



QUALITY CONTROL

eMolecules Quality Control Services

Version 2.0

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Global Expertise in Analytical Integrity for the Life Sciences

With decades of experience in processing and handling chemical compounds for the life sciences industry, eMolecules delivers rigorous and reliable quality control services from our facilities in both Europe and the United States.

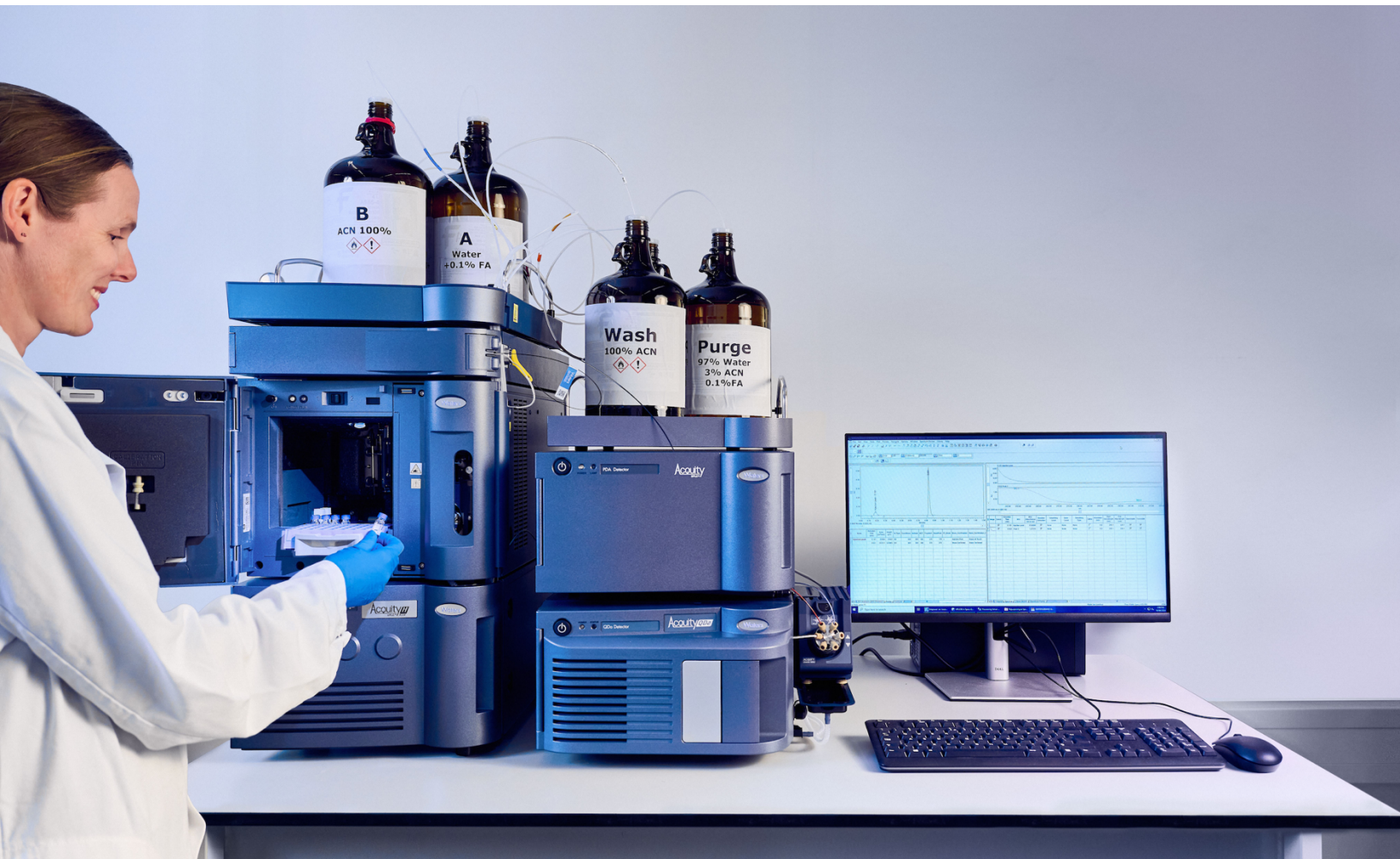
In today's demanding R&D drug discovery landscape, the integrity and purity of chemical compounds are non-negotiable. Our quality control service addresses these needs head-on.

At eMolecules, QC is fully embedded in our compound management operations and is now available to clients either as a stand-alone outsourced service or as an integrated component of our broader compound aggregation and reformatting workflows. Whether you are looking to verify the quality of your internal collection or assess incoming compounds from third-party sources, we ensure scientific rigor through two orthogonal analytical techniques: LCMS and ¹H-NMR, applied at high throughput.

Outsourced QC Services

From single batches to entire libraries, our global QC teams are equipped to process your compounds efficiently and accurately. We offer:

- LCMS and NMR analysis (also nuclei other than H, e.g. C, F and 2D experiments)
- Data interpretation
- Optional integration into eMolecules' full compound management and aggregation workflows
- Service delivery from both our European and US facilities



Our QC services are particularly well suited for a variety of critical applications in the drug discovery and development process. They are commonly used to support screening and hit validation, ensuring that compounds being tested in biological assays meet required identity and purity thresholds. In addition, our services are frequently used for routine quality monitoring of existing stock, helping organizations maintain the integrity of their compound libraries over time through consistent, high-quality analytical assessments.

LCMS Analysis

Our UPLC systems are configured to analyze samples from vials as well as 96- and 384-well plates, supporting a weekly throughput of up to 2,500 compounds. A further 2,000 compounds can be analyzed per week through our HPLC capabilities. Results can be processed using eMolecules' standard QC protocols or tailored to align with your internal SOPs, ensuring consistency across datasets.

¹H-NMR Analysis

Samples are prepared under inert conditions (argon atmosphere) in 600 μ L of DMSO-d₆ and analyzed the same day to minimize water uptake and ensure data reliability. Spectra are recorded at 400 MHz in high-throughput mode, enabling the analysis of up to 1,000 samples per week. Interpretation can be handled by our trained staff following eMolecules' QC protocols or adapted to your SOPs, or we can provide raw FID files for in-house analysis. Turnaround times depend on compound complexity and solubility.

A Trusted Partner for Quality Assurance

Global pharmaceutical and biotechnology companies already trust eMolecules as an extension of their internal QC and assurance programs. Whether you are managing outsourced compound libraries, verifying new acquisitions, or supplementing internal capacity, our team is ready to support your analytical needs with scalable, science-driven solutions. We have extensive experience executing both small-scale and high-volume projects using LC/MS and NMR, and we consistently deliver high-quality results within agreed timelines.

More information

Contact us to learn more about how eMolecules can support your quality control program. Our team is happy to discuss your requirements and develop a customized service plan.



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