

Supplementary Data

Enantioselective Henry Reaction Catalyzed by Chiral Piperazine Derivatives

Leman Alkan*

Department of Chemistry, Faculty of Science, Ege University, Izmir, 35100 Turkey

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^1H NMR spectra and ^{13}C NMR spectra of compounds 2-8

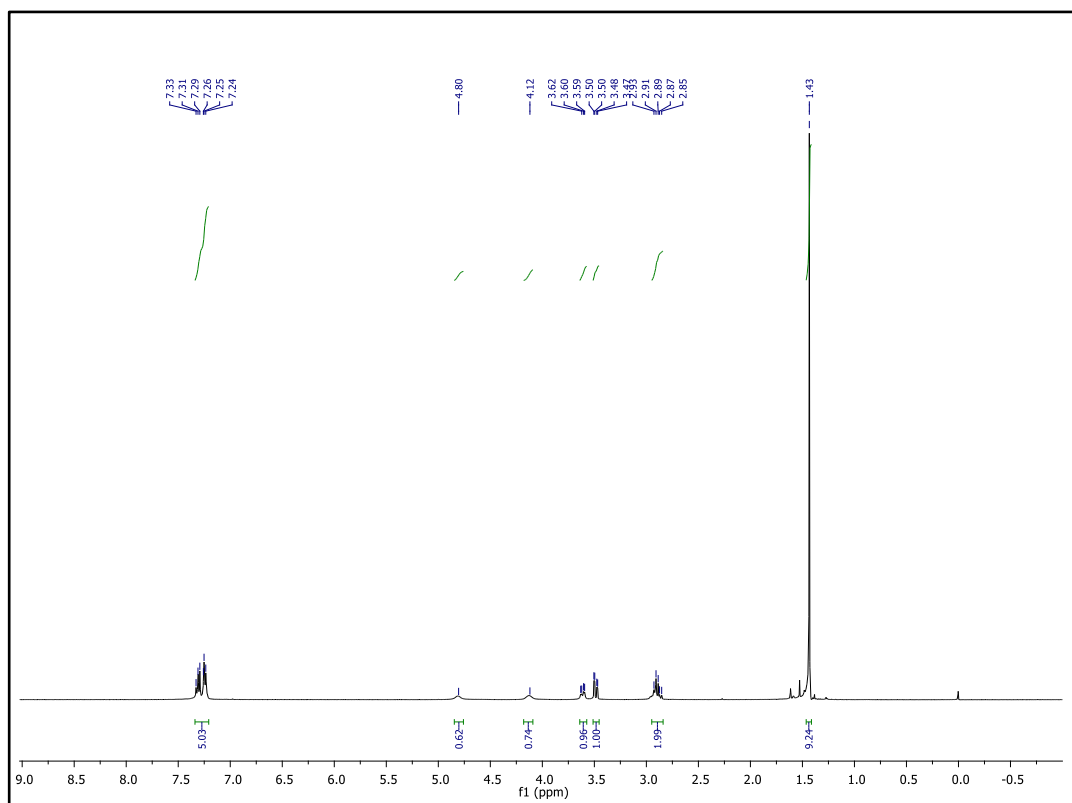


Figure 1: ^1H NMR spectrum of **2**

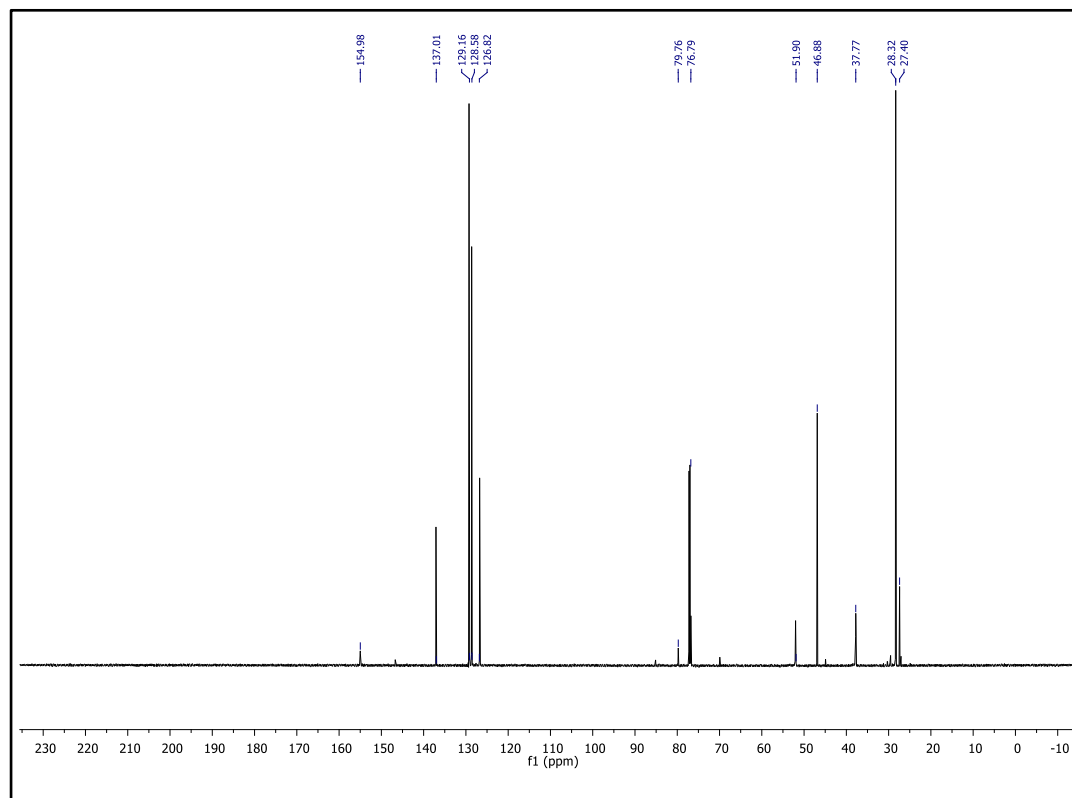


Figure 2: ^{13}C NMR spectrum of **2**

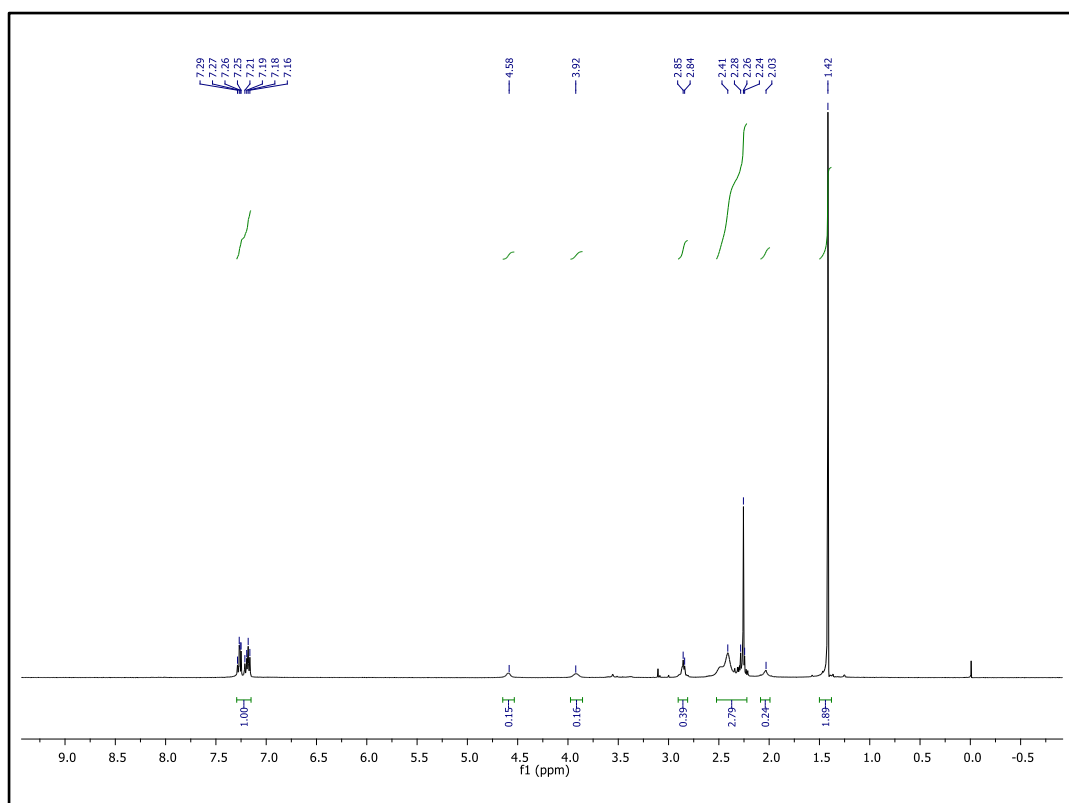


Figure 3: ¹H NMR spectrum of **3**

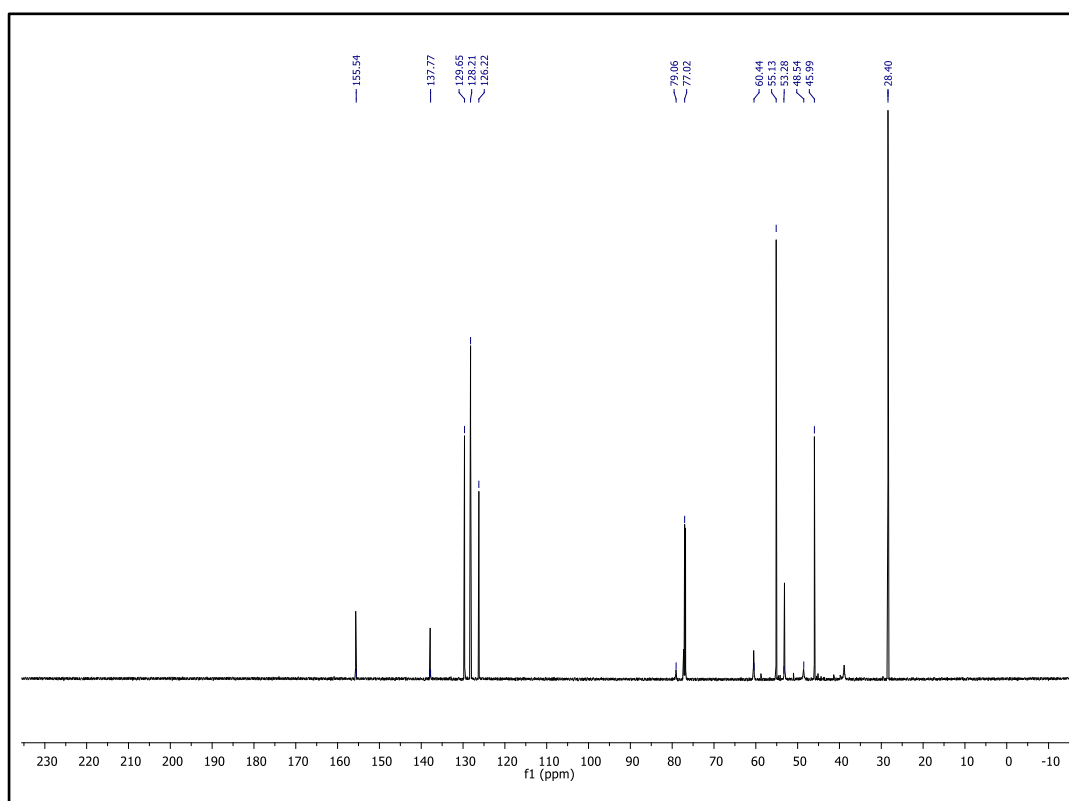


Figure 4: ¹³C NMR spectrum of **3**

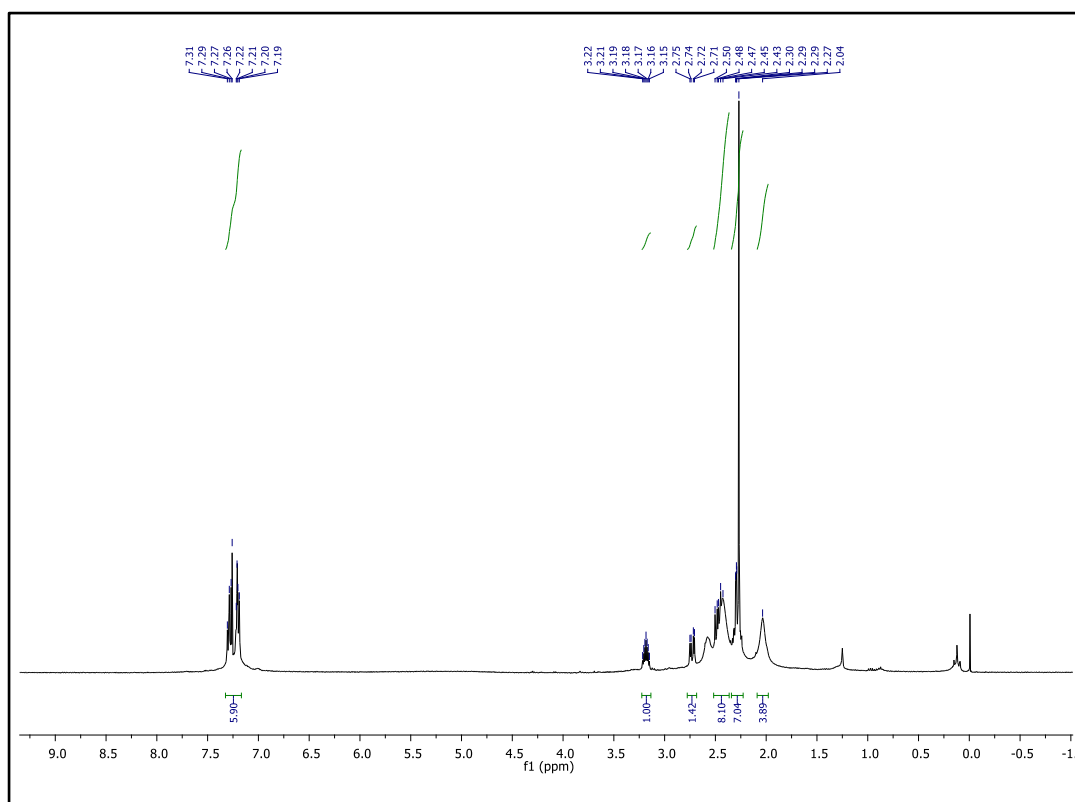


Figure 5: ^1H NMR spectrum of 4

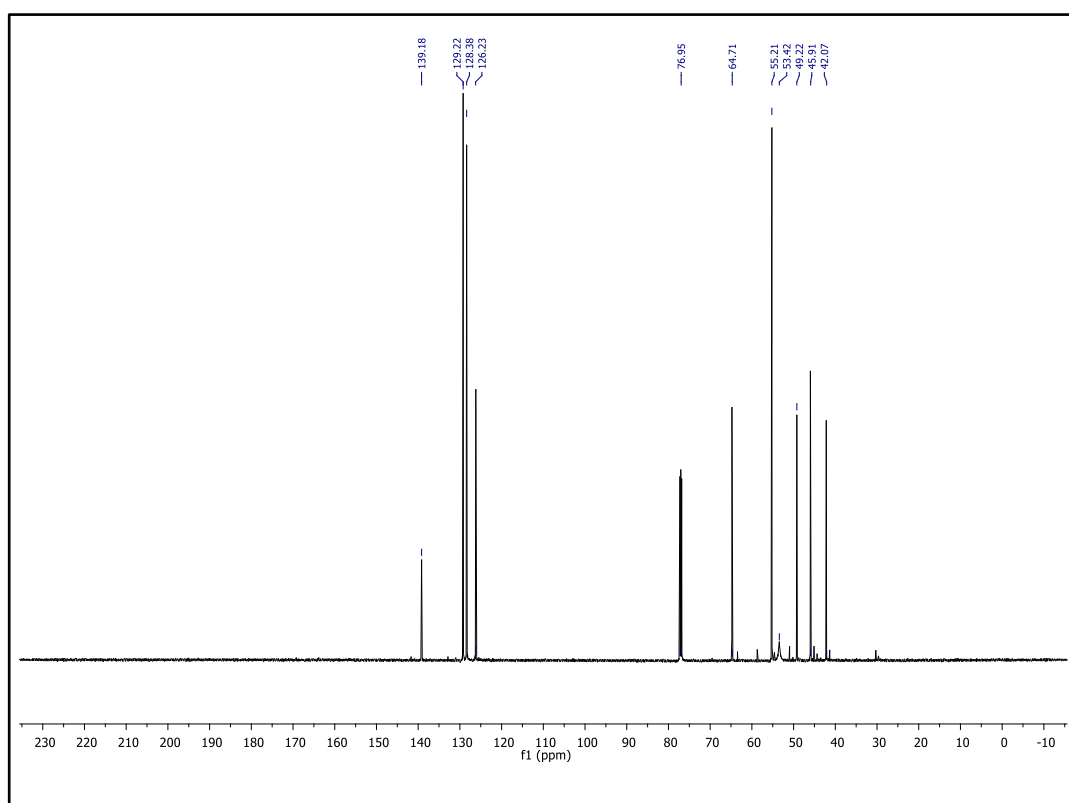


Figure 6: ^{13}C NMR spectrum of 4

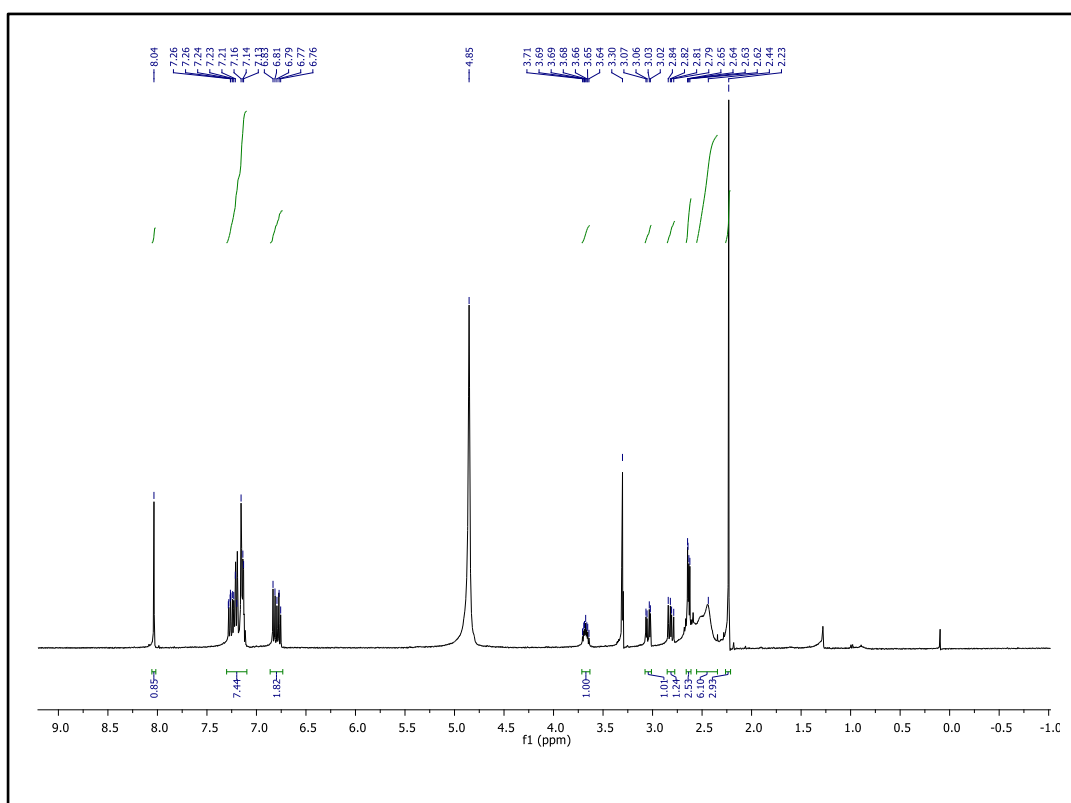


Figure 7: ¹H NMR spectrum of **5**

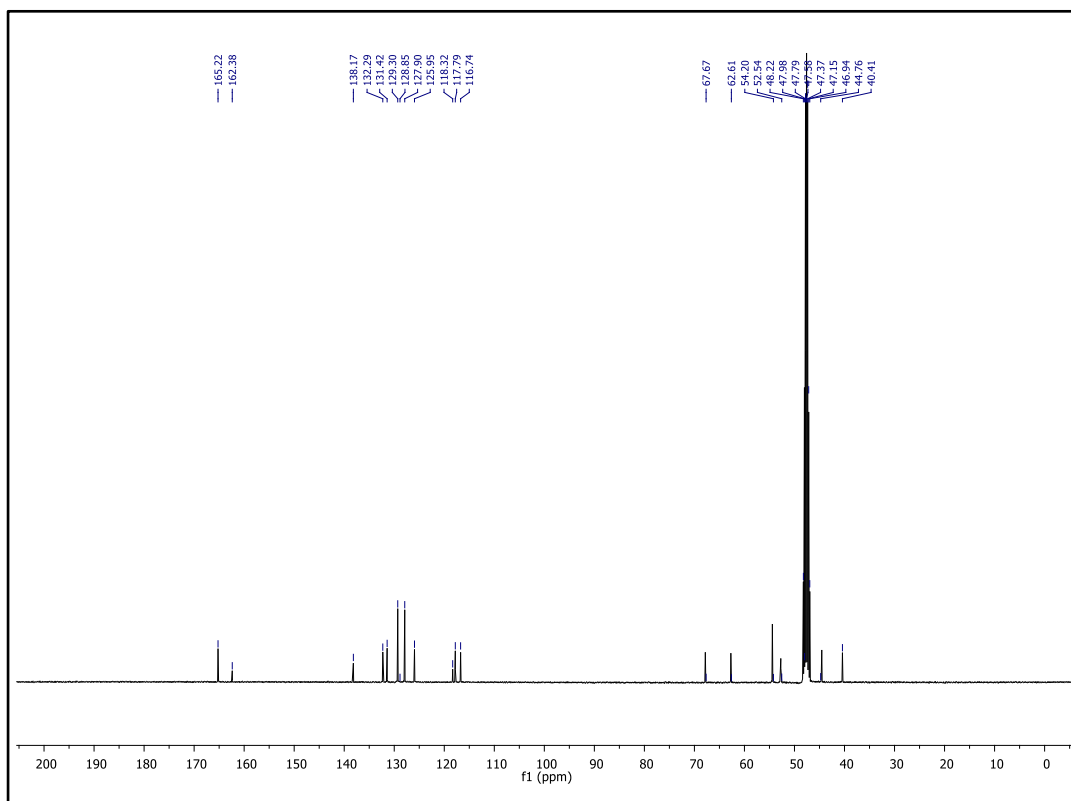


Figure 8: ¹³C NMR spectrum of **5**

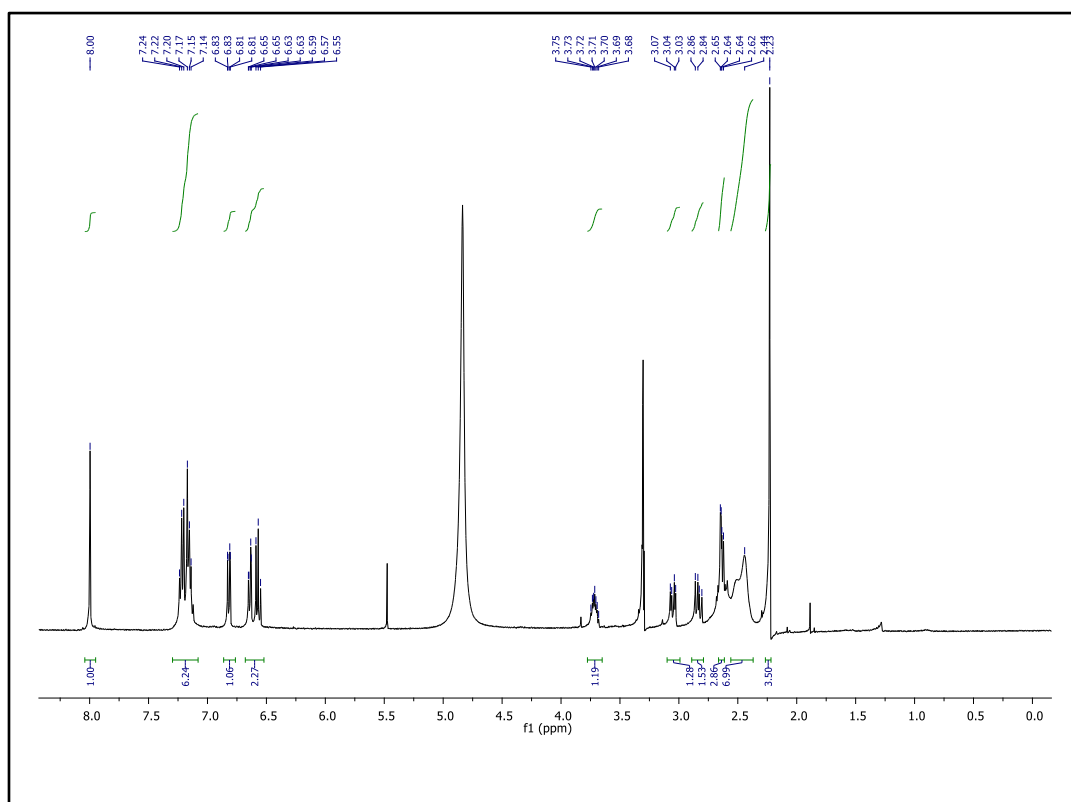


Figure 9: ¹H NMR spectrum of **6**

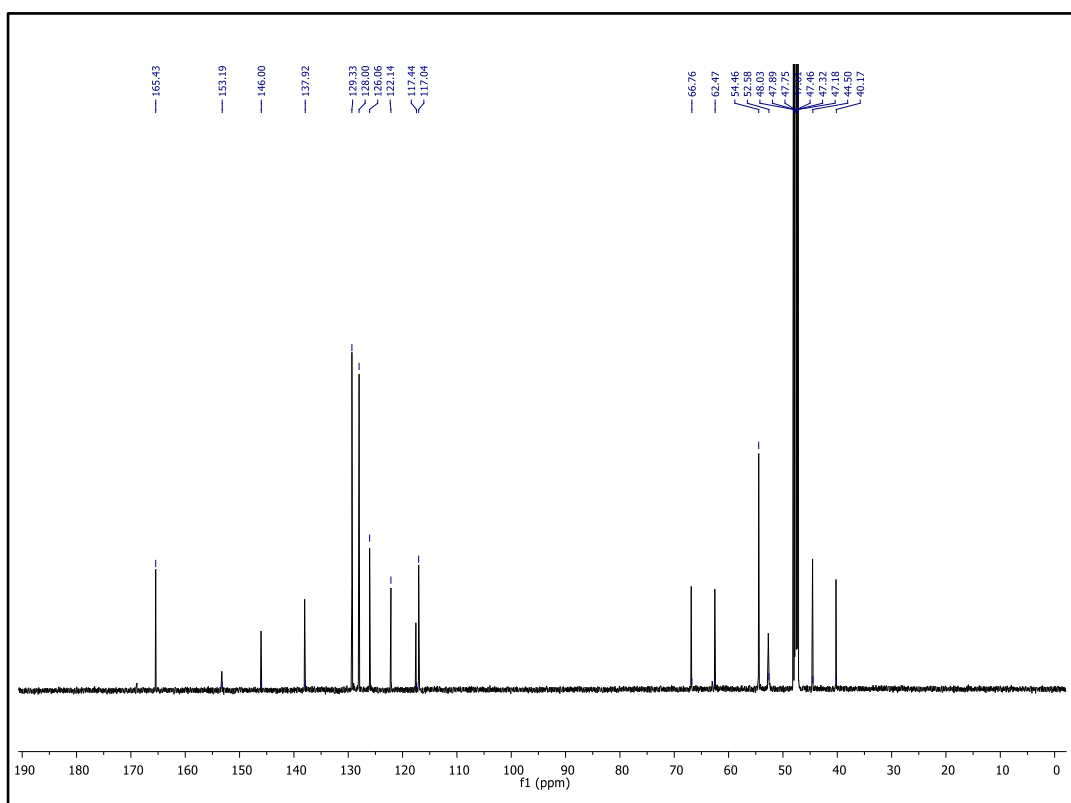


Figure 10: ¹³C NMR spectrum of **6**

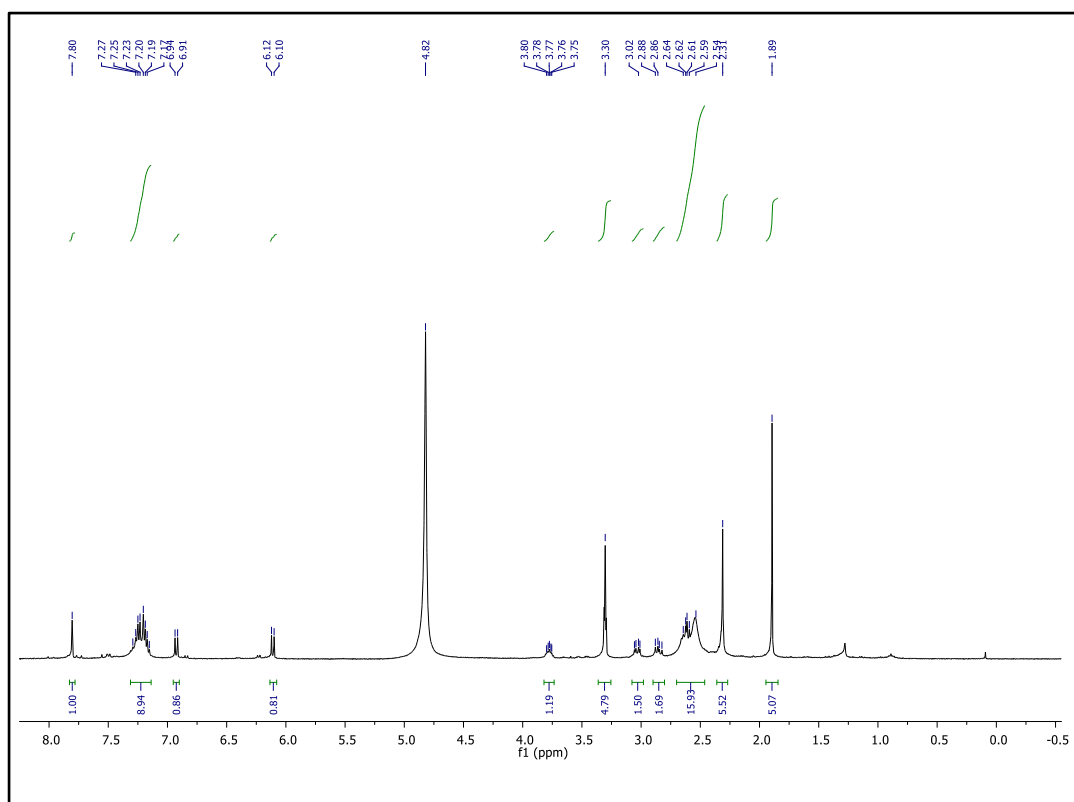


Figure 11: ¹H NMR spectrum of **7**

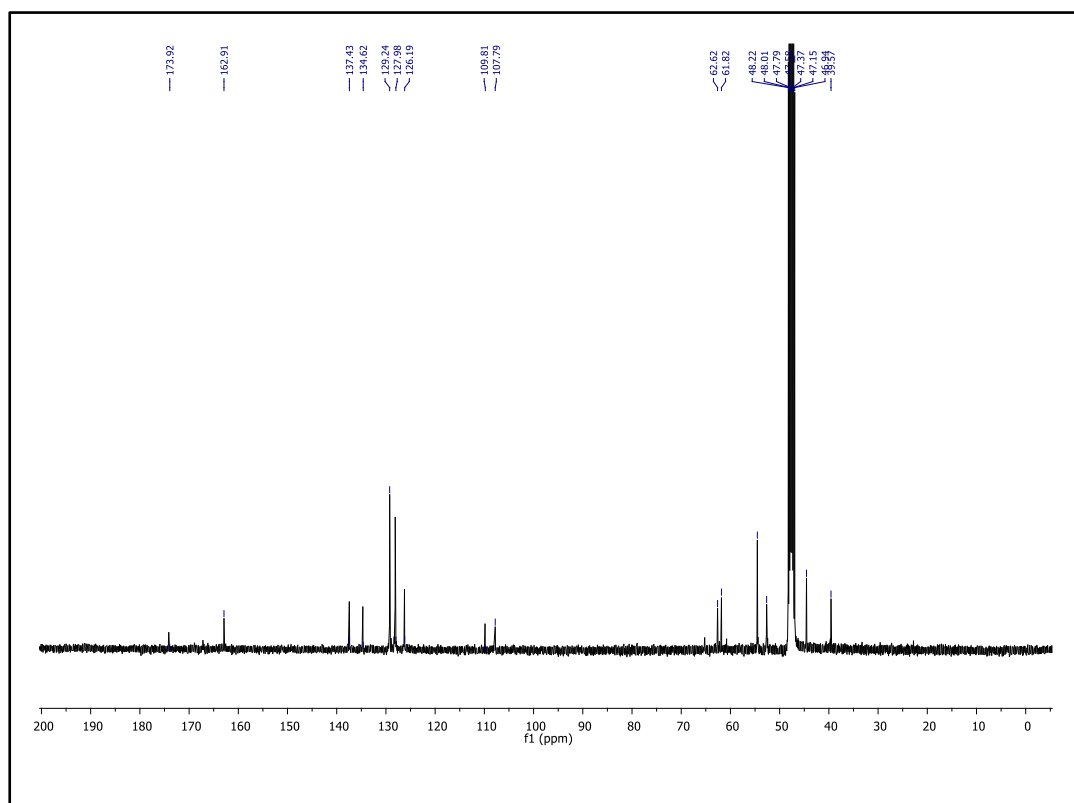


Figure 12: ¹³C NMR spectrum of **7**

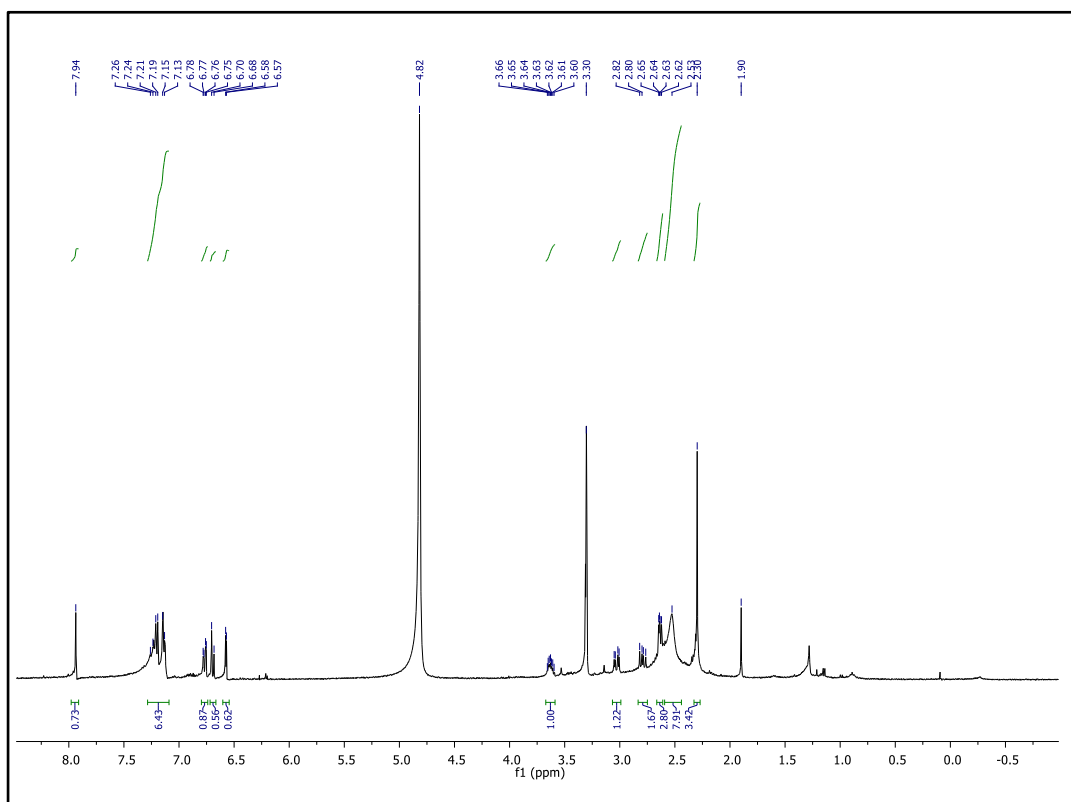


Figure 13: ¹H NMR spectrum of **8**

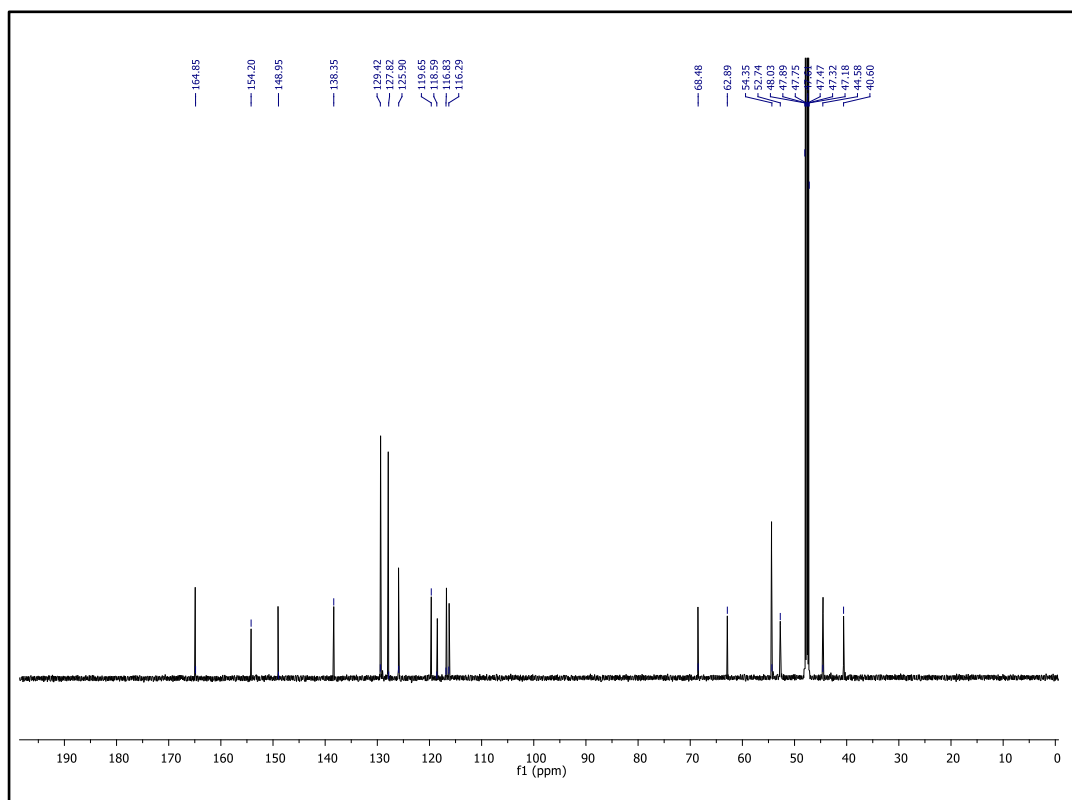


Figure 14: ¹³C NMR spectrum of **8**

HPLC Chromatograms of compounds 5–8

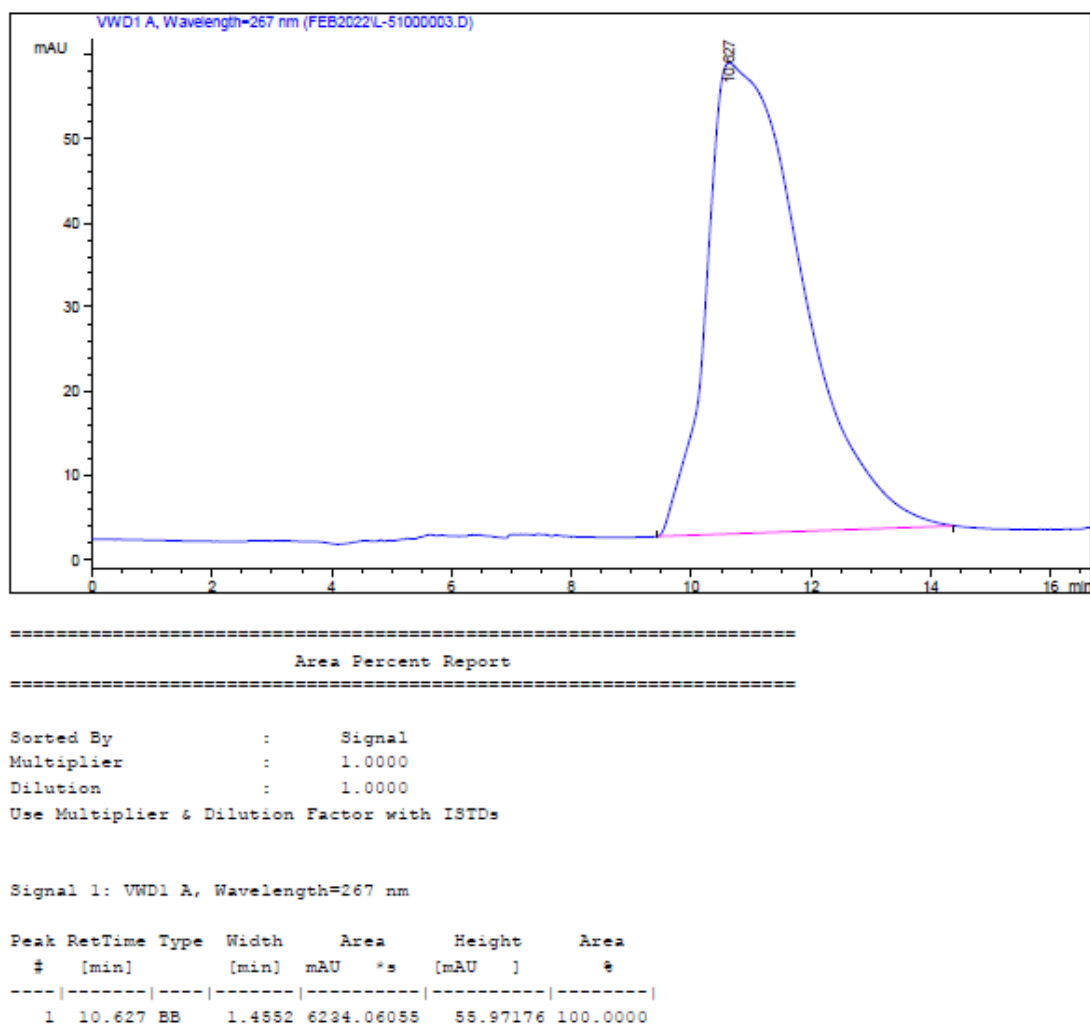
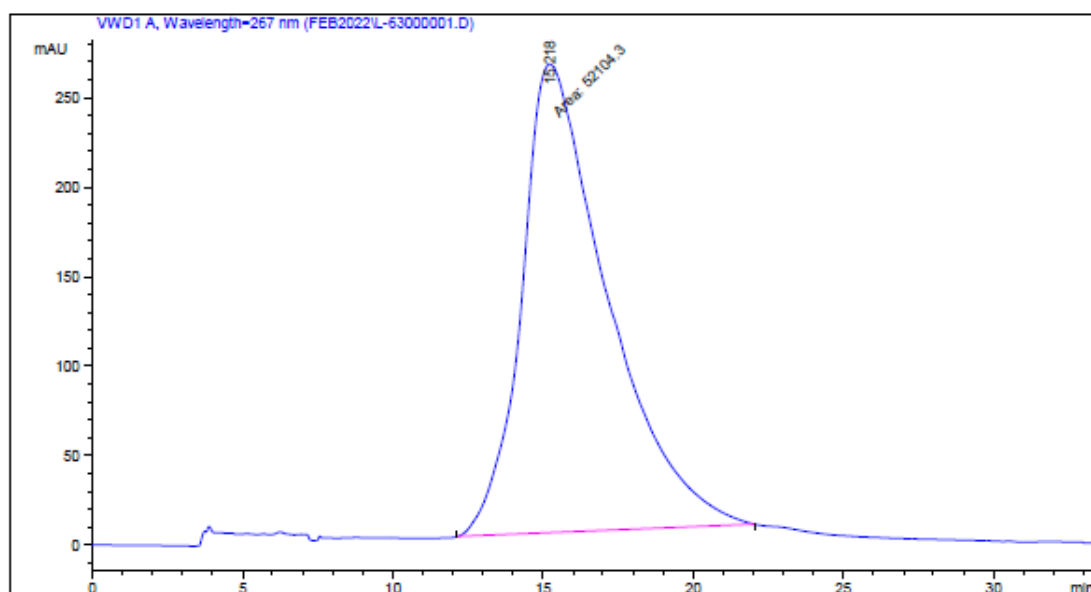


Figure 15: HPLC chromatogram of **5**



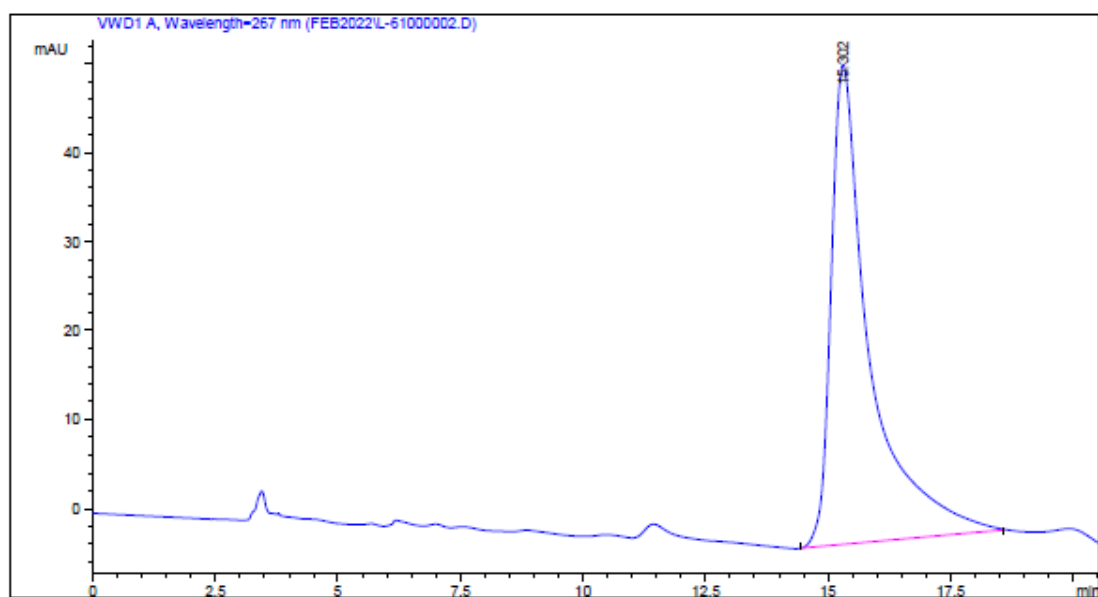
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                        Area Percent Report
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Sorted By      :      Signal
Multiplier     :      1.0000
Dilution       :      1.0000
Use Multiplier & Dilution Factor with ISTDs
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Signal 1: VWD1 A, Wavelength=267 nm

Peak #	RetTime [min]	Type	Width [min]	Area mAU	Area %s	Height [mAU]	Area %
1	15.218	MM T	3.3140	5.21043e4		262.04388	100.0000

Figure 16: HPLC chromatogram of **6**



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 Area Percent Report
 =====

Sorted By : Signal
 Multiplier : 1.0000
 Dilution : 1.0000
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=267 nm

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1	15.302	BB	0.7815	2973.09448	53.92542	100.0000	100.0000

Figure 17: HPLC chromatogram of 7

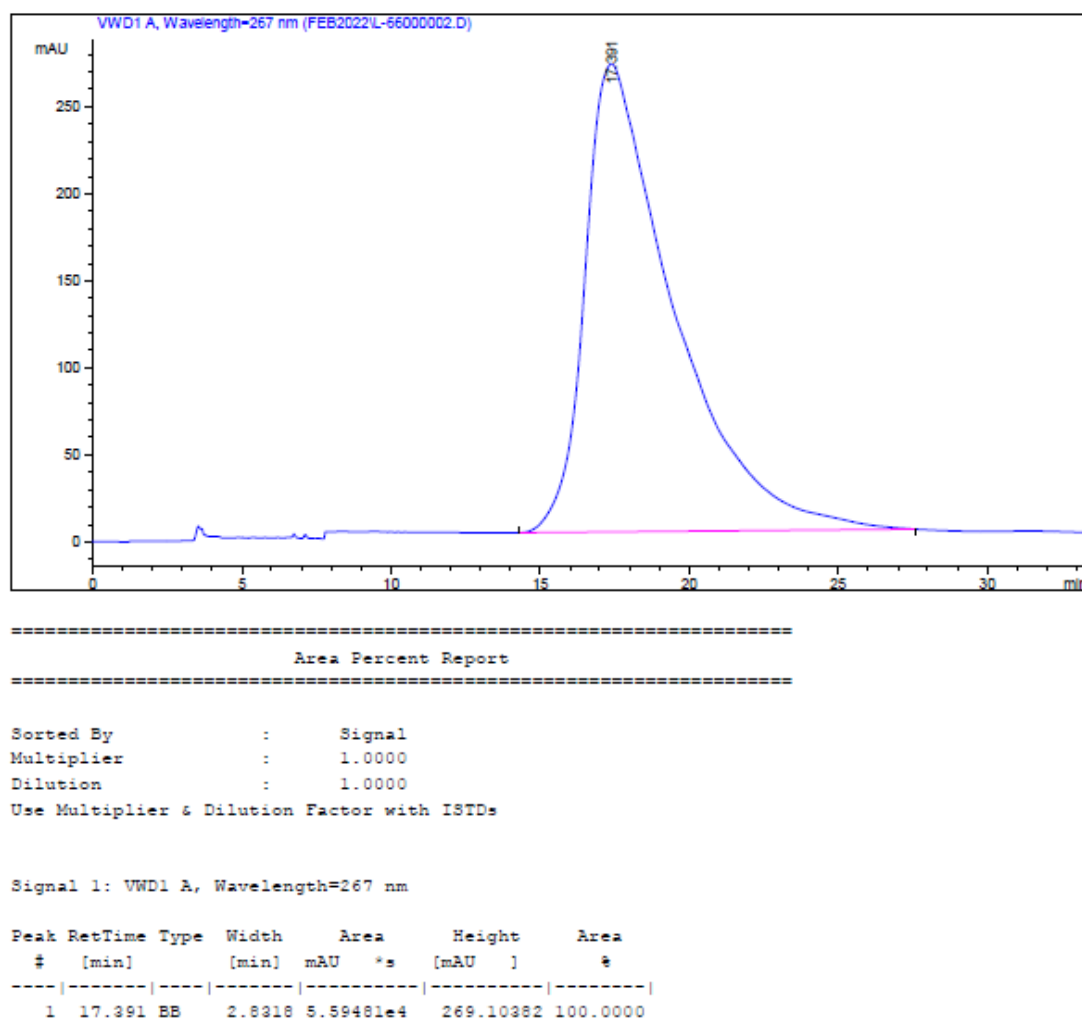


Figure 18: HPLC chromatogram of **8**