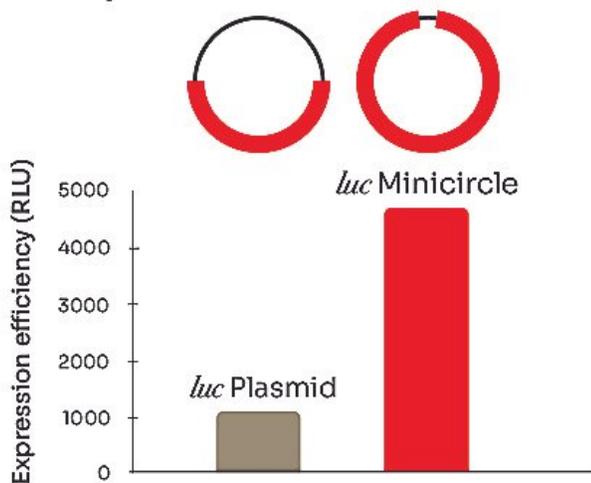


## PlasmidFactory – Enabling Next-Generation DNA Manufacturing

04 March 2026 | News

With more than 25 years of experience, PlasmidFactory is a trusted European CDMO specializing in plasmid and Minicircle DNA manufacturing for research, clinical development, and GMP production. With over 3,500 successfully completed projects and a 99.9% success rate, the company stands for reliability, flexibility, and scientific excellence — with technologies already proven in clinical trials.

### Equimolar transfection



Source: W. Walther et al., Max Delbrück Center, Berlin

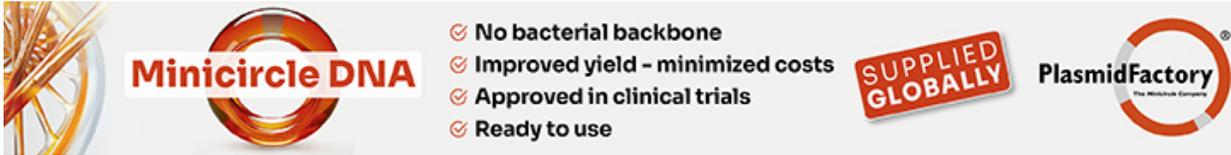
Offering scalable quality grades from Research to GMP, PlasmidFactory supports advanced gene-based innovations worldwide.

### Minicircle DNA – The Core Technology for Next-Generation Therapies

PlasmidFactory's patented Minicircle DNA technology removes all bacterial backbone sequences, leaving only the therapeutic expression cassette in a small, supercoiled DNA molecule.

This minimalistic vector design enables:

- Reduced immunogenicity and lower DNA toxicity
- Higher transfection efficiency and improved cell viability
- Stronger, more stable gene expression
- Backbone-free design available up to GMP Grade for safer, regulatory-aligned manufacturing



Minicircle DNA provides clear advantages across advanced applications. It enhances virus-free cell engineering such as CAR-T, CAR-NK, and HSPCs by improving transfection, expression, and viability while enabling efficient non-viral gene transfer — with clinical programs already underway. In viral vector production, its backbone-free structure prevents retro-packaging of bacterial sequences, ensuring vector purity, functional yield, and safety. As a template for IVT and vaccination platforms, Minicircles support cleaner and more reproducible mRNA manufacturing workflows.

Whether you are developing CAR-T, CAR-NK, viral vector strategies, RNA therapeutics, or novel in vivo gene delivery approaches — PlasmidFactory delivers the clean, reliable DNA foundation your program depends on.

**PlasmidFactory – The Better Way to DNA.**

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

**Accelerate your manufacturing with Minicircle DNA.**

<https://www.plasmidfactory.com/custom-dna/minicircle-dna/>

**Webinar: *Why DNA Quality Matters***

**March 26, 2026 | 17:00 CET / 16:00 GMT / 11:00 EST / 08:00 PST**

<https://www.plasmidfactory.com/events/why-dna-quality-matters-from-research-to-gmp/>