



# Antioxidant and anticancer activities of synthesized methylated and acetylated derivatives of natural bromophenols

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The <sup>1</sup>H NMR, <sup>13</sup>C NMR, HRMS and HPLC Spectrum of Compound **3b-1** to **9** and **4b-1** to **6**

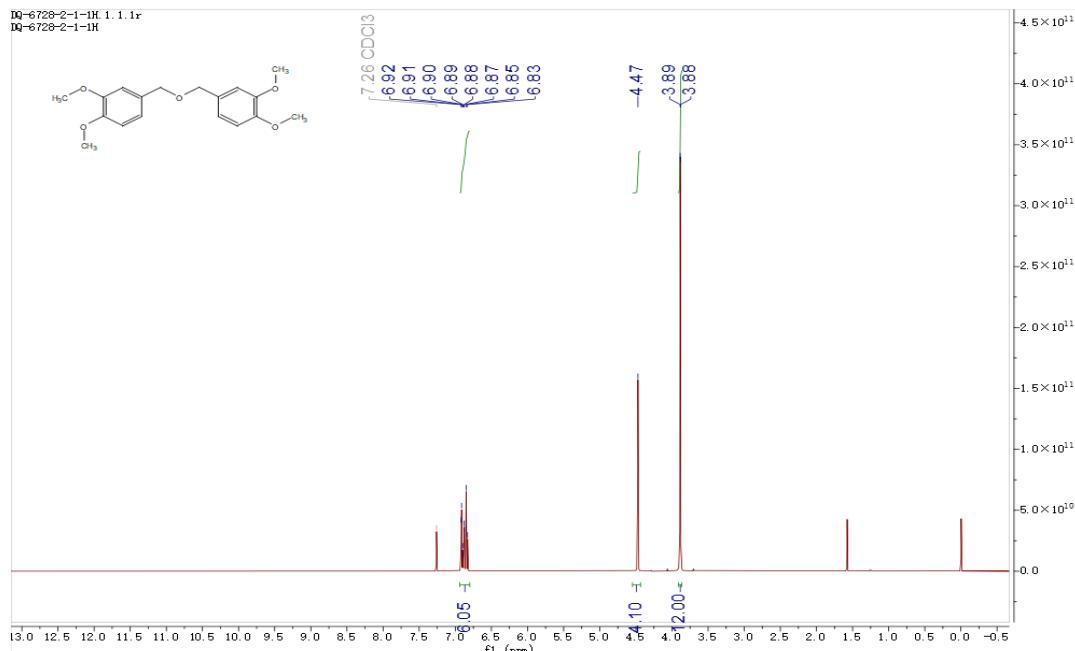


Figure S1. <sup>1</sup>H NMR spectrum of compound **3b-1** in Chloroform-d (400 MHz).

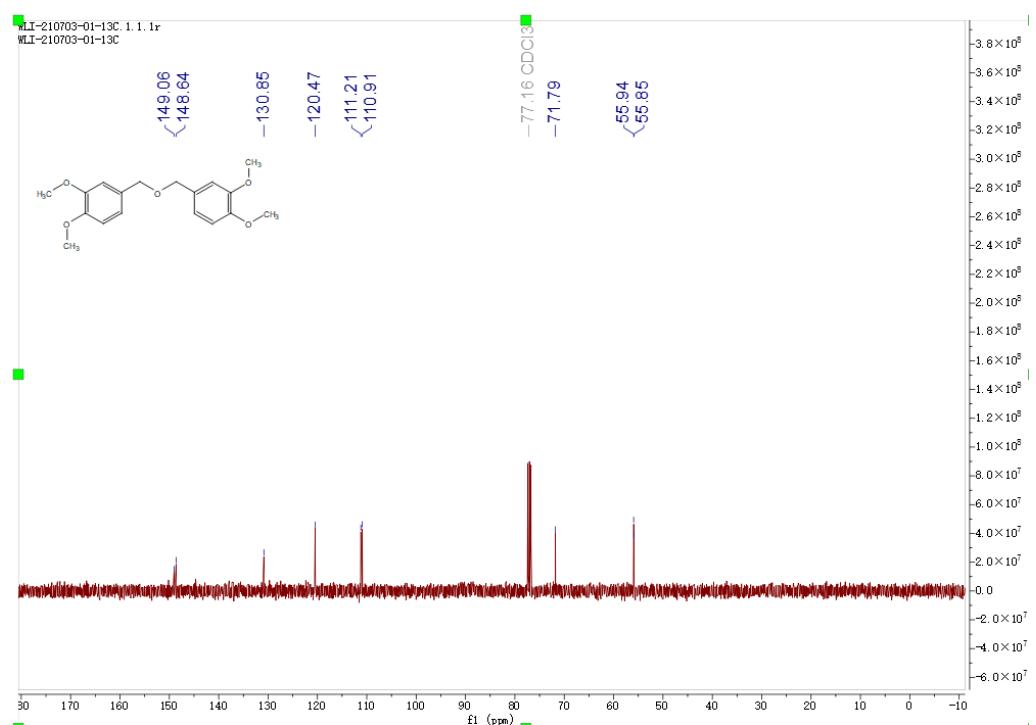


Figure S2. <sup>13</sup>C NMR spectrum of compound **3b-1** in Chloroform-d (101 MHz).

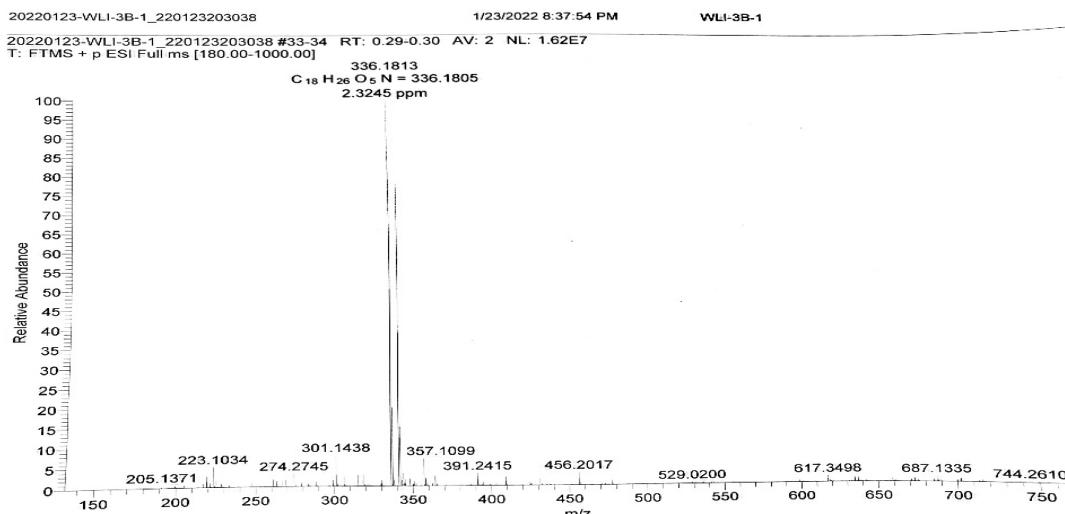
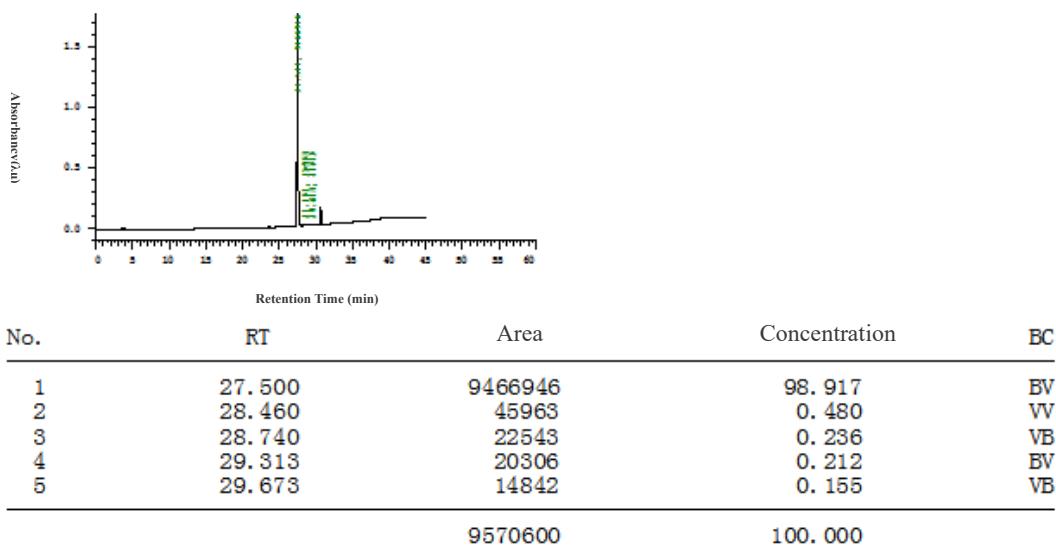
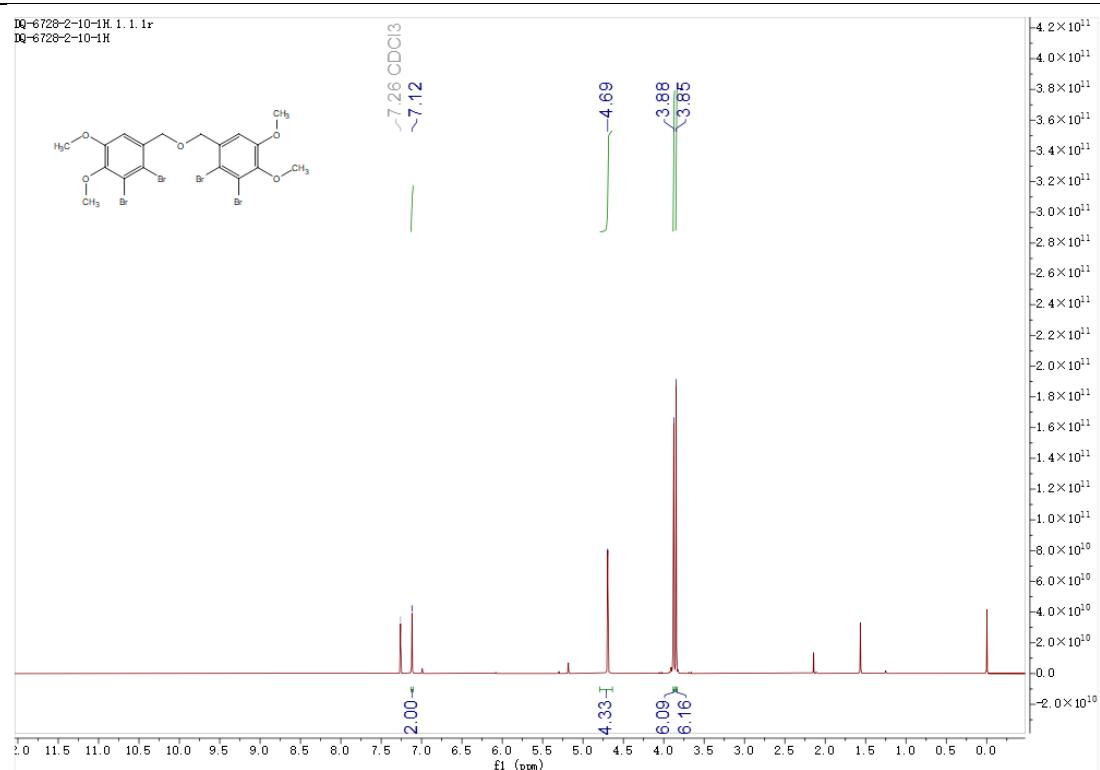
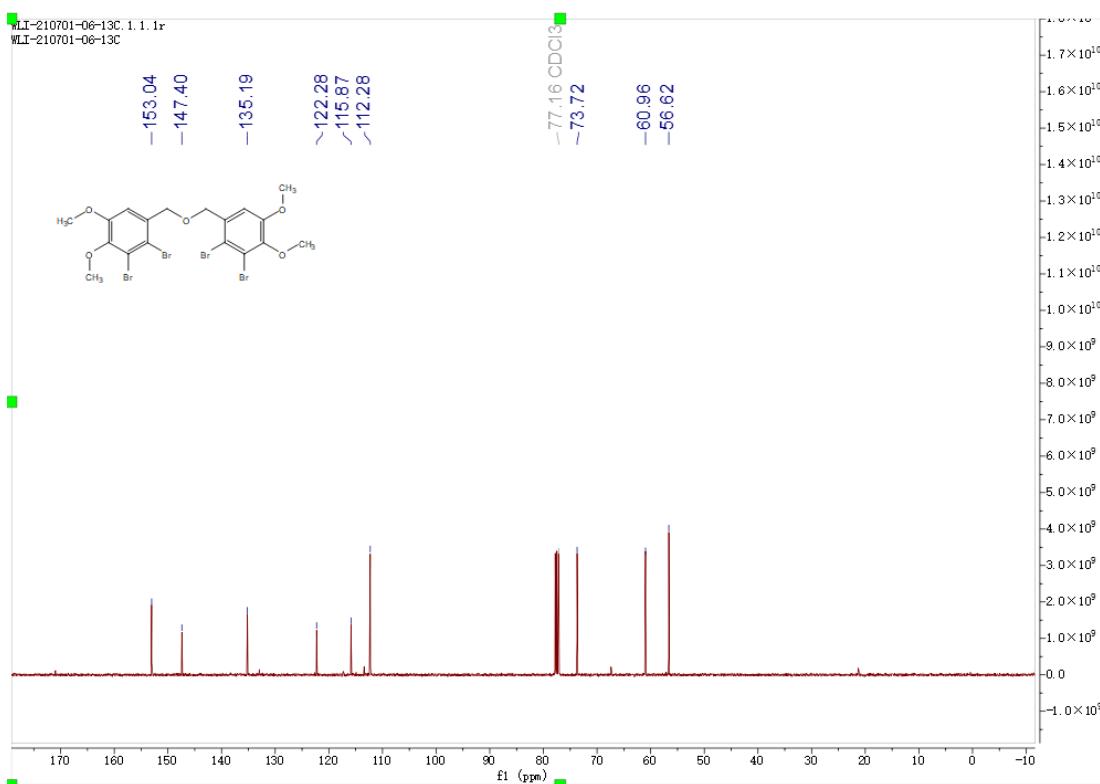


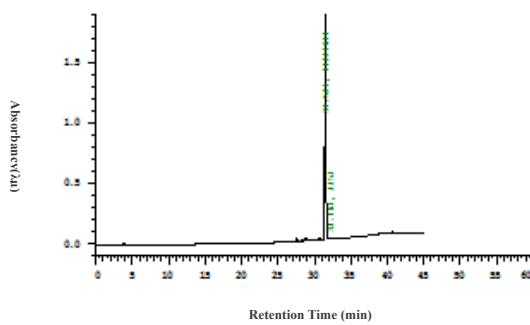
Figure S3. HRMS and HPLC Spectra of **3b-1**.



**Figure S4.**  $^1\text{H}$  NMR spectrum of compound **3b-2** in Chloroform-*d* (400 MHz).



**Figure S5.**  $^{13}\text{C}$  NMR spectrum of compound **3b-2** in Chloroform-*d* (101 MHz).



No.	RT	Area	Concentration	EC
1	31.527	10220611	99.978	BB
2	32.067	2252	0.022	BB
		10222863	100.000	

Figure S6. HPLC Spectra of 3b-2.

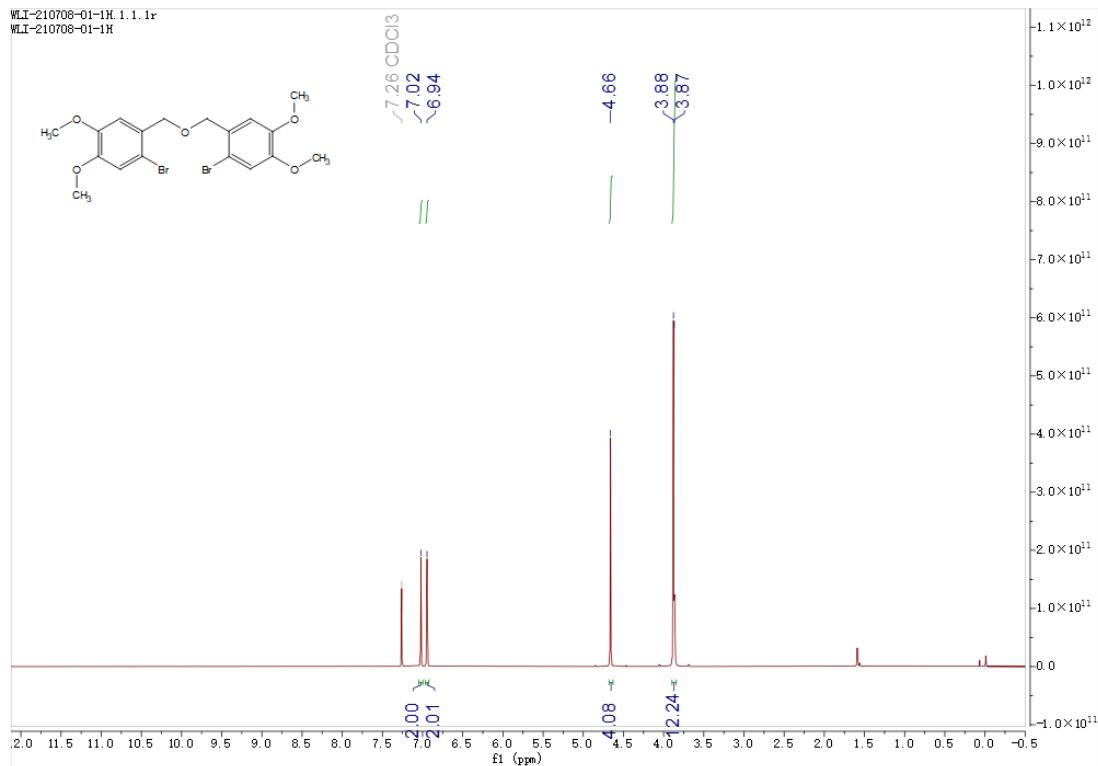
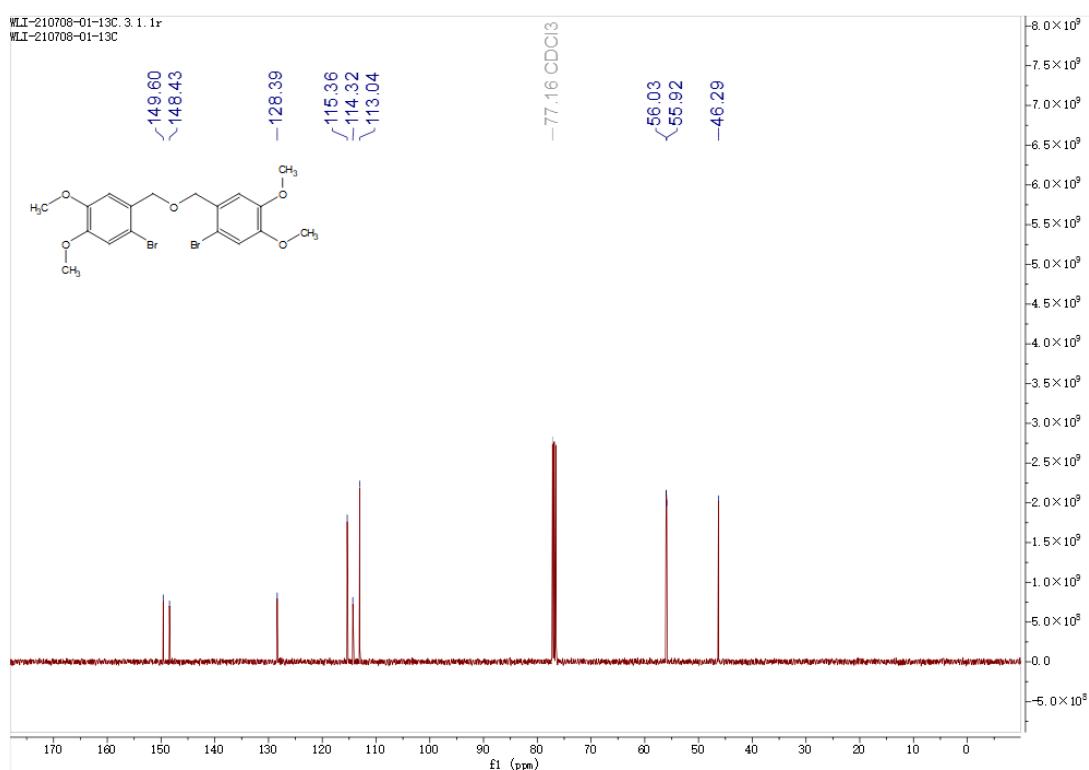
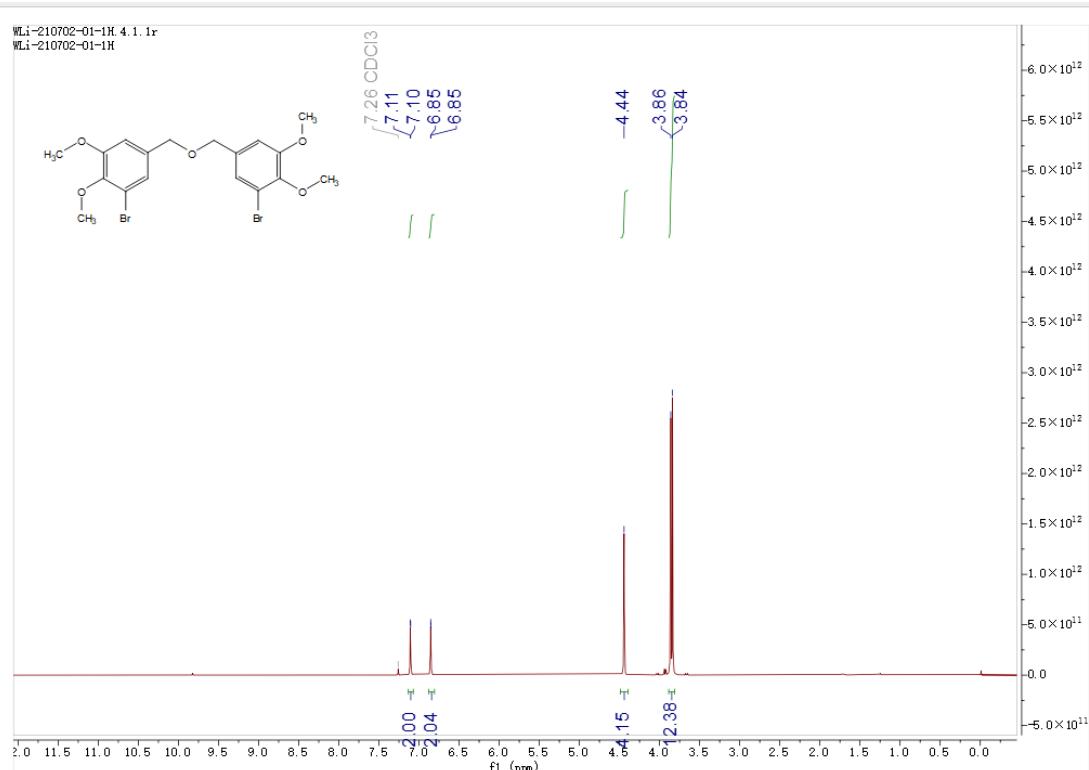


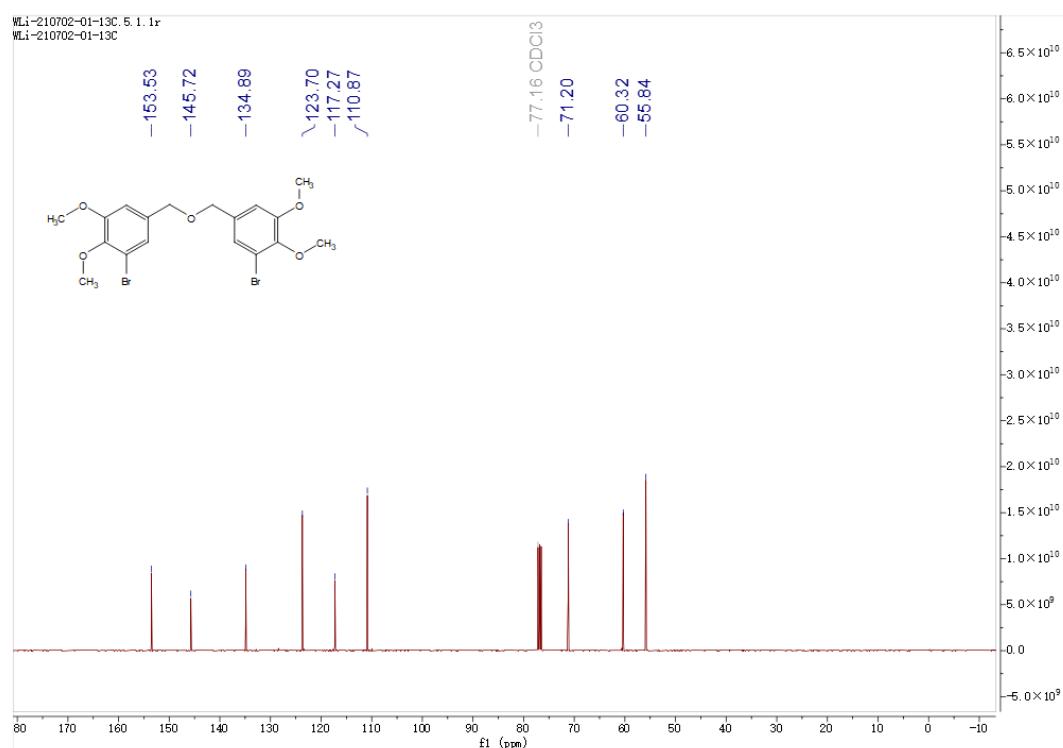
Figure S7. <sup>1</sup>H NMR spectrum of compound 3b-3 in Chloroform-d (400 MHz).



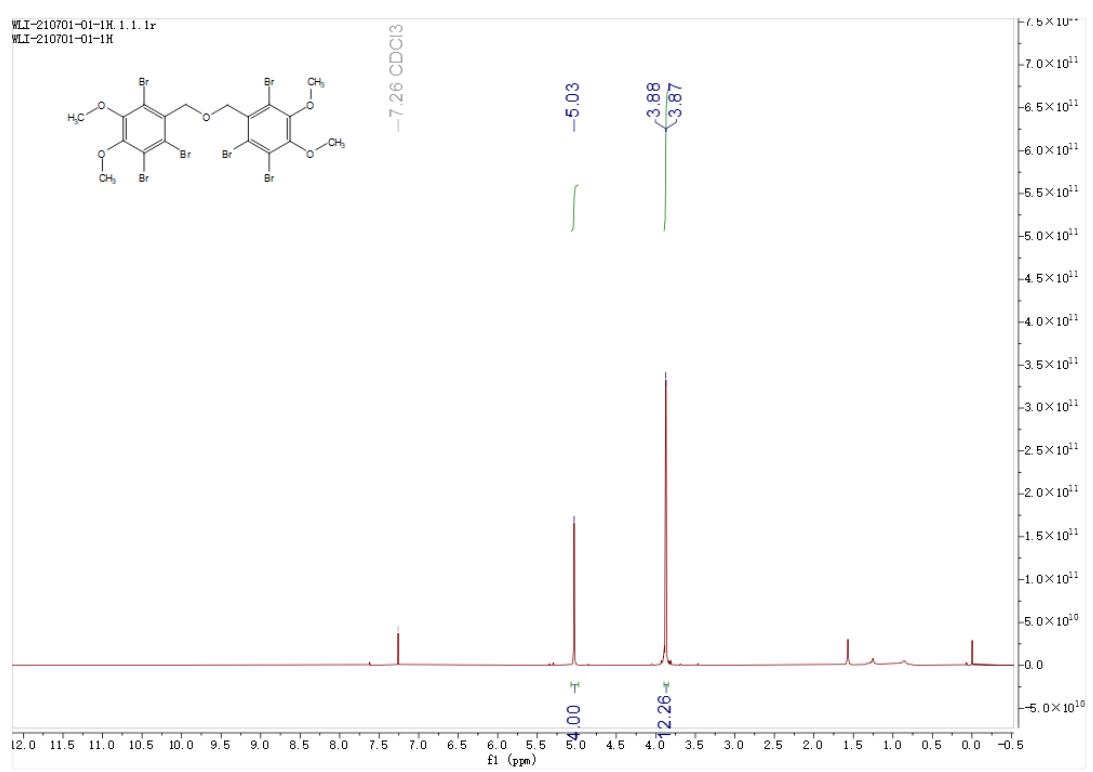
**Figure S8.** <sup>13</sup>C NMR spectrum of compound 3b-3 in Chloroform-d (101 MHz).



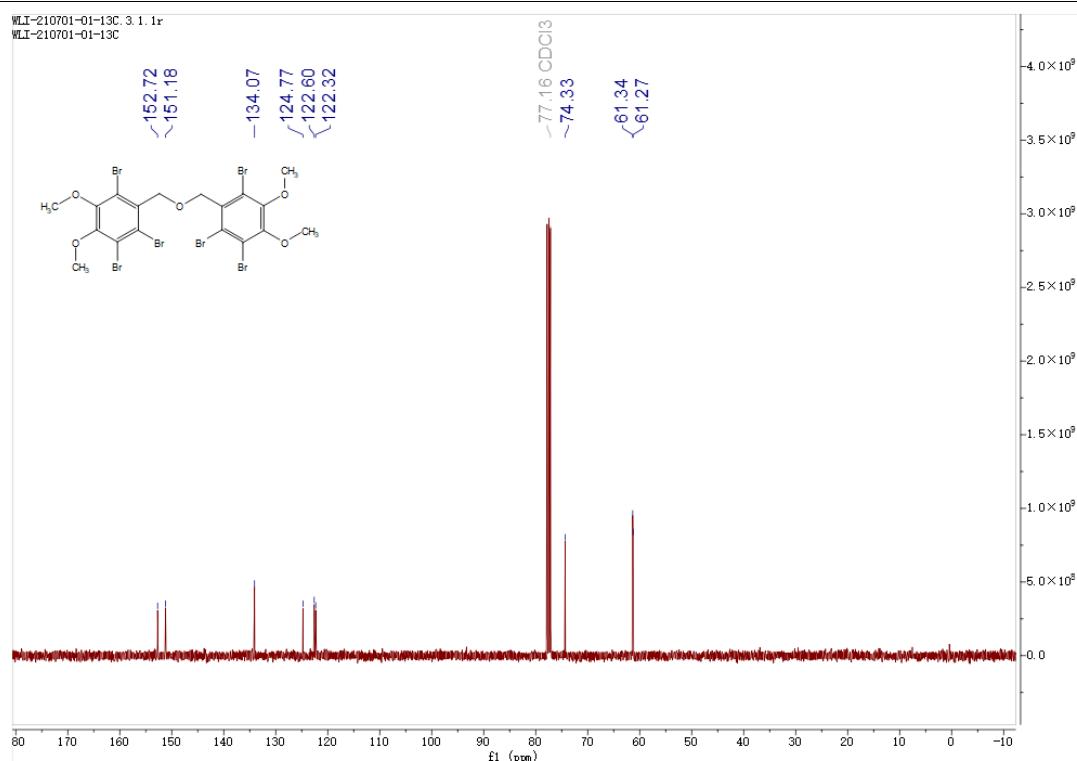
**Figure S9.** <sup>1</sup>H NMR spectrum of compound 3b-4 in Chloroform-d (400 MHz).



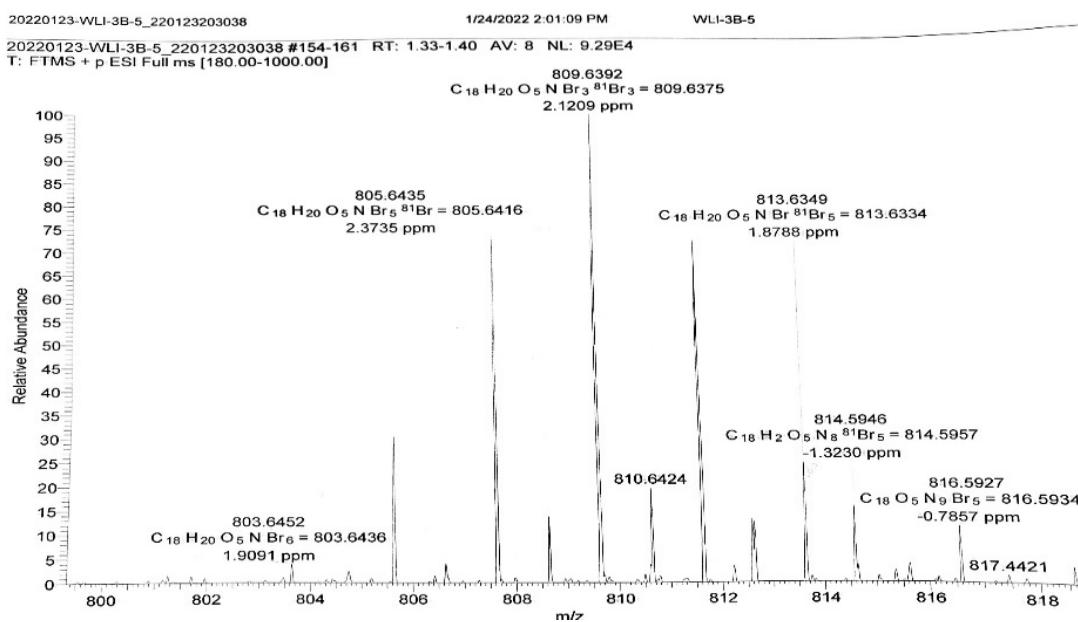
**Figure S10.** <sup>13</sup>C NMR spectrum of compound 3b-4 in Chloroform-d (101 MHz).



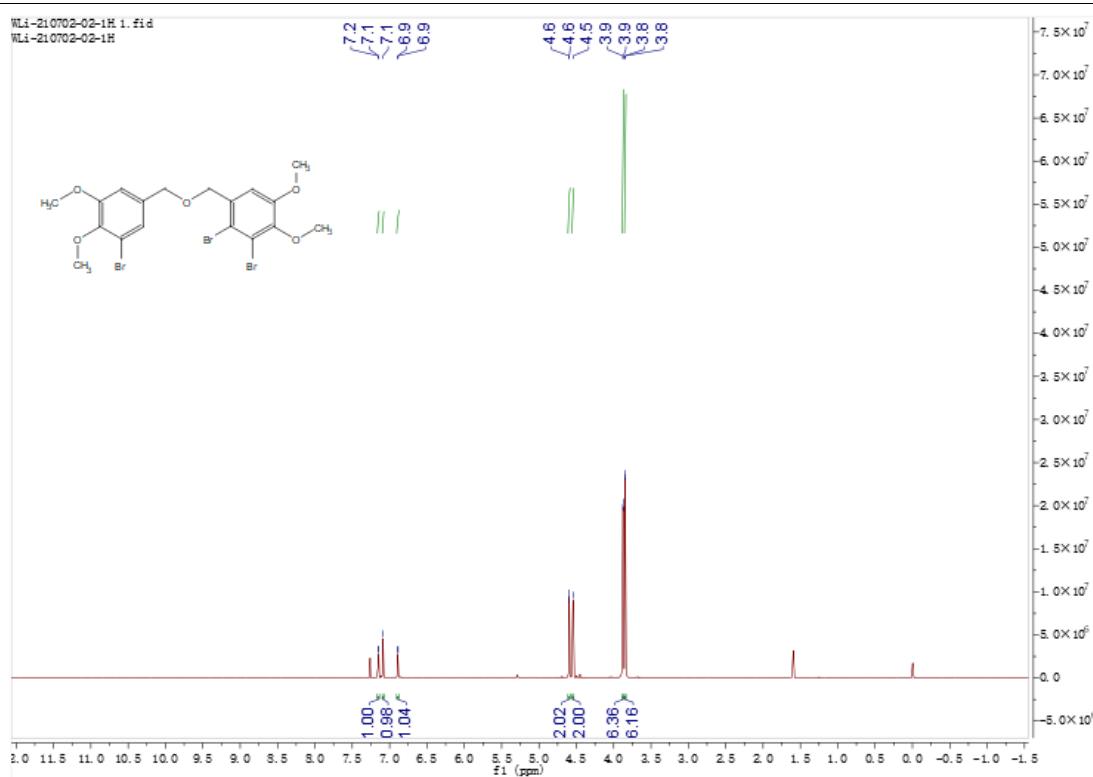
**Figure S11.** <sup>1</sup>H NMR spectrum of compound 3b-5 in Chloroform-d (400 MHz).



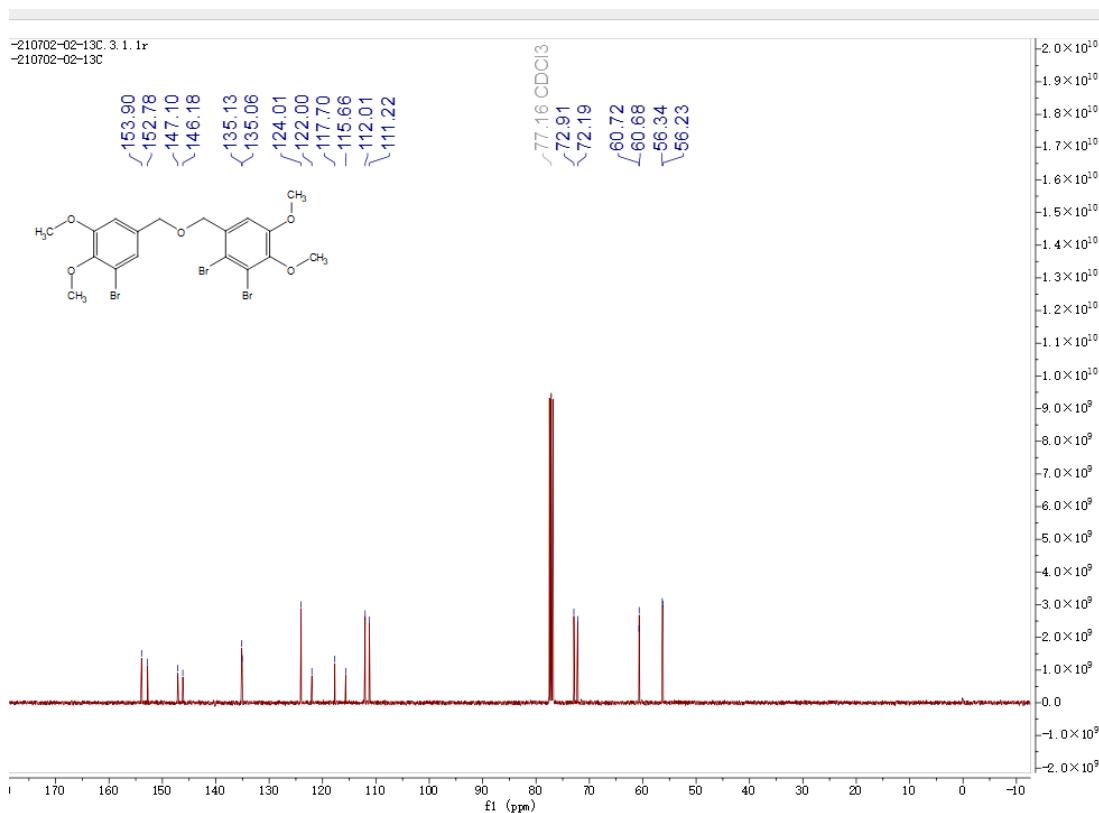
**Figure S12.**  $^{13}\text{C}$  NMR spectrum of compound 3b-5 in Chloroform-d (101 MHz).



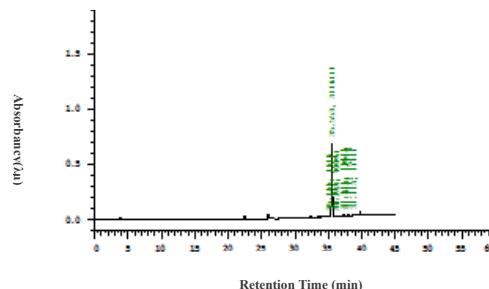
**Figure S13.** HRMS Spectra of 3b-5.



**Figure S14.**  $^1\text{H}$  NMR spectrum of compound 3b-6 in Chloroform-*d* (400 MHz).



**Figure S15.**  $^{13}\text{C}$  NMR spectrum of compound 3b-6 in Chloroform-*d* (101 MHz).



No.	RT	Area	Concentration	BC
1	35.020	1186	0.037	BB
2	35.238	1844	0.042	BB
3	35.553	3086778	95.854	BV
4	35.920	5551	0.172	TBB
5	36.233	12258	0.381	VB
6	37.007	17228	0.535	BV
7	37.327	49522	1.538	VB
8	37.673	14119	0.438	BV
9	38.040	15276	0.474	VV
10	38.873	17017	0.528	VB
		3220279	100.000	

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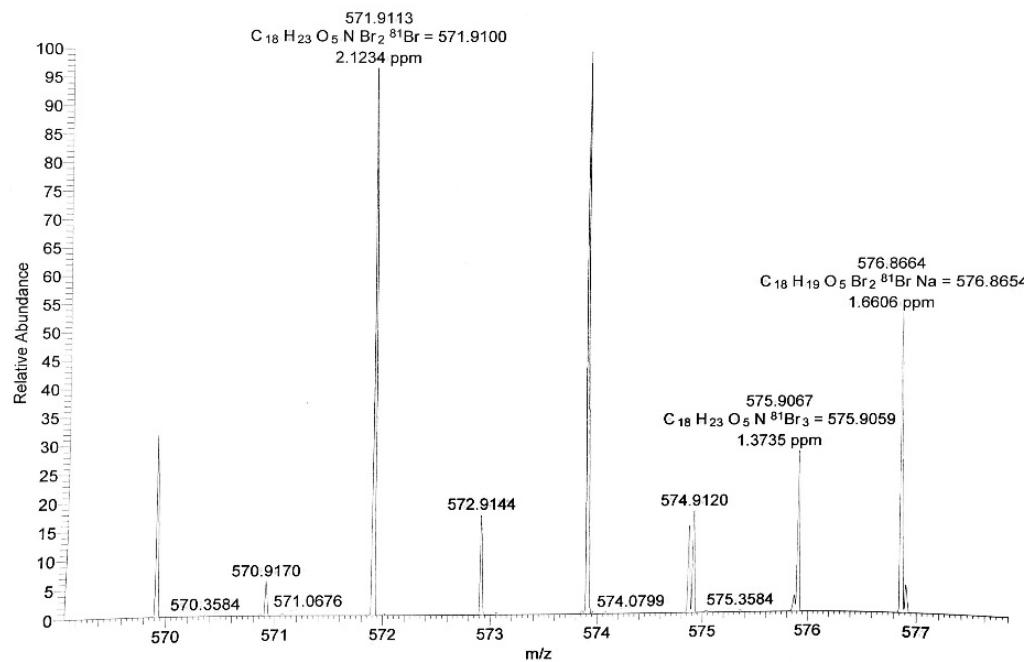
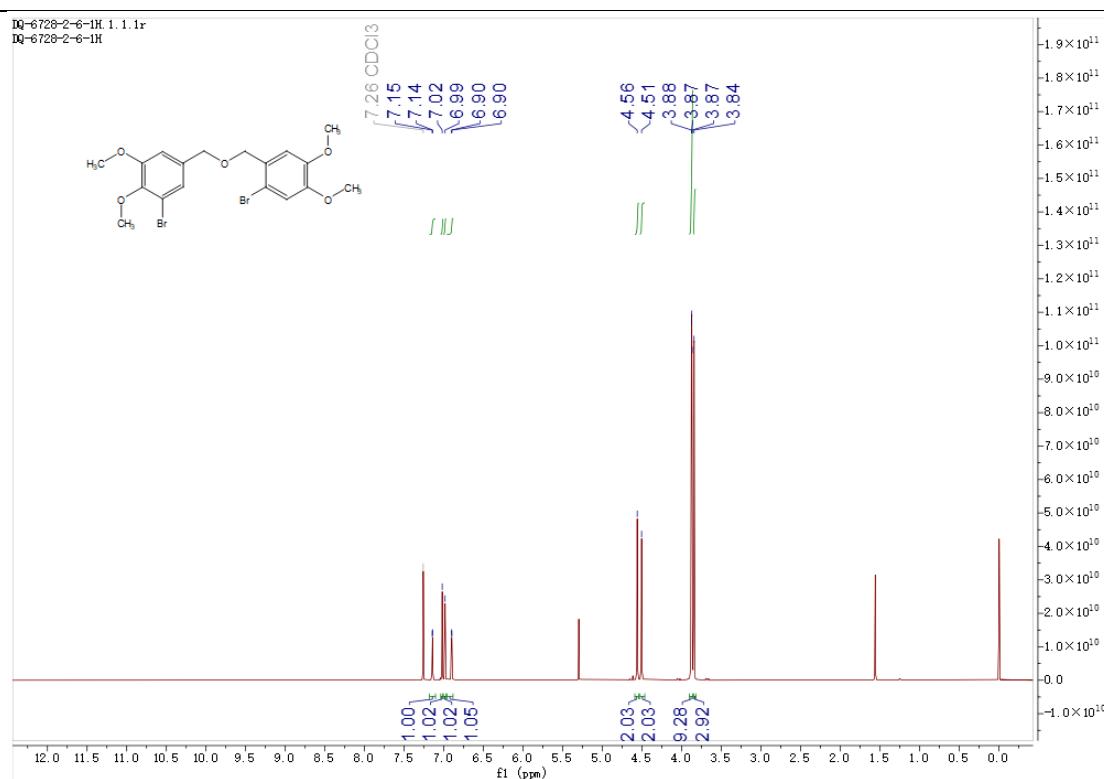
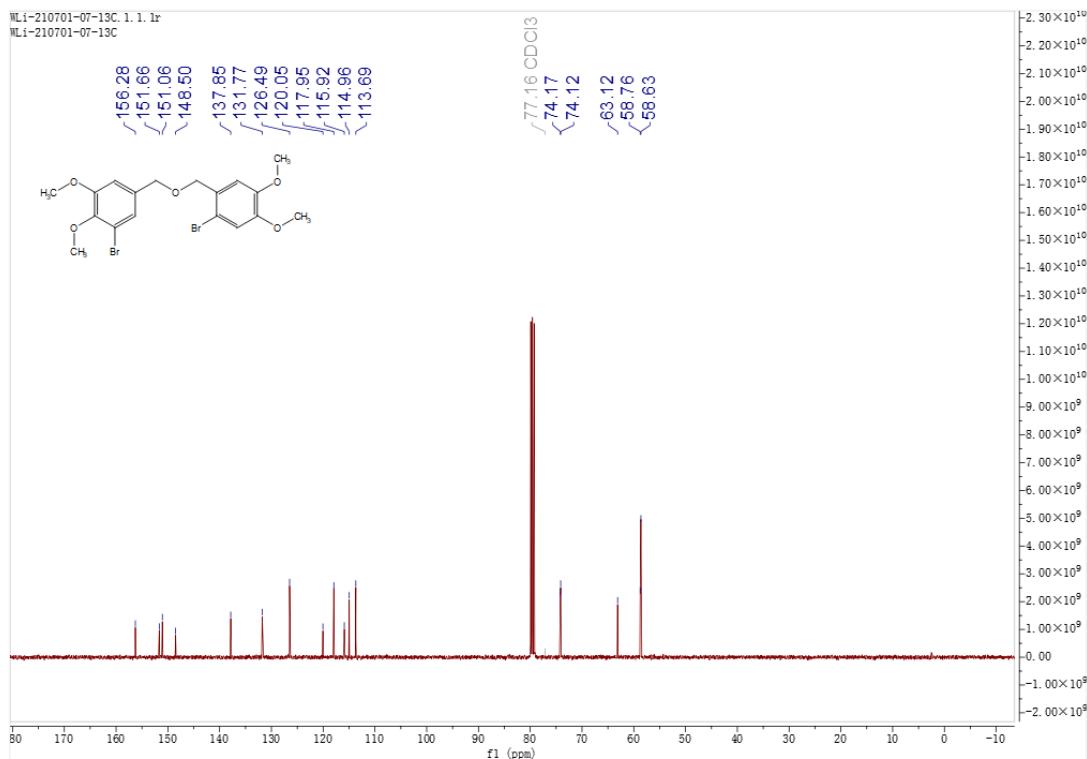
20220123-WLI-3B-6\_220123203038 #51 RT: 0.49 AV: 1 NL: 1.27E6  
T: FTMS + p ESI Full ms [180.00-1000.00]

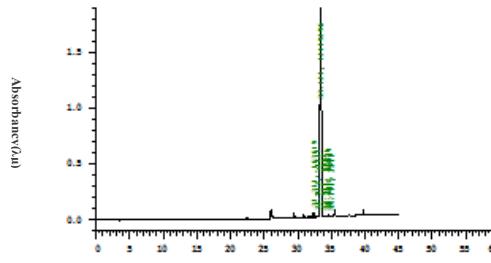
Figure S16. HRMS and HPLC Spectra of 3b-6.



**Figure S17.**  $^1\text{H}$  NMR spectrum of compound **3b-7** in Chloroform-*d* (400 MHz).



**Figure S18.**  $^{13}\text{C}$  NMR spectrum of compound **3b-7** in Chloroform-*d* (101 MHz).



No.	RT	Area	Concentration	BC
1	32.380	163649	1. 249	BB
2	32.973	52727	0. 402	BV
3	33.420	12789296	97. 577	VV
4	33.920	6662	0. 051	TBB
5	34.387	21238	0. 162	VV
6	34.613	63740	0. 486	VV
7	34.860	7316	0. 056	VV
8	35.047	2287	0. 017	VB
		13106915	100. 000	

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WLI-3B-7

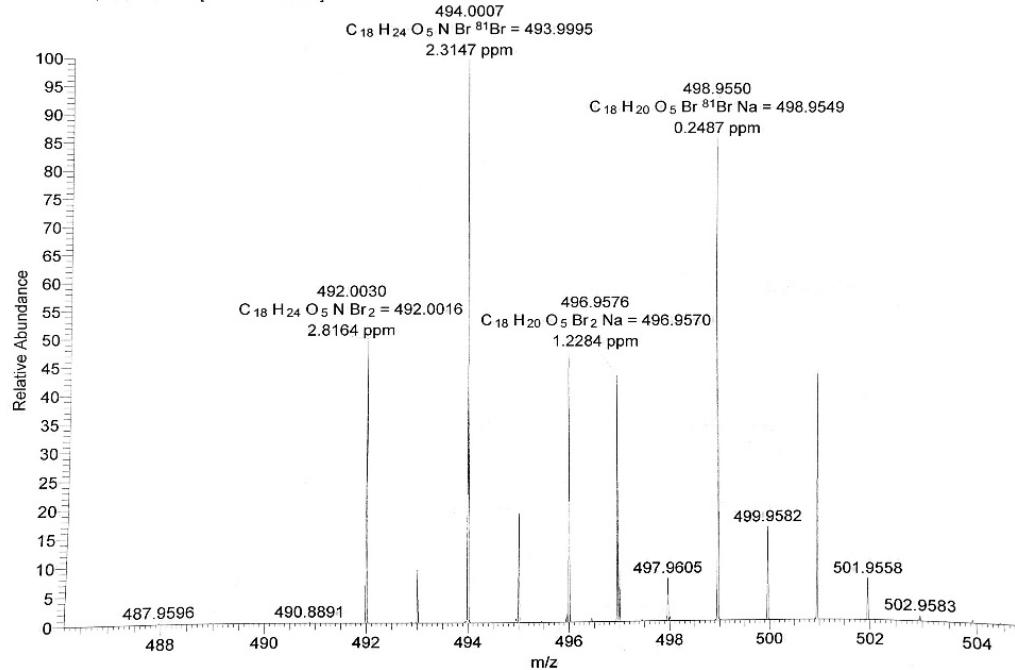
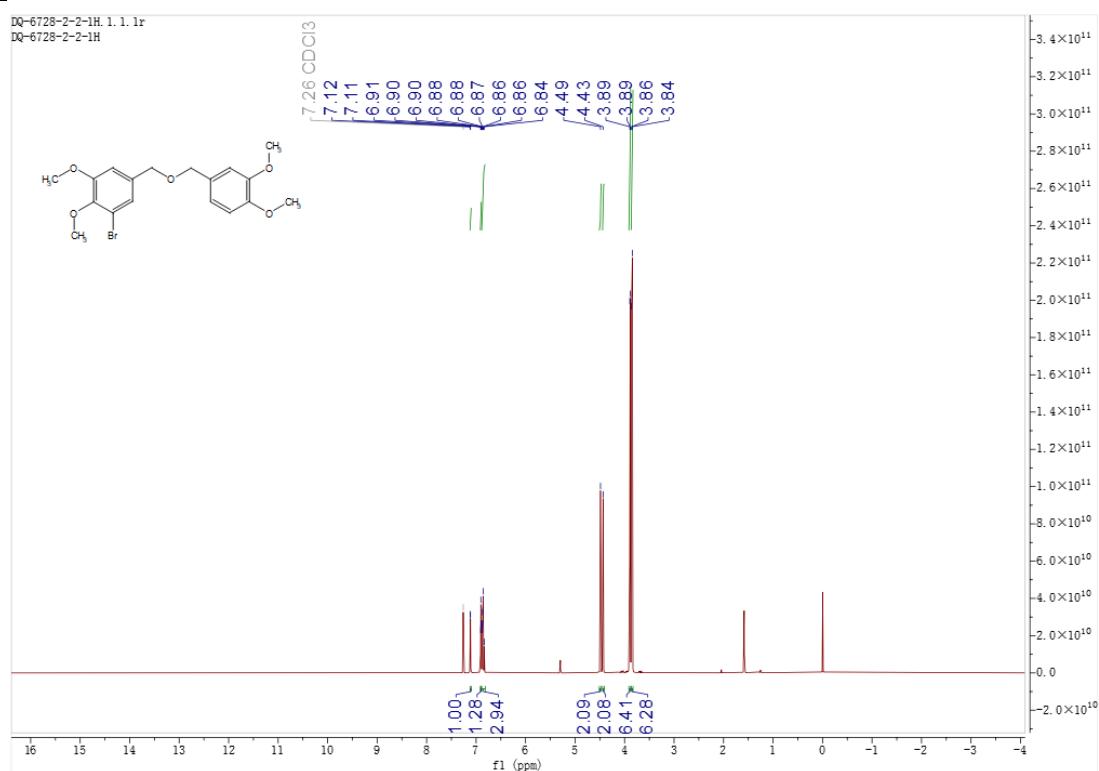
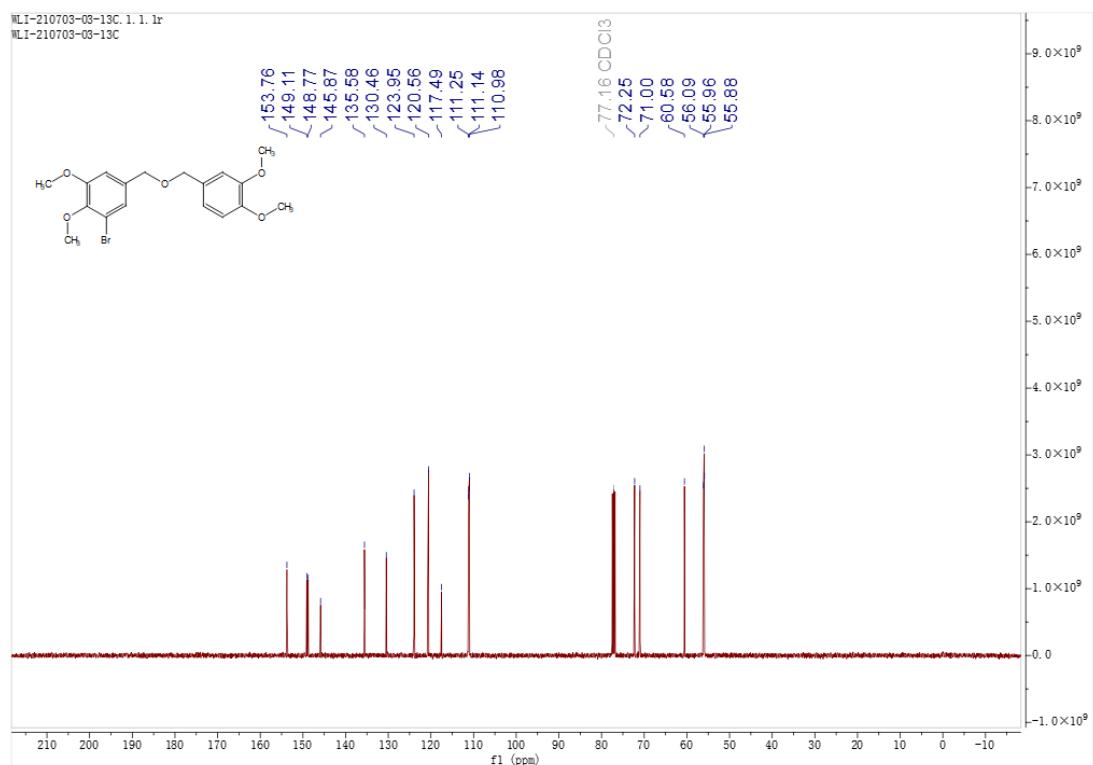
20220123-WLI-3B-7\_220123203038 #63 RT: 0.58 AV: 1 NL: 5.15E6  
T: FTMS + p ESI Full ms [180.00-1000.00]

Figure S19. HRMS and HPLC Spectra of 3b-7.



**Figure S20.**  $^1\text{H}$  NMR spectrum of compound **3b-8** in Chloroform-*d* (400 MHz).



**Figure S21.**  $^{13}\text{C}$  NMR spectrum of compound **3b-8** in Chloroform-*d* (101 MHz).



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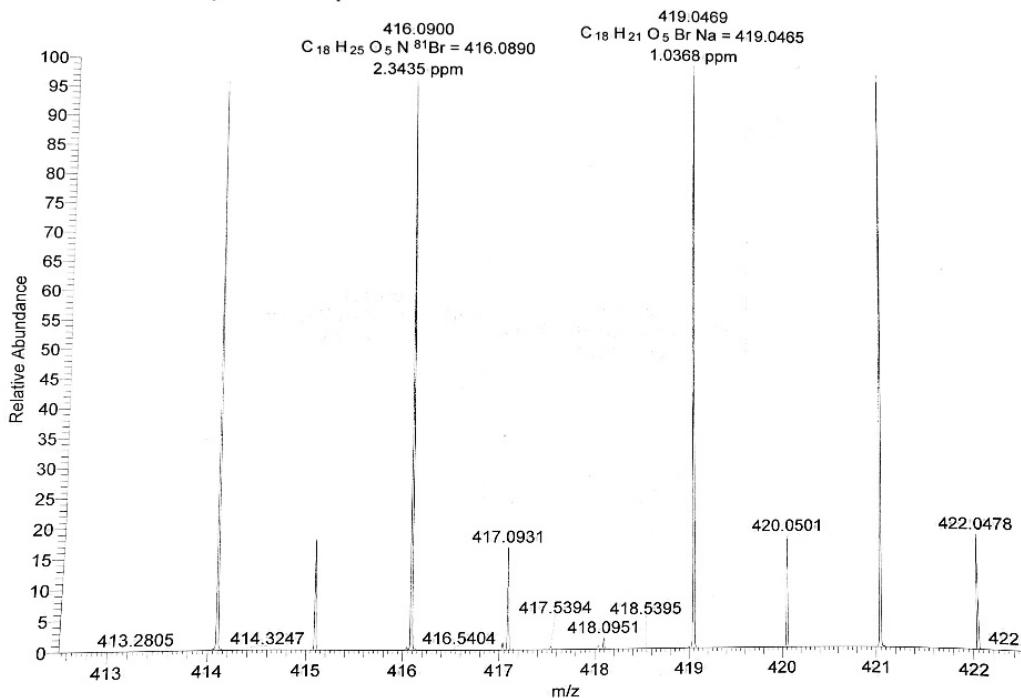
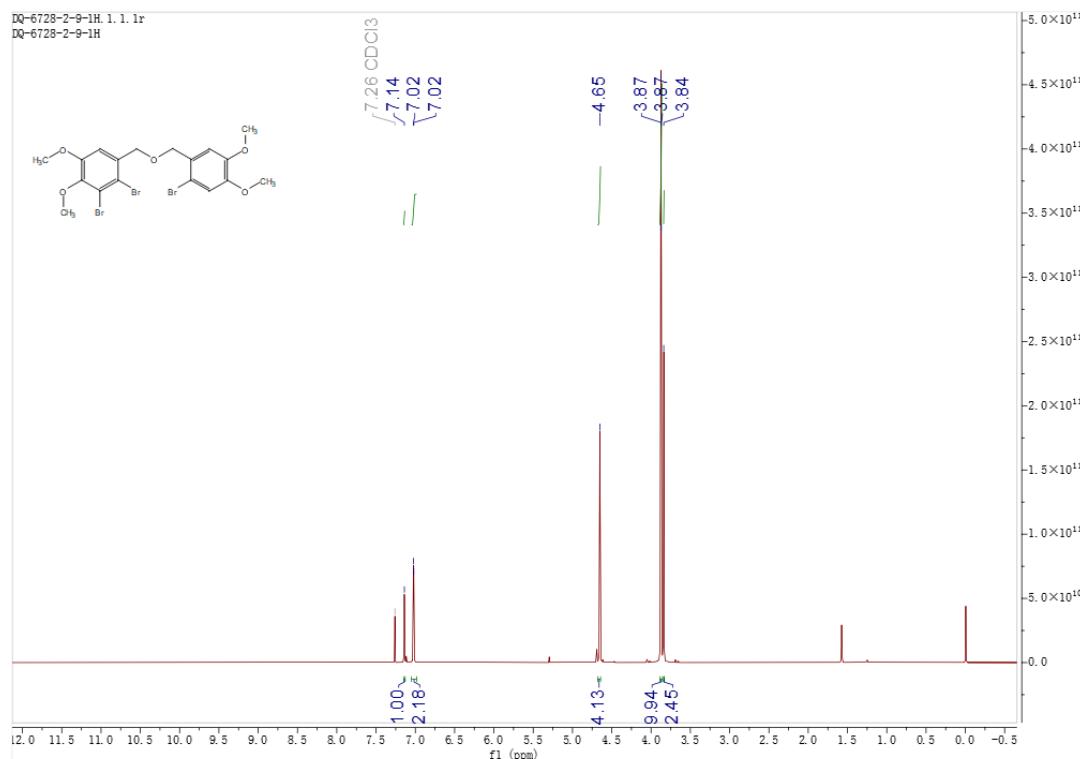
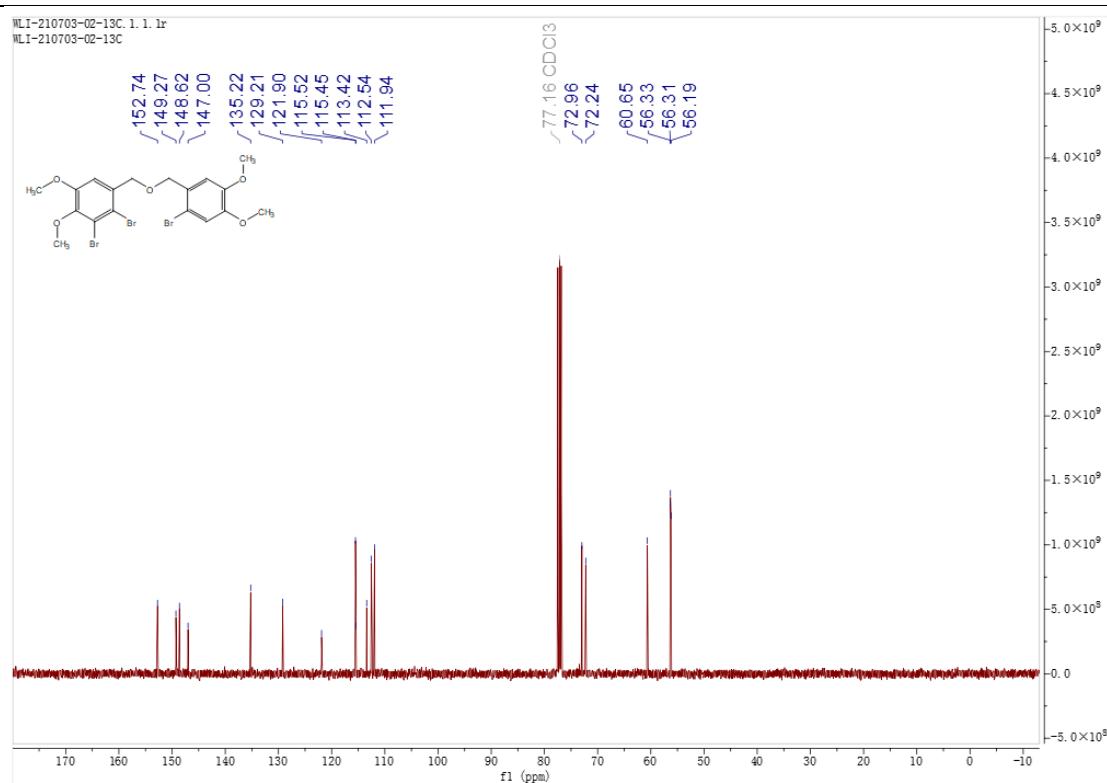
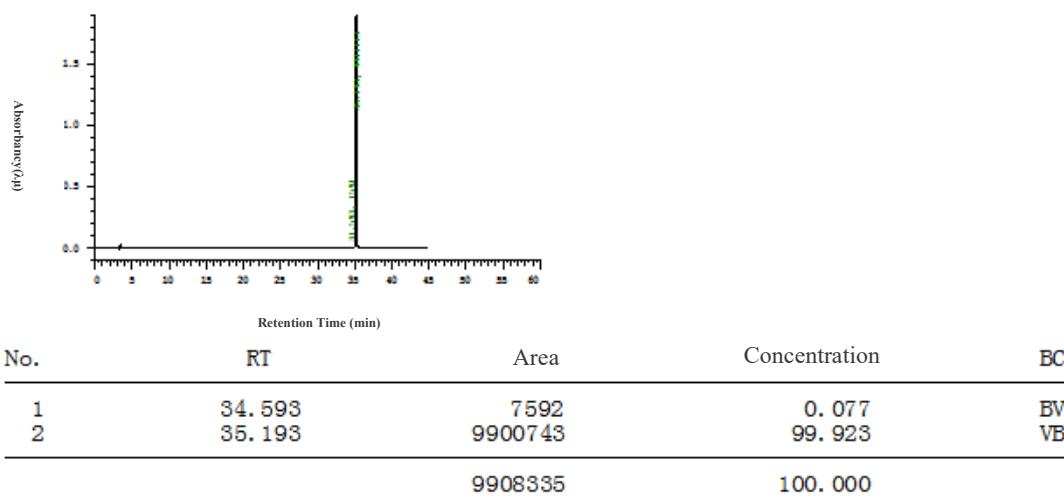
20220123-WLI-3B-8\_220123203038 #47 RT: 0.43 AV: 1 SB: 10 0.21-0.29 NL: 2.99E6  
T: FTMS + p ESI Full ms [180.00-1000.00]

Figure S22. HRMS Spectra of 3b-8.

Figure S23.  $^1\text{H}$  NMR spectrum of compound 3b-9 in  $\text{Chloroform}-d$  (400 MHz).



**Figure S24.**  $^{13}\text{C}$  NMR spectrum of compound **3b-9** in Chloroform-*d* (101 MHz).



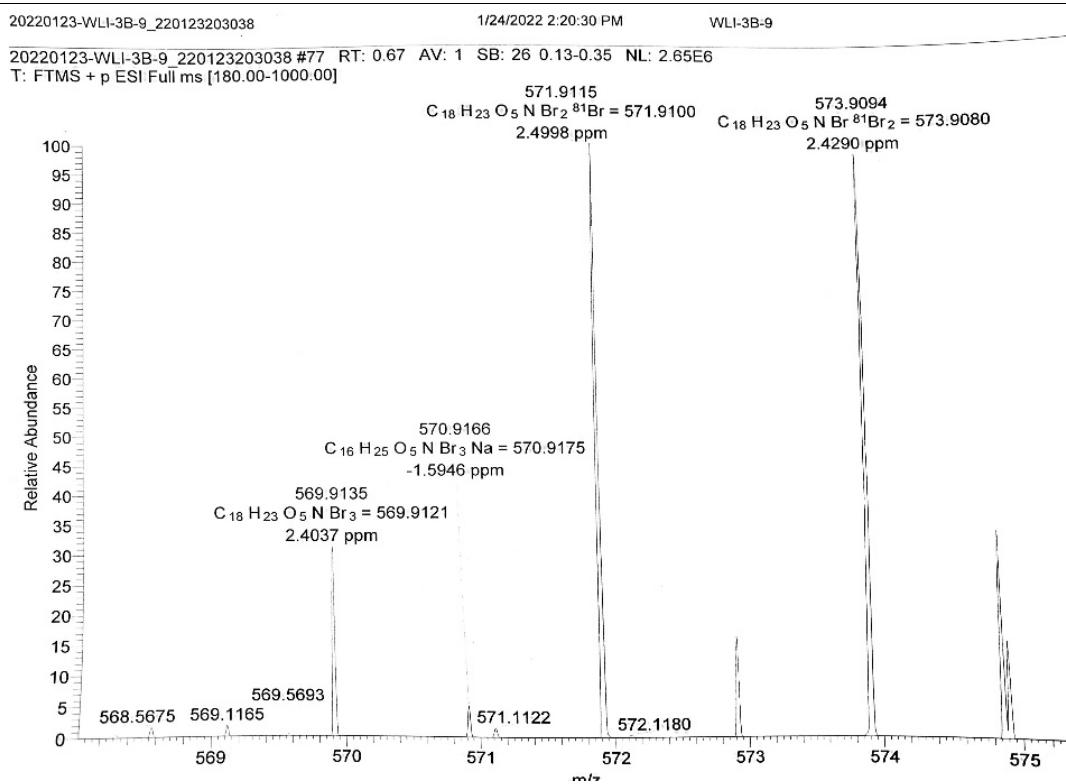
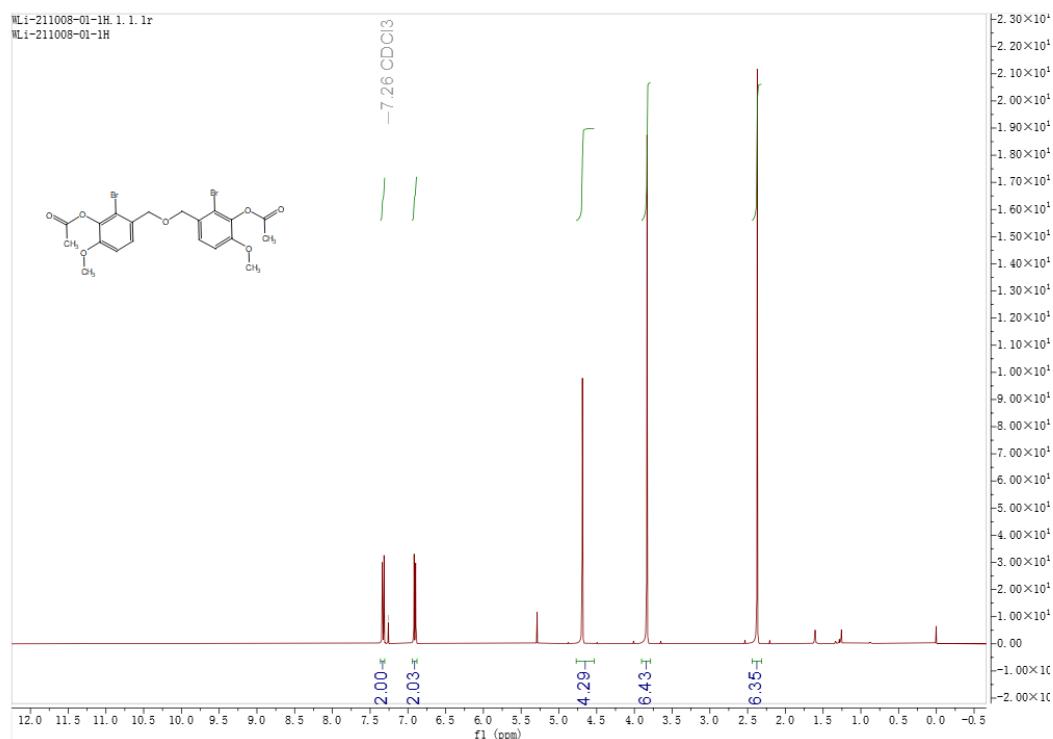
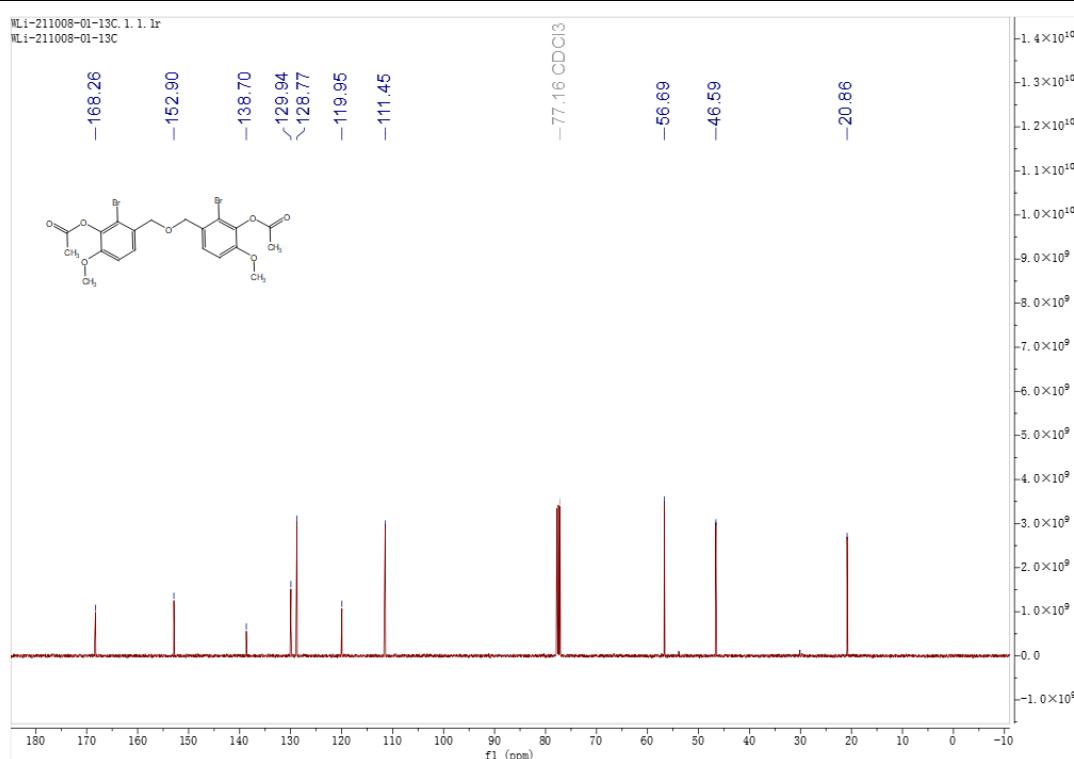
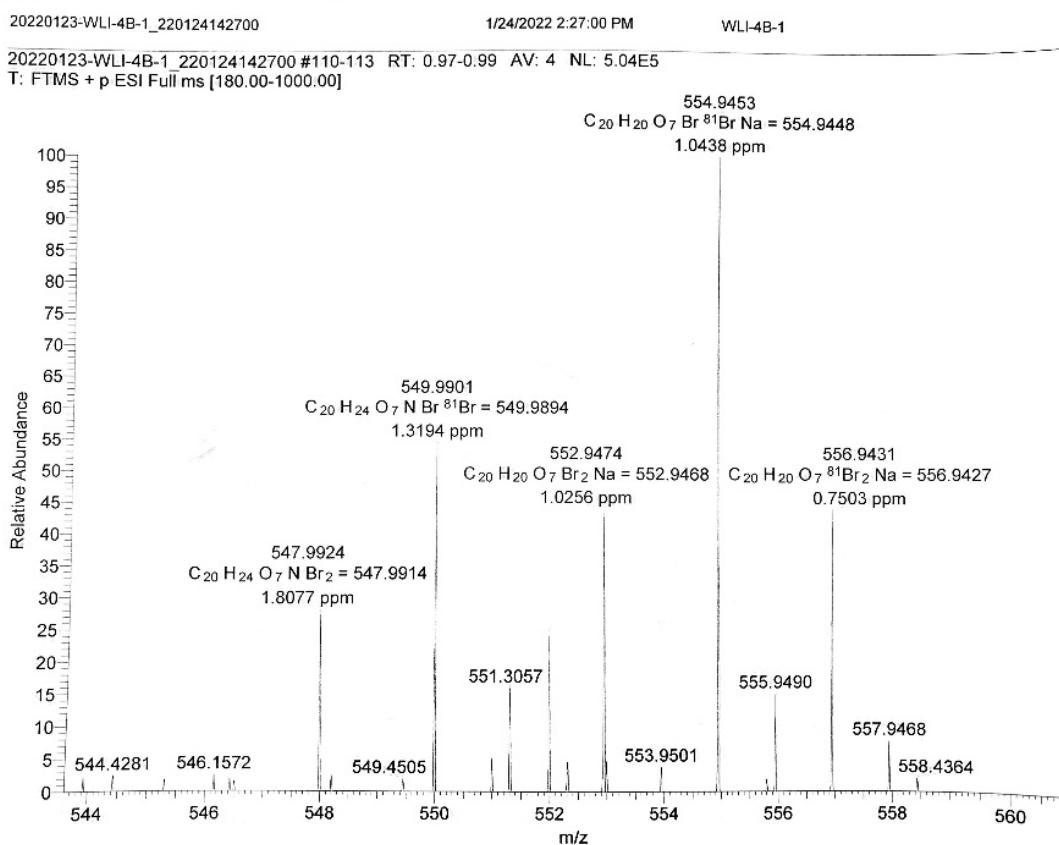


Figure S25. HRMS and HPLC Spectra of 3b-9.

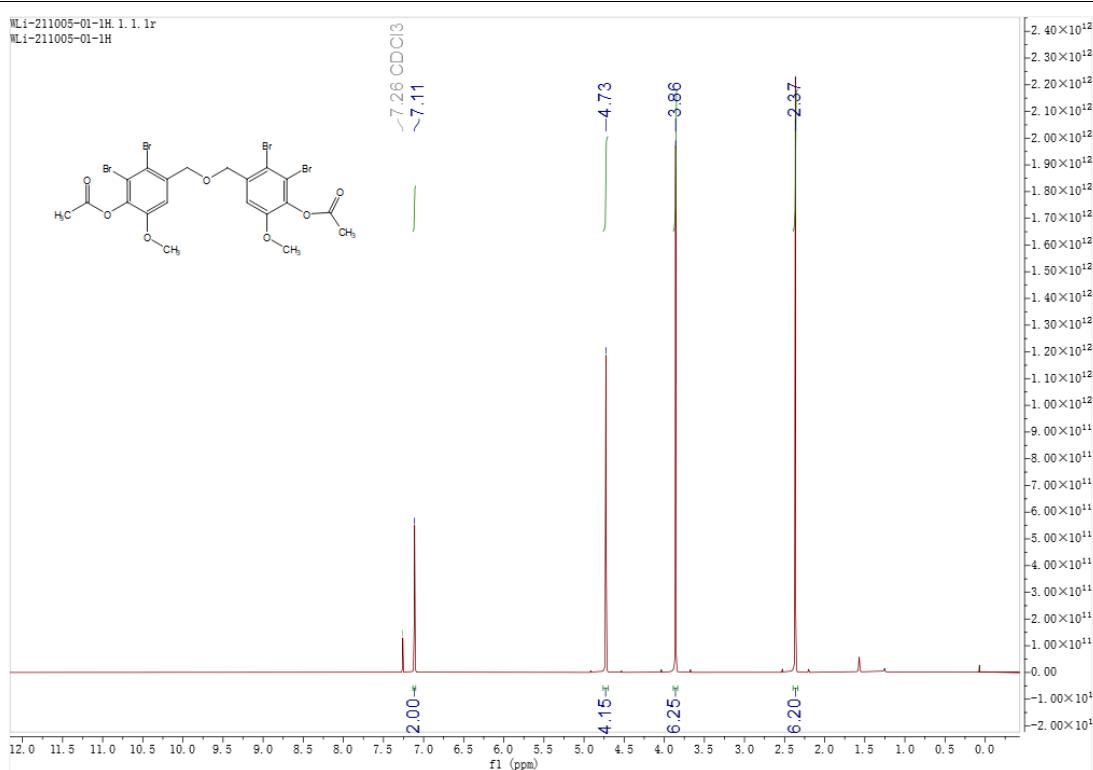
Figure S26.  $^1H$  NMR spectrum of compound 4b-1 in Chloroform-d (400 MHz).



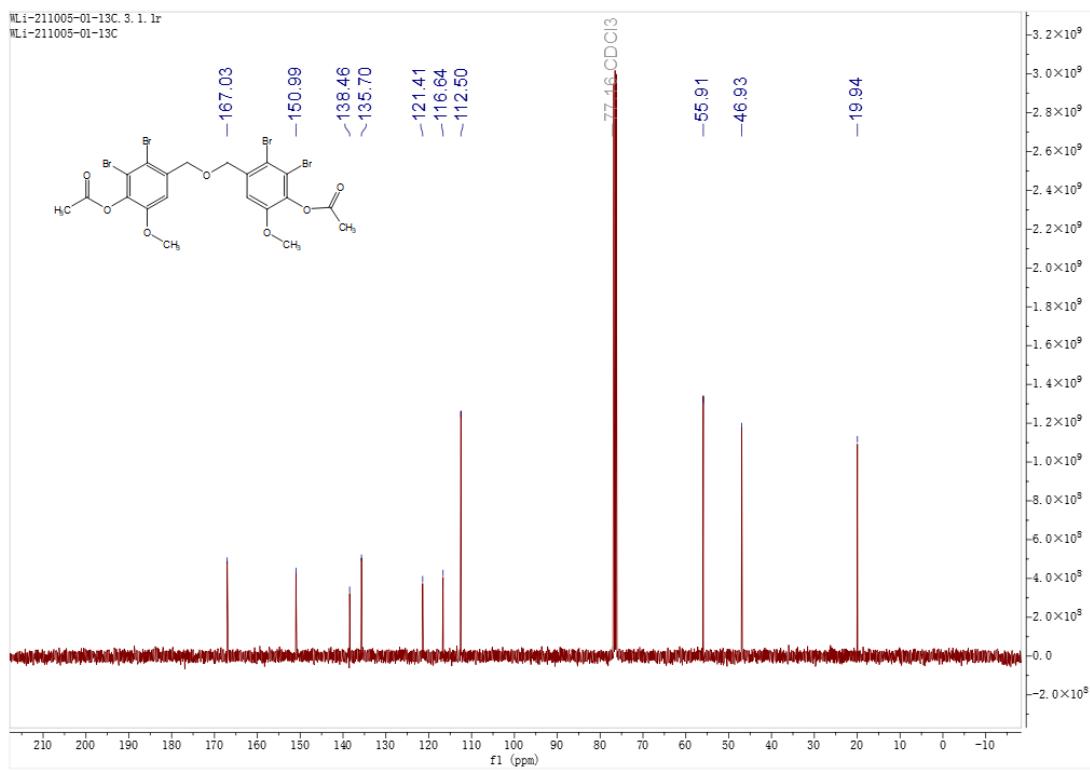
**Figure S27.**  $^{13}\text{C}$  NMR spectrum of compound **4b-1** in Chloroform-*d* (101 MHz).



**Figure S28.** HRMS Spectra of 4b-1.



**Figure S29.**  $^1\text{H}$  NMR spectrum of compound **4b-2** in Chloroform-*d* (400 MHz).



**Figure S30.**  $^{13}\text{C}$  NMR spectrum of compound **4b-2** in Chloroform-*d* (101 MHz).

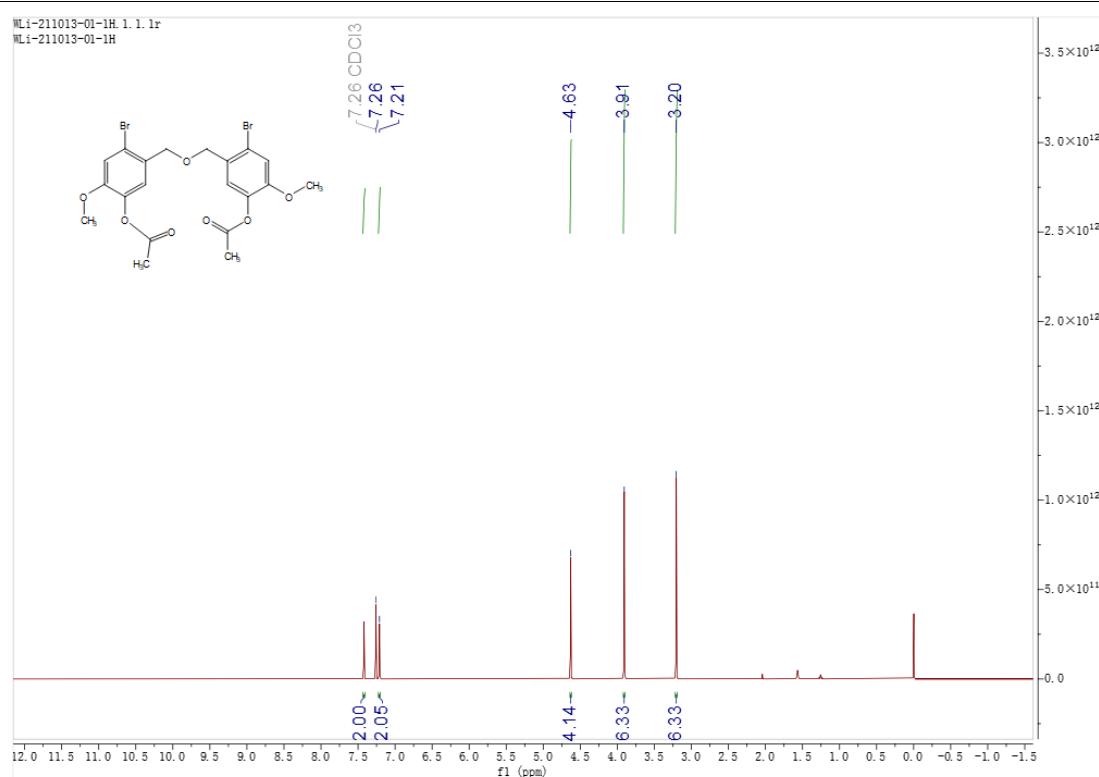


Figure S31. <sup>1</sup>H NMR spectrum of compound 4b-3 in Chloroform-d (400 MHz).

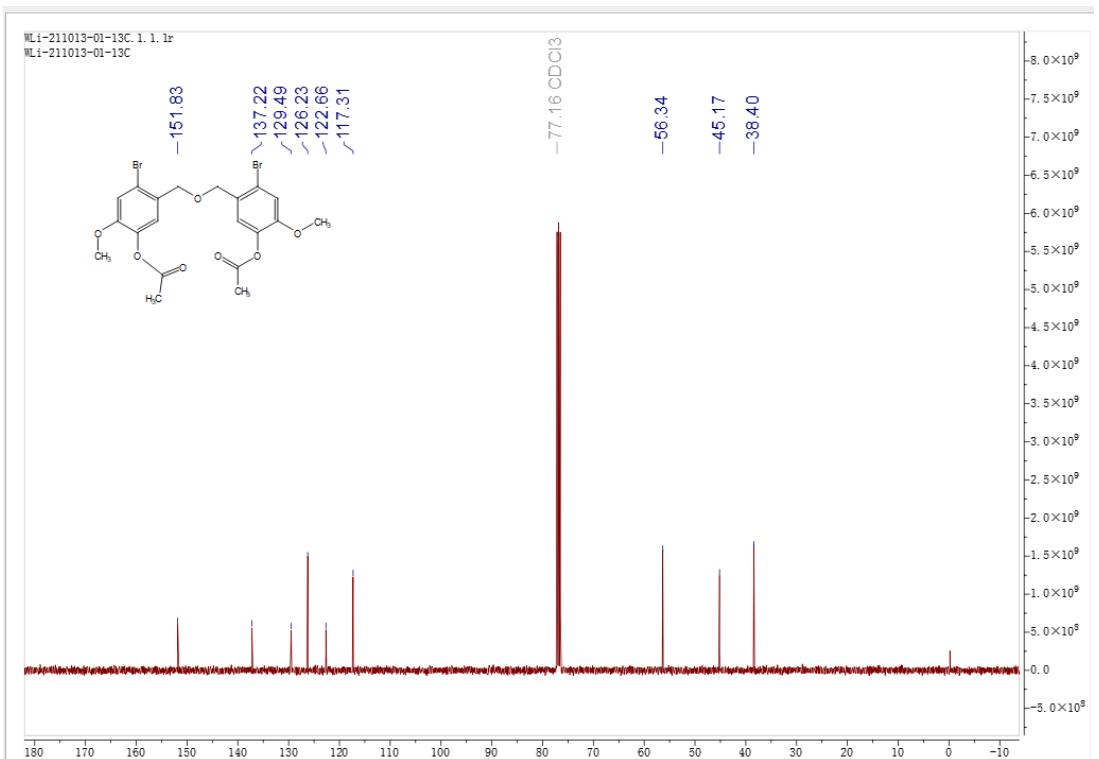
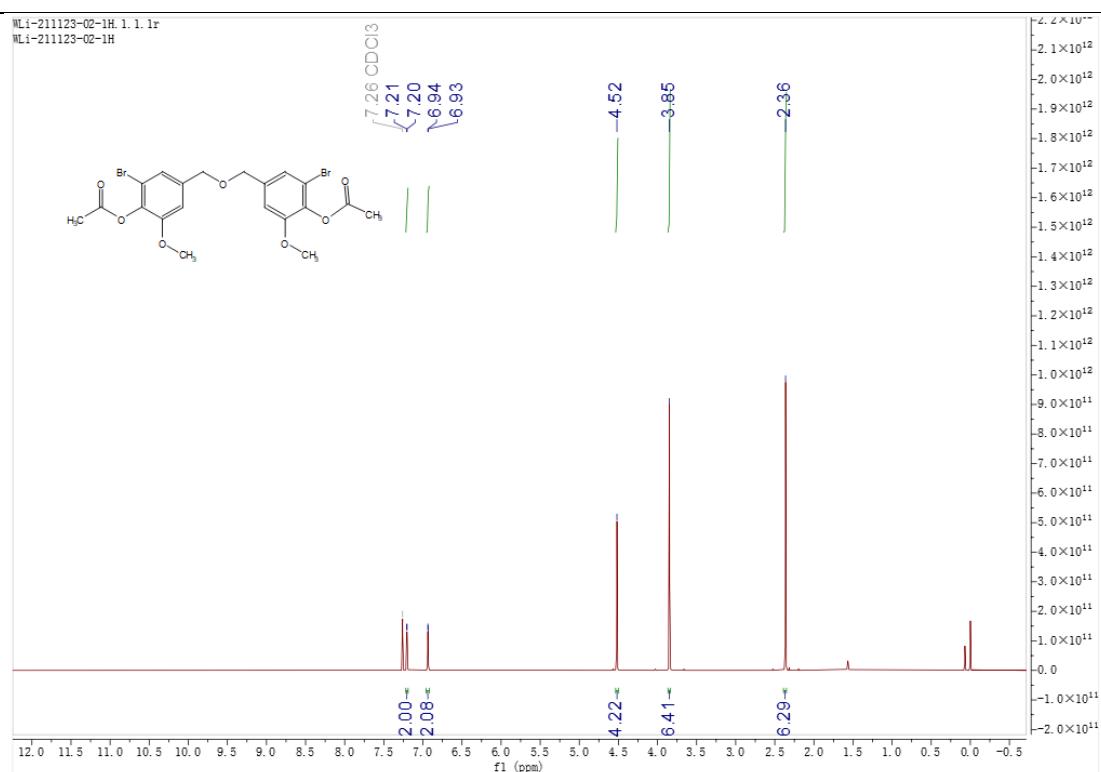
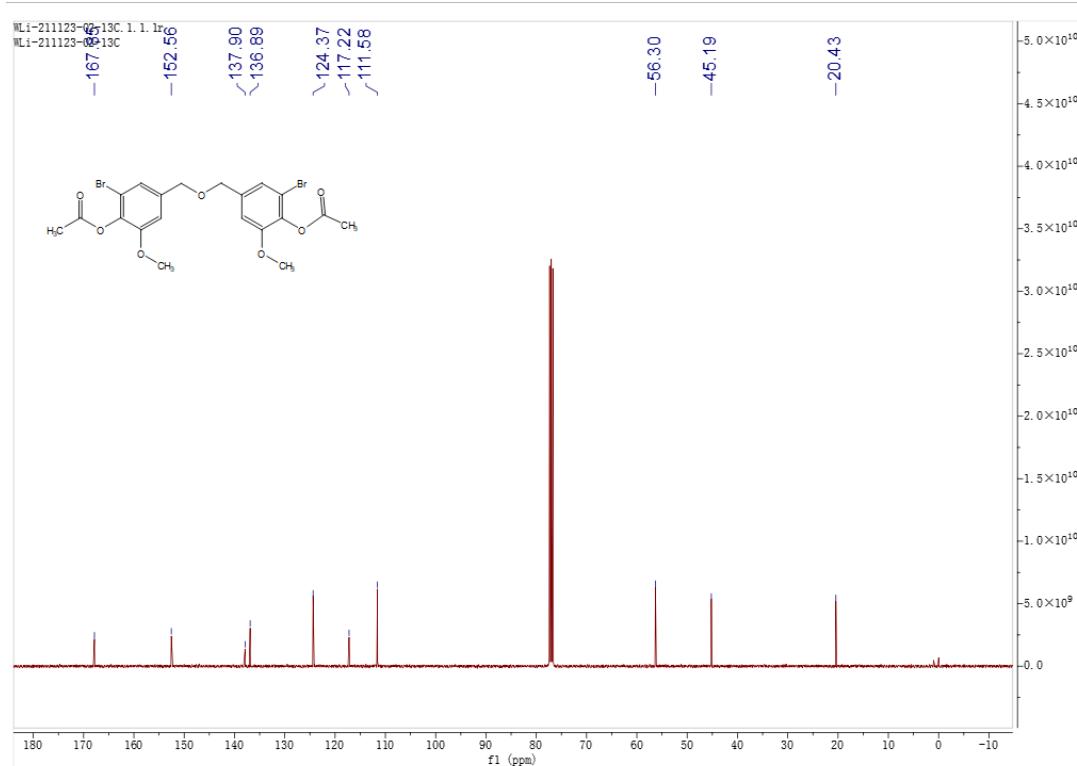


Figure S32. <sup>13</sup>C NMR spectrum of compound 4b-3 in Chloroform-d (101 MHz).



**Figure S33.** <sup>1</sup>H NMR spectrum of compound 4b-4 in Chloroform-d (400 MHz).



**Figure S34.** <sup>13</sup>C NMR spectrum of compound 4b-4 in Chloroform-d (101 MHz).

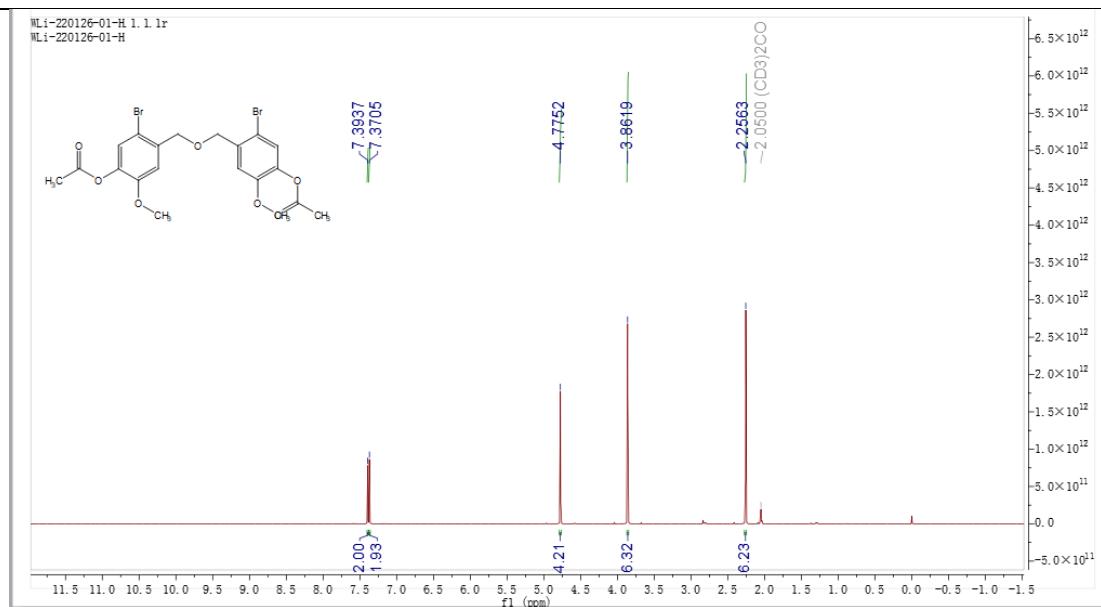


Figure S35. <sup>1</sup>H NMR spectrum of compound 4b-5 in Chloroform-d (400 MHz).

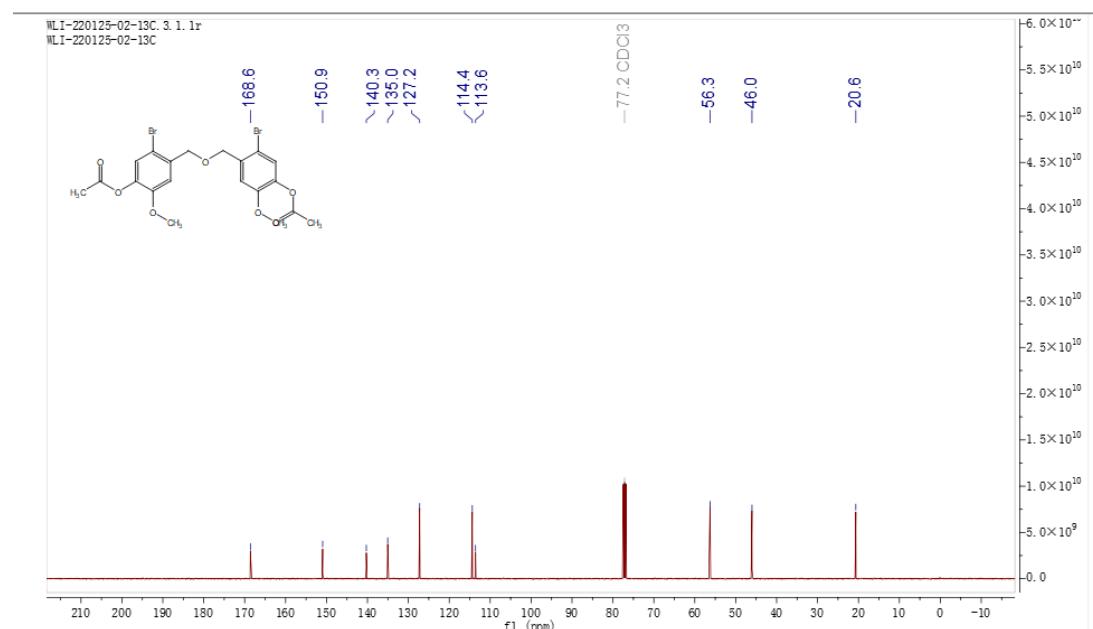


Figure S36. <sup>13</sup>C NMR spectrum of compound 4b-5 in Chloroform-d (101 MHz).

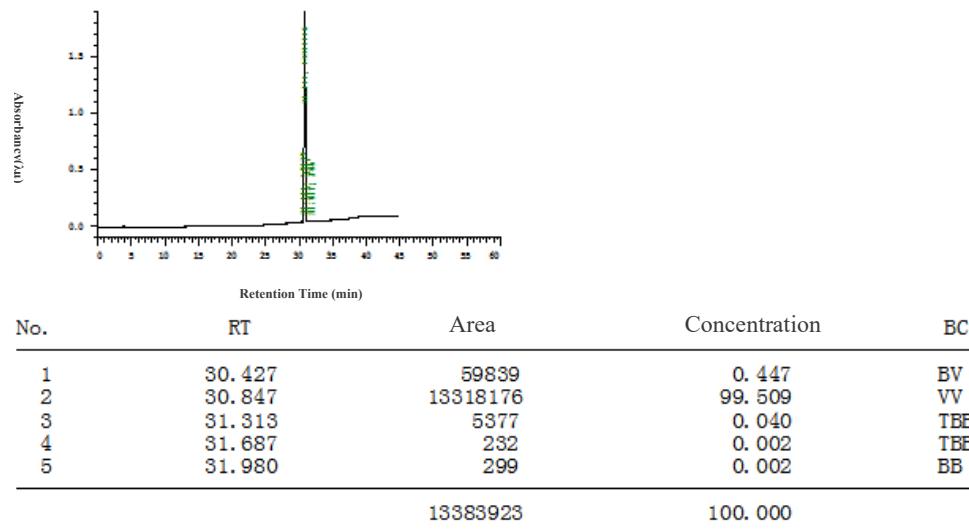


Figure S37. HRMS Spectra of 4b-5.

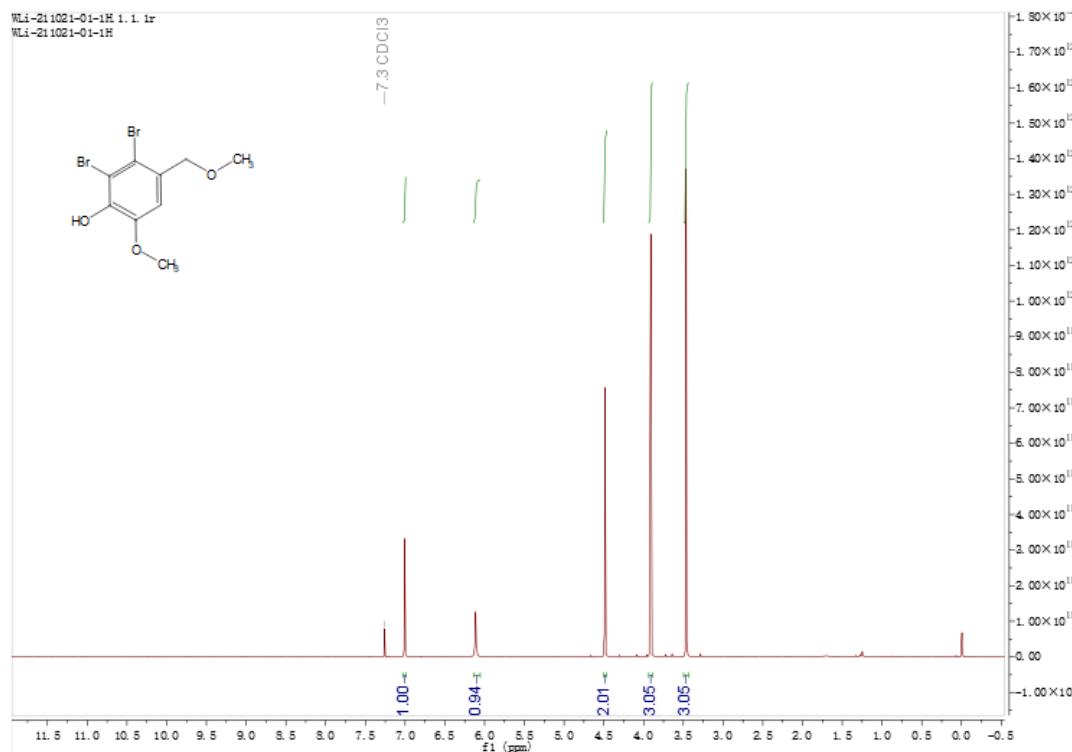
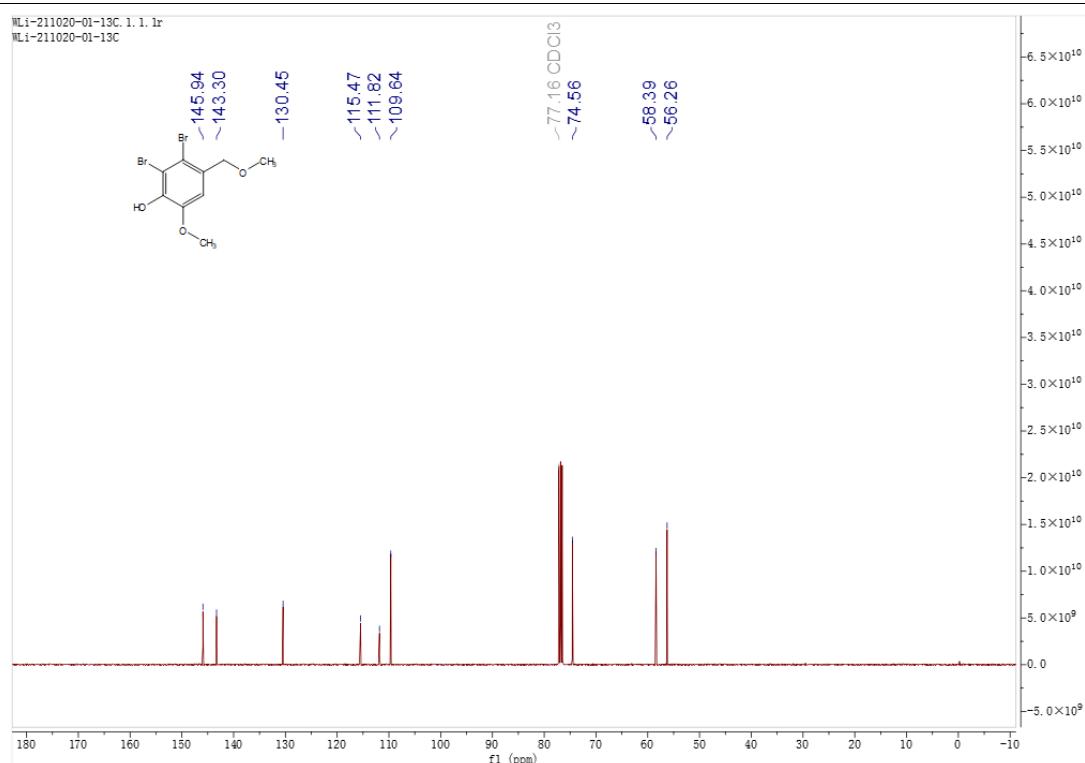
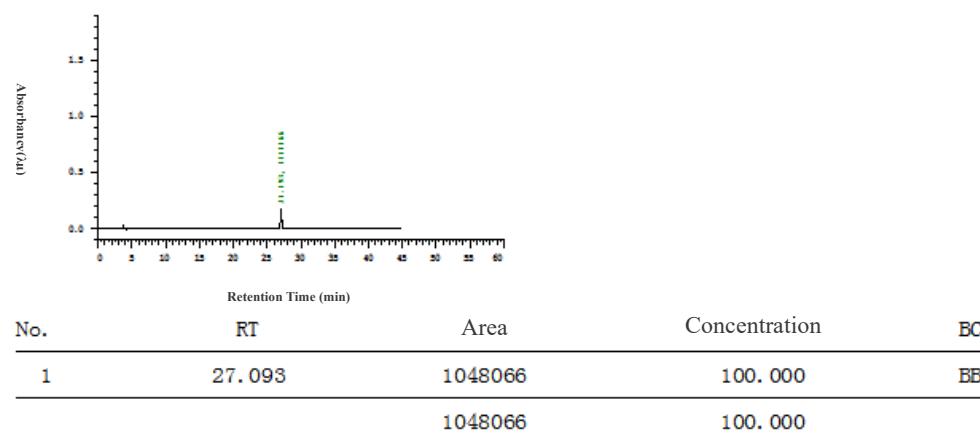
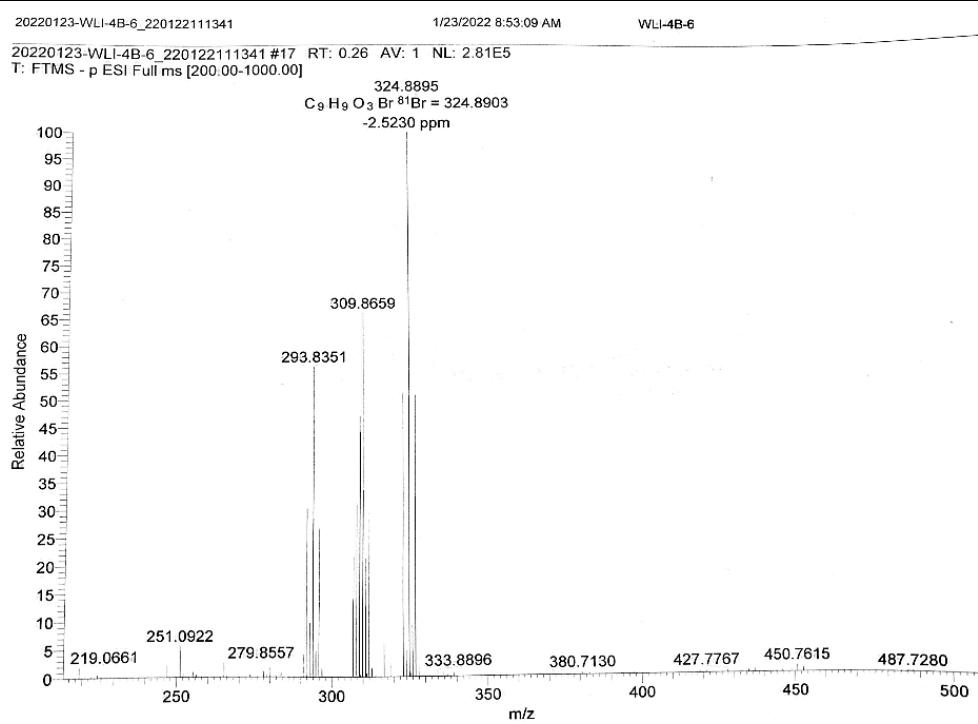


Figure S38. <sup>1</sup>H NMR spectrum of compound 4b-6 in Chloroform-d (400 MHz).



**Figure S39.**  $^{13}\text{C}$  NMR spectrum of compound **4b-6** in Chloroform-*d* (101 MHz).





**Figure S40.** HRMS and HPLC Spectra of **4b-6**.