



## Antisense Oligonucleotides and siRNAs for Early Drug Discovery

### High Quality and Consistency

We provide comprehensive, hands-on expertise in synthesizing a broad range of ASO and siRNA 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



**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-cEt<sup>1</sup>, 5' Palmitate

### Purification

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

### Quality Control and Documentation

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

### Available Products

- Antisense oligonucleotides (ASO)
- siRNA

- Anti-microRNA (AMO)
- Aptamers
- CpG oligonucleotides

### Low Endotoxin

- Production process for low endotoxin levels (<0.5 EU/mg).
- Tested by external service provider

1) On request

## 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.