

Supporting Information

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Stereo selective reduction of enantiopure α -l-amino- β -keto esters using oxazaborolidine catalysts for the synthesis of statine analogues

Malapati Venkateswara Reddy^{1,2}, Shyamala Pulipaka^{2*}

and Arvind Kumar Sharma^{1*}

¹Dept of Chemistry solutions, Aragen life sciences Pvt. Ltd. Nacharam, Hyderabad, India

²Dept of Chemistry, Andhra University, Andhra Pradesh, India

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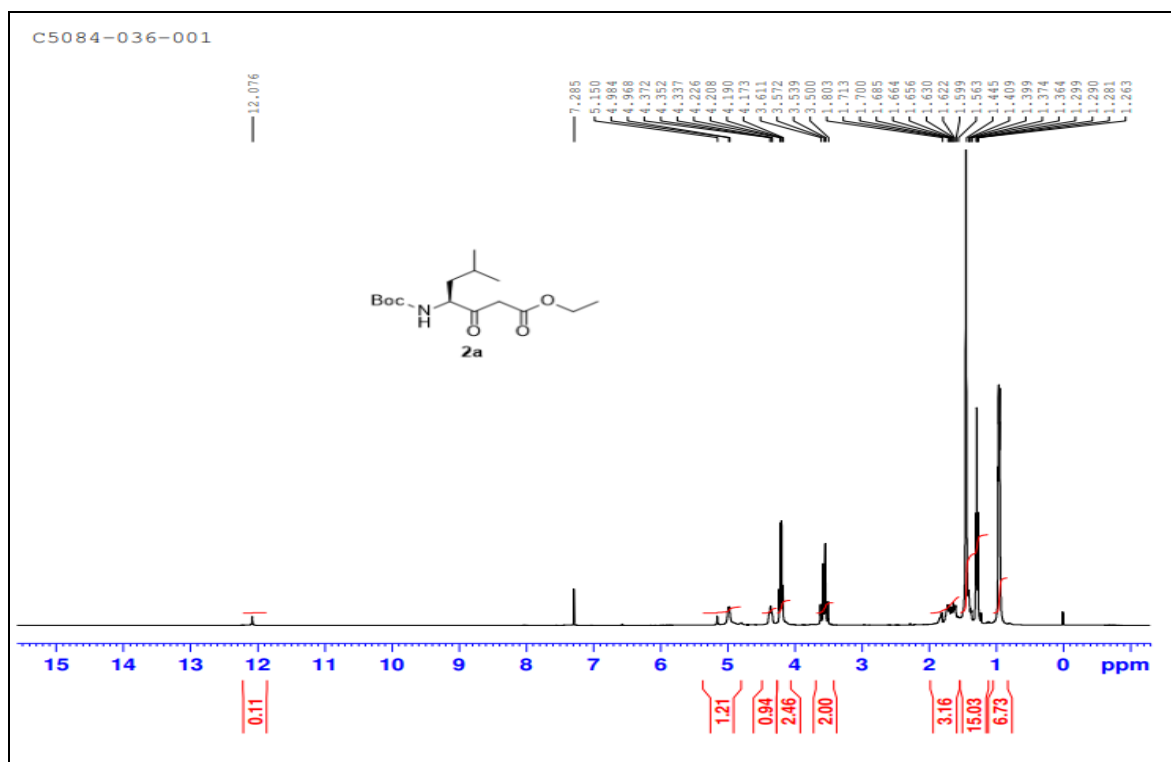


Figure S1: 400 MHz ¹H-NMR spectrum of compound **2a** in CDCl₃

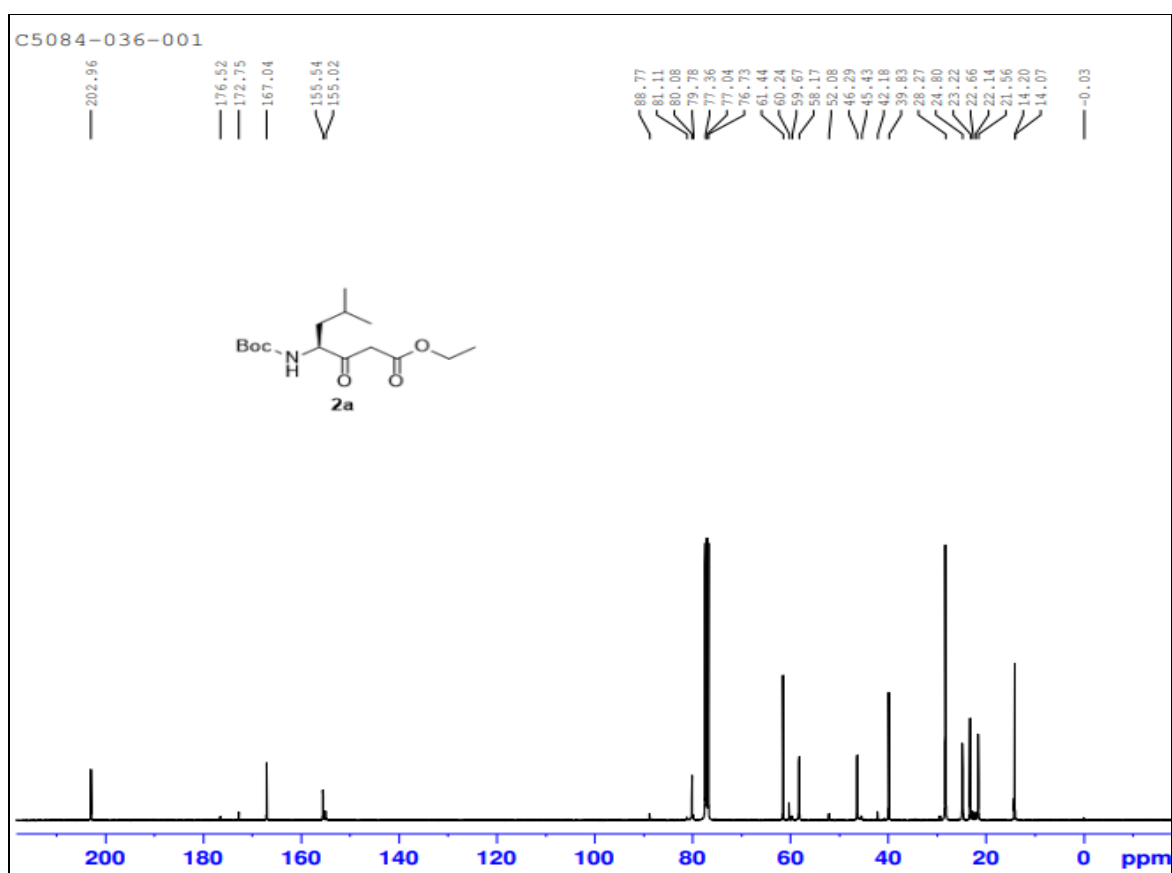


Figure S2: 100 MHz ¹³C-NMR Spectrum of compound **2a** in CDCl₃

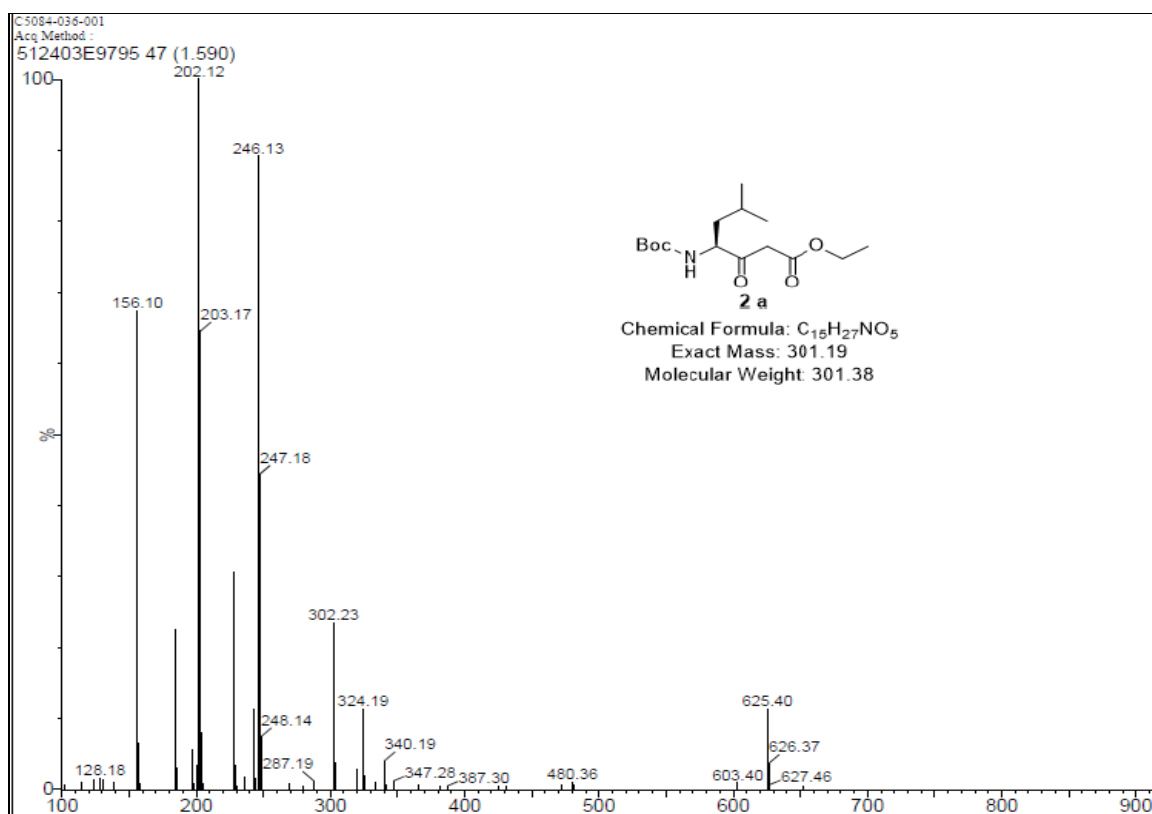


Figure S3: Mass spectrum of compound **2a**

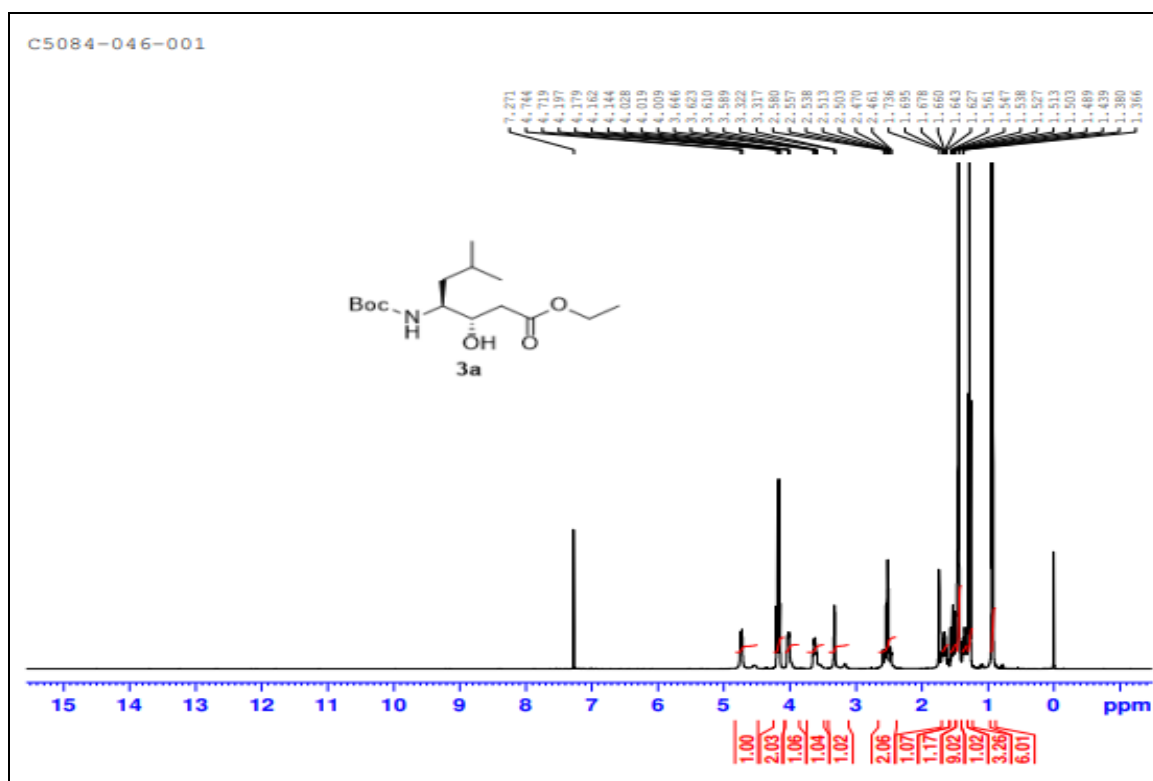


Figure S4: 400 MHz ^1H -NMR spectrum of compound **3a** in CDCl_3

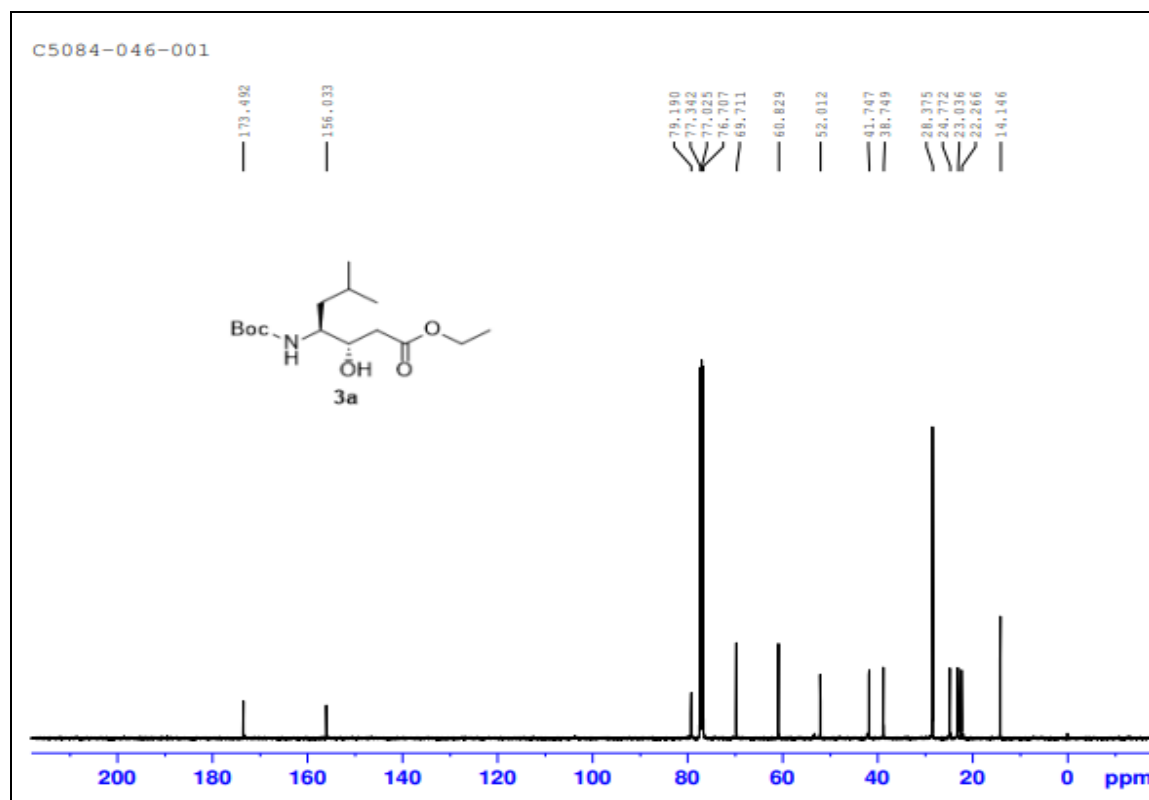


Figure S5: 100 MHz ^{13}C -NMR Spectrum of compound **3a** in CDCl_3

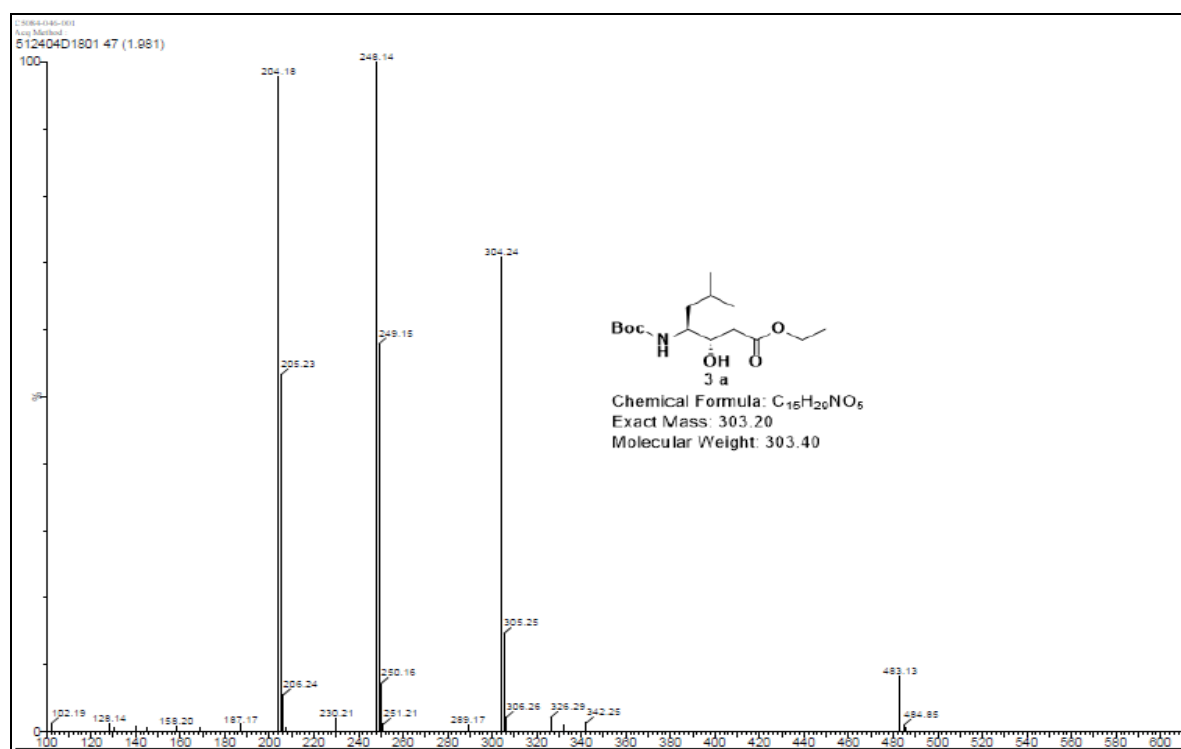


Figure S6: Mass spectrum of compound **3a**

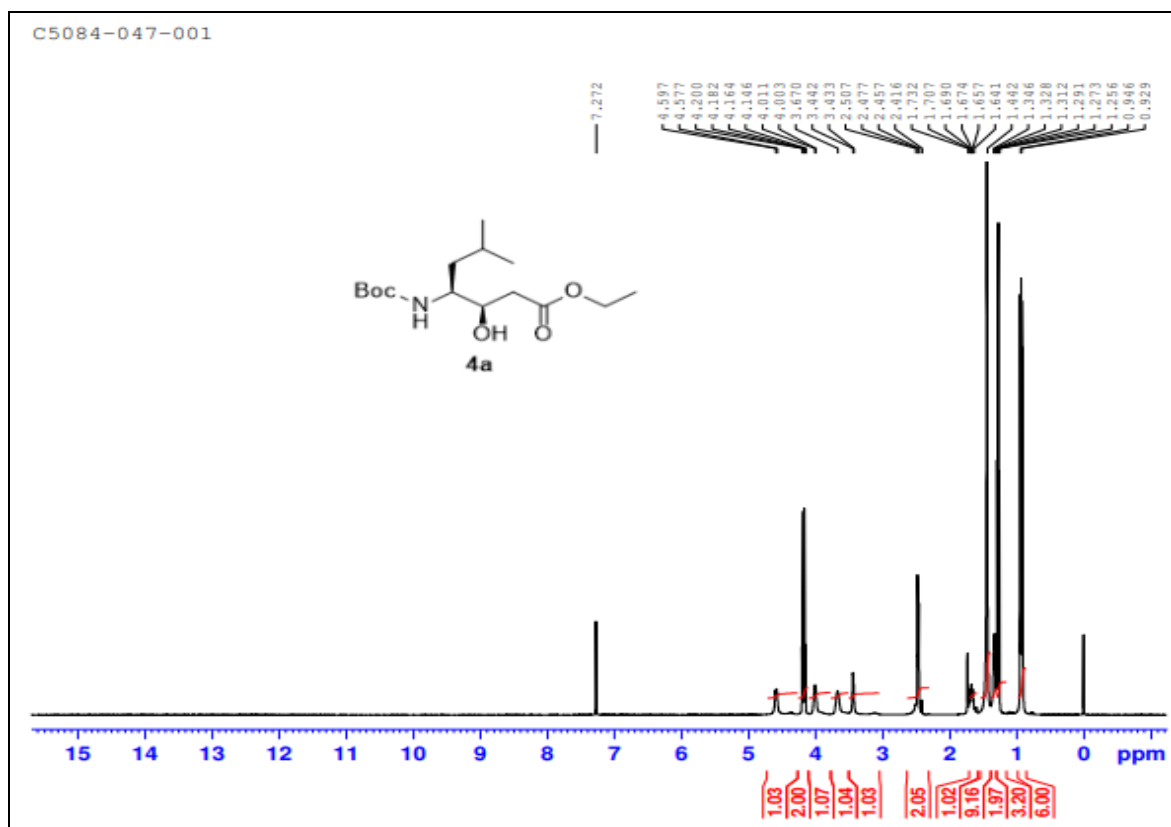


Figure S7: 400 MHz ^1H -NMR spectrum of compound **4a** in CDCl_3

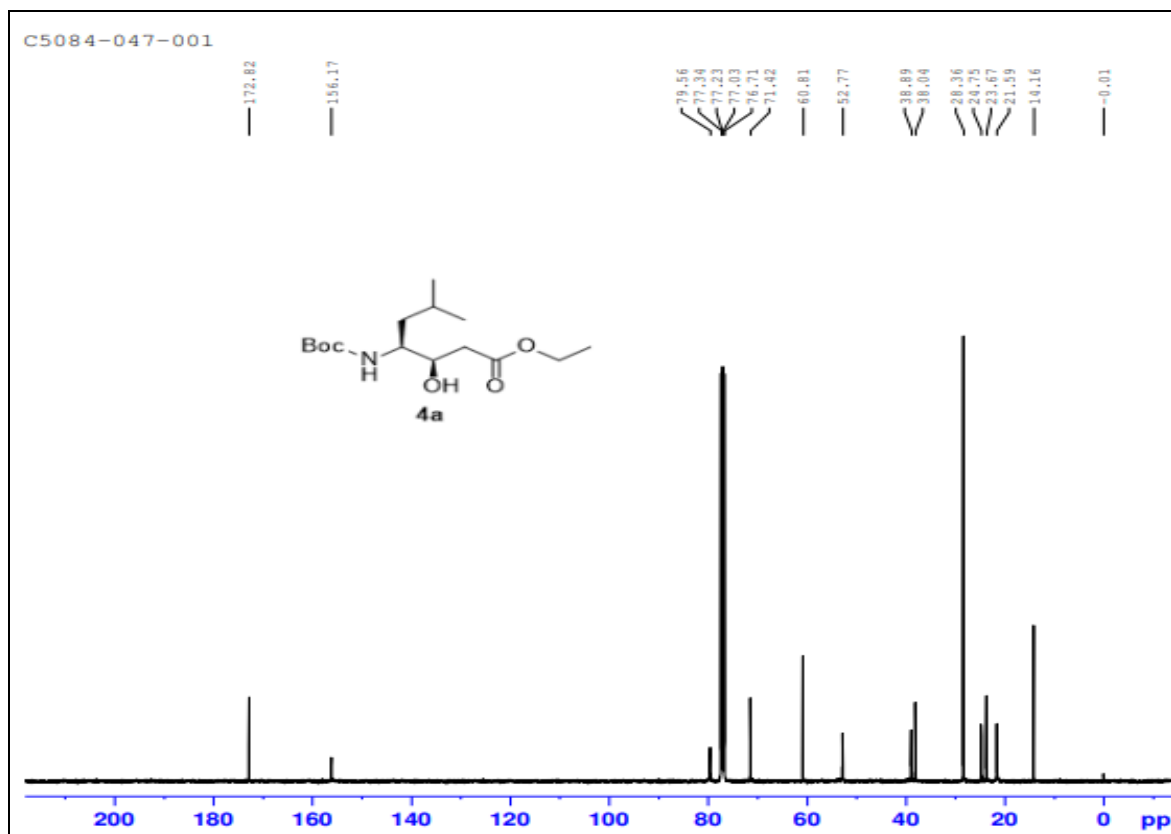


Figure S8: 100 MHz ^{13}C -NMR Spectrum of compound **4a** in CDCl_3

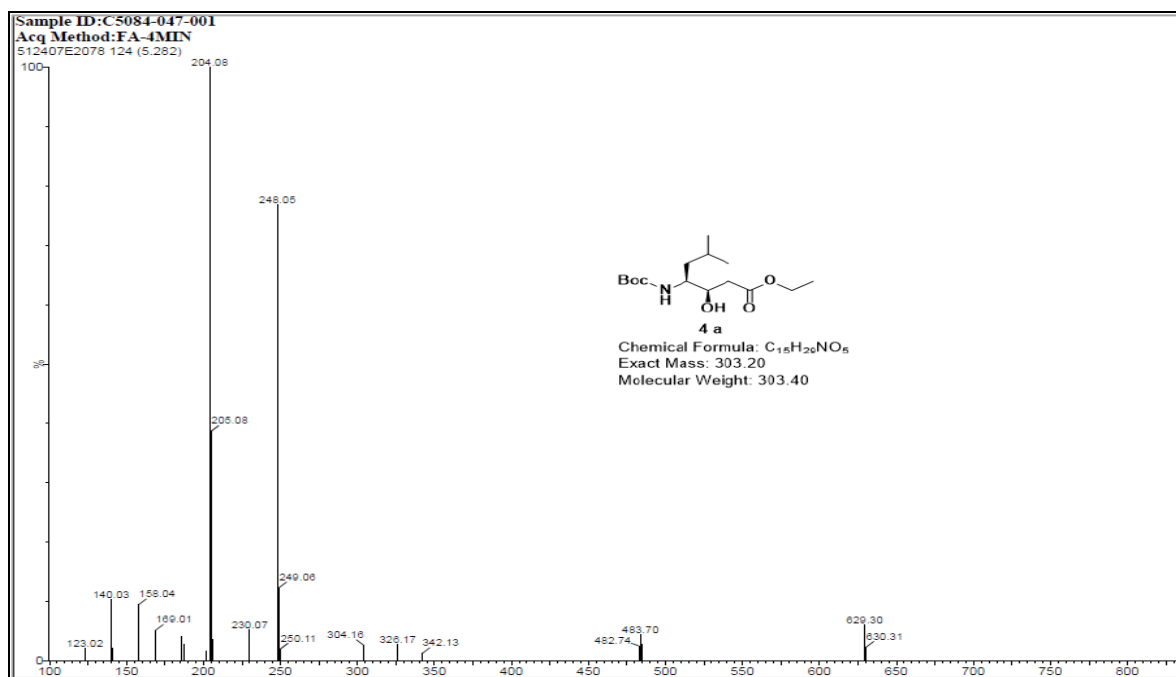


Figure S9: Mass spectrum of compound **4a**

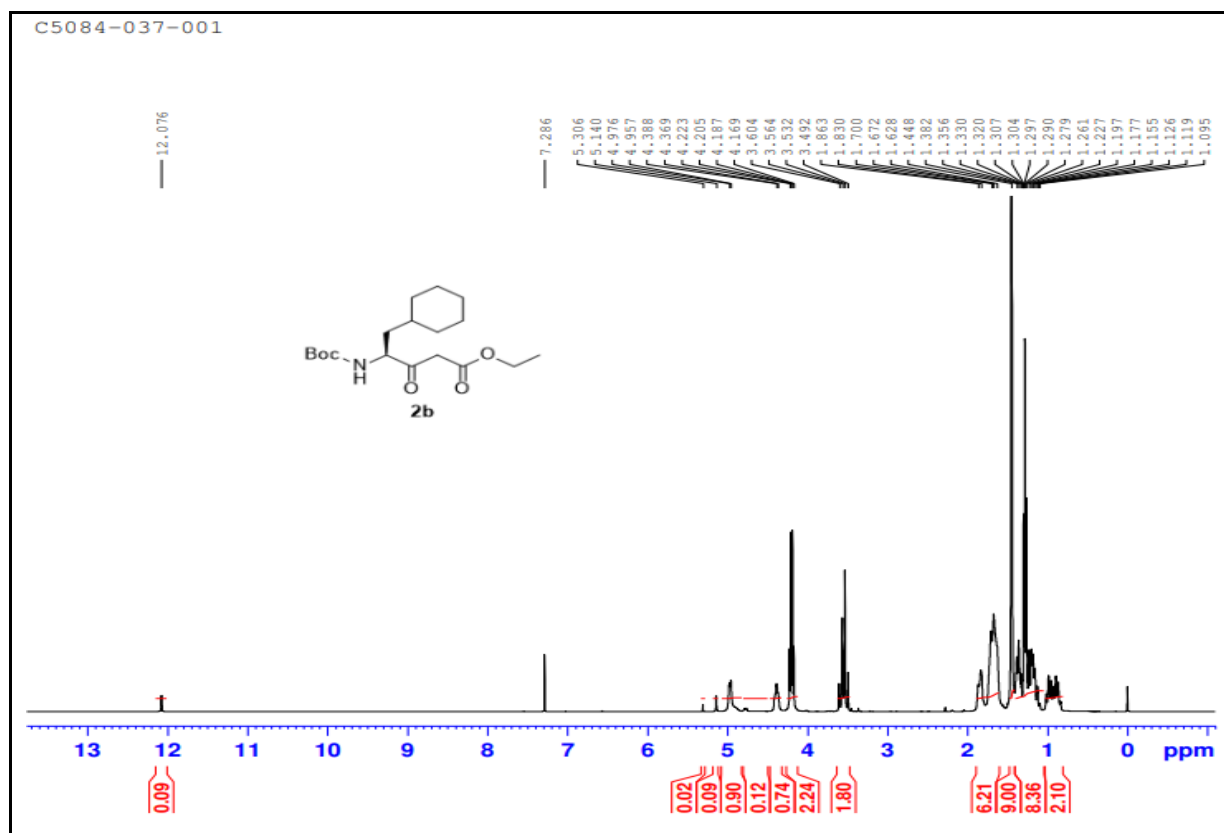


Figure S10: 400 MHz ^1H -NMR spectrum of compound **2b** in CDCl_3

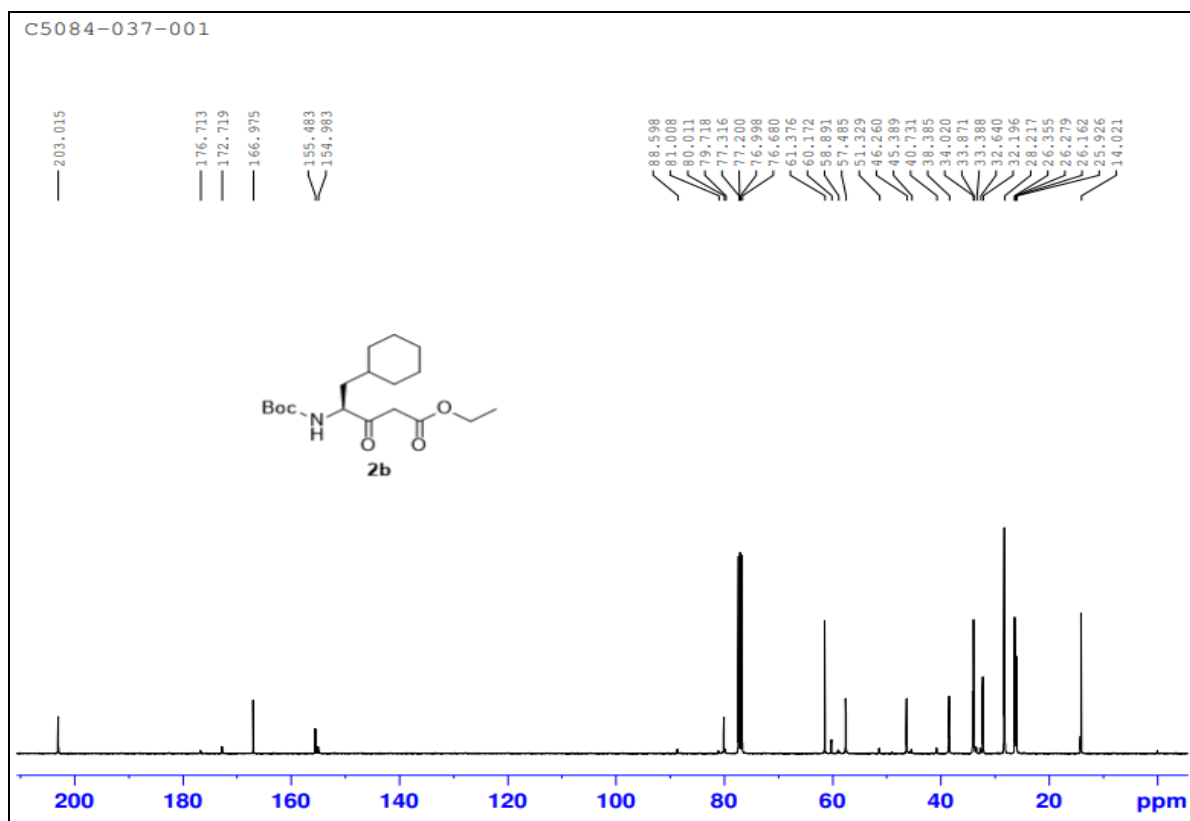


Figure S11: 100 MHz ^{13}C -NMR Spectrum of compound **2b** in CDCl_3

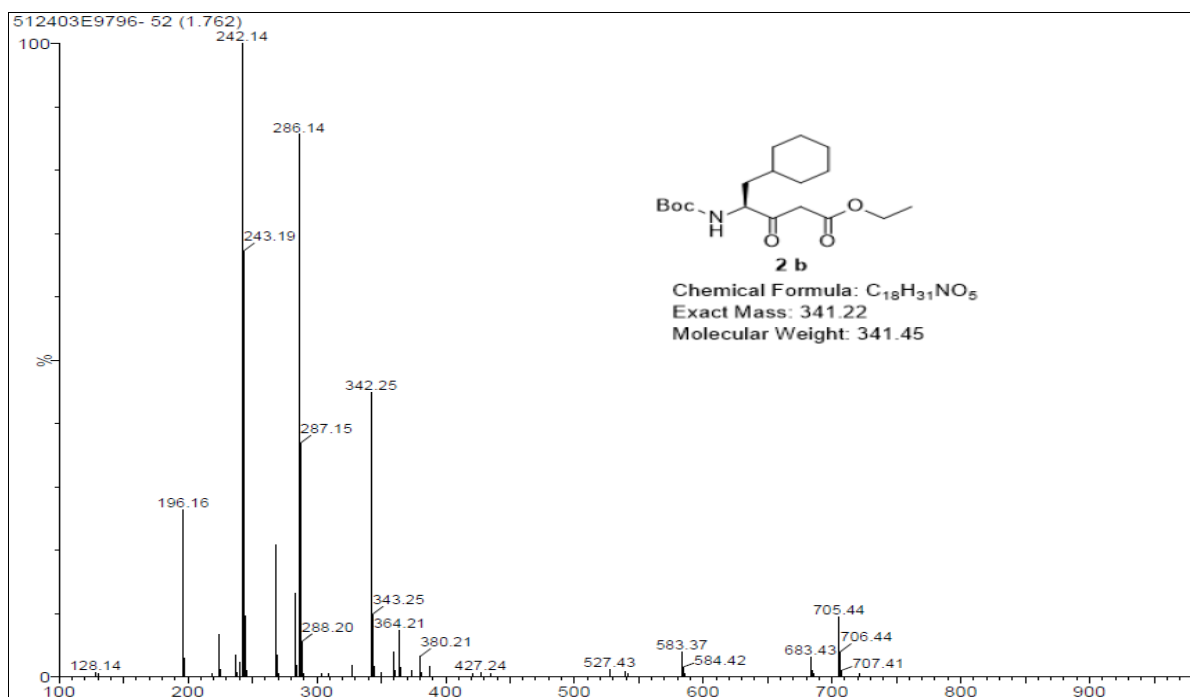


Figure S12: Mass spectrum of compound **2b**

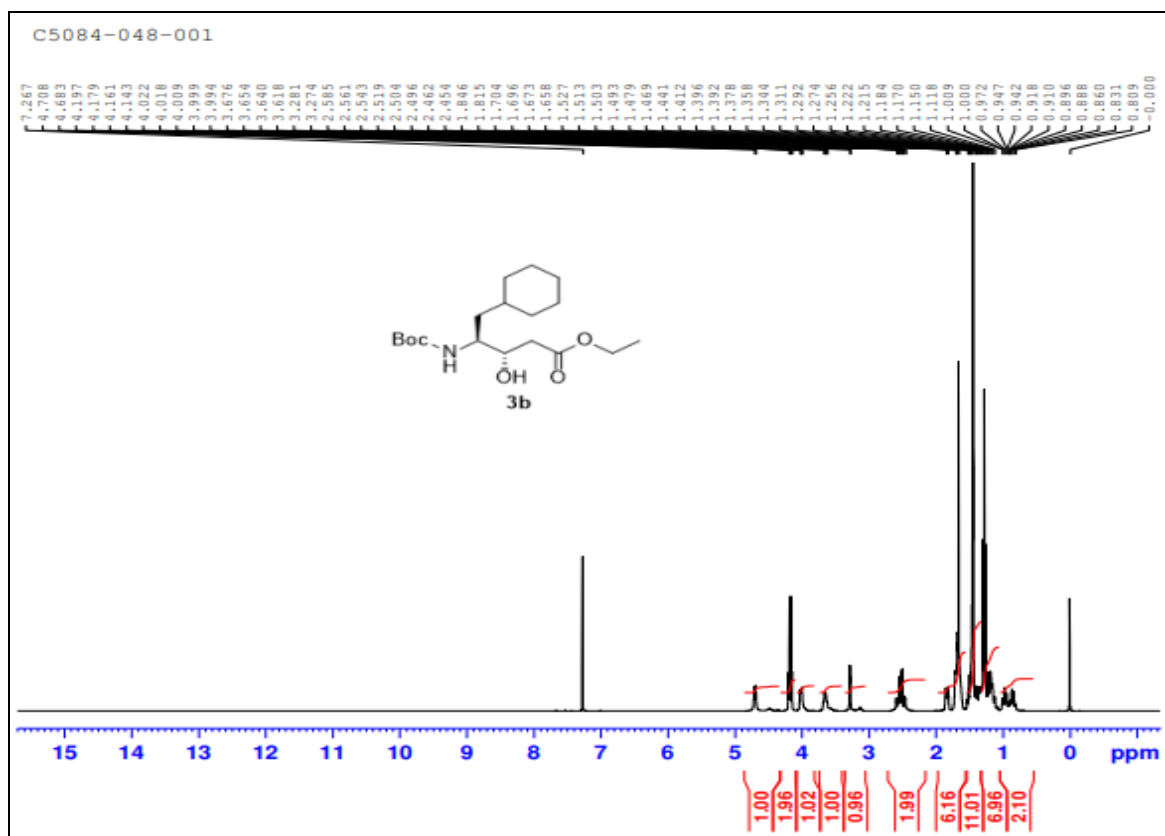


Figure S13: 400 MHz ^1H -NMR spectrum of compound **3b** in CDCl_3

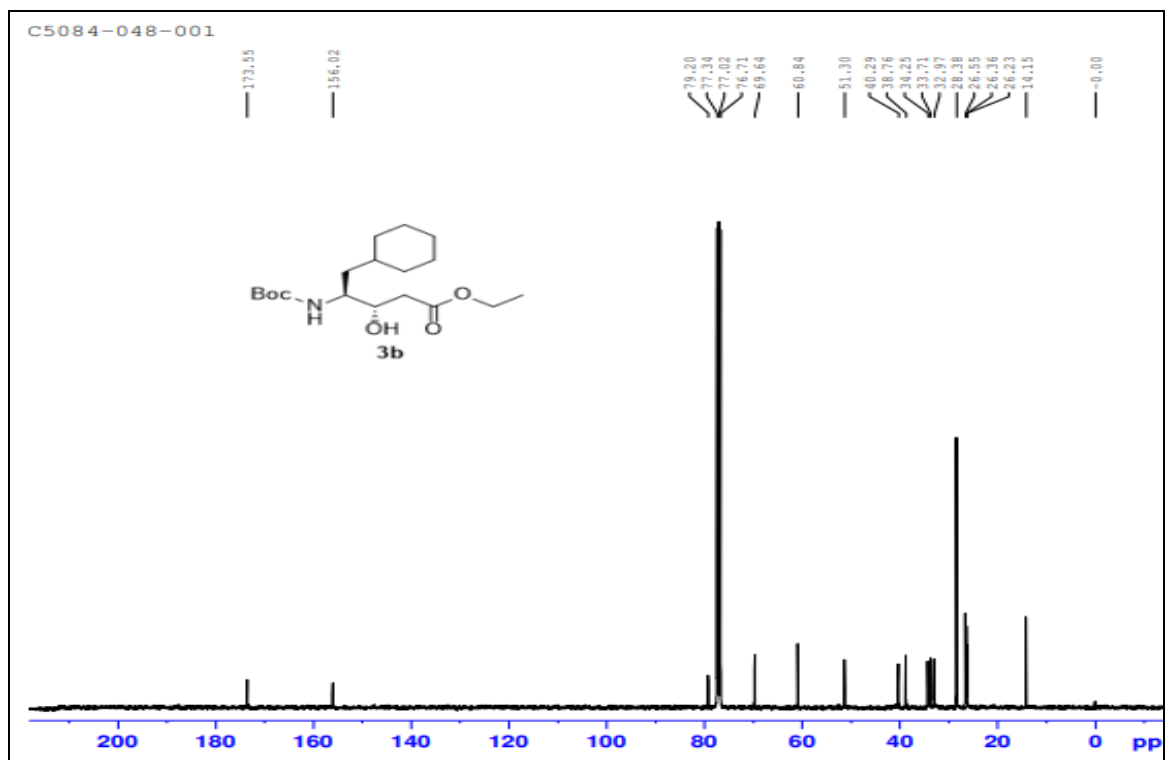


Figure S14: 100 MHz ^{13}C -NMR Spectrum of compound **3b** in CDCl_3

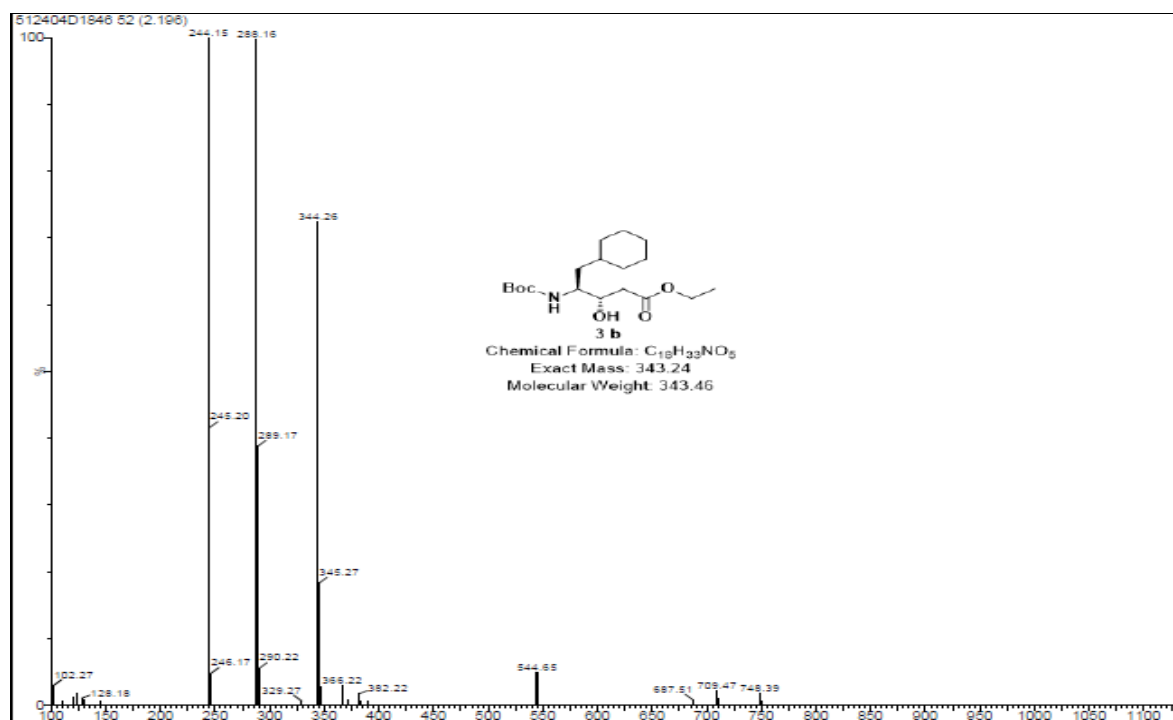


Figure S15: Mass spectrum of compound **3b**

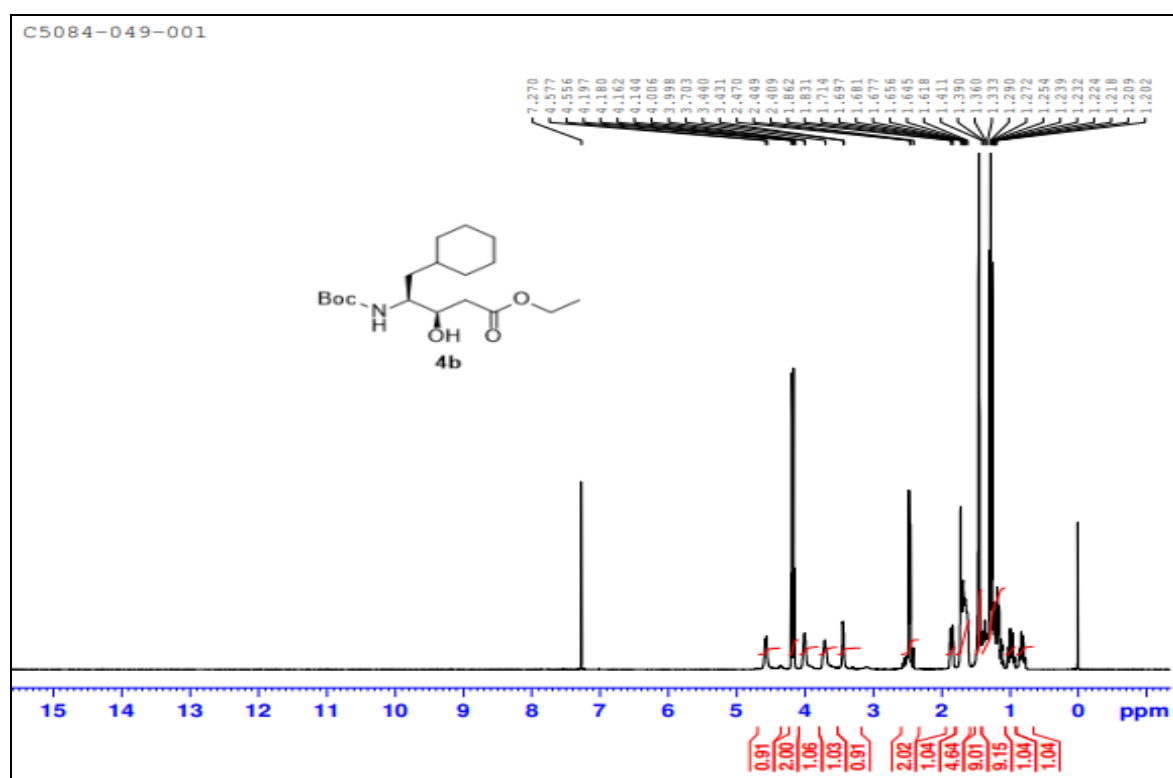


Figure S16: 400 MHz ^1H -NMR spectrum of compound **4b** in CDCl_3

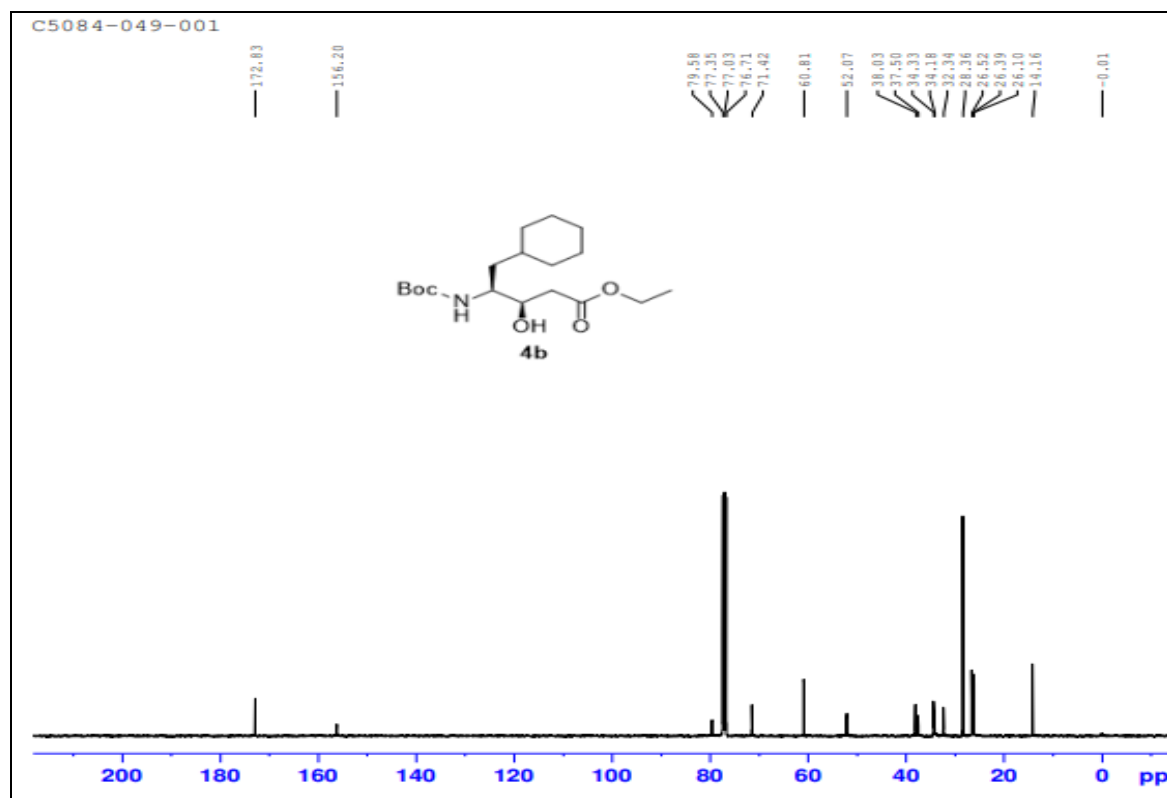


Figure S17: 100 MHz ^{13}C -NMR Spectrum of compound **4b** in CDCl_3

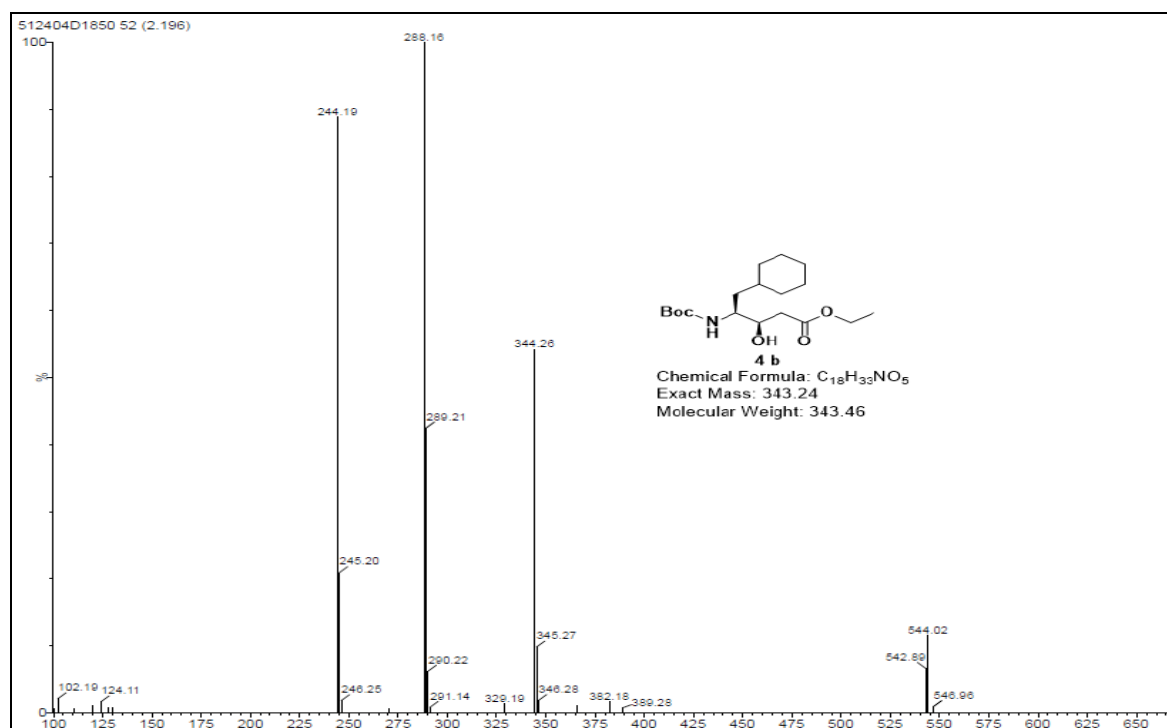


Figure S18: Mass spectrum of compound **4b**

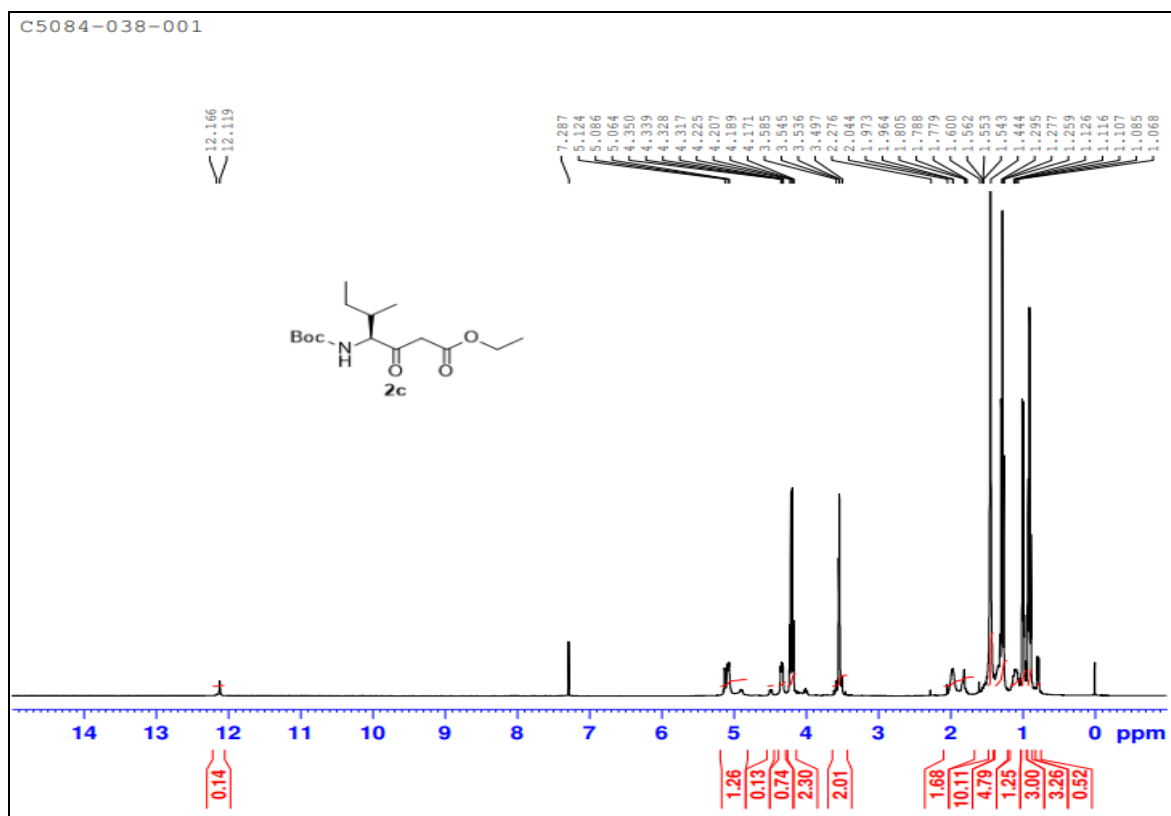


Figure S19: 400 MHz ¹H-NMR spectrum of compound **2c** in CDCl₃

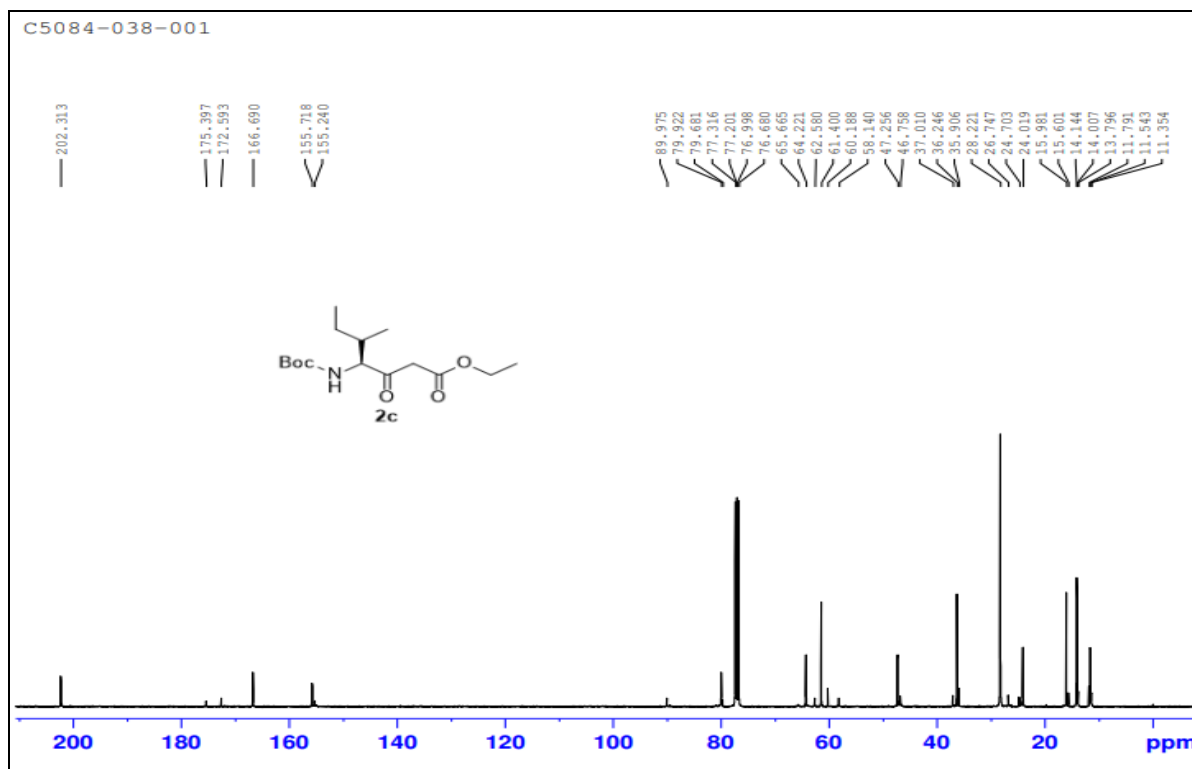


Figure S20: 100 MHz ¹³C-NMR Spectrum of compound **2c** in CDCl₃

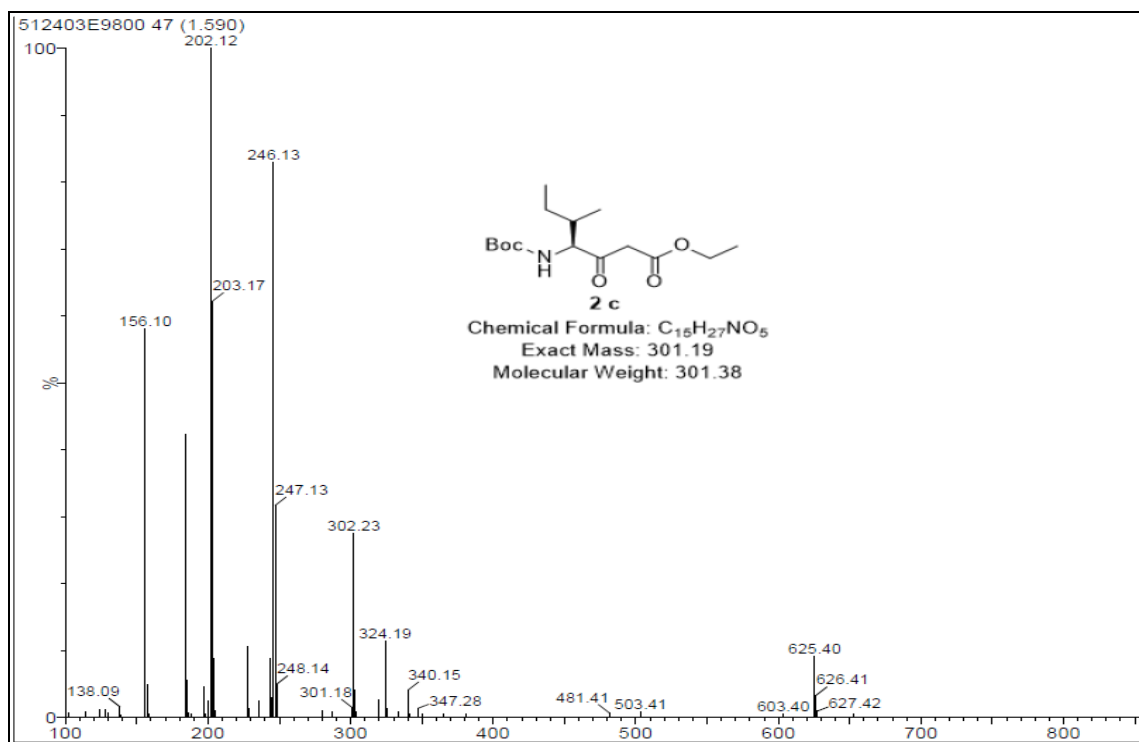


Figure S21: Mass spectrum of compound **2 C**

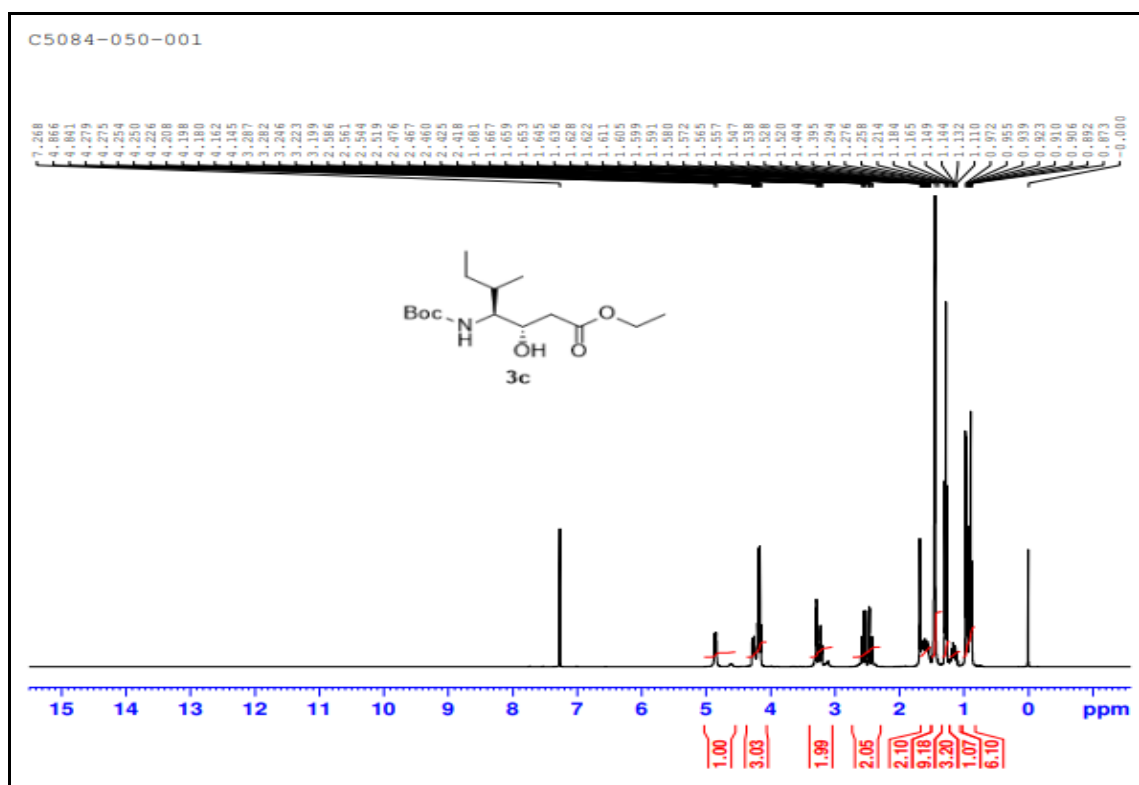


Figure S22: 400 MHz ¹H-NMR spectrum of compound **3c** in CDCl₃

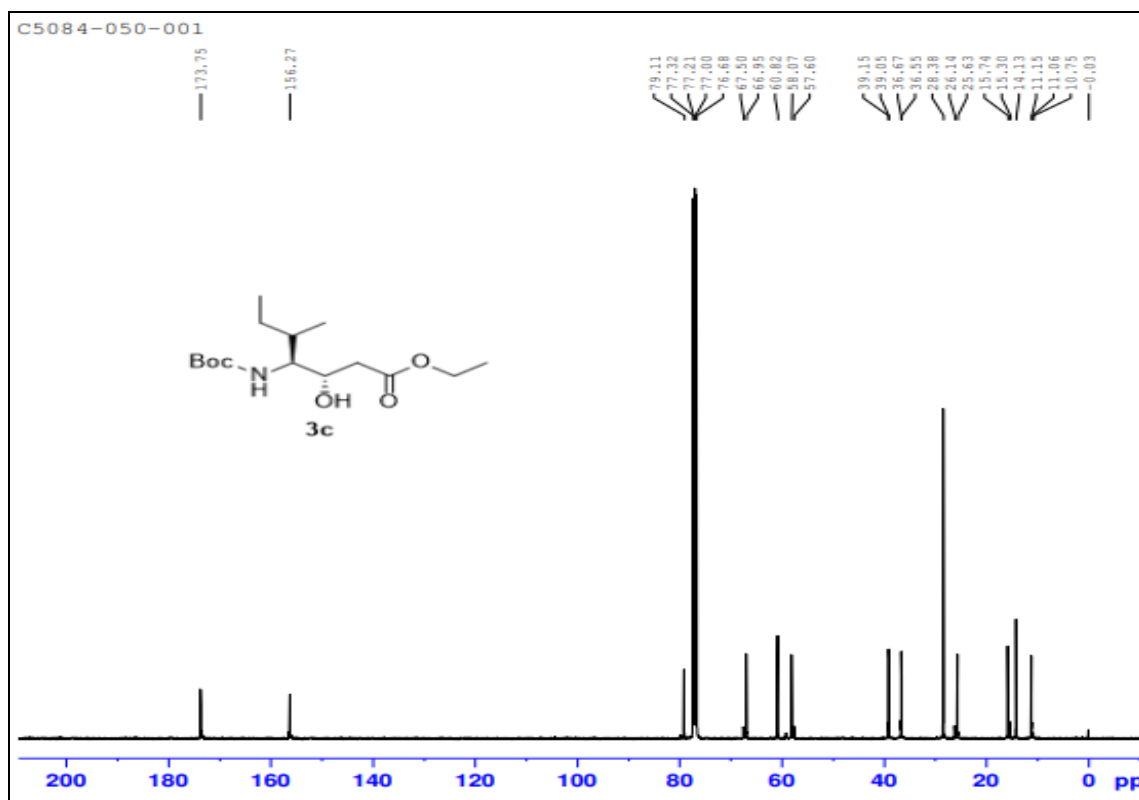


Figure S23: 100 MHz ^{13}C -NMR Spectrum of compound 3c in CDCl_3

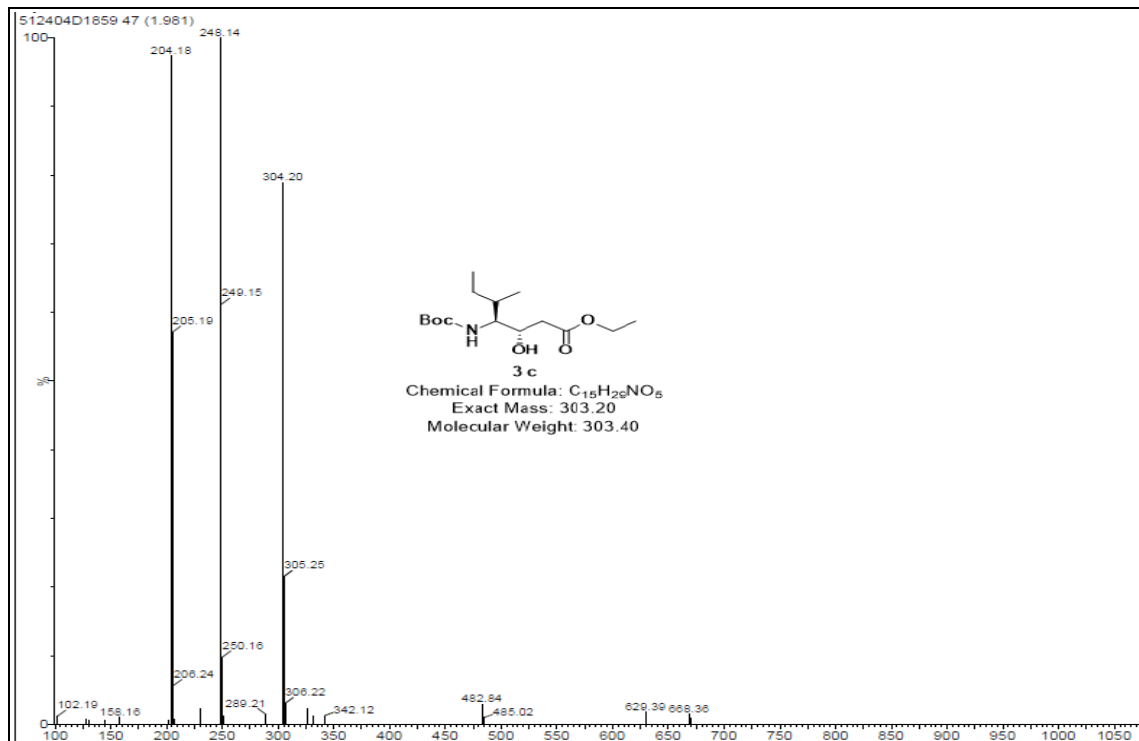


Figure S24: Mass spectrum of compound 3 C

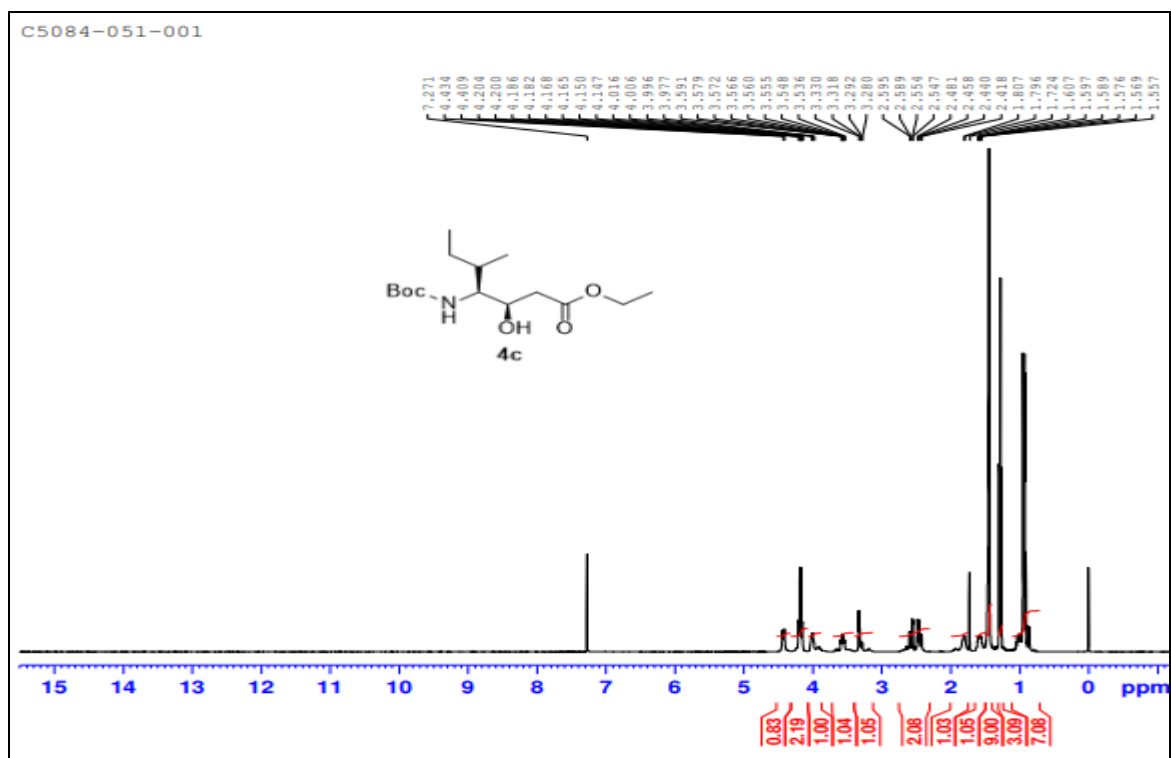


Figure S25: 400 MHz ¹H-NMR spectrum of compound **4c** in CDCl₃

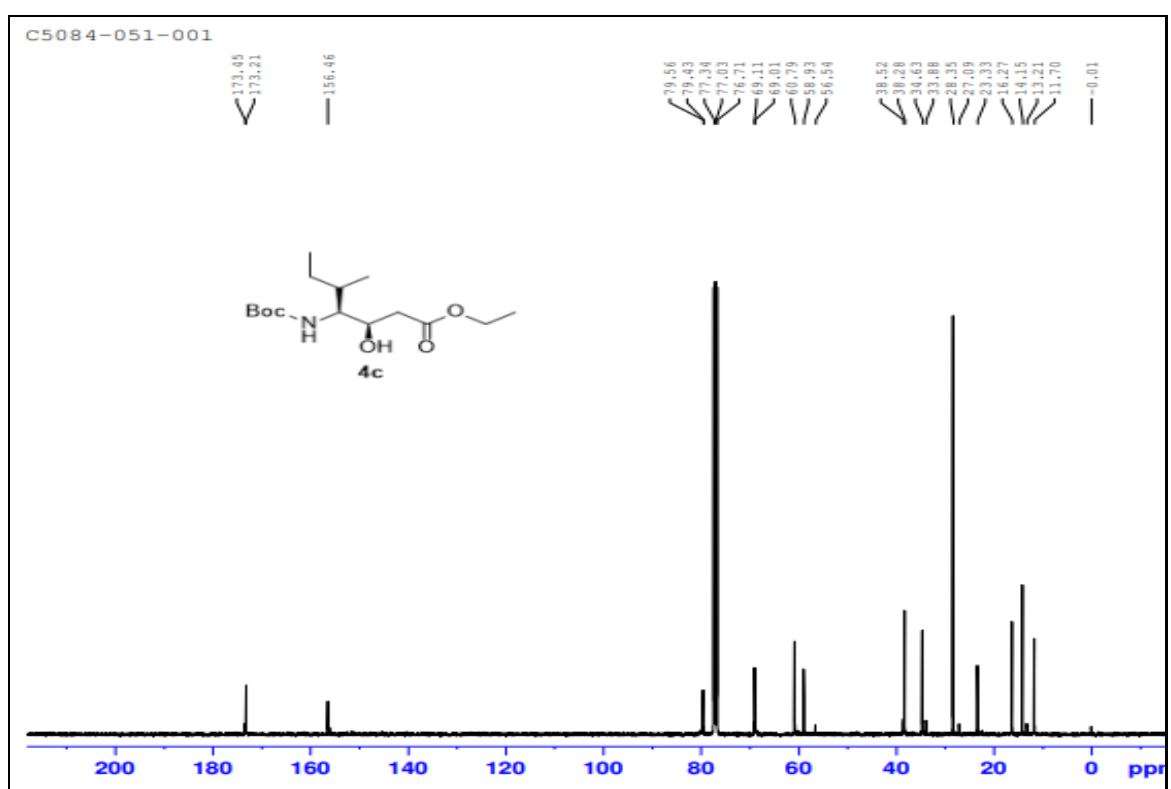


Figure S26: 100 MHz ¹³C-NMR Spectrum of compound **4c** in CDCl₃

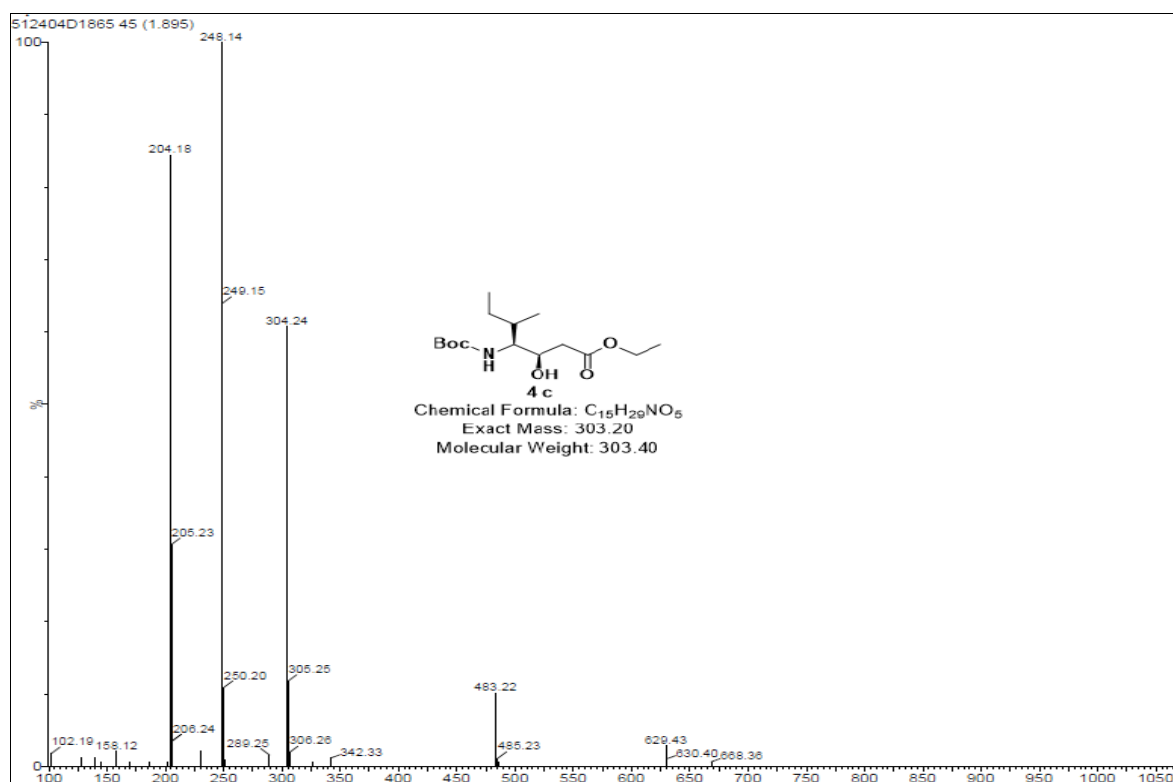


Figure S27: Mass spectrum of compound **4c**

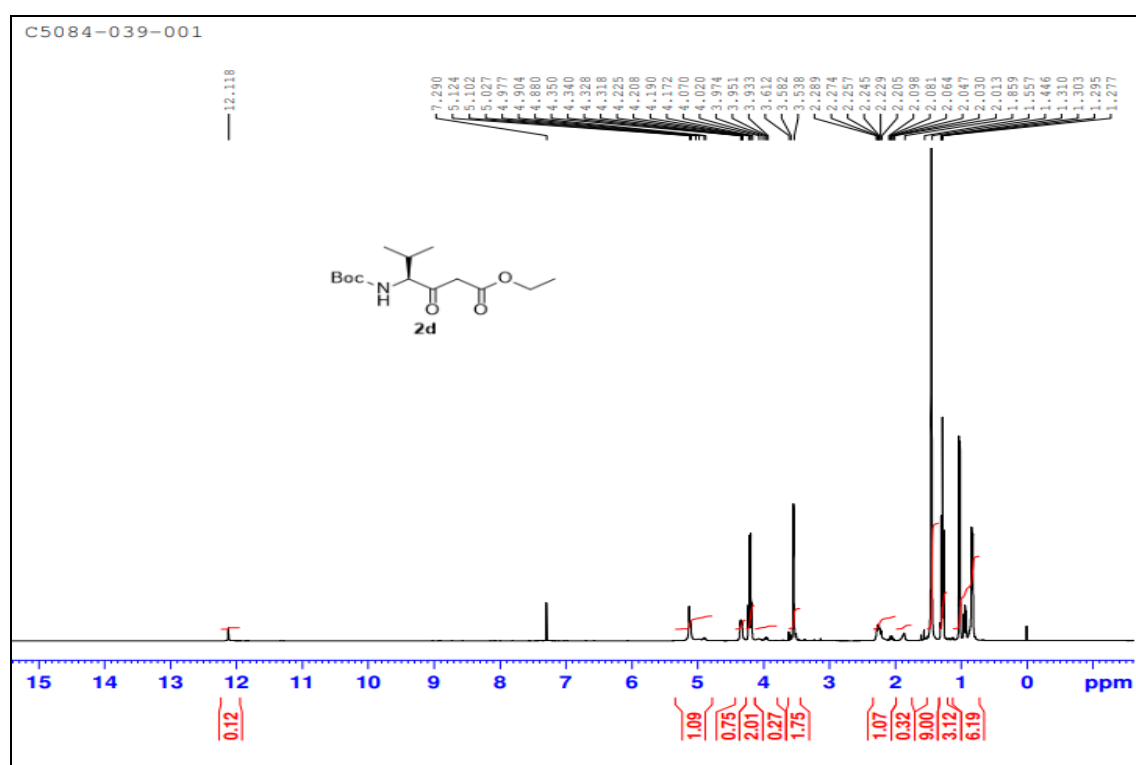


Figure S28: 400 MHz 1H -NMR spectrum of compound **2d** in $CDCl_3$

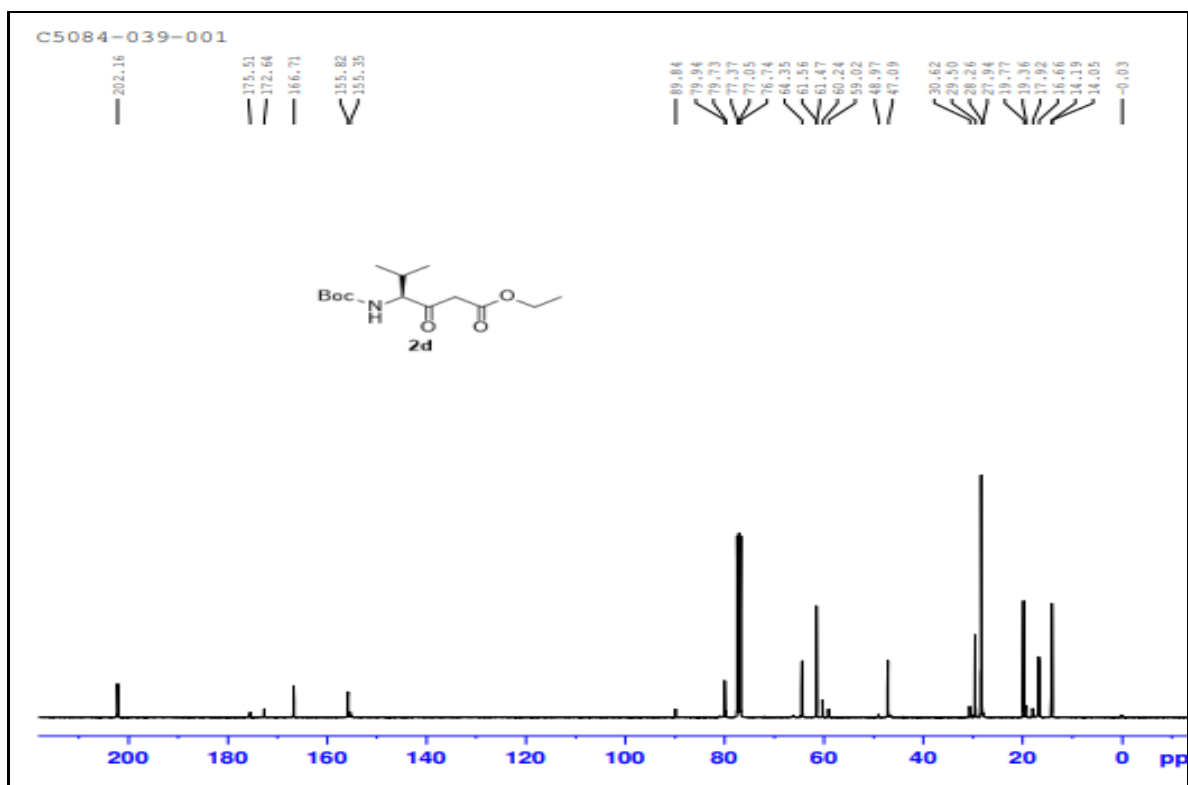


Figure S29: 100 MHz ^{13}C -NMR Spectrum of compound **2d** in CDCl_3

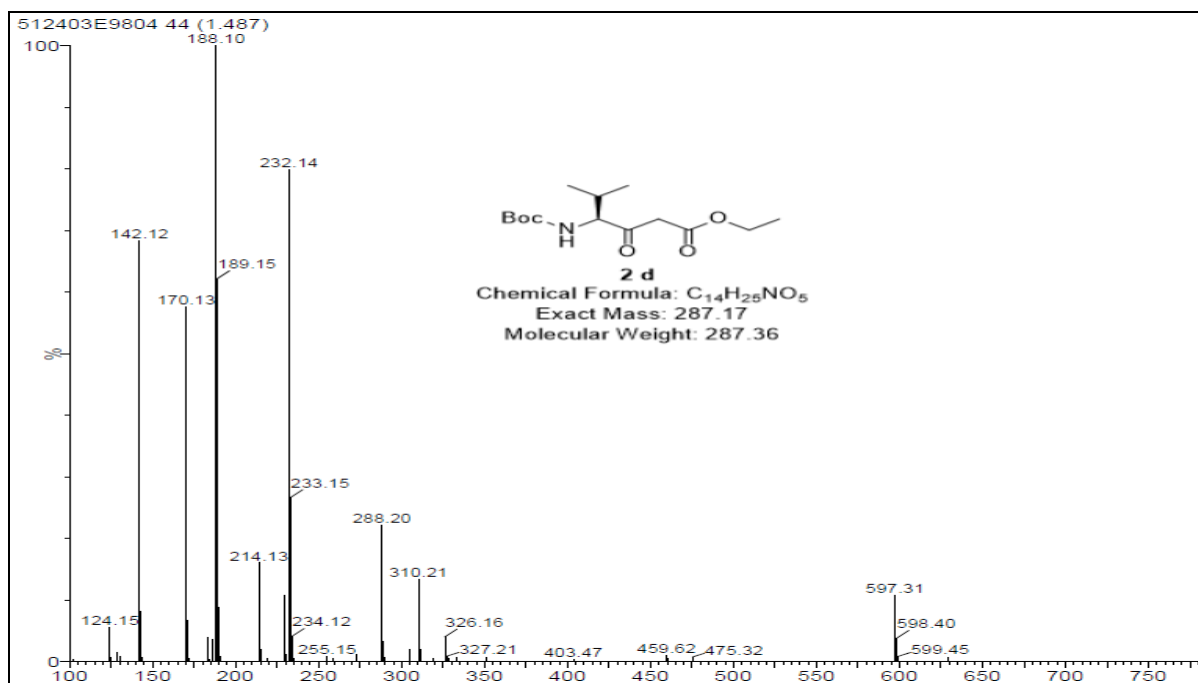


Figure S30: Mass spectrum of compound **2 d**

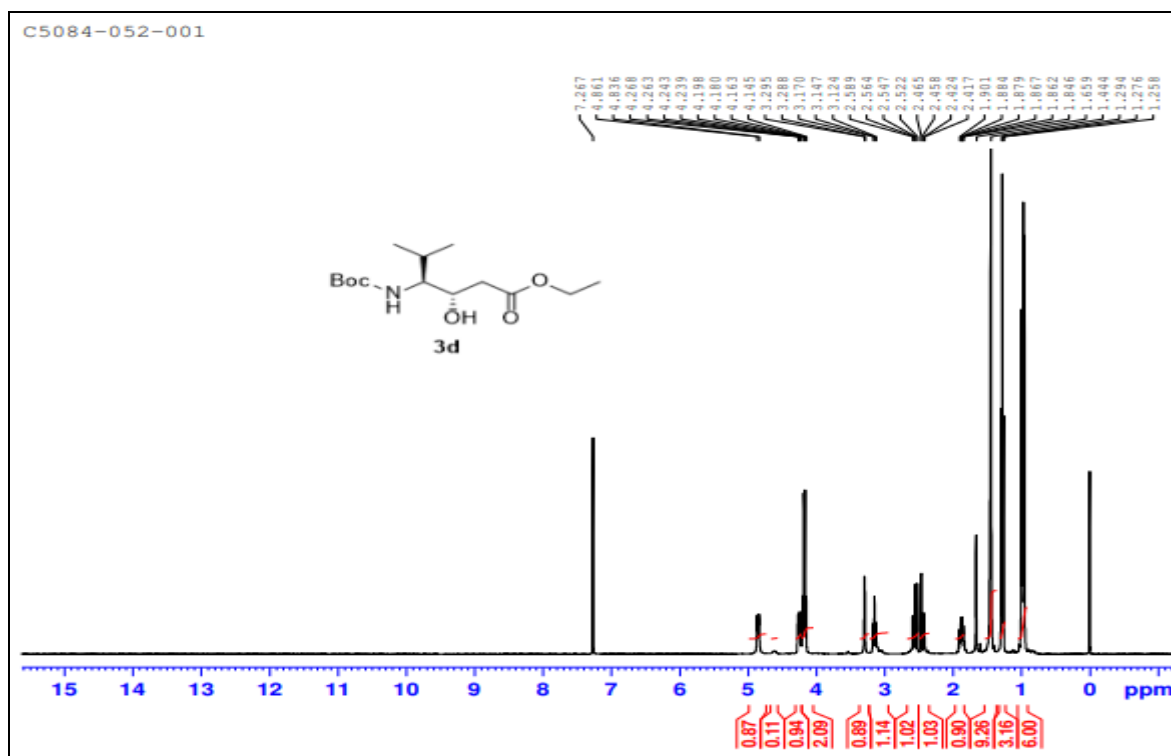


Figure S31: 400 MHz ¹H-NMR spectrum of compound **3 d** in CDCl₃

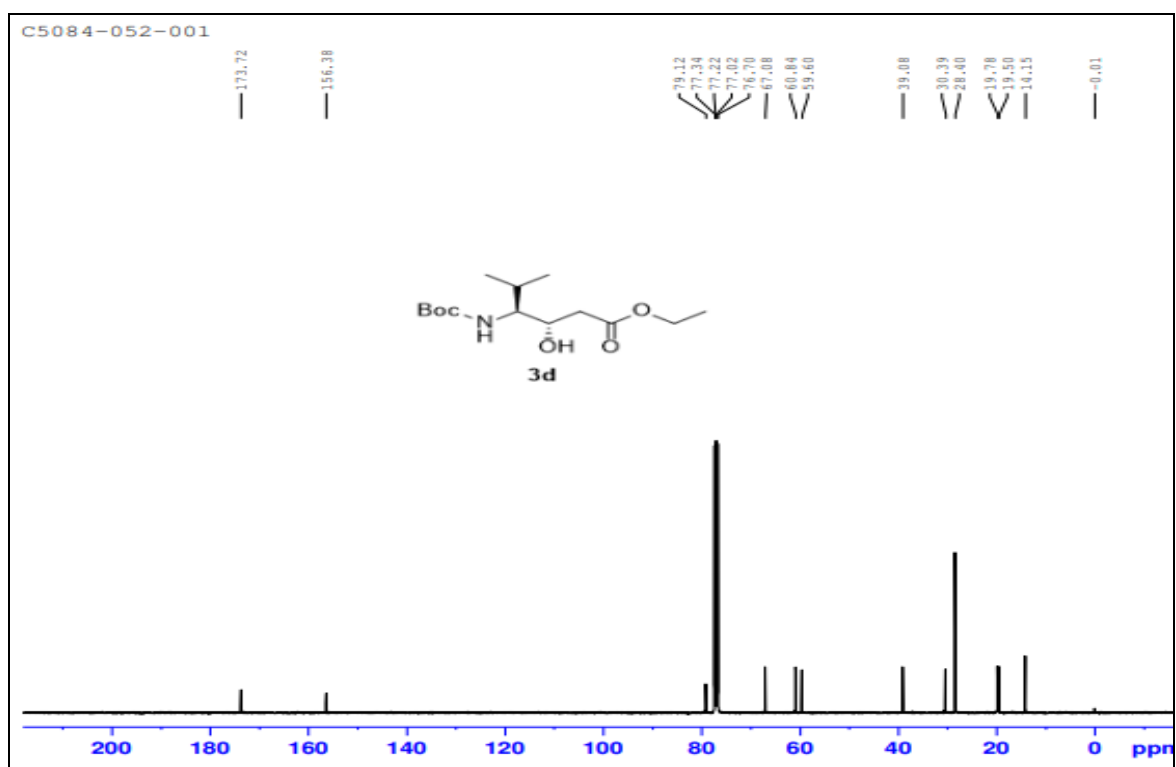


Figure S32: 100 MHz ¹³C-NMR Spectrum of compound **3 d** in CDCl₃

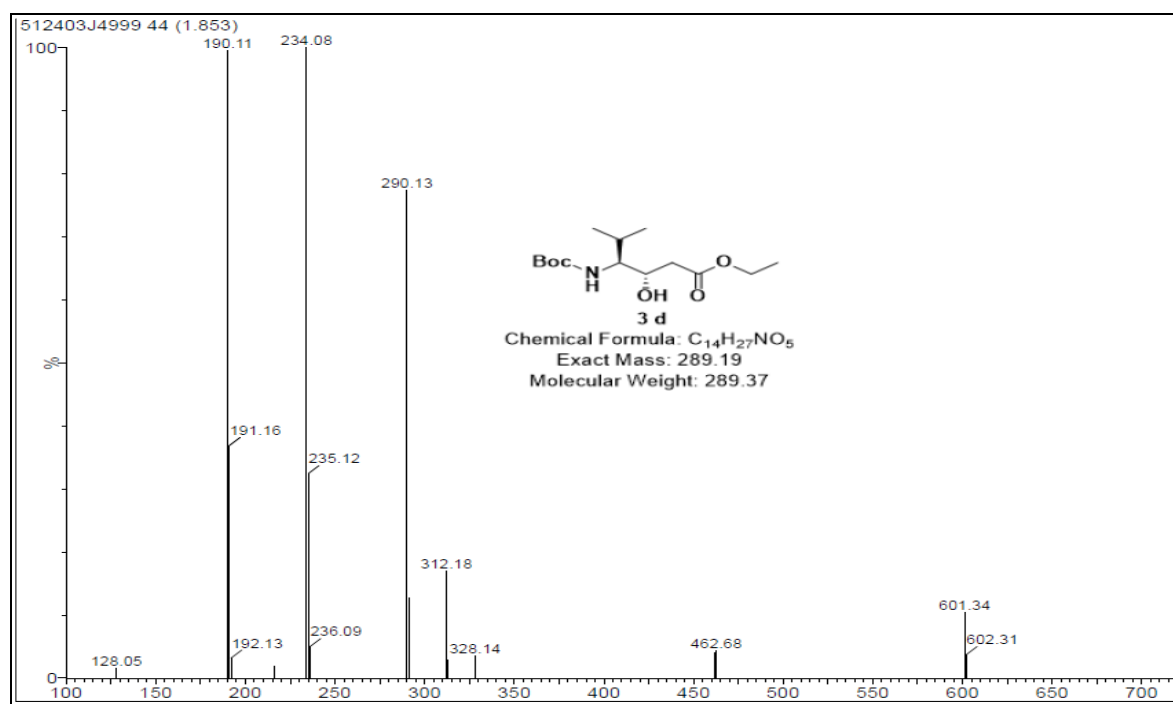


Figure S33: Mass spectrum of compound **3 d**

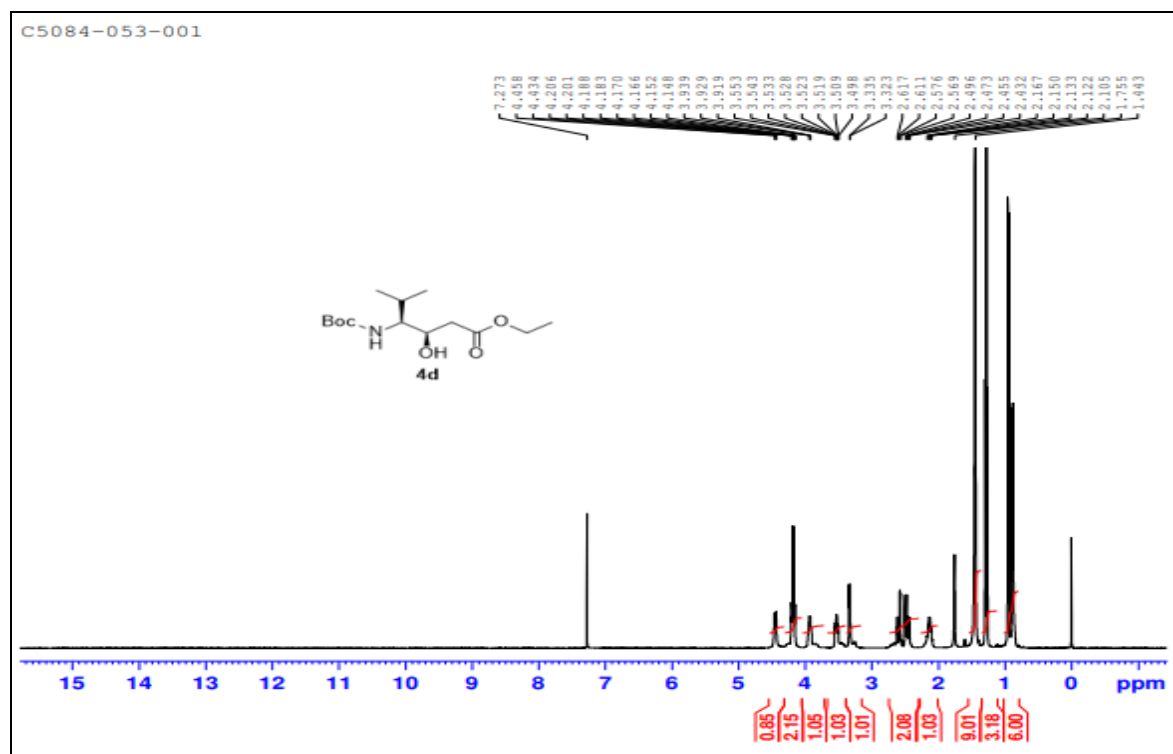


Figure S34: 400 MHz ^1H -NMR spectrum of compound **4d** in CDCl_3

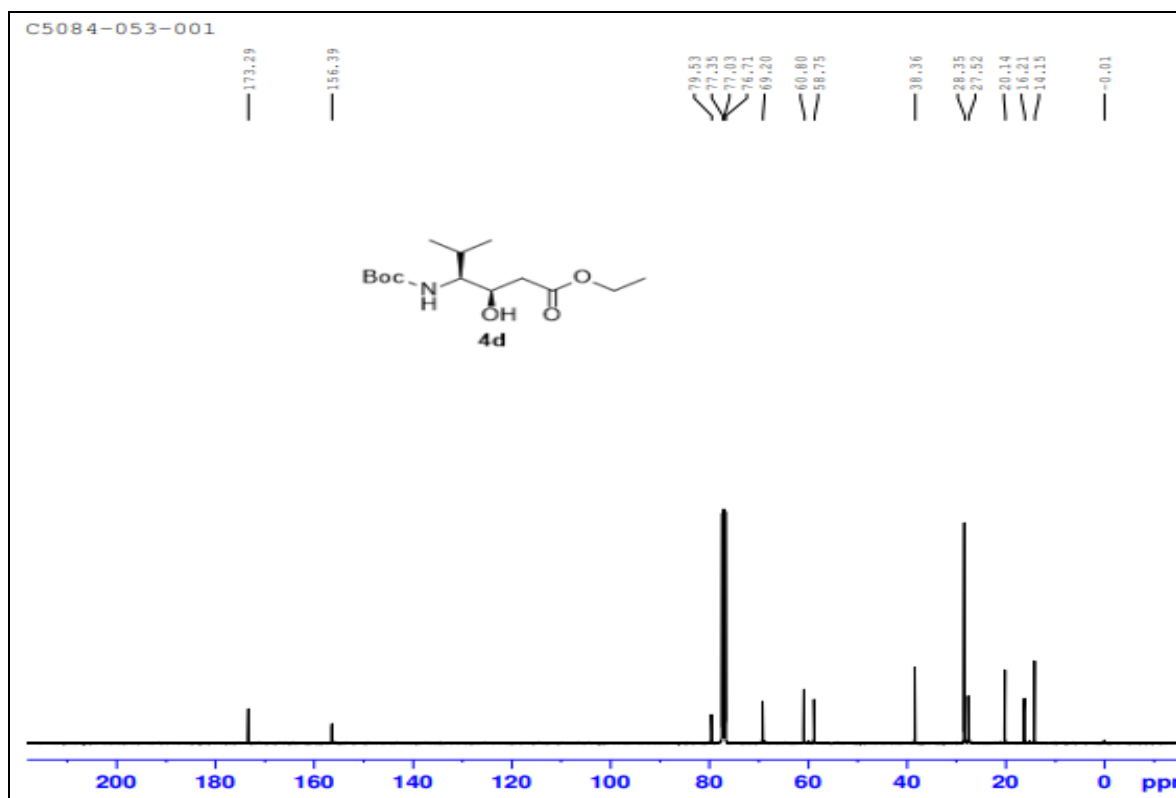


Figure S35: 100 MHz ^{13}C -NMR Spectrum of compound **4d** in CDCl_3

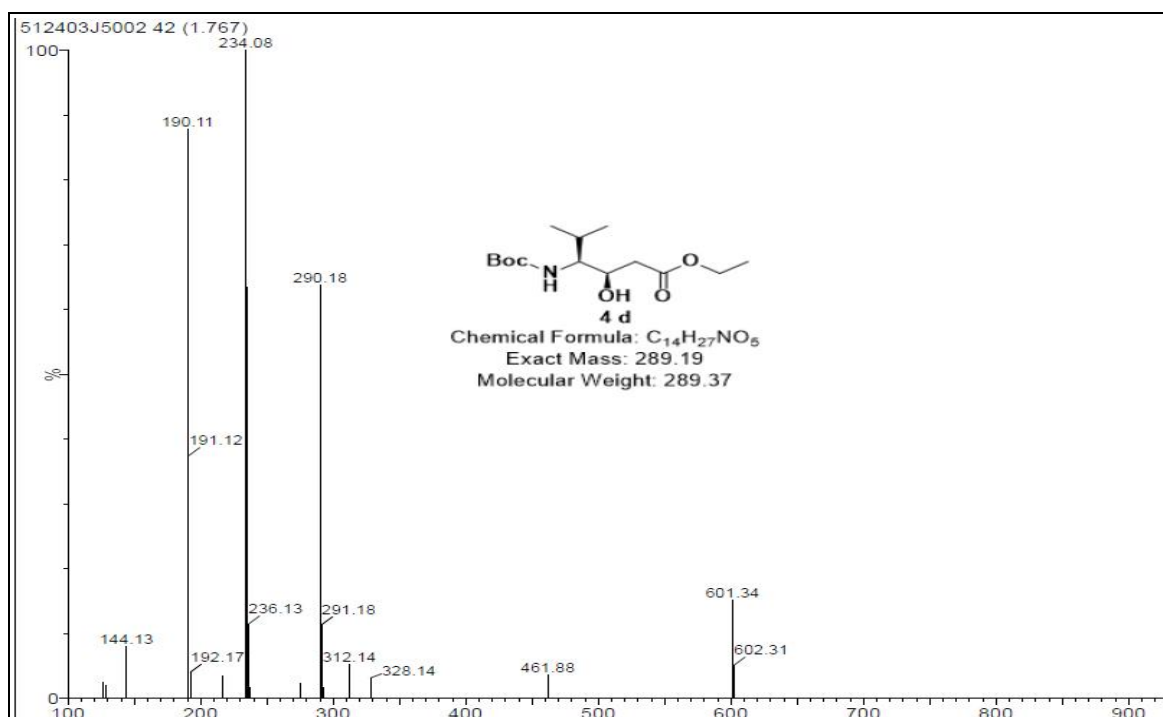


Figure S36: Mass spectrum of compound **4d**

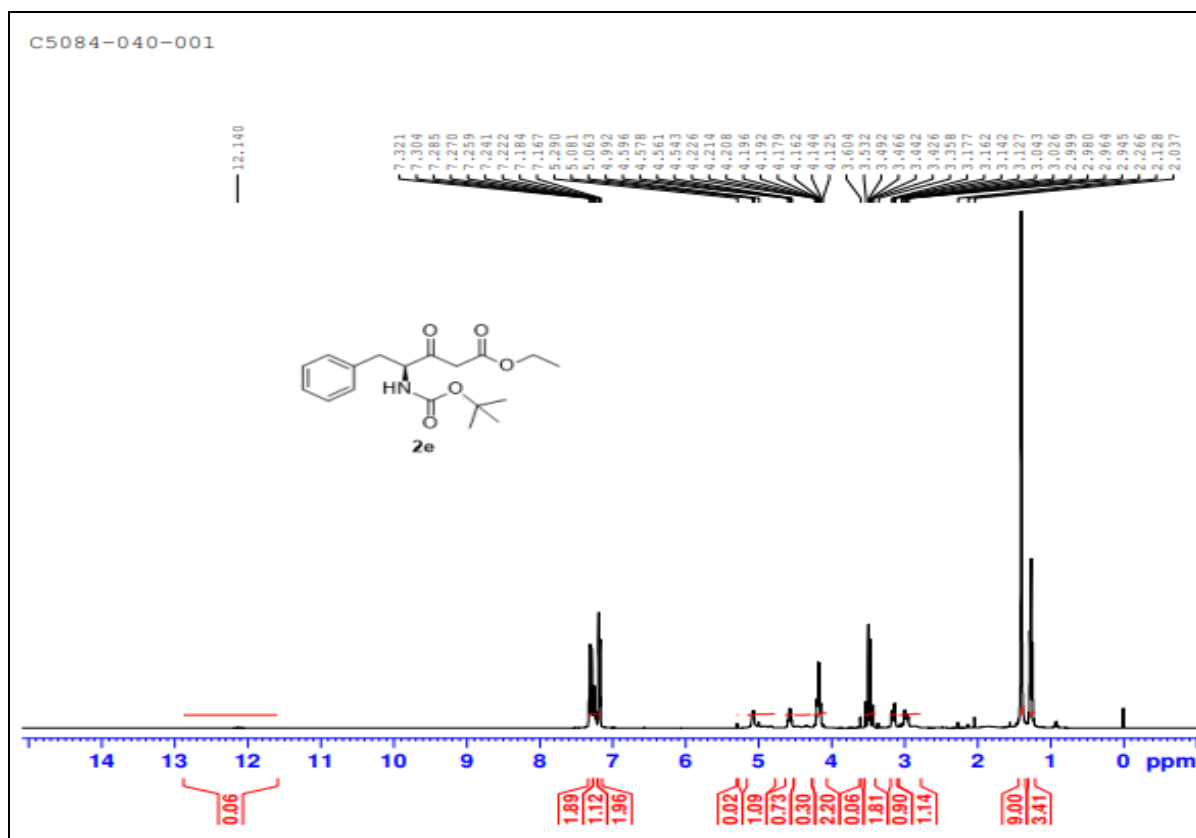


Figure S37: 400 MHz ^1H -NMR spectrum of compound **2e** in CDCl_3

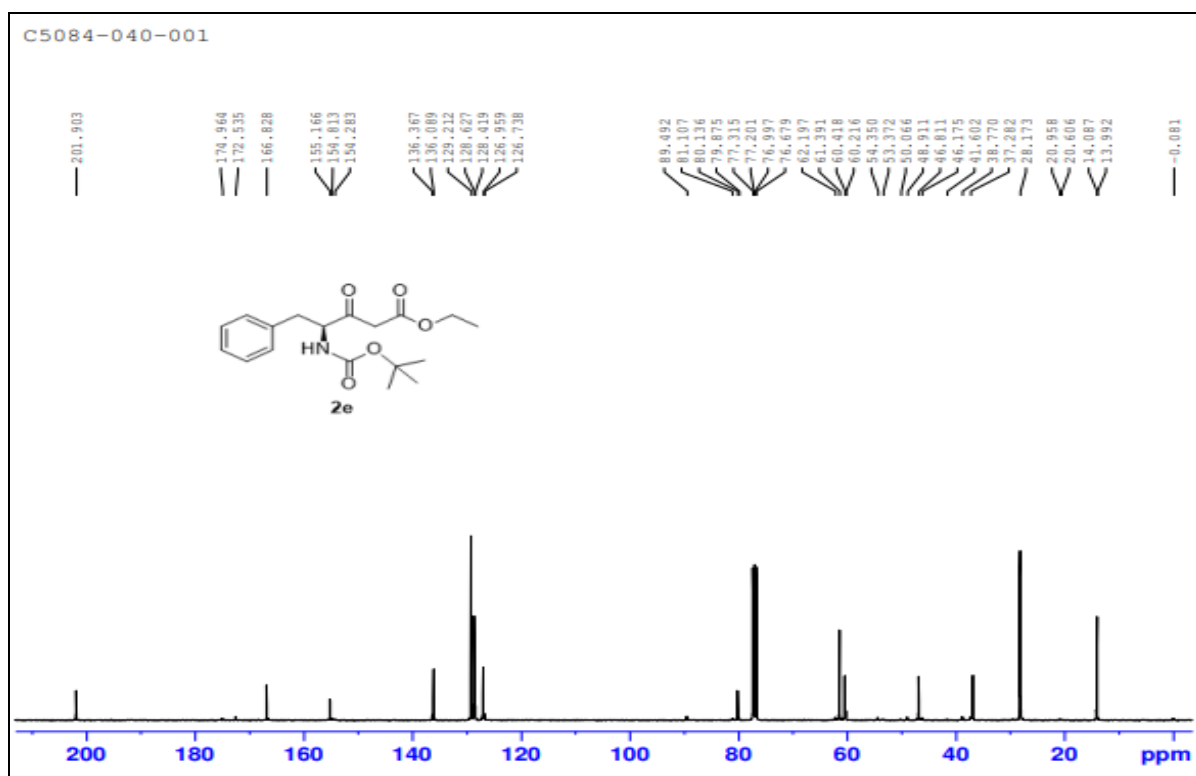


Figure S38: 100 MHz ^{13}C -NMR Spectrum of compound **2e** in CDCl_3

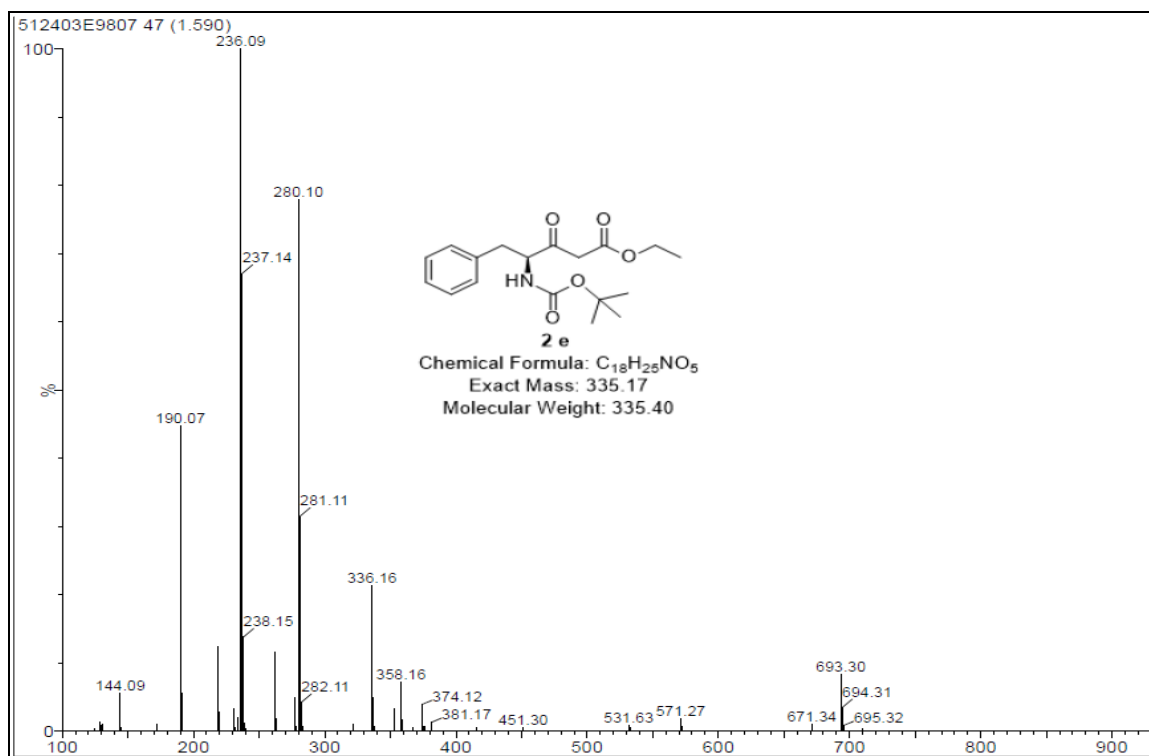


Figure S39: Mass spectrum of compound **2e**

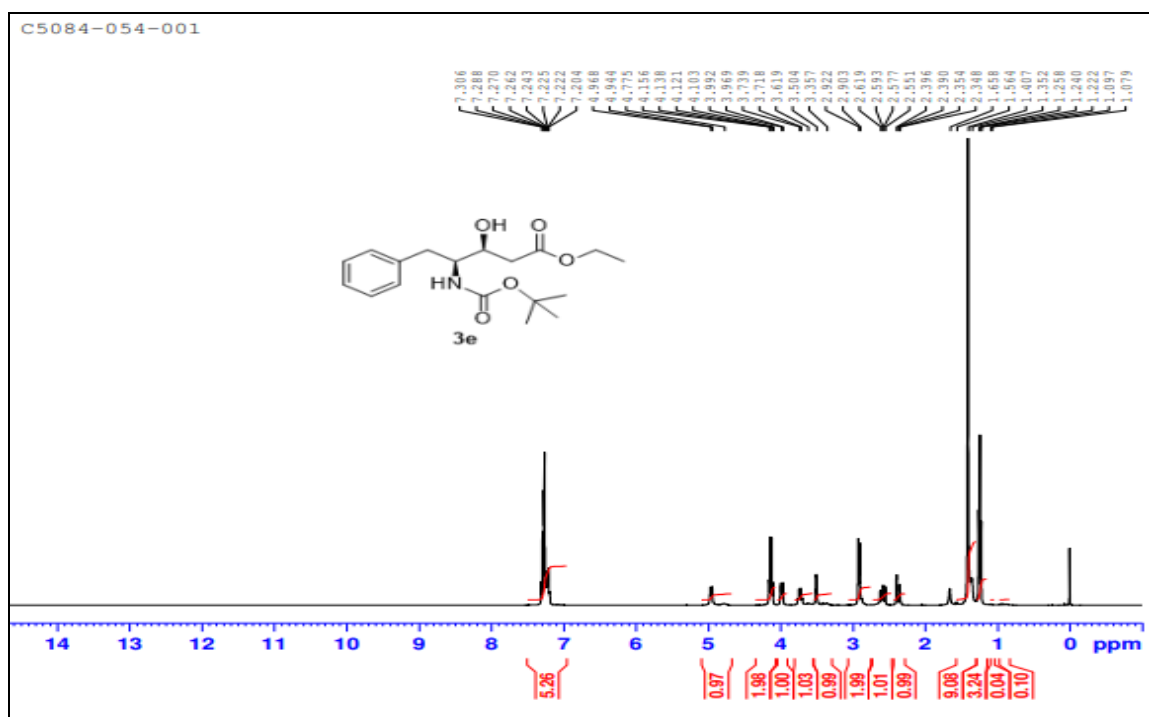


Figure S40: 400 MHz ^1H -NMR spectrum of compound **3e** in CDCl_3

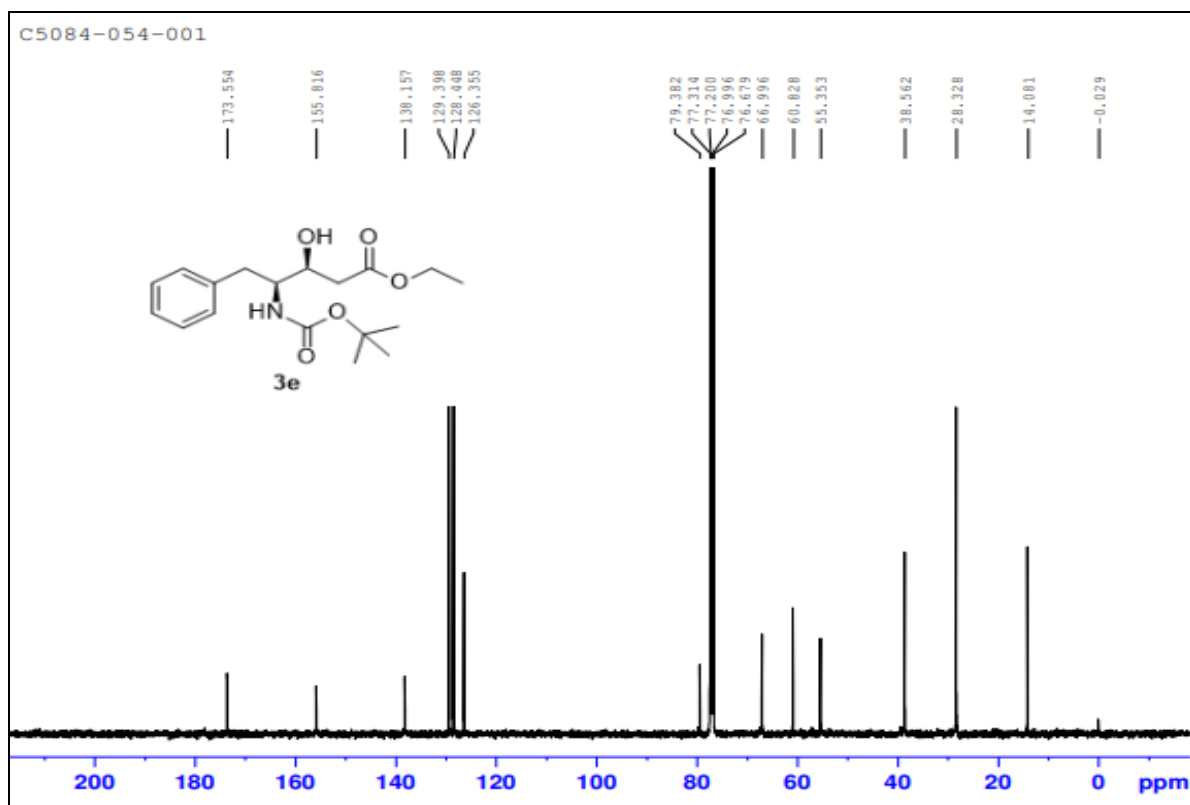


Figure S41: 100 MHz ^{13}C -NMR Spectrum of compound **2e** in CDCl_3

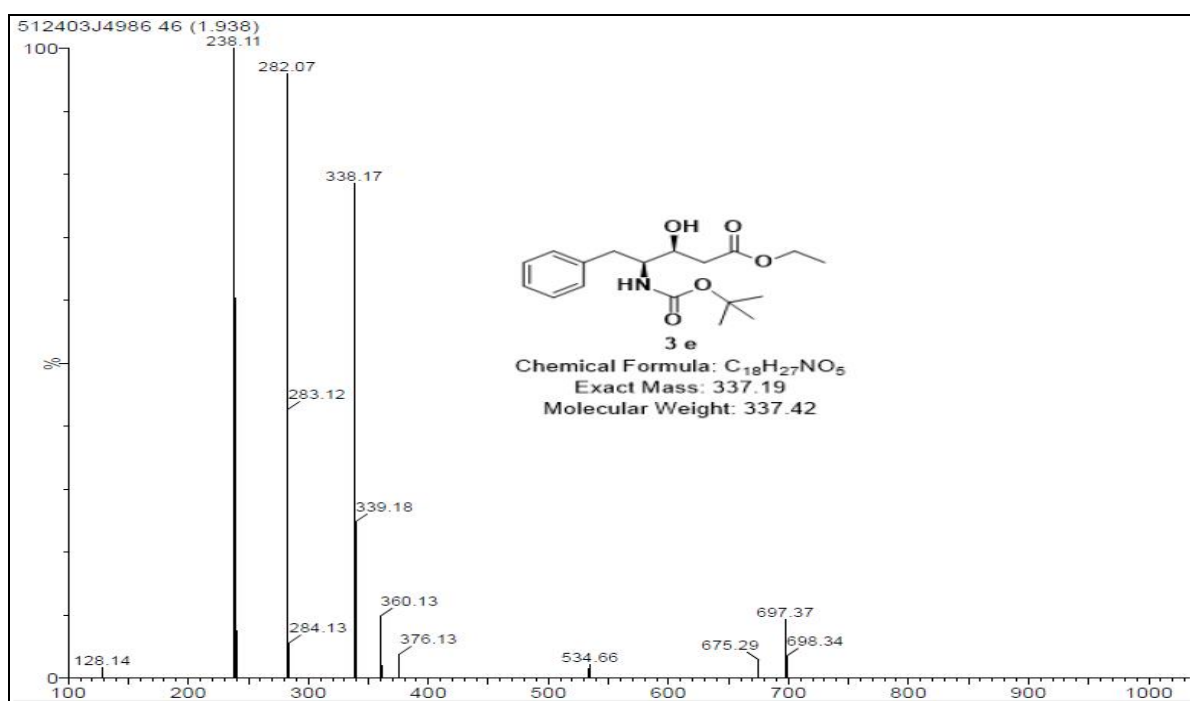


Figure S42: Mass spectrum of compound **3e**

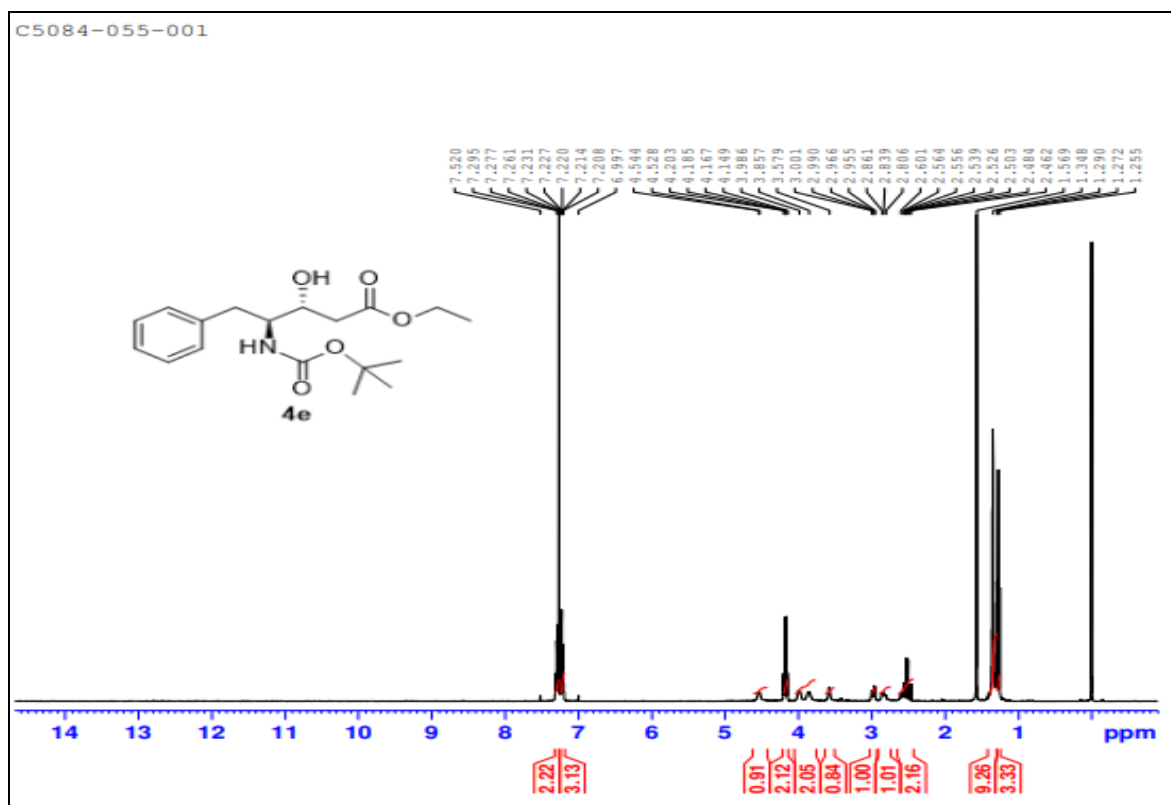


Figure S43: 400 MHz ¹H-NMR spectrum of compound **4e** in CDCl₃

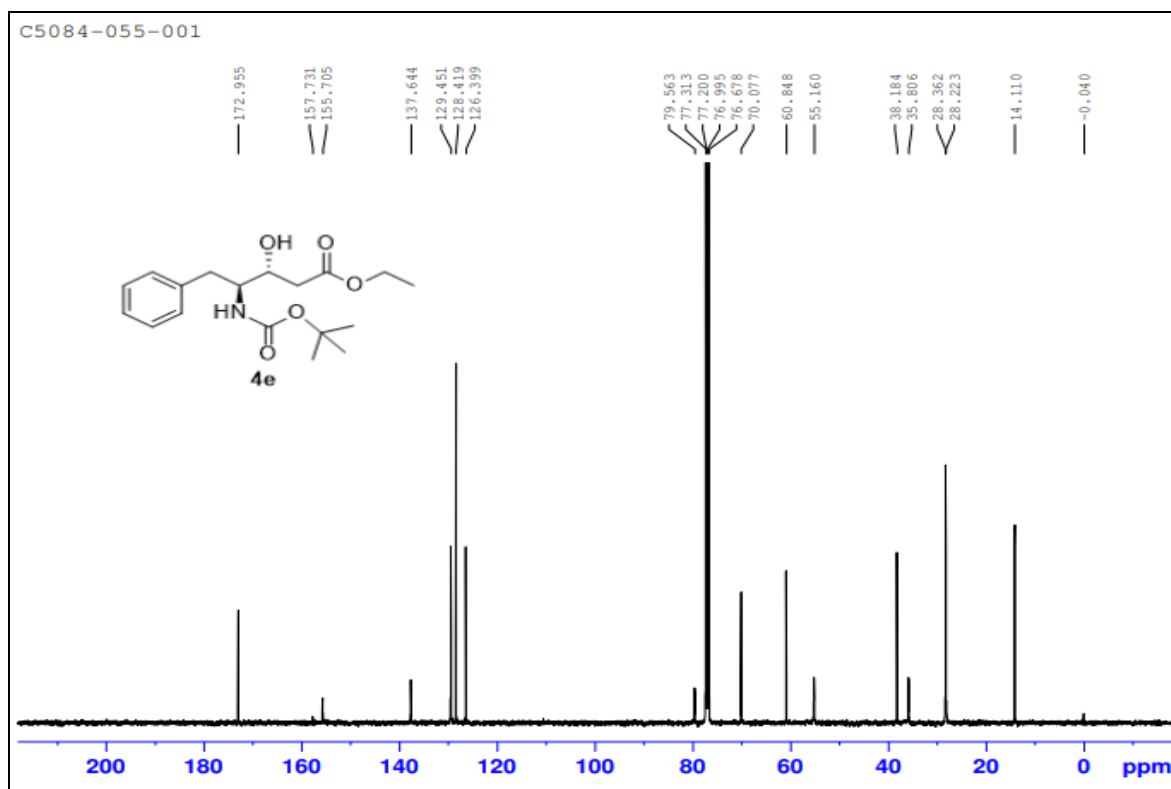


Figure S44: 100 MHz ¹³C-NMR Spectrum of compound **4e** in CDCl₃

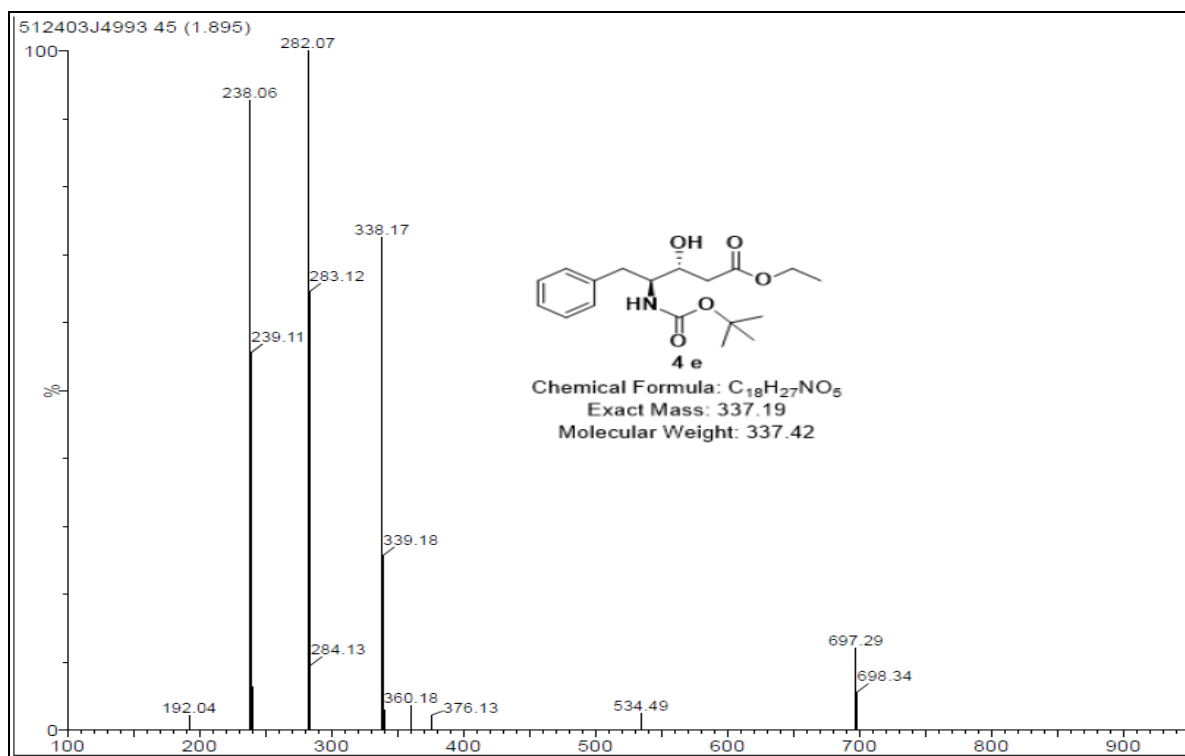


Figure S45: Mass spectrum of compound **4 e**

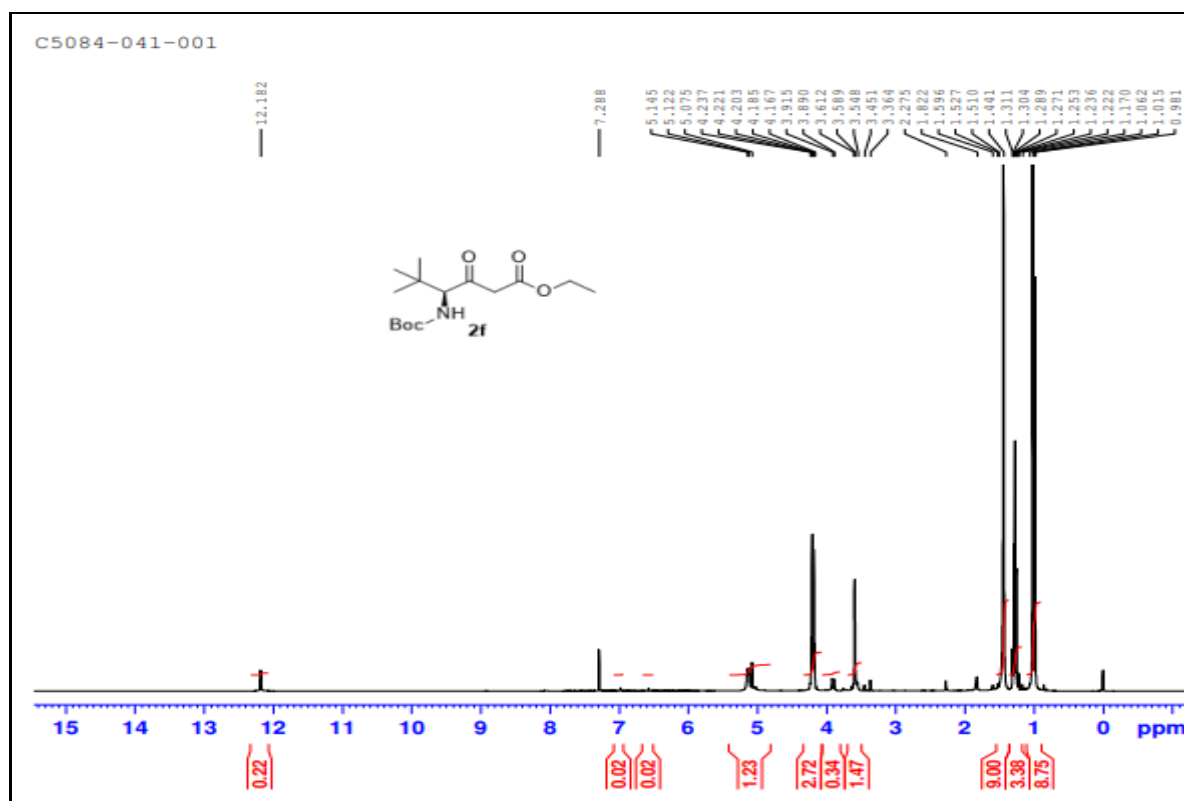


Figure S46: 400 MHz 1H -NMR spectrum of compound **2 f** in $CDCl_3$

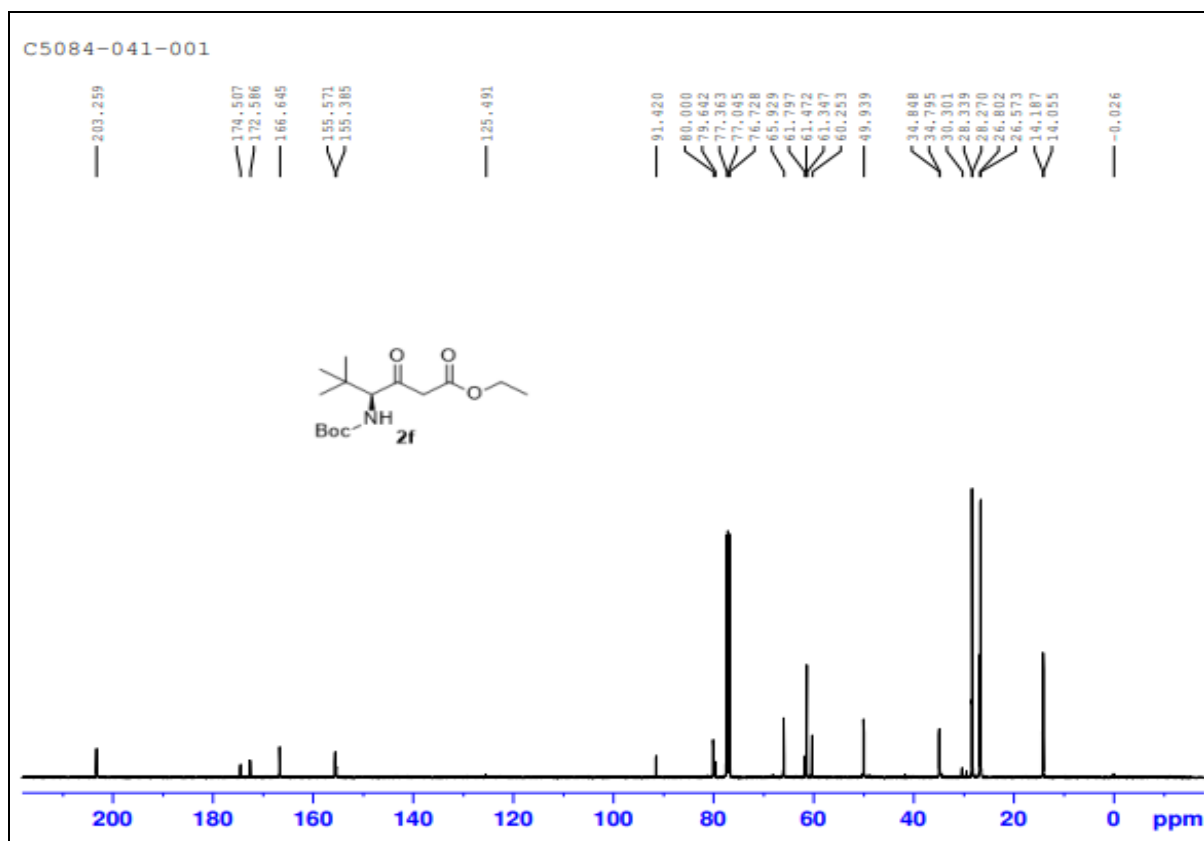


Figure S47: 100 MHz ^{13}C -NMR Spectrum of compound **2f** in CDCl_3

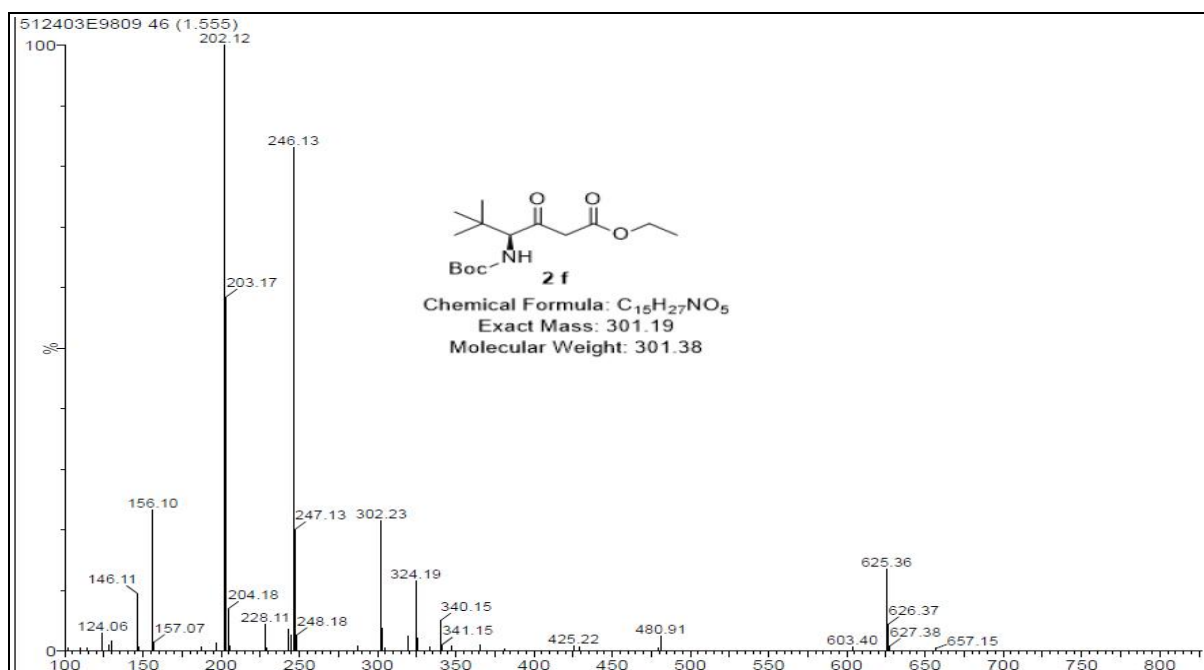


Figure S48: Mass spectrum of compound **2f**

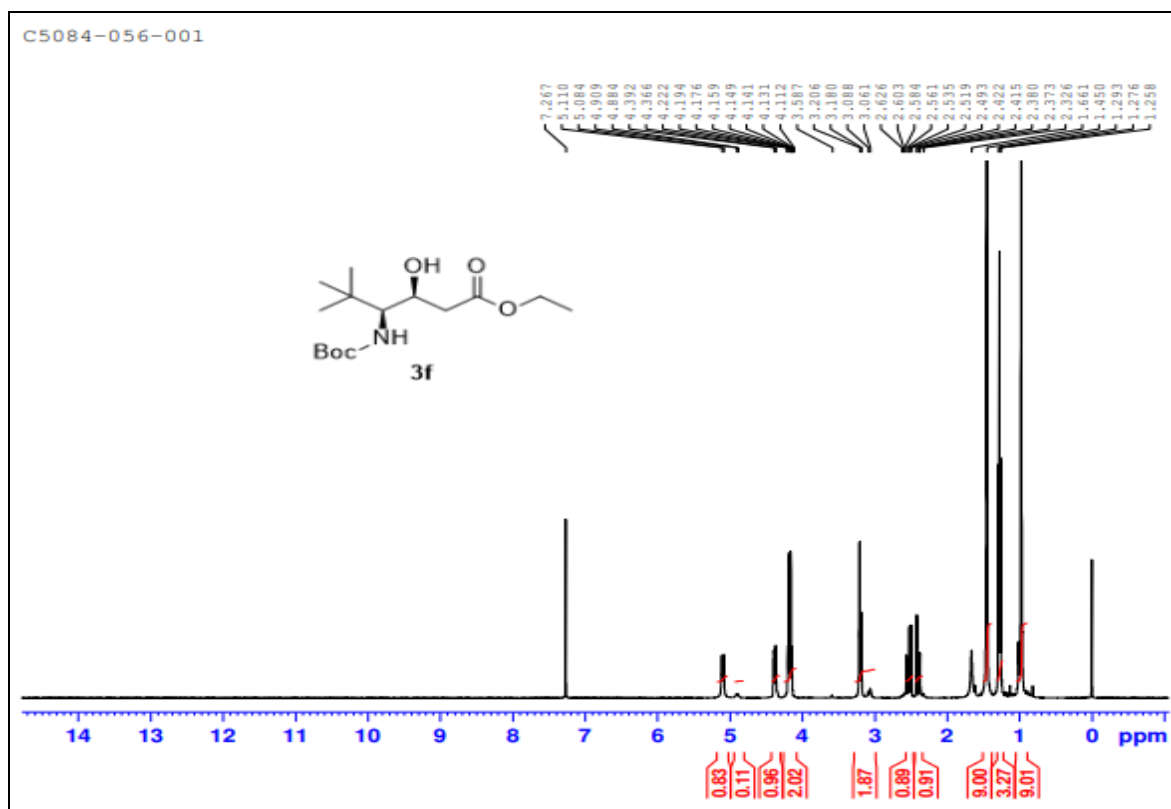


Figure S49: 400 MHz ^1H -NMR spectrum of compound **3 f** in CDCl_3

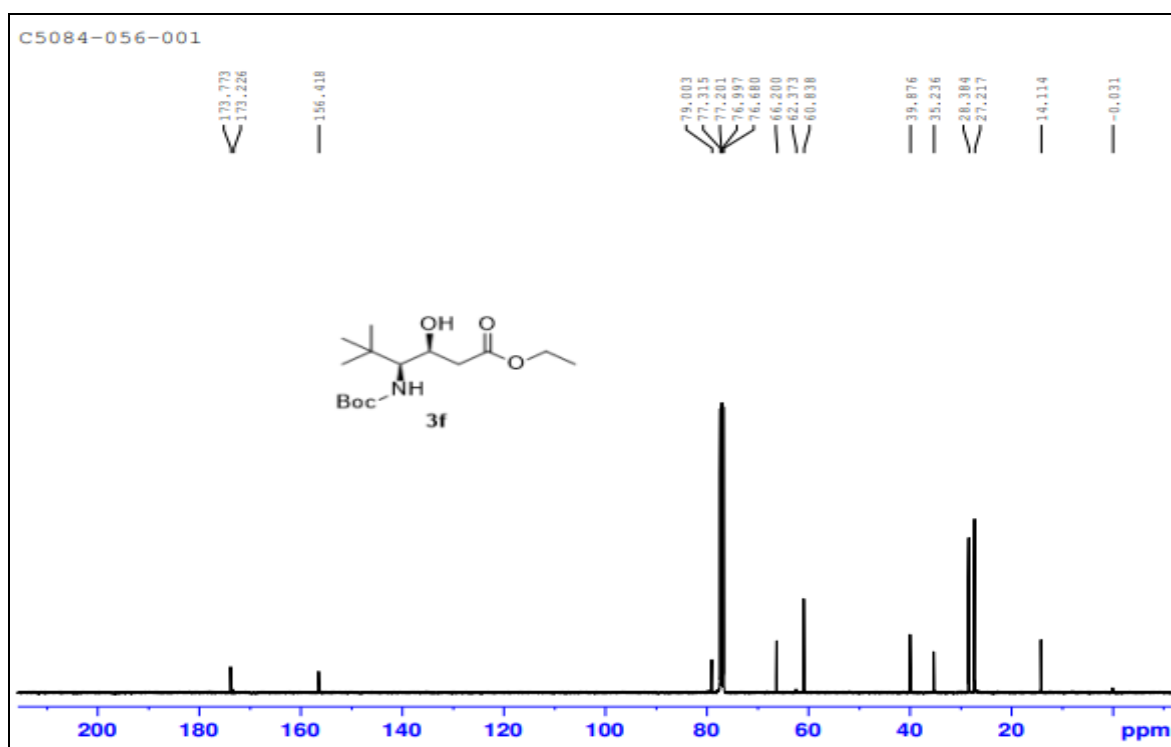


Figure S50: 100 MHz ^{13}C -NMR Spectrum of compound **3 f** in CDCl_3

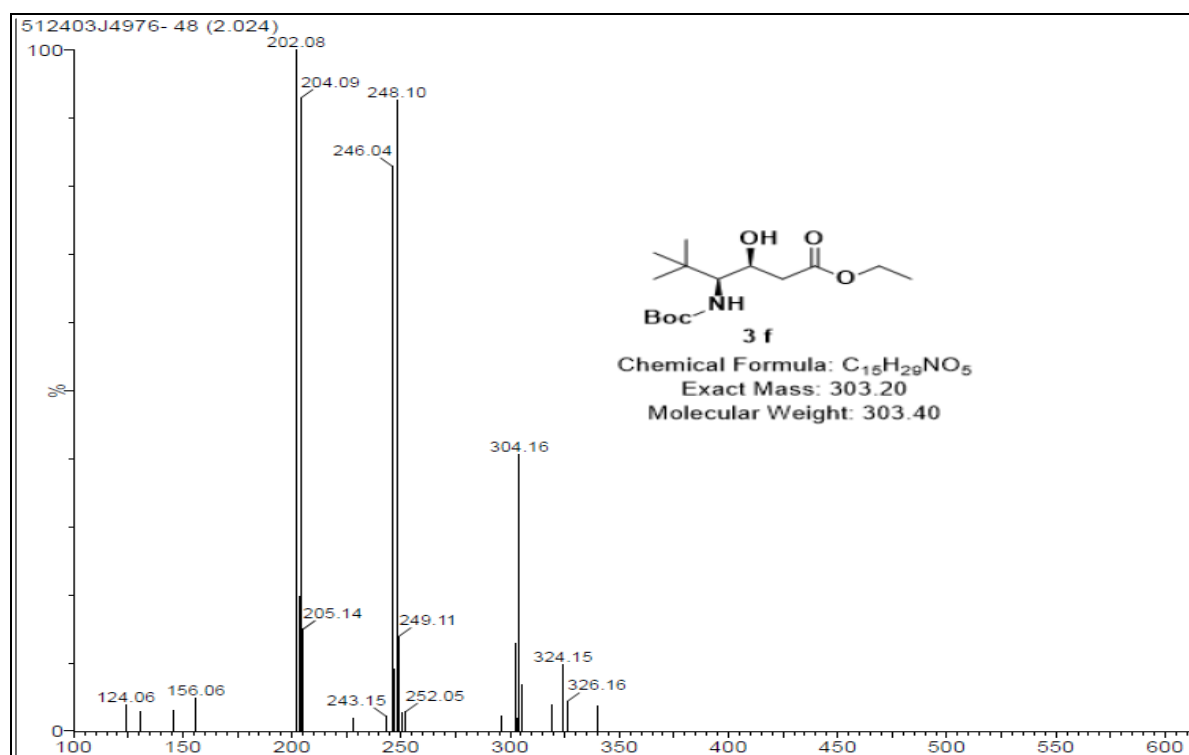


Figure S51: Mass spectrum of compound **3 f**

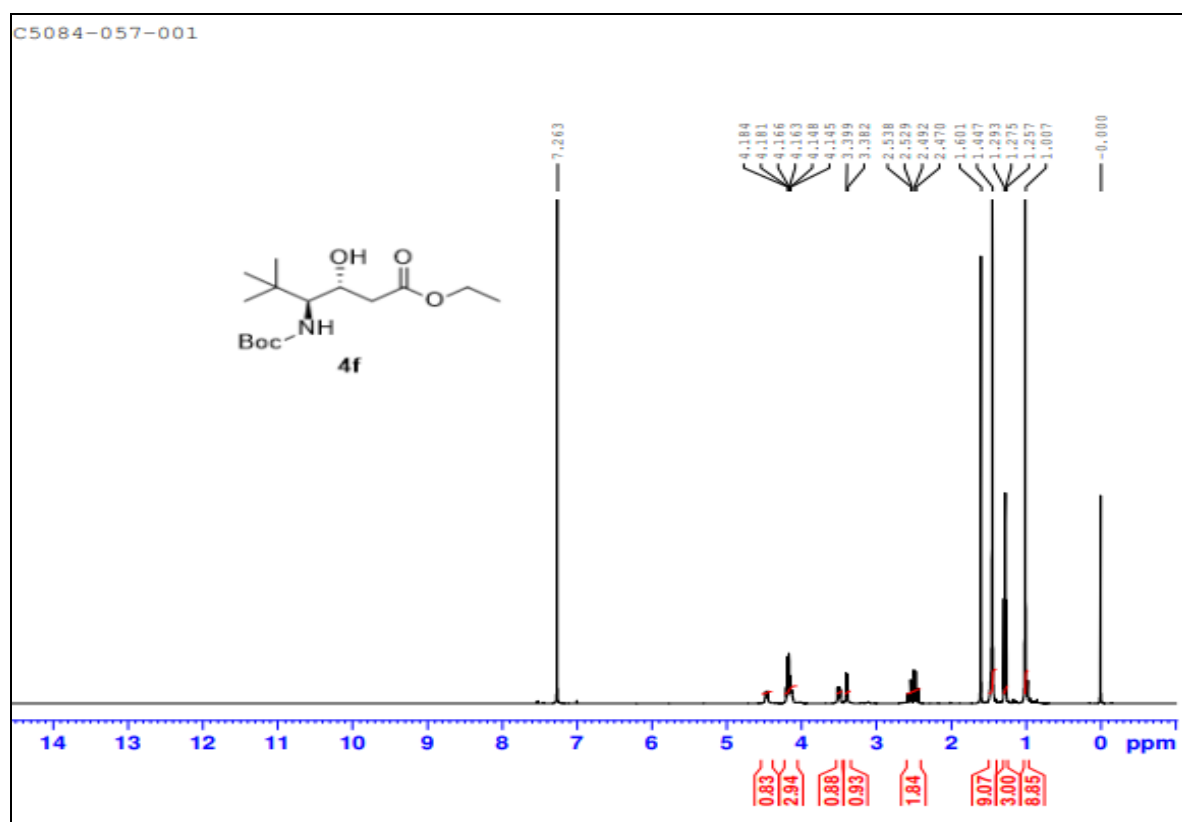


Figure S52: 400 MHz ¹H-NMR spectrum of compound **4 f** in CDCl₃

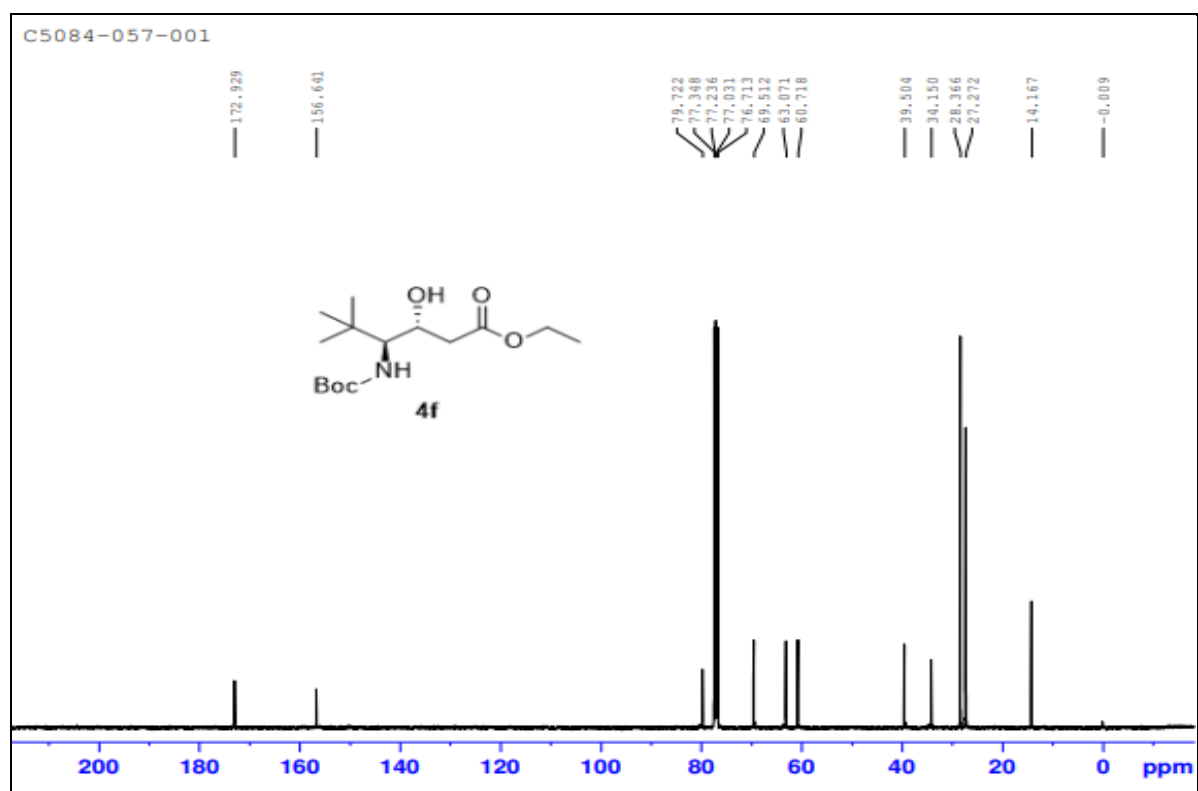


Figure S53: 100 MHz ^{13}C -NMR Spectrum of compound **4f** in CDCl_3

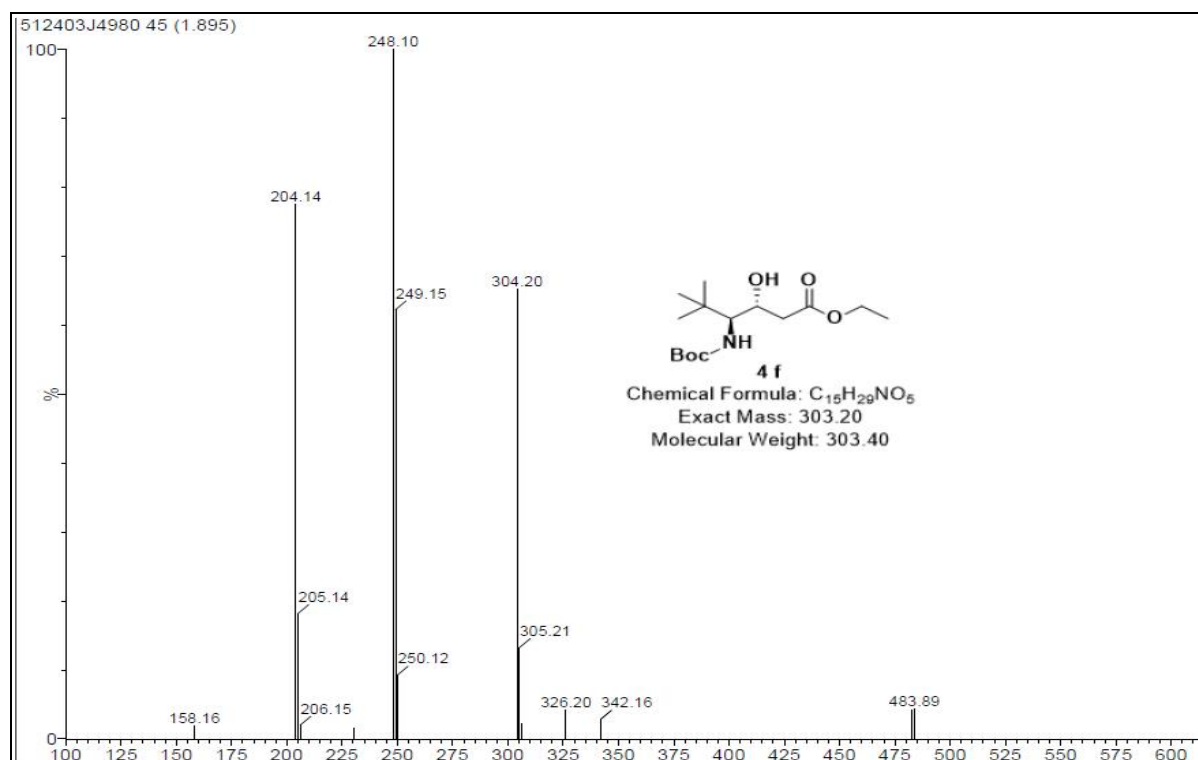


Figure S54: Mass spectrum of compound **4f**

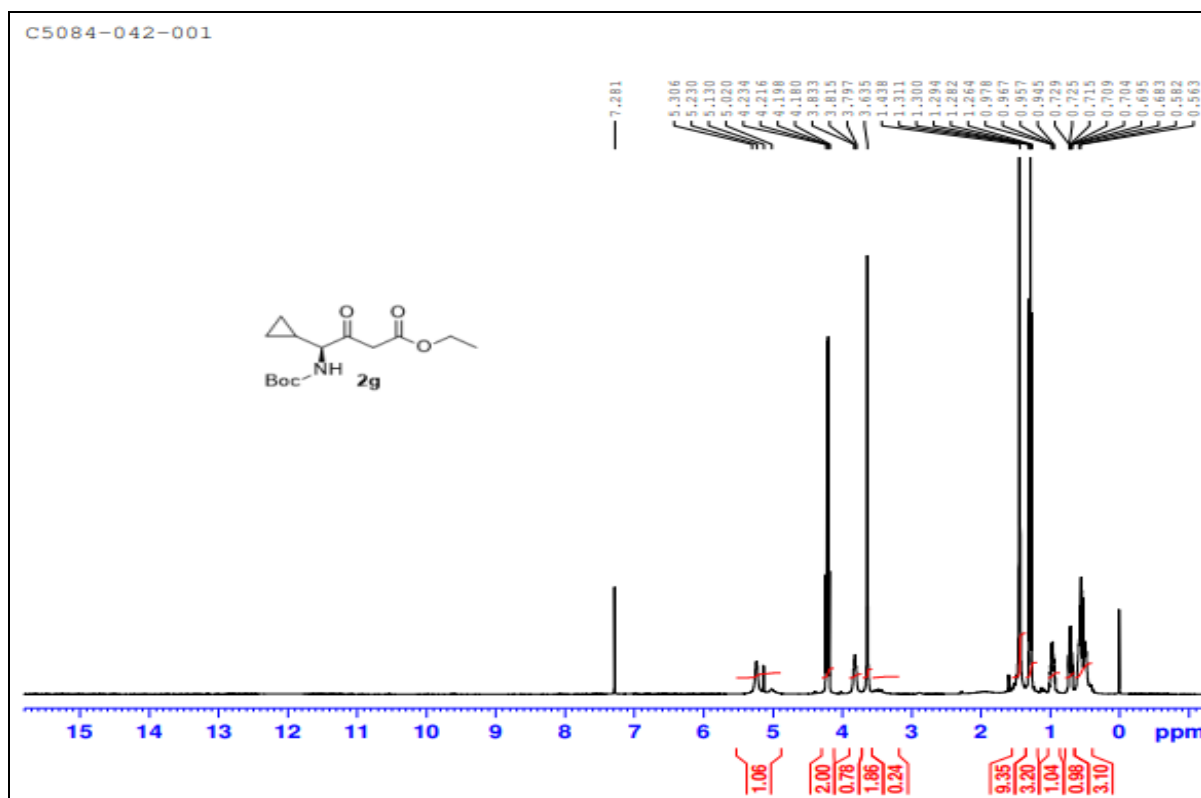


Figure S55: 400 MHz ¹H-NMR spectrum of compound **2 g** in CDCl₃

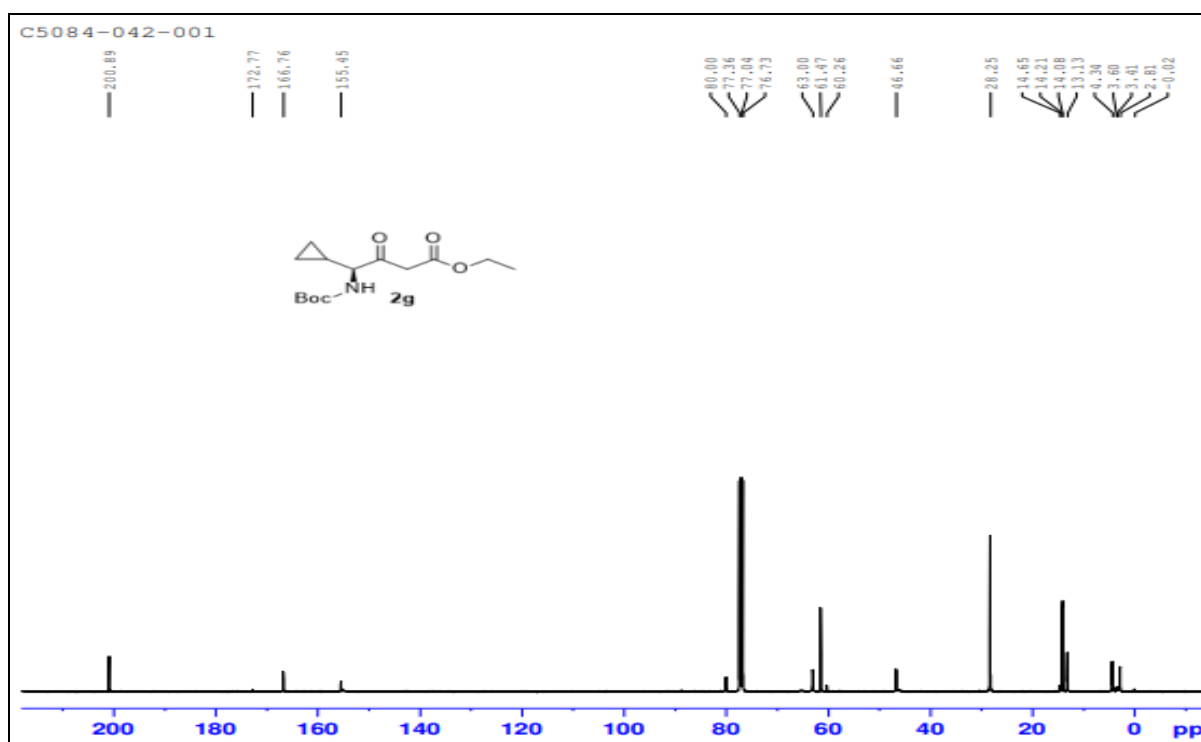


Figure S56: 100 MHz ¹³C-NMR Spectrum of compound **2 g** in CDCl₃

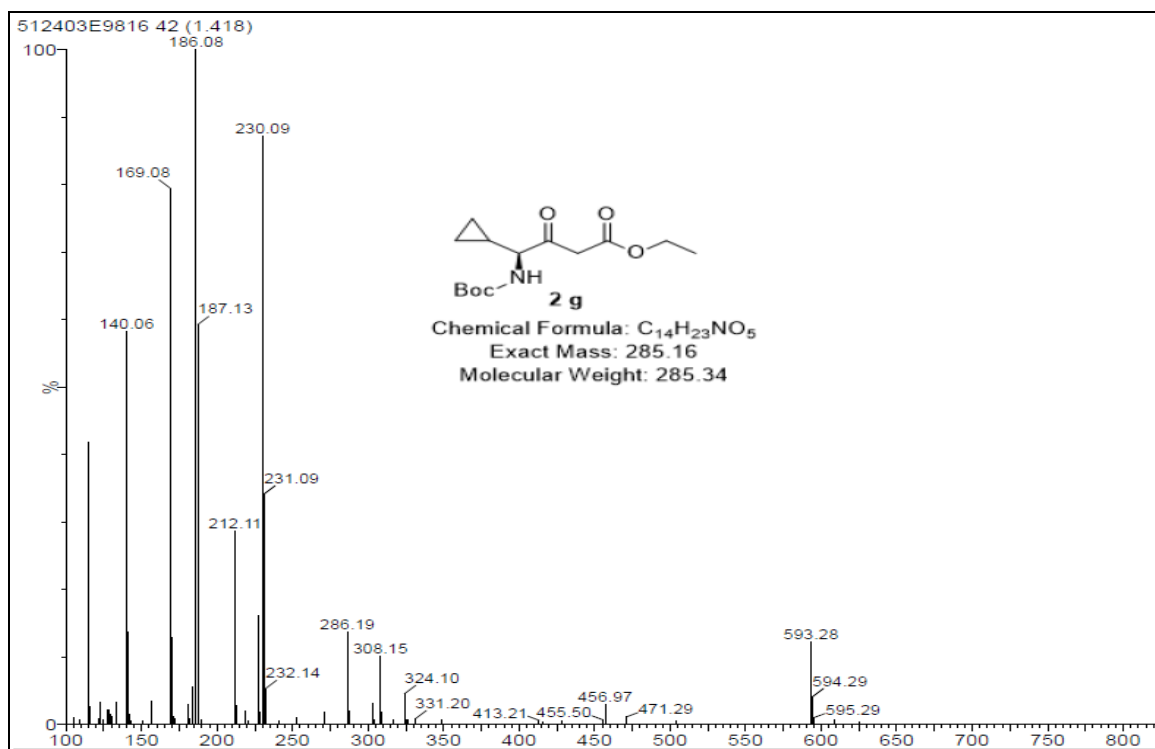


Figure S57: Mass spectrum of compound **2 g**

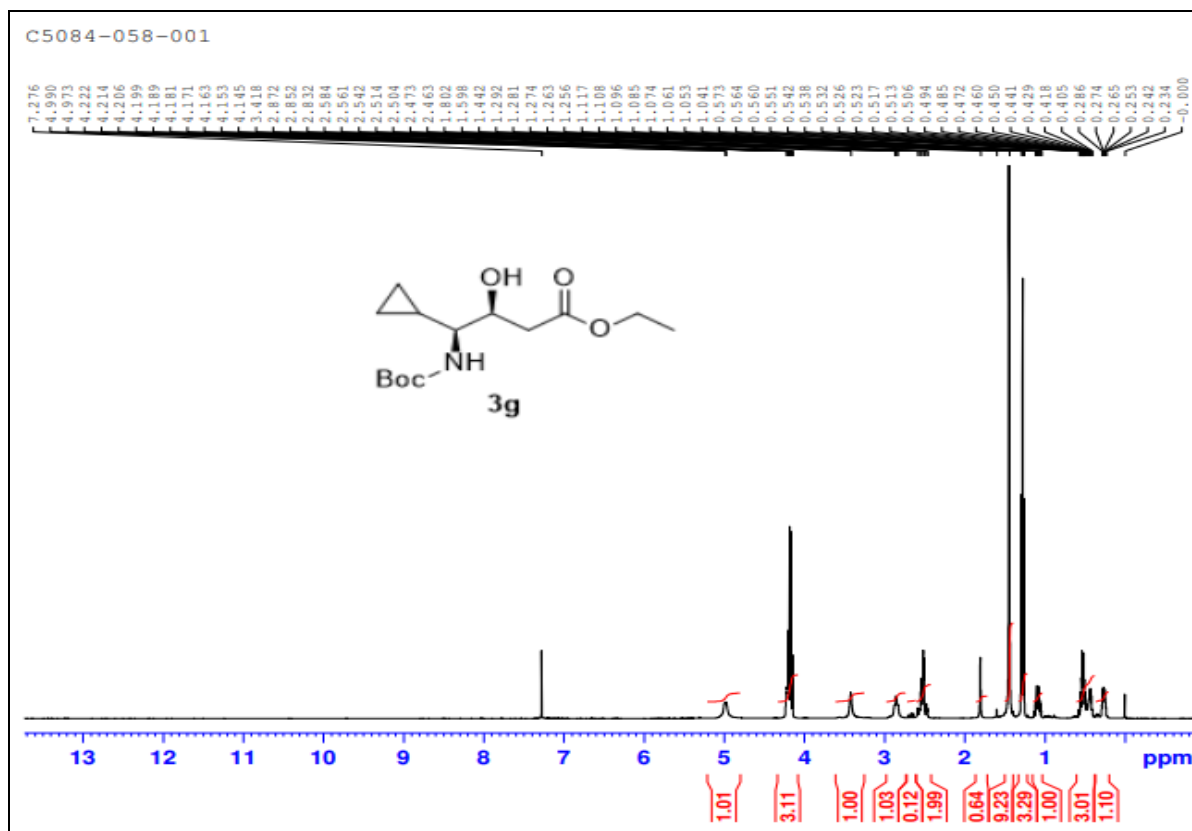


Figure S58: 400 MHz ^1H -NMR spectrum of compound **3 g** in CDCl_3

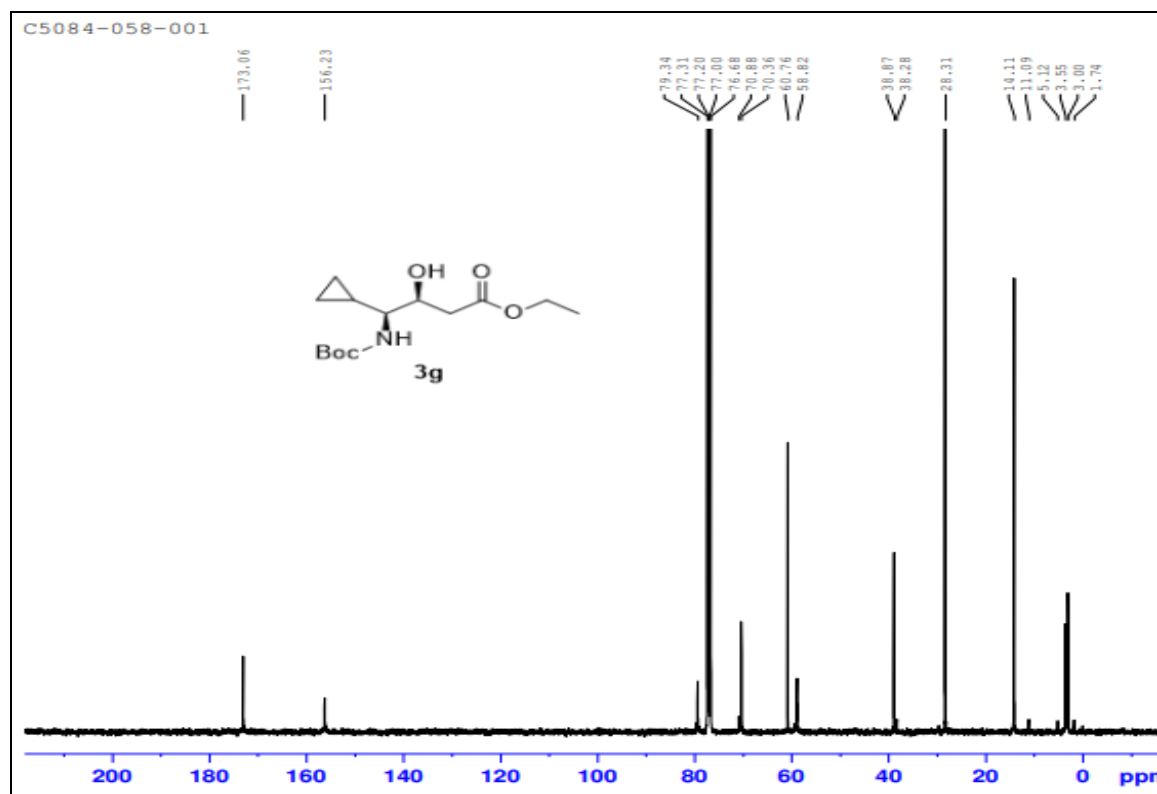


Figure S59: 100 MHz ^{13}C -NMR Spectrum of compound **3 g** in CDCl_3

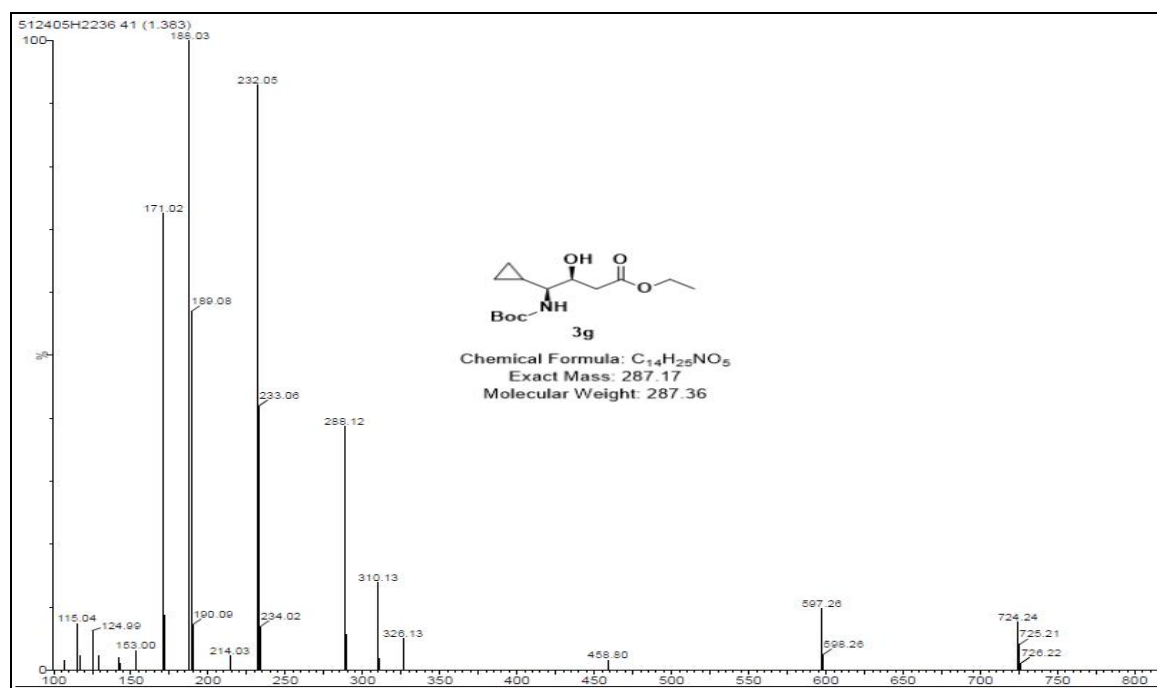


Figure S60: Mass spectrum of compound **3 g**

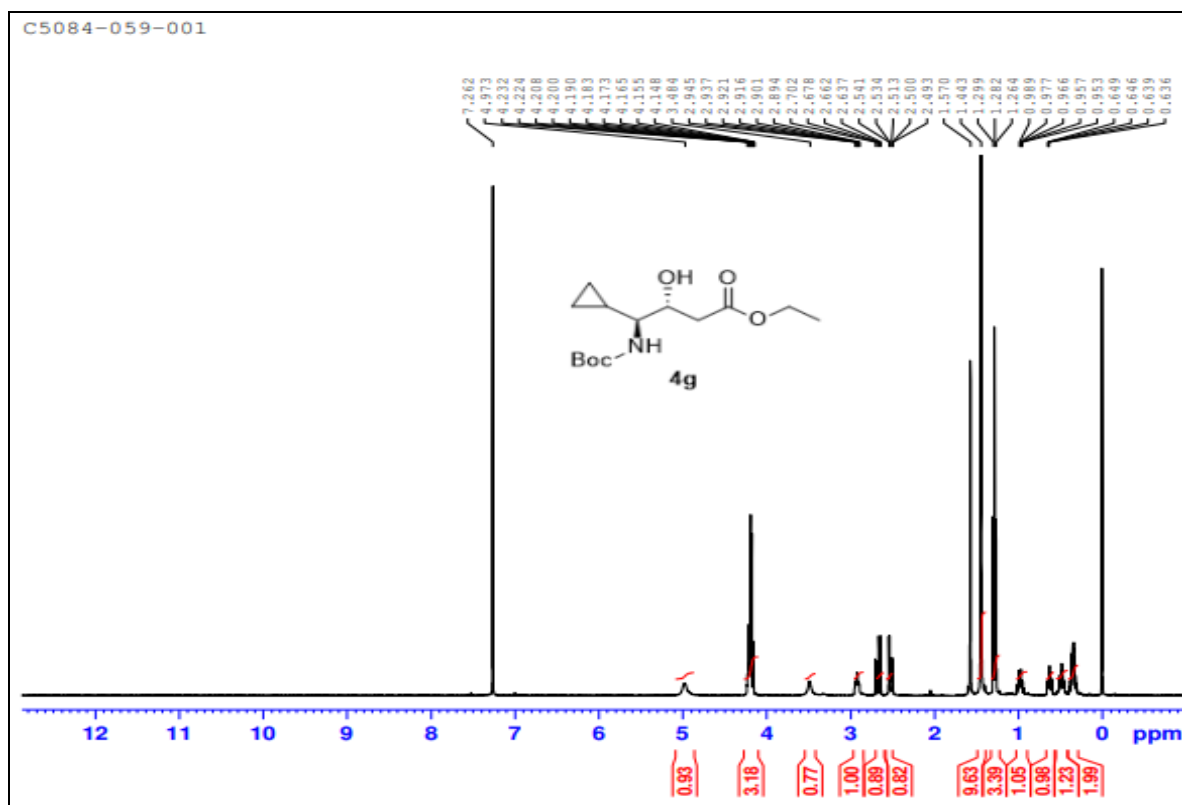


Figure S61: 400 MHz ^1H -NMR spectrum of compound **4g** in CDCl_3

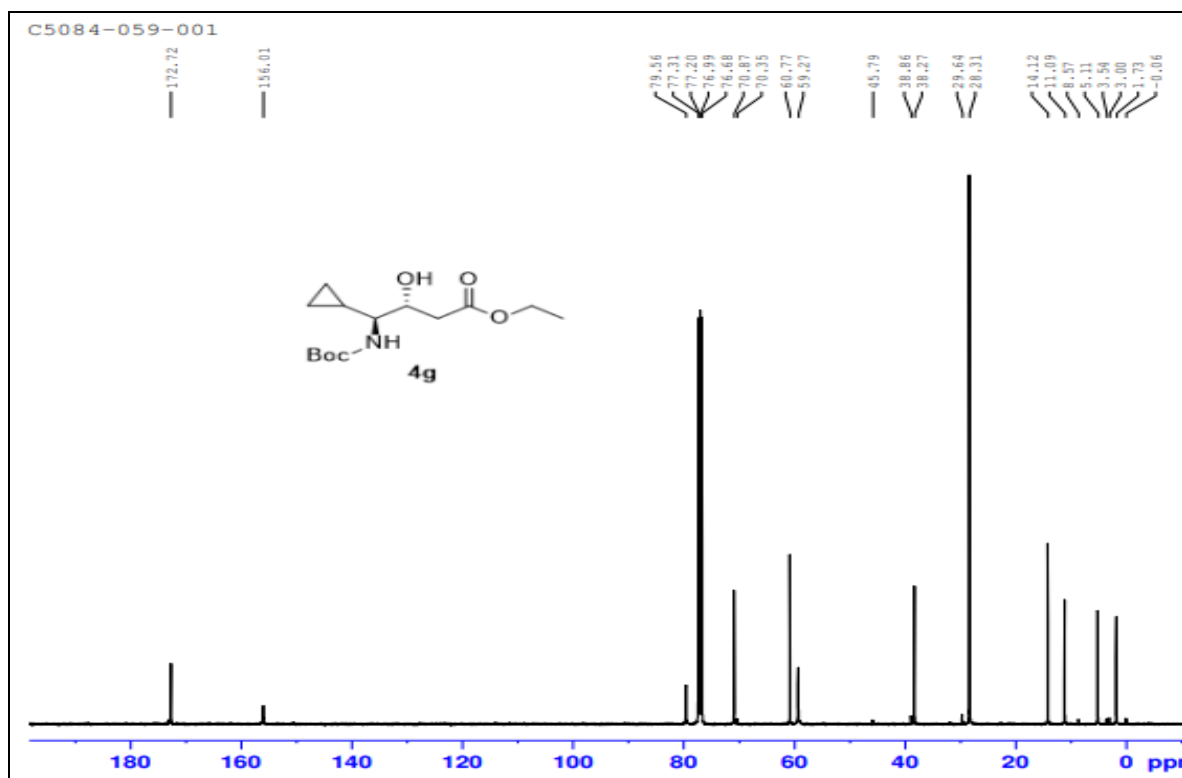


Figure S62: 100 MHz ^{13}C -NMR Spectrum of compound **4g** in CDCl_3

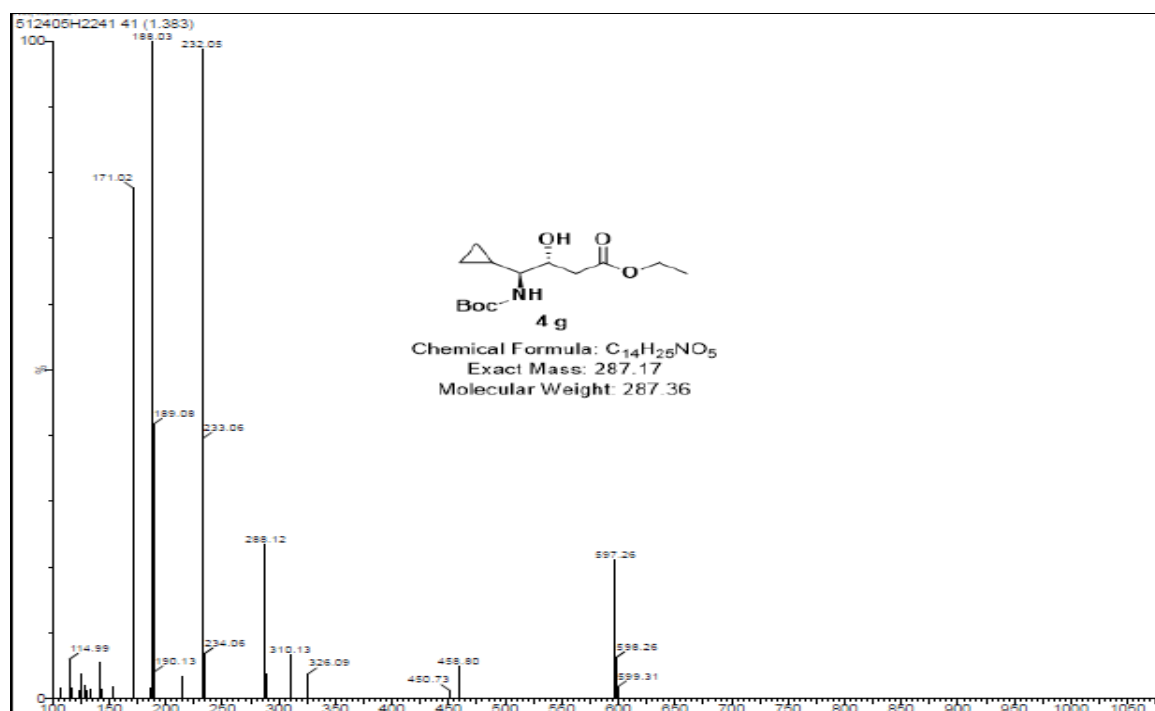


Figure S63: Mass spectrum of compound **4 g**

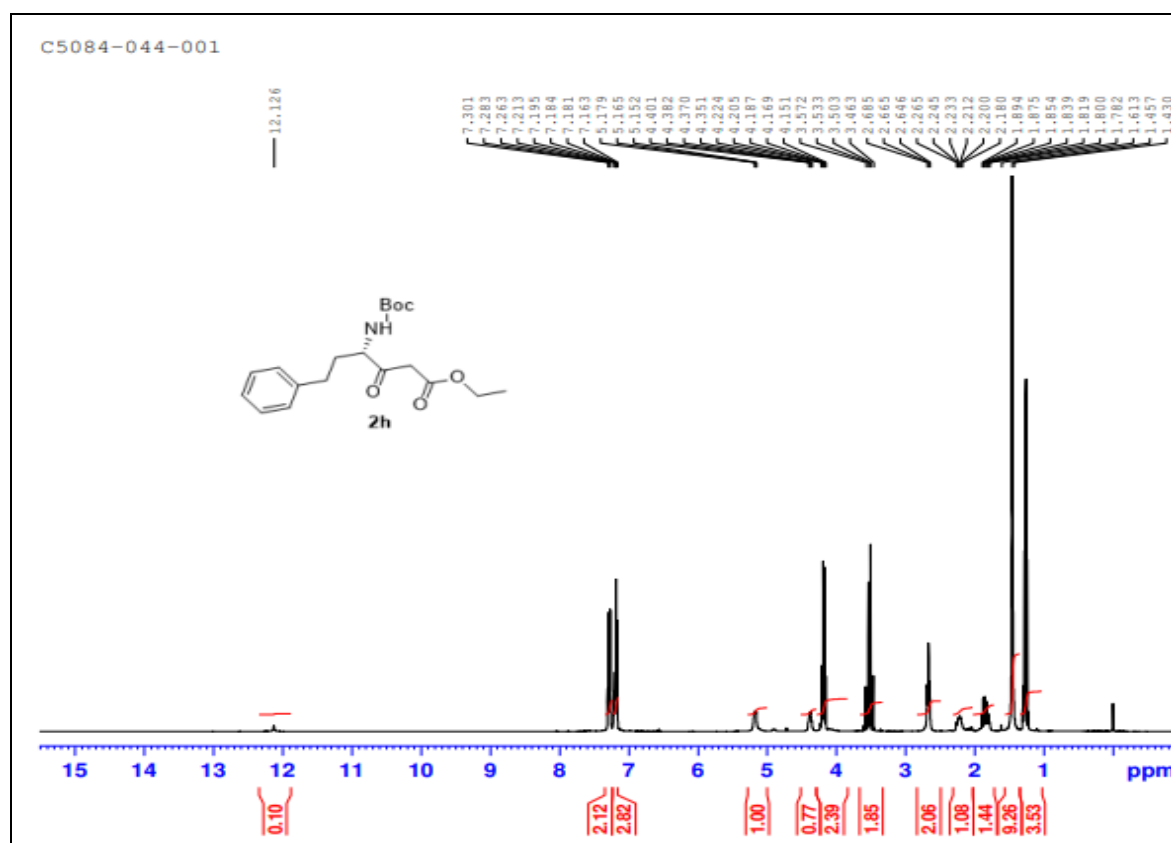


Figure S64: 400 MHz ^1H -NMR spectrum of compound **2 h** in CDCl_3

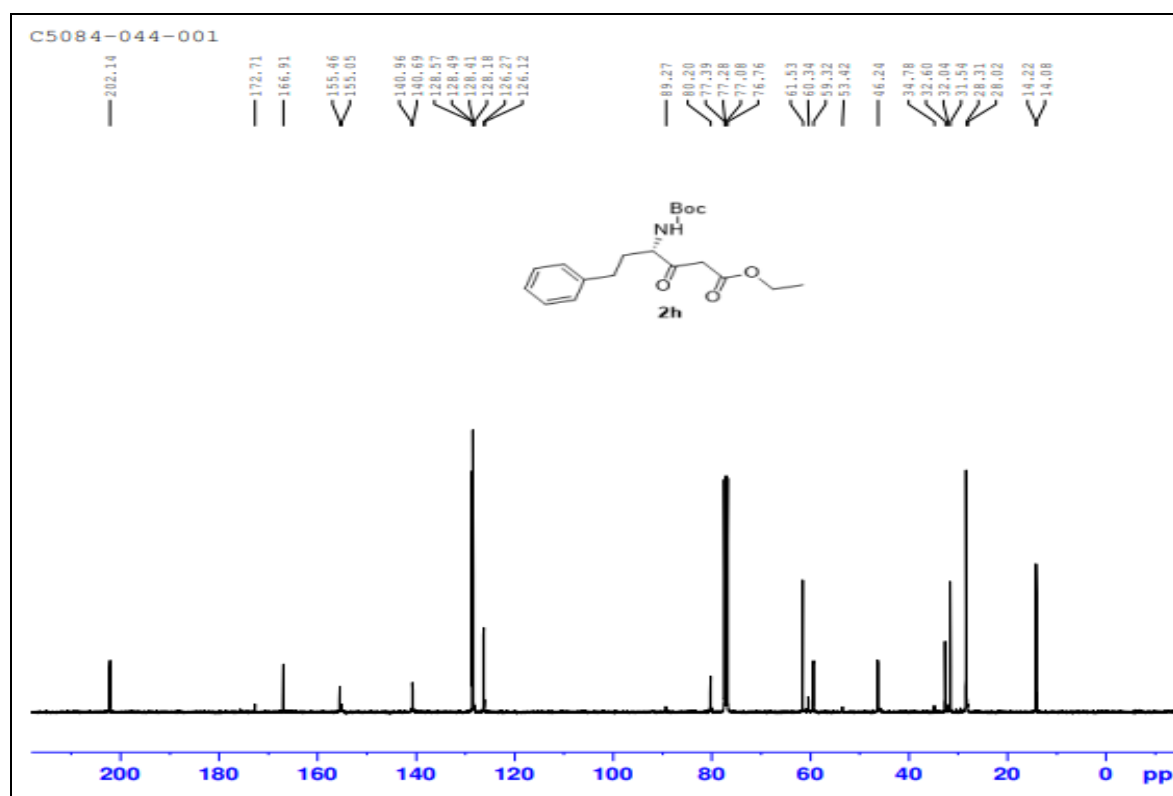


Figure S65: 100 MHz ^{13}C -NMR Spectrum of compound **2 h** in CDCl_3

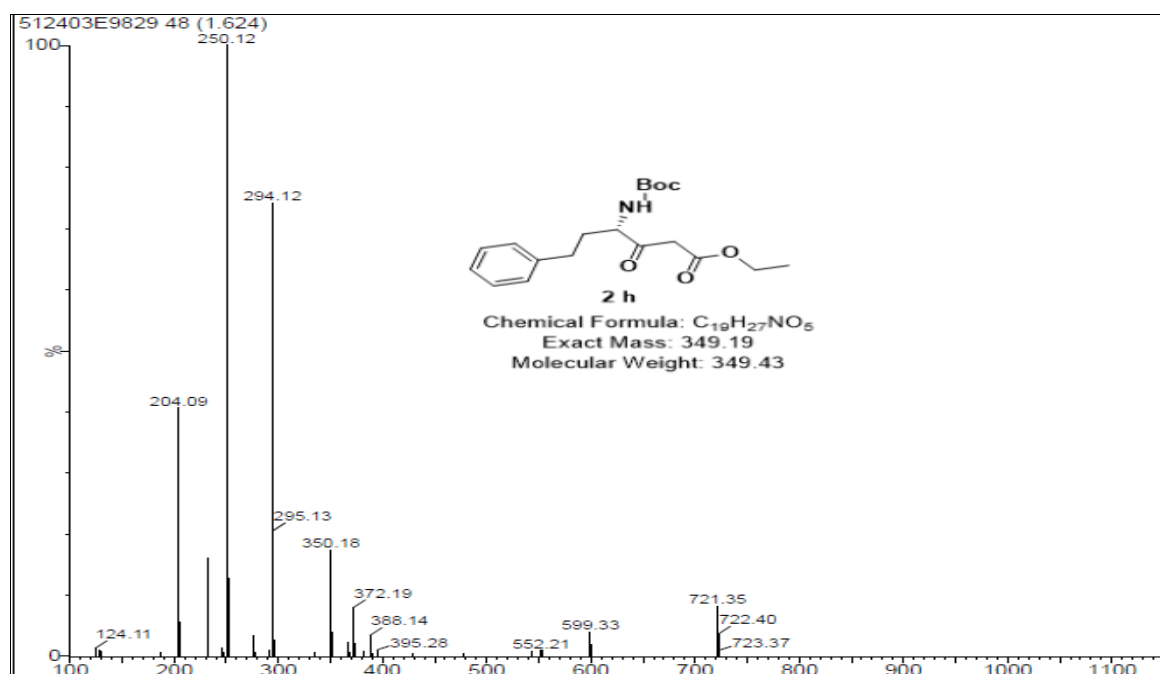


Figure S66: Mass spectrum of compound **2 h**

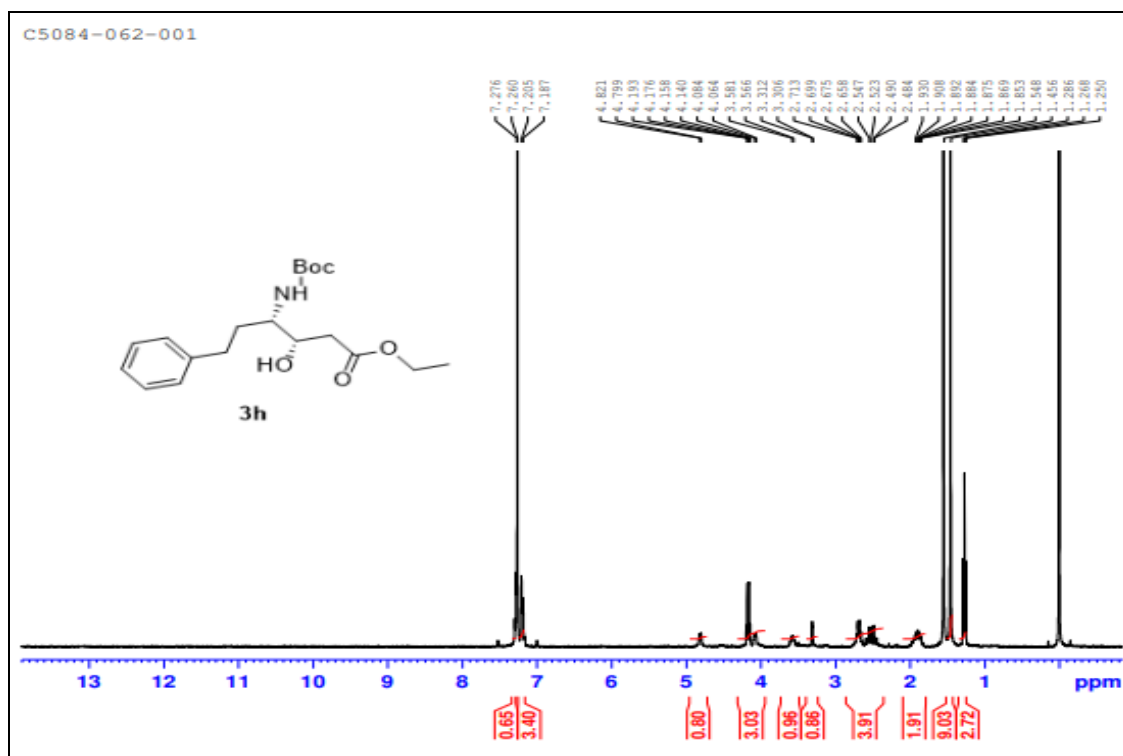


Figure S67: 400 MHz ^1H -NMR spectrum of compound **3h** in CDCl_3

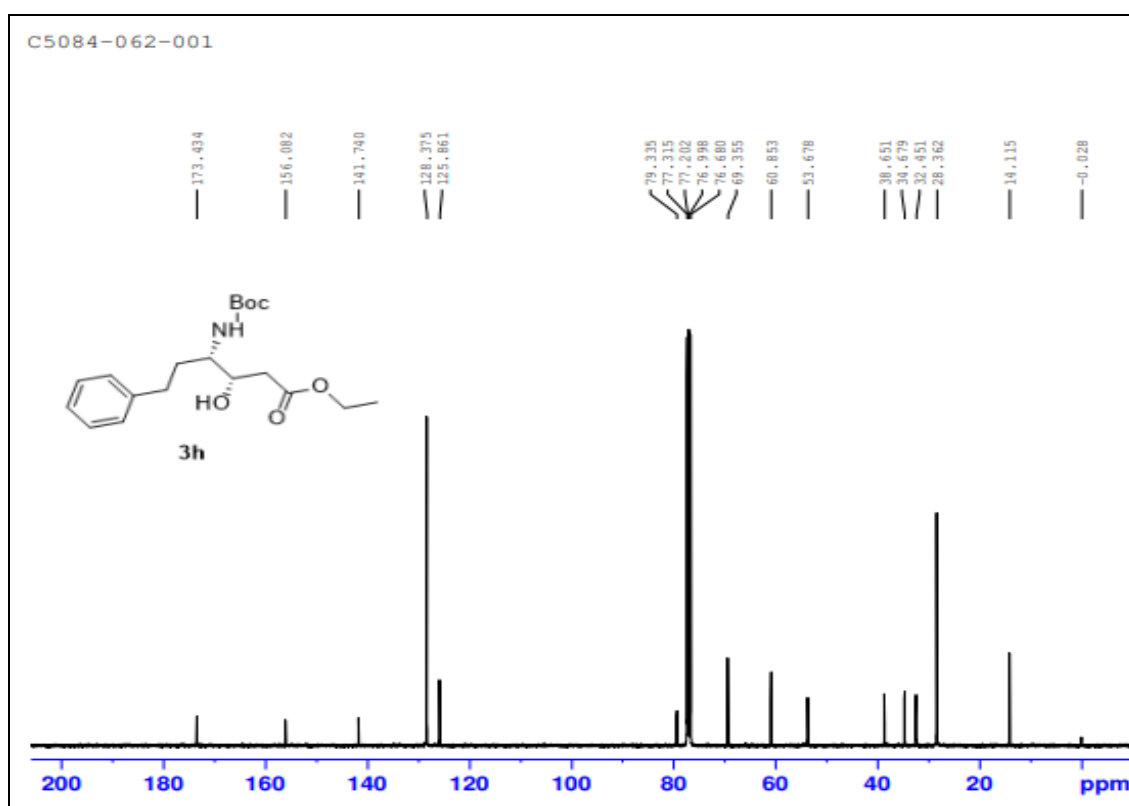


Figure S68: ^{13}C NMR Spectra of compound **3h** in CDCl_3

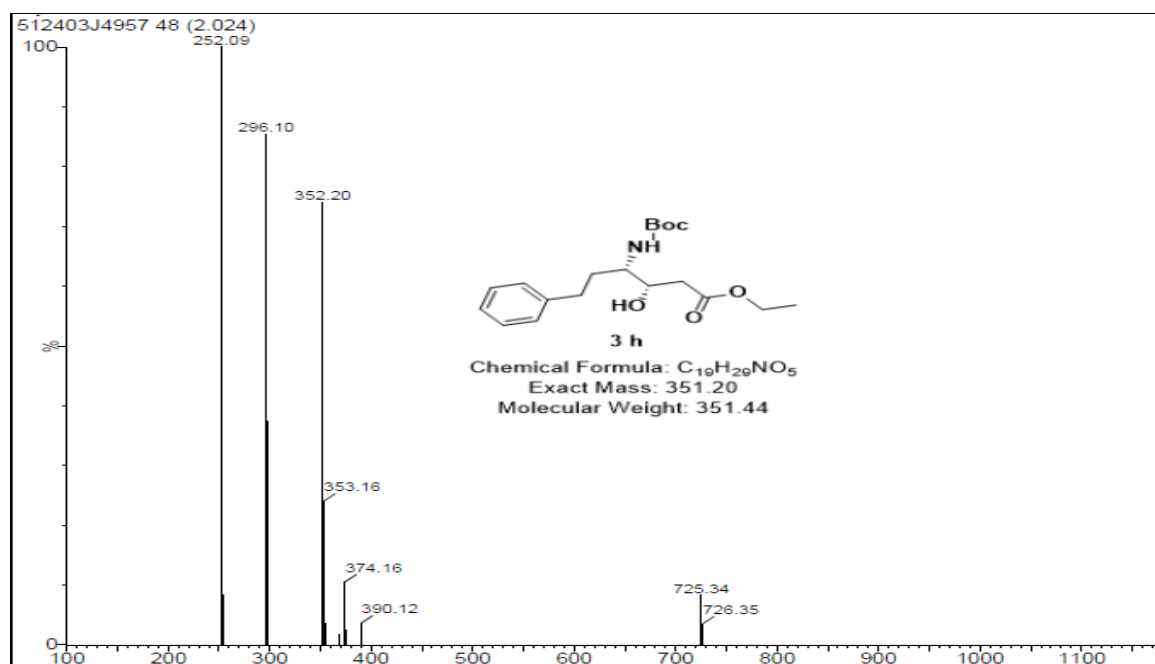


Figure S69: Mass spectrum of compound **3 h**

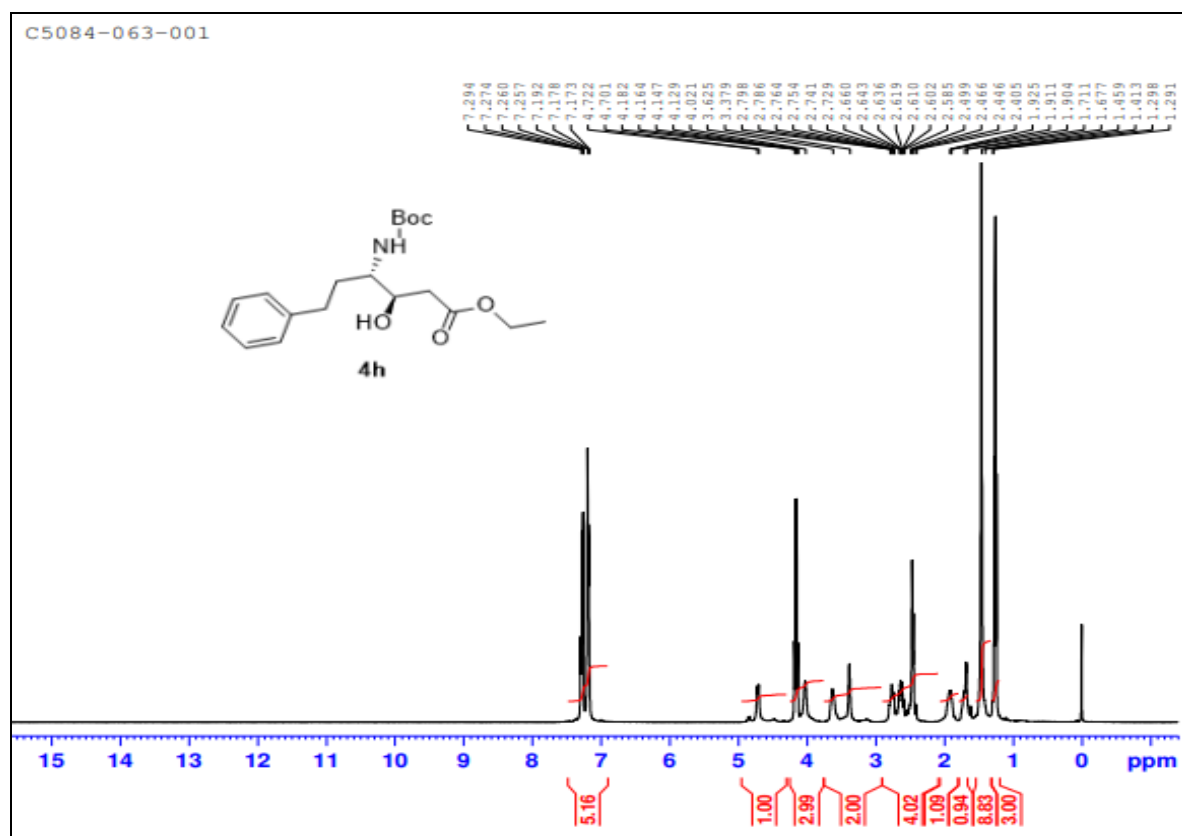


Figure S70: 400 MHz 1H -NMR spectrum of compound **4 h** in $CDCl_3$

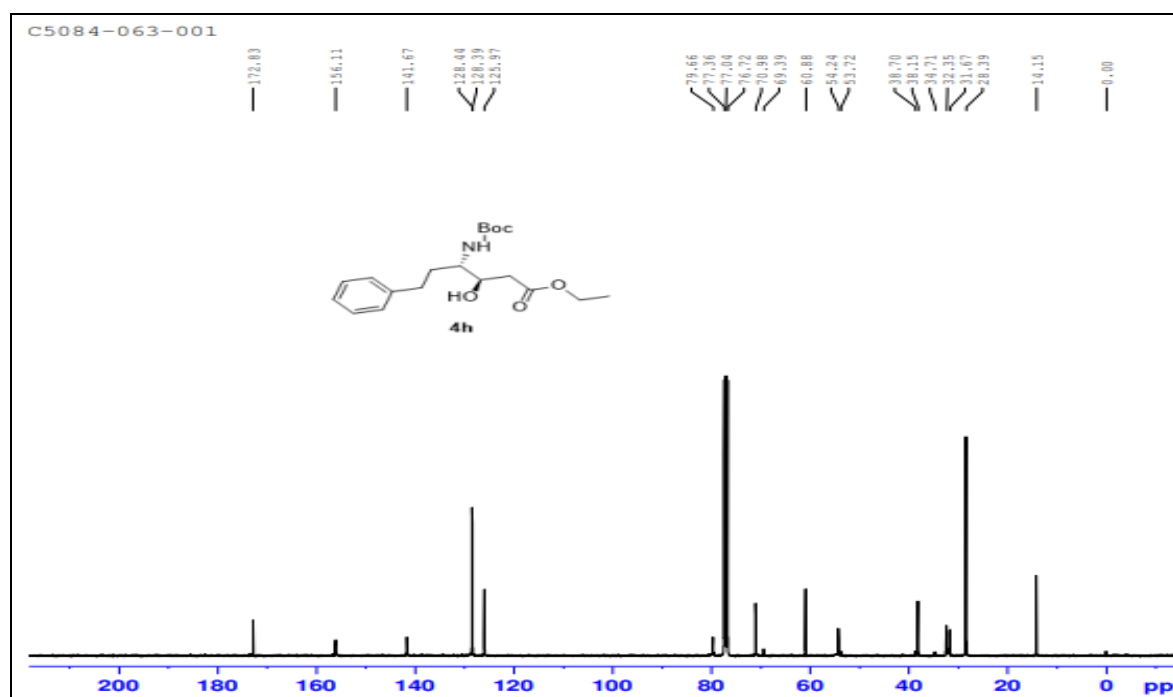


Figure S71: 100 MHz ^{13}C -NMR Spectrum of compound **4 h** in CDCl_3

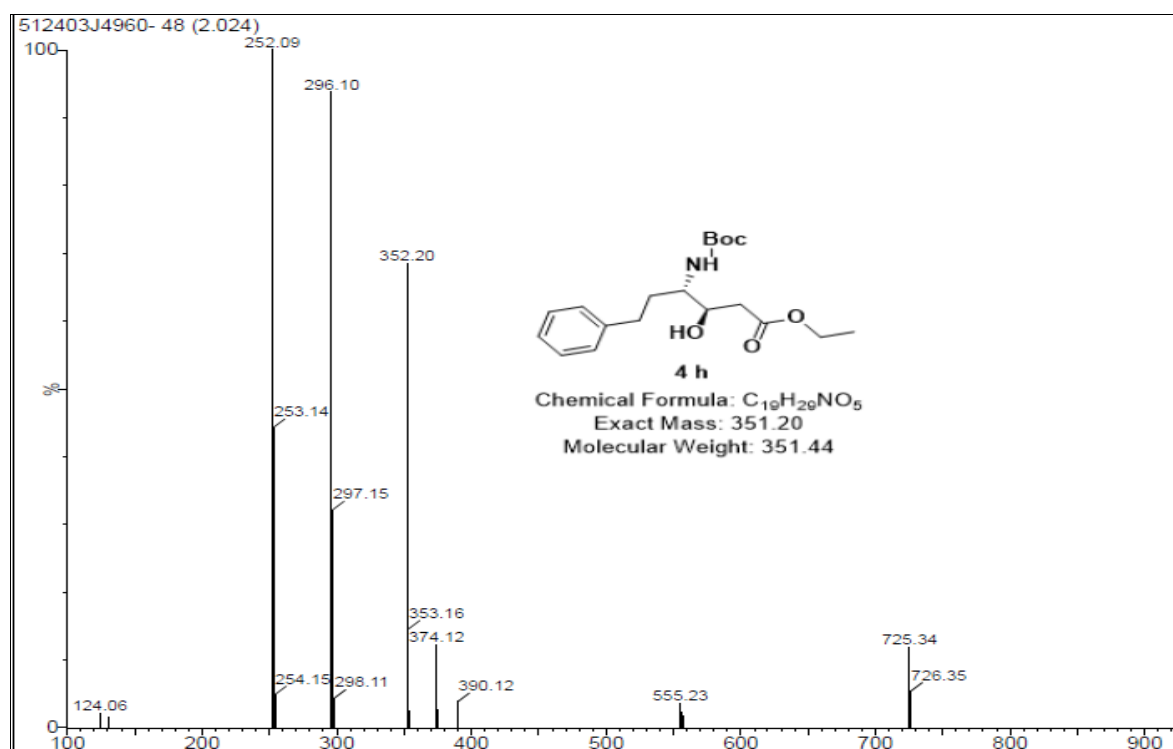


Figure S72: Mass spectrum of compound **4 h**

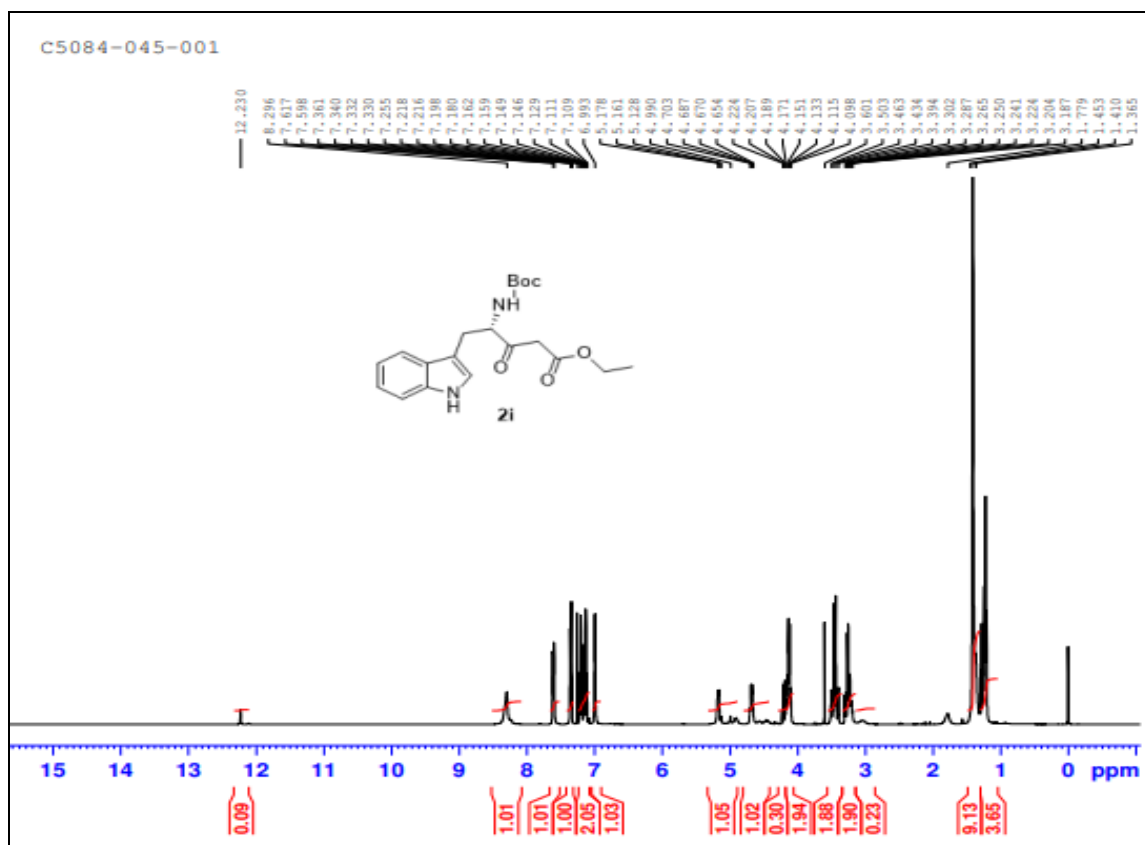


Figure S73: 400 MHz ^1H -NMR spectrum of compound **2 i** in CDCl_3

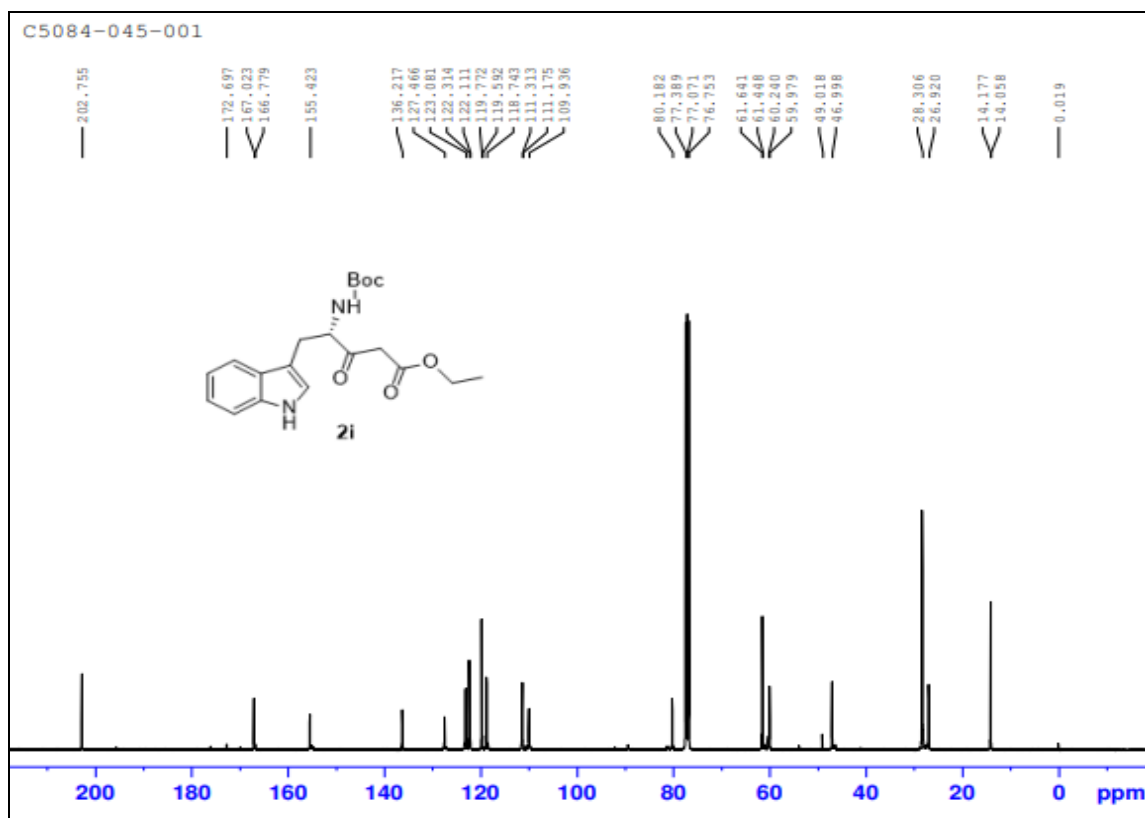


Figure S74: 100 MHz ^{13}C -NMR Spectrum of compound **2 i** in CDCl_3

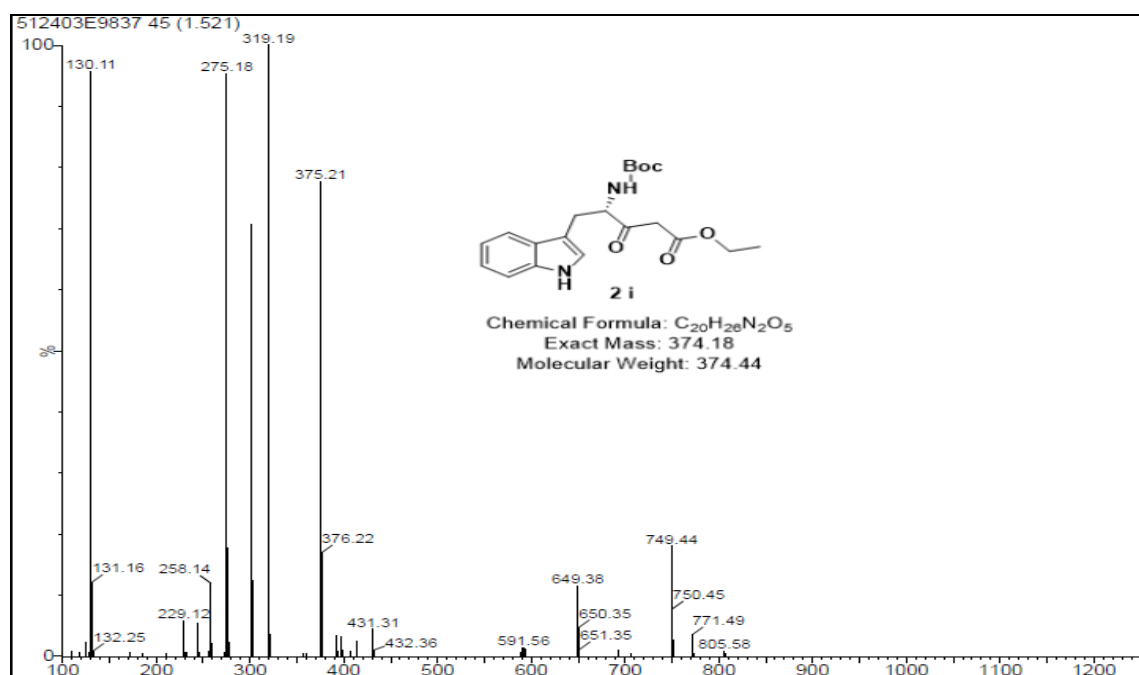


Figure S75: Mass spectrum of compound **2 i**

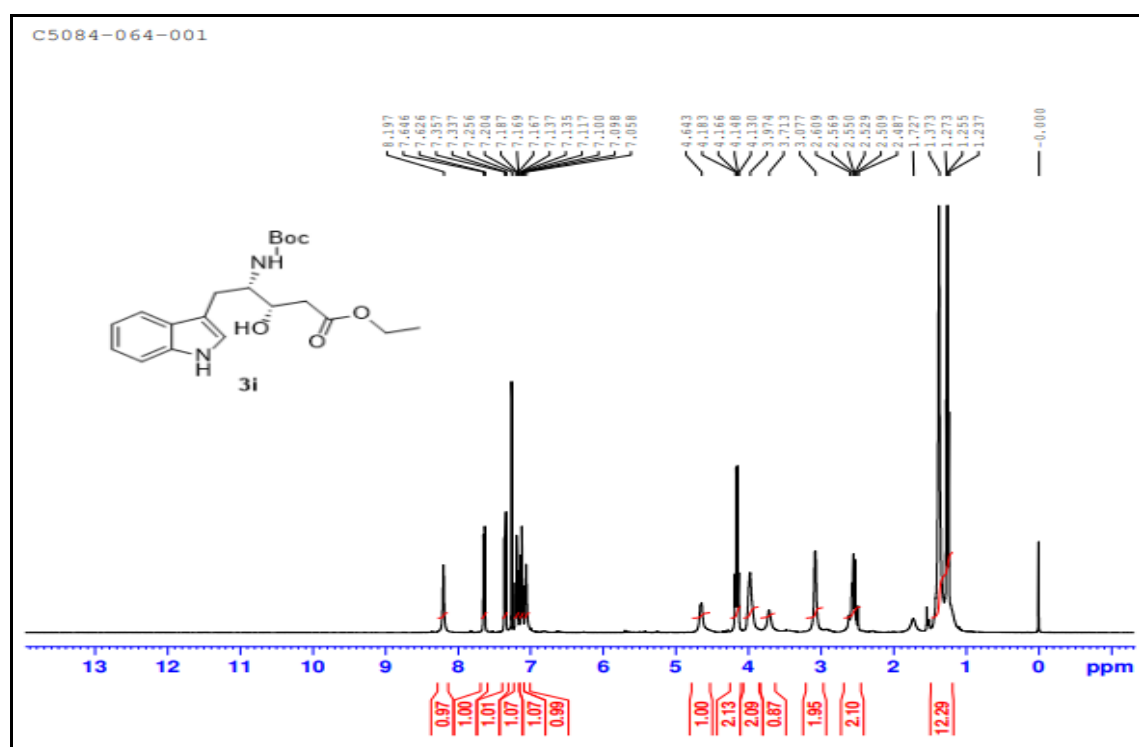


Figure S76: 400 MHz ^1H -NMR spectrum of compound **3 i** in CDCl_3

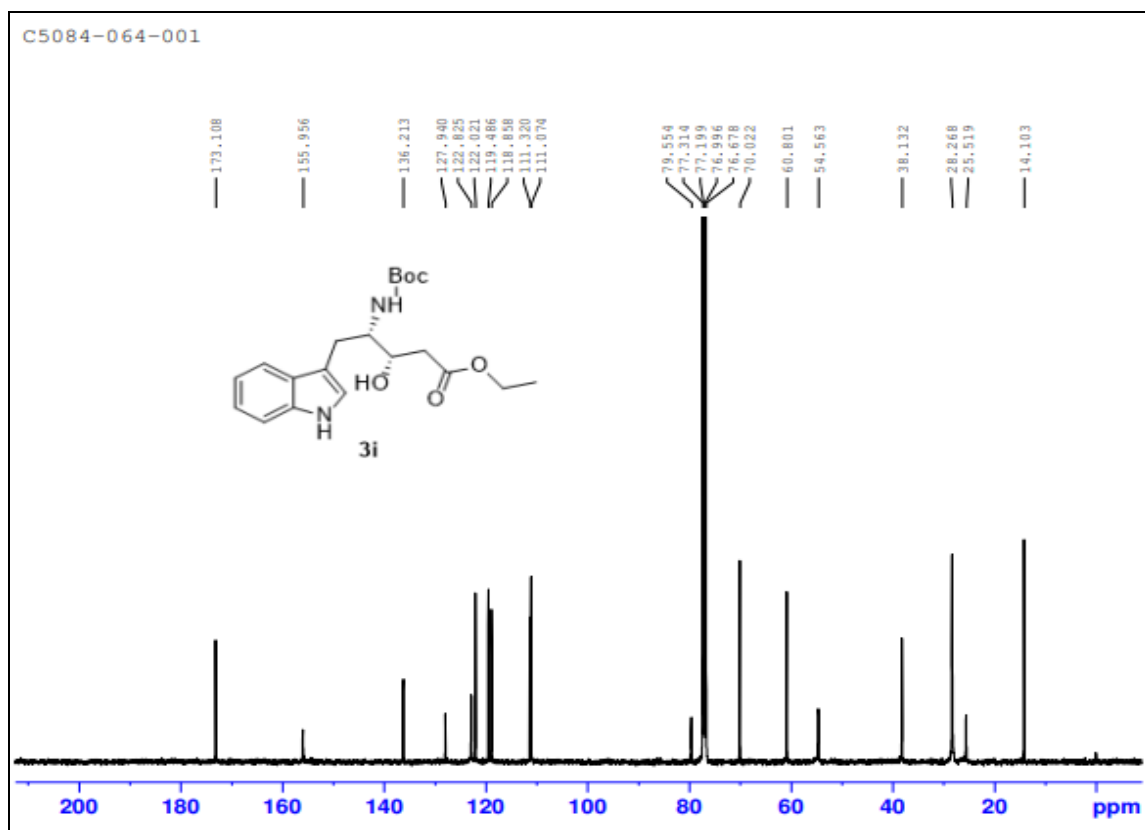


Figure S77: 100 MHz ^{13}C -NMR Spectrum of compound **3 i** in CDCl_3

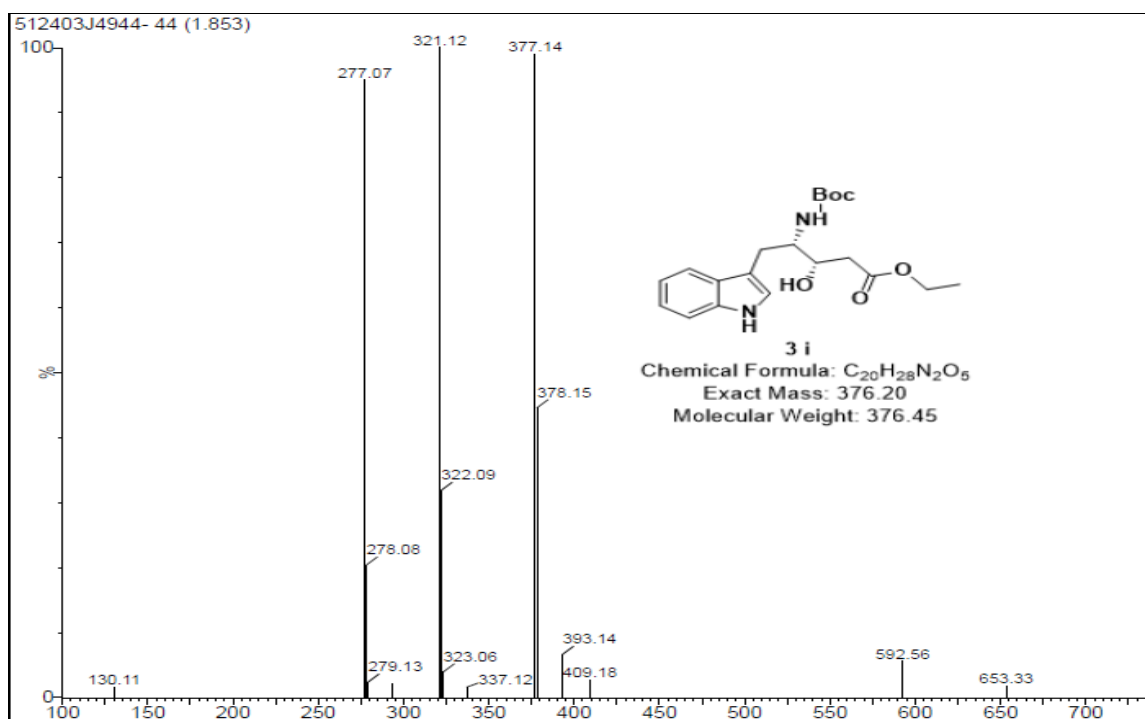
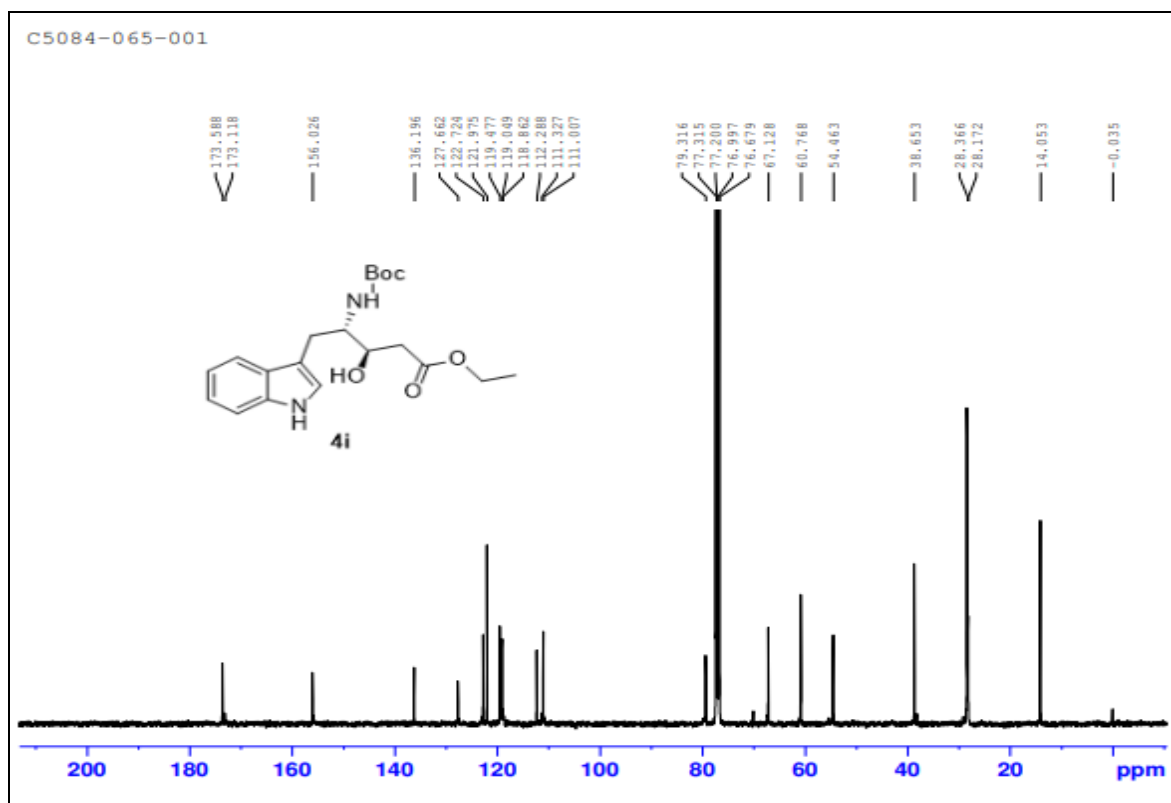
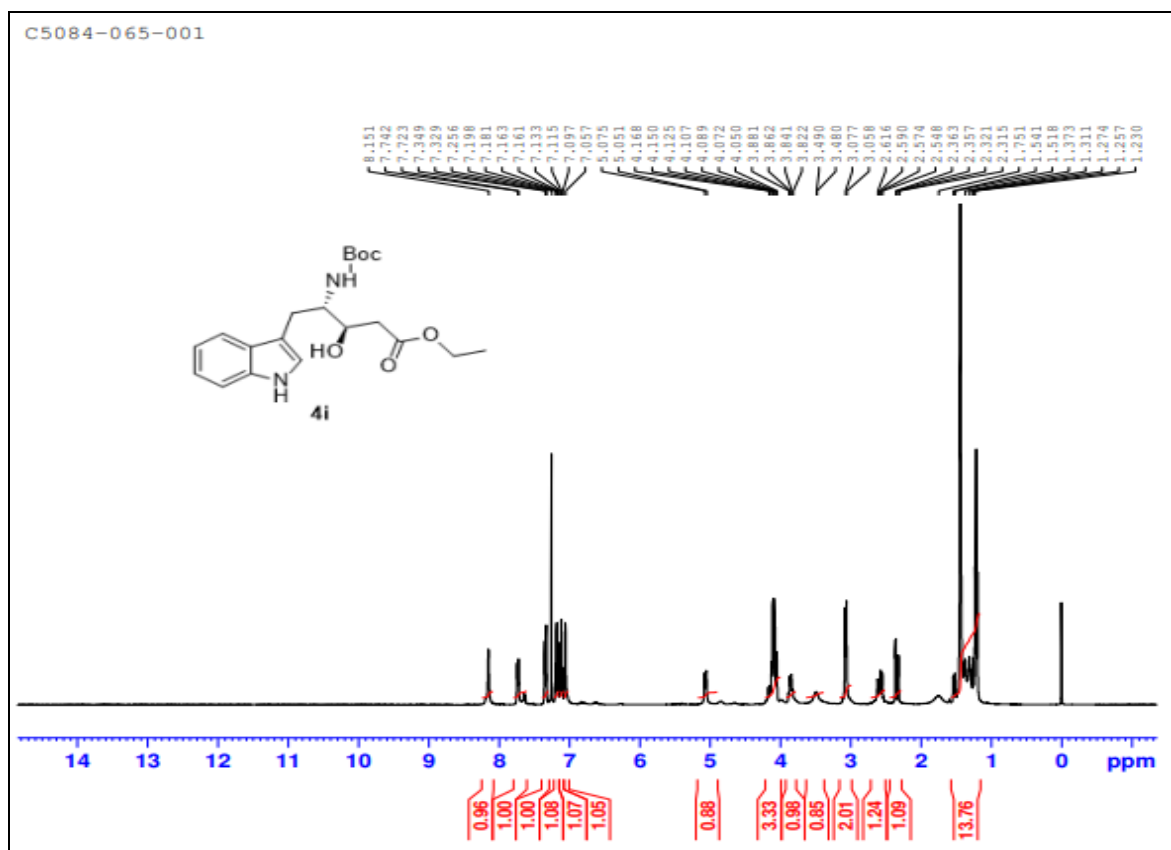


Figure S78: Mass spectrum of compound **3 i**



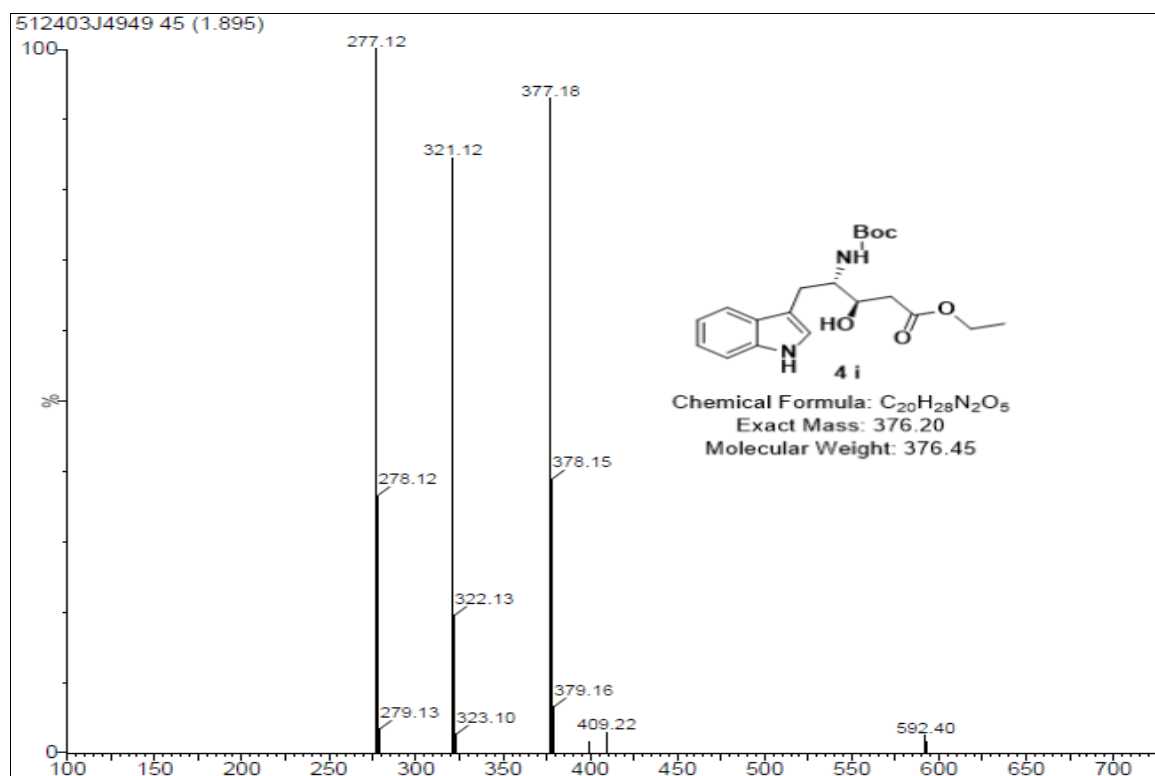


Figure S81: Mass spectrum of compound **4 i**

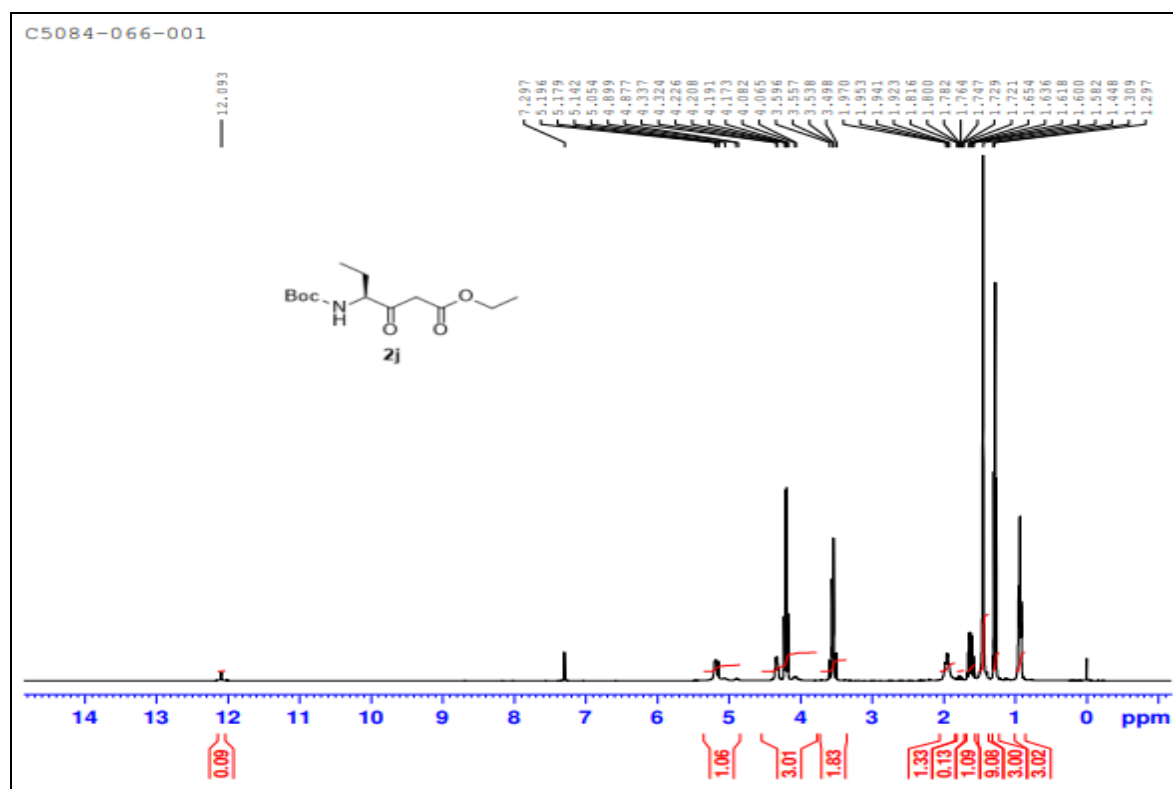


Figure S82: 400 MHz ^1H -NMR spectrum of compound **2 j** in CDCl_3

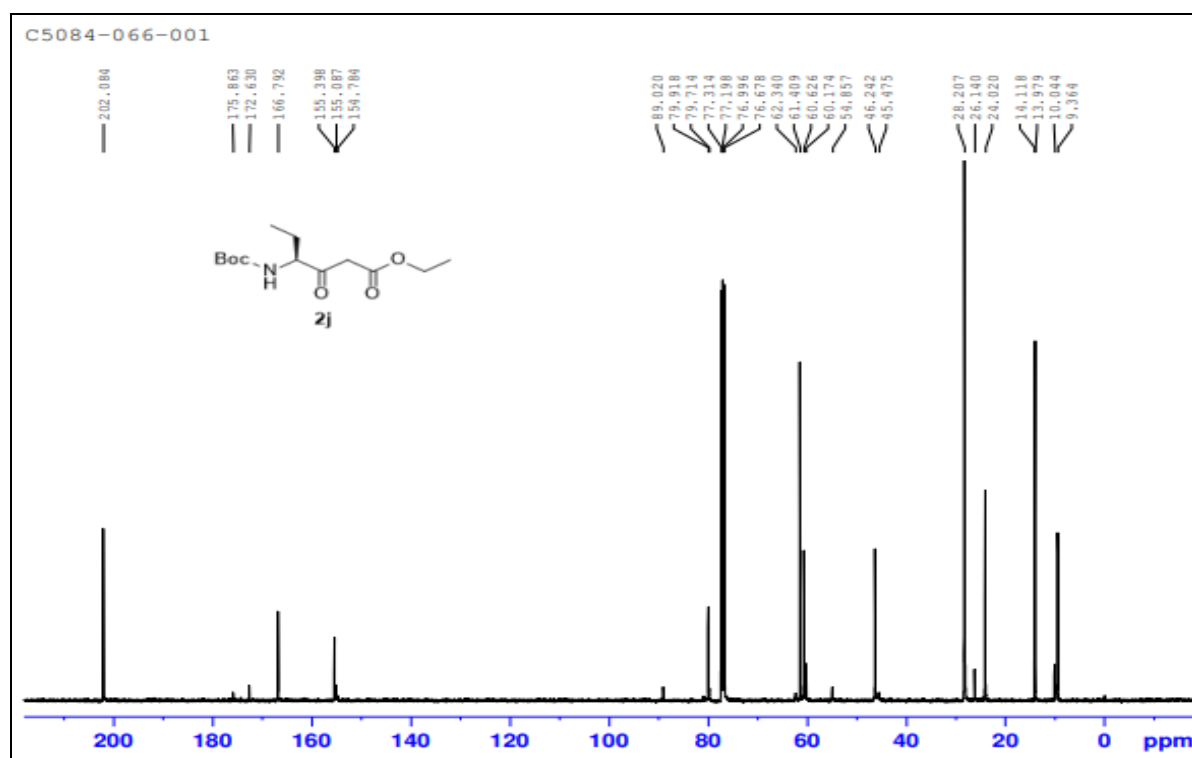


Figure S83: 100 MHz ^{13}C -NMR Spectrum of compound **2j** in CDCl_3

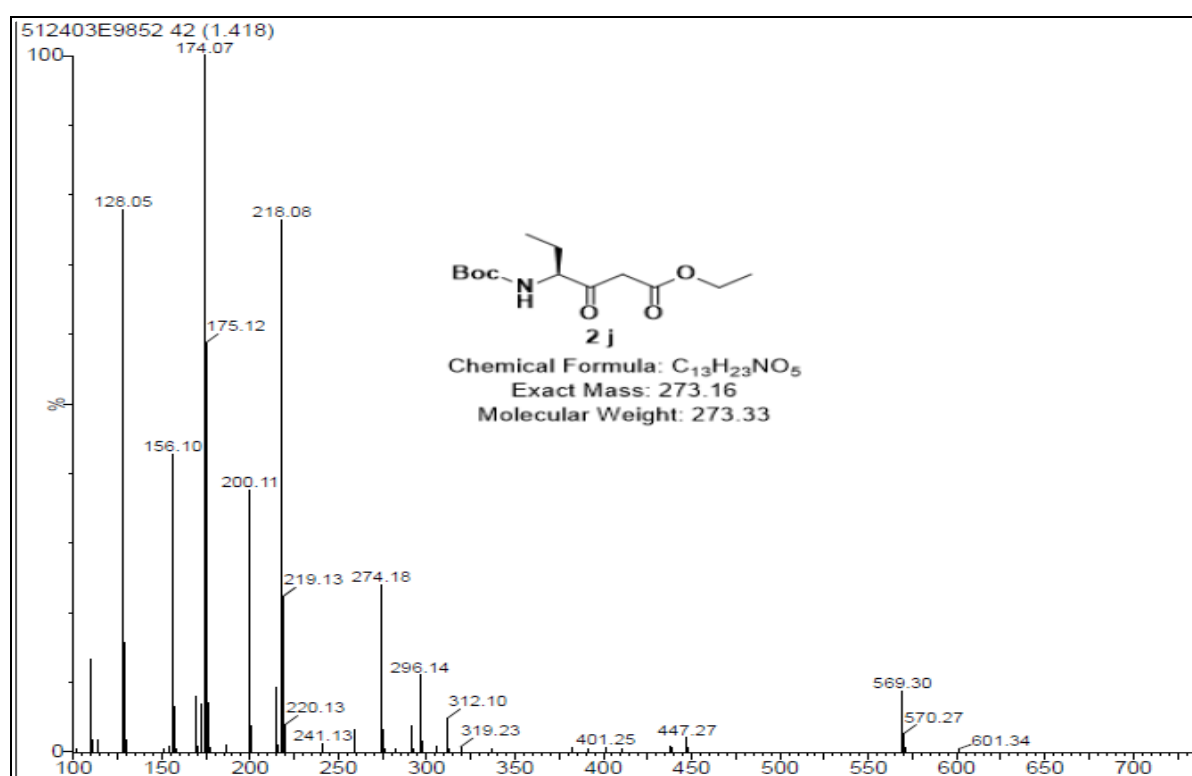


Figure S84: Mass spectrum of compound **2j**

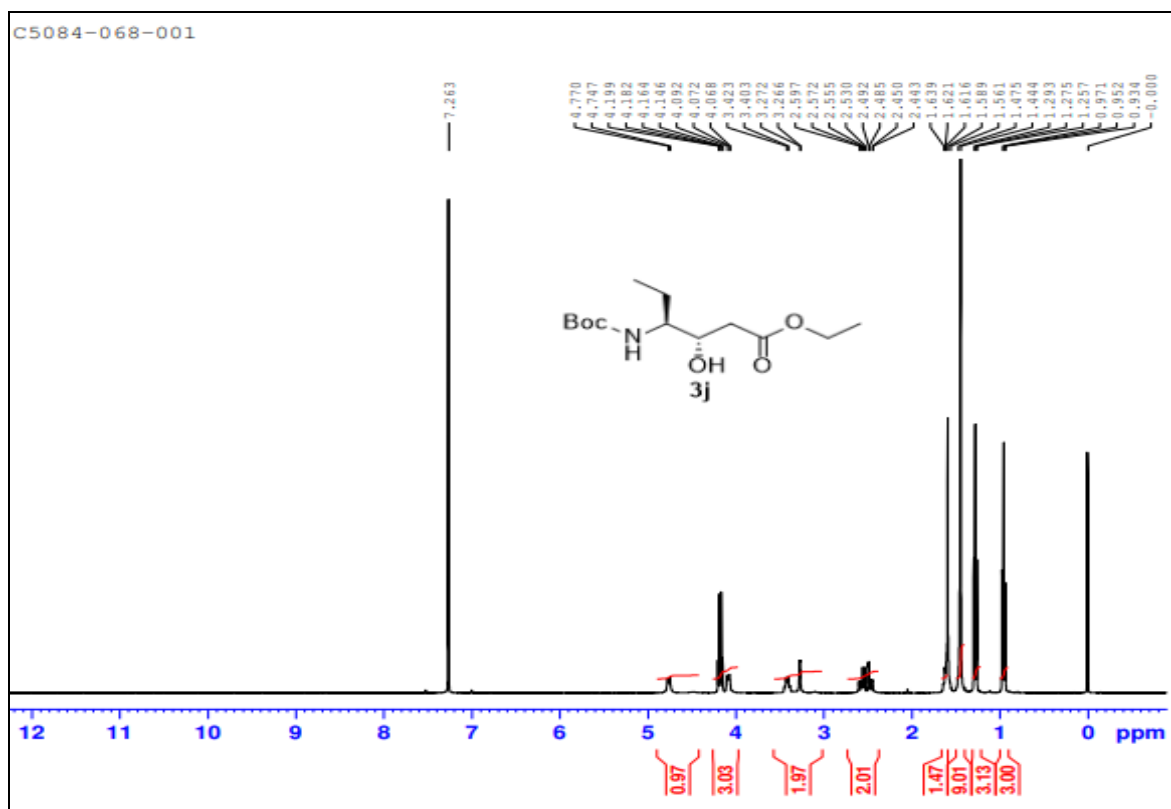


Figure S85: 400 MHz ^1H -NMR spectrum of compound **3j** in CDCl_3

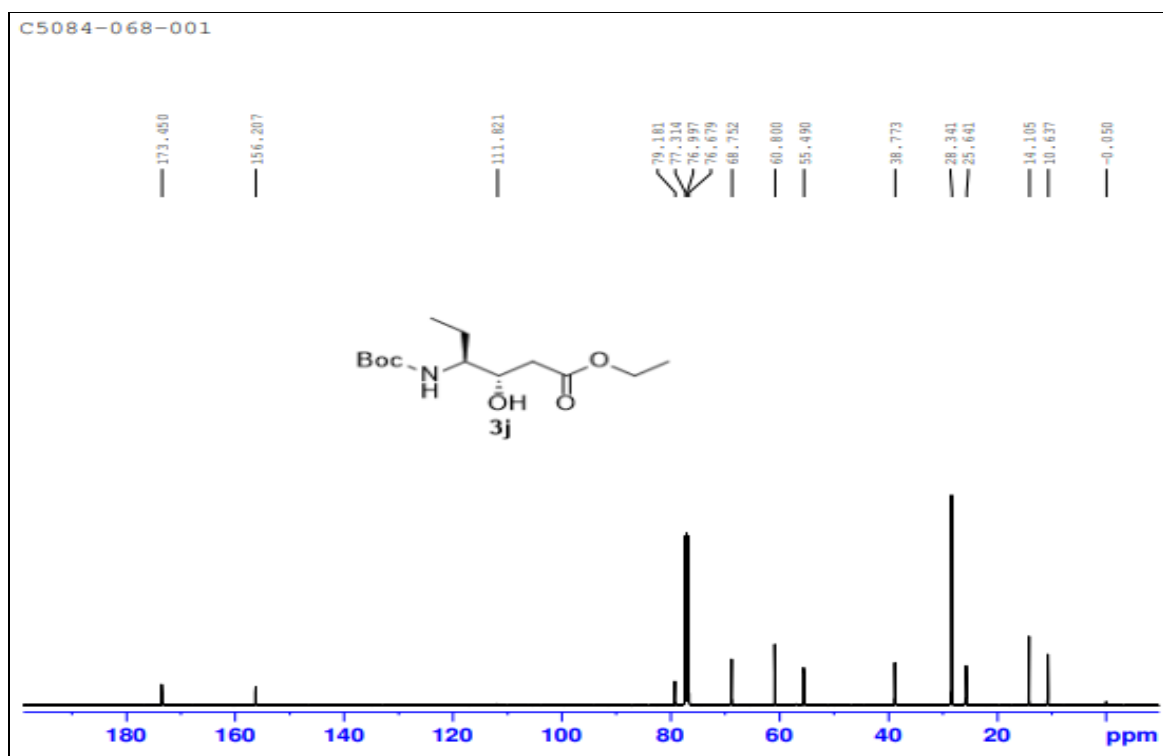


Figure S86: 100 MHz ^{13}C -NMR Spectrum of compound **3j** in CDCl_3

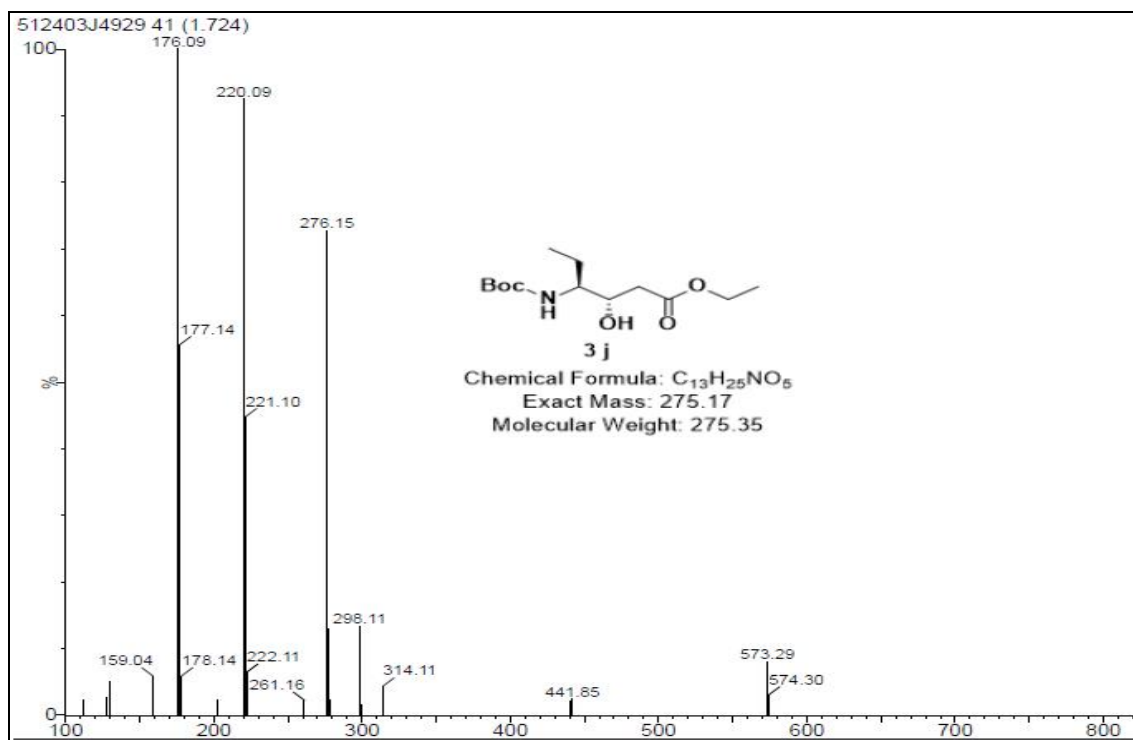


Figure S87: Mass spectrum of compound **3 j**

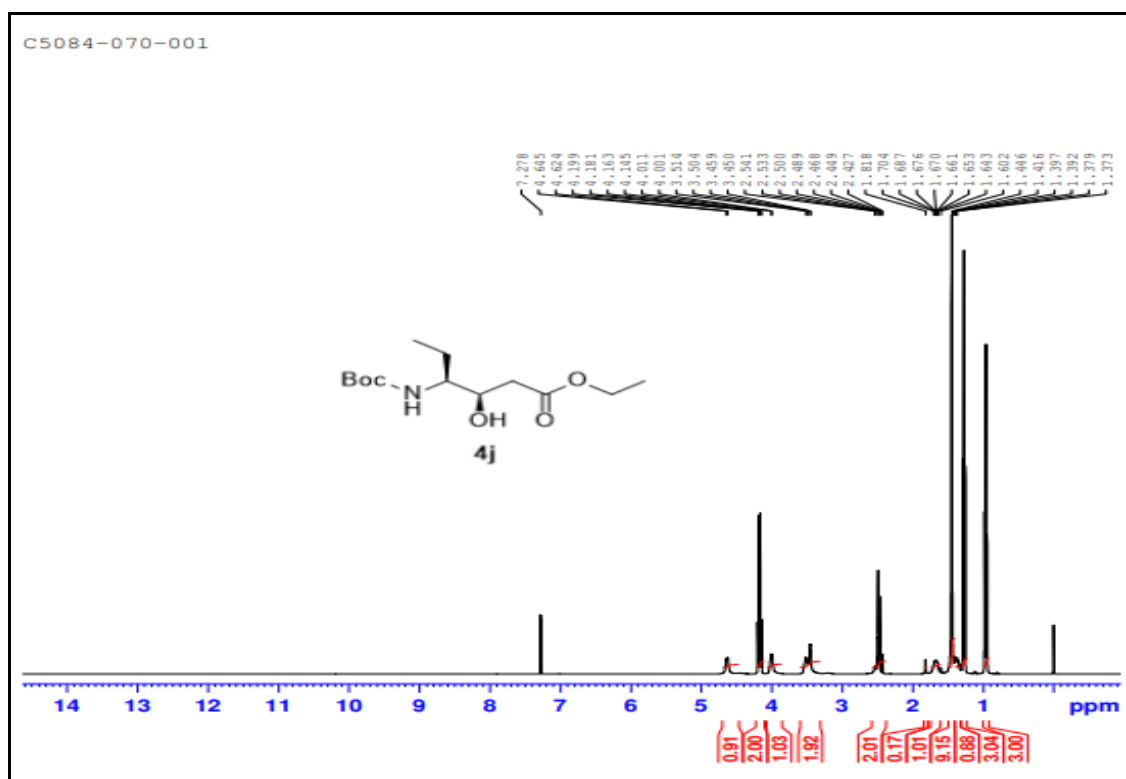


Figure S88: 400 MHz ^1H -NMR spectrum of compound **4 j** in CDCl_3

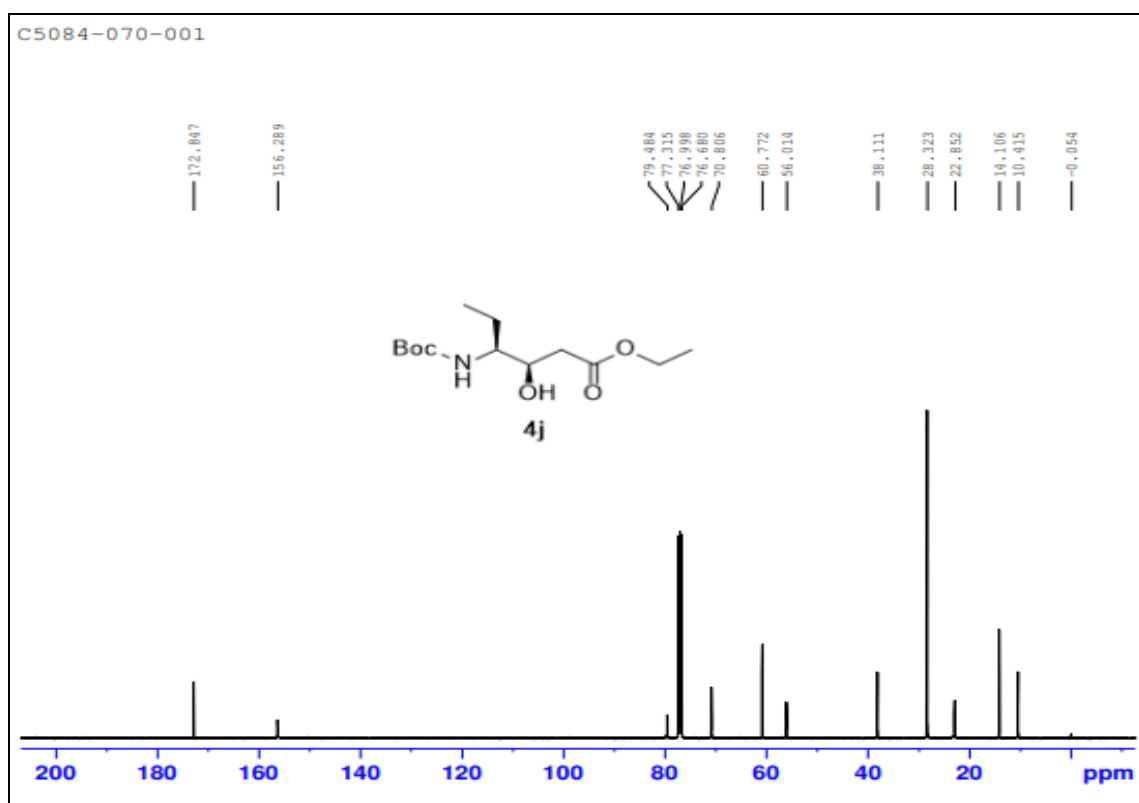


Figure S89: 100 MHz ^{13}C -NMR Spectrum of compound **4j** in CDCl_3

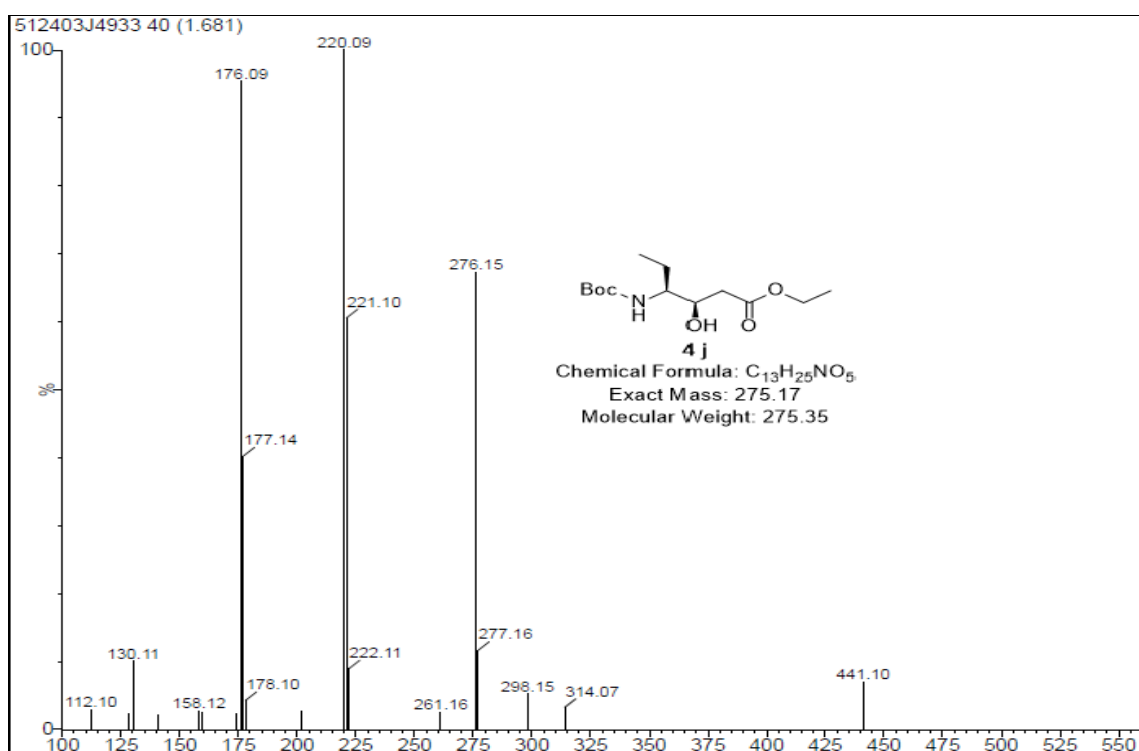


Figure S90: Mass spectrum of compound **4j**

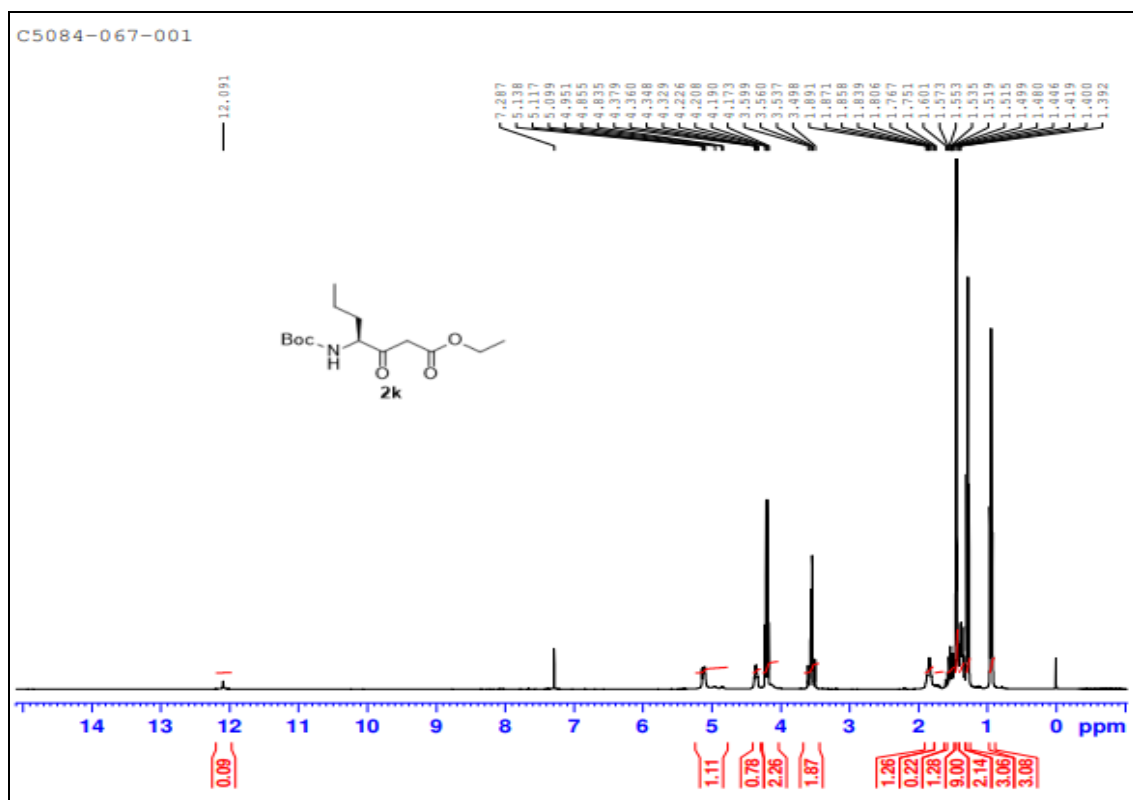


Figure S91: 400 MHz ¹H-NMR spectrum of compound **2 k** in CDCl₃

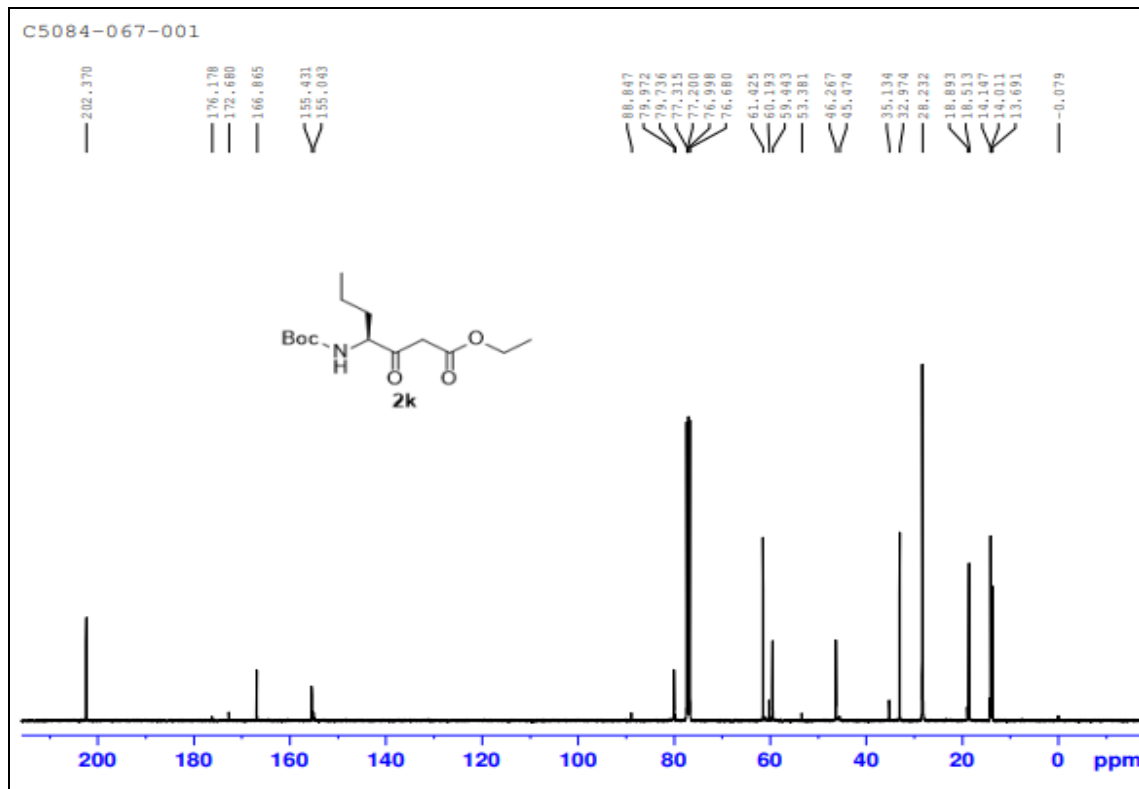


Figure S92: 100 MHz ¹³C-NMR Spectrum of compound **2 k** in CDCl₃

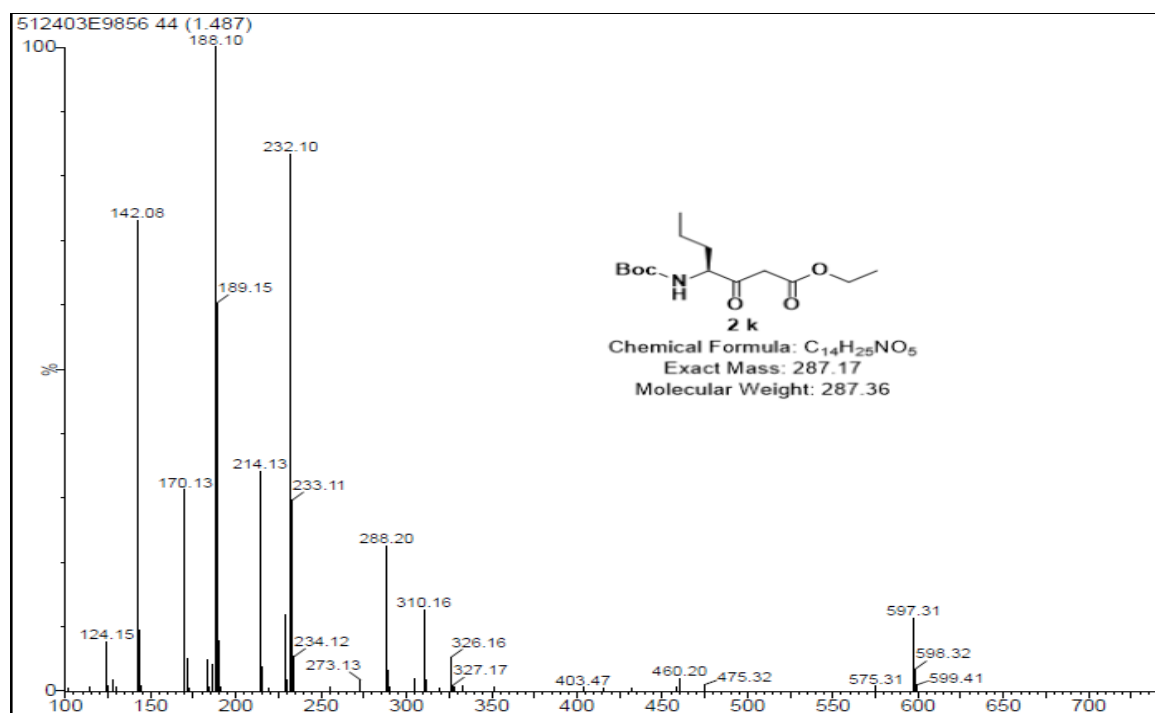


Figure S93: Mass spectrum of compound **2 k**

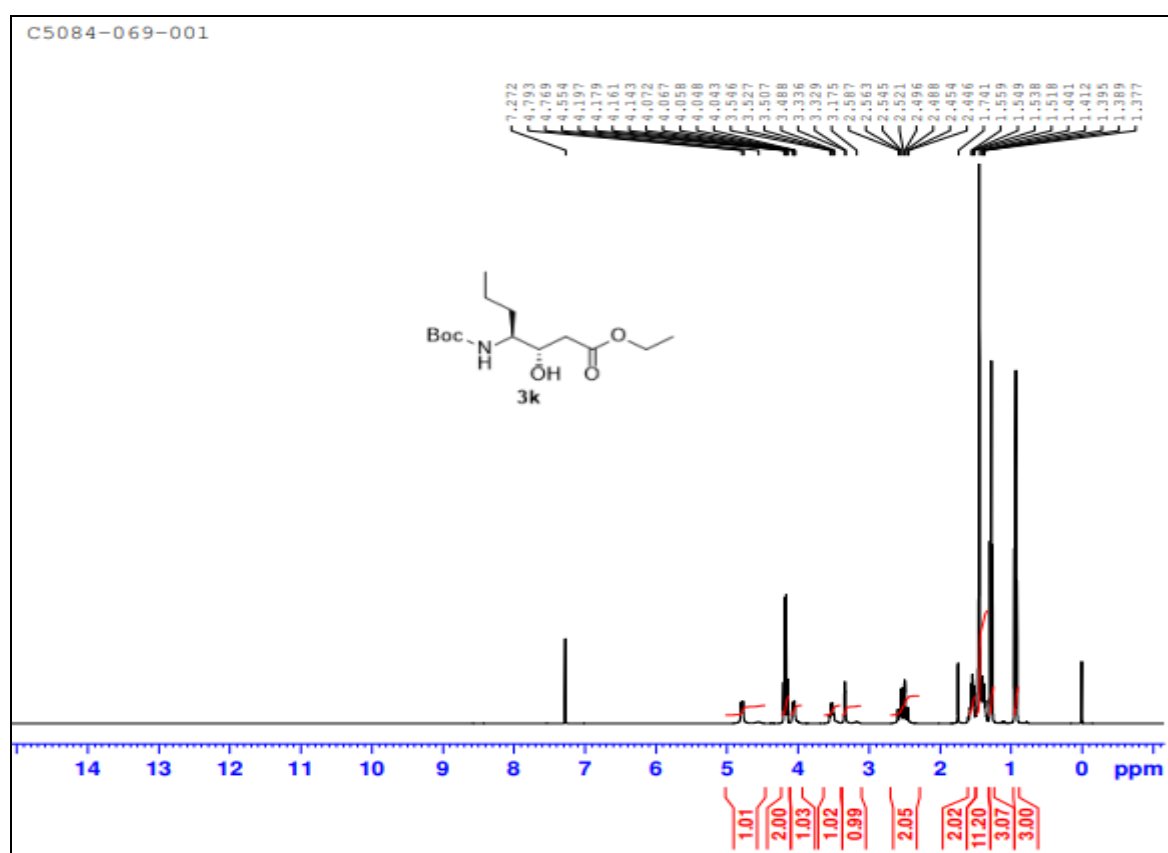


Figure S94: 400 MHz ¹H-NMR spectrum of compound **3k** in CDCl₃

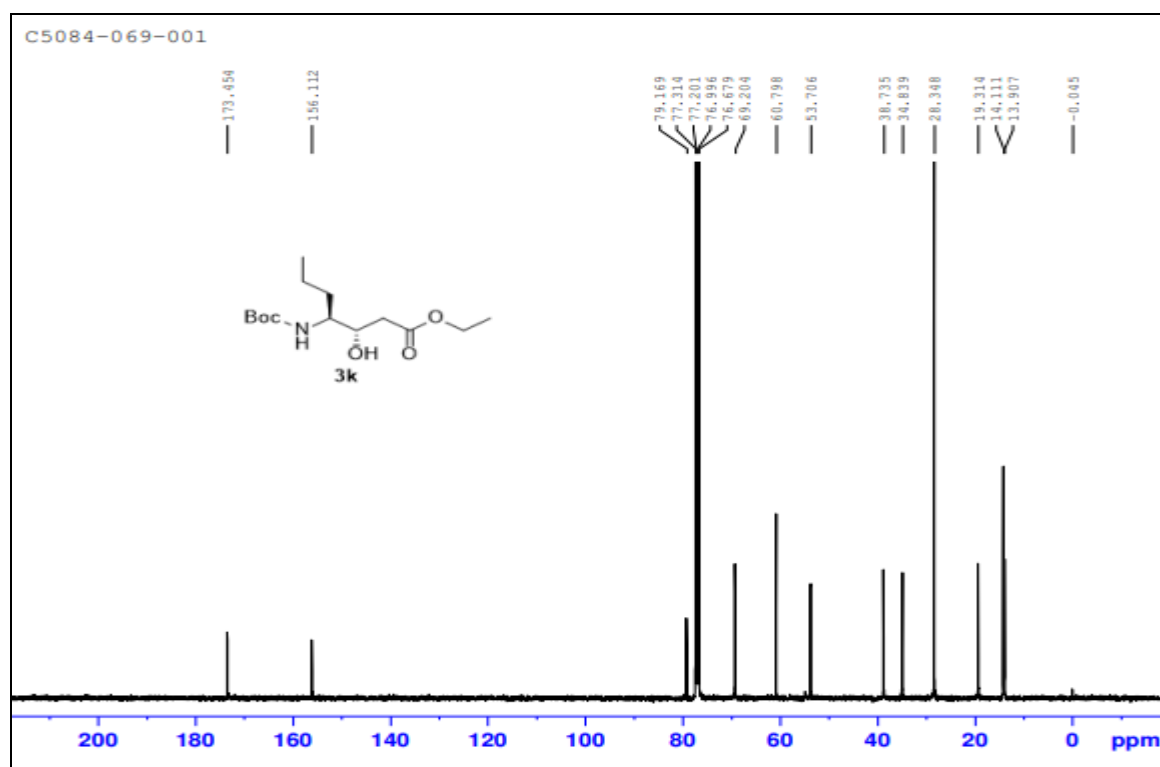


Figure S95: 100 MHz ^{13}C -NMR Spectrum of compound **3 k** in CDCl_3

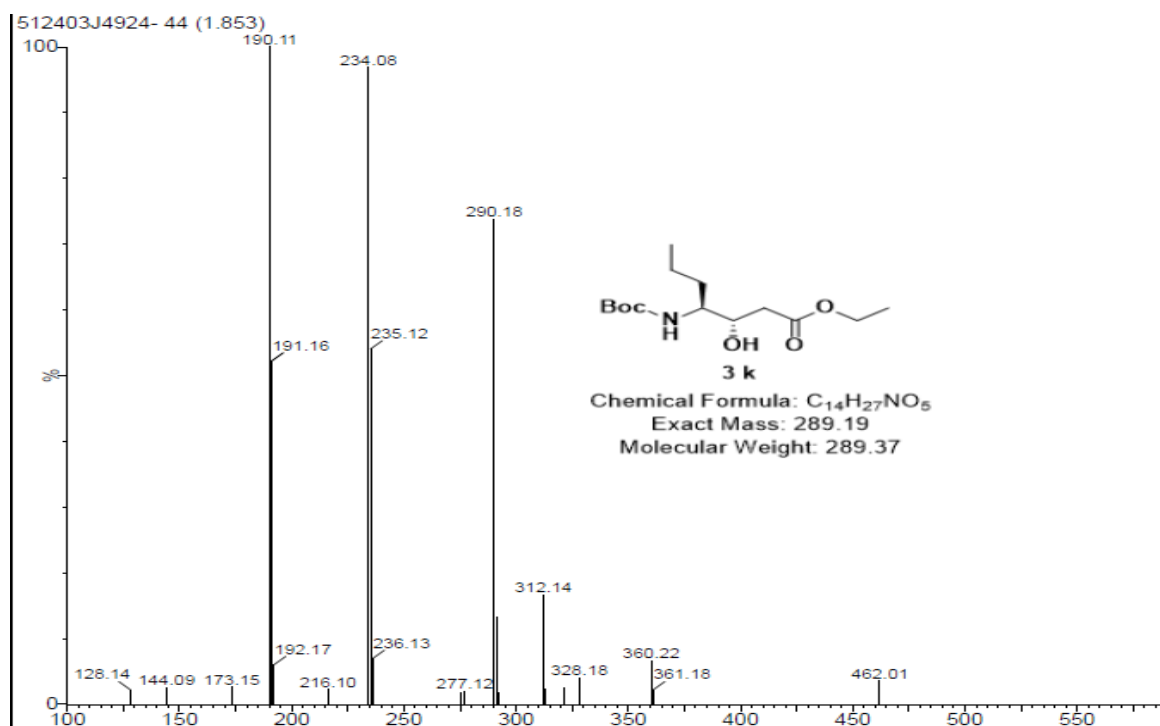


Figure S96: Mass spectrum of compound **3 k**

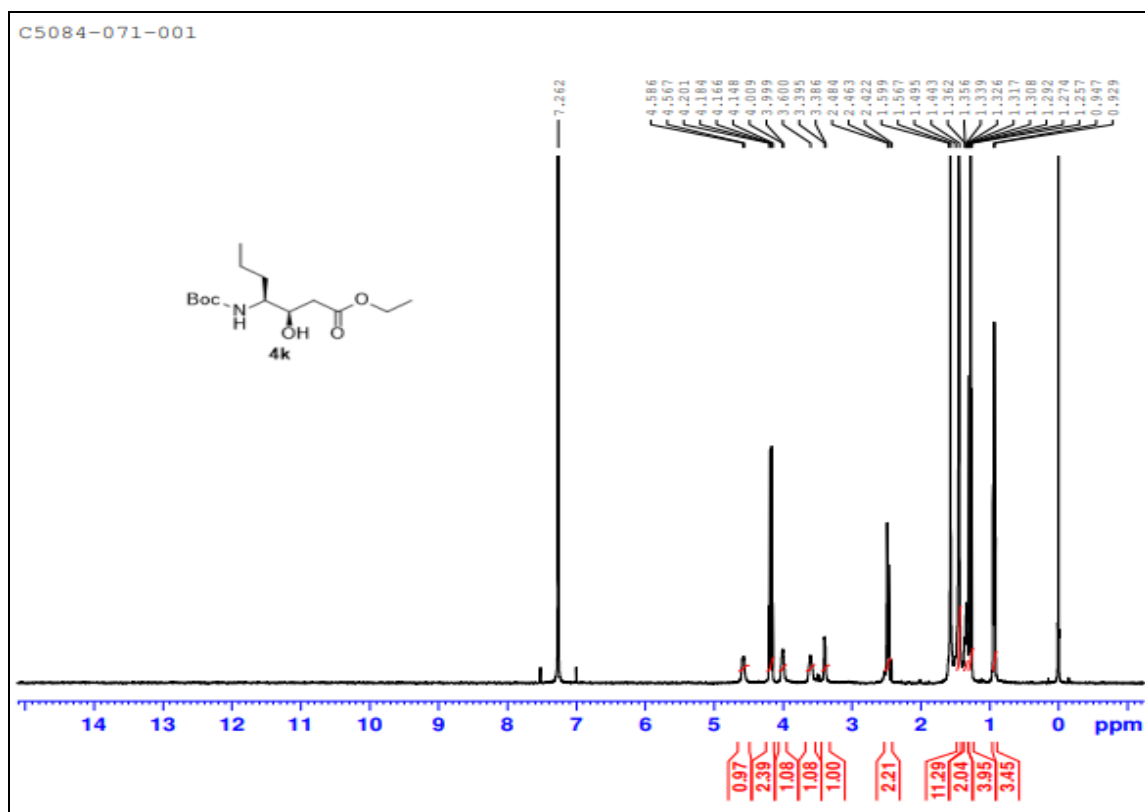


Figure S97: 400 MHz ¹H-NMR spectrum of compound **4 k** in CDCl₃

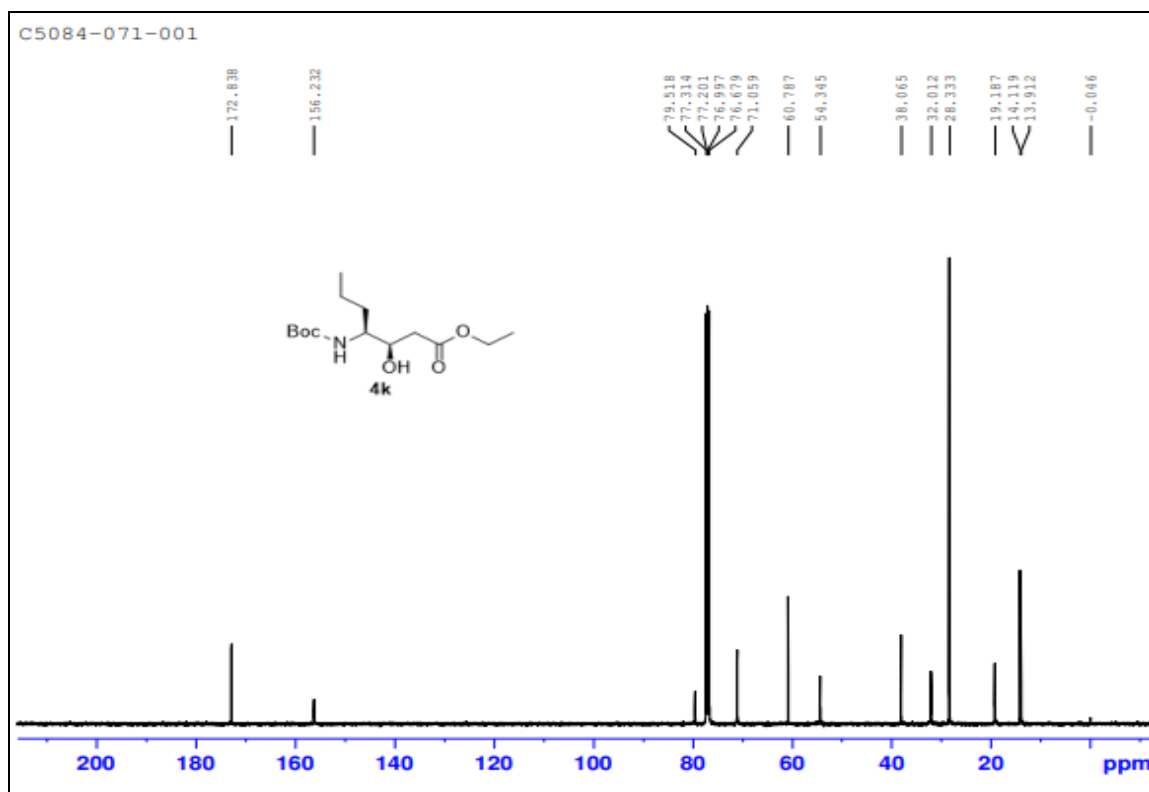


Figure S98: 100 MHz ¹³C-NMR Spectrum of compound **4 k** in CDCl₃

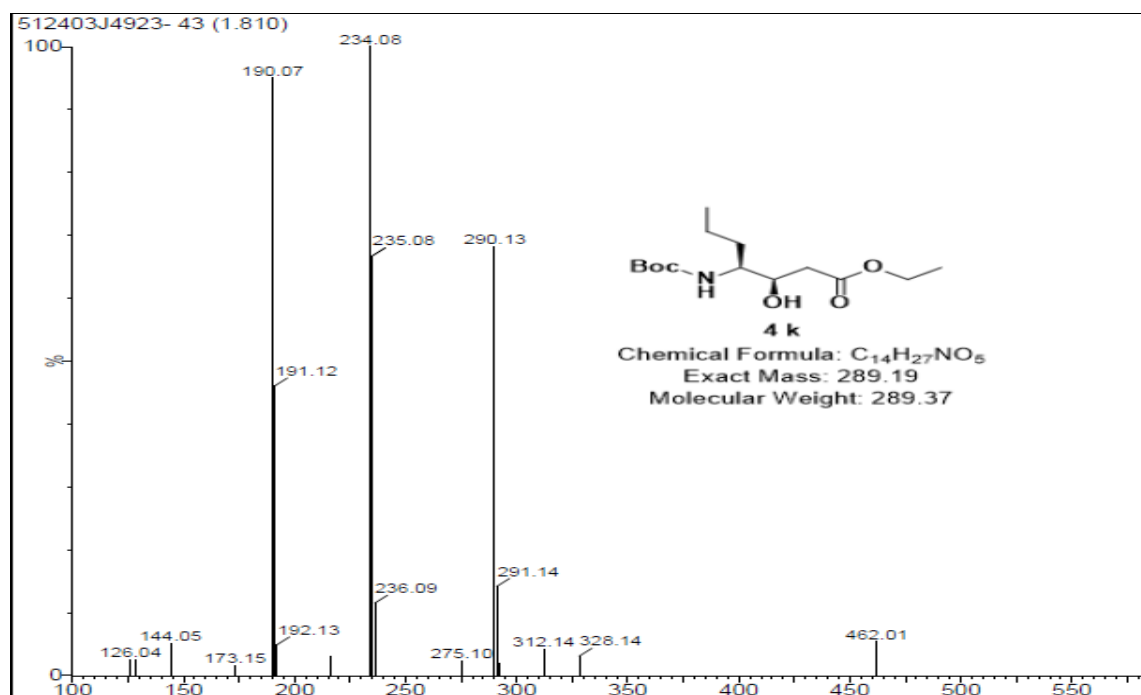


Figure S99: Mass spectrum of compound **4 k**

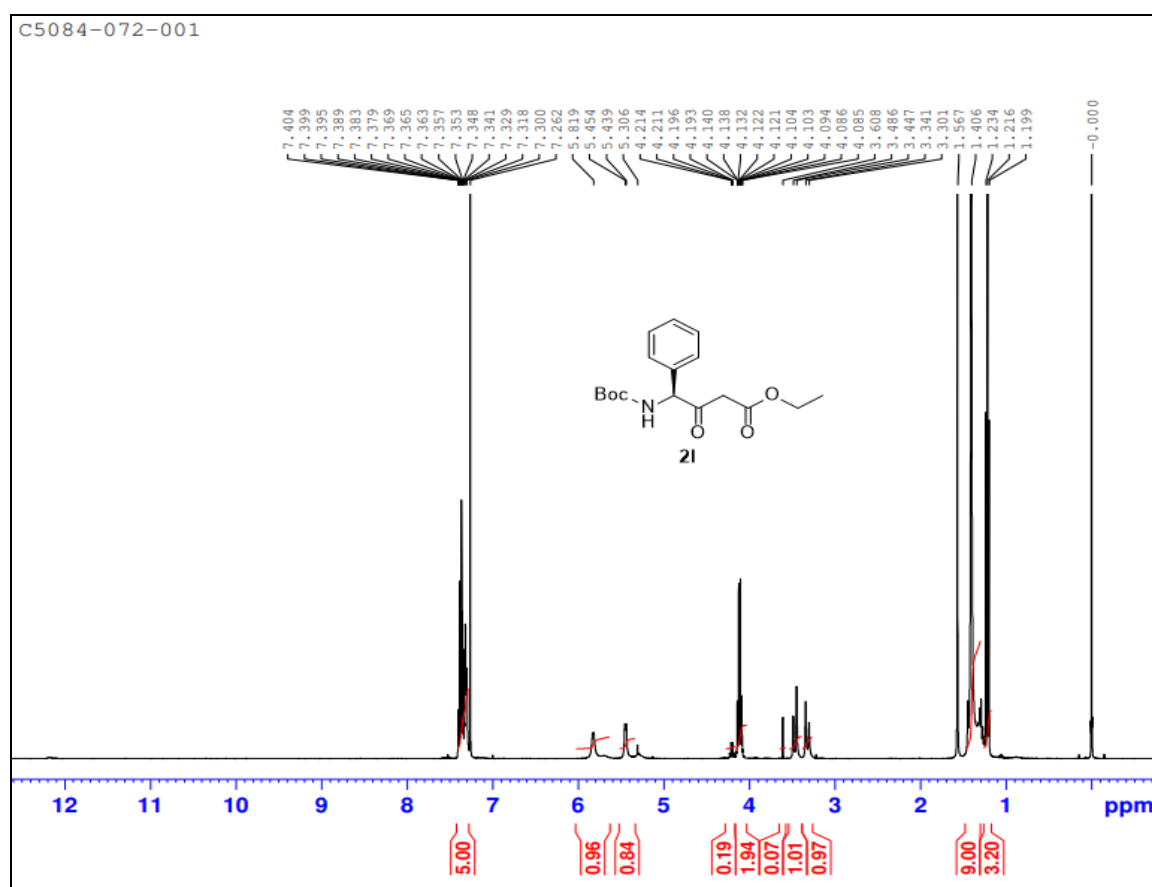


Figure S100: 400 MHz ^1H -NMR spectrum of compound **2 l** in CDCl_3