

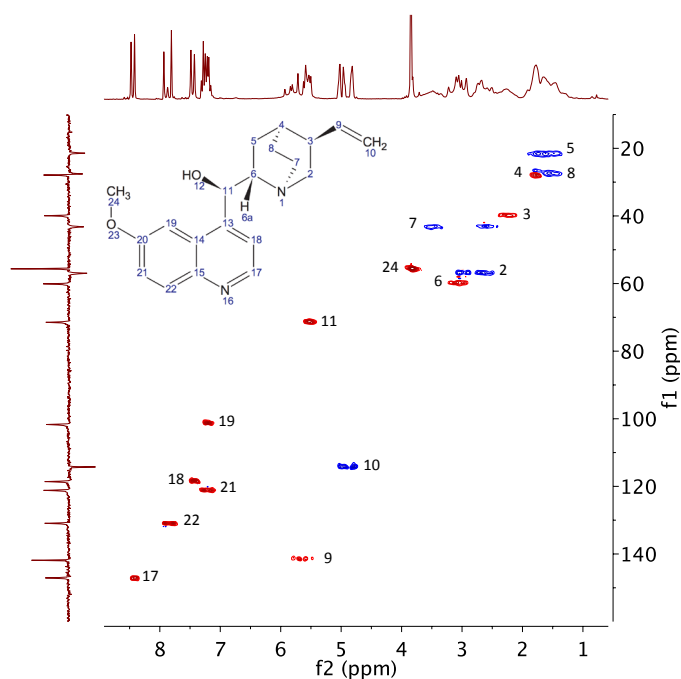
# Spinsolve 80

**Experience the most powerful benchtop NMR spectrometer**



## Outstanding Features

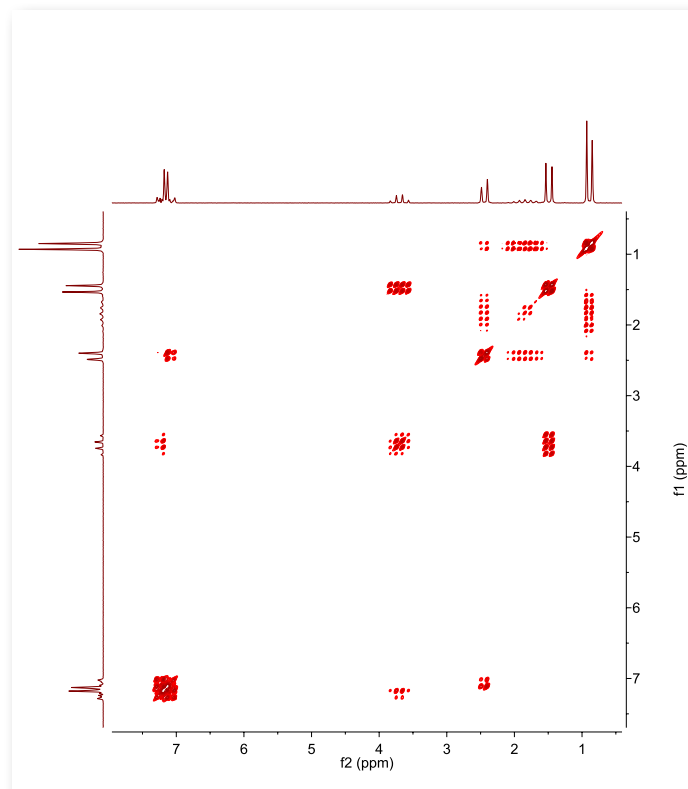
- Highest field strength (80 MHz)
- Largest chemical shift spread
- Highest sensitivity
- Superb Resolution (0.5 Hz/20 Hz)
- Multi-nuclear probe
- 5 mm standard NMR tubes
- No sample spinning required
- Advanced methods like COSY, HSQC, HMBC, etc.
- Benchtop size and weight
- No cryogenics
- Available with automatic sample changer



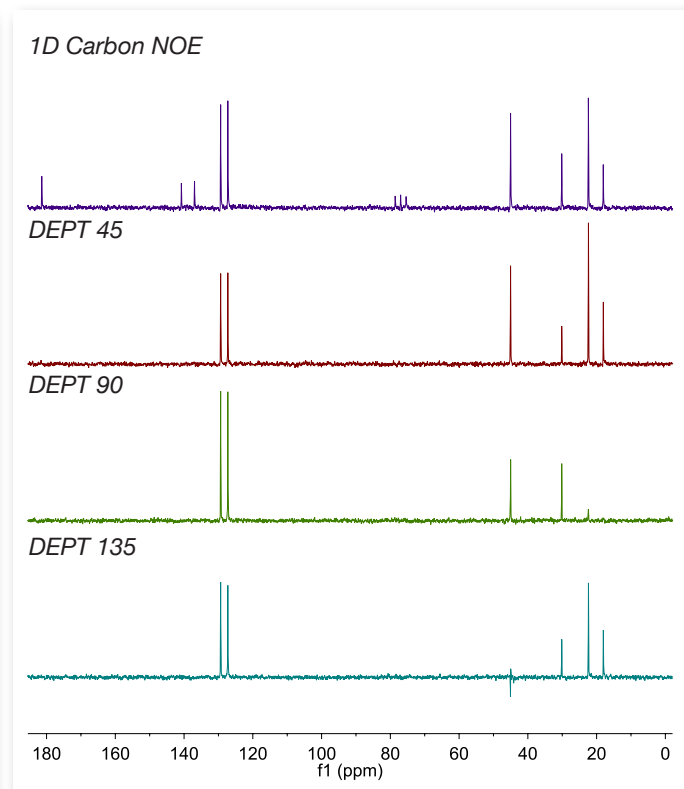
80 MHz HSQC-ME of Quinine

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

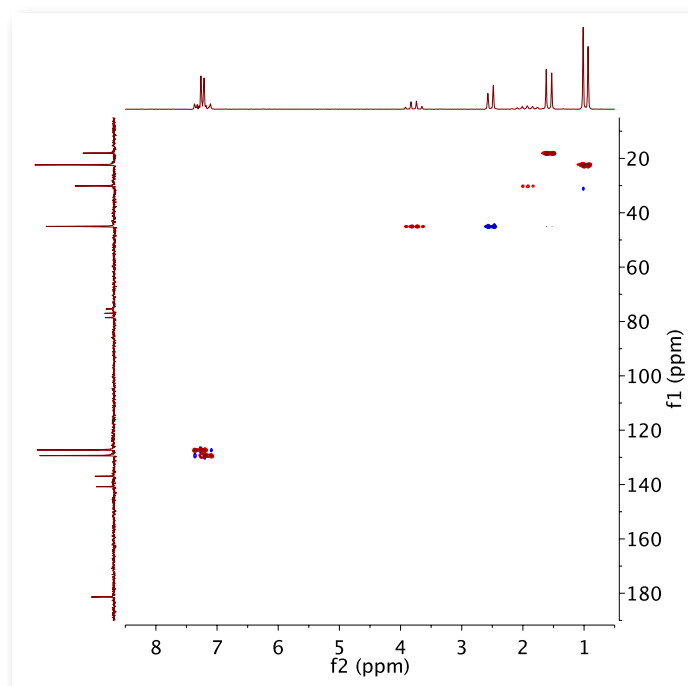
### 80 MHz NMR spectra of Ibuprofen



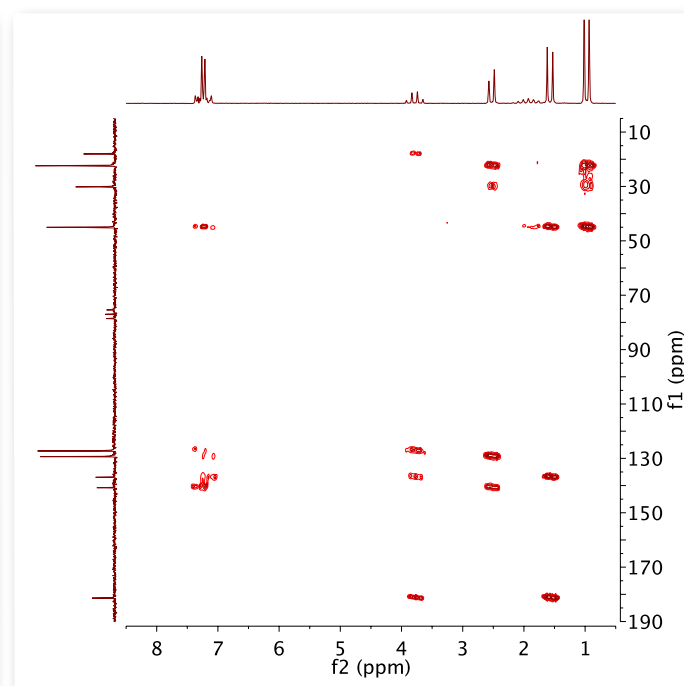
*H-H COSY*



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



*HSQC-ME*



*HMBC*

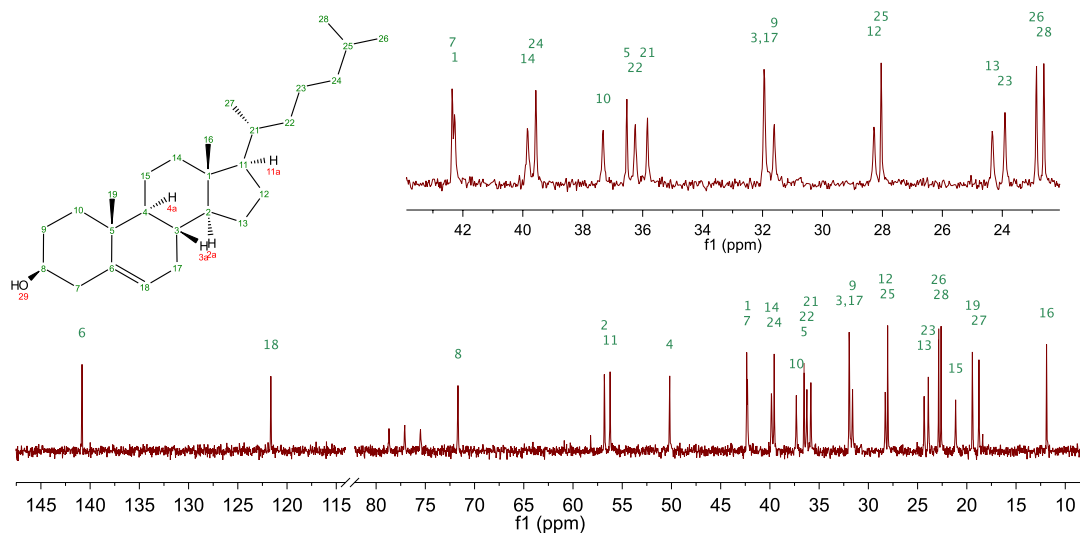
## $^{13}\text{C}$ spectroscopy exploited for structure elucidation

### Cholesterol

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

Concentration: 400 mMolar

Solvent: CDCl<sub>3</sub>

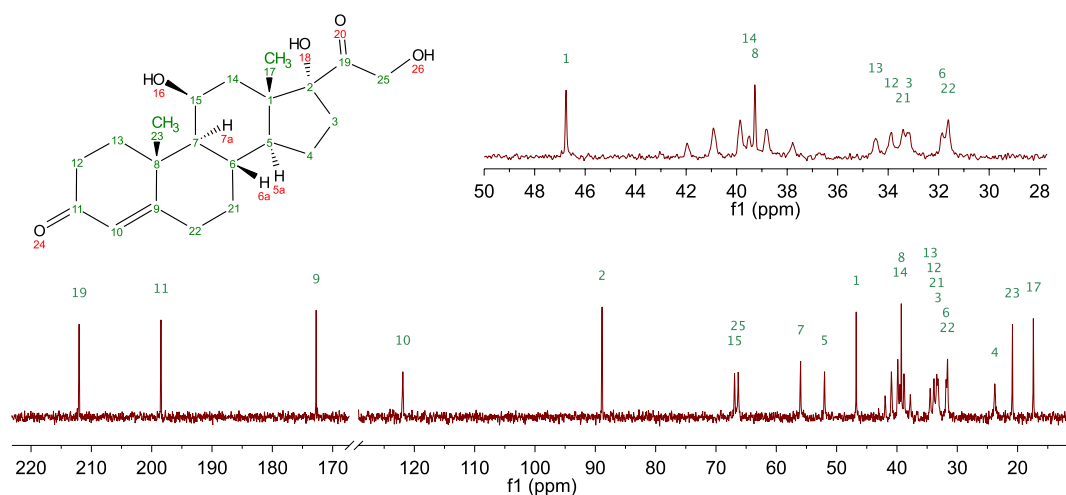


### Hydro-Cortisone

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

Concentration: 500 mMolar

Solvent: DMSO

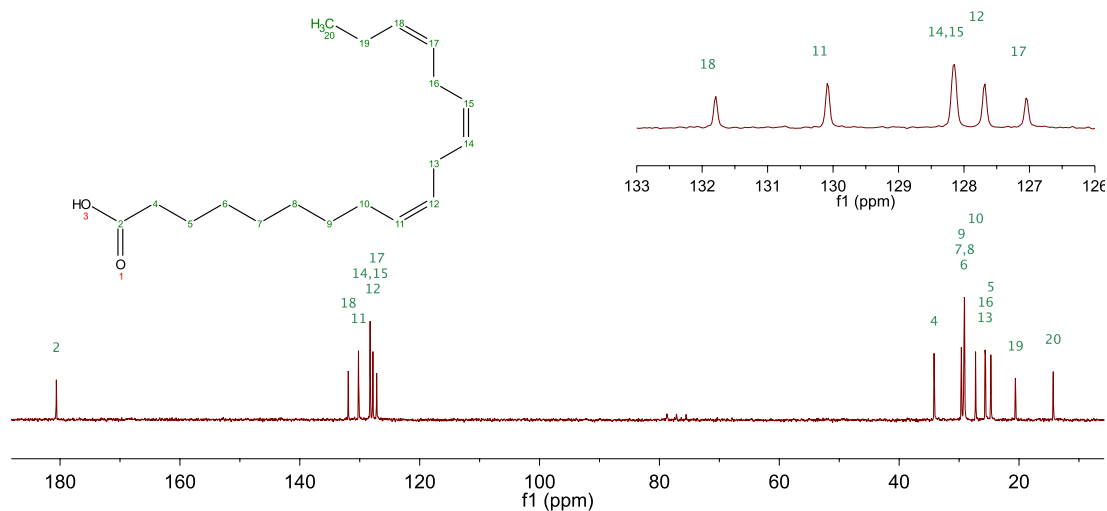


### $\alpha$ -Linolenic

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 ( $^1\text{H}$ )
- $^1\text{H}$  50% Linewidth:  $< 0.5$  Hz
- $^1\text{H}$  0.55% Linewidth:  $< 20$  Hz
- $^1\text{H}$  Sensitivity (dual channel):  $>200:1$  for 1% Ethyl Benzene
- Operating Temperature Range:  $18^\circ\text{C}$  to  $28^\circ\text{C}$  ( $65^\circ\text{F}$  to  $82^\circ\text{F}$ )
- 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



## Pulse sequences available on the Spinsolve 80 Carbon spectrometer

Proton	Fluorine	Carbon
1D	1D	1D with proton decoupling
1D for paramagnetic products	Paramagnetic	DEPT
1D with carbon decoupling	2D F - COSY	APT
2D COSY	2D F - JRES	HETCOR
2D TOCSY	2D FH - COSY	HSQC
2D ROESY	Reaction Monitoring	HSQC-ME
2D JRES		HMQC
$T_1$ , $T_2$		HMBC
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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