Oligonucleotides

LC-MS Support from Development to Release

Oligonucleotide therapeutics, such as antisense oligonucleotides (ASOs), small interfering RNAs (siRNAs), and aptamers, offer new hope for patients with conditions once considered untreatable by targeting disease-causing proteins and modulating gene expression. These innovative modalities are gaining momentum, with over a dozen FDA approvals since 2018.



However, their complex, highly charged structures and the diverse chemistries used to enhance stability and delivery present significant analytical challenges. Accurate characterization requires sensitive, selective, and robust methods to confirm identity and sequence, and to assess purity and impurity profiles. Cell-based potency assays with a targeted LC-MS readout are used to assess the decrease, increase or restoration of protein expression. At Solvias, we combine deep scientific expertise with powerful LC-MS-based solutions to help you confidently navigate the complexity of oligonucleotide analysis from development to release.

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- ✓ Identity by molecular weight by ion-pair reversed-phase LC-MS (IP-RP-MS)
- ✓ Identity by sequence confirmation of an oligonucleotide up to 30mer by LC-MS/MS
- ✓ Nucleotide identity of oligonucleotides after enzymatic digestion by LC-MS
- ✓ Purity by IP-RP(-MS)
- ✓ Purity of nucleotide raw material by LC(-MS)
- ✓ Impurities by IP-RP(-MS)
- Potency by cell-based bioassay with targeted MS readout

Why partner with us?

- CDMO/CRO
- Founded in 1999
- 800+ team members
- 175+ PhD-level scientists
- GMP, GLP, ISO9001 certified
- 22.5K sqm of lab capacity
- 700+ customers worldwide
- 6 centers of excellence



Contact us to speak with an expert: info@solvias.com



