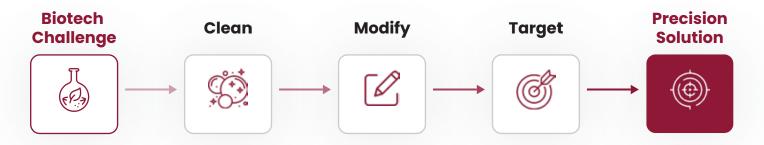


Genomic nanotechnologies

Solutions for Therapeutic Development



Nanomaterial and Reagents

- Proprietary technology for the design, control, and synthesis of magnetic nanoparticles (MNPs)
- Large volume production process
- Tailored surface chemistry and functionality
- Customed buffer and reagent formulation

Applications

- Development and optimization of purification workflows (protein, DNA, RNA)
- Plasmid purification
- T-cell purification and activation

Oligonucleotide Synthesis and Purification

- Synthesis of DNA/RNA therapeutic oligonucleotides
- Highly modified oligonucleosides for increase stability and functionality
- Over 90% purity, from mg to gram scale

- Synthesis of antisense oligonucleotides (ASOs), splice-switching oligonucleotides (SSOs), and modified RNAs for screening and pre-clinical validations
- Incorporation of modification (2'-O-Methyl, 2'-O-Fluoro, 2'-O-araF (FANA), 2'-O-Methoxyethyl (MOE), Locked nucleic acids (LNAs), Phosphorothioate (PS) linkage
- sgRNA for CRISPR for gene editing applications

Validation and in vitro Analysis Services

- Access to full suite of molecular and cellular biology assays for analysis of target and drug activities
- Target binding kinematic studies
- Cellular uptake studies
- Immunogenicity assessment
- Pharmacodynamic studies

- Screening & pre-clinical validations for IND applications
- Quantitative validation of activity through assessment of gene expression
- The internalization and localization of molecules or drugs of interest within cells.
- Off-target gene knockdown analysis

