

Electronic Supplementary Information for

Synthesis of azepino[4,5-*b*]indolones via an intermolecular radical oxidative substitution of *N*-Boc tryptamine

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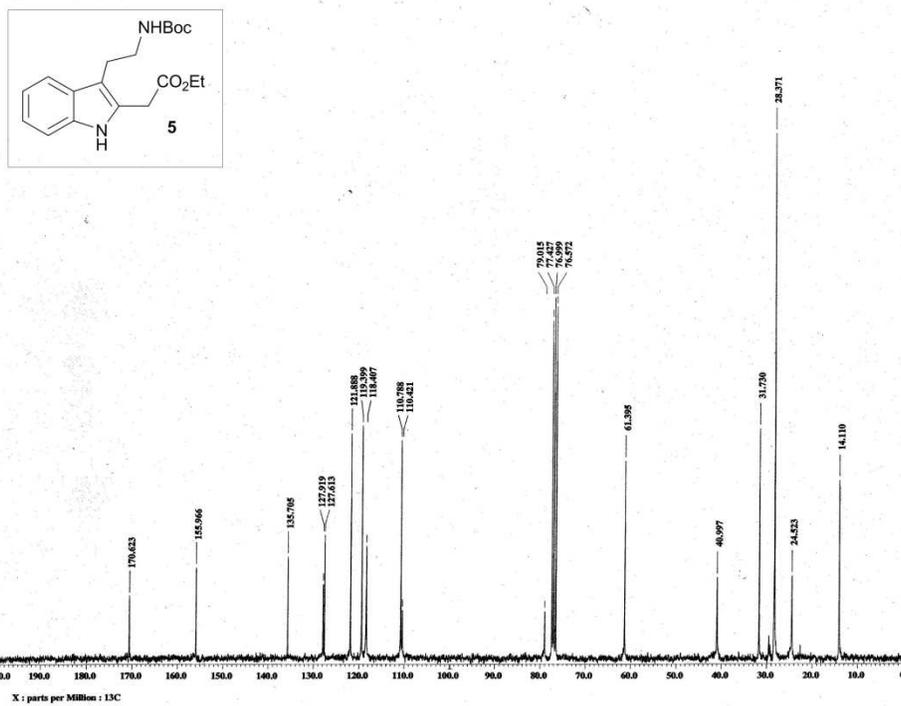
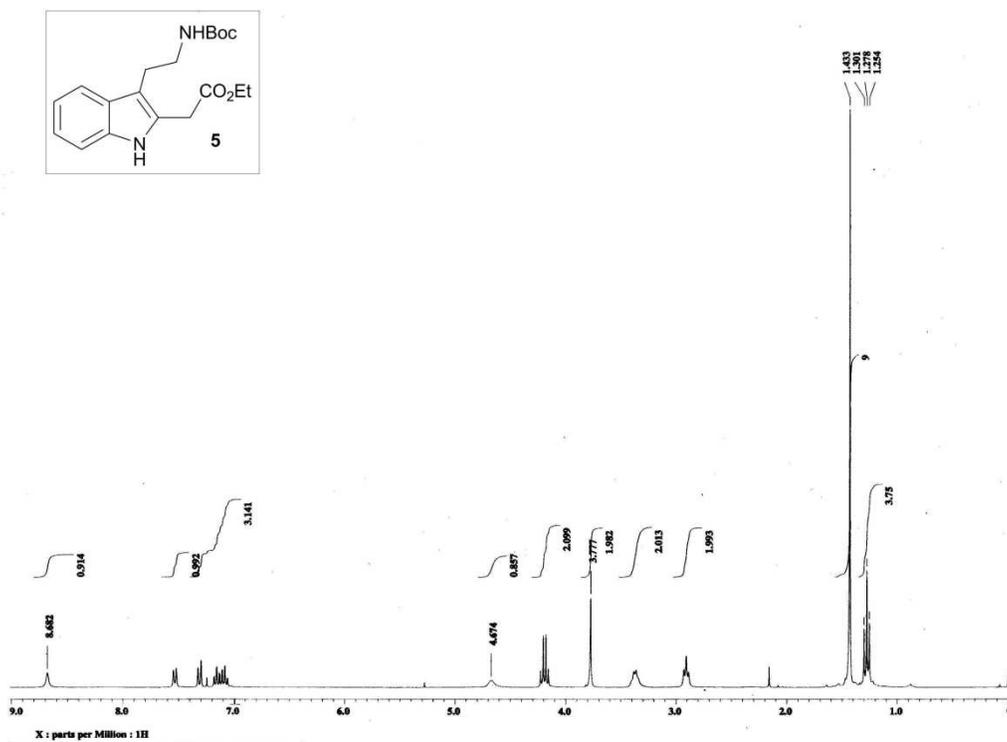
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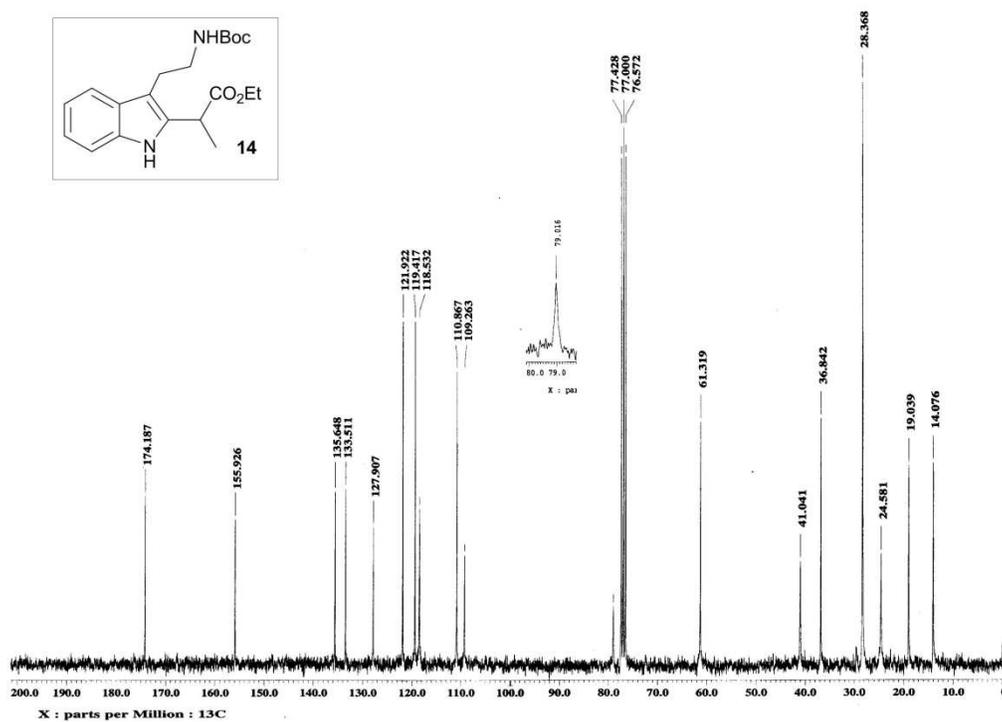
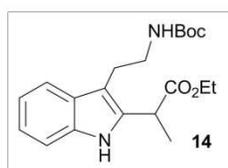
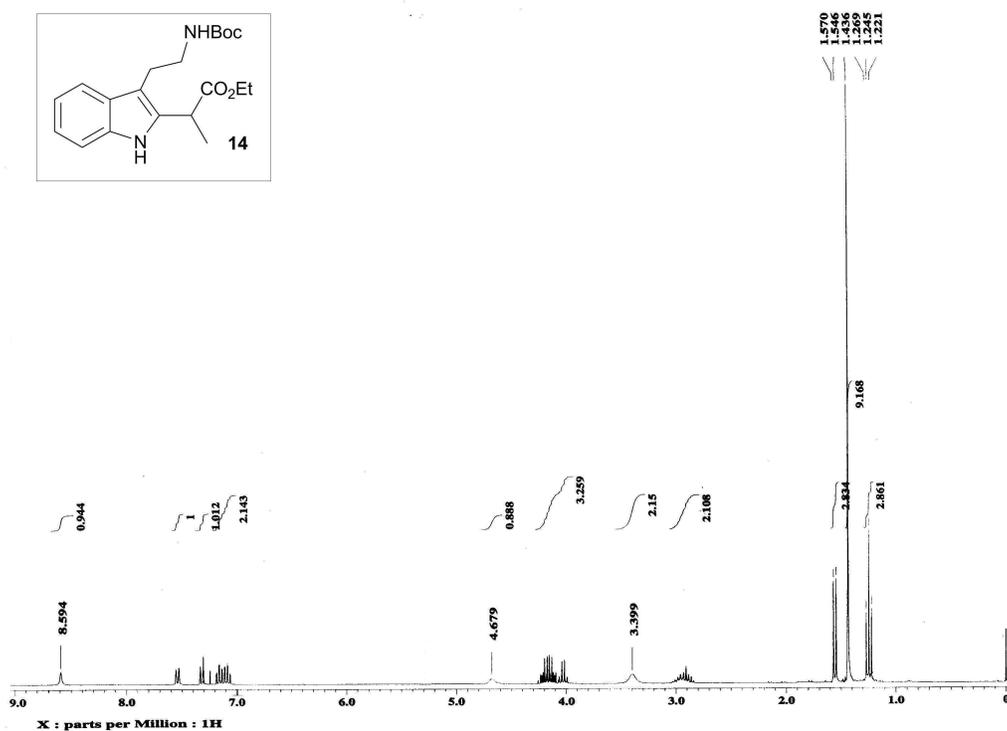
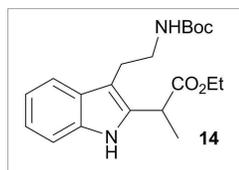
General

^1H NMR spectra were recorded on Varian Gemini-200 MHz and Eclipse 300 MHz JEOL spectrometers in deuterated chloroform (CDCl_3) solutions with internal standard TMS (0 ppm) or in deuterated dimethyl sulfoxide (DMSO-d_6), and the chemical shifts were reported in parts per million (δ/ppm). ^{13}C NMR spectra were recorded at 50 MHz and 75 MHz on the same instruments. Assignments of ^{13}C spectra were performed by DEPT experiments. IR spectra were collected on a FT-IR Tensor 27 Bruker spectrometer. Mass spectra were recorded on a JEOL JEM-AX505HA spectrometer by electronic impact (EI) of lower resolution at 70 eV. Elemental analyses were determined on a CE-440 Elemental analyzer (Exeter analytical, INC). The X-ray crystallography was carried out on a Bruker Smart Apex CCD diffractometer. Flash column chromatography was carried out with silica gel 60 (230-400 mesh ASTM) from Macherey-Nagel GmbH & Co.

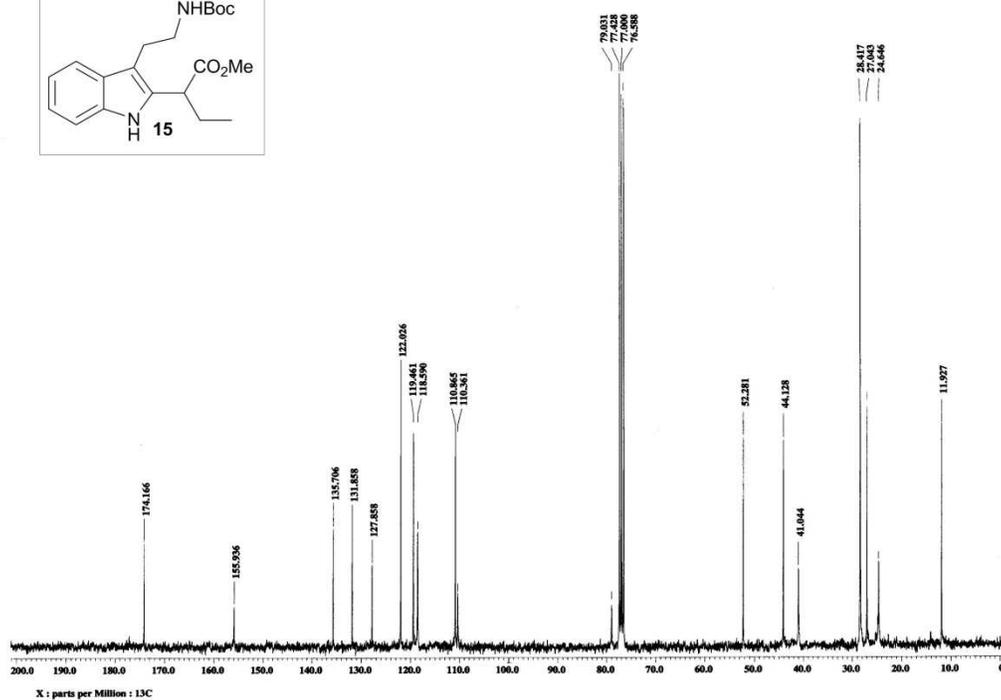
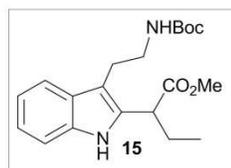
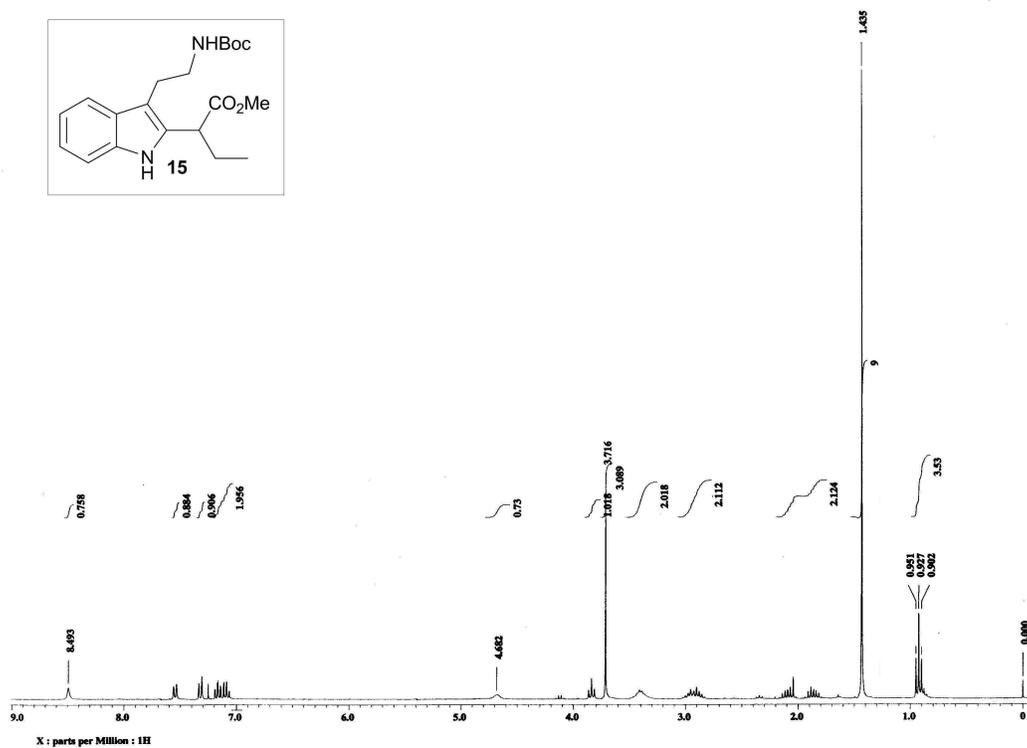
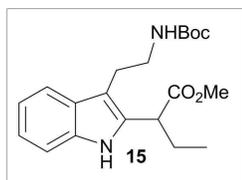
^1H and ^{13}C NMR Spectrum of **5** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$



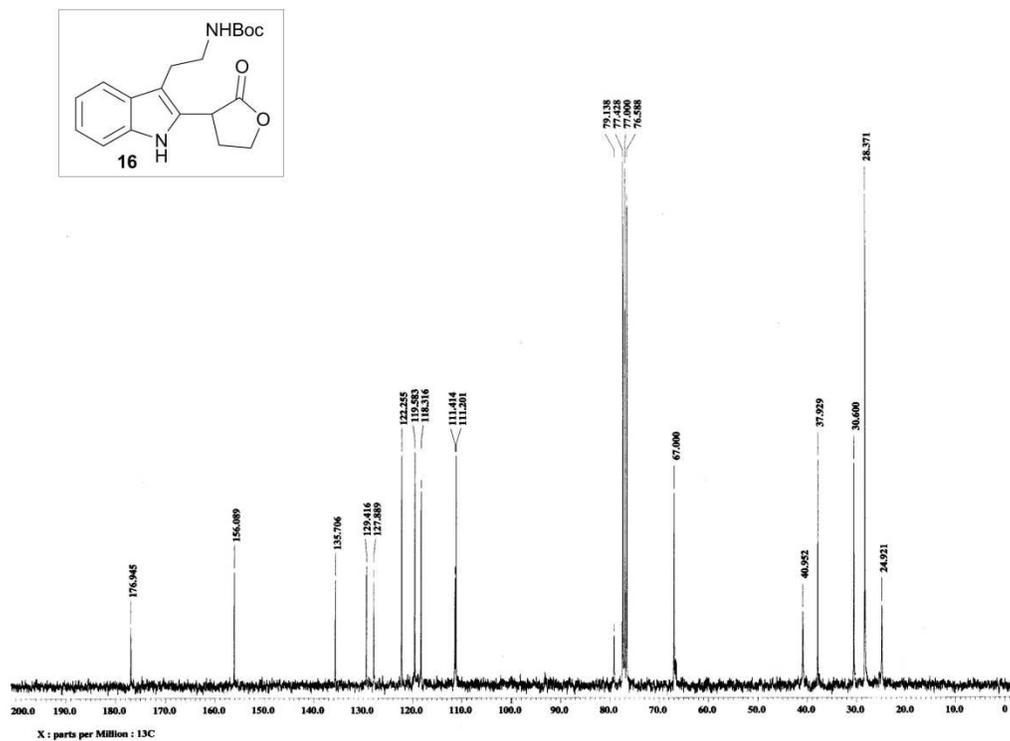
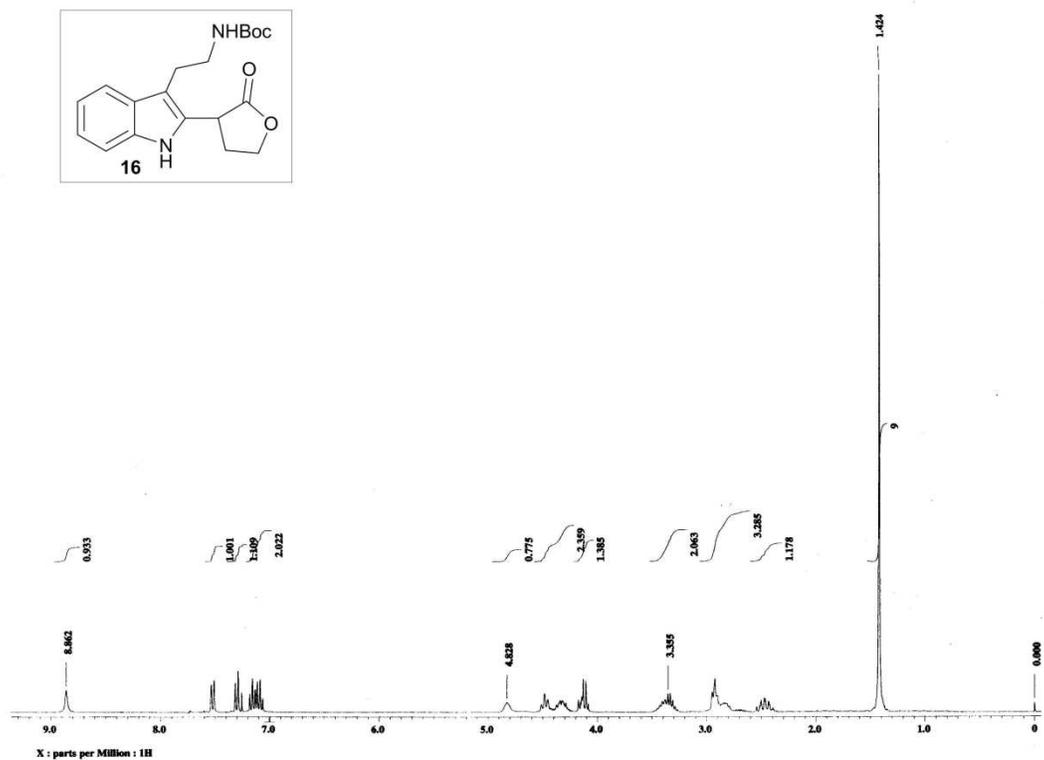
^1H and ^{13}C NMR Spectrum of **14** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$



^1H and ^{13}C NMR Spectrum of **15** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$

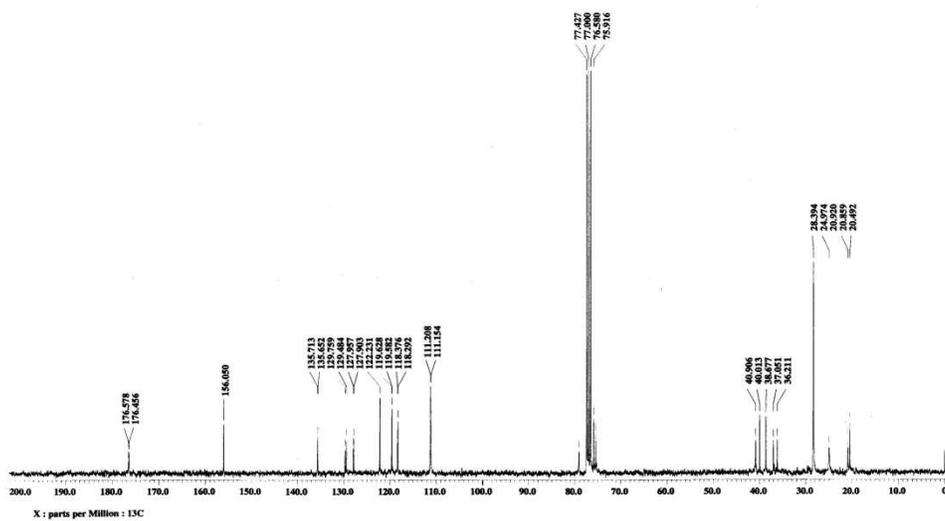
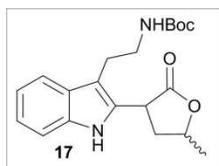
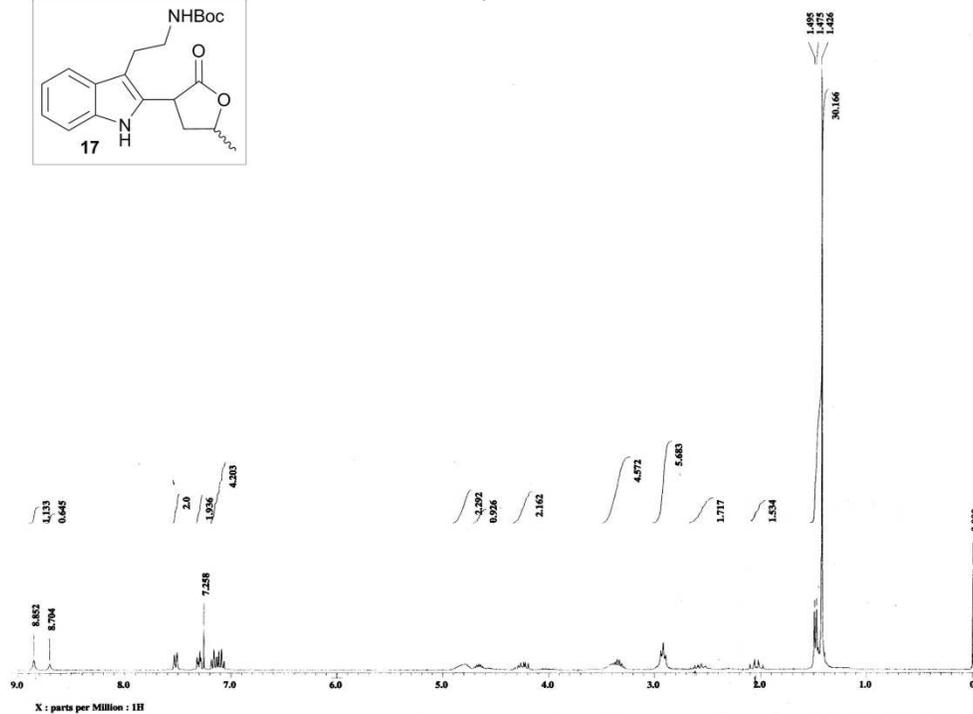
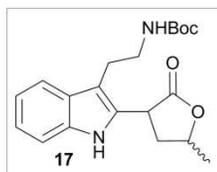


^1H and ^{13}C NMR Spectrum of **16** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$

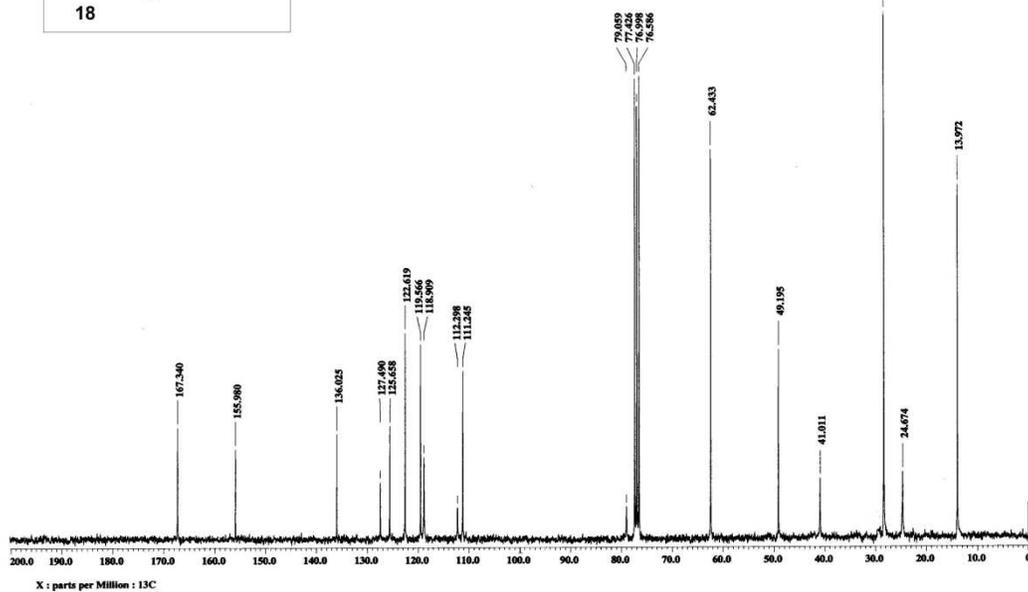
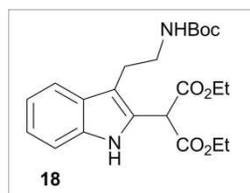
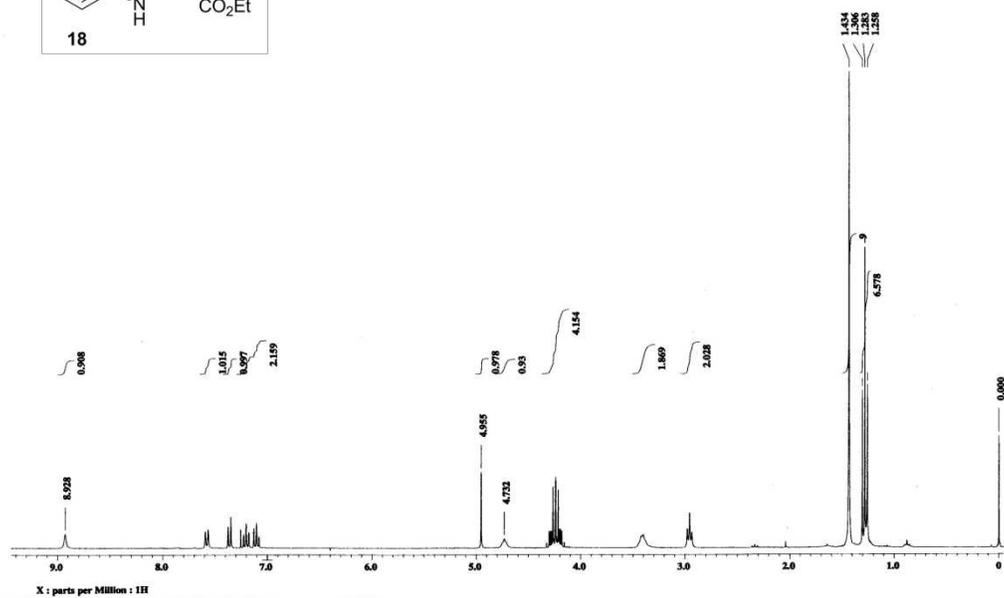
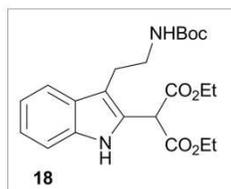


^1H and ^{13}C NMR Spectrum of **17**, mixture of diastereomers (300 and 75 MHz, CDCl_3)

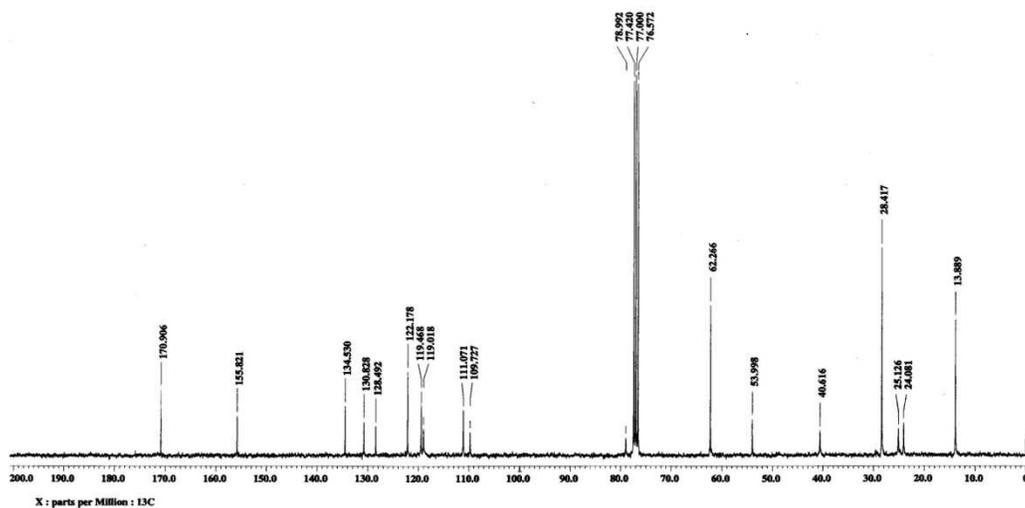
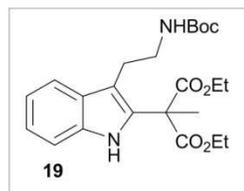
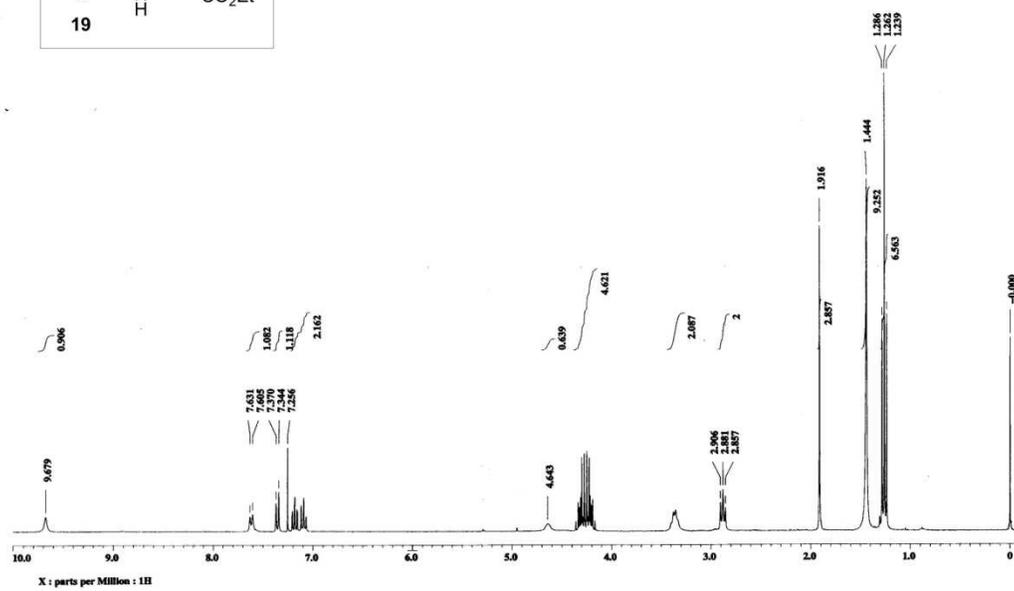
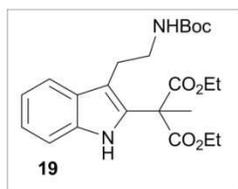
$\delta(\text{ppm})$



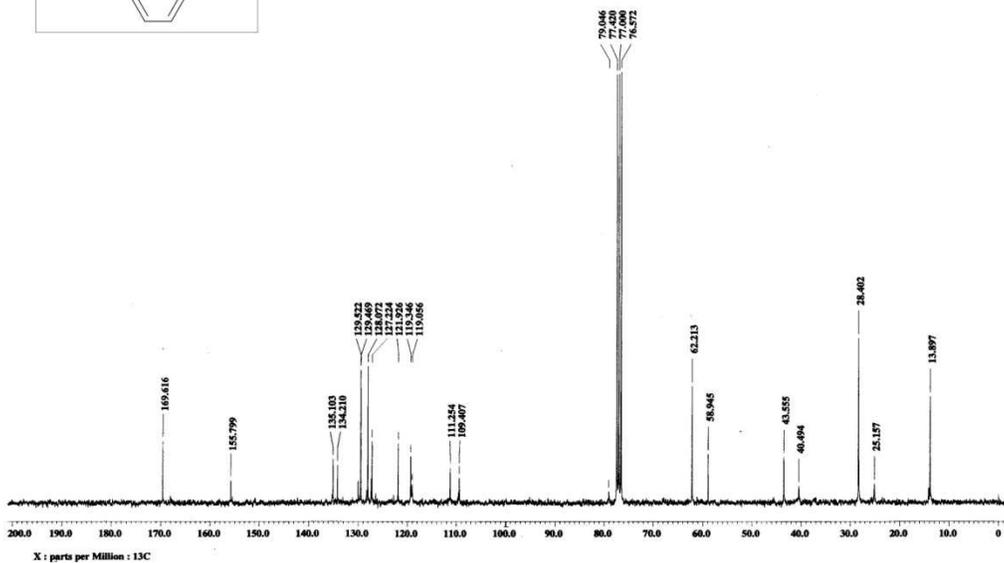
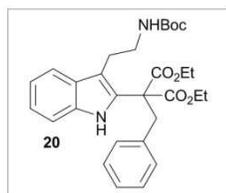
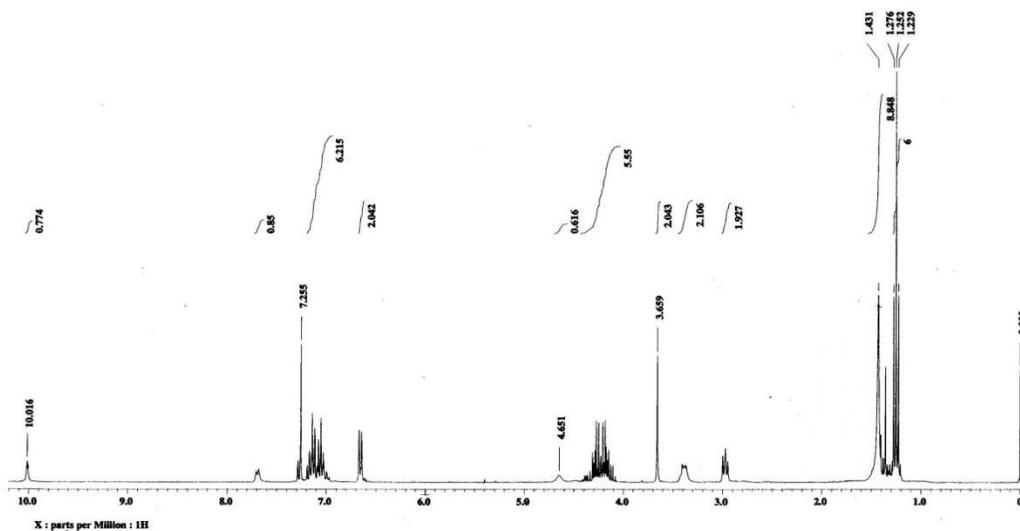
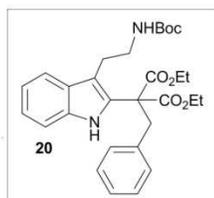
^1H and ^{13}C NMR Spectrum of **18** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$



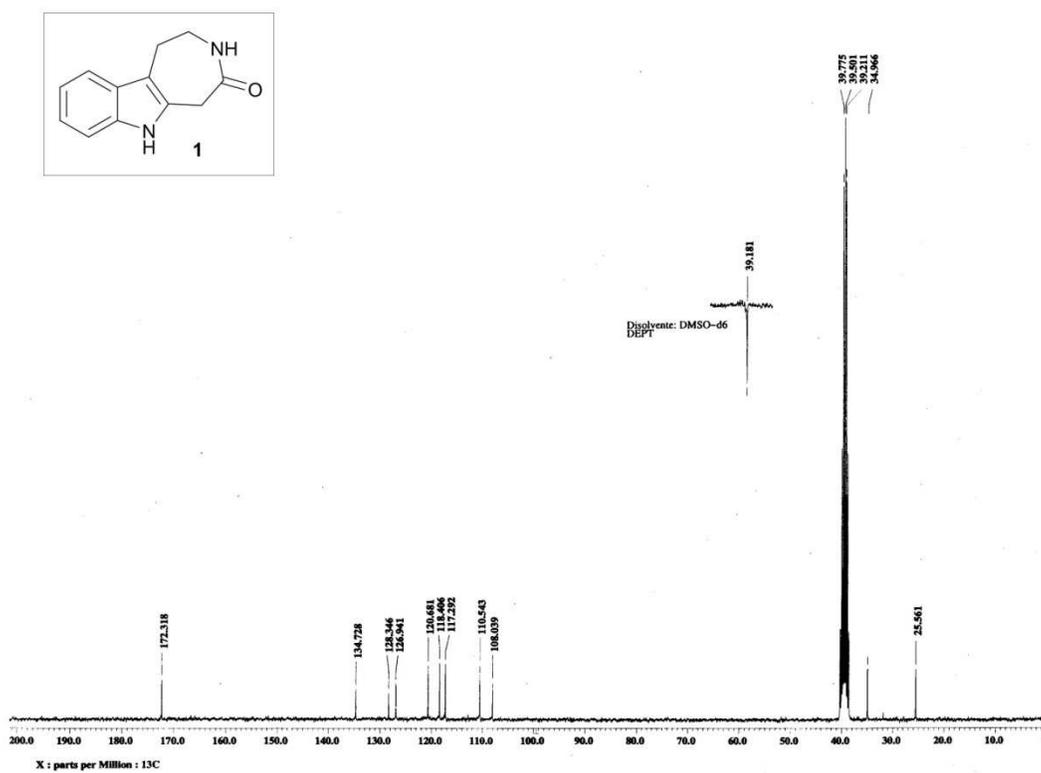
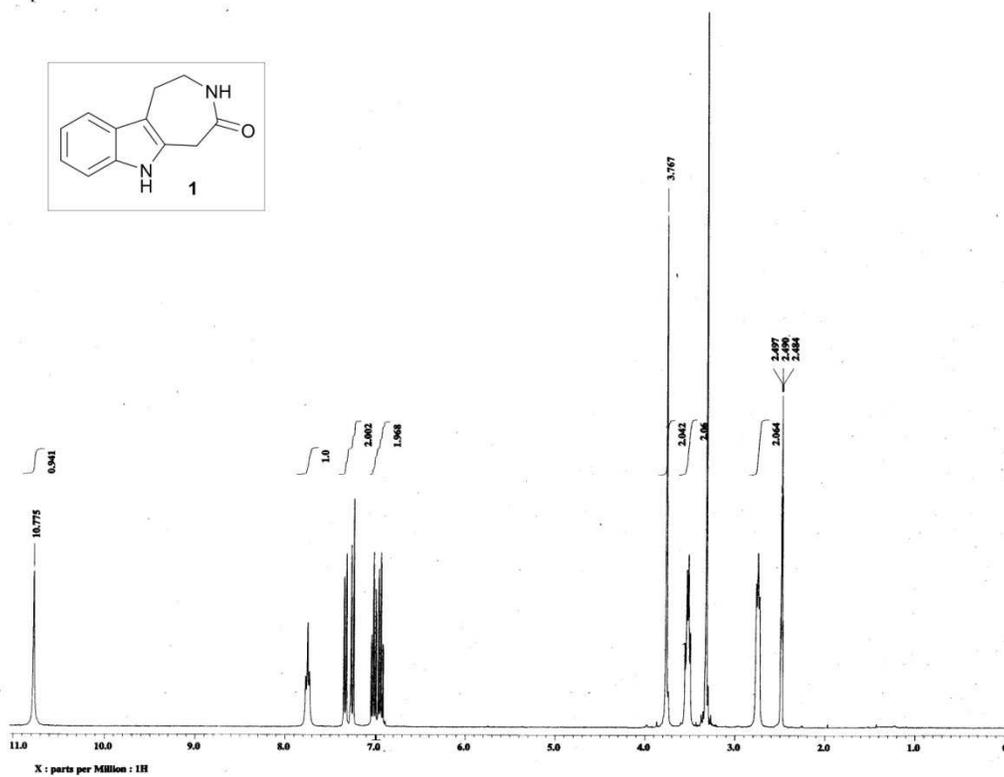
^1H and ^{13}C NMR Spectrum of **19** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$



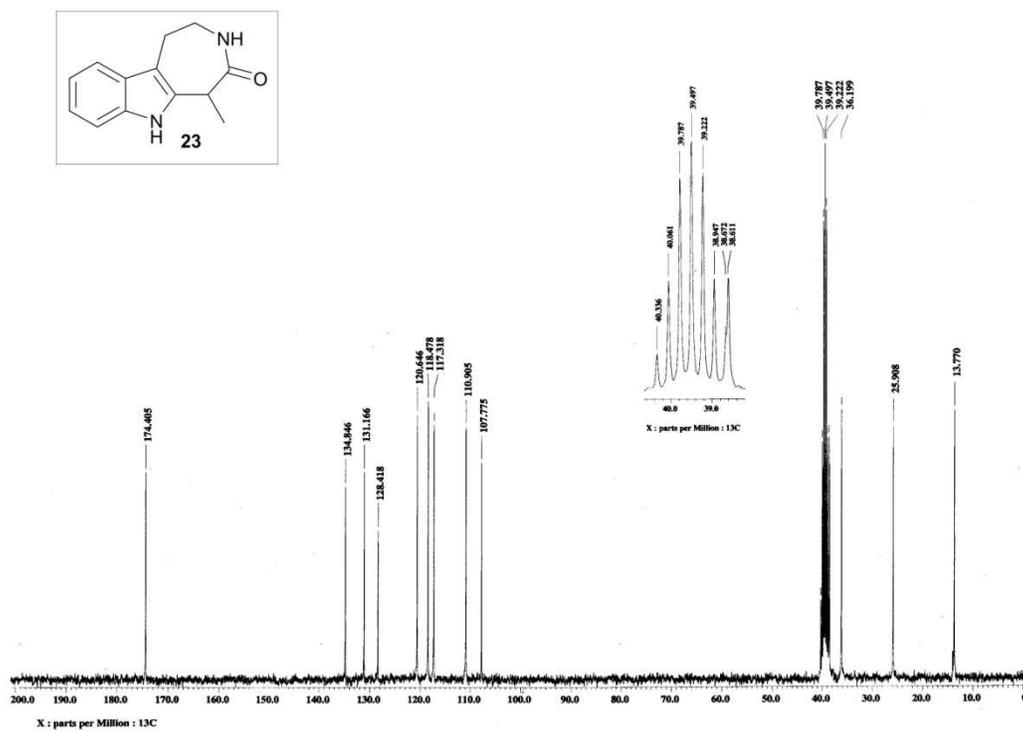
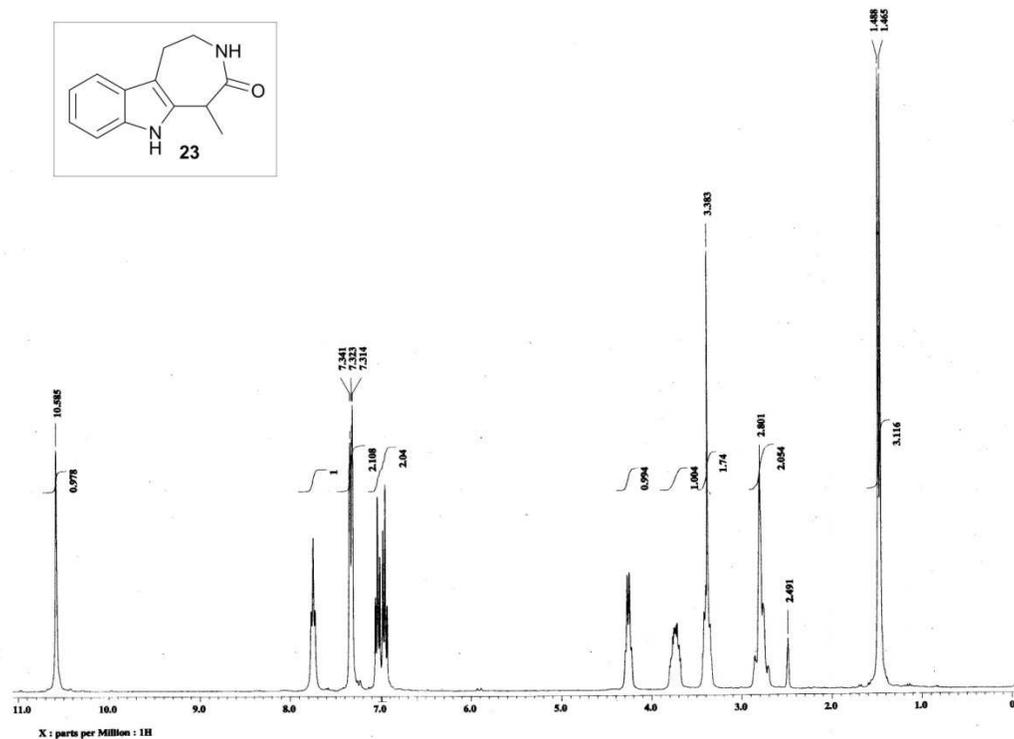
^1H and ^{13}C NMR Spectrum of **20** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$



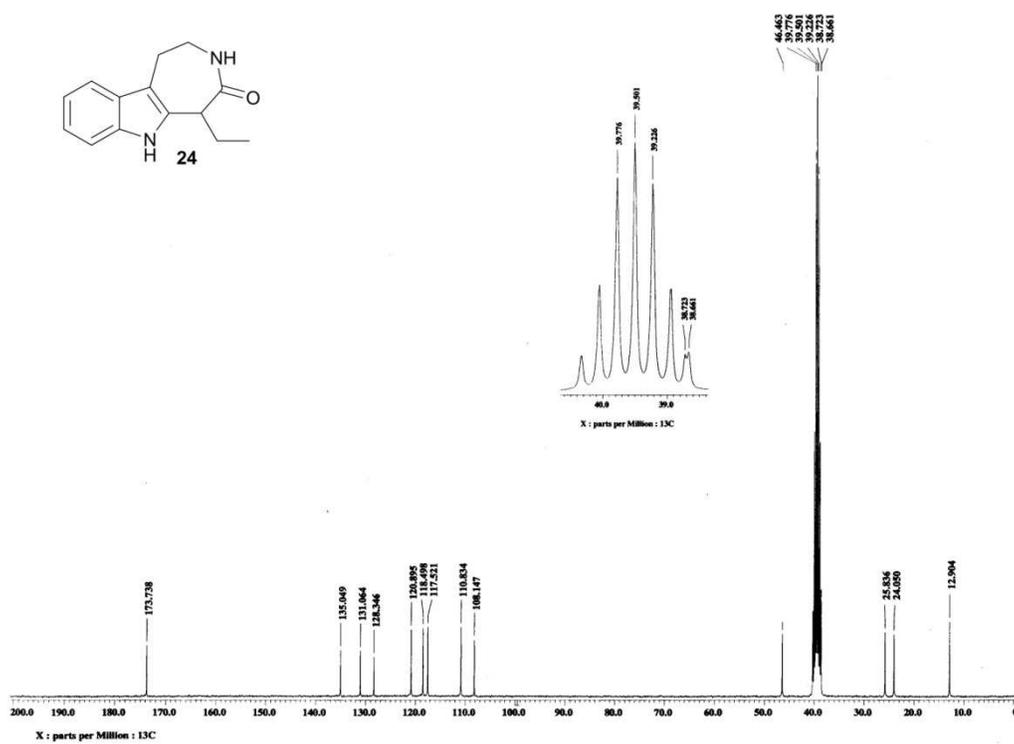
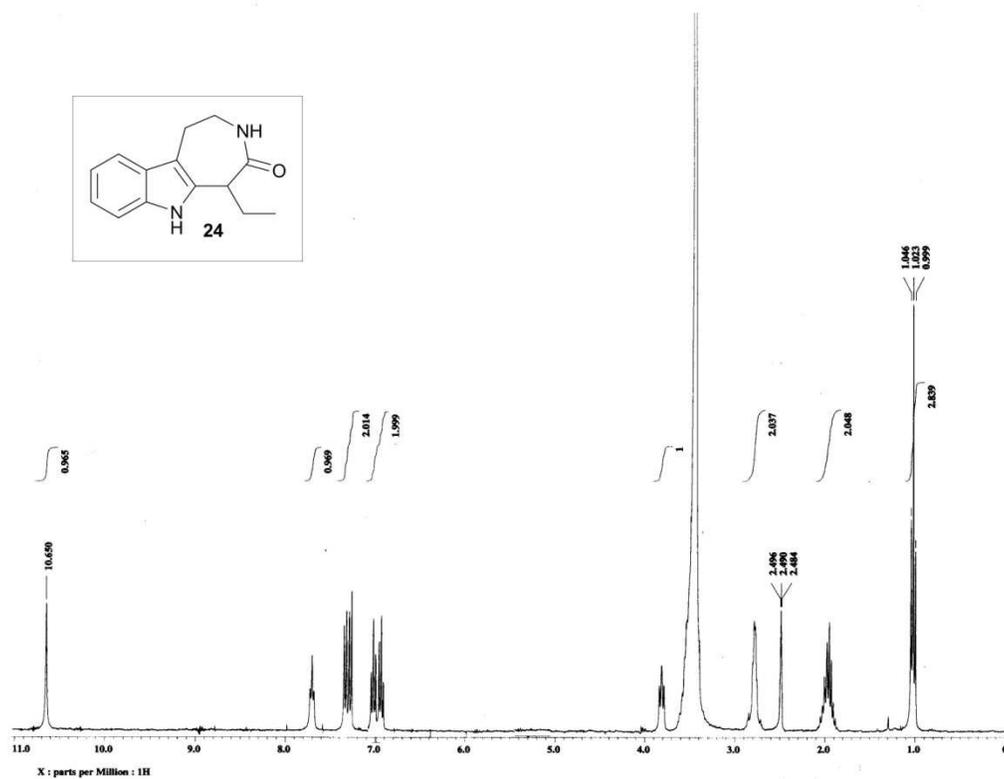
^1H and ^{13}C NMR Spectrum of **1** (300 and 75 MHz, DMSO- d_6) $\delta(\text{ppm})$



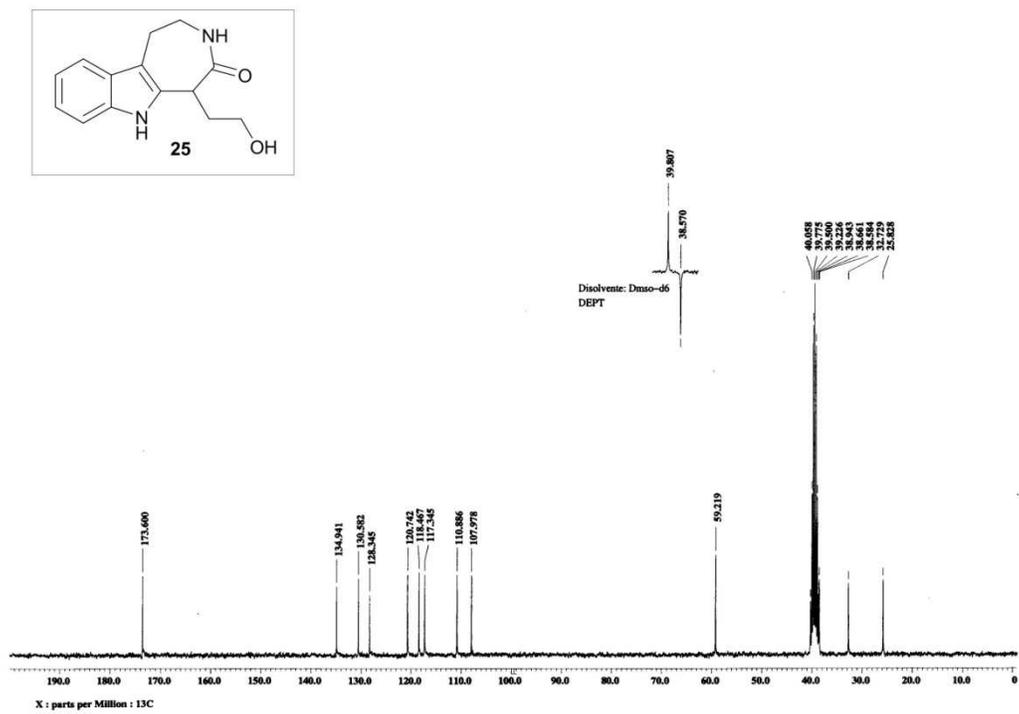
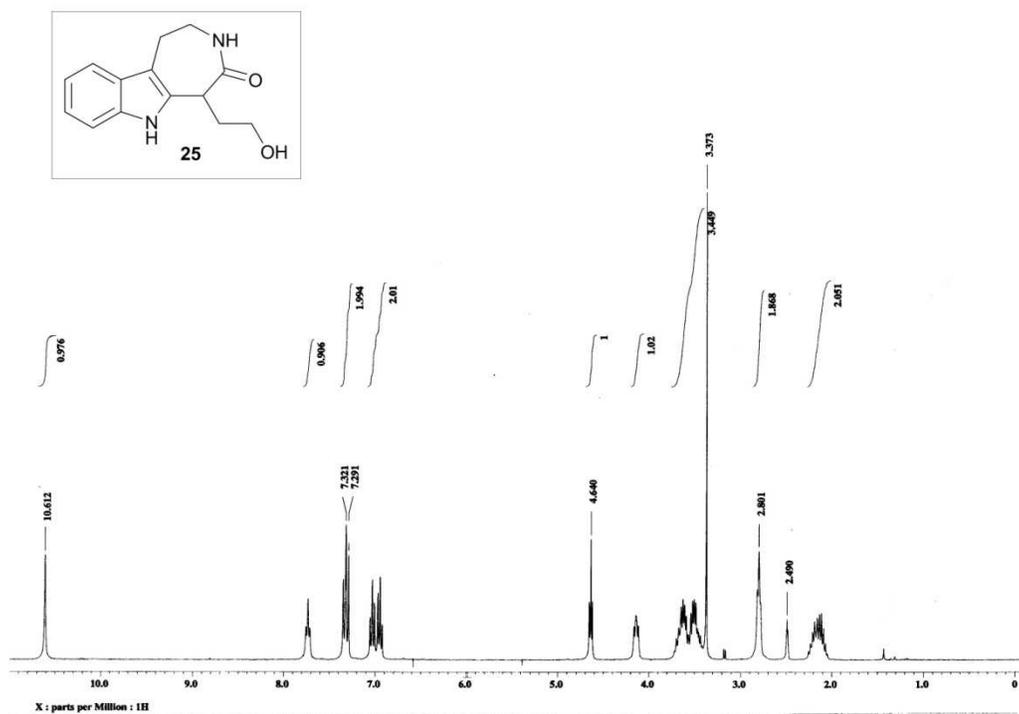
^1H and ^{13}C NMR Spectrum of **23** (300 and 75 MHz, DMSO- d_6) $\delta(\text{ppm})$



^1H and ^{13}C NMR Spectrum of **24** (300 and 75 MHz, DMSO- d_6) $\delta(\text{ppm})$

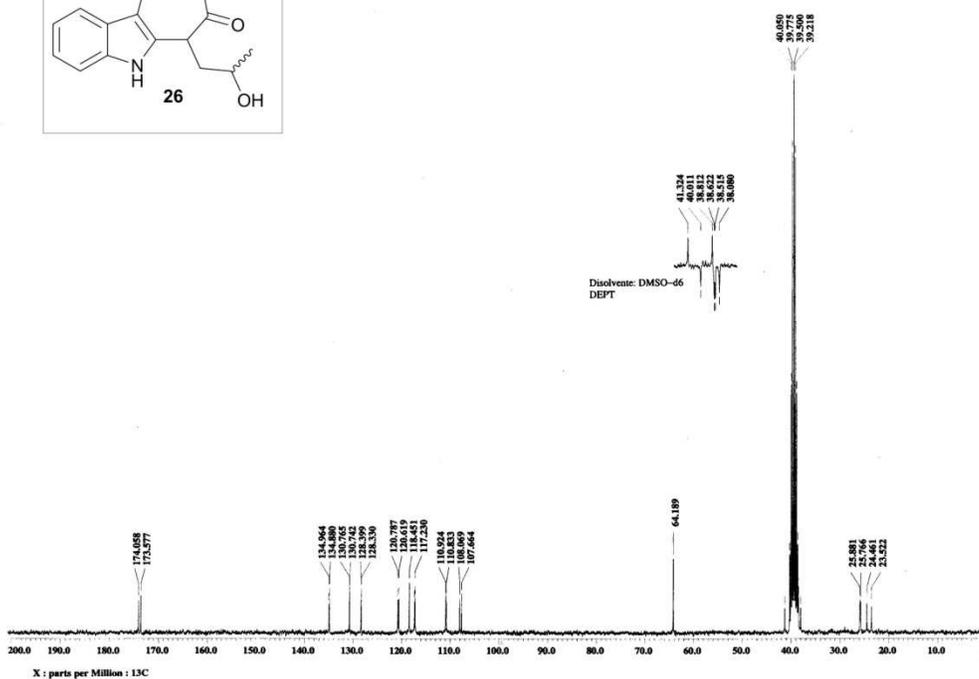
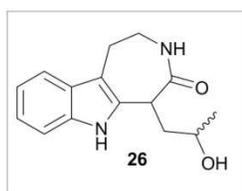
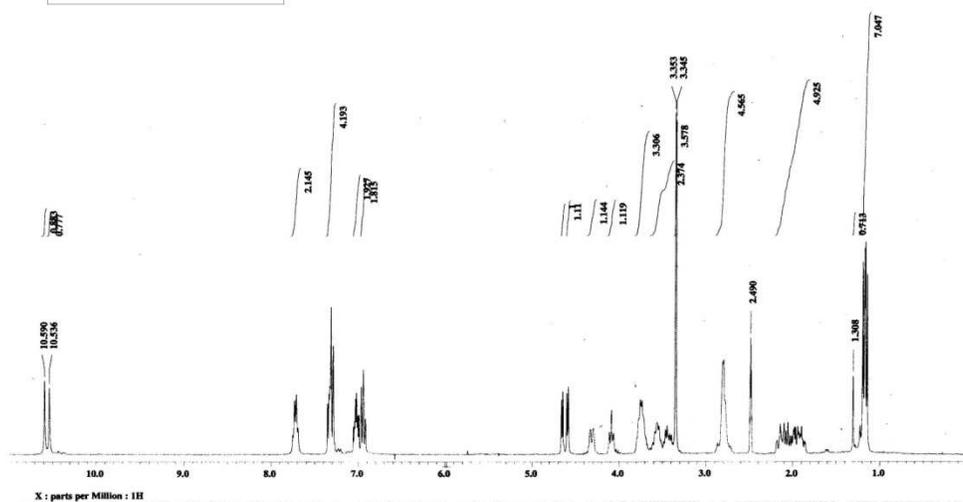
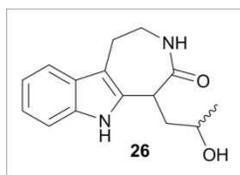


^1H and ^{13}C NMR Spectrum of **25** (300 and 75 MHz, DMSO- d_6) $\delta(\text{ppm})$

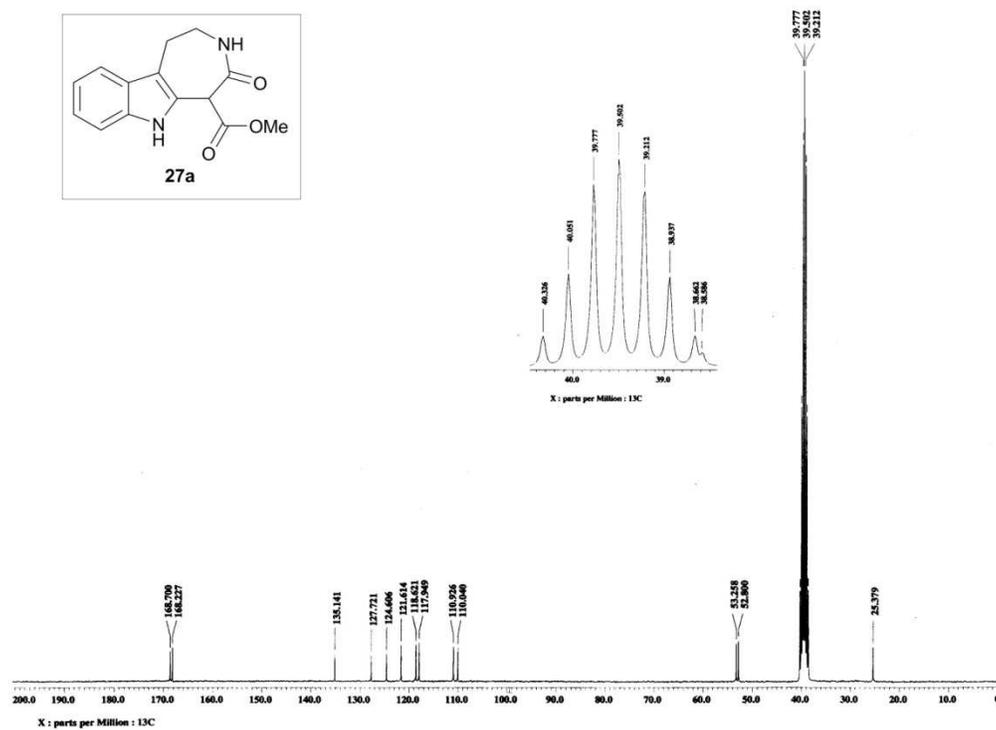
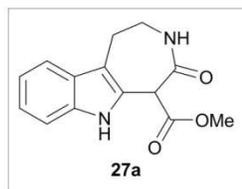
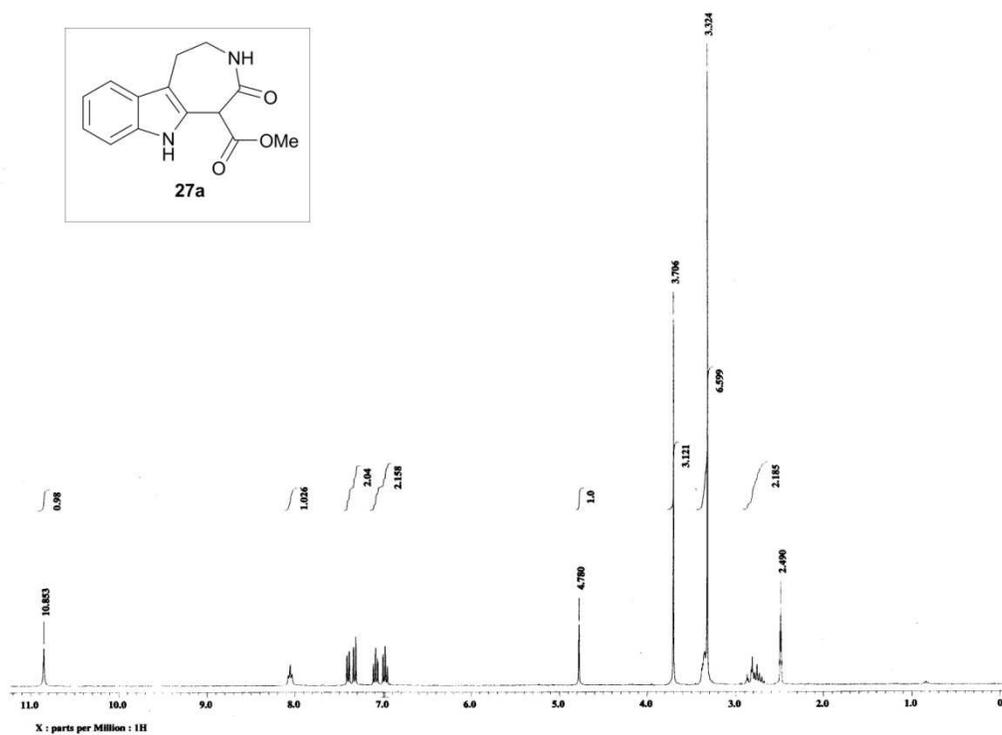
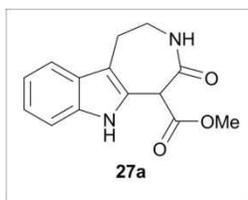


^1H and ^{13}C NMR Spectrum of **26**, mixture of diastereomers (300 and 75 MHz, DMSO- d_6)

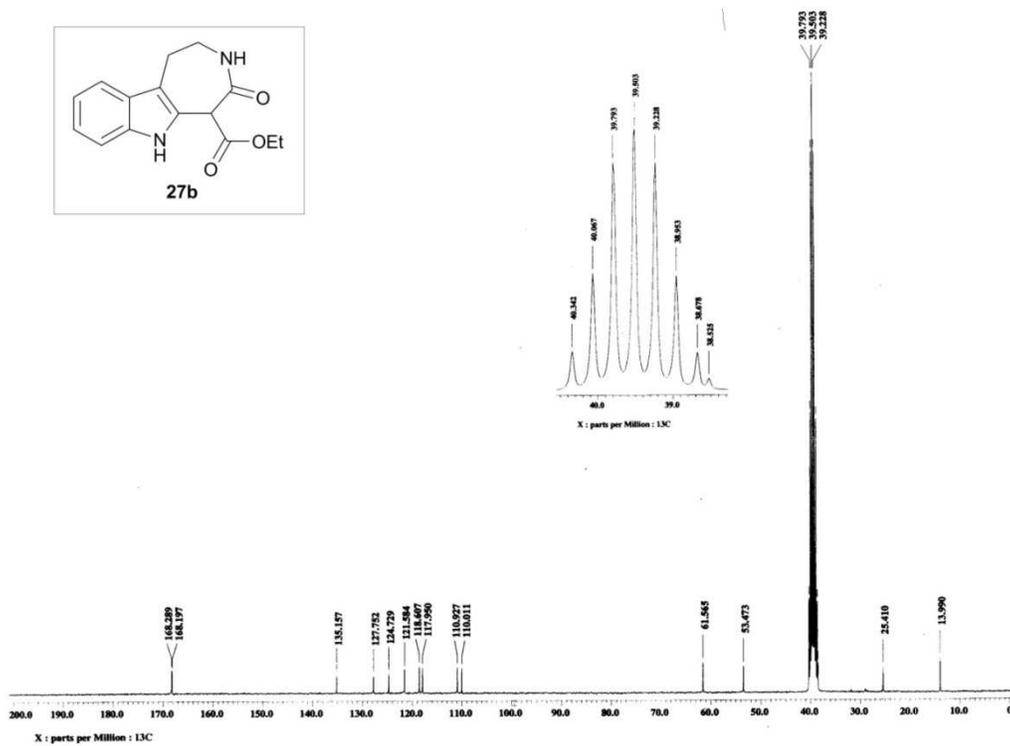
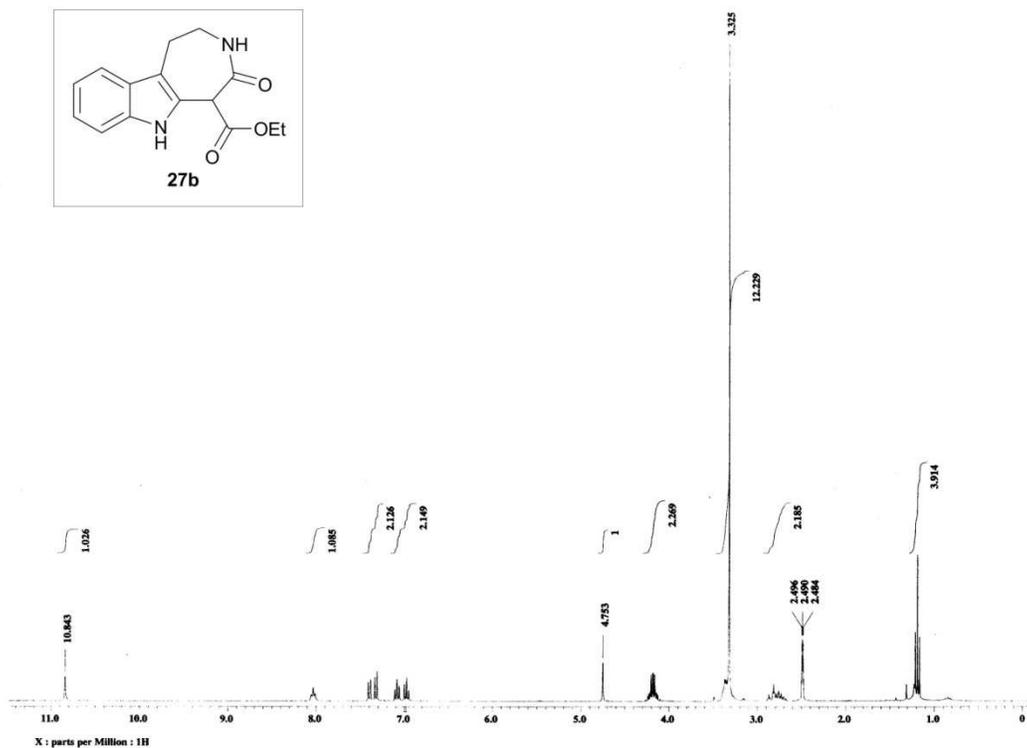
$\delta(\text{ppm})$



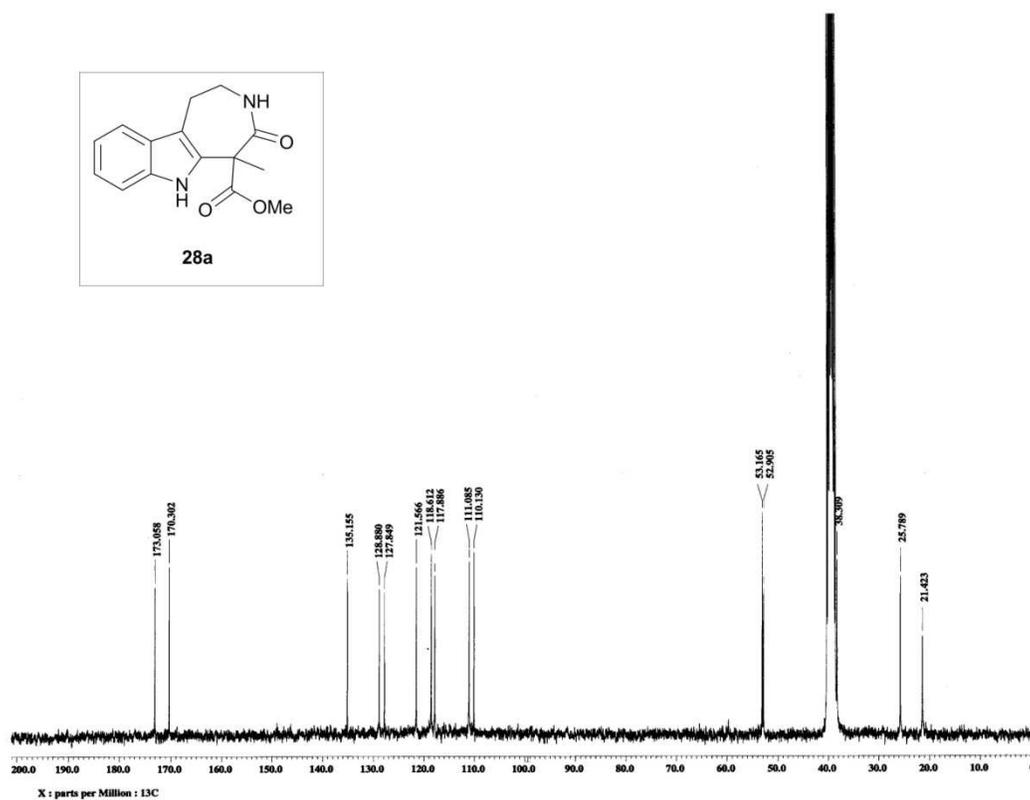
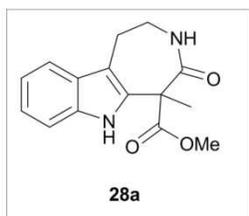
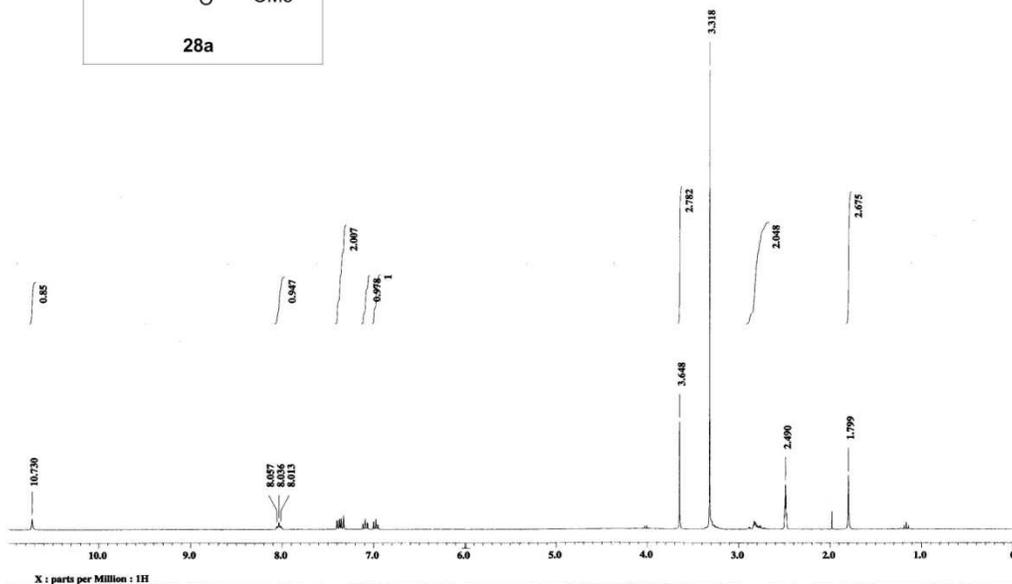
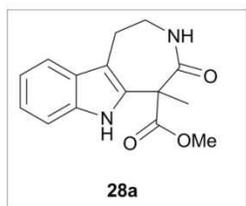
^1H and ^{13}C NMR Spectrum of **27a** (300 and 75 MHz, DMSO- d_6) δ (ppm)



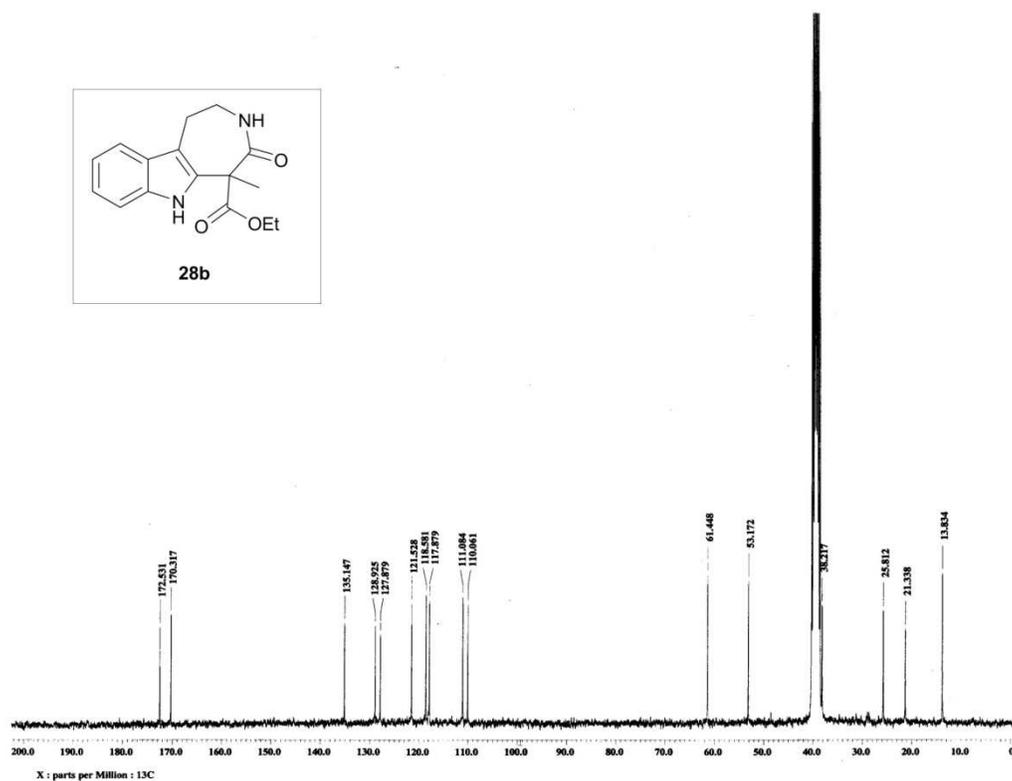
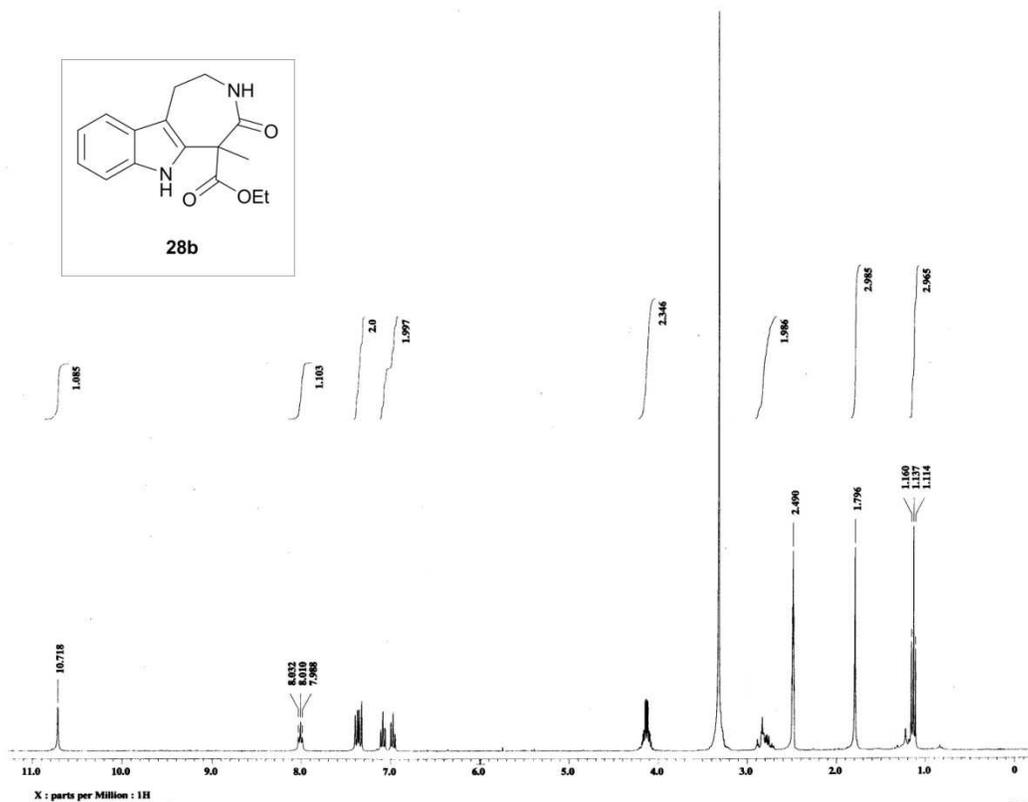
^1H and ^{13}C NMR Spectrum of **27b** (300 and 75 MHz, DMSO- d_6) $\delta(\text{ppm})$



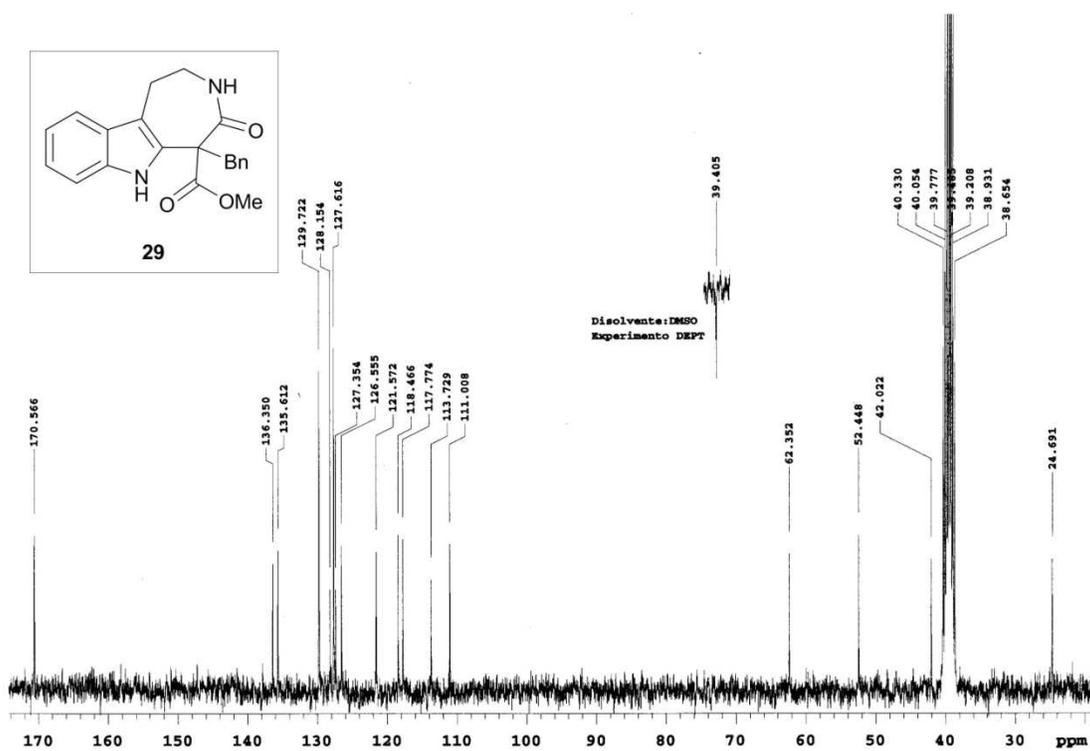
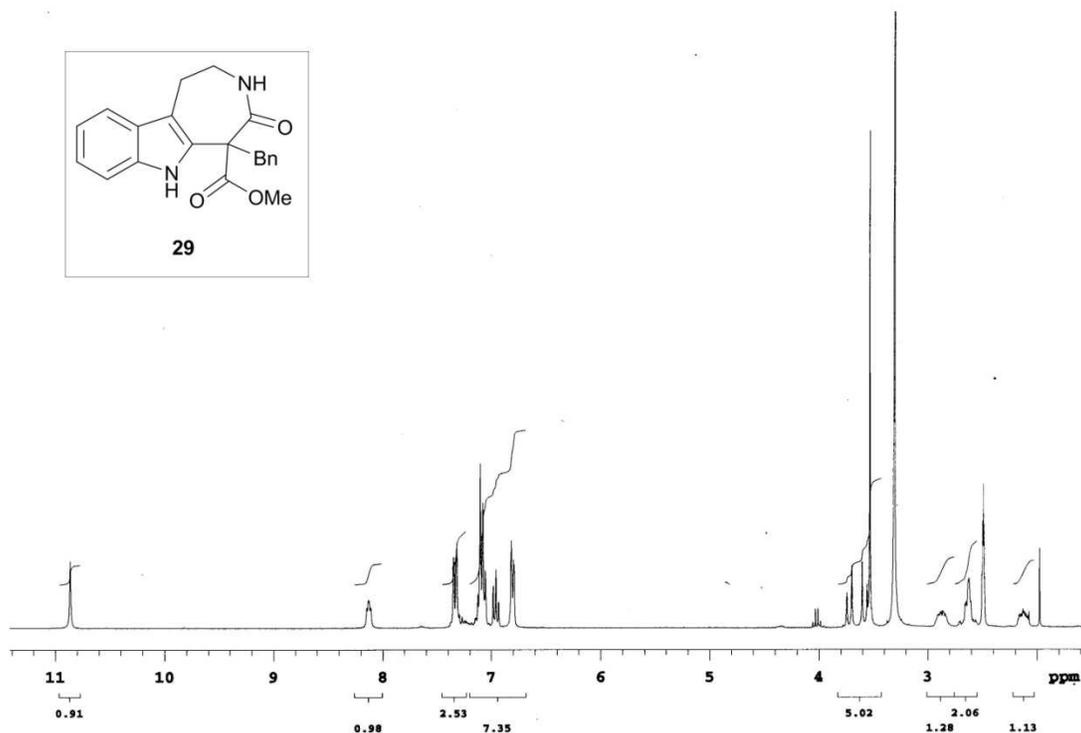
^1H and ^{13}C NMR Spectrum of **28a** (300 and 75 MHz, DMSO- d_6) δ (ppm)



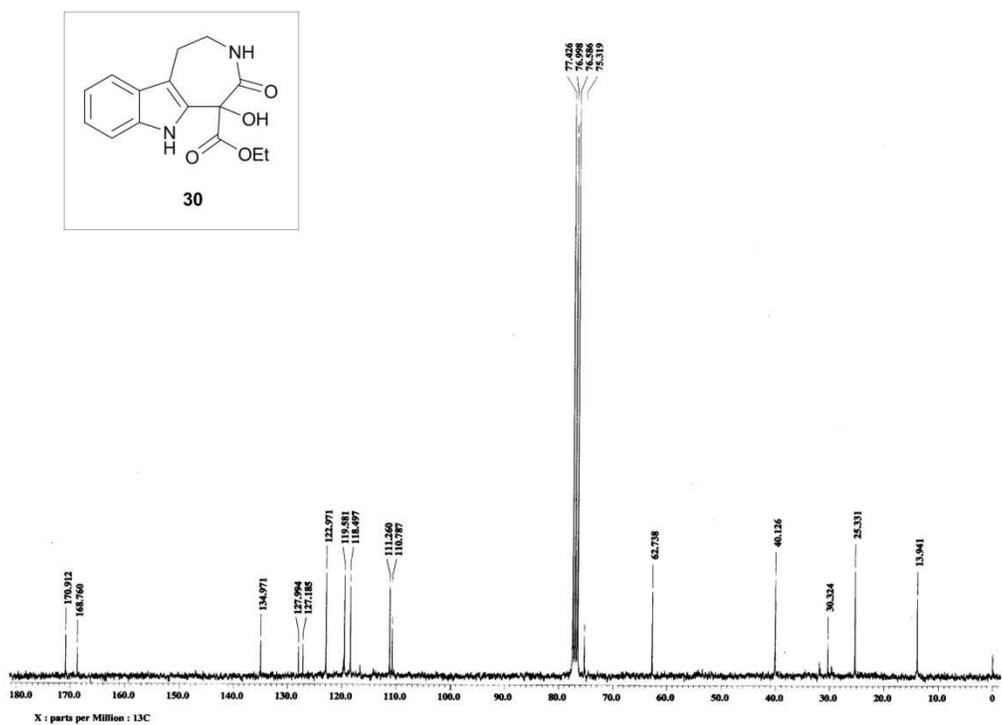
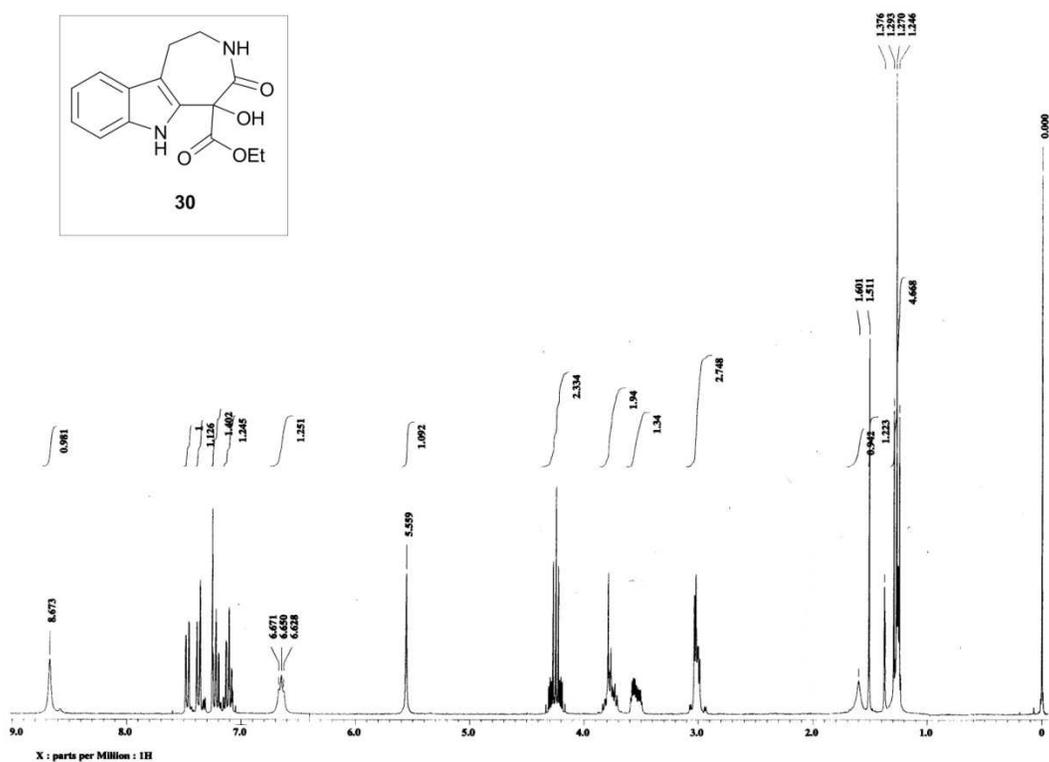
^1H and ^{13}C NMR Spectrum of **28b** (300 and 75 MHz, DMSO- d_6) $\delta(\text{ppm})$



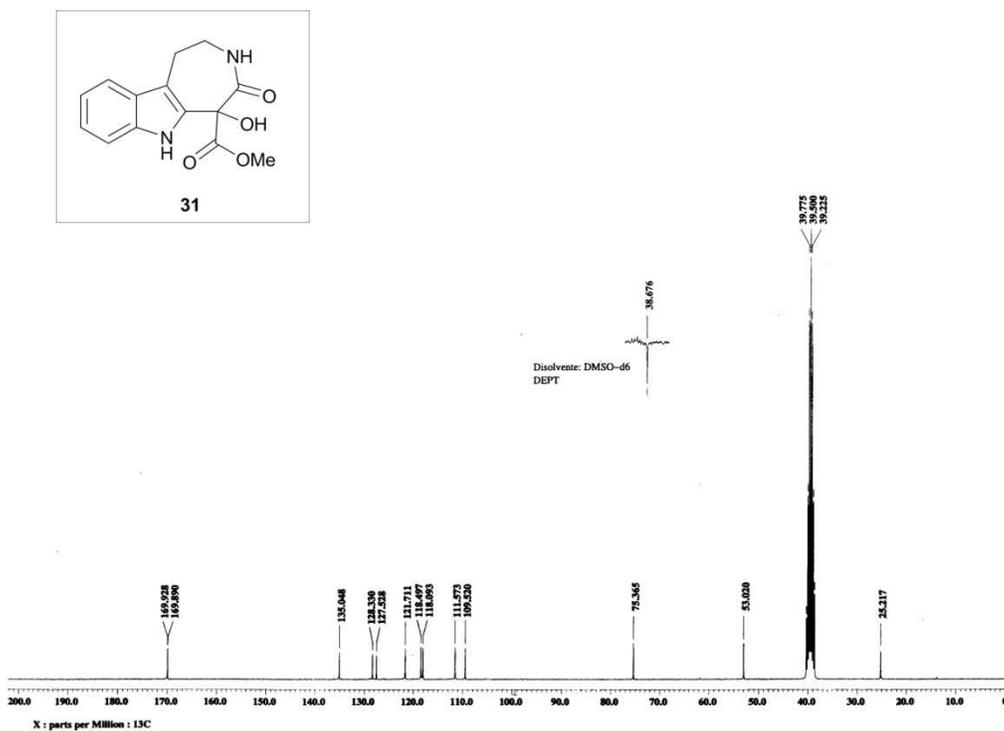
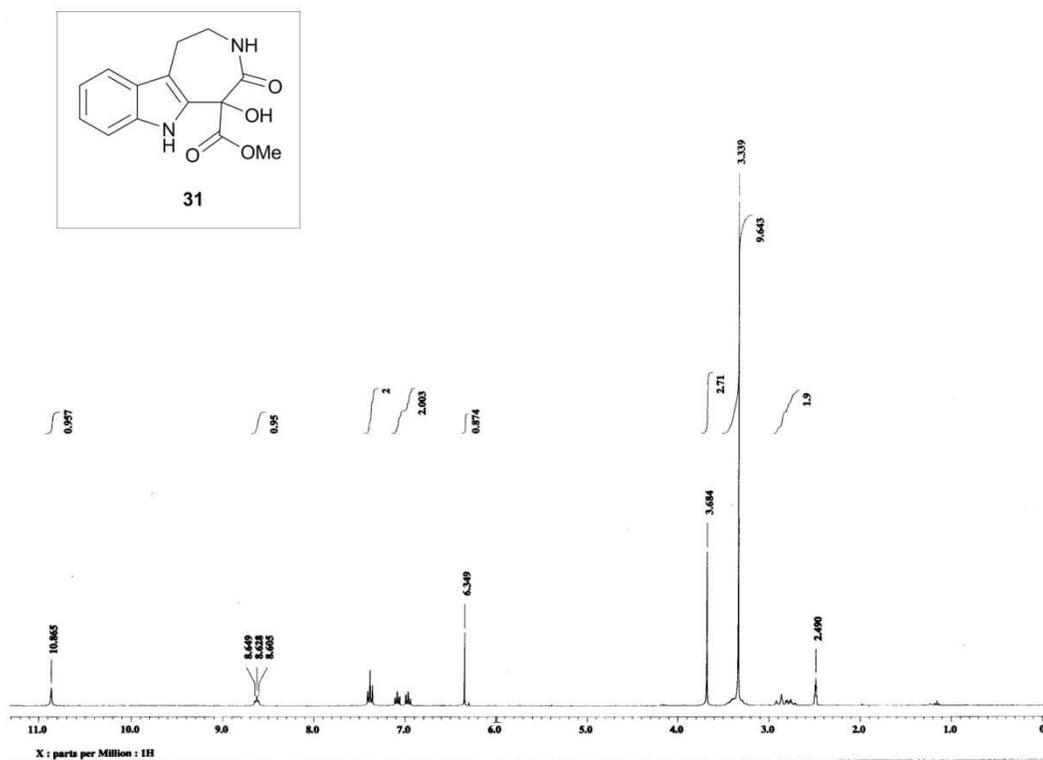
^1H and ^{13}C NMR Spectrum of **29** (300 and 75 MHz, DMSO- d_6) δ (ppm)



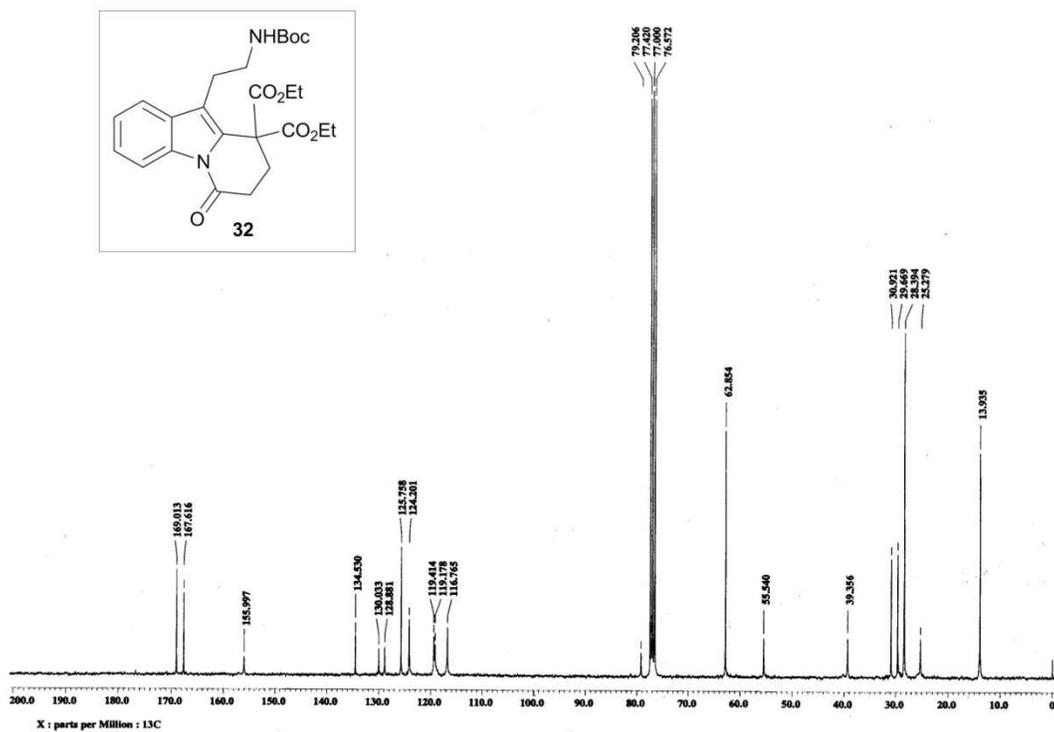
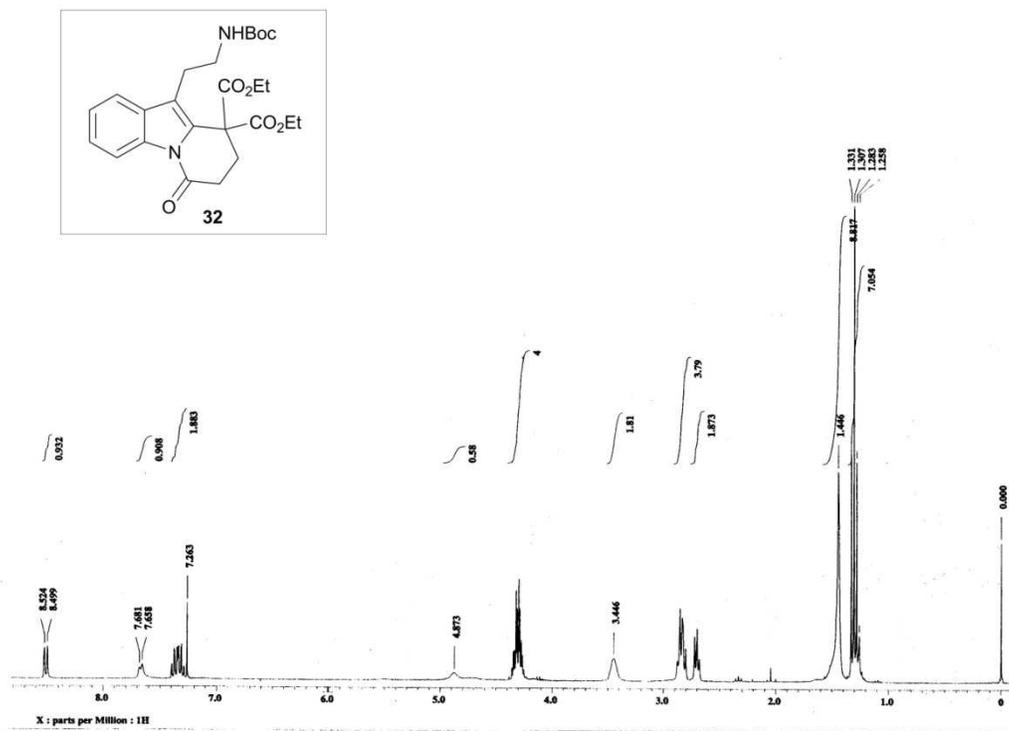
^1H and ^{13}C NMR Spectrum of **30** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$



^1H and ^{13}C NMR Spectrum of **31** (300 and 75 MHz, DMSO- d_6) δ (ppm)



^1H and ^{13}C NMR Spectrum of **32** (300 and 75 MHz, CDCl_3) $\delta(\text{ppm})$



^1H and ^{13}C NMR Spectrum of **33** (300 and 75 MHz, DMSO- d_6) $\delta(\text{ppm})$

