

High Quality and Consistency

Providing comprehensive hands-on expertise in the synthesis of a broad range of ASO chemistries, combined with highly optimized synthesis platforms. The result is oligonucleotides of the highest quality.

Fast Turnaround Times

High scalability and adaptability of the production processes provide you with fast turn-around times for your drug discovery process.

Attractive Prices

Tailor-made and highly automated manufacturing processes create ASOs, siRNAs, and other oligonucleotides for potential therapeutic applications at attractive prices.



Overview

Several oligonucleotide-based drugs have been approved by regulatory agencies (e.g. FDA and EMEA) during the past two decades. Antisense and RNAi therapeutics - which are currently amongst the hottest topics in the world of research and development - are forms of treatments that are clearly distinguished from traditional

approaches such as the small molecule or antibody-based approaches. Since they can be directed against a broad variety of RNA targets (i.e. premRNA, mRNA, lncRNA, miRNA), they open the door to the treatment of a wide range of diseases, including those that are considered undruggable on the protein level.

Microsynth is a well known oligo supplier with more than three decades of experience. We have developed technical capabilities and expertise that enable us to offer a portfolio of therapeutic oligonucleotides, which are especially suited for leveraging your early drug discovery program in this field.

Microsynth Core Competency Areas to Support Your Drug Discovery Program

Drug Discovery and Screening

- High-throughput synthesis of screening oligos
- Broad range of synthesis chemistries and modifications
- Flexible and fast production times
 Batch sizes up to 200 oligos larger sizes are possible if you wish to discuss this option

Lead Optimization

- Highly modified oligos (multiple different modifications are possible)
- Manufacturing from nmol to mg quantities
 Broad spectrum of post-synthetic
- conjugation techniques (e.g. terminal GalNAc conjugates) - Customized processes

Figure 1. Steps of a typical process for the discovery of therapeutic oligos, where Microsynth can support you. A list confirming the typical services provided by Microsynth gives you an insight into our extensive service portfolio.

Product Specifications and Services

Backbones and Modifications

DNA, RNA, 2' MOE, 2' OMe, LNA, PTO, 2'F, GalNAc, S-cEt¹

Purification

- RP HPLC (single and dual)
- IP RP HPLC
- IEX HPLC
- Dialysis

1) On request

Quality Control and Documentation

- Online Trityl monitoring
- MALDI-TOF
- Analytical HPLC
- Various Certificates of Analysis

Available Products

- Antisense oligonucleotides (ASO)
- siRNA
- Anti-microRNA (AMO)
- $\bullet \, Aptamers$
- CpG oligonucleotides

Getting Started with Microsynth

Our modular integrated synthesis process gives us the flexibility to accommodate your project at any stage of your discovery program.

Please contact one of our project managers to discuss your personal program and needs. Our dedicated experts will then create a customized project pro-

posal and timing schedule for you that we are confident will meet your expectations.