

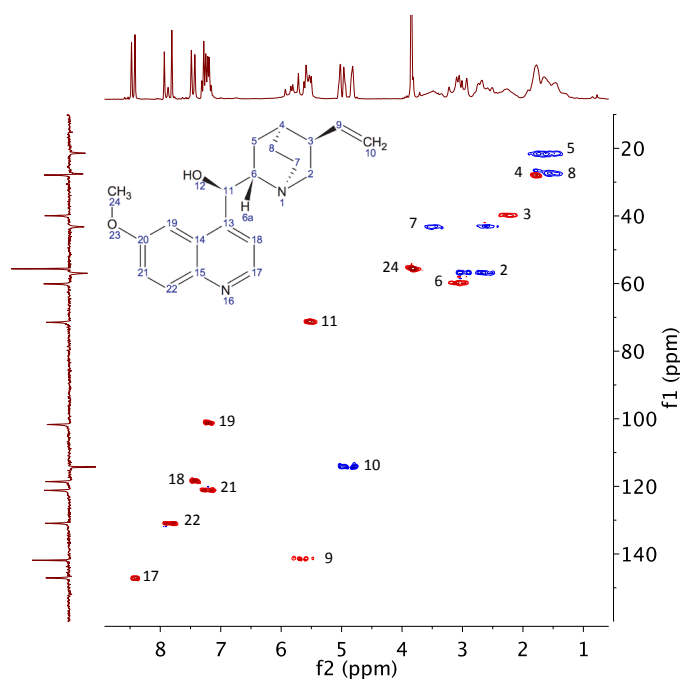
# Spinsolve 80

Experience the most powerful benchtop NMR spectrometer



## Outstanding Features

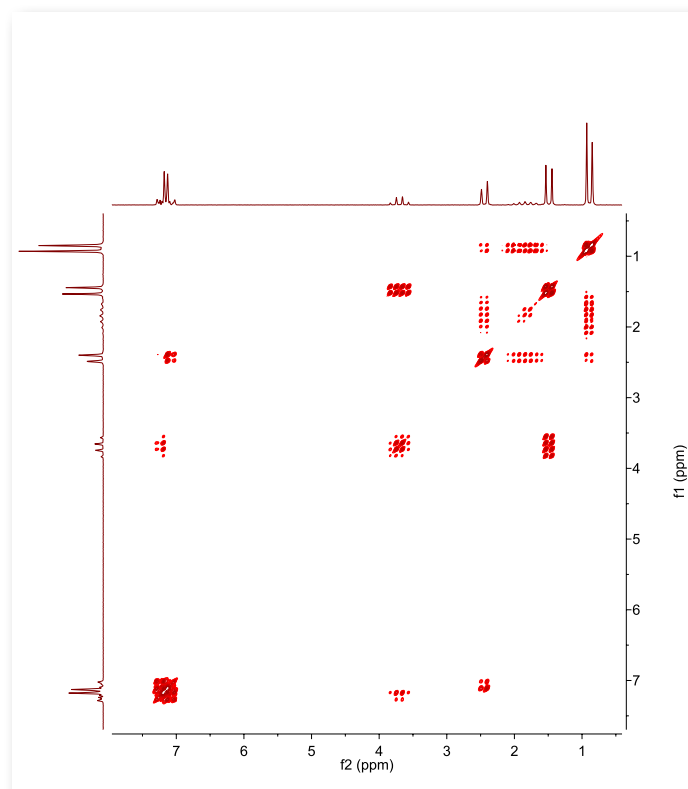
- Highest field strength (80 MHz  $^1\text{H}$  frequency)
- Largest chemical shift spread
- Highest sensitivity
- Superb Resolution
  - Classic LW 50/0.55% < 0.4 / 16 Hz
  - ULTRA LW 50/0.55/0.11% < 0.25 / 10 / 20 Hz
- Multi-nuclear probe
- 5 mm standard NMR tubes
- No sample spinning required
- Advanced methods like COSY, HSQC, HMBC, etc.
- Benchtop size and weight
- No cryogenics
- Available with automatic sample changer



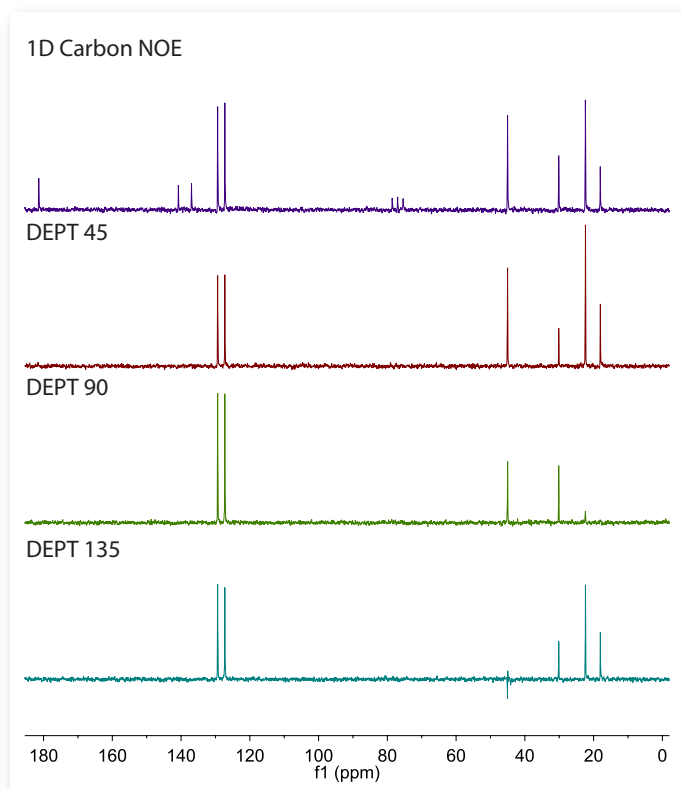
80 MHz HSQC-ME of Quinine

## The most advanced multi-nuclear methods... in one click!

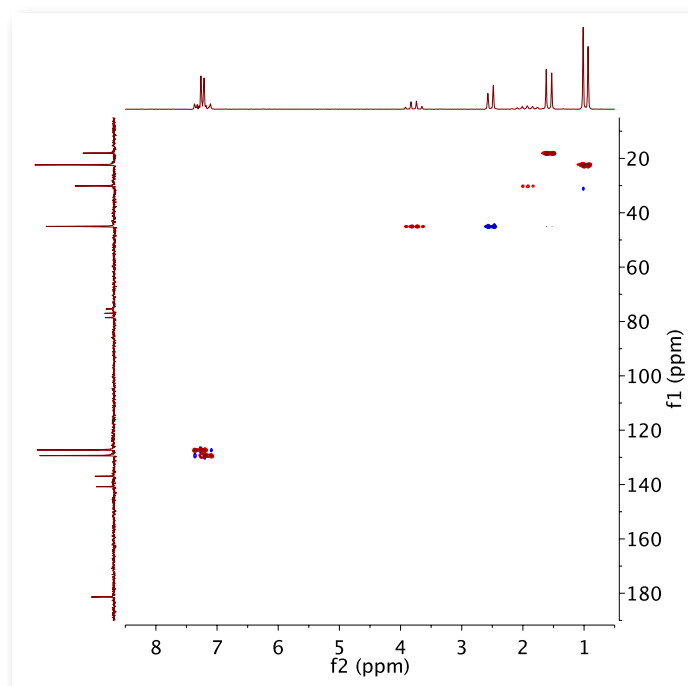
80 MHz NMR spectra of Ibuprofen



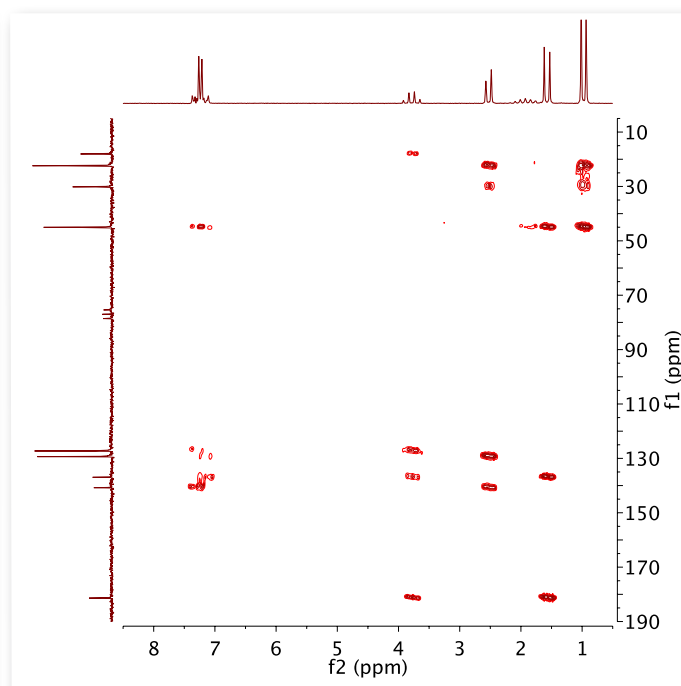
H-H COSY



1D Carbon plus DEPT 45, 90, and 135 spectra



HSQC-ME



HMBC

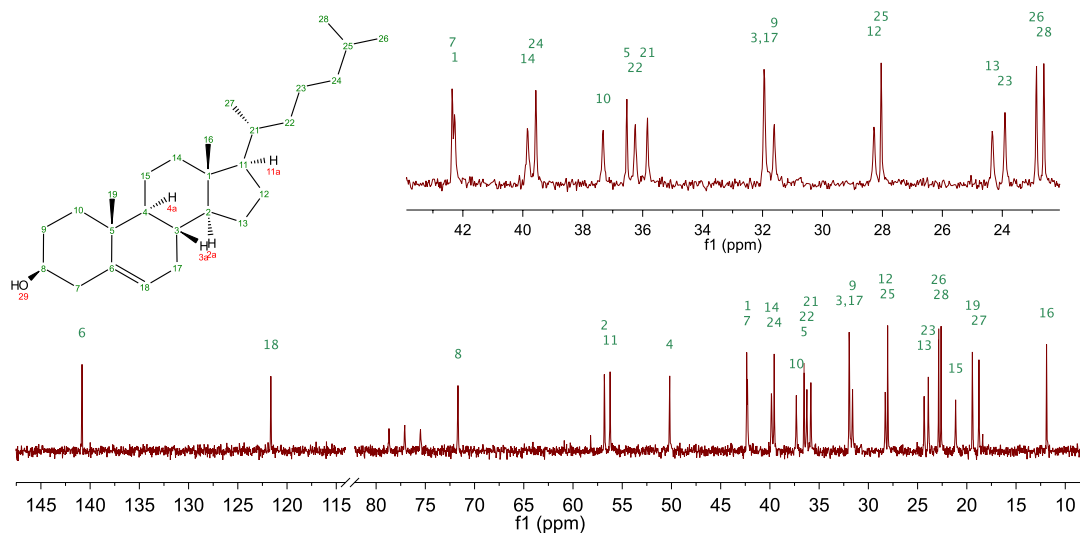
## $^{13}\text{C}$ spectroscopy exploited for structure elucidation

### Cholesterol

C<sub>27</sub>H<sub>46</sub>O, Mw: 386.65 g/mol

Concentration: 400 mMolar

Solvent: CDCl<sub>3</sub>

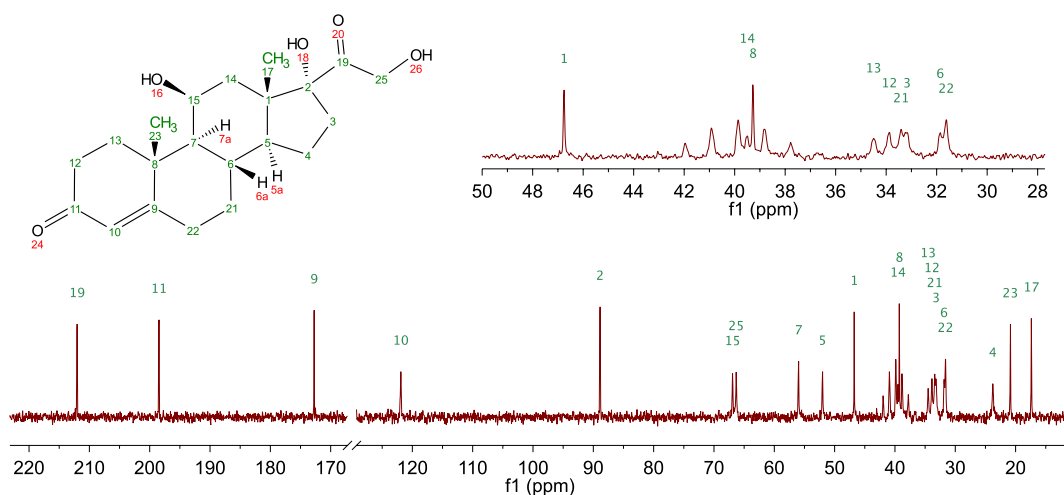


### Hydro-Cortisone

C<sub>21</sub>H<sub>30</sub>O<sub>5</sub>, Mw: 362.4 g/mol

Concentration: 500 mMolar

Solvent: DMSO

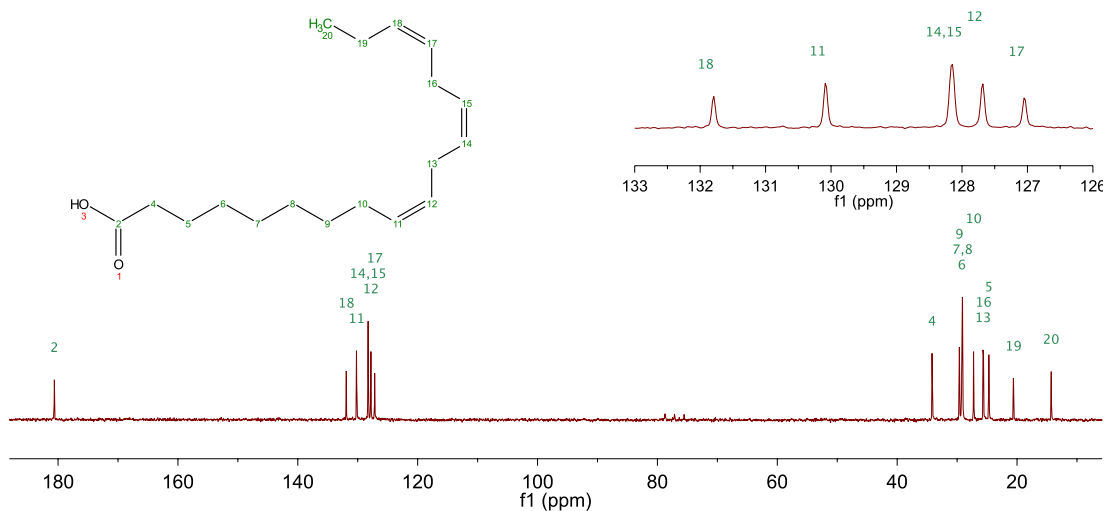


### alpha-Linolenic

C<sub>18</sub>H<sub>30</sub>O<sub>2</sub>, Mw: 278.44 g/mol

Concentration: 1 Molar

Solvent: CDCl<sub>3</sub>



# Spinsolve 80



## Specifications

- Nuclei:  $^1\text{H}$ ,  $^{19}\text{F}$ ,  $^{13}\text{C}$  (Other Nuclei Available)
- Operating frequency: 80 MHz ( $^1\text{H}$ )
- $^1\text{H}$  Linewidth:
  - Classic 50 / 0.55% < 0.4 / 16 Hz
  - ULTRA 50 / 0.55 / 0.11% < 0.25 / 10 / 20 Hz **NEW**
- $^1\text{H}$  Sensitivity (dual channel): >200:1 for 1% Ethyl Benzene
- Operating Temperature Range: 18° C to 28° C (65° F to 82° F)
- Dimensions: 58 x 43 x 40 cm (23" x 17" x 16")
- Weight: 72.5 kg (160 lb)
- Stray Field: < 2 G all around system
- Voltage Requirement: 100-240 VAC, 50/60 Hz
- Available with automatic sample changer
- Available with pulsed field gradients **NEW**



## Pulse sequences available on the Spinsolve 80 Carbon spectrometer

Proton	Fluorine	Carbon
1D proton	1D Fluorine with $^1\text{H}$ decoupling	1D Carbon with $^1\text{H}$ and $^{19}\text{F}$ decoupling
1D PRESAT solvent suppression	Paramagnetic	DEPT
1D with $^{19}\text{F}$ and $^{13}\text{C}$ decoupling	2D F - COSY	APT
2D COSY	2D F - JRES	HETCOR
2D TOCSY	2D FH - COSY	HSQC
2D ROESY	$T_1$	HSQC-ME
2D JRES	PFG-DOSY	HMQC
$T_1, T_2$	Reaction Monitoring	HMBC
PFG-DOSY		
Reaction Monitoring		

Other sequences available, contact Magritek for details.

Contact us now for a quote, to request a demo or to measure your samples

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