

Creative Biolabs Announces Optimized Custom Oligonucleotide Synthesis Service

Creative Biolabs recently optimized the portfolio of custom oligonucleotide synthesis services to cover more types of complex oligonucleotides to boost RNAi therapy discovery and development.

New York City, New York Apr 12, 2022 ([Issuewire.com](https://www.issuewire.com)) - Since the first RNA interference (RNAi) therapy, Patisiran, was approved in 2018, RNAi technology catches more attention. And advanced treatments like this are replacing traditional cancer treatment approaches such as chemotherapy. However, scientists may confront several difficulties, such as the unstable and potentially immunogenic nature of RNA and the costly expense.

With an industry-leading portfolio of services and regulatory expertise, Creative Biolabs pays attention to the latest drug development programs by endogenous RNAi machinery and offers a total solution containing every step of RNAi therapy discovery. Recently, the portfolio of custom oligonucleotide synthesis services is updated to cover more types of complex oligonucleotides.

• Custom miRNA Synthesis

Creative Biolabs is ready to support miRNA-based therapeutics studies with custom [miRNA synthesis](#) services, including fast protein expression by injecting or transfecting mRNA into cells and regulatory miRNA study through profiling, overexpression, or knockdowns.

- * miRNA expression: chemical synthesis and lentiviral vector-based expression to allow optimization of knockdown by synthetic miRNAs
- * Hairpin architecture: a custom design for the high knockdown efficiency
- * Concatenation strategy: natural polycistronic miRNA backbones, concatenation of several synthetic miRNA hairpins, DROSHA-independent intronic miRNA

• Custom siRNA Synthesis

Creative Biolabs is dedicated to providing custom [siRNA synthesis](#) services using online design tools and extensive synthesis options for specific applications. Now, the team has built a series of worry-free customizations for siRNA synthesis based on clients' sequences or sequences designed at clients' requests.

- * Custom siRNA Design: free online design tools for customized projects
- * Modifications & Labeling: a full range of modifications and fluorescent labels
- * Product Processing Options: HPLC purified, desalted single strand, desalted duplex strands, siRNA *in-vivo*-ready

• Custom mRNA Synthesis

Scientists at Creative Biolabs are skillful in manufacturing research-grade or GMP-grade mRNAs and

provide tailored synthesis at milligram to multigram scales, with lengths ranging from a few hundred nucleotides to more than 10 kilobases.

The service covers the whole workflow from the synthesis of the gene, plasmid cloning and purification, full DNA sequencing documentation, PCR amplification of insert and PCR products purification, [mRNA synthesis](#) by in vitro transcription, to purification and quality control (QC).

More custom synthesis services are available for miRNA inhibitor, ssRNA, bridged nucleic acid, plate oligonucleotide, degenerated oligo, etc. Find more information on the official website <https://www.creative-biolabs.com/gene-therapy/>.

About Creative Biolabs

With years of experience in providing one-stop preclinical development services, Creative Biolabs has built a team of experts with solid knowledge of gene therapy, and is fully competent in providing services for worldwide clients. The services include but are not limited to delivery vehicles development, gene editing, RNAi therapy development, safety and toxicology analysis, potency tests, and solutions of specific gene therapy development for diseases.

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Source : Creative Biolabs

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