

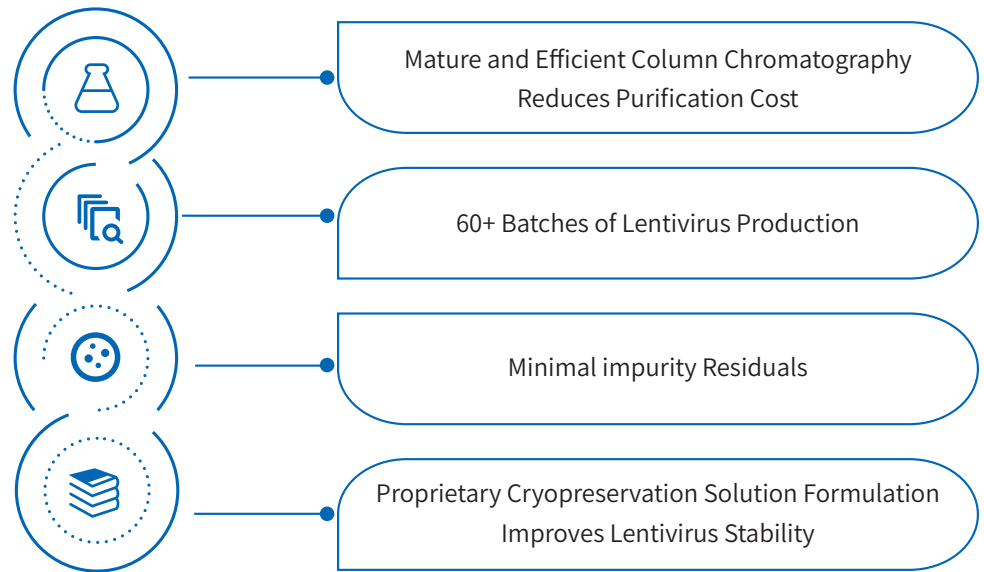
# LVV Manufacturing and Testing Platform

Developing successful cell therapies using LVV-based genetic modification requires overcoming significant scientific, time, and regulatory challenges. uBriGene's LVV manufacturing platform can help clients reduce time to clinic with off-the-shelf access to qualified cell line and LVV helper plasmids while producing high quality vector at large scale.



- **Comprehensive LVV Suite:** From molecular engineering to clinical-grade vector production, our full spectrum of services is designed to propel your therapeutic candidate towards clinical success.
- **Proprietary fully GMP released LVV production MCB & WCB, suspension cells, serum free**
- **Process Customization:** Exploit our specialized technology to refine process parameters tailored to your unique therapeutic profile.
- **Quality and Regulatory Vigilance:** Depend on our robust quality systems to ensure your LVV vectors are manufactured under compliance with global regulatory directives.
- **Expedited Development Cycle:** Utilize our scalable platforms to fast-track your LVV critical raw materials from laboratory bench to clinical forefront.

## uBriGene's Platforms Enable LVV Manufacturing at Large Scale



## uBriGene's Excellence in Plasmid & LVV Upstream Processing



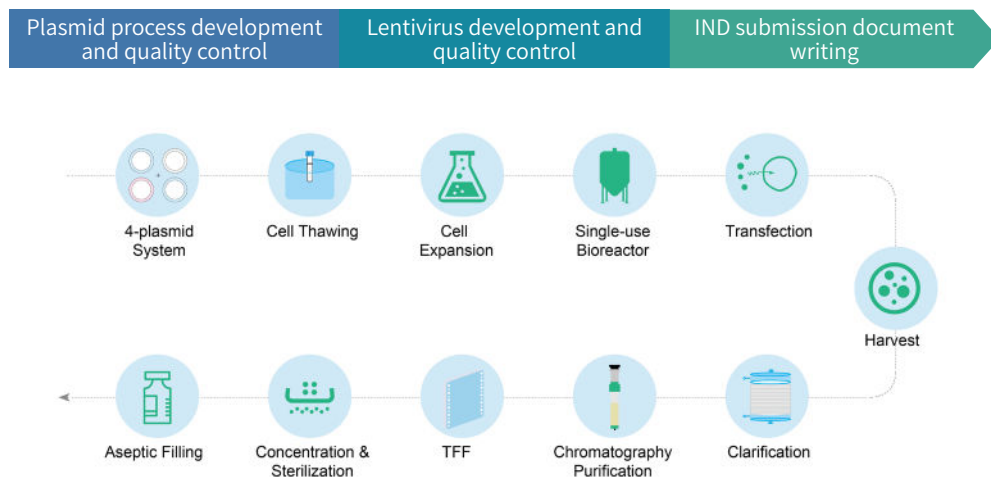
GMP plasmid production platform



Scalable LVV production

| GMP Plasmid Production  | Scalable LVV Production Platforms  |
|---|--|
| High-capacity fermentation yielding up to 1 g/L of plasmid DNA.                                   | Proprietary 293TH suspension cell line for high-yield LVV production, serum free               |
| Animal-derived ingredient and antibiotic-free processes.  | LVV yields exceeding E8 TU/mL (using Jurkat T)   |
| Scalable up to 200L, ensuring cost-effectiveness and adaptability.                                | Scalable production from 50L to 2000L, supporting projects of any size                         |
| Two-step purification process, significantly reducing costs while maintaining high purity levels. | Advanced downstream purification methods tailored for maximum efficiency, purity, and potency. |

## LVV One-stop CDMO Process Flow

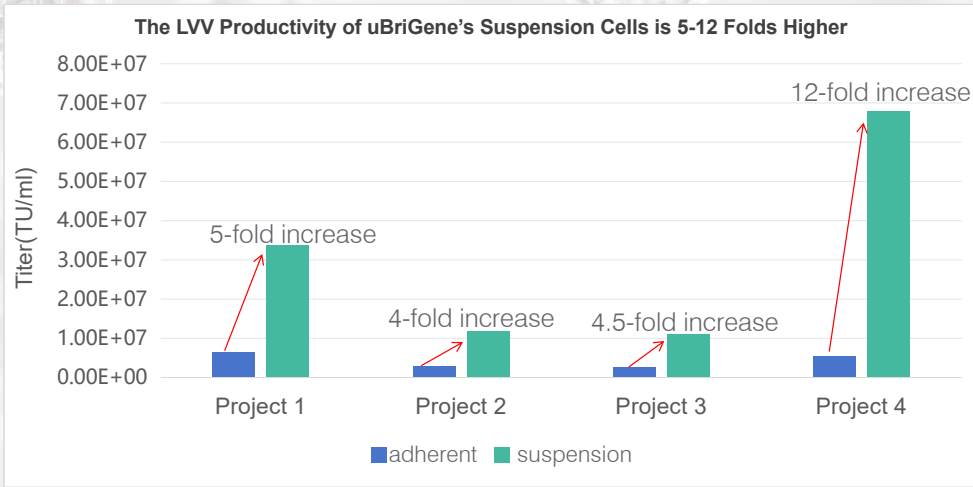


## Commitment to Quality Assurance in LVV Manufacturing

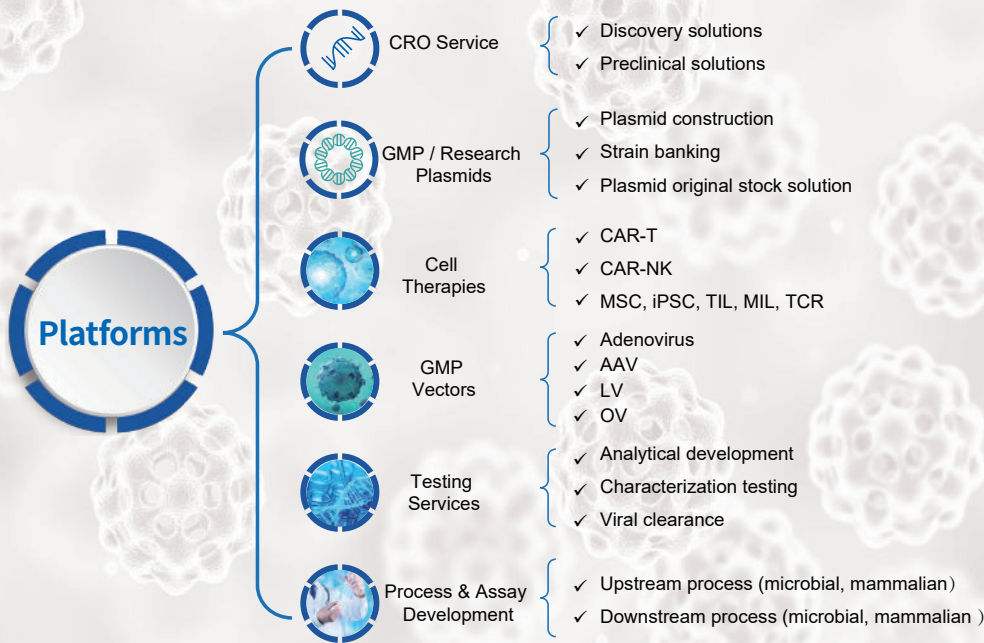
uBriGene stands as your quality assurance partner with your LVV based cell therapy developed in compliance with the highest standards of quality control and regulatory oversight.

| Assay               |  | Methods           |
|---------------------|--|-------------------|
| Identity            |  | Sanger Sequencing |
| Physical Inspection | Appearance                                   | Visual inspection |
| Chemical Inspection | pH Value                                     | pH meter          |
| Contents            | Lentiviral transduction titer (Jurkat T)     | Flow cytometry    |
|                     | Lentivirus titer (total number of particles) | ELISA             |
| Purity              | HCD  | qPCR              |
|                     | Residual Plasmid                             | qPCR              |
|                     | Foreign DNA segment size                     | CE-LIF            |
|                     | HCP  | ELISA             |
|                     | Residual Nuclease                            | ELISA             |
| Safety              | Endotoxin                                    | Gel clot          |
|                     | Sterility test                               | Cell culture      |
|                     | Mycoplasma test                              | PCR/qPCR          |
|                     | Replication competent lentivirus             | Cell Culture      |
|                     | SV40 gene transfer                           | qPCR              |
|                     | E1A gene transfer                            | qPCR              |

## The Productivity of LVV Using uBriGene's 293TH Suspension Cells is 5-12 Folds Higher Than That of Adherent 293T



## uBriGene's Service Platforms



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