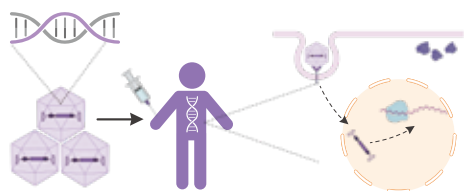


# Gene Therapy Solutions

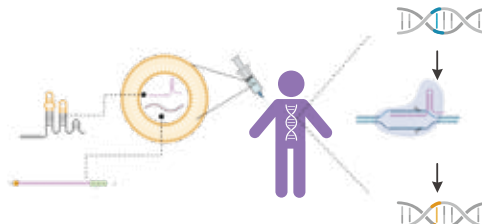
Advance your gene therapy projects to the next stage

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



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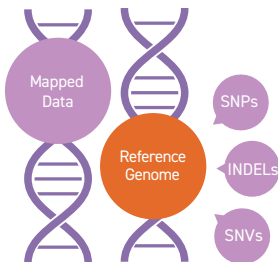


[www.genscript.com](http://www.genscript.com)



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NJ 08854 USA

# Target Identification



## Gene Sequencing and Analysis

- Precise Synthetic Oligo Pools<sup>NEW</sup>
- 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

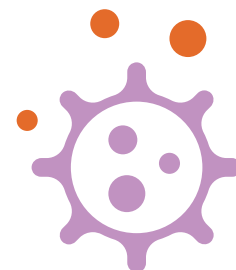
# Lead Generation and Optimization

## Viral Vector Optimization

- GenSmart Codon Optimization
- Gene Synthesis<sup>HOT</sup>
- Plasmid and GenCircle dsDNA<sup>NEW</sup>
- Precision Mutant Libraries<sup>HOT</sup>
- Viral Vector Packaging
- Plasmid Purification Instrument<sup>NEW</sup>

## Non-Viral Vector Optimization

- GenCRISPR gRNA Design Tool
- Synthetic sgRNA & Cas Nucleases<sup>HOT</sup>
- CRISPR HDR Templates (ssDNA, dsDNA, circle dsDNA)<sup>HOT</sup>
- IVT mRNA Services<sup>NEW</sup>



AAV Capsid Engineering

2

# 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<sup>NEW</sup>
- Plasmid CMC
- AAV CMC
- GMP-Like sgRNA & HDR Templates CMC<sup>HOT</sup>

3

# Clinical Development

## GMP Manufacturing

- cGMP sgRNA & HDR Templates<sup>HOT</sup>
- GMP Cas9, eSpCa9
- GMP Plasmid
- Clinical GMP AAV

## CLINICAL TRIAL

### PHASE I



### PHASE II



### PHASE III



4