



A COMPREHENSIVE SOLUTION

Cell Line Engineering Service

*Streamline cell engineering to empower researchers
to focus on therapeutics*



Service at-a-glance

A

CRISPR Strategy design

B

sgRNA screening

C

HDR template (oligo or
cssDNA) design, synthesis,
and production

D

Sequence verification (NGS
short- or long-read, and/or
Sanger sequencing)

E

Clonal selection and
expansion

F

Transfection optimization

G

Mycoplasma testing

H

Karyotyping (iPSC)

I

Transgene promoter
screening

J

Deliverables: 2-3 clones of
each cell line with CoA

 **Cell line**

A stable cell line allows for persistent and reproducible modification of your gene of interest and is used in many drug discovery assays. Utilizing a stable cell line overcomes inconsistencies that come with standard transient expression.

 **The Quintara cell line engineering solution**

Quintara offers a complete package for stable cell line and iPSC clone development with gene deletion, gene mutation, and precise gene writing at desired genome locations.

Our proprietary **Gatalyst™ platform** that uses circular single-stranded DNA offers gene writing for up to 20 kb in length. A team of experts will handle the time-consuming and strenuous process for our customers, delivering fast and reliable results for your research.

Combined with our gene synthesis and sequencing expertise, Quintara offers a wide range of assay development and characterization, including but not limited to NGS, qPCR, flow cytometry, cell sorting, immunocytochemistry, ELISA, and much more.



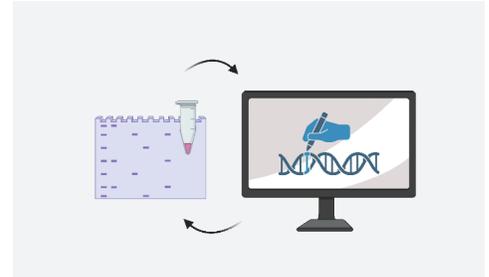


A comprehensive solution

Aiming to simplify cell engineering for our customers, so they can focus on therapeutics.

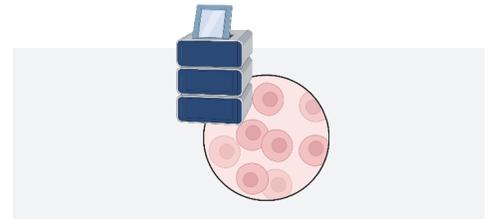
01 Design and validation

- Target sequence verification
- In silico CRISPR design
- In vitro validation of sgRNAs
- In vivo validation of sgRNAs by amplicon sequencing
- HDR template design and production



02 Culture and transfection

- Culture protocol transfer and optimization
- Transfection protocol optimization



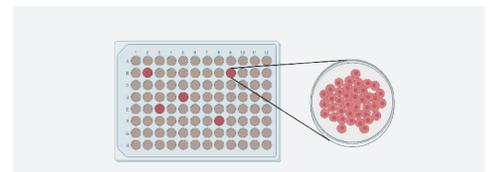
03 Cell sorting

- Single-cell or bulk sorting



04 Clonal expansion

- Clonal expansion of positive cells



05 Target confirmation by NGS

- Amplicon sequencing (Illumina short-reads)
- PacBio or Nanopore sequencing (long-reads)



* Other services available upon request.

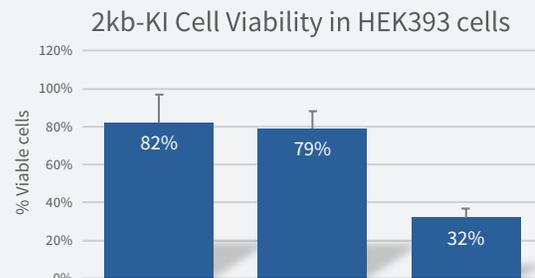
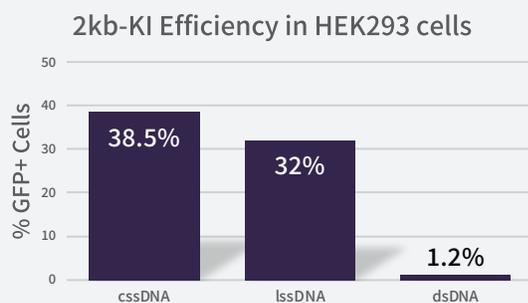


Gatalyst™: the ultimate platform for gene targeting with long sequence

The core of Gatalyst™ technology is the use of circular single-stranded (css) DNA as Homology-Directed Repair (HDR) template. Our proprietary cssDNA construction and production process provides clean and customizable HDR template, resulting in efficient, scalable, safe, and cost-effective cell engineering.

	Lentivirus	Transposon	dsDNA	AAV	lssDNA	Gatalyst
Cargo size	★★	★★★★	★★	★	★★	★★★★
Efficiency	★★	★☆	★	★★	★★	★★
Tolerability	★★	★☆	★	★★	★★	★★
Precise targeting	☆	★	★★★★	★★★★	★★★★	★★★★
Scalability	★★★★	★★★★	★★★★	★★★★	★	★★★★
Cost effectiveness	★☆	★★	★★★★	★★	★	★★★★

"Gatalyst™ is a non-viral cell engineering platform capable of precisely targeting genomic loci with large DNA insert sequences."





Extensive customer support

■ With experts in sequencing (NGS, Sanger, Nanopore and Pacbio), cloning, gene editing, iPSC biology and more

 CRISPR Strategy and design	 sgRNA screening
 Transfection optimization	 Cell sorting and clonal expansion
 Sequence verification <i>(NGS short-read, long-read, and/or Sanger)</i>	 iPSC verification

■ Additional services

<ul style="list-style-type: none"> • Blood immune cell isolation • Oligo synthesis 	<ul style="list-style-type: none"> • Gene synthesis • Cloning and DNA prep 
--	--

▶▶ ABOUT QUINTARA

Quintara stands as a nationwide gene sequencing leader, spanning California, Massachusetts, Colorado, Connecticut, Maryland, and beyond. We are committed to delivering the best service to the life science community and ensuring the fastest turnarounds so your research can move forward faster.

<ul style="list-style-type: none"> ✓ Sanger Sequencing ✓ Amplicon NGS Sequencing ✓ NGS Service ✓ Gene Synthesis and Cloning 	<ul style="list-style-type: none"> ✓ Whole Plasmid Sequencing ✓ Oligo Synthesis ✓ PacBio Sequencing ✓ Virus Packaging 	<ul style="list-style-type: none"> ✓ Single-Stranded DNA Synthesis ✓ DNA Prep ✓ Cell Line Engineering
---	---	--