magritek
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Spinsolve 100

High field NMR power on your bench

100 MHz Performance. Benchtop Simplicity

- 100 MHz ^{1}H frequency
- Highest sensitivity: > 400:1 for 1% Ethyl Benzene
- Highest resolution: 50/0.55/0.11% < 0.2/8/16 Hz
- Auto-tuned broadband multi-nuclear probe
- Benchtop footprint and weight
- Available with 80 positions sample changer
- On-line reaction monitoring directly in the fume hood

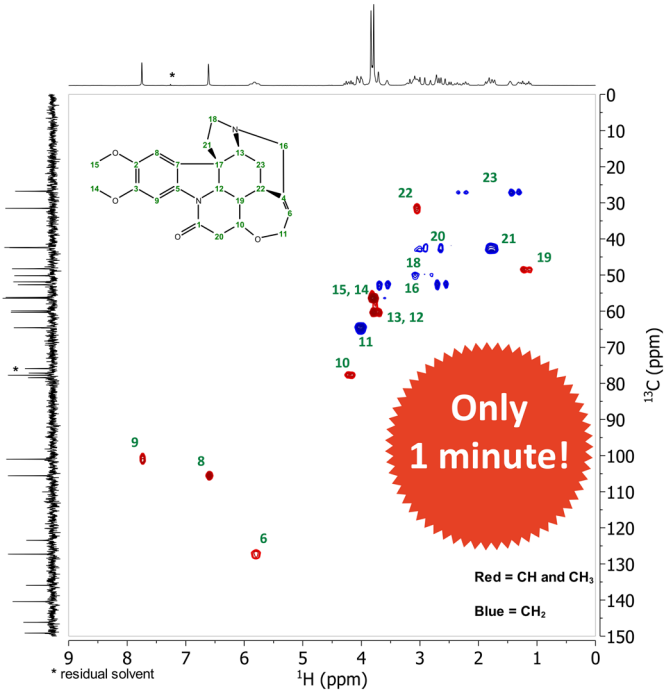
Instant results for immediate decisions

Eliminate time-consuming sample preparation to significantly speed up your workflow. Discover the power of our new solvent suppression methods to measure samples in their original solvents while delivering high-quality spectra.

Multi-nuclear high throughput analysis

The Multi Xn probe combined with the Spinsolve autosampler enables fully unattended multi-nuclear analysis with assured optimum performance.

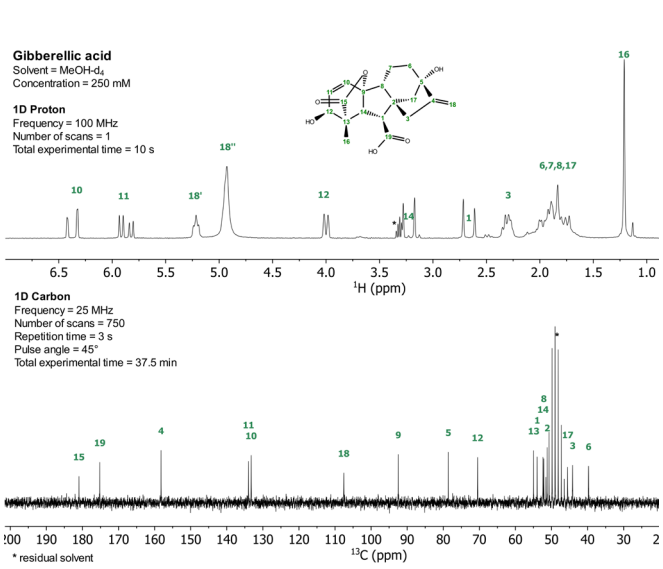
The most powerful structural analysis... ...in just one minute!

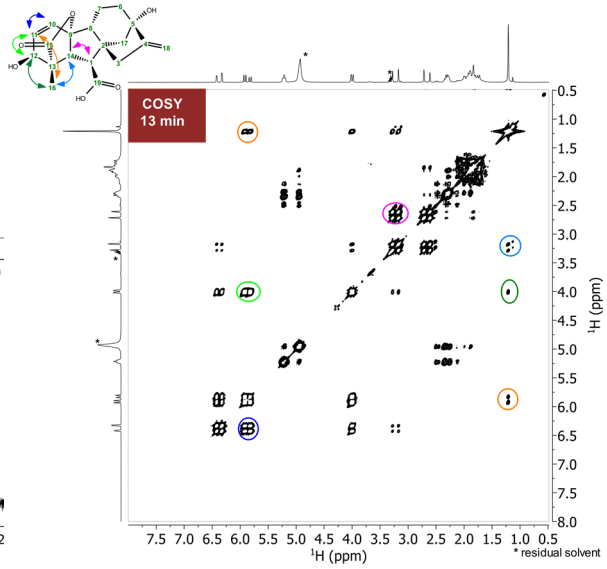


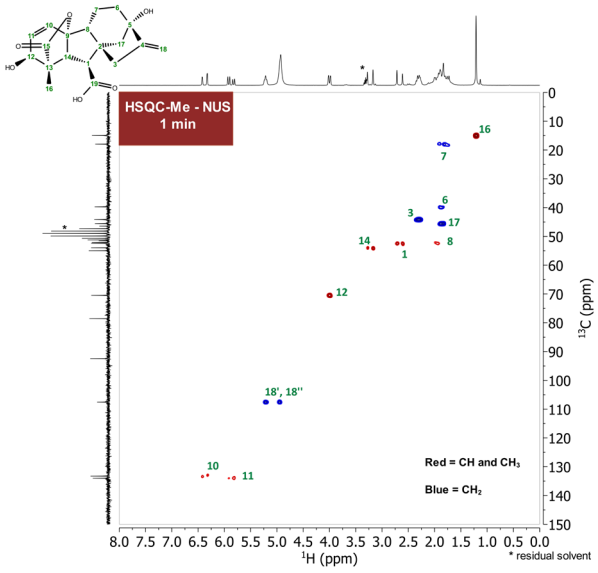
100 MHz HSQC-Me of Brucine at 250 mM

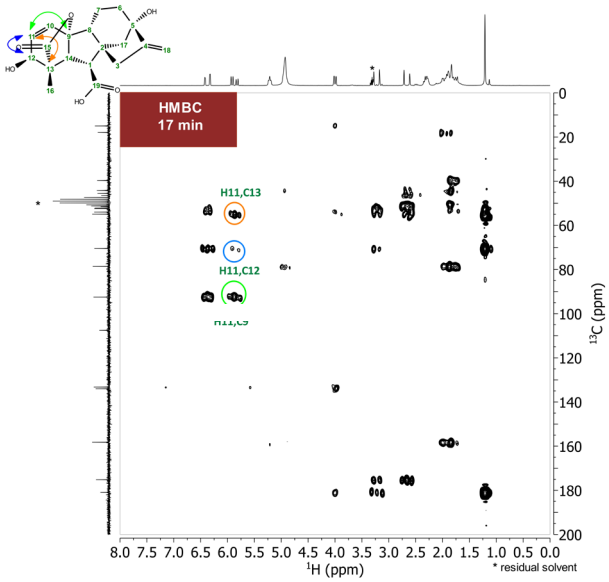
Fast and powerful, advanced multi-nuclear methods for structure confirmation

100 MHz NMR spectra of Gibberelic acid at 250 mMolar concentration









The Spinsolve 100 is fully compatible with our autotuned Multi X^n family of probes.

NEW

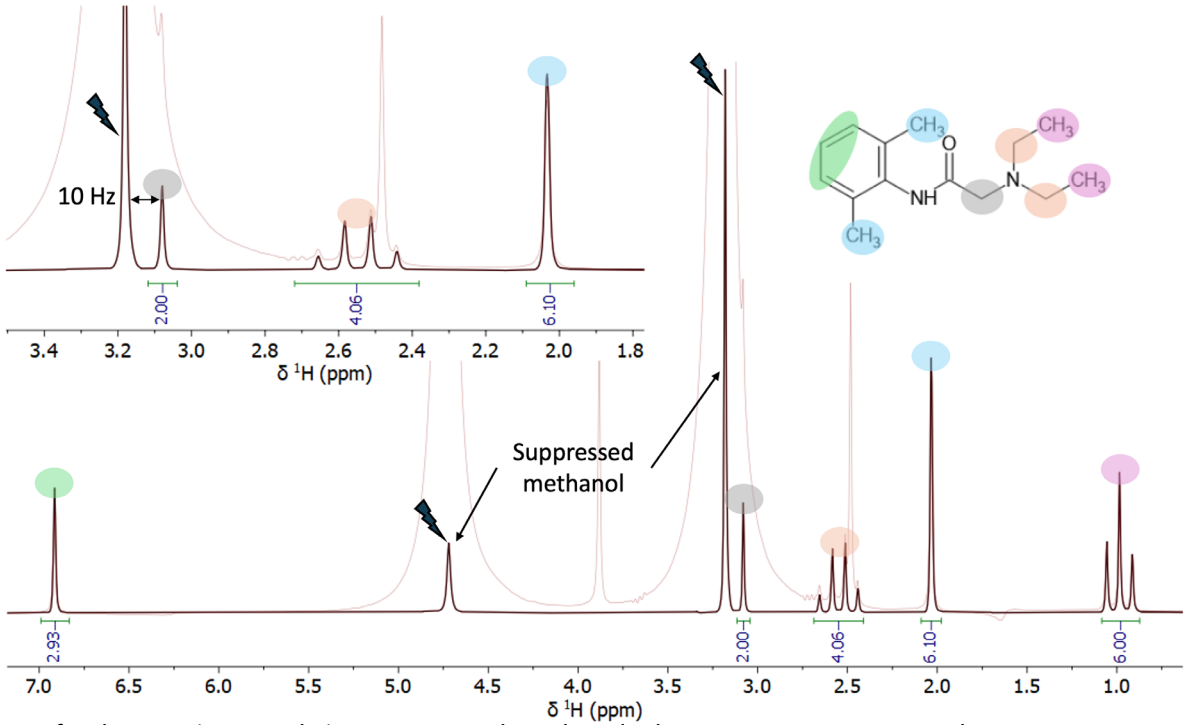
Spinsolve Multi X^n

The next Generation of fully automated multi-nuclear NMR

Add All the nuclei You Need, without compromising performance

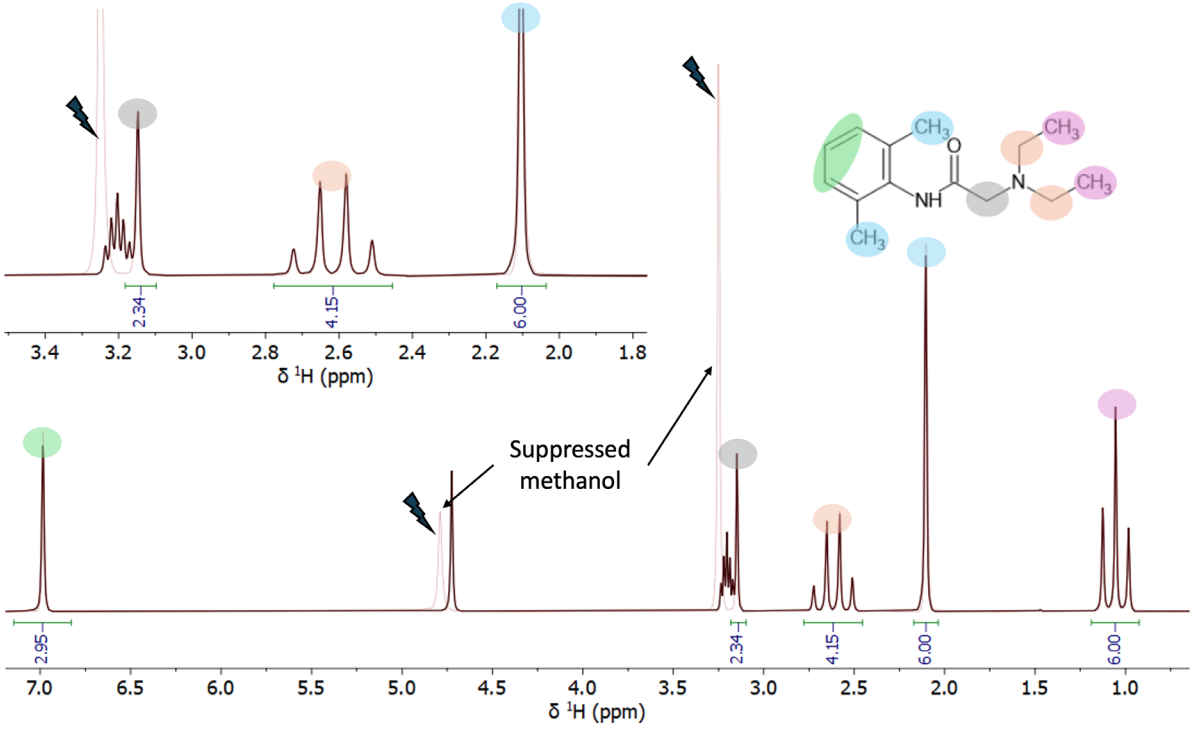
Discover the power of the solvent suppression methods

Measure your samples in regular protonated solvents with the accuracy obtained with deuterated solvents. By eliminating the sample work up required to exchange solvents, measurements can be done during your synthesis in just a few seconds. This is changing how NMR spectroscopy is being used in the chemistry lab for fast sample analysis.



Spectra of Lidocaine (50 mMolar) in protonated methanol. The spectrum was acquired in one minute using a WET solvent suppression sequence targeting the two methanol signals. This highly selective suppression enables the lidocaine peak at 3.1 ppm—which fully overlaps with methanol in a standard 1D spectrum (light red)—to be baseline resolved and accurately integrated.

How does the solvent suppression compare with deuterated solvent?



In the spectrum of lidocaine sample prepared in deuterated methanol, the intensity of the residual solvent signals is comparable to those of the residual signals of the protonated methanol in the solvent-suppressed spectrum (red trace). The inset shows the overlap of the multiplet from CH3 group of deuterated methanol and the lidocaine signal at 3.1 ppm. The solvent-suppressed spectrum enables more accurate integration of this lidocaine signal.

Spinsolve 100

Specifications

- Operating frequency: 100 MHz (^{1}H)
- Nuclei: ^{1}H, ^{19}F, ^{13}C, ^{31}P, ^{7}Li, ^{11}B, ^{29}Si, ^{129}Xe, ^{2}D, ^{15}N, and more
- ^{1}H Linewidth ULTRA: 50 / 0.55 / 0.11% < 0.20 / 8 / 16 Hz
- ^{1}H Sensitivity single channel: > 400:1 for 1% Ethyl Benzene
  dual channel : > 300:1 for 1% Ethyl Benzene
- Operating Temperature Range: 14° C to 28° C (57° F to 82° F)
- Dimensions: 66 x 45 x 43 cm (26" x 18" x 17")
- Weight: 120 kg (265 lb)
- Stray Field: < 2 G all around the enclosure
- Voltage Requirement: 100-240 VAC, 50/60 Hz
- Available with automatic sample changer
- Compatible with the reaction monitoring kit
- 3D pulsed field gradients optimized for modern pulse sequences
- Optional diffusion PFG > 0.5 T/m
- No cryogens
- 5 mm standard NMR tubes
- No sample spinning required

Pulse sequences available on the Spinsolve 100

Proton	Fluorine	Carbon
1D with ^{19}F and X-nucleus decoupling	1D Fluorine with ^{1}H decoupling	1D Carbon with ^{1}H and ^{19}F decoupling
1D paramagnetic	2D F - COSY	DEPT
2D COSY*, JRES, TOCSY, and ROESY	2D F - JRES	APT
1D solvent suppression (Presat and WET)	2D FH - COSY	HETCOR
1D solvent suppression with T_2 filter	T_1, T_2	gs-HSQC
2D COSY-WET, HSQC-WET	PFG-DOSY	gs-HSQC-me*
T_1, T_2	Reaction Monitoring	gs-HMQC
PFG-DOSY		gs-HMBC*
Reaction Monitoring		gs-NOAH*

All sequences are gradient assisted (gs). Other sequences available. *Non-Uniform Sampling (NUS) available

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

Email: sales@magritek.com

Website: www.magritek.com/contact-us

GERMANY +49 241 9278 7270 UNITED STATES +1 855 667 6835

UNITED KINGDOM +44 7468 529 615 NEW ZEALAND +64 4 477 7096

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