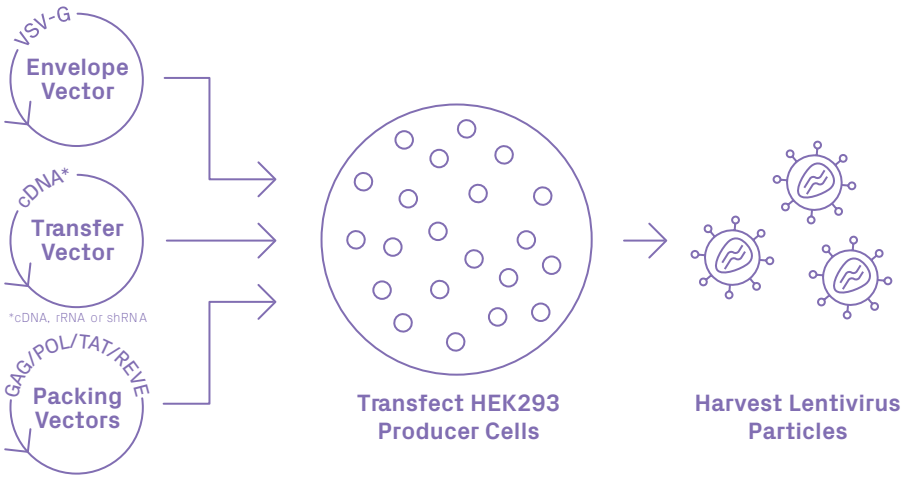
Genomics & Analytical Services | Gene Synthesis

Gene-to-Lentivirus Solutions

Azenta Life Sciences now offers an expanded solution for lentiviral vectors, from construct synthesis through to viral production and storage. The gene-to-lentivirus workflow, combined with Azenta Life Sciences sample management services, provides a complete end-to-end solution designed with speed and convenience in mind.

Lentiviral vectors are research tools used to introduce gene products into *in vitro* systems, animal models, or human patients via gene therapy. Lentiviruses have a broad range of applications and are commonly used in clinical gene therapy as well as in CAR-Tcell engineering.



Azenta Life Sciences Gene-to-Lentivirus Workflow

Step 1
Construct Design

Step 2
DNA Sequence Optimization and Synthesis

Step 3
Cloning and Plasmid Prep

Step 4
Lentivirus Packaging

Step 5
Functional Titer Determination

Step 6
Plasmid and Lentivirus Storage at Azenta

Need long-term storage of valuable plasmid or viral stocks?
Inquire about adding best-in-class storage services through Azenta Life Sciences

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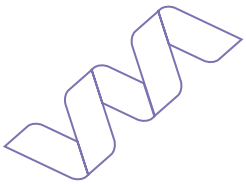
Gene-to-Lentivirus Solutions

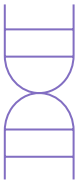
Advantages of Lentivirus

- Ability to transduce both dividing and non-dividing cells
- Integration into the host genome and stable expression of the transgene
- Lentiviral vectors can carry relatively large transgenes
- Low immunogenicity
- Functional titer (IFU/mL) is determined by cell transduction and qPCR

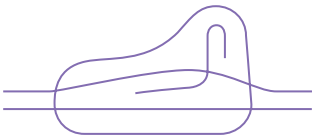
Applications



Protein Expression



Gene and Cell Therapy



Genome Engineering

Features and Benefits

Complete Service Chain:

- Simplify your project management with a single provider for all services
- Fast turnaround time
- Ph.D. scientists to support every step of your project

US-Based Production:

- US-based lentivirus production
- US-based gene synthesis available (optional)

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