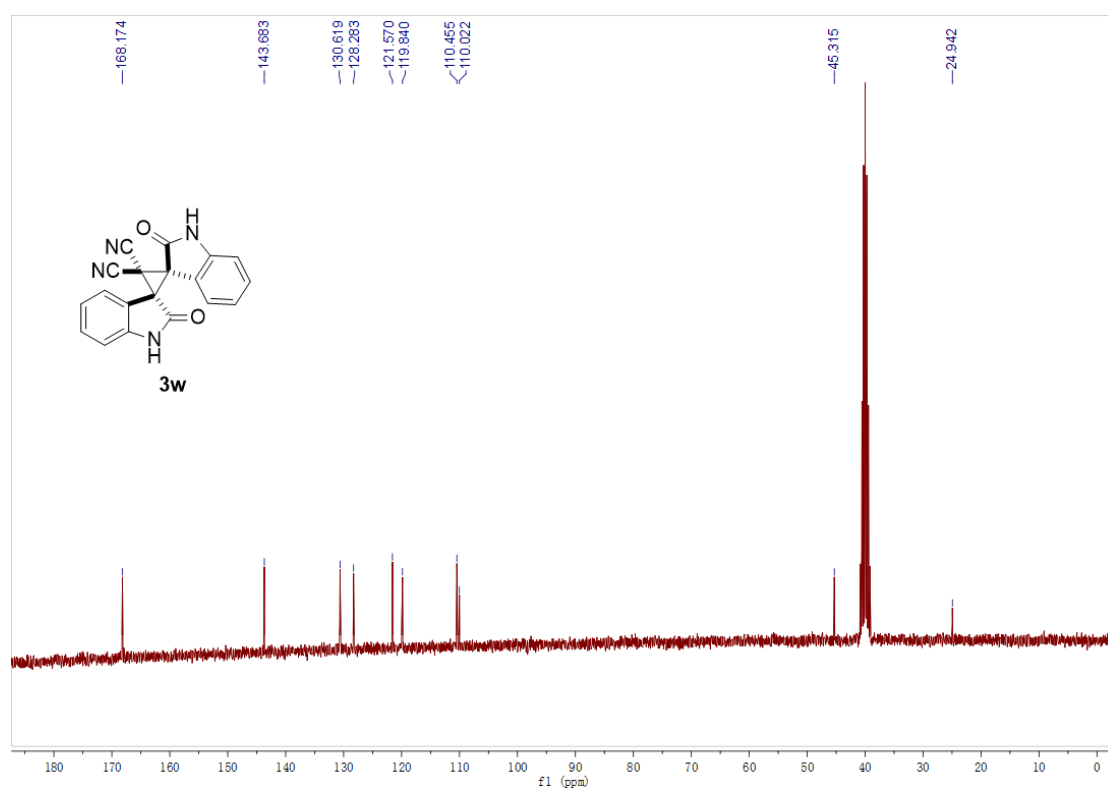
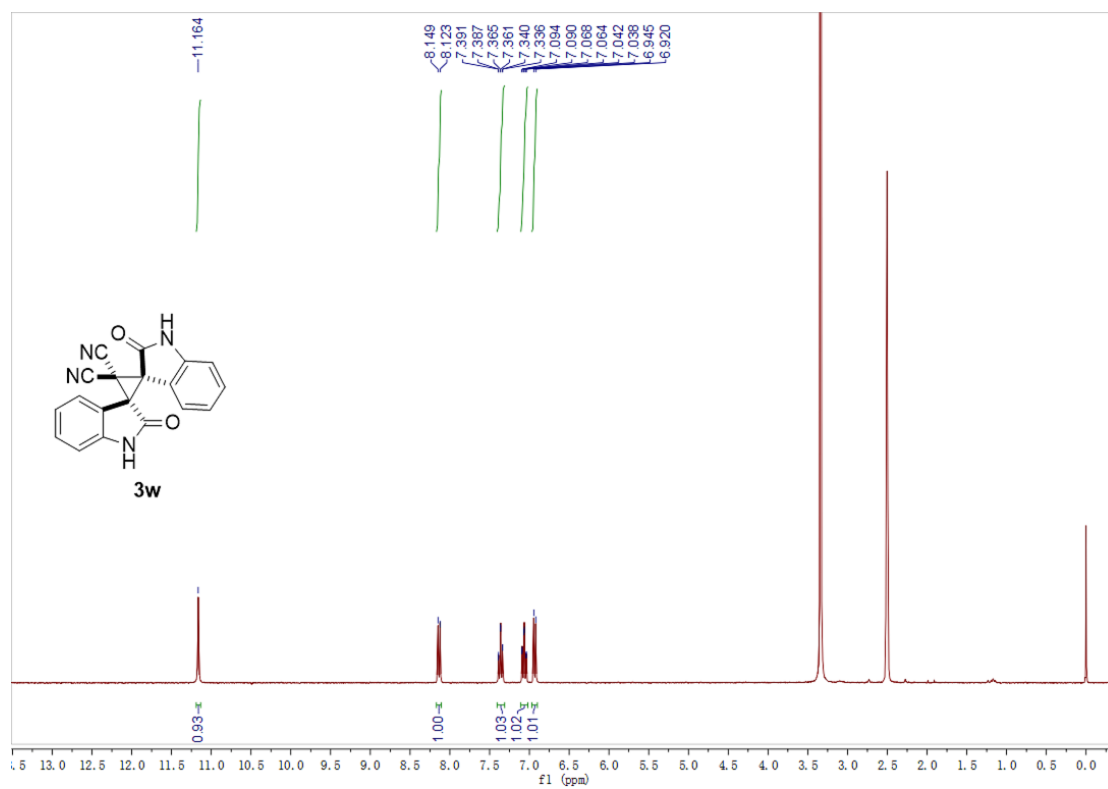


Figure S23. <sup>1</sup>H (top) and <sup>13</sup>C (bottom) NMRs of **3w**