

Supporting Information

(5-Hydroxy-4-oxo-2-styryl-4H-pyridin-1-yl)-acetic Acid Derivatives as Multifunctional Aldose Reductase Inhibitors

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NMR spectra, high-resolution mass spectra and UV-vis spectra for tested products

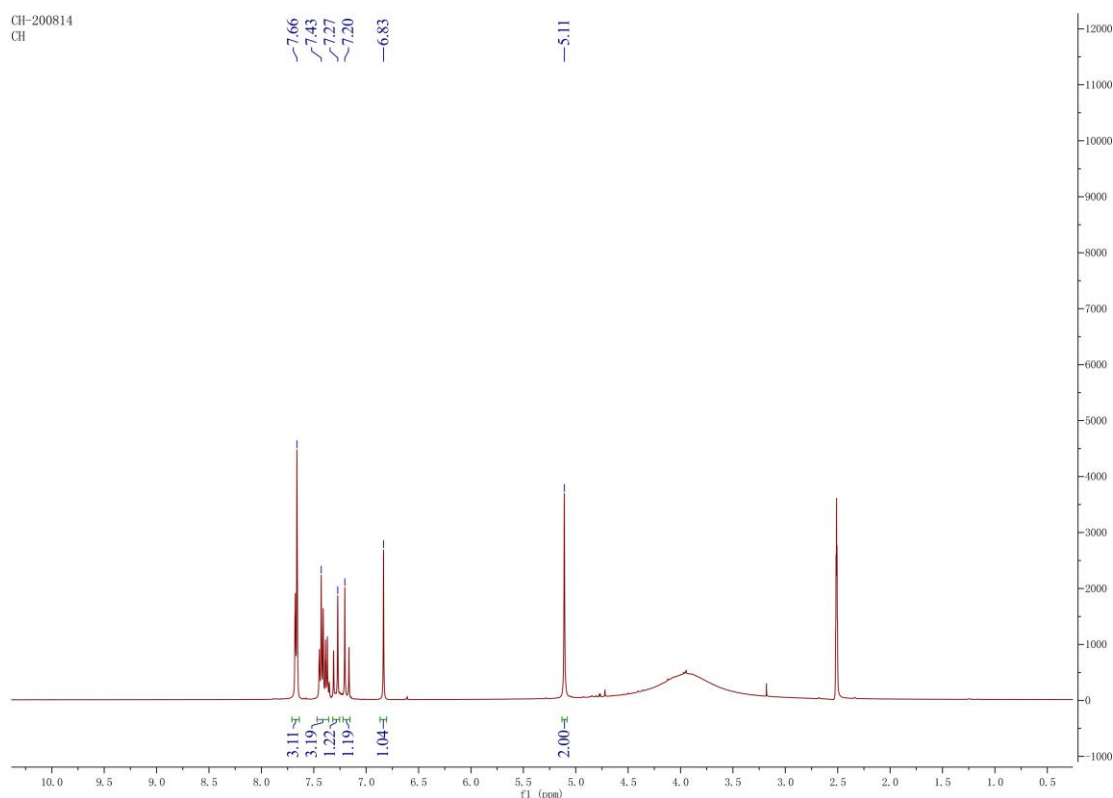
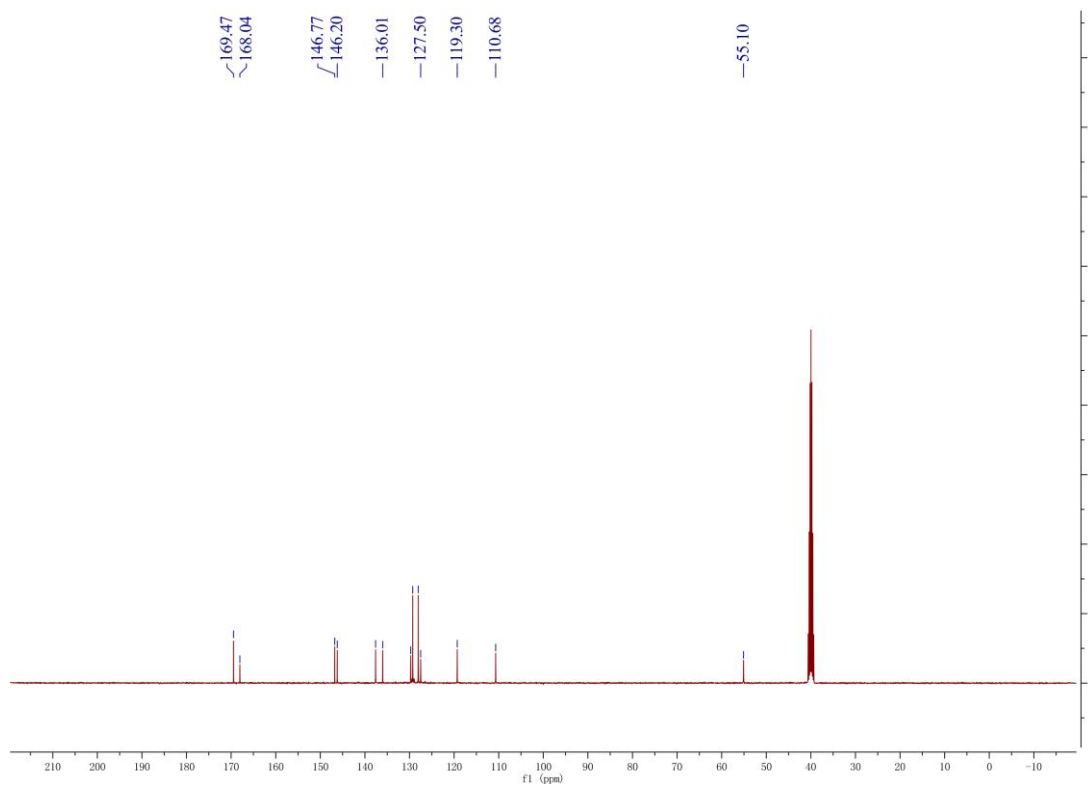
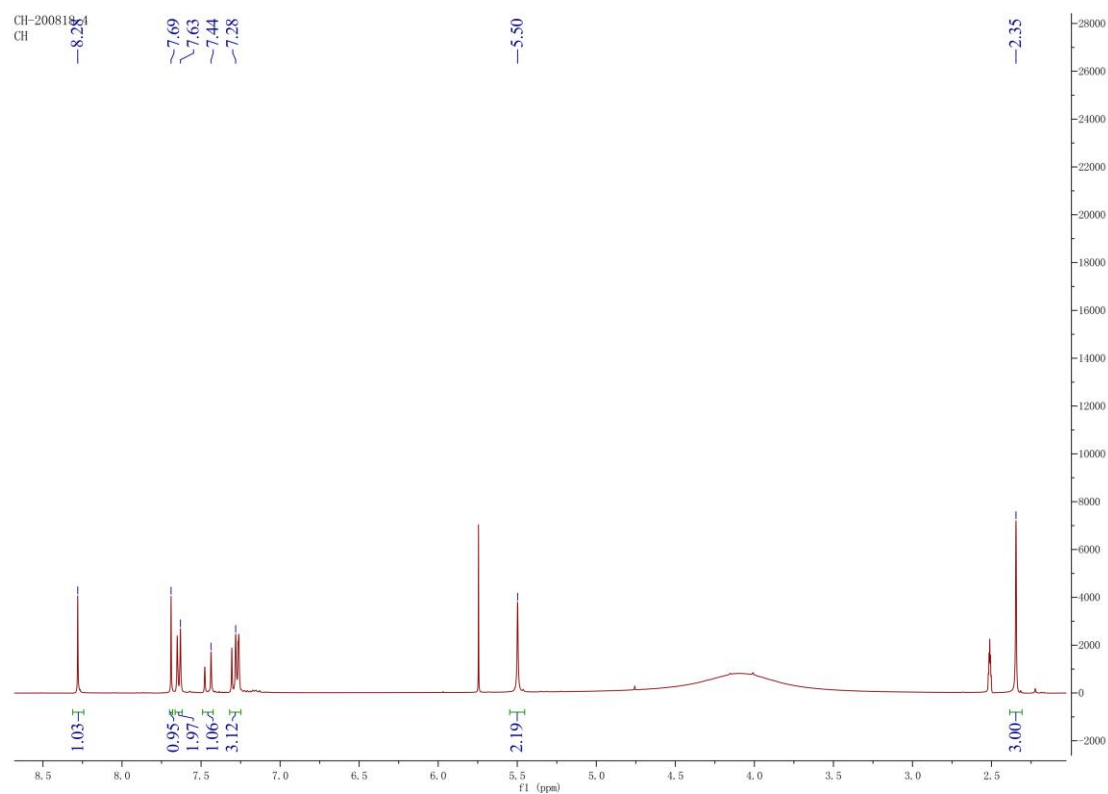
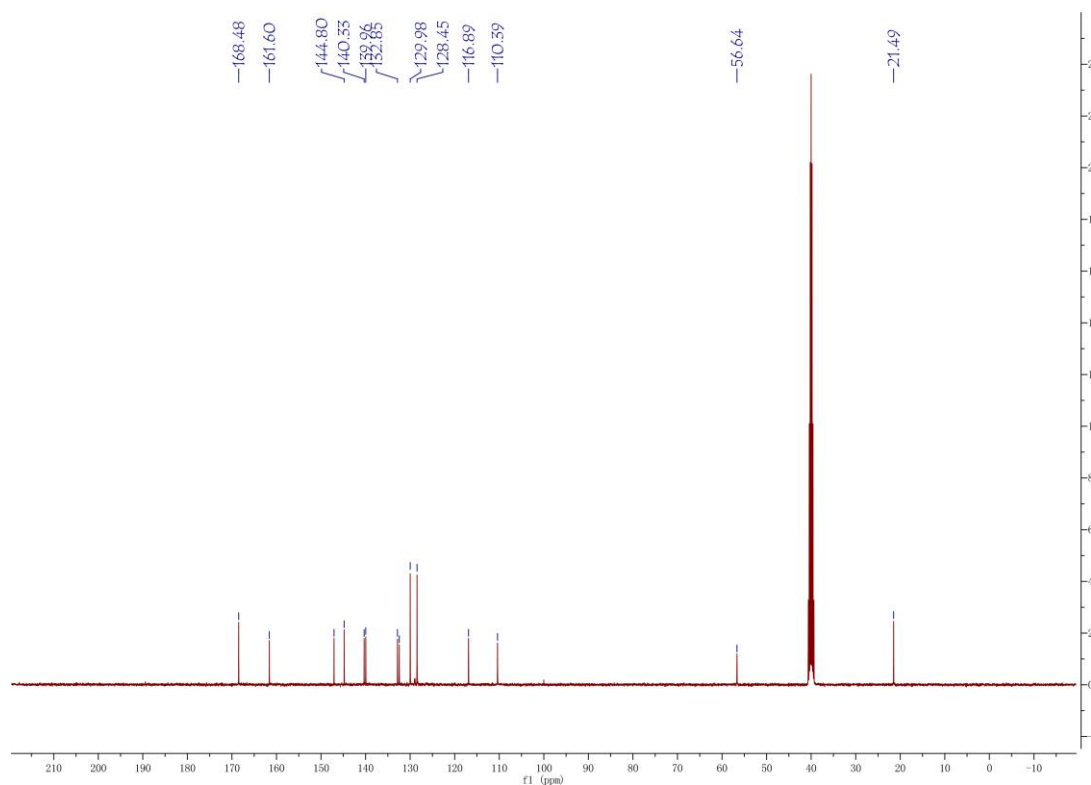
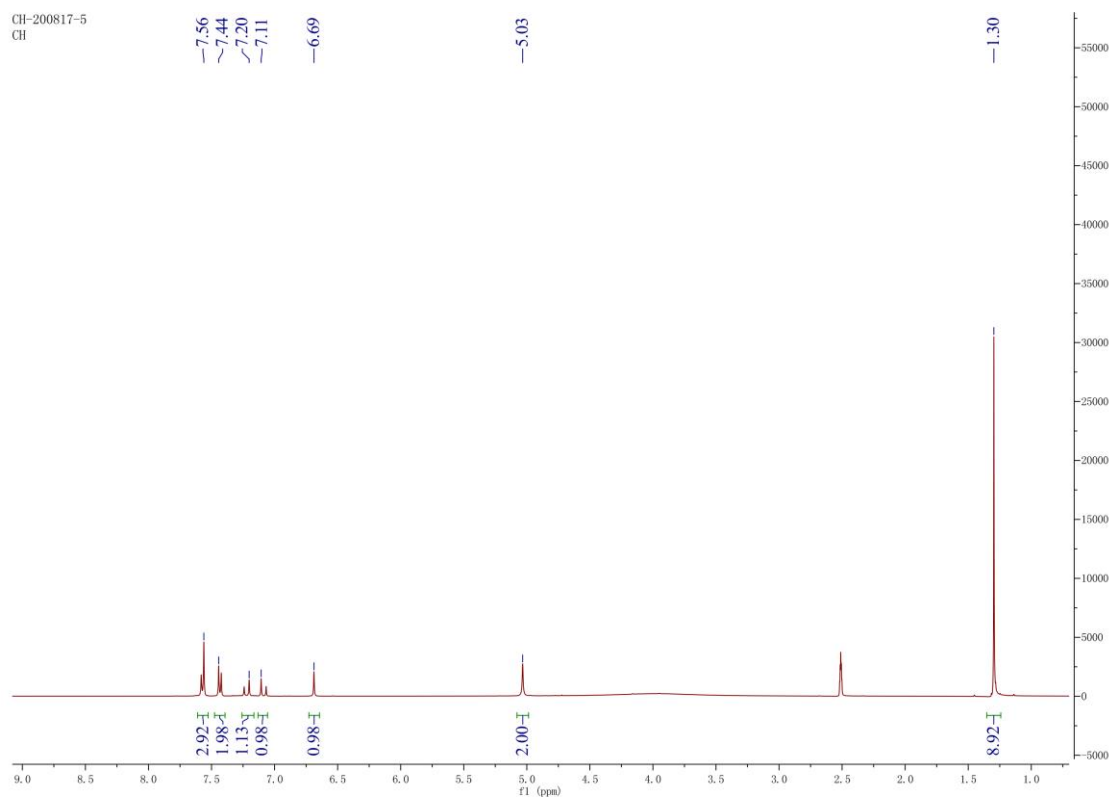
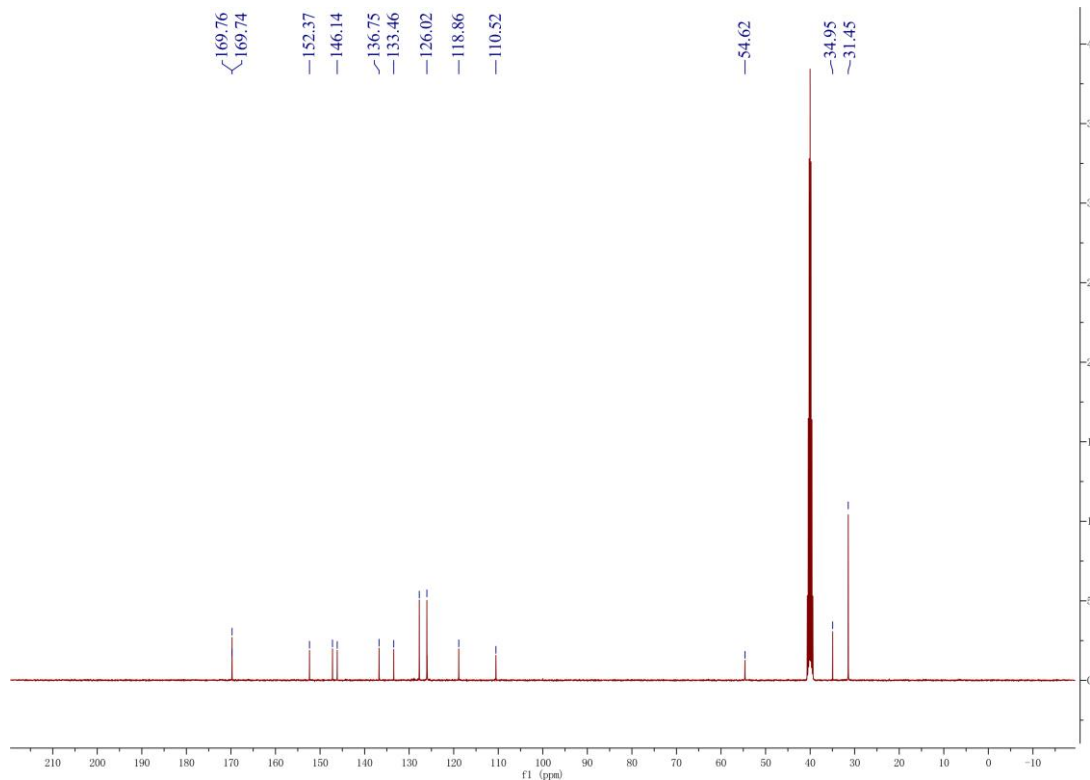
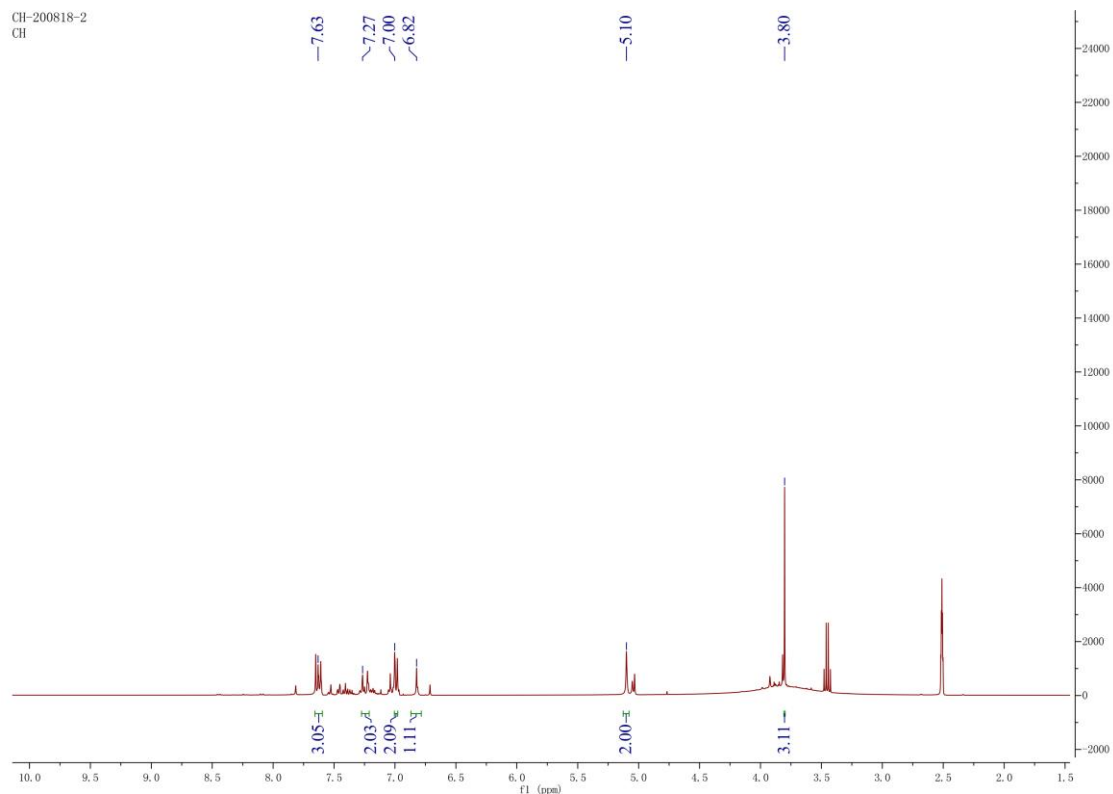


Figure S1 ^1H -NMR (400 MHz, $\text{DMSO}-d_6$) of **7a**

Figure S2 ¹³C-NMR (100 MHz, DMSO-*d*₆) of **7a**Figure S3 ¹H-NMR (400 MHz, DMSO-*d*₆) of **7b**

**Figure S4** ¹³C-NMR (100 MHz, DMSO-*d*₆) of **7b****Figure S5** ¹H-NMR (400 MHz, DMSO-*d*₆) of **7c**

**Figure S6** ¹³C-NMR (100 MHz, DMSO-*d*₆) of 7c**Figure S7** ¹H-NMR (400 MHz, DMSO-*d*₆) of 7d

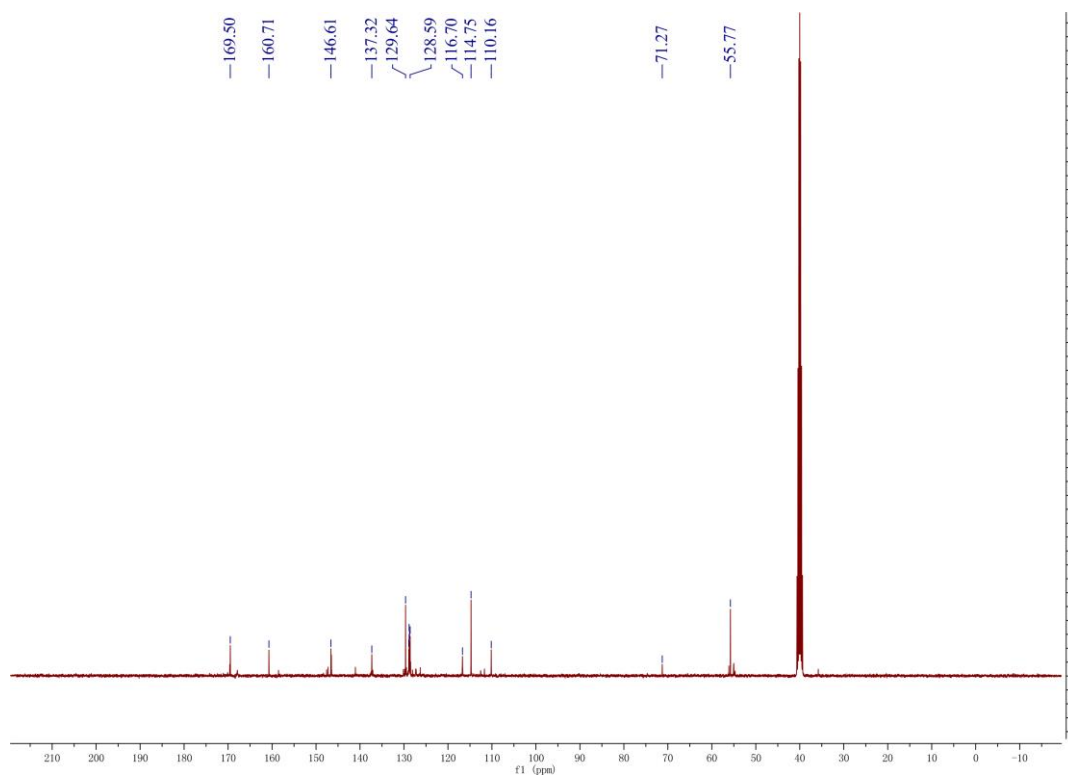


Figure S8 ¹³C-NMR (100 MHz, DMSO-*d*₆) of 7d

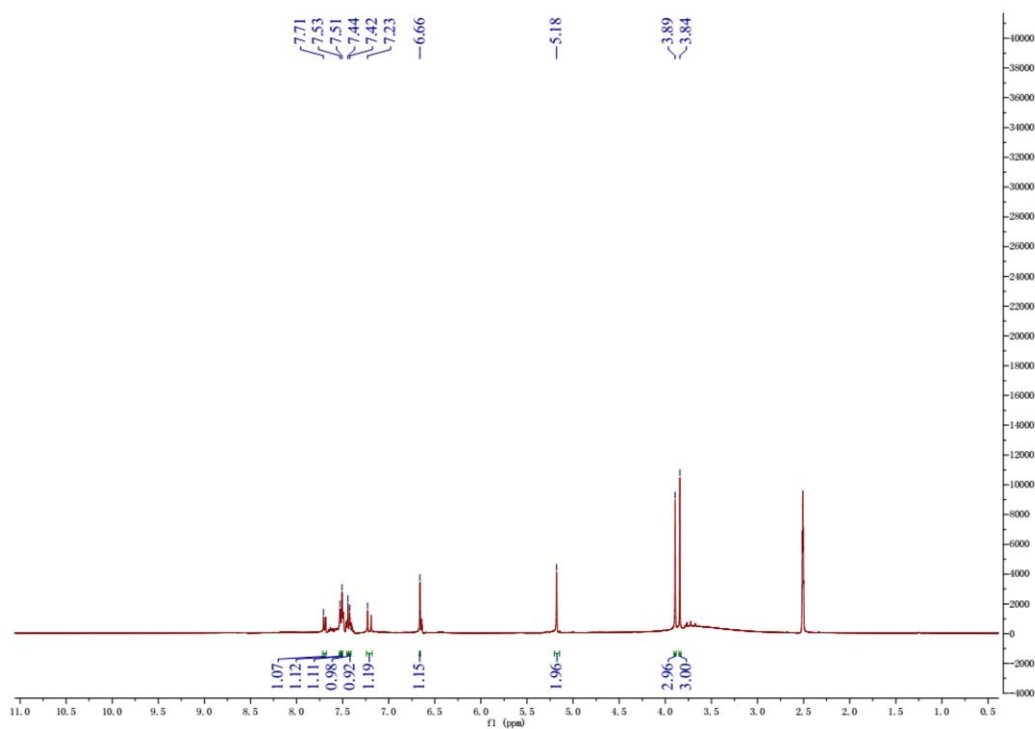


Figure S9 ¹H-NMR (400 MHz, DMSO-*d*₆) of 7e

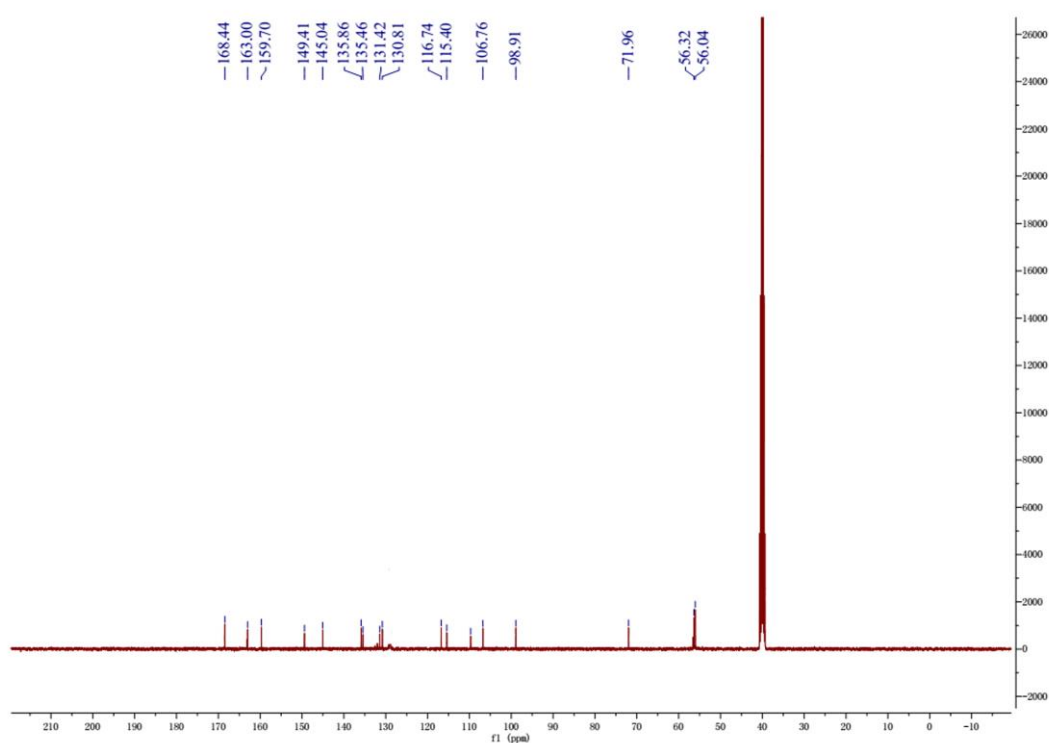


Figure S10 ^{13}C -NMR (100 MHz, $\text{DMSO-}d_6$) of 7e

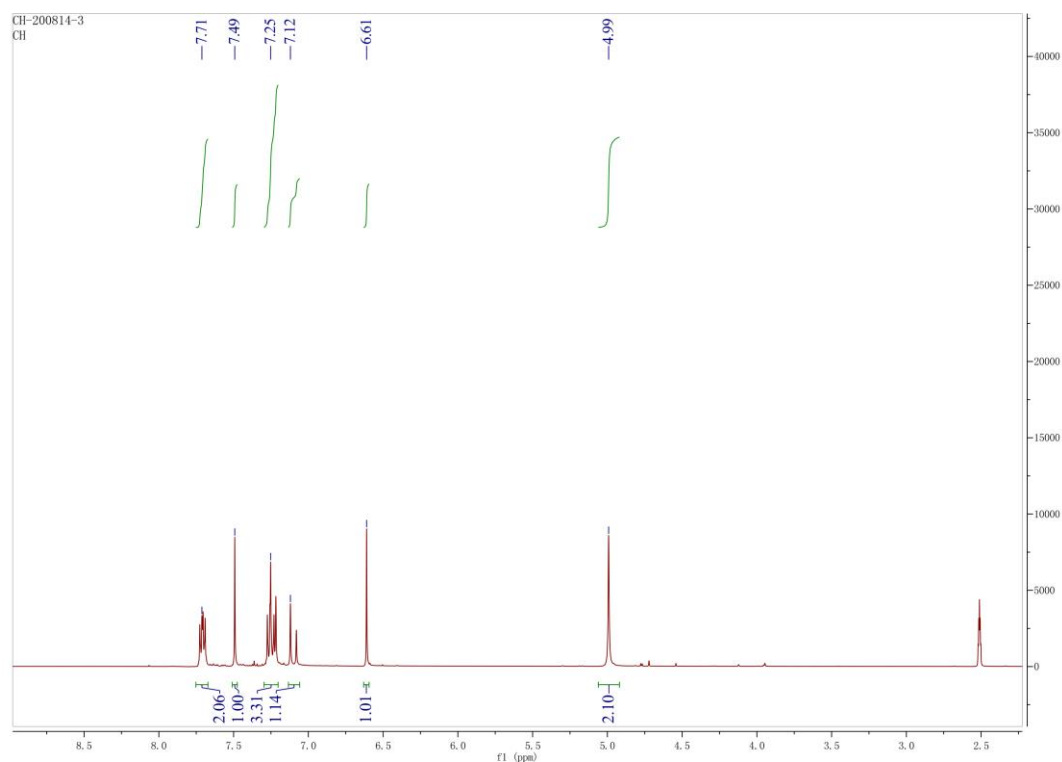
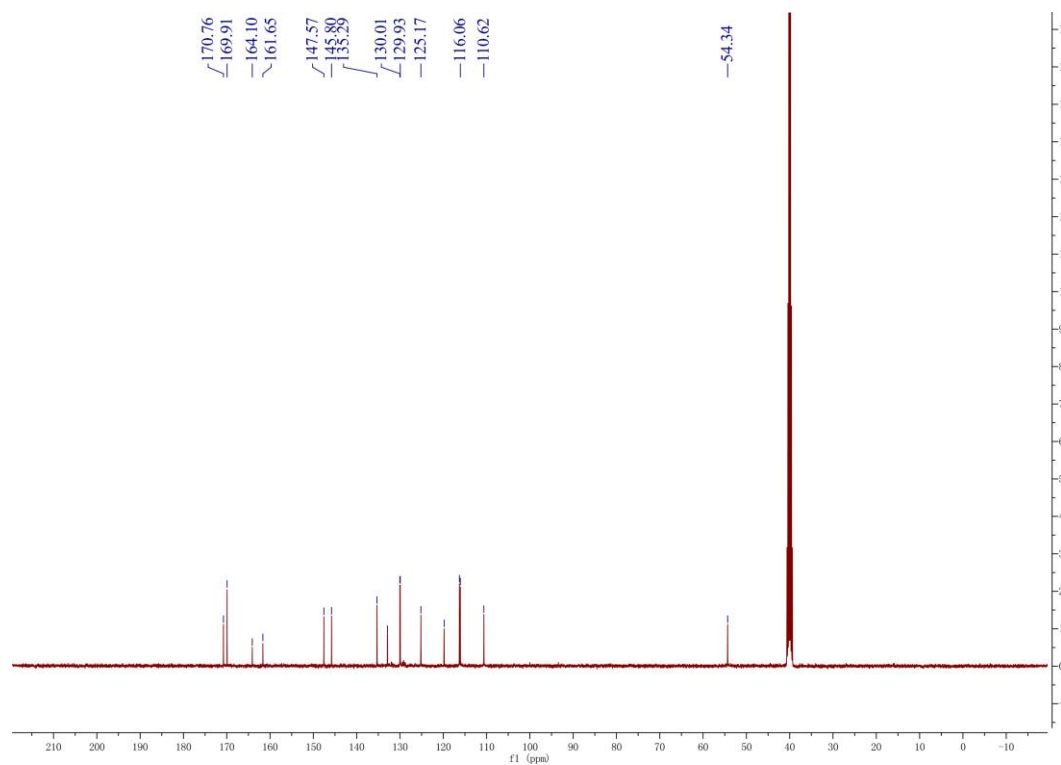
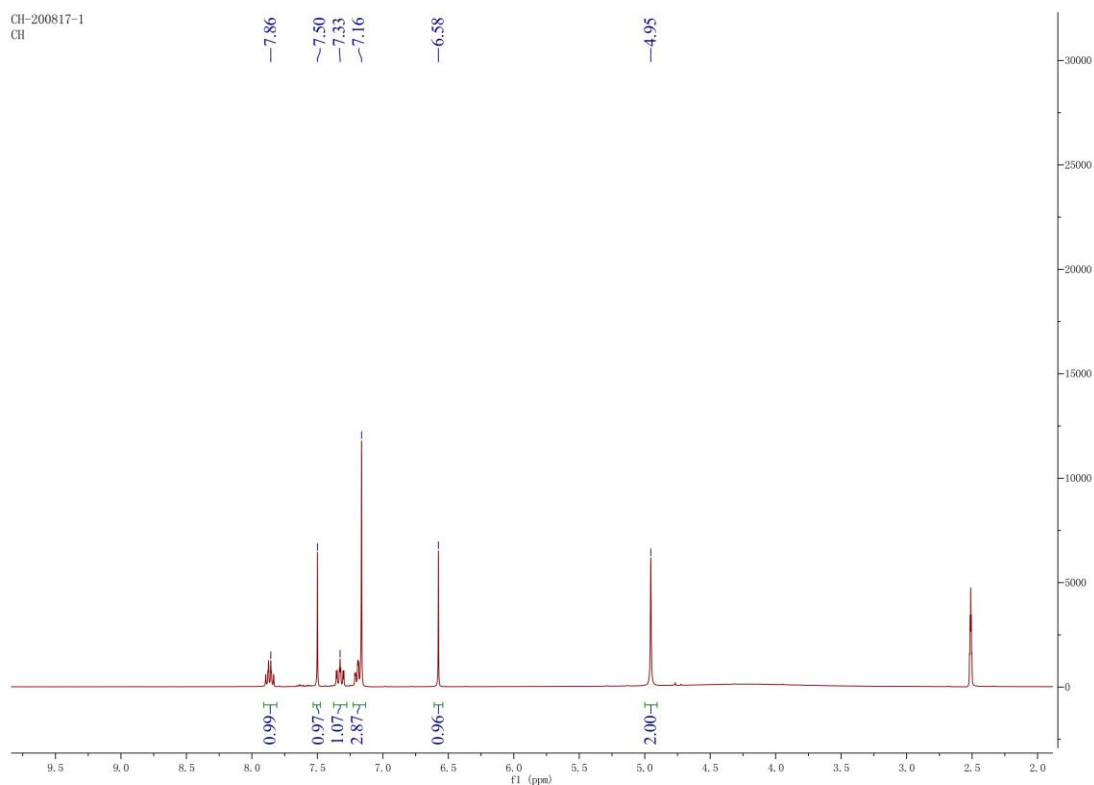
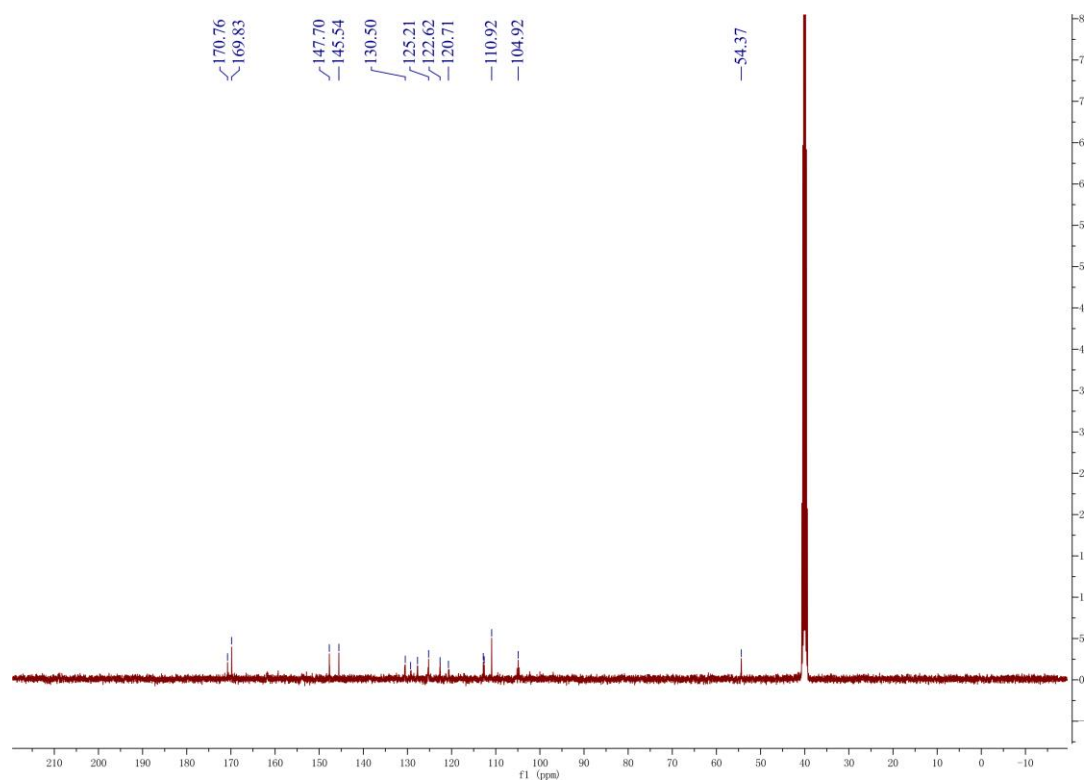
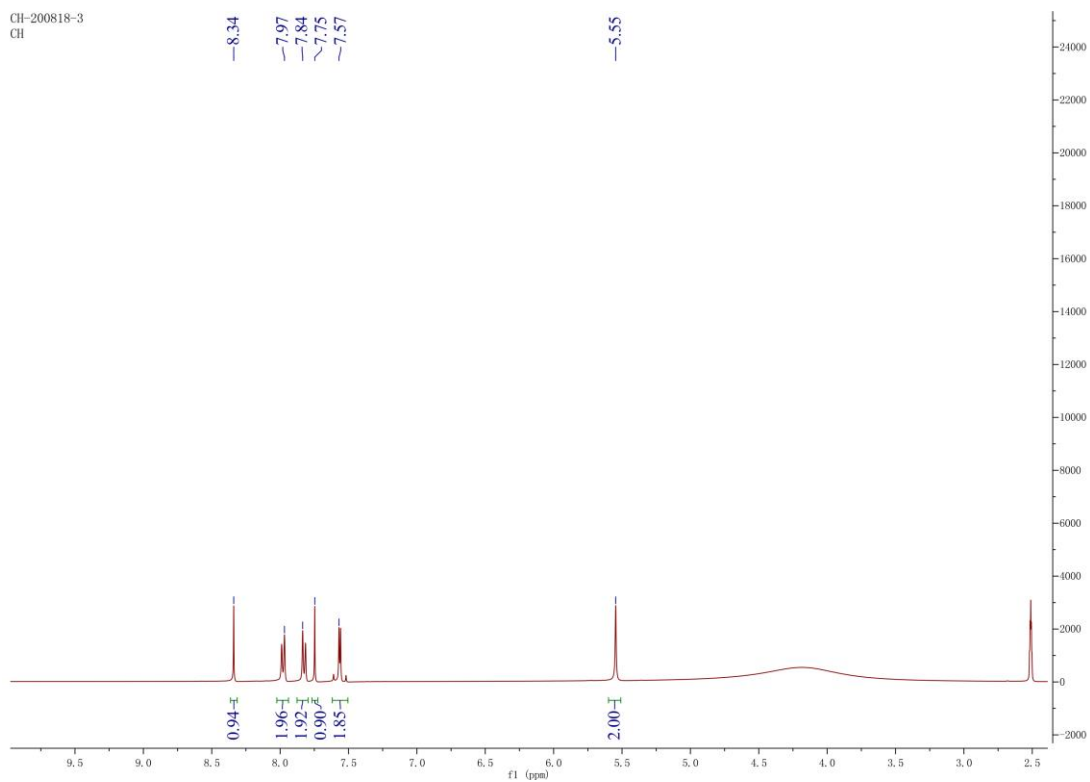
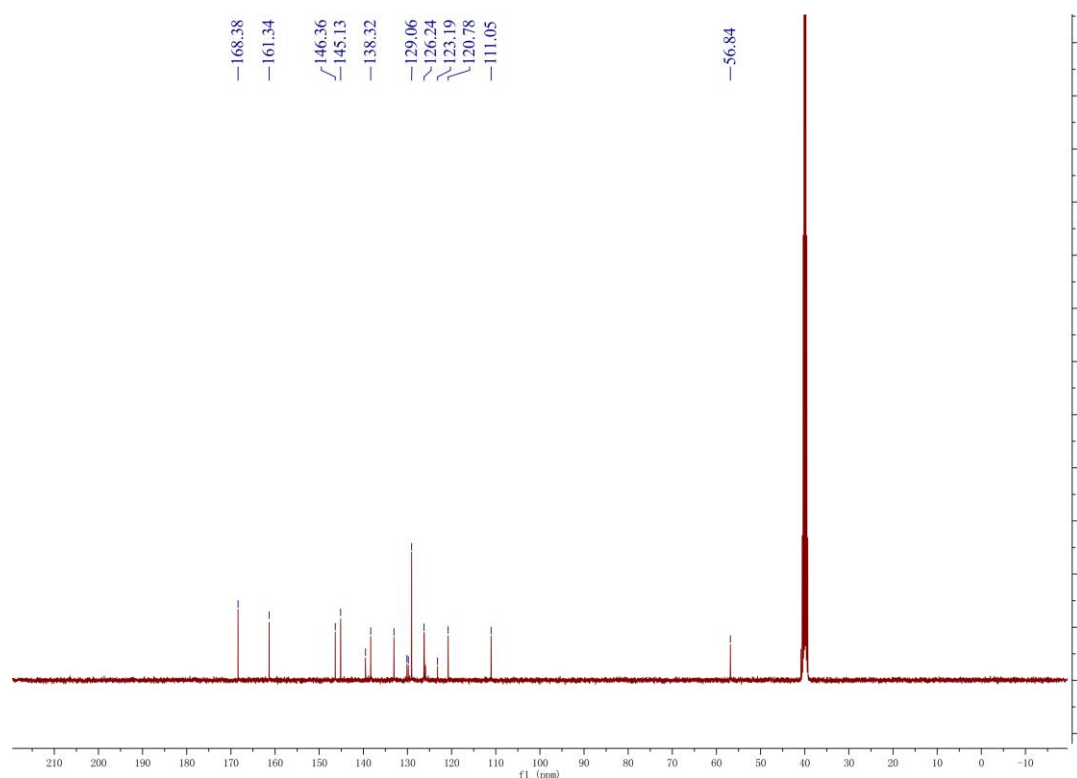
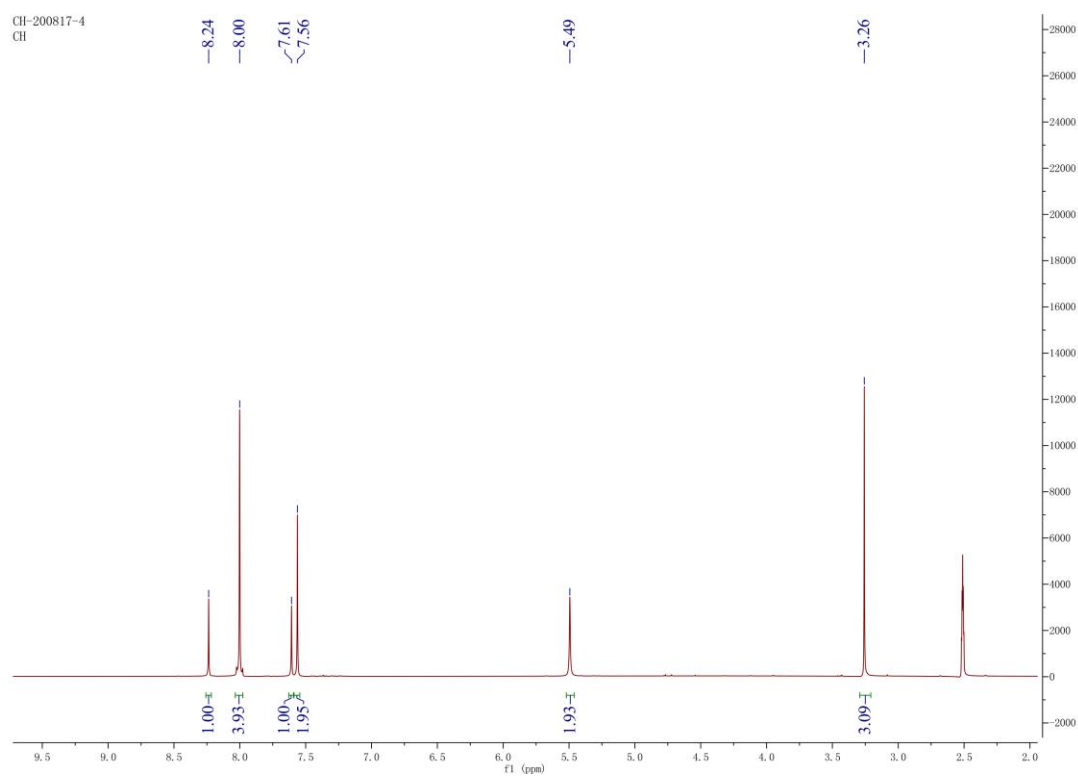
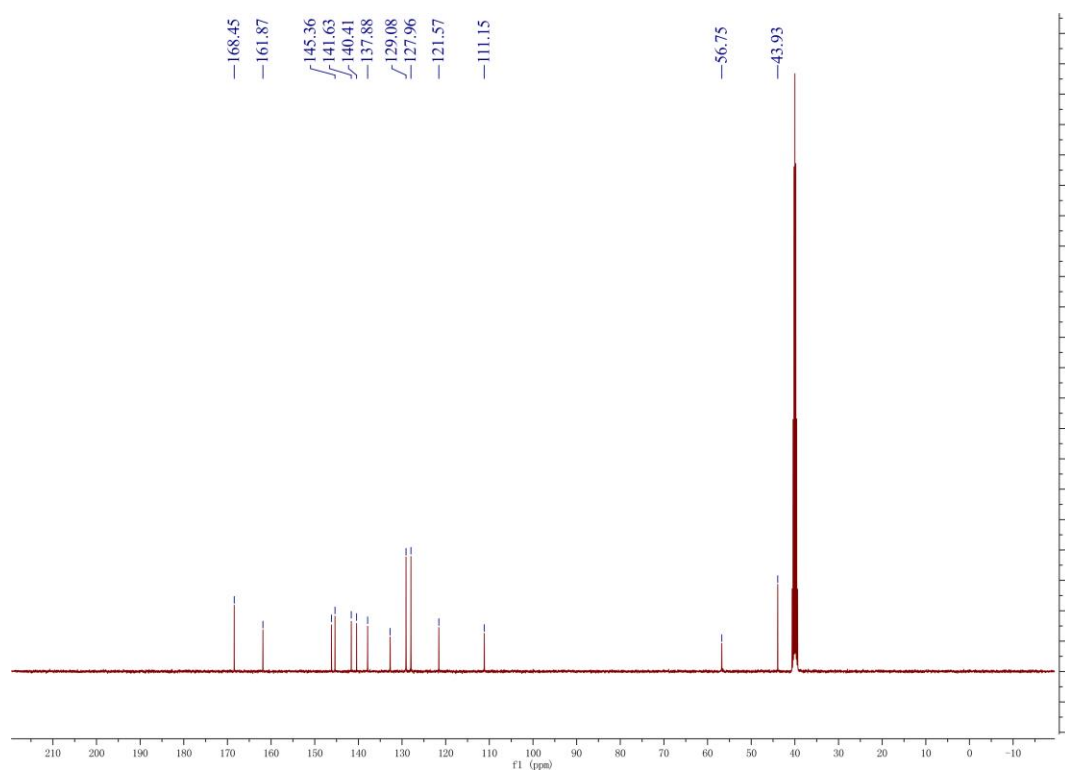
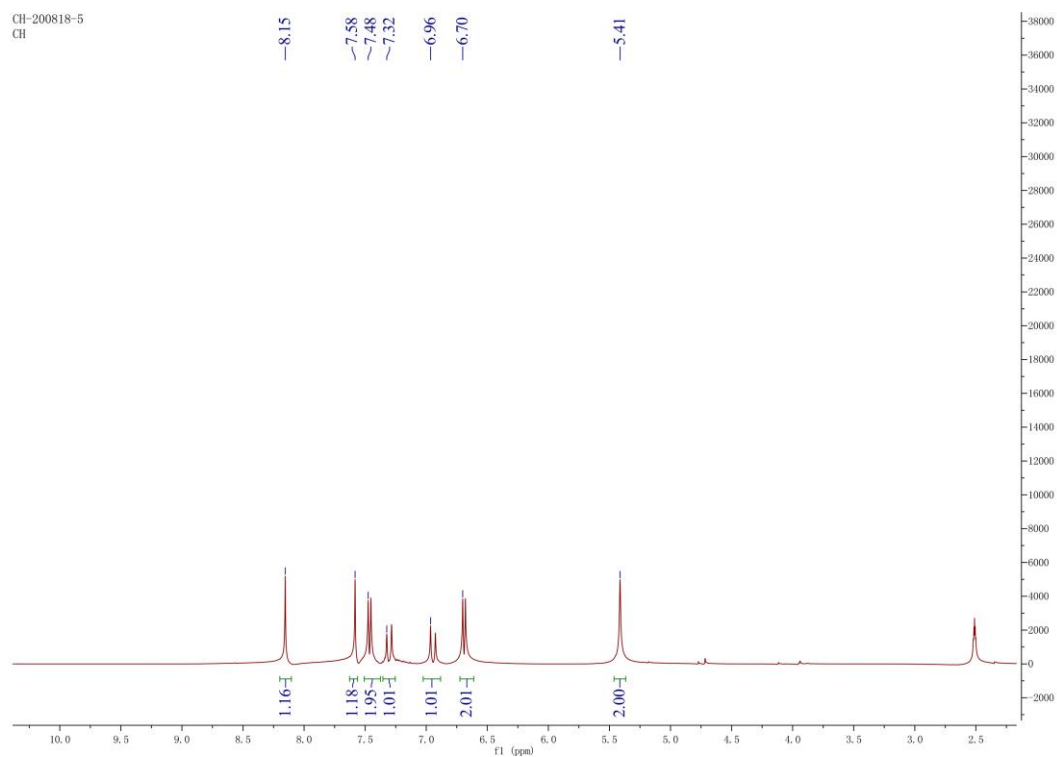


Figure S11 ^1H -NMR (400 MHz, $\text{DMSO-}d_6$) of 7f

**Figure S12** ¹³C-NMR (100 MHz, DMSO-*d*₆) of 7f**Figure S13** ¹H-NMR (400 MHz, DMSO-*d*₆) of 7g

Figure S14 ¹³C-NMR (100 MHz, DMSO-*d*₆) of 7gFigure S15 ¹H-NMR (400 MHz, DMSO-*d*₆) of 7h

**Figure S16** ^{13}C -NMR (100 MHz, $\text{DMSO}-d_6$) of **7h****Figure S17** ^1H -NMR (400 MHz, $\text{DMSO}-d_6$) of **7i**

**Figure S18** ^{13}C -NMR (100 MHz, $\text{DMSO-}d_6$) of **7i****Figure S19** ^1H -NMR (400 MHz, $\text{DMSO-}d_6$) of **7j**

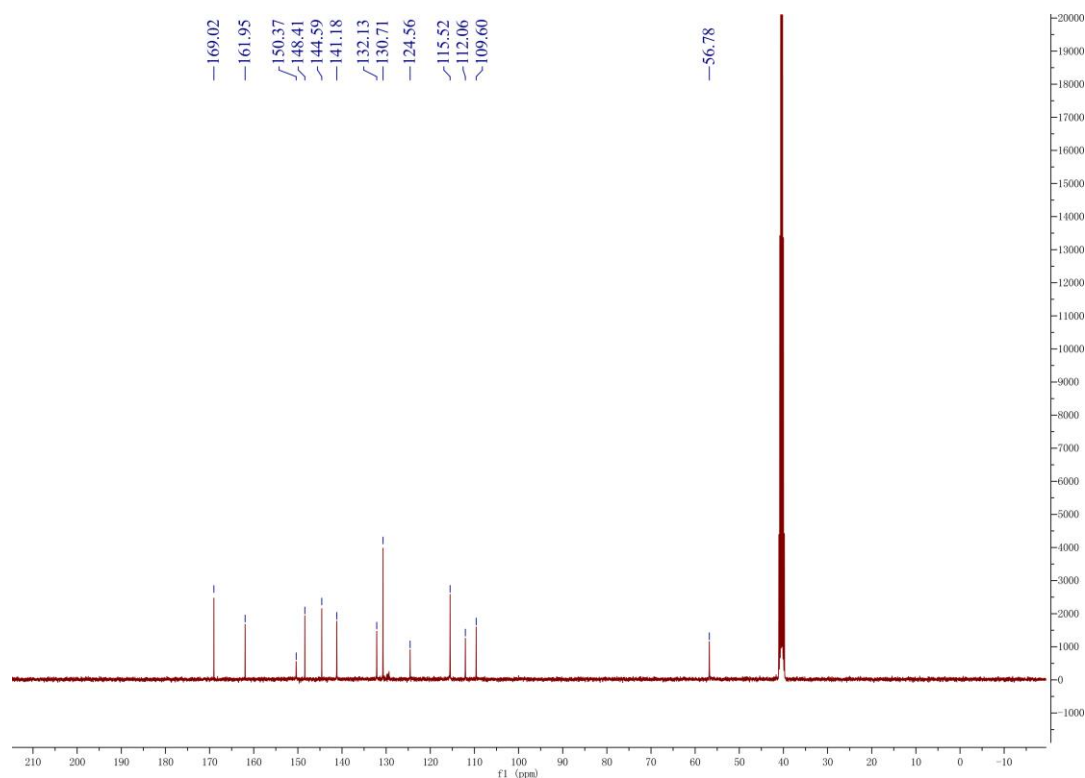


Figure S20 ^{13}C -NMR (100 MHz, $\text{DMSO-}d_6$) of 7j

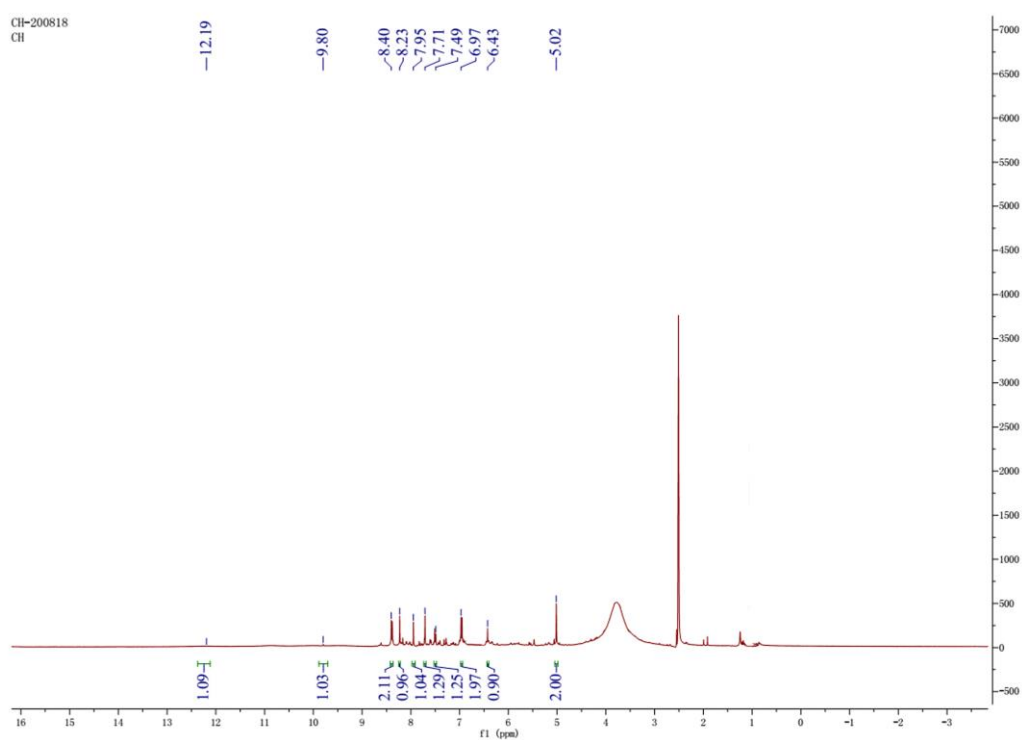


Figure S21 ^1H -NMR (400 MHz, $\text{DMSO-}d_6$) of 7k

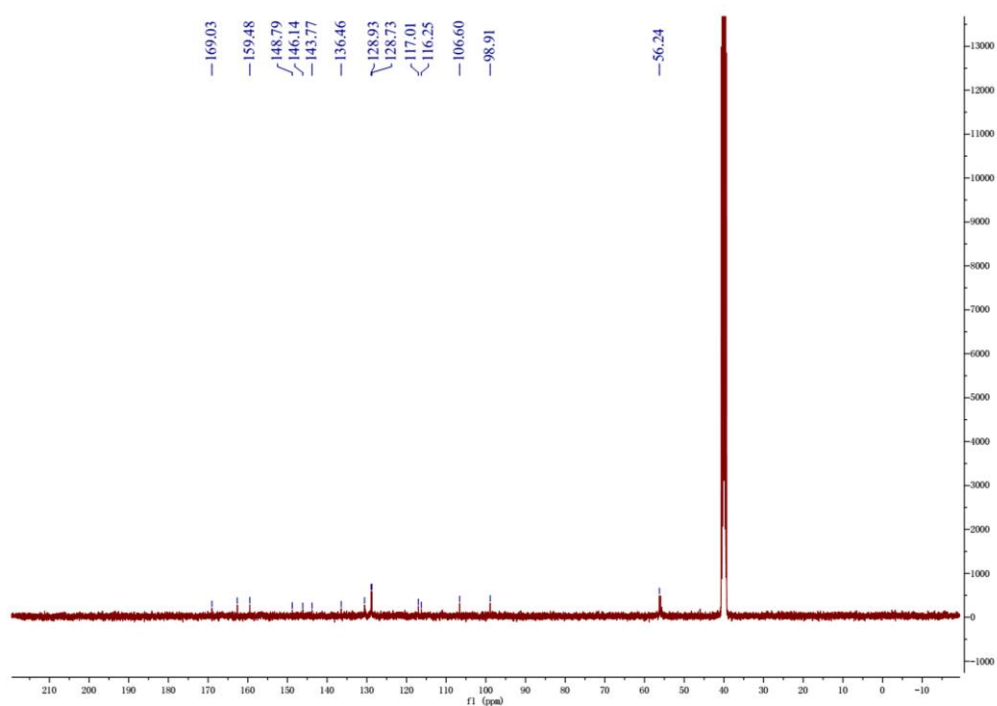


Figure S22 ^{13}C -NMR (100 MHz, $\text{DMSO}-d_6$) of 7k

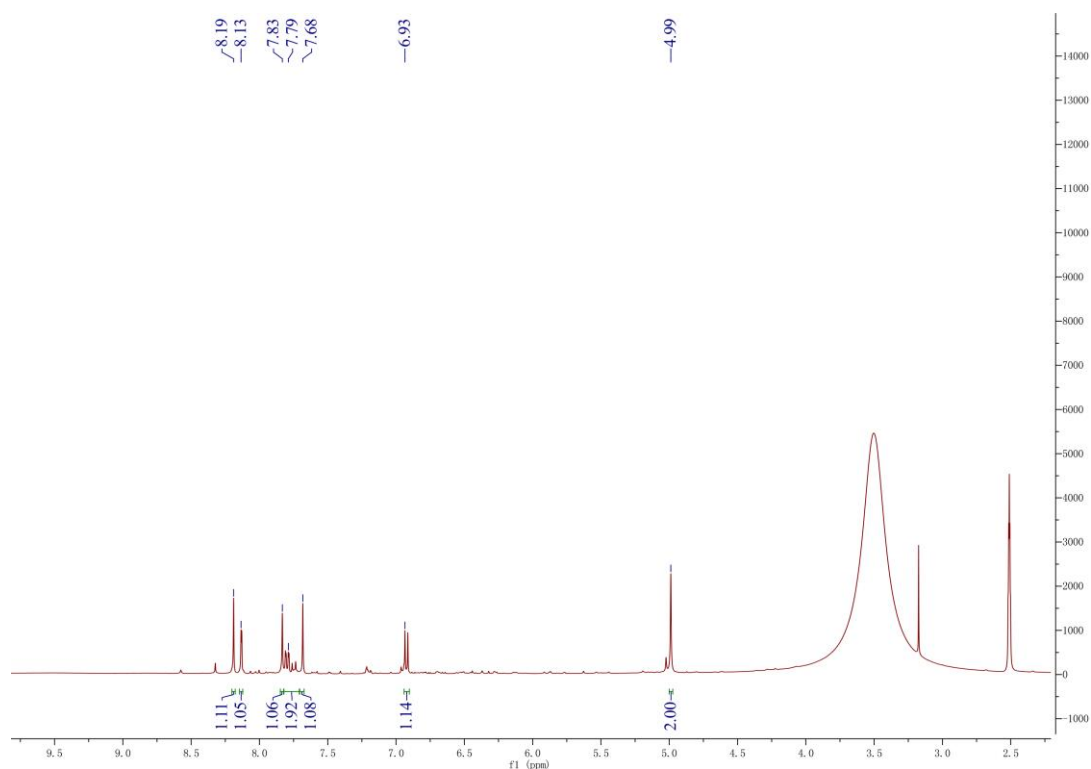
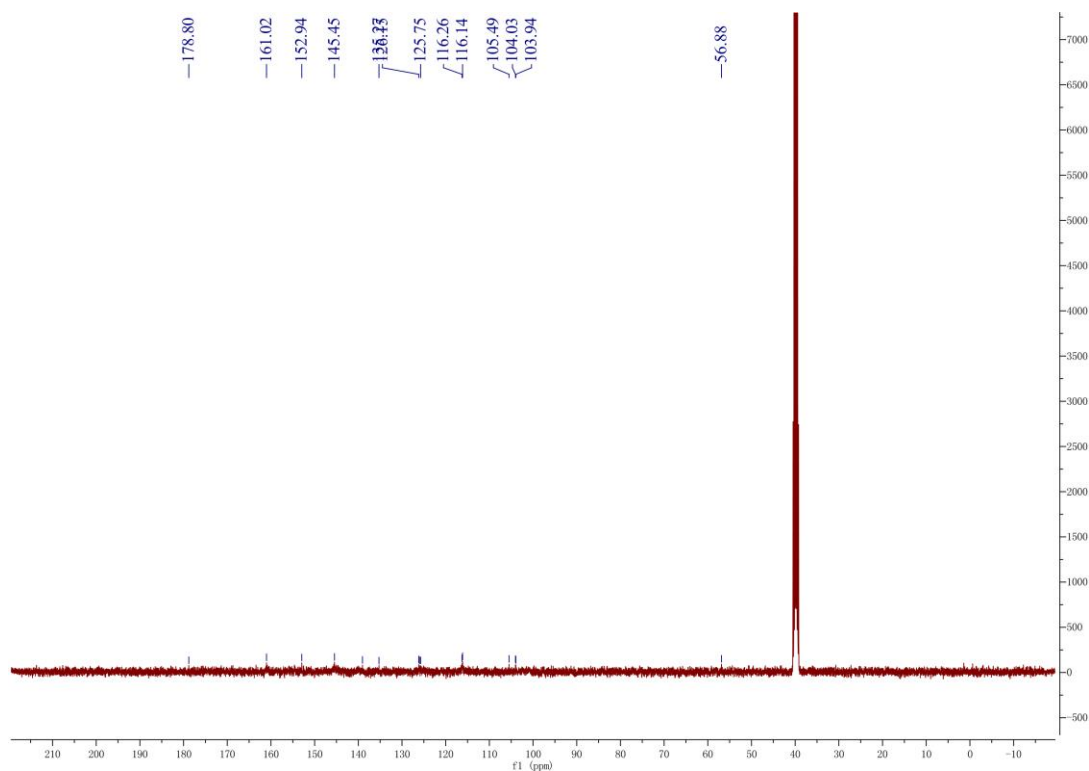
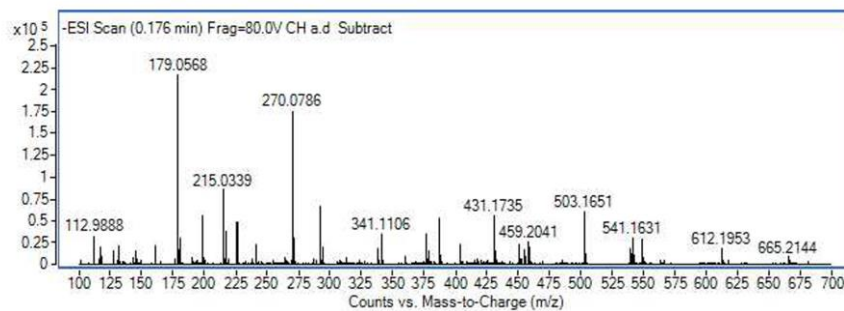
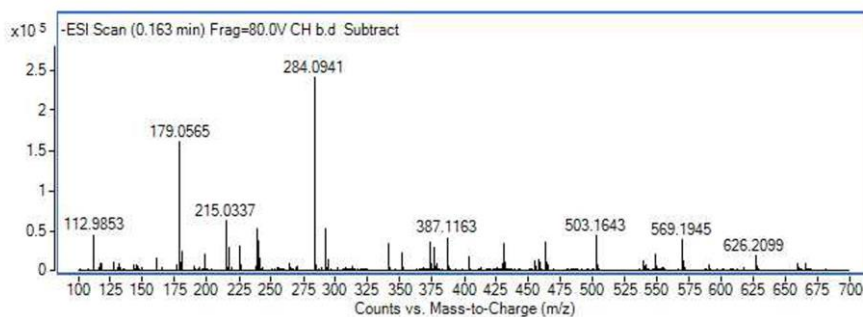


Figure S23 ^1H -NMR (400 MHz, $\text{DMSO}-d_6$) of 7k

**Figure S24** ¹³C-NMR (100 MHz, DMSO-*d*₆) of 7l**Figure S25** HRMS of 7a**Figure S26** HRMS of 7b

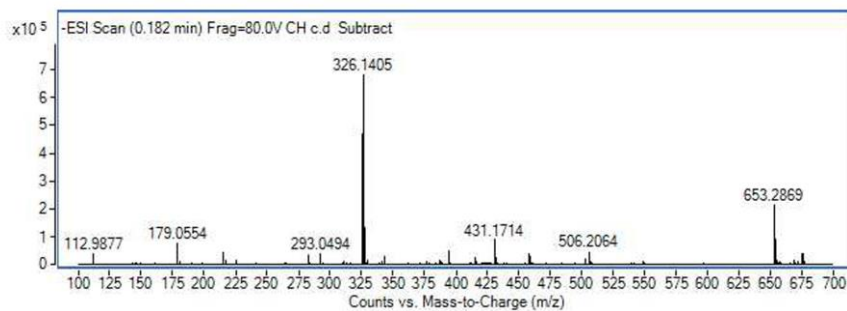


Figure S27 HRMS of 7c

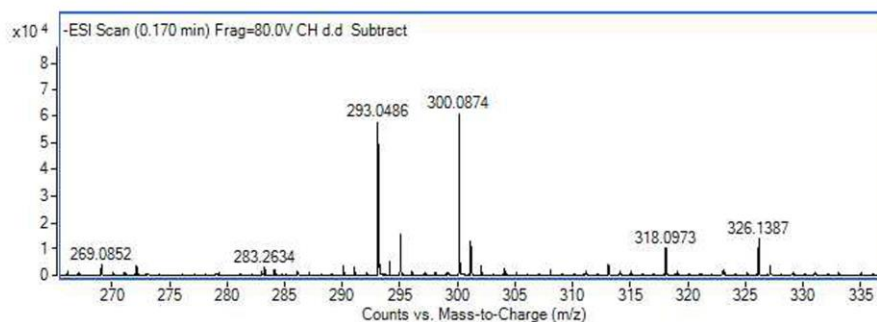


Figure S28 HRMS of 7d

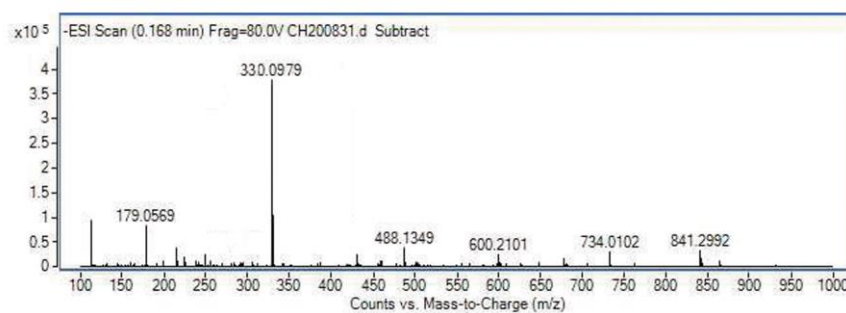


Figure S29 HRMS of 7e

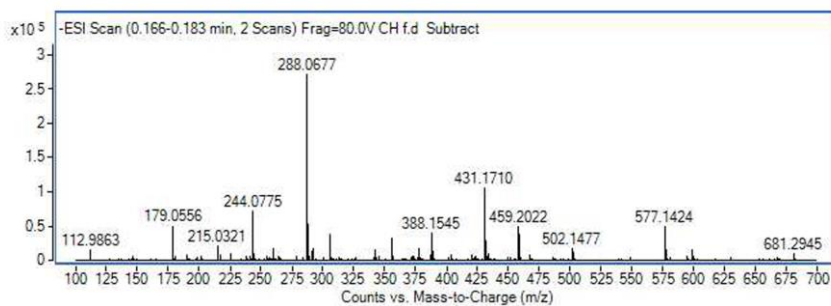


Figure S30 HRMS of 7f

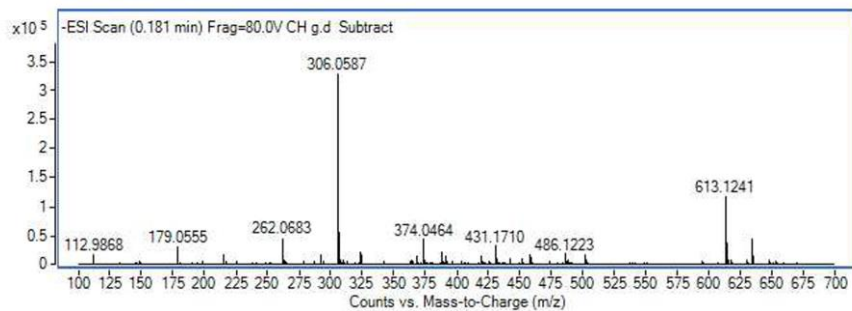


Figure S31 HRMS of 7g

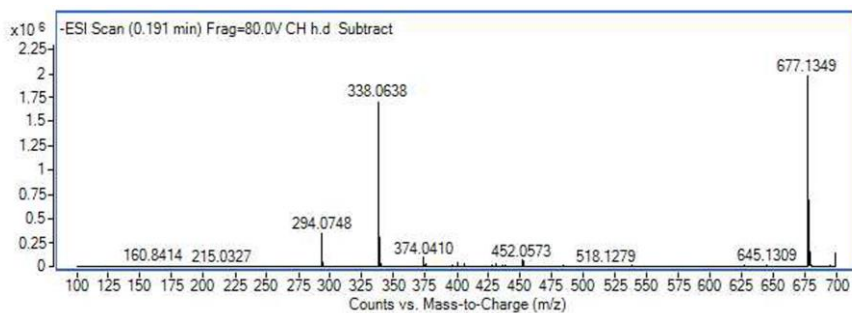


Figure S32 HRMS of 7h

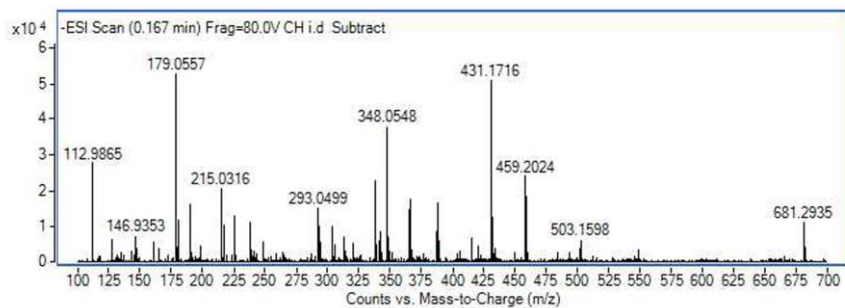


Figure S33 HRMS of 7i

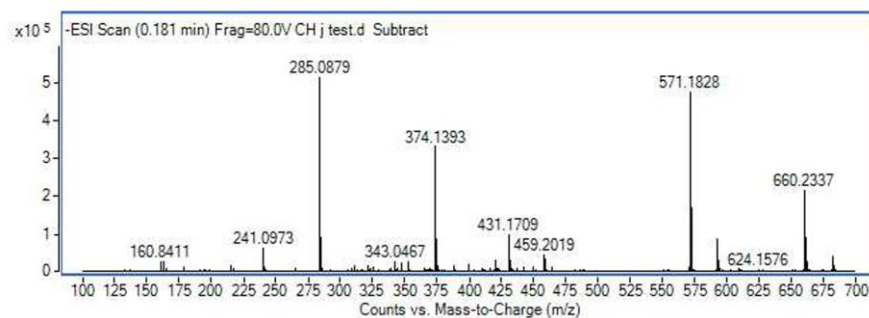


Figure S34 HRMS of 7j

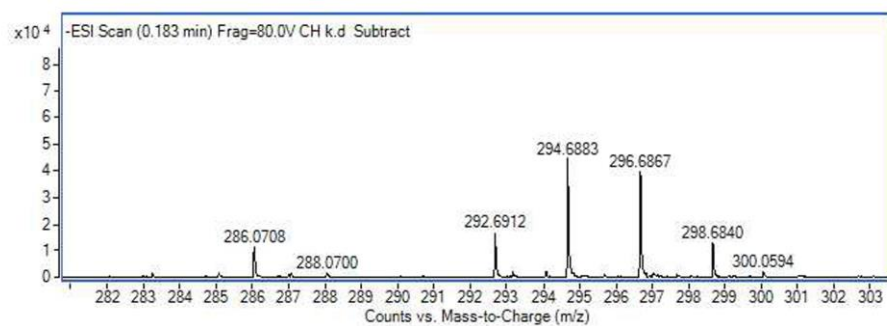


Figure S35 HRMS of 7k

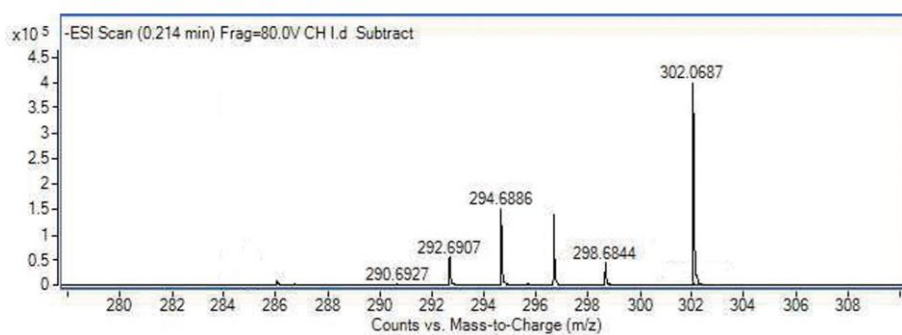


Figure S36 HRMS of 7l

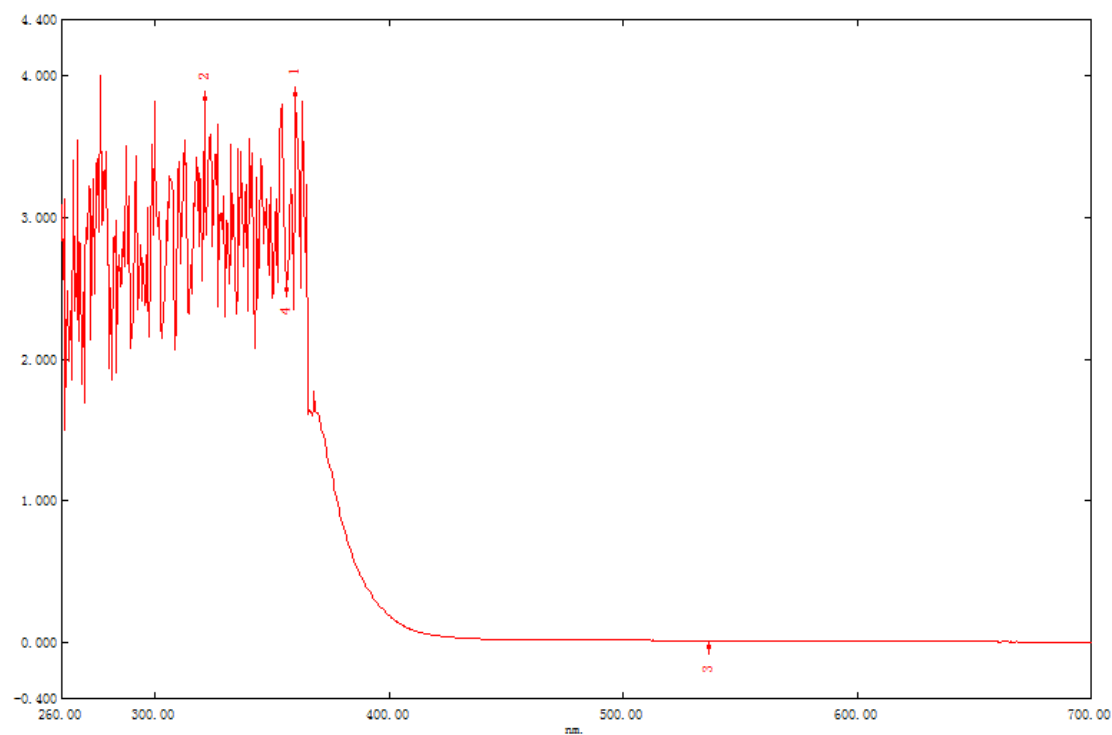
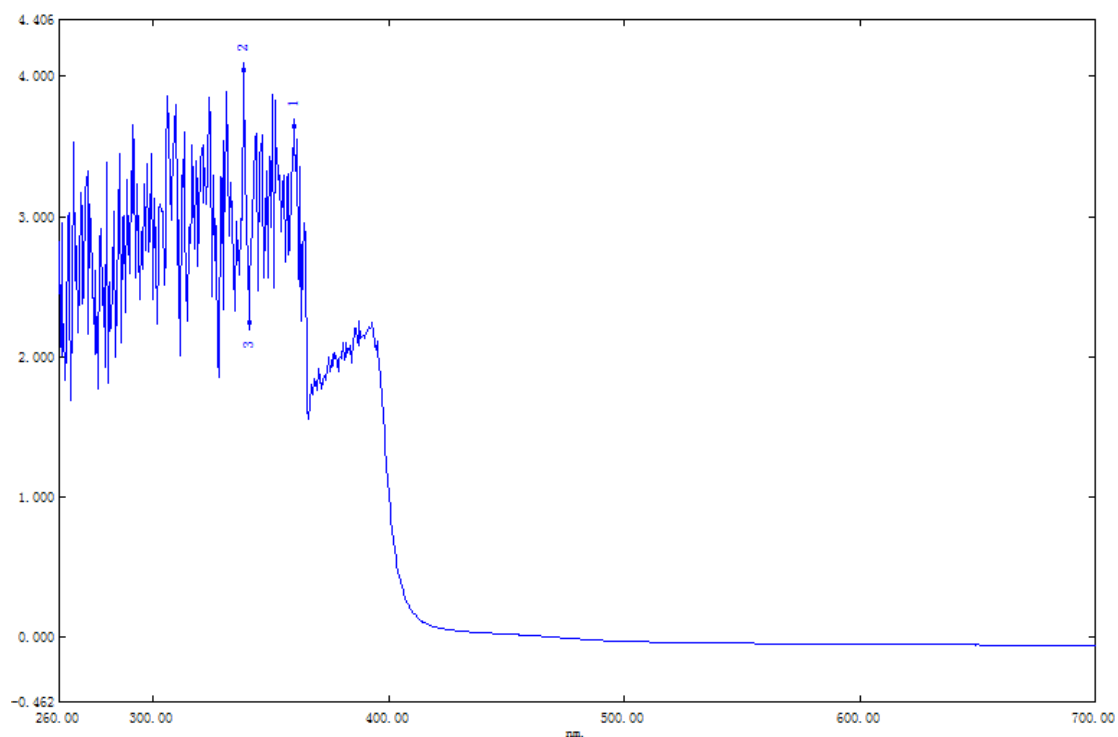
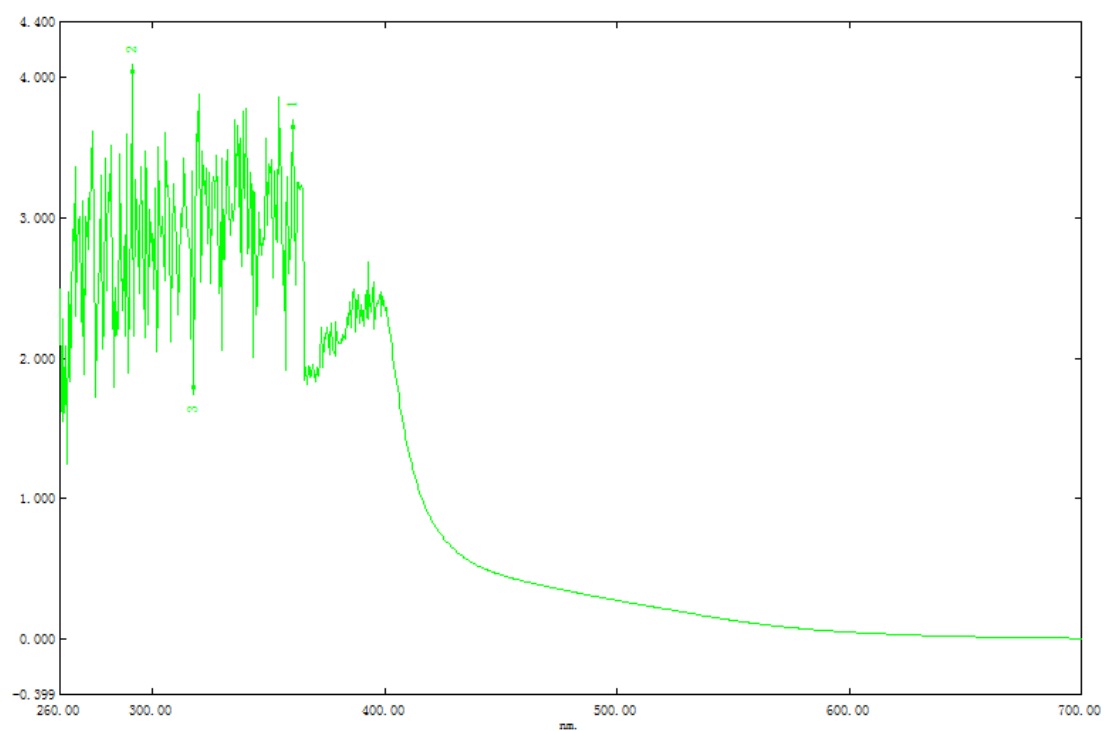


Figure S37 UV-Vis spectra of 7a

**Figure S38** UV-Vis spectra of **7b****Figure S39** UV-Vis spectra of **7c**

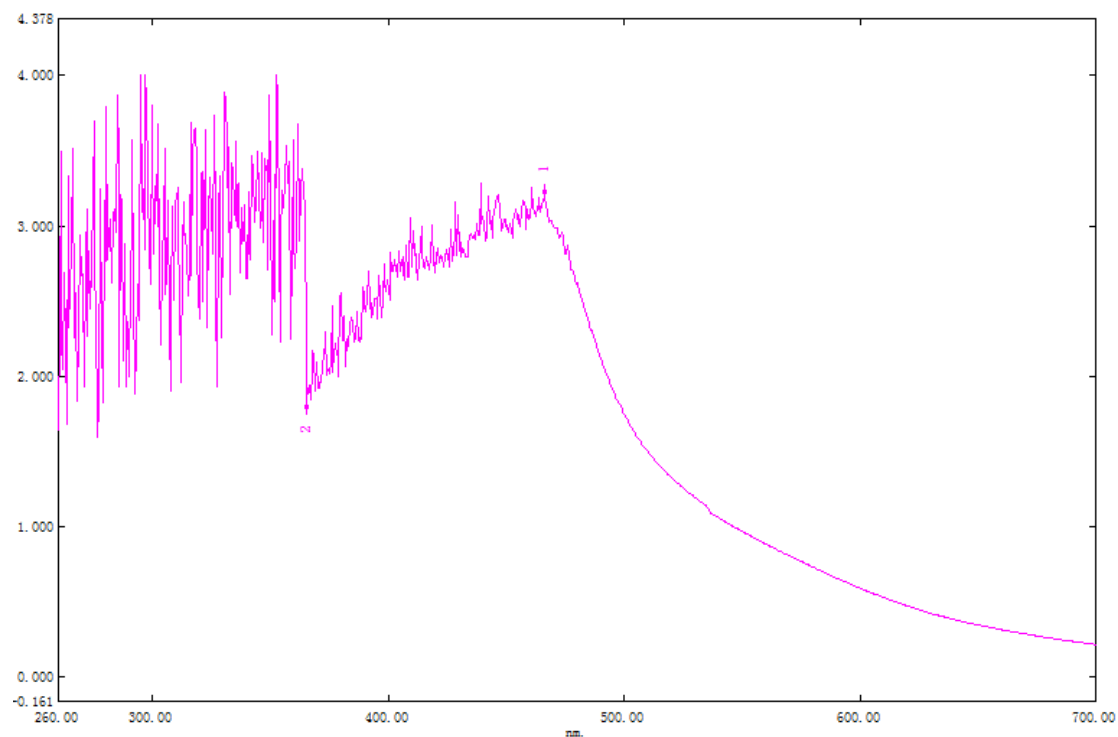


Figure S40 UV-Vis spectra of 7d

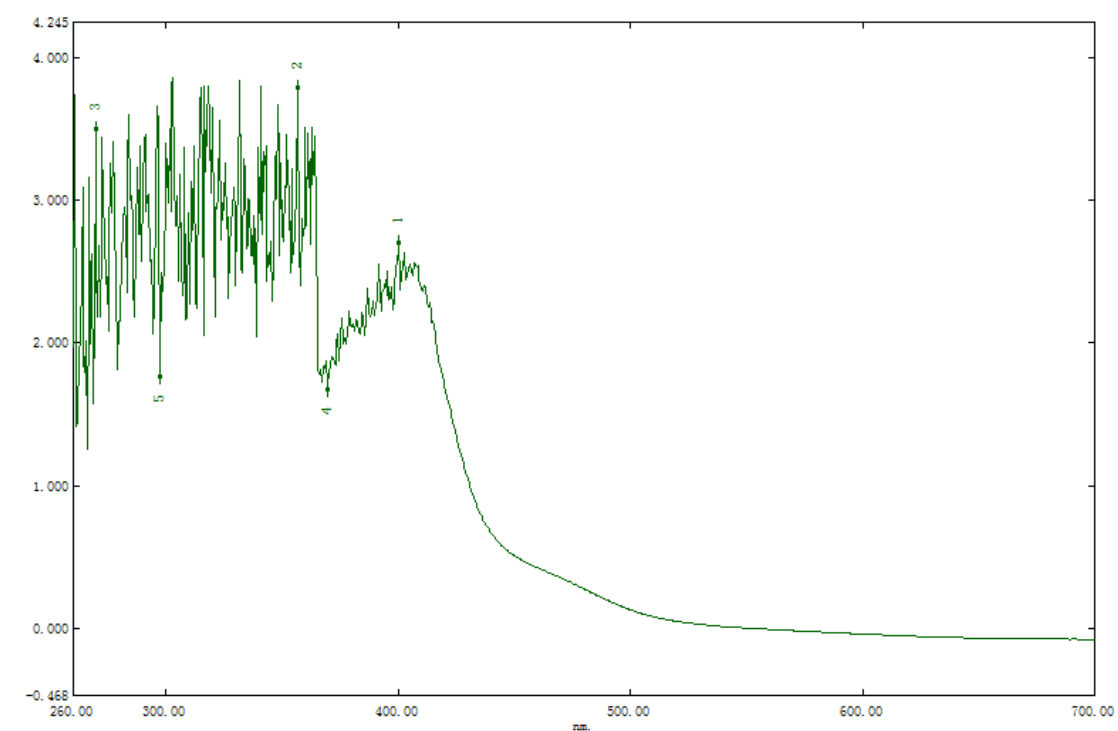


Figure S41 UV-Vis spectra of 7e

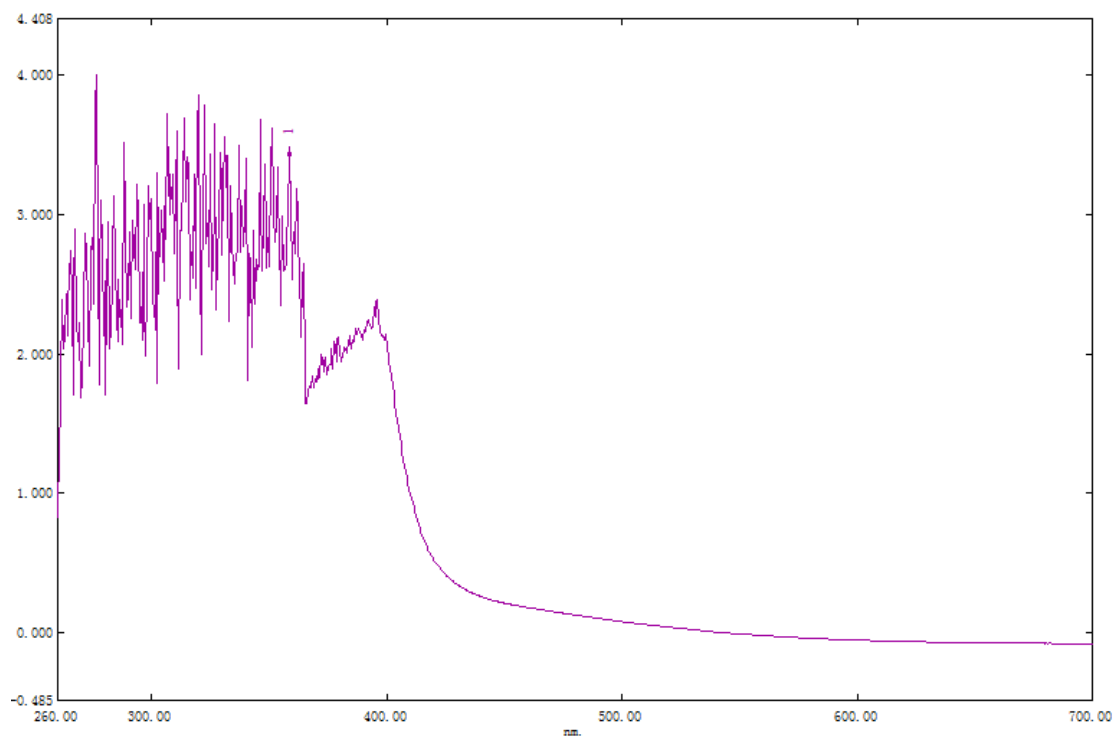


Figure S42 UV-Vis spectra of 7f

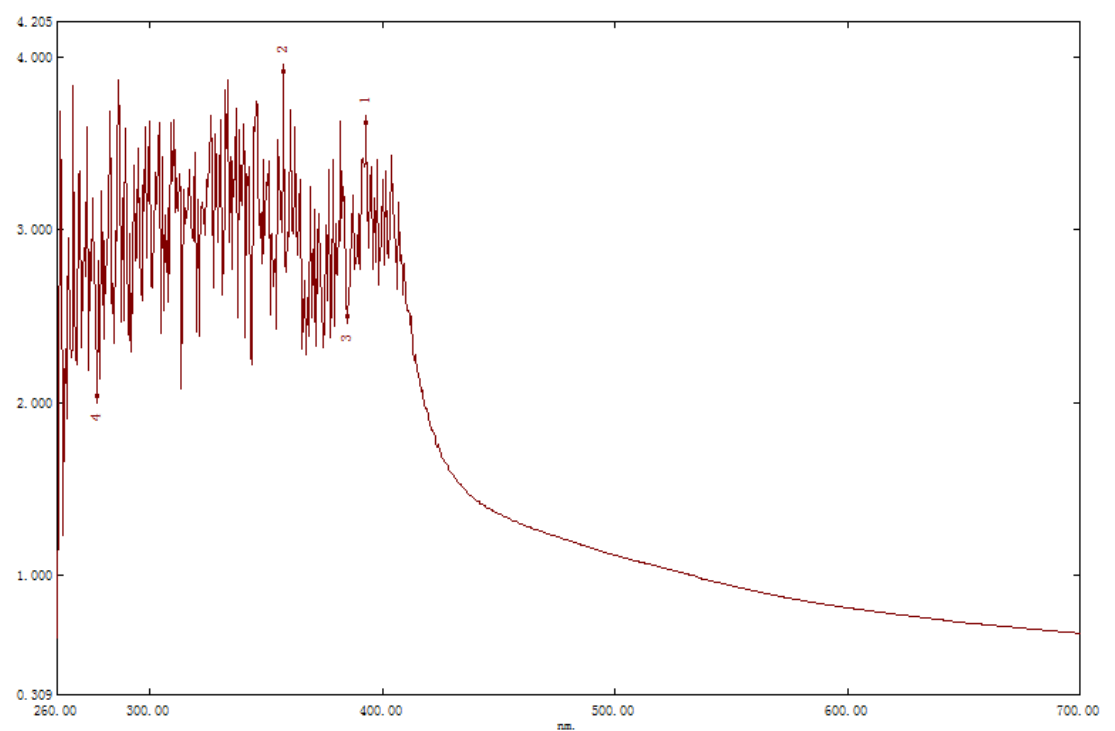
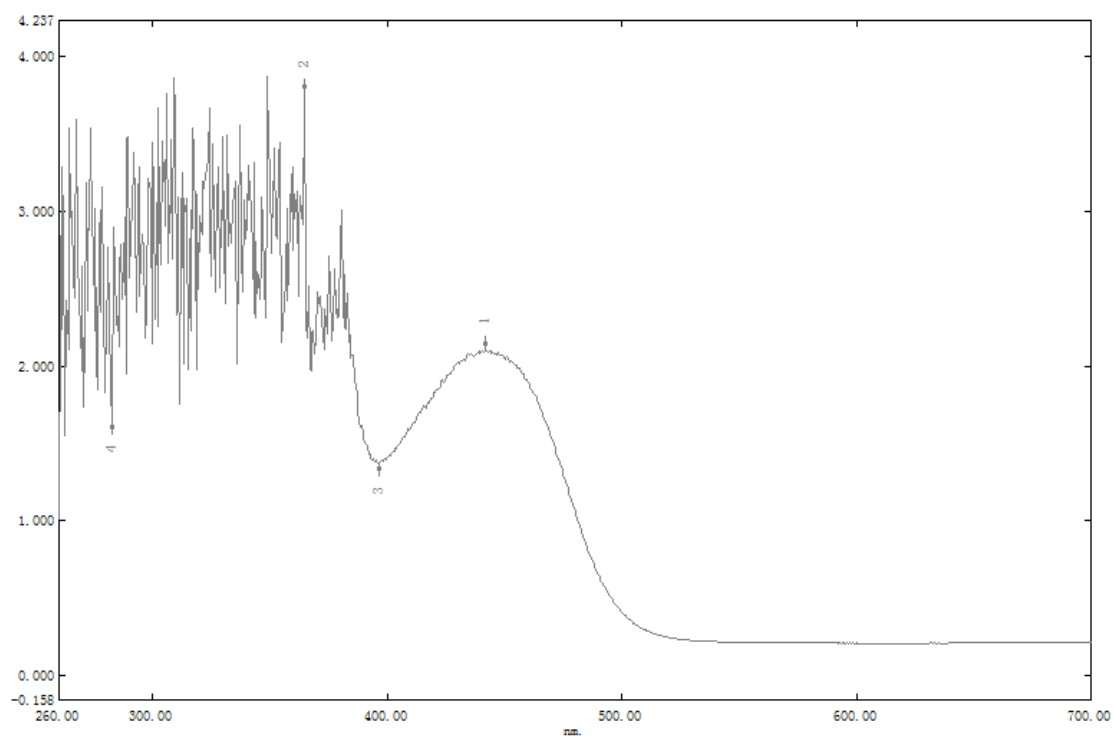
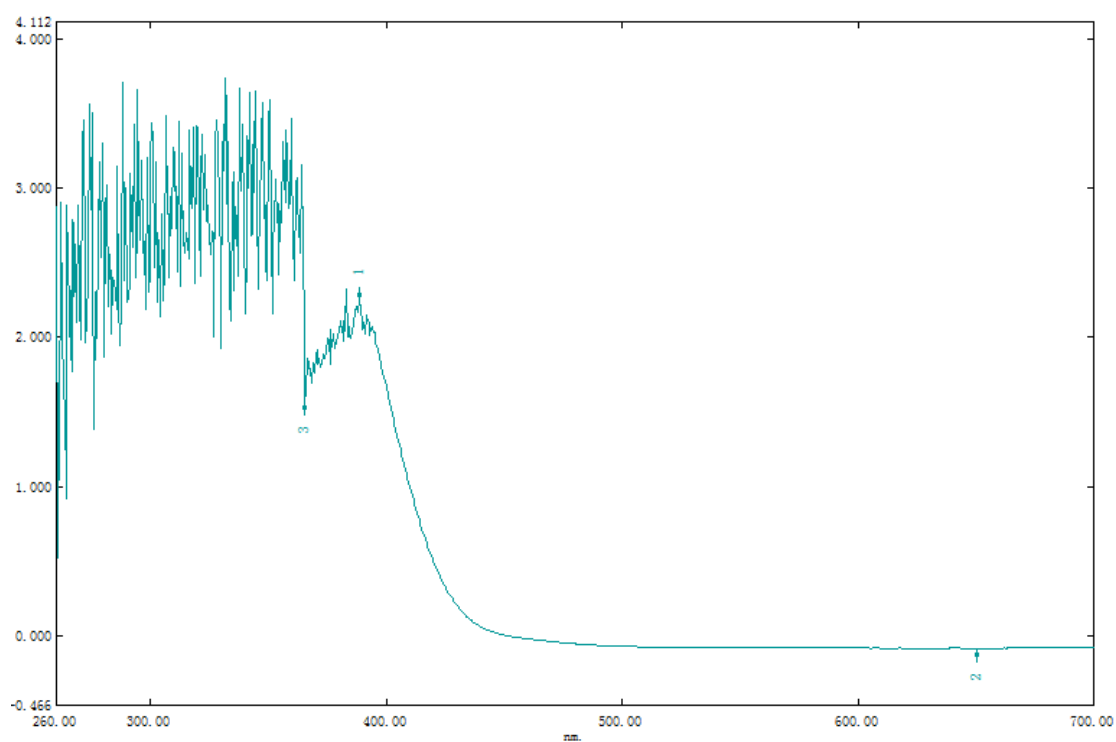
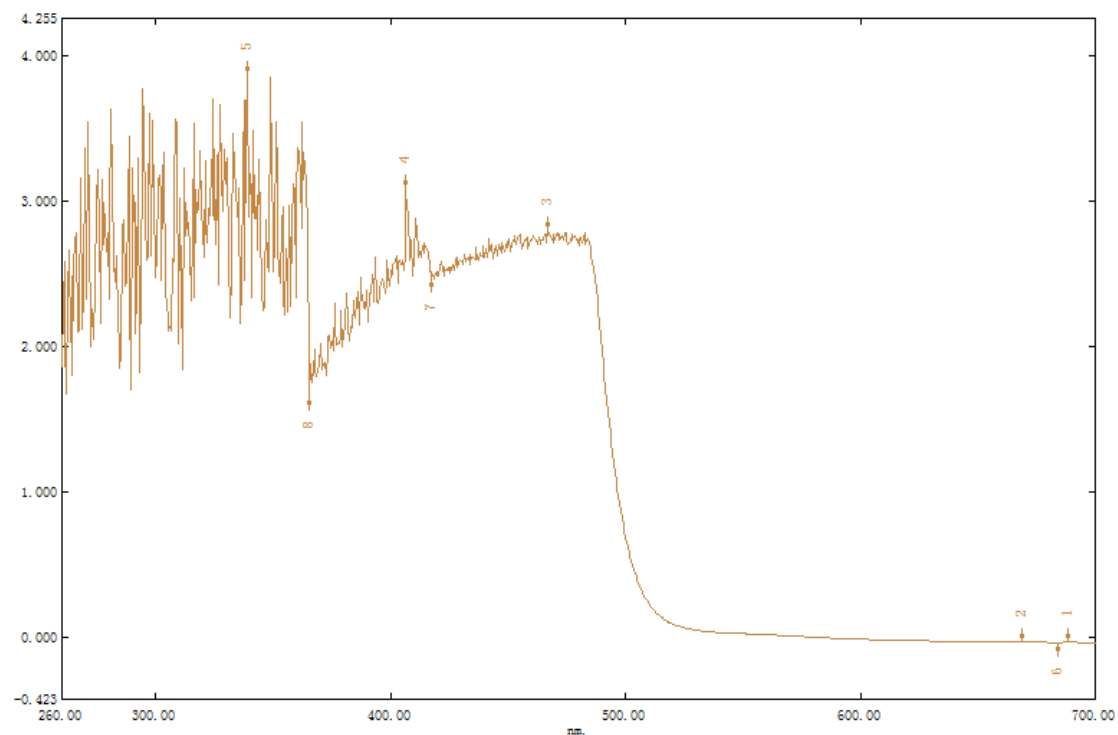
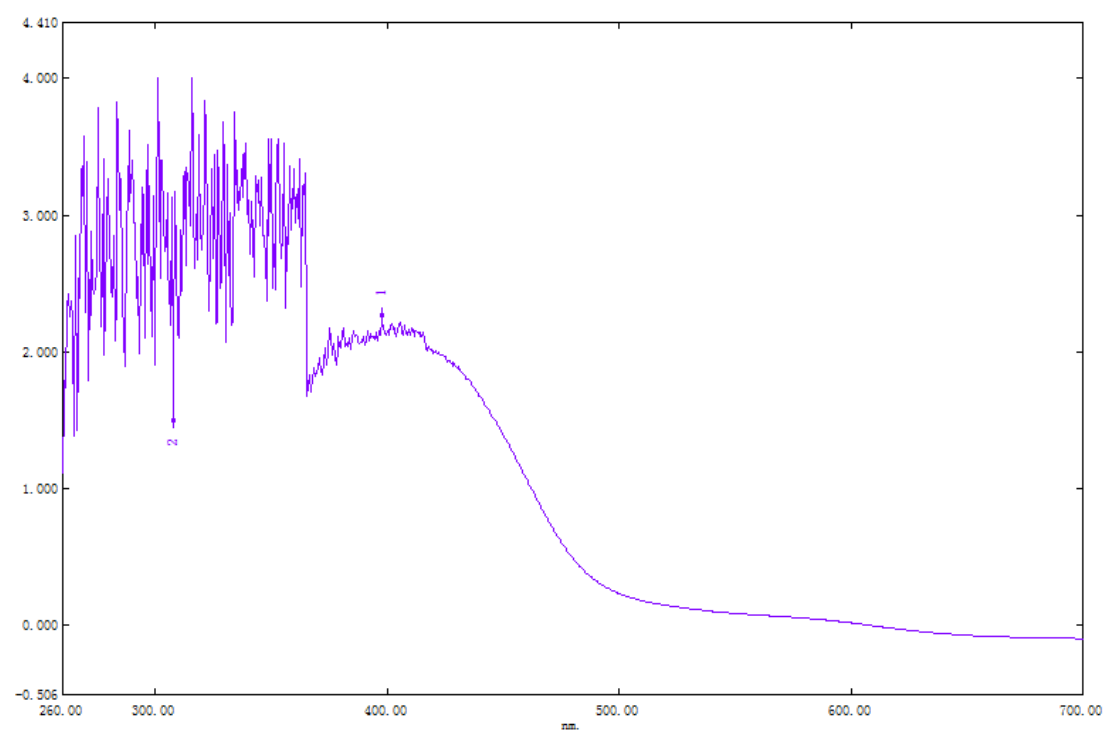


Figure S43 UV-Vis spectra of 7g

**Figure S44** UV-Vis spectra of 7h**Figure S45** UV-Vis spectra of 7i

**Figure S46** UV-Vis spectra of 7j**Figure S47** UV-Vis spectra of 7k

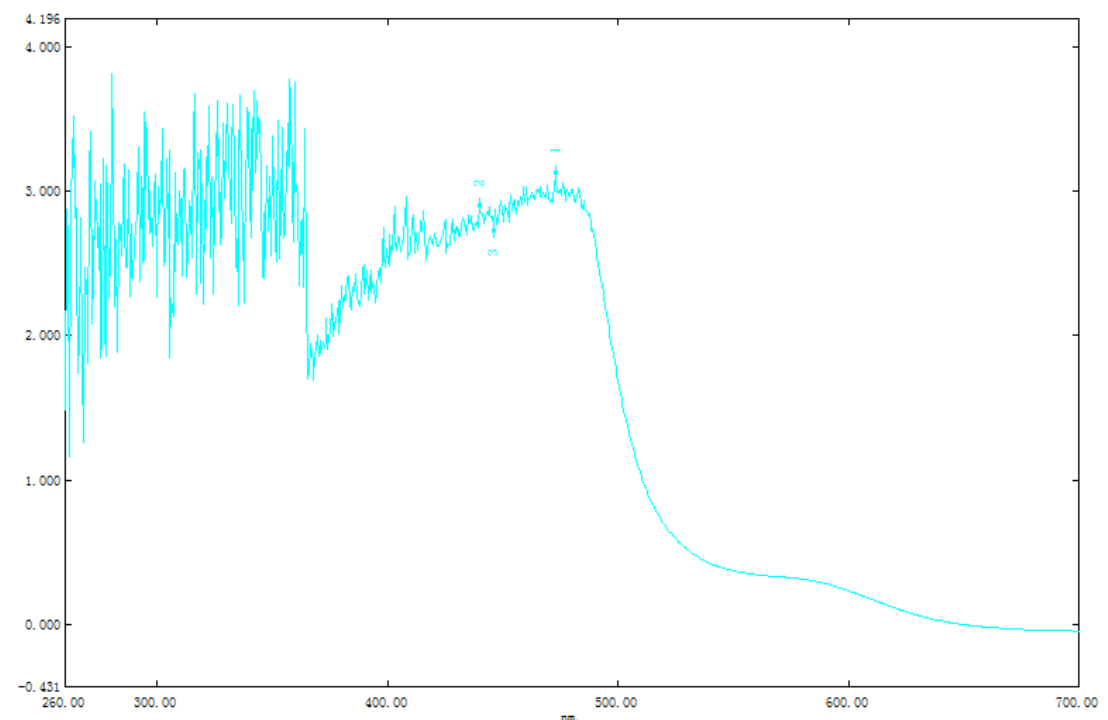


Figure S48 UV-Vis spectra of 71