QCI-F (H/F-C/N) and QCI-P (H/P/C-N) CryoProbes™ at 600 MHz

Most sensitive, robust and versatile 4-Channel Probes

One Probe Platform. Broad Application Coverage.

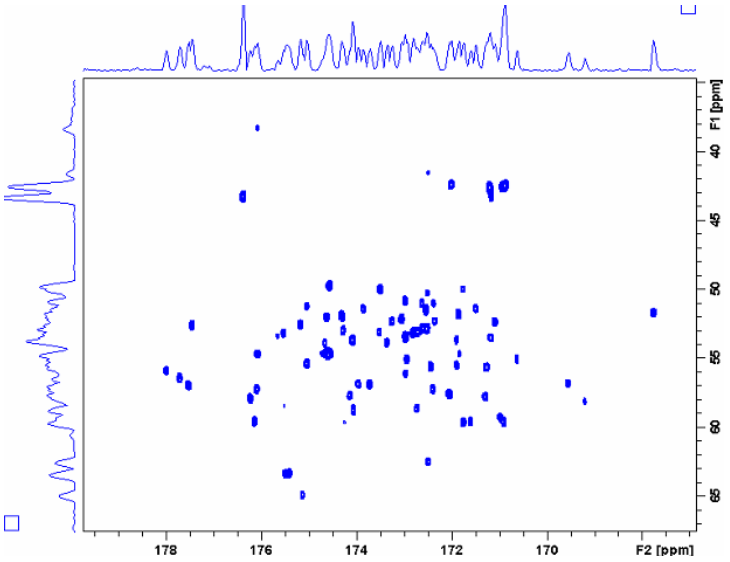
The **600 MHz QCI CryoProbe™** delivers all the capabilities of a TCI probe while **adding exceptional versatility** through its four-channel architecture, making it the ideal choice for pharmaceutical and biomolecular NMR applications. Supporting the popular **5 mm tube format**, as well as **3 mm and shaped tubes**, the QCI provides maximum experimental flexibility without compromising performance.

Built on Bruker's proven CryoProbe™ platform, the QCI combines **sensitivity** with outstanding **reliability**. Featuring cryogenically cooled RF coils and cold preamplifiers, it delivers exceptional signal-to-noise performance while enabling a broader range of experiments than traditional triple-resonance TCI probes. As a result, the QCI has become one of the most widely adopted and trusted cryogenic probes worldwide.

Maximum Sensitivity and Versatility. Proven Reliability.

The 4-channel architecture supports a broad range of double, triple, and quadruple-resonance experiments without requiring probe changes, maximizing instrument uptime, reliability and laboratory productivity.

Designed for continuous 24/7 operation, the QCI combines outstanding reliability with good performance for both ^{13}C and heteronuclear observation experiments, providing one platform for virtually all multinuclear workflows.



^{13}C detected CACO experiment on 1mM ubiquitin in 50 mM phosphate buffer.

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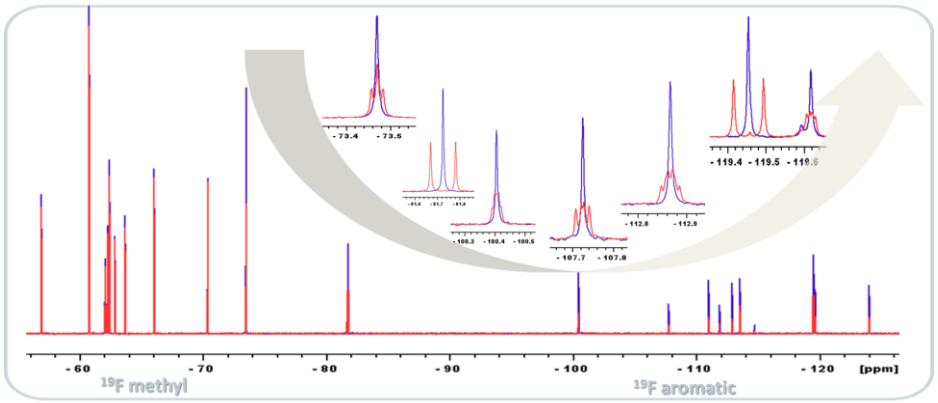
QCI-F Cryoprobe: The Standard for the pharmaceutical industry and fragment-based drug discovery (FBDD)

The QCI-F CryoProbe has become the industry standard for fragment-based drug discovery using ^{19}F detection. It supports both highly sensitive ^{1}H detection with ^{19}F decoupling and direct ^{19}F detection with ^{1}H decoupling, enabling comprehensive fluorine characterization on a single platform.

This unique combination of sensitivity, flexibility, and workflow efficiency has established the QCI-F as the leading cryogenic probe for pharmaceutical research.

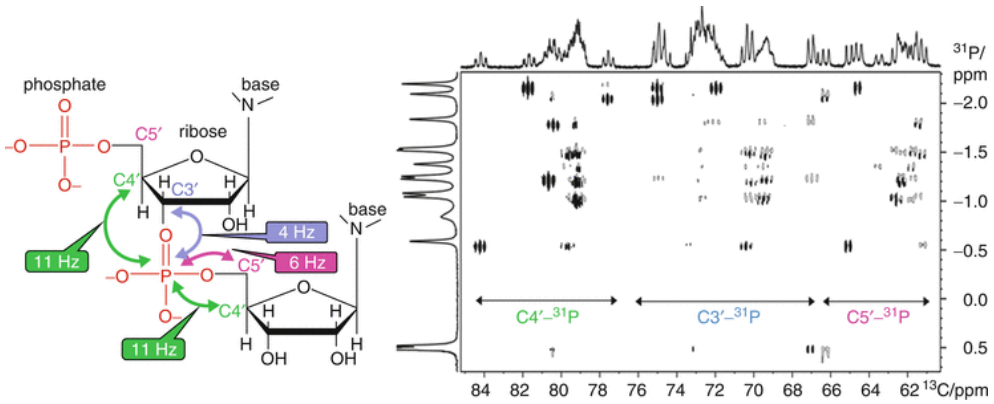


The QCI-F CryoProbe allows ^{19}F observation with simultaneous ^{1}H decoupling thereby increasing the signal-to-noise ratio (blue vs red) and reducing spectral overlap and complexity.

QCI-P Cryoprobe: The standard for DNA and RNA

The QCI-P CryoProbe extends the proven capabilities of the QCI platform with good performance for ^{31}P spectroscopy due to the use of optimized cold preamplifiers. It delivers enhanced sensitivity for ^{31}P observation and decoupling, making it ideal for RNA, DNA, and other phosphorus-containing biomolecules.

For laboratories investigating nucleic acids, the QCI-P provides a dedicated solution without compromising the flexibility and performance expected from the QCI platform.



$^{13}C,^{31}P$ HCNP correlation using a $^{13}C,^{15}N$ labeled RNA 14-mer (Reference: Encyclopedia of biophysics, Cryogenic probes, DOI https://doi.org/10.1007/978-3-642-16712-6_322).

Valid as of July 29, 2026. Technical data and specifications subject to change without notice.

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