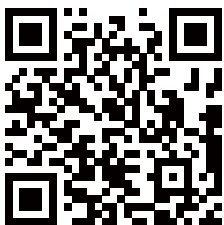


# Antibody Drug Discovery ROADMAP

Highly **Customizable**,  
**Scalable**, **Total**,  
Antibody Drug Discovery  
Solutions!

## GenScript Solutions Made Simple

Therapeutic antibodies have become the predominant class of new drugs developed in recent years. With GenScript's solutions, we aim to support your antibody drug discovery and development via a simple but specialized process. We have integrated a series of precise and consistent scalable solutions to facilitate each principal milestone in antibody-drug discovery, combining speed and quality towards IND.



Contact Us Now

Toll-Free: +1-877-436-7274

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



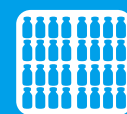
Target  
Discovery



Lead  
Generation



Lead Identification  
& Optimization



Preclinical Stage

# Target Discovery

Therapeutic targets are identified and characterized through different approaches to demonstrate how their modulation affects disease states, thus revealing their direct involvement in pathogenesis.

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## Precise Synthetic Oligo Pools

Used for precise DNA libraries to identify druggable targets



## CRISPR gRNA Library

High throughput KO/KI libraries maximize your screening capability



## Lentivirus Packaging

A powerful delivery vector ensures the stable expression of your target



## CellPower™ Assay Cell Line

Overexpression and inducible expression elucidate your target's functional role

# Lead Generation

Validated antigen targets are used to generate therapeutic antibody candidates by eliciting an immune response through antigenic presentation.



## Antigen Synthesis

GenScript generates nucleotides, peptides, proteins and cell lines/pools



## Transgenic Model by GenExact™ ssDNA

CRISPR-mediated KI generates transgenic models for target production



## MonoRab™-B Cell Cloning

Deliver high specificity & affinity rabbit mAb for your lead generation



## Beacon-Single B Cell Sorting

Achieve the most diversified antibodies with a high success rate



## Antibody Sequencing (Sanger & NGS)

Speed up therapeutic lead discovery and obtain accurate antibody sequences

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# Lead Identification & Optimization

Different approaches may be leveraged to modify therapeutic antibody candidates to increase their effectiveness and affinity and reduce immunogenicity.

3



## Ab Genes to Vectors

Seamless delivery of candidate genes in your selected expression vector



## CRISPR Mediated Cell Engineering

Evaluate lead efficiency or generate disease models to facilitate discovery



## Precision Mutant Library

Superior variant coverage in your highly diverse mutant pools



## TurboCHO™ High Throughput/Express

The most cost & time-effective (Only 2 weeks) options for target screening and optimization



## CellPower™ Assay Cell Line

An appealing tool for cell-based binding assays to evaluate lead efficacy

# Preclinical Stage

Once lead candidates are identified, preclinical tests evaluate their safety. Preclinical trials are conducted on non-human subjects to study the efficacy, toxicity, and pharmacokinetics of therapeutic antibodies.



## Anti-idiotype Antibody Discovery

An important reagent for drug development assays (PK, ADA, diagnostic assays)



## TurboCHO™ High Performance

Supporting the high yield (up to 2.5 g/L) needs in late-stage drug discovery workflow



## Custom ELISA Kits - PK/ADA/HCP

Specifically develop kits for reliable detection and quantitation of your unique antigen

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