NMR Characterization and QC Testing

As the Eurofins European Centre of Excellence for Nuclear Magnetic Resonance (NMR), Eurofins Spinnovation Analytical provides NMR characterization and QC testing solutions for raw materials, drug substances and drug products.

We provide Solution and Solid State NMR (ssNMR) contract research and method development services and can support projects and testing related to ingredients, polymers and pharmaceutical drug substances and products.

Why Choose Eurofins BioPharma Product Testing?

All methods and testing are performed under GMP requirements and are EU-GMP and FDA inspected.

Our broad scope of NMR capabilities and knowledge are centralized in the European Centre of Excellence for NMR in Oss, the Netherlands.

Our state-of-the-art equipment allows high capacity, optimum sensitivity and fast turn-around, supporting development and product release.

Solutions and Applications

- Solid-state characterization: crystal polymorphism, solid-state process development, impurity ID, limit test, etc.
- Identification of unknown (impurity identification, metabolite identification)
- gNMR to qualify reference compounds
- High throughput QC of compound library
- Compound library chemical shift encoding and protein ligand NMR binding assays
- 3D-NMR structure characterization

Equipment

- 400MHz WB Bruker Avance fitted with a dedicated 19F-NMR setup allowing 1H-19F CPMAS experiment, 10 positions sample changer, Probes: 4mm MAS (1H, 19F, X), 7mm MAS (1H, X)
- 2 x 500MHz NMR Bruker Avance III, BBFO probe and TCI cryoprobe, SampleJet
- 400MHz NMR Bruker Avance III, BBFO probe (1H, 13C, 31P, 19F), SampleJet
- LC-SPE/NMR capability

GMP NMR Testing

We provide simple and easy access to GMP NMR QC testing services for your raw materials and pharmaceutical products. We can perform Pharmacopoeia NMR test methods, as well as develop and validate custom NMR based methods as needed.

Equipment

- 500MHz NMR Bruker Avance III
- BBFO and TCI cryoprobe
- SampleJet
- GMP certified, FDA inspected

Pharmacopoeia methods (Ph. Eur./USP)

- Heparin (sodium/calcium/LMWH)
- Poloxamer
- Enoxaparin
- Polyoxyl
- Hydroxypropyl
- Chitosan
- Oxytocin
- Goserelin
- Medronic acid
- Buserelin
- Animal oil
- Lauromacrogol
- Pemetrexed disodium hydrate
- Client internal methods