

Structural Optimization of Isoquinoline Derivatives from Lycobetaine and Their Inhibitory Activity against Neuroendocrine Prostate Cancer Cells

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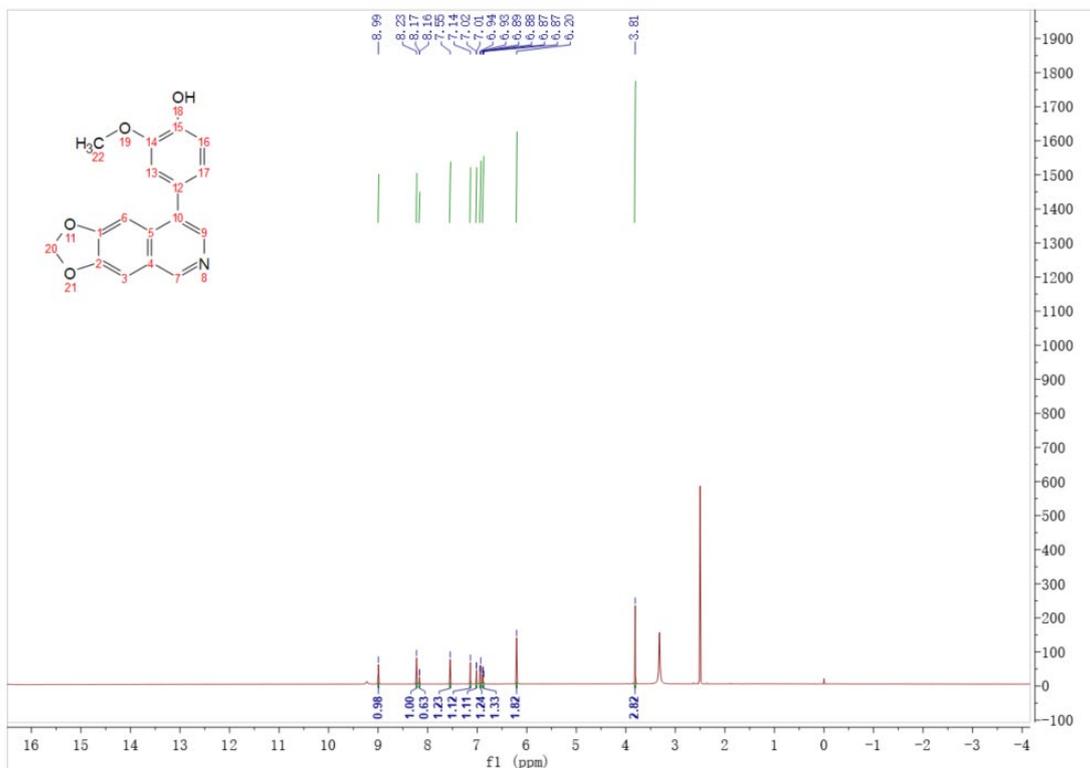
Supporting Information

Content

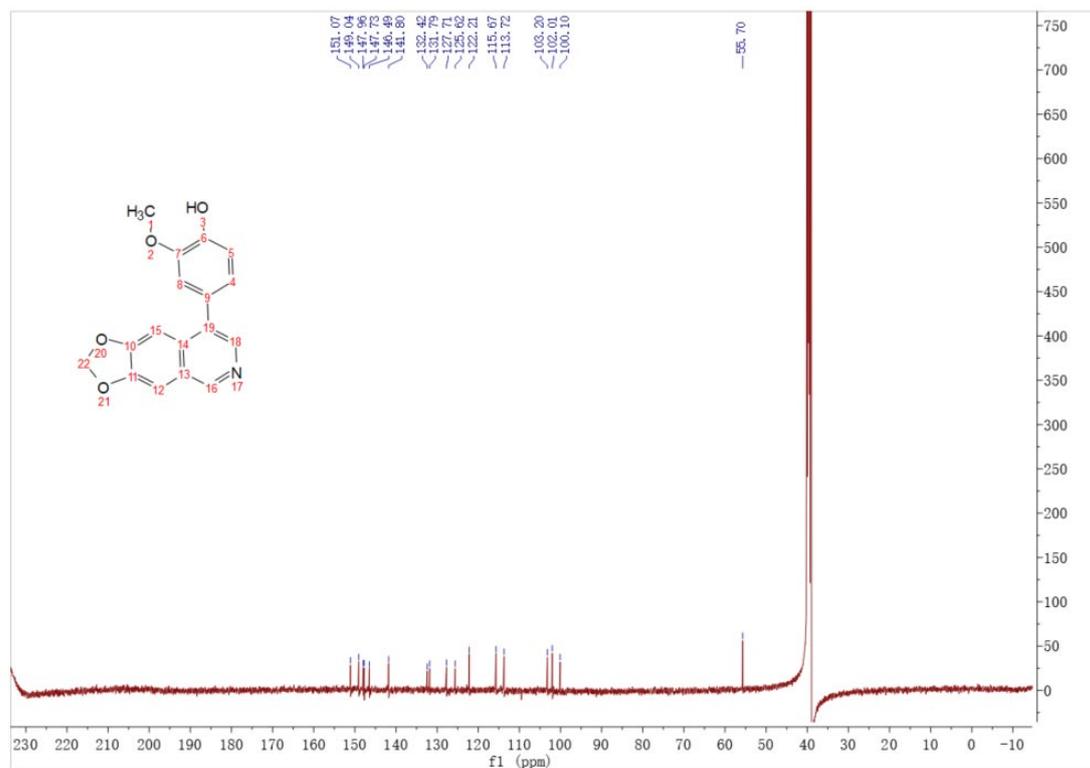
1. NMR Spectrums of representative compounds.....S3–S13
2. HPLC Spectrums of representative compounds..... ·S14–S15

1. NMR Spectrums

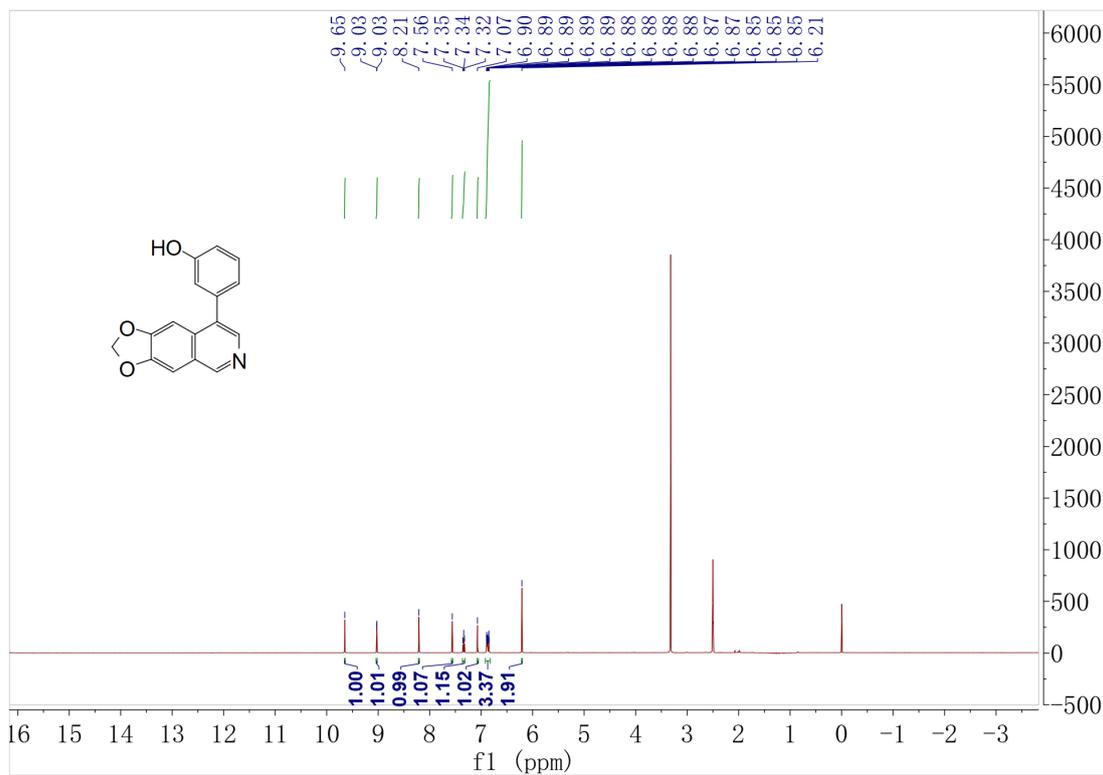
¹H NMR Spectrum of compound 1



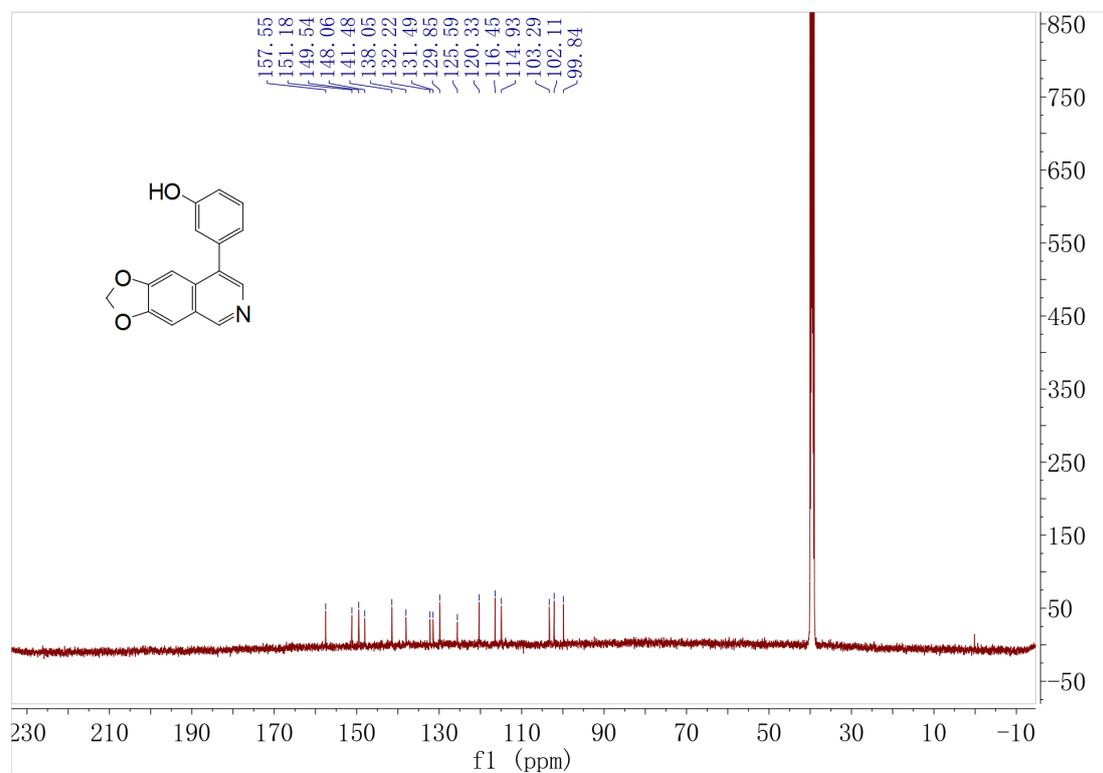
¹³C NMR Spectrum of compound 1



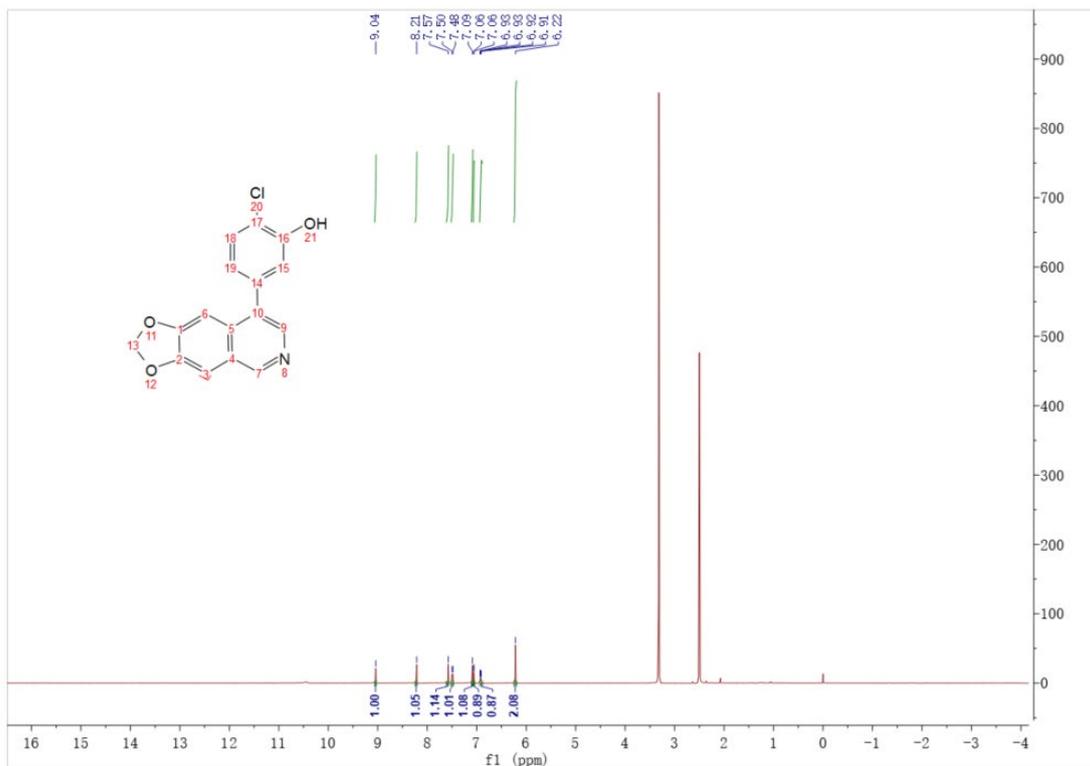
¹H NMR Spectrum of compound 19



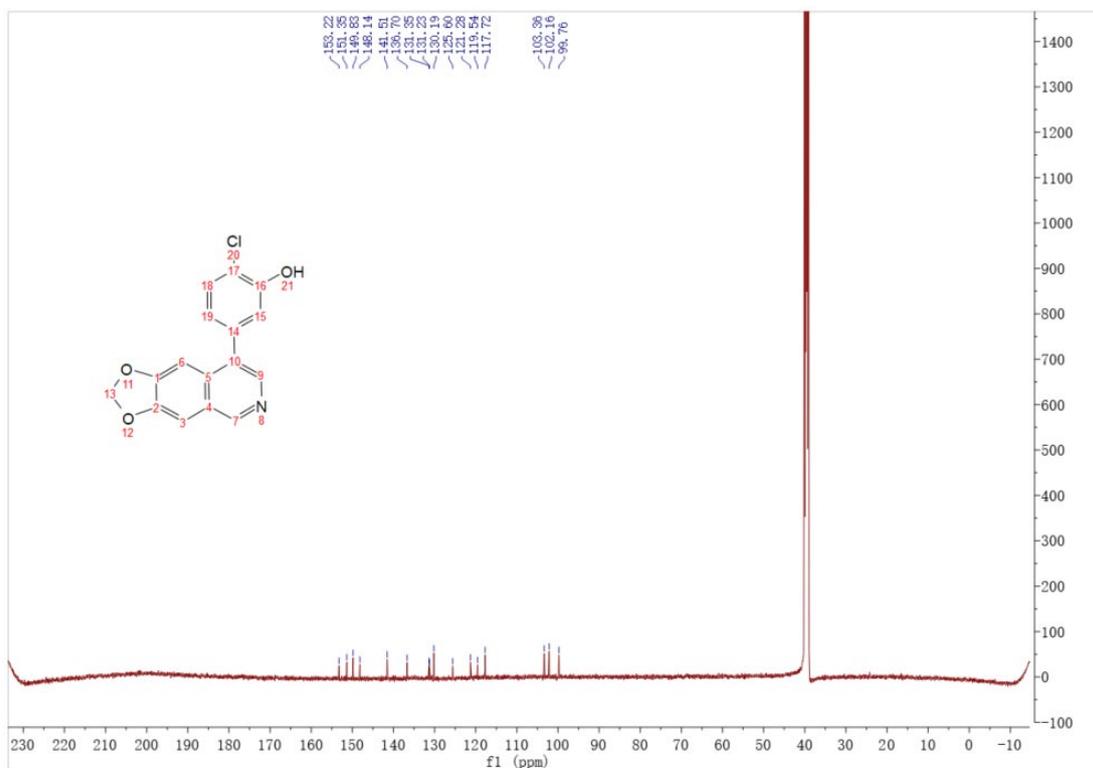
¹³C NMR Spectrum of compound 19



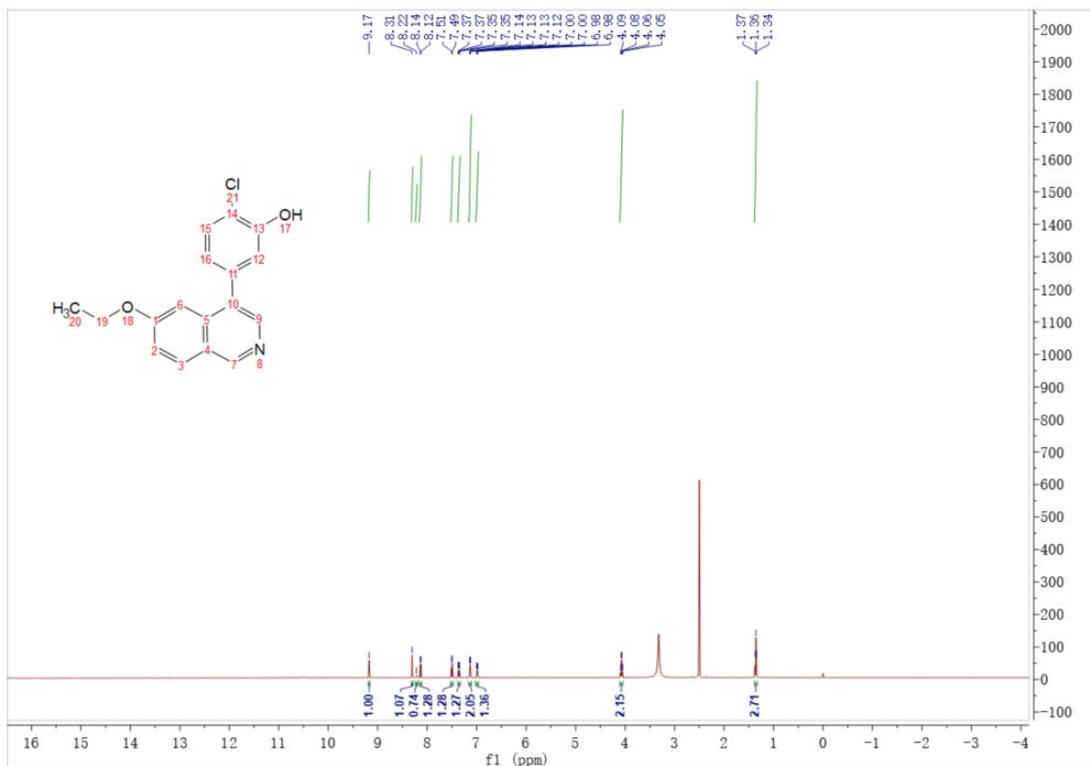
¹H NMR Spectrum of compound 20



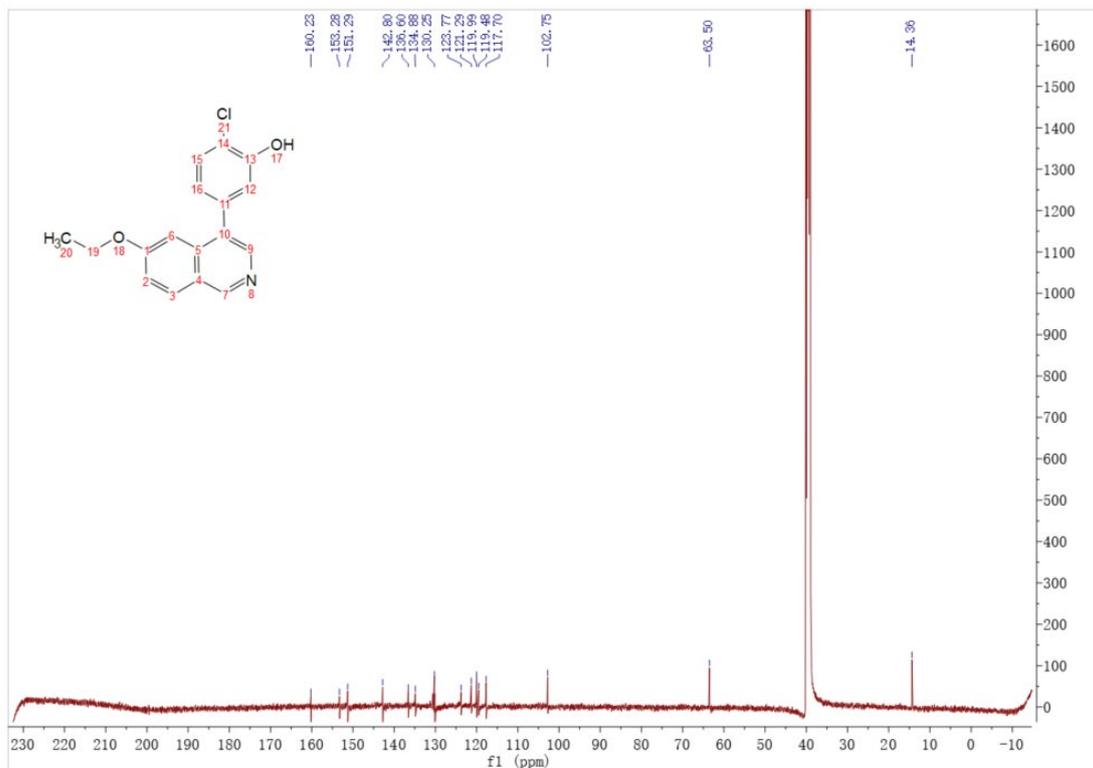
¹³C NMR Spectrum of compound 20



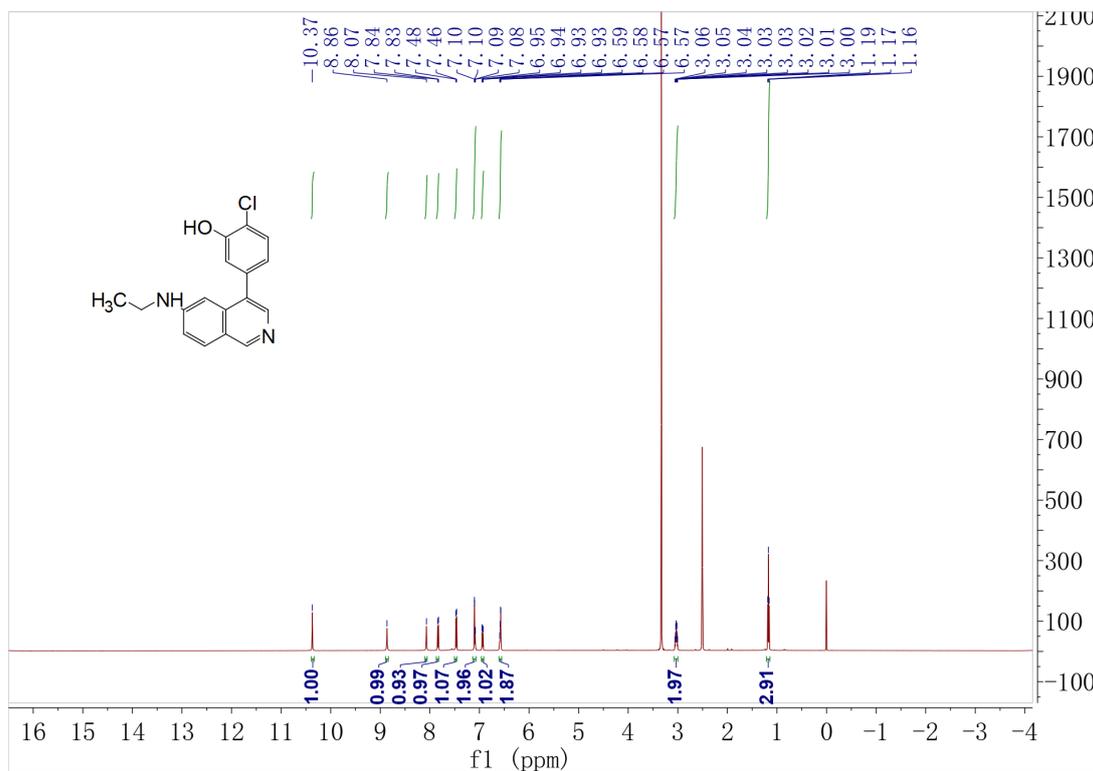
^1H NMR Spectrum of compound 23



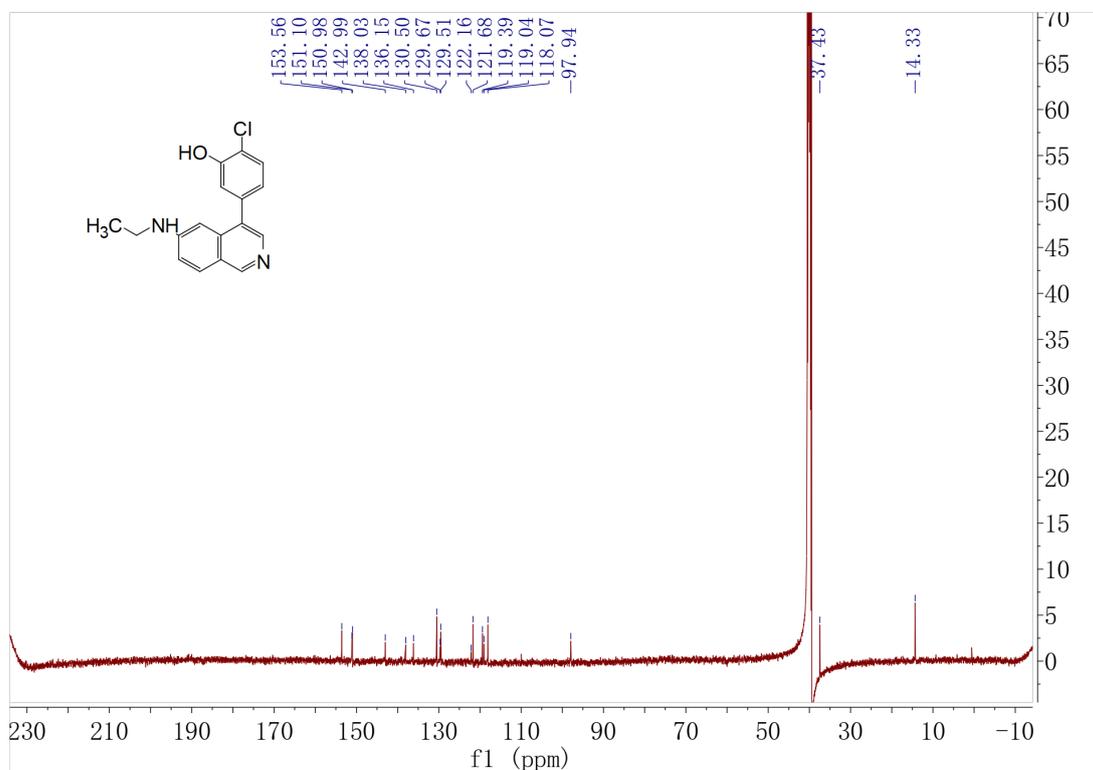
^{13}C NMR Spectrum of compound 23



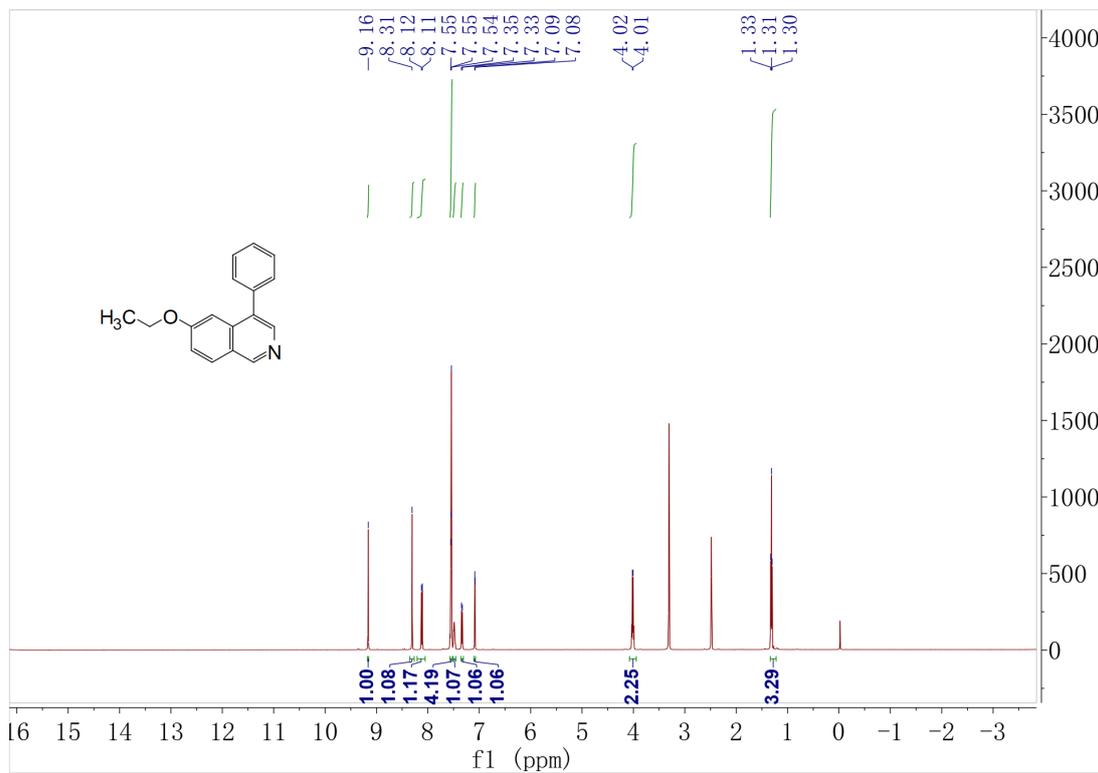
¹H NMR Spectrum of compound 34



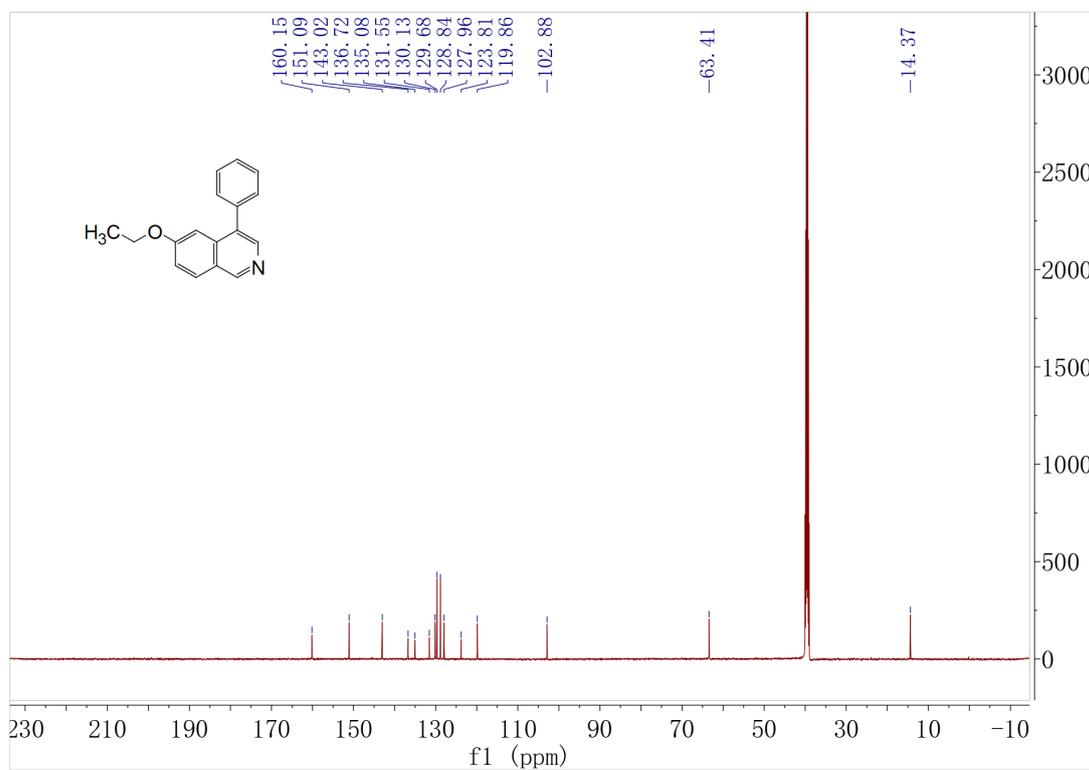
¹³C NMR Spectrum of compound 34



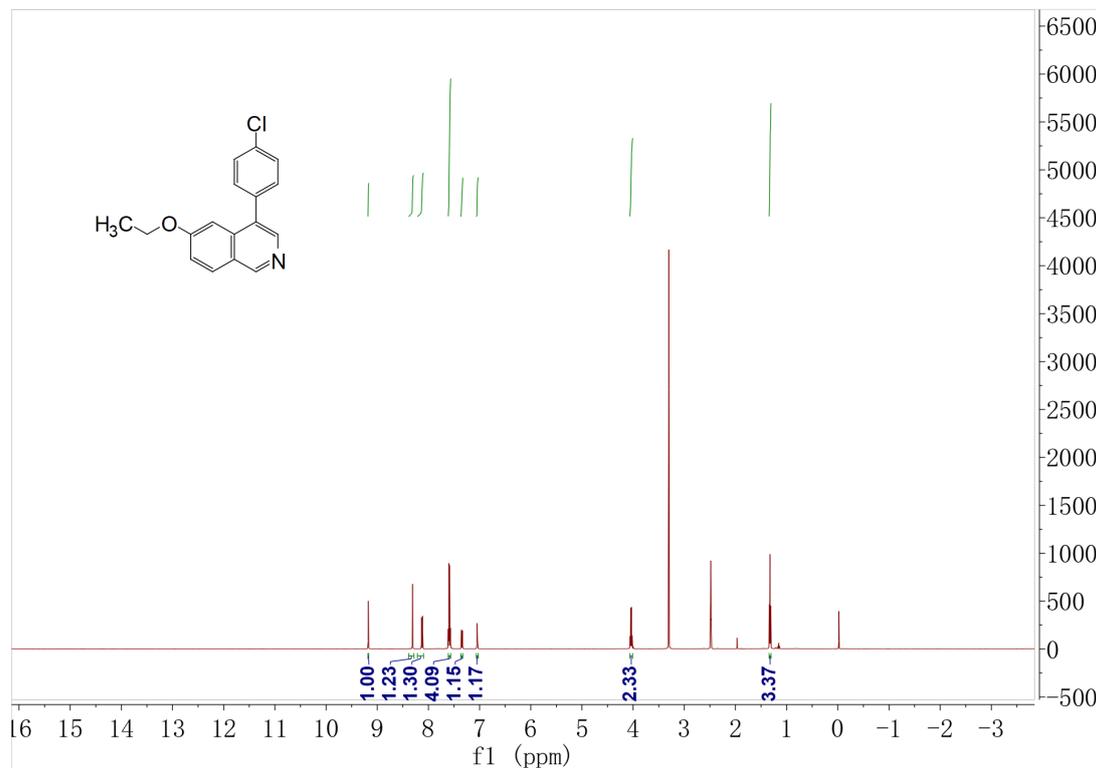
¹H NMR Spectrum of compound 37



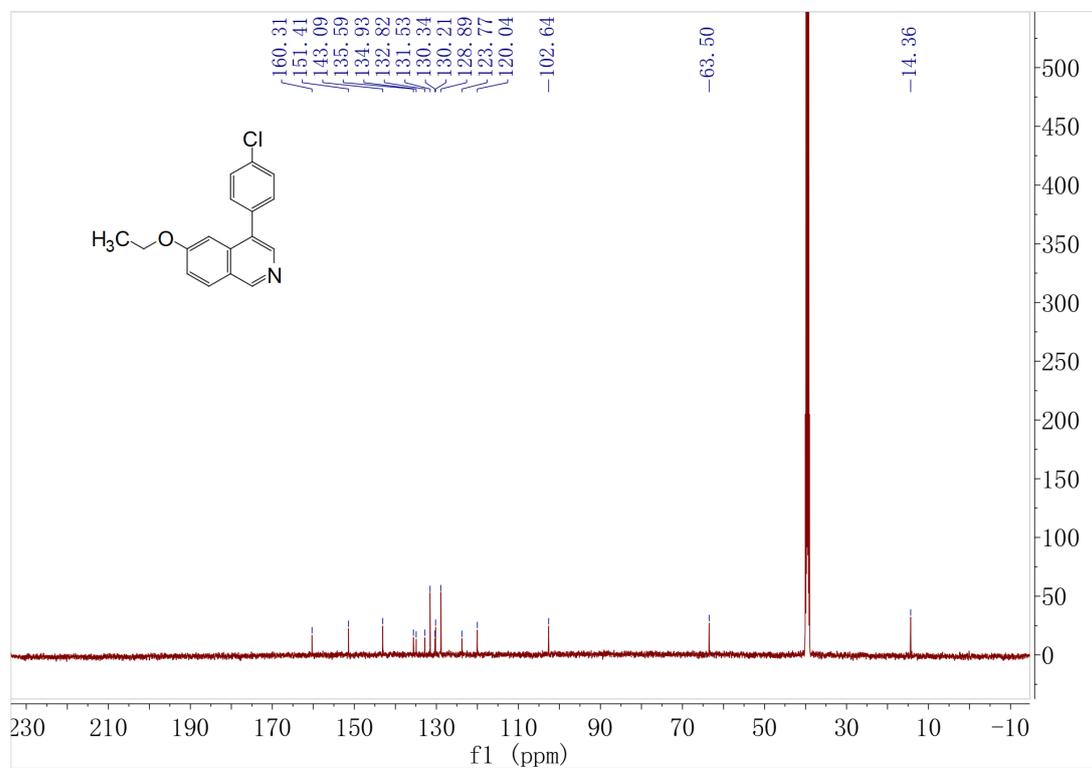
¹³C NMR Spectrum of compound 37



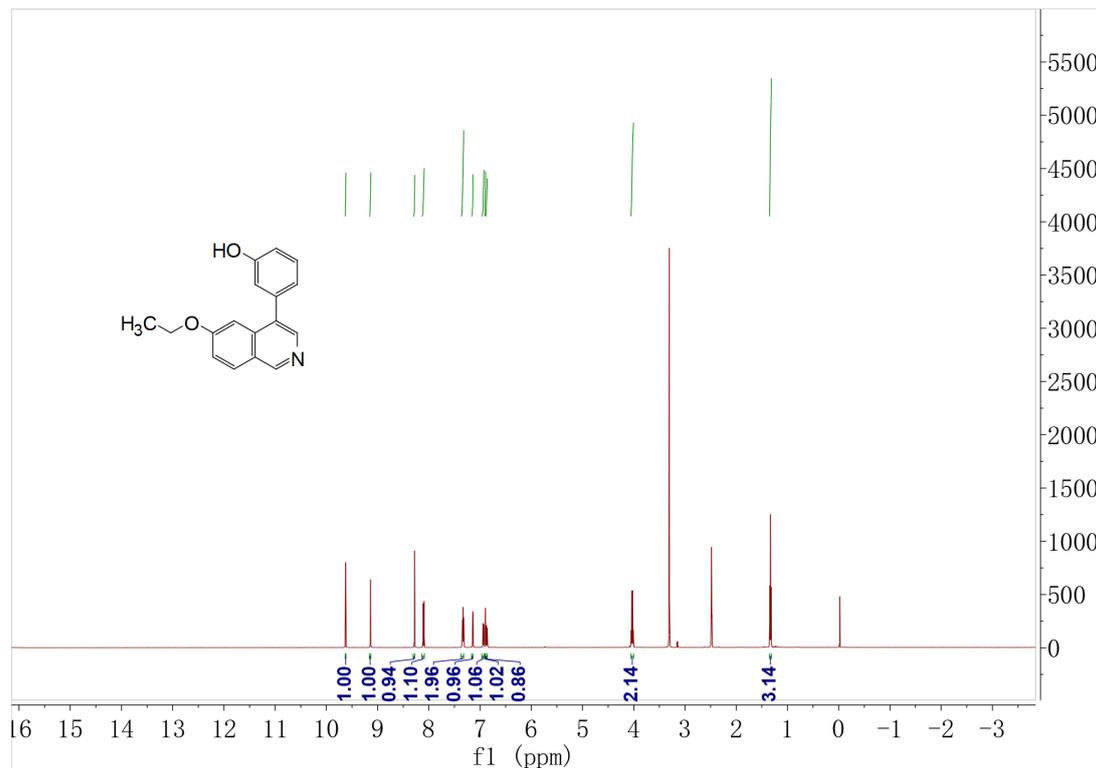
¹H NMR Spectrum of compound 38



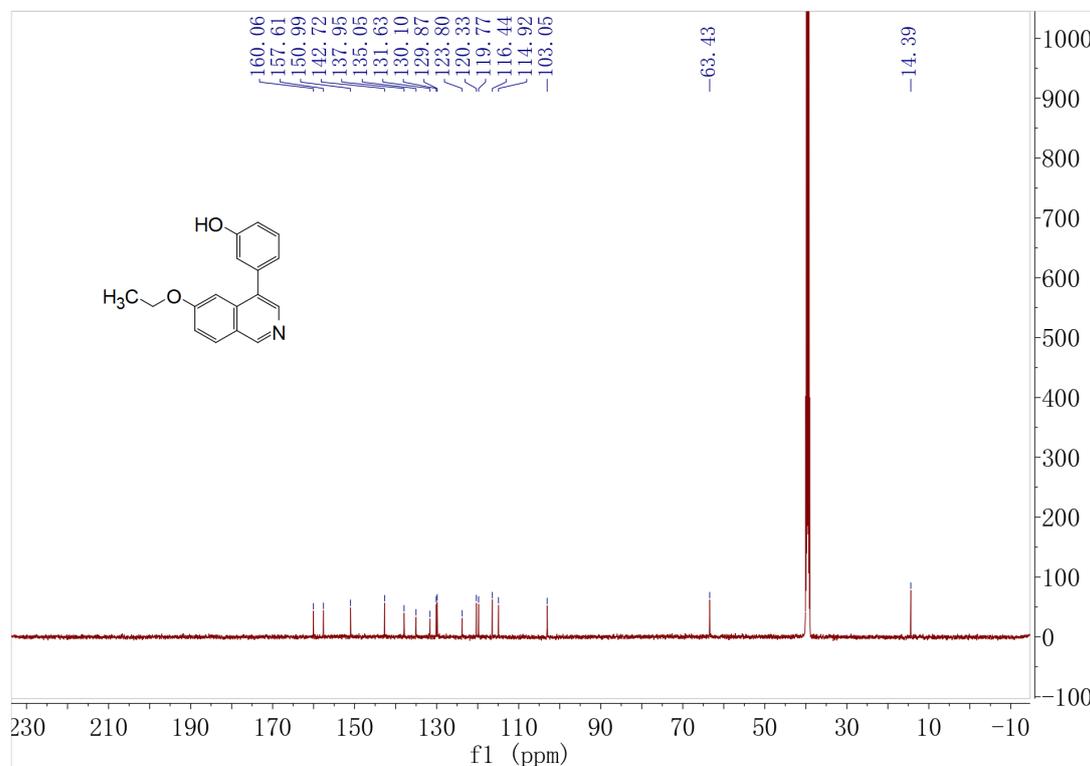
¹³C NMR Spectrum of compound 38



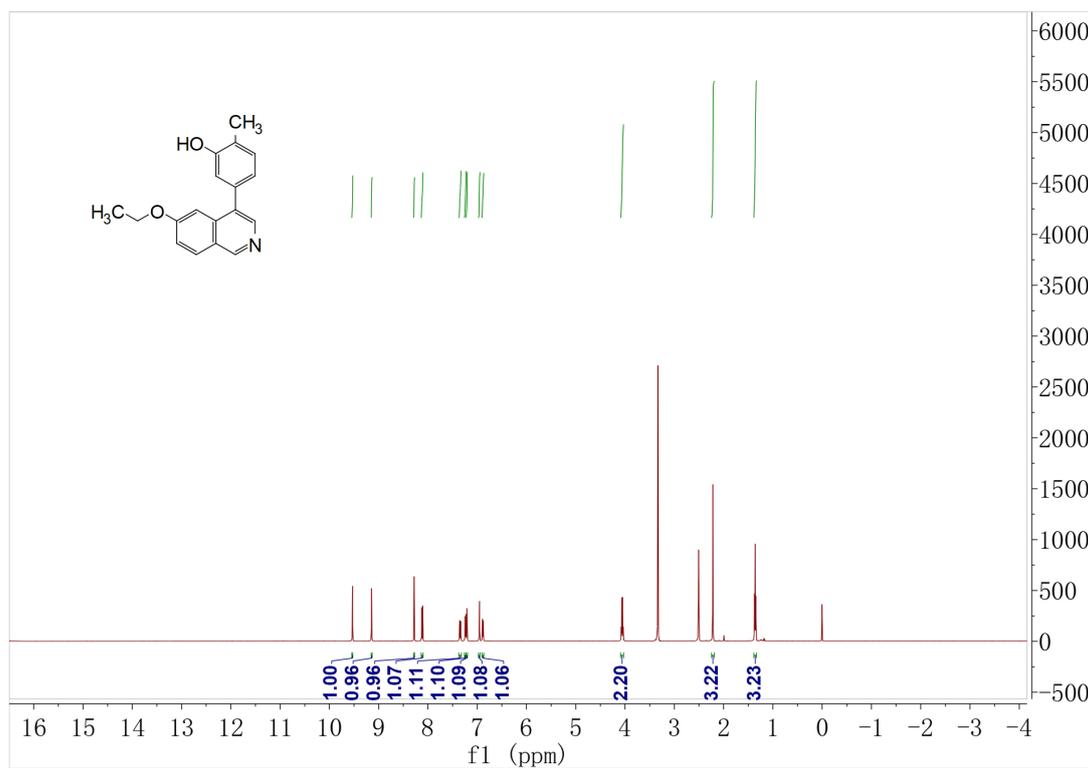
¹H NMR Spectrum of compound 39



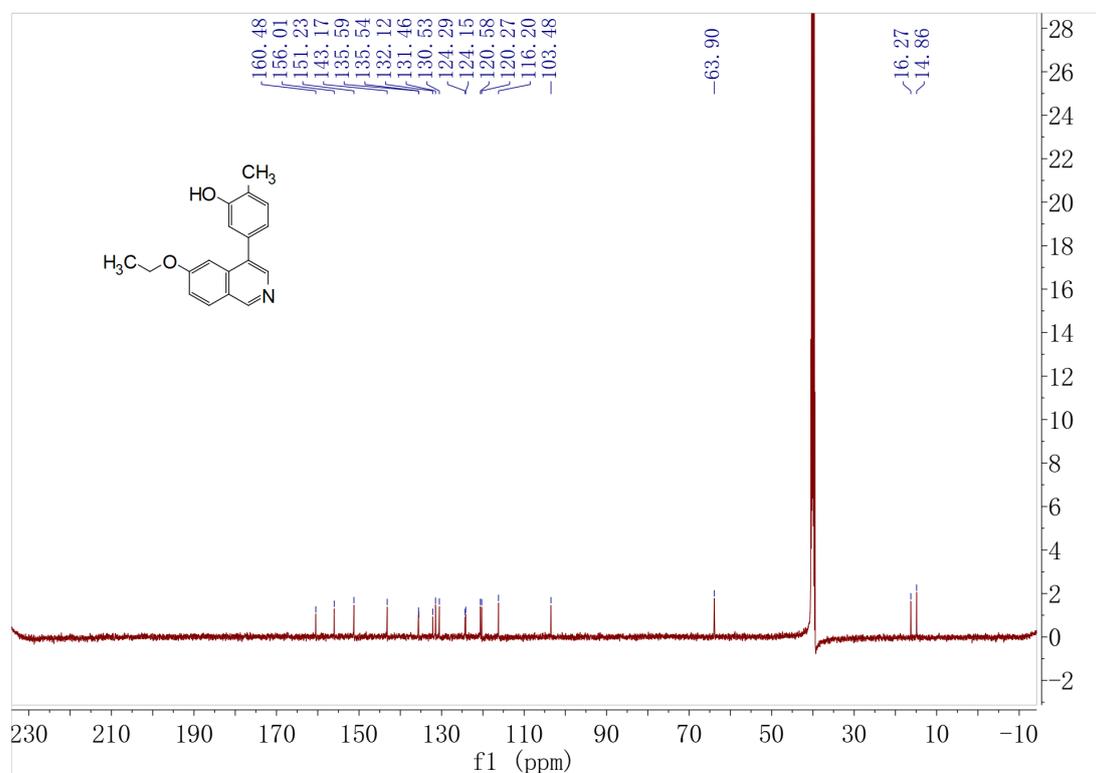
¹³C NMR Spectrum of compound 39



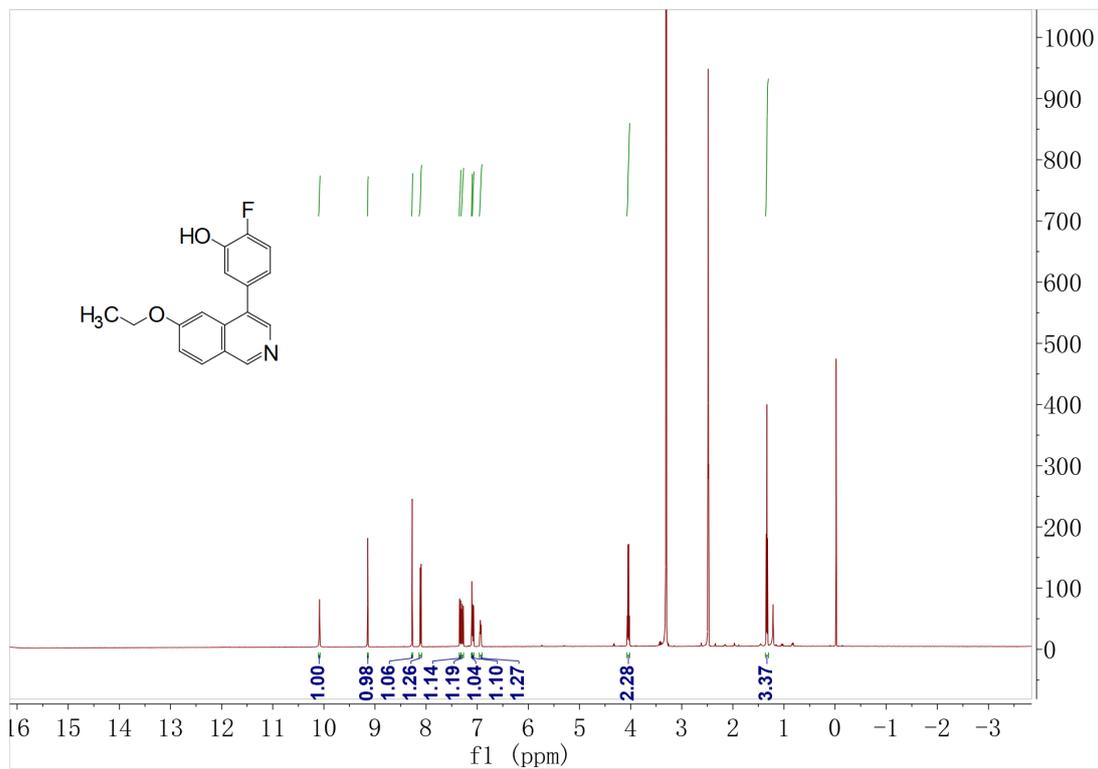
¹H NMR Spectrum of compound 40



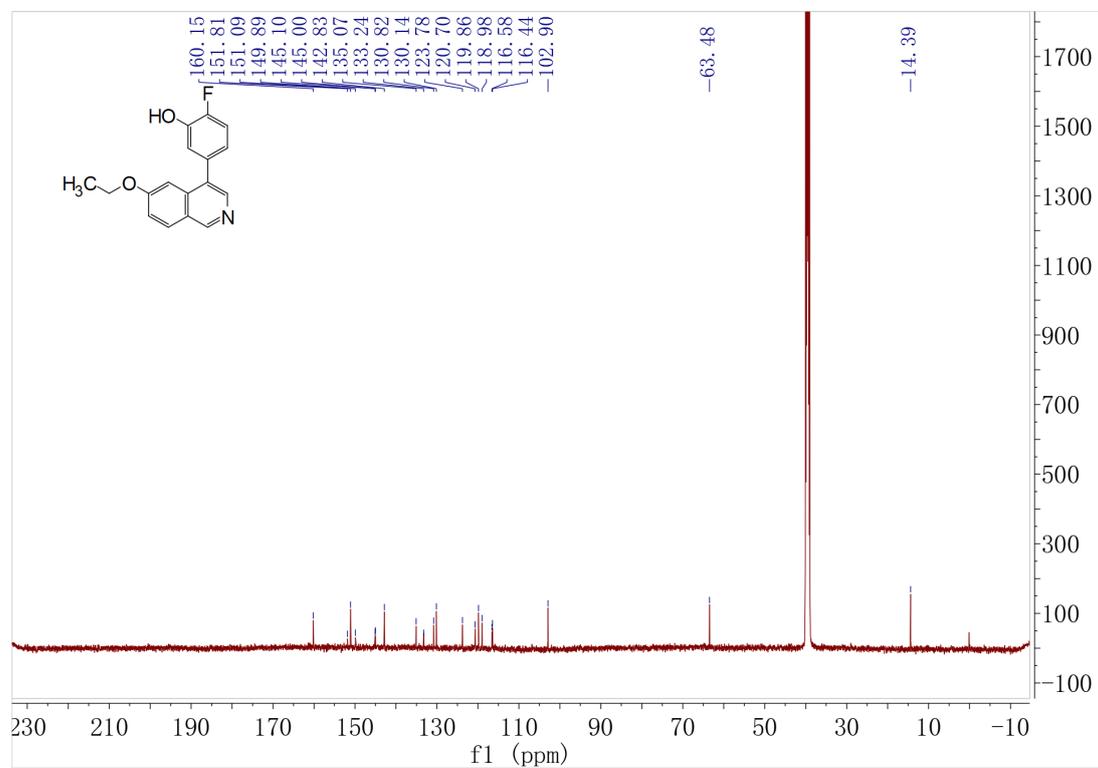
¹³C NMR Spectrum of compound 40



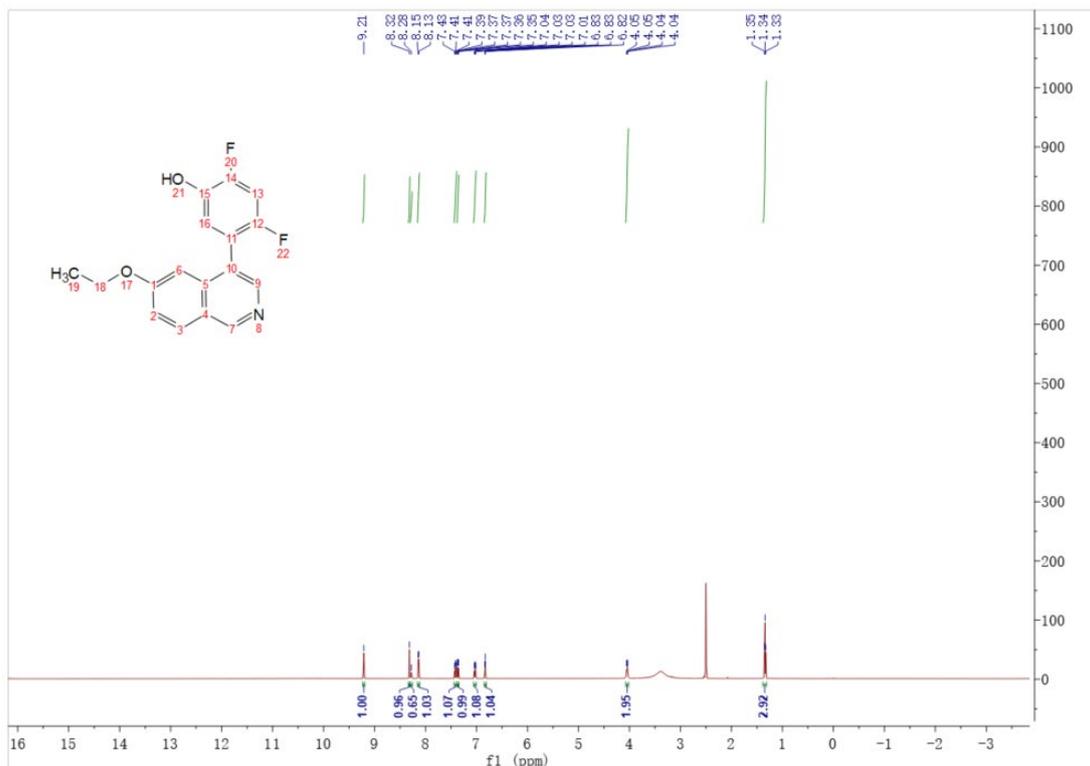
¹H NMR Spectrum of compound 45



¹³C NMR Spectrum of compound 45

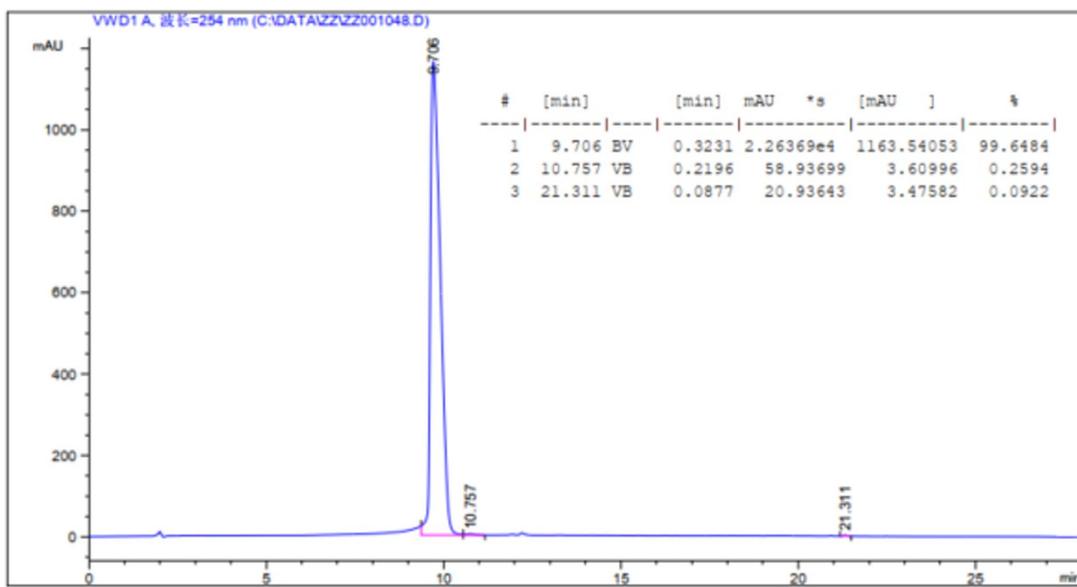


¹H NMR Spectrum of compound 46

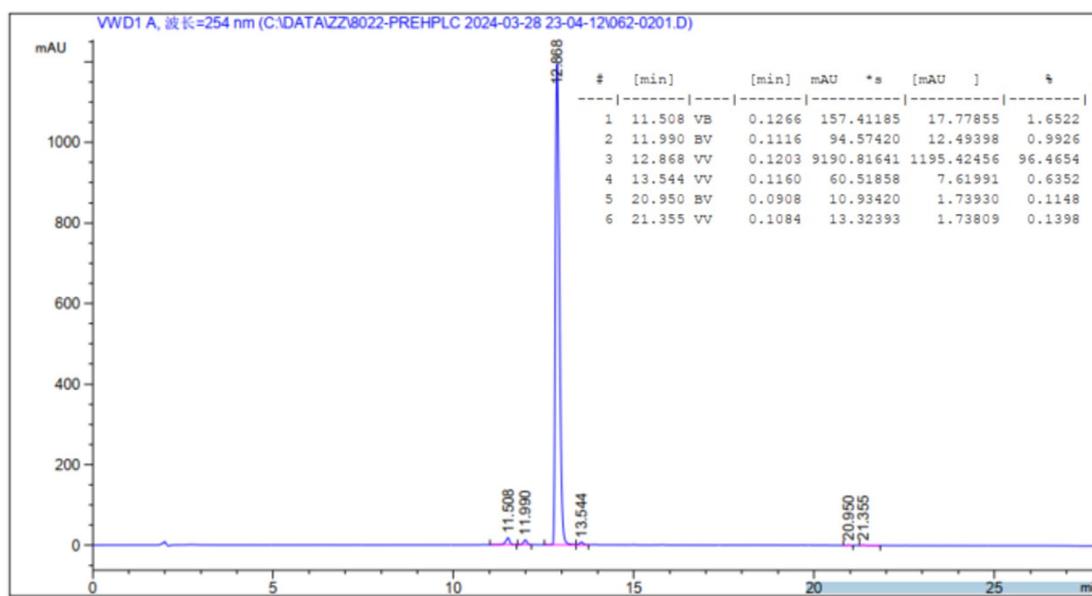


2. HPLC Spectrums

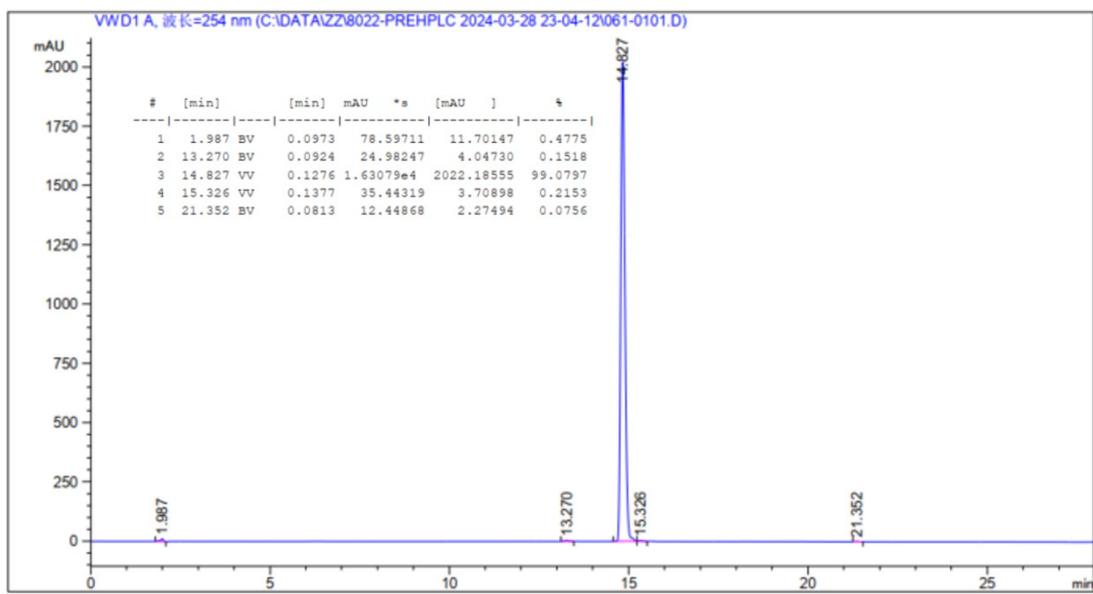
HPLC Spectrum of compound **1** (99.6% purity)



HPLC Spectrum of compound **20** (96.5% purity)



HPLC Spectrum of compound 23 (99.1% purity)



HPLC Spectrum of compound 46 (99.5% purity)

