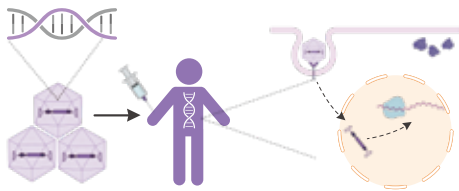


Gene Therapy Solutions

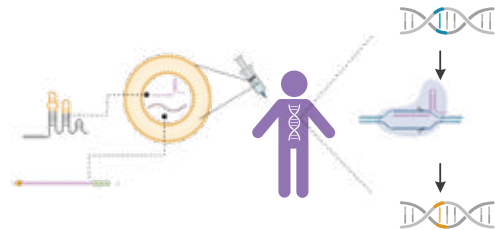
Advance your gene therapy projects to the next stage

GenScript offers integrated solutions to support you through each principal milestone of gene therapy development, **from target discovery, through lead identification and optimization, to pre-clinical and clinical studies. We can support you through the whole process.**

Viral Vector Gene Therapy



Non-Viral Vector Gene Therapy



RELIABLE SERVICES & PRODUCTS



Molecular Biology & Mutant Library

- Highly customizable Gene & DNA synthesis, plasmid prep, and mutant library solutions for therapeutic target discovery and lead optimization



Protein & Antibody Production

- Wide range of expression systems that support your specific application



CRISPR Services

- CRISPR gRNA/Cas9 and HDR templates (ssDNA, dsDNA, circle dsDNA) solutions for precise and efficient genome editing; gRNA libraries for efficient screening



Viral Vector Packaging

- One-stop-shop from gene synthesis to viral packaging



Catalog Products

- Reliable reagents, optimized kits, and instrumentation for target and biomarkers analysis



Target Identification

NGS DATA ANALYSIS



Gene Sequencing and Analysis

- Precise Synthetic Oligo Pools^{NEW}
- NGS Primer & Probe Synthesis
- qPCR Probes & Primer Synthesis

Target Gene Screening and Validation

- CRISPR gRNA Libraries
- Cell Line Engineering Service
- Protein Expression Service
- Antibody Service
- Gels & Blotting

1

Lead Generation and Optimization

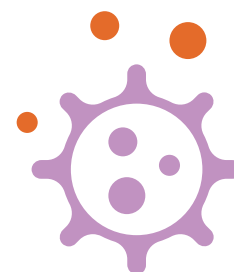
2

Viral Vector Optimization

- GenSmart Codon Optimization
- Gene Synthesis^{HOT}
- Plasmid and GenCircle dsDNA^{NEW}
- Precision Mutant Libraries^{HOT}
- Viral Vector Packaging
- Plasmid Purification Instrument^{NEW}

Non-Viral Vector Optimization

- GenCRISPR gRNA Design Tool
- Synthetic sgRNA & Cas Nucleases^{HOT}
- CRISPR HDR Templates (ssDNA, dsDNA, circle dsDNA)^{HOT}
- IVT mRNA Services^{NEW}



AAV Capsid Engineering

Pre-Clinical Study



Preclinical Studies

Pre Clinical Study*

- Preclinical Plasmid
- GMP-Like sgRNA & HDR Templates
- Basic GMP Nucleases
- Preclinical mRNA
- ELISA Kit development service

IND Support

- Gene Synthesis-IND filing & GLP documentation^{NEW}
- Plasmid CMC
- AAV CMC
- GMP-Like sgRNA & HDR Templates CMC^{HOT}

3

Clinical Development

4

GMP Manufacturing

- cGMP sgRNA & HDR Templates^{HOT}
- GMP Cas9, eSpCa9
- GMP Plasmid
- Clinical GMP AAV

CLINICAL TRIAL

PHASE I



PHASE II



PHASE III



* RUO, preclinical, GMP-like, and GMP grade levels available. Please inquire regarding your project requirements.