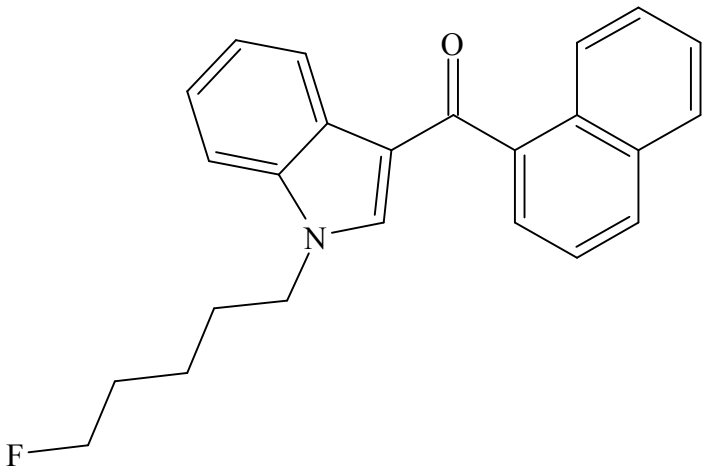


1. GENERAL INFORMATION

IUPAC Name: [1-(5-fluoropentyl)-1H-indol-3-yl](naphthalen-1-yl)methanone

CFR: Schedule I

CAS#: 335161-24-5

Synonyms: (1-(5-fluoropentyl)-3-(1-naphthoyl)indole

Source: DEA Reference Material Collection

Appearance: White powder

Kovat's Index: Pending

UV_{max} (nm): 218.1, 314.0

2. CHEMICAL AND PHYSICAL DATA

2.1 CHEMICAL DATA

Form	Chemical Formula	Molecular Weight	Melting Point (^{o}C)
Base	$C_{24}H_{22}FNO$	359	93.7

3. ADDITIONAL RESOURCES

Forendex

Wikipedia

4. QUALITATIVE DATA

4.1 NUCLEAR MAGNETIC RESONANCE

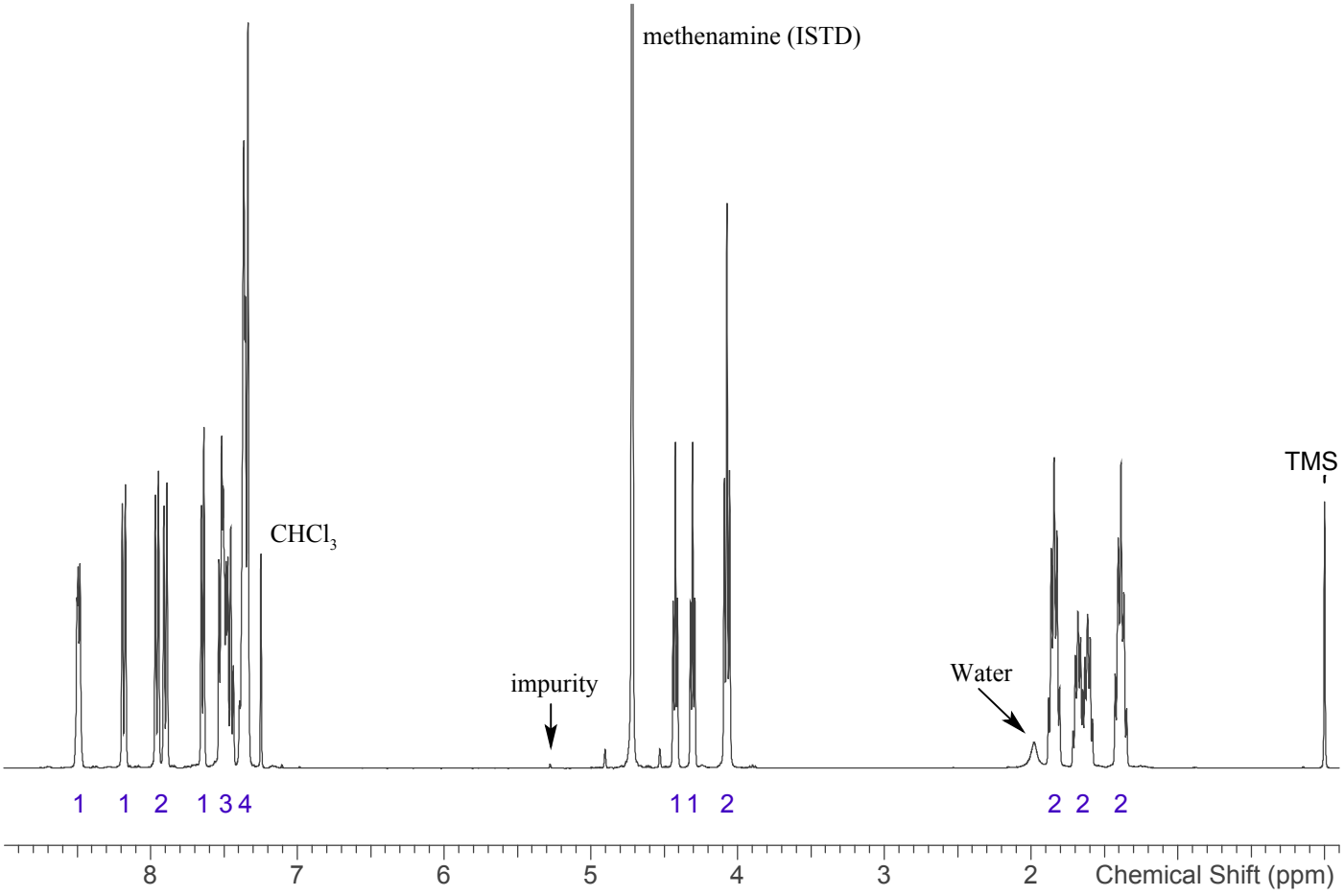
Method NMR $CDCl_3$

Sample Preparation: Dilute analyte to ~5mg/mL in deuterochloroform ($CDCl_3$) containing TMS for 0 ppm reference and methenamine as quantitative internal standard.

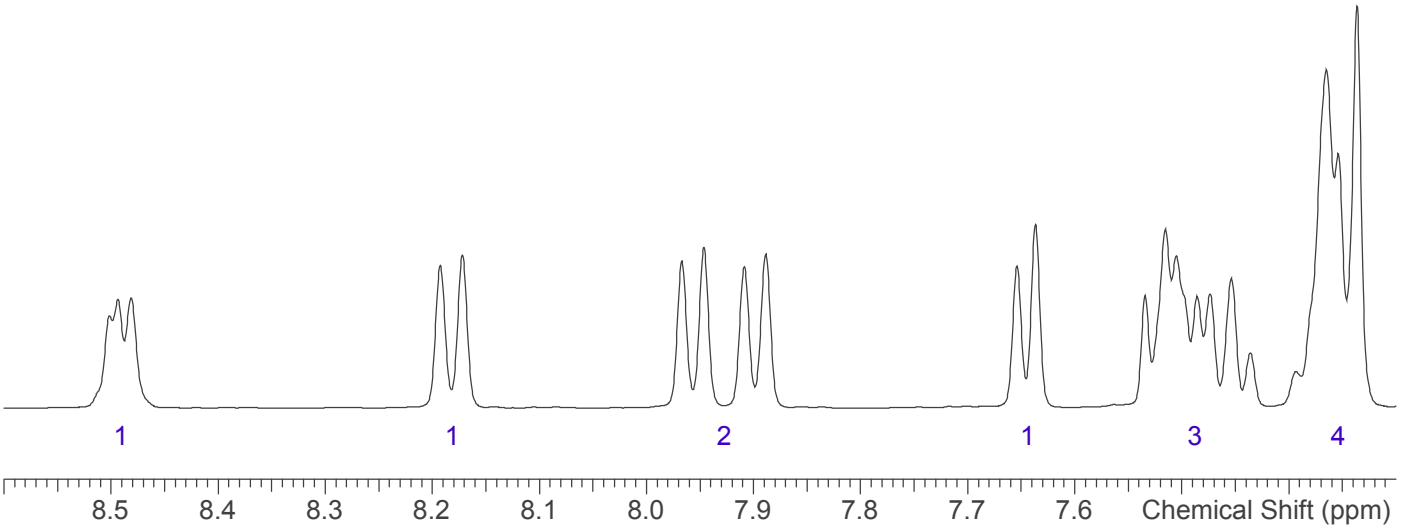
Instrument: Varian Mercury 400 MHz NMR spectrometer with proton detection probe

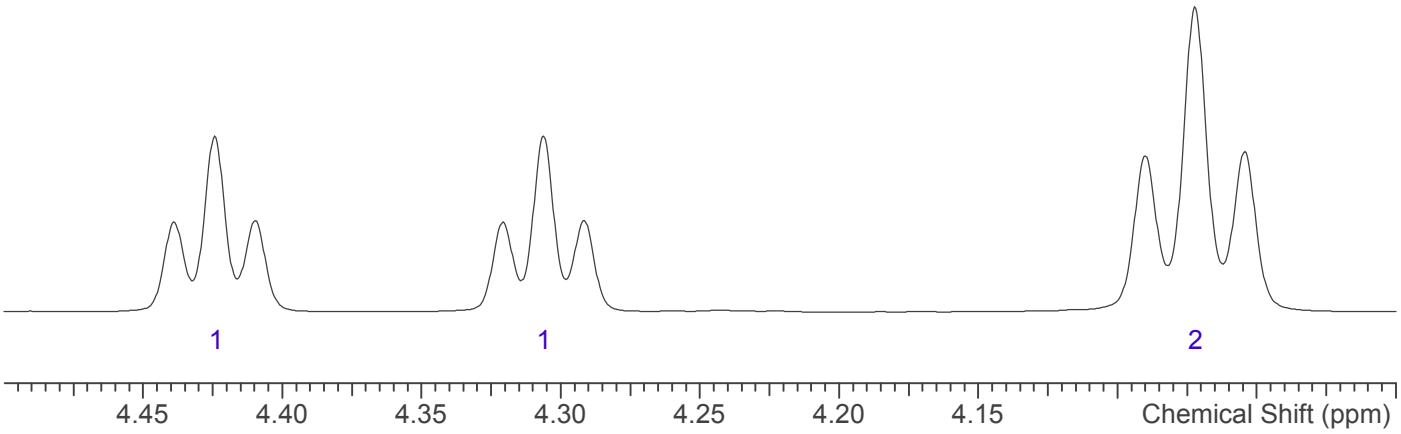
Parameters: Spectral width: at least containing -3 ppm through 13 ppm
Pulse angle: 90°
Delay between pulses: 45 seconds
Number of scans (nt): 8
Number of steady state scans: 0
Oversampling: 4 or more
Shimming: automatic gradient shimming of Z1-4 shims
Phasing, Drift Correction: automatic or manual

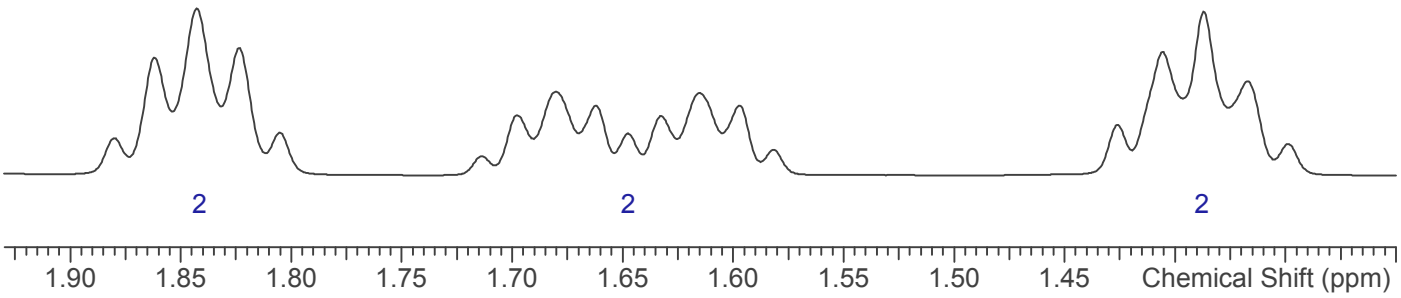
^1H NMR: AM2201 Lot SF0006; $CDCl_3$; 400 MHz



^{1}H NMR: AM2201 Lot SF0006; $CDCl_3$; 400 MHz





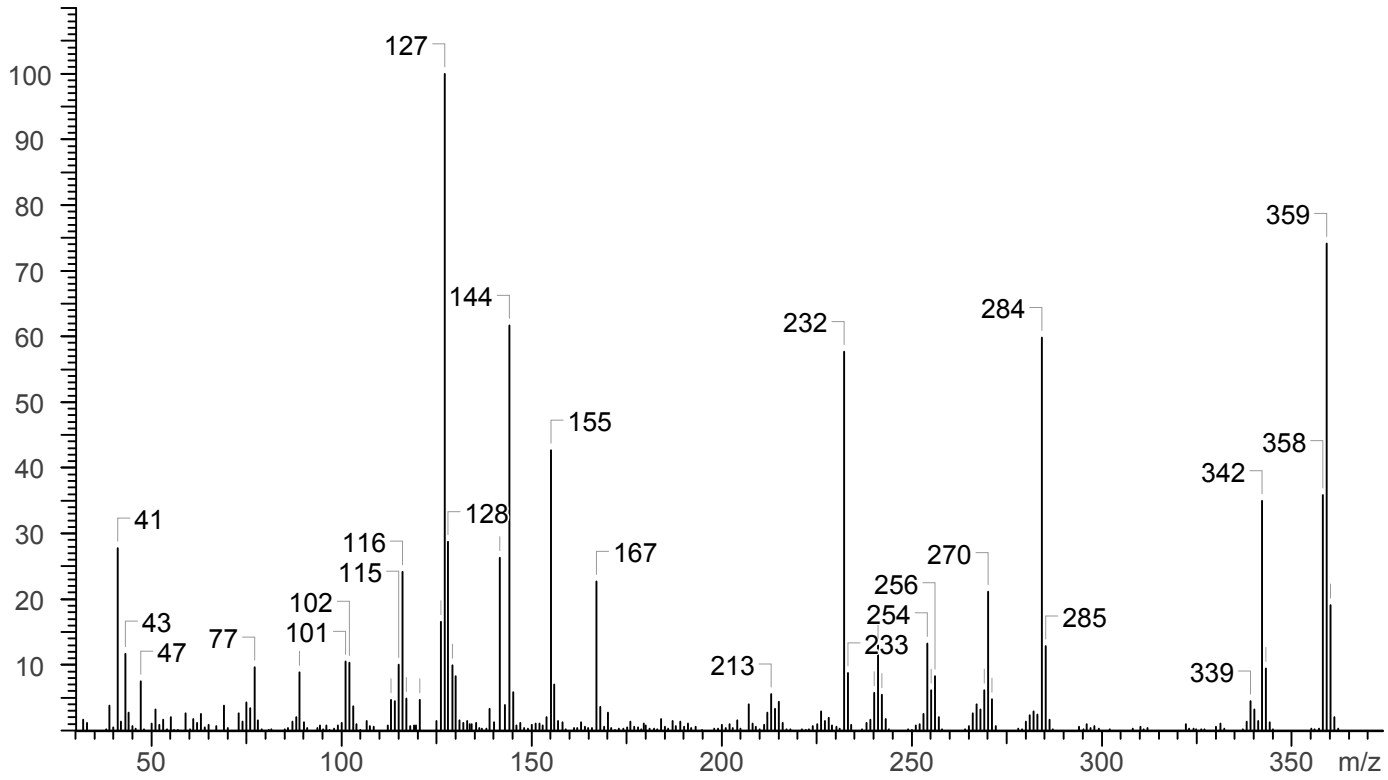


4.2 GAS CHROMATOGRAPHY/MASS SPECTROMETRY

Sample Preparation: Dilute to ~1 mg/mL in MeOH

Instrument:	Agilent gas chromatograph operated in split mode with MS detector
Column:	DB-1MS; 30m x 0.25mm x 0.25µm
Carrier Gas:	Helium at 1 mL/min
Temperatures:	Injector: 280°C MSD transfer line: 280°C MS Source: 230°C MS Quad: 150°C Oven Program: 1) 100°C initial temperature for 1.0 min 2) Ramp to 300°C at 12°C/min 3) Hold final temperature for 9.0 min
Injection Parameters:	Split Ratio = 20:1, 1 µL injected
MS Parameters:	Mass scan range: 30-550 amu Threshold: 100 Tune file: stune.u Acquisition mode: scan
Retention Time:	21.093 min

EI Mass Spectrum: AM2201 Lot SF0006



4.3 INFRARED SPECTROSCOPY (FTIR)

Insrument: FTIR with diamond ATR attachment (3 bounce)

Scan Parameters: Number of scans: 32
Number of background scans: 32
Resolution: 4 cm^{-1}
Sample gain: 8
Aperture: 150

FTIR ATR (Diamond, 3 bounce): AM2201 Lot SF0006