



Synthesis and Antiproliferative Effect of New Alkyne-Tethered Vindoline Hybrids Containing Pharmacophoric Fragments

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Supporting Information

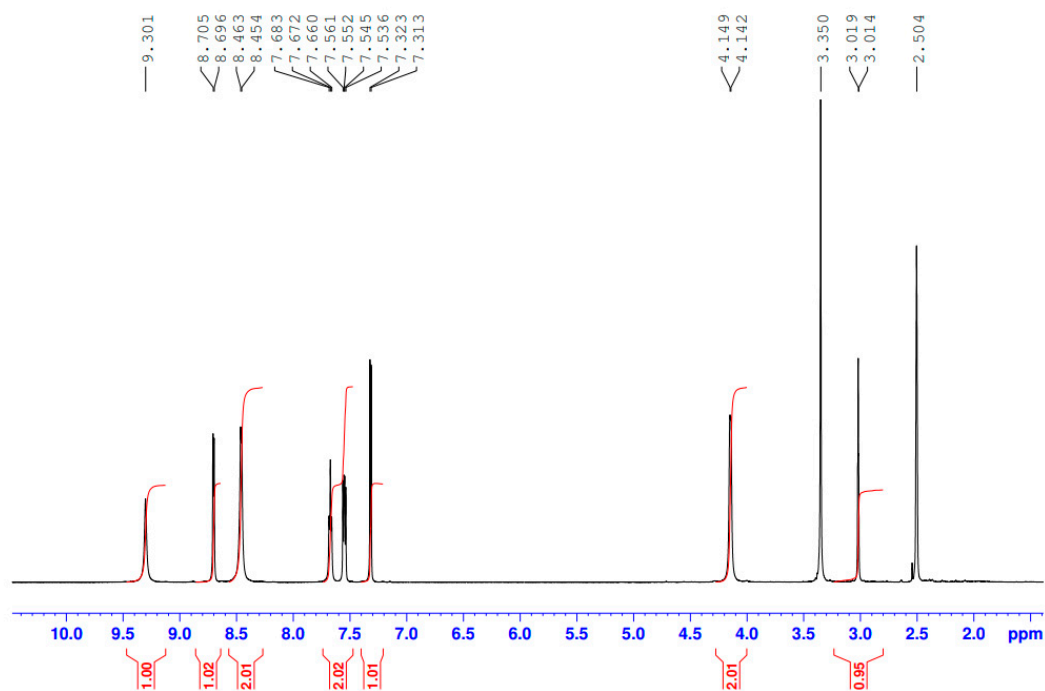
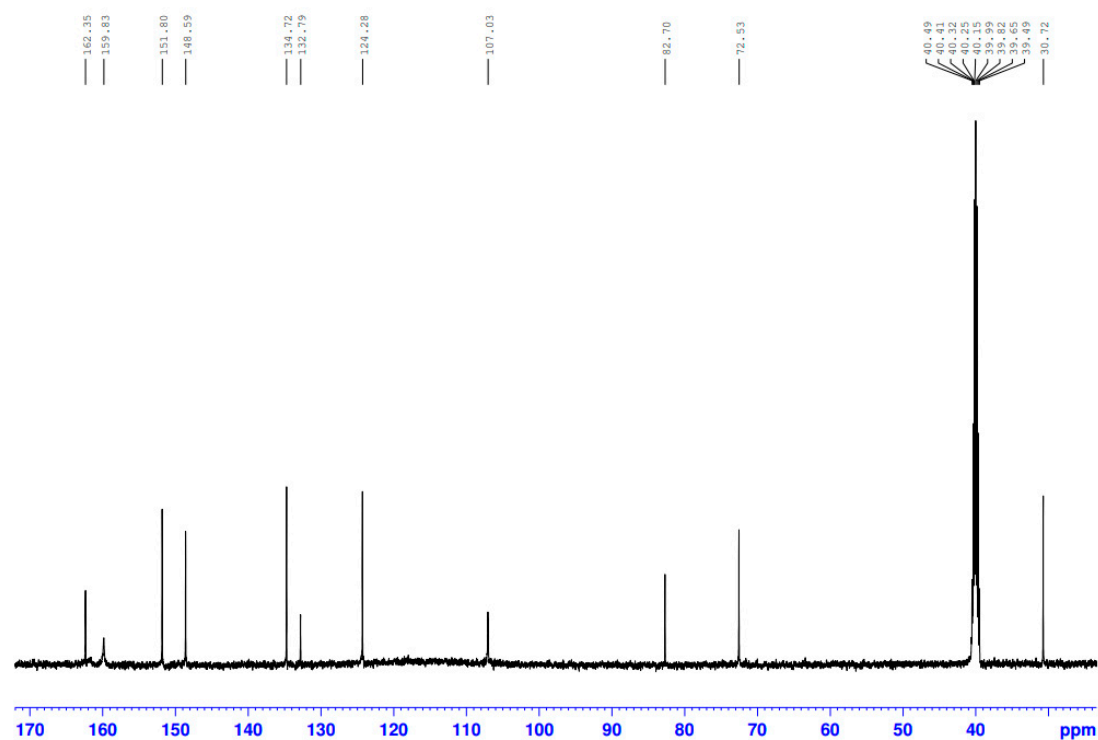
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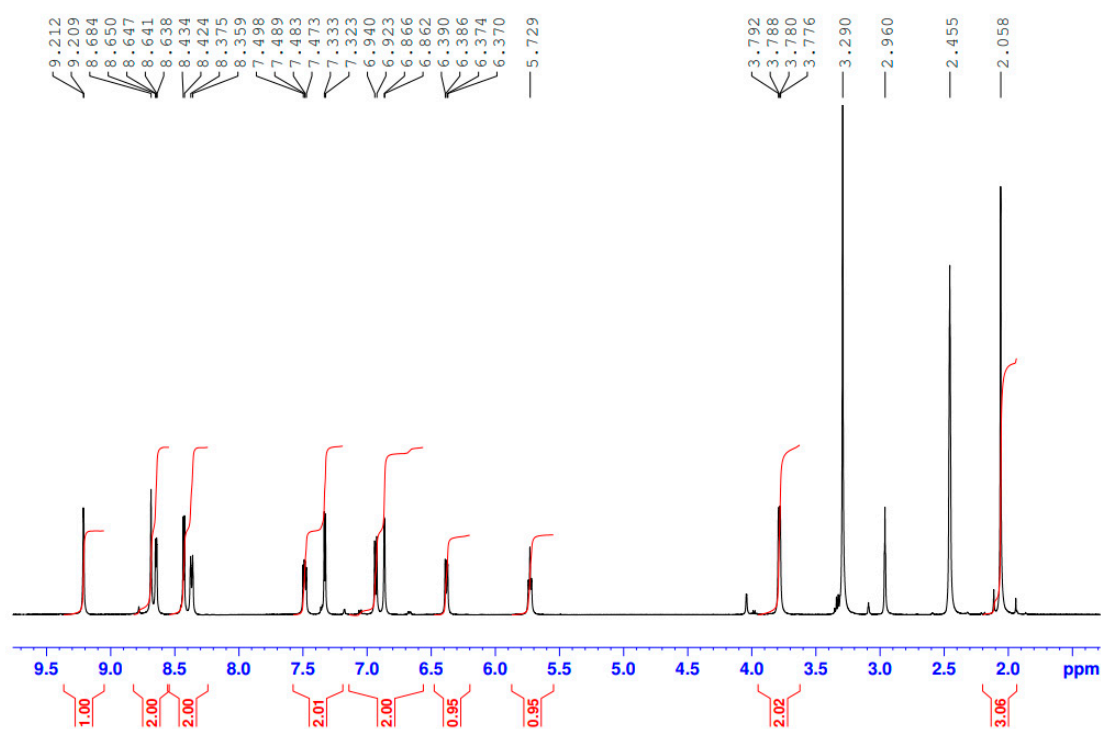
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1 Copies of NMR spectra

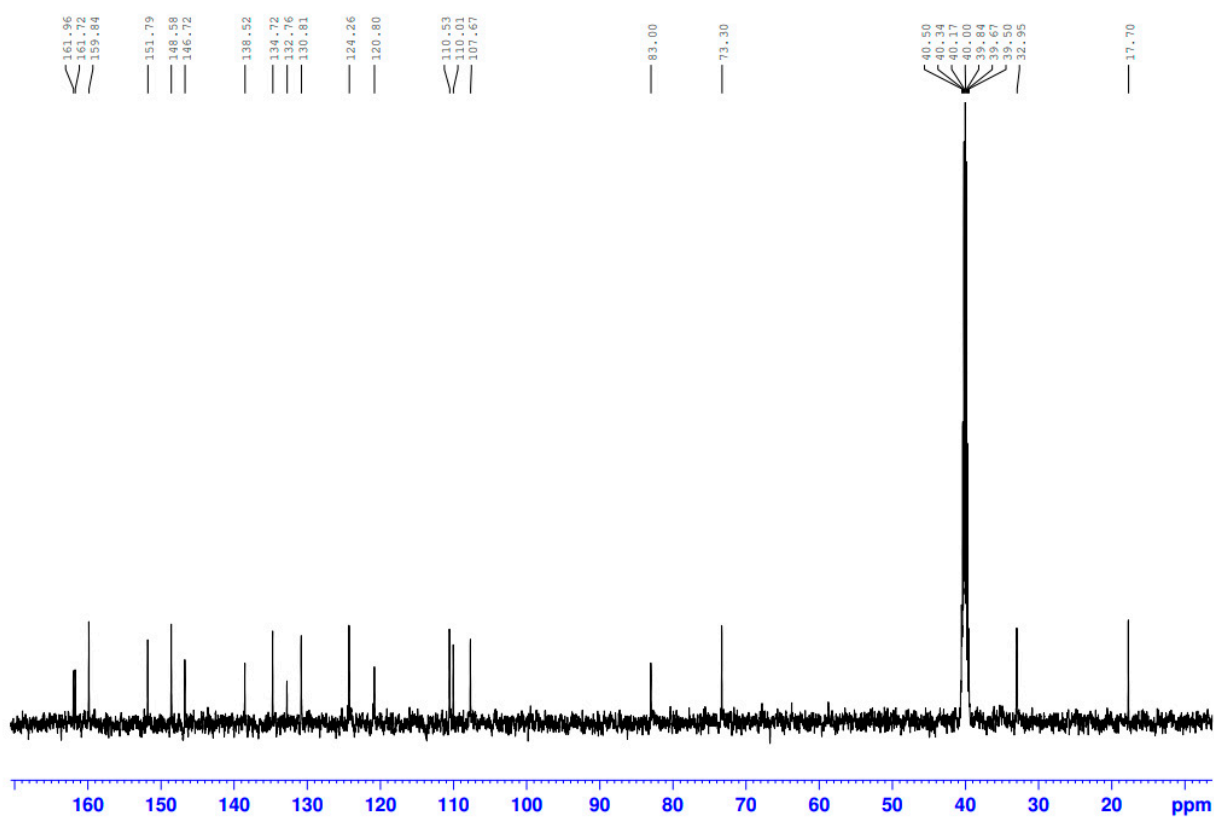
1.1 NMR spectra of the novel propargylated pharmacophore fragments

¹H-NMR of **10** (500 MHz, DMSO-d₆)

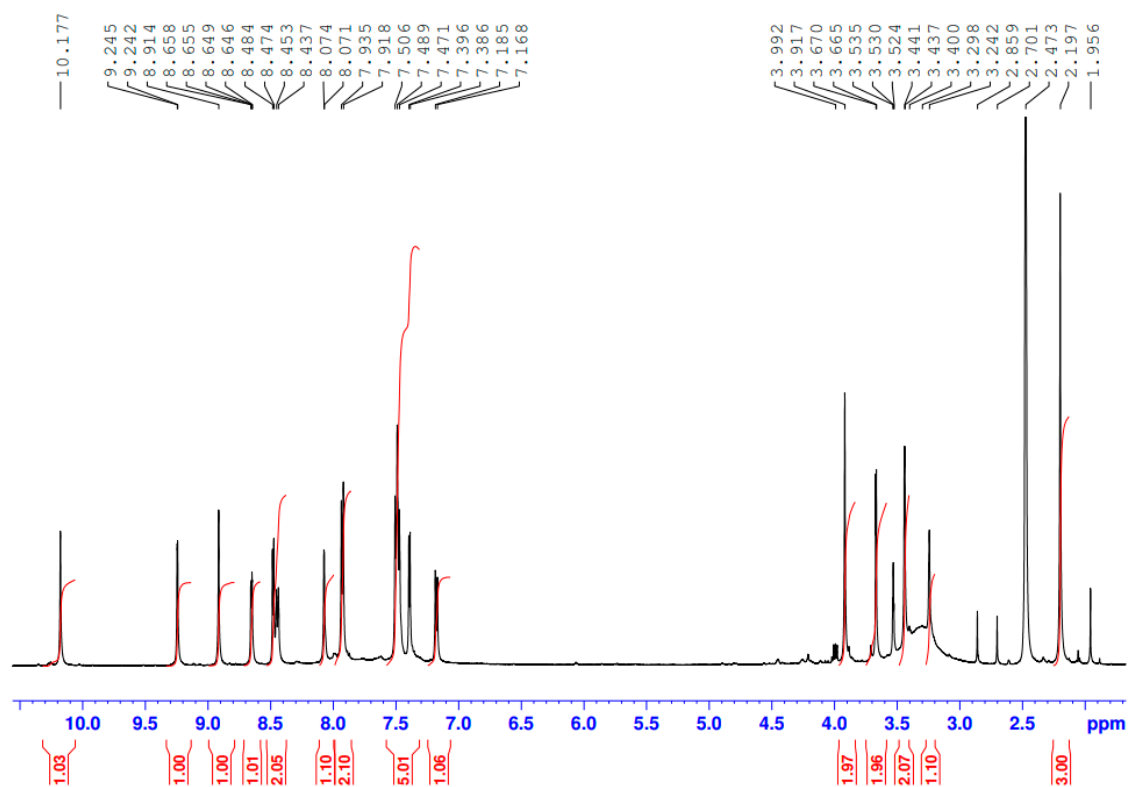
¹³C-NMR of **10** (125 MHz, DMSO-d₆)¹H-NMR of **15** (500 MHz, DMSO-d₆)



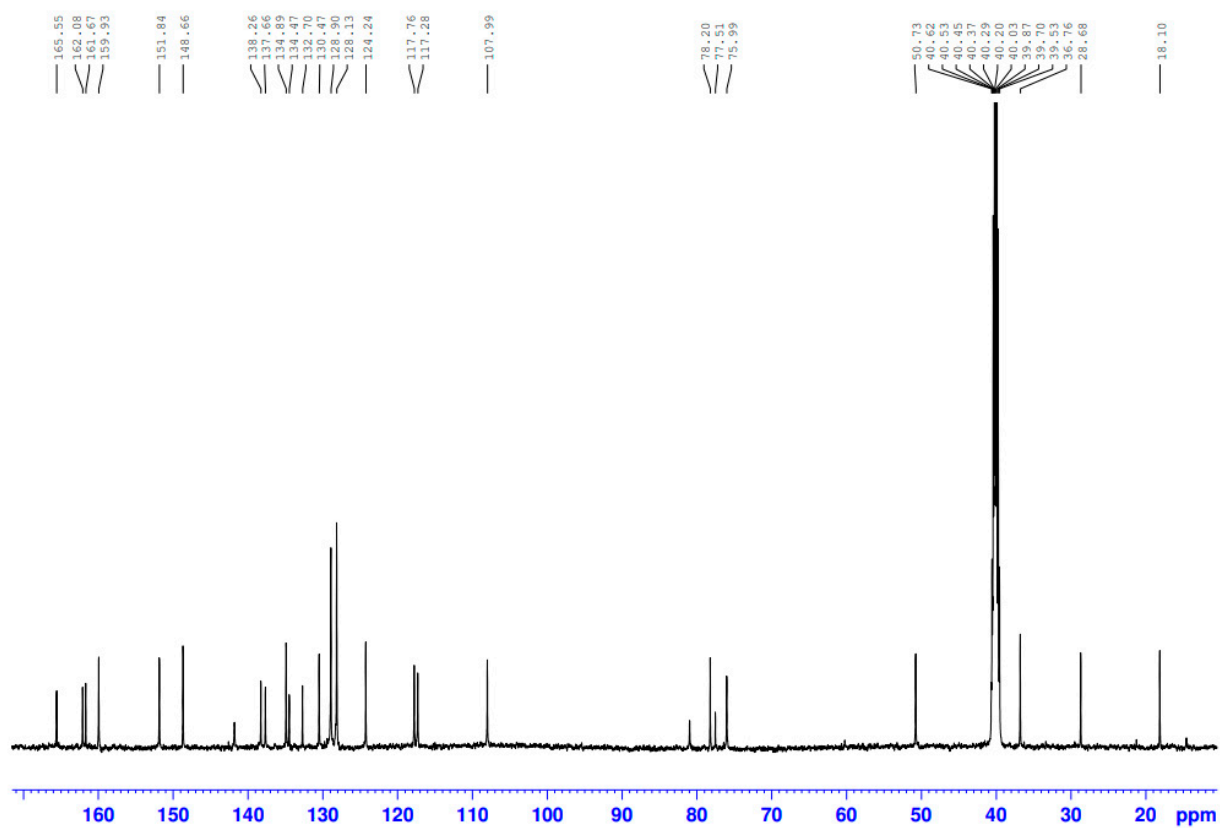
¹³C-NMR of **15** (125 MHz, DMSO-d₆)

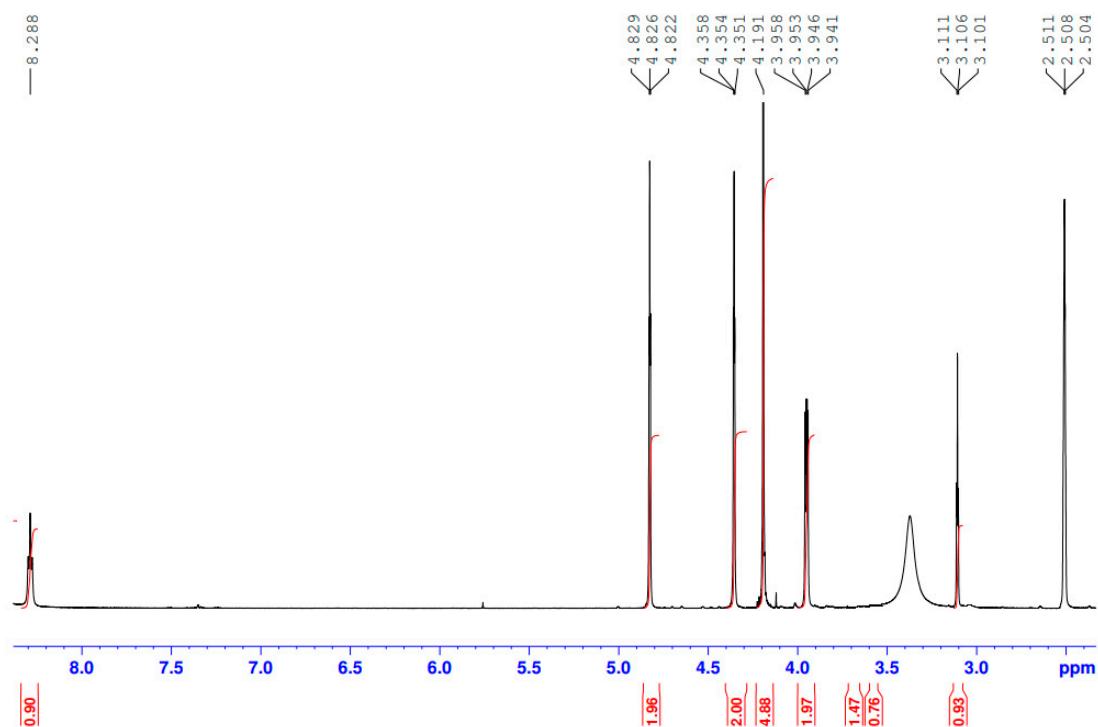
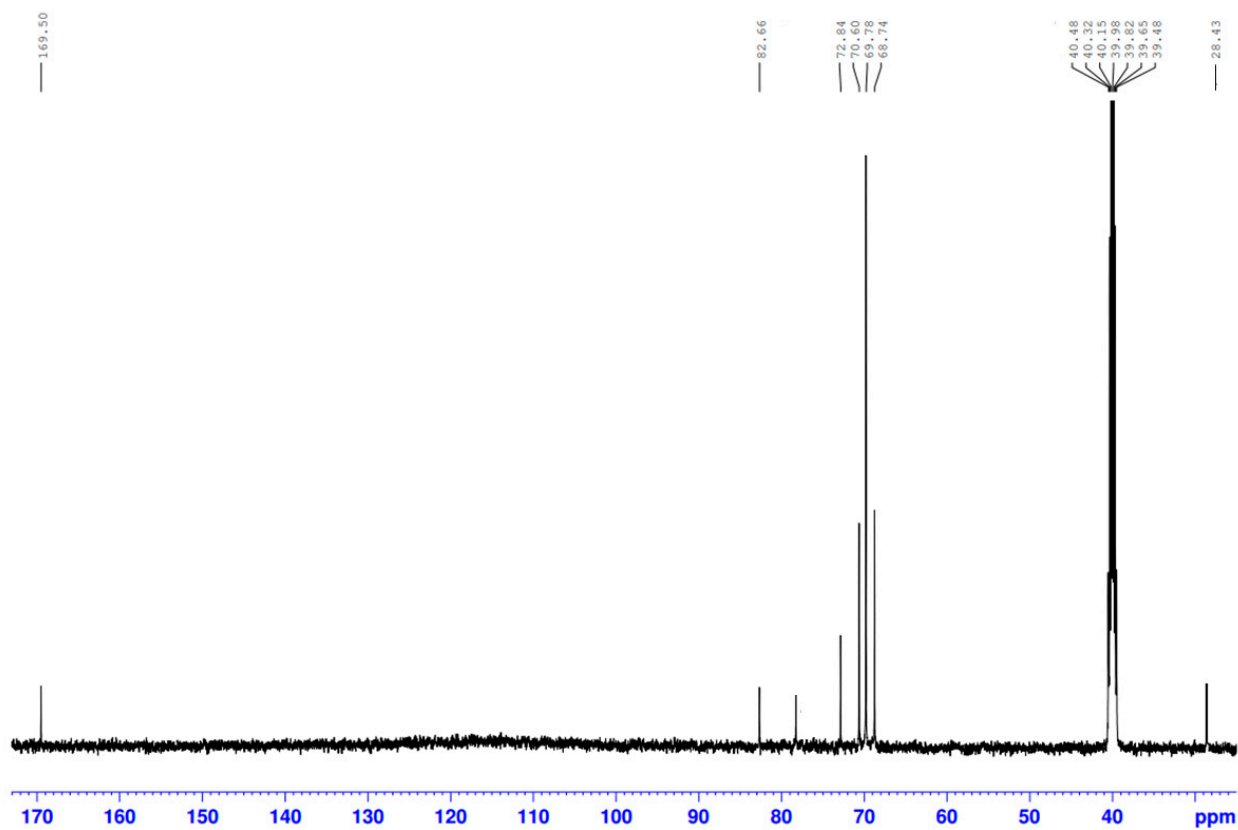


¹H-NMR of **19** (500 MHz, DMSO-d₆)



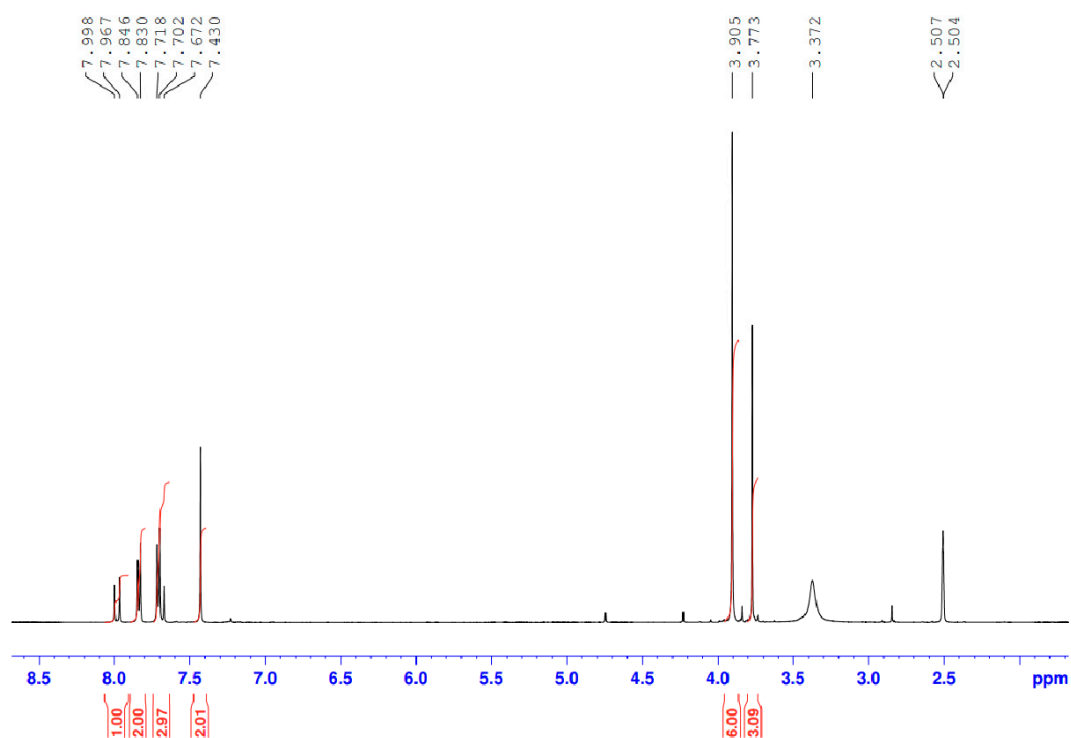
¹³C-NMR of **19** (125 MHz, DMSO-d₆)



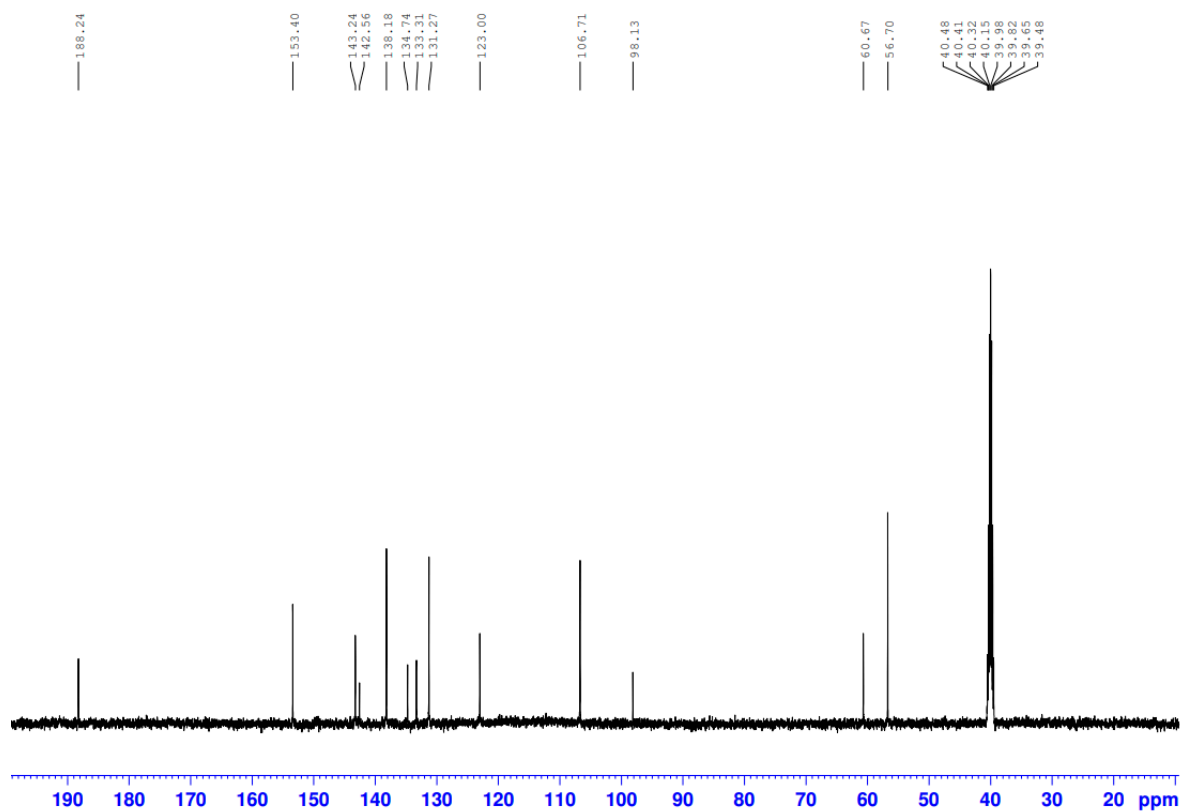
¹H-NMR of **27** (500 MHz, DMSO-d₆)¹³C-NMR of **27** (125 MHz, DMSO-d₆)

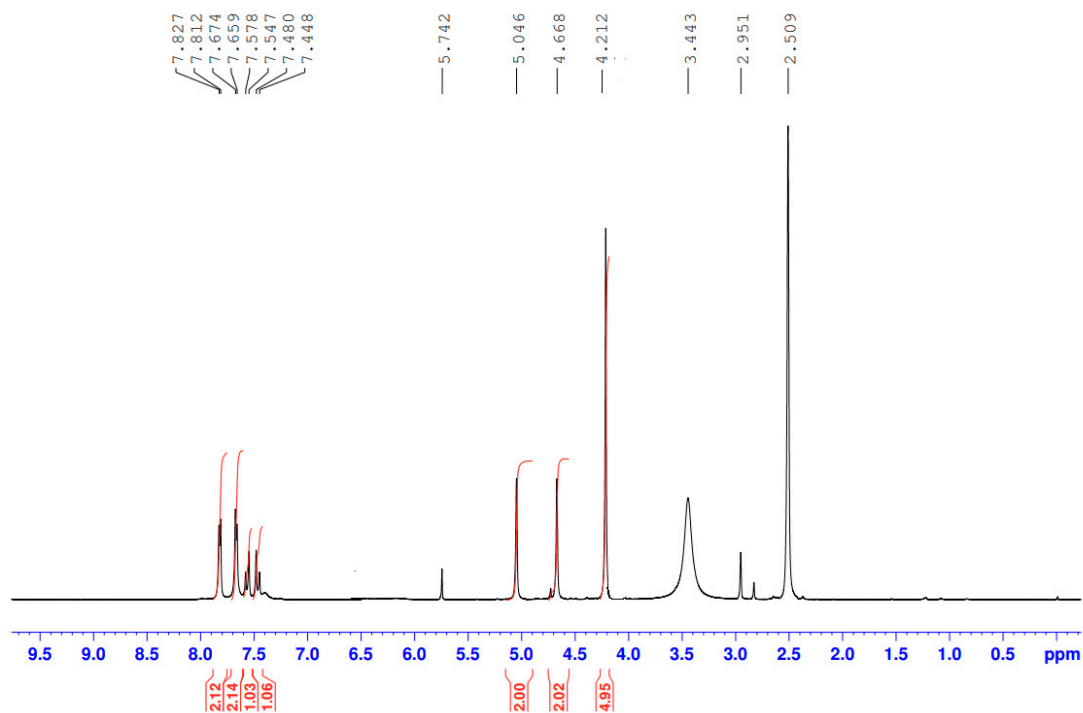
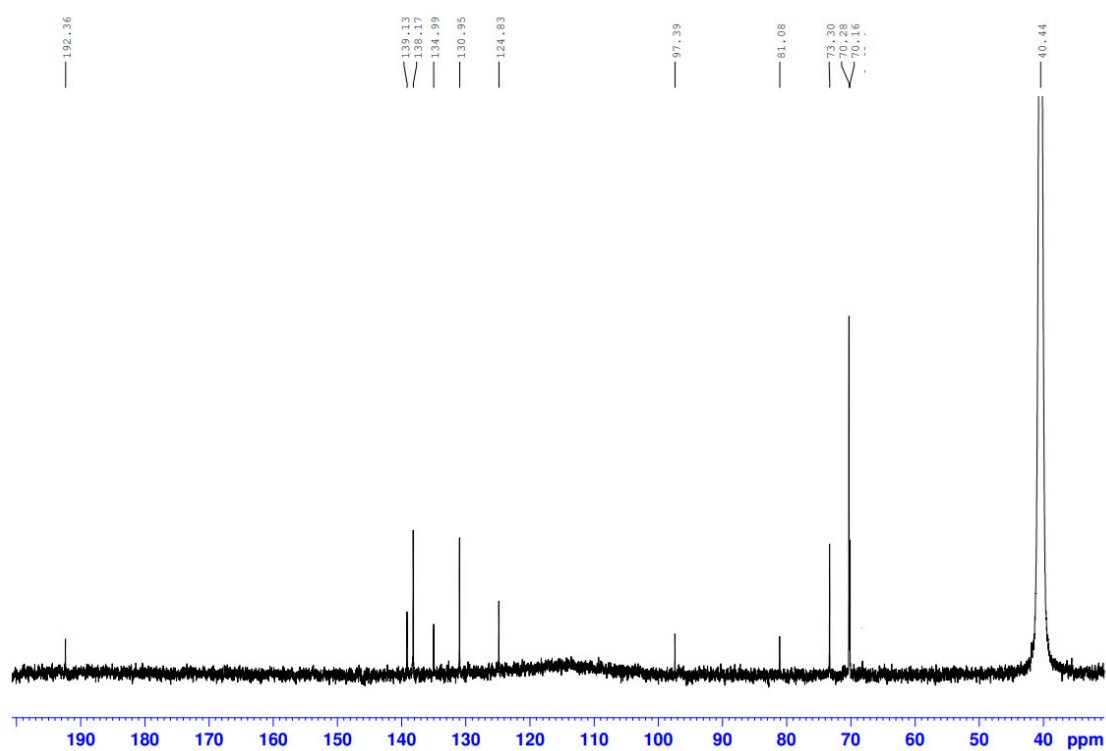
1.2 NMR spectra of the novel iodinated chalcones

^1H -NMR of **34** (500 MHz, DMSO- d_6)



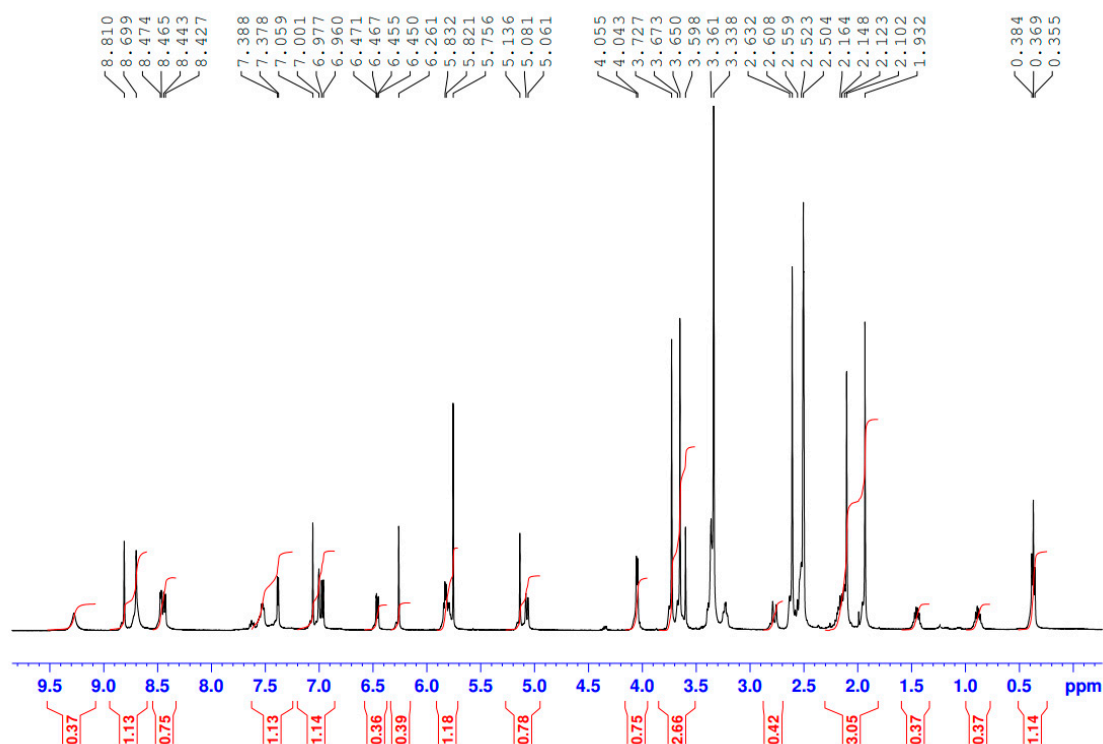
^{13}C -NMR of **34** (500 MHz, DMSO- d_6)



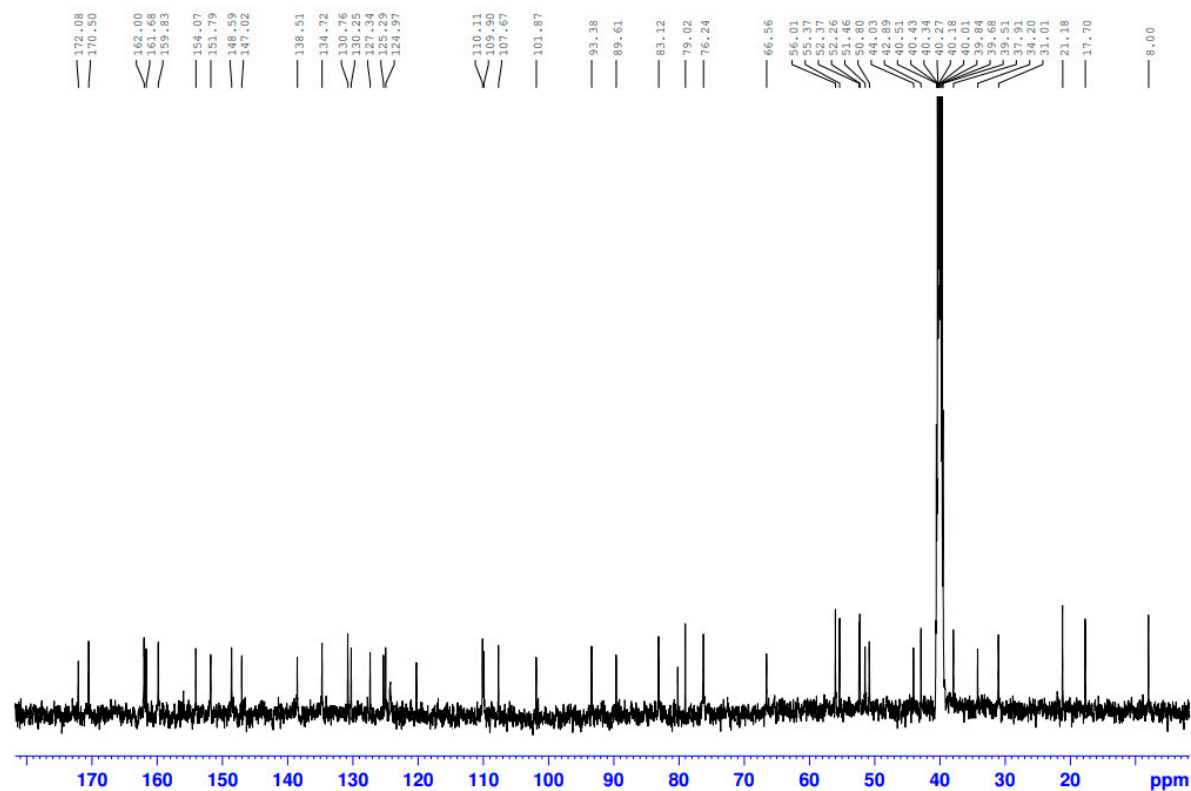
¹H-NMR of **35** (500 MHz, DMSO-d₆)¹³C-NMR of **35** (500 MHz, DMSO-d₆)

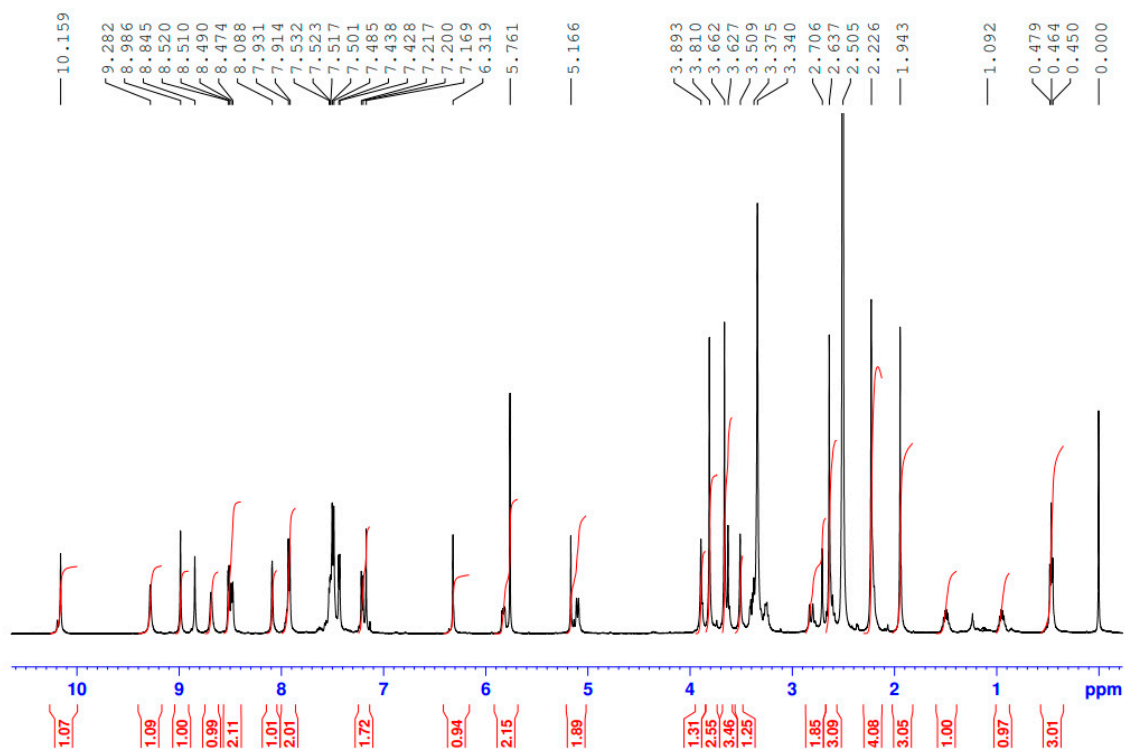
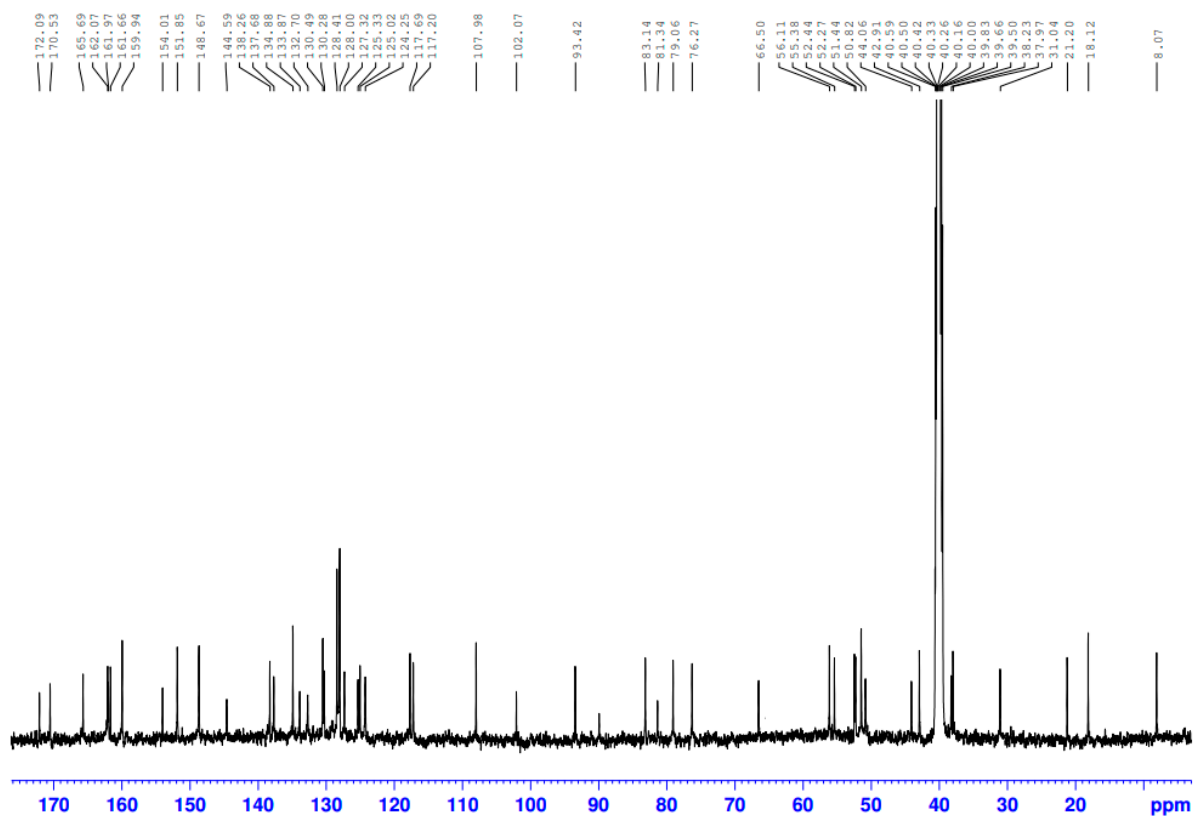
1.3 NMR spectra of the novel alkyne-tethered vindoline hybrids

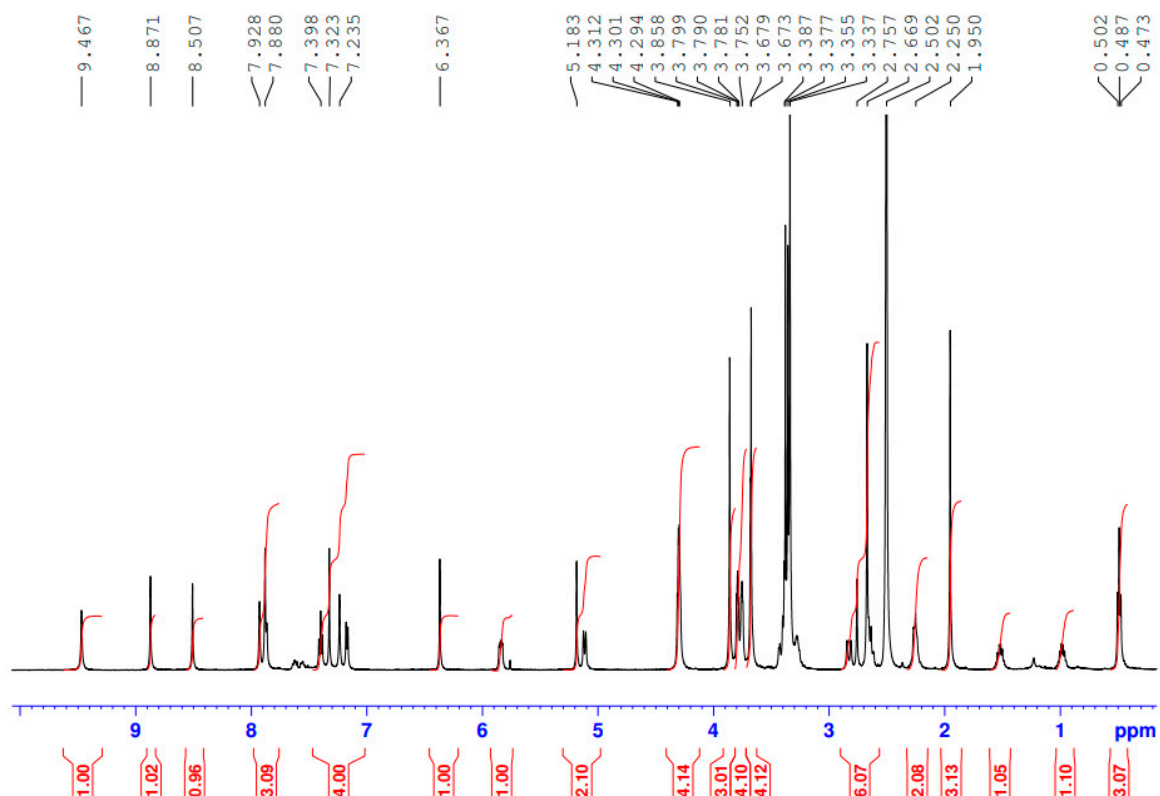
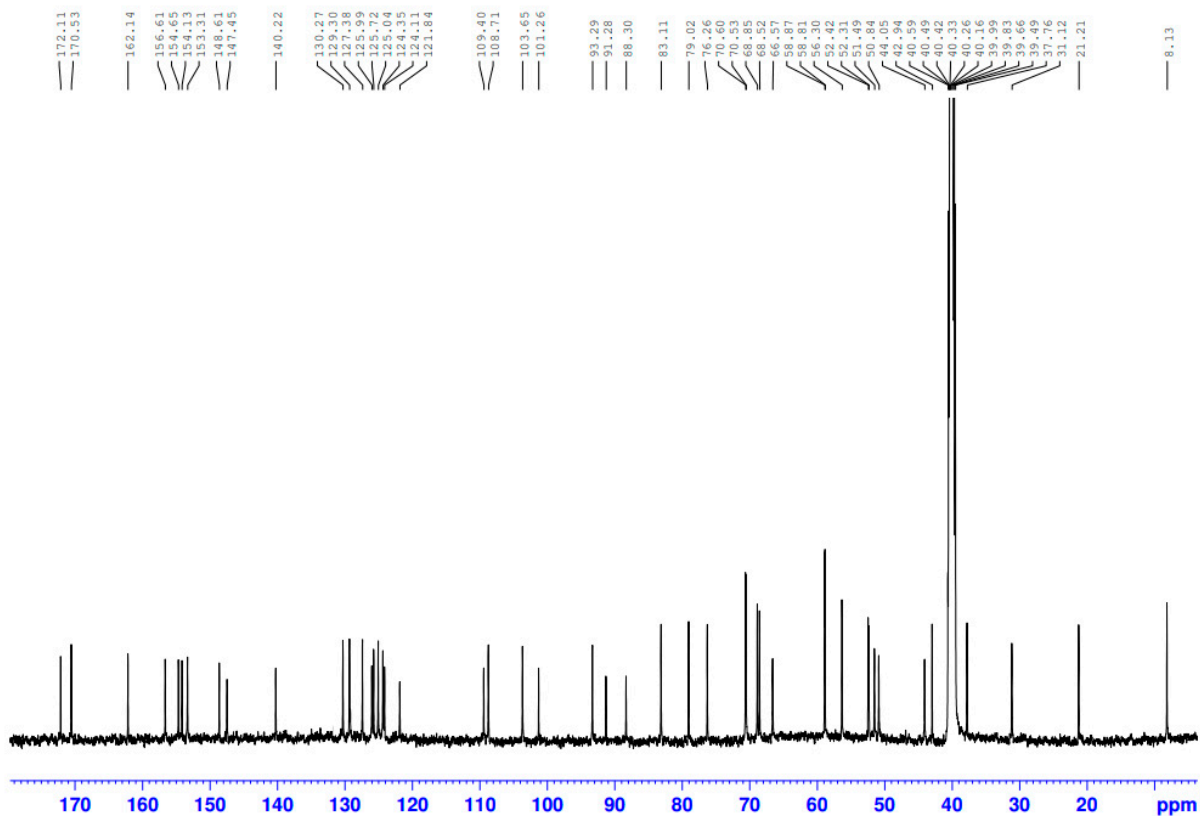
^1H -NMR of **22** (500 MHz, DMSO- d_6)

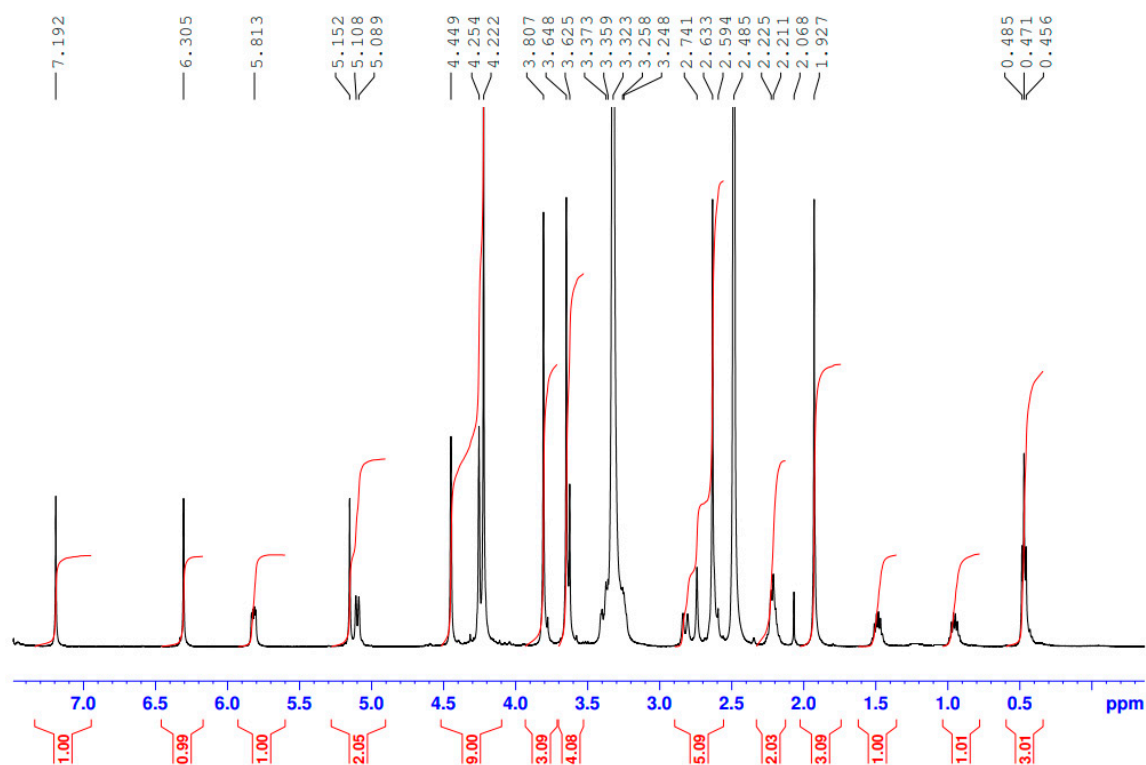
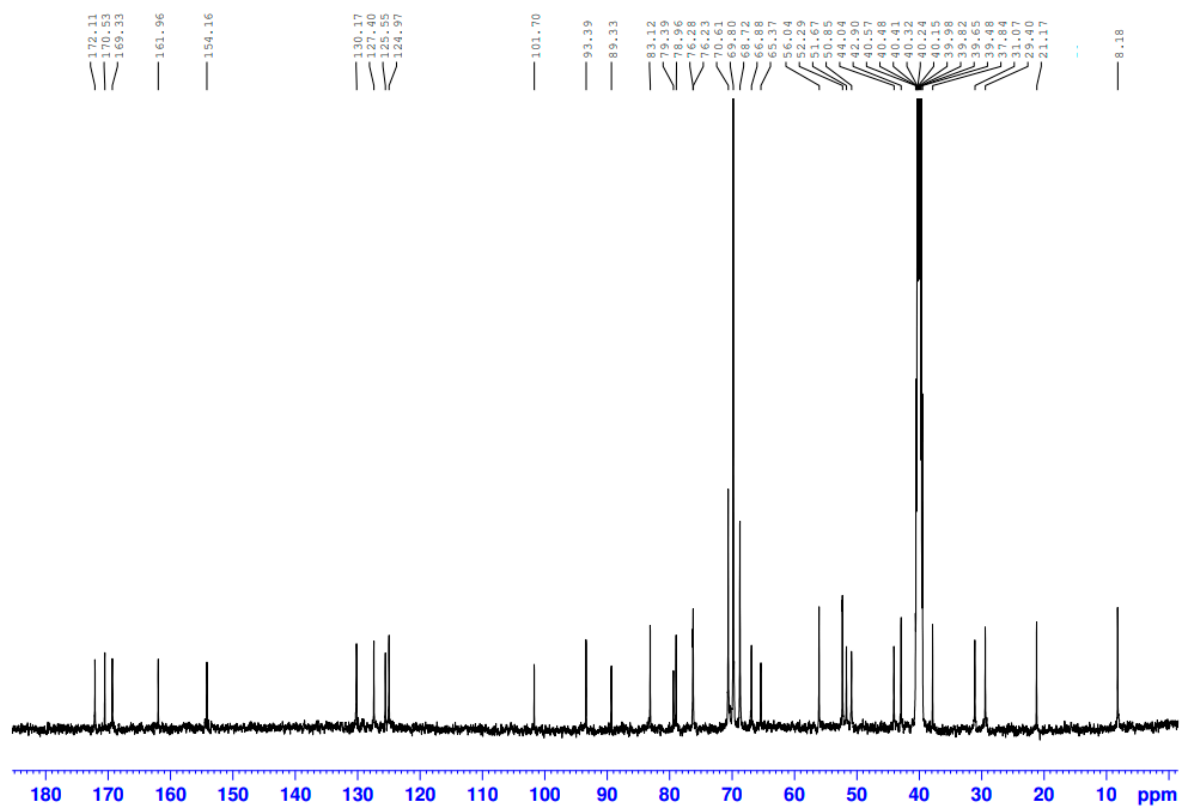


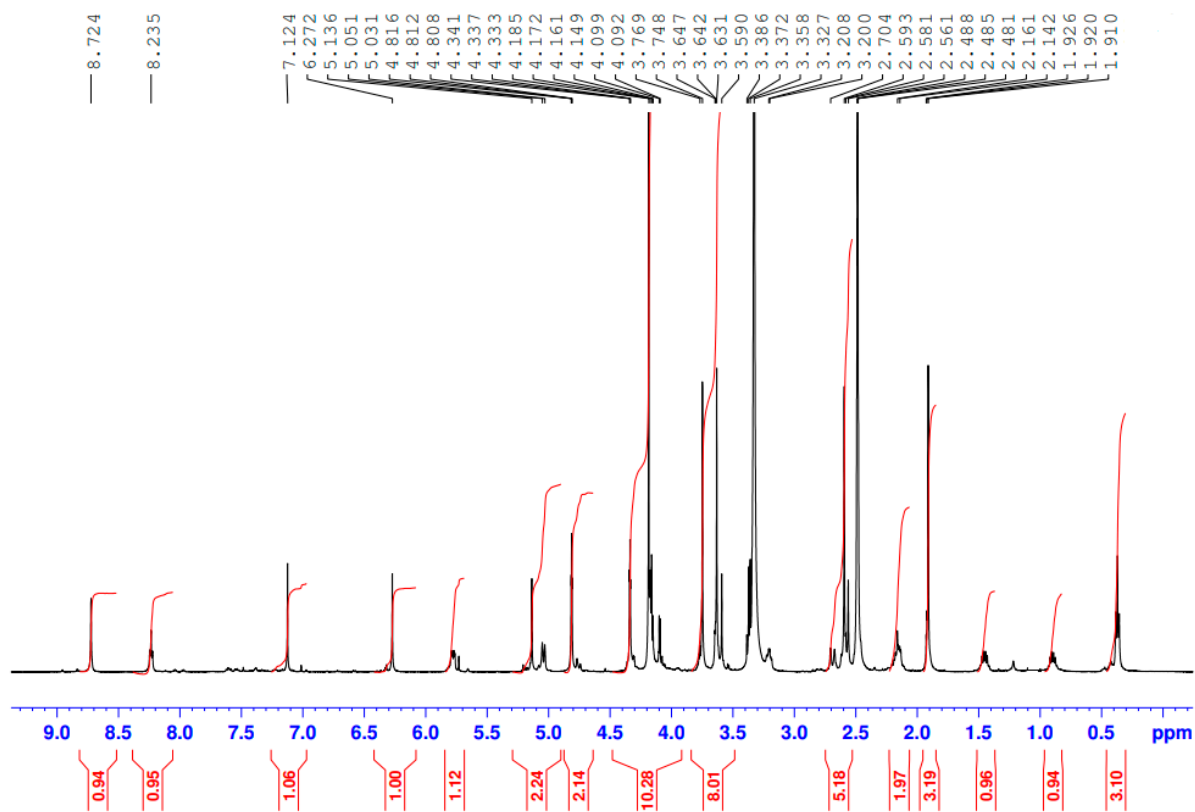
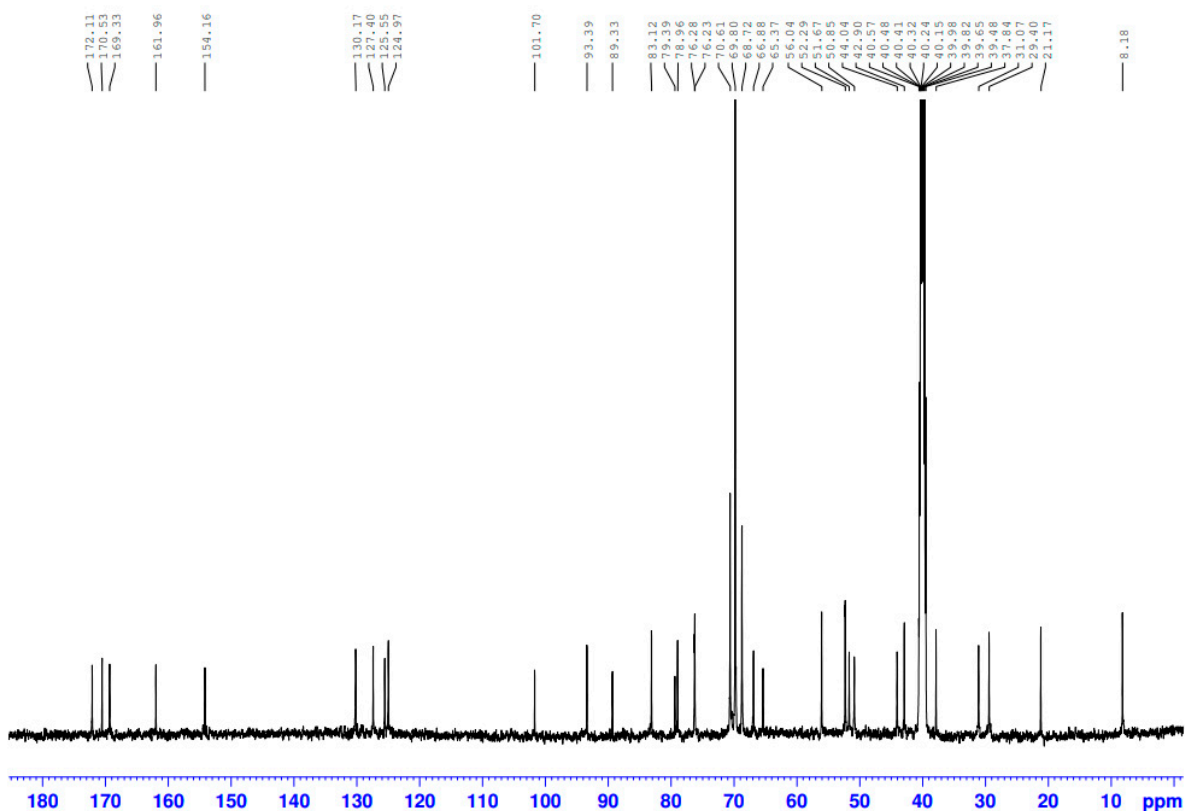
^{13}C -NMR of **22** (125 MHz, DMSO- d_6)

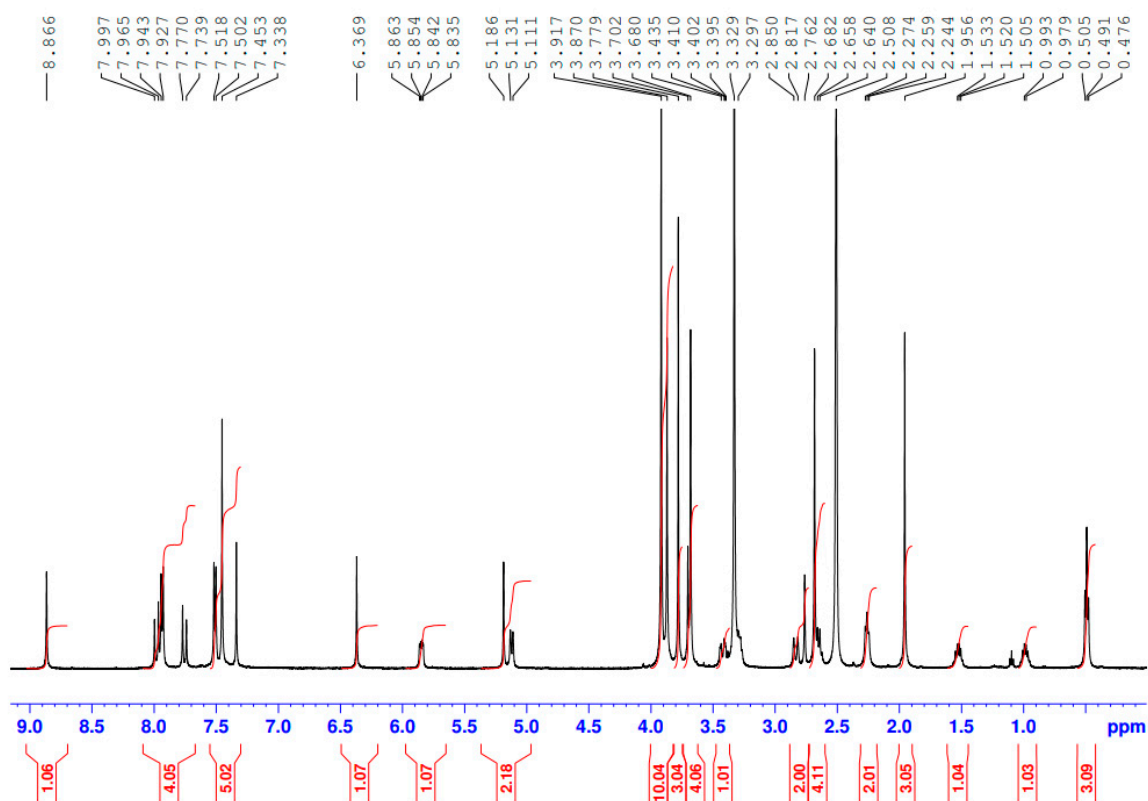
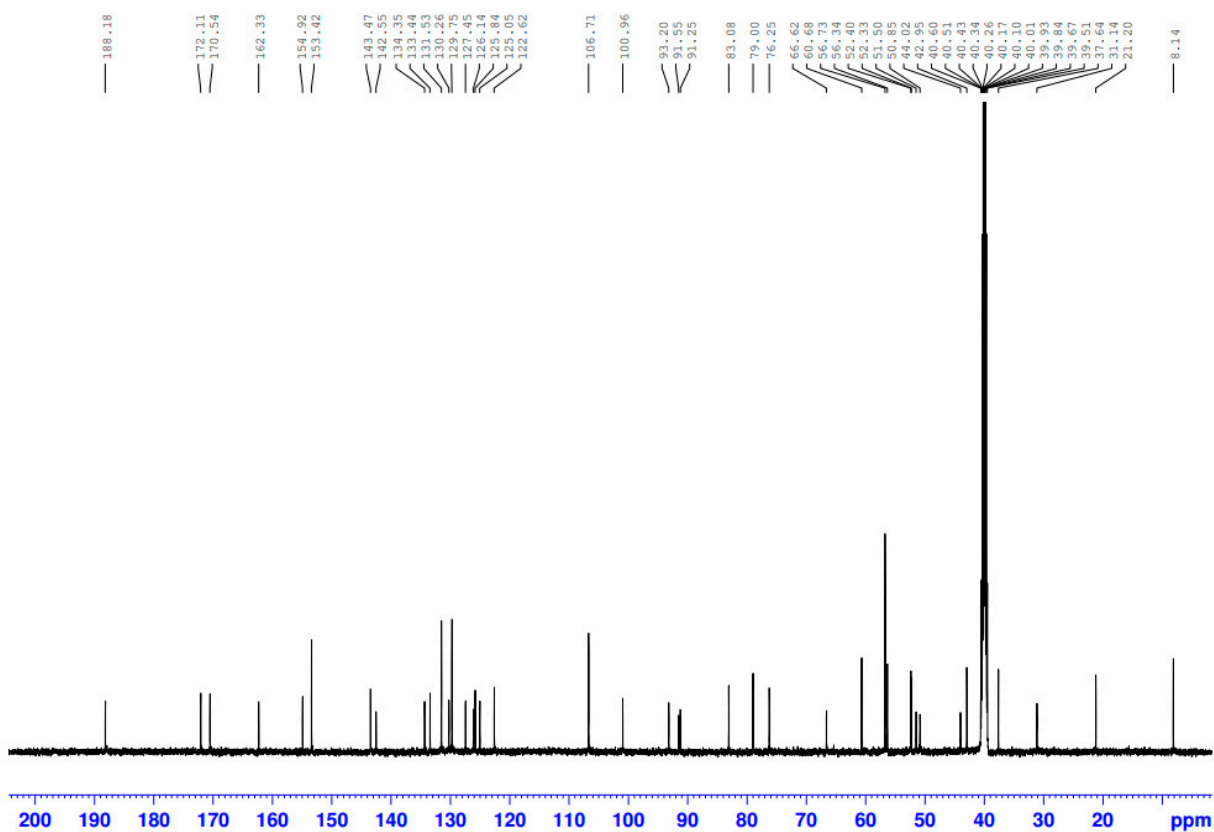


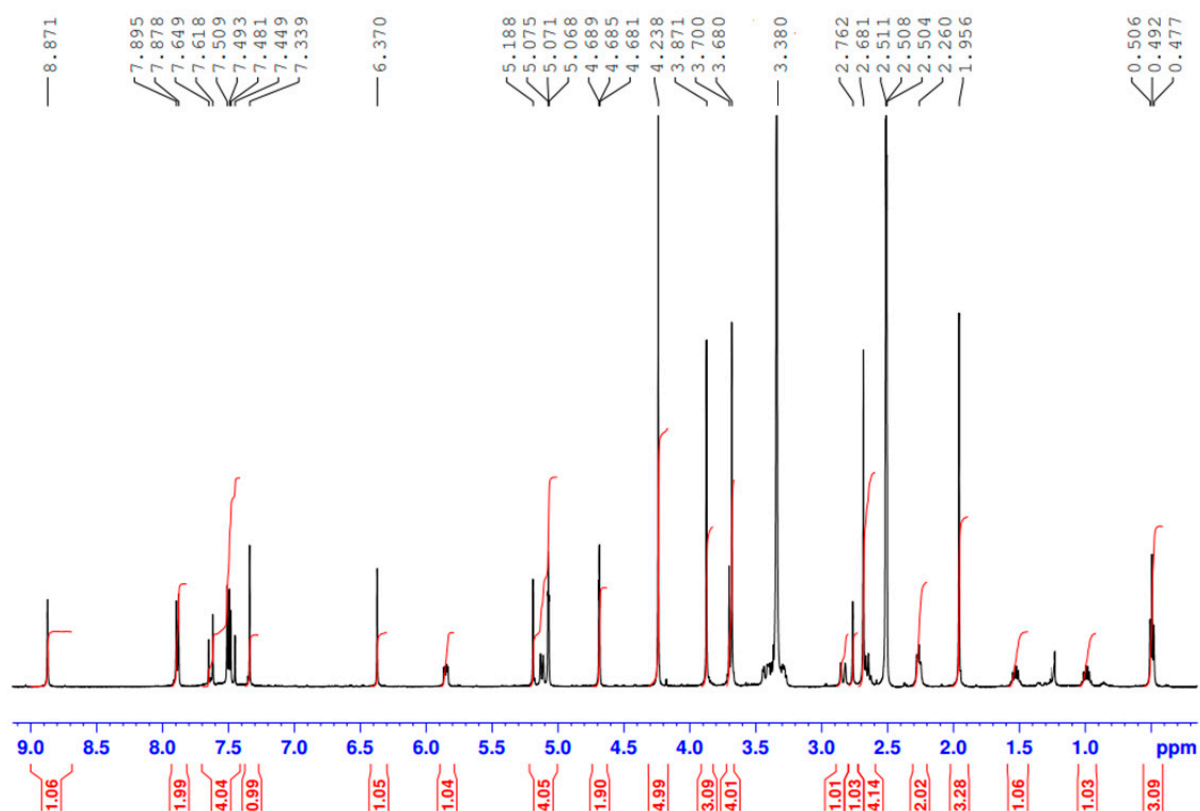
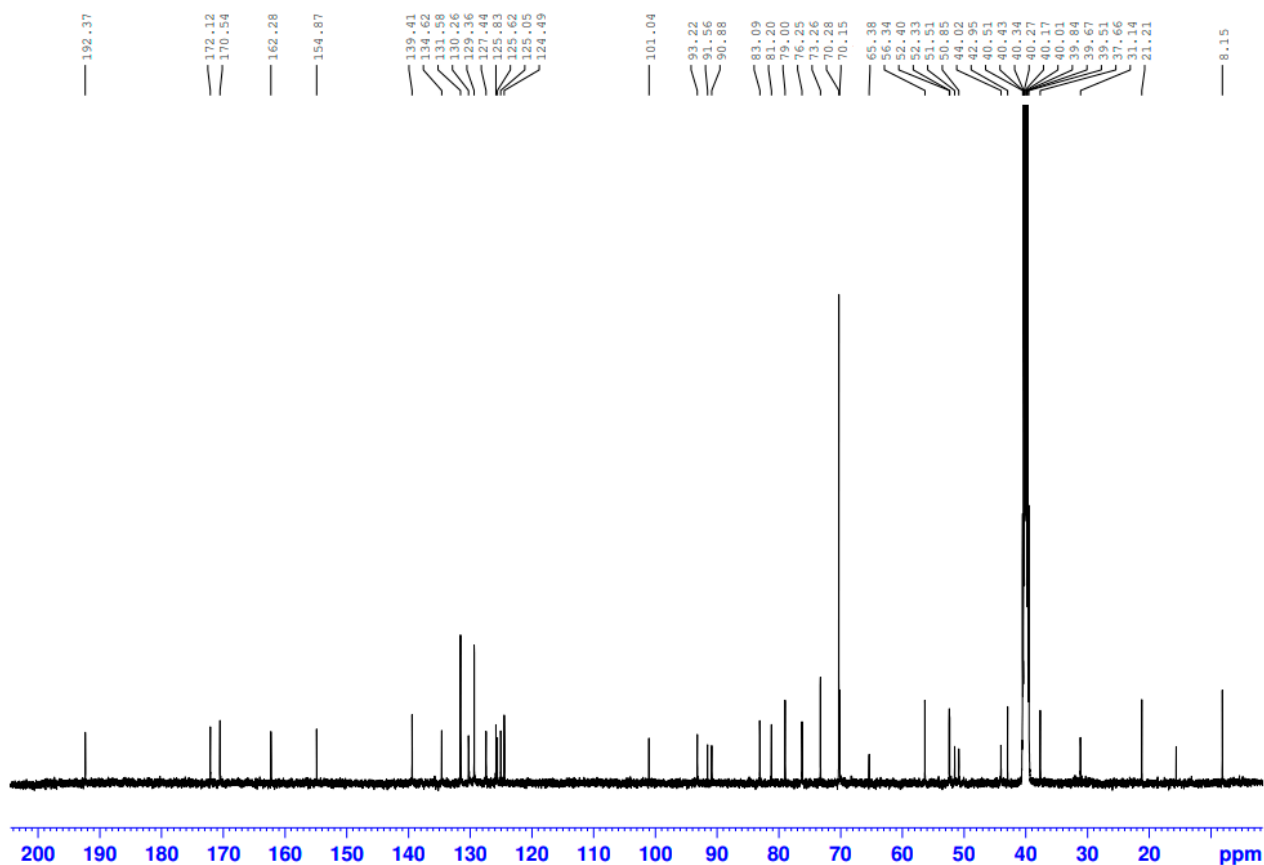
¹H-NMR of **23** (500 MHz, DMSO-d₆)¹³C-NMR of **23** (125 MHz, DMSO-d₆)

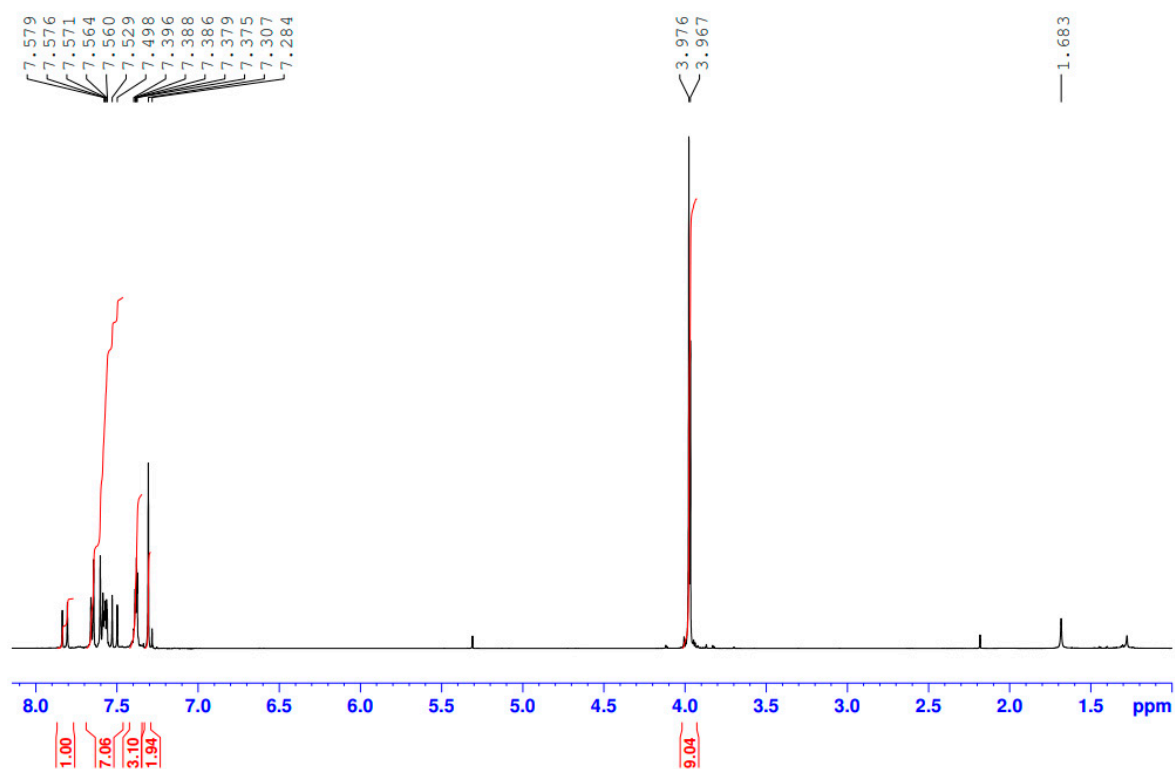
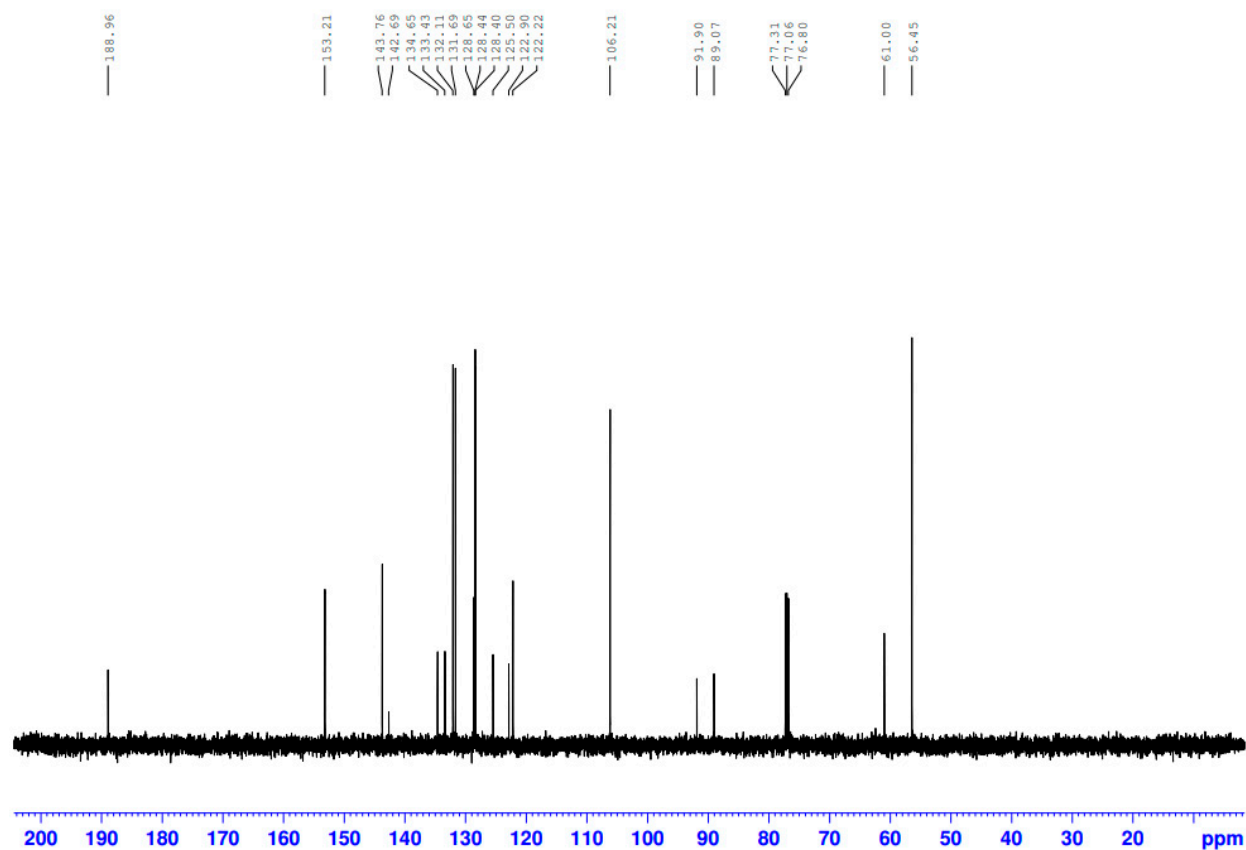
¹H-NMR of **24** (500 MHz, DMSO-d₆)¹³C-NMR of **24** (125 MHz, DMSO-d₆)

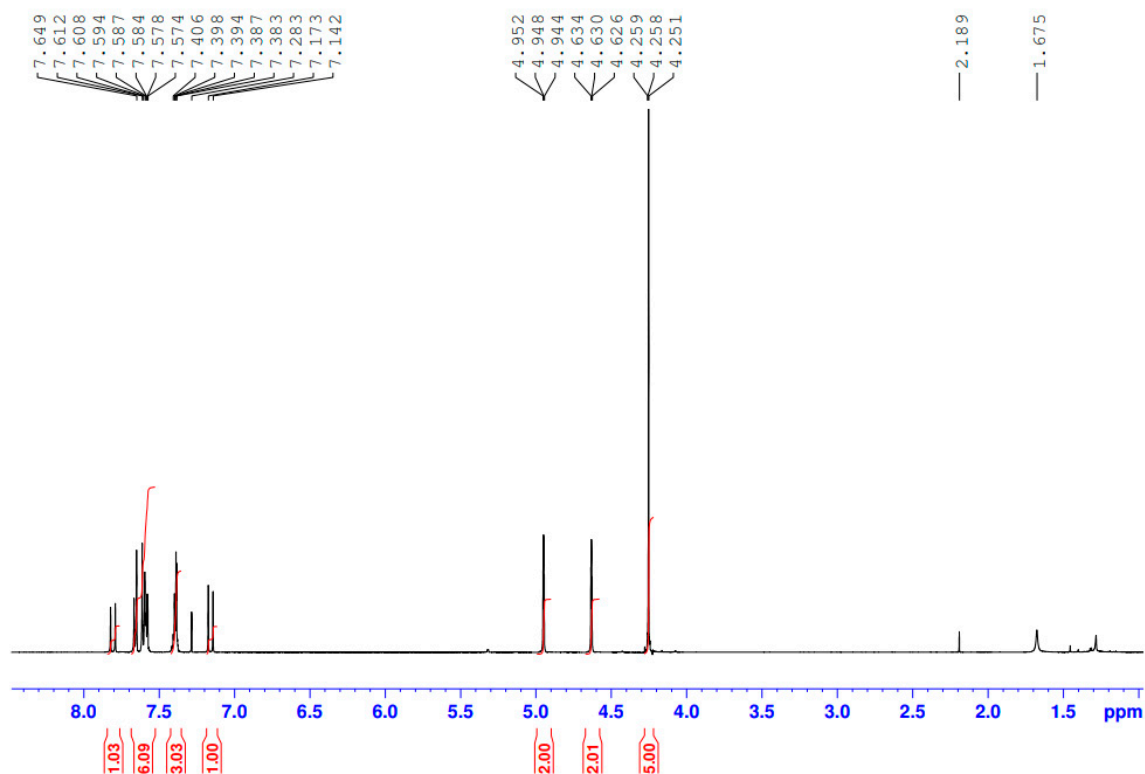
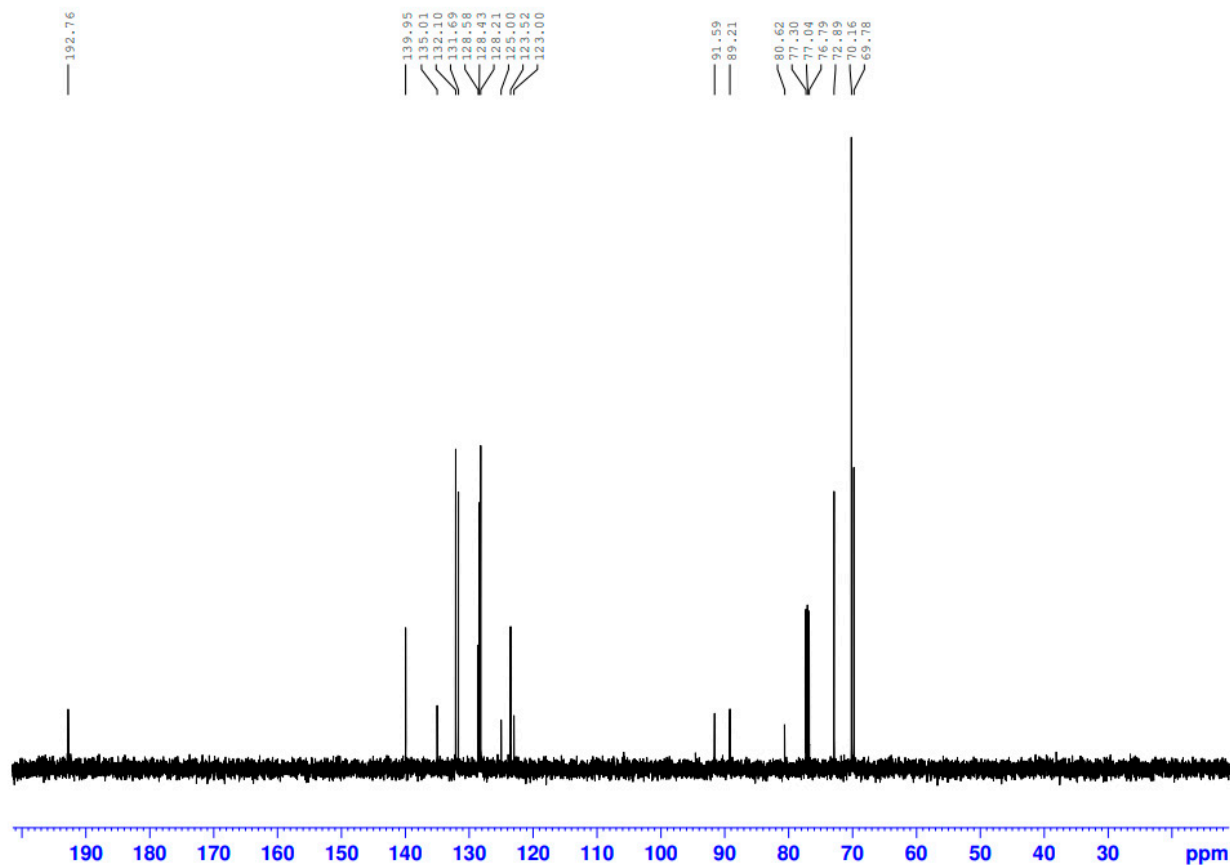
¹H-NMR of **28** (500 MHz, DMSO-d₆)¹³C-NMR of **28** (125 MHz, DMSO-d₆)

¹H-NMR of **29** (500 MHz, DMSO-d₆)¹³C-NMR of **29** (125 MHz, DMSO-d₆)

¹H-NMR of **36** (500 MHz, DMSO-d₆)¹³C-NMR of **36** (125 MHz, DMSO-d₆)

¹H-NMR of **37** (500 MHz, DMSO-d₆)¹³C-NMR of **37** (125 MHz, DMSO-d₆)

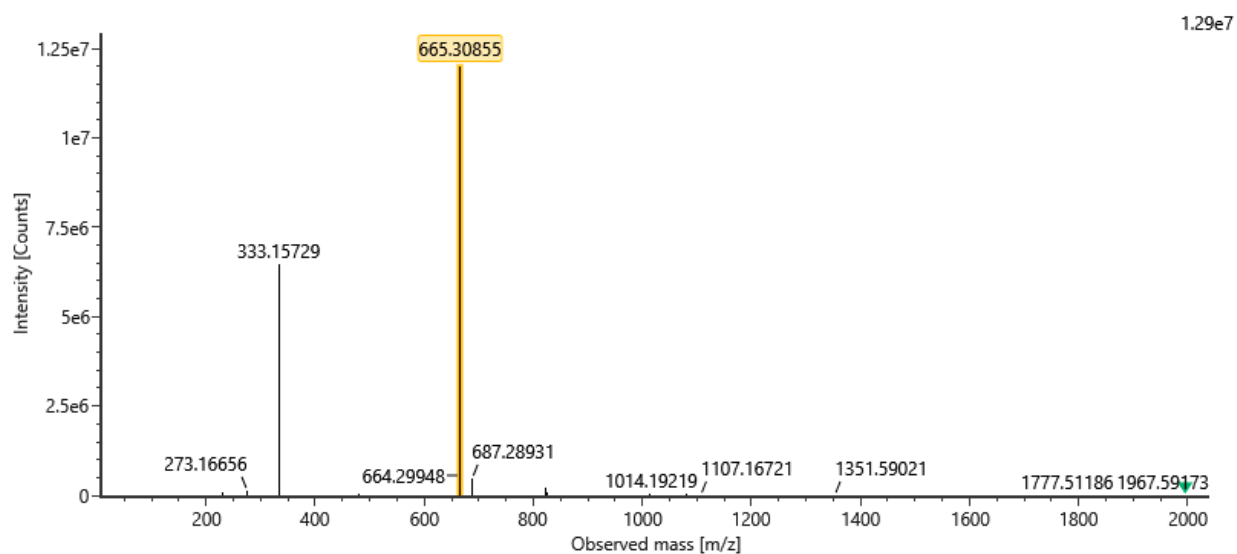
^1H -NMR of **36a** (500 MHz, DMSO- d_6) ^{13}C -NMR of **36a** (125 MHz, DMSO- d_6)

¹H-NMR of **37a** (500 MHz, DMSO-d₆)¹³C-NMR of **37a** (125 MHz, DMSO-d₆)

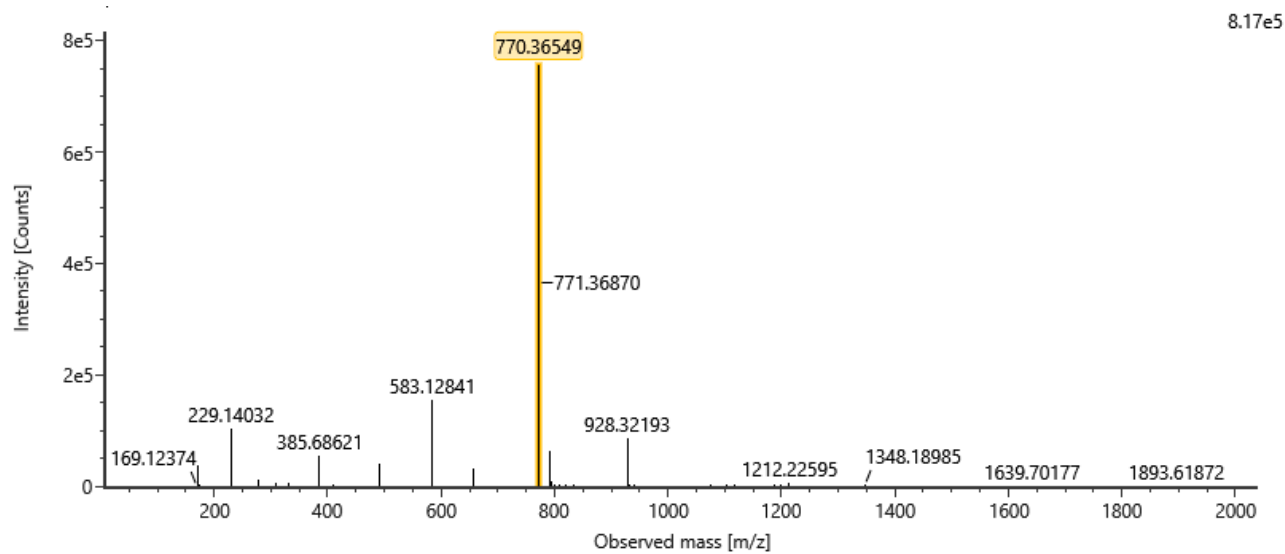
2 Copies of HRMS spectra

2.1 HRMS spectra of the novel alkyne-tethered vindoline hybrids

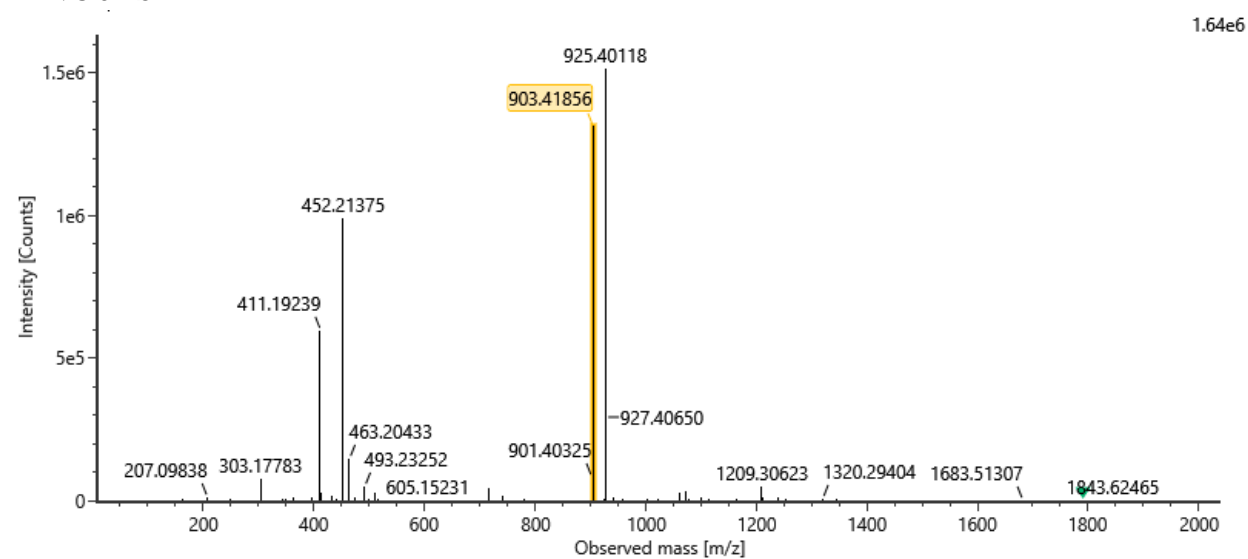
HRMS of 21



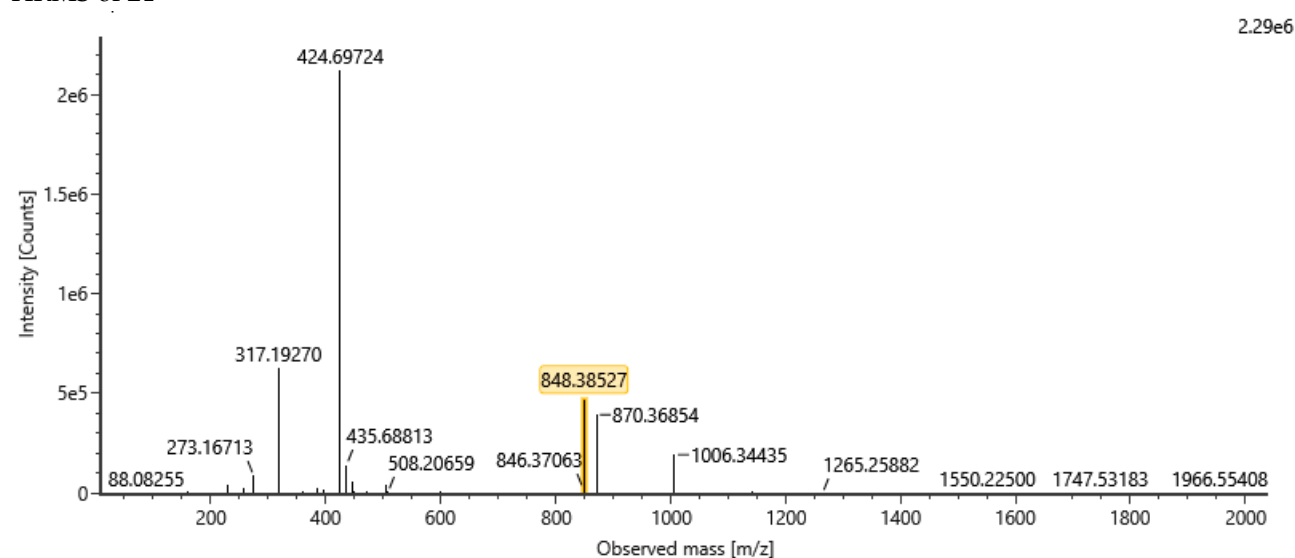
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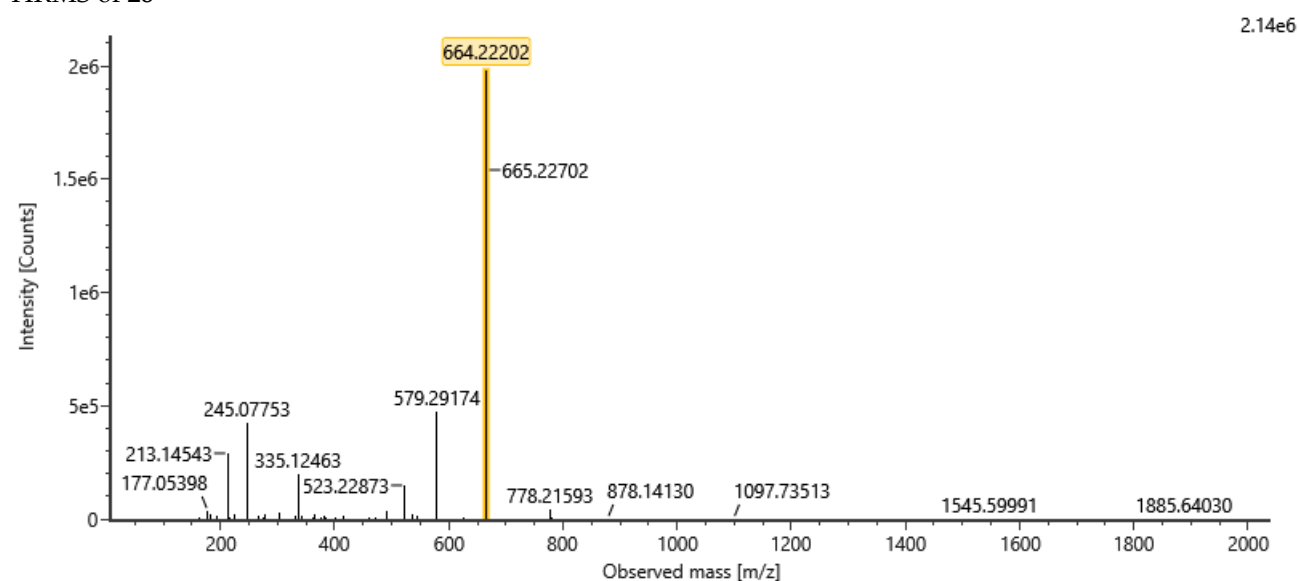
HRMS of 23



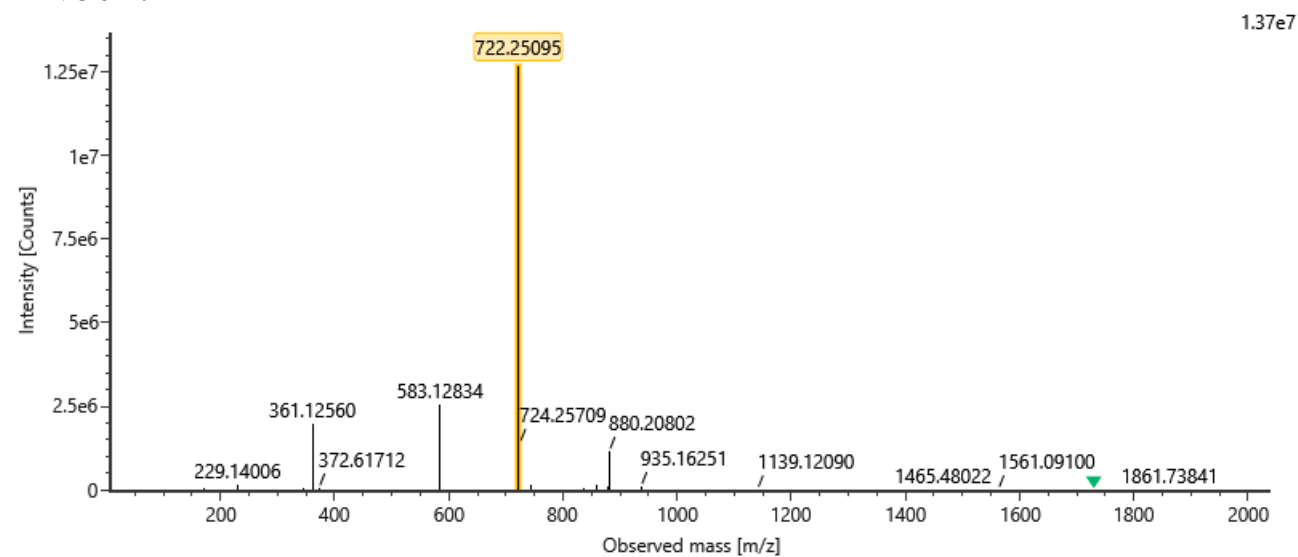
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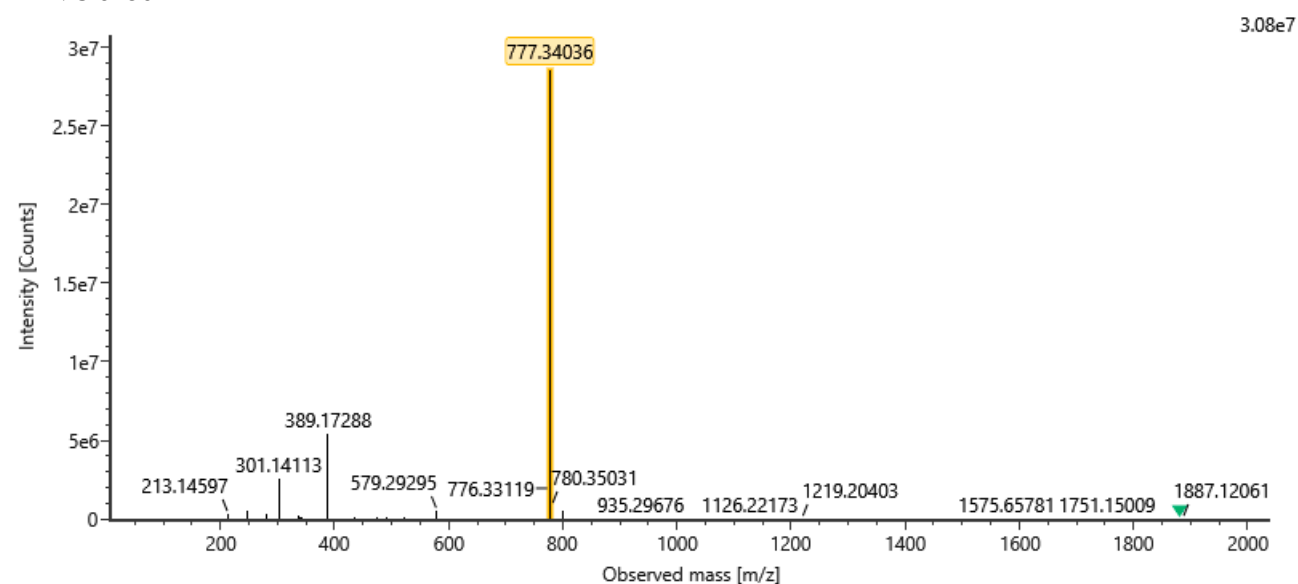
HRMS of 28



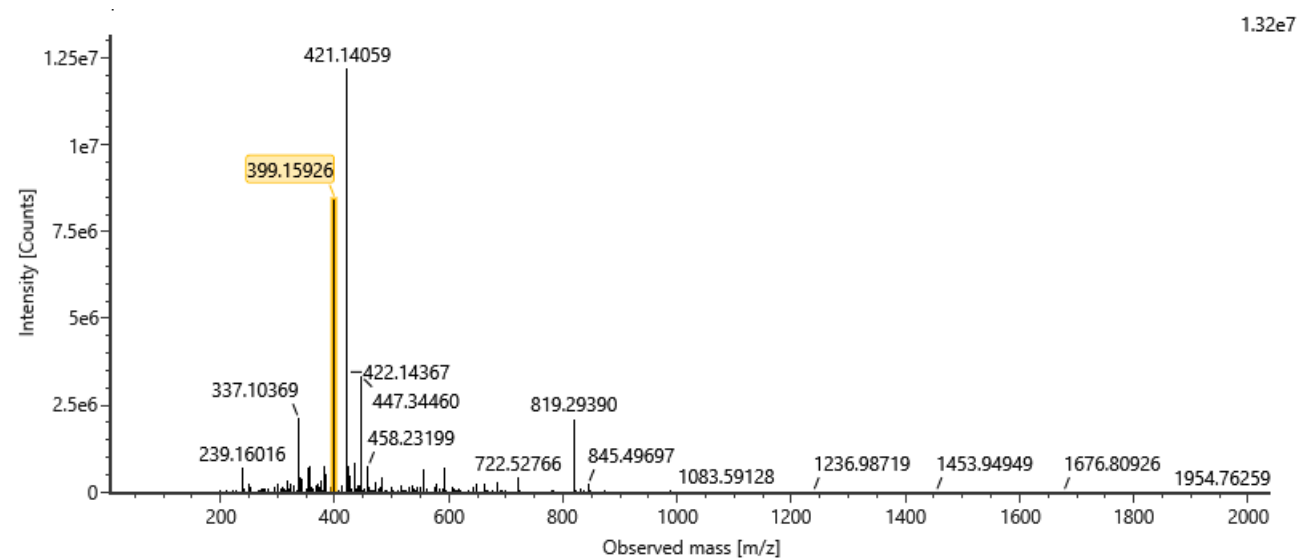
HRMS of 29



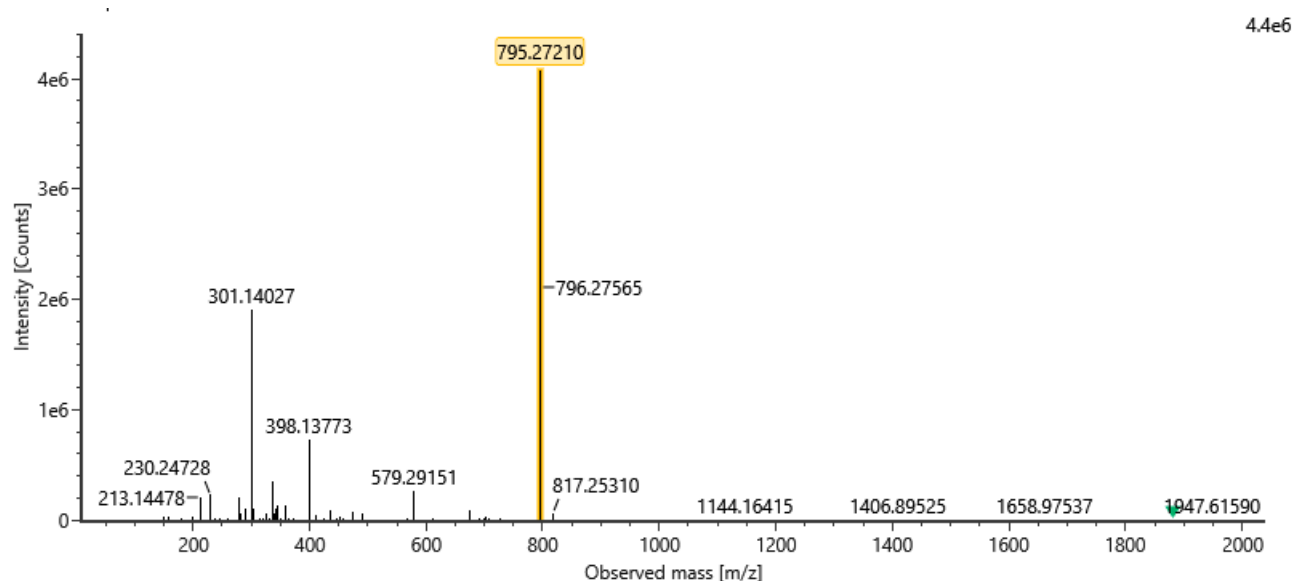
HRMS of 36



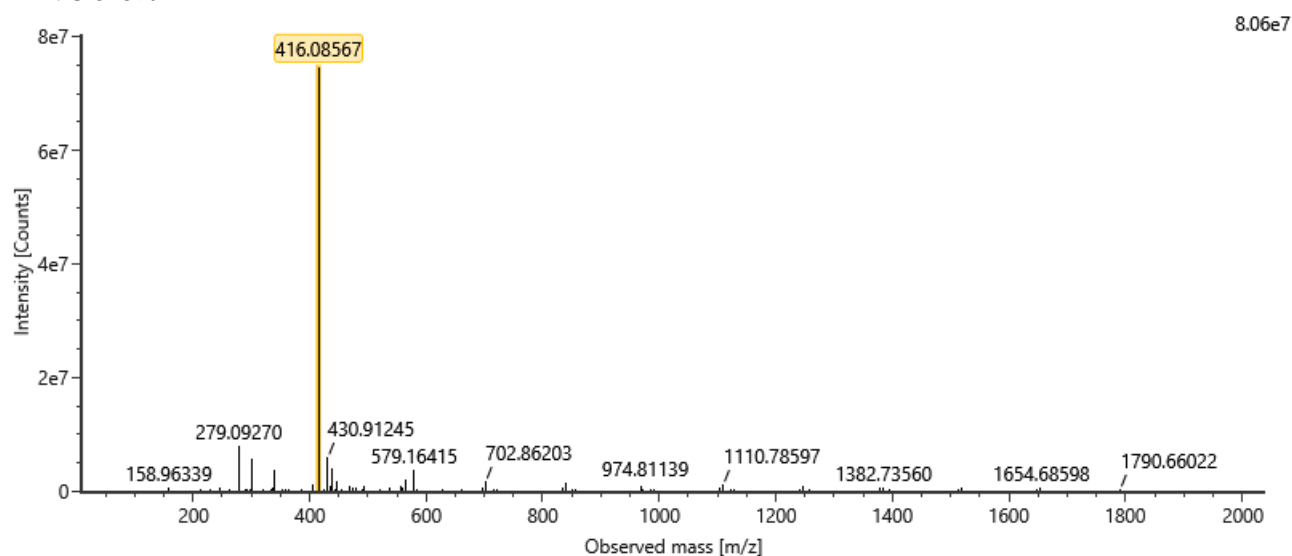
HRMS of 36a



HRMS of 37



HRMS of 37a



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